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CHARLES SAWYER, Secretary

BUREAU OF THE CENSUS

PHILIP M. HAUSER, Acting Director (Appointed August 9, 1949)

J. C. CAPT, Director (Retired August 9, 1949)

CENSUS OF MANUFACTURES: 1947

Volume II

STATISTICS BY INDUSTRY

General and Product Statistics for Each of the
453 Industries; Materials Consumed and
Metalworking Operations Data
for Selected Industries



Prepared under the supervision of

MAXWELL R. CONKLIN

Chief, Industry Division

Comprising, with some revisions, the series individually published as "Industry Pamphlets"

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The Census of Manufactures is a large-scale enterprise requiring for its successful completion the cooperation of many thousands of individuals and organizations. In determining the information to be collected and in designing the report forms the Bureau of the Census obtained the advice of many Government agencies; in particular, the Bureau of the Budget, the Department of Agriculture, the Bureau of Mines, the Bureau of Labor Statistics, and the Office of Domestic Commerce of the Department of Commerce. In developing the content of the product sections of the individual industry reports, nearly all trade associations and many individual manufacturers contributed generously of their time and counsel.

The primary responsibility for the 1947 Census of Manufactures was centered in the Industry Division of the Bureau of the Census. Other divisions of the Bureau, particularly those dealing with field activities and machine tabulation operations, also had important functions in particular phases of the Census.

In addition to the Bureau staff members shown above, special recognition should be given to the contribution of a number of persons. In the Economic Planning Section of the Industry Division, Pamela Brown and Irvin Strauss assisted in the preparation of instructions for reporting manufacturers and field enumerators, in the development of specifications for reviewing the general sections of the reports, and in the compilation of historical series; Murray D. Dessel assisted in the selection of metropolitan areas, developed the methods used for avoiding the disclosure of operations of individual companies, and directed the application of these methods. Carl W. Anderson was responsible for developing specifications for machine tabulation. In the Sampling Techniques Section Leon Gilford assisted in the conduct of spot sampling tests of the adequacy of the original mailing list and of the effectiveness of editing and other procedures, and in the design of a national area sample to provide a quantitative measurement of the completeness of the Census of Manufactures.

In the Operations Section of the Industry Division, Francis H. Wilmer was responsible for the preparation of the list of manufacturers and for the mailing and check-in of report forms and other materials; Robert W. DePuy, for the clerical operations of coding and editing report forms and for the statistical review of tabulations; Charles G. Parsons, for the preparation of the procedures used in clerical operations; and Andrew J. Danton, for the preparation of manuscript for printing.

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1947 CENSUS OF MANUFACTURES REPORTS

Volume I—GENERAL SUMMARY

Chapter I.—SUMMARY STATISTICS

TABLE 1.—General statistics for all manufacturing industries in the United States: 1849–1947

TABLE 2.—General statistics for industry groups and for industries: 1947 and 1939

TABLE 3.—General statistics for divisions, States, and standard metropolitan areas: 1947 and 1939

TABLE 4.—General statistics for divisions, States, and standard metropolitan areas: 1899–1947

TABLE 5.—General statistics for selected counties: 1947 and 1939

TABLE 6.—Selected statistics by divisions, for industry groups and for industries: 1947 and 1939

Chapter II.—EMPLOYMENT AND PAY ROLLS

TABLE 1.—Number of employees by functional class and sex: pay roll period ended nearest October 15, 1947 and earlier census years

TABLE 2.—Number of employees by functional class and sex, for industry groups and for industries: pay roll period ended nearest October 15, 1947

TABLE 3.—Number of employees by functional class and sex, for divisions, States, and standard metropolitan areas: pay roll period ended nearest October 15, 1947

TABLE 4.—Employment, pay rolls, and man-hours for industry groups and for industries: 1947

Chapter III.—SIZE OF ESTABLISHMENTS

TABLE 1.—General statistics for establishments classified as to size by number of employees, for industry groups and for industries: 1947

TABLE 2.—General statistics for establishments classified as to size by number of employees, for divisions and States: 1947

Chapter IV.—TYPE OF ORGANIZATION

TABLE.—General statistics for establishments classified by type of operation and legal organization, for major industry groups: 1947

Chapter V.—INVENTORIES IN THE HANDS OF MANUFACTURERS

TABLE.—Manufacturers' inventories, for industry groups and for industries: 1947

Chapter VI.—EXPENDITURES FOR PLANT AND EQUIPMENT

TABLE 1.—Expenditures for plant and equipment by industry groups and industries: 1947

TABLE 2.—Expenditures for plant and equipment by divisions, States, and standard metropolitan areas: 1947

TABLE 3.—Expenditures for plant and equipment by principal industrial counties: 1947

Chapter VII.—HIGHWAY-TYPE MOTOR VEHICLES

TABLE 1.—Highway-type motor vehicles owned or leased, by type and by manufacturer's rated capacity, for industry groups and for industries: 1947

TABLE 2.—Highway-type motor vehicles owned or leased, by type and by manufacturer's rated capacity, for divisions and States: 1947

TABLE 3.—Number of trucks and trailers and semitrailers, by employee size groups, for industry groups and for industries: 1947

Chapter VIII.—FUEL CONSUMED

TABLE 1.—Fuel consumed and electric energy purchased and generated by manufacturing industries, totals for the United States: 1947 and earlier census years

TABLE 2.—Fuel consumed and electric energy purchased and generated, by industry groups and industries: 1947

TABLE 3.—Fuel consumed and electric energy purchased and generated, by divisions and States: 1947

Chapter IX.—SELECTED MATERIALS CONSUMED BY INDUSTRY AND BY STATES (14 tables presented by major industry groups)

Chapter X.—SELECTED METALWORKING OPERATIONS PERFORMED

TABLE 1.—Number of establishments performing selected metalworking operations, by industry: 1947

TABLE 2.—Number of establishments performing selected metalworking operations, by divisions and States: 1947

Volume II—STATISTICS BY INDUSTRY

SUMMARY STATISTICS

STANDARD INDUSTRY TABLES (published for each of 453 industries):

- TABLE 1.—General statistics for the United States: 1947 and earlier census years
- TABLE 2.—General statistics by divisions and States: 1947
- TABLE 3.—Detailed statistics for the United States: 1947
- TABLE 4.—Selected general statistics by size of establishment, for the United States: 1947
- TABLE 5.—Value of products shipped, by broad classes of products, for the United States: 1947
- TABLE 6.—Quantity and value of products, totals for the United States: 1947 and 1939

SPECIAL INDUSTRY TABLES (published for selected industries only):

- TABLE 7.—Materials consumed: 1947
- TABLE 8.—Machinery in possession and selected metalworking operations performed: 1947

Volume III—STATISTICS BY STATES

SUMMARY STATISTICS

STATE TABLES (published, as applicable, for each State and the District of Columbia):

- TABLE 1.—General statistics for the State and its standard metropolitan areas: 1947 and earlier census years
- TABLE 2.—General statistics for standard metropolitan areas, counties, and urban places: 1947 and 1939
- TABLE 3.—General statistics for the State, by major industry groups: 1947 and 1939
- TABLE 4.—General statistics and distribution of establishments by employment size groups, by industry, for the State: 1947
- TABLE 5.—General statistics for standard metropolitan areas, by industry: 1947
- TABLE 6.—General statistics for principal industrial counties, by industry groups: 1947
- TABLE 7.—Distribution of establishments by employment size groups and by major industry groups, for counties; 1947
- TABLE 8.—Number of employees by month and salaries and wages, for the State, by major industry groups: 1947
- TABLE 9.—Detailed statistics for the State, and its standard metropolitan areas and principal industrial counties: 1947
- TABLE 10.—Highway-type motor vehicles owned or leased, by body type and by manufacturer's rated capacity, for the State: December 31, 1947

PRODUCT SUPPLEMENT

This volume assembles all the product statistics published in the more than 100 product tables of *Volume II—Statistics by Industry*. It presents in convenient reference form the 1947 and comparative 1939 statistics for approximately 6,500 products manufactured by United States industry.

CONTENTS

GENERAL EXPLANATIONS

	Page		Page
1. Historical note	1	20. Wages and salaries for the entire year	13
2. Area and period covered	1	21. Production workers' man-hours	14
3. The census mailing list	1	22. Cost of materials consumed	14
4. The canvass	1	23. Specific materials consumed	14
5. Definition of establishment	2	24. Products	15
6. Establishments covered in the census—type	3	25. Classes of products	15
7. Establishments covered in the census—comparison with other figures	4	26. Value of products shipped	16
8. Change in scope between 1939 and 1947	4	27. Transfer values	16
9. Definition of industries	5	28. Duplication in cost of materials and value of prod- ucts	17
10. Classification of establishments into industries	5	29. Value added by manufacture	18
11. Groups of industries	7	30. Method of calculating value added by manufacture for selected industries in 1947	18
12. Statistics for 1939 and earlier years	7	31. Inventories	18
13. The census report form	8	32. Expenditures for plant and equipment	19
14. Disclosure of data for individual companies	9	33. Fuels and electric energy	19
15. Standard metropolitan areas	11	34. Metalworking operations	19
16. Content of the general sections of the census form	12	35. Highway-type motor vehicles	20
17. Manufacturing employees—classifications used	12	36. Abbreviations	20
18. Employment for the October 15 pay roll period	13		
19. Monthly and average employment	13		

SUMMARY STATISTICS

Table 1.—General statistics for all manufacturing in- dustries in the United States: 1849–1947	21	Table 4.—General statistics for divisions, States, and standard metropolitan areas: 1899–1947	33
Table 2.—General statistics for industry groups and for industries: 1947 and 1939	22	Table 5.—General statistics for selected counties: 1947 and 1939	40
Table 3.—General statistics for divisions, States, and standard metropolitan areas: 1947 and 1939	30	Table 6.—Selected statistics by divisions, for industry groups and for industries: 1947 and 1939	50

INDUSTRY GROUPS

Group 20.—Food and Kindred Products	66	Group 30.—Rubber Products	466
Group 21.—Tobacco Manufactures	147	Group 31.—Leather and Leather Products	475
Group 22.—Textile Mill Products	152	Group 32.—Stone, Clay, and Glass Products	490
Group 23.—Apparel and Related Products	204	Group 33.—Primary Metal Industries	529
Group 24.—Lumber and Products, Except Furniture	253	Group 34.—Fabricated Metal Products	575
Group 25.—Furniture and Fixtures	293	Group 35.—Machinery (Except Electrical)	636
Group 26.—Paper and Allied Products	313	Group 36.—Electrical Machinery	714
Group 27.—Printing and Publishing Industries	345	Group 37.—Transportation Equipment	750
Group 28.—Chemicals and Allied Products	382	Group 38.—Instruments and Related Products	776
Group 29.—Petroleum and Coal Products	447	Group 39.—Miscellaneous Manufactures	792

APPENDIXES

Appendix A.—Provisions of Law Relating to the Census of Manufactures	842
Appendix B.—Census Report Forms and Punch Cards	843
Appendix C.—Industry Descriptions	862
Appendix D.—Derivation of 1939 Industry Data Comparable With 1947 Census Industry Classifications	915
Appendix E.—Comparison of 1947 Census and Standard Industrial Classification Systems	931

INDEX

Index	935
-------------	-----

INDUSTRIES

	Page		Page
Group 20—FOOD AND KINDRED PRODUCTS		Cotton and rayon broad-woven fabrics:	
Meat products:	Page	Cotton broad-woven fabrics.....	153
Meat packing, wholesale.....	67	Rayon and related broad-woven fabrics.....	153
Prepared meats.....	67	Narrow fabric mills.....	153
Poultry dressing, wholesale.....	67	Finishing textiles, except wool.....	153
Dairy products:		Woolen and worsted manufactures:	
Creamery butter.....	77	Scouring and combing plants.....	170
Natural cheese.....	77	Yarn mills, wool, except carpet.....	170
Concentrated milk.....	77	Woolen and worsted fabrics.....	170
Ice cream and ices.....	77	Finishing wool textiles.....	170
Special dairy products.....	77	Knitting mills:	
Canning, preserving, and freezing:		Full-fashioned hosiery mills.....	176
Canned sea food.....	88	Seamless hosiery mills.....	176
Cured fish.....	88	Knit outerwear mills.....	176
Canning and preserving, except fish.....	88	Knit underwear mills.....	176
Dehydrated fruits and vegetables.....	88	Knit glove mills.....	176
Pickles and sauces.....	88	Knit-fabric mills.....	176
Frozen foods.....	88	Knitting mills, n.e.c.....	176
Grain-mill products:		Carpets and rugs:	
Flour and meal.....	100	Wool carpets, rugs, and carpet yarn.....	186
Prepared animal feeds.....	100	Carpets and rugs, n.e.c.....	186
Cereal preparations.....	100	Hard-surface floor coverings.....	186
Rice cleaning and polishing.....	100	Hats (except cloth and millinery):	
Blended and prepared flour.....	100	Fur-felt hats and hat bodies.....	191
Bakery products:		Wool-felt hats and hat bodies.....	191
Bread and other bakery products.....	110	Straw hats.....	191
Biscuit, crackers, and pretzels.....	110	Hatters' fur.....	191
Sugar:		Miscellaneous textile goods:	
Raw cane sugar.....	119	Felt goods, n.e.c.....	195
Cane-sugar refining.....	119	Lace goods.....	195
Beet sugar.....	119	Paddings and upholstery filling.....	195
Confectionery and related products:		Processed textile waste.....	195
Confectionery products.....	119	Coated fabrics, except rubberized.....	195
Chocolate and cocoa products.....	119	Jute (except felt), and linen goods.....	195
Chewing gum.....	119	Cordage and twine.....	195
Beverages:		Textile goods, n.e.c.....	195
Bottled soft drinks.....	128	Group 23—APPAREL AND RELATED PRODUCTS	
Malt liquors.....	128	Men's and boys' suits and coats:	
Malt.....	128	Men's and boys' suits and coats.....	205
Wines and brandy.....	128	Suit and coat findings.....	205
Distilled liquors, except brandy.....	128	Men's and boys' furnishings:	
Miscellaneous food preparations:		Men's dress shirts and nightwear.....	209
Leavening compounds.....	136	Men's and boys' underwear.....	209
Shortening and cooking oils.....	136	Men's and boys' neckwear.....	209
Oleomargarine.....	136	Men's and boys' cloth hats and caps.....	209
Corn products.....	136	Hat and cap materials.....	209
Flavorings.....	136	Separate trousers.....	209
Vinegar and cider.....	136	Work shirts.....	209
Manufactured ice.....	136	Men's and boys' clothing, n.e.c.....	209
Macaroni and spaghetti.....	136	Women's and misses' outerwear:	
Liquid, frozen, and dried eggs.....	136	Blouses and waists.....	217
Food preparations, p.e.c.....	136	Dresses, unit price.....	217
Group 21—TOBACCO MANUFACTURES		Dresses, dozen price.....	217
Cigarettes.....	148	Women's suits and coats.....	217
Cigars.....	148	Women's skirts.....	217
Chewing and smoking tobacco.....	148	Women's neckwear and scarfs.....	217
Tobacco stemming and redrying.....	148	Women's outerwear, n.e.c.....	217
Group 22—TEXTILE MILL PRODUCTS		Women's and children's undergarments:	
Yarn and thread mills, except wool:		Women's and children's underwear.....	225
Yarn throwing mills.....	153	Corsets and allied garments.....	225
Thread mills.....	153	Millinery.....	225
Yarn mills, cotton system.....	153		
Yarn mills, silk system.....	153		

Group 23—APPAREL AND RELATED PRODUCTS—Cont'd

	Page
Children's outerwear:	
Children's dresses	225
Children's coats	225
Children's outerwear, n.e.c.	225
Fur goods	225
Miscellaneous apparel and accessories:	
Fabric and combination dress gloves	235
Fabric and combination work gloves	235
Suspenders and garters	235
Robes and dressing gowns	235
Waterproof outer garments	235
Leather and sheep-lined clothing	235
Belts	235
Handkerchiefs	235
Apparel, n.e.c.	235
Miscellaneous fabricated textiles:	
Curtains and draperies	243
Housefurnishings, n. e. c.	243
Textile bags	243
Canvas products	243
Tucking, pleating, and hemstitching	243
Trimmings and art goods	243
Schiffli-machine embroideries	243
Embroideries, except Schiffli-machine	243
Fabricated textile products, n.e.c.	243

**Group 24—LUMBER AND PRODUCTS,
EXCEPT FURNITURE**

Lumber and timber basic products:	
Sawmills and planing mills, general	254
Veneer mills	254
Shingle mills	254
Cooperage stock mills	254
Excelsior mills	254
Millwork and related products:	
Millwork plants	275
Plywood plants	275
Prefabricated wood products	275
Wooden containers:	
Fruit and vegetable baskets	281
Rattan and willow ware, n.e.c.	281
Cigar boxes	281
Wooden boxes (except cigar boxes)	281
Cooperage	281
Miscellaneous wood products:	
Wood preserving	287
Lasts and related products	287
Mirror and picture frames	287
Wood products, n.e.c.	287

Group 25—FURNITURE AND FIXTURES

Household furniture:	
Wood house furniture, except upholstered	294
Household furniture, upholstered	294
Reed and rattan furniture	294
Metal house furniture, except upholstered	294
Mattresses and bedsprings	294
Household furniture, n.e.c.	294
Office furniture:	
Wood office furniture	302
Metal office furniture	302
Public and professional furniture:	
Public-building furniture	302
Professional furniture	302
Partitions and fixtures	302

	Page
Screens, shades, and blinds:	
Window and door screens	308
Window shades	308
Venetian blinds	308
Miscellaneous furniture and fixtures:	
Restaurant furniture	308
Furniture and fixtures, n.e.c.	308

Group 26—PAPER AND ALLIED PRODUCTS

Pulp, paper, and board:	
Pulp mills	314
Paper and board mills	314
Paper coating and glazing	331
Envelopes	331
Paper bags	331
Paperboard containers and boxes:	
Paperboard boxes	331
Fiber cans, tubes, drums, etc.	331
Pulp goods and miscellaneous paper products:	
Die-cut paper and board	331
Wallpaper	331
Pulp goods, pressed and molded	331
Converted paper products, n.e.c.	331

Group 27—PRINTING AND PUBLISHING INDUSTRIES

Newspapers	346
Periodicals	346
Books:	
Books: publishing and printing	346
Book printing	346
Miscellaneous publishing	346
Commercial printing	364
Lithographing	364
Greeting cards	364
Bookbinding and related industries:	
Bookbinding	364
Blankbook making and paper ruling	364
Loose-leaf binders and devices	364
Miscellaneous bookbinding work	364
Printing trades service industries:	
Typesetting	376
Engraving and plate printing	376
Photoengraving	376
Electrotyping and stereotyping	376

Group 28—CHEMICALS AND ALLIED PRODUCTS

Industrial inorganic chemicals:	
Alkalies and chlorine	383
Inorganic chemicals, n.e.c.	383
Industrial organic chemicals:	
Cyclic (coal-tar) crudes	391
Plastics materials	391
Synthetic rubber	391
Synthetic fibers	391
Explosives	391
Organic chemicals, n.e.c.	391
Drugs and medicines:	
Biological products	400
Botanical products	400
Medicinal chemicals	400
Pharmaceutical preparations	400
Soap and related products:	
Soap and glycerin	405
Cleaning and polishing preparations	405
Sulfonated oils and assistants	405

Group 28—CHEMICALS AND ALLIED PRODUCTS—Cont'd

	Page
Paints and allied products:	
Paints and varnishes	412
Inorganic color pigments	412
Whiting and fillers	412
Gum and wood chemicals:	
Hardwood distillation	418
Softwood distillation	418
Gum naval stores (steam distilled)	418
Natural tanning and dyeing materials	418
Fertilizers:	
Fertilizers	418
Fertilizers (mixing only)	418
Vegetable and animal oils:	
Cottonseed oil mills	427
Linseed oil mills	427
Soybean oil mills	427
Vegetable oil mills, n.e.c.	427
Marine animal oils	427
Grease and tallow	427
Fatty acids	427
Animal oils, n.e.c.	427
Miscellaneous chemical products:	
Printing ink	435
Essential oils	435
Toilet preparations	435
Glue and gelatin	435
Carbon black	435
Compressed and liquefied gases	435
Insecticides and fungicides	435
Salt	435
Chemical products, n.e.c.	435

Group 29—PETROLEUM AND COAL PRODUCTS

Petroleum refining	448
Coke and byproducts:	
Beehive coke ovens	448
Byproduct coke ovens	448
Paving and roofing materials:	
Paving mixtures and blocks	448
Roofing felts and coatings	448
Miscellaneous petroleum and coal products:	
Fuel briquets and packaged fuel	448
Lubricants, n.e.c.	448
Petroleum and coal products, n.e.c.	448

Group 30—RUBBER PRODUCTS

Tires and inner tubes	467
Rubber footwear	467
Reclaimed rubber	467
Rubber industries, n.e.c.	467

Group 31—LEATHER AND LEATHER PRODUCTS

Leather tanning and finishing	476
Industrial leather belting	476
Footwear cut stock	476
Footwear (except rubber):	
Footwear, except rubber	476
House slippers	476
Leather gloves and mittens:	
Leather dress gloves	484
Leather work gloves	484
Luggage	484
Handbags and small leather goods:	
Handbags and purses	484
Small leather goods	484

Handbags and small leather goods—Continued	Page
Saddlery, harness, and whips	484
Leather goods, n.e.c.	484

Group 32—STONE, CLAY, AND GLASS PRODUCTS

Flat glass	491
Pressed and blown glassware:	
Glass containers	491
Pressed and blown glassware, n.e.c.	491
Products of purchased glass	491
Cement, hydraulic	498
Structural clay products:	
Brick and hollow tile	498
Floor and wall tile	498
Sewer pipe	498
Clay refractories	498
Structural clay products, n.e.c.	498
Pottery and related products:	
Vitreous plumbing fixtures	506
Vitreous-china food utensils	506
Earthenware food utensils	506
Porcelain electrical supplies	506
China decorating for the trade	506
Pottery products, n.e.c.	506
Concrete and plaster products:	
Concrete products	512
Gypsum products	512
Lime	512
Mineral wool	512
Cut-stone and stone products	512
Miscellaneous nonmetallic mineral products:	
Abrasive products	519
Asbestos products	519
Gaskets and asbestos insulations	519
Graphite: ground or blended	519
Minerals: ground or treated	519
Sand-lime products	519
Nonclay refractories	519
Statuary and art goods	519
Nonmetallic mineral products, n.e.c.	519

Group 33—PRIMARY METAL INDUSTRIES

Blast furnaces and steel mills:	
Blast furnaces	530
Steel works and rolling mills	530
Electrometallurgical products	530
Iron and steel foundries:	
Gray-iron foundries	530
Malleable-iron foundries	530
Steel foundries	530
Primary nonferrous metals:	
Primary copper	548
Primary lead	548
Primary zinc	548
Primary aluminum	548
Primary nonferrous metals, n.e.c.	548
Secondary nonferrous metals	548
Nonferrous metal rolling and drawing:	
Copper rolling and drawing	558
Aluminum rolling and drawing	558
Nonferrous metal rolling, n. e. c.	558
Nonferrous foundries	558
Miscellaneous primary metal industries:	
Iron and steel forgings	566
Wire drawing	566
Welded and heavy-riveted pipe	566
Primary metal industries, n.e.c.	566

Group 34—FABRICATED METAL PRODUCTS

	Page
Tin cans and other tinware	576
Cutlery, hand tools, and hardware:	
Cutlery	576
Edge tools	576
Hand tools, n.e.c.	576
Files	576
Hand saws and saw blades	576
Hardware, n.e.c.	576
Heating and plumbing equipment:	
Metal plumbing fixtures and fittings	588
Oil burners	588
Heating and cooking apparatus, n.e.c.	588
Structural metal products:	
Structural and ornamental products	597
Metal doors, sash, and trim	597
Boiler shop products	597
Sheet-metal work	597
Metal stamping and coating:	
Vitreous-enameled products	609
Metal stampings	609
Enameling and lacquering	609
Galvanizing	609
Engraving on metal	609
Plating and polishing	609
Lighting fixtures	609
Fabricated wire products:	
Nails and spikes	620
Wirework, n.e.c.	620
Miscellaneous fabricated metal products:	
Metal barrels, drums, and pails	620
Safes and vaults	620
Steel springs	620
Bolts, nuts, washers, and rivets	628
Screw-machine products	628
Collapsible tubes	628
Metal foil	628
Fabricated metal products, n.e.c.	628

Group 35—MACHINERY (EXCEPT ELECTRICAL)

Engines and turbines:	
Steam engines and turbines	637
Internal-combustion engines	637
Tractors and farm machinery:	
Tractors	637
Farm machinery (except tractors)	637
Construction and mining machinery:	
Construction and mining machinery	637
Oil-field machinery and tools	637
Metalworking machinery:	
Machine tools	656
Metalworking machinery, n.e.c.	656
Cutting tools, jigs, fixtures, etc.	656
Special-industry machinery, n.e.c.:	
Food-products machinery	665
Textile machinery	665
Woodworking machinery	665
Paper-industries machinery	665
Printing-trades machinery	665
Special-industry machinery, n.e.c.	665
General industry machinery:	
Pumps and compressors	677
Elevators and escalators	677
Conveyors	677
Blowers and fans	677
Industrial trucks and tractors	677

	Page
General industrial machinery—Continued	
Power-transmission equipment	677
Industrial furnaces and ovens	677
Mechanical stokers	677
General industrial machinery, n.e.c.	677
Office and store machines:	
Computing and related machines	690
Typewriters	690
Scales and balances	690
Office and store machines, n.e.c.	690
Service and household machines:	
Domestic laundry equipment	697
Laundry and dry-cleaning machinery	697
Sewing machines	697
Vacuum cleaners	697
Refrigeration machinery	697
Measuring and dispensing pumps	697
Service and household machines, n.e.c.	697
Miscellaneous machinery parts:	
Valves and fittings, except plumbers'	707
Fabricated pipe and fittings	707
Ball and roller bearings	707
Machine shops	707

Group 36—ELECTRICAL MACHINERY

Electrical industrial apparatus:	
Wiring devices and supplies	715
Carbon and graphite products	715
Electrical measuring instruments	715
Motors and generators	715
Transformers	715
Electrical control apparatus	715
Electrical welding apparatus	715
Electrical industrial apparatus, n.e.c.	715
Electrical appliances	730
Insulated wire and cable	730
Engine electrical equipment	730
Electric lamps	730
Communication equipment:	
Radios and related products	738
Electronic tubes	738
Phonograph records	738
Telephone and telegraph equipment	738
Communication equipment, n.e.c.	738
Miscellaneous electrical products:	
Storage batteries	745
Primary batteries (dry and wet)	745
X-ray and therapeutic apparatus	745
Electrical products, n.e.c.	745

Group 37—TRANSPORTATION EQUIPMENT

Motor vehicles and equipment:	
Motor vehicles and parts	751
Truck and bus bodies	751
Truck trailers	751
Automobile trailers	751
Aircraft and parts:	
Aircraft	759
Aircraft engines	759
Aircraft propellers	759
Aircraft equipment, n.e.c.	759
Ships and boats:	
Ship building and repairing	764
Boat building and repairing	764
Railroad equipment:	
Locomotives and parts	764
Railroad and street cars	764

Group 37—TRANSPORTATION EQUIPMENT—Continued		Page
Motorcycles and bicycles.....	764	
Transportation equipment, n.e.c.....	764	
Group 38—INSTRUMENTS AND RELATED PRODUCTS		
Scientific instruments.....	777	
Mechanical measuring instruments.....	777	
Optical instruments and lenses.....	777	
Medical instruments and supplies:		
Surgical and medical instruments.....	777	
Surgical appliances and supplies.....	777	
Dental equipment and supplies.....	777	
Ophthalmic goods.....	777	
Photographic equipment.....	785	
Watches and clocks:		
Watches and clocks.....	785	
Watchcases.....	785	
Group 39—MISCELLANEOUS MANUFACTURES		
Jewelry and silverware:		
Jewelry (precious metal).....	793	
Jewelers' findings.....	793	
Lapidary work.....	793	
Silverware and plated ware.....	793	
Musical instruments and parts:		
Pianos.....	798	
Organs.....	798	
Piano and organ parts.....	798	
Musical instruments, n.e.c.....	798	
Toys and sporting goods:		
Games and toys, n.e.c.....	798	
Dolls.....	798	
Childrens' vehicles.....	798	
Sporting and athletic goods.....	798	
Office supplies:		
Pens and mechanical pencils.....	806	
Lead pencils and crayons.....	806	
Hand stamps and stencils.....	806	
Artists' materials.....	806	
Carbon paper and inked ribbons.....	806	
Costume jewelry and notions:		
Costume jewelry.....	806	
Artificial flowers.....	806	
Buttons.....	806	
Needles, pins, and fasteners.....	806	
Plastics products, n.e.c.....	815	
Miscellaneous manufactures:		
Brooms and brushes.....	815	
Cork products.....	815	
Matches.....	815	
Candles.....	815	
Fireworks and pyrotechnics.....	815	
Jewelry and instrument cases.....	815	
Lamp shades.....	815	
Morticians' goods.....	815	
Beauty and barber-shop equipment.....	824	
Furs, dressed and dyed.....	824	
Signs and advertising displays.....	824	
Hair work.....	824	
Umbrellas, parasols, and canes.....	824	
Tobacco pipes.....	824	
Soda-fountain and bar equipment.....	824	
Models and patterns (except paper).....	824	
Small arms.....	824	
Small arms ammunition.....	824	
Miscellaneous products, n.e.c.....	824	
MOTION PICTURES		
Motion pictures.....		835

GENERAL EXPLANATIONS

1. Historical Note

The 1947 Census of Manufactures is the first to be taken since 1939. The first Census of Manufactures covered the year 1809 and a census was taken at 10-year intervals in connection with the Decennial Census of Population up to and including 1899, with the exception of 1829. It was conducted at 5-year intervals from 1904 through 1919, and every other year from 1921 through 1939 *but was suspended during* the war period. The 1947 census was authorized by the Fifteenth Census Act of June 18, 1929 (46 Stat. 21); present legislation provides for a Census of Manufactures to cover the year 1953 and every fifth year thereafter.

2. Area and Period Covered

The 1947 census covered manufacturing activity in the 48 States and the District of Columbia. Manufacturing activities in Alaska, Hawaii, and Puerto Rico, which had been included in the decennial censuses of 1929 and 1939, were not covered in this census.

The census covered activity during the calendar year 1947, and, as in the past, manufacturers were strongly urged to file a calendar-year report regardless of whether their records were maintained on a fiscal-year basis. Reports were obtained on a calendar-year basis from the great majority of companies in all industries except a few such as fertilizers and agricultural machinery, where the use of a 12-month period other than the calendar year is common and statistics collected by other agencies are on a fiscal-year basis. In the relatively small number of cases where the individual manufacturer was granted permission to submit a fiscal-year report, he was still required to report the employment and pay roll data on a calendar-year basis. In view of the fact that the year 1947 and the months immediately preceding and following that year constituted a period of sustained high activity in most industries, comparability of production with employment, or value added by manufacture with wages, is not appreciably affected by the fact that in some instances shipments were reported for a 12-month period different from the calendar year.

3. The Census Mailing List

In order to secure a complete list of manufacturing establishments, the 1939 census lists were sup-

plemented by lists supplied by other Government agencies, particularly the war agencies, and by trade associations. The consolidated census list was, finally, matched against the master file of the Bureau of Old-Age and Survivors Insurance of the Social Security Administration. This file was never before available for the Census of Manufactures. In all, more than a million names were processed in the course of developing the census mailing list. While this composite list was virtually complete, as subsequent tests showed, it contained a large number of nonmanufacturing, duplicate, and out-of-business establishments and it was therefore necessary to provide for a further elimination of duplicates and nonmanufacturers as well as to obtain enough production information to permit mailing of the correct form to each manufacturing establishment that operated during 1947.

For this purpose, a preliminary canvass, or "pre-canvass," of all manufacturing establishments was undertaken. The prec canvass was begun in August of 1947 and was substantially completed with the help of local postoffices and the Field Offices of the Census Bureau by the end of that year. In total, after eliminating obvious duplicates, approximately 525,000 prec canvass cards were mailed. The prec canvass provided the Bureau with the following information: Name, address, and corporate affiliation of the establishment; manufacturing processes used and type of products made; and the approximate size of the establishment as measured by its employment for a recent date. The production information permitted the elimination of thousands of nonmanufacturing establishments and, in most cases, the mailing of the appropriate report form to genuine manufacturers. Names were not eliminated as duplicates or nonmanufacturers, however, unless the evidence from the prec canvass was conclusive.

4. The Canvass

While the 1947 census report forms were distributed and for the most part returned by mail, manufacturers who did not send in a report or whose reports were incomplete or otherwise inadequate were reached by telephone or personal visit from the Field Offices of the Bureau. An important exception to this procedure was made in the case of the highly mobile eastern lumber mills which were canvassed entirely by field enumeration.

Mailing was begun late in January 1948, and continued through the first quarter of the year, with a supplementary mailing of 50,000 forms in midsummer. The field follow-up began in June and was completed by the end of the year. In all, about 325,000 report forms were mailed to possible manufacturers (exclusive of eastern sawmills). This large number was included in the original mailing to avoid the possibility of omission, even though it was known that a considerable proportion of these would ultimately prove to be duplicate names, nonmanufacturing establishments, or firms which had discontinued operations prior to 1947. In fact, only slightly more than 225,000 of these establishments were tabulated in the census. In addition, of the nearly 60,000 eastern sawmills contacted by the Field Offices, some 15,000 were included in the census tabulations of plant statistics, bringing the total number of establishments included in the census to nearly 242,000. Some 10,000 of the sawmills enumerated did not operate in 1947, and from the remaining 35,000 active mills only lumber production figures were obtained.

For the first time in the history of the Census of Manufactures, the Bureau is obtaining a direct measure of the coverage of such a census. Preliminary results of an intensive enumeration in representative sample areas indicate that for the country as a whole the census obtained and included in its tabulations reports from over 98 percent of all manufacturing employees as defined for census purposes. A large proportion of the remainder, or 200,000 employees not covered were found to be employed in small establishments which also engaged at the same location in retail trade, custom work, repair services, construction, or other non-manufacturing activities. The classification of such "marginal" establishments is difficult at best and, for those located in the coverage check, a definitive classification was made only after intensive correspondence or special interviews by field agents of the Bureau. Since, it was obviously impossible to devote as much attention to the thousands of reports received from similar establishments in the census proper, the census tabulations undoubtedly include some marginal establishments which, with more adequate information, would have been properly classified as nonmanufacturing. Final estimates and additional details on the test will be published in the General Summary Volume of the 1947 Census of Manufactures.

5. Definition of Establishment

To the extent possible, the Census of Manufactures is conducted on an establishment basis. As a rule, the term "establishment" signifies a single plant or factory and is not necessarily identical with the business unit or company which may consist of one or more

establishments. A company operating establishments at more than one location is required to submit a report for each location; also, companies engaged in distinctly different lines of activity at one location are required to submit separate reports if separate pay roll and inventory records are kept for each activity.

In practice, some flexibility was allowed in the application of these rules. Where a company did not keep separate records for two or more establishments engaged in the same line of activity and located within the same State and county, a consolidated report was usually accepted and the plants counted as a single establishment. In a very few cases where a company operated two or more plants engaged in the same line of activity within the same State but in different counties, a consolidated report was accepted but the company was requested to supply employment and pay roll figures for both establishments and all the operations of the establishment were apportioned on this basis. Where two or more plants were located in different States, separate reports were obtained, by estimate if necessary.

The requirement that distinct lines of activity at the same location be separately reported was also selectively applied. In particular instances, e.g., in the separation of blast furnaces from steel works, or that of pulp mills from paper mills—reporting manufacturers were required to provide separate reports and in many cases somewhat arbitrary values had to be assigned to materials transferred from one to another phase of an integrated industrial operation. For most industries outside the paper and products and some sections of the metals and products (including machinery) industries, consolidated reports were accepted and the plant classified in the industry accounting for the largest proportion of its shipments. Where, however, companies operated two or more establishments engaged in different lines of activity at different locations, separate reports were secured, even though this involved the assignment of somewhat arbitrary values for materials transferred from one plant to another.

In all instances in which a company operated more than one establishment as defined for census purposes, the company was considered as a multiunit company in the tabulation showing statistics by character of ownership and legal organization (chapter IV of the General Summary Volume). Conversely, a company operating only one manufacturing establishment and in addition one or more nonmanufacturing establishments was considered as an "independent" for purposes of this tabulation.

Where an establishment changed ownership during the year 1947 it was counted as a single establishment provided it continued to operate in the same line of

activity, although in some cases reports had to be secured from both owners and if these were received at wide intervals it was not feasible to tabulate them as one report.

6. Establishments Covered in the Census—Type

The 1947 Census of Manufactures covers all establishments primarily engaged in manufacturing as defined in the Standard Industrial Classification Manual, Volume I, Manufacturing Industries, dated November 1945, with certain exceptions as indicated below. A detailed comparison of the Census and Standard Industrial Classification systems, including differences within the manufacturing division, is shown in Appendix E.

The Standard Industrial Classification Manual describes manufacturing establishments as those engaged in the mechanical or chemical transformation of inorganic or organic substances into new products. These activities are usually carried on in plants, factories, or mills, which characteristically use power-driven machines and materials-handling equipment.

Manufacturing production is usually carried on for the wholesale market, for interplant transfer, or to order of industrial users rather than for direct sale to the household consumer. Some manufacturers in a few industries sell chiefly at retail to domestic consumers through the mail, through house-to-house routes, or through salesmen. Some activities of a service nature (enameling, china decorating, etc.), when performed primarily for the trade are included in the manufacturing division; when performed primarily to the order of the household consumer, they are considered nonmanufacturing.

There are indicated below the more important instances in which both census and standard classification may differ from common usage as well as those few instances in which census procedure differs from standard. A fuller discussion of such differences will be found in Appendixes C and E, and in the introductory text for the industries affected (Industry Volume).

(a) The following types of activities are defined as nonmanufacturing by the Standard Industrial Classification and are also excluded from the Census of Manufactures:

Processing on farms if the raw materials are grown on the farm and if the manufacturing activities are on a small scale without extensive use of paid labor. Also custom milling, cotton ginning, and similar activities.

Dressing and beneficiating of ores, and the breaking, washing, and grading of coal.

Jobbing by establishments which do no manufacturing but assign materials to contractors to be fabricated by them; the Census of Manufactures does, however, include jobbing in the textile, apparel, and leather industries.

Manufacturing activities of certain establishments which sell most of their products at retail on the premises, e.g., single-shop retail bakeries.

Fabricating operations performed at the site of construction by contractors.

Production by public utilities of electric light and power or of heating, cooking, and illuminating gas distributed through mains.

Custom work to the individual order of household consumers, such as custom tailoring or woodworking.

Repair and other service activities except specified services performed "for the trade." Machine shops engaged exclusively or almost exclusively in repair work and railroad repair shops are also excluded.

Engineering, design, and experimental work, except in the aircraft industry, or when carried on at establishments primarily engaged in manufacturing activities.

Educational, eleemosynary, and penal institutions engaged in some manufacturing.

(b) The following types or activities, though not universally considered to be manufacturing, are so classified by the Standard Industrial Classification and are included in the Census of Manufactures:

- Printing
- Publishing
- Custom slaughtering
- Rice cleaning and polishing
- Scouring and combing textile fibers
- Apparel contracting
- Wood preserving
- Electroplating, plating, and metal polishing
- Galvanizing
- Job stamping, casting, machining
- Lapidary work

(c) The following types of establishments are classified as manufacturing by the Standard Industrial Classification but excluded from the census, mainly because of the difficulties involved in locating the plants or securing reports in the detail required for a Census of Manufactures:

Establishments with no employees in 1947. An exception to this policy was made in the case of textile, apparel, and leather jobbers (see *d* below).

Sawmills producing less than 200 M ft. b.m. of lumber in 1947. Statistics on lumber production were, however, obtained from all such establishments.

Logging camps and logging contractors.

Fire distilling of gum naval stores.

Establishments producing cut-stone and stone products from own quarried stone.

Establishments primarily rebuilding motor vehicle parts.

(d) The following types of establishments were covered in the census though not classified as manufacturing by the Standard Industrial Classification:

Textile, apparel, and leather jobbers who do no manufacturing but who assign material to contract factories for fabrication. These were included for the purpose of providing complete information on materials, products, and value added by manufacture.

Establishments producing manufactured dairy products but also engaged in distributing fluid milk were canvassed in the census but are not included in group totals or in any of the tables in the General Summary or State Volumes. These are shown separately in the industry reports, however, primarily for the purpose of obtaining commodity statistics.

Motion picture producers and establishments processing films for motion picture producers reported in the census and statistics for these establishments are shown in the Industry Volume but are not included in group totals or in any of the tables in the General Summary or State Volumes.

(e) Military arsenals, Navy yards, and Government printing establishments were not included in the census.

7. Establishments Covered in the Census— Comparison With Other Figures

Despite the application of fairly uniform definitions of manufacturing activity, the 1947 census figures differ, in some cases rather markedly, as to region and industry from those published by other Federal agencies for the same year. These differences reflect in large part the greater emphasis in the census on securing separate reports for each establishment of companies with more than one plant, thus permitting more accurate geographic breakdowns and the exclusion from the census of nonmanufacturing activities (mining, transportation, distribution, etc.) of such companies at locations other than the manufacturing plant, and in some instances the exclusion of "general office" activities at the plant itself. The exclusion of such nonmanufacturing activities from the census is facilitated by the fact that all large manufacturers are required to submit for each establishment detailed information on input of materials and production of commodities.

Also, the greater detail on production and materials consumption received in the 1947 Census of Manufactures makes possible more rigid application of the *Standard Industrial Classification* rules which provide for the exclusion from manufacturing of establishments producing on a custom basis or for retail sale on the premises and of establishments engaged primarily in repair work. This factor eliminated from the census a large number of nonmanufacturing establishments. In terms of employment, the exclusion of nonmanufacturing activities was less consequential.

A minor portion of the difference between census and other figures arose from the fact that the 1947 census did not cover several manufacturing activities (see Section 6, item c), of which logging camps and logging contractors accounted for the largest number of employees.

For these reasons, the 1947 census employment figures for the United States as a whole and for most

of the States are somewhat lower than those published by other agencies. Census figures, however, are somewhat higher in a comparison of census and other figures for a number of States—usually the smaller States—and in many local areas. A comparison of census and other figures for a number of cities and counties indicates a tendency for census figures to be lower in central cities and higher in surrounding areas.

8. Change in Scope Between 1939 and 1947

In 1939 and earlier biennial censuses, establishments having less than \$5,000 value of products were designated as out of the scope of the Census of Manufactures. In the 1947 census, a different procedure was followed. No value size limit was used but, instead, no attempt was made to canvass establishments known to have had no employees during 1947, and all reports received from such establishments were discarded before tabulation. The basic reason for this decision was that in the mail canvass of 1947, the main reliance for coverage of small establishments was on the files maintained by the Bureau of Old-Age and Survivors Insurance of the Social Security Administration, which do not include establishments having no employees.

This change in procedure has not, however, appreciably affected the comparability of the figures for 1947 with those for earlier years except for the figures on number of establishments. In 1939, establishments with no employees amounted to fewer than 5,000 and accounted for about \$125 million out of a total of \$25 billion value added by manufacture. However, a substantial portion of this value added was accounted for by a small number of jobbers of the type also included in 1947. On the other hand, a partial study of the 1947 returns indicates that some 10,000 establishments with products valued at less than \$5,000 and accounting for about \$15 million value added were tabulated in that year. Moreover, the price level of manufactured goods approximately doubled between 1939 and 1947, and therefore a minimum size limit of \$10,000 for 1947 would correspond in terms of manufacturing activities to the \$5,000 size limit used in 1939. In 1947, there were tabulated some 23,000 establishments shipping products valued at less than \$10,000 and accounting in total for less than \$75 million value added by manufacture. Accordingly, it will be seen that, on balance, about 18,000 of the 67,000 increase in the number of establishments between 1939 and 1947 is accounted for by the exclusion of no-employee establishments and the inclusion of other establishments whose scale of activities was so limited as to have been eliminated from the 1939

census, but that other census figures are not thereby appreciably affected.

Establishments primarily engaged in the following activities were included in manufacturing industries in 1947 but were considered as nonmanufacturing in 1939:

Coffee and spice, roasting and grinding
Tobacco stemming and redrying

The 1947 tabulations included 400 coffee roasters (included in industry 2099, Miscellaneous Food Preparations, who employed 20,000 persons and accounted for \$75 million of value added; and 163 tobacco stemmers and redryers, who employed nearly 26,000 persons and contributed \$72 million to the value added by manufacturing.

The 1947 census excluded the following types of establishments which were included in the 1939 census:

Dried fruit packers
Retail establishments manufacturing ice cream
Independent retail bakeries, selling through a single retail outlet and not operating any house-to-house routes
Logging camps and logging camp operations
Contractors and building materials dealers primarily engaged in mixing and delivering ready-mixed concrete
Quarrying departments of establishments both quarrying limestone and producing hydraulic cement and lime. The hydraulic cement and lime plants of the combined operations were retained in manufacturing
Quarries also engaged in producing cut-stone and stone products
Machine shops engaged exclusively or almost exclusively in repair work

Except for logging camps and logging camp contractors, the types of establishments listed above were classified as nonmanufacturing in 1947 in accordance with standard classification procedure. In all, some 10,400 establishments (including 7,700 retail bakeries), employing 78,400 wage earners and contributing \$96 million to value added by manufacture in that year, were excluded from the retabulation of the 1939 returns incorporated in the 1947 census volumes. In 1947, sawmills producing less than 200 M ft. b.m., in that year were excluded from the census but this cut-off is believed to be the approximate equivalent of the \$5,000 cut-off in that industry in 1939.

9. Definition of Industries

An industry consists of a group of establishments primarily engaged in the same line or similar lines of economic activity. In the manufacturing field, the line of activity is generally defined in terms of the products made or the processes of manufacture used. On this basis, there may theoretically be thousands of manufacturing industries corresponding to the differ-

ent types of products and the processes used in their manufacture. However, industries established in this manner would be too numerous to deal with and, further, would not generally satisfy the criteria considered essential in the creation of a good system of industry classification.

Except for certain relatively minor modifications, the 453 manufacturing industry classifications used in this census were derived from the 1945 Standard Industrial Classification Manual issued by the Bureau of the Budget. The following general principles were followed in the preparation of this system of industry classification:

- (1) The classification should conform to the existing structure of American industry;
- (2) The reporting units to be classified are establishments (for definition of establishment, cf. Section 5 above), rather than legal entities or companies; each establishment is to be classified according to its major activity;
- (3) To be recognized as an industry, each group of establishments must have significance from the standpoint of the number of establishments, volume of business, employment and pay rolls, and other important economic features.

In addition to the above principles, it is important that an industry comprise a group of establishments: (a) whose output consists, to a relatively large extent, of the products defining the industry; and (b) whose output of the products defining the industry accounts for a relatively high proportion of the total output of those products by establishments in all industries. Finally, (c) the output of the bulk of the establishments should be distributed among the various products or groups of products defining the industry; if any considerable number of establishments concentrated on the production of a single product within the group of products defining the industry, such concentration would constitute the basis for a further subdivision of the industry.

10. Classification of Establishments Into Industries

An establishment is assigned to, or classified in, an industry, generally on the basis of the principal products made. The products made by each establishment are grouped according to the industries to which they "belong" (see Appendix C, Industry Descriptions) and the group of products accounting for the principal portion of the total value of shipments of the establishment determines its industry classification. This group of products is said to be the primary products of the establishment as well as of the industry which it defines; all other products made by establishments classified in the industry are referred to as secondary products.

In some instances, a knowledge of the types and value of products shipped is not sufficient for deter-

mining the proper industry classification of an establishment. It may also be necessary to know the process used in the manufacture of the products, or the materials used, or other characteristics of the operations of the establishment. For example, an establishment primarily engaged in producing insulated copper wire is classified in Industry 3392, Wire Drawing, if it purchases copper rods, draws the rods into wire, and insulates the wire, but in Industry 3631, Insulated Wire and Cable, if it purchases copper wire and insulates it.

While some establishments produce only the primary products of the industry in which they are classified, this is rarely true of all the establishments in an industry. The general statistics (employment, pay rolls, value added by manufacture, etc.) shown for an industry, therefore, reflect not only the primary activities of the establishments in that industry, but also their activities in the manufacture of secondary products and, for that matter, their auxiliary non-manufacturing activities. For this reason the industry statistics shown throughout the census volumes and, in particular, in tables 1 through 4 of each industry report in the Industry Volume, usually cannot be directly related to the product statistics (table 6 in each industry report) showing shipments by all industries of the primary products of that industry. The extent to which industry and product statistics can be matched with each other is indicated in a transition table (table 5) which shows on the one hand the proportions by value of the primary and secondary products shipped by the industry and on the other, the value of the primary products of the industry made as secondary products in other industries.

In a classification system dividing the manufacturing field into some 450 separate industries to which establishments are assigned on the basis of their principal activity, a certain amount of overlapping production by one industry of products of other industries, is bound to arise. Such overlapping is particularly prevalent in such industry groups as apparel, furniture, and metal fabricating, where establishments within each group, employing the same basic types of machinery and fabricating operations, produce a wide variety of products belonging to a number of different industries. For 1947, the average amount of overlapping for all industries was approximately 10 percent in both directions, compared with from 15 to 20 percent for the furniture and metal fabricating (except transportation equipment) groups of industries. The greater the degree of overlapping, the less meaningful are the relationships between general and product statistics for the particular industry. Measures of overlapping production for each of the 1947 industries are shown in Appendix C, Industry

Descriptions; these measures are derived from table 5 of the Industry reports. In a number of instances, the Standard Industrial Classification was modified for use in this census to minimize the extent of overlapping for certain industries. (See 1947 Census Deviations from Standard Industrial Classification, Appendix E.) As indicated in Section 5, Definition of Establishment, the census attempts for some industries to secure separate reports for large plants engaged in more than one line of activity in order to compile "cleaner" industry statistics by reducing the extent of overlapping production in each of the industries affected.

As the number of separate industry classifications for manufacturing has increased over the years there has been a greater likelihood of year-to-year shifts of the industry to which a particular establishment is assigned on the basis of the principal products made. An establishment whose value of output consists of 55 percent creamery butter and 45 percent natural cheese in one year is classified in the creamery butter industry for that year; if, in another year, the proportions are reversed (45 percent creamery butter and 55 percent natural cheese), it appropriately belongs in the natural cheese industry. Such shifts, when affecting a number of large establishments, may be reflected in an apparent abnormal increase or decline in activity for the industries affected, whereas, in fact there may have been little change.

Census experience in applying the industrial classification system to establishment reports indicate that on the whole the system does conform to the structure of industry. However, a number of industries were found to be of relatively little economic significance. Some of them, such as Industry 2014, Sausage Casings; 2296, Linen Goods; 2864, Natural Dyeing Materials; and 3335, Primary Refining of Magnesium, were merged with other industries. (For a complete list, see Comparison of 1947 Census with Standard Industrial Classification, Appendix E.) No attempt was made to make similar combinations for a number of other relatively unimportant industries.

There were also difficulties encountered in the assignment of industry classifications to certain types of establishments. In some of the borderline areas between manufacturing and other major divisions of the classification system, it is not possible to attain the same degree of precision in assignment of establishments to industry classifications, nor as complete industry coverage as in other areas of the manufacturing division. This is particularly true for manufacturing industries, products of which are also made to a significant extent by establishments engaged primarily in nonmanufacturing activities. Since no reports were obtained from such primarily non-manufacturing establishments which fall outside the

scope of the Census of Manufactures, national totals for the output of these products as published in the table 6's will be understated to the extent of their production. Where this type of understatement is important, e.g., venetian blinds, awnings, millwork, dried fruit, and prepared feeds, it is pointed out in the textual material preceding the tables for each of the industries affected.

11. Groups of Industries

The Standard Industrial Classification system used in this census groups the 450-odd individual manufacturing industries mentioned above into 141 subgroups comprising one individual industry or a small number of closely related individual industries and further into 20 major industry groups comprising several industry subgroups. Each individual industry is designated by a 4-digit code, each industry subgroup by a 3-digit code identical with the first three digits of its component industries, and each major industry group by a 2-digit code identical with the first two digits of its component industry subgroups. For brevity, individual industries are sometimes referred to as 4-digit industries, subgroups as 3-digit industries, and major industry groups as 2-digit industries.

In all the summary industry tables as well as in the State or area tables by industry, subtotals for industry subgroups and major groups are shown where possible, and codes for each industry level are shown at the left of the industry name. Where a 3-digit industry subgroup comprises only one 4-digit industry, only the 4-digit industry name and code are shown. In order to save space in these tables, shorter titles have been substituted for many of the titles shown in the Standard Industrial Classification.

As indicated in Section 14 below, a more prominent place has been given to groups of industries in this as compared with earlier censuses. The principal reasons for this change in emphasis are threefold: (1) Most important for census purposes, States, or local areas can frequently be compared at broader industry levels, where no comparative data can be published at the 4-digit level; (2) the census data are frequently used as "bench-marks" for other series on manufacturing for which the coverage is not adequate or the production data not sufficiently complete to justify publication of the statistics on a 4-digit basis; and (3) the limitations attaching to year-to-year comparisons of 4-digit statistics (cf. Section 10 above) do not apply in equal degree to 3- and 2-digit statistics. A minor shift in the character of an establishment's production may change its 4-digit industry classification, where its 3-digit classification is frequently, and its 2-digit classification nearly always, unaffected.

12. Statistics for 1939 and Earlier Years

The changes in the scope of the census between 1939 and 1947 have already been discussed in Section 8 above. No attempt was made to eliminate from the 1939 tabulations data for establishments reporting no employees in that year, but, as indicated, this adjustment would have been small and is partly offset by the inclusion in the 1947 census of data for establishments whose scale of activity was so small as to have been eliminated by the \$5,000 value of products limitation in 1939 and earlier years. It was, of course, impossible to include in the 1939 tables any figures for the two industries (coffee and spice roasting and grinding and tobacco stemming and redrying) covered in 1947 but not in 1939. On the other hand, the statistics for industries covered in 1939 but not in 1947 have been eliminated from the 1939 tables. In some instances the 1939 returns did not supply sufficient information to permit a completely satisfactory distinction between "manufacturing" and "non-manufacturing" activities as defined in 1947; the lack of comparability between 1947 and 1939 statistics arising from this difficulty would be small on an over-all basis, though in small counties or industry-State combinations there might well be some distortion of the 1939-1947 relationship introduced by differences in the classification of identical establishments in the two years.

Within the manufacturing area proper, there were significant changes in industry definitions and in the criteria used for classifying establishments into individual industries. These changes are described in full in Appendix D. As in former years, the most basic general statistics (number of establishments, production workers and their wages, cost of materials, value of products, and value added by manufacture) were retabulated for all industries affected by changes in definition. Other data such as the number and salaries and wages of all employees, inventories, capital expenditures, etc., were not retabulated for 1939. Total employment and salaries and wages are shown for all industries not affected by changes in definition and estimated figures are shown for States and metropolitan areas; for all other comparable 1939 general statistics, the reader is referred to the 1939 census volumes.

Whenever possible, these basic general statistics, in addition to those for total employment and pay rolls, have been shown for census years back to 1899. In general, the series for each industry was carried back as long as comparability was not affected by more than 10 percent as a result of the change in definition. Comparability was measured in terms of the difference between the original and retabulated value added by manufacture figures for the year in

question. If the difference was less than 10 percent, the earlier years were considered comparable with the later years and were shown in the series; if the difference exceeded 10 percent, the earlier years were considered noncomparable and the series was discontinued at the point of change. It was not possible to apply this 10 percent rule to industries for which the schedules were not retabulated following changes in definition, and in such cases the determination of comparability was usually based on the relative importance of the products involved in the change for the year in question. Figures for years earlier than 1939 were taken from the published volumes. In general, significant differences resulting from changes in definition have been explained in headnotes or footnotes; minor changes are merely indicated by the footnote "Revised." In a few instances, figures for some years have been eliminated to save space.

In a number of instances, comparable 1939 industry data are not available because of differences in census procedure in the two years, e.g., in 1947 separate reports were required of all manufacturers producing paper and board and further converting them into paper and board products in an integrated operation. In 1939, many such manufacturers filed consolidated reports and the integrated operation was classified in the Paper and Board Industry. It was not, however, feasible to retabulate the 1939 reports. Consequently, relative to 1947, the 1939 employment and other industry figures are overstated for the Paper and Board Industry and understated for some of the converting industries. The general statistics for the major industry (2-digit) group, Paper and Paper Products, are, however, comparable for the two years. All such instances are noted in the text for the industries affected.

Two instances of changes in census procedure should be noted particularly since they affect the industry figures for nearly all States. In the bakery industries, 1939 production-worker employment, the only 1939 figure shown by State and by industry, is high relative to 1947 because in the earlier year driver-salesmen were classified as production workers whereas in 1947 they have been included with salaried employees. The effect of this change may be indicated by noting that for the country as a whole production-worker employment "declined" from 180,000 to 150,000 between 1939 and 1947, whereas total employment rose from 217,000 to 233,000. Value added by manufacture was not, of course, affected by this change in the method of reporting. In the dairy products industries the increase in both value added and employment from 1939 to 1947 is somewhat understated because in 1939 separate reports were obtained from the manufacturing departments of plants distributing fluid milk whereas in 1947 the

whole plant was treated as "nonmanufacturing" in accordance with standard classification procedures, and excluded from the tables presented in the State and General Summary Volumes. In consequence, the 1939 figures may be too high by 25 percent as compared with 1947. For the Food and Kindred Products Industry Group as a whole the effect of these two factors is to overstate the 1939 production-worker employment by 7 to 8 percent relative to 1947.

It was not feasible to retabulate 1939 data for the State Volume even in the detail employed for industries. On an individual industry basis, it was feasible to retabulate only production-worker employment and that only for the State (table 4); consequently, no 1939 industry comparisons are available for metropolitan areas or principal industrial counties. Value added by manufacture was also retabulated for the State by major industry group (table 3) and for each of its subdivisions on an over-all basis. For the State and its standard metropolitan areas (table 1), wages of production workers were retabulated and the number and salaries and wages of all employees were estimated for 1939 on the basis of their relationship to production workers and wages in that year.

13. The Census Report Form

Although only one form was required from each establishment, the diversity of manufacturing activities made it necessary to use more than 200 different report forms to canvass the various industries included in the 1947 census. For convenience, however, these may be classified into four types:

(a) Most of the 200 forms represented variations of the "standard" form. This form called for detailed general statistics, and in addition contained inquiries adapted to the requirements for information on production of commodities, materials consumption, and equipment in use for one or several manufacturing industries (cf. Appendix B).

The production and materials section of each form was the result of intensive study of the 1939 census reports and extensive consultation with other Federal agencies, manufacturers, and trade associations in an effort to provide the most useful information consistent with the ability of manufacturers to report the desired data.

Nearly two-thirds of all manufacturers reporting in the census used one variety or other of the standard form. One variety of the standard form was the "general" schedule which was used in a number of industries producing commodities which could not be specified in significant detail.

(b) A "short" form, designed to cover very small plants outside the lumber industry was originally mailed to 15,000 establishments which reported in the precensus that they employed only one person during 1947 or went out of business in that year, but was finally used for approximately 40,000 establishments accounting for 200,000 employees or 1.4 percent of total employment in manufacturing. This form (cf. Appendix B) contained a product section similar to that on the "general" schedule but requested in addition only the following general information: Total employment as of four months of

the year, salaries and wages, and total cost of materials. In order to simplify the presentation of the main census tables, production workers and wages were estimated by assuming that there were no salaried employees in establishments with fewer than ten employees, and by applying ratios derived from the 1939 census in the few cases in which employment was ten or more. Man-hours were derived by assuming a 2,000-hour year for production workers so estimated.

(c) A short form was specifically designed for sawmills producing between 200 M ft. b.m. and 1,000 M ft. b.m. of lumber during 1947. The form contained a product inquiry somewhat less detailed than that used by larger mills, and a materials consumed inquiry identical with that on the standard lumber form, but the general information requested was the same as that requested on the short form, except that total employment was requested for each month of the year. This form was used by 10,000 sawmills accounting for 75,000 employees. All employees reported on this form were assumed to be production workers and man-hours were again assumed to average 2,000 per employee-year.

(d) A short form was also designed for the use of smaller establishments in all printing and publishing industries, except book and magazine publishing. This form was used by some 15,000 establishments with 75,000 employees, most of which had reported in the precensus that they employed more than one but less than ten employees in 1947. (Establishments employing one person in the printing and publishing industries received the regular short form.) The product section of this form was again less detailed than the standard form for these industries, and the general information requested was the same as that contained in the regular short form. Since, however, employment is generally stable in these industries employment data were estimated and tabulated for the eight months not reported on the form. The ratio of production workers to total employees obtaining for the smaller establishments in each of these industries in 1939 was used to derive the number of production workers, their wages and hours of work.

The practical importance of the use of these short forms is as follows: The statistics on number of establishments, average employment, and pay rolls, cost of materials, value of shipments, and value added by manufacture, where shown, represent all establishments covered in the census; the monthly employment statistics represent all establishments reporting on the standard forms and the short sawmill and printing forms; all other general statistics cover only establishments reporting on the standard forms. Where figures for which coverage is not complete are shown, the tables either include an appropriate measure of coverage or a cross-reference to another table which does include such a measure.

The principal exception to this last statement is that for expenditures for plant and equipment. Since this item was tabulated by State and by industry it was not considered feasible to include a coverage measure in every instance in which this figure is shown. In using the expenditures figures it should, therefore, be noted that establishments reporting on this item accounted for 97.5 percent of the employment in all census establishments, and that for the United States as a whole the percent coverage is bet-

ter than 95 percent for all major industry groups, except Lumber, and Printing and Publishing, and on an individual industry basis is less than 90 percent only for: Sawmills (81 percent), Commercial Printing (85 percent), Machine Shops (84 percent) and for 22 smaller industries whose aggregate employment was less than 200,000 in 1947.

Product cards were not punched for establishments reporting on the short form, and in consequence all product detail was lost in tabulation. This accounts for a substantial portion of the "products not specified by kind" in certain industries (table 6 of the Industry Volume).

Although short forms were received from establishments in nearly all industries, it was considered desirable for purposes of tabulation and presentation, to eliminate them in those industries containing only a handful of such forms. In all such instances a standard report was built up from the basic information reported on the short form. This accounts for the fact that only about 150 industries are shown as including short form reports. The percentage of estimate involved in this procedure was usually a fraction of 1 percent.

14. Disclosure of Data for Individual Companies

The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported by individual companies. In this as in all recent censuses the practice has been as follows:

(a) It is not a disclosure to show the number of establishments, even down to one, as to locality, industry classification, or approximate size;

(b) Employment figures may be shown for any industry or locality represented by three or more companies;

(c) Value figures may be shown for any industry, locality or product represented by three or more companies; provided also that one or two companies do not produce a very large proportion of the combined output of these companies;

(d) Care is taken to provide against the probability of disclosure by subtraction. If, for example, the subtraction of the statistics for a city from that for a county in which it is located would isolate a group of establishments not meeting the tests indicated in (b) and (c), the data for the city are withheld.

An important change was, however, made in the handling of data which could not be shown in full detail in this census as compared with earlier censuses. Previously, preference was given to State-by-industry figures. Consequently, regional figures for an industry were available only if all States within a region were shown separately, or if the sum of the States which could not be shown separately did not constitute a disclosure. Conversely, industry group data were available for a State only if all industries within the group were shown separately or if the sum of the industries which could not be shown did not constitute a disclosure.

In the 1947 census, preference has been given to regions and the nine Census divisions over individual States in table 2 of each Industry report and to industry groups over individual industries in table 4 of each State report. This change in procedure was made because (1) it was considered preferable to show regional data for an industry even at the cost of withholding data for another, usually the least important, State in a region, rather than to show all publishable data for the individual States and group the disclosure States throughout the United States in an "all other" category; and (2) by giving preference to industry group statistics over individual industries within each State, the extent to which individual States can be compared on an industry classification basis is greatly increased. For example, it is frequently possible to compare data for two States at the 3-digit industry group level when no comparative data can be published for any 4-digit industry component of this group.

Table 2 of each Industry report shows summary general statistics for each geographic Census division and State for which this information could be shown. For industries with few establishments or considerable geographic concentration it has frequently been necessary to use geographic regions broader than the traditional nine Census divisions, in order to show all plants by some geographic location. For this purpose the following combinations of Census divisions have been used in the Industry reports:

Northeast	South
New England	South Atlantic
Middle Atlantic	East South Central
North Central	West South Central
East North Central	West
West North Central	Mountain
	Pacific

For each producing State not shown separately in table 2 of the Industry reports, a footnote indicates the number of establishments and, ordinarily, in parentheses, the number of employees for States represented by three or more companies. In some instances, however, the number of employees also had to be withheld in order to avoid disclosing (by subtraction) the number of employees in other States represented by only one or two companies.

Table 4 of each State report shows the industry data for the State. As indicated above, in constructing this table preference was given primarily to the Major Industry (2-digit) Group, for example, Food and Kindred Products; secondarily, to the 3-digit industry group, Dairy Products; and lastly, to the individual (4-digit) industry, Creamery Butter. Where information cannot be shown for a 4-digit industry, it is also withheld for another industry, usually the

least important, in the same 3-digit group, in order to avoid disclosure by subtraction. Similarly, information for a 3-digit group will often be withheld to permit the publication of data for the 2-digit major group in the same State. When 3-digit information is withheld for this reason, it will sometimes happen that information for one or more 4-digit industries within that 3-digit group can be shown without prejudice to the 2-digit major group. This will explain many cases in which a 4-digit industry is shown and the corresponding 3-digit industry suppressed in many tables. In other instances, data for a 4-digit industry only are shown because this was the only 4-digit industry for which reports were received within the 3-digit group.

Table 6 of Chapter I of each census volume shows the number of production workers and value added by manufacture for industries and industry groups and major groups by geographic division and region.

It is obvious that table 2 of the Industry reports and table 4 of the State reports could not be prepared independently. For example, figures for a 4-digit industry are frequently eliminated from table 4 of the State report, not to protect the 3-digit information for the State but to protect the 4-digit information for the region (table 2 of the Industry reports). Similarly, 2- and 3-digit information for the State is sometimes withheld to protect 2- or 3-digit figures for the division in table 6, Chapter I of each volume.

In addition to the preference of regions over States, the following priorities were assigned to the lesser geographic areas: States were given preference over standard metropolitan areas (table 5 in the State reports), standard metropolitan areas over principal industrial counties (table 6 in the State reports), principal industrial counties over other counties (table 2 in the State reports), and counties over urban places (table 2 in the State reports).

Information has also been withheld in all the tables mentioned in this section for those 4-digit industries and 3-digit groups in which less than 100 manufacturing employees were reported. The reasons for this are threefold: Earlier census experience shows that as often as not information cannot be shown for smaller "publication cells" without disclosing the operations of individual establishments and some time and money were saved by limiting the "disclosure analysis" required for such cells. Secondly, it was considered desirable to omit lines of relatively little significance in order to make the State tables easier to use. Finally, a not-inconsiderable number of small establishments were inadvertently omitted from the 1947 census (sec. 4) and, it was not possible to review the reports of smaller establishments with the care given to the larger plants; on an industry or

State basis, the effect of these considerations is negligible, but the data for any particular "cell" consisting of a small number of small plants are subject to some qualification.

The effect of the change in the Bureau's handling of the "disclosure" problem is illustrated by the following table:

ITEM	Publishable under 1939 "disclosure" rules		Actually published under 1947 "disclosure" rules	
	Number of lines	Percent of value added by manufacture	Number of lines	Percent of value added by manufacture
California:				
2-digit groups.....	9	33	17	97
3-digit subgroups.....	91	70	99	90
4-digit industries.....	327	97	201	79
Louisiana:				
2-digit groups.....	9	73	17	100
3-digit subgroups.....	40	71	43	92
4-digit industries.....	82	94	43	62
Maryland:				
2-digit groups.....	15	90	20	100
3-digit subgroups.....	51	36	66	55
4-digit industries.....	131	45	77	38

If, as in earlier years, preference had been given to States and individual industries, statistics could have been shown for 327 California industries accounting for 97 percent of the value added by manufacture for the State; whereas, statistics have actually been shown for 201 industries accounting for 79 percent of the State's value added. On the other hand, 3-digit information has been published for 90 percent as against 70 percent and 2-digit information for 97 percent as against 33 percent of the State's value added under the procedures followed in earlier years. At the same time, industry information has frequently been shown for the Pacific Division, where otherwise it would have been necessary to include the data for Washington or Oregon or both States and in some cases the data for one or more of the Mountain States in an "All other States" total. In the case of California, the most important industrial State in a division consisting of only three States, most of the "suppressions" have been made in order to protect the divisional or regional data for individual industries, rather than to protect the industry group data for the State. Since Maryland is included in a division consisting of nine States, most of the "suppressions" in this State have been made to protect the industry group data for the State itself. In these three States the number of lines omitted because they covered fewer than 100 employees ranged from 16 to 23, but in no case was the value added by manufacture for all omitted lines as much as one-half of one percent of the State total.

Under the 1947 disclosure procedures, comparative industry group data for these three States are available except for three industry groups accounting for less than 3 percent of California's value added,

whereas under the procedures used in earlier years, comparative data at any industry level would have been available in less than half the cases in terms of value added.

15. Standard Metropolitan Areas

In addition to the legally constituted units—States, counties, cities—Census of Manufactures statistics have been tabulated for those standard metropolitan areas having 40,000 or more manufacturing employees in 1947. The standard metropolitan areas replace the industrial areas shown in earlier censuses. Industrial areas, as defined in previous years, were groups of contiguous counties having large numbers of manufacturing wage earners. The standard metropolitan areas, on the other hand, are integrated economic and social entities which contain not only highly industrialized counties but also adjoining counties which, though primarily residential in character, contribute significantly to the industrial counties' labor force.

The areas used in this census represent a part of a larger list of standard metropolitan areas defined by the Census Bureau for use in the Censuses of Manufactures, Business, and Population and are recommended by an Inter-Agency Committee on Standard Metropolitan Areas of the Budget Bureau for use throughout the Federal Government. The general concept applied was that an area should be an integrated economic and social entity, with an attendant large volume of daily travel and communication between the central city and the outlying parts of the area. (This usually resulted in a standard metropolitan area considerably more restricted than the market or trading area.) The following principles were used in applying this general concept to the definition of individual areas:

(a) Each standard metropolitan area must include at least one city of 50,000 or more; the area as a whole must have a total population of at least 100,000. Areas may cross State lines.

(b) Where two cities of 50,000 or over are within 20 miles of each other, they will ordinarily be included in the same area.

(c) Each county included in a standard metropolitan area must have either 10,000 nonagricultural workers or 10 percent of the nonagricultural workers in the area, or more than one-half of the county's population must have been included in the "metropolitan district" as defined by the Bureau of the Census. In addition, nonagricultural workers must constitute at least two-thirds of the total employed labor force of the county.

(d) Each peripheral county included in a standard metropolitan area must be economically and socially integrated with the central counties of the area. A peripheral county has been regarded as integrated (1) if 15 percent of the workers living in the county work in the central county of the area, or (2) if 25 percent of those working in the county live in the central county of the area, or (3) if telephone calls from the county to the central county of the area average 4 or more toll calls per subscriber per month.

In New England, where areas have been defined on a town rather than on a county basis, the same principles were applied insofar as they were applicable. Item (c) was not applicable to towns. As a substitute, a population density criterion of 150 persons per square mile or, where strong integration was indicated, 100 persons per square mile, was adopted in considering towns for inclusion in an area.

These criteria were selected largely because investigation indicated that they were the only measure of integration on which usable data might be obtained for a substantial proportion of the problem areas under consideration. Preliminary field investigation indicated that comparative statistics measuring the proportion of dollars spent at retail in the central city by inhabitants of the peripheral counties or the proportion of bank deposits held in the central city by individuals and businesses in the peripheral county, were impossible to obtain. Where satisfactory data on even the measures listed in paragraph (d) above were lacking, considerable reliance was necessarily placed on informed local opinion.

The requirement that each area consist of county units sometimes results in the inclusion in a standard metropolitan area of a considerable amount of territory which would not ordinarily be considered "metropolitan," much less "industrial." It is recognized that metropolitan areas could be more accurately defined in terms of minor civil divisions, but the value of areas so defined is limited by the fact that most types of economic and social data are available only on a county basis. Moreover, so far as the Census of Manufactures is concerned, the inclusion in the metropolitan area of large tracts of agricultural or forest land is of little importance, since their contribution to the industrial activity of the area is negligible. In New England, metropolitan areas consist of towns because they, rather than counties, are the basic political and statistical unit in this region of the country.

A total of 87 metropolitan areas had been officially defined by the Inter-Agency Committee at the time the Census of Manufactures was tabulated, but these included all the areas that could qualify as "industrial" in character. Of these, only 53 met the 40,000-manufacturing-employee minimum established to determine those areas for which separate tabulation, by complete industry detail, would appear in the census volumes. A list of these 53 areas, showing their constituent counties (or towns) is included as a supplement to table 3, Chapter I of each census volume.

Each standard metropolitan area is designated by the name of the principal city in the area. In addition to the name of the principal city, the area title may include a maximum of two additional names, provided

that the cities each have a population of one-third or more of the principal city and a minimum population of 25,000 (based on the 1940 Census of Population). The "New York-Northeastern New Jersey" designation is treated as the one exception to this rule. Because of the wide use given Federal area-type data, locally-popular designations such as "Twin cities," "Quad cities," etc., were not adopted.

Individual industry (4-digit) statistics have been tabulated for the 53 standard metropolitan areas having 40,000 or more manufacturing employees in 1947 (table 5 of the State reports). In addition, industry group (3-digit) statistics have also been compiled for "principal" industrial counties, defined as those counties with 20,000 or more manufacturing employees (table 6 of the State reports). In general, the disclosure rule makes it impossible to show significant industry statistics for geographic areas with fewer employees. In contrast with earlier census years, no industry statistics are presented for incorporated cities.

16. Content of the General Sections of the Census Form

On the whole, the 1947 report forms did not differ greatly from those used in 1939. Two inquiries, distribution of sales and power equipment, were dropped entirely and one, highway motor vehicles in use, was added. In general, changes in the form of particular inquiries have not been such as to invalidate comparison with other censuses. For the most part, such changes represent attempts at clarification rather than changes in objectives; consequently historical series published in this and other Census of Manufactures reports may be considered to be reasonably comparable. Where qualifications are considered necessary they have been stated either in the special text for each industry or in the footnotes to the tables.

Most of the general sections of the form were pretested in cooperation with the States of Massachusetts and Pennsylvania, the Bureau of Labor Statistics, and some 10,000 individual manufacturers on their mailing lists; in a few instances additional questions proposed by other Government agencies were dropped because the tests indicated that most manufacturers maintained no records on these matters.

17. Manufacturing Employees— Classifications Used:

"All employees" comprises all full-time and part-time persons on the pay rolls of reporting establishments who worked or received compensation for any part of the 12 pay periods covered in the census year, including persons on paid sick leave, paid holidays, and paid vacation. Other persons, such as members of the armed forces and pensioners carried on the

active rolls but not working during the period were excluded. This total of manufacturing employment is divided in a threefold standard functional classification as follows:

(a) Production and Related Workers, closely comparable to "Wage earners" in the 1939 census classification, comprises working foremen and all nonsupervisory workers (including leadmen and trainees) engaged in fabricating, handling, packing, warehousing, shipping, maintenance, repair, janitorial and watchman services, product development, auxiliary production for plant's own use (e. g., power plant), record-keeping, and other services closely associated with these production operations.

(b) Force-Account Construction Workers, comparable to "Construction employees" in the 1939 census classification, includes all employees on the pay roll engaged in construction of major additions or alterations to the plant, who are utilized as a separate work force. Workers engaged in regular maintenance and repair operations are not included here but are classified as production workers.

(c) Administrative, Sales, Technical, and Office Personnel, comprises in terms of the 1939 classification (1) salaried officers of the corporation; (2) distribution employees; (3) managers, superintendents, other supervisory employees above the working foreman level, and professional and technical employees; (4) clerks, stenographers, bookkeepers, and other clerical employees; and (5) the few employees previously included under "all other." This class, like the two preceding, does not include employees at the central office or distributing branches of multiunit companies.

18. Employment for the October 15 Pay-Roll Period

Manufacturers were requested to report employment and pay rolls in some detail for the October 15 pay-roll period, in order to provide for a single pay period: (1) a breakdown of employment by sex; (2) a further breakdown of Administrative, Sales, etc., Personnel into (a) Clerical and Routine Office Workers, and (b) Executive, Sales, Professional, Technical, and Other Personnel; and (3) some measurement of the average pay of clerical and routine office workers as compared with that of production workers (cf. Appendix B, Item 8). In the course of editing the forms, however, it was discovered that a high proportion of manufacturers, including many large establishments, were reporting all their employees other than production and force-account workers in the line provided for routine office workers and that another large percentage of those establishments which did report these two types of employees separately were including the salaries of their administrative and executive personnel in the box provided only for routine office workers. Since it was impossible to incur the additional costs and the loss of time involved in corresponding with many thousands of manufacturers on this question, the employment data for the two types of employees were combined and no further attempt was made to tabulate the wage

data for clerical and routine office workers for the October pay period.

19. Monthly and Average Employment

In addition to requesting detailed statistics for the October pay period, the standard forms also requested total and production-worker employment for the pay-roll period ended nearest the 15th of each month of 1947. So far as total employment is concerned, this represented a departure from previous censuses. Beginning with the Census of 1889, average employment was calculated by the Census Bureau by adding the number of nonwage earner employees reported for a "normal" pay period, usually in October, to an average wage earner figure which was derived from 12 monthly figures. The 1947 census averages for total employees are for the first time based on 12 separate monthly figures and constitute more nearly representative annual averages.

From the 12 reported monthly figures an average employment figure was calculated for both total employees and production workers, and entered in the basic machine tabulation card (Appendix B) most widely used in both industry and area tabulations and in the industry-area cross-tabulations. Total employment was also tabulated by months for the United States by 4-digit industry and for the States by 2-digit industry. No data on employment by months were tabulated for metropolitan areas or industrial counties. Information on production-worker employment by months is not shown in any of the census volumes.

20. Wages and Salaries for the Entire Year

Total wages and salaries for the year 1947 were collected for each of the three functional classes. These payments were defined as the gross earnings of employees, including commissions, dismissal pay, nonproduction bonuses, vacation and sick leave pay, and compensation in kind, and prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. This definition of wages and salaries is substantially the same as in 1939 and is in conformity with that used by other Government agencies.

Production-worker wages and total salaries and wages were both included on the basic machine tabulation card. The annual wages of force-account construction workers are included in total salaries and wages, but not in production-worker wages. Construction-worker wages were punched on another card, that containing the October pay-roll data, but in view of the fact that the tabulation of the latter had been abandoned it was decided not to tabulate annual wages of construction workers. These wages are a small fraction of total salaries and wages in

manufacturing, as most construction is performed on a contract basis, but there is some loss in being unable to isolate them since they are properly a cost chargeable to capital additions rather than to current production.

21. Production Workers' Man-Hours

As defined for census purposes, a man-hour is one hour of work by one person regardless of whether on regular time or overtime. This unit-of-work measure provides the most comprehensive measure of labor input available since it takes into account both number of production workers and hours of work.

This census marks the first time production workers' man-hour statistics were collected for all industries, although similar data have been reported by some industries for each census year since 1933, beginning with 32 industries for that year and reaching 171 for 1939. The earlier statistics were collected on a monthly basis. For this census, however, man-hours were requested by quarter (either 13 weeks or 3 months) because a study of manufacturing records showed that many manufacturers could more easily report these data by quarters than by months.

Man-hours were generally well reported except in the case of very small establishments which have difficulty in distinguishing between production and other types of workers, and more generally in the apparel trades where it is customary to pay workers on a piece rather than an hourly basis. As indicated in Section 14 above, man-hours data were not requested of small establishments in the sawmill and some of the printing and publishing industries. Man-hours were estimated on the basis of reported production workers and their wages in the case of many small establishments. None of these factors, however, seriously qualify the published man-hour figures except for establishments with fewer than 10 employees.

Total man-hours for the year were punched on the basic "A" card, but the card containing quarterly man-hours was not included in the census tabulations.

22. Cost of Materials Consumed

The form called for the net costs, after discounts and allowances (paid or payable) for (a) materials, parts, containers, and supplies; (b) fuel; and (c) purchased electric energy actually consumed during the entire year. Manufacturers were asked to include costs of materials or fuels whether they were purchased by the individual establishment, transferred to it from other establishments of the same company, or withdrawn from inventory during the year; whether or not they were processed by the establishment or by others for its account. Manufacturers were asked to exclude materials sold in the same form as purchased and materials not owned by the estab-

lishment although processed by it. On the standard form, separate entries were made for each of the items (a), (b), and (c) above, as well as for cost of contract work, and all items were added to arrive at a total cost of materials, etc., to be deducted from value of shipments or estimated value of production to obtain value added by manufacture. The cost of fuel does not cover that used as material in manufacturing processes—for example, coal in the production of coke—which is included with other materials.

While the cost of fuel and electric energy was on the whole well reported, nearly one-third of all reports as originally received at the Bureau contained no entry for cost of Materials, Parts, Containers, and Supplies. Subsequent correspondence usually yielded a prompt and satisfactory reply, and it is believed that the original failures to report this item were due in part to the fact that the form (cf. Appendix B) did not give sufficient prominence to this item rather than to any particular difficulty in reporting materials. It was, however, impractical to engage in correspondence in all cases in which this item was not reported originally, and it was, therefore, decided to estimate for many of the smaller nonreporting establishments. For most industries this could be done reasonably well, since the establishment had reported the cost of its principal materials in another section of the form.

The volume of estimating done on this inquiry is not believed to have appreciably affected the industry totals for either cost of materials or the derived figure of value added by manufacture. However, the relationship of value added to wages for the two lowest size classes (table 4 of the Industry reports and Chapter III of the Summary Volume) are somewhat suspect not only because of the relatively large degree of estimating for cost of materials in these size groups, but more important because of the proportionately large labor contribution of the proprietor or partners in establishments of this size.

23. Specific Materials Consumed

In addition to the total cost of materials which all manufacturers were required to report, figures on the quantities and, in most cases, the corresponding value of 61 specified materials, such as steel and aluminum castings, crude petroleum, and rubber by type and class were collected from establishments in every industry that consumed appreciable amounts of these materials. Since American industry consumes an enormous variety of materials, the number of materials on which information was requested had to be strictly limited. The inclusion of a particular material for general coverage was therefore based primarily on the following considerations: The importance of the material as measured by the total value

of United States consumption or production; the percentage of total consumption accounted for by factory consumption and the availability of nonfactory consumption data from other sources; the number of establishments to be canvassed in order to assure adequate coverage; the availability of consumption information from manufacturers' records; and, in certain cases, such less tangible factors as the strategic importance of the material. In addition to those materials for which consumption information was collected from all important consuming industries, another group of 75 materials was covered on a more limited basis. The inclusion of these materials was generally based on factors peculiar to each industry, e.g., a large proportion of these materials were included on particular forms because the industry's production was of a heterogeneous character and materials consumption was believed to give a better measure of physical output than production statistics.

Consumption of materials is usually shown in the report for the consuming industry. In addition, for the 61 materials consumed in a number of industries, consumption by all industries and, in most cases, by States are also shown in Chapter IX of the Summary Volume. The data on materials consumed, shown in table 7 of the Industry Volume, for gray-iron castings, steel castings, aluminum castings, and copper and copper-base alloy castings include only those castings purchased from other companies or obtained from other plants of the same company. Castings produced in the same establishment and further fabricated into a finished product or part are not included in the figures shown for these four types of castings. The consumption of castings produced in the same establishment are, however, shown in the Summary Volume in Chapter IX, table 12.

24. Products

As indicated in Section 13 above, most manufacturers were asked to report their shipments and, in many cases, their production of a specified list of products, both primary and secondary, known to be produced by a significant number of establishments in their industry. The list of products was prepared for each industry after intensive study of the 1939 reports, and review and approval by a number of Inter-Agency Committees set up within the Federal Government. In developing the product sections of the 1947 report forms, the Bureau benefited from the advice of trade association officials in nearly all industries. In addition, preliminary drafts of the form were mailed to selected manufacturers in every industry, and, where feasible, the form was revised in accordance with their suggestions.

In all, about 6,500 individual product items were specified on the various forms. The term "products,"

as used in the Census of Manufactures, may have a broader or narrower content than in common usage. For example, automotive gasoline was reported as a single item. On the other hand, cotton broad-woven goods were distributed into nearly 200 individual "products" according to type of weave, width of fabric, and other specifications. For some items, e.g., bearings, it would have been desirable to obtain product information in much greater detail than that actually requested, but the extent to which the production of individual types and sizes is concentrated in one or two individual companies would have made it impossible to publish detailed data. Thus the 6,500 individual products included on the forms merely represent the number of items for which it was considered practical to publish census information.

Of the 6,500 items included on the forms, data were actually published for approximately 6,100. The balance were eliminated because their publication would involve disclosure of the activities of individual companies or because it turned out that a number of important producers could not report products in the detail requested; in all such cases the product data were combined with that for a similar item or included in an "all other" category. In this respect 1947 experience compares favorably with that for 1939 when of approximately the same number of items included, only about 4,000 could be shown. The principal reason for this difference seems to have been that in 1947 a large number of products were eliminated from the forms because they were of very limited economic importance; in general, a product was not included if its 1939 production was valued at less than \$2 million. In 1939 the loss of product detail owing to disclosure or poor reporting was particularly heavy in products of this magnitude. On the other hand, product items which were reported in large volume by a large number of establishments in 1939 were split up in 1947 into a number of products, where feasible.

In designing the 1947 product inquiries more weight was given to current industry practice and requirements than to comparability with 1939. In consequence, at the individual product level 1939 data are available for only about 1,500 product items. In many instances, however, comparable 1939 value and sometimes quantity data are available for the sum of two or more 1947 product items; on this basis, 1939 data are shown for about 2,500 of the 1947 products. Comparable 1939 data are more often available for basic materials such as steel and textiles than for finished manufactures such as machinery or apparel.

25. Classes of Products

In the 1947 census the 6,500 individual product items were grouped into slightly more than 1,000

classes of products. Except for the conditions that the number of product classes within an industry should not exceed 10 and that every individual product should be assigned to a single product class, the classes were selected to secure the most homogeneous grouping of products within each industry in which they were primary. Of the 453 industries used in this census, 242 had only one class of products and only 33 had six or more. In many instances, of course, some products had to be left in a residual class, e. g., "other food preparations, n.e.c."

The purposes to be served by the use of product classes were twofold. They were useful in permitting more detailed breakdowns such as that between primary and secondary production (table 5 of the Industry reports) where the production of individual products would frequently be so concentrated as to make such breakdowns impossible under the disclosure rules. Secondly, for certain types of analysis, e.g., for studying the relation between output and employment or wages, the industry classification is frequently too broad to yield satisfactory data. To overcome this difficulty, every plant reporting on a standard form was coded according to the degree to which it specialized in the production of a single class of products primary to the industry. By this device it is possible to sort out and tabulate general, product, and materials consumption statistics for homogeneous groups of establishments within an industry. This procedure is, of course, useful mainly in those industries producing a large number of products. For such industries individual products could not be used as a basis for coding since an establishment would rarely specialize to any extent in the production of a single product item. Census data by class of product specialization were not tabulated for publication in the volumes, but all important cards have been so coded, for a variety of future tabulations.

26. Value of Products Shipped

For 1947, the data were collected for practically all industries on the quantity and value of products shipped or on receipts for contract work or other services. In addition, many of the industry forms also requested data on production when it seemed likely that shipments would differ significantly from production either because of changes in finished inventories or because some commodities reported, instead of being shipped, were used for further manufacture in the producing plant. The amounts under the heading of value of products shipped, both for each industry in total (tables 1-3) and for individual products or classes of products (tables 5 and 6), are the received or receivable net selling values, f.o.b. plant, after discounts and allowances, and excluding freight charges and excise taxes. This is the first Census of

Manufactures in which excise taxes were specifically eliminated from product values. For tobacco and other industries where these taxes are important, such taxes are covered separately. In shipments, manufacturers were asked to include, along with receipts for contract work, all items made by or for each establishment from materials owned by it, whether sold, transferred to other plants of the same company, or shipped on consignment. They were also asked to exclude shipments of products which were produced by the establishment from materials owned by others, resold in the same condition as purchased, or returned to it without sale.

The general use of shipments as the basis for valuing the output of manufacturing industries differs from the practice for all censuses except that for 1929. This change was made in order to facilitate direct reporting from records of sales, shipments, or billings. Value of shipments for 1937 may, however, be directly compared with value of products for earlier years. In the first place, it is likely that in previous censuses many manufacturers valued their output in terms of shipments even though value of production was requested. Secondly, the changes in the quantity of finished goods inventories for most industries were of minor importance and there was, therefore, little difference between production and shipments in either 1947 or 1939.

27. Transfer Values

The values to be assigned to products transferred from one establishment to another of a multiunit establishment always constitute a difficult problem where value figures are collected on an establishment basis. The manner in which the problem was handled in the 1947 census is best indicated by the following excerpt from the instructions forwarded to multiunit companies:

"In order to provide accurate information for individual industries, States, and local areas, it is necessary that each reporting unit of a multiple-unit organization report as though it were operated as an independent manufacturing establishment. For example, where a single company operates a textile mill and also manufactures apparel, the transfer of fabrics from one establishment to the other should be reported at approximately commercial value and not at the cost of production. This requires that a company operating two or more plants assign to each plant and to the individual products a reasonable proportion of the profits and overhead costs. The method found by each company to be most convenient will ordinarily be acceptable to the Census Bureau. It is recognized that estimates will often be involved.

"If Part VII of the form calls for 'interplant transfer' and 'shipments to others' separately, interplant transfers means transfers between manufacturing plants. The products reported at 'transfer values' by the shipping plant should be reported by the receiving plant at the same values, except for the addition of freight or other direct handling charges.

"Transfers to separate selling departments, sales, branches,

retail stores, export subsidiaries or other distribution channels owned by your company should be included in sales to 'others,' rather than in interplant transfers, and the value should be reported at approximately the net selling value f.o.b. plant.

"These instructions apply to all establishments for which separate reports are being submitted including those at the same location, as well as those at different locations. . . ."

The transfer problem is especially difficult in a few instances in which an integrated operation is for census purposes broken down into two or more industrial activities. For example, in the paper and pulp industries, pulp can be manufactured in the pulp mill and transferred in slush form to an adjacent paper mill at a cost (including overhead and profit) very much lower than that at which it can be manufactured in an independent pulp mill, dried, baled, shipped, and again converted to slush by a paper mill at another location. Consequently, the use of the price at which the relatively small quantity of pulp enters the market, for evaluating transferred pulp would result in assigning an unduly large part of the value added by manufacture for the combined operation to the pulp mill. In fact such values for transferred pulp would frequently have caused the paper mill to show a very substantial loss. The reporting manufacturer was therefore asked to prorate the value added in the combined operation and thus derive somewhat arbitrary value figures for "shipments" from the pulp mill and "cost of materials" for the paper mill. A very similar situation exists between the blast furnace and steel mills industries and a similar procedure was followed. In other industries where the same situation exists to some degree, some reports may have been tabulated in which an inappropriate "market price" was attached to a transferred item but as it was the practice to examine all reports of a multiunit company at the same time, it is not likely that there were many such instances.

In the more common situation in which a plant manufactures a part or component for the use of an affiliated plant which may be located at some distance from the parts plant, the cost of production (including overhead and profit) will not differ much from the market price and neither will differ greatly from the "book" value assigned to this part. In fact, plants of many large corporations are frequently operated very much like independent factories, and in some instances a plant is authorized to purchase materials in the open market if the market price is below that charged by an affiliated plant.

It is believed that shipments data obtained from manufacturers generally were valued f.o.b. plant, even where shipments from one or more factories were largely or exclusively to a central warehouse or to sales branches operated by the same company. To insure this, the Bureau conferred directly with

most large multiunit companies during the course of the census and these apparently experienced little difficulty in converting such shipments to an f.o.b. plant value, when it was not the usual practice to carry them on such a basis on the factory's books.

28. Duplication in Cost of Materials and Value of Products

The aggregate of the cost of materials and value of shipments figures for industry groups and for all manufacturing industries includes large amounts of duplication owing to the use of products of some industries as materials by others. With some important exceptions, such as the steel, refrigeration, and motor vehicle industries, this duplication is not significant within individual industries. It arises importantly, however, from the addition of industries representing successive stages in the production of a finished manufactured product. Examples are the addition of flour mills to bakeries in the Food Group and the addition of blast furnaces to steel mills in the Primary Metals Group of industries.

The manner in which this duplication arises and the proportions it may assume may be indicated by citing a few figures for the Paper and Paper Products Industry Group. Virtually all the pulp produced by pulp mills is consumed by paper mills and accounts for well over one-half of the latter's cost of materials. In turn, well over half of the paper and board shipped by paper mills is consumed by plants classified in the Paper and Board Products Industries and accounts for most of the materials cost of these industries. For the major group as a whole, about 40 percent of the total value of shipments represents shipments to other plants in the 2-digit group and over 60 percent of the total cost of materials for the industry group represents purchases or transfers from other plants in the group. Further duplication arises in the compiling of national totals because of the use of paper products by establishments in other major groups, e.g., most of the printing papers shipped from paper mills is consumed by printing and publishing establishments and a large proportion of the containers shipped by paperboard box mills is used in packaging products of a wide variety of manufacturing plants. Within the 2-digit group there was some increase in the amount of duplication between 1939 and 1947. A decision to require separate reports of all companies operating paper mills and paper products plants on an integrated basis, resulted in increasing the value of shipments and the cost of materials for the 2-digit group by nearly 10 percent and over 15 percent, respectively.

Similar measures are not available for most other industry groups but estimates of the over-all extent of this duplication indicate that the value of manu-

factured products exclusive of such duplication—the value of finished manufactures—tends to approximate two-thirds of the total value of products reported in the Census of Manufactures. Because of the unknown and varying amounts of duplication contained in cost of materials and value of products, these figures are not shown for groups of industries or States or local areas in this census and are also eliminated for 12 individual industries for which the proportion of duplication in the value of shipments was known to exceed 10 percent.

29. Value Added by Manufacture

Value added by manufacture is calculated by subtracting the cost of materials, supplies, and containers, fuel, purchased electric energy, and contract work from the total value of shipments. In that it approximates the value created in the process of manufacture, value added provides the most satisfactory measure of the relative economic importance of given industries available in the Census of Manufactures.

Value added by manufacture should not, however, be confused with the contribution of the manufacturing industry to the national income, as measured by the Office of Business Economics, Department of Commerce. Income produced in manufacturing is estimated at \$17.9 billion for 1939 and at \$61.7 billion for 1947, or about 70 and 83 percent, respectively, of the value added by manufacture for these two years. The main differences between income produced and value added is that the former excludes, in addition to cost of materials, such additional costs as depreciation, the labor costs involved in maintenance and repairs, State and local taxes (other than corporate income taxes), advertising, etc.; these deductions are partly offset by the inclusion of employer contributions to Social Security as a form of income and by the fact that the national income estimates are to a large extent prepared on a company rather than an establishment basis. In fact, many of the items that must be deducted from value added to arrive at income produced in manufacturing can only with great difficulty, if at all, be reported on an establishment basis.

Income produced in manufacturing increased nearly 250 percent between 1939 and 1947 as compared with an increase of approximately 200 percent in value added. This difference is due principally to the inclusion in value added of a number of important overhead costs which are fairly stable in the short run. As would be expected, the relative increase in income is greater in those industry groups and, presumably, in those areas which showed the largest percentage increase in value added over the period.

30. Method of Calculating Value Added by Manufacture for Selected Industries in 1947

As stated in Section 29 above, value added by manufacture is usually calculated for each establishment by subtracting cost of materials, etc., from value of shipments. For a limited number of industries, however, a different procedure was used for calculating value added by manufacture in the larger establishments (more than 50 employees). For most industries for which information was requested on the quantity of production as well as on the quantity and value of shipments of product items, value added for large plants was calculated by multiplying the quantity of each item produced by a unit value derived from the shipments data, adding these values to obtain a total value of production and subtracting therefrom the cost of materials. Consequently, for these industries value added by manufacture does not equal value of shipments less cost of materials.

31. Inventories

The value of beginning- and end-of-the-year inventories, respectively, was requested of all establishments except those in the Printing and Publishing and Allied Industries group and those reporting on short forms in all industries. As in the two preceding censuses, data were collected under two heads: (a) finished products and (b) materials, supplies, work in process, fuel, and other inventories.

Inventory data were generally well reported, particularly by larger establishments. Some manufacturers reported only a total figure on inventories and occasionally figures were given only for beginning-of-year or end-of-year inventories. Corrected data were ordinarily obtained for larger establishments, but for smaller establishments the inventories for the date not reported were assumed to be the same as those for the date reported, provided the establishment was operating on the former date. More frequently, the breakdown between finished goods and materials was not supplied. In these cases, the breakdown was estimated from the tabulated figures for reporting establishments in the same industry. In a few industries, usually with small inventories, the breakdown involved a considerable proportion of estimates. In these cases the detailed inventories figures are not shown in the Industry Volume, but they are included in the General Summary Volume, in order to construct national and group totals. Where no inventory figures were reported, inventories were estimated by applying the ratio of inventories to cost of materials for reporting establishments in the same industry to the cost of materials on nonreporting establishments. No estimates were prepared for establishments reporting on short forms. Estimates were

seldom resorted to in the case of large establishments, and in no instance in which they were expected to amount to a sizable proportion of an industry's annual production.

32. Expenditures for Plant and Equipment

Following the precedent established for 1939, data were collected on capital expenditures for plant and equipment by all establishments reporting on the standard forms. As for 1939, manufacturers were requested to report expenditures made during the census year for permanent additions and major alterations that were charged to the fixed-asset accounts of the individual establishments and were of the type for which depreciation accounts are ordinarily maintained. The figures do not include expenditures made by the owners of plants and equipment leased to reporting manufacturers. The breakdown requested for capital expenditures is similar to, but more detailed than, that requested for 1939.

Reporting on this question is believed to have been considerably better than in 1939. In 1947, establishments which made no capital expenditures during the year were asked to so state on the form. Correspondence was undertaken with all large and medium-sized establishments which neither supplied data nor indicated that they did not make any capital expenditures in 1947. Subsequent to tabulation, a special run of the cards for the State of Pennsylvania showed that establishments reporting capital expenditures in 1947 accounted for 92 percent of value added in that State, as compared with 85 percent in 1939. It should be noted, however, that 1947 was a year of heavy capital investment compared with 1939 and that this factor may explain much of this increase.

Expenditures for new plant and equipment amounted to \$6 billion in 1947 according to the census, as compared with an estimate of \$7.5 billion prepared jointly by the Office of Business Economics of the Department of Commerce and the Securities and Exchange Commission. Apart from reporting errors, of which little is known, it would seem that this discrepancy arises principally from two factors. The census did not attempt to cover capital expenditures by nonmanufacturing establishments of manufacturing companies. This factor is particularly important in the Petroleum industry, where company expenditures for developing new wells and for distribution facilities are normally much larger than their capital expenditures at refineries. Secondly, the census figures do not include capital expenditures at plants which were not in production at any time in 1947, whether or not such plants were owned by companies which did report in the census. Multiunit companies were requested to report their expenditures for manufacturing plants not in operation in

1947 and, therefore, not required to submit a census form, and reports aggregating some \$200 million in expenditures were received. However, a review of these reports raised some doubts as to coverage and these expenditures have not been tabulated by industry or geographic area.

33. Fuels and Electric Energy

Separate figures were collected in 1947 for quantity and cost of bituminous coal, anthracite, coke, fuel oil, and gas, and for cost of other fuels, consumed in manufacturing establishments for power and heat. In addition to quantity and cost of purchased electric energy, figures were obtained for quantity of electric energy generated, and quantity and value of electric energy sold. Check boxes were provided which yielded an approximate segregation of "Natural," "Manufactured," and "Mixed" gas, but prevented the segregation of gas by type for establishments which purchased more than one kind of gas.

The figures for cost of each type of fuel and for cost of purchased electric energy appear in table 3 for each industry in the Industry Volume. No separate figures on fuels are shown in the State volume, but the General Summary Volume contains a chapter showing totals for each of the fuel and electric energy items for which data were collected, summarized by industry and by State. Similar quantity figures were tabulated for 1909 and in several subsequent censuses, but cost figures for each type of fuel were tabulated previously for 1929 only. The introductory text to the Chapter on "Fuels and Electric Energy Consumed" in the General Summary Volume discusses in more detail the nature and qualifications of the fuel statistics.

34. Metalworking Operations

For 110 metalworking industries the 1947 forms included a special inquiry on the approximate number of production workers usually employed in selected metalworking operations. This information is useful in indicating the extent to which these operations, which for the most part define individual industries, are conducted by establishments classified in other industries in the metal-product area. When used in conjunction with the industry and product statistics for the industries primarily engaged in these operations, they are useful as an indication of the Nation's capacity for performing the more important types of metalworking operations.

This information was collected from establishments in every industry in which these operations were believed to be significant. Manufacturers were not requested to specify the number of production workers engaged in each operation; rather, they were merely asked to check that one of five size-classes

which most closely represented the usual number of production workers employed. Since the smaller establishments in a number of industries did not report on this inquiry, the number of establishments performing a particular operation in the lowest size-class may be incomplete for individual industries. However, the coverage for all other production-worker size classes is essentially complete.

Manufacturers were also requested to report the number of days each operation was performed in 1947. The responses indicated, however, that operations with more than 20 employees were almost uniformly maintained on a continuous basis with the exception of tool and die rooms and pattern shops. This did not hold true to the same extent for operations with less than 20 employees, but even there the operation was maintained on a continuous basis in the majority of cases.

The data on metalworking operations are included as table 8 of the appropriate industry reports. For comparative purposes, the data for each operation are also presented in industry order in Chapter X of the General Summary Volume. This chapter also shows comparable data by geographic divisions and States.

35. Highway-Type Motor Vehicles

Manufacturers reporting on standard forms were required to report the number of selected highway-type motor vehicles (other than passenger cars and busses) operated directly by each establishment on December 31, 1947, regardless of whether the vehicles in question were owned or leased by the establishment. Vehicles operated by trucking concerns providing services to manufacturing establishments were not included.

This information is shown by rated capacity and by body type in table 3 of the Industry reports and by rated capacity by body type in table 10 of the State reports. In addition, table 1, Chapter VII, of the General Summary Volume shows for each industry the number of trucks by body type by rated capacity and table 3 shows the total number of trucks operated by establishments in selected employee size-classes in each industry. Some manufacturers reported the operation of trucks in impossible body-type capacity combination, e.g., light delivery trucks of a capacity exceeding 1½ tons, and vans of a capacity less than 1½ tons. These items were transferred from van to light delivery and vice versa.

36. Abbreviations

The following abbreviations and symbols recur frequently both in the tables and footnotes:

n.a.	not available
n.e.c.	not elsewhere classified
M	thousand
mil.	million
bil.	billion
std.	standard
lin.	linear
b. m.	board measure
equiv.	equivalent
.....	zero or not applicable
(d)	withheld to avoid disclosing figures for individual companies.

Other abbreviations, such as lb., gal., yd., doz., bbl., are used in the customary sense. Where the term tons only is used, it refers to short tons of 2,000 lbs. Where the figures are expressed in tons of 2,240 lbs., the unit of measure is specified as long tons or gross tons.

SUMMARY STATISTICS

TABLE 1.—GENERAL STATISTICS FOR ALL MANUFACTURING INDUSTRIES IN THE UNITED STATES: 1849—1947

[Money figures in thousands of dollars]

CENSUS YEAR	Number of establishments	Number of proprietors and firm members	All employees ¹		Production workers		Value added by manufacture ²
			Number ³ (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total	
FACTORIES, EXCLUDING HAND AND NEIGHBORHOOD INDUSTRIES							
1947.....	240,881	188,948	14,294,304	\$39,689,527	11,916,188	\$30,242,343	\$74,425,825
1939 ⁴	173,802	⁵ 123,655	⁶ 9,527,306	⁶ 12,706,102	7,808,205	8,997,515	24,487,304
1937.....	166,794	99,268	9,786,402	12,829,749	8,569,231	10,112,883	25,173,539
1935.....	167,916	81,521	8,262,295	9,564,754	7,203,794	7,311,329	18,552,553
1933.....	139,325	72,267	⁷ 6,557,925	⁷ 6,237,800	5,787,611	4,940,146	14,007,540
1931.....	171,450	n.a.	n.a.	n.a.	6,163,144	6,688,541	18,600,532
1929.....	206,603	132,686	9,659,742	14,284,282	8,369,705	10,884,919	30,591,435
1927.....	187,620	132,151	9,072,052	13,123,135	7,848,070	10,099,465	26,325,394
1925.....	183,877	132,971	9,142,417	12,957,707	7,871,409	9,979,649	25,667,624
1923.....	102,096	147,958	9,474,658	12,996,460	8,194,170	10,148,624	24,569,487
1921.....	192,059	172,291	7,557,364	9,870,199	6,475,474	7,451,299	17,252,775
1919.....	270,231	249,865	9,836,801	12,426,902	8,464,916	9,664,009	23,841,624
1914.....	268,436	258,560	7,514,186	5,015,977	6,602,287	3,782,322	9,385,622
1909.....	264,810	272,421	7,012,066	4,105,470	6,261,736	3,205,213	8,160,075
1904.....	213,444	225,115	5,674,957	2,990,937	5,181,660	2,440,851	6,019,171
1899.....	204,754	n.a.	4,850,019	2,258,654	4,501,919	1,892,574	4,646,981
FACTORIES AND HAND AND NEIGHBORHOOD INDUSTRIES							
1899.....	509,490	n.a.	5,478,301	2,595,566	5,097,562	2,206,547	5,474,892
1889.....	353,864	n.a.	4,586,494	2,209,058	4,129,355	1,820,854	4,102,301
1879.....	253,852	n.a.	n.a.	n.a.	2,732,595	947,954	1,972,756
1869.....	252,148	n.a.	n.a.	n.a.	2,053,996	⁸ 620,467	⁸ 1,395,119
1859.....	140,433	n.a.	n.a.	n.a.	1,311,246	378,879	854,257
1849.....	123,025	n.a.	n.a.	n.a.	957,059	236,755	463,983

n.a.—Not available.

¹ The figures for 1947 and 1939 include data for employees of manufacturing establishments who were engaged in distribution and in construction work. The extent to which data for such employees were included in the figures for earlier years is not known. See GENERAL EXPLANATIONS, Manufacturing-employees—classifications used.

² For 1947, the number of "All employees" represents the average of 12 monthly figures; for 1939 and earlier years, it represents the sum of the average number of production workers for the year and the number of nonproduction workers reported for one pay roll period (usually in October). See GENERAL EXPLANATIONS—Monthly and average employment.

³ Value of products less cost of materials, supplies, fuel, electricity, and contract work. For 1849-1933, cost of contract work was not subtracted from value of products in calculating value added by manufacture. See GENERAL EXPLANATIONS—Value added by manufacture.

⁴ Figures for 1947 include all establishments employing one or more persons at any time during the year; for 1921-1939, those with products valued at \$5,000 or more; and for 1849-1919, those having products valued at \$500 or more. The figures for 1939, but not for earlier years, have been revised on the basis of retabulation of the returns to exclude data for establishments classified as manufacturing in 1939 and prior years but classified as nonmanufacturing in 1947. Value added by manufacture for 1939, prior to revision land on a basis comparable with 1937 and previous years, was \$24.7 billion. The figures for 1899-1935 were previously revised to exclude data for "Railroad repair shops" (both steam and electric), "Manufactured gas," "Coffee and spice roasting and grinding," "Peanuts and walnuts processed or shelled," "Motion pictures," "Grindstones, pulpstones, and millstones," "Flax and hemp, dressed," and "Automobile repairing" (canvassed only in 1914 and 1919). See GENERAL EXPLANATIONS—Statistics for 1939 and earlier years.

⁵ Not revised.

⁶ The 1939 figures for "All employees" were revised on the basis of estimates rather than by retabulation of the 1939 reports. (See footnote 4.) The estimates were made in the following manner: for number of employees, by multiplying the retabulated figure for number of production workers by the ratio of all employees to production workers computed from the unrevised 1939 statistics; for salaries and wages, by multiplying the retabulated wage figure by the ratio of salaries and wages also derived from the unrevised 1939 statistics.

⁷ Not including data for salaried officers of corporations and their salaries and, therefore, not strictly comparable with figures for other years.

⁸ Reduced to gold basis.

CENSUS OF MANUFACTURES: 1947

TABLE 2.—GENERAL STATISTICS FOR INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939

[Money figures in thousands of dollars. For explanation of column captions, see GENERAL EXPLANATIONS; for definitions of industries see APPENDIX C—Industry Descriptions, and detailed industry reports in Volume II—Statistics by Industry. The figures for 1939 have been adjusted for comparability with 1947; see GENERAL EXPLANATIONS—Statistics for 1939 and earlier years.]

No.	INDUSTRY AND INDUSTRY GROUP Title	1947						1939			
		Number of establishments	Number of proprietors and firm members	All employees		Production workers		Value added by manufacture	Number of establishments	Number of production workers (average for the year)	Value added by manufacture
				Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
	All industries, total.....	240,881	188,948	14,294,304	\$39,689,527	11,916,188	\$30,242,343	\$74,425,825	173,802	7,808,205	\$24,487,304
	INDUSTRY GROUPS										
20	Food and kindred products.....	39,933	31,430	1,441,847	3,789,387	1,099,478	2,572,190	9,024,912	43,667	802,133	3,484,696
21	Tobacco manufactures.....	1,086	874	111,782	205,838	103,289	175,318	641,366	765	87,525	360,162
22	Textile mill products.....	8,185	4,063	1,233,431	2,830,168	1,147,194	2,449,312	5,340,876	6,388	1,081,710	1,817,096
23	Apparel and related products.....	30,960	28,430	1,081,844	2,527,499	972,897	2,015,220	4,443,373	20,275	752,829	1,380,004
24	Lumber and products, except furniture.....	26,231	29,272	635,708	1,337,612	596,118	1,179,981	2,497,192	13,208	422,947	731,208
25	Furniture and fixtures.....	7,687	6,112	322,384	824,061	282,760	653,915	1,377,908	5,178	189,382	417,785
26	Paper and allied products.....	4,103	1,289	449,833	1,280,672	383,901	1,010,972	2,874,958	3,328	270,239	888,350
27	Printing and publishing industries.....	23,986	22,685	715,450	2,277,203	438,135	1,318,285	4,260,416	24,878	324,371	1,765,314
28	Chemicals and allied products.....	10,073	4,034	632,319	1,910,453	460,458	1,242,628	5,365,201	8,830	275,609	1,818,941
29	Petroleum and coal products.....	1,387	398	212,003	739,345	169,610	556,385	2,015,307	1,227	107,695	697,273
30	Rubber products.....	875	366	259,092	783,464	214,533	614,762	1,302,893	505	120,740	406,155
31	Leather and leather products.....	5,308	3,496	383,175	875,666	348,529	725,143	1,532,808	3,505	327,189	852,915
32	Stone, clay, and glass products.....	11,650	10,323	462,072	1,210,768	405,755	994,884	2,306,480	6,678	267,094	860,323
33	Primary metal industries.....	5,363	2,893	1,157,124	3,594,848	1,010,055	2,978,607	5,765,434	3,512	672,438	2,108,899
34	Fabricated metal products.....	16,734	12,848	971,461	2,332,835	822,614	2,188,681	4,921,476	9,532	451,087	1,400,883
35	Machinery (except electrical).....	17,906	13,159	1,545,323	4,804,863	1,244,135	3,592,771	7,812,455	8,860	536,082	2,030,965
36	Electrical machinery.....	3,973	1,727	801,369	2,271,039	639,147	1,647,401	3,894,115	1,079	247,030	941,469
37	Transportation equipment.....	3,711	2,534	1,181,680	3,719,683	987,142	2,939,815	5,869,190	2,012	544,563	1,772,573
38	Instruments and related products.....	2,599	1,661	231,997	665,347	181,939	467,785	1,080,338	1,292	84,807	333,409
39	Miscellaneous manufactures.....	14,131	11,849	464,420	1,205,608	397,579	920,508	2,090,168	8,084	241,725	629,994
	INDUSTRIES										
20	Food and kindred products.....	39,933	31,430	1,441,847	3,789,387	1,099,478	2,572,190	9,024,912	43,667	802,133	3,484,696
201	Meat products.....	3,974	3,249	274,441	781,940	220,732	584,586	1,280,692	3,341	140,624	489,801
2011	Meat packing, wholesale.....	2,153	2,088	208,369	622,770	167,072	468,743	976,905	1,392	115,040	403,943
2013	Prepared meats.....	1,284	835	44,379	122,742	34,473	80,570	235,537	1,197	17,024	63,769
2015	Poultry dressing, wholesale.....	567	366	21,693	36,428	19,187	29,253	68,100	752	13,054	22,089
202	Dairy products.....	5,423	3,170	92,693	225,312	69,074	155,841	595,168	9,497	50,488	281,920
2021	Creamery butter.....	1,633	665	20,564	44,373	15,242	31,883	107,248	3,506	17,053	73,470
2022	Natural cheese.....	1,711	1,175	12,320	27,697	10,535	23,024	63,267	2,682	5,009	10,767
2023	Concentrated milk.....	428	78	16,635	42,870	13,982	34,838	148,771	662	9,705	46,233
2024	Ice cream and ices.....	1,521	1,192	35,807	92,000	23,196	52,222	228,049	2,696	15,443	138,265
2025	Special dairy products.....	130	70	7,367	18,472	6,119	13,874	47,843	51	2,378	7,185
203	Canning, preserving, and freezing.....	3,826	2,784	201,627	418,669	181,004	339,224	916,621	3,058	135,087	319,183
2031	Canned sea food.....	254	225	20,153	37,207	18,929	31,755	96,807	214	15,735	25,434
2032	Cured fish.....	127	117	2,431	5,111	2,143	3,763	9,948	114	1,893	4,643
2033	Canning and preserving, except fish.....	2,265	1,545	135,974	288,443	121,916	234,886	609,939	1,890	93,603	227,399
2034	Dehydrated fruits and vegetables.....	146	136	3,976	8,145	3,662	6,834	18,165	269	8,058	15,965
2035	Pickles and sauces.....	743	610	21,730	48,221	18,584	36,163	122,395	611	12,404	41,087
2037	Frozen foods.....	291	151	17,363	31,542	15,770	25,833	69,377	61	3,334	4,625
204	Grain-mill products.....	4,206	3,531	113,217	311,736	86,063	216,229	1,001,692	3,740	50,082	325,960
2041	Flour and meal.....	1,243	1,017	39,458	118,940	30,722	85,680	410,408	2,143	24,771	143,882
2042	Prepared animal feeds.....	2,689	2,363	65,347	143,301	40,266	93,579	394,236	1,983	15,401	99,240
2043	Cereal preparations.....	64	25	11,276	30,689	9,490	25,160	130,188	70	7,468	70,349
2044	Rice cleaning and polishing.....	88	59	4,072	9,999	3,267	6,700	43,432	72	2,340	8,561
2045	Blended and prepared flour.....	122	67	3,004	8,807	2,312	5,110	23,368	78	706	3,028
205	Bakery products.....	7,123	7,054	279,368	765,202	187,581	429,487	1,365,809	10,681	209,375	692,580
2051	Bread and other bakery products.....	6,797	6,863	233,310	655,979	150,055	351,126	1,100,836	10,325	180,202	573,837
2052	Biscuit, crackers, and pretzels.....	326	191	46,058	109,223	37,526	78,361	264,973	356	29,173	118,743
206	Sugar.....	181	62	35,423	91,291	30,749	75,529	233,869	190	28,700	115,948
2061	Raw cane sugar.....	82	62	4,635	8,560	4,022	6,597	17,700	78	4,217	10,510
2062	Cane-sugar refining.....	25	-----	17,376	47,172	15,093	38,974	98,112	27	14,133	55,993
2063	Beet sugar.....	74	-----	13,412	35,569	11,634	29,968	118,048	85	10,410	49,445
207	Confectionery and related products.....	1,754	1,444	91,710	214,558	78,063	155,666	587,065	1,318	88,831	265,738
2071	Confectionery products.....	1,686	1,423	75,165	167,886	64,883	123,046	413,852	1,252	40,740	127,026
2072	Chocolate and cocoa products.....	31	7	9,605	27,480	7,708	19,174	98,276	30	6,464	35,559
2073	Chewing gum.....	37	14	6,940	19,192	5,472	13,446	74,937	27	2,627	43,153
208	Beverages.....	6,755	5,605	202,574	598,654	138,515	375,921	1,860,914	5,745	67,777	656,198
2081	Bottled soft drinks.....	5,618	5,172	79,397	194,305	41,214	83,291	420,711	4,604	21,265	211,844
2082	Malt liquors.....	440	37	82,534	292,405	63,688	210,228	808,946	605	36,088	363,180
2083	Malt.....	53	10	2,524	9,550	2,060	6,896	53,885	52	1,459	10,183
2084	Wines and brandy.....	418	337	7,697	21,896	5,824	13,681	95,015	348	2,337	15,020
2085	Distilled liquors, except brandy.....	226	49	30,422	80,498	25,740	61,825	472,357	236	6,628	46,971
209	Miscellaneous food preparations.....	6,691	4,531	150,794	382,025	107,697	239,727	1,193,082	6,091	54,500	307,898
2091	Leavening compounds.....	48	14	3,066	8,944	2,364	6,804	46,494	47	2,334	17,312
2092	Shortening and cooking oils.....	100	53	8,003	24,550	5,931	16,298	162,146	82	4,913	33,131
2093	Oleomargarine.....	27	-----	2,867	8,337	5,279	43,750	182,146	18	984	12,867
2094	Corn products.....	55	17	12,324	41,115	10,168	32,688	127,143	35	6,704	52,493
2095	Flavorings.....	606	322	11,726	37,149	7,242	17,720	168,333	477	3,689	89,734
2096	Vinegar and cider.....	118	70	987	2,094	828	1,579	3,503	132	1,059	3,240
2097	Manufactured ice.....	3,432	2,244	46,462	103,038	29,048	63,026	226,584	3,975	15,912	104,156
2098	Macaroni and spaghetti.....	226	217	8,043	18,763	6,628	13,134	42,049	328	6,013	10,224
2099	{ Liquid, frozen, and dried eggs { Food preparations, n.e.c.....	154 1,925	90 1,504	9,800 47,816	16,570 121,465	8,700 34,992	13,284 69,915	32,209 350,871	41 956	1,388 11,538	3,395 62,346

SUMMARY STATISTICS

23

TABLE 2.—GENERAL STATISTICS FOR INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

INDUSTRY AND INDUSTRY GROUP		1947						1939			
		Number of establishments	Number of proprietors and firm members	All employees		Production workers		Value added by manufacture	Number of establishments	Number of production workers (average for the year)	Value added by manufacture
				Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
No.	Title										
21	Tobacco manufactures	1,086	874	111,782	\$205,838	103,289	\$175,318	\$641,356	765	87,525	\$350,152
2111	Cigarettes.....	28		27,674	63,204	25,553	54,986	368,417	35	27,426	226,679
2121	Cigars.....	822	789	47,068	76,344	44,512	68,402	143,145	598	50,897	81,505
2131	Chewing and smoking tobacco.....	73	32	11,139	22,676	9,725	17,616	57,571	132	9,202	41,968
2141	Tobacco stemming and redrying.....	163	53	25,901	43,611	23,499	34,314	72,223			
22	Textile mill products	8,185	4,068	1,233,431	2,836,166	1,147,194	2,449,312	5,340,876	6,388	1,081,710	1,817,996
221	Woolen and worsted manufactures.....	828	262	180,054	457,055	166,947	394,655	803,592	725	149,976	284,637
2211	Scouring and combing plants.....	74	19	8,726	26,475	7,912	21,202	54,166	49	6,731	13,015
2212	Yarn mills, wool, except carpet.....	200	79	33,178	75,380	31,463	66,443	127,808	135	22,764	35,465
2213	Woolen and worsted fabrics.....	495	134	132,348	338,928	122,432	293,962	599,534	478	116,660	222,673
2216	Finishing wool textiles.....	59	30	5,802	16,272	5,140	13,048	22,084	63	3,821	10,484
222	Yarn and thread mills, except wool.....	658	195	123,599	241,717	117,356	215,171	447,110	611	105,508	134,504
2222	Yarn throwing mills.....	122	37	14,866	28,401	13,860	24,323	45,970	161	25,740	20,448
2223	Thread mills.....	80	40	14,652	33,240	13,126	26,930	67,372	87	14,382	27,122
2224	Yarn mills, cotton system.....	404	88	92,280	176,152	88,830	160,767	326,839	325	62,511	73,448
2225	Yarn mills, silk system.....	43	30	1,801	3,924	1,591	3,151	6,929	38	2,875	4,486
223	Cotton and rayon broad-woven fabrics.....	1,109	277	455,009	996,604	433,534	904,862	2,050,384	1,055	398,487	560,880
2233	Cotton broad-woven fabrics.....	602	50	357,361	764,532	342,330	699,871	1,562,336	661	318,892	445,895
2234	Rayon and related broad-woven fabrics.....	507	227	97,648	232,072	91,174	204,991	488,048	394	79,595	115,015
2241	Narrow fabric mills.....	479	277	27,662	63,861	24,917	51,604	108,201	400	24,591	47,319
225	Knitting mills.....	3,126	2,106	230,527	492,718	212,962	414,036	854,596	2,089	236,628	357,030
2251	Full-fashioned hosiery mills.....	738	371	70,034	178,062	65,148	156,320	319,369	499	97,200	156,047
2252	Seamless hosiery mills.....	617	418	64,808	105,626	61,343	91,858	163,805	433	61,852	72,090
2253	Knit outerwear mills.....	1,201	1,094	34,760	80,988	30,596	59,876	145,743	725	23,437	46,674
2254	Knit underwear mills.....	172	52	40,579	80,520	37,546	67,990	134,399	184	37,478	50,099
2255	Knit glove mills.....	46	22	5,212	9,222	4,955	8,203	14,730	20	5,574	7,387
2256	Knit-fabric mills.....	308	113	14,158	36,087	12,502	28,051	72,272	143	9,548	21,448
2259	Knitting mills, n.o.c.....	44	36	976	2,213	872	1,738	4,278	85	1,539	3,285
2261	Finishing textiles, except wool.....	641	272	77,985	218,933	69,035	176,094	359,270	468	60,237	130,695
227	Carpets and rugs.....	296	200	57,211	157,917	50,883	131,340	331,314	162	38,892	134,282
2271	Wool carpets, rugs, and carpet yarn.....	95	51	40,096	111,558	35,500	92,656	217,046	61	28,727	87,385
2273	Carpets and rugs, n.o.c.....	182	148	7,055	14,378	6,444	11,556	30,986	84	3,137	6,391
2274	Hard-surface floor coverings.....	19	1	10,060	31,981	8,879	27,128	83,282	17	7,028	41,506
228	Hats (except cloth and millinery).....	271	136	21,428	55,159	18,864	43,362	92,040	254	23,639	48,162
2281	Fur-felt hats and hat bodies.....	136	74	13,034	36,433	11,495	28,554	61,474	158	14,515	31,391
2282	Wool-felt hats and hat bodies.....	49	25	4,467	9,394	3,907	7,564	13,938	22	4,572	8,161
2283	Straw hats.....	40	15	2,438	5,387	2,057	4,113	8,610	37	2,650	4,909
2284	Hatters' fur.....	46	22	1,489	3,945	1,345	3,131	8,018	37	1,893	3,701
229	Miscellaneous textile goods.....	777	343	59,056	152,202	52,606	118,188	294,369	624	43,752	120,487
2291	Felt goods, n.o.c.....	46	4	4,737	14,177	4,167	11,109	24,881	37	3,346	10,526
2292	Lace goods.....	96	68	8,580	21,346	7,856	17,745	44,872	63	7,254	15,353
2293	Padding and upholstery filling.....	135	64	8,243	21,290	7,378	17,018	44,444	124	4,505	13,292
2294	Processed textile waste.....	179	98	5,805	12,894	5,149	9,822	22,612	153	4,844	10,495
2295	Coated fabrics, except rubberized.....	110	37	8,698	27,596	6,948	19,219	51,200	92	5,895	28,273
2297	Jute (except felt), and linen goods.....	35	11	5,290	12,140	4,815	9,942	21,318	31	5,321	12,061
2298	Cordage and twine.....	148	52	15,950	30,228	14,122	28,490	71,999	124	12,587	30,487
2299	Textile goods, n.o.c.....	25	9	2,653	6,526	2,201	4,843	13,034			
23	Apparel and related products	30,960	28,430	1,081,844	2,527,499	972,897	2,015,220	4,443,373	20,275	752,829	1,386,004
231	Men's and boys' suits and coats.....	1,969	1,655	150,369	404,799	136,136	337,972	674,243	1,960	119,599	240,681
2311	Men's and boys' suits and coats.....	1,816	1,526	146,768	396,244	132,806	331,151	658,358	1,848	116,852	239,511
2312	Suit and coat findings.....	153	129	3,601	8,555	3,270	6,821	15,885	112	2,747	4,170
232	Men's and boys' furnishings.....	4,026	3,254	253,436	450,321	234,476	374,850	893,911	2,875	190,258	248,883
2321	Men's dress shirts and nightwear.....	1,065	681	94,308	163,945	88,172	137,653	292,714	590	70,727	83,727
2322	Men's and boys' underwear.....	103	54	7,269	11,330	6,929	9,847	20,348	54	6,543	6,415
2323	Men's and boys' neckwear.....	413	374	10,744	25,367	9,246	18,485	50,708	381	9,003	19,795
2325	Men's and boys' cloth hats and caps.....	313	361	5,541	12,379	5,063	10,455	20,685	270	3,383	5,894
2326	Hat and cap materials.....	70	58	1,111	3,002	943	2,100	5,620	55	796	1,747
2327	Separate trousers.....	976	962	48,300	93,639	44,939	77,370	163,731	659	31,327	39,528
2328	Work shirts.....	85	16	12,061	16,609	11,169	13,858	33,212	87	13,449	14,253
2329	Men's and boys' clothing, n.o.c.....	1,001	748	74,102	130,050	68,015	105,082	216,893	779	60,704	77,524
233	Women's and misses' outerwear.....	10,085	9,439	313,402	846,340	279,029	671,342	1,427,891	6,339	208,895	421,708
2331	Blouses and waists.....	1,361	1,404	32,757	67,473	29,046	54,160	123,640	3,302	9,673	16,853
2333	Dresses, unit price.....	4,202	3,803	133,294	370,854	118,276	294,847	609,576	2,916	103,738	218,331
2334	Dresses, dozen price.....	917	753	48,692	90,494	43,867	68,658	153,052	742	38,794	48,525
2335	Women's suits and coats.....	2,477	2,368	74,306	261,425	65,397	211,245	438,145	1,753	41,032	108,006
2336	Women's skirts.....	493	525	8,312	21,270	7,434	16,841	38,484	213	4,421	9,352
2338	Women's neckwear and scarfs.....	166	181	2,754	6,963	2,181	3,829	16,850	107	1,931	4,748
2339	Women's outerwear, n.o.c.....	469	405	13,287	27,861	11,928	21,756	48,144	306	9,306	15,893
234	Women's and children's undergarments.....	2,051	1,531	94,558	197,898	83,895	145,208	387,974	1,031	58,624	103,319
2341	Women's and children's underwear.....	1,516	1,195	57,306	114,543	51,997	86,181	227,236	759	39,859	59,006
2342	Corsets and allied garments.....	535	336	37,252	83,355	31,898	59,027	160,738	272	18,765	44,313
2351	Millinery.....	932	754	20,893	59,489	18,076	46,812	100,723	1,026	24,017	56,625
236	Children's outerwear.....	1,687	1,576	48,136	101,162	43,358	79,351	178,265	620	25,289	45,812
2361	Children's dresses.....	664	624	22,435	43,416	20,347	33,975	76,469	296	15,133	25,537
2363	Children's coats.....	506	455	12,427	33,229	10,990	25,899	58,365	156	3,501	9,828
2369	Children's outerwear, n.o.c.....	517	497	13,274	24,517	12,021	19,477	43,431	168	6,655	10,447
2371	Fur goods.....	2,229	2,623	16,190	68,571	13,745	57,636	122,821	2,175	13,111	60,280

TABLE 2.—GENERAL STATISTICS FOR INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

INDUSTRY AND INDUSTRY GROUP		1947						1939			
		Number of establishments	Number of proprietors and firm members	All employees		Production workers		Value added by manufacture	Number of establishments	Number of production workers (average for the year)	Value added by manufacture
				Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
No.	Title										
23	Apparel and related products—Continued										
238	Miscellaneous apparel and accessories	1,727	1,443	57,229	\$119,519	50,972	\$91,548	\$215,019	951	38,222	\$65,103
2381	Fabric and combination dress gloves	130	71	5,136	8,378	4,769	6,998	13,256	51	3,852	4,665
2382	Fabric and combination work gloves	144	65	10,981	17,979	10,421	15,963	35,005	94	8,001	10,530
2383	Suspenders and garters	64	64	1,685	3,641	1,408	2,417	6,774	66	2,568	6,565
2384	Robes and dressing gowns	376	358	10,884	23,353	9,803	17,630	42,563	190	5,774	11,740
2385	Waterproof outer garments	247	221	8,283	19,561	7,339	14,991	31,975	81	2,412	4,341
2386	Leather and sheep-lined clothing	126	114	4,335	10,678	3,816	8,041	18,798	97	4,072	8,376
2387	Belts	396	361	9,162	22,016	7,573	15,889	38,037	245	9,176	17,976
2388	Handkerchiefs	159	134	4,583	9,054	4,073	6,303	20,689	80	4,839	7,002
2389	Apparel, n.e.c.	85	55	2,180	4,869	1,765	3,316	7,922	47	992	2,198
239	Miscellaneous fabricated textiles	6,254	6,155	127,631	273,400	113,210	210,501	532,526	3,208	68,814	143,503
2391	Curtains and draperies	397	286	7,982	17,081	6,928	11,702	34,909	327	7,091	13,053
2392	Housefurnishings, n.e.c.	1,233	1,114	40,220	78,790	36,384	63,053	150,430	584	20,096	34,210
2393	Textile bags	233	140	10,824	28,363	12,159	21,046	60,320	216	11,091	27,805
2394	Canvas products	902	857	10,569	24,667	8,639	17,429	41,424	334	3,869	11,378
2395	Tucking, pleating, and hemstitching	531	626	5,029	12,421	5,532	11,035	21,339	273	4,254	8,420
2396	Trimmings and art goods	787	789	15,007	33,024	13,120	25,547	65,092	383	5,455	13,485
2397	Schiffli-machine embroideries	646	710	5,078	15,054	5,080	11,081	31,733	398	3,750	7,903
2398	Embroideries, except Schiffli-machine	787	936	9,836	20,234	9,308	17,027	34,521	411	4,797	7,013
2399	Fabricated textile products, n.e.c.	838	697	18,520	42,866	16,060	31,381	80,708	372	6,011	18,847
24	Lumber and products, except furniture	26,231	29,272	635,798	1,337,612	598,118	1,179,981	2,497,192	13,208	422,947	731,208
242	Lumber and timber basic products	19,685	24,021	406,815	797,161	388,665	728,645	1,560,476	8,058	260,200	425,220
2421	Sawmills and planing mills, general	19,223	23,770	382,902	753,878	366,119	691,094	1,491,932	7,546	262,036	402,729
2422	Veneer mills	156	85	10,461	20,441	9,722	17,248	30,868	139	7,784	11,873
2424	Cooperage stock mills	250	109	12,291	20,253	11,739	17,984	27,191	320	8,464	9,012
2425	Excelsior mills	56	57	1,161	2,579	1,085	2,319	4,495	53	925	1,606
243	Millwork and related products	2,681	2,250	94,275	255,366	83,214	207,733	442,746	2,406	50,434	133,665
2431	Millwork plants	2,312	2,043	57,589	156,073	60,288	125,014	256,399	2,260	41,532	103,380
2432	Plywood plants	162	71	26,489	71,026	24,448	61,977	140,087	98	13,164	26,058
2433	Prefabricated wood products	207	138	10,177	28,267	8,478	20,742	40,260	48	1,748	3,627
244	Wooden containers	1,516	1,147	69,104	139,553	64,727	121,257	233,453	1,379	57,602	87,587
2441	Fruit and vegetable baskets	141	138	9,105	13,398	8,781	12,093	19,330	101	9,093	9,815
2442	Rattan and willow ware, n.e.c.	53	57	1,073	2,101	983	1,776	3,573	47	1,377	2,244
2443	Cigar boxes	42	25	1,875	3,135	1,747	2,650	4,655	59	3,101	3,848
2444	Wooden boxes (except cigar boxes)	1,025	845	47,828	98,833	44,606	85,757	174,545	702	36,838	57,737
2445	Cooperage	255	82	9,223	22,086	8,610	18,981	31,350	350	7,193	13,043
249	Miscellaneous wood products	2,349	1,854	65,514	145,542	59,512	122,346	260,517	1,305	30,702	84,736
2491	Wood preserving	242	54	16,247	37,142	14,772	32,020	92,041	218	11,242	28,818
2492	Lasts and related products	50	13	1,959	5,348	1,699	4,159	8,937	48	1,519	4,046
2493	Mirror and picture frames	246	208	3,811	10,255	3,293	7,742	15,506	182	3,220	7,679
2499	Wood products, n.e.c.	1,811	1,579	43,497	92,797	39,748	78,425	144,033	917	23,721	43,503
25	Furniture and fixtures	7,687	6,112	322,384	824,061	282,780	653,915	1,377,908	5,178	189,382	417,785
251	Household furniture	4,880	3,774	228,946	559,025	204,020	450,772	933,407	3,390	143,100	288,450
2511	Wood house furniture, exc. upholst.	2,251	1,692	132,709	306,371	120,661	254,595	492,738	1,273	83,923	147,093
2512	Household furniture, upholstered	1,991	1,086	44,755	114,861	39,786	92,908	102,430	977	32,226	67,006
2513	Reed and rattan furniture	29	23	771	1,919	686	1,521	3,097	55	970	1,010
2514	Metal house furniture, exc. upholst.	309	178	19,485	51,634	16,654	39,369	94,511	138	7,033	10,587
2515	Mattresses and bedsprings	879	780	30,344	82,102	25,400	60,824	140,050	947	18,342	52,173
2519	Household furniture, n.e.c.	21	15	882	2,138	773	1,555	4,041			
252	Office furniture	218	109	21,292	59,834	17,984	47,128	107,711	127	11,105	30,403
2521	Wood office furniture	115	70	6,601	17,211	5,897	14,152	26,839	64	4,013	7,327
2522	Metal office furniture	103	39	14,691	42,623	12,087	32,976	80,872	63	7,152	23,070
253	Public and professional furniture	195	95	14,410	41,151	11,916	30,500	65,098	170	8,715	23,174
2531	Public-building furniture	118	65	8,855	24,710	7,402	18,716	37,632	106	5,900	15,241
2532	Professional furniture	77	30	5,555	16,441	4,514	11,784	27,466	73	2,815	7,933
2541	Partitions and fixtures	1,134	954	27,678	88,632	23,783	69,953	136,843	707	14,911	43,857
256	Screens, shades, and blinds	1,058	1,004	25,973	64,237	21,541	46,600	116,396	715	11,401	31,892
2561	Window and door screens	284	232	9,510	25,205	7,706	17,894	44,416	102	2,830	7,381
2562	Window shades	126	79	6,760	18,668	5,495	13,264	34,844	273	3,261	11,061
2563	Venetian blinds	648	693	9,703	20,364	8,280	16,448	37,136	280	5,400	12,850
259	Miscellaneous furniture and fixtures	202	176	4,085	11,182	3,536	8,956	18,393			
2591	Restaurant furniture	173	151	3,370	9,161	2,880	7,273	15,201			
2599	Furniture and fixtures, n.e.c.	29	25	715	2,021	656	1,683	3,192			
26	Paper and allied products	4,103	1,289	449,833	1,280,672	388,901	1,010,972	2,874,958	9,328	270,239	888,350
261	Pulp, paper, and paperboard	891	27	198,370	609,270	174,096	509,023	1,466,046	844	142,097	407,807
2611	Pulp mills	226	7	50,290	148,125	45,412	127,452	415,038	194	20,870	82,115
2612	Paper and board mills	665	20	148,080	461,145	128,684	381,571	1,050,108	650	115,227	415,752
2641	Paper coating and glazing	182	28	18,133	56,832	15,194	43,190	120,840	140	7,450	30,750
2651	Envelopes	164	43	13,797	39,191	11,543	27,656	68,253	109	8,689	25,495
2661	Paper bags	193	65	22,265	53,800	19,558	42,318	119,265	119	11,081	31,812
267	Paperboard containers and boxes	1,652	705	119,131	316,136	102,861	236,020	670,127	1,454	60,107	188,264
2671	Paperboard boxes	1,522	647	109,776	292,948	94,625	217,154	633,269	1,388	62,530	168,871
2674	Fiber cans, tubes, drums, etc.	130	58	9,355	23,188	8,236	18,866	36,858	116	6,637	10,303
269	Pulp goods and misc. paper products	1,021	421	78,137	205,383	65,049	152,765	424,427	602	31,755	114,153
2691	Die-cut paper and board	205	109	8,488	23,200	7,032	17,039	40,955	121	4,354	17,194
2693	Wallpaper	58	4	5,462	16,287	4,771	12,222	32,732	46	4,054	13,273
2694	Pulp goods, pressed and molded	19	10	1,748	4,910	1,482	3,870	9,672	14	701	2,304
2699	Converted paper products, n.e.c.	739	298	62,439	160,986	52,364	119,034	335,068	421	22,040	81,382

¹ Includes data for Shingle Mills (Industry 2423).

SUMMARY STATISTICS

TABLE 2.—GENERAL STATISTICS FOR INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

INDUSTRY AND INDUSTRY GROUP		1947						1939			
		Number of establishments	Number of proprietors and firm members	All employees		Production workers		Value added by manufacture	Number of establishments	Number of production workers (average for the year)	Value added by manufacture
				Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
No.	Title										
27	Printing and publishing industries	28,986	22,685	715,450	\$2,277,263	438,135	\$1,318,252	\$4,269,416	24,878	324,371	\$1,765,314
2711	Newspapers.....	8,339	7,069	234,375	743,854	118,116	372,725	1,398,724	7,278	96,731	673,802
2721	Periodicals.....	2,160	727	68,823	235,508	19,346	64,314	664,632	2,337	15,411	262,999
273	Books.....	804	273	50,900	143,114	17,372	49,844	320,862	753	13,786	128,185
2731	Books: publishing and printing.....	648	219	39,942	104,278	8,082	20,142	262,903	554	6,158	103,708
2732	Book printing.....	156	54	10,958	38,830	9,280	29,702	57,959	199	7,628	24,477
2741	Miscellaneous publishing.....	611	332	12,036	35,200	3,430	8,475	72,151	175	477	12,560
2751	Commercial printing.....	11,932	10,459	193,415	598,702	155,987	453,516	977,686	10,295	112,389	381,892
2761	Lithographing.....	1,413	901	52,240	192,178	41,247	126,872	313,462	789	26,948	99,910
2771	Greeting cards.....	162	88	18,053	43,898	12,650	23,900	81,051	109	7,522	24,225
278	Bookbinding and related industries	1,342	1,190	42,661	107,466	36,437	84,632	177,144	1,137	25,891	73,164
2781	Bookbinding.....	686	628	22,227	57,541	20,037	48,857	90,259	620	14,339	33,399
2782	Blankbook making and paper ruling.....	305	278	8,768	21,028	7,039	14,654	36,622	247	5,126	20,528
2783	Loose-leaf binders and devices.....	131	86	8,133	20,946	6,445	14,914	36,797	132	3,964	13,530
2789	Miscellaneous bookbinding work.....	220	198	3,433	7,951	2,910	6,207	13,466	138	2,462	5,707
279	Printing trades service industries	2,217	1,646	43,047	177,343	33,550	133,980	264,004	2,005	25,216	108,577
2791	Typesetting.....	794	694	11,475	44,905	9,301	35,409	61,842	641	6,244	22,044
2792	Engraving and plate printing.....	416	346	7,688	20,998	6,463	16,959	33,094	436	5,363	16,134
2793	Photoengraving.....	770	540	16,711	80,003	12,234	57,962	116,131	694	48,258	88,258
2794	Electrotyping and stereotyping.....	237	66	7,173	31,436	5,552	23,650	47,937	234	9,207	22,141
28	Chemicals and allied products	10,073	4,034	632,319	1,910,463	466,458	1,242,628	5,365,201	8,839	275,669	1,818,941
281	Industrial inorganic chemicals	412	105	65,347	204,113	50,203	146,960	454,699	340	33,595	233,718
2812	Alkalies and chlorine.....	32	2	19,853	63,822	15,017	45,494	113,888	33	10,516	68,204
2819	Inorganic chemicals, n.e.c.....	380	103	45,494	140,291	35,186	101,466	340,831	307	23,079	165,514
282	Industrial organic chemicals	563	52	206,295	648,018	157,905	458,663	1,551,381	388	86,873	476,801
2821	Cycolic (coal-tar) erudes.....	46	1	1,972	5,490	1,633	4,627	17,071	45	1,528	11,433
2823	Plastics materials.....	125	6	29,337	93,410	22,212	64,306	200,341	41	7,191	39,742
2824	Synthetic rubber.....	20	-----	7,663	25,774	5,721	18,381	97,356	-----	-----	-----
2825	Synthetic fibers.....	38	5	71,882	199,910	67,857	150,380	447,877	30	48,332	168,606
2826	Explosives.....	76	3	10,426	32,313	8,932	26,051	74,706	80	7,242	44,193
2829	Organic chemicals, n.e.c.....	258	37	85,015	291,721	61,560	195,018	714,030	192	22,580	212,827
283	Drugs and medicines	1,355	543	81,803	236,912	54,725	133,324	748,570	1,117	24,212	260,649
2831	Biological products.....	85	55	3,154	8,831	2,244	5,119	19,941	80	2,155	12,046
2832	Botanical products.....	15	4	709	2,042	506	1,245	9,009	17	618	4,389
2833	Medicinal chemicals.....	92	27	12,388	40,178	9,414	28,032	110,516	20	1,892	10,701
2834	Pharmaceutical preparations.....	1,163	457	65,652	185,861	42,561	98,928	609,104	1,000	19,637	233,513
284	Soap and related products	1,392	774	44,962	149,753	29,729	82,042	606,079	986	19,509	200,988
2841	Soap and glycerin.....	249	103	27,660	93,638	19,394	57,619	450,721	264	13,624	141,632
2842	Cleaning and polishing preparations.....	1,038	631	15,352	48,209	9,090	20,984	135,120	637	5,128	52,097
2843	Sulfonated oils and assistants.....	105	37	1,950	7,906	1,245	3,439	20,238	85	757	7,259
285	Paints and allied products	1,456	550	67,807	224,840	46,822	124,936	573,237	1,225	27,660	225,818
2851	Paints and varnishes.....	1,291	495	63,412	180,952	34,693	94,155	469,584	1,125	21,879	185,723
2852	Inorganic color pigments.....	94	19	13,140	39,747	10,310	28,731	94,658	59	5,497	38,373
2853	Whiting and fillers.....	71	36	1,255	4,141	819	2,050	8,995	41	284	1,722
286	Gum and wood chemicals	118	66	8,466	20,552	7,382	16,347	62,965	868	6,368	20,723
2861	Hardwood distillation.....	27	13	1,872	4,140	1,618	3,313	7,490	43	1,770	2,915
2862	Softwood distillation.....	32	24	4,674	11,815	4,071	9,655	46,004	25	2,353	7,590
2863	Gum naval stores (steam distilled).....	31	25	638	1,385	612	947	2,634	755	971	3,906
2865	Natural tanning and dyeing materials.....	28	4	1,382	3,212	1,181	2,432	6,777	35	1,274	6,252
287	Fertilizers	704	216	31,933	71,607	26,874	52,758	186,601	763	18,807	57,241
2871	Fertilizers.....	187	13	20,371	48,000	17,373	37,309	129,856	171	11,923	32,172
2872	Fertilizers (mixing only).....	617	203	11,562	23,607	9,201	15,449	56,745	592	7,770	25,069
288	Vegetable and animal oils	1,194	625	43,431	117,307	35,887	86,054	482,476	962	27,042	86,785
2881	Cottonseed oil mills.....	315	47	14,398	31,419	12,136	22,560	104,603	447	15,191	32,712
2882	Linseed oil mills.....	17	-----	1,877	4,536	1,349	3,628	42,243	25	2,120	11,555
2883	Soybean oil mills.....	133	34	6,490	18,773	5,076	13,489	105,291	47	1,481	9,512
2884	Vegetable oil mills, n.e.c.....	84	16	6,036	13,366	4,292	9,873	77,509	38	860	3,681
2885	Marine animal oils.....	59	39	1,947	5,046	1,792	4,341	15,033	81	1,631	6,212
2886	Grease and tallow.....	556	477	12,472	38,969	10,066	28,722	118,830	310	5,201	20,111
2887	Fatty acids.....	16	3	1,335	4,433	1,037	3,055	17,151	9	522	2,813
2889	Animal oils, n.e.c.....	14	9	206	775	139	386	1,816	5	36	188
289	Miscellaneous chemical products	2,879	1,103	82,275	236,761	58,231	141,544	699,193	2,200	31,003	250,218
2891	Printing ink.....	239	57	6,021	20,496	4,154	11,890	51,949	197	2,480	23,288
2892	Essential oils.....	42	16	1,151	3,737	896	2,510	14,477	15	440	4,921
2893	Toilet preparations.....	718	330	26,023	65,580	18,186	36,697	226,872	639	10,363	88,956
2894	Glue and gelatin.....	72	19	5,372	17,133	4,317	12,472	45,346	80	3,039	15,538
2895	Carbon black.....	59	-----	3,184	10,017	2,834	8,456	44,962	53	1,574	8,523
2896	Compressed and liquefied gases.....	371	17	8,983	25,241	6,139	10,996	69,833	379	3,960	39,833
2897	Insecticides and fungicides.....	166	54	4,579	13,452	7,997	3,216	6,827	83	656	3,825
2898	Salt.....	38	5	4,809	12,762	4,056	9,826	25,197	40	3,737	17,961
2899	Chemical products, n.e.c.....	1,174	605	22,153	68,293	14,433	34,700	193,436	814	5,354	53,373
29	Petroleum and coal products	1,387	398	212,093	739,345	169,610	556,365	2,015,307	1,227	107,695	697,273
2911	Petroleum refining.....	437	103	145,806	535,781	113,847	398,236	1,494,474	518	72,982	528,575
293	Coke and byproducts.....	167	62	38,938	119,996	34,416	101,012	275,230	112	21,693	85,781
2931	Beehive coke ovens.....	78	62	3,100	10,251	2,935	9,597	21,661	29	685	1,214
2932	Byproduct coke ovens.....	89	-----	35,838	109,745	31,481	91,415	256,569	83	21,008	84,547
295	Paving and roofing materials	437	111	19,263	58,048	15,779	44,001	155,655	366	10,621	61,807
2951	Paving mixtures and blocks.....	263	75	2,684	8,268	1,960	5,486	22,803	231	2,437	13,728
2952	Roofing felts and coatings.....	174	36	16,579	49,780	13,819	38,515	132,852	135	8,187	48,079
299	Misc. petroleum and coal products	346	122	7,996	25,520	5,668	15,116	86,948	231	2,390	21,130
2991	Fuel briquets and packaged fuel.....	99	52	1,204	3,467	1,042	2,986	9,093	32	410	1,716
2992	Lubricants, n.e.c.....	233	67	6,271	20,643	4,091	11,022	69,435	199	1,986	19,414
2999	Petroleum and coal products, n.e.c.....	14	3	521	1,410	435	1,108	8,420	-----	-----	-----

TABLE 2.—GENERAL STATISTICS FOR INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

INDUSTRY AND INDUSTRY GROUP		1947						1939			
		Number of establishments	Number of proprietors and firm members	All employees		Production workers		Value added by manufacture	Number of establishments	Number of production workers (average for the year)	Value added by manufacture
				Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
No.	Title										
30	Rubber products.....	875	366	259,092	\$783,464	214,533	\$614,762	\$1,302,863	595	120,740	\$406,155
3011	Tires and inner tubes.....	57	19	115,657	390,841	93,916	311,270	650,195	53	54,115	231,372
3021	Rubber footwear.....	26	1	28,125	72,666	23,952	53,462	121,040	13	14,801	29,231
3031	Reclaimed rubber.....	15	14	2,070	6,849	1,855	5,823	9,094	10	1,072	3,002
3099	Rubber industries, n.e.c.....	777	332	113,240	313,108	94,810	239,198	522,054	519	60,692	141,650
31	Leather and leather products.....	5,308	3,496	383,175	873,566	348,529	725,143	1,532,803	3,505	327,189	582,915
3111	Leather tanning and finishing.....	561	230	53,205	156,540	48,627	130,586	403,783	440	47,262	117,394
3121	Industrial leather belting.....	183	97	5,032	13,441	4,015	9,667	28,375	190	2,337	10,814
3131	Footwear cut stock.....	606	417	22,077	47,793	19,706	38,468	87,301	620	18,845	38,912
314	Footwear (except rubber).....	1,500	406	240,315	516,879	220,654	438,894	785,543	1,069	218,010	346,147
3141	Footwear, except rubber.....	1,288	349	229,303	494,319	210,634	420,510	745,995	930	207,707	330,075
3142	House slippers.....	212	117	11,012	22,560	10,020	18,384	39,548	130	10,243	10,072
315	Leather gloves and mittens.....	341	363	11,544	20,710	10,464	17,040	31,011	231	0,530	12,407
3151	Leather dress gloves.....	252	288	8,908	15,844	8,151	13,141	24,042	166	7,090	0,700
3152	Leather work gloves.....	89	75	2,576	4,866	2,313	3,899	7,869	65	1,840	2,701
3161	Luggage.....	592	562	16,066	41,293	13,904	31,141	68,078	329	8,326	17,377
317	Handbags and small leather goods.....	980	842	25,907	57,011	23,246	44,122	96,076	404	17,063	29,891
3171	Handbags and purses.....	734	601	20,301	45,409	18,404	35,902	70,586	286	14,048	22,029
3172	Small leather goods.....	246	241	5,606	11,602	4,842	8,130	19,490	118	3,015	6,002
319	Miscellaneous leather goods.....	545	519	9,029	19,899	7,913	15,225	31,730	316	5,217	0,013
3192	Saddlery, harness, and whips.....	140	111	2,861	6,294	2,501	5,021	9,437	150	2,765	5,242
3199	Leather goods, n.e.c.....	405	408	6,168	13,605	5,412	10,204	22,299	160	2,462	4,671
32	Stone, clay, and glass products.....	11,650	10,323	462,072	1,210,768	405,755	994,884	2,306,480	6,678	267,094	856,323
3211	Flat glass.....	34	62	27,241	84,067	24,325	73,252	173,754	37	10,730	68,540
322	Pressed and blown glassware.....	213	62	89,302	230,287	79,417	193,954	421,518	102	53,083	168,062
3221	Glass containers.....	87	8	47,132	126,503	41,943	107,101	252,069	77	25,763	98,378
3229	Pressed and blown glassware, n.e.c.....	126	54	42,170	103,784	37,474	86,853	169,440	116	27,330	70,284
3231	Products of purchased glass.....	1,054	840	22,357	56,644	19,298	43,739	118,107	557	10,012	23,432
3241	Cement, hydraulic.....	155	1	35,862	98,626	30,639	70,861	247,036	100	20,240	115,209
325	Structural clay products.....	1,110	514	69,273	169,179	62,689	144,040	280,392	1,200	56,745	118,120
3251	Brick and hollow tile.....	674	328	29,617	69,399	27,002	69,876	110,867	800	20,069	55,084
3253	Floor and wall tile.....	37	18	6,828	16,335	6,250	13,774	31,238	49	6,681	12,817
3254	Sewer pipe.....	69	6	9,105	22,421	8,310	19,652	38,362	65	6,400	13,668
3255	Clay refractories.....	169	19	17,978	47,074	15,950	38,084	70,054	105	12,211	28,978
3259	Structural clay products, n.e.c.....	161	143	5,745	13,950	4,177	12,154	23,871	127	3,378	7,273
326	Pottery and related products.....	742	654	58,066	146,962	53,376	126,677	224,792	200	33,105	60,067
3261	Vitreous plumbing fixtures.....	33	4	7,831	24,615	6,996	21,187	45,677	25	4,534	14,007
3262	Vitreous-china food utensils.....	27	14	11,100	28,849	10,328	23,630	35,228	17	4,860	7,653
3263	Earthenware food utensils.....	76	63	16,747	42,091	15,742	37,175	64,837	31	11,728	10,644
3264	Porcelain electrical supplies.....	50	12	11,547	30,463	10,447	25,454	62,832	42	6,019	13,073
3265	China decorating for the trade.....	65	52	1,046	2,471	875	1,679	5,143	24	421	1,215
3269	Pottery products, n.e.c.....	491	519	9,733	20,473	8,990	17,652	31,075	151	6,054	12,775
327	Concrete and plaster products.....	6,494	7,001	70,176	169,559	61,572	140,032	346,761	2,325	28,947	108,030
3271	Concrete products.....	6,158	6,899	46,821	106,484	41,537	88,471	202,769	1,892	15,455	55,372
3272	Gypsum products.....	73	7	7,472	21,384	6,543	17,911	67,879	8	4,036	20,548
3274	Lime.....	172	59	7,069	18,767	6,129	15,516	39,253	316	6,708	18,574
3275	Mineral wool.....	91	36	8,874	22,924	7,363	18,134	36,840	40	1,848	4,530
3281	Cut-stone and stone products.....	640	581	9,880	25,922	8,312	20,895	45,940	1,002	11,841	37,148
329	Misc. nonmetallic mineral products.....	1,208	670	80,175	229,522	66,127	172,724	447,280	819	36,373	147,925
3291	Abrasive products.....	253	127	20,754	66,168	15,864	45,031	126,659	124	7,734	44,765
3292	Asbestos products.....	111	24	21,463	60,119	18,140	47,429	112,571	85	10,415	38,522
3293	Gaskets and asbestos insulations.....	191	73	12,960	36,047	10,743	27,038	65,303	134	6,907	19,602
3294	Graphite: ground or blended.....	12	853	2,799	2,799	618	1,625	4,945	6	390	390
3295	Minerals: ground or treated.....	206	46	7,955	21,328	6,729	16,798	51,058	223	5,173	23,046
3296	Sand-lime products.....	26	9	303	746	250	591	1,188	27	346	1,276
3297	Nonclay refractories.....	63	4	10,273	27,783	8,951	22,963	58,022	41	4,542	13,404
3298	Statuary and art goods.....	272	359	2,025	4,268	1,829	3,534	7,391	126	983	2,466
3299	Nonmetallic mineral products, n.e.c.....	74	28	3,589	10,274	3,003	7,715	20,145	53	1,217	3,724
33	Primary metal industries.....	5,363	2,893	1,157,124	3,594,548	1,010,055	2,976,507	5,765,434	3,512	672,433	2,168,899
331	Blast furnaces and steel mills.....	320	4	547,364	1,735,111	478,960	1,454,985	2,659,250	352	391,215	1,260,499
3311	Blast furnaces.....	86	4	36,937	112,018	32,697	93,598	328,060	81	10,537	87,083
3312	Steel works and rolling mills.....	215	4	600,799	1,593,808	438,088	1,337,938	2,276,697	253	308,004	1,147,548
3313	Electrometallurgical products.....	19	9,628	29,285	29,285	8,175	23,440	55,493	18	2,774	15,868
332	Iron and steel foundries.....	1,930	939	267,306	793,485	239,272	672,116	1,121,522	1,501	123,809	205,012
3321	Gray-iron foundries.....	1,654	904	173,776	512,177	157,361	441,687	732,647	1,254	75,080	169,278
3322	Malleable-iron foundries.....	78	1	29,862	90,811	26,659	76,750	121,601	83	18,041	35,500
3323	Steel foundries.....	204	34	63,668	190,497	55,252	153,709	267,214	164	30,088	90,234
333	Primary nonferrous metals.....	88	4	42,804	127,026	37,396	107,291	325,643	63	27,030	137,002
3331	Primary copper.....	27	-----	14,629	44,790	13,065	38,967	134,658	-----	-----	-----
3332	Primary lead.....	16	-----	4,663	14,082	4,022	11,610	35,902	-----	-----	-----
3333	Primary zinc.....	20	-----	12,424	35,476	11,088	30,475	77,068	-----	-----	-----
3334	Primary aluminum.....	11	-----	8,919	26,398	7,336	20,930	65,282	-----	-----	-----
3339	Primary nonferrous metals, n.e.c.....	14	4	2,169	6,280	1,885	5,309	12,753	4	2,802	86,885
3341	Secondary nonferrous metals.....	322	158	18,402	56,576	14,750	39,046	119,667	280	8,109	41,381
335	Nonferrous metal rolling and drawing.....	162	11	88,824	264,117	74,796	209,657	603,363	101	40,300	185,197
3351	Copper rolling and drawing.....	78	5	53,887	166,076	45,924	133,969	302,592	57	33,697	135,642
3352	Aluminum rolling and drawing.....	29	2	27,365	73,665	22,786	57,544	150,697	13	0,020	34,831
3359	Nonferrous metal rolling, n.e.c.....	55	4	7,592	24,376	6,086	18,144	50,074	31	2,786	15,224

SUMMARY STATISTICS

TABLE 2.—GENERAL STATISTICS FOR INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

INDUSTRY AND INDUSTRY GROUP		1947							1939		
		Number of establishments	Number of proprietors and firm members	All employees		Production workers		Value added by manufacture	Number of establishments	Number of production workers (average for the year)	Value added by manufacture
				Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
No.	Title										
33	Primary metal industries—Cont.										
3361	Nonferrous foundries.....	1,724	1,431	65,342	\$198,988	57,469	\$163,706	\$295,834	776	23,362	\$67,590
339	Misc. primary metal industries.....	811	346	127,082	419,245	107,412	329,706	740,155	439	52,004	192,218
3391	Iron and steel forgings.....	250	92	36,724	128,198	32,384	105,776	197,111	192	14,764	49,426
3392	Wire drawing.....	134	32	55,079	175,682	45,644	136,797	314,788	95	21,969	76,521
3393	Welded and heavy-riveted pipe.....	50	10	13,144	48,115	11,306	34,348	89,614	49	8,370	34,008
3399	Primary metal industries, n.e.c.....	377	212	22,135	72,280	18,078	52,785	138,642	103	6,901	32,263
34	Fabricated metal products.....	16,734	12,348	971,461	2,832,835	822,514	2,188,581	4,921,476	9,532	451,087	1,400,883
3411	Tin cans and other tinware.....	217	24	46,890	127,338	49,890	105,089	231,953	195	29,277	116,152
342	Cutlery, hand tools, and hardware.....	1,866	1,245	154,168	432,726	131,004	339,103	728,426	1,212	75,175	208,968
3421	Cutlery.....	195	125	20,248	64,142	17,579	42,530	104,833	124	10,252	28,381
3422	Edge tools.....	238	169	8,828	24,061	7,632	19,486	40,472	163	13,183	31,183
3423	Hand tools, n.e.c.....	579	410	35,668	103,191	30,138	79,061	174,540	354	14,722	46,110
3424	Files.....	37	19	4,440	11,213	4,084	9,714	19,149	22	3,203	8,841
3425	Hand saws and saw blades.....	89	43	8,441	25,600	7,380	20,872	42,975	87	4,072	11,686
3429	Hardware, n.e.c.....	728	482	70,537	213,896	64,791	167,500	346,457	462	38,035	100,767
343	Heating and plumbing equipment.....	1,276	569	150,882	430,102	126,725	339,029	789,524	1,036	78,330	244,851
3431	Metal plumbing fixtures.....	277	146	34,089	96,371	30,107	80,144	155,944	247	22,889	66,743
3432	Oil burners.....	151	52	6,818	19,889	4,646	12,760	44,388	133	1,852	8,391
3439	Heating and cooking apparatus, n.e.c.....	848	371	110,475	322,842	91,972	246,125	589,192	656	53,889	169,717
344	Structural metal products.....	4,507	3,304	212,379	661,099	172,690	486,737	1,143,553	3,099	83,429	288,601
3441	Structural and ornamental products.....	1,667	1,170	79,678	249,034	64,278	180,105	440,701	1,171	36,776	116,925
3442	Metal doors, sash, and trim.....	320	193	21,079	66,038	19,238	49,238	117,642	188	7,387	27,425
3443	Boiler shop products.....	812	523	68,979	213,364	55,937	157,464	358,764	478	20,517	77,891
3444	Sheet-metal work.....	1,708	1,418	42,643	132,603	35,110	99,930	226,446	1,262	18,749	66,360
346	Metal stamping and coating.....	4,437	3,859	182,983	521,331	159,926	414,874	861,173	1,920	80,649	225,317
3461	Vitreous-enamelled products.....	49	7	12,240	28,070	11,061	22,917	45,116	55	10,809	23,891
3463	Metal stampings.....	1,981	1,332	132,011	388,038	113,976	304,120	642,483	965	57,182	168,209
3465	Enameling and lacquering.....	261	248	4,025	10,188	3,653	8,653	16,638	80	1,821	4,480
3466	Galvanizing.....	125	98	3,056	8,636	2,711	6,548	15,296	83	1,212	3,683
3467	Engraving on metal.....	219	231	3,428	10,064	2,929	8,176	16,262	94	1,419	4,186
3468	Plating and polishing.....	1,802	1,943	28,223	76,345	25,590	64,460	125,388	643	8,206	20,868
3471	Lighting fixtures.....	1,206	802	47,596	132,858	39,883	97,351	247,619	568	20,477	64,731
348	Fabricated wire products.....	977	689	60,647	171,294	52,543	136,195	282,147	705	32,901	90,937
3481	Nails and spikes.....	68	27	3,805	9,876	3,278	7,738	15,721	36	2,515	7,072
3489	Wirework, n.e.c.....	909	602	56,842	161,418	49,265	128,457	266,420	669	30,386	83,865
349	Misc. fabricated metal products.....	2,248	1,856	115,916	347,087	98,253	269,543	637,081	797	50,849	161,326
3491	Metal barrels, drums, and pails.....	70	7	10,915	31,331	9,329	24,919	64,119	64	6,072	16,838
3492	Safes and vaults.....	26	16	3,754	10,117	3,004	7,437	19,434	16	1,236	3,671
3493	Steel springs.....	81	23	7,760	24,938	6,747	20,233	45,870	53	2,940	10,249
3494	Bolts, nuts, washers, and rivets.....	364	199	49,235	151,514	40,908	115,790	285,451	219	20,722	63,999
3495	Screw-machine products.....	1,207	1,242	28,492	86,860	24,740	68,049	143,853	288	10,871	31,654
3496	Collapsible tubes.....	19	4	3,866	9,415	3,475	7,205	16,942	14	1,933	4,536
3497	Metal foil.....	43	29	4,261	11,732	3,673	9,252	21,439	39	2,278	11,051
3499	Fabricated metal products, n.e.c.....	438	336	7,033	21,190	6,377	15,759	39,967	104	5,097	19,328
35	Machinery (except electrical).....	17,906	13,159	1,545,323	4,804,563	1,244,135	3,592,771	7,812,455	8,860	536,082	2,036,965
351	Engines and turbines.....	151	31	93,064	298,789	71,826	218,538	408,099	94	18,646	72,684
3511	Steam engines and turbines.....	17	2	21,640	71,972	15,375	49,584	80,947	20	4,094	15,782
3519	Internal-combustion engines.....	134	29	71,424	226,817	56,451	168,954	327,152	74	14,752	56,902
352	Tractors and farm machinery.....	1,102	774	171,435	494,625	139,629	381,574	753,762	421	60,144	210,958
3521	Tractors.....	94	44	77,317	227,767	62,926	177,966	332,062	28	30,776	116,721
3522	Farm machinery (except tractors).....	1,008	730	94,118	266,858	76,703	203,608	421,700	393	29,248	94,237
353	Construction and mining machinery.....	747	324	113,871	355,367	88,905	255,047	641,397	562	36,750	159,266
3531	Construction and mining machinery.....	517	206	84,694	263,835	66,106	189,964	470,132	323	24,108	101,155
3532	Oil-field machinery and tools.....	230	118	29,177	91,532	22,709	65,083	171,265	239	12,642	58,101
354	Metalworking machinery.....	4,293	3,780	214,543	723,840	172,982	541,586	1,131,182	1,470	80,954	325,235
3541	Machine tools.....	316	139	70,657	235,938	54,892	166,206	347,965	224	36,997	155,941
3542	Metalworking machinery, n.e.c.....	428	194	54,888	182,068	43,568	132,810	302,842	231	18,123	73,439
3543	Cutting tools, jigs, fixtures, etc.....	3,549	3,447	88,898	310,834	74,522	242,570	480,375	1,015	25,834	96,855
355	Special-industry machinery, n.e.c.....	4,106	3,107	215,967	685,776	173,592	512,363	1,095,558	2,239	77,246	268,233
3551	Food-products machinery.....	822	380	36,839	113,506	28,826	82,062	191,214	406	14,155	58,587
3552	Textile machinery.....	489	255	53,583	168,446	45,393	126,142	256,436	339	22,880	62,033
3553	Woodworking machinery.....	294	173	15,642	48,707	12,623	35,332	86,360	148	3,649	12,677
3554	Paper-industries machinery.....	149	57	17,088	57,749	13,393	41,523	81,358	116	5,670	20,198
3555	Printing-trades machinery.....	326	192	24,752	84,333	19,584	62,616	131,625	254	9,664	41,137
3559	Special-industry machinery, n.e.c.....	2,226	2,070	68,063	223,035	53,768	164,688	348,565	976	21,728	73,601
356	General industrial machinery.....	2,191	1,100	217,402	690,443	164,249	472,472	1,189,229	1,380	72,799	302,024
3561	Pumps and compressors.....	447	206	54,726	167,498	40,358	115,404	282,476	369	20,963	84,780
3562	Elevators and escalators.....	111	56	10,227	33,998	7,317	22,890	68,614	101	3,591	16,945
3563	Conveyors.....	253	136	24,578	84,084	18,073	55,024	148,515	115	5,733	22,931
3564	Blowers and fans.....	182	98	14,794	44,202	11,087	30,329	84,429	89	4,069	17,474
3565	Industrial trucks and tractors.....	197	121	13,974	42,038	10,652	26,660	81,789	70	3,652	13,181
3566	Power-transmission equipment.....	410	209	54,316	173,596	43,975	124,941	283,647	250	18,203	68,488
3567	Industrial furnaces and ovens.....	108	36	6,341	21,719	4,045	11,872	38,990	60	1,263	7,766
3568	Mechanical stokers.....	46	20	4,111	12,371	3,118	8,886	22,212	65	3,756	15,407
3569	General industrial machinery, n.e.c.....	421	218	34,335	110,937	25,624	73,466	183,557	261	12,449	55,052

TABLE 2.—GENERAL STATISTICS FOR INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

INDUSTRY AND INDUSTRY GROUP		1947						1939			
		Number of establishments	Number of proprietors and firm members	All employees		Production workers		Value added by manufacture	Number of establishments	Number of production workers (average for the year)	Value added by manufacture
				Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
No.	Title										
35	Machinery (except electrical)—Continued										
357	Office and store machines.....	357	125	97,778	\$303,123	84,340	\$247,458	\$503,854	251	42,080	\$146,043
3571	Computing and related machines.....	53	21	46,375	154,710	40,467	129,361	231,207	38	16,517	71,929
3572	Typewriters.....	28	6	26,604	73,377	23,838	63,709	121,385	18	16,195	20,096
3576	Scales and balances.....	75	33	6,526	18,849	4,874	12,847	34,766	50	2,839	9,363
3579	Office and store machines, n.e.c.....	201	65	18,273	56,181	15,161	41,541	116,496	139	7,438	35,655
358	Service and household machines.....	1,088	521	220,286	659,982	180,771	504,203	1,105,798	650	67,906	273,576
3581	Domestic laundry equipment.....	65	17	28,403	85,596	23,651	65,596	101,791	42	7,460	25,230
3582	Laundry and dry-cleaning machinery.....	127	67	9,093	27,435	6,888	19,015	54,347	88	2,783	13,358
3583	Sewing machines.....	70	46	15,305	48,484	12,647	37,920	68,681	30	7,840	21,000
3584	Vacuum cleaners.....	34	17	14,880	44,797	12,232	35,269	91,047	21	3,880	33,113
3585	Refrigeration machinery.....	561	269	129,290	380,216	108,316	299,175	597,486	343	30,433	147,000
3586	Measuring and dispensing pumps.....	52	15	12,083	36,972	8,884	24,174	66,223	38	5,054	25,267
3589	Service and household machines, n.e.c.....	179	90	11,232	30,482	8,153	23,051	66,223	70	1,444	8,407
359	Miscellaneous machinery parts.....	3,871	3,397	200,977	587,618	167,841	459,530	983,576	1,793	78,448	277,956
3591	Valves and fittings, except plumbers'.....	453	187	80,075	238,951	65,855	184,038	393,860	298	32,150	107,511
3592	Fabricated pipe and fittings.....	212	143	10,568	33,362	8,273	23,172	58,786	112	2,792	10,842
3593	Ball and roller bearings.....	94	15	52,174	153,333	45,075	125,711	259,060	58	10,164	77,497
3599	Machine shops.....	3,112	3,052	58,160	161,972	48,638	126,009	271,870	1,325	24,333	82,106
36	Electrical machinery.....	3,973	1,727	801,359	2,271,039	639,147	1,647,401	3,894,115	1,979	247,930	941,469
361	Electrical industrial apparatus.....	1,567	681	321,352	940,861	253,575	683,452	1,616,398	713	95,179	374,002
3611	Wiring devices and supplies.....	342	141	38,367	102,322	32,452	77,451	213,596	141	14,024	47,951
3612	Carbon and graphite products.....	44	13	7,818	22,028	6,426	16,504	40,218	31	3,180	11,694
3613	Electrical measuring instruments.....	154	68	20,928	60,661	16,086	42,326	103,946	50	6,970	26,093
3614	Motors and generators.....	256	88	127,012	374,135	101,852	282,252	569,745	132	44,423	160,054
3615	Transformers.....	144	83	36,635	107,978	28,160	78,525	195,102	47	6,200	38,808
3616	Electrical control apparatus.....	324	155	72,330	215,974	54,589	148,300	395,175	217	14,747	71,830
3617	Electrical welding apparatus.....	108	42	7,265	29,151	5,139	17,709	67,310	47	1,653	10,313
3619	Elec. industrial apparatus, n.e.c.....	195	91	10,999	28,612	8,871	20,325	41,306	39	907	3,609
3621	Electrical appliances.....	326	127	44,371	124,957	37,271	96,654	236,241	118	13,572	42,150
3631	Insulated wire and cable.....	171	86	21,282	58,044	18,185	45,375	103,722	70	15,096	50,265
3641	Engine electrical equipment.....	110	30	43,920	125,933	37,978	102,144	196,351	90	17,043	60,066
3651	Electric lamps.....	62	12	23,842	57,914	21,556	48,891	120,344	55	9,822	36,287
366	Communication equipment.....	1,210	476	303,391	847,247	234,706	581,158	1,374,117	460	74,092	267,374
3661	Radios and related products.....	857	337	178,595	462,207	142,478	324,306	773,233	305	45,484	125,429
3662	Electronic tubes.....	51	6	27,703	65,420	22,571	46,704	94,010	26	11,256	23,901
3663	Phonograph records.....	111	74	10,045	29,193	8,240	22,840	75,600	24	6,424	6,424
3664	Telephone and telegraph equipment.....	90	20	76,072	258,567	53,630	167,488	384,417	43	14,433	98,715
3669	Communication equipment, n.e.c.....	101	39	10,976	31,860	7,781	19,826	46,707	62	2,893	12,905
369	Miscellaneous electrical products.....	527	315	43,201	116,623	35,882	89,727	240,942	404	21,826	85,355
3691	Storage batteries.....	246	182	16,570	48,379	13,632	38,257	114,246	130	9,584	36,841
3692	Primary batteries (dry and wet).....	38	7	10,261	24,463	9,181	20,056	45,275	31	5,470	18,565
3693	X-ray and therapeutic apparatus.....	116	62	7,678	23,217	5,621	15,354	38,635	77	1,020	12,087
3699	Electrical products, n.e.c.....	127	64	8,692	20,564	7,448	16,460	48,786	106	4,872	18,892
37	Transportation equipment.....	3,711	2,534	1,181,680	3,719,583	987,142	2,939,815	5,869,196	2,012	544,553	1,772,873
371	Motor vehicles and equipment.....	1,904	1,225	701,121	2,297,456	699,301	1,797,805	3,810,070	1,128	303,617	1,304,395
3717	Motor vehicles and parts.....	963	434	653,169	2,067,473	558,993	1,687,885	3,577,404	942	388,126	1,287,472
3713	Truck and bus bodies.....	603	546	28,646	79,386	22,876	62,664	127,429	109	3,000	13,626
3715	Truck trailers.....	119	63	12,020	34,386	9,400	25,256	65,257	99	3,000	13,626
3716	Automobile trailers.....	219	182	9,286	26,764	8,332	22,200	48,986	87	1,531	3,207
372	Aircraft and parts.....	332	201	219,811	703,702	102,596	470,297	954,575	131	48,761	183,873
3721	Aircraft.....	58	4	146,625	462,906	110,332	310,795	605,983	44	34,159	112,343
3722	Aircraft engines.....	57	23	50,253	165,554	35,872	110,177	251,158	20	9,445	60,928
3723	Aircraft propellers.....	13	4	7,423	25,966	4,822	15,230	26,685	67	5,157	20,602
3729	Aircraft equipment, n.e.c.....	204	170	15,310	49,576	11,570	34,095	70,749	67	5,157	20,602
373	Ships and boats.....	1,110	884	149,655	467,585	132,033	394,371	580,558	608	69,241	170,898
3731	Ship building and repairing.....	301	107	130,200	415,828	114,718	350,836	517,504	608	69,241	170,898
3732	Boat building and repairing.....	809	777	19,455	51,757	17,315	43,535	69,054	608	69,241	170,898
374	Railroad equipment.....	122	20	91,116	283,552	75,691	221,867	415,907	68	24,796	82,251
3741	Locomotives and parts.....	36	9	39,337	97,908	25,368	78,131	142,477	20	6,098	23,450
3742	Railroad and street cars.....	86	9	90,779	185,944	50,323	146,736	273,130	48	17,711	58,801
3751	Motorcycles and bicycles.....	76	34	15,615	45,661	13,059	37,732	72,838	36	6,973	19,011
3799	Transportation equipment, n.e.c.....	167	170	4,592	11,627	3,862	8,743	20,542	41	1,252	3,145
38	Instruments and related products.....	2,599	1,661	231,997	665,347	181,939	467,785	1,080,336	1,292	84,867	333,409
3811	Scientific instruments.....	216	122	20,384	61,719	15,023	41,831	83,010	125	6,520	30,627
3821	Mechanical measuring instruments.....	463	274	53,237	155,589	40,937	109,196	245,144	227	15,075	69,463
3831	Optical instruments and lenses.....	114	90	6,458	18,664	5,228	14,025	20,743	31	2,209	7,159
384	Medical instruments and supplies.....	980	686	38,369	107,837	29,617	71,281	184,665	552	14,624	64,620
3841	Surgical and medical instruments.....	139	102	6,980	20,297	5,818	15,281	30,214	61	1,011	7,235
3842	Surgical appliances and supplies.....	628	458	22,315	61,915	16,667	38,600	111,526	360	8,468	36,102
3843	Dental equipment and supplies.....	213	126	9,074	25,625	7,132	17,304	42,925	131	4,245	18,289
3851	Ophthalmic goods.....	184	96	22,457	56,811	19,744	46,224	81,530	91	10,252	30,745
3861	Photographic equipment.....	366	216	59,911	154,416	36,273	101,765	264,784	160	19,434	87,816
387	Watches and clocks.....	276	177	40,181	110,311	35,117	83,463	194,460	106	19,744	52,973
3871	Watches and clocks.....	194	119	34,623	93,331	30,237	70,372	169,474	104	17,335	47,169
3872	Watchcases.....	82	58	5,558	16,980	4,880	13,091	24,986	42	2,409	8,804

TABLE 2.—GENERAL STATISTICS FOR INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

INDUSTRY AND INDUSTRY GROUP		1947						1939			
		Number of establishments	Number of proprietors and firm members	All employees		Production workers		Value added by manufacture	Number of establishments	Number of production workers (average for the year)	Value added by manufacture
				Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
No.	Title										
39	Miscellaneous manufactures.....	14,131	11,849	464,420	\$1,205,508	397,579	\$920,508	\$2,090,168	8,084	241,725	\$629,994
391	Jewelry and silverware.....	2,031	1,855	54,827	167,433	45,880	120,947	302,859	1,211	27,604	85,820
3911	Jewelry (precious metal).....	1,344	1,264	25,598	70,462	20,610	54,222	140,478	886	11,358	38,822
3912	Jewelers' findings.....	182	153	6,050	17,350	5,203	12,389	29,714	82	2,813	7,996
3913	Lapidary work.....	270	323	1,699	5,524	1,525	4,632	10,860	90	267	1,374
3914	Silverware and plated ware.....	235	115	21,506	68,097	18,542	55,804	121,807	153	13,166	39,628
393	Musical instruments and parts.....	260	192	16,889	40,808	14,814	38,198	71,356	193	10,806	23,445
3931	Pianos.....	27	3	6,978	20,573	6,170	16,948	31,097	35	5,311	10,369
3932	Organs.....	64	32	4,546	11,764	4,059	9,832	18,137	57	2,304	4,968
3933	Piano and organ parts.....	169	157	5,365	14,471	4,585	11,418	22,122	101	3,191	8,108
394	Toys and sporting goods.....	2,198	1,861	75,493	173,833	67,228	138,350	294,727	824	36,803	83,479
3941	Games and toys, n.e.c.....	837	701	27,140	60,554	24,174	47,403	105,414	294	13,778	27,364
3942	Dolls.....	377	372	9,797	21,847	8,886	17,739	37,577	136	4,890	8,874
3943	Children's vehicles.....	120	62	8,783	24,735	7,773	19,423	44,204	44	4,319	9,177
3949	Sporting and athletic goods.....	864	726	29,773	66,697	20,395	53,785	107,532	350	13,816	38,064
395	Office supplies.....	787	580	31,557	82,074	24,734	55,553	103,160	499	12,591	45,039
3951	Pens and mechanical pencils.....	184	113	15,553	40,600	12,527	28,207	89,897	70	4,463	16,181
3952	Lead pencils and crayons.....	50	22	6,279	14,726	5,190	10,409	23,633	40	3,779	8,580
3953	Hand stamps and stencils.....	426	368	4,684	12,900	3,462	8,729	20,047	289	2,211	7,607
3954	Artists' materials.....	60	45	1,390	3,220	997	1,944	5,968	42	397	2,051
3955	Carbon paper and inked ribbons.....	67	32	3,681	10,022	2,558	6,264	23,615	58	1,741	10,620
396	Costume jewelry and notions.....	2,034	1,974	65,878	153,501	57,593	118,562	262,685	1,008	40,989	79,130
3961	Costume jewelry.....	899	805	25,371	59,487	22,266	45,979	107,224	299	12,228	23,439
3962	Artificial flowers.....	445	525	7,130	13,448	6,569	10,713	23,813	314	6,650	11,080
3963	Buttons.....	453	457	10,418	21,835	9,417	17,542	34,856	316	10,972	17,344
3964	Needles, pins, and fasteners.....	277	187	22,959	58,791	19,341	44,328	97,202	79	11,139	27,267
3971	Plastics products, n.e.c.....	1,360	805	60,092	159,024	51,512	123,583	289,594	216	15,094	40,157
399	Miscellaneous manufactures.....	5,461	4,582	169,684	422,775	135,818	319,315	705,787	4,133	97,838	272,924
3981	Brooms and brushes.....	798	659	18,551	44,875	15,543	31,102	87,288	565	11,678	28,002
3982	Cork products.....	36	8	2,485	6,802	2,150	5,427	11,657	35	2,923	9,311
3983	Matches.....	29	1	7,350	10,422	6,612	13,406	31,302	28	6,426	11,479
3984	Candies.....	54	50	2,405	5,596	1,933	3,704	8,911	28	840	2,991
3985	Fireworks and pyrotechnics.....	73	24	3,251	6,694	2,982	5,706	8,626	50	1,158	2,775
3986	Jewelry and instrument cases.....	165	140	7,383	16,446	6,681	13,280	26,460	124	4,099	8,318
3987	Lamp shades.....	291	288	4,488	8,473	4,100	7,043	14,668	128	2,671	3,991
3988	Morticians' goods.....	568	355	22,375	60,002	18,242	42,388	92,395	599	12,447	38,491
3991	Beauty and barber-shop equipment.....	70	25	4,065	11,884	3,185	7,698	17,840	71	1,779	6,349
3992	Furs, dressed and dyed.....	175	126	6,848	25,540	6,147	21,673	42,954	136	4,956	17,018
3993	Signs and advertising displays.....	1,983	1,783	28,879	82,045	24,328	62,026	130,454	1,396	17,200	55,132
3994	Hair work.....	87	90	1,170	2,436	1,046	2,040	4,380	42	322	662
3995	Umbrellas, parasols, and canes.....	164	179	3,585	8,360	3,267	6,390	15,421	90	2,862	4,651
3996	Tobacco pipes.....	76	47	3,140	8,810	2,745	6,302	13,738	32	2,481	5,208
3997	Soda-fountain and bar equipment.....	67	45	2,739	8,488	2,231	6,524	16,254	51	1,590	7,692
3998	Models and patterns (except paper).....	209	208	1,808	5,144	1,601	4,325	8,573	112	1,200	4,124
1951	Small arms (3990).....	34	15	10,453	30,545	9,249	25,876	42,314	23	5,001	14,659
1961	Small arms ammunition (3990).....	8	4	8,050	22,091	6,748	17,297	40,840	13	4,264	16,087
3999	Miscellaneous products, n.e.c.....	666	545	20,599	52,122	16,938	36,948	91,712	611	14,929	34,984

CENSUS OF MANUFACTURES: 1947

TABLE 3.—GENERAL STATISTICS FOR DIVISIONS, STATES, AND STANDARD METROPOLITAN AREAS: 1947 AND 1939
 [Money figures in thousands of dollars. For explanation of column captions see GENERAL EXPLANATIONS. For definitions of Standard Metropolitan Areas see following pages; see also GENERAL EXPLANATIONS—Standard Metropolitan Areas]

DIVISION, STATE, AND AREA	1947						1939 ¹		
	Number of establishments	All employees		Production workers		Value added by manufacture	Number of establishments	Number of production workers (average for the year)	Value added by manufacture
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
United States	240,881	14,294,304	\$39,689,527	11,916,188	\$30,242,343	\$74,425,825	173,802	7,808,205	\$24,487,304
New England	20,274	1,474,684	3,941,011	1,248,325	3,054,119	6,813,800	15,201	947,412	2,414,268
Maine.....	1,635	100,181	233,994	90,378	199,204	432,123	1,118	74,040	150,688
New Hampshire.....	1,124	74,752	177,479	66,448	145,324	308,932	772	55,434	104,453
Vermont.....	830	34,872	83,021	30,239	66,400	140,685	659	20,498	40,741
Massachusetts.....	10,524	718,441	1,923,141	601,603	1,404,047	3,370,094	8,444	468,372	1,181,405
Rhode Island.....	2,214	146,850	374,582	128,130	297,599	658,420	1,309	106,080	237,098
Connecticut.....	3,947	399,588	1,148,794	331,527	881,545	1,890,546	2,800	232,070	600,323
Middle Atlantic	75,363	3,953,738	11,412,746	3,245,879	8,513,460	20,790,626	53,226	2,234,295	7,308,780
New York.....	47,819	1,775,975	5,279,686	1,424,705	3,815,374	9,000,688	32,672	940,362	3,313,049
New Jersey.....	10,755	738,229	2,214,159	601,748	1,644,207	4,177,080	7,438	431,602	1,618,260
Pennsylvania.....	16,789	1,439,534	3,918,901	1,219,426	3,053,879	6,940,958	13,116	853,371	2,470,862
East North Central	50,570	4,317,892	13,007,601	3,565,172	9,935,496	23,473,563	38,013	2,180,600	7,744,406
Ohio.....	12,303	1,194,603	3,560,075	988,440	2,727,481	6,369,006	9,543	595,623	2,110,434
Indiana.....	5,408	548,346	1,587,518	457,582	1,236,558	2,977,608	4,102	275,272	904,746
Illinois.....	15,988	1,184,820	3,585,093	954,415	2,627,318	6,080,137	11,983	590,905	2,187,240
Michigan.....	9,892	973,675	3,090,688	821,721	2,438,027	5,190,338	5,901	520,165	1,794,016
Wisconsin.....	6,979	416,448	1,184,247	343,008	906,112	2,260,574	6,334	198,648	681,970
West North Central	17,403	785,064	2,063,739	635,940	1,508,105	4,119,409	14,066	376,156	1,348,167
Minnesota.....	4,567	179,986	501,355	145,153	358,863	1,022,586	3,735	78,023	300,840
Iowa.....	2,965	140,425	372,339	112,490	275,454	671,100	2,541	64,773	243,390
Missouri.....	5,725	327,515	827,184	269,711	607,404	1,623,145	4,487	175,983	681,804
North Dakota.....	362	5,218	12,341	3,823	8,490	20,461	342	2,005	10,084
South Dakota.....	494	10,265	25,796	8,062	19,193	51,398	450	5,421	10,610
Nebraska.....	1,344	47,031	119,923	37,338	87,432	200,658	1,093	18,416	68,139
Kansas.....	1,946	74,624	204,801	59,363	151,269	401,001	1,418	30,935	117,391
South Atlantic	24,001	1,523,495	3,370,875	1,344,444	2,709,342	6,942,054	16,657	977,596	2,216,976
Delaware.....	482	34,465	92,183	29,014	70,007	182,088	416	19,825	54,085
Maryland.....	2,825	228,553	612,035	188,639	458,244	1,138,407	2,712	140,930	420,580
District of Columbia.....	428	17,815	55,872	10,007	27,691	99,067	452	67,676	43,367
Virginia.....	3,644	216,637	483,904	190,635	384,441	1,051,620	2,404	132,089	370,250
West Virginia.....	1,602	127,353	337,869	108,984	268,469	693,003	1,004	74,411	213,284
North Carolina.....	5,322	381,480	758,895	350,207	641,966	1,040,073	3,158	209,238	544,181
South Carolina.....	2,137	188,601	376,964	175,724	330,465	794,312	1,300	120,408	160,204
Georgia.....	4,754	249,926	484,246	225,807	399,820	1,015,999	3,055	155,870	280,032
Florida.....	2,807	78,665	168,817	66,027	128,239	349,070	1,976	61,140	115,885
East South Central	10,907	633,765	1,360,231	558,191	1,093,293	2,875,428	7,024	355,096	823,101
Kentucky.....	2,244	129,504	304,668	110,602	235,989	740,772	1,582	62,481	180,485
Tennessee.....	3,346	221,454	473,211	192,367	369,920	957,530	2,225	131,024	318,378
Alabama.....	3,335	206,136	444,647	185,646	372,404	870,933	1,982	115,608	245,877
Mississippi.....	1,982	76,671	137,705	69,577	114,980	300,184	1,235	45,803	72,601
West South Central	13,181	550,241	1,333,054	456,123	995,239	3,027,709	9,509	268,882	815,276
Arkansas.....	1,924	65,321	124,167	58,254	101,869	265,144	1,115	35,672	60,444
Louisiana.....	2,389	132,464	309,871	111,553	229,673	694,074	1,779	70,453	198,527
Oklahoma.....	1,740	55,403	143,605	44,302	105,277	341,027	1,530	27,642	101,782
Texas.....	7,128	297,053	755,411	242,014	558,420	1,727,464	5,085	125,115	448,523
Mountain	5,049	141,638	379,900	116,199	293,601	839,202	3,787	67,011	269,381
Montana.....	652	16,992	43,481	13,606	35,350	92,258	552	8,802	38,828
Idaho.....	664	16,907	45,748	14,602	37,904	100,694	408	9,864	20,788
Wyoming.....	256	5,607	16,696	4,285	12,291	34,957	300	3,351	15,330
Colorado.....	1,602	54,071	144,207	44,153	100,734	286,774	1,210	23,388	90,330
New Mexico.....	432	7,590	18,222	6,349	14,173	55,486	262	3,210	8,640
Arizona.....	545	14,188	39,333	11,167	29,680	103,058	313	5,005	31,025
Utah.....	772	24,516	63,804	19,973	48,063	128,298	640	11,407	43,341
Nevada.....	126	2,667	8,409	2,064	6,416	27,777	94	1,025	11,403
Pacific	24,133	913,787	2,820,370	745,915	2,139,688	5,544,034	16,319	411,038	1,546,957
Washington.....	3,410	144,324	438,020	123,488	354,590	874,030	2,858	82,261	267,710
Oregon.....	3,075	105,591	317,827	92,144	265,837	675,017	1,903	57,487	150,090
California.....	17,648	663,872	2,064,523	530,283	1,519,255	3,994,981	11,558	271,200	1,122,545
STANDARD METROPOLITAN AREAS: ¹									
Akron	482	94,011	284,302	75,289	215,444	400,327	324	40,114	100,444
Albany-Schenectady-Troy	599	70,839	202,484	55,023	146,122	322,172	537	36,217	120,102
Allentown-Bethlehem-Easton	898	88,539	222,904	76,285	177,416	360,314	602	59,181	168,236
Atlanta	872	49,034	112,049	40,505	80,889	237,012	620	27,092	81,033
Baltimore	1,785	179,062	482,643	138,810	359,340	890,534	1,885	105,786	342,465
Birmingham	530	53,295	137,845	44,748	106,619	275,326	374	28,774	105,409
Boston	5,406	271,273	752,788	215,294	630,965	1,391,157	4,378	157,230	508,099
Bridgeport	1,684	70,127	203,592	56,014	151,927	342,780	422	34,348	104,590
Buffalo	5,694	183,876	557,384	149,758	425,314	1,023,231	1,356	90,244	391,785
Canton	385	55,564	158,649	47,600	128,551	280,241	323	28,854	107,807
Chicago	12,284	945,326	2,993,068	756,115	2,177,257	5,529,062	9,058	478,126	1,890,111
Cincinnati	1,700	135,774	382,935	108,476	274,717	677,201	1,621	72,401	268,017
Cleveland	3,258	268,750	860,849	218,929	645,539	1,546,117	2,441	120,356	504,992
Columbus (Ohio)	679	84,877	153,462	42,363	105,356	277,809	500	25,309	90,040
Dayton	638	95,347	308,299	79,433	240,266	496,380	481	40,200	164,963

See footnotes at end of table.

SUMMARY STATISTICS

TABLE 3.—GENERAL STATISTICS FOR DIVISIONS, STATES, AND STANDARD METROPOLITAN AREAS:
1947 AND 1939—Continued

DIVISION, STATE, AND AREA	1947						1939 ¹		
	Number of establishments	All employees		Production workers		Value added by manufacture	Number of establishments	Number of production workers (average for the year)	Value added by manufacture
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
STANDARD METROPOLITAN AREAS ² —Continued									
Detroit.....	4,765	555,788	\$1,846,600	406,922	\$1,451,803	\$2,910,650	2,684	315,221	\$1,087,575
Erie.....	368	46,285	134,693	38,076	103,640	224,906	296	19,216	72,110
Fall River-New Bedford.....	588	62,572	142,422	57,379	122,624	244,340	451	48,127	72,661
Flint.....	214	55,159	171,859	47,887	141,033	324,507	134	33,072	133,499
Grand Rapids.....	694	49,241	147,276	41,961	114,990	255,255	468	23,882	71,736
Hartford.....	584	63,792	199,160	52,014	142,678	300,353	415	31,588	118,126
Houston.....	916	58,606	182,282	46,001	131,512	385,549	620	22,600	106,608
Indianapolis.....	944	92,649	279,861	73,168	198,676	484,860	784	38,705	138,633
Kansas City.....	1,345	78,645	218,827	61,098	156,140	469,504	1,023	38,085	147,655
Los Angeles.....	9,771	358,772	1,118,344	281,806	797,090	2,052,671	5,505	127,425	617,671
Louisville.....	743	73,791	193,664	60,827	144,107	488,956	641	35,009	128,466
Millwaukee.....	1,963	177,202	535,089	141,172	396,832	973,335	1,465	76,473	287,667
Minneapolis-St. Paul.....	2,117	118,824	346,278	93,966	239,110	714,565	1,626	48,710	203,011
New Britain-Bristol.....	299	45,708	132,824	38,507	105,823	205,103	160	23,564	65,681
New Haven.....	577	41,503	115,374	34,395	86,140	188,528	459	24,528	69,883
New Orleans.....	724	45,363	105,210	37,532	78,201	222,995	888	25,509	80,710
New York-Northeastern New Jersey.....	48,304	1,604,184	4,932,996	1,274,357	3,495,956	9,322,683	32,132	867,953	3,126,135
Peoria.....	278	42,511	123,726	34,492	94,376	280,670	265	18,875	85,046
Philadelphia.....	7,399	532,492	1,530,946	437,553	1,140,317	2,803,106	5,756	320,627	1,037,292
Pittsburgh.....	2,228	337,074	1,023,913	284,017	807,132	1,707,918	1,905	191,278	640,908
Portland (Oreg.).....	1,207	51,643	153,747	42,075	119,893	314,273	943	25,017	79,875
Providence.....	2,363	152,845	392,583	132,506	309,014	680,049	1,411	95,411	218,331
Reading.....	617	53,423	136,503	46,756	111,376	230,962	493	40,537	83,782
Rochester.....	910	104,997	307,821	80,735	218,838	510,225	755	50,898	207,730
St. Louis.....	2,960	244,516	664,733	200,123	400,936	1,296,471	2,549	126,416	461,772
San Francisco-Oakland.....	3,671	163,641	526,747	131,161	393,346	1,049,490	3,213	76,044	361,966
Seattle.....	1,221	54,770	171,221	44,668	129,010	265,422	1,137	23,681	83,804
South Bend.....	259	44,139	144,419	37,158	117,504	234,908	194	20,819	71,555
Springfield-Holyoke.....	831	81,598	233,624	67,366	177,556	371,902	639	38,604	114,584
Syracuse.....	512	54,503	158,093	43,328	116,729	275,257	381	25,563	82,777
Toledo.....	627	69,599	221,562	56,730	167,461	390,032	473	30,542	111,138
Trenton.....	402	40,422	113,283	34,094	88,389	208,485	318	25,287	72,054
Utica-Rome.....	429	50,563	139,504	43,854	113,258	231,000	383	32,263	79,945
Waterbury.....	295	43,388	125,719	36,386	96,557	208,291	180	28,537	81,371
Wheeling-Steubenville.....	343	51,751	147,020	46,484	125,513	259,509	304	41,228	100,873
Worcester.....	702	53,251	153,583	43,525	114,474	241,017	600	32,033	99,796
York.....	597	41,932	100,709	35,569	76,540	189,357	455	27,114	66,435
Youngstown.....	552	108,654	330,825	94,263	273,021	567,307	429	63,010	200,320

¹ The figures for 1939 have been adjusted for comparability with the 1947 statistics by excluding data for certain establishments classified as manufacturing in 1939 but classified as nonmanufacturing in 1947. See GENERAL EXPLANATIONS—Statistics for 1939 and earlier years. Figures for States will not add to totals due to rounding.
² Only standard metropolitan areas with 40,000 or more manufacturing employees in 1947 are included in this report.

TABLE 3.—GENERAL STATISTICS FOR DIVISIONS, STATES, AND STANDARD METROPOLITAN AREAS:
1947 AND 1939—Continued

STANDARD METROPOLITAN AREA AND DEFINITION	STANDARD METROPOLITAN AREA AND DEFINITION
Akron Summit County, Ohio	New Britain-Bristol Bristol and New Britain cities; Berlin, Plainville, and Southington towns in Hartford County, Conn.; Plymouth town in Litchfield County, Conn.
Albany-Schenectady-Troy Albany, Rensselaer, and Schenectady Counties, N. Y.	New Haven New Haven city; Branford, East Haven, Hamden, North Haven, Orange, West Haven, and Woodbridge towns in New Haven County, Conn.
Allentown-Bethlehem-Easton Lehigh and Northampton Counties, Pa.; Warren County, N. J.	New Orleans Jefferson, Orleans, and St. Bernard Parishes, La.
Atlanta Cobb, De Kalb, and Fulton Counties, Ga.	New York-Northeastern New Jersey New York City (Bronx, Kings, New York, Queens, and Richmond Counties); Nassau, Rockland, Suffolk, and Westchester Counties, N. Y.; Bergen, Essex, Hudson, Middlesex, Morris, Passaic, Somerset, and Union Counties, N. J.
Baltimore Baltimore city; Baltimore and Anne Arundel Counties, Md.	Peoria Peoria and Tazewell Counties, Ill.
Birmingham Jefferson County, Ala.	Philadelphia Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties, Pa.; Burlington, Camden, and Gloucester Counties, N. J.
Boston All of Suffolk County, Mass.; Cambridge, Everett, Malden, Medford, Melrose, Newton, Somerville, Waltham, and Woburn cities; Arlington, Ashland, Bedford, Belmont, Burlington, Concord, Framingham, Lexington, Lincoln, Natick, North Reading, Reading, Stoneham, Wakefield, Watertown, Wayland, Weston, Wilmington, and Winchester towns in Middlesex County, Mass.; Beverly, Lynn, Peabody, and Salem cities; Danvers, Hamilton, Lynnfield, Manchester, Marblehead, Middleton, Nahant, Saugus, Swampscott, and Wenham towns in Essex County, Mass.; Quincy city; Braintree, Brookline, Canton, Cohasset, Dedham, Dover, Medfield, Milton, Needham, Norwood, Randolph, Sharon, Walpole, Wellesley, Westwood, and Weymouth towns in Norfolk County, Mass.; Hingham and Hull towns in Plymouth County, Mass.	Pittsburgh Allegheny, Beaver, Washington, and Westmoreland Counties, Pa.
Bridgeport Bridgeport city; Fairfield, Stratford, and Trumbull towns in Fairfield County, Conn.; Millford town in New Haven County, Conn.	Portland (Oregon) Clackamas, Multnomah, and Washington Counties, Ore.; Clark County, Wash.
Buffalo Erie and Niagara Counties, N. Y.	Providence Central Falls, Cranston, Pawtucket, Providence, and Woonsocket cities; Cumberland, East Providence, Johnston, Lincoln, North Providence, North Smithfield, and Smithfield towns in Providence County, R. I.; North Kingstown town in Washington County, R. I.; Warwick city; East Greenwich, and West Warwick towns in Kent County, R. I.; Barrington, Bristol, and Warren towns in Bristol County, R. I.; Attleboro city; North Attleboro, and Seekonk towns in Bristol County, Mass.; Bellingham, Franklin, Plainville, and Wrentham towns in Norfolk County, Mass.; Blackstone and Millville towns in Worcester County, Mass.
Canton Stark County, Ohio	Reading Berks County, Pa.
Chicago Cook, Du Page, Kane, Lake, and Will Counties, Ill.; Lake County, Ind.	Rochester Monroe County, N. Y.
Cincinnati Hamilton County, Ohio; Campbell and Kenton Counties, Ky.	St. Louis St. Louis city, St. Charles and St. Louis Counties, Mo.; Madison and St. Clair Counties, Ill.
Cleveland Cuyahoga and Lake Counties, Ohio	San Francisco-Oakland Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Solano Counties, Calif.
Columbus (Ohio) Franklin County, Ohio	Seattle King County, Wash.
Dayton Greene and Montgomery Counties, Ohio	South Bend St. Joseph County, Ind.
Detroit Macomb, Oakland, and Wayne Counties, Mich.	Springfield-Holyoke Chicopee, Holyoke, Springfield, and Westfield cities, Agawam, East Longmeadow, Longmeadow, Ludlow, West Springfield, and Wilbraham towns in Hampden County, Mass.; Northampton city; Easthampton and South Hadley towns in Hampshire County, Mass.; Enfield town in Hartford County, Conn.
Erie Erie County, Pa.	Syracuse Onondaga County, N. Y.
Fall River-New Bedford Fall River and New Bedford cities; Acushnet, Dartmouth, Fairhaven, Somerset, Swansea, and Westport towns in Bristol County, Mass.; Tiverton town in Newport County, R. I.	Toledo Lucas County, Ohio
Flint Genesee County, Mich.	Trenton Mercer County, N. J.
Grand Rapids Kent County, Mich.	Utica-Rome Oneida and Herkimer Counties, N. Y.
Hartford Hartford city; Avon, Bloomfield, East Hartford, Farmington, Glastonbury, Manchester, Newington, Rocky Hill, Simsbury, South Windsor, West Hartford, Wethersfield, and Windsor towns in Hartford County, Conn.	Waterbury Waterbury city; Naugatuck borough; Beacon Falls, Cheshire, Middlebury, Prospect, and Wolcott towns in New Haven County, Conn.; Thomastown and Watertown towns in Litchfield County, Conn.
Houston Harris County, Texas	Wheeling-Steubenville Brooke, Hancock, Marshall, and Ohio Counties, W. Va.; Belmont and Jefferson Counties, Ohio
Indianapolis Marion County, Ind.	Worcester Worcester city; Auburn, East Brookfield, Grafton, Holden, Leicester, Millbury, Northborough, North Brookfield, Shrewsbury, Spencer, Westborough, and West Boylston towns in Worcester County, Mass.
Kansas City Johnson and Wyandotte Counties, Kans.; Clay and Jackson Counties, Mo.	York York County, Pa.
Los Angeles Los Angeles and Orange Counties, Calif.	Youngstown Mahoning and Trumbull Counties, Ohio; Mercer County, Pa.
Louisville Jefferson County, Ky.; Clark and Floyd Counties, Ind.	
Milwaukee Milwaukee County, Wis.	
Minneapolis-St. Paul Anoka, Dakota, Hennepin, and Ramsey Counties, Minn.	

TABLE 4.—GENERAL STATISTICS FOR DIVISIONS, STATES, AND STANDARD METROPOLITAN AREAS: 1899-1947
 (Money figures in thousands of dollars. For explanation of column captions see GENERAL EXPLANATIONS; for definitions of Standard Metropolitan Areas, see table 3)

DIVISION, STATE, AREA, AND CENSUS YEAR ¹	Number of establishments	All employees ²		Production workers		Value added by manufacture ³
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total	
United States:						
1947	240,881	14,294,304	\$39,689,527	11,916,188	\$30,242,343	\$74,425,825
1939	173,802	8,527,306	12,708,102	7,808,205	8,997,515	24,487,304
1929	206,663	8,659,742	14,284,282	8,369,705	10,884,919	30,591,435
1919	207,231	8,836,801	12,426,902	8,464,916	9,664,009	29,841,624
1909	264,810	7,012,066	4,105,470	6,261,736	3,205,213	8,160,075
1899	204,750	4,850,019	2,258,654	4,501,919	1,892,374	4,646,981
New England:						
1947	20,274	1,474,684	3,941,011	1,248,325	3,054,119	6,813,800
1939	15,201	1,121,152	1,402,144	947,412	1,018,683	2,414,268
1929	18,272	1,245,898	1,732,750	1,098,514	1,846,391	3,239,798
1919	24,552	1,509,093	1,765,285	1,347,531	1,431,687	3,221,328
1909	25,351	1,187,987	689,914	1,101,290	557,630	1,193,767
1899	22,576	897,305	421,070	851,903	367,675	756,311
Maine:						
1947	1,635	100,181	233,994	90,378	199,204	432,123
1939	1,118	82,184	83,479	74,040	67,340	150,588
1929	1,568	76,799	90,300	70,159	74,200	174,385
1919	2,834	96,082	111,203	88,251	93,761	201,444
1909	3,546	84,815	43,429	79,955	37,632	78,928
1899	2,878	73,017	28,781	69,914	25,731	51,749
New Hampshire:						
1947	1,124	74,752	177,479	66,448	145,324	306,932
1939	772	61,224	65,154	55,434	52,394	104,453
1929	1,075	71,233	85,246	65,511	70,514	147,182
1919	1,451	88,726	92,330	82,917	79,136	167,329
1909	1,961	82,177	40,391	78,658	36,200	66,424
1899	1,771	69,714	28,049	67,646	25,850	47,427
Vermont:						
1947	830	34,872	83,021	30,239	66,400	149,685
1939	659	24,084	27,422	20,498	19,940	49,741
1929	927	30,540	41,946	27,421	33,810	77,260
1919	1,702	36,709	41,069	33,194	33,758	71,788
1909	1,958	36,467	20,075	33,788	17,272	33,487
1899	1,938	29,874	13,037	28,179	11,427	25,130
Massachusetts:						
1947	10,524	718,441	1,923,141	601,603	1,464,047	3,370,094
1939	8,444	549,550	702,487	458,372	498,177	1,181,465
1929	9,872	639,164	910,023	557,494	694,805	1,710,729
1919	11,627	801,200	947,768	712,254	764,579	1,746,539
1909	11,684	633,205	364,452	584,559	301,173	659,764
1899	10,929	463,490	224,758	438,234	195,278	408,971
Rhode Island:						
1947	2,214	146,850	374,582	128,130	297,599	658,420
1939	1,399	122,671	141,282	106,080	105,216	237,608
1929	1,701	140,110	182,899	126,068	144,197	324,078
1919	2,307	153,499	168,068	139,316	137,105	330,590
1909	1,951	120,920	65,811	113,538	55,234	122,152
1899	1,678	92,219	41,296	88,197	35,095	77,599
Connecticut:						
1947	3,947	399,588	1,148,794	331,527	881,545	1,896,516
1939	2,809	281,439	382,340	232,079	275,616	690,323
1929	3,129	288,016	422,345	251,891	328,805	806,214
1919	4,571	332,817	404,847	291,599	323,548	703,638
1909	4,251	230,403	135,756	210,792	110,119	233,012
1899	3,382	168,991	86,149	159,733	73,394	145,435
Middle Atlantic:						
1947	75,363	3,953,738	11,412,746	3,245,879	8,513,460	20,790,626
1939	53,226	2,757,909	3,859,853	2,234,295	2,668,489	7,308,780
1929	64,730	3,002,843	4,853,031	2,562,340	3,640,419	10,175,956
1919	85,509	3,348,567	4,463,569	2,859,004	3,447,834	8,399,615
1909	81,315	2,491,161	1,527,833	2,207,747	1,182,508	2,982,204
1899	65,834	1,732,170	871,309	1,604,844	729,366	1,703,315
New York:						
1947	47,819	1,775,075	5,279,686	1,424,705	3,815,374	9,666,538
1939	32,672	1,211,010	1,749,676	949,362	1,151,820	3,313,649
1929	39,395	1,331,357	2,294,882	1,105,966	1,650,379	4,973,929
1919	48,331	1,467,443	1,961,398	1,221,933	1,450,119	3,908,864
1909	44,935	1,155,672	743,263	1,003,981	557,231	1,512,586
1899	35,957	794,939	414,064	726,909	337,324	853,454
New Jersey:						
1947	10,755	738,229	2,214,159	601,748	1,644,207	4,177,030
1939	7,438	531,126	753,941	431,562	519,087	1,518,269
1929	8,388	516,576	808,862	442,328	610,596	1,771,430
1919	10,564	590,920	769,258	507,059	598,514	1,397,775
1909	8,817	363,061	218,046	326,223	169,710	425,496
1899	6,416	229,336	114,223	213,975	95,165	218,280
Pennsylvania:						
1947	16,789	1,439,534	3,918,901	1,219,426	3,053,879	6,946,958
1939	13,116	1,015,773	1,356,236	853,371	997,582	2,476,862
1929	16,047	1,154,910	1,749,287	1,014,046	1,370,444	3,430,006
1919	26,614	1,290,204	1,732,913	1,130,612	1,399,201	3,092,976
1909	27,563	972,428	566,524	877,543	455,627	1,044,182
1899	23,462	707,895	343,022	663,960	296,877	691,581
East North Central:						
1947	50,570	4,317,892	13,007,601	3,565,172	9,935,496	23,473,563
1939	38,013	2,692,815	4,092,078	2,180,600	2,932,440	7,744,406
1929	46,596	2,940,356	4,841,271	2,542,176	3,738,863	9,973,491
1919	58,717	2,824,006	3,849,389	2,387,477	2,981,205	7,093,838
1909	60,013	1,729,537	1,077,660	1,513,764	827,153	2,177,230
1899	50,521	1,176,672	574,539	1,073,322	473,040	1,205,478
Ohio:						
1947	12,303	1,194,003	3,560,075	988,446	2,727,481	6,359,006
1939	9,543	731,742	1,120,831	595,520	2,110,434	2,809,399
1929	11,855	853,385	1,404,180	741,143	1,102,165	2,859,804
1919	15,585	867,255	1,214,652	728,303	941,340	2,182,610
1909	15,138	508,285	317,597	446,934	245,450	613,734
1899	13,868	336,218	164,579	308,109	130,428	359,368

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

TABLE 4.—GENERAL STATISTICS FOR DIVISIONS, STATES, AND STANDARD METROPOLITAN AREAS: 1899-1947—Continued

DIVISION, STATE, AREA, AND CENSUS YEAR ¹	Number of establishments	All employees ²		Production workers		Value added by manufacture ³
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total	
East North Central—Continued						
Indiana:						
1947	5,408	548,346	\$1,587,518	457,582	\$1,236,558	\$2,077,508
1939	4,192	337,869	474,099	275,272	342,652	604,740
1929	5,091	359,838	534,186	314,608	418,771	1,130,463
1919	7,558	322,362	400,042	276,695	315,970	721,736
1909	7,969	210,589	121,810	186,984	95,511	244,700
1899	7,128	149,464	69,251	139,017	59,280	141,009
Illinois:						
1947	15,988	1,184,820	3,585,093	954,415	2,027,318	6,080,137
1939	11,983	752,728	1,107,625	590,995	742,451	2,187,240
1929	15,333	827,507	1,393,592	691,555	1,024,870	2,030,038
1919	17,808	785,859	1,070,992	640,994	797,081	1,929,125
1909	18,020	543,687	364,768	465,704	273,319	758,350
1899	14,374	373,835	199,653	332,871	159,104	439,418
Michigan:						
1947	9,892	973,675	3,090,668	821,721	2,438,027	5,196,338
1939	5,961	618,702	1,024,965	520,165	788,036	1,794,016
1929	6,686	599,179	1,041,789	530,035	840,505	2,067,344
1919	8,046	541,175	787,241	470,274	638,420	1,544,681
1909	9,159	262,106	153,838	231,499	118,908	316,497
1899	7,310	169,150	74,868	155,800	62,532	143,720
Wisconsin:						
1947	6,979	416,448	1,184,247	343,008	906,112	2,200,574
1939	6,334	251,774	364,558	108,648	240,902	681,970
1929	7,431	309,397	467,524	204,745	352,401	949,842
1919	9,720	307,955	375,662	262,211	288,388	715,786
1909	9,721	204,870	119,641	182,583	93,005	243,949
1899	7,841	148,005	66,188	137,625	55,690	141,057
West North Central:						
1947	17,403	785,064	2,063,739	635,940	1,508,105	4,119,409
1939	14,066	490,651	642,705	370,156	420,581	1,348,167
1929	17,792	567,160	804,673	474,115	589,162	1,809,691
1919	20,255	603,866	734,649	492,054	530,304	1,387,774
1909	27,171	437,777	274,298	374,337	204,793	562,044
1899	20,732	296,687	146,336	266,051	117,200	325,404
Minnesota:						
1947	4,567	179,986	501,355	145,153	358,863	1,022,586
1939	3,735	102,179	143,307	78,023	95,273	300,840
1929	4,315	124,231	180,142	103,414	132,418	404,995
1919	5,633	140,414	169,843	113,781	124,811	327,921
1909	5,561	99,030	62,923	84,787	47,471	127,797
1899	4,096	71,182	35,093	64,557	29,029	73,394
Iowa:						
1947	2,965	140,425	372,339	112,400	275,454	671,100
1939	2,541	88,054	114,087	64,773	72,880	243,890
1929	3,317	97,414	137,243	81,678	102,327	323,820
1919	5,104	98,470	122,168	79,190	88,381	221,767
1909	5,528	73,037	43,514	61,635	32,542	88,531
1899	4,828	49,579	22,253	44,420	18,021	47,092
Missouri:						
1947	5,725	327,515	827,184	269,711	607,404	1,623,145
1939	4,487	229,269	280,607	175,983	187,614	681,804
1929	5,765	240,602	332,278	202,879	240,369	777,497
1919	8,175	235,772	273,722	193,754	194,927	534,616
1909	8,375	177,479	109,837	152,993	80,843	219,700
1899	6,853	120,178	60,009	107,704	46,714	132,115
North Dakota:						
1947	362	5,218	12,341	3,823	8,490	20,401
1939	342	4,075	4,968	2,605	2,737	10,984
1929	373	5,017	7,762	4,024	5,687	15,937
1919	755	5,033	6,424	4,169	5,033	12,198
1909	752	3,425	2,416	2,789	1,787	5,404
1899	337	1,510	801	1,358	671	2,109
South Dakota:						
1947	494	10,265	25,796	8,062	19,193	51,398
1939	450	7,327	9,036	5,421	5,905	19,619
1929	615	7,803	10,691	6,536	8,132	22,681
1919	1,054	6,774	8,773	5,588	6,751	17,070
1909	1,020	4,284	2,914	3,602	2,298	6,394
1899	624	2,512	1,305	2,224	1,130	3,046
Nebraska:						
1947	1,344	47,031	119,923	37,338	87,432	260,658
1939	1,093	26,183	34,138	18,416	20,175	68,139
1929	1,491	34,752	51,347	28,212	36,881	119,094
1919	2,385	44,924	60,138	35,387	44,513	112,646
1909	2,500	29,444	19,439	24,336	13,048	47,938
1899	1,695	20,965	10,950	18,060	8,842	34,377
Kansas:						
1947	1,946	74,624	204,801	59,363	151,269	461,061
1939	1,418	42,564	56,412	30,935	36,088	117,391
1929	1,916	57,341	85,210	47,373	63,348	205,367
1919	3,149	72,479	93,581	60,179	71,888	161,566
1909	3,435	51,078	33,255	44,215	25,904	66,220
1899	2,299	30,731	15,925	27,110	12,802	33,271
South Atlantic:						
1947	24,001	1,523,495	3,370,875	1,344,444	2,709,342	6,942,054
1939	10,657	1,110,704	1,073,672	677,596	818,075	2,216,970
1929	20,860	999,995	1,035,670	612,247	825,903	2,468,223
1919	25,682	896,592	940,127	612,122	771,830	1,846,999
1909	28,088	715,047	301,652	603,015	244,379	591,182
1899	19,324	482,712	153,274	458,344	130,864	316,115
Delaware:						
1947	482	34,465	92,183	29,014	70,007	182,088
1939	416	23,360	29,114	19,825	21,163	54,085
1929	469	26,556	37,407	23,552	29,003	69,151
1919	653	33,231	44,614	28,904	37,214	70,547
1909	726	23,262	12,618	21,238	10,206	21,902
1899	633	21,751	9,794	20,562	8,457	16,596

See footnotes at end of table.

SUMMARY STATISTICS

TABLE 4.—GENERAL STATISTICS FOR DIVISIONS, STATES, AND STANDARD METROPOLITAN AREAS: 1899-1947—Continued

DIVISION, STATE, AREA, AND CENSUS YEAR ¹	Number of establishments	All employees ²		Production workers		Value added by manufacture ³
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total	
South Atlantic—Continued						
Maryland:						
1947.....	2,825	228,553	\$612,035	188,639	\$458,244	\$1,138,407
1939.....	2,712	166,091	209,193	140,930	155,938	420,589
1929.....	3,231	150,906	195,013	131,099	148,835	422,097
1919.....	4,725	159,362	188,223	139,241	146,578	322,092
1909.....	4,837	120,113	59,053	107,921	45,436	116,620
1899.....	3,886	100,911	39,260	94,170	32,414	81,722
District of Columbia:						
1947.....	428	17,815	55,872	10,007	27,691	99,067
1939.....	452	14,377	24,920	7,676	11,526	43,367
1929.....	547	14,002	25,449	9,762	15,513	52,773
1919.....	568	13,327	18,537	10,268	12,960	37,404
1909.....	518	9,283	6,835	7,707	4,989	15,043
1899.....	491	7,112	3,895	6,155	3,023	8,951
Virginia:						
1947.....	3,644	216,637	483,994	190,035	384,441	1,051,629
1939.....	2,494	150,202	132,089	113,848	376,259	376,259
1929.....	3,287	131,586	147,352	120,273	118,089	380,086
1919.....	5,487	132,842	145,423	118,976	119,583	271,131
1909.....	5,085	114,227	47,256	105,676	38,155	94,211
1899.....	3,186	70,051	23,903	66,223	20,274	49,285
West Virginia:						
1947.....	1,602	127,353	337,869	108,984	268,469	603,903
1939.....	1,094	87,741	113,660	74,411	87,700	213,284
1929.....	1,488	93,565	136,291	85,326	115,295	251,615
1919.....	2,627	90,651	118,898	82,615	101,310	199,568
1909.....	2,586	68,864	38,710	63,893	33,000	69,072
1899.....	1,824	34,824	14,159	33,080	12,640	29,779
North Carolina:						
1947.....	5,322	381,480	758,895	350,207	641,966	1,646,673
1939.....	3,158	203,258	245,879	269,238	198,519	544,181
1929.....	3,797	226,425	198,810	209,826	160,868	693,018
1919.....	5,690	167,848	148,361	156,378	124,978	413,707
1909.....	4,931	128,002	41,259	121,473	34,355	94,795
1899.....	3,405	75,216	16,447	72,322	14,052	40,420
South Carolina:						
1947.....	2,137	188,601	376,964	175,724	330,465	794,312
1939.....	1,300	136,094	103,171	126,408	86,280	169,294
1929.....	1,059	113,876	86,023	108,777	78,223	159,351
1919.....	1,821	83,982	72,336	78,918	61,934	152,301
1909.....	1,864	76,303	24,117	73,046	20,361	46,885
1899.....	1,369	48,444	10,438	47,025	9,130	22,850
Georgia:						
1947.....	4,754	249,926	484,246	225,807	396,820	1,015,999
1939.....	3,055	176,965	142,021	155,870	106,195	280,032
1929.....	4,179	171,734	140,674	158,774	110,435	294,649
1919.....	4,608	135,263	125,503	122,678	100,140	251,098
1909.....	4,792	112,895	43,867	104,588	34,805	85,893
1899.....	3,015	87,151	23,162	83,336	19,958	45,176
Florida:						
1947.....	2,807	78,665	168,817	66,027	128,239	349,976
1939.....	1,976	62,016	55,355	51,149	36,847	115,885
1929.....	2,212	71,345	68,051	64,868	54,582	135,488
1919.....	2,503	80,086	77,932	74,156	67,136	120,151
1909.....	2,159	62,098	27,937	57,473	22,982	46,761
1899.....	1,275	37,252	12,216	35,471	10,916	21,336
East South Central:						
1947.....	10,907	633,765	1,360,231	558,191	1,093,203	2,875,428
1939.....	7,024	410,008	389,733	355,096	288,656	823,101
1929.....	9,860	416,905	440,520	377,870	348,734	924,428
1919.....	14,094	304,878	367,639	327,352	296,470	660,223
1909.....	15,381	288,257	131,200	261,772	102,192	294,325
1899.....	10,058	188,412	66,388	177,208	56,004	148,579
Kentucky:						
1947.....	2,244	129,504	304,668	110,602	235,989	740,772
1939.....	1,582	76,504	89,004	62,481	61,592	186,485
1929.....	2,246	88,583	113,623	77,825	88,644	236,080
1919.....	3,767	79,261	85,845	68,726	60,261	158,498
1909.....	4,770	74,010	37,491	65,400	27,888	111,975
1899.....	3,648	56,091	22,639	51,735	18,454	59,102
Tennessee:						
1947.....	3,346	221,454	473,211	192,367	369,920	957,539
1939.....	2,225	152,179	149,525	131,024	108,828	318,378
1929.....	2,855	142,020	149,080	128,400	115,877	322,898
1919.....	4,426	107,725	105,861	94,564	80,687	210,201
1909.....	4,609	82,257	37,438	73,840	28,252	76,201
1899.....	3,116	49,292	17,775	45,963	14,728	38,190
Alabama:						
1947.....	3,335	206,136	444,647	185,645	372,404	876,933
1939.....	1,982	129,261	114,706	115,698	91,100	245,577
1929.....	2,848	130,034	120,390	119,659	102,005	258,125
1919.....	3,522	116,440	110,974	100,079	98,482	190,905
1909.....	3,398	78,203	33,849	72,148	27,294	62,619
1899.....	2,000	54,970	16,971	52,711	14,912	34,112
Mississippi:						
1947.....	1,982	76,671	137,705	69,577	114,980	300,184
1939.....	1,235	52,064	36,498	45,893	27,130	72,661
1929.....	1,911	56,268	51,427	52,086	42,208	107,325
1919.....	2,379	61,452	58,959	57,333	51,040	100,559
1909.....	2,598	53,787	22,422	50,384	18,768	43,630
1899.....	1,294	28,059	9,003	26,799	7,910	17,175
West South Central:						
1947.....	13,181	550,241	1,333,054	456,123	995,239	3,027,709
1939.....	9,509	330,516	362,542	258,882	234,980	815,275
1929.....	10,576	341,079	416,742	297,743	316,474	950,463
1919.....	13,239	323,642	305,389	282,751	290,125	724,099
1909.....	12,339	227,958	123,028	204,520	97,646	243,312
1899.....	7,174	121,643	50,049	113,388	42,715	98,803

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

TABLE 4.—GENERAL STATISTICS FOR DIVISIONS, STATES, AND STANDARD METROPOLITAN AREAS:
1899-1947—Continued

DIVISION, STATE, AREA, AND CENSUS YEAR ¹	Number of establishments	All employees ²		Production workers		Value added by manufacture ³
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total	
West South Central—Continued						
Arkansas:						
1947	1,924	65,321	\$124,167	58,254	\$101,869	\$205,144
1939	1,115	41,183	33,352	35,072	24,205	60,444
1929	1,731	48,747	49,446	44,205	39,593	94,255
1919	3,044	54,234	56,207	49,693	46,909	90,953
1909	2,925	48,275	22,574	44,982	19,113	39,981
1899	1,746	33,074	11,447	31,525	10,184	21,600
Louisiana:						
1947	2,389	132,464	309,871	111,553	220,673	604,074
1939	1,779	87,770	85,273	70,453	54,454	198,527
1929	1,989	97,551	107,060	87,345	83,867	246,407
1919	2,489	109,853	116,718	97,742	93,858	263,886
1909	2,516	84,268	42,394	76,165	33,380	89,084
1899	1,826	44,454	17,659	40,878	14,725	35,994
Oklahoma:						
1947	1,740	55,403	143,605	44,302	105,277	341,027
1939	1,530	37,585	47,170	27,642	29,057	101,782
1929	1,058	38,638	57,604	31,095	41,277	149,404
1919	2,316	35,445	46,234	29,048	34,423	87,551
1909	2,310	15,336	9,285	13,143	7,240	19,530
1899	495	2,650	1,113	2,381	894	2,703
Texas:						
1947	7,128	297,053	755,411	242,014	558,420	1,727,404
1939	5,085	163,978	196,747	125,115	120,304	448,523
1929	5,198	166,143	201,732	134,498	151,827	460,307
1919	5,390	124,110	146,230	106,268	114,935	295,700
1909	4,583	80,079	48,775	70,230	37,907	94,717
1899	3,107	41,465	19,530	38,604	16,912	38,506
Mountain:						
1947	5,049	141,638	379,600	116,199	293,001	830,202
1939	3,787	89,409	119,074	67,011	79,090	269,381
1929	4,319	118,778	181,403	102,492	144,486	370,050
1919	6,675	122,668	169,004	105,794	137,075	393,751
1909	5,254	85,013	69,392	75,435	56,870	135,304
1899	3,146	47,983	31,610	44,407	27,714	76,220
Montana:						
1947	652	16,092	43,481	13,066	35,350	92,258
1939	552	11,939	17,286	8,802	11,697	38,828
1929	589	17,136	29,470	14,869	24,215	61,249
1919	1,235	18,893	28,623	16,040	23,968	43,079
1909	677	13,035	12,955	11,655	10,901	21,692
1899	395	10,362	8,103	9,854	7,377	22,677
Idaho:						
1947	664	16,907	45,748	14,002	37,004	109,604
1939	498	11,719	14,697	9,854	11,490	29,788
1929	562	17,023	25,488	15,648	22,452	44,489
1919	803	15,022	20,639	13,575	18,014	37,659
1909	725	9,078	6,482	8,220	5,498	12,480
1899	287	1,644	884	1,552	818	1,593
Wyoming:						
1947	256	5,607	16,696	4,285	12,291	34,057
1939	300	4,416	6,841	3,351	4,613	15,336
1929	248	7,154	12,544	6,259	10,265	33,028
1919	437	7,108	12,227	6,271	10,587	38,142
1909	268	3,130	2,302	2,807	2,081	3,641
1899	139	2,147	1,300	2,090	1,200	1,899
Colorado:						
1947	1,602	54,071	144,207	44,153	109,734	286,774
1939	1,219	32,234	43,053	23,988	28,038	90,330
1929	1,548	39,113	57,221	32,890	43,640	122,331
1919	2,230	40,786	53,770	33,759	41,020	97,195
1909	2,034	32,393	25,500	29,067	16,012	40,553
1899	1,323	21,368	13,769	19,498	11,708	28,317
New Mexico:						
1947	432	7,590	18,222	6,349	14,173	55,486
1939	282	4,107	4,182	2,875	8,040	8,040
1929	250	5,070	6,831	4,476	5,595	11,278
1919	387	6,310	7,680	5,730	6,058	10,129
1909	313	4,478	2,974	4,143	2,591	4,637
1899	174	2,578	1,290	2,490	1,190	2,092
Arizona:						
1947	545	14,188	39,333	11,167	29,080	103,068
1939	313	7,996	10,988	5,905	9,955	31,025
1929	348	12,209	19,343	10,550	15,075	32,289
1919	369	9,652	14,725	8,297	11,658	27,478
1909	311	6,941	6,303	6,441	5,595	16,656
1899	154	3,331	2,567	3,120	2,287	12,562
Utah:						
1947	772	24,516	63,804	19,973	48,053	128,298
1939	549	15,537	18,070	11,467	11,873	43,341
1929	651	18,510	26,107	15,001	19,699	59,727
1919	1,035	21,526	26,524	18,442	20,031	45,831
1909	749	13,445	10,360	11,785	8,400	20,724
1899	375	6,012	3,293	5,413	2,793	6,541
Nevada:						
1947	126	2,667	8,409	2,064	6,416	27,777
1939	94	1,461	2,357	1,025	1,558	11,493
1929	123	2,564	4,399	2,200	3,585	8,065
1919	149	3,371	4,810	3,074	4,239	6,238
1909	177	2,513	2,300	2,257	1,982	3,521
1899	99	541	387	504	363	509
Pacific:						
1947	24,133	913,787	2,820,370	745,015	2,139,688	5,544,034
1939	16,319	523,439	704,247	411,038	536,528	1,546,957
1929	13,154	555,534	609,604	471,246	670,599	1,922,882
1919	17,116	485,308	685,090	426,005	568,266	1,293,163
1909	13,579	242,576	180,638	213,106	153,809	349,833
1899	8,329	133,329	74,558	123,206	63,777	140,849

See footnotes at end of table.

TABLE 4.—GENERAL STATISTICS FOR DIVISIONS, STATES, AND STANDARD METROPOLITAN AREAS:
1899-1947—Continued

DIVISION, STATE, AREA, AND CENSUS YEAR ¹	Number of establishments	All employees ²		Production workers		Value added by manufacture ³
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total	
Pacific—Continued						
Washington:						
1947	3,410	144,324	\$438,020	123,488	\$354,596	\$874,036
1939	2,858	99,119	142,565	82,261	108,220	267,716
1929	3,672	123,740	196,575	114,830	160,671	367,149
1909	4,356	144,331	222,482	131,241	192,473	361,907
1899	3,674	76,854	59,593	69,120	49,766	102,859
1947	1,926	33,626	19,120	31,523	17,065	32,554
Oregon:						
1947	3,075	105,591	317,827	92,144	265,837	675,017
1939	1,903	67,222	87,938	57,487	69,574	156,696
1929	2,463	73,865	106,242	65,605	86,829	206,542
1919	2,478	64,596	93,906	57,832	80,067	158,763
1909	2,246	32,223	23,949	28,750	19,902	42,452
1899	1,406	15,602	8,044	14,459	6,822	15,804
California:						
1947	17,048	663,872	2,064,523	530,283	1,519,255	3,904,981
1939	11,558	357,098	533,744	271,290	358,734	1,122,545
1929	12,019	352,920	607,147	290,911	423,099	1,349,191
1919	10,282	276,381	368,702	236,932	295,726	742,493
1909	7,659	133,499	107,096	115,296	84,141	204,522
1899	4,997	84,101	47,385	77,224	39,890	92,491
STANDARD METROPOLITAN AREAS ⁴						
Akron:						
1947	482	94,011	284,302	75,289	215,444	460,327
1939	324	52,602	96,759	40,114	65,463	166,444
1929	353	77,093	132,202	66,871	106,477	280,546
1919	405	n.a.	n.a.	71,050	102,708	261,175
Albany-Schenectady-Troy:						
1947	599	70,839	202,484	55,023	146,122	322,172
1939	537	45,899	68,698	36,217	45,981	128,192
1929	677	67,852	105,244	58,771	83,633	178,252
1919	1,073	n.a.	n.a.	63,815	67,799	157,684
Allentown-Bethlehem-Easton:						
1947	898	88,539	222,094	76,285	177,416	360,314
1939	692	67,883	80,781	59,181	62,891	158,236
1929	783	72,461	107,132	64,919	80,508	216,477
1919	1,169	n.a.	n.a.	64,972	72,379	180,335
Atlanta:						
1947	872	49,034	112,049	40,505	80,889	237,012
1939	620	31,166	32,302	27,692	24,515	81,633
1929	625	31,473	37,060	26,554	24,878	94,108
1919	676	n.a.	n.a.	22,362	21,482	60,993
Baltimore:						
1947	1,785	170,062	482,043	138,810	359,340	899,534
1939	1,885	126,197	171,515	105,786	126,959	342,465
1929	2,225	110,313	148,187	94,562	110,692	327,520
1919	2,967	n.a.	n.a.	113,068	123,529	277,655
Birmingham:						
1947	530	53,295	137,845	44,748	106,619	275,326
1939	374	31,988	40,440	28,774	33,000	105,409
1929	419	36,319	40,542	31,544	37,924	111,211
1919	440	n.a.	n.a.	28,909	33,009	62,540
Boston ⁵:						
1947	5,406	271,273	752,788	215,294	530,965	1,391,157
1939	4,378	192,556	273,628	157,230	187,431	508,099
Bridgeport ⁶:						
1947	585	70,127	203,592	56,014	151,927	342,780
1939	422	30,779	55,305	34,348	41,594	104,596
Buffalo:						
1947	1,694	183,876	557,384	149,758	425,314	1,023,231
1939	1,356	115,859	183,753	90,244	125,665	391,785
1929	1,896	128,704	212,117	108,966	160,766	480,123
1919	2,913	n.a.	n.a.	116,633	152,180	346,627
Canton:						
1947	385	55,564	158,649	47,600	128,551	280,241
1939	323	32,342	50,343	28,854	42,061	107,807
1929	338	36,834	67,456	32,292	54,735	142,508
1919	584	n.a.	n.a.	34,182	47,876	108,670
Chicago:						
1947	12,284	945,326	2,993,068	756,115	2,177,257	5,520,062
1939	9,058	609,940	941,363	478,126	632,520	1,896,111
1929	11,693	636,464	1,137,863	527,677	830,322	2,477,970
1919	12,399	n.a.	n.a.	520,133	677,238	1,670,150
Cincinnati:						
1947	1,700	135,774	382,935	108,476	274,717	777,201
1939	1,521	83,466	119,166	72,401	90,159	268,017
1929	2,189	108,088	167,392	90,468	121,721	350,625
1919	2,721	n.a.	n.a.	97,166	98,908	284,555
Cleveland:						
1947	3,258	268,750	866,849	218,929	645,539	1,546,117
1939	2,441	150,854	240,879	129,358	183,314	504,992
1929	2,829	191,612	336,550	164,793	257,684	690,275
1919	3,182	n.a.	n.a.	169,813	228,027	518,009
Columbus (Ohio):						
1947	679	54,877	153,462	42,363	105,356	277,809
1939	500	29,380	39,631	26,309	29,658	90,049
1929	624	32,603	50,730	27,562	36,911	111,403
1919	774	n.a.	n.a.	31,573	37,447	82,882
Dayton:						
1947	638	95,347	308,269	79,433	240,266	496,380
1939	481	50,532	84,491	40,200	60,874	164,963
1929	555	51,874	87,005	43,778	66,085	216,284
1919	734	n.a.	n.a.	34,331	42,916	103,170
Detroit:						
1947	4,765	555,788	1,846,600	466,922	1,451,803	2,910,660
1939	2,684	372,882	665,102	315,221	517,849	1,087,575
1929	2,844	328,414	626,246	290,980	507,375	1,216,159
1919	2,634	n.a.	n.a.	264,901	402,488	658,755

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

TABLE 4.—GENERAL STATISTICS FOR DIVISIONS, STATES, AND STANDARD METROPOLITAN AREAS:
1899-1947—Continued

DIVISION, STATE, AREA, AND CENSUS YEAR ¹	Number of establishments	All employees ²		Production workers		Value added by manufacture ³
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total	
STANDARD METROPOLITAN AREAS ⁴ —Continued						
Erie:						
1947	368	46,285	\$134,663	38,076	\$103,640	\$224,906
1939	296	22,794	33,380	19,216	24,085	72,110
1929	306	27,352	45,082	23,022	33,568	91,258
1919	455	n.a.	n.a.	22,944	28,030	70,441
Fall River-New Bedford:						
1947	588	62,572	142,422	57,379	122,624	244,346
1939	451	54,791	52,365	48,127	30,700	72,601
Flint:						
1947	214	55,159	171,859	47,887	141,033	324,507
1939	134	36,878	68,734	33,072	59,214	133,490
1929	136	35,843	62,000	32,001	52,042	142,654
1919	151	n.a.	n.a.	24,884	38,580	103,901
Grand Rapids:						
1947	694	49,241	147,276	41,961	114,990	255,255
1939	468	27,155	37,258	23,882	29,168	71,736
1929	561	35,063	57,548	30,979	44,756	96,706
1919	700	n.a.	n.a.	25,640	28,395	63,336
Hartford:						
1947	584	63,792	189,160	52,014	142,678	300,353
1939	415	38,033	59,715	31,588	44,112	118,126
Houston:						
1947	916	58,606	182,282	46,001	131,512	385,549
1939	620	27,116	41,566	22,600	30,423	100,608
1929	475	26,213	37,909	22,131	28,097	63,498
1919	422	n.a.	n.a.	11,411	12,173	31,064
Indianapolis:						
1947	944	92,649	279,361	73,168	108,676	484,800
1939	784	50,666	73,782	38,705	47,089	138,633
1929	902	55,504	84,492	46,339	60,158	178,062
1919	1,028	n.a.	n.a.	52,142	55,083	135,701
Kansas City:						
1947	1,345	78,645	218,827	61,698	150,140	400,564
1939	1,023	50,680	73,102	38,085	47,410	147,655
1929	1,163	54,008	80,401	44,203	57,076	222,020
1919	1,392	n.a.	n.a.	48,546	55,322	129,365
Los Angeles:						
1947	9,771	358,772	1,118,344	281,800	797,090	2,052,671
1939	5,505	172,757	258,967	127,425	167,133	517,671
1929	5,029	127,881	210,001	103,652	151,486	505,380
1919	3,721	n.a.	n.a.	63,255	74,291	183,855
Louisville:						
1947	743	73,791	193,064	60,827	141,107	488,056
1939	641	39,770	46,757	35,009	35,581	128,466
1929	822	49,469	65,304	42,303	48,399	153,178
1919	979	n.a.	n.a.	35,238	34,165	90,721
Milwaukee:						
1947	1,963	177,202	635,089	141,172	396,832	673,335
1939	1,465	94,774	147,996	79,473	111,135	287,007
1929	1,939	141,088	233,200	117,658	170,962	434,088
1919	2,247	n.a.	n.a.	106,137	117,674	302,467
Minneapolis-St. Paul:						
1947	2,117	118,824	346,278	93,960	239,110	714,865
1939	1,626	65,359	97,870	48,710	62,577	209,011
1929	1,939	71,504	100,045	58,342	73,833	201,080
1919	2,389	n.a.	n.a.	67,138	73,866	212,398
New Britain-Bristol:						
1947	299	45,708	132,524	38,507	105,823	205,103
1939	160	23,408	38,657	23,564	28,655	65,681
New Haven:						
1947	577	41,503	115,374	34,395	86,140	188,528
1939	459	28,027	33,710	24,528	26,244	69,883
New Orleans:						
1947	721	45,363	105,210	37,932	78,201	222,095
1939	688	28,679	27,168	25,509	19,931	86,710
1929	851	31,558	35,893	27,065	21,839	94,120
1919	923	n.a.	n.a.	30,231	27,036	83,836
New York-Northeastern New Jersey:						
1947	48,304	1,604,184	4,932,096	1,274,357	3,495,966	9,322,693
1939	32,132	1,116,708	1,646,817	867,653	1,062,166	3,126,135
1929	36,823	1,110,942	1,988,775	910,870	1,309,040	4,482,466
1919	42,293	n.a.	n.a.	1,057,677	1,300,273	3,592,026
Peoria:						
1947	278	42,511	123,726	34,492	94,376	289,670
1939	265	21,962	34,440	18,875	28,023	85,046
1929	268	18,067	27,840	14,773	20,143	82,024
1919	353	n.a.	n.a.	12,304	13,684	42,510
Philadelphia:						
1947	7,399	532,492	1,530,946	437,553	1,140,317	2,803,100
1939	5,756	393,561	555,590	320,627	385,782	1,037,202
1929	7,136	428,914	663,047	307,784	497,430	1,396,529
1919	11,673	n.a.	n.a.	405,487	567,866	1,303,034
Pittsburgh:						
1947	2,228	337,074	1,023,913	284,017	807,132	1,707,018
1939	1,905	229,353	357,044	191,278	270,370	640,008
1929	2,544	248,607	423,336	216,481	338,023	835,162
1919	3,796	n.a.	n.a.	214,991	369,325	803,556
Portland (Oreg.):						
1947	1,297	51,643	153,747	42,675	119,893	314,273
1939	943	28,398	38,224	25,017	30,079	79,875
1929	1,307	38,083	56,783	31,576	42,254	112,605
1919	1,129	n.a.	n.a.	38,075	54,862	111,892
Providence:						
1947	2,363	152,845	392,583	132,506	309,014	689,049
1939	1,411	108,620	125,065	95,411	95,033	218,331
Reading:						
1947	617	53,423	136,503	40,756	111,376	230,962
1939	493	46,124	53,975	40,537	41,012	83,782
1929	587	47,525	67,817	43,487	56,392	117,936
1919	1,031	n.a.	n.a.	41,072	39,910	81,356

See footnotes at end of table.

SUMMARY STATISTICS

TABLE 4.—GENERAL STATISTICS FOR DIVISIONS, STATES, AND STANDARD METROPOLITAN AREAS: 1899-1947—Continued

DIVISION, STATE, AREA, AND CENSUS-YEAR ¹	Number of establishments	All employees ²		Production workers		Value added by manufacture ³
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total	
STANDARD METROPOLITAN AREAS ⁵ —Continued						
Rochester:						
1947.....	910	104,997	\$307,821	80,735	\$218,838	\$510,225
1939.....	755	67,004	106,494	50,898	70,381	207,730
1929.....	1,044	74,107	119,628	62,239	87,844	247,685
1919.....	1,536	n.a.	n.a.	67,553	73,332	195,916
St. Louis:						
1947.....	2,900	244,516	664,733	200,123	490,936	1,296,471
1939.....	2,549	162,238	227,865	126,416	151,860	461,772
1929.....	3,258	174,798	250,764	147,440	189,423	600,157
1919.....	4,011	n.a.	n.a.	154,311	104,281	454,815
San Francisco-Oakland:						
1947.....	3,671	103,641	526,747	131,161	393,346	1,049,400
1939.....	3,213	101,103	165,356	76,044	110,418	361,966
1929.....	3,023	109,119	179,628	89,299	131,461	448,062
1919.....	3,651	n.a.	n.a.	107,080	140,611	360,185
Seattle:						
1947.....	1,221	54,770	171,221	44,668	120,910	265,422
1939.....	1,137	27,734	42,682	23,581	32,971	83,804
1929.....	1,342	34,858	56,600	29,167	41,786	107,252
1919.....	1,405	n.a.	n.a.	47,474	72,842	141,883
South Bend:						
1947.....	269	44,139	144,419	37,158	117,504	234,908
1939.....	194	24,178	36,030	20,819	29,592	71,555
1929.....	236	35,032	52,915	31,400	43,691	98,430
1919.....	277	n.a.	n.a.	19,957	23,206	60,606
Springfield-Holyoke ⁴ :						
1947.....	831	81,598	233,624	67,866	177,550	371,902
1939.....	639	47,625	65,924	38,504	40,090	114,584
Syracuse:						
1947.....	512	54,563	158,093	43,328	110,720	275,257
1939.....	381	29,740	40,898	25,563	31,592	82,777
1929.....	549	41,031	68,360	35,060	52,556	141,615
1919.....	864	n.a.	n.a.	37,372	43,987	101,577
T Toledo:						
1947.....	627	69,599	221,562	56,730	167,461	390,032
1939.....	473	37,958	61,161	30,542	43,505	111,138
1929.....	605	58,330	97,339	51,646	75,941	206,805
1919.....	714	n.a.	n.a.	44,713	56,910	126,667
Trenton:						
1947.....	402	40,422	113,283	34,004	88,389	208,485
1939.....	318	28,406	36,195	25,287	28,587	72,054
1929.....	346	27,091	40,251	23,721	31,200	79,440
1919.....	497	n.a.	n.a.	30,515	34,874	78,698
Utica-Rome:						
1947.....	429	50,563	139,504	43,854	113,258	231,009
1939.....	383	35,885	41,632	32,203	33,651	79,945
1929.....	515	43,212	56,820	37,974	43,871	106,355
1919.....	808	n.a.	n.a.	43,073	45,409	97,553
Waterbury ⁶ :						
1947.....	205	43,388	125,719	36,380	96,557	206,291
1939.....	180	32,609	44,795	28,537	34,872	81,371
Wheeling-Steubenville:						
1947.....	343	51,751	147,020	46,484	125,513	259,509
1939.....	304	44,031	60,829	41,228	53,069	100,873
1929.....	416	44,887	73,905	41,066	64,076	129,534
1919.....	743	n.a.	n.a.	36,464	51,440	101,187
Worcester ⁴ :						
1947.....	702	53,251	153,583	43,525	114,474	241,917
1939.....	600	38,107	55,961	32,033	40,511	99,796
York:						
1947.....	597	41,932	100,700	35,569	76,540	189,357
1939.....	455	29,909	30,224	27,114	24,246	66,435
1929.....	586	33,480	37,891	30,331	29,934	88,991
1919.....	1,023	n.a.	n.a.	27,117	23,680	57,243
Youngstown:						
1947.....	552	108,654	330,825	94,263	273,621	567,307
1939.....	429	69,461	110,720	63,010	94,861	200,320
1929.....	406	74,600	139,583	66,515	118,047	273,627
1919.....	704	n.a.	n.a.	63,830	114,050	208,200

n.a.—Not available.

¹ The figures for 1899-1919 include all establishments having products valued at \$500 or more; for 1929 and 1939, those having products valued at \$5,000 or more; and for 1947, those employing one or more persons at any time during the year.

The figures for 1939, but not for earlier years, have been revised on the basis of a retabulation of the 1939 returns to exclude data for establishments classified as manufacturing in 1939 and previous years but classified as nonmanufacturing in 1947. The 1939 figures for "All employees" were partly revised by estimation, as follows: For number of employees, the retabulated 1939 production-worker figure for each State and Standard Metropolitan Area was multiplied by the corresponding ratio of all employees to production workers computed from the unrevised 1939 statistics; for salaries and wages, the retabulated 1939 wage figure for each State and Standard Metropolitan Area was multiplied by the corresponding ratio of salaries and wages to wages also computed from the unrevised 1939 statistics. For the United States totals an average ratio was used to estimate number of employees and salaries and wages and, therefore, the figures for States do not add to these totals. In the other columns the figures for States will not add to totals due to rounding.

² The comparability of the Divisional and State figures for 1899-1929 with those for 1939 and 1947 is also affected to the extent that the following industries, no longer classified as manufacturing, were represented in the State or Division during the earlier period: "Railroad repair shops," "Manufactured gas," "Motion pictures," "Flax and hemp, dressed," "Peanuts and walnuts, processed or shelled," and "Grindstones, pulpstones, and millstones." Data for these industries are omitted from the 1929 figures for certain Standard Metropolitan Areas, but are included in the 1919 figures for all Areas. The 1919 figures for all Standard Metropolitan Areas also include data for the "Automobile repairing" industry, which was not canvassed after that year. See GENERAL EXPLANATION—Statistics for 1939 and earlier years, and Volume III—Statistics by States.

³ The 1947 and 1939 figures for Divisions, States, and certain Standard Metropolitan Areas include data for employees of manufacturing establishments who were engaged in distribution and construction work. The extent to which data for such employees were included in the figures for earlier years is not known. See GENERAL EXPLANATIONS, Manufacturing employees—Classifications used, and Volume III—Statistics by States.

⁴ Value of products less cost of materials, supplies, fuel, electricity, and contract work. For 1899-1929, cost of contract work was not subtracted from value of products in calculating value added by manufacture. See GENERAL EXPLANATIONS—Value added by manufacture.

⁵ The United States totals for 1899-1929 are not equal to the sums of the respective State figures because the former have been adjusted for changes in the definition of manufacturing, whereas the State figures could not be similarly adjusted (see footnote 1).

⁶ Only standard metropolitan areas with 40,000 or more manufacturing employees in 1947 are included in this report.

⁷ Standard metropolitan areas in the New England States have been defined in terms of cities and towns, rather than whole counties (as was the case for other areas). Consequently, published 1929 and 1919 statistics for all the components of this area are not available.

CENSUS OF MANUFACTURES: 1947

TABLE 5.—GENERAL STATISTICS FOR SELECTED COUNTIES: 1947 AND 1939

[Money figures in thousands of dollars. For explanation of column captions see GENERAL EXPLANATIONS. This table presents, by States, statistics for all counties with 2,500 or more employees in manufacturing establishments in 1947. Statistics for at least five counties are, however, shown for each State. For States having fewer than five counties with 2,500 or more manufacturing employees, the next largest counties were added until a total of five was reached.]

STATE AND COUNTY	Population, 1940	1947						1939		
		Number of establishments	All employees		Production workers		Value added by manufacture	Number of establishments	Number of production workers (average for the year)	Value added by manufacture
			Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
Alabama	2,832,961	3,335	206,136	\$444,647	185,645	\$372,404	\$876,933	1,982	115,698	\$245,577
Calhoun	63,319	101	10,381	22,289	9,734	19,694	36,702	62	6,065	10,125
Chambers	42,146	44	8,926	(d)	8,393	(d)	(d)	21	6,901	(d)
Colbert	34,093	50	6,972	17,443	5,589	12,758	29,362	24	486	900
Covington	42,417	65	3,700	5,544	3,543	4,987	10,008	38	3,357	3,028
Dallas	55,245	63	2,723	3,557	2,496	2,964	8,103	37	3,983	1,253
Elmore	34,546	31	3,588	(d)	3,390	(d)	(d)	16	693	(d)
Etowah	72,580	100	15,033	39,223	13,730	34,178	68,831	49	8,820	23,004
Jefferson	459,930	530	53,265	137,845	44,748	106,610	275,326	374	28,774	105,400
Lee	36,455	52	2,821	5,277	2,589	4,657	11,804	27	1,623	2,157
Madison	66,317	50	4,444	9,119	4,110	8,053	18,686	30	2,950	2,070
Mobile	141,974	198	17,581	44,858	15,511	37,327	91,312	151	8,788	22,320
Montgomery	114,420	129	5,617	10,700	4,677	7,875	24,942	112	3,350	7,241
Morgan	48,148	57	4,105	9,230	3,785	7,873	15,074	31	2,390	3,721
Talladega	51,832	82	6,442	14,306	6,107	13,183	20,225	47	4,690	4,838
Tallapoosa	35,270	65	4,747	10,872	4,493	9,837	21,417	40	5,336	5,234
Tuscaloosa	76,036	96	5,988	13,278	5,418	11,266	30,682	57	3,104	5,253
Arizona	499,261	545	14,188	39,333	11,167	29,680	103,958	313	5,905	31,625
Apache	24,095	10	967	(d)	679	(d)	(d)	2	(d)	(d)
Cochise	34,627	21	1,100	(d)	901	(d)	(d)	19	1,000	(d)
Gila	23,867	16	826	2,693	719	2,192	15,475	15	448	(d)
Maricopa	186,193	284	7,449	20,464	5,635	14,269	41,425	145	1,934	8,350
Pima	72,838	97	1,174	3,140	911	2,234	6,015	51	423	1,591
Arkansas	1,949,387	1,924	65,321	124,167	58,254	101,869	265,144	1,115	35,672	66,444
Ouachita	31,151	53	3,694	7,989	3,259	6,355	18,792	20	1,748	3,027
Phillips	45,970	25	2,839	5,289	2,018	4,615	10,007	24	2,150	2,003
Pulaski	156,085	217	8,390	16,710	6,555	11,817	36,901	137	4,553	10,077
Sebastian	62,809	114	5,418	12,644	4,674	9,576	21,737	78	3,452	8,033
Union	50,461	58	3,812	10,297	3,283	8,480	27,408	42	2,037	5,124
California	6,907,387	17,648	663,872	2,064,523	530,283	1,519,255	3,994,981	11,558	271,290	1,122,545
Alameda	513,011	1,186	66,322	209,321	54,038	159,522	409,206	803	28,846	122,020
Butte	42,840	83	2,608	7,255	2,323	6,306	15,021	42	1,281	3,271
Contra Costa	100,450	168	24,316	79,546	20,089	62,418	155,142	115	13,310	81,457
Fresno	178,565	307	7,519	21,999	6,134	16,456	57,268	244	4,888	18,713
Humboldt	45,812	145	5,506	19,355	4,801	16,008	34,155	73	4,263	11,240
Kern	135,124	130	2,904	8,740	2,366	6,968	27,607	100	1,201	9,393
Lassen	14,479	18	2,758	8,979	2,714	8,725	14,056	16	2,634	4,089
Los Angeles	2,785,643	9,472	352,672	1,101,583	277,083	785,110	2,021,513	5,388	125,342	509,517
Monterey	73,032	126	4,093	10,121	3,548	7,762	20,109	82	2,209	11,007
Orange	130,760	299	6,100	16,761	4,723	11,974	31,158	117	2,083	8,154
Riverside	105,524	140	4,414	11,112	3,435	8,247	27,626	75	1,480	7,417
Sacramento	170,333	247	8,320	24,762	6,765	19,693	52,512	206	4,907	18,648
San Bernardino	161,108	256	11,186	33,817	8,703	25,036	75,795	113	2,487	14,400
San Diego	289,348	419	20,783	61,993	15,264	41,804	101,548	240	5,944	21,595
San Francisco	634,536	1,990	61,574	201,536	47,781	143,018	410,320	2,032	31,440	136,843
San Joaquin	134,207	234	8,672	28,900	8,082	22,880	63,940	196	4,329	18,238
San Mateo	111,782	228	9,430	30,207	7,652	23,090	60,228	97	3,447	15,175
Santa Clara	174,949	424	18,543	56,118	15,519	44,245	117,701	289	9,261	29,679
Siskiyou	28,598	50	3,456	10,996	3,211	10,033	21,118	37	3,001	7,894
Sonoma	69,052	176	2,990	7,627	2,488	6,068	19,146	172	1,515	5,705
Stanislaus	74,866	147	5,278	14,385	4,605	12,025	31,727	103	2,707	7,814
Tulare	107,152	135	2,663	7,107	2,128	5,312	22,358	80	1,020	3,740
Colorado	1,123,296	1,602	54,071	144,207	44,153	109,734	286,774	1,219	23,388	99,330
Arapahoe	32,150	26	1,318	3,928	1,070	2,947	4,632	16	358	1,069
Denver	322,412	772	30,876	83,028	24,166	58,890	162,391	585	11,379	48,303
El Paso	54,025	88	1,642	3,668	1,207	2,563	5,563	55	400	1,400
Pueblo	68,870	80	8,274	25,314	7,658	22,850	38,536	65	4,007	16,558
Weld	63,747	49	1,282	3,203	1,081	2,505	9,569	37	752	2,821
Connecticut	1,709,242	3,947	399,588	1,148,794	331,527	881,545	1,896,546	2,869	232,979	699,323
Fairfield	418,384	1,151	112,168	329,587	80,269	241,973	560,740	808	69,487	187,403
Hartford	450,189	917	113,840	334,242	94,369	258,901	525,907	641	62,107	204,149
Litchfield	87,041	181	18,205	48,465	15,571	38,596	85,360	112	10,520	28,767
Middlesex	55,999	178	10,544	28,774	9,086	22,508	42,791	97	5,793	12,340
New Haven	484,316	1,142	110,611	318,269	92,795	246,658	530,834	842	68,082	205,428
New London	125,224	216	17,900	48,978	15,401	37,944	79,354	170	13,130	29,399
Tolland	31,866	50	4,272	11,319	3,954	9,750	22,071	54	3,034	6,035
Windham	56,223	114	12,048	29,160	11,083	25,146	48,883	85	9,320	15,839
Delaware (only three counties)	266,505	482	34,465	92,183	29,014	70,007	182,088	416	19,825	54,085
Kent	34,441	69	2,809	5,430	2,453	4,258	13,932	58	1,427	2,698
New Castle	179,562	251	24,175	70,710	19,907	52,834	121,564	231	16,070	46,619
Sussex	52,502	171	7,481	16,043	6,654	12,915	46,562	127	3,328	4,768
District of Columbia (no counties)	663,091	428	17,815	55,872	10,007	27,691	99,067	452	7,676	43,367
Florida	1,887,414	2,807	78,665	168,817	66,027	128,239	349,976	1,976	51,149	115,885
Dade	267,739	534	9,271	21,920	6,951	17,157	45,528	310	3,472	13,352
Duval	210,143	308	12,771	28,177	10,487	20,234	66,736	236	7,443	24,479
Escambia	74,607	78	3,434	8,091	2,881	6,520	21,039	74	2,146	5,406
Hillsborough	180,148	333	16,179	34,523	13,980	27,130	59,796	255	12,247	23,811
Orange	70,074	139	2,752	6,255	2,112	4,194	10,888	67	1,007	2,910
Polk	86,665	134	5,076	10,273	4,209	7,611	22,003	90	3,744	5,973

See footnotes at end of table.

TABLE 5.—GENERAL STATISTICS FOR SELECTED COUNTIES: 1947 AND 1939—Continued

STATE AND COUNTY	Popu- lation, 1940	1947						1939		
		Number of estab- lishments	All employees		Production workers		Value added by manu- facture	Number of estab- lishments	Number of production workers (average for the year)	Value added by manu- facture
			Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
Georgia	3,123,723	4,754	249,928	\$484,246	225,807	\$399,820	\$1,015,999	3,055	155,870	\$280,082
Bartow.....	25,283	64	2,849	5,661	2,645	5,016	8,602	24	1,713	2,332
Bibb.....	83,783	133	8,360	16,216	7,430	12,981	34,532	99	6,240	11,094
Chattham.....	117,970	146	11,042	20,838	9,292	20,792	75,177	137	6,008	18,525
Chattooga.....	18,532	40	4,752	10,477	4,624	9,572	16,719	16	3,564	3,608
Clarke.....	28,398	56	2,851	5,130	2,481	4,092	10,211	36	2,184	2,945
Cobb.....	38,272	78	3,517	6,144	3,173	5,223	10,278	26	2,125	3,233
Coweta.....	20,972	37	3,993	7,004	3,863	6,506	14,232	27	3,297	4,215
De Kalb.....	86,942	81	2,897	6,079	2,506	4,709	9,788	24	1,130	1,815
Floyd.....	56,141	98	10,538	23,508	9,334	19,603	46,948	56	9,086	14,002
Fulton.....	392,886	713	42,630	99,826	34,826	70,957	216,966	570	24,437	76,685
Hall.....	34,822	72	4,923	9,599	4,586	8,644	22,872	27	3,080	4,316
Muscogee.....	75,494	126	18,889	38,228	17,193	31,854	86,953	81	12,474	24,887
Newton.....	18,576	18	3,225	(d)	3,055	(d)	(d)	15	2,525	(d)
Polk.....	28,467	42	5,414	11,371	5,113	10,206	16,806	22	3,805	5,271
Richmond.....	81,863	103	8,939	17,928	7,932	14,168	37,295	73	5,789	9,302
Spalding.....	28,427	49	6,831	12,223	6,600	11,373	24,447	38	5,224	6,682
Stephens.....	12,972	36	3,314	6,260	3,039	5,468	10,120	14	663	914
Troup.....	43,870	75	9,927	18,453	9,404	16,892	28,760	36	6,017	8,315
Upson.....	25,064	36	5,897	(d)	5,671	(d)	(d)	20	4,850	(d)
Walker.....	31,024	56	5,009	9,976	4,707	8,036	20,253	22	3,878	5,823
Whitfield.....	26,105	122	6,875	10,498	6,478	9,078	21,721	45	5,281	6,855
Idaho	524,873	664	16,907	45,748	14,602	37,904	109,694	498	9,854	29,788
Ada.....	50,401	74	1,480	4,026	1,094	2,885	7,792	50	429	1,844
Canyon.....	40,987	67	1,833	4,327	1,520	3,399	13,602	40	428	1,688
Nez Percé.....	18,873	19	2,105	6,106	1,883	5,274	11,138	17	1,350	3,547
Shoshone.....	21,230	23	1,101	(d)	982	(d)	(d)	20	687	(d)
Twin Falls.....	36,403	39	943	2,576	700	2,057	6,382	25	320	1,978
Illinois	7,897,241	15,988	1,184,820	3,585,093	954,415	2,627,318	6,680,137	11,983	590,995	2,187,240
Adams.....	65,229	106	9,842	24,256	6,332	13,201	43,116	100	3,532	11,467
Coles.....	38,470	38	3,376	6,565	2,928	5,247	12,947	31	1,947	3,063
Cook.....	4,063,342	11,234	788,408	2,491,175	620,405	1,789,659	4,548,453	8,327	389,261	1,503,873
De Kalb.....	34,388	65	5,714	16,162	4,831	11,822	28,084	40	2,259	7,775
Du Page.....	103,480	116	2,863	7,642	2,397	5,764	15,554	48	1,131	6,659
Fulton.....	44,627	30	3,178	(d)	2,547	(d)	(d)	21	1,007	(d)
Henry.....	43,798	40	4,339	11,467	3,616	8,976	18,356	34	2,746	7,261
Jefferson.....	34,375	28	3,302	7,859	2,879	6,636	12,309	27	2,034	5,796
Kane.....	130,206	301	20,236	78,221	21,015	56,722	136,832	218	13,335	44,899
Kankakee.....	60,877	81	7,407	20,663	6,337	16,799	37,461	59	4,683	11,795
Knox.....	52,250	62	4,376	11,479	3,704	9,071	21,943	50	2,616	7,001
Lake.....	121,004	186	20,482	58,788	16,163	42,242	139,396	127	8,309	41,072
La Salle.....	97,801	142	17,221	44,459	15,235	37,721	100,280	118	9,198	34,393
McHenry.....	37,311	81	4,650	11,981	4,025	9,738	22,248	37	2,615	6,053
McLean.....	73,930	76	4,520	12,806	3,438	8,527	26,335	55	1,323	4,689
Macon.....	84,693	126	10,296	30,472	8,197	21,608	82,512	95	5,345	20,624
Madison.....	149,349	179	34,122	96,230	29,038	77,321	199,632	147	17,930	71,183
Ogle.....	20,869	61	3,097	8,911	2,684	7,172	16,726	39	1,860	4,763
Peoria.....	153,374	219	17,476	51,423	14,234	38,787	158,056	205	8,034	40,536
Rock Island.....	113,323	169	28,019	83,340	22,738	64,878	127,945	148	14,034	46,825
St. Clair.....	106,899	247	24,839	70,275	20,369	53,690	122,603	211	12,666	47,225
Sangamon.....	117,912	240	12,047	32,122	10,057	24,844	54,976	111	16,339	48,339
Stephenson.....	40,646	80	4,686	12,585	3,865	9,760	18,846	88	2,848	10,735
Tazewell.....	58,362	59	25,035	72,303	20,258	55,689	122,614	60	10,241	44,510
Vermilion.....	86,791	105	7,495	19,458	6,321	14,057	33,377	80	3,411	9,695
Whiteside.....	43,338	64	6,187	18,080	5,234	15,002	37,573	53	3,770	11,384
Will.....	114,210	163	14,387	43,383	11,903	34,052	101,449	122	8,054	34,159
Winnebago.....	121,178	375	34,982	111,235	28,597	85,365	188,520	243	17,404	50,785
Indiana	3,427,796	5,408	549,346	1,537,518	487,582	1,236,558	2,977,508	4,192	275,272	864,746
Allen.....	155,084	267	38,972	113,606	30,085	82,234	224,377	174	14,133	54,133
Bartholomew.....	28,276	64	6,382	16,562	5,364	12,492	32,374	55	2,316	7,792
Cass.....	36,098	61	3,397	8,151	2,895	6,495	15,202	53	2,450	6,155
Clark.....	31,020	38	3,974	10,930	2,791	6,897	53,969	27	1,484	(d)
Dearborn.....	23,063	30	6,228	14,857	4,539	12,529	71,661	30	1,506	6,596
Delaware.....	74,963	145	17,985	52,667	15,718	43,781	106,004	105	10,404	30,631
Dubois.....	22,579	68	3,069	7,181	2,785	6,001	13,180	71	2,207	3,811
Elkhart.....	72,634	241	15,478	44,095	12,643	32,821	83,167	152	8,174	28,662
Fayette.....	19,411	27	6,521	20,074	5,761	17,186	39,594	25	2,310	6,677
Floyd.....	35,061	65	3,911	8,642	3,481	6,821	15,132	57	2,551	(d)
Grant.....	55,813	111	10,688	26,321	9,296	21,189	54,615	101	5,855	17,067
Hamilton.....	24,614	34	2,646	6,466	2,358	5,449	9,844	25	1,043	2,186
Henry.....	40,208	52	5,769	15,958	5,049	13,391	25,233	41	4,246	8,675
Howard.....	47,752	94	11,626	32,319	10,188	26,942	51,022	55	5,789	16,723
Huntington.....	20,031	63	3,921	9,339	3,251	7,052	17,671	56	1,871	4,570
Jackson.....	26,612	47	3,283	6,415	2,976	5,436	13,584	40	1,942	3,482
Jay.....	22,601	32	3,343	8,452	3,001	7,083	14,346	20	2,574	5,485
Lake.....	293,195	284	92,890	313,859	78,272	252,818	587,378	216	58,036	206,379
La Porte.....	63,660	110	13,663	38,666	11,459	30,282	70,778	86	7,113	27,083
Lawrence.....	35,045	34	2,966	7,093	2,609	5,705	12,314	26	1,206	3,042

See footnotes at end of table.

TABLE 5.—GENERAL STATISTICS FOR SELECTED COUNTIES: 1947 AND 1939—Continued

STATE AND COUNTY	Population, 1940	1947					1939			
		Number of estab- lishments	All employees		Production workers		Value added by manu- facture	Number of estab- lishments	Number of production workers (average for the year)	Value added by manu- facture
			Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
Indiana—Continued										
Madison	88,575	148	26,048	\$73,440	22,583	\$59,757	\$125,395	114	13,021	\$44,001
Marion	460,926	944	92,649	279,361	73,108	199,070	484,860	784	38,705	138,633
Miami	27,926	54	2,978	6,457	2,650	5,261	12,490	32	1,341	2,260
Monroe	36,534	50	3,386	7,323	2,917	5,699	14,150	47	1,594	3,390
Montgomery	27,231	41	2,569	6,923	2,176	5,528	10,923	38	1,291	3,926
Perry	17,770	26	3,168	7,061	2,906	6,211	11,763	24	1,638	2,402
Randolph	26,766	49	8,295	2,718	6,982	13,080		30	1,704	4,447
St. Joseph	161,823	259	44,139	144,419	37,158	117,604	234,908	194	20,819	71,555
Shelby	25,953	49	2,816	6,122	2,535	5,149	11,346	40	1,595	3,248
Tippecanoe	51,020	54	6,980	20,222	5,478	14,523	37,936	42	2,152	7,068
Vanderburgh	130,783	193	28,935	81,338	23,845	62,162	145,130	100	13,822	61,837
Vigo	99,709	134	9,630	25,776	8,039	19,343	62,213	110	4,985	17,740
Wabash	26,601	60	4,351	10,980	3,774	8,903	17,517	47	2,142	4,000
Wayne	59,229	103	13,559	38,918	10,947	30,725	72,065	91	5,783	16,807
Iowa										
Black Hawk	2,538,268	2,955	140,425	372,339	112,490	275,454	671,100	2,541	64,773	243,390
Cerro Gordo	79,946	134	17,859	50,715	14,602	40,174	64,547	99	8,077	30,854
Clinton	43,845	66	3,519	9,614	2,832	7,184	15,475	55	2,061	8,537
Des Moines	44,722	51	4,763	13,718	3,701	9,839	31,059	51	2,478	8,350
Dubuque	36,804	67	3,705	8,808	3,056	6,575	10,254	60	2,380	5,758
Floyd	63,768	115	9,225	24,597	7,762	19,268	37,585	89	4,531	10,020
Jasper	20,169	20	2,501	(d)	1,855	(d)	(d)	21	1,001	(d)
Lee	31,496	32	4,287	12,791	3,490	9,265	20,569	23	1,571	(d)
Linn	41,074	60	6,792	17,023	5,549	13,105	39,610	58	2,480	11,075
Marshall	89,142	176	14,313	41,080	10,065	28,282	81,333	133	5,208	28,088
Muscatine	35,406	44	3,175	9,352	2,601	7,176	16,641	50	1,457	5,258
Polk	31,296	79	3,846	8,644	3,359	6,604	15,409	55	2,371	4,900
Scott	195,835	326	16,090	44,715	12,179	30,927	86,907	257	7,071	30,077
Wapello	84,748	150	9,272	25,432	7,339	18,583	43,148	124	4,578	10,372
Webster	44,280	50	6,155	(d)	5,062	(d)	(d)	41	2,954	(d)
Woodbury	41,521	53	3,210	9,066	2,582	6,768	10,857	47	1,662	7,772
Wyandotte	103,627	136	9,889	26,105	8,369	20,024	44,766	121	4,480	16,320
Kansas										
Montgomery	1,801,028	1,946	74,624	204,801	59,363	151,269	461,061	1,418	30,935	117,391
Reno	49,729	79	3,899	9,876	3,323	7,993	23,460	67	2,230	9,105
Sedgewick	52,165	75	2,607	7,106	2,124	5,127	17,962	54	1,108	4,320
Shawnee	143,311	326	16,853	49,869	13,584	36,096	85,367	185	5,010	17,602
Wyandotte	91,247	119	5,974	16,444	4,448	11,334	29,317	105	2,481	11,461
Franklin	145,071	186	21,144	61,797	16,752	46,703	136,421	120	6,393	33,607
Kentucky										
Boyd	2,845,627	2,244	129,504	304,658	110,602	235,989	740,772	1,582	62,481	186,485
Campbell	45,938	47	5,021	14,897	4,340	12,090	31,320	31	3,597	12,460
Daviess	71,918	48	5,602	15,112	4,811	12,513	20,705	33	3,814	8,000
Fayette	52,335	74	5,821	12,455	5,072	10,003	42,092	65	2,814	6,406
Franklin	78,899	95	3,568	7,172	2,559	5,155	12,855	57	623	4,253
Graves	23,308	19	3,169	6,128	2,698	4,725	30,036	16	1,245	2,793
Jefferson	31,763	25	2,891	5,283	2,739	4,867	11,107	17	1,205	2,402
Kenton	385,382	640	65,906	174,092	54,555	130,380	419,855	557	30,974	111,447
McCracken	83,139	88	3,689	10,661	2,787	6,999	24,248	74	1,895	7,643
Webster	48,534	54	3,455	6,559	3,120	6,640	11,736	43	2,485	5,338
Louisiana										
Caddo	2,363,880	2,389	132,464	309,871	111,553	229,673	694,074	1,779	70,453	198,527
Calcasieu	150,203	171	6,507	15,553	5,093	11,698	31,081	140	3,143	11,638
East Baton Rouge	56,506	71	5,597	17,612	4,322	7,297	53,195	44	1,235	3,778
Jefferson	88,415	109	16,818	59,576	12,031	40,505	132,820	48	3,458	30,377
Morehouse	50,427	72	8,186	18,747	7,189	14,790	50,676	53	4,484	16,673
Orleans	27,571	18	2,765	(d)	2,307	(d)	(d)	13	1,268	(d)
Ouachita	494,537	643	35,302	82,559	29,053	60,192	163,585	622	19,579	60,015
Rapides	59,168	70	3,720	8,848	3,335	7,235	25,046	63	2,485	6,588
Washington	73,370	93	3,591	6,306	3,148	4,830	13,643	53	2,009	4,240
Webster	34,443	36	3,522	(d)	3,055	(d)	(d)	21	1,378	(d)
Webster	33,676	31	3,441	(d)	3,142	(d)	(d)	19	1,378	(d)
Maine										
Androscoggin	847,226	1,635	100,181	\$233,994	90,378	\$199,204	\$432,123	1,118	74,040	\$150,588
Cumberland	76,679	181	16,717	37,774	15,317	32,463	76,536	148	14,201	29,497
Franklin	146,000	314	13,957	32,711	12,013	26,199	64,204	213	9,200	21,655
Kennebec	19,896	50	3,878	8,894	3,600	7,744	14,329	39	2,640	4,640
Oxford	77,231	112	11,129	27,404	10,175	23,061	51,666	77	8,024	17,587
Penobscot	42,662	127	7,219	18,788	6,469	15,597	26,481	78	5,141	9,181
Sagadahoc	97,104	161	9,440	23,315	8,583	20,139	47,314	122	5,925	18,363
Somerset	19,123	28	4,157	10,589	3,727	9,098	8,702	24	3,440	7,139
Washington	38,245	87	4,513	9,833	4,190	8,652	15,201	59	3,217	5,989
York	37,767	93	3,103	6,094	2,832	5,149	15,785	73	2,512	4,410
York	82,550	136	16,710	38,607	14,913	33,453	75,361	91	13,010	20,895
Maryland										
Allegany	1,821,244	2,825	228,553	612,035	188,639	458,244	1,138,407	2,712	140,930	420,589
Baltimore city 1	86,973	60	16,921	45,810	13,090	34,870	86,262	67	11,139	30,015
Baltimore County	859,100	1,638	120,929	335,589	97,656	243,235	667,323	1,773	76,145	247,889
Carroll	155,825	97	47,704	143,644	40,009	113,577	225,799	92	29,081	62,077
Dorchester	39,054	85	4,144	7,759	3,764	6,568	17,601	80	3,040	4,632
Frederick	28,006	68	3,612	6,231	3,168	4,843	13,352	69	2,763	4,701
Washington	57,312	78	3,962	7,395	3,449	5,900	12,130	68	2,493	5,352
Wicomico	68,838	112	10,469	26,300	8,316	18,237	46,320	94	5,175	12,176
Wicomico	34,530	96	4,506	7,616	4,042	6,061	13,129	72	3,467	4,948

See footnotes at end of table.

TABLE 5.—GENERAL STATISTICS FOR SELECTED COUNTIES: 1947 AND 1939—Continued

STATE AND COUNTY	Popu- lation, 1940	1947						1939		
		Number of estab- lishments	All employees		Production workers		Value added by manu- facture	Number of estab- lishments	Number of production workers (average for the year)	Value added by manu- facture
			Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
Massachusetts	4,316,721	10,524	718,441	\$1,923,141	601,603	\$1,464,047	\$3,370,094	8,444	458,372	\$1,181,465
Berkshire.....	122,273	178	28,223	77,954	22,790	58,503	136,878	165	17,950	48,537
Bristol.....	304,037	1,012	87,453	208,006	78,638	173,584	301,489	725	63,677	109,398
Essex.....	496,313	1,280	104,447	271,342	90,254	217,590	468,362	1,018	73,328	160,183
Franklin.....	49,463	121	7,894	20,545	6,867	16,932	37,047	78	4,316	11,890
Hampden.....	332,107	772	74,167	213,978	60,962	161,882	340,414	601	36,279	109,531
Hampshire.....	72,401	157	9,849	25,228	8,545	20,006	41,533	115	6,309	14,490
Middlesex.....	971,390	1,766	128,583	345,925	105,088	252,918	635,588	1,471	77,555	227,530
Norfolk.....	325,180	463	29,249	83,541	23,646	61,344	139,294	303	23,089	66,544
Plymouth.....	108,824	414	21,647	52,438	18,697	40,985	89,236	350	15,112	32,639
Suffolk.....	863,248	2,082	107,257	294,018	84,067	200,346	572,845	2,425	61,090	201,851
Worcester.....	504,470	1,334	117,248	324,023	100,077	255,211	534,227	1,062	78,106	197,955
Michigan	5,256,106	9,892	973,675	3,090,668	821,721	2,438,027	5,196,338	5,961	520,165	1,794,016
Allegan.....	41,839	74	2,840	7,730	2,448	6,268	16,760	52	1,466	4,020
Bay.....	74,981	141	10,841	30,141	9,291	24,027	50,707	96	5,934	16,249
Berrien.....	89,117	221	18,344	52,784	15,631	42,070	89,819	163	9,041	24,267
Branch.....	25,845	56	2,660	6,904	2,376	5,842	12,268	32	1,284	3,078
Calhoun.....	94,206	167	19,758	56,380	16,395	45,438	126,630	126	9,768	52,889
Genesee.....	227,944	214	55,159	171,859	47,887	141,033	324,507	134	33,072	133,499
Grandtrot.....	32,205	30	2,820	7,140	2,403	5,555	14,285	27	977	3,062
Ingham.....	130,616	181	25,852	84,895	21,355	65,703	156,064	119	12,720	(d)
Ionia.....	35,710	54	3,439	8,835	2,993	7,292	17,159	35	1,484	3,146
Jackson.....	93,108	230	16,261	52,684	13,652	41,080	87,913	119	6,918	25,932
Kalamazoo.....	100,085	251	20,867	65,223	17,058	48,356	150,412	175	11,016	45,903
Kent.....	246,338	694	49,241	147,276	41,961	114,990	255,255	468	23,882	71,736
Lenawee.....	53,110	122	10,428	28,808	9,185	24,352	50,005	85	3,122	10,003
Macomb.....	107,638	326	14,660	48,062	12,709	39,684	104,792	57	4,504	(d)
Marquette.....	47,144	45	2,611	6,397	2,357	4,612	10,318	38	1,557	3,154
Menominee.....	24,883	59	2,847	6,876	2,522	5,535	12,376	42	1,642	3,714
Midland.....	27,094	27	7,963	(d)	5,696	(d)	(d)	13	2,487	(d)
Monroe.....	58,020	88	6,820	24,535	6,166	21,728	44,630	46	4,238	13,566
Montcalm.....	29,681	47	3,612	9,897	3,089	7,696	22,041	22	1,078	3,868
Muskegon.....	94,501	191	30,187	97,098	25,563	78,274	142,016	116	13,461	38,524
Onkland.....	254,068	567	44,566	149,426	36,820	114,286	261,462	132	16,102	(d)
Ottawa.....	59,660	180	10,093	28,237	8,651	23,121	55,873	125	6,017	18,232
Saginaw.....	130,468	187	21,756	65,292	18,701	53,426	113,885	151	12,119	37,282
St. Clair.....	76,222	116	10,264	27,741	8,742	21,982	53,504	70	5,318	20,068
St. Joseph.....	31,749	101	5,914	15,877	4,993	12,550	33,028	53	3,259	10,040
Shitawnesco.....	41,207	59	4,695	11,073	4,332	9,345	20,209	43	1,553	3,130
Van Buren.....	35,111	75	2,811	6,708	2,555	5,519	12,206	50	1,139	3,062
Washtenaw.....	80,810	164	23,005	80,357	18,045	59,515	120,298	110	4,838	16,056
Wayne.....	2,015,023	3,872	496,562	1,648,218	417,324	1,297,833	2,544,396	2,495	294,615	1,004,576
Minnesota	2,792,300	4,567	179,986	501,355	145,153	358,863	1,022,586	3,735	78,023	306,840
Carlton.....	24,212	30	3,117	7,951	6,250	6,250	16,719	30	1,807	7,164
Dakota.....	39,060	36	7,845	23,687	6,442	18,399	32,567	24	4,456	13,983
Freoborn.....	31,780	51	2,840	8,251	2,493	6,105	17,026	43	1,241	3,236
Hennephi.....	568,899	1,410	66,450	185,501	52,106	130,214	386,144	1,051	26,735	108,130
Mower.....	36,113	38	5,136	(d)	4,032	(d)	(d)	34	3,107	(d)
Ramsey.....	309,935	641	42,381	130,773	33,596	85,642	281,832	529	16,853	77,760
St. Louis.....	206,917	261	11,543	30,300	9,837	24,127	46,228	204	4,530	18,001
Washington.....	26,430	37	2,831	7,939	2,393	6,316	11,177	32	1,603	(d)
Winona.....	37,795	86	3,239	8,154	2,703	5,986	16,683	76	1,264	5,802
Mississippi	2,183,796	1,982	76,671	137,705	69,577	114,980	300,184	1,235	45,893	72,661
Adams.....	27,238	29	2,819	6,099	2,509	5,074	9,106	24	1,681	3,440
Forrest.....	34,901	63	2,826	5,284	2,448	4,218	16,489	42	1,622	4,465
Harrison.....	50,700	92	2,871	3,881	2,652	3,193	7,778	53	2,653	3,287
Hinds.....	107,273	166	6,694	13,314	5,453	9,358	30,373	105	2,802	8,002
Jackson.....	20,001	32	6,255	(d)	5,917	(d)	(d)	26	2,029	(d)
Jones.....	49,227	54	6,279	13,957	5,690	11,809	33,930	39	3,827	4,492
Lauderdale.....	58,247	98	4,391	7,502	3,812	5,675	18,561	56	2,675	3,916
Missouri	3,784,664	5,725	327,515	827,184	269,711	607,404	1,623,145	4,487	175,983	581,804
Audrain.....	22,673	28	3,919	10,463	3,225	6,888	14,129	23	2,258	5,079
Buchanan.....	94,067	114	11,125	28,146	9,190	21,418	52,734	110	5,697	20,010
Cape Girardeau.....	37,775	64	3,427	6,722	3,101	5,785	11,183	38	2,421	6,458
Clay.....	30,417	76	7,184	19,680	6,040	14,938	51,712	62	2,715	12,471
Franklin.....	33,808	48	4,038	7,394	3,740	6,355	10,238	39	2,927	6,219
Greene.....	90,541	128	5,490	11,032	4,479	7,969	18,992	111	2,331	6,521
Jackson.....	477,828	1,059	40,993	136,621	38,633	93,956	280,146	820	25,875	101,447
Jasper.....	78,705	134	5,500	12,734	4,603	9,571	25,216	111	3,774	8,780
Jefferson.....	32,623	28	4,438	11,936	4,044	10,587	30,560	21	3,292	(d)
Marion.....	31,576	36	2,976	6,027	2,544	4,835	9,566	30	3,087	(d)
St. Louis city.....	816,048	2,330	172,946	462,809	141,232	335,051	911,107	2,028	88,127	315,096
St. Louis County.....	274,230	180	10,347	30,266	7,624	19,913	58,506	144	6,490	(d)

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

TABLE 5.—GENERAL STATISTICS FOR SELECTED COUNTIES: 1947 AND 1939—Continued

STATE AND COUNTY	Popu- lation, 1940	1947						1939 ¹		
		Number of estab- lishments	All employees		Production workers		Value added by manu- facture	Number of estab- lishments	Number of production workers (average for the year)	Value added by manu- facture
			Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
Montana	559,456	652	16,092	\$43,481	13,606	\$35,350	\$92,258	552	8,802	\$18,828
Cascade.....	41,999	44	2,736	8,022	2,229	6,329	15,702	46	1,508	11,405
Deer Lodge.....	13,627	13	1,922	(d)	1,632	(d)	(d)	12	1,356	(d)
Flathead.....	24,271	92	1,538	3,696	1,440	3,383	9,985	42	694	1,584
Missoula.....	29,038	44	2,020	5,380	1,734	4,335	9,639	28	1,180	3,673
Yellowstone.....	41,182	61	1,829	5,081	1,433	3,736	14,068	53	771	4,847
Nebraska	1,315,834	1,344	47,031	119,923	37,338	87,432	260,658	1,093	18,416	68,139
Adams.....	24,576	34	950	2,436	745	1,648	3,880	32	513	1,544
Douglas.....	247,562	447	25,919	72,027	20,339	51,436	169,807	366	11,021	40,990
Gage.....	29,588	26	1,349	3,151	1,100	2,309	5,248	24	573	2,120
Lancaster.....	100,585	120	7,529	18,170	6,001	13,630	34,658	120	1,062	6,980
Scotts Bluff.....	33,917	34	1,207	3,015	1,034	2,420	9,318	30	605	2,803
Nevada	110,247	126	2,667	8,409	2,064	6,416	27,777	94	1,025	11,493
Churchill.....	5,317	6	53	(d)	45	(d)	(d)	5	28	(d)
Clark.....	10,414	32	915	2,851	721	2,258	6,610	9	110	353
Douglas.....	2,050	5	38	(d)	31	(d)	(d)	3	15	(d)
Washoe.....	32,476	53	1,202	3,839	889	2,747	6,015	40	500	2,112
White Pine.....	12,377	7	354	(d)	295	(d)	(d)	6	321	(d)
New Hampshire	491,524	1,124	74,752	177,479	66,448	145,324	306,932	772	55,434	104,453
Belknap.....	24,328	79	4,627	11,537	4,108	9,166	19,186	48	2,171	4,472
Cheshire.....	34,953	114	5,566	13,964	4,905	11,237	24,001	80	4,110	9,131
Cook.....	39,274	44	3,939	(d)	3,633	(d)	(d)	37	2,743	(d)
Grafton.....	44,645	97	4,093	9,807	3,674	8,260	15,032	67	2,728	4,086
Hillsborough.....	144,888	338	31,845	75,947	28,029	61,749	132,176	231	22,220	43,340
Merrimack.....	60,710	117	6,354	14,348	5,750	12,154	26,135	83	4,487	7,812
Rockingham.....	58,142	131	4,591	10,140	4,144	8,152	14,995	80	4,014	7,030
Strafford.....	43,553	107	9,125	21,203	8,289	17,532	35,727	80	8,740	14,061
Sullivan.....	25,442	53	3,933	9,954	3,300	7,767	17,293	30	2,934	5,701
New Jersey	4,160,165	10,755	738,229	2,214,159	601,748	1,644,207	4,177,980	7,438	431,562	1,518,269
Atlantic.....	124,066	209	6,057	14,237	5,329	11,596	23,212	140	3,392	7,533
Bergen.....	409,646	924	52,384	160,393	42,447	116,337	324,458	480	25,790	87,252
Burlington.....	97,013	165	12,516	34,859	10,896	28,244	58,388	120	9,403	17,304
Camden.....	255,727	391	44,076	130,334	34,601	92,883	227,997	273	28,075	108,170
Cumberland.....	73,184	210	16,499	39,551	14,687	32,514	71,009	133	9,520	20,694
Essex.....	837,340	2,599	144,068	436,412	114,203	310,182	804,594	1,907	77,631	280,582
Gloucester.....	72,219	113	7,425	22,544	6,484	18,511	40,037	72	4,000	25,427
Hudson.....	652,040	2,169	143,424	445,085	113,221	316,949	883,325	1,632	85,029	342,458
Hunterdon.....	36,766	73	4,123	10,944	3,545	8,804	24,056	39	2,517	7,249
Mercer.....	197,318	402	40,422	113,283	34,994	88,380	208,485	318	25,287	72,054
Middlesex.....	217,077	540	59,089	178,686	48,994	136,981	331,348	392	30,048	118,351
Monmouth.....	161,238	309	11,587	28,973	10,007	22,753	50,680	202	7,082	16,601
Morris.....	125,732	226	12,837	37,059	10,517	27,876	82,167	102	6,315	18,745
Passaic.....	309,353	1,279	78,521	235,103	66,877	187,111	370,137	874	60,741	140,407
Salem.....	42,274	48	12,331	40,827	9,435	27,427	85,060	33	6,515	(d)
Somerset.....	74,390	109	13,787	39,879	11,669	32,400	80,117	84	6,746	32,535
Union.....	328,344	741	66,460	212,308	54,227	159,089	434,282	440	32,176	130,247
Warren.....	50,181	89	9,043	25,250	7,550	18,795	41,060	67	5,437	19,381
New Mexico	531,818	432	7,599	18,222	6,349	14,173	55,486	262	3,219	8,640
Bernalillo.....	69,391	110	1,954	4,246	1,610	3,198	8,743	52	617	2,577
Chaves.....	23,980	28	459	1,180	340	707	2,607	19	161	654
Eddy.....	24,311	24	1,202	4,181	1,089	3,887	13,242	17	158	871
Otero.....	10,522	13	441	1,061	421	1,034	2,333	10	374	593
Santa Fe.....	30,826	27	457	1,093	340	726	1,787	18	131	380
New York	13,479,142	47,819	1,775,975	5,279,686	1,424,795	3,815,374	9,666,538	32,672	949,362	3,513,649
Albany.....	221,315	319	21,077	57,621	17,221	42,434	111,726	270	12,794	45,199
Allegany.....	39,681	61	3,632	7,830	2,485	6,004	14,334	66	1,081	4,406
Bronx (Bronx Borough) ²	1,394,711	1,865	39,877	111,249	34,042	84,778	185,659	847	17,228	50,753
Broome.....	165,749	237	35,769	105,978	30,961	86,793	159,879	201	27,194	61,205
Cattaraugus.....	72,652	135	8,681	24,037	7,472	19,529	45,334	107	4,237	13,988
Cayuga.....	65,508	103	10,088	27,699	8,017	20,151	48,081	75	5,590	15,480
Chautauqua.....	123,580	277	22,560	63,913	19,851	53,338	109,776	214	13,770	37,129
Chemung.....	73,718	94	16,358	44,260	14,086	36,702	74,571	90	6,371	17,030
Chenango.....	36,454	64	3,052	6,753	2,563	4,005	20,525	55	1,854	6,040
Clinton.....	54,006	45	2,857	7,977	2,672	5,080	19,004	33	1,300	4,091
Columbia.....	41,464	72	4,647	11,117	4,051	8,705	23,302	57	3,015	7,541
Cortland.....	33,668	77	5,279	12,977	4,637	10,420	27,357	61	4,224	8,808
Delaware.....	40,989	65	3,344	8,875	2,583	6,049	14,762	55	1,331	3,080
Dutchess.....	120,542	185	14,640	41,866	12,234	31,841	70,248	148	7,110	20,040
Erie.....	798,377	1,437	140,116	421,251	114,802	323,468	753,534	1,141	69,424	288,898
Fulton.....	48,597	328	10,340	22,395	9,742	18,193	37,506	215	9,812	15,737
Genesee.....	44,481	61	6,169	17,094	5,402	14,514	33,795	62	3,517	11,083
Herkimer.....	59,527	88	14,521	39,172	12,780	32,201	61,178	88	9,330	19,010
Jefferson.....	84,003	106	7,199	19,444	6,047	15,542	31,782	113	3,763	12,201
Kings (Brooklyn Borough) ²	2,698,285	7,298	229,395	652,328	194,314	491,838	1,100,293	4,397	139,085	418,207
Livingston.....	38,510	51	3,262	7,634	2,666	5,714	12,103	37	1,781	6,180
Madison.....	39,598	57	2,883	6,239	2,217	4,855	10,093	47	1,204	3,339
Monroe.....	438,230	910	104,997	307,821	80,735	218,838	510,225	755	60,898	207,730
Montgomery.....	59,142	100	13,870	35,843	12,024	30,976	74,023	104	11,044	31,044
Nassau.....	406,748	517	25,725	78,268	16,645	46,661	115,152	213	4,239	12,003

See footnotes at end of table.

SUMMARY STATISTICS

TABLE 5.—GENERAL STATISTICS FOR SELECTED COUNTIES: 1947 AND 1939—Continued

STATE AND COUNTY	Popu- lation, 1940	1947					1939 ¹			
		Number of estab- lishments	All employees		Production workers		Value added by manu- facture	Number of estab- lishments	Number of production workers (average for the year)	Value added by manu- facture
			Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
New York—Continued										
New York (Manhattan Borough) ²	1,889,024	26,328	562,540	\$1,827,260	424,489	\$1,213,150	\$3,484,471	18,634	209,159	\$1,146,072
Niagara.....	160,110	257	43,760	136,133	34,956	101,846	269,697	215	20,820	102,889
Oneida.....	203,630	341	35,742	100,332	31,094	81,057	169,831	295	22,924	60,935
Onondaga.....	295,108	512	54,563	158,093	43,328	116,729	275,257	381	25,563	82,777
Ontario.....	55,307	97	5,383	14,341	4,641	11,415	23,577	71	3,314	8,667
Orange.....	140,113	264	13,605	32,559	12,082	20,462	58,645	167	8,821	20,244
Oswego.....	71,275	98	10,146	26,699	8,769	21,901	62,610	81	6,200	18,859
Queens (Queens Borough) ³	1,267,634	2,206	97,602	293,742	79,612	210,630	584,142	1,285	51,688	199,784
Rensselaer.....	121,834	174	15,837	39,353	13,513	30,320	77,099	157	11,684	32,437
Richmond (Richmond Borough) ⁴	174,441	173	10,821	32,993	8,790	24,764	96,860	124	5,065	30,206
Rockland.....	74,261	120	7,893	21,642	6,444	15,273	53,255	72	4,632	18,946
St. Lawrence.....	91,098	104	8,253	22,453	7,034	18,070	41,951	94	4,730	22,929
Saratoga.....	65,606	103	7,554	18,608	6,822	16,050	38,854	64	6,094	14,206
Schenectady.....	122,494	106	33,925	105,510	24,289	73,368	133,347	101	11,739	48,556
Seneca.....	25,732	29	2,665	6,929	2,163	5,604	10,798	21	1,416	3,095
Steuben.....	84,927	107	11,596	30,632	9,508	24,270	55,447	91	5,342	19,378
Suffolk.....	197,355	283	13,213	36,326	10,847	24,568	49,115	165	3,115	7,673
Tompkins.....	42,340	55	4,728	12,679	4,015	10,137	21,827	39	2,120	5,273
Ulster.....	87,017	106	7,412	16,010	6,659	13,109	24,760	136	5,015	9,369
Warren.....	36,035	70	4,074	10,496	3,485	7,804	19,849	40	2,844	8,682
Washington.....	46,726	74	4,897	12,317	4,207	9,063	21,635	44	2,896	5,286
Wayne.....	52,747	89	4,501	10,259	4,132	8,652	23,454	72	3,078	6,846
Westchester.....	573,658	927	46,508	134,172	37,019	96,760	268,308	469	21,167	79,014
Wyoming.....	31,394	43	3,138	6,910	2,731	5,440	13,594	43	2,411	6,727
North Carolina	3,571,623	5,322	381,480	758,895	350,207	641,966	1,646,673	3,158	269,238	544,181
Alamance.....	57,427	136	15,930	35,451	14,379	29,277	76,454	100	13,249	21,143
Buncombe.....	108,755	124	11,942	26,127	10,024	20,047	56,697	70	6,683	19,040
Burke.....	38,615	98	7,201	13,027	6,888	11,089	25,041	40	5,888	8,840
Cabarrus.....	59,393	71	22,525	45,001	21,889	42,595	106,016	45	21,065	(d)
Caldwell.....	35,795	95	8,083	16,081	7,587	13,949	29,766	53	5,082	7,673
Catawba.....	51,653	251	12,931	22,971	12,182	20,280	40,966	119	8,803	10,892
Cleveland.....	58,055	86	8,651	17,503	5,101	15,628	37,118	55	6,643	9,934
Cumberland.....	59,320	55	3,400	6,229	3,057	5,040	12,382	44	2,072	2,851
Davidson.....	53,377	155	11,449	20,934	10,794	18,200	42,629	63	8,386	10,233
Durham.....	80,244	107	16,109	(d)	14,653	(d)	(d)	73	8,156	(d)
Forsyth.....	126,475	187	27,368	58,427	23,571	44,426	177,425	110	21,049	(d)
Gaston.....	87,631	179	28,879	58,112	27,539	52,894	120,617	130	19,000	25,567
Guilford.....	153,916	410	28,885	59,031	26,172	48,906	126,578	243	25,123	39,582
Hallfax.....	56,612	60	5,688	11,160	5,271	9,730	21,930	33	4,596	6,437
Haywood.....	34,804	24	4,405	13,087	3,584	10,241	22,221	26	2,152	6,227
Iredell.....	50,424	98	8,651	17,075	8,109	14,856	34,605	83	5,889	7,305
Lincoln.....	24,187	48	3,350	5,967	3,212	5,427	10,397	31	2,147	2,613
McDowell.....	22,096	57	3,185	5,452	3,068	5,048	11,213	25	2,463	3,301
Mecklenburg.....	161,820	313	18,200	40,963	15,695	30,494	80,465	177	11,993	25,478
Nash.....	55,608	47	2,906	5,401	2,607	4,352	10,649	26	1,366	2,076
New Hanover.....	47,935	82	3,329	6,269	2,799	4,696	13,366	61	2,606	9,121
Randolph.....	44,654	135	8,865	16,182	8,290	14,055	31,577	67	5,802	7,067
Richmond.....	36,810	50	4,081	8,245	3,800	7,542	14,372	31	4,030	4,147
Robeson.....	76,860	55	3,390	6,482	3,156	5,725	11,879	30	1,286	1,328
Rockingham.....	57,898	83	11,744	24,623	11,046	21,962	72,658	45	7,806	(d)
Rowan.....	69,206	106	7,835	16,037	7,170	13,654	33,757	62	5,754	10,027
Rutherford.....	45,577	51	6,703	14,251	6,376	12,549	30,980	33	5,115	6,760
Stanly.....	32,834	60	6,627	12,453	6,058	10,814	21,544	36	4,835	11,706
Surry.....	41,783	79	6,793	13,624	6,409	11,825	21,592	32	4,612	5,749
Transylvania.....	12,241	10	2,654	7,250	2,220	4,858	16,016	13	901	1,561
Vance.....	29,061	32	2,736	5,564	2,560	4,792	10,747	22	1,658	1,634
Wake.....	109,544	133	4,002	7,984	3,292	5,735	15,499	93	2,088	4,418
Wayne.....	58,328	56	2,901	5,429	2,679	4,390	9,005	34	1,830	2,736
Wilson.....	50,219	49	2,548	4,467	2,185	3,270	7,529	20	594	1,288
North Dakota	641,935	362	5,218	12,341	3,823	8,490	29,461	342	2,605	10,984
Burleigh.....	22,736	20	275	637	187	373	1,626	12	119	514
Cass.....	52,840	60	1,757	4,560	1,325	3,145	8,392	45	375	4,470
Grand Forks.....	34,618	31	924	2,496	601	1,654	6,970	28	419	1,603
Morton.....	20,184	14	250	(d)	171	(d)	(d)	18	120	(d)
Ward.....	31,981	42	470	1,033	343	731	3,528	35	228	916
Ohio	6,907,612	12,303	1,194,603	3,560,075	988,446	2,727,481	6,359,006	9,543	595,520	2,116,434
Allen.....	73,303	103	14,702	43,450	11,772	32,243	73,106	80	6,135	16,388
Ashland.....	29,785	42	4,306	11,902	3,616	9,140	28,086	44	2,820	7,357
Ashtabula.....	68,674	131	6,707	17,745	5,753	14,164	37,151	73	2,420	7,391
Augliazo.....	23,037	57	3,909	10,411	3,286	7,830	16,729	57	1,885	4,552
Belmont.....	95,014	71	4,627	11,208	4,094	9,257	19,037	38	3,318	6,440
Butler.....	120,249	153	27,047	84,037	22,617	60,181	137,406	124	14,593	46,160
Clark.....	95,047	192	19,446	56,088	15,573	43,431	113,247	152	10,280	47,934
Columbiana.....	90,121	165	12,692	33,753	11,053	27,251	59,129	122	6,667	10,233
Coshocton.....	30,594	71	4,474	11,033	3,609	7,596	22,351	44	2,105	5,634
Crawford.....	35,871	71	5,946	17,156	5,148	13,037	33,018	68	2,752	9,269

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

TABLE 5.—GENERAL STATISTICS FOR SELECTED COUNTIES: 1947 AND 1939—Continued

STATE AND COUNTY	Population, 1940	1947					1939			
		Number of establishments	All employees		Production workers		Value added by manufacture	Number of establishments	Number of production workers (average for the year)	Value added by manufacture
			Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
Ohio—Continued										
Cuyahoga	1,217,250	3,162	260,034	\$839,791	211,789	\$625,291	\$1,488,276	2,303	125,346	\$487,550
Defiance	24,367	58	2,503	6,781	2,195	5,332	12,036	41	1,305	3,646
Erie	43,201	105	8,814	23,950	7,441	18,901	43,834	84	3,453	10,082
Fairfield	48,490	56	5,914	14,279	5,075	11,654	24,487	45	5,130	10,753
Franklin	388,712	679	54,877	153,462	42,363	105,366	277,800	500	25,309	90,040
Hamilton	621,987	1,564	120,603	357,162	100,878	255,205	732,158	1,414	66,692	251,574
Hancock	40,793	73	4,585	12,333	3,630	8,039	21,495	46	2,558	7,323
Huron	34,800	65	2,672	6,539	2,266	4,949	13,863	53	1,444	3,733
Jefferson	93,129	65	10,156	31,272	9,222	28,178	53,652	60	0,399	20,145
Knox	31,024	41	4,688	13,791	3,848	10,730	23,046	33	1,074	0,016
Lake	50,020	96	8,716	27,058	7,140	20,248	57,841	48	4,012	17,442
Lawrence	46,705	39	4,180	11,167	3,591	9,087	30,046	30	1,612	4,610
Licking	62,279	65	7,088	19,520	5,700	15,056	31,571	64	3,414	11,239
Lorain	112,390	101	28,980	87,791	24,226	69,350	131,638	113	14,585	56,651
Lucas	344,333	627	69,599	221,562	50,730	167,461	300,032	473	30,542	111,138
Mahoning	240,251	260	47,858	144,194	42,379	122,378	232,043	198	33,037	98,482
Marion	44,898	81	7,231	20,658	5,846	15,493	36,837	51	2,048	0,553
Medina	33,034	53	4,487	11,708	3,790	8,992	18,052	34	2,010	6,110
Miami	52,632	116	7,965	23,261	6,658	17,288	44,606	80	4,688	17,537
Montgomery	295,480	595	93,668	303,886	77,994	236,807	487,755	454	30,330	102,130
Muskingum	69,795	102	9,483	22,808	8,178	18,492	44,087	68	5,638	15,074
Ottawa	24,360	54	2,552	6,908	2,231	5,008	15,508	31	1,700	6,400
Portage	46,660	80	7,234	20,457	6,264	16,000	32,896	50	3,231	10,778
Richland	73,853	125	13,683	60,151	15,841	47,731	118,465	106	9,633	20,678
Ross	52,147	43	3,411	8,841	2,842	6,891	10,376	20	2,751	8,807
Sandusky	41,014	95	6,544	17,950	5,662	14,154	35,540	76	3,200	9,082
Scioto	85,585	76	11,634	28,904	10,662	25,087	40,023	48	7,031	17,240
Seneca	48,499	77	8,727	23,668	7,563	19,168	40,819	72	3,680	12,471
Shelby	26,071	55	4,136	11,867	3,568	9,163	21,933	38	1,705	4,969
Stark	234,887	385	53,664	158,649	47,600	128,551	280,241	323	28,854	107,807
Summit	330,405	482	64,011	284,302	75,289	215,444	460,327	324	40,114	160,444
Trumbull	132,315	176	40,157	121,400	34,788	99,258	213,734	135	19,208	60,000
Tuscarawas	68,816	120	8,495	21,898	7,574	18,501	41,290	107	6,558	13,714
Warren	29,894	59	3,164	8,627	2,840	7,603	20,422	29	1,540	5,126
Washington	43,537	60	2,524	6,898	2,068	4,319	14,961	38	701	2,178
Wayne	50,520	90	5,825	15,830	4,801	11,612	32,856	71	2,421	7,326
Wood	51,796	63	5,547	16,577	4,825	14,005	43,681	50	2,829	15,008
Oklahoma	2,336,434	1,740	55,403	143,605	44,302	105,277	341,027	1,530	27,642	101,782
Garfield	45,484	58	1,852	4,649	1,431	3,402	17,732	47	900	4,432
Key	47,084	44	3,681	10,530	3,289	9,122	24,612	46	1,781	5,422
Oklahoma	244,159	346	13,273	35,822	9,903	23,251	71,998	306	5,979	24,065
Okmulgee	50,101	32	2,366	6,382	2,038	5,468	13,743	32	1,317	3,734
Tulsa	183,363	342	14,766	42,057	11,527	29,565	96,462	252	6,313	20,167
Oregon	1,089,684	3,075	105,591	317,827	92,144	265,837	675,017	1,903	57,487	156,696
Clackamas	57,130	156	4,120	12,203	3,727	10,730	26,315	67	1,528	6,340
Clatsop	24,897	55	3,178	8,423	2,830	7,282	17,673	44	2,217	6,304
Columbia	20,971	84	2,942	8,937	2,751	8,104	22,115	33	2,118	6,004
Cook	32,466	120	3,749	12,507	3,489	11,301	29,631	65	2,794	7,471
Douglas	25,728	190	5,296	17,077	4,879	15,303	38,162	44	639	1,947
Jackson	36,213	118	2,878	9,083	2,602	7,665	22,004	48	1,076	2,780
Klamath	40,497	55	2,971	9,326	2,683	7,994	20,232	57	4,873	13,886
Lane	69,096	300	8,721	26,945	7,903	23,727	59,346	130	4,384	8,403
Linn	30,485	146	4,571	14,315	4,213	12,770	32,790	59	1,265	2,769
Marion	75,246	162	5,287	13,998	4,678	11,795	30,257	110	3,732	8,895
Multnomah	355,099	978	39,235	116,984	31,659	88,479	225,166	770	18,392	59,050
Pennsylvania	9,900,180	16,789	1,439,534	3,918,901	1,219,426	3,053,879	6,946,958	13,116	853,371	2,476,862
Adams	39,435	89	5,115	9,148	4,680	7,844	17,226	69	4,106	9,949
Allegheny	1,411,539	1,581	222,506	675,249	184,144	520,470	1,130,168	1,397	123,073	425,145
Armstrong	81,087	67	7,534	20,540	6,617	17,437	74,448	48	4,040	14,094
Beaver	156,754	183	44,428	139,756	38,900	116,456	233,149	157	20,630	88,483
Berks	241,884	617	53,423	136,503	46,756	111,376	230,962	403	40,537	83,782
Blair	140,358	117	8,423	18,965	7,443	15,676	39,152	101	4,988	(d)
Bradford	50,615	73	4,005	9,844	3,266	7,174	17,937	40	2,372	5,910
Bucks	107,715	322	17,135	45,395	14,445	34,564	73,685	184	10,898	20,320
Butler	87,590	106	9,590	28,184	8,213	22,887	45,486	79	4,775	15,254
Cambria	213,459	148	22,249	60,400	20,002	51,563	95,796	131	14,180	36,120
Carbon	61,735	83	7,360	15,917	6,252	12,238	34,515	58	5,430	(d)
Centre	52,608	59	4,029	9,452	3,527	7,532	17,816	50	2,397	5,321
Chester	135,626	206	18,449	52,172	16,453	39,430	93,100	172	10,800	25,624
Clearfield	92,094	100	5,060	11,298	4,520	9,733	20,350	69	2,961	6,462
Clinton	34,557	52	5,430	12,384	4,768	10,031	26,452	41	3,273	7,324
Columbia	51,413	94	9,541	21,965	8,073	17,170	45,428	75	5,496	0,122
Crawford	71,644	94	10,378	28,044	8,385	20,510	50,083	70	5,825	10,520
Cumberland	74,806	131	7,695	15,674	6,946	12,968	30,278	107	6,905	10,794
Dauphin	177,410	236	23,189	57,544	19,967	45,535	114,307	242	15,043	40,474
Delaware	310,756	310	47,255	148,016	38,257	112,015	257,820	200	20,491	65,445

See footnotes at end of table.

SUMMARY STATISTICS

TABLE 5.—GENERAL STATISTICS FOR SELECTED COUNTIES: 1947 AND 1939—Continued

STATE AND COUNTY	Popu- lation, 1940	1947						1939 ¹		
		Number of estab- lishments	All employees		Production workers		Value added by manu- facture	Number of estab- lishments	Number of production workers (average for the year)	Value added by manu- facture
			Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
Pennsylvania—Continued										
Elk.....	34,443	51	6,839	\$17,493	5,053	\$13,959	\$28,607	42	3,351	\$9,793
Eric.....	180,889	368	46,285	134,693	38,076	103,640	224,906	296	19,216	72,110
Fayette.....	200,999	177	9,576	24,459	8,592	21,205	48,939	115	3,857	9,767
Franklin.....	69,378	95	9,204	20,850	8,039	16,749	34,856	94	6,936	15,955
Huntingdon.....	41,836	65	3,938	8,395	3,513	7,178	13,440	41	2,106	3,607
Jefferson.....	54,000	81	3,413	7,104	3,026	6,070	14,747	48	5,004	3,641
Lackawanna.....	301,243	394	24,879	50,705	22,018	40,615	83,654	264	12,316	24,954
Lancaster.....	212,504	553	38,707	93,251	33,526	72,626	177,087	424	27,652	65,626
Lawrence.....	96,877	113	16,557	47,868	14,300	35,977	77,733	86	9,576	25,330
Lebanon.....	72,641	169	13,391	30,374	11,904	25,047	49,441	154	10,867	17,428
Lohigh.....	177,533	460	35,732	86,471	30,537	68,970	148,402	335	22,402	46,064
Luzerne.....	441,518	468	35,608	73,279	31,904	60,527	126,075	293	18,036	40,757
Lycoming.....	93,633	223	15,335	35,890	13,202	27,761	58,645	150	9,289	22,102
McKean.....	66,673	93	6,271	15,625	5,240	11,893	33,089	88	3,765	12,363
Morcer.....	101,039	116	20,639	65,231	17,066	51,985	121,530	96	10,765	32,748
Mifflin.....	42,993	47	7,243	19,840	6,339	16,546	32,055	37	5,600	12,440
Monroe.....	20,802	66	3,605	8,711	3,171	7,000	16,937	53	1,808	4,809
Montgomery.....	289,247	648	57,005	165,442	40,058	131,971	263,815	493	34,097	89,159
Northampton.....	168,959	349	43,764	110,373	38,398	89,551	170,846	260	31,842	92,791
Northumberland.....	126,887	143	13,474	29,775	11,980	24,259	51,416	119	6,673	12,167
Philadelphia.....	1,031,334	5,244	328,630	932,184	268,359	682,299	1,759,264	4,242	195,637	649,777
Philadelph.....	228,331	244	16,699	30,515	15,252	25,654	49,863	199	8,594	14,810
Tioga.....	35,004	46	3,466	8,594	3,255	7,853	20,223	29	1,939	6,610
Union.....	63,058	101	8,576	22,371	7,171	17,377	49,414	64	3,620	11,236
Warren.....	42,780	80	5,070	13,557	4,282	10,469	24,540	56	2,631	8,569
Washington.....	210,852	151	21,727	62,302	18,914	52,192	101,574	119	14,451	44,508
Westmoreland.....	303,411	313	49,313	146,606	42,059	118,014	234,027	232	26,518	82,772
York.....	178,022	597	41,932	100,709	35,569	78,540	189,358	455	27,114	66,435
Rhode Island										
Bristol.....	713,346	2,214	146,850	374,582	123,130	297,599	658,420	1,399	106,089	237,698
Providence.....	25,548	49	5,832	13,037	5,184	11,356	27,181	41	4,671	8,237
Kent.....	58,311	131	7,415	18,713	6,695	15,341	35,112	84	6,939	15,466
Newport.....	46,696	40	775	1,607	603	1,323	2,719	22	1,108	1,459
Washington.....	550,298	1,938	128,104	328,373	111,274	259,474	575,386	1,203	88,727	204,659
Westerly.....	32,493	56	4,724	12,252	4,314	10,105	18,022	40	4,644	7,877
South Carolina										
Abbeville.....	1,899,804	2,137	188,601	376,964	175,724	330,465	794,312	1,300	126,408	169,294
Anderson.....	22,931	15	2,679	5,507	2,548	5,045	12,479	7	1,450	(d)
Aiken.....	49,916	53	6,286	12,185	6,013	10,808	19,499	25	4,831	(d)
Charleston.....	88,712	74	13,832	26,844	13,265	24,806	64,476	81	9,980	11,740
Cherokee.....	121,105	148	9,972	19,729	8,363	15,005	30,617	96	5,346	10,405
Greenwood.....	33,200	55	3,910	9,982	3,759	6,273	17,568	30	3,391	3,975
Lancaster.....	32,570	26	4,798	10,033	4,676	9,671	15,701	16	3,588	3,895
Laurens.....	45,198	49	4,474	10,122	4,119	8,485	18,367	34	2,999	5,872
Marion.....	26,352	25	2,992	(d)	2,729	(d)	(d)	18	1,237	(a)
Mecklenburg.....	136,580	189	26,274	68,907	24,005	49,847	128,045	115	18,224	24,025
Orangeburg.....	40,083	61	11,000	22,626	10,317	19,098	48,723	39	6,723	7,486
Rock Hill.....	33,542	31	6,317	13,055	5,868	11,937	26,128	19	4,092	4,677
Union.....	44,185	37	6,594	14,443	6,295	12,840	30,590	21	5,182	6,707
York.....	33,677	61	4,272	8,443	4,111	7,731	18,340	27	3,104	4,238
Abbeville.....	30,512	62	3,519	6,485	3,383	6,078	14,920	23	1,787	2,060
Anderson.....	63,707	61	2,814	4,802	2,507	3,881	8,975	41	1,398	1,994
Charleston.....	37,111	49	4,979	8,694	4,808	8,108	17,629	21	2,935	3,083
Columbia.....	104,843	144	7,050	13,858	6,227	11,031	28,011	86	4,070	7,159
Durham.....	127,733	124	24,340	50,422	22,825	44,920	119,225	100	17,508	23,027
Greenville.....	82,403	69	3,353	6,205	3,030	4,893	9,546	40	2,954	3,094
Hampton.....	81,360	40	5,316	10,578	5,087	9,794	23,660	21	3,670	3,505
York.....	58,063	71	10,452	21,036	9,885	19,554	41,665	43	6,994	11,658
South Dakota										
Beadle.....	642,961	494	10,265	25,796	8,062	19,193	51,398	450	5,421	19,619
Brookings.....	10,648	17	660	(d)	645	(d)	(d)	14	299	(d)
Brown.....	29,676	30	662	1,551	466	991	2,958	20	238	892
Codington.....	17,014	24	619	1,601	474	1,115	3,749	24	331	1,105
Minnehaha.....	57,697	73	4,804	13,418	3,710	9,733	27,402	66	2,639	9,704
Pennington.....	23,799	38	914	2,188	760	1,764	4,499	25	564	1,057
Tennessee										
Blount.....	2,915,841	3,346	221,454	473,211	192,367	369,920	957,539	2,225	131,024	318,378
Bradley.....	41,116	38	10,209	(d)	8,942	(d)	(d)	25	4,159	(d)
Carroll.....	28,498	71	3,622	6,974	3,325	5,388	14,788	38	2,971	4,767
Davidson.....	35,127	22	6,020	(d)	4,962	(d)	(d)	12	4,036	(d)
Gibson.....	257,267	370	30,310	68,750	24,915	50,136	134,030	300	17,321	58,107
Hamilton.....	44,835	29	2,503	4,304	2,262	3,612	7,273	27	1,248	1,846
Madison.....	180,478	331	33,184	74,399	28,979	58,548	128,851	249	19,972	41,001
Meigs.....	178,468	216	19,005	43,477	17,314	33,576	74,062	182	14,040	28,871
Monroe.....	54,115	59	3,128	6,097	2,712	4,861	15,166	39	2,102	3,401
Murray.....	40,357	44	2,729	5,926	2,421	4,870	15,113	44	1,791	4,082
Roane.....	27,795	35	2,998	5,164	2,823	4,619	7,620	18	2,103	2,454
Shelby.....	358,250	491	35,216	85,382	28,809	62,698	198,873	364	18,125	57,494
Sullivan.....	60,085	73	17,981	45,814	15,179	34,761	96,089	56	8,399	25,854
Washington.....	51,631	64	3,193	6,070	2,800	4,811	12,085	48	2,405	3,700

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

TABLE 5.—GENERAL STATISTICS FOR SELECTED COUNTIES: 1947 AND 1939—Continued

STATE AND COUNTY	Popu- lation, 1940	1947						1939 ¹		
		Number of estab- lishments	All employees		Production workers		Value added by manu- facture	Number of estab- lishments	Number of production workers (average for the year)	Value added by manu- facture
			Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
Texas	6,414,824	7,128	297,053	\$755,411	242,014	\$558,420	\$1,727,464	5,085	125,115	\$448,523
Angelina.....	32,201	47	4,521	10,637	4,035	9,110	23,553	31	1,813	3,425
Bexar.....	338,176	463	15,514	31,611	12,530	21,922	68,931	332	6,022	22,254
Bowie.....	50,208	65	2,536	6,430	2,106	3,365	8,719	55	1,504	3,221
Brazoria.....	27,069	20	3,671	(d)	2,789	(d)	(d)	7	100	(d)
Dallas.....	398,564	1,068	38,936	97,507	30,695	66,852	238,905	608	16,267	61,458
El Paso.....	131,067	148	6,176	13,780	5,116	10,183	35,175	128	3,051	7,427
Galveston.....	81,173	66	9,119	29,095	7,431	23,025	73,580	69	3,111	13,640
Grayson.....	69,499	66	3,173	6,929	2,593	5,029	23,182	63	2,137	5,176
Harris.....	528,961	916	58,606	182,282	46,001	131,512	386,549	620	22,000	100,008
Harrison.....	50,900	71	2,584	4,279	2,350	3,645	7,977	32	1,277	2,670
Hidalgo.....	106,059	109	3,117	4,227	2,701	3,043	10,303	61	1,000	2,377
Hutchinson.....	19,069	30	3,227	10,133	2,493	7,266	69,171	24	1,142	5,506
Jefferson.....	145,329	150	23,181	77,879	18,851	60,488	177,608	114	12,082	68,905
McLennan.....	101,898	134	6,451	14,655	5,375	11,172	32,621	107	2,834	6,907
Nueces.....	92,661	129	4,577	13,496	3,408	9,184	41,599	85	1,188	9,385
Orange.....	17,382	33	3,835	11,027	2,222	5,978	16,598	15	523	990
Tarrant.....	225,521	427	32,039	83,298	26,414	61,967	146,501	200	8,030	30,112
Travis.....	111,053	113	2,554	5,853	1,848	3,676	11,793	95	1,200	4,640
Wichita.....	73,604	101	2,972	7,440	2,427	5,525	21,648	100	1,627	5,325
Utah	550,310	772	24,516	63,804	19,973	48,053	128,298	549	11,467	43,341
Cache.....	29,797	34	881	1,903	741	1,488	6,902	25	520	2,312
Davis.....	16,784	17	766	1,833	691	1,482	4,440	11	471	2,470
Salt Lake.....	211,623	373	10,849	30,096	8,614	21,983	57,827	255	5,414	23,413
Utah.....	57,382	76	5,783	15,717	4,766	12,217	30,632	68	1,256	3,708
Weber.....	50,714	84	3,414	8,033	2,693	5,689	14,943	71	2,001	6,800
Vermont	359,231	830	34,872	83,021	30,239	66,400	149,685	659	20,498	49,741
Bennington.....	22,286	60	3,365	7,819	2,970	6,156	11,719	35	2,300	3,805
Chittenden.....	52,088	97	5,765	13,682	5,028	10,983	23,708	70	3,683	7,282
Rutland.....	45,638	80	3,350	7,581	2,992	6,384	13,743	68	1,481	3,211
Washington.....	41,546	157	3,281	7,891	2,821	6,405	14,801	162	2,209	6,190
Windham.....	27,850	97	3,278	7,733	2,935	6,593	16,887	60	1,941	3,791
Windsor.....	37,862	81	7,073	19,648	5,728	14,117	26,602	64	3,900	14,008
Virginia (counties and independent cities)	2,677,773	3,644	216,637	483,994	190,035	384,441	1,051,629	2,494	132,089	376,259
Allegheny County.....	22,688	60	4,151	10,435	3,693	8,848	24,793	23	2,843	(d)
Augusta County.....	42,772	54	6,928	18,363	5,479	13,138	33,779	47	4,345	13,328
Bristol city.....	9,708	34	3,557	8,054	3,091	5,728	11,042	33	1,306	2,481
Campbell County.....	20,048	43	3,307	7,068	2,966	6,045	15,999	15	1,071	3,708
Carroll County.....	25,904	32	2,522	4,801	2,300	4,052	12,761	16	1,598	2,625
Chesterfield County.....	31,183	28	5,316	(d)	4,231	(d)	(d)	36	3,630	(d)
Danville city.....	32,749	37	14,741	33,300	13,451	26,364	58,043	32	900	(d)
Giles County.....	14,635	14	4,522	(d)	3,889	(d)	(d)	7	108	(d)
Halifax County.....	41,271	54	2,673	5,027	2,473	4,428	12,789	36	478	787
Henry County.....	26,481	47	7,167	16,665	6,251	12,737	47,187	20	3,805	8,889
Hopewell city.....	8,679	13	3,062	10,571	3,140	7,475	27,670	11	1,077	10,887
Lynchburg city.....	44,541	58	8,794	17,689	7,687	14,292	20,703	64	7,440	12,485
Martinsville city.....	10,080	23	4,775	2,318	3,796	10,590	21	3,824	5,316	
Newport News city.....	37,067	28	12,418	40,197	10,925	34,877	48,150	23	7,005	(d)
Norfolk County.....	35,828	49	3,802	8,405	3,314	6,562	16,401	35	2,330	6,561
Norfolk city.....	144,332	184	10,336	27,691	8,374	20,208	54,080	170	5,071	13,307
Petersburg city.....	30,631	39	3,794	6,929	3,479	5,908	16,071	43	4,438	(d)
Pulaski County.....	22,767	31	2,927	5,900	2,711	5,161	7,337	24	2,235	3,419
Richmond city.....	103,942	396	28,068	66,163	24,148	60,213	205,130	307	18,221	100,508
Roanoke County.....	42,897	45	5,456	14,568	4,737	11,466	27,515	20	5,350	(d)
Roanoke city.....	69,287	63	5,832	13,072	4,932	9,742	22,077	74	2,302	(d)
Rockingham County.....	31,289	56	2,637	4,866	2,332	3,762	8,474	25	269	570
Smyth County.....	28,861	30	3,196	6,975	2,828	5,836	11,054	23	2,090	5,200
Spotsylvania County.....	9,905	44	2,810	(d)	2,400	(d)	(d)	8	1,637	(d)
Warren County.....	11,352	17	3,710	(d)	3,223	(d)	(d)	13	300	(d)
Washington	1,736,191	3,410	144,324	438,020	123,488	354,596	874,036	2,858	82,261	267,716
Clark.....	49,852	95	6,618	20,065	5,775	16,782	62,746	62	3,612	12,518
Cowlitz.....	40,155	89	8,140	26,313	7,354	23,309	69,781	51	5,812	18,549
Grays Harbor.....	53,166	128	7,465	23,201	6,854	20,154	48,403	98	5,403	15,962
King.....	504,680	1,221	54,770	171,221	44,668	120,010	265,422	1,137	23,581	83,804
Pierce.....	182,081	351	16,896	51,918	14,797	42,539	100,425	298	12,234	37,416
Skagit.....	37,650	92	3,002	8,868	2,764	7,930	18,951	68	1,627	6,104
Snohomish.....	88,754	197	8,554	27,758	8,084	24,210	71,833	145	6,337	19,532
Spokane.....	164,652	267	10,924	31,128	8,703	23,602	71,995	243	6,205	18,882
Whatcom.....	60,355	112	3,666	9,586	3,097	8,030	22,919	93	2,366	6,075
Yakima.....	99,019	123	4,466	11,669	3,852	9,532	22,226	97	2,309	6,007
West Virginia	1,901,974	1,602	127,353	337,869	108,984	268,469	663,903	1,094	74,411	213,284
Berkeley.....	29,016	31	4,188	7,844	3,843	6,974	13,181	27	3,197	5,851
Brooke.....	25,513	31	4,674	13,216	4,174	11,137	24,217	25	3,561	(d)
Cabell.....	97,459	134	12,106	30,332	10,189	22,926	56,103	96	5,933	21,084
Fayette.....	80,628	33	2,848	(d)	2,559	(d)	(d)	10	987	(d)
Hancock.....	31,572	31	17,580	53,459	16,147	46,564	92,471	38	13,692	(d)
Harrison.....	82,911	63	7,186	19,817	6,390	16,980	36,335	51	4,084	11,074
Kanawha.....	195,619	163	23,073	74,492	19,843	60,292	178,158	91	8,958	49,542
Marion.....	68,883	52	6,685	16,797	5,871	14,285	35,037	30	1,889	7,036
Marshall.....	46,189	33	6,683	14,769	5,124	12,420	29,164	32	4,451	(d)
Ohio.....	73,115	106	9,031	23,096	7,723	17,948	40,968	101	6,477	16,300
Wood.....	62,399	74	9,434	23,245	8,161	19,005	42,277	61	6,911	17,568

See footnotes at end of table.

TABLE 5.—GENERAL STATISTICS FOR SELECTED COUNTIES: 1947 AND 1939—Continued

STATE AND COUNTY	Popu- lation, 1940	1947						1939 ¹		
		Number of estab- lishments	All employees		Production workers		Value added by manu- facture	Number of estab- lishments	Number of production workers (average for the year)	Value added by manu- facture
			Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total				
Wisconsin	3,137,587	6,979	416,448	\$1,184,247	343,008	\$906,112	\$2,260,574	6,334	198,648	\$681,970
Brown.....	83,109	191	9,491	26,099	7,926	19,909	54,556	172	5,004	18,101
Dane.....	130,660	238	10,750	29,153	8,506	21,490	49,582	249	4,052	18,872
Dodge.....	54,280	170	5,729	13,627	5,027	11,248	31,576	204	3,324	9,104
Etou Claire.....	46,909	70	8,672	32,115	7,083	25,972	47,226	65	3,555	12,209
Fond du Lac.....	62,353	146	7,153	18,099	5,859	13,169	38,410	133	3,625	9,778
Jefferson.....	38,868	101	5,833	14,948	4,551	10,613	28,614	98	3,069	10,108
Kenosha.....	63,505	83	17,060	51,080	14,128	39,922	99,694	66	8,616	31,258
La Crosse.....	59,653	114	9,700	24,617	8,162	19,554	51,813	93	4,031	13,178
Manitowoc.....	61,617	164	9,774	24,966	8,495	20,216	61,499	182	5,244	20,595
Marathon.....	75,915	165	8,593	21,856	7,441	17,554	47,763	183	4,665	12,717
Marinette.....	36,225	70	4,004	10,038	3,401	7,923	17,763	49	2,125	8,027
Milwaukee.....	766,885	1,063	177,202	535,080	141,172	396,832	973,335	1,465	79,473	287,667
Outagamie.....	70,032	153	10,211	27,446	8,724	21,444	52,712	163	5,229	16,836
Ozaukee.....	18,985	72	3,592	9,513	2,990	6,987	18,456	64	1,419	3,275
Racine.....	94,047	264	22,512	71,779	17,795	51,546	124,664	192	9,487	40,301
Rock.....	80,173	106	16,200	48,749	13,703	39,680	91,738	90	8,116	33,804
Sheboygan.....	76,221	228	13,485	35,919	12,214	30,738	71,410	232	9,058	26,966
Walworth.....	33,103	74	2,718	7,034	2,334	5,455	10,935	40	802	1,692
Washington.....	28,430	77	4,219	11,116	3,541	8,162	21,366	68	2,075	6,483
Waukesha.....	62,744	147	7,280	21,501	5,807	16,452	40,929	90	3,231	12,141
Waupaca.....	34,614	93	3,154	6,373	2,404	4,988	17,807	80	945	2,367
Winnebago.....	80,507	195	15,432	42,340	13,212	33,275	85,397	106	8,402	24,231
Wood.....	44,468	96	6,102	16,855	5,414	14,392	36,586	84	3,611	11,548
Wyoming	250,742	256	5,867	16,696	4,285	12,291	34,957	300	3,351	15,336
Albany.....	13,946	15	603	1,517	497	1,243	2,177	22	356	978
Carbon.....	12,644	13	693	(d)	512	(d)	(d)	24	330	(d)
Laramie.....	33,651	24	569	1,695	398	1,049	4,953	24	187	830
Natrona.....	23,858	27	1,287	4,712	953	3,420	7,363	37	602	3,998
Sheridan.....	19,265	26	515	1,277	386	937	2,601	23	314	1,149

^d Withheld to avoid disclosing figures for individual companies.

¹ The figures for 1939 have been adjusted for comparability with the 1947 statistics by excluding data for certain establishments classified as manufacturing in 1939 but classified as nonmanufacturing in 1947. See GENERAL EXPLANATIONS—Statistics for 1939 and earlier years.

² The independent cities of Baltimore, Md., and St. Louis, Mo., are treated as counties.

³ A borough of New York City.

TABLE 6.—SELECTED STATISTICS BY DIVISIONS

[Value added figures in thousands of dollars. For explanation of column captions see GENERAL EXPLANATIONS. A dotted line indicates a zero in the 1947 production or the 1947 production worker figure has been withheld to avoid disclosure. The symbol "n.a." appears in each case where a comparable 1939 production worker figure is the figures for one or more other geographic divisions. In such cases, a "d" appears in each column where a figure has been omitted and the combined figures appear, printed for the New England and Middle Atlantic Divisions could not be shown separately because the figures for one of these geographic divisions constituted a disclosure. As a result, whenever geographic division figures for individual industries (4-digit codes) appear in italics, or the symbol "d" has been substituted, the figures the individual industries in the Dairy products group (industry group 202) cannot add to the printed total for that group in the New England or Middle Atlantic Division printed totals for those geographic divisions in which italicized figures or "d" symbols appear for one or more industry groups. For some industries, the sum of the 1939 a rounded average of the reported 1939 monthly employment figures]

No.	INDUSTRY AND INDUSTRY GROUP	United States			Northeast						North Central		
		Value added by manufacture	Production workers (average for the year)	1939	New England			Middle Atlantic			Value added by manufacture	Production workers (average for the year)	1939
					1947	1947	1939	1947	1947	1939			
	All industries, total	\$74,425,825	11,916,188	7,808,205	\$6,813,800	1,248,325	947,412	\$20,790,626	3,245,879	2,234,295	\$23,473,563	3,565,172	2,180,600
	INDUSTRY GROUPS												
20	Food and kindred products.....	9,024,912	1,099,478	802,133	364,696	50,639	44,146	1,918,175	214,717	171,502	2,382,765	269,334	206,413
21	Tobacco manufactures.....	641,358	103,289	87,525	3,957	1,270	1,343	103,806	25,180	29,102	(d)	(d)	(d)
22	Textile mill products.....	5,340,876	1,147,194	1,081,710	1,245,559	260,695	260,557	1,376,829	264,744	274,002	200,617	40,585	44,680
23	Apparel and related products.....	4,443,373	972,897	752,829	279,981	66,909	61,078	2,095,194	531,551	408,070	505,872	111,348	106,396
24	Lumber and products, except furniture.....	2,497,192	596,118	422,947	115,965	31,300	20,809	142,024	33,886	22,041	200,090	57,371	45,597
25	Furniture and fixtures.....	1,377,908	282,780	189,382	74,619	15,609	12,072	298,210	55,043	37,100	510,622	97,312	67,078
26	Paper and allied products.....	2,874,958	388,901	270,239	307,013	60,020	46,002	733,898	104,757	74,415	770,000	100,040	78,281
27	Printing and publishing industries.....	4,269,416	438,135	324,371	281,179	36,127	29,145	1,576,511	138,372	104,998	1,169,861	128,100	90,964
28	Chemicals and allied products.....	5,305,201	466,458	275,669	216,910	20,123	12,174	1,655,359	141,607	89,583	1,356,706	102,867	54,744
29	Petroleum and coal products.....	2,015,307	169,610	107,695	33,818	2,985	2,734	615,501	43,054	28,543	431,152	30,607	20,098
30	Rubber products.....	1,302,863	214,533	120,740	222,783	37,502	26,661	210,499	33,855	21,240	588,746	102,037	58,360
31	Leather and leather products.....	1,532,803	348,529	327,189	458,039	98,770	106,992	469,152	100,971	91,807	318,804	67,037	67,490
32	Stone, clay, and glass products.....	2,306,480	405,755	267,094	108,475	17,508	11,399	691,541	122,245	81,584	888,262	115,809	82,277
33	Primary metal industries.....	5,765,434	1,010,055	672,498	288,198	52,924	37,764	1,804,246	330,947	243,010	2,416,939	418,142	204,679
34	Fabricated metal products.....	4,921,476	822,514	451,087	506,176	91,808	57,477	1,205,294	207,371	117,383	2,159,830	344,637	185,920
35	Machinery (except electrical).....	7,812,455	1,244,135	536,082	933,120	164,096	82,700	1,678,754	270,525	115,748	4,013,422	616,615	266,807
36	Electrical machinery.....	3,894,115	639,147	247,930	451,268	77,337	35,486	1,362,157	220,032	93,435	1,634,719	268,520	90,146
37	Transportation equipment.....	5,869,196	987,142	544,553	206,974	38,997	21,545	944,560	163,300	80,644	3,283,208	537,105	340,403
38	Instruments and related products.....	1,080,336	181,939	84,867	165,832	31,335	19,123	589,637	91,905	44,797	(d)	(d)	(d)
39	Miscellaneous manufactures.....	2,090,168	397,579	241,725	463,700	92,311	57,989	818,520	150,417	94,362	400,884	93,770	87,846
	INDUSTRIES												
201	Food and kindred products	9,024,912	1,099,478	802,133	364,696	50,639	44,146	1,918,175	214,717	171,502	2,382,765	269,334	206,413
201	Meat products.....	1,280,692	220,732	140,624	36,366	6,293	4,183	187,807	23,291	17,473	361,258	60,780	45,049
2011	Meat packing, wholesale.....	976,995	167,073	115,046	16,693	3,196	1,009	103,212	14,957	12,148	270,418	47,088	37,403
2012	Prepared meats.....	235,537	34,473	17,624	18,567	2,856	1,907	81,221	7,045	4,811	86,504	12,487	6,471
2015	Poultry dressing, wholesale.....	68,160	19,187	13,954	1,106	241	277	3,074	689	514	4,270	1,205	1,115
202	Dairy products.....	595,168	69,074	50,488	25,673	2,107	1,463	96,079	9,042	7,186	221,072	25,629	17,930
2021	Creamery butter.....	107,248	15,242	17,953	(d)	(d)	(d)	2,346	543	543	221,072	25,629	17,930
2022	Natural cheese.....	63,257	10,535	5,009	918	140	114	5,823	907	500	30,155	4,137	5,285
2023	Concentrated milk.....	148,771	13,982	9,705	1,464	131	163	11,174	1,068	1,806	74,340	6,809	2,830
2024	Ice cream and ices.....	228,049	23,196	15,443	22,277	1,752	1,134	71,184	6,230	4,223	40,618	4,730	4,563
2025	Special dairy products.....	47,843	6,119	2,378	(d)	(d)	(d)	6,566	698	698	35,384	4,280	1,073
203	Canning, preserving, and freezing.....	916,621	181,004	135,087	41,975	7,903	5,682	176,052	31,525	21,504	178,220	34,454	25,335
2031	Canned sea food.....	96,807	18,929	15,735	(d)	(d)	(d)	19,087	3,580	2,324	(d)	(d)	(d)
2032	Canned fish.....	9,948	2,143	1,893	(d)	(d)	(d)	5,809	744	1,456	(d)	(d)	(d)
2033	Canning and preserving, except fish.....	609,939	121,916	93,603	14,280	2,707	1,752	131,249	23,064	16,000	135,039	20,728	20,702
2034	Dehydrated fruits and vegetables.....	18,155	3,662	8,058	(d)	(d)	(d)	1,540	414	545	(d)	(d)	(d)
2035	Pickles and sauces.....	122,395	18,584	12,464	2,298	350	317	27,169	4,133	2,084	30,607	6,255	4,494
2037	Frozen foods.....	59,377	16,770	3,334	6,095	1,334	123	11,120	3,312	1,106	(d)	(d)	(d)
204	Grain-mill products.....	1,001,692	86,063	50,682	16,198	(d)	(d)	156,763	11,542	7,210	220,084	18,107	11,437
2041	Flour and meal.....	410,468	30,722	24,771	(d)	(d)	(d)	58,880	2,731	2,747	69,408	5,130	4,752
2042	Prepared animal feeds.....	394,236	40,266	15,401	15,206	1,435	(d)	72,327	6,104	3,403	81,239	7,219	2,831
2043	Cereal preparations.....	130,188	9,496	7,458	708	75	16	21,825	1,646	1,080	79,743	6,582	3,784
2044	Rice cleaning and polishing.....	43,432	3,267	2,346	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
2045	Blended and prepared flour.....	23,368	2,312	706	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
205	Bakery products.....	1,365,809	187,581	209,375	97,164	13,845	18,545	397,365	53,300	63,188	316,010	43,542	52,009
2051	Bread and other bakery products.....	1,100,836	150,055	180,202	86,147	12,334	16,813	310,123	41,483	54,173	248,705	34,370	43,261
2052	Biscuit, crackers, and pretzels.....	264,973	37,526	29,173	11,017	1,511	1,732	87,242	11,883	9,015	68,206	9,172	8,748
206	Sugar.....	233,869	30,749	28,780	(d)	(d)	(d)	41,128	6,538	6,868	7,620	1,555	2,337
2061	Raw cane sugar.....	17,709	4,022	4,217	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
2062	Cane-sugar refining.....	98,112	15,093	14,133	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
2063	Beet sugar.....	118,048	11,634	10,410	(d)	(d)	(d)	41,128	6,538	6,868	700	69	64
207	Confectionery and related products.....	587,065	78,063	58,831	(d)	(d)	(d)	229,232	56,886	28,445	187,486	19,525	17,363
2071	Confectionery products.....	413,852	64,883	49,740	(d)	(d)	(d)	155,802	20,062	20,705	154,387	17,055	16,187
2072	Chocolate and cocoa products.....	98,276	7,708	6,464	(d)	(d)	(d)	87,802	7,242	6,016	(d)	(d)	(d)
2073	Chewing gum.....	74,937	5,472	2,627	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
208	Beverages.....	1,850,914	138,515	67,777	50,795	5,262	3,204	382,755	32,382	15,399	553,145	30,788	19,857
2081	Bottled soft drinks.....	420,711	41,214	21,265	24,551	2,648	1,437	88,593	7,273	3,867	77,086	7,818	4,200
2082	Malt liquors.....	808,946	63,668	30,088	20,850	2,025	1,424	220,052	19,142	9,482	280,648	21,056	12,400
2083	Malt.....	53,885	2,069	1,459	(d)	(d)	(d)	3,203	177	122	38,163	1,379	983
2084	Wines and brandy.....	95,015	5,824	2,337	(d)	(d)	(d)	16,446	1,202	593	(d)	(d)	(d)
2085	Distilled liquors, except brandy.....	472,357	25,740	6,628	(d)	(d)	(d)	74,656	5,177	1,695	(d)	(d)	(d)
209	Miscellaneous food preparations.....	1,193,082	107,697	54,509	31,084	3,793	1,801	286,735	20,032	12,517	330,061	25,804	15,006
2091	Leavening compounds.....	46,494	2,364	2,334	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
2092	Shortening and cooking oils.....	162,146	5,931	4,913	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
2093	Oleomargarine.....	43,750	1,806	984	(d)	(d)	(d)	47,809	1,599	1,041	(d)	(d)	(d)
2094	Corn products.....	127,143	10,158	6,764	1,553	161	95	(d)	(d)	(d)	(d)	(d)	(d)
2095	Flavorings.....	158,333	7,242	3,589	3,149	348	188	1,094	100	260	87,203	6,470	4,509
2096	Vinegar and cider.....	3,503	828	1,059	275	81	88	56,214	2,240	1,010	28,875	1,797	731
2097	Manufactured ice.....	226,584	29,048	15,912	7,073	885	580	608	143	201	(d)	(d)	(d)
2098	Macaroni and spaghetti.....	42,049	6,828	6,013	2,197	293							

SUMMARY STATISTICS

FOR INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939

worker and value added by manufacture columns. In the 1939 production worker columns, a dotted line indicates either a zero or a figure that is not applicable because not available. In cases where figures for a geographic division cannot be given separately without disclosing data for individual companies, they have been combined with in italics, in the column of the last geographic division included in the combination (reading from left to right). For example, Creamery butter (industry 2021) statistics Statistics for the two divisions were combined, therefore, into a total for the Northeast region and this regional total appears, in italics, in the Middle Atlantic Division for the individual industries within an industry group (3-digit codes) will not add to the industry group total printed for that geographic division. Thus, the figures for columns because of the combination cited above for the Creamery butter industry. Similarly, industry group totals will not add to major industry group (2-digit codes) production workers (average for the year) for geographic divisions differs slightly from the United States total, because each divisional production worker figure represents

North Central--Continued			South									West						No.
West North Central			South Atlantic			East South Central			West South Central			Mountain			Pacific			
Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		
	1947	1947		1939	1947		1947	1939		1947	1947		1939	1947		1947	1939	
\$1,119,409	635,940	376,156	\$1,942,054	1,344,444	977,596	\$2,375,428	558,191	355,096	\$3,027,709	456,123	258,882	\$839,202	116,199	67,011	\$5,544,034	745,915	411,038	
1,204,953	161,701	110,102	606,422	105,465	69,313	510,352	50,564	29,271	593,684	84,000	55,796	245,359	32,182	21,396	1,108,506	130,876	94,185	20
38,071	7,199	9,691	(d)	(d)	(d)	485,662	69,640	47,422	21									
28,270	7,404	6,504	2,021,825	461,326	395,449	368,078	92,230	81,001	43,528	11,702	11,250	1,604	581	480	48,557	7,825	6,822	22
187,519	48,207	36,020	327,314	92,480	65,165	132,690	47,865	31,602	98,203	28,837	16,202	8,824	2,803	1,543	206,770	42,747	25,851	23
77,023	18,403	14,856	383,370	133,453	90,681	277,203	92,583	59,963	269,573	85,879	62,415	101,926	12,983	12,983	869,202	123,623	93,506	24
58,025	12,656	7,414	206,806	51,282	35,008	59,949	16,259	9,101	43,420	10,271	6,811	5,761	1,393	626	120,487	22,355	14,097	25
121,804	18,095	11,474	312,438	30,883	23,880	116,864	14,316	8,629	150,090	19,326	10,664	4,758	608	219	253,033	25,787	16,613	26
335,192	38,031	27,055	262,272	29,108	20,906	102,083	13,555	8,619	154,406	17,115	11,395	50,857	7,187	4,757	328,056	30,480	20,529	27
328,481	23,006	11,887	779,083	85,165	58,175	291,990	36,767	23,689	389,299	32,035	13,452	39,798	3,673	1,535	307,516	21,255	10,940	28
70,401	7,016	5,027	47,900	4,947	3,509	59,104	4,099	2,700	878,617	46,050	26,965	52,098	4,224	2,427	217,871	17,628	9,601	29
31,032	4,939	1,852	(d)	(d)	(d)	249,805	35,500	12,624	30									
128,775	41,827	33,453	69,143	15,947	15,838	50,496	13,586	7,702	9,343	2,777	609	4,811	1,111	389	28,550	5,603	2,848	31
148,796	24,492	10,858	201,549	55,015	36,694	90,460	18,804	11,865	107,583	13,527	10,169	31,891	5,530	3,126	177,623	27,765	13,115	32
115,014	23,123	12,495	50,309	43,183	287,693	54,886	36,715	96,122	17,074	5,480	175,735	20,523	12,405	259,116	36,127	15,790	33	
232,093	37,100	19,630	207,287	38,529	22,519	144,419	29,326	17,071	105,190	17,445	7,430	22,460	3,561	1,291	338,727	52,677	22,356	34
422,902	70,539	26,262	134,846	25,350	10,552	94,514	19,534	5,459	175,440	25,210	11,230	29,966	4,960	1,600	320,482	47,294	15,623	35
101,232	33,134	9,636	94,860	15,537	2,970	27,663	5,614	2,501	14,109	1,996	572	1,864	401	41	116,236	15,007	4,137	36
261,527	37,461	11,564	286,812	54,570	30,657	104,804	19,724	5,659	132,722	27,985	4,400	4,811	871	178	643,778	107,039	32,097	37
200,386	46,769	17,298	9,685	2,388	1,075	13,319	2,563	876	7,999	2,108	154	1,902	318	77	31,836	5,565	1,462	38
135,818	22,537	10,101	50,461	13,699	9,692	16,211	4,721	3,021	21,382	4,633	2,247	(d)	(d)	(d)	84,192	15,482	6,466	39
1,204,953	161,701	110,102	696,422	105,465	69,313	510,352	50,564	29,271	593,684	84,000	55,796	245,359	32,182	21,396	1,108,506	130,876	94,185	20
389,458	70,510	47,363	79,379	17,421	8,026	41,371	6,744	3,909	85,619	14,978	9,206	33,630	5,806	2,943	96,104	4,909	8,471	201
335,402	50,278	38,971	48,702	9,487	5,413	32,535	5,349	3,395	70,756	11,937	6,452	29,435	4,924	2,067	69,842	10,856	6,537	2011
22,545	2,912	721	17,032	3,212	1,955	7,359	1,089	289	11,116	1,575	567	2,296	272	26	18,837	2,425	927	2013
81,511	8,320	6,771	13,045	4,722	658	1,477	306	225	4,722	1,460	2,187	1,899	610	250	7,425	1,628	1,007	2015
88,533	12,850	9,834	38,818	3,860	2,181	34,603	4,233	2,245	22,160	3,526	2,704	21,172	2,711	2,292	47,058	5,116	4,564	202
47,082	7,103	7,388	(d)	(d)	(d)	(d)	(d)	(d)	12,972	1,575	2,020	5,987	915	1,271	10,286	1,129	1,641	2021
6,033	1,481	207	160	26	40	4,448	707	270	1,986	423	205	(d)	(d)	(d)	7,734	1,190	677	2022
18,158	2,028	733	7,516	465	215	11,779	1,085	710	3,116	366	193	5,192	381	274	16,032	1,559	1,048	2023
16,133	1,014	1,382	28,090	3,043	1,658	10,616	1,450	642	11,753	1,755	1,073	5,571	686	451	15,807	1,630	1,310	2024
1,127	204	34	(d)	(d)	(d)	(d)	(d)	(d)	3,145	634	194	(d)	(d)	(d)	1,631	337	184	2025
30,259	6,912	5,000	82,020	25,151	20,393	13,904	4,144	3,850	37,118	12,119	7,317	15,870	4,278	2,978	340,294	54,518	42,879	203
340	102	(d)	(d)	(d)	(d)	(d)	(d)	(d)	8,123	4,955	6,381	(d)	(d)	(d)	69,271	10,492	6,902	2031
1,761	398	111	(d)	(d)	(d)	2,988	1,091	524	2032									
21,633	5,274	4,224	63,441	18,844	16,620	6,520	1,018	1,523	20,248	7,643	3,435	11,513	2,094	2,528	205,416	32,754	25,902	2033
2,606	392	49	(d)	(d)	(d)	14,009	2,866	7,464	2034									
4,212	843	(d)	10,235	1,881	1,429	4,250	600	533	10,409	1,024	763	1,417	419	(d)	25,708	3,079	1,202	2035
5,595	1,434	(d)	4,348	2,123	611	1,363	478	(d)	3,073	909	84	(d)	(d)	(d)	27,783	6,180	1,599	2037
250,082	20,334	11,851	52,602	6,794	3,840	50,006	5,011	3,073	113,727	10,694	5,992	31,223	3,076	1,868	90,007	7,966	4,577	204
157,328	10,844	7,556	18,088	2,299	1,837	2,004	1,810	1,810	50,209	3,666	2,509	17,753	1,554	1,215	35,875	2,494	1,911	2041
70,118	7,486	1,917	33,570	4,417	1,379	27,345	3,322	955	28,664	4,038	1,295	12,511	1,464	(d)	47,262	4,781	2,248	2042
24,477	1,943	2,349	(d)	(d)	(d)	(d)	(d)	(d)	1,149	77	15	(d)	(d)	(d)	2,286	173	215	2043
1,150	61	(d)	(d)	(d)	(d)	(d)	(d)	(d)	54,461	2,906	2,168	(d)	(d)	(d)	8,071	301	179	2044
122,107	17,298	18,347	131,073	18,840	18,260	48,450	8,077	7,559	83,448	11,871	11,751	31,280	4,905	4,130	137,022	15,801	15,577	205
91,513	12,748	15,085	113,043	15,996	16,881	41,554	6,552	6,341	70,851	10,054	10,384	(d)	(d)	(d)	128,900	16,488	17,293	2051
30,684	4,520	3,262	18,930	2,850	1,379	6,896	1,495	1,218	12,597	1,817	1,367	(d)	(d)	(d)	29,402	4,273	2,460	2052
14,408	1,474	1,220	(d)	(d)	(d)	(d)	(d)	(d)	62,319	9,963	9,452	(d)	(d)	(d)	108,295	11,219	8,873	206
14,408	1,474	1,220	(d)	(d)	(d)	(d)	(d)	(d)	17,709	4,022	4,217	(d)	(d)	(d)	56,218	8,486	7,201	2061
14,408	1,474	1,220	(d)	(d)	(d)	96,687	8,674	6,907	2063									
22,700	4,013	2,769	(d)	(d)	(d)	(d)	(d)	(d)	46,716	11,164	6,179	(d)	(d)	(d)	40,931	6,475	4,076	207
22,700	4,013	2,764	(d)	(d)	(d)	81,563	7,153	10,084	2071									
71,636	5,143	2,607	(d)	(d)	(d)	2072												
161,775	12,897	8,090	150,788	13,077	6,096	258,169	14,013	4,636	82,246	7,527	4,198	26,087	2,282	1,150	185,154	11,287	5,160	208
36,369	3,599	1,892	80,896	7,606	3,671	38,044	3,790	1,860	50,939	5,061	2,712	10,918	1,134	547	32,715	2,287	1,072	2081
113,599	8,421																	

CENSUS OF MANUFACTURES: 1947

TABLE 6.—SELECTED STATISTICS BY DIVISIONS, FOR

No.	INDUSTRY AND INDUSTRY GROUP Title	United States						Northeast						North Central		
		United States			New England			Middle Atlantic			East North Central					
		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)				
		1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939			
21	Tobacco manufactures	\$641,356	103,289	87,525	\$3,987	1,270	1,343	\$103,666	25,180	29,102	(d)	(d)	(d)			
2111	Cigarettes	368,417	25,553	27,426	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)			
2121	Cigars	143,145	44,512	50,897	(d)	(d)	(d)	84,711	23,855	27,965	\$16,250	3,042	5,501			
2131	Chewing and smoking tobacco	57,571	9,725	9,202	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)			
2141	Tobacco stemming and redrying	72,223	23,499	n.a.	(d)	(d)	n.a.	(d)	(d)	n.a.	(d)	(d)	n.a.			
22	Textile mill products	5,340,876	1,147,194	1,081,710	1,245,559	260,695	260,557	1,376,829	264,744	274,062	206,617	40,585	44,680			
221	Woolen and worsted manufactures	803,592	166,947	149,976	503,992	105,293	94,540	183,026	37,002	33,115	38,391	0,054	7,268			
2211	Scouring and combing plants	54,166	7,912	6,731	46,254	6,192	4,497	6,795	1,544	2,117	(d)	(d)	(d)			
2212	Yarn mills, wool, except carpet	127,808	31,463	22,764	86,712	21,408	15,370	27,829	7,324	5,595	(d)	(d)	(d)			
2213	Woolen and worsted fabrics	599,534	122,432	116,660	364,887	76,074	73,227	135,367	25,118	23,451	(d)	(d)	(d)			
2216	Finishing wool textiles	22,084	5,140	3,821	6,139	1,591	1,440	13,935	3,106	1,952	(d)	(d)	(d)			
222	Yarn and thread mills, except wool	447,110	117,356	105,508	(d)	(d)	(d)	180,903	28,424	40,380	2,350	617	1,740			
2222	Yarn throwing mills	45,970	13,800	25,740	1,976	453	1,086	31,508	9,702	19,504	(d)	(d)	(d)			
2223	Thread mills	67,372	13,126	14,382	41,236	7,767	8,690	9,929	1,101	2,288	(d)	(d)	(d)			
2224	Yarn mills, cotton system	326,839	88,839	62,511	(d)	(d)	(d)	(d)	(d)	(d)	30,114	7,816	6,353			
2225	Yarn mills, silk system	6,929	1,591	2,875	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)			
223	Cotton and rayon broad-woven fabrics	2,050,384	433,534	398,487	(d)	(d)	(d)	(d)	(d)	(d)	281,554	61,244	65,575			
2233	Cotton broad-woven fabrics	1,582,336	342,360	318,892	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)			
2234	Rayon and related broad-woven fabrics	488,048	91,174	79,595	127,607	24,846	25,014	113,088	22,098	22,380	(d)	(d)	(d)			
2241	Narrow fabric mills	108,201	24,917	24,591	40,756	9,893	10,356	46,540	10,234	10,787	(d)	(d)	(d)			
225	Knitting mills	854,596	212,962	236,628	42,261	10,159	11,248	382,377	81,971	96,428	73,733	18,121	24,703			
2251	Full-fashioned hosiery mills	319,369	65,148	97,200	6,287	1,306	3,126	144,930	27,223	44,088	30,755	0,554	11,145			
2252	Seamless hosiery mills	163,805	61,343	61,852	4,457	1,482	1,684	22,507	7,435	7,540	10,173	3,338	4,005			
2253	Knit underwear mills	145,743	30,596	23,437	13,111	3,022	2,406	102,474	20,773	14,273	(d)	(d)	(d)			
2254	Knit underwear mills	134,399	37,546	37,478	8,994	2,739	2,641	62,253	16,152	17,872	(d)	(d)	(d)			
2255	Knit glove mills	14,730	4,955	5,574	(d)	(d)	(d)	12,404	4,064	4,020	(d)	(d)	(d)			
2256	Knit-fabric mills	72,272	12,502	9,548	8,905	1,434	1,175	35,354	5,907	6,063	(d)	(d)	(d)			
2259	Knitting mills, n.e.c.	4,278	872	1,539	(d)	(d)	(d)	2,803	539	1,319	(d)	(d)	(d)			
2261	Finishing textiles, except wool	359,270	69,035	80,237	93,621	19,941	21,302	152,328	20,035	21,650	(d)	(d)	(d)			
227	Carpets and rugs	331,314	50,883	38,892	36,184	6,372	4,739	244,721	35,820	20,704	(d)	(d)	(d)			
2271	Wool carpets, rugs, and carpet yarn	217,046	35,500	28,277	27,111	5,157	3,777	168,773	27,122	23,100	(d)	(d)	(d)			
2273	Carpets and rugs, n.e.c.	30,986	6,444	3,137	(d)	(d)	(d)	14,399	2,307	1,361	(d)	(d)	(d)			
2274	Hard-surface floor coverings	83,282	8,879	7,028	(d)	(d)	(d)	70,522	7,555	6,265	(d)	(d)	(d)			
228	Hats (except cloth and millinery)	92,040	18,864	23,639	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)			
2281	Fur-felt hats and hat bodies	61,474	11,495	14,615	31,687	5,196	6,536	23,070	5,115	6,942	(d)	(d)	(d)			
2282	Wool-felt hats and hat bodies	13,933	3,967	4,572	(d)	(d)	(d)	12,406	3,452	4,454	(d)	(d)	(d)			
2283	Straw hats	8,610	2,037	2,659	(d)	(d)	(d)	8,663	614	880	(d)	(d)	(d)			
2284	Hatters' fur	8,018	1,345	1,893	4,332	756	1,227	3,086	580	607	(d)	(d)	(d)			
229	Miscellaneous textile goods	294,369	52,696	43,752	71,740	12,220	10,467	110,169	10,766	17,130	58,710	8,053	6,421			
2291	Felt goods, n.e.c.	24,881	4,167	3,346	6,747	1,154	859	7,773	1,375	1,075	7,820	1,230	1,195			
2292	Lace goods	44,872	7,856	7,254	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)			
2293	Paddings and upholstery filling	44,444	7,378	4,505	2,444	422	385	8,551	1,483	730	(d)	(d)	(d)			
2294	Processed textile waste	22,612	5,149	4,844	6,547	1,317	1,701	7,023	1,410	1,483	2,270	403	553			
2295	Coated fabrics, except rubberized	51,209	6,948	5,895	16,938	2,418	1,490	21,675	3,216	3,071	(d)	(d)	(d)			
2297	Jute (except felt), and linen goods	21,318	4,815	5,321	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)			
2298	Cordage and twine	71,999	14,122	12,587	12,035	1,983	1,881	22,460	4,400	3,898	(d)	(d)	(d)			
2299	Textile goods, n.e.c.	13,034	2,261	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)			
23	Apparel and related products	4,443,373	972,897	752,829	279,981	66,909	61,078	2,695,194	531,551	408,970	508,872	111,348	106,396			
231	Men's and boys' suits and coats	674,243	136,136	119,599	37,597	8,110	6,242	397,687	70,748	63,371	118,168	23,372	25,810			
2311	Men's and boys' suits and coats	658,358	132,866	116,852	36,727	7,938	6,135	385,981	74,315	61,403	(d)	(d)	(d)			
2312	Suit and coat findings	15,885	3,270	2,747	870	172	107	11,706	2,433	1,908	(d)	(d)	(d)			
232	Men's and boys' furnishings	803,911	234,476	196,258	48,380	13,403	14,248	339,958	86,734	72,023	81,707	22,201	25,616			
2321	Men's dress shirts and nightwear	292,714	88,172	70,453	20,308	6,104	7,402	161,580	40,479	35,497	15,177	4,323	4,210			
2322	Men's and boys' underwear	20,348	6,929	6,543	(d)	(d)	(d)	6,398	1,988	2,713	(d)	(d)	(d)			
2323	Men's and boys' neckwear	50,708	9,246	9,603	4,294	920	1,499	34,451	5,724	4,065	4,423	817	1,288			
2325	Men's and boys' cloth hats and caps	20,685	5,063	3,383	853	180	127	9,706	1,908	1,033	4,397	1,292	712			
2326	Hat and cap materials	5,620	943	796	(d)	(d)	(d)	5,494	924	764	(d)	(d)	(d)			
2327	Separate trousers	163,731	44,939	31,327	8,895	2,487	1,510	74,614	19,314	15,659	20,382	4,834	4,193			
2328	Work shirts	33,212	11,169	13,449	(d)	(d)	(d)	4,802	1,295	1,348	1,831	684	1,406			
2329	Men's and boys' clothing, n.e.c.	216,893	68,015	60,704	13,439	3,566	3,481	53,444	15,240	9,970	33,207	9,584	11,720			
233	Women's and misses' outerwear	1,427,891	279,029	208,895	74,092	16,876	17,045	1,015,010	182,119	140,309	137,202	30,512	24,144			
2331	Blouses and waists	123,640	29,946	9,873	5,337	1,264	726	97,449	23,363	7,480	(d)	(d)	(d)			
2333	Dresses, unit price	609,578	118,276	103,739	30,787	8,815	8,147	468,736	86,401	75,393	50,433	9,303	9,834			
2334	Dresses, dozen price	153,052	43,897	38,794	12,237	3,428	4,484	52,097	14,110	17,157	47,433	13,003	9,285			
2335	Women's suits and coats	438,145	65,387	41,032	16,584	3,580	2,176	328,477	44,778	30,300	29,244	4,025	3,819			
2336	Women's skirts	38,484	7,434	4,421	6,442	908	974	26,188	5,107	2,033	(d)	(d)	(d)			
2338	Women's neckwear and scarfs	16,850	2,181	1,931	(d)	(d)	(d)	16,160	2,001	1,828	(d)	(d)	(d)			
2339	Women's outerwear, n.e.c.	48,144	11,928	9,306	(d)	(d)	(d)	28,588	7,092	6,206	2,050	855	411			
234	Women's and children's undergarments	387,974	83,895	58,624	43,694	9,577	9,820	240,076	53,892	38,227	43,564	7,084	6,140			
2341	Women's and children's underwear	227,236	51,997	39,859	21,415	5,584	6,641	168,979	36,904	27,211	(d)	(d)	(d)			
2342	Corsets and allied garments	160,738	31,898	18,765	22,279	3,993	3,279	80,097	16,898	11,016	(d)	(d)	(d)			
2351	Millinery	100,723	18,076	24,017	5,555	1,376	1,831	75,515	12,295	14,500	9,014	2,026	3,451			
236	Children's outerwear	178,205	43,358	25,289	7,735	2,530	1,594	146,514	33,182	21,326	5,927	1,040	676			
2361	Children's dresses	76,469	20,347	15,133	2,230	831	720	69,972	10,825	13,117	950	372	144			
2363	Children's coats	58,365	10,990	3,501	1,832	515	271	52,080	9,326	720	254	144	144			
2369	Children's outerwear, n.e.c.	43,431	12,021	6,655	3,694	1,184	603	27,492	7,031	4,454	4,257	1,020	288			
2371	Fur goods	122,821	13,745	13,111	745	152	103	114,318	12,615	11,267	4,788	475	777			

SUMMARY STATISTICS

INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

North Central—Continued			South									West						No.	
West North Central			South Atlantic			East South Central			West South Central			Mountain			Pacific				
Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)			
1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939		
\$38,071	7,199	9,591	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	\$495,662	69,640	47,489	21	
379	295	410	\$316,124	20,153	23,685	\$28,024	3,530	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	1,742	461	7,118	211
25,108	3,220	4,595	(d)	(d)	(d)	(d)	(d)	(d)	\$40,035	15,966	16,301	\$28	13	(d)	32,403	6,505	4,009	212	
2,509	861	n.a.	59,717	18,922	n.a.	9,997	3,710	n.a.	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	213	
28,279	7,494	6,504	2,021,825	461,326	395,449	368,078	92,239	81,901	43,528	11,702	11,250	1,604	581	480	48,557	7,828	6,822	22	
3,171	892	835	(d)	(d)	(d)	(d)	(d)	(d)	62,906	14,468	12,028	(d)	(d)	(d)	11,206	2,276	2,189	221	
5,548	535	598	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	221	
85,973	6,893	7,162	(d)	(d)	(d)	(d)	(d)	(d)	55,802	12,712	11,160	(d)	(d)	(d)	9,719	2,190	1,517	221	
			(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	221	
			281,019	76,539	54,729	42,832	11,776	8,502	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	222	
			(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	222	
			262,858	71,293	49,134	33,867	9,731	6,990	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	222	
			(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	222	
522,229	108,188	112,975	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	1,528,155	355,346	285,519	223	
			(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	1,280,802	281,116	253,916	223	
			(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	247,353	44,230	32,106	223	
5,158	1,274	1,157	13,321	2,810	1,714	2,279	677	523	(d)	(d)	(d)	(d)	(d)	(d)	142	29	78	224	
12,395	3,477	3,395	240,082	67,788	68,627	85,049	27,395	27,977	4,050	1,226	1,305	950	399	342	13,699	2,426	2,541	225	
4,045	872	1,705	(d)	(d)	(d)	(d)	(d)	(d)	131,257	23,307	35,923	(d)	(d)	(d)	2,086	386	613	225	
357	113	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	126,311	48,975	48,015	225	
16,156	3,616	3,510	1,735	791	603	424	203	396	(d)	(d)	(d)	(d)	(d)	(d)	11,843	2,191	2,188	225	
20,677	5,798	5,662	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	42,475	12,857	11,902	(d)	(d)	(d)	225	
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	225	
1,562	417	660	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	20,451	4,084	1,652	225	
6,495	1,155	963	(d)	(d)	(d)	(d)	(d)	(d)	105,246	21,430	16,169	(d)	(d)	(d)	(d)	(d)	(d)	225	
14,939	2,459	1,614	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	225	
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	35,470	6,223	2,775	227	
8,128	1,416	744	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	3,459	2,001	1,032	227	
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	227	
84,843	17,161	22,021	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	7,107	1,703	1,620	228	
2,184	584	562	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	3,624	900	476	228	
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	228	
6,335	1,376	712	23,526	5,849	5,200	9,817	2,345	1,724	3,435	921	1,078	(d)	(d)	(d)	10,631	1,576	955	229	
44,872	7,896	7,254	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2,555	402	210	229	
25,282	3,777	2,245	(d)	(d)	(d)	(d)	(d)	(d)	6,897	1,877	321	(d)	(d)	(d)	2,300	319	324	229	
1,410	304	106	(d)	(d)	(d)	(d)	(d)	(d)	4,564	1,425	987	(d)	(d)	(d)	780	(d)	(d)	229	
11,999	1,244	1,200	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	803	70	43	229	
16,309	3,569	4,149	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	4,932	1,249	1,170	229	
11,955	2,022	1,365	(d)	(d)	(d)	(d)	(d)	(d)	20,891	4,960	5,093	(d)	(d)	(d)	4,658	688	352	229	
12,776	2,191	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	259	70	(d)	229	
187,519	48,267	36,020	327,314	92,489	65,165	132,696	47,865	31,602	98,293	28,837	16,202	9,824	2,993	1,543	206,770	42,737	25,831	23	
15,000	3,286	2,477	61,024	12,236	12,838	20,088	6,477	5,017	7,033	2,350	1,544	1,646	367	194	14,420	3,140	2,107	231	
132,166	26,307	27,850	(d)	(d)	(d)	(d)	(d)	(d)	37,709	20,874	19,169	1,046	367	194	14,100	3,065	2,094	231	
1,953	561	431	(d)	(d)	(d)	(d)	(d)	(d)	1,056	289	250	(d)	(d)	(d)	320	75	(d)	231	
53,766	17,877	15,418	115,206	39,219	31,052	78,952	31,693	22,842	45,051	13,498	8,504	3,069	1,080	492	37,162	8,771	5,991	232	
11,072	4,270	4,156	54,861	18,196	12,301	21,215	9,003	5,272	4,955	1,680	651	(d)	(d)	(d)	13,346	3,508	964	232	
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	232	
1,903	346	659	(d)	(d)	(d)	(d)	(d)	(d)	5,631	968	855	404	161	(d)	1,540	310	650	232	
3,095	1,108	605	(d)	(d)	(d)	(d)	(d)	(d)	886	271	153	(d)	(d)	(d)	1,059	214	140	232	
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	232	
10,474	3,105	1,401	17,105	5,759	5,058	12,132	5,094	1,502	10,922	2,270	1,119	(d)	(d)	(d)	(d)	(d)	(d)	232	
2,285	731	626	(d)	(d)	(d)	(d)	(d)	(d)	24,294	8,559	801	(d)	(d)	(d)	9,147	1,986	878	232	
23,220	7,620	7,484	35,254	11,934	10,440	19,022	8,133	7,544	24,201	8,266	6,309	1,708	493	418	13,332	3,171	3,365	232	
60,332	12,863	8,737	26,557	8,291	5,416	7,458	2,755	863	15,347	4,765	2,040	1,816	590	429	94,017	18,256	9,847	233	
5,620	1,612	456	1,920	500	178	1,301	467	(d)	752	300	(d)	(d)	(d)	(d)	12,572	2,907	832	233	
20,292	4,710	4,920	6,111	1,851	1,173	1,301	467	(d)	6,142	1,330	1,227	(d)	(d)	(d)	25,714	5,339	3,019	233	
19,899	4,949	2,157	10,840	4,199	2,937	2,151	1,058	(d)	3,602	1,371	1,345	(d)	(d)	(d)	4,773	1,149	1,546	233	
13,500	2,441	1,154	6,458	1,417	899	2,651	672	(d)	3,923	1,458	89	447	185	2,645	36,705	5,941	2,625	233	
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	233	
1,707	442	390	(d)	(d)	(d)	(d)	(d)	(d)	2,732	918	397	201	85	(d)	11,737	2,500	1,899	233	
11,029	2,378	1,066	21,215	5,088	1,453	2,448	593	(d)	4,152	1,465	487	532	207	(d)	12,264	2,711	1,411	234	
17,520	3,855	3,407	(d)	(d)	(d)	(d)	(d)	(d)	13,054	4,347	1,789	(d)	(d)	(d)	5,668	1,217	846	234	
37,073	6,507	3,748	(d)	(d)	(d)	(d)	(d)	(d)	14,161	2,799	158	(d)	(d)	(d)	7,128	1,701	605	234	
2,208	454	1,055	(d)	(d)	(d)	(d)	(d)	(d)	3,974	1,084	1,370	(d)	(d)	(d)	4,397	841	1,500	235	
5,449	1,320	(d)	(d)	(d)	(d)	(d)	(d)	(d)	7,253	3,247	1,553	32	30	(d)	5,325	1,403	239	236	
555	237	(d)	(d)	(d)	(d)	(d)	(d)	(d)	5,470	1,451	678	(d)	(d)	(d)	2,233	631	173	236	
2,147	432	(d)	(d)	(d)	(d)	(d)	(d)	(d)	605	240	(d)	(d)	(d)	(d)	981	223	20	236	
2,747	61	(d)	1,143	441	505	783	356</												

INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

North Central—Continued			South									West						No
West North Central			South Atlantic			East South Central			West South Central			Mountain			Pacific			
Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		
1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	
\$14,919 (d)	3,762 (d)	2,741 (d)	\$13,293 (d)	3,882 (d)	1,728 (d)	\$3,124 (d)	1,288 (d)	478 (d)	\$1,821 (d)	574 (d)	96 (d)	\$135 (d)	83 (d)	(d)	\$8,873 (d)	1,908 (d)	1,532 (d)	238 (d)
5,748 (d)	1,677 (d)	1,532 (d)	(d)	(d)	(d)	(d)	(d)	(d)	9,355 (d)	2,719 (d)	1,594 (d)	(d)	(d)	(d)	900 (d)	324 (d)	334 (d)	2381 (d)
1,654 (d)	466 (d)	287 (d)	(d)	(d)	(d)	(d)	(d)	(d)	3,977 (d)	1,631 (d)	159 (d)	(d)	(d)	(d)	2,260 (d)	505 (d)	323 (d)	2383 (d)
6,149 (d)	1,432 (d)	628 (d)	520 (d)	221 (d)	27 (d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	1,217 (d)	297 (d)	(d)	2385 (d)
2,860 (d)	560 (d)	757 (d)	(d)	(d)	(d)	(d)	(d)	(d)	1,145 (d)	349 (d)	89 (d)	(d)	(d)	(d)	2,753 (d)	500 (d)	431 (d)	2386 (d)
515 (d)	150 (d)	24 (d)	(d)	(d)	(d)	1,130 (d)	242 (d)	128 (d)	2387 (d)									
2,071 (d)	494 (d)	425 (d)	(d)	(d)	(d)	(d)	(d)	(d)	150 (d)	38 (d)	(d)	(d)	(d)	(d)	702 (d)	110 (d)	85 (d)	2388 (d)
26,257 (d)	6,072 (d)	4,008 (d)	85,130 (d)	21,906 (d)	10,824 (d)	18,763 (d)	4,519 (d)	1,901 (d)	10,325 (d)	4,130 (d)	2,405 (d)	1,829 (d)	505 (d)	366 (d)	20,355 (d)	5,572 (d)	3,116 (d)	230 (d)
1,435 (d)	306 (d)	423 (d)	(d)	(d)	(d)	(d)	(d)	(d)	1,863 (d)	392 (d)	192 (d)	(d)	(d)	(d)	4,699 (d)	833 (d)	621 (d)	2391 (d)
1,741 (d)	393 (d)	625 (d)	60,284 (d)	17,050 (d)	7,771 (d)	9,567 (d)	2,751 (d)	781 (d)	1,536 (d)	515 (d)	229 (d)	(d)	(d)	(d)	3,504 (d)	737 (d)	602 (d)	2392 (d)
10,693 (d)	2,512 (d)	1,928 (d)	9,045 (d)	1,732 (d)	1,947 (d)	4,541 (d)	896 (d)	980 (d)	12,210 (d)	2,394 (d)	1,700 (d)	(d)	(d)	(d)	7,261 (d)	1,150 (d)	1,358 (d)	2393 (d)
4,488 (d)	906 (d)	416 (d)	(d)	(d)	(d)	(d)	(d)	(d)	9,373 (d)	1,820 (d)	578 (d)	756 (d)	194 (d)	66 (d)	4,599 (d)	846 (d)	238 (d)	2394 (d)
163 (d)	53 (d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	618 (d)	263 (d)	67 (d)	(d)	(d)	(d)	1,136 (d)	275 (d)	131 (d)	2395 (d)
1,151 (d)	206 (d)	205 (d)	251 (d)	60 (d)	39 (d)	(d)	(d)	(d)	169 (d)	74 (d)	45 (d)	(d)	(d)	(d)	4,203 (d)	887 (d)	49 (d)	2396 (d)
751 (d)	295 (d)	175 (d)	(d)	(d)	(d)	960 (d)	223 (d)	255 (d)	2397 (d)									
5,835 (d)	1,411 (d)	108 (d)	8,200 (d)	1,508 (d)	572 (d)	2,246 (d)	482 (d)	94 (d)	1,745 (d)	401 (d)	12 (d)	239 (d)	91 (d)	(d)	3,884 (d)	841 (d)	518 (d)	2398 (d)
77,023 (d)	18,403 (d)	14,856 (d)	383,376 (d)	133,453 (d)	90,681 (d)	277,203 (d)	92,583 (d)	59,968 (d)	269,573 (d)	85,879 (d)	62,415 (d)	101,926 (d)	19,620 (d)	12,983 (d)	869,202 (d)	123,623 (d)	93,506 (d)	24 (d)
15,285 (d)	4,991 (d)	3,641 (d)	270,130 (d)	100,324 (d)	62,534 (d)	207,233 (d)	73,049 (d)	44,080 (d)	195,512 (d)	66,037 (d)	49,565 (d)	84,007 (d)	16,048 (d)	11,240 (d)	651,149 (d)	90,855 (d)	72,605 (d)	242 (d)
38,971 (d)	7,814 (d)	7,092 (d)	46,099 (d)	11,826 (d)	7,960 (d)	18,318 (d)	3,873 (d)	3,811 (d)	24,506 (d)	5,934 (d)	3,485 (d)	9,914 (d)	2,139 (d)	856 (d)	160,280 (d)	23,599 (d)	12,620 (d)	243 (d)
35,329 (d)	7,023 (d)	6,063 (d)	19,614 (d)	4,998 (d)	4,772 (d)	8,960 (d)	2,127 (d)	1,829 (d)	16,181 (d)	4,001 (d)	2,791 (d)	(d)	(d)	(d)	87,188 (d)	14,605 (d)	8,344 (d)	2431 (d)
22,890 (d)	4,769 (d)	2,275 (d)	22,637 (d)	5,742 (d)	3,188 (d)	8,355 (d)	1,568 (d)	1,378 (d)	6,025 (d)	693 (d)	605 (d)	(d)	(d)	(d)	82,183 (d)	9,095 (d)	4,951 (d)	2432 (d)
12,435 (d)	2,720 (d)	631 (d)	3,848 (d)	1,086 (d)	(d)	1,003 (d)	178 (d)	904 (d)	6,025 (d)	1,240 (d)	80 (d)	(d)	(d)	(d)	6,328 (d)	1,438 (d)	181 (d)	2433 (d)
9,340 (d)	2,645 (d)	2,281 (d)	41,630 (d)	15,003 (d)	16,471 (d)	24,082 (d)	8,833 (d)	6,341 (d)	21,886 (d)	7,408 (d)	5,739 (d)	2,188 (d)	490 (d)	307 (d)	27,094 (d)	5,013 (d)	6,265 (d)	244 (d)
175 (d)	95 (d)	118 (d)	(d)	(d)	(d)	(d)	(d)	(d)	11,994 (d)	6,070 (d)	6,125 (d)	(d)	(d)	(d)	641 (d)	170 (d)	218 (d)	2441 (d)
6,215 (d)	1,740 (d)	1,179 (d)	31,293 (d)	10,386 (d)	9,802 (d)	15,349 (d)	5,406 (d)	4,864 (d)	16,070 (d)	4,904 (d)	3,847 (d)	(d)	(d)	(d)	145 (d)	44 (d)	308 (d)	2442 (d)
2,950 (d)	810 (d)	779 (d)	2,859 (d)	961 (d)	959 (d)	6,929 (d)	2,481 (d)	1,100 (d)	1,913 (d)	529 (d)	411 (d)	(d)	(d)	(d)	1,278 (d)	621 (d)	1,198 (d)	2443 (d)
13,427 (d)	2,953 (d)	1,842 (d)	25,511 (d)	6,210 (d)	3,716 (d)	27,570 (d)	6,828 (d)	5,130 (d)	27,669 (d)	6,500 (d)	3,626 (d)	5,817 (d)	943 (d)	580 (d)	24,079 (d)	4,156 (d)	2,010 (d)	249 (d)
6,440 (d)	900 (d)	731 (d)	17,539 (d)	3,142 (d)	2,233 (d)	14,370 (d)	2,385 (d)	2,180 (d)	19,064 (d)	3,385 (d)	2,277 (d)	5,488 (d)	845 (d)	(d)	10,933 (d)	1,236 (d)	1,406 (d)	2491 (d)
1,089 (d)	210 (d)	181 (d)	(d)	(d)	(d)	(d)	(d)	(d)	355 (d)	139 (d)	130 (d)	(d)	(d)	(d)	735 (d)	104 (d)	136 (d)	2493 (d)
250 (d)	71 (d)	40 (d)	(d)	(d)	(d)	(d)	(d)	(d)	29,413 (d)	10,490 (d)	5,668 (d)	329 (d)	98 (d)	(d)	13,011 (d)	2,756 (d)	1,053 (d)	2499 (d)
58,025 (d)	12,656 (d)	7,414 (d)	206,806 (d)	51,282 (d)	35,008 (d)	59,949 (d)	16,259 (d)	9,101 (d)	43,420 (d)	10,271 (d)	6,811 (d)	5,761 (d)	1,393 (d)	626 (d)	120,487 (d)	22,355 (d)	14,097 (d)	25 (d)
33,482 (d)	7,557 (d)	4,220 (d)	190,038 (d)	47,041 (d)	32,973 (d)	54,943 (d)	14,925 (d)	8,342 (d)	30,890 (d)	7,572 (d)	5,924 (d)	3,515 (d)	845 (d)	487 (d)	88,453 (d)	17,143 (d)	10,097 (d)	251 (d)
10,355 (d)	3,086 (d)	1,000 (d)	142,134 (d)	35,074 (d)	25,360 (d)	32,821 (d)	9,771 (d)	5,890 (d)	16,731 (d)	4,328 (d)	3,536 (d)	422 (d)	164 (d)	31 (d)	42,384 (d)	8,833 (d)	5,873 (d)	2511 (d)
9,405 (d)	2,077 (d)	1,044 (d)	28,848 (d)	7,563 (d)	5,200 (d)	10,805 (d)	2,930 (d)	1,199 (d)	9,459 (d)	1,971 (d)	1,281 (d)	1,668 (d)	328 (d)	228 (d)	23,242 (d)	4,598 (d)	2,738 (d)	2512 (d)
1,877 (d)	522 (d)	496 (d)	(d)	(d)	(d)	(d)	(d)	(d)	7,234 (d)	1,259 (d)	315 (d)	(d)	(d)	(d)	877 (d)	145 (d)	104 (d)	2513 (d)
54,420 (d)	10,207 (d)	5,038 (d)	(d)	(d)	(d)	(d)	(d)	(d)	28,809 (d)	5,684 (d)	4,285 (d)	1,525 (d)	353 (d)	228 (d)	4,963 (d)	772 (d)	225 (d)	2514 (d)
9,180 (d)	1,482 (d)	1,408 (d)	(d)	(d)	(d)	(d)	(d)	(d)	28,809 (d)	5,684 (d)	4,285 (d)	1,525 (d)	353 (d)	228 (d)	17,022 (d)	2,812 (d)	1,700 (d)	2515 (d)
1,337 (d)	227 (d)	(d)	(d)	(d)	(d)	87 (d)	32 (d)	(d)	2519 (d)									
2,744 (d)	440 (d)	223 (d)	(d)	(d)	(d)	(d)	(d)	(d)	3,472 (d)	1,115 (d)	601 (d)	(d)	(d)	(d)	1,588 (d)	244 (d)	133 (d)	252 (d)
15,188 (d)	2,502 (d)	2,080 (d)	(d)	(d)	(d)	3,724 (d)	1,165 (d)	704 (d)	2521 (d)									
48,555 (d)	7,459 (d)	4,519 (d)	(d)	(d)	(d)	1,131 (d)	194 (d)	30 (d)	2522 (d)									
1,811 (d)	413 (d)	340 (d)	(d)	(d)	(d)	(d)	(d)	(d)	2,888 (d)	918 (d)	519 (d)	(d)	(d)	(d)	1,884 (d)	340 (d)	178 (d)	253 (d)
202 (d)	106 (d)	85 (d)	(d)	(d)	(d)	3,016 (d)	1,090 (d)	612 (d)	2531 (d)									
1,519 (d)	307 (d)	264 (d)	(d)	(d)	(d)	1,156 (d)	168 (d)	85 (d)	2532 (d)									
10,067 (d)	2,073 (d)	1,890 (d)	5,309 (d)	1,145 (d)	673 (d)	1,709 (d)	412 (d)	104 (d)	3,732 (d)	841 (d)	376 (d)	1,635 (d)	435 (d)	74 (d)	17,135 (d)	2,653 (d)	1,756 (d)	2541 (d)
6,615 (d)	1,540 (d)	723 (d)	0,321 (d)	1,422 (d)	482 (d)	2,651 (d)	697 (d)	481 (d)	6,482 (d)	1,311 (d)	385 (d)	(d)	(d)	(d)	9,906 (d)	1,702 (d)	1,398 (d)	250 (d)
2,728 (d)	554 (d)	264 (d)	(d)	(d)	(d)	(d)	(d)	(d)	8,100 (d)	1,129 (d)	595 (d)	(d)	(d)	(d)	1,899 (d)	265 (d)	112 (d)	2501 (d)
25,333 (d)	3,591 (d)	1,754 (d)	(d)	(d)	(d)	(d)	(d)	(d)	623 (d)	115 (d)	200 (d)	(d)	(d)	(d)	1,605 (d)	184 (d)	159 (d)	2502 (d)
11,168 (d)	2,762 (d)	2,244 (d)	4,391 (d)	975 (d)	244 (d)	777 (d)	178 (d)	15 (d)	4,563 (d)	1,033 (d)	234 (d)	370 (d)	75 (d)	19 (d)	6,002 (d)	1,180 (d)	1,106 (d)	2

CENSUS OF MANUFACTURES: 1947

TABLE 6.—SELECTED STATISTICS BY DIVISIONS, FOR

No.	INDUSTRY AND INDUSTRY GROUP	United States						Northeast				North Central		
		United States			New England		Middle Atlantic		East North Central					
		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)	Value added by manufacture	Production workers (average for the year)	Value added by manufacture	Production workers (average for the year)				
		1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	
	Printing and publishing industries	\$1,269,416	438,135	324,371	\$281,179	36,127	29,147	\$1,576,511	138,372	104,998	\$1,169,861	128,160	96,964	
27	Newspapers	1,398,724	118,116	96,731	103,107	9,497	8,358	335,871	28,539	25,124	323,116	24,977	21,882	
2711	Periodicals	664,632	19,346	15,411	25,197	1,024	1,337	390,753	6,612	4,064	154,159	7,480	5,218	
2721	Books	320,562	17,372	13,786	21,757	1,849	2,350	186,269	6,478	5,105	60,086	6,542	4,427	
273	Books: publishing and printing	262,903	8,092	6,158	15,710	1,314	1,355	159,820	2,548	2,044	64,385	2,714	1,900	
2731	Book printing	57,659	9,280	7,628	3,047	535	995	26,449	3,930	3,151	22,401	3,828	2,437	
2732	Miscellaneous publishing	72,151	3,430	477	4,337	14	34,357	907	291	(d)	(d)	(d)		
2741	Commercial printing	977,686	155,987	112,389	60,787	11,544	8,325	206,659	44,820	34,820	340,030	53,237	39,476	
2751	Lithographing	313,462	41,247	26,948	14,065	2,290	1,578	110,530	14,160	9,454	90,011	12,054	9,240	
2761	Greeting cards	81,051	12,650	7,522	12,412	2,267	2,152	24,483	4,223	2,480	(d)	(d)	(d)	
2771	Bookbinding and related industries	177,144	36,437	25,891	19,616	4,302	2,899	83,676	17,470	12,317	43,237	8,434	6,804	
278	Bookbinding	90,250	20,037	14,339	10,950	2,430	1,877	49,452	10,703	7,082	15,879	3,070	3,008	
2781	Blankbook making and paper ruling	36,622	7,039	5,126	(d)	(d)	(d)	19,090	3,876	2,967	8,700	1,400	1,123	
2782	Loose-leaf binders and devices	36,797	6,445	3,904	(d)	(d)	(d)	16,889	5,077	1,707	14,550	2,434	1,020	
2783	Miscellaneous bookbinding work	13,460	2,916	2,462	635	147	61	7,270	1,590	1,522	4,000	834	753	
2789	Printing trades service industries	264,004	33,550	25,216	16,901	2,600	2,132	113,913	15,061	10,653	80,040	9,377	7,808	
279	Typesetting	66,842	9,301	6,244	4,004	719	573	29,690	4,322	2,614	21,333	2,603	1,906	
2791	Engraving and plate printing	33,094	6,463	5,353	2,643	499	409	19,097	3,801	3,027	4,735	857	971	
2792	Photoengraving	116,131	12,234	9,207	7,409	1,009	706	46,822	4,987	3,311	34,842	3,475	3,280	
2793	Electrotyping and stereotyping	47,937	5,552	4,412	2,845	373	354	17,704	1,861	1,701	20,030	2,442	1,732	
2794	Chemicals and allied products	5,365,201	466,458	275,669	216,910	20,123	12,174	1,655,359	141,507	89,533	1,356,796	102,867	54,744	
28	Industrial inorganic chemicals	454,690	50,203	33,595	9,801	1,213	608	105,349	10,641	10,331	131,226	15,458	11,238	
281	Alkalies and chlorine	113,868	15,017	10,516	(d)	(d)	(d)	21,202	3,051	3,240	47,518	6,758	4,548	
2812	Inorganic chemicals, n.e.c.	340,831	35,186	23,070	(d)	(d)	(d)	83,948	8,823	7,099	83,708	8,700	6,690	
282	Industrial organic chemicals	1,551,381	157,905	86,873	45,950	5,496	3,459	470,330	51,736	32,088	203,484	17,085	7,034	
2821	Cyclic (coal-tar) crudes	17,071	1,633	1,528	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
2823	Plastics materials	200,341	22,212	7,191	22,893	2,658	1,035	100,113	11,575	5,895	(d)	(d)	(d)	
2824	Synthetic rubber	97,356	5,721	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
2825	Synthetic fibers	447,877	57,857	48,332	(d)	(d)	(d)	52,627	9,423	11,074	37,770	3,701	2,003	
2826	Explosives	74,709	8,932	7,242	(d)	(d)	(d)	42,046	5,574	4,403	(d)	(d)	(d)	
2829	Organic chemicals, n.e.c.	714,030	61,550	22,580	10,663	1,155	662	289,410	26,244	11,734	116,070	9,058	3,462	
283	Drugs and medicines	748,570	54,725	24,212	24,005	1,587	1,316	327,049	22,943	10,800	279,741	20,192	6,955	
2831	Biological products	19,941	2,244	2,155	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
2832	Botanical products	9,009	506	618	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
2833	Medicinal chemicals	110,516	9,414	1,802	(d)	(d)	(d)	72,968	5,792	1,590	(d)	(d)	(d)	
2834	Pharmaceutical preparations	609,104	42,561	19,637	24,612	1,560	1,310	244,500	16,389	7,772	246,037	17,764	6,535	
284	Soap and related products	606,079	29,729	19,509	52,943	3,568	2,460	175,012	9,840	7,392	219,704	9,035	6,153	
2841	Soap and glycerin	450,721	19,394	13,624	34,316	1,771	1,033	111,040	5,919	4,743	(d)	(d)	(d)	
2842	Cleaning and polishing preparations	135,120	9,090	5,128	15,225	1,593	717	3,030	49,387	2,103	(d)	(d)	(d)	
2843	Sulfonated oils and assistants	20,238	1,245	767	3,402	204	116	14,576	801	516	(d)	(d)	(d)	
285	Paints and allied products	573,237	45,822	27,660	18,413	1,649	1,018	191,485	16,440	9,932	193,094	16,085	9,500	
2851	Paints and varnishes	469,584	34,693	21,879	(d)	(d)	(d)	169,025	13,015	8,678	172,416	12,601	8,742	
2852	Inorganic color pigments	94,658	10,310	5,497	(d)	(d)	(d)	42,021	4,907	2,089	(d)	(d)	(d)	
2853	Whiting and fillers	8,995	819	284	(d)	(d)	(d)	1,858	176	188	(d)	(d)	(d)	
286	Gum and wood chemicals	62,965	7,382	6,368	928	44	12	4,248	839	858	(d)	(d)	(d)	
2861	Hardwood distillation	7,490	1,618	1,770	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
2862	Softwood distillation	46,064	4,071	2,353	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
2863	Gum naval stores (steam distilled)	2,634	612	971	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
2865	Natural tanning and dyeing materials	6,777	1,181	1,274	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
287	Fertilizers	186,601	26,574	18,807	5,156	789	497	13,766	1,802	1,508	(d)	(d)	(d)	
2871	Fertilizers	126,856	17,373	11,028	1,482	324	162	9,071	1,202	957	25,738	3,062	1,582	
2872	Fertilizers (mixing only)	59,745	9,201	7,779	3,674	465	335	4,095	600	551	(d)	(d)	(d)	
288	Vegetable and animal oils	482,476	35,887	27,042	11,066	774	644	84,514	4,577	3,052	121,503	7,042	3,317	
2881	Cottonseed oil mills	104,603	12,136	15,191	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
2882	Linseed oil mills	42,243	1,340	2,120	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
2883	Soybean oil mills	105,291	5,076	1,481	(d)	(d)	(d)	(d)	(d)	(d)	72,700	2,850	831	
2884	Vegetable oil mills, n.e.c.	77,509	4,292	860	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
2885	Marine animal oils	15,033	1,792	1,631	(d)	(d)	(d)	2,705	207	214	(d)	(d)	(d)	
2886	Grease and tallow	118,830	10,066	5,201	(d)	(d)	(d)	47,748	5,747	2,370	33,575	3,183	1,675	
2887	Fatty acids	17,151	1,037	522	(d)	(d)	(d)	4,785	314	146	(d)	(d)	(d)	
2889	Animal oils, n.e.c.	1,816	139	36	(d)	(d)	(d)	1,257	105	(d)	(d)	(d)	(d)	
289	Miscellaneous chemical products	699,193	58,231	31,603	47,352	5,093	2,154	283,606	22,080	12,746	169,813	13,793	7,869	
2891	Printing ink	51,949	4,154	2,480	1,197	138	90	23,271	1,859	1,210	18,122	1,430	837	
2892	Essential oils	14,477	896	440	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
2893	Toilet preparations	226,872	18,186	10,303	9,977	1,368	405	135,651	10,327	6,569	38,769	2,973	1,792	
2894	Glue and gelatin	45,346	4,317	3,039	13,793	1,214	844	14,066	1,435	1,029	13,071	1,380	896	
2895	Carbon black	44,962	2,834	1,574	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
2896	Compressed and liquefied gases	66,833	6,139	3,980	(d)	(d)	(d)	19,614	1,767	1,179	16,028	1,443	1,074	
2897	Insecticides and fungicides	30,121	3,216	656	300	45	5	13,295	1,480	71	(d)	(d)	(d)	
2898	Salt	25,197	4,056	3,737	(d)	(d)	(d)	4,080	726	592	9,717	1,600	1,536	
2899	Chemical products, n.e.c.	193,436	14,433	5,354	20,222	2,026	645	64,988	4,687	1,992	72,576	4,860	1,683	
29	Petroleum and coal products	2,015,307	169,610	107,695	33,818	2,985	2,734	515,591	43,054	28,543	431,152	39,607	26,098	
2911	Petroleum refining	1,494,474	113,847	72,982	13,953	740	696	334,583	23,404	15,859	253,307	20,405	13,757	
293	Coke and byproducts	278,230	34,416	21,693	(d)	(d)	(d)	119,747	14,956	9,736	94,101	12,137	7,735	
2931	Beehive coke ovens	21,661	2,935	685	(d)	(d)	(d)	18,502	2,317	304	(d)	(d)	(d)	
2932	Byproduct coke ovens	256,569	31,481	21,008	(d)	(d)	(d)	101,245	12,639	9,372	94,101	12,137	7,735	

SUMMARY STATISTICS

INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

North Central—Continued			South									West						No.
West North Central			South Atlantic			East South Central			West South Central			Mountain			Pacific			
Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		
	1947	1947		1939	1947		1947	1939		1947	1947		1939	1947		1947	1939	
\$335,192	38,031	27,055	\$262,272	29,108	20,906	\$102,083	13,555	8,619	\$154,406	17,115	11,395	\$59,857	7,187	4,757	\$328,055	30,480	20,529	27
138,510	13,206	10,800	140,371	12,462	8,873	49,951	4,691	3,387	97,854	8,813	6,290	41,392	4,030	3,001	108,552	11,901	9,017	2711
31,900	2,064	1,854	23,340	245	472	10,068	726	506	5,446	266	484	2,983	451	90	17,000	472	716	2721
15,039	1,603	739	(d)	(d)	(d)	(d)	(d)	(d)	6,085	616	806	(d)	(d)	(d)	3,826	284	208	273
12,376	1,058	534	2,101	45	25	1,039	77	(d)	1,323	152	92	(d)	(d)	(d)	3,149	184	92	2731
2,663	645	205	(d)	(d)	(d)	(d)	(d)	(d)	2,222	342	662	(d)	(d)	(d)	677	100	176	2732
28,610	1,323	158	(d)	(d)	(d)	(d)	(d)	(d)	4,324	151	(d)	312	4	(d)	5,211	221	35	2741
65,492	11,209	8,437	67,040	11,886	7,579	25,026	5,221	2,970	33,365	5,415	3,284	10,100	1,904	1,339	77,375	10,625	6,156	2751
40,368	5,606	2,241	11,001	1,843	1,532	3,375	801	457	5,061	1,019	434	2,830	435	120	26,321	3,033	1,884	2761
41,687	6,812	2,670	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2,569	348	220	2771
7,309	1,492	927	4,759	1,258	947	5,637	1,197	721	2,456	481	227	447	119	(d)	984	1,084	1,047	278
1,855	463	468	(d)	(d)	(d)	(d)	(d)	(d)	2,253	1,181	1,481	(d)	(d)	(d)	2,837	652	425	2781
2,024	539	301	(d)	(d)	(d)	(d)	(d)	(d)	2,162	489	363	(d)	(d)	(d)	3,781	705	580	2782
1,992	347	117	(d)	(d)	(d)	(d)	(d)	(d)	937	145	14	(d)	(d)	(d)	3,429	502	205	2783
568	143	41	(d)	(d)	(d)	(d)	(d)	(d)	497	149	46	(d)	(d)	(d)	307	44	23	2789
12,703	1,640	1,262	10,140	1,266	978	4,251	668	395	6,079	776	495	1,667	243	126	17,401	1,020	1,281	279
3,593	483	370	(d)	(d)	(d)	(d)	(d)	(d)	3,093	628	409	305	41	26	3,954	505	345	2791
877	209	161	1,758	323	230	1,178	258	139	793	158	113	361	90	31	1,052	178	183	2792
5,669	633	511	5,715	554	396	1,490	134	118	3,428	358	255	1,001	112	61	9,755	972	662	2793
2,564	324	220	(d)	(d)	(d)	(d)	(d)	(d)	2,154	287	208	(d)	(d)	(d)	2,640	265	101	2794
328,481	23,066	11,387	779,083	85,165	58,175	291,960	36,767	23,689	389,299	32,035	13,452	39,798	3,673	1,535	307,515	21,255	10,940	28
25,040	1,933	1,051	53,137	6,180	4,276	30,637	4,261	1,756	46,691	5,355	1,420	10,511	1,400	274	36,307	3,753	2,639	281
25,040	1,933	1,051	(d)	(d)	(d)	(d)	(d)	(d)	37,146	2,123	842	(d)	(d)	(d)	8,002	842	604	2812
20,492	3,218	1,088	441,011	48,008	30,132	139,297	18,207	10,756	176,417	10,975	750	4,475	591	356	40,919	2,589	1,212	282
11,893	1,170	1,133	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	5,208	463	391	2821
25,972	1,097	238	(d)	(d)	(d)	(d)	(d)	(d)	40,890	5,702	(d)	(d)	(d)	(d)	2,073	280	(d)	2823
19,440	852	(d)	(d)	(d)	(d)	77,916	4,889	(d)	2824									
14,954	1,009	1,202	(d)	(d)	(d)	(d)	(d)	(d)	357,480	44,733	35,166	(d)	(d)	(d)	(d)	(d)	(d)	2825
16,486	1,099	673	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	17,706	1,809	1,576	2826
55,888	4,511	2,498	(d)	(d)	(d)	(d)	(d)	(d)	279,496	21,196	6,730	(d)	(d)	(d)	21,200	1,298	320	2826
(d)	(d)	(d)	(d)	(d)	(d)	61,197	5,492	2,638	283									
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2831									
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2832									
32,022	2,829	60	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	5,520	793	(d)	2833
42,948	2,551	1,740	(d)	(d)	(d)	(d)	(d)	(d)	56,459	2,803	1,816	(d)	(d)	(d)	15,539	1,414	453	2834
53,390	2,252	1,007	45,874	1,709	731	1,234	225	63	15,402	641	44	683	45	18	41,777	1,814	1,064	284
220,581	8,962	5,835	(d)	(d)	(d)	(d)	(d)	(d)	51,122	1,519	485	(d)	(d)	(d)	33,653	1,223	928	2841
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2842									
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2843									
30,940	3,250	2,044	35,325	3,191	2,263	20,441	1,475	751	14,762	975	388	2,000	222	88	56,838	3,596	1,682	285
32,181	2,122	1,149	(d)	(d)	(d)	(d)	(d)	(d)	46,835	5,560	1,042	(d)	(d)	(d)	52,127	3,375	1,671	2851
23,537	3,070	1,675	(d)	(d)	(d)	(d)	(d)	(d)	23,525	2,031	1,752	(d)	(d)	(d)	5,727	302	84	2852
5,780	542	78	(d)	(d)	(d)	(d)	(d)	(d)	570	30	(d)	(d)	(d)	(d)	1,053	71	(d)	2853
3,789	598	535	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	54,000	5,901	4,962	286
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2861									
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2862									
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2,654	612	971	(d)	(d)	(d)	(d)	(d)	(d)	2863
4,080	399	311	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2,747	732	963	2865
36,545	4,304	2,192	87,593	13,627	11,129	18,426	3,181	2,225	15,513	1,995	837	(d)	(d)	(d)	9,092	1,176	421	287
2,539	208	19	57,531	8,497	6,070	13,024	2,285	1,533	12,723	1,254	512	(d)	(d)	(d)	3,548	481	105	2871
8,298	974	591	30,062	5,130	5,059	4,802	800	692	2,790	441	325	(d)	(d)	(d)	6,054	695	280	2872
70,158	3,410	1,078	30,702	5,554	4,747	39,319	4,518	4,682	50,529	6,890	6,732	6,108	510	318	52,917	2,603	1,575	288
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2881									
40,087	1,230	1,072	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	1,556	119	148	2882
20,194	1,116	151	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	8,507	821	(d)	2883
53,116	1,184	244	7,280	1,117	254	3,939	521	123	4,636	671	(d)	(d)	(d)	(d)	28,538	799	201	2884
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2885									
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	9,627	1,281	860	(d)	(d)	(d)	2,701	244	521	2885
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	4,080	506	(d)	2,308	219	82	11,020	979	334	2886
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2887									
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2889									
51,540	4,167	1,072	24,211	2,432	1,393	8,024	949	671	54,552	4,260	2,506	7,265	558	220	51,930	4,389	1,981	289
1,655	161	97	(d)	(d)	(d)	(d)	(d)	(d)	2,064	169	62	(d)	(d)	(d)	5,650	397	175	2891
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2892									
27,124	1,875	750	2,687	283	170	1,957	252	182	782	119	135	158	43	24	9,877	946	387	2893
(d)	(d)	(d)	(d)	(d)	(d)	4,108	240	208	2894									
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2895									
4,755	404	305																

CENSUS OF MANUFACTURES: 1947

TABLE 6.—SELECTED STATISTICS BY DIVISIONS, FOR

No.	INDUSTRY AND INDUSTRY GROUP Title	United States			Northeast			North Central					
		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)				
			1947	1947		1939	1947		1947	1939	1947	1947	1939
29	Petroleum and coal products—Con.	\$155,655	15,779	10,624	(d)	(d)	(d)	\$45,752	4,810	3,825	\$50,913	5,370	3,086
295	Paving and roofing materials	22,803	1,960	2,437	(d)	(d)	(d)	8,881	732	891	4,932	410	656
2951	Paving mixtures and blocks	132,852	13,810	8,187	\$6,740	633	527	30,331	3,545	2,407	45,081	4,900	3,330
2952	Roofing felts and coatings												
299	Miscellaneous petroleum and coal products	86,948	5,568	2,396	1,020	60	28	34,340	1,900	1,133	27,081	1,086	620
2991	Fuel briquets and packaged fuel	9,093	1,042	410	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
2992	Lubricants, n.e.c.	69,435	4,001	1,986	(d)	(d)	(d)	32,880	1,740	1,089	19,590	1,000	473
2999	Petroleum and coal products, n.e.c.	8,420	435		(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
30	Rubber products	1,302,863	214,533	120,740	222,783	37,502	26,661	210,499	33,855	21,240	588,746	102,937	58,360
3011	Tires and inner tubes	650,165	98,916	54,115	(d)	(d)	(d)	117,362	14,585	6,300	(d)	(d)	(d)
3021	Rubber footwear	121,040	23,952	14,861	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
3031	Reclaimed rubber	9,604	1,855	1,072	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
3099	Rubber industries, n.e.c.	522,054	94,810	50,692	96,575	16,836	13,616	129,415	22,814	10,685	(d)	(d)	(d)
31	Leather and leather products	1,532,803	348,529	327,189	453,639	98,770	106,992	469,152	100,971	91,807	318,894	67,937	67,490
3111	Leather tanning and finishing	403,763	48,627	47,252	129,386	13,277	10,933	14,755	15,795	(d)	(d)	(d)	(d)
3121	Industrial leather belting	28,375	4,015	2,337	6,133	841	637	620	480	10,009	1,624	880	
3131	Footwear cut stock	87,301	19,706	18,845	49,155	9,407		16,438	4,072	3,182	9,311	1,074	1,800
314	Footwear (except rubber)	785,543	220,654	218,010	251,899	70,884	80,725	189,136	47,011	48,504	156,970	42,957	45,181
3141	Footwear, except rubber	745,995	210,634	207,707	242,894	68,544	77,423	160,230	43,275	42,051	151,022	41,504	44,079
3142	House shippers	39,548	10,020	10,243	9,005	2,340		19,906	4,036	5,553	5,348	1,453	602
315	Leather gloves and mittens	31,911	10,464	9,539	633	223	124	10,271	6,297	6,372	9,842	3,273	2,638
3151	Leather dress gloves	24,042	8,151	7,800	(d)	(d)	(d)	18,305	6,172	6,227	4,429	1,658	1,216
3152	Leather work gloves	7,869	2,313	1,849	(d)	(d)	(d)	1,966	548	769	5,413	1,615	1,322
3161	Luggage	68,078	13,904	8,320	3,520	724	629	20,637	6,155	3,118	17,035	3,360	2,143
317	Handbags and small leather goods	96,076	23,240	17,063	10,235	2,702	3,453	74,403	17,700	12,644	5,167	1,227	936
3171	Handbags and purses	76,588	18,404	14,048	7,180	2,037	2,707	65,040	14,084	10,810	(d)	(d)	(d)
3172	Small leather goods	19,490	4,842	3,615	3,055	665	740	9,363	2,722	1,825	(d)	(d)	(d)
319	Miscellaneous leather goods	31,736	7,913	5,217	2,172	422	432	15,291	3,449	1,712	(d)	(d)	(d)
3192	Saddlery, harness, and whips	9,437	2,501	2,755	243	59	43	133	771	130	1,116	213	638
3199	Leather goods, n.e.c.	22,299	5,412	2,462	1,929	563	380	14,520	3,310	1,582	3,430	850	320
32	Stone, clay, and glass products	2,306,450	405,755	267,094	168,475	17,508	11,399	691,541	122,245	81,584	688,262	115,869	82,277
3211	Flat glass	173,754	24,325	16,739	(d)	(d)	(d)	56,144	8,685	5,736	(d)	(d)	(d)
322	Pressed and blown glassware	421,518	79,417	53,083	(d)	(d)	(d)	151,930	31,403	20,447	(d)	(d)	(d)
3221	Glass containers	252,059	41,943	25,753	(d)	(d)	(d)	74,287	14,144	9,320	85,073	13,805	9,737
3229	Pressed and blown glassware, n.e.c.	169,449	37,474	27,330	(d)	(d)	(d)	77,643	17,259	11,127	(d)	(d)	(d)
3231	Products of purchased glass	118,107	19,285	10,012	12,221	2,172	513	37,571	7,609	3,987	50,055	5,832	3,600
3241	Cement, hydraulic	247,930	30,639	20,249	(d)	(d)	(d)	17,186	7,609	5,819	49,420	6,338	4,046
325	Structural clay products	280,392	62,089	56,745	3,550	904	1,178	55,759	12,223	12,058	65,308	10,854	10,413
3251	Brick and hollow tile	110,867	27,002	29,069	3,314	321	1,041	19,138	4,482	5,312	33,018	6,802	7,711
3253	Floor and wall tile	31,238	6,259	5,681				(d)	(d)	(d)	(d)	(d)	(d)
3254	Sewer pipe	38,362	8,519	6,406				(d)	(d)	(d)	(d)	(d)	(d)
3255	Clay refractories	76,054	15,950	12,211	245	83	61	4,200	955	779	18,744	4,070	2,755
3259	Structural clay products, n.e.c.	23,871	5,177	3,378				22,138	4,908	4,042	15,957	3,083	2,222
326	Pottery and related products	224,792	53,376	33,105	1,370	330	104	74,403	16,954	6,422	82,147	17,765	13,530
3261	Vitreous plumbing fixtures	45,677	6,966	4,534	(d)	(d)	(d)	22,088	3,439	2,223	18,000	2,707	1,832
3262	Vitreous-china food utensils	35,228	10,326	4,360	(d)	(d)	(d)	21,429	6,655	2,666	(d)	(d)	(d)
3263	Earthenware food utensils	54,837	15,742	11,728	(d)	(d)	(d)	3,205	1,609	232	(d)	(d)	(d)
3264	Porcelain electrical supplies	52,832	10,447	6,018	(d)	(d)	(d)	21,709	4,543	3,001	(d)	(d)	(d)
3265	China decorating for the trade	5,143	875	421	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
3269	Pottery products, n.e.c.	31,075	8,990	6,054	443	94	(d)	4,256	1,035	1,078	(d)	(d)	(d)
327	Concrete and plaster products	346,781	61,572	28,947	11,646	1,811	1,595	66,409	10,326	6,060	93,810	15,810	7,410
3271	Concrete products	202,789	41,537	15,455	7,615	1,298	1,073	34,487	6,534	3,452	48,728	8,595	5,440
3272	Gypsum products	67,879	6,543	4,936	(d)	(d)	(d)	20,645	1,901	1,828	(d)	(d)	(d)
3274	Lime	39,253	6,129	6,705	(d)	(d)	(d)	8,583	1,229	1,997	(d)	(d)	(d)
3275	Mineral wool	36,840	7,363	1,848	(d)	(d)	(d)	6,725	1,175	214	21,153	4,083	1,243
3281	Cut-stone and stone products	45,940	8,312	11,847	11,465	1,844	2,541	7,634	1,179	1,776	9,207	1,737	2,192
329	Miscellaneous nonmetallic mineral products	447,280	66,127	36,373	(d)	(d)	(d)	228,719	50,375	20,143	(d)	(d)	(d)
3291	Abrasive products	126,659	15,864	7,734	38,399	5,041	2,238	60,860	7,570	3,179	20,000	3,140	1,403
3292	Asbestos products	112,571	18,140	10,415	12,136	2,283	1,330	47,830	6,824	4,171	(d)	(d)	(d)
3293	Gaskets and asbestos insulations	65,303	10,743	5,907	4,310	739	592	24,278	4,208	2,336	32,592	5,140	2,401
3294	Graphite: ground or blended	4,945	618	56				1,094	94	39	(d)	(d)	(d)
3295	Minerals: ground or treated	51,058	6,729	5,173	(d)	(d)	(d)	10,653	1,404	1,548	(d)	(d)	(d)
3296	Sand-lime products	1,186	250	346	(d)	(d)	(d)	277	69	191	(d)	(d)	(d)
3297	Nonclay refractories	58,022	8,951	4,542	1,786	204	(d)	33,523	5,340	3,121	7,415	1,463	707
3298	Statuary and art goods	7,391	1,829	983	339	97	70	1,606	489	405	3,553	813	292
3299	Nonmetallic mineral products, n.e.c.	20,145	3,003	1,217	4,019	759	352	10,800	1,457	576	2,050	171	47
33	Primary metal industries	5,765,434	1,010,655	672,438	288,198	52,924	37,764	1,804,246	330,947	243,910	2,416,939	418,142	264,679
331	Blast furnaces and steel mills	2,659,250	478,960	391,215	16,649	4,115	3,161	1,031,454	198,282	168,372	1,091,224	182,061	152,607
3311	Blast furnaces	328,060	32,697	19,537	(d)	(d)	(d)	180,704	12,244	7,055	(d)	(d)	(d)
3312	Steel works and rolling mills	2,275,697	438,088	368,904	(d)	(d)	(d)	801,821	186,538	160,887	(d)	(d)	(d)
3313	Electrometallurgical products	55,493	8,175	2,774	(d)	(d)	(d)	26,478	3,650	1,671	(d)	(d)	(d)
332	Iron and steel foundries	1,121,522	239,272	123,809	50,839	10,434	6,471	240,855	51,070	27,974	595,815	124,720	50,261
3321	Gray-iron foundries	732,647	157,361	75,080	39,146	8,206	5,019	128,293	27,020	15,213	378,201	80,232	31,343
3322	Malleable-iron foundries	121,661	26,659	18,041	7,675	1,466	1,074	19,637	4,548	3,798	87,637	19,128	12,033
3323	Steel foundries	267,214	55,252	30,688	4,018	762	378	92,928	20,111	8,973	120,977	25,300	16,885

INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

North Central—Continued			South									West						No.
West North Central			South Atlantic			East South Central			West South Central			Mountain			Pacific			
Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		
1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	
\$9,395	907	457	\$7,740	686	551	\$4,621	494	468	\$14,460	1,441	306	\$781	91	66	\$21,993	1,871	873	295
885	107	110	1,822	155	234	1,120	161	273	1,216	114	36	312	31	(d)	3,829	250	173	291
8,510	800	338	5,918	531	267	3,495	333	195	13,244	1,327	360	469	60	(d)	18,164	1,621	701	2952
8,011	814	348	(d)	(d)	(d)	(d)	(d)	(d)	8,823	709	204	(d)	(d)	(d)	6,164	350	66	299
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	291
7,305	592	247	(d)	(d)	(d)	(d)	(d)	(d)	6,029	457	144	(d)	(d)	(d)	5,631	212	90	292
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	299
31,032	4,939	1,852	(d)	(d)	(d)	249,803	35,300	12,624	30									
555,898	56,730	39,917	(d)	(d)	(d)	(d)	(d)	(d)	115,987	13,632	4,293	(d)	(d)	(d)	60,918	8,069	3,603	3011
116,875	22,557	14,543	(d)	(d)	(d)	4,165	1,395	317	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	3021
227,563	45,800	16,008	(d)	(d)	(d)	68,701	11,500	4,333	3031									
128,775	41,827	33,453	69,143	15,947	15,838	50,496	13,586	7,702	9,343	2,777	669	4,811	1,111	389	28,550	5,603	2,848	31
108,007	15,266	15,459	(d)	(d)	(d)	(d)	(d)	(d)	39,633	6,064	6,345	(d)	(d)	(d)	5,424	665	754	3111
407	62	70	(d)	(d)	(d)	(d)	(d)	(d)	5,730	427	224	(d)	(d)	(d)	2,317	455	46	3121
8,975	3,793	3,416	(d)	(d)	(d)	(d)	(d)	(d)	2,048	369	269	(d)	(d)	(d)	774	141	55	3131
104,784	34,026	27,092	22,098	7,071	7,082	44,352	11,968	6,361	5,286	1,824	207	(d)	(d)	(d)	11,018	2,513	1,059	314
100,928	35,453	27,379	(d)	(d)	(d)	(d)	(d)	(d)	70,841	21,479	14,461	(d)	(d)	(d)	10,480	2,379	874	3141
3,850	1,173	613	(d)	(d)	(d)	(d)	(d)	(d)	395	234	(d)	(d)	(d)	(d)	538	134	(d)	3142
602	174	221	(d)	(d)	(d)	(d)	(d)	(d)	401	184	(d)	(d)	(d)	(d)	1,102	313	285	315
278	103	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	472	218	103	3151
324	71	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	1,091	279	182	3152
4,055	1,173	681	(d)	(d)	(d)	(d)	(d)	(d)	4,811	808	1,170	(d)	(d)	(d)	8,394	1,684	684	3161
4,045	955	345	(d)	(d)	(d)	(d)	(d)	(d)	1,022	554	210	27	8	(d)	1,177	294	78	317
2,846	932	340	(d)	(d)	(d)	(d)	(d)	(d)	503	191	161	(d)	(d)	(d)	1,017	260	33	3171
6,566	1,850	941	(d)	(d)	(d)	(d)	(d)	(d)	519	163	(d)	27	8	(d)	160	34	104	3172
6,210	1,640	1,232	1,849	658	623	1,234	408	527	1,912	475	293	1,067	273	142	2,001	388	254	319
761	240	260	(d)	(d)	(d)	(d)	(d)	(d)	4,636	1,481	1,370	846	220	(d)	1,014	185	317	3192
894	307	0	(d)	(d)	(d)	(d)	(d)	(d)	809	120	73	221	53	(d)	987	203	79	3199
148,796	24,492	16,858	261,549	55,015	36,694	90,460	18,804	11,865	107,883	18,627	10,169	31,891	5,530	3,126	177,623	27,765	13,115	32
79,618	9,208	7,171	(d)	(d)	(d)	(d)	(d)	(d)	38,092	6,432	3,796	(d)	(d)	(d)	(d)	(d)	(d)	3211
141,664	25,427	20,352	79,307	14,340	8,908	4,986	980	407	14,583	2,644	1,097	(d)	(d)	(d)	29,048	4,557	1,812	322
50,591	11,562	10,616	(d)	(d)	(d)	(d)	(d)	(d)	65,143	9,700	5,076	(d)	(d)	(d)	27,566	4,254	1,619	3221
1,938	380	218	(d)	(d)	(d)	(d)	(d)	(d)	33,733	8,270	5,396	(d)	(d)	(d)	1,422	523	193	3229
33,805	4,550	2,991	12,223	1,813	976	22,946	2,823	1,616	27,039	2,776	1,774	8,407	892	496	36,844	3,329	1,933	3241
34,436	7,038	5,249	32,073	8,158	8,227	18,063	5,026	5,142	12,358	3,564	2,887	6,200	1,558	1,430	22,036	4,364	3,562	325
8,699	1,881	1,078	10,749	5,301	5,881	8,211	2,612	2,586	9,757	2,972	2,525	3,279	810	1,039	5,702	1,261	996	3251
23,145	4,554	4,114	(d)	(d)	(d)	(d)	(d)	(d)	3,158	677	467	(d)	(d)	(d)	4,955	1,019	1,102	3253
3,498	801	800	(d)	(d)	(d)	(d)	(d)	(d)	6,010	1,447	1,477	1,327	298	(d)	4,583	739	592	3254
10,644	3,851	2,317	7,323	1,399	1,144	6,390	1,613	1,654	686	165	(d)	(d)	(d)	(d)	3,071	848	716	3255
17,222	3,608	2,500	(d)	(d)	(d)	(d)	(d)	(d)	1,810	562	469	(d)	(d)	(d)	4,739	947	543	3259
1,503	698	203	31,575	9,323	7,127	7,825	2,374	632	2,595	638	138	(d)	(d)	(d)	23,373	5,285	1,852	326
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	5,495	850	478	3261
19,340	5,398	5,770	(d)	(d)	(d)	(d)	(d)	(d)	21,246	6,945	5,325	(d)	(d)	(d)	(d)	(d)	(d)	3262
18,962	5,227	1,839	(d)	(d)	(d)	11,040	2,390	401	3263									
5,015	832	378	(d)	(d)	(d)	12,161	2,077	1,189	3264									
16,132	4,690	3,566	(d)	(d)	(d)	(d)	(d)	(d)	3,157	1,161	579	(d)	(d)	(d)	128	48	42	3265
37,798	6,709	2,708	41,008	9,480	4,184	16,997	4,098	1,521	24,737	4,437	1,629	13,609	2,340	754	39,847	6,555	2,170	327
18,603	3,984	1,461	31,871	7,977	2,641	13,309	3,310	726	11,186	3,007	934	7,927	1,554	299	29,063	5,278	1,428	3271
18,904	1,732	1,663	(d)	(d)	(d)	(d)	(d)	(d)	17,601	1,721	860	4,069	505	(d)	6,060	684	686	3272
19,195	2,918	2,137	3,145	623	1,102	2,425	407	698	1,969	362	210	1,175	172	(d)	2,771	358	566	3274
5,025	1,213	183	(d)	(d)	(d)	(d)	(d)	(d)	2,146	548	163	438	109	(d)	1,353	235	(d)	3275
3,420	605	1,336	9,176	1,978	1,599	2,029	457	1,334	1,325	265	589	187	41	69	1,407	206	401	3281
122,873	18,395	11,002	(d)	(d)	(d)	(d)	(d)	(d)	47,827	8,338	3,863	(d)	(d)	(d)	23,801	2,769	1,354	329
272	40	(d)	(d)	(d)	(d)	(d)	(d)	(d)	143	28	(d)	(d)	(d)	(d)	311	45	(d)	3291
34,715	5,534	5,515	(d)	(d)	(d)	(d)	(d)	(d)	16,122	3,184	1,177	(d)	(d)	(d)	2,762	315	220	3292
272	45	141	(d)	(d)	(d)	(d)	(d)	(d)	1,227	252	89	(d)	(d)	(d)	2,555	347	238	3293
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	3294
550	156	77	263	52	49	118	49	15	8,863	1,181	521	(d)	(d)	(d)	6,445	763	101	3297
699	54	16	(d)	(d)	(d)	(d)	(d)	(d)	1,442	466	203	115	20	(d)	1,020	86	22	3299
115,014	23,123	12,495	322,372	56,399	43,183	287,693	54,886	36,715	96,122	17,074	5,480	175,735	20,523	12,405	259,115	36,127	15,790	33
30,620	6,972	4,730	(d)	(d)	(d)	(d)	(d)	(d)	395,824	97,061	55,001	(d)	(d)	(d)	123,470	19,869	9,383	331
147,241	14,515	8,784	(d)	(d)	(d)	60,115	6,132	3,707	3311									
989,448	174,051	148,189	(d)	(d)	(d)	(d)	(d)	(d)	298,430	59,240	50,913	(d)	(d)	(d)	106,898	18,274	8,975	3312
6,104	1,297	514	(d)	(d)	(d)	23,851	3,278	789	3313									
52,015	11,468	5,405	33,264	8,343	4,981	73,108	16,466	11,051	16,277	4,152	2,019	8,477	1,670	1,304	50,869	10,040	5,338	332
36,993	8,138	3,444	(d)															

CENSUS OF MANUFACTURES: 1947

TABLE 6.—SELECTED STATISTICS BY DIVISIONS, FOR

No.	INDUSTRY AND INDUSTRY GROUP	United States											
		United States			New England			Middle Atlantic			North Central		
		Value added by manufacture	Production workers (average for the year)	1939	Value added by manufacture	Production workers (average for the year)	1939	Value added by manufacture	Production workers (average for the year)	1939	Value added by manufacture	Production workers (average for the year)	1939
1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939		
33	Primary metal industries—Con.				(d)	(d)							
3331	Primary nonferrous metals	\$325,643	37,396	27,630	(d)	(d)	\$70,233	9,061	9,080	(d)	(d)	(d)	
3331	Primary copper	134,958	13,065	(1)	(d)	(1)	(d)	(1)	(1)	(d)	(d)	(d)	
3332	Primary lead	35,902	4,022	(1)	(d)	(1)	(d)	(1)	(1)	(d)	(d)	(d)	
3333	Primary zinc	77,088	11,088	(1)	(d)	(1)	(d)	(1)	(1)	(d)	(d)	(d)	
3334	Primary aluminum	65,262	7,336	2,802	(d)	(d)	1,103	(d)	(d)	(d)	(d)	(d)	
3339	Primary nonferrous metals, n.e.c.	12,753	1,885	12,828	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
3341	Secondary nonferrous metals	119,667	14,760	8,100	\$5,775	655	824	31,401	4,420	3,018	47,781	5,748	3,237
335	Nonferrous metal rolling and drawing	503,363	74,796	46,309	109,992	20,014	17,794	146,630	19,305	14,031	(d)	(d)	(d)
3361	Copper rolling and drawing	302,592	45,924	33,597	104,031	19,531	17,025	99,716	12,024	8,034	(d)	(d)	(d)
3362	Aluminum rolling and drawing	160,997	22,786	9,025	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
3359	Nonferrous metal rolling, n.e.c.	60,074	6,086	2,785	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
3361	Nonferrous foundries	295,834	57,469	23,362	(d)	(d)	(d)	86,429	17,250	5,753	(d)	(d)	(d)
339	Miscellaneous primary metal industries	740,155	107,412	52,004	90,775	14,367	8,045	211,349	33,683	18,547	393,195	52,454	23,377
3391	Iron and steel forgings	197,111	32,383	14,764	(d)	(d)	(d)	52,717	10,912	3,989	(d)	(d)	(d)
3392	Wire drawing	314,788	45,644	21,609	61,658	9,098	5,430	95,476	15,057	8,077	(d)	(d)	(d)
3393	Welded and heavy-riveted pipe	89,614	11,306	8,370	(d)	(d)	(d)	49,892	4,604	4,285	(d)	(d)	(d)
3399	Primary metal industries, n.e.c.	138,642	18,078	6,901	14,609	1,630	932	47,272	6,740	2,881	(d)	(d)	(d)
34	Fabricated metal products	4,921,476	822,514	451,987	506,176	91,868	67,477	1,205,294	207,371	117,383	2,159,830	344,637	185,920
3411	Tin cans and other tinware	231,953	40,890	29,277	4,780	919	704	64,118	10,085	8,307	75,544	13,555	8,868
342	Cutlery, hand tools, and hardware	723,426	131,604	75,175	206,119	38,203	26,184	185,978	35,745	19,330	299,253	47,584	23,010
3421	Cutlery	104,833	17,579	10,252	46,795	7,260	4,713	49,993	8,721	4,484	5,765	1,110	839
3422	Edge tools	40,472	7,632	4,889	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
3423	Hand tools, n.e.c.	174,540	30,133	14,722	31,971	6,026	3,982	46,712	8,301	3,935	69,840	10,783	4,022
3424	Files	10,149	4,084	3,205	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
3425	Hand saws and saw blades	42,975	7,980	4,072	18,129	2,430	964	12,409	2,636	1,446	(d)	(d)	(d)
3429	Hardware, n.e.c.	346,457	64,791	38,035	87,197	17,878	13,832	67,355	12,033	7,610	106,382	30,221	14,131
343	Heating and plumbing equipment	789,524	126,725	78,330	50,998	8,212	4,648	136,384	23,875	17,232	380,218	55,920	33,910
3431	Metal plumbing fixtures and fittings	155,944	30,107	22,889	19,585	3,941	1,962	19,537	4,377	4,466	62,021	10,065	9,896
3432	Oil burners	44,388	4,646	1,552	8,528	841	275	9,425	955	388	16,705	1,648	509
3439	Heating and cooking apparatus, n.e.c.	589,192	91,972	53,889	22,885	3,430	3,311	107,422	18,543	12,378	301,402	44,210	23,511
344	Structural metal products	1,143,553	172,690	83,429	37,531	5,956	2,942	309,126	47,777	26,505	383,915	51,652	29,816
3441	Structural and ornamental products	440,701	64,278	36,776	12,569	1,696	1,092	130,438	19,839	12,677	132,929	17,183	10,010
3442	Metal doors, sash, and trim	117,642	17,359	7,387	1,802	307	134	31,248	4,797	2,799	65,444	8,392	3,085
3443	Baller shop products	358,764	55,937	20,517	12,857	2,107	700	87,407	13,853	6,745	115,077	15,343	5,775
3444	Sheet-metal work	220,440	35,116	18,749	10,303	1,846	1,016	60,033	9,288	4,207	70,168	10,134	6,927
349	Metal stamping and coating	861,173	159,926	80,649	64,214	13,259	6,335	233,504	43,783	19,692	455,356	81,068	43,419
3491	Vitreous-enameled products	45,116	11,091	10,809	637	164	30	11,098	2,776	164	22,460	5,538	6,498
3493	Metal stampings	642,483	113,976	57,182	45,290	9,091	4,909	179,820	32,532	13,795	313,620	58,112	30,974
3495	Enameling and lacquering	16,638	3,653	1,821	(d)	(d)	(d)	4,160	1,064	877	10,390	2,130	1,341
3496	Galvanizing	15,296	2,711	1,212	(d)	(d)	(d)	6,472	1,109	656	6,067	965	305
3497	Engraving on metal	16,252	2,929	1,419	2,298	433	141	6,250	1,017	925	6,295	1,172	324
3498	Plating and polishing	125,388	25,590	8,206	14,488	3,125	1,051	27,455	5,699	2,084	60,045	13,145	3,967
3471	Lighting fixtures	247,619	39,883	20,477	26,797	4,016	1,739	70,328	10,747	7,703	127,135	21,573	10,603
3475	Fabricated wire products	282,147	52,543	32,901	35,651	6,887	3,941	68,217	12,883	7,400	127,330	21,325	15,790
3481	Nails and spikes	15,721	3,278	2,515	7,774	1,903	1,985	1,839	442	180	(d)	(d)	(d)
3489	Wirework, n.e.c.	266,426	40,265	30,380	27,277	4,984	3,400	66,378	12,411	7,277	(d)	(d)	(d)
349	Miscellaneous fabricated metal products	637,081	98,253	50,849	80,686	14,416	0,480	147,549	23,860	11,902	344,064	48,081	23,883
3491	Metal barrels, drums, and pails	64,119	9,329	6,072	(d)	(d)	(d)	19,310	1,665	1,019	31,542	4,002	2,680
3492	Safes and vaults	19,434	3,004	1,236	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
3493	Steel springs	45,876	6,747	2,940	(d)	(d)	(d)	18,895	3,674	1,156	22,913	3,038	1,466
3494	Bolts, nuts, washers, and rivets	285,451	40,908	20,722	52,583	9,308	4,055	69,738	8,895	3,909	159,109	29,500	10,758
3495	Screw-machine products	143,853	24,740	10,571	20,881	3,805	1,732	20,447	3,762	1,519	92,725	18,350	8,806
3496	Collapsible tubes	16,942	3,475	1,933	(d)	(d)	(d)	19,404	2,790	1,524	(d)	(d)	(d)
3497	Metal foil	21,439	3,673	2,278	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
3499	Fabricated metal products, n.e.c.	39,967	6,377	5,097	3,022	529	2,104	12,793	2,142	1,521	(d)	(d)	(d)
35	Machinery (except electrical)	7,812,455	1,244,135	536,082	933,120	164,095	82,766	1,678,754	270,625	116,748	4,013,422	616,615	266,807
351	Engines and turbines	408,099	71,826	18,846	43,033	7,094	311	85,101	14,803	6,540	252,155	44,303	10,223
3511	Steam engines and turbines	80,947	13,375	4,094	(d)	(d)	(d)	79,804	13,456	8,754	(d)	(d)	(d)
3519	Internal-combustion engines	327,152	58,451	14,752	(d)	(d)	(d)	64,399	8,402	3,110	(d)	(d)	(d)
352	Tractors and farm machinery	753,792	139,629	60,144	3,770	632	189	74,629	11,912	2,023	504,170	90,933	48,030
3521	Tractors	332,982	62,923	30,898	(d)	(d)	(d)	9,878	1,217	(d)	206,000	47,198	25,793
3522	Farm machinery (except tractors)	421,700	76,706	29,246	(d)	(d)	(d)	68,581	11,327	2,701	298,174	43,735	22,237
353	Construction and mining machinery	641,397	88,905	36,750	10,769	1,444	943	85,176	12,671	3,950	284,633	30,393	16,280
3531	Construction and mining machinery	470,132	60,196	21,108	(d)	(d)	(d)	87,179	12,175	3,780	275,387	37,587	15,180
3532	Oil-field machinery and tools	171,265	28,709	12,642	(d)	(d)	(d)	8,796	1,940	1,110	9,246	1,800	1,094
354	Metalworking machinery	1,131,182	172,982	80,594	166,257	35,817	20,860	293,008	31,388	13,669	692,428	96,365	43,530
3541	Machine tools	347,965	54,892	36,697	93,560	17,723	13,227	39,008	6,000	4,087	204,406	20,770	10,281
3542	Metalworking machinery, n.e.c.	302,842	43,568	18,123	19,343	3,020	1,576	89,925	14,719	6,855	163,399	21,080	8,831
3543	Cutting tools, jigs, fixtures, etc.	480,375	74,522	25,834	83,348	15,074	0,047	64,165	10,663	3,727	314,032	45,497	16,418
355	Special-industry machinery, n.e.c.	1,095,558	173,592	77,246	243,977	45,427	21,433	309,182	48,669	22,729	366,909	50,970	22,139
3551	Food-products machinery	191,214	28,826	14,155	4,953	660	712	46,862	7,254	3,019	75,910	11,385	7,352
3552	Textile machinery	256,436	45,393	22,680	146,839	28,418	13,741	81,638	12,500	6,731	(d)	(d)	(d)
3553	Woodworking machinery	86,360	12,623	3,649	7,872	1,148	310	13,434	1,734	714	(d)	(d)	(d)
3554	Paper-industry machinery	81,358	13,398	5,670	22,063	3,421	1,455	28,156	4,702	1,963	(d)	(d)	(d)
3555	Printing-trades machinery	131,625	10,584	0,561	10,292	1,826	609	62,734	9,921	5,155	53,183	7,105	3,331
3559	Special-industry machinery, n.e.c.	348,565	53,768	21,728	51,928	9,953	4,540	78,328	12,465	5,097	162,		

INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

North Central—Continued			South									West						No.
West North Central			South Atlantic			East South Central			West South Central			Mountain			Pacific			
Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	Production workers (average for the year)		
1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	
\$24,199	3,866	3,727	(d)	(d)	(d)	(d)	(d)	(d)	\$74,317	11,245	5,617	\$116,230	8,550	7,002	\$40,670	4,074	1,598	333
(1)	(d)	(1)	(d)	(d)	(1)	86,099	5,420	(1)	3331									
(1)	(1)	(1)	(d)	(d)	(1)	39,748	5,749	(1)	3332									
(1)	(1)	(1)	(d)	(d)	(1)	10,510	1,564	12,008	3334									
2,245	321	12,214	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	3339
3,744	336	138	\$1,860	225	269	\$1,535	196	22	14,112	2,043	110	(d)	(d)	(d)	13,399	1,121	491	3341
125,849	18,920	9,084	(d)	(d)	(d)	(d)	(d)	(d)	30,369	12,793	5,205	(d)	(d)	(d)	33,970	3,764	183	335
84,550	12,456	7,403	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	14,316	1,913	1,132	3351
57,025	9,700	6,731	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	93,672	13,086	3,194	3352
37,164	4,528	1,719	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	12,910	1,558	1,067	3359
173,724	53,568	15,238	4,162	944	221	1,607	695	182	2,830	628	280	1,303	263	124	25,779	4,121	1,561	3361
3,790	552	410	(d)	(d)	(d)	(d)	(d)	(d)	30,369	3,478	420	815	150	38	19,862	2,728	1,168	339
136,497	20,622	9,222	(d)	(d)	(d)	(d)	(d)	(d)	3,510	278	259	(d)	(d)	(d)	5,387	872	305	3391
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	52	(d)	(d)	(d)	(d)	(d)	(d)	3392
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	3393									
70,441	8,375	3,025	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	6,320	824	65	3399
232,093	37,100	19,630	207,287	38,529	22,519	144,419	29,325	17,071	105,190	17,445	7,430	22,460	3,561	1,291	338,727	52,677	22,356	34
10,880	1,804	853	32,686	5,943	5,170	1,062	310	210	12,499	2,084	1,614	(d)	(d)	(d)	59,784	5,590	3,429	3411
21,065	3,974	2,589	(d)	(d)	(d)	(d)	(d)	(d)	15,939	3,574	2,315	2,108	488	60	27,952	4,036	1,067	342
735	103	8	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	1,546	386	205	3421
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	3422									
10,159	1,709	717	4,177	1,097	817	1,656	242	73	704	163	26	(d)	(d)	(d)	9,312	1,217	249	3423
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	3424									
10,815	2,075	1,400	(d)	(d)	(d)	(d)	(d)	(d)	650	98	79	(d)	(d)	(d)	902	132	123	3425
5,165	1,276	1,123	(d)	(d)	(d)	(d)	(d)	(d)	2,897	652	655	(d)	(d)	(d)	17,461	2,731	674	3429
50,600	7,107	3,876	23,059	4,601	2,836	62,358	14,513	10,334	9,618	1,043	179	713	119	12	75,576	10,666	5,301	343
3,889	540	498	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	50,912	11,124	6,969	3431
3,385	505	116	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	6,255	697	264	3432
43,226	6,062	3,262	(d)	(d)	(d)	(d)	(d)	(d)	66,992	11,943	7,821	(d)	(d)	(d)	67,165	7,778	3,608	3439
87,710	13,686	7,069	74,713	12,200	4,871	58,162	10,222	3,627	64,651	10,805	4,462	16,320	2,448	935	111,395	17,854	7,200	344
35,585	4,846	2,780	31,695	4,951	2,442	23,634	3,853	2,013	20,909	5,158	2,330	7,903	1,087	450	36,039	5,665	2,972	3441
4,902	1,034	342	3,022	578	(d)	1,625	323	(d)	751	204	95	(d)	(d)	(d)	8,311	1,124	502	3442
32,898	5,982	1,927	18,171	2,987	(d)	19,316	4,125	1,325	28,732	4,300	1,385	3,742	685	(d)	40,564	7,155	1,535	3443
14,265	2,424	2,020	21,845	3,774	1,082	13,587	1,921	(d)	5,289	1,143	652	(d)	(d)	(d)	80,656	4,589	2,511	3444
22,272	4,428	2,249	30,962	8,615	5,409	7,254	1,602	1,274	3,901	857	240	243	56	79	34,377	6,168	1,803	346
17,001	3,359	1,831	6,491	1,018	1,018	3,306	922	982	(d)	(d)	(d)	(d)	(d)	(d)	524	109	133	3461
664	140	26	31,197	6,502	4,231	3,050	548	187	2,540	563	127	(d)	(d)	(d)	19,365	3,269	1,128	3463
260	71	48	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	1,675	513	177	3465
161	36	(d)	(d)	(d)	(d)	(d)	(d)	(d)	1,374	276	102	(d)	(d)	(d)	2,123	290	100	3466
3,686	822	343	(d)	(d)	(d)	(d)	(d)	(d)	2,664	731	232	(d)	(d)	(d)	1,273	241	28	3467
8,449	1,246	534	(d)	(d)	(d)	(d)	(d)	(d)	831	229	111	(d)	(d)	(d)	10,150	2,074	510	3468
17,838	2,703	1,246	10,787	1,493	892	2,948	710	297	2,788	402	102	294	58	39	14,079	2,062	697	3471
3,592	570	223	(d)	(d)	(d)	(d)	(d)	(d)	2,280	323	120	(d)	(d)	(d)	236	40	(d)	3481
141,582	20,458	10,322	(d)	(d)	(d)	(d)	(d)	(d)	14,243	2,282	1,171	294	58	39	16,652	3,042	1,678	3489
13,270	2,152	1,214	14,614	2,755	1,700	8,020	1,260	655	9,814	1,242	662	1,003	136	10	20,365	3,475	1,247	349
4,539	672	339	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	14,728	2,100	2,026	3491
18,501	2,849	1,220	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	933	155	(d)	3492
1,855	205	148	(d)	(d)	(d)	(d)	(d)	(d)	349	73	10	(d)	(d)	(d)	1,864	397	169	3493
2,317	437	308	(d)	(d)	(d)	(d)	(d)	(d)	5,657	1,070	423	(d)	(d)	(d)	5,007	663	307	3494
3,018	548	173	(d)	(d)	(d)	(d)	(d)	(d)	1,068	212	24	(d)	(d)	(d)	5,744	1,063	316	3495
12,417	2,508	1,338	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	3496
16,515	2,380	1,230	(d)	(d)	(d)	(d)	(d)	(d)	3,516	762	115	(d)	(d)	(d)	9,022	1,105	441	3497
422,902	70,539	26,262	134,846	25,356	10,552	94,514	19,534	5,459	175,449	25,210	11,230	29,966	4,966	1,600	329,482	47,294	15,623	35
10,918	2,260	1,313	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	16,892	3,096	456	351
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	3511									
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	3519									
120,885	23,214	6,832	11,013	2,620	1,086	9,949	4,501	741	9,378	1,924	112	3,991	566	104	16,977	3,327	425	352
44,164	10,660	4,970	(d)	(d)	(d)	(d)	(d)	(d)	7,913	3,589	76	(d)	(d)	(d)	3,411	352	(d)	3521
76,721	12,654	1,862	(d)	(d)	(d)	(d)	(d)	(d)	22,427	5,446	1,864	(d)	(d)	(d)	17,567	3,541	521	3522
56,846	7,941	2,552	14,213	2,533	841	5,326	1,335	521	107,134	14,174	7,304	11,487	1,672	526	65,313	7,742	3,821	353
49,100	6,015	1,954	(d)	(d)	(d)	(d)	(d)	(d)	20,722	4,111	1,078	(d)	(d)	(d)	37,744	5,408	2,097	3531
7,746	1,028	508	(d)	(d)	(d)	(d)	(d)	(d)	106,451	13,951	7,588	(d)	(d)	(d)	39,056	4,006	2,250	3532
26,183	3,874	1,149	(d)	(d)	(d)	(d)	(d)	(d)	15,760	2,818	793	365	79	(d)	17,091	2,641	945	354
8,871	908	182	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2,114	326	208	3541
10,096	1,490	639	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	20,094	3,250	1,171	3542
7,222	1,386	281	(d)	(d)	(d)	(d)	(d)	(d)	3,199	688	54	365	79	(d)	7,444	1,195	305	3543
41,762	6,367	2,327	53															

SUMMARY STATISTICS

INDUSTRY GROUPS AND FOR INDUSTRIES: 1947 AND 1939—Continued

North Central—Continued			South									West						No.
West North Central			South Atlantic			East South Central			West South Central			Mountain			Pacific			
Value added by manu- facture	Production workers (average for the year)		Value added by manu- facture	Production workers (average for the year)		Value added by manu- facture	Production workers (average for the year)		Value added by manu- facture	Production workers (average for the year)		Value added by manu- facture	Production workers (average for the year)		Value added by manu- facture	Production workers (average for the year)		
1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	1947	1947	1939	
\$35,917	5,329	4,138	\$18,802	3,223	1,313	\$25,922	4,203	886	\$19,168	2,653	1,020	\$3,702	652	509	\$65,291	8,272	2,907	356
15,225	2,090	2,730	(d)	(d)	(d)	(d)	(d)	(d)	14,798	2,053	801	(d)	(d)	(d)	29,022	5,470	1,494	361
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	352
7,403	921	505	(d)	(d)	(d)	(d)	(d)	(d)	8,115	1,522	268	(d)	(d)	(d)	5,637	613	272	353
1,755	226	60	(d)	(d)	(d)	(d)	(d)	(d)	10,880	1,438	137	(d)	(d)	(d)	5,292	170	564	354
2,300	346	95	1,934	458	118	624	162	(d)	466	118	(d)	(d)	(d)	(d)	6,192	1,153	234	355
3,002	852	343	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	9,117	1,408	225	356
23,176	2,191	647	(d)	(d)	(d)	(d)	(d)	(d)	5,473	966	322	(d)	(d)	(d)	310	42	71	357
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2,064	355	88	(d)	(d)	(d)	(d)	(d)	(d)	358
2,202	300	158	6,438	1,006	594	4,843	971	226	2,968	350	195	(d)	(d)	(d)	10,458	1,253	695	359
2,102	318	323	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	357
159,485	22,616	10,228	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	21,189	3,229	840	357
18,668	2,213	1,165	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	18,272	2,791	480	361
67,367	8,809	4,168	(d)	(d)	(d)	(d)	(d)	(d)	732	118	56	(d)	(d)	(d)	(d)	(d)	(d)	352
88,658	14,595	5,045	8,870	2,087	563	9,733	1,041	485	(d)	(d)	(d)	(d)	(d)	(d)	744	130	54	367
25,173	4,079	1,799	(d)	(d)	(d)	(d)	(d)	(d)	10,137	1,657	484	2,507	418	77	23,816	3,947	846	358
60,886	6,356	2,625	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	1,030	203	(d)	358
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2,209	357	127	(d)	(d)	(d)	1,252	195	23	352
47,025	8,379	2,676	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	353
7,935	1,018	309	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	354
4,823	558	82	(d)	(d)	(d)	(d)	(d)	(d)	22,141	4,226	1,263	(d)	(d)	(d)	21,316	3,718	850	355
39,031	6,641	2,583	15,368	3,648	1,914	30,076	5,158	1,538	(d)	(d)	(d)	(d)	(d)	(d)	2,267	386	164	356
12,603	2,059	446	1,234	418	86	26,249	4,259	1,156	1,079	168	17	(d)	(d)	(d)	2,092	280	12	359
4,418	575	258	(d)	(d)	(d)	(d)	(d)	(d)	15,727	2,223	1,304	2,168	358	253	52,704	7,730	3,232	359
22,610	4,007	1,870	(d)	(d)	(d)	(d)	(d)	(d)	6,383	797	157	(d)	(d)	(d)	21,890	2,967	610	359
191,232	33,134	9,636	94,869	15,537	2,970	27,663	5,614	2,501	7,226	1,188	467	(d)	(d)	(d)	5,832	723	235	359
118,169	19,422	6,907	23,499	3,716	1,008	6,952	1,949	374	948	191	(d)	(d)	(d)	(d)	185	56	85	353
9,602	1,258	304	(d)	(d)	(d)	(d)	(d)	(d)	19,136	4,176	2,894	1,792	311	(d)	25,173	4,046	2,555	359
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	360
504	168	(d)	(d)	(d)	(d)	(d)	(d)	(d)	14,109	1,996	572	1,864	401	41	116,236	15,667	4,137	36
44,800	9,007	5,027	(d)	(d)	(d)	(d)	(d)	(d)	4,970	1,011	100	827	139	5	51,444	6,975	1,748	361
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	9,082	1,158	437	(d)	(d)	(d)	7,481	1,160	122	361
50,749	7,205	960	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	362
3,654	262	73	(d)	(d)	(d)	(d)	(d)	(d)	5,480	1,319	79	(d)	(d)	(d)	3,098	396	54	361
38,744	8,511	890	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	361
16,348	3,053	825	(d)	(d)	(d)	(d)	(d)	(d)	10,678	1,744	600	(d)	(d)	(d)	16,659	1,971	805	361
16,544	3,845	3,728	(d)	(d)	(d)	(d)	(d)	(d)	864	272	(d)	(d)	(d)	(d)	3,482	432	92	361
912	331	107	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	1,598	288	7	361
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2,887	600	55	(d)	(d)	(d)	17,880	2,731	623	362
28,188	6,166	388	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2,635	403	1,200	361
325,513	66,917	21,218	(d)	(d)	(d)	(d)	(d)	(d)	598	140	(d)	(d)	(d)	(d)	304	69	(d)	361
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	361
101	21	(d)	(d)	(d)	(d)	(d)	(d)	(d)	60,753	10,815	2,503	(d)	(d)	(d)	31,436	4,361	818	366
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	37,963	5,463	641	(d)	(d)	(d)	16,961	2,853	556	361
770	189	87	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	362
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	363
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	364
8,350	854	475	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	369
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	14,097	1,538	755	(d)	(d)	(d)	(d)	(d)	(d)	361
25,479	5,472	1,155	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	362
24,235	3,229	1,823	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	363
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	369
261,527	37,461	11,564	286,812	54,576	30,657	104,804	19,724	5,054	132,722	27,985	4,409	4,811	871	178	643,778	107,039	52,097	37
183,456	22,407	8,541	(d)	(d)	(d)	(d)	(d)	(d)	142,017	18,789	9,156	(d)	(d)	(d)	138,712	16,806	7,002	371
109,107	19,402	n.a.	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	216,307	24,373	n.a.	371
9,044	1,980	n.a.	5,174	1,189	n.a.	3,882	481	n.a.	4,173	807	n.a.	1,251	263	n.a.	9,824	1,568	n.a.	371
4,496	778	337	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	26,461	3,425	1,531	371
809	247	62	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	14,257	2,484	269	371
445,751	70,779	21,413	(d)	(d)	(d)	(d)	(d)	(d)	115,644	25,279	7,920	141	28		395,030	66,510	19,428	372
39,000	6,052	1,356	(d)	(d)	(d)	(d)	(d)	(d)	114,698	25,047	(d)	(d)	(d)	(d)	341,474	58,901	17,089	372
63,488	14,601	1,253	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	11,185	1,250	(d)	372
27,379	4,988	n.a.	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	45,370	6,582	n.a.	372
3,003	826	338	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	106,422	23,727	5,823	373
9,669	2,148	n.a.	141,202	30,659	16,579	47,497	10,544	1,985	54,001	12,468	2,612	87	24		97,514	21,908	n.a.	373
13,951	3,725	n.a.	129,372	27,800	n.a.	46,392	10,205	n.a.	46,503	10,208	n.a.	(d)	(d)	(d)	8,608	1,819	n.a.	373
20,232	4,127	1,230	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	22,428	4,406	1,226	374
(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	374
54,009	9,683	4,479	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	4,059	758	279	375
16,464	2,671	863	1,229	328	221	1,341	322	155	903	200	(d)	(d)	(d)	(d)	1,605	341	(d)	379

CENSUS OF MANUFACTURES: 1947

TABLE 6.—SELECTED STATISTICS BY DIVISIONS, FOR

No.	INDUSTRY AND INDUSTRY GROUP Title	United States			Northeast						North Central			
		Value added by manufacture	Production workers (average for the year)		Value added by manufacture	New England			Middle Atlantic			Value added by manufacture	East North Central	
			1947	1947		1939	1947	1947	1939	1947	1947		1939	1947
38	Instruments and related products	\$1,080,336	181,939	84,867	\$165,822	31,335	19,123	\$589,537	91,905	44,797	(d)	(d)	(d)	
3811	Scientific instruments	83,010	15,023	6,629	2,357	380	242	55,097	10,076	5,090	\$12,157	2,168	646	
3821	Mechanical measuring instruments	245,144	40,937	16,075	41,228	6,375	2,006	107,742	17,188	6,847	(d)	(d)	(d)	
3831	Optical instruments and lenses	26,743	5,228	2,209	2,076	475	(d)	18,782	3,688	1,028	(d)	(d)	(d)	
384	Medical instruments and supplies	184,665	29,617	14,624	16,153	2,943	1,662	98,642	15,523	8,412	57,267	8,706	3,380	
3841	Surgical and medical instruments	30,214	5,818	1,911	(d)	(d)	(d)	25,034	4,991	1,559	3,391	558	192	
3842	Surgical appliances and supplies	111,526	16,667	8,408	9,098	1,570	1,202	50,038	6,920	4,068	44,857	6,635	2,433	
3843	Dental equipment and supplies	42,925	7,132	4,245	(d)	(d)	(d)	30,625	5,066	(d)	9,019	1,603	755	
3851	Ophthalmic goods	81,530	19,744	10,282	30,316	5,028	3,785	30,893	10,785	5,273	6,838	1,470	555	
3861	Photographic equipment	264,784	36,273	16,434	7,128	1,416	630	196,000	25,814	13,467	44,035	6,406	1,808	
387	Watches and clocks	194,400	35,117	19,744	65,974	13,818	9,784	72,472	8,831	3,780	(d)	(d)	5,842	
3871	Watches and clocks	169,474	30,237	17,335	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
3872	Watchcases	24,926	4,880	2,409	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
39	Miscellaneous manufactures	2,090,168	397,579	241,725	463,700	92,311	57,989	818,520	150,417	94,362	499,884	93,779	67,846	
391	Jewelry and silverware	302,850	45,880	27,604	142,506	23,208	14,630	127,207	17,350	9,187	(d)	(d)	(d)	
3911	Jewelry (precious metal)	149,478	20,610	11,358	43,488	8,006	4,345	72,574	9,102	4,437	11,000	1,632	1,280	
3912	Jewelers' findings	29,714	5,203	2,813	23,062	4,114	(d)	6,578	1,071	458	(d)	(d)	(d)	
3913	Lapidary work	10,860	1,525	287	590	150	(d)	9,402	1,251	230	(d)	(d)	(d)	
3914	Silverware and plated ware	121,807	18,542	13,166	75,450	10,938	7,012	38,743	6,920	4,062	(d)	(d)	(d)	
393	Musical instruments and parts	71,356	14,814	10,806	4,720	1,260	1,082	21,000	3,846	2,604	40,081	8,522	6,572	
3931	Pianos	31,067	6,170	5,311	(d)	(d)	(d)	19,779	2,277	2,086	17,318	3,803	3,211	
3932	Organs	5,100	1,131	989	(d)	(d)	(d)	1,420	555	271	(d)	(d)	(d)	
3933	Piano and organ parts	12,947	2,928	1,315	(d)	(d)	(d)	4,527	1,146	729	(d)	(d)	(d)	
3939	Musical instruments, n.e.c.	22,122	4,585	3,191	1,077	237	202	6,008	1,092	370	(d)	(d)	(d)	
394	Toys and sporting goods	294,727	67,228	36,803	51,995	12,140	7,612	106,010	23,800	12,031	100,668	20,994	12,822	
3941	Games and toys, n.e.c.	105,414	24,174	13,778	16,683	4,183	2,320	52,216	10,900	4,835	26,244	6,030	4,707	
3942	Dolls	37,577	8,886	4,800	1,017	434	720	6,348	3,857	(d)	(d)	(d)	(d)	
3943	Children's vehicles	44,204	7,773	4,319	12,351	2,082	1,218	5,609	1,162	400	(d)	(d)	(d)	
3949	Sporting and athletic goods	107,532	26,395	13,816	21,661	5,441	3,154	18,904	5,300	2,930	46,046	9,874	5,504	
395	Office supplies	163,169	24,734	12,591	9,933	1,720	1,020	61,172	10,073	6,895	57,317	6,253	2,527	
3951	Pens and mechanical pencils	89,897	12,527	4,463	3,389	741	(d)	21,248	3,427	1,872	(d)	(d)	(d)	
3952	Lead pencils and crayons	23,633	5,190	3,779	599	158	(d)	16,904	3,380	2,895	(d)	(d)	(d)	
3953	Hand stamps and stencils	20,047	3,482	2,211	(d)	(d)	(d)	9,677	1,730	1,119	5,451	831	630	
3954	Artists' materials	5,968	997	397	(d)	(d)	(d)	2,955	462	299	(d)	(d)	(d)	
3955	Carbon paper and inked ribbons	23,615	2,558	1,741	4,324	429	203	12,000	1,435	1,003	(d)	(d)	(d)	
396	Costume jewelry and notions	262,685	57,563	40,989	88,484	19,887	14,472	138,146	29,862	20,335	21,406	4,229	2,484	
3961	Costume jewelry	107,224	22,266	12,228	47,616	10,850	7,867	48,727	9,379	3,830	(d)	(d)	(d)	
3962	Artificial flowers	23,813	6,569	6,650	(d)	(d)	(d)	20,149	6,637	6,734	(d)	(d)	(d)	
3963	BUTTONS	34,356	9,417	10,972	(d)	(d)	(d)	23,156	5,693	7,127	2,874	780	764	
3964	Needles, pins, and fasteners	97,292	19,341	11,139	36,268	7,740	4,247	50,745	9,534	5,952	(d)	(d)	(d)	
3971	Plastics products, n.e.c.	289,594	51,512	15,094	51,014	11,333	3,143	89,398	16,180	5,318	(d)	(d)	(d)	
399	Miscellaneous manufactures	705,787	135,818	97,838	114,068	22,664	16,030	274,657	50,201	37,030	184,010	35,782	25,938	
3981	Brooms and brushes	87,288	15,543	11,678	17,257	2,705	2,588	31,430	5,420	3,380	19,840	3,319	2,080	
3982	Cork products	11,657	2,150	2,923	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
3983	Matches	31,302	6,612	5,426	(d)	(d)	(d)	9,694	2,066	1,650	15,500	2,064	2,418	
3984	Candies	8,911	1,933	840	285	82	14	7,826	1,621	698	(d)	(d)	(d)	
3985	Fireworks and pyrotechnics	8,626	2,982	1,158	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
3986	Jewelry and instrument cases	26,460	6,681	4,099	11,597	3,118	1,692	10,711	2,612	1,760	(d)	(d)	(d)	
3987	Lamp shades	14,988	4,100	2,671	1,005	262	134	6,649	2,492	1,800	3,701	1,087	886	
3988	Morticians' goods	92,395	18,242	12,447	4,640	798	578	22,364	3,718	2,058	37,071	7,233	4,801	
3989	Beauty and barber-shop equipment	17,840	3,185	1,779	(d)	(d)	(d)	1,315	363	349	13,035	2,421	950	
3992	Furs, dressed and dyed	42,954	6,147	4,956	416	46	(d)	39,236	5,851	4,630	(d)	(d)	(d)	
3993	Signs and advertising displays	130,454	24,328	17,209	5,650	1,110	707	30,847	6,487	5,208	45,000	8,430	6,133	
3994	Hair work	4,380	1,046	322	37	12	(d)	4,068	966	298	(d)	(d)	(d)	
3995	Umbrellas, parasols, and canes	15,421	3,267	2,862	430	77	117	13,020	2,642	2,250	600	123	160	
3996	Tobacco pipes	13,738	2,745	2,481	(d)	(d)	(d)	11,008	2,178	1,887	(d)	(d)	(d)	
3997	Soda-fountain and bar equipment	16,254	2,231	1,600	(d)	(d)	(d)	6,172	839	242	(d)	(d)	(d)	
3998	Models and patterns (except paper)	8,573	1,601	1,208	475	111	102	4,650	896	687	2,338	484	160	
1951	Small arms (3980)	42,314	9,249	5,091	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
1951	Small arms ammunition (3990)	40,840	6,748	4,264	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	
3999	Miscellaneous products, n.e.c.	91,712	16,938	14,029	9,362	2,001	2,314	49,102	8,718	7,010	17,100	3,140	3,067	

Major Group 20.—FOOD AND KINDRED PRODUCTS

This major group includes establishments manufacturing foods and beverages for human consumption, and certain related products, such as manufactured ice, chewing gum, and prepared feeds for animals and fowls. Establishments which manufacture dairy products and are also engaged in the distribu-

tion of fluid milk or cream are classified in trade industries. Establishments producing meat, poultry, dairy, bakery, and confectionery products for sale chiefly at retail on the manufacturing premises are also classified in trade industries.

GENERAL STATISTICS FOR THE UNITED STATES: 1947 AND EARLIER CENSUS YEARS

(Money figures in thousands of dollars. For explanation of column captions see GENERAL EXPLANATIONS)

CENSUS YEAR	Number of establishments	All employees ¹		Production workers		Value added by manufacture ²
		Number (average for the year)	Wages and salaries, total	Number (average for the year)	Wages, total	
1947 ³	39,033	1,441,847	\$3,789,387	1,090,478	42,572,100	\$9,024,912
1939	43,667	n.a.	n.a.	892,133	888,355	3,484,506
1937	48,763	n.a.	n.a.	800,603	981,409	3,370,766
1935	48,982	932,429	1,067,539	800,108	804,159	2,804,182
1933	40,325	767,655	776,783	668,027	624,212	2,412,886
1931 ⁴	46,728	n.a.	n.a.	646,959	740,208	2,745,357
1929	55,325	871,910	1,202,560	740,037	805,713	3,330,848
1927 ⁵	48,947	795,881	1,104,311	668,311	817,238	2,830,084
1925	48,151	792,772	1,082,044	667,361	708,867	2,718,202
1923	51,173	818,098	1,083,559	676,004	701,726	2,508,644
1921 ⁶	51,502	750,931	1,016,203	620,750	742,352	2,119,577

n.a.—Not available.

¹ The figures for 1947 and 1939 include data for employees of manufacturing establishments who were engaged in distribution and construction work. Data for such employees are included to a considerable extent in the figures for earlier years. See GENERAL EXPLANATIONS—Manufacturing employees—Classifications used.

² Value of products less cost of materials, supplies, fuel, electricity, and contract work. For 1921-33, cost of contract work was not subtracted from value of products in calculating value added by manufacture. See GENERAL EXPLANATIONS—Value added by manufacture.

³ The comparability of the figures for 1947 with those for earlier years is affected by the exclusion in 1947 and the inclusion in 1939 and earlier years of data for the dairy products departments of establishments which manufacture dairy products and are also engaged in the distribution of fluid milk or cream. If data for these dairy products departments were included in the 1947 figures, it is estimated that value added by manufacture for the "Food and kindred products" group would be increased by \$182 million. The comparability of the figures is further affected by the exclusion in 1947 and 1939 and the inclusion in earlier years of data for meat-packing jobbers and establishments making bakery products or ice cream and ices for sale chiefly at retail on the manufacturing premises. If data for these establishments were included in the 1939 figures, value added by manufacture for the "Food and kindred products" group would be increased by \$72 million.

⁴ The figures for 1933-47 exclude, whereas those for 1931 and earlier years include, data for establishments primarily engaged in manufacture of ethyl alcohol. For 1933-47 data for ethyl alcohol are included in the figures for the "Chemicals and allied products" industries.

⁵ The figures for 1923-31 do not include data for the "Malt liquors" industry.

⁶ The figures for 1927 and later years include data for establishments primarily engaged in manufacture of vegetable cooking oils, included for earlier years in the series for the "Chemicals and allied products" industries.

⁷ The figures for 1927 do not include data for the "Poultry dressing, wholesale" industry, which was not embraced in that year.

⁸ No comparable figures are available for years prior to 1921.

MEAT PRODUCTS

This report shows 1947 Census of Manufactures statistics for establishments primarily engaged in the slaughtering of animals and poultry and the manufacture of meat products. These establishments have been classified in three industries as described below.

The aggregates for value of shipments and cost of materials for this group of industries contain a large amount of duplication, owing to the use of products (principally fresh meats) of some establishments as materials by others. For example, it is common for one slaughtering establishment to buy fresh meat from another for resale as fresh meat, or for use in curing or sausage making. The cost of materials figure for the industry includes both the cost of livestock (reported by the second slaughterer) and the cost of the fresh meat (reported by the first slaughterer). Similar duplication exists between the Prepared Meats Industry and the Meat Packing, Wholesale, Industry, since the raw materials of the former industry are largely produced by the latter. Furthermore, the records kept by establishments in these two industries often do not distinguish between meat purchased for resale and for use in processing. Consequently, the 1947 census questionnaire required the inclusion of all purchases (including purchases for resale) in the cost of materials. A detailed list of purchases also was required, corresponding closely with the list of products shipped. This differed from the practice in most industries for 1947 (see introductory text).

Because of the duplication described, cost of materials and value of shipments figures are not shown for these two industries in the general statistics. Detailed information on sales and purchases is shown in table 6-A. This table provides data on shipments of the two industries combined, net of duplication, computed by subtraction of purchases of meat and other products from shipments of these products.

Companies accounting for a large proportion of the output of meats and meat products (except poultry) reported shipments, production, inventories, and expenditures for plant and equipment, for the fiscal year ending November 1, 1947, rather than for the calendar year. Comparison of total commercial slaughter figures for the two periods, as published by the Department of Agriculture, indicates that the output of carcass during the fiscal year was practically identical with calendar year production. The statistics may thus be taken as representative of the calendar year.

Meat Packing, Wholesale (*Includes Standard Industrial Classification No. 2011, Meat Packing, Wholesale and No. 2012, Custom Slaughtering, Wholesale.*)—This industry comprises establishments primarily engaged in the slaughtering of cattle, hogs, sheep, lambs, calves, and other animals, for meat to be sold fresh or to be used on the same premises in canning and curing, and in making sausage, lard, and other products. Important products of this industry include fresh meat (beef, veal, mutton, lamb, and pork); cured beef and pork; canned beef, pork, and other meat goods; sausage; and lard. Establishments manufacturing sausages and meat specialties from purchased meats are classified in Industry 2013, Prepared Meats; and establishments killing, dressing, and packing poultry, rabbits, and other small game in Industry 2015, Poultry Dressing, Wholesale.

The industry does not include all slaughtering operations; establishments in which a nonmanufacturing activity pre-

dominates are excluded. Important omissions are retail butcher shops, food locker plants and other custom slaughterers servicing consumers rather than the trade, and farm slaughter. Estimates of the U. S. Department of Agriculture of the total number of animals slaughtered in 1947 provide a basis for measuring Census of Manufactures coverage, as follows:

ANIMAL	Animals slaughtered (thousands)							
	Total		"Meat packing, wholesale" industry ¹		On farms		All other	
	No.	Per-cent of total	No.	Per-cent of total	No.	Per-cent of total	No.	Per-cent of total
Cattle.....	22,383	100	18,260	82	860	4	3,263	14
Calves.....	13,695	100	10,170	74	682	5	2,843	21
Sheep and lambs.....	18,766	100	17,254	92	559	3	953	5
Hogs.....	74,715	100	51,678	69	12,781	17	10,256	14

¹ Plants reporting detailed slaughter figures, which accounted for about 98 percent of the output of the industry.

Prepared Meats (*Includes Standard Industrial Classification No. 2013, Sausages and Other Prepared Meat Products, and part of No. 2014, Sausage Casings.*)—This industry comprises establishments primarily engaged in manufacturing sausages, canned meats, prepared meats, meat specialties, and animal casings, but performing no slaughtering operations on the premises. Sausage or meat kitchens and canning departments operated by packing houses as separate establishments also are included in this industry.

Poultry Dressing, Wholesale (*Part of Standard Industrial Classification No. 2015, Poultry and Small Game Dressing and Packing, Wholesale.*)—This industry comprises establishments primarily engaged in killing, dressing, and packing poultry, rabbits, and other small game for the trade. Important products of the industry include dressed and packed poultry (chickens, turkeys, ducks, and geese), dressed rabbits and dressed hares. Establishments primarily engaged in canning chicken soup and poultry (whole and parts) are classified in Industry 2033, Canning and Preserving, Except Fish.

The industry does not include all commercial establishments dressing poultry and small game, those in which a nonmanufacturing activity (e.g., farming, egg grading, live poultry, wholesaling) predominates being excluded. Comparison with estimates of the U. S. Department of Agriculture indicates that establishments included in the census accounted for a little over 20 percent of the total weight of poultry consumed as food in 1947, including farm consumption.

Census statistics for this industry were in general unsatisfactorily reported, the most common errors being the inclusion of dressed poultry purchased and resold in the same condition as part of the production of the reporting plant, and the inclusion of employees considered as engaged in nonmanufacturing activities (egg grading, handling live poultry for resale, etc.) as production workers. Although every effort was made to correct these errors when detected, there is no doubt that some nonmanufacturing employees are included in the production worker figures, and there is some duplication in the products figures shown in table 6-B. Information of live poultry killed (table 7-A) is free from duplication.

TABLE 1.—GENERAL STATISTICS FOR THE UNITED STATES: 1947 AND EARLIER CENSUS YEARS

(Money figures in thousands of dollars. For explanation of column captions see GENERAL EXPLANATIONS)

INDUSTRY AND CENSUS YEAR	Number of establishments	All employees		Production and related workers		Value added by manufacture ¹	Cost of materials, fuel, electricity, and contract work ²	Value of products shipped ³
		Number (average for the year) ⁴	Salaries and wages, total ⁵	Number (average for the year) ⁶	Wages, total ⁷			
Meat packing, wholesale:								
1947	2,153	208,369	\$622,770	167,072	\$468,743	\$976,995	(⁸)	(⁹)
1939 ¹⁰	1,392	n.a.	n.a.	115,046	155,598	403,953		
1937	1,160	152,574	222,694	127,477	170,386	401,298		
1935	1,223	138,717	180,209	116,620	136,468	331,445		
1933	1,078	132,517	144,963	113,193	112,266	287,546		
1929	1,277	145,854	220,601	122,505	165,867	460,526		
1925	1,269	144,685	211,136	120,422	159,355	425,094		
1921	1,184	149,338	217,923	117,042	152,903	332,744		
1919	1,304	196,321	269,175	160,996	200,489	463,301		
1909	1,221	104,801	70,123	87,813	50,404	184,106		
1899	882	78,585	43,494	68,386	33,392	101,682		
Prepared meats:								
1947	1,264	44,379	122,742	34,473	86,570	235,537	(⁸)	(⁹)
1939 ¹⁰	1,197	n.a.	n.a.	17,624	20,863	63,769		
Poultry dressing, wholesale:								
1947	557	21,693	36,428	10,187	20,253	68,100	\$413,769	\$481,020
1939 ¹⁰	752	n.a.	n.a.	13,054	8,162	22,080	112,672	134,781
1937	533	10,149	7,884	8,913	5,931	18,384	87,457	105,841
1935	562	9,476	7,132	8,078	5,068	10,302	76,612	92,044
1933	437	8,695	6,376	7,471	4,862	14,304	51,853	66,157
1929 ¹¹	485	9,154	9,869	7,769	7,285	23,295	106,866	130,161

n.a.—Not available.

¹ Value of products less cost of materials, supplies, fuel, electricity, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.² Figures for years prior to 1935 do not include cost of contract work.³ For 1947, value of products shipped; for prior years, value of products made. See GENERAL EXPLANATIONS—Value of products shipped.⁴ The returns for 1939, but not for earlier years, have been retabulated to provide figures comparable with those for 1947. Value added for 1939, before retabulation and on a basis comparable with earlier years, was \$423.2 million for "Meat packing, wholesale" and \$23.6 million for "Poultry dressing, wholesale." No comparable data are available prior to 1939 for "Prepared meats."⁵ Omitted because of duplication in these figures. See text on industry and GENERAL EXPLANATIONS—Duplication in cost of materials and value of products.⁶ "Poultry dressing, wholesale" was not canvassed in 1927. The figures for 1925 and earlier years are not sufficiently comparable with those for later years to be given in this table.

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947

(Money figures and man-hours in thousands. For explanation of column captions see GENERAL EXPLANATIONS)

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Meat packing, wholesale, total¹	2,153	208,369	\$622,770	167,072	375,835	\$468,743	\$976,995		\$67,867	
New England	86	4,122	12,341	3,196	7,197	8,824	16,993		1,097	
Vermont	11	104	251	85	175	187	665		20	
Massachusetts	38	2,961	8,926	2,271	5,115	6,353	11,323		499	
Rhode Island	6	122	448	97	202	279	651		44	
Connecticut	13	591	1,812	466	1,070	1,287	2,413		267	
Middle Atlantic	359	19,088	57,052	14,957	32,700	40,862	103,212		6,045	
New York	115	7,211	22,426	5,487	12,455	15,647	43,089		2,076	
New Jersey	51	2,729	8,620	2,193	4,547	6,557	15,807		808	
Pennsylvania	193	9,148	26,006	7,277	15,707	18,658	44,610		2,561	
East North Central	542	58,451	181,918	47,088	107,654	130,658	270,418		17,325	
Ohio	176	8,317	26,039	6,616	15,020	18,008	43,804		3,272	
Indiana	87	8,663	25,537	6,799	15,017	18,492	47,208		4,011	
Illinois	100	29,515	92,677	24,245	56,232	73,683	125,546		6,083	
Michigan	130	4,474	14,919	3,562	8,272	10,970	24,938		1,473	
Wisconsin	49	7,482	22,746	5,866	13,113	17,305	28,772		2,380	
West North Central	238	72,927	221,291	59,278	133,933	171,169	335,492		21,102	
Minnesota	25	13,646	46,292	11,197	24,218	35,015	69,144		3,189	
Iowa	38	22,665	66,706	18,458	41,555	51,775	92,009		6,430	
Missouri	63	9,281	28,084	7,458	16,664	21,441	39,908		6,561	
Nebraska	32	9,466	29,064	7,842	18,765	23,279	60,580		1,706	
Kansas	59	13,241	37,533	10,661	24,168	29,199	49,170		2,089	
South Atlantic	231	11,961	30,368	9,487	20,741	20,788	48,702		3,957	
Delaware	8	376	1,072	315	698	787	1,344		33	
Maryland	35	2,760	8,322	2,071	4,594	5,835	11,781	(²)	(³)	
Virginia	35	1,991	5,377	1,685	3,843	3,407	8,612		758	
West Virginia	19	395	1,073	293	701	722	1,471		237	
North Carolina	36	692	1,365	550	1,126	916	4,091		263	
South Carolina	19	1,030	2,105	796	1,658	1,267	3,919		352	
Georgia	43	3,520	8,409	2,809	5,997	5,992	12,402		785	
East South Central	119	6,712	16,761	5,349	11,844	12,025	32,635		2,965	
Kentucky	32	1,706	4,581	1,364	2,973	3,371	9,098		698	
Tennessee	31	2,891	7,608	2,320	5,389	5,444	14,379		1,316	
Alabama	30	1,846	3,382	1,202	2,514	2,470	6,848		349	
Mississippi	17	569	1,190	463	977	740	2,210		302	
West South Central	217	15,109	39,877	11,937	27,460	28,898	70,756		4,941	
Arkansas	23	486	1,016	334	780	673	3,091		240	
Louisiana	36	971	2,183	823	1,834	1,649	3,865		441	
Oklahoma	43	3,575	9,361	2,874	6,477	6,717	14,297		1,003	
Texas	115	10,997	27,317	7,006	18,360	19,820	49,593		3,257	
Mountain	143	5,968	17,091	4,924	10,605	12,893	29,435		3,348	
Colorado	32	3,231	9,970	2,086	5,912	7,453	15,786		1,771	
Arizona	15	530	1,334	445	880	1,041	2,049		77	
Utah	23	750	2,042	504	1,323	1,595	3,753		512	
Pacific	227	14,031	46,071	10,856	23,692	33,666	69,842		7,117	
Washington	62	2,468	7,298	1,977	4,213	5,689	13,092		1,070	
Oregon	32	1,210	3,902	910	1,982	2,670	5,511		834	
California	133	10,353	34,871	7,969	17,497	25,301	51,239		5,207	

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947—Continued

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Prepared meats, total ¹	1,264	44,379	\$122,742	34,473	73,899	\$86,570	\$235,537			\$11,565
New England	134	3,752	10,035	2,856	6,005	6,707	18,575			654
Maine	11	199	452	162	345	339	975			59
New Hampshire	7	130	294	98	212	201	542			49
Massachusetts	74	2,727	7,451	2,129	4,440	5,080	14,004			437
Rhode Island	17	189	461	172	349	359	948			23
Middle Atlantic	337	10,328	30,704	7,645	16,850	21,000	51,221			2,327
New York	195	5,583	17,404	4,147	9,336	12,148	29,656			1,275
New Jersey	45	1,971	6,403	1,408	3,140	4,166	8,880			301
Pennsylvania	97	2,774	6,897	2,090	4,374	4,686	12,685			751
East North Central	284	15,560	45,202	12,487	27,079	32,874	86,564			3,729
Ohio	46	1,903	4,588	1,521	2,972	3,262	8,867			506
Indiana	11	366	1,128	297	676	675	2,423			124
Illinois	120	10,688	31,517	8,757	19,244	23,533	60,754			2,315
Michigan	57	1,593	5,081	1,164	2,538	3,325	9,636			523
Wisconsin	50	1,015	2,888	748	1,649	1,879	4,884			261
West North Central	70	3,543	9,835	2,912	6,066	7,447	22,545			1,018
Minnesota	24	1,589	4,894	1,271	2,566	3,569	8,545			741
Iowa	8	245	646	174	411	471	1,607			34
Missouri	24	593	1,454	499	976	1,057	3,028			103
Nebraska	10	866	2,200	775	1,683	1,878	7,266	(?)	(?)	116
South Atlantic	130	4,150	9,346	3,212	6,768	6,414	17,032			926
Maryland	22	971	2,625	726	1,747	1,842	4,128			444
District of Columbia	7	411	1,025	325	676	747	1,341			147
Virginia	21	550	1,260	458	943	868	3,436			75
North Carolina	19	307	542	269	529	435	1,355			62
Georgia	30	900	1,817	631	1,283	1,054	3,134			132
Florida	20	715	1,487	544	1,122	1,001	2,428			37
East South Central	68	1,575	3,217	1,089	2,207	2,064	7,359			421
Tennessee	22	490	1,045	328	668	623	2,333			98
West South Central	72	2,006	4,495	1,575	3,368	2,836	11,116			784
Arkansas	7	110	212	91	186	157	665			3
Louisiana	20	718	1,496	436	930	770	2,976			187
Oklahoma	7	165	397	139	320	307	1,205			24
Texas	38	1,103	2,390	909	1,932	1,602	6,370			570
Mountain	19	349	942	272	600	648	2,296			127
Colorado	8	300	833	228	504	554	2,078			120
Pacific	138	3,026	8,966	2,425	4,956	6,580	18,837			1,579
Washington	27	526	1,371	415	872	1,009	2,838			177
Oregon	8	163	463	127	288	342	923			91
California	103	2,337	7,132	1,883	3,796	5,229	15,076			1,311
Poultry dressing, wholesale, total ¹	557	21,693	36,428	19,187	38,835	29,253	68,160	\$413,769	\$481,929	5,904
New England	21	300	635	241	464	429	1,106	10,179	11,285	118
Massachusetts	13	193	414	153	301	288	828	6,633	7,461	63
Middle Atlantic	31	891	1,801	689	1,411	1,283	3,074	13,730	16,804	279
New York	10	142	344	118	244	266	490	3,272	3,762	66
New Jersey	10	157	249	146	240	217	574	3,334	3,908	23
Pennsylvania	11	692	1,208	425	927	800	2,010	7,124	9,134	100
East North Central	65	1,362	2,432	1,205	2,534	1,990	4,276	20,833	25,109	408
Ohio	22	280	496	240	439	410	1,007	5,905	6,912	110
Indiana	11	279	449	265	550	396	1,002	3,242	4,244	20
Illinois	16	693	1,071	539	1,167	844	1,395	7,705	9,100	220
Wisconsin	7	116	247	90	211	202	524	2,538	3,062	42
West North Central	217	9,561	16,389	8,320	17,004	12,956	31,511	189,218	217,729	2,433
Minnesota	33	2,364	3,640	2,119	3,997	2,990	41,524	48,276	602	802
Iowa	73	2,829	5,060	2,393	5,298	3,966	6,981	50,808	57,789	823
Missouri	23	1,148	1,766	1,021	1,748	1,356	2,639	14,964	17,603	135
South Dakota	12	367	726	312	699	564	1,362	6,162	7,524	190
Nebraska	27	2,116	3,989	1,817	4,510	3,073	11,931	58,602	70,533	414
South Atlantic	62	5,058	7,501	4,722	9,149	6,431	13,645	102,311	115,956	930
Delaware	8	1,300	2,341	1,234	2,481	2,031	4,004	35,679	39,683	437
Maryland	16	1,652	2,529	1,529	2,735	2,135	4,665	33,755	38,420	159
Virginia	16	791	1,034	725	1,461	870	1,777	13,020	14,797	105
North Carolina	10	195	211	184	277	167	439	3,204	3,643	129
Georgia	8	957	1,202	896	1,872	1,063	2,441	14,033	16,474	88
East South Central	12	353	528	306	603	411	1,477	7,508	8,985	70
Tennessee	4	157	261	131	281	187	555	2,788	3,343	37
West South Central	48	1,678	2,454	1,466	2,918	1,073	3,747	20,616	24,303	757
Arkansas	6	375	539	341	688	488	581	2,846	3,427	53
Oklahoma	12	381	672	319	627	489	1,099	6,003	7,102	300
Texas	30	922	1,243	806	1,603	996	2,067	11,767	13,834	404
Mountain	31	656	807	610	771	681	1,899	13,776	15,076	385
Pacific	70	1,834	3,881	1,628	3,331	3,099	7,425	38,598	46,023	524
Washington	15	354	963	326	1,043	892	1,491	6,168	7,059	4
Oregon	16	553	945	474	1,809	638	2,560	12,490	15,050	140
California	39	927	1,973	828	1,529	1,569	3,374	19,940	23,314	380

¹ For each producing State not shown separately in the table (see GENERAL EXPLANATIONS "Disclosure of Data for Individual Companies"), there are shown below the number of establishments; and, in parentheses, the number of employees for States represented by three or more companies, when possible.

Meat packing, wholesale: *New England*, Maine, 14 (201); *New Hampshire*, 4 (143); *West North Central*, North Dakota, 7 (844); *South Dakota*, 14 (3,784); *South Atlantic*, District of Columbia, 2; Florida, 34; *Mountain*, Montana, 18 (667); Idaho, 28 (338); Wyoming, 7 (80); New Mexico, 10 (259); Nevada, 7 (113).

Prepared meats: *New England*, Vermont, 1; Connecticut, 24; *West North Central*, South Dakota, 2; Kansas, 8; *South Atlantic*, Delaware, 3 (37); West Virginia, 7 (170); *South Carolina*, 7 (89); *East South Central*, Kentucky, 11 (257); Alabama, 25 (737); Mississippi, 10 (91); *Mountain*, Montana, 3; New Mexico, 1; Arizona, 1; Utah, 5 (30); Nevada, 1.

Poultry dressing, wholesale: *New England*, Maine, 3 (34); *New Hampshire*, 2; Vermont, 2; Connecticut, 1; *East North Central*, Michigan, 9 (85); *West North Central*, North Dakota, 13 (259); Kansas, 16 (478); *South Atlantic*, District of Columbia, 1; West Virginia, 1; South Carolina, 1; Florida, 1; *East South Central*, Kentucky, 3 (115); Alabama, 2; Mississippi, 3; *Mountain*, Idaho, 4 (72); Wyoming, 1; Colorado, 6 (66); Arizona, 2; Utah, 18 (481).

² Omitted because of duplication in these figures. See text on industry and GENERAL EXPLANATIONS—Duplication in cost of materials and value of products.

CENSUS OF MANUFACTURES: 1947

TABLE 3.—DETAILED STATISTICS FOR THE UNITED STATES: 1947

[Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS]

ITEM	Industry			ITEM	Industry		
	Meat packing, wholesale	Prepared meats	Poultry dressing, wholesale		Meat packing, wholesale	Prepared meats	Poultry dressing, wholesale
ALL ESTABLISHMENTS				ESTABLISHMENTS REPORTING DETAILED STATISTICS—Continued			
Number of establishments	2,153	1,264	557	Cost of materials, fuel, electricity, and contract work	(1)	(1)	\$413,700
All employees:				Materials, parts, containers, and supplies	(1)	(1)	411,368
Number (average for the year)	208,369	44,379	21,693	Fuels, total	\$18,158	\$3,105	953
Salaries and wages, total	\$622,770	\$122,742	\$36,428	Bituminous coal	9,314	979	387
Production and related workers:				Anthracite	469	80	92
Number (average for the year)	167,972	34,473	19,187	Coke	17	12	2
Man-hours, total, thousands	375,835	73,899	38,835	Fuel oils	3,186	835	220
Wages, total	\$468,743	\$86,570	\$29,253	Gas	3,993	799	153
Value added by manufacture	\$976,995	\$235,537	\$68,160	Other fuels	1,473	481	90
ESTABLISHMENTS REPORTING DETAILED STATISTICS				Purchased electric energy	10,991	2,097	1,196
Number of establishments	1,815	1,137	557	Contract and commission work	2,250	1,470	252
All employees:				Value of inventories:			
Number (average for the year)	204,825	43,025	21,693	Beginning of year, total	\$309,674	\$66,154	\$24,278
Salaries and wages, total	\$616,712	\$120,755	\$36,428	Finished products	197,037	41,985	18,716
Production and related workers:				Materials, supplies, and work in process	202,637	24,169	5,562
Number (average for the year)	163,978	33,751	19,187	End of year, total	433,671	82,509	40,990
Man-hours, total, thousands	369,631	72,492	38,835	Finished products	295,770	51,148	35,188
Wages, total	\$463,562	\$84,855	\$29,253	Materials, supplies, and work in process	137,901	29,361	5,802
Value added by manufacture	\$963,534	\$230,031	\$68,160	Expenditures for plant and equipment:			
Number of employees for pay period ended nearest Oct. 15:				New plant and equipment	\$67,567	\$11,565	\$5,004
All employees:				Construction and major alteration of fixed plants	27,577	3,791	1,874
Male	171,876	30,679	13,756	Buildings	24,865	3,299	1,618
Female	30,687	15,008	11,892	Other construction	2,712	462	256
Production and related workers:				Machinery and equipment	39,990	7,804	4,630
Male	165,743	35,372	19,333	Production machinery and equipment	25,870	5,233	2,561
Female	138,680	23,615	11,913	Other machinery and equipment	14,020	2,561	1,499
Force-account construction workers	27,063	12,737	11,104	Used plant and equipment, and land	3,273	1,220	176
Administrative, supervisory, sales, and all other	454	73	12	Number of highway-type motor vehicles owned or leased:			
Male	42,366	10,242	2,619	Trucks	210,509	3,015	2,177
Female	32,742	7,991	1,831	By manufacturer's rated capacity:			
Male	9,624	2,251	788	Under 1 1/2 tons	2,263	1,227	507
All employees, number by month:				1 1/2 tons	4,747	1,593	1,245
January	205,785	42,725	17,768	Over 1 1/2 tons and less than 3 1/2 tons	2,640	627	330
February	201,498	41,552	16,971	3 1/2 tons and less than 5 tons	407	114	26
March	196,744	41,110	17,247	5 tons and over	506	54	0
April	192,950	40,929	19,333	By body type:			
May	197,610	41,824	20,161	Van	2,878	783	152
June	202,035	42,391	21,161	Stake or platform	1,441	139	1,470
July	203,842	43,972	21,782	Panel or light delivery	3,138	1,817	324
August	204,747	45,029	21,895	All other trucks	3,112	870	231
September	204,149	45,116	23,115	Truck tractors	1,132	85	138
October	208,553	45,687	25,648	Trailers and semitrailers	1,302	88	134
November	216,090	46,033	28,513				
December	222,905	46,568	26,445				

1 Omitted because of duplication between cost of materials and value of products shipped. See text on industry.

2 Includes 105 tank-type bodies and 3,918 refrigerated-type bodies.

3 Includes 794 refrigerated-type bodies.

TABLE 4.—SELECTED GENERAL STATISTICS BY SIZE OF ESTABLISHMENT, FOR THE UNITED STATES: 1947

[Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS. Data which cannot be shown without disclosing information for individual companies have been combined with figures for other groups. A ^d appears in the column where the figure has been omitted and the combined figure is printed in italics]

INDUSTRY AND ITEM	Total, all establishments	Establishments with an average of—									
		1-4 employees	5-9 employees	10-19 employees	20-49 employees	50-99 employees	100-249 employees	250-499 employees	500-999 employees	1,000-2,499 employees	2,500 employees and over
Meat packing, wholesale:											
Number of establishments	2,153	1,559	379	383	372	187	130	57	39	35	12
Number of employees (average for the year)	208,369	1,274	2,551	5,464	11,711	13,136	21,612	10,635	20,493	58,848	47,045
Value added by manufacture	\$976,995	\$8,921	\$15,412	\$30,247	\$71,213	\$70,649	\$115,023	\$86,795	\$119,695	\$245,878	\$213,162
Prepared meats:											
Number of establishments	1,264	311	201	241	302	127	60	14	5	3	
Number of employees (average for the year)	44,379	713	1,386	3,414	9,265	8,811	8,949	4,981	3,078	3,782	
Value added by manufacture	\$235,537	\$4,201	\$7,751	\$16,581	\$48,181	\$47,490	\$51,184	\$26,071	\$12,882	\$20,598	
Poultry dressing, wholesale:											
Number of establishments	557	87	71	90	185	80	37	6	1		
Number of employees (average for the year)	21,693	263	479	1,239	5,987	5,470	5,639	2,676	(4)		
Value added by manufacture	\$68,160	\$1,154	\$2,051	\$4,051	\$16,162	\$15,145	\$15,794	\$13,893	(4)		

1 Includes 2 establishments with no employees accounting for \$36,000 value added.

TABLE 5.—VALUE OF PRODUCTS SHIPPED, BY BROAD CLASSES OF PRODUCTS, FOR THE UNITED STATES: 1947

[The first column shows the total value of shipments of this group of industries, divided among: (A) products classified in (primary to) the industries, (B) products classified in other industries (secondary to these industries), and (C) miscellaneous receipts. The second, third, and fourth columns show similar information for each of the three industries in the group. The fifth column shows the value of shipments of the primary products of these industries reported by establishments in other industries. The sixth column shows the total value of shipments of the primary products of these industries by all reporting manufacturers]

[Money figures in thousands of dollars]

MEAT PRODUCTS	Shipped by—					All industries
	Meat products industries				Other industries	
	Total ¹	Meat packing, wholesale, industry ¹	Prepared meats industry ¹	Poultry dressing, wholesale, industry		
Total shipments by the meat products industries	\$9,206,802	(²)	(²)	\$481,929		
A. Meat products	8,766,322	(²)	(²)	371,912	\$94,393	\$8,860,715
Fresh beef.....	2,645,771	(²)	(²)			2,645,771
Fresh veal.....	341,568	(²)	(²)			341,568
Fresh lamb and mutton.....	284,057	(²)	(²)			284,057
Fresh pork.....	1,168,541	(²)	(²)			1,168,541
Lard.....	460,829	\$145,890	\$14,939		5,661	460,490
Hides, skins, and pelts.....	317,839	316,483	1,350		13,051	330,890
Other slaughtering plant products.....	34,498	(²)	(²)		868	35,366
Slaughtering plant products, kind not specified.....	197,979	(²)	(²)		269	198,248
Pork, processed and cured.....	1,472,505	1,313,797	158,708		370	1,472,875
Sausage, meat loaves, etc.....	961,654	571,043	³ 390,611		(^d)	961,654
Canned meats.....	382,134	137,007	245,127		21,017	406,151
Miscellaneous cured meats and casings.....	64,163	43,737	² 20,426		(^d)	64,163
Prepared meat products, kind not specified.....	62,872	1,657	61,215		846	63,718
Chicken and fowl, New York dressed.....	203,591			203,591	21,609	225,200
Other poultry, New York dressed.....	63,901			63,901	8,932	72,833
Chicken and fowl, eviscerated.....	72,897			72,897	6,862	79,759
Other poultry, eviscerated.....	26,395			26,395	3,416	29,811
Small game and byproducts.....	1,689			1,689	136	1,825
Poultry, kind not specified.....	3,439			3,439	8,356	11,795
B. Secondary products	374,383	290,612	34,183	49,588		
Creamery butter.....	11,494	(^d)	(^d)	11,394		
Oleomargarine.....	11,331	11,331				
Shortening and cooking oils.....	10,821	8,462	2,359			
Dried, frozen, and liquid eggs.....	(^d)	(^d)	(^d)	36,240		
Dog and cat food.....	12,160	9,888	2,272			
Other prepared feeds.....	(^d)	4,569	(^d)	(^d)		
Feed and fertilizer byproducts.....	67,672	66,914	758			
Grease and tallow.....	157,567	155,503	(^d)	(^d)		
Blue and glue stock.....	4,142	4,142				
Other secondary products.....	57,325	28,876	27,028	1,421		
C. Miscellaneous receipts	66,097	5,519	149	60,429		
Contract and commission work.....	5,577	5,184	149	244		
Scrap and salable refuse.....	335	335				
Nonmanufacturing activities.....	60,185			60,185		

^d Withheld to avoid disclosing figures for individual companies.
¹ Figures represent net value of shipments, derived by subtraction of purchases from sales (see table 6).
² Shown in combination only, since purchases of fresh meats by the Prepared Meats Industry exceeded sales.
³ Includes the value of small quantities made in other industries.

TABLE 6-A.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939

[Money figures in thousands of dollars]

PRODUCT	1947						1939	
	Net shipments		Gross shipments and interplant transfers		Purchases and interplant receipts		Production ¹	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Fresh beef, total ²	(M lbs.) 7,569,143	\$2,645,771	(M lbs.) 8,635,155	\$2,971,372	(M lbs.) 1,066,012	\$325,601	(M lbs.) n.a.	n.a.
Carcass.....	6,401,784	2,263,961	7,377,335	2,571,657	975,551	307,696	5,492,233	\$762,725
Variety meats.....	373,286	93,675	458,708	110,013	85,422	16,338	n.a.	n.a.
Fresh beef, not specified by kind.....	794,073	288,135	799,112	289,702	5,039	1,567		
Fresh veal, total ²	1,014,701	341,568	1,118,199	373,498	103,498	31,930	n.a.	n.a.
Carcass.....	842,236	277,986	939,108	307,666	90,872	29,680	672,503	97,343
Variety meats.....	63,823	20,102	59,829	22,030	6,001	1,923	n.a.	n.a.
Fresh veal, not specified by kind.....	118,637	43,480	119,262	43,802	625	322	n.a.	n.a.
Fresh lamb and mutton, total ²	748,932	284,057	811,542	306,654	62,610	22,597	n.a.	n.a.
Carcass.....	687,808	265,923	747,335	287,648	58,527	21,725	780,423	126,313
Variety meats.....	34,889	6,831	37,921	7,687	3,032	856	n.a.	n.a.
Fresh lamb and mutton, not specified by kind.....	26,235	11,303	26,286	11,319	51	16	n.a.	n.a.
Fresh pork, total ²	3,066,018	1,168,541	4,356,513	1,630,150	1,290,495	461,609	n.a.	n.a.
Carcass.....	2,498,302	988,738	3,681,300	1,420,536	1,182,098	431,798	n.a.	n.a.
Variety meats.....	190,996	31,233	285,225	56,910	94,229	26,677	n.a.	n.a.
Fresh pork, not specified by kind.....	376,720	148,570	389,988	152,704	13,268	4,134	n.a.	n.a.
Lard (including rendered pork fat).....	1,816,201	466,490	2,049,745	522,845	233,544	56,355	1,552,338	107,422

See footnotes at end of table.

TABLE 6-A.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939—Continued

PRODUCT	1947						1939	
	Net shipments		Gross shipments and interplant transfers		Purchases and interplant receipts		Production ¹	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	(thousands)		(thousands)		(thousands)		(thousands)	
Hides, skins, and pelts, total		\$330,890		\$354,851		\$23,961		\$97,931
Cattle	17,972	211,945	18,549	215,305	577	3,360	12,055	63,005
Calves	8,459	57,630	9,048	60,544	589	2,914	5,377	11,887
Sheep and lamb	16,099	39,183	20,539	51,249	4,440	12,066	25,615	21,811
Other hides and skins	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	352	238
Hides, skins, and pelts, not specified by kind		22,132		27,753		5,621	n.a.	n.a.
	(M lbs.)		(M lbs.)		(M lbs.)		(M lbs.)	
Other slaughtering plant products, total		35,366		44,364		8,998		n.a.
Other meat (goat, horse, etc.)	125,704	15,789	156,068	18,876	30,364	3,087	18,762	1,284
Pulled wool ²	22,019	17,234	30,460	22,889	8,441	5,655	37,225	16,737
Animal products for medicinal use		2,343		2,589		256		n.a.
Slaughtering plant products, not specified by kind		198,248		307,856		109,608		52,122
Pork, processed and cured, total	2,828,017	1,472,875	3,607,657	1,814,673	779,640	341,798	n.a.	n.a.
Sweet pickled and dry cured	148,093	62,148	644,310	279,680	495,317	217,532	n.a.	n.a.
Dry salt	354,730	99,459	424,961	118,960	70,231	19,501	n.a.	n.a.
Smoked ham and picnic	867,461	461,847	921,164	489,160	53,703	27,313	n.a.	n.a.
Sliced bacon	615,869	371,578	662,949	396,367	47,080	24,780	n.a.	n.a.
Other smoked pork products	445,890	214,906	477,663	230,310	31,773	15,404	n.a.	n.a.
Cooked, boiled, or ready-to-eat pork	274,103	195,065	295,194	208,392	21,031	13,327	230,509	63,207
Processed pork, not specified by kind	120,971	67,872	181,416	91,804	60,445	23,932	n.a.	n.a.
Sausage, meat loaves, etc. (except canned) ³	2,359,113	961,654	2,525,639	1,022,445	166,526	60,791	1,673,571	273,807
Canned meats ⁴	1,011,352	406,151	1,221,563	480,977	210,231	74,826	341,425	65,770
Miscellaneous cured meats and casings, total		64,163		119,998		55,835		n.a.
Beef, pickled or cured	30,608	18,000	62,325	28,974	31,717	10,974	n.a.	n.a.
Beef, dried or dehydrated	22,491	17,532	32,266	23,934	9,775	6,402	n.a.	n.a.
Beef, cooked or roasted	4,169	2,827	4,291	2,897	122	70	n.a.	n.a.
Other processed beef (smoked tongue, etc.)	10,309	7,977	10,309	7,977			n.a.	n.a.
Veal, cured	4,143	1,588	4,894	1,862	751	274	n.a.	n.a.
Lamb and mutton, cured	189	44	1,898	504	1,709	480	n.a.	n.a.
Casings, beef	n.a.	2,223	n.a.	8,124	n.a.	5,001	n.a.	2,405
Casings, hog	n.a.	11,716	n.a.	27,369	n.a.	15,053	n.a.	7,932
Casings, sheep and lamb	n.a.	2,172	n.a.	16,146	n.a.	13,974	n.a.	6,976
Casings, other natural	n.a.	84	n.a.	2,211	n.a.	2,127	n.a.	n.a.
Prepared meat products, not specified by kind		63,718		69,809		6,091		2,398
Fresh and processed meats, not specified by kind						72,824		

PRODUCT	1947		1939	
	Net shipments		Production	
	Quantity	Value	Quantity	Value
	(M lbs.)		(M lbs.)	
Chicken and fowl, New York dressed, total	607,327	\$225,200	7427,400	\$76,470
Frozen or hard-chilled (box-packed)	471,638	174,400	n.a.	n.a.
Other pack (iced in barrels, etc.)	132,584	49,718	n.a.	n.a.
Pack not specified	3,105	992		
Other poultry, New York dressed, total	172,342	72,833	7130,043	726,043
Turkeys, total	162,142	69,356	7112,316	723,009
Frozen or hard-chilled	136,482	58,297	n.a.	n.a.
Other pack	23,771	10,282	n.a.	n.a.
Pack not specified	1,889	777		
Ducks, geese, etc.	10,200	3,477	717,727	72,974
Chicken and fowl, eviscerated, total	149,376	79,759	n.a.	n.a.
Frozen or hard-chilled	116,456	62,645		
Other pack	32,920	17,114		
Other poultry, eviscerated, total	58,518	29,811	n.a.	n.a.
Turkeys, total	54,923	28,206		
Frozen or hard-chilled	n.a.	26,231		
Other pack	n.a.	1,975		
Ducks, geese, etc.	3,595	1,605		
Small game and byproducts (fat, feathers, etc.)		1,825		754
Poultry, not specified by kind		11,795		7,483

n.a.—Not available.

¹ 1939 production includes an unknown amount of duplication because of the use of products of some establishments as materials by others. See Sixteenth Census of the United States: 1940, Manufactures 1939, Volume II, part 1, table 9, page 61, for data believed to account for the bulk of this duplication.² Includes frozen.³ Figures represent the output of establishments classified in the "Meat packing, wholesale" and "Grease and tallow" industries. Detailed product information was not obtained from establishments primarily engaged in wool pulling (Industry 3999).⁴ Includes total sales (\$111,703,000) of 338 establishments reporting on a short form which did not call for a breakdown of sales. Purchases of these establishments are not included in the purchases figure.⁵ For detailed production data, see table 6-B.⁶ Includes total sales (\$23,376,000) of 127 establishments reporting on a short form which did not call for a breakdown of sales. Purchases of these establishments are not included in the purchases figure.⁷ Includes eviscerated.

MEAT PRODUCTS

TABLE 6-B.—PRODUCTION OF SELECTED MEAT PRODUCTS, TOTALS FOR THE UNITED STATES: 1947

[Figures in thousands of pounds]

PRODUCT	Quantity produced ¹	PRODUCT	Quantity produced ¹
Fresh beef, total		Sausage, meat loaves, etc. (except canned)—Continued	
Carcass.....	9,066,288	Other hard dry sausage.....	29,823
Variety meats.....	7,632,028	Other semidry sausage.....	88,509
Fresh beef, not specified by kind.....	510,384	Meat loaves.....	236,475
	923,876	Jellied goods and other preparations.....	85,537
		Sausage and other prepared meats, not specified by kind.....	387,717
Fresh veal, total		Canned meats, total	1,088,302
Carcass.....	1,169,829	Luncheon meats.....	332,134
Variety meats.....	1,006,229	Canned hams.....	89,171
Fresh veal, not specified by kind.....	21,617	Vienna sausage.....	70,430
	142,083	Other frankfurters, including sausages in oil.....	26,001
Fresh lamb and mutton, total		Potted and deviled meats, except deviled ham.....	43,037
Carcass.....	788,325	Deviled ham.....	10,016
Variety meats.....	718,312	Sliced dried beef.....	10,471
Fresh lamb and mutton, not specified by kind.....	41,698	Liver products.....	36,212
	28,415	Meat stew, all types.....	26,844
Fresh pork		Spaghetti-meat products, all types.....	13,996
Carcass.....	9,435,891	Tongue, other than pickled.....	10,796
Variety meats.....	8,213,639	Vinegar pickled products.....	30,289
Fresh pork, not specified by kind.....	460,514	Corned and roast beef.....	24,600
	761,738	Meat with gravy.....	35,467
Lard (including rendered pork fat)	2,185,587	Other canned meat products, except dog and cat food:	
Sausage, meat loaves, etc. (except canned), total		20% or more meat.....	221,014
Fresh pork sausage.....	2,357,931	Less than 20% meat.....	65,070
Other fresh sausage.....	247,074	Canned meat, not specified by kind.....	32,845
Frankfurters.....	92,321		
Bologna.....	534,181		
Liver sausage and braunschweiger.....	405,502		
Salami, all types.....	165,360		
	85,423		

¹ Production of establishments reporting detailed statistics. See table 6-A for value of shipments of establishments not reporting detail.

² This figure is about 4 percent higher than that published in the Census "Facts for Industry" series for 1947. The Census of Manufactures included some establishments not reporting in the "Facts for Industry" survey.

TABLE 7-A.—NUMBER, WEIGHT, AND COST OF ANIMALS SLAUGHTERED, TOTALS FOR THE UNITED STATES: 1947¹

[Weight and cost figures in thousands]

PRODUCT	Number	Live weight (pounds)	Delivered cost ²	Chilled dressed weight ³ (pounds)
Cattle, total	18,260,251	16,427,945	\$2,986,313	8,591,108
Full federal inspection.....	14,524,251	13,415,358	2,460,263	7,042,732
Limited federal inspection.....	260,729	200,051	36,082	108,548
State inspection.....	1,106,392	919,604	157,255	469,877
Municipal inspection.....	1,897,160	1,485,396	200,781	761,535
No inspection.....	252,559	207,063	35,510	106,149
Inspection not reported.....	219,160	191,473	36,432	102,267
Calves, total	10,170,309	2,084,603	400,419	1,177,249
Full federal inspection.....	7,567,222	1,561,416	297,580	881,699
Limited federal inspection.....	114,346	27,556	5,509	15,161
State inspection.....	789,082	162,567	30,638	91,041
Municipal inspection.....	1,429,679	278,770	55,629	158,024
No inspection.....	174,390	36,180	7,272	21,011
Inspection not reported.....	95,584	18,108	3,791	10,413
Sheep and lambs, total	17,253,990	1,622,543	320,309	742,905
Full federal inspection.....	16,264,570	1,532,519	301,999	700,327
Limited federal inspection.....	56,341	5,136	1,061	2,348
State inspection.....	439,950	39,423	8,492	18,694
Municipal inspection.....	401,084	36,969	7,038	17,712
No inspection.....	12,504	1,082	210	520
Inspection not reported.....	78,941	7,414	1,500	3,304
Hogs, total	51,678,047	12,930,703	3,154,899	9,089,433
Full federal inspection.....	46,797,742	11,575,868	2,830,672	8,129,678
Limited federal inspection.....	527,984	126,580	29,595	86,215
State inspection.....	2,014,979	459,169	111,015	329,382
Municipal inspection.....	2,724,634	619,094	147,091	438,072
No inspection.....	348,263	78,371	19,302	55,380
Inspection not reported.....	264,445	71,621	17,224	50,706
Other, total	459,562	350,332	14,389	194,021
Full federal inspection.....	243,260	278,524	11,374	161,708
Limited federal inspection.....	11,483	11,661	476	3,987
State inspection.....	44,752	2,082	182	1,143
Municipal inspection.....	54,199	17,376	720	7,505
No inspection.....	31,334	32,514	1,131	15,351
Inspection not reported.....	74,534	7,575	508	4,237

¹ These figures represent slaughter in establishments reporting detailed statistics, which accounted for 98 percent of the total cost of animals slaughtered in the "Meat packing, wholesale" industry. Condemned animals are not included.

² Includes estimated cost of animals slaughtered on a custom basis, amounting to 3 percent of the total slaughter of cattle, 10 percent of calves, 3 percent of sheep and lambs, and 2 percent of hogs.

³ The difference between these figures and the carcass weight figures shown in table 6-B are due to the fact that some establishments reported detailed slaughter figures but not production figures and vice versa.

CENSUS OF MANUFACTURES: 1947

TABLE 7-B.—NUMBER, WEIGHT, AND COST OF ANIMALS SLAUGHTERED, BY STATES: 1947
(Weight and cost figures in thousands)

DIVISION AND STATE	Number	Live weight (pounds)	Delivered cost ¹ (dollars)	Chilled dressed weight (pounds)	DIVISION AND STATE	Number	Live weight (pounds)	Delivered cost ¹ (dollars)	Chilled dressed weight (pounds)
NEW ENGLAND					WEST NORTH CENTRAL				
Maine:					Minnesota:				
Cattle.....	8,502	6,705	1,277	3,446	Cattle.....	1,249,651	1,209,844	202,230	622,470
Calves.....	3,095	479	98	277	Calves.....	800,831	122,100	21,200	70,242
Sheep and lambs.....	479	43	6	21	Sheep and lambs.....	1,129,008	109,055	21,332	50,168
Hogs.....	21,027	5,576	1,380	4,164	Hogs.....	4,659,097	1,251,556	295,263	880,318
Detail not available.....			687		Other.....	(d)	(d)	(d)	(d)
New Hampshire:					Detail not available.....			720	
Cattle.....	(d)	(d)	(d)	(d)	Iowa:				
Calves.....	(d)	(d)	(d)	(d)	Cattle.....	1,414,048	1,349,205	263,415	727,134
Sheep and lambs.....	(d)	(d)	(d)	(d)	Calves.....	474,320	89,017	18,228	49,621
Hogs.....	(d)	(d)	7,784		Sheep and lambs.....	1,922,575	183,401	37,232	84,682
Detail not available.....					Hogs.....	8,451,781	2,154,393	545,819	1,586,273
Vermont:					Other.....	(d)	(d)	4,328	
Cattle.....	7,122	5,948	694	2,722	Detail not available.....				
Calves.....	(d)	(d)	(d)	(d)	Missouri:				
Sheep and lambs.....	(d)	(d)	(d)	(d)	Cattle.....	875,203	740,291	142,196	394,601
Hogs.....	(d)	(d)	1,380		Calves.....	439,861	103,884	19,084	55,689
Detail not available.....					Sheep and lambs.....	(d)	(d)	(d)	(d)
Massachusetts:					Hogs.....	2,081,668	746,416	181,383	524,669
Cattle.....	102,808	100,068	18,203	50,119	Other.....	13,128	14,778	401	5,414
Calves.....	198,167	18,031	3,286	10,114	Detail not available.....			19,525	
Sheep and lambs.....	(d)	(d)	(d)	(d)	North Dakota:				
Hogs.....	624,342	165,767	40,262	123,812	Cattle.....	(d)	(d)	(d)	(d)
Detail not available.....			11,899		Calves.....	(d)	(d)	(d)	(d)
Rhode Island:					Sheep and lambs.....	(d)	(d)	(d)	(d)
Cattle.....	20,940	19,395	3,350	10,056	Hogs.....	(d)	(d)	(d)	(d)
Calves.....	17,099	1,951	307	1,082	Other.....	(d)	(d)	38,551	
Sheep and lambs.....	388	30	6	16	Detail not available.....				
Hogs.....	(d)	(d)	(d)	(d)	South Dakota:				
Other.....	(d)	(d)	725		Cattle.....	216,206	204,905	36,717	107,016
Detail not available.....					Calves.....	18,260	5,180	906	2,863
Connecticut:					Sheep and lambs.....	326,862	31,084	6,128	14,625
Cattle.....	47,199	43,414	6,166	19,723	Hogs.....	1,696,245	476,309	111,298	328,277
Calves.....	11,306	1,008	155	545	Other.....	(d)	(d)	337	
Sheep and lambs.....	(d)	(d)	(d)	(d)	Detail not available.....				
Hogs.....	(d)	(d)	(d)	(d)	Nebraska:				
Detail not available.....			11,909		Cattle.....	1,259,694	1,186,085	239,606	647,475
MIDDLE ATLANTIC					Calves.....	83,217	20,139	4,395	13,731
New York:					Sheep and lambs.....	1,285,602	127,565	25,442	59,678
Cattle.....	522,294	489,317	104,151	262,914	Hogs.....	2,340,691	652,274	154,710	451,421
Calves.....	650,021	103,456	23,057	59,291	Detail not available.....			381	
Sheep and lambs.....	1,585,795	145,056	32,708	65,246	Kansas:				
Hogs.....	1,491,893	301,922	77,800	208,505	Cattle.....	1,256,682	1,123,930	205,027	588,270
Detail not available.....			6,180		Calves.....	488,559	135,498	24,616	74,798
New Jersey:					Sheep and lambs.....	1,351,296	120,602	23,832	59,198
Cattle.....	210,233	210,689	45,592	116,299	Hogs.....	2,927,419	751,593	184,006	504,484
Calves.....	193,009	37,781	9,485	22,201	Other.....	(d)	(d)	(d)	(d)
Sheep and lambs.....	732,934	68,508	16,671	31,065	Detail not available.....			2,470	
Hogs.....	726,376	151,304	38,441	107,673	SOUTH ATLANTIC				
Other.....	(d)	(d)	(d)	(d)	Delaware:				
Detail not available.....			4,629		Cattle.....	(d)	(d)	(d)	(d)
Pennsylvania:					Calves.....	8,085	1,271	292	722
Cattle.....	535,874	526,859	96,679	272,365	Sheep and lambs.....	(d)	(d)	(d)	(d)
Calves.....	419,517	58,056	12,118	32,548	Hogs.....	(d)	(d)	(d)	(d)
Sheep and lambs.....	200,169	18,560	3,836	8,179	Detail not available.....			11,400	
Hogs.....	1,822,891	421,680	107,339	268,831	Maryland:				
Other.....	(d)	(d)	(d)	(d)	Cattle.....	(d)	(d)	(d)	(d)
Detail not available.....			8,963		Calves.....	98,808	15,714	3,307	8,556
EAST NORTH CENTRAL					Sheep and lambs.....	47,483	4,207	823	1,841
Ohio:					Hogs.....	722,930	160,403	41,130	114,016
Cattle.....	819,404	731,632	146,062	392,296	Detail not available.....			33,307	
Calves.....	223,929	38,018	8,336	21,410	District of Columbia:				
Sheep and lambs.....	143,029	13,077	2,640	6,391	Cattle.....	(d)	(d)	(d)	(d)
Hogs.....	2,292,992	528,272	132,834	380,438	Calves.....	(d)	(d)	(d)	(d)
Other.....	(d)	(d)	(d)	(d)	Sheep and lambs.....	(d)	(d)	(d)	(d)
Detail not available.....			5,615		Detail not available.....			1,802	
Indiana:					Virginia:				
Cattle.....	514,616	438,820	77,693	226,930	Cattle.....	84,973	69,590	12,018	35,318
Calves.....	154,883	32,068	7,065	18,703	Calves.....	79,753	10,103	3,467	9,141
Sheep and lambs.....	(d)	(d)	(d)	(d)	Sheep and lambs.....	19,014	1,041	326	983
Hogs.....	2,755,869	689,377	166,103	479,506	Hogs.....	631,038	134,900	32,030	91,200
Other.....	(d)	(d)	(d)	(d)	Detail not available.....			7,644	
Detail not available.....			9,214		West Virginia:				
Illinois:					Cattle.....	30,408	25,397	4,320	12,399
Cattle.....	1,834,448	1,656,933	321,528	888,553	Calves.....	12,005	2,192	471	1,206
Calves.....	1,002,762	170,784	33,433	96,847	Sheep and lambs.....	2,450	240	51	116
Sheep and lambs.....	(d)	(d)	(d)	(d)	Hogs.....	62,783	11,807	2,909	8,388
Hogs.....	5,797,086	1,626,260	363,519	1,065,514	Detail not available.....			634	
Other.....	(d)	(d)	(d)	(d)	North Carolina:				
Detail not available.....			53,192		Cattle.....	39,320	36,364	5,302	16,421
Michigan:					Calves.....	42,567	7,751	1,436	4,731
Cattle.....	678,728	510,540	92,355	262,106	Sheep and lambs.....	792	72	13	32
Calves.....	440,258	76,121	16,907	45,636	Hogs.....	137,896	37,662	8,478	26,800
Sheep and lambs.....	299,312	26,016	3,483	12,163	Other.....	(d)	(d)	(d)	(d)
Hogs.....	1,080,953	254,311	61,887	180,026	Detail not available.....			2,109	
Other.....	(d)	(d)	(d)	(d)	South Carolina:				
Detail not available.....			4,153		Cattle.....	42,887	30,826	4,276	14,867
Wisconsin:					Calves.....	14,673	2,971	405	1,150
Cattle.....	550,638	558,627	86,657	278,968	Sheep and lambs.....	(d)	(d)	(d)	(d)
Calves.....	1,049,089	119,221	25,147	74,504	Hogs.....	161,519	34,707	8,136	23,314
Sheep and lambs.....	206,863	19,933	3,221	9,110	Other.....	(d)	(d)	(d)	(d)
Hogs.....	2,361,220	607,629	145,273	435,537	Detail not available.....			62	
Other.....	(d)	(d)	(d)	(d)					
Detail not available.....			5,048						

See footnotes at end of table.

TABLE 7-B.—NUMBER, WEIGHT, AND COST OF ANIMALS SLAUGHTERED, BY STATES: 1947—Continued

DIVISION AND STATE	Number	Live weight (pounds)	Delivered cost ¹ (dollars)	Chilled dressed weight (pounds)	DIVISION AND STATE	Number	Live weight (pounds)	Delivered cost ¹ (dollars)	Chilled dressed weight (pounds)
SOUTH ATLANTIC—Continued					MOUNTAIN				
Georgia:					Montana:				
Cattle.....	271,352	176,306	23,610	82,233	Cattle.....	44,046	41,658	7,500	22,228
Calves.....	160,106	37,372	5,365	20,051	Calves.....	10,565	3,327	624	1,922
Sheep and lambs.....	1,854	153	24	75	Sheep and lambs.....	5,209	514	92	250
Hogs.....	863,785	175,867	40,436	122,975	Hogs.....	118,556	28,767	7,142	19,379
Other.....	(d)	(d)	(d)	(d)	Other.....	(d)	(d)	(d)	(d)
Detail not available.....			3,404		Detail not available.....			391	
Florida:					Idaho:				
Cattle.....	161,781	108,828	14,285	52,433	Cattle.....	50,614	47,524	9,016	25,377
Calves.....	76,938	17,383	2,530	8,775	Calves.....	7,560	2,418	434	1,335
Sheep and lambs.....	(d)	(d)	(d)	(d)	Sheep and lambs.....	13,363	1,383	251	687
Hogs.....	150,017	27,198	5,612	18,777	Hogs.....	61,514	14,367	3,376	10,085
Detail not available.....			1,237		Other.....	(d)	(d)	(d)	(d)
					Detail not available.....			282	
EAST SOUTH CENTRAL					Wyoming:				
Kentucky:					Cattle.....	16,180	14,816	2,045	8,062
Cattle.....	104,481	159,541	28,272	82,977	Calves.....	622	180	32	96
Calves.....	134,240	25,588	5,966	15,458	Sheep and lambs.....	1,827	192	30	91
Sheep and lambs.....	(d)	(d)	(d)	(d)	Hogs.....	5,126	1,180	284	861
Hogs.....	395,531	89,432	22,730	62,778	Detail not available.....			11	
Other.....	(d)	(d)	(d)	(d)	Colorado:				
Detail not available.....			2,381		Cattle.....	435,578	402,472	82,244	221,857
Tennessee:					Calves.....	64,260	19,498	3,725	10,731
Cattle.....	269,054	195,063	29,148	93,912	Sheep and lambs.....	728,261	71,294	14,475	24,588
Calves.....	314,370	56,945	10,419	30,510	Hogs.....	554,792	147,485	35,794	100,913
Sheep and lambs.....	51,966	4,206	754	2,042	Detail not available.....			4,124	
Hogs.....	682,416	147,851	36,015	103,146	New Mexico:				
Other.....	(d)	(d)	(d)	(d)	Cattle.....	24,599	17,255	2,806	8,237
Detail not available.....			1,934		Calves.....	1,360	527	92	291
Alabama:					Sheep and lambs.....	6,064	508	91	248
Cattle.....	166,140	108,771	15,704	51,237	Hogs.....	16,304	3,037	697	2,211
Calves.....	91,574	24,412	3,840	12,270	Detail not available.....			2,489	
Sheep and lambs.....	808	65	11	32	Arizona:				
Hogs.....	267,978	61,685	13,483	43,761	Cattle.....	53,444	46,387	8,071	25,286
Other.....	(d)	(d)	(d)	(d)	Calves.....	11,698	4,608	923	2,500
Detail not available.....			2,077		Sheep and lambs.....	13,957	1,294	285	624
Mississippi:					Hogs.....	37,685	8,563	2,280	5,788
Cattle.....	50,423	34,688	5,087	15,647	Detail not available.....			4,009	
Calves.....	25,796	8,094	1,583	4,153	Utah:				
Sheep and lambs.....	(d)	(d)	(d)	(d)	Cattle.....	111,193	100,901	18,292	50,526
Hogs.....	49,385	10,474	2,453	7,431	Calves.....	26,542	6,963	1,357	4,002
Other.....	(d)	(d)	(d)	(d)	Sheep and lambs.....	78,197	8,063	1,360	3,705
Detail not available.....			667		Hogs.....	164,223	39,513	10,085	25,008
					Detail not available.....			84	
WEST SOUTH CENTRAL					Nevada:				
Arkansas:					Cattle.....	(d)	(d)	(d)	(d)
Cattle.....	46,786	39,190	5,902	17,600	Calves.....	5,715	2,015	394	1,272
Calves.....	27,416	7,300	1,346	4,259	Sheep and lambs.....	(d)	(d)	(d)	(d)
Sheep and lambs.....	(d)	(d)	(d)	(d)	Hogs.....	(d)	(d)	(d)	(d)
Hogs.....	71,089	16,617	3,556	11,602	Detail not available.....			9,182	
Detail not available.....			217		PACIFIC				
Louisiana:					Washington:				
Cattle.....	185,704	127,666	18,064	62,560	Cattle.....	357,952	315,505	56,939	169,798
Calves.....	107,552	55,805	9,459	28,725	Calves.....	67,926	20,013	3,986	11,714
Sheep and lambs.....	872	59	6	28	Sheep and lambs.....	207,045	20,812	4,064	9,735
Hogs.....	52,385	10,323	2,411	7,354	Hogs.....	471,221	113,692	28,681	77,538
Detail not available.....			476		Other.....	(d)	(d)	(d)	(d)
Oklahoma:					Detail not available.....			2,755	
Cattle.....	357,909	289,333	43,406	141,421	Oregon:				
Calves.....	(d)	(d)	(d)	(d)	Cattle.....	138,422	130,781	22,020	67,122
Sheep and lambs.....	(d)	(d)	(d)	(d)	Calves.....	25,826	7,438	1,492	4,235
Hogs.....	545,430	126,791	30,567	85,878	Sheep and lambs.....	(d)	(d)	(d)	(d)
Detail not available.....			21,405		Hogs.....	239,811	57,014	14,772	42,080
Texas:					Other.....	(d)	(d)	(d)	(d)
Cattle.....	1,188,973	924,985	131,466	450,843	Detail not available.....			6,335	
Calves.....	1,003,451	349,883	59,972	191,552	California:				
Sheep and lambs.....	(d)	(d)	(d)	(d)	Cattle.....	1,551,698	1,518,120	284,934	809,611
Hogs.....	1,153,174	264,215	64,563	185,245	Calves.....	600,093	142,436	30,904	83,420
Other.....	148,748	10,077	17,490	4,571	Sheep and lambs.....	2,182,919	210,646	48,764	101,101
Detail not available.....					Hogs.....	1,473,747	381,063	97,634	262,769
					Other.....	65,444	69,051	2,939	36,514
					Detail not available.....			9,404	

^d Withheld to avoid disclosing figures for individual companies.

¹ Includes estimated cost of animals slaughtered on a custom basis, amounting to 3 percent of the total slaughter of cattle, 10 percent of calves, 3 percent of sheep and lambs, and 2 percent of hogs. The figures marked "Detail not available" include the costs reported by establishments for which detailed statistics are withheld to avoid disclosure of individual company figures, and the estimated cost of livestock for establishments not reporting slaughter figures.

TABLE 7-C.—NUMBER, WEIGHT AND COST OF POULTRY SLAUGHTERED, BY DIVISIONS AND STATES: 1947¹

[All figures in thousands]

DIVISION AND STATE	Chickens and fowl			Turkeys			Other poultry		
	Number	Live weight (pounds)	Delivered cost	Number	Live weight (pounds)	Delivered cost	Number	Live weight (pounds)	Delivered cost
United States	198,227	742,715	\$217,161	12,074	210,614	\$71,785	2,810	12,870	\$3,423
New England	7,055	29,318	9,595	5	90	35	(d)	(d)	(d)
Maine	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
New Hampshire	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Vermont	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Massachusetts	4,510	18,774	6,340	(d)	(d)	(d)	(d)	(d)	(d)
Rhode Island	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Connecticut	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Middle Atlantic	8,300	32,784	9,965	274	4,561	1,686	(d)	(d)	(d)
New York	1,231	5,149	1,663	92	1,700	658	(d)	(d)	(d)
New Jersey	2,116	8,353	2,616	(d)	(d)	(d)	(d)	(d)	(d)
Pennsylvania	5,043	19,282	5,686	182	2,861	1,028	(d)	(d)	(d)
East North Central	9,971	42,382	11,731	283	5,331	1,853	135	687	135
Ohio	2,659	11,016	3,256	45	811	315	74	304	65
Indiana	1,579	6,719	1,713	29	563	198	(d)	(d)	(d)
Illinois	3,520	15,024	4,159	117	2,232	734	42	242	40
Michigan	667	2,834	817	(d)	(d)	(d)	(d)	(d)	(d)
Wisconsin	1,546	6,789	1,786	92	1,725	606	(d)	(d)	(d)
West North Central	64,943	275,729	72,753	5,705	66,880	32,818	1,002	5,006	1,083
Minnesota	13,775	55,445	13,757	2,031	31,605	10,523	141	868	102
Iowa	18,053	80,470	20,744	1,010	29,330	10,386	332	1,993	427
Missouri	7,143	23,895	9,352	138	2,633	935	(d)	(d)	(d)
North Dakota	1,492	6,310	1,436	184	3,224	1,064	(d)	(d)	(d)
South Dakota	2,037	8,862	2,160	(d)	(d)	(d)	(d)	(d)	(d)
Nebraska	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Kansas	22,443	94,747	25,304	1,742	30,097	9,910	610	2,145	464
South Atlantic	83,760	273,922	87,256	450	7,749	2,829	(d)	(d)	(d)
Delaware	30,646	103,289	33,171	(d)	(d)	(d)	(d)	(d)	(d)
Maryland	28,843	94,785	30,102	45	830	327	(d)	(d)	(d)
District of Columbia	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Virginia	8,840	30,338	8,768	283	4,872	1,744	(d)	(d)	(d)
West Virginia	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
North Carolina	1,987	7,031	2,290	101	1,727	636	(d)	(d)	(d)
South Carolina	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Georgia	11,914	33,158	10,670	21	320	122	(d)	(d)	(d)
Florida	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
East South Central	2,455	9,586	2,979	58	853	288	(d)	(d)	(d)
Kentucky	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Tennessee	1,258	5,455	1,676	(d)	(d)	(d)	(d)	(d)	(d)
Alabama	(d)	(d)	(d)	58	853	288	(d)	(d)	(d)
Mississippi	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
West South Central	8,009	26,978	7,932	851	13,679	4,580	326	1,032	208
Arkansas	2,158	7,177	1,947	(d)	(d)	(d)	(d)	(d)	(d)
Louisiana	(d)	(d)	(d)	237	3,972	1,394	(d)	(d)	(d)
Oklahoma	1,960	7,184	2,137	(d)	(d)	(d)	(d)	(d)	(d)
Texas	3,891	12,617	3,848	614	9,707	3,192	326	1,032	208
Mountain	2,191	9,181	2,473	1,288	23,000	8,860	(d)	(d)	(d)
Montana	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Idaho	310	1,490	407	(d)	(d)	(d)	(d)	(d)	(d)
Wyoming	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Colorado	517	2,164	495	(d)	(d)	(d)	(d)	(d)	(d)
New Mexico	(d)	(d)	(d)	59	1,050	376	(d)	(d)	(d)
Arizona	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Utah	1,364	5,527	1,571	(d)	(d)	(d)	(d)	(d)	(d)
Nevada	(d)	(d)	(d)	1,160	21,330	8,108	(d)	(d)	(d)
Pacific	11,453	42,835	12,477	3,160	57,853	18,830	803	4,503	1,433
Washington	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Oregon	5,297	22,556	5,855	1,819	32,423	10,541	(d)	(d)	(d)
California	6,156	20,279	6,622	1,341	25,430	8,289	803	4,503	1,433

⁴ Withheld to avoid disclosing figures for individual companies.¹ These figures represent poultry slaughtered in establishments reporting detailed statistics, which accounted for 98 percent of the total value of shipments by the Poultry Dressing, Wholesale Industry.

DAIRY PRODUCTS

This report shows 1947 Census of Manufactures statistics for establishments engaged in the manufacture of dairy products such as butter, cheese, concentrated milk, and ice cream. About one-third of the dairy plants included in the census were engaged both in the manufacture of these products and in the processing and distribution of fluid milk and cream. The Standard Industrial Classification at present does not include such establishments as manufacturing plants, although in many individual plants the output of fluid milk and cream is insignificant compared with the output of manufactured products. Shipments of manufactured products from these combination plants during 1947 amounted to about 20 percent of the total value of such products. Statistics for combination plants are not included in the State bulletins and summary volume in this series of publications, but because of their importance in the production of manufactured products they are included in this report. In order to provide comparability with the Standard Industrial Classification definitions, however, they have been classified in separate subindustries, as described below.

Although dairy plants engaged in fluid milk distribution were included in all previous censuses, the instructions for reporting were changed in 1947. In previous years the questionnaire called for information on manufacturing operations only, excluding all data pertaining to fluid milk. Since in most of the combination plants separate records for manufacturing activities are not maintained, the completed questionnaires are believed to have been estimated in large part. To improve accuracy in reporting, the 1947 questionnaire called for information on all activities, including fluid milk processing and distribution. It is estimated that combination plants distributed slightly over one-third of the total amount of fluid milk and cream consumed in cities and villages in 1947. No reports were obtained from plants solely engaged in fluid milk operations.

The value of shipments and cost of materials figures for the dairy products group of industries contain a substantial amount of duplication, owing to the use of products of some industries as materials by others. For example, a large part of the cost of materials for process cheese (a mixture of natural cheese with other substances) represents the value of natural cheese reported as a product of the Natural Cheese Industry. There is relatively little duplication in the value of shipments and cost of materials of each industry considered separately.

Creamery Butter (*Consists of Standard Industrial Classification No. 2021, Creamery Butter, and Census No. 4021, Creamery Butter and Fluid Milk.*)—This industry comprises establishments in which the primary manufacturing activity is the production of creamery butter. The industry does not include the production for sale of butter on farms, amounting

to about 4 percent of creamery production; or the manufacture of renovated butter, which is classified in the Special Dairy Products Industry. Skimming or separating stations operated in connection with butter plants have been included as parts of the plants, but independent separating stations and milk and cream assembly stations are not included.

Subindustry 2021 includes butter plants not engaged in house-to-house distribution of fluid milk and cream; subindustry 4021 includes those engaged in house-to-house distribution.

Cooperatively owned and operated plants are common in the butter industry, particularly in Iowa, Minnesota, and Wisconsin. Farmers who ship milk to these plants receive payments prorated individually according to the volume of milk delivered and its quality, and computed by subtracting operating expenses from receipts for sales of finished products. Since the price received by these farmers includes the operating margin that ordinarily would be retained by the processor, cost of materials in relation to value of shipments for the States mentioned is higher than for the rest of the country.

Natural Cheese (*Consists of Standard Industrial Classification No. 2022, Natural Cheese, and Census No. 4022, Natural Cheese and Fluid Milk.*)—This industry comprises establishments in which the primary manufacturing activity is the production of all types of natural cheese, including cottage cheese. Establishments primarily engaged in manufacturing process cheese are classified in the Special Dairy Products Industry.

Subindustry 2022 includes cheese plants not engaged in house-to-house distribution of fluid milk and cream; subindustry 4022 includes those engaged in house-to-house distribution. The principal manufactured product of the latter group is cottage cheese.

As shown in table 6, the quantity of natural cheese (other than cottage cheese) shipped during 1947 is considerably less than the quantity produced as reported by the Department of Agriculture. The difference is accounted for by several factors, the most important of which are (1) factories manufacturing process cheese from natural cheese made in the same plant reported shipments of the process cheese in the census, and production of the natural cheese, to the Department of Agriculture, and (2) several hundred small establishments reporting to the Department of Agriculture fell outside the scope of the 1947 census because they had no paid employees, or were primarily engaged in nonmanufacturing activities.

The quantity and value of cottage cheese shipped, shown in table 6, contains an unknown amount of duplication owing to the practice of shipping cottage cheese curd from the producing plant to another plant for creaming. The census questionnaire called for data on finished and unfinished cottage cheese separately, but this breakdown was not reported satisfactorily and it was necessary to combine the two items.

Small farmers' cooperatives are numerous in the Natural Cheese Industry, particularly in Wisconsin and Minnesota. The cooperative typically hires a cheesemaker to operate the factory, paying him on a percentage-of-sales basis. Out of this percentage the cheesemaker pays for materials other than milk and for whatever additional labor he needs. In many instances, the cooperative management, in filling out the census report at the end of the year, was able to report accurately neither the number of employees in the factory during the year, nor any detailed costs other than payments to producers for milk. Consequently, the labor statistics for Wisconsin and Minnesota are less reliable than for other areas.

As in the butter industry, higher payments for milk by cooperatives in Wisconsin and Minnesota result in a higher cost of materials relative to shipments than in other areas.

Concentrated Milk (Consists of Standard Industrial Classification No. 2023, Condensed and Evaporated Milk, and Census No. 4023, Concentrated and Fluid Milk.)—This industry comprises establishments in which the primary manufacturing activity is the production of condensed and evaporated milk and related products such as sweetened condensed milk (case and bulk goods); unsweetened condensed and evaporated milk; condensed buttermilk; dried and powdered skim milk, whole milk, whey, and buttermilk; and ice-cream mix and ice-milk mix made for sale as such.

Subindustry 2023 includes concentrated milk plants not engaged in house-to-house distribution of fluid milk and cream; subindustry 4023 includes those engaged in house-to-house distribution.

Ice Cream (Consists of Standard Industrial Classification Industry No. 2024, Ice Cream and Ices, and Census No. 4024, Ice Cream, Ices, and Fluid Milk.)—This industry comprises establishments in which the primary manufacturing activity is the production of ice cream, ices, and other frozen desserts.

Subindustry 2024 includes ice cream plants not engaged in house-to-house distribution of fluid milk and cream; subindustry 4024 includes those engaged in house-to-house distribution.

The quantity of ice cream and other frozen products shipped (table 6) is about 10 percent less than the total amount produced, as reported by the Department of Agriculture. The difference is largely accounted for by the fact that small

retailers, hotels, and restaurants are not included in the Census of Manufactures. Some plants were also omitted because they fell below the minimum size limit (one employee) for the census.

Special Dairy Products (Consists of Standard Industrial Classification No. 2025, Special Dairy Products, and Census No. 4025, Special Dairy Products and Fluid Milk.)—This industry comprises establishments in which the primary manufacturing activity is the production of special dairy products, such as process cheese and other cheese products made from natural cheese, renovated butter, malted milk, cultured buttermilk, and other fermented milk. The industry includes cheese factories manufacturing natural cheese and using it to make process cheese.

Subindustry 2025 includes special dairy products plants not engaged in house-to-house distribution; subindustry 4025 includes those engaged in house-to-house distribution. The principal manufactured product of the latter group is cultured buttermilk.

Plastic Cream and Bulk Products (Census No. 4029.)—This industry includes establishments primarily engaged in processing plastic cream, frozen cream, or in processing and distributing fluid milk and cream in bulk quantities, but which are not engaged in house-to-house distribution of fluid milk and cream. All of the plants included manufactured other dairy products, principally butter and concentrated milk (see table 5).

TABLE 1.—GENERAL STATISTICS FOR THE UNITED STATES: 1947 AND EARLIER CENSUS YEARS
[Money figures in thousands of dollars. For explanation of column captions see GENERAL EXPLANATIONS]

INDUSTRY AND CENSUS YEAR	Number of establishments	All employees		Production and related workers		Value added by manufacture ¹	Cost of materials, fuel, electricity, and contract work ²	Value of products shipped ³
		Number (average for the year) ⁴	Salaries and wages, total ⁵	Number (average for the year) ⁶	Wages, total ⁷			
Dairy products:								
1947, total	7,816	207,669	\$540,653	129,031	\$307,036	\$1,225,675	\$4,139,174	\$5,364,740
Dairy products (202)	5,423	92,693	225,312	69,074	155,841	595,168	2,348,293	2,943,461
Dairy products and fluid milk (402)	2,393	114,976	324,341	59,957	151,195	630,407	1,790,881	2,421,288
1947, adjusted total (comparable to prior years) ⁴	7,816	n.a.	n.a.	n.a.	n.a.	777,000	2,028,000	3,705,000
1939	9,497	n.a.	n.a.	50,488	54,300	281,020	867,856	1,140,770
1937	9,803	68,238	81,757	53,461	57,220	280,001	901,196	1,247,797
Creamery butter:								
1947, total	2,157	37,988	89,611	25,186	54,768	190,766	1,004,168	1,194,934
Creamery butter (2021)	1,633	20,564	44,373	15,242	31,883	107,248	737,465	844,713
Creamery butter and fluid milk (4021)	524	17,424	45,238	9,944	22,885	83,518	266,703	350,221
1947, adjusted total (comparable to prior years) ⁴	2,157	n.a.	n.a.	n.a.	n.a.	132,000	905,000	1,037,000
1939	3,506	28,774	32,907	17,953	18,370	73,470	418,751	492,221
1937	3,716	25,971	28,785	19,437	19,619	70,663	510,114	589,707
1935	3,453	24,864	26,697	18,434	17,616	78,053	423,103	501,216
1933	3,166	20,970	20,507	16,498	15,062	68,609	316,843	385,612
1931	3,367	n.a.	n.a.	15,667	18,023	70,244	393,228	463,472
1929	3,527	26,627	30,687	10,097	24,198	110,544	635,874	746,418
1927	3,519	27,669	37,430	20,096	26,633	101,674	637,337	739,011
1925	3,493	24,582	32,253	17,758	22,203	80,196	603,397	683,693
1923	3,653	n.a.	n.a.	20,312	24,950	90,916	540,558	640,474
1921	3,444	24,913	32,152	18,306	22,920	72,223	407,501	470,724
1919	3,738	24,333	28,375	17,041	18,853	68,817	514,340	583,163
1914	4,356	18,973	14,090	14,149	10,119	30,832	212,547	243,370
1909	4,783	15,525	9,691	11,563	7,241	25,353	100,040	104,999
1904	5,235	12,547	6,382	9,530	5,406	17,230	101,201	118,521
Natural cheese:								
1947, total	1,811	16,579	39,974	12,602	20,189	91,338	460,578	551,916
Natural cheese (2022)	1,711	12,320	27,597	10,535	23,024	63,257	394,678	487,935
Natural cheese and fluid milk (4022)	100	4,259	12,377	2,157	6,165	28,081	65,000	93,981
1947, adjusted total (comparable to prior years) ⁴	1,811	n.a.	n.a.	n.a.	n.a.	67,000	417,000	484,000
1939	2,682	6,152	6,788	5,009	5,156	10,707	91,440	108,207
1937	2,567	5,107	5,274	4,482	4,369	17,114	95,672	112,786
1935	2,573	5,052	4,890	4,344	3,036	14,828	84,122	98,950
1933	2,157	3,443	3,259	3,141	2,910	10,543	40,791	57,334
1931	2,371	n.a.	n.a.	2,964	3,564	13,901	54,081	68,072
1929	2,758	4,262	5,447	3,401	4,588	17,918	92,727	110,645
1927	2,738	4,365	5,666	3,520	4,897	17,060	100,788	118,448
1925	2,935	4,128	4,830	3,398	4,320	15,109	103,569	118,078
1923	3,399	n.a.	n.a.	4,283	5,113	20,743	107,022	127,705
1921	2,789	4,125	4,909	3,498	4,424	12,702	69,118	81,880
1919	3,530	4,503	5,859	3,907	4,800	14,031	120,425	143,456
1914	3,082	3,234	2,274	2,908	2,066	4,986	40,759	51,745
1909	3,560	3,016	1,825	2,704	1,670	5,241	30,022	44,263
1904	3,610	2,820	1,531	2,652	1,404	3,881	25,257	29,138

See footnotes at end of table.

TABLE I.—GENERAL STATISTICS FOR THE UNITED STATES: 1947 AND EARLIER CENSUS YEARS—Continued

INDUSTRY AND CENSUS YEAR	Number of establishments	All employees		Production and related workers		Value added by manufacture ¹	Cost of materials, fuel, electricity, and contract work ²	Value of products shipped ³
		Number (average for the year) ⁴	Salaries and wages, total ⁵	Number (average for the year) ⁶	Wages, total ⁷			
Concentrated milk:								
1947, total	562	28,070	\$77,454	19,568	\$49,743	\$220,211	\$784,793	\$1,005,004
Concentrated milk (2023)	428	16,635	42,870	13,982	34,838	148,771	588,836	737,607
Concentrated and fluid milk (4023)	134	11,444	34,584	5,586	14,905	71,440	195,957	267,397
1947, adjusted total (comparable to prior years) ⁴	562	n.a.	n.a.	n.a.	n.a.	164,000	648,000	812,000
1930	562	12,392	15,916	9,705	11,234	46,233	163,523	209,756
1937	601	10,743	13,251	8,067	9,964	44,112	166,606	210,718
1935	467	9,801	10,013	8,458	8,319	40,544	130,045	171,489
1933	436	7,338	7,758	6,331	6,100	34,388	96,608	131,086
1931	485	n.a.	n.a.	6,121	7,256	39,201	100,397	148,598
1929	535	8,498	11,681	7,065	8,795	45,323	163,787	209,110
1927	464	8,742	11,757	7,390	9,191	40,406	159,680	200,086
1925	402	8,385	10,629	7,118	8,391	31,206	140,041	171,247
1923	378	n.a.	n.a.	8,293	10,126	33,115	153,996	187,111
1921	382	12,268	15,911	9,462	10,349	44,312	132,525	176,837
1919	401	16,487	19,924	13,675	14,278	56,912	282,595	339,507
1914	100	7,579	5,613	6,002	3,602	13,441	55,720	69,161
1909 ⁸	136	4,946	3,156	4,164	2,170	8,417	26,878	35,295
1904 ⁹	81	3,688	1,876	3,375	1,513	4,151	16,373	20,524
Ice cream and ices:								
1947, total	2,273	80,882	216,994	44,260	103,877	456,684	843,330	1,300,023
Ice cream and ices (2024)	1,521	35,807	92,000	23,196	52,222	228,049	383,706	611,755
Ice cream, ices, and fluid milk (4024)	752	45,075	124,994	21,064	51,655	228,635	450,633	688,268
1947, adjusted total (comparable to prior years) ⁴	2,273	n.a.	n.a.	n.a.	n.a.	325,000	545,000	870,000
1930 ¹⁰	2,696	n.a.	n.a.	15,443	17,104	138,265	143,758	282,023
1937	2,885	24,506	32,430	18,664	21,269	138,416	143,887	282,003
1935	2,447	24,024	31,738	17,321	19,104	108,409	101,276	209,685
1933	2,118	19,819	24,215	14,367	16,145	92,071	60,315	158,386
1931	2,948	n.a.	n.a.	17,819	25,416	158,011	110,504	268,515
1929	3,150	20,431	50,948	22,399	33,803	172,450	155,964	328,414
1927	2,981	28,703	48,565	21,927	33,108	151,043	150,602	301,645
1925	2,790	29,566	47,642	23,043	33,457	145,312	140,864	286,176
1923	2,762	28,592	44,658	23,132	32,435	114,660	145,307	259,067
1921	2,528	24,867	37,387	20,209	28,237	92,092	121,170	213,262
1919	3,475	24,141	30,250	19,155	21,699	73,108	116,375	189,483
1914 ¹¹	2,437	12,862	9,436	10,376	6,845	23,211	32,772	55,983
Special dairy products:								
1947, total	503	26,923	79,864	15,050	38,044	150,705	471,991	622,696
Special dairy products (2025)	130	7,367	18,472	6,119	13,874	47,843	243,608	291,451
Special dairy products and fluid milk (4025)	373	19,556	61,392	8,931	24,170	102,862	228,383	331,245
1947, adjusted total (comparable to prior years) ⁴	503	n.a.	n.a.	n.a.	n.a.	54,000	273,000	327,000
1930	51	3,085	3,800	2,378	2,427	7,185	50,384	57,569
1937 ¹²	34	n.a.	n.a.	1,911	2,017	7,306	45,217	52,523
Plastic cream and bulk products:								
1947, total (4020)	510	17,218	45,756	12,275	31,415	115,871	574,305	690,176
1947, adjusted total (comparable to prior years) ⁴	510	n.a.	n.a.	n.a.	n.a.	35,000	140,000	175,000

n.a.—Not available.

¹ Value of products less cost of materials, supplies, fuel, electricity, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

² Figures for years prior to 1935 do not include cost of contract work.

³ For 1947 and 1929, value of products shipped; for all other years, value of products made. See GENERAL EXPLANATIONS—Value of products shipped.

⁴ Adjusted to exclude fluid milk operations of plants classified in industries 4021, 4022, 4023, 4024, 4025, and 4029 (dairy products establishments that also ship fluid milk). Estimated by deducting from value of shipments the value of fluid milk (bottled and bulk) handled by plants in those industries, and applying to the balance the 1947 cost of materials ratios (cost of materials divided by value of shipments) for the corresponding industries beginning with the digit 2. Note that the 1947 data for the four-digit industries do not include proportionate shares of industry 4020 covered in 1939.

⁵ The figures for years prior to 1937 are omitted from this table because they do not include data for establishments primarily engaged in the manufacture of special dairy products, classified for those years in "Food preparations, n.e.c."

⁶ The figures for "All employees" for 1937 do not include data for employees other than production workers reported by the "Special dairy products" industry, a component of the "Dairy products" group. The figures do include, however, 1911 production workers and \$2.0 million in wages for this industry.

⁷ Prior to 1904, "Creamery butter," "Natural cheese," and "Concentrated milk" were combined in one industry.

⁸ The coverage of "Natural cheese" was incomplete in the 1933 census.

⁹ The figures for 1904 and 1909, are not entirely comparable with those for later years because they do not include data for powdered milk and sugar of milk, which were classified in "Chemicals, n.e.c." for those years.

¹⁰ Revised to exclude data for 38 establishments that were primarily retail stores. Value added for 1939, including data for these establishments, was \$139.9 million.

¹¹ Prior to 1914, "Ice cream and ices" was not canvassed in the Census of Manufactures.

¹² "Special dairy products" was formerly classified in "Food preparations, n.e.c." Separate figures are therefore not available for years prior to 1937.

CENSUS OF MANUFACTURES: 1947

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947

[Money figures and man-hours in thousands. For explanation of column captions see GENERAL EXPLANATIONS]

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Creamery butter, total ¹	1,633	20,564	\$44,373	15,242	35,295	\$31,863	\$107,248	\$737,465	\$844,743	\$16,191
Northeast	30	471	1,184	323	756	720	2,346	13,983	16,329	156
New York	20	240	624	176	405	412	1,395	6,253	7,648	91
East North Central	293	5,570	12,716	4,137	9,327	8,990	28,575	180,708	218,373	5,491
Ohio	33	1,427	3,536	915	2,036	2,118	6,279	32,338	38,617	720
Indiana	25	908	2,016	719	1,724	1,453	5,973	24,186	30,150	664
Illinois	40	1,067	2,512	778	1,637	1,702	5,453	31,561	37,014	1,033
Michigan	64	686	1,419	532	1,208	1,119	3,410	26,032	29,442	738
Wisconsin	122	1,482	3,233	1,193	2,722	2,598	7,460	75,081	83,141	2,246
West North Central	1,038	9,612	19,452	7,163	16,791	14,465	47,082	306,581	443,063	8,760
Minnesota	476	3,486	6,674	2,569	6,176	5,248	15,246	144,211	159,357	2,575
Iowa	295	2,033	4,163	1,569	3,750	3,214	11,373	113,170	124,543	1,330
Missouri	34	797	1,463	588	1,468	1,364	4,128	33,218	37,346	610
Nebraska	64	1,050	2,083	823	1,765	1,531	5,132	35,996	41,128	520
Kansas	38	851	1,855	672	1,368	1,195	4,001	24,048	28,109	952
South	91	2,164	4,300	1,575	3,705	2,888	12,972	56,733	69,705	1,080
Kentucky	6	371	1,056	363	831	740	4,143	15,922	20,065	236
Mississippi	4	114	205	88	196	140	476	2,534	3,010	105
Arkansas	6	156	279	117	352	197	800	3,794	4,690	347
Oklahoma	25	536	988	419	943	703	2,395	15,391	17,780	299
Texas	16	212	411	172	433	319	1,038	5,105	6,293	146
Mountain	95	1,198	2,626	915	2,127	1,914	5,987	37,813	43,800	1,119
Montana	38	242	574	178	390	333	1,023	4,586	5,600	178
Idaho	22	510	1,240	408	987	851	3,190	20,285	23,475	629
Colorado	18	225	483	151	342	310	1,018	7,640	8,658	183
Pacific	80	1,549	4,035	1,129	2,589	2,897	10,286	42,357	52,843	1,079
Washington	27	455	1,256	271	608	746	1,998	10,517	12,515	314
Oregon	31	549	1,437	395	964	1,032	3,867	11,455	15,322	471
California	20	545	1,342	463	927	1,119	4,421	20,585	25,000	291
Creamery butter and fluid milk, total ¹	524	17,424	45,238	9,944	24,366	22,885	83,518	266,703	350,221	11,765
Northeast	24	1,570	4,811	725	1,785	2,046	7,535	18,898	26,433	492
Pennsylvania	16	846	2,622	323	873	912	3,386	9,404	12,880	296
East North Central	97	3,778	10,849	1,908	4,682	4,631	18,482	55,780	74,242	2,247
Ohio	27	935	2,836	453	1,134	1,176	4,871	12,060	16,931	604
Indiana	12	960	2,061	568	1,204	1,211	4,733	10,034	15,607	445
Illinois	9	407	1,007	229	537	495	1,745	7,112	8,857	335
Michigan	25	596	1,667	320	831	771	2,435	9,060	12,395	440
Wisconsin	24	880	2,378	398	970	978	4,698	15,894	20,492	463
West North Central	255	6,567	15,491	3,947	9,899	8,312	31,392	118,445	149,437	4,821
Minnesota	99	2,035	5,014	1,161	2,798	2,549	10,717	39,744	50,461	1,566
Iowa	69	1,266	2,737	849	2,244	1,747	6,505	31,449	38,014	879
Missouri	10	309	684	190	504	498	1,198	4,130	5,328	178
Nebraska	24	1,201	3,151	638	1,623	1,325	5,049	19,089	24,018	697
Kansas	13	1,215	2,758	740	1,844	1,471	5,047	13,849	18,806	1,056
South Atlantic	20	771	1,746	510	1,170	977	3,130	7,397	10,517	322
Virginia	13	622	1,461	399	895	750	2,583	5,917	8,599	407
East South Central	6	453	1,214	210	445	419	2,378	5,399	7,779	275
West South Central	21	1,075	2,414	576	1,408	1,008	5,308	14,781	20,089	1,007
Oklahoma	7	461	955	287	688	536	2,328	6,000	8,294	338
Mountain	56	1,615	3,909	1,004	2,449	2,295	7,337	21,438	28,775	1,030
Montana	14	195	423	128	311	241	1,201	2,803	4,004	349
Idaho	9	110	267	86	225	104	531	1,812	2,343	92
Wyoming	15	176	385	125	288	275	1,052	2,550	3,602	113
Colorado	11	757	1,920	386	986	902	2,615	8,174	10,780	298
Pacific	45	1,595	4,804	1,064	2,528	3,107	7,060	24,586	32,552	1,331
Washington	29	961	2,830	658	1,583	1,895	5,110	14,082	19,172	650
Natural cheese, total ¹	1,711	12,320	27,597	10,535	24,975	23,024	63,257	394,678	467,935	12,385
New England	24	178	411	140	310	280	918	3,090	4,014	159
Vermont	13	110	262	63	211	192	607	2,340	3,007	81
Middle Atlantic	118	1,049	2,505	607	2,170	1,965	5,823	20,691	32,514	649
New York	95	790	1,921	689	1,646	1,500	4,413	21,745	29,158	732
Pennsylvania	20	259	584	203	488	431	1,309	4,635	6,044	184
East North Central	1,245	6,328	14,079	5,571	12,958	12,431	36,155	237,504	273,749	5,749
Illinois	87	1,125	2,578	952	2,254	2,004	5,116	28,952	34,098	1,003
Wisconsin	1,067	3,853	8,292	3,451	7,994	7,620	25,078	174,924	209,092	2,872
West North Central	118	1,758	3,803	1,481	3,605	3,079	6,033	55,271	61,594	1,823
Minnesota	44	713	1,822	586	1,481	1,435	2,491	28,714	31,265	813
Iowa	16	59	132	50	127	114	305	2,305	2,810	135
Missouri	40	788	1,448	673	1,601	1,101	2,339	19,595	21,634	714
Kansas	13	141	280	110	272	220	598	3,391	3,889	93
South Atlantic	4	33	62	26	64	47	160	840	1,000	41
East South Central	45	982	2,014	797	2,129	1,504	4,448	23,501	28,639	858
Kentucky	11	338	733	287	740	575	1,660	7,515	9,175	187
Tennessee	17	383	775	311	841	584	1,858	10,872	12,730	462
Alabama	5	77	144	64	179	113	247	1,460	1,707	121
Mississippi	12	184	362	135	369	232	683	3,744	4,427	88

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947—Continued

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Natural cheese—Continued										
West South Central.....	32	508	\$985	423	1,062	\$778	\$1,986	\$9,869	\$11,845	\$638
Arkansas.....	10	151	277	130	321	228	436	3,158	3,554	(1)
Oklahoma.....	11	192	378	155	376	296	967	3,384	4,351	159
Texas.....	11	165	330	138	365	254	583	3,317	3,900	(1)
West.....	125	1,484	3,737	1,190	2,677	2,940	7,734	37,736	45,470	2,174
Idaho.....	20	330	779	288	728	643	1,565	8,809	10,454	479
Utah.....	15	130	288	111	271	250	1,237	3,763	5,000	272
Oregon.....	32	331	896	290	570	788	1,515	11,075	13,190	198
Natural cheese and fluid milk, total 1.....	100	4,259	12,377	2,157	5,609	6,165	28,081	65,900	93,981	2,973
Middle Atlantic.....	11	817	2,372	622	1,112	1,418	6,932	18,280	25,212	306
East North Central.....	49	1,443	4,140	414	1,592	1,675	6,903	17,804	24,707	866
Ohio.....	9	423	1,441	116	376	472	1,904	4,335	6,239	281
Illinois.....	10	297	802	159	461	356	1,284	2,711	3,995	119
Wisconsin.....	16	318	764	149	345	343	1,172	5,700	6,872	182
West North Central.....	16	507	1,331	255	662	547	2,165	6,144	8,309	892
Missouri.....	7	330	932	145	416	307	1,408	4,345	5,753	742
South.....	12	514	1,260	256	737	523	2,135	6,780	8,915	258
Kentucky.....	3	210	507	84	203	201	918	2,441	3,359	135
West.....	12	978	3,284	610	1,506	2,002	9,946	16,892	26,838	681
Concentrated milk, total 1.....	428	16,635	42,870	13,982	33,711	34,838	148,771	588,836	737,607	15,111
New England.....	10	159	350	131	331	285	1,464	5,515	6,979	120
Vermont.....	3	104	221	98	263	206	843	4,317	5,160	34
Middle Atlantic.....	39	1,245	3,139	1,068	2,636	2,615	11,174	39,333	50,507	904
New York.....	29	844	2,132	724	1,860	1,773	8,612	28,822	34,434	605
Pennsylvania.....	10	401	1,027	344	776	842	2,562	13,511	16,073	299
East North Central.....	176	8,129	21,872	6,809	16,698	17,961	74,340	317,112	391,452	8,163
Ohio.....	25	1,346	3,624	1,088	2,630	2,865	13,850	50,789	64,639	895
Indiana.....	12	569	1,676	497	1,291	1,433	4,553	20,987	26,540	1,292
Illinois.....	32	1,054	2,994	893	2,282	2,296	10,645	36,734	47,379	1,415
Michigan.....	32	1,224	3,389	1,021	2,456	2,776	10,686	45,475	56,161	1,460
Wisconsin.....	75	3,936	10,219	3,400	8,060	8,591	34,606	162,127	196,733	3,101
West North Central.....	89	2,409	5,627	2,028	5,246	4,470	18,158	66,930	85,088	1,872
Minnesota.....	46	1,211	2,849	1,031	2,675	2,336	7,375	25,002	32,377	1,083
Missouri.....	14	636	1,407	630	1,390	1,084	5,548	24,263	29,811	354
Kansas.....	13	398	639	329	824	714	3,310	12,440	15,750	288
South Atlantic.....	12	600	1,456	465	1,149	1,132	7,516	19,585	27,101	373
East South Central.....	22	1,293	3,083	1,085	2,686	2,521	11,779	39,972	51,751	1,382
Tennessee.....	7	438	1,129	380	973	955	3,579	15,017	18,596	467
West South Central.....	17	439	914	366	841	694	3,116	8,924	12,040	175
Mountain.....	19	494	1,190	381	906	898	5,192	18,504	23,696	316
Utah.....	7	216	526	166	384	378	2,194	7,022	10,116	128
Pacific.....	44	1,867	5,219	1,559	3,218	4,262	16,032	72,961	88,093	1,806
Washington.....	9	224	686	194	455	589	2,850	10,073	12,923	244
Oregon.....	6	129	375	112	247	321	1,337	3,265	4,602	85
California.....	29	1,614	4,158	1,253	2,516	3,352	11,845	59,623	71,468	1,477
Concentrated and fluid milk, total 1.....	134	11,444	34,584	5,586	13,428	14,905	71,440	195,957	267,397	7,628
New England.....	13	2,477	7,522	1,072	2,461	2,817	23,677	50,079	73,756	855
Connecticut.....	4	612	1,941	220	572	592	2,606	10,132	12,738	143
Middle Atlantic.....	27	2,574	7,078	1,068	2,489	2,803	12,828	36,193	49,021	1,756
New York.....	12	1,212	3,602	681	1,362	1,590	6,327	22,050	28,377	689
Pennsylvania.....	15	1,362	4,076	477	1,127	1,213	6,501	14,143	20,644	1,167
East North Central.....	38	2,755	9,102	1,324	3,294	3,652	13,822	50,301	64,123	1,680
Ohio.....	14	836	2,703	369	908	933	3,810	11,356	15,160	485
Illinois.....	8	693	2,480	272	620	806	4,415	6,569	13,084	345
Wisconsin.....	8	712	2,034	414	1,012	1,077	2,871	17,119	19,990	426
West North Central.....	21	1,478	3,956	892	1,956	2,307	7,970	29,771	37,741	1,478
Iowa.....	3	302	877	168	352	419	1,932	4,362	6,294	187
Kansas.....	6	274	687	150	402	314	1,699	3,857	5,566	153
South.....	20	1,595	4,652	909	2,320	2,226	9,700	20,668	30,368	1,033
Kentucky.....	4	737	2,403	372	966	847	5,564	7,399	12,063	213
Oklahoma.....	3	160	355	108	285	221	691	1,220	1,911	174
Texas.....	5	282	679	144	351	347	1,217	5,008	6,225	289
West.....	15	565	1,674	381	908	1,100	3,443	8,945	12,388	826
Washington.....	3	86	305	49	112	158	417	1,504	1,921	(1)
California.....	6	132	360	82	182	222	846	3,272	4,118	127
Ice cream and ices, total 1.....	1,521	35,807	92,000	23,196	52,779	52,222	228,049	383,706	611,755	36,026
New England.....	130	2,829	7,588	1,752	4,007	3,961	22,277	35,405	57,682	3,282
Massachusetts.....	68	1,577	4,167	986	2,236	2,135	11,738	18,224	29,962	1,906
Connecticut.....	22	481	1,255	292	661	681	4,009	6,312	10,321	467
Middle Atlantic.....	267	9,466	27,428	6,230	14,651	16,226	71,184	117,993	189,177	8,068
New York.....	124	4,361	13,381	2,789	6,330	7,574	38,612	50,548	89,160	4,177
New Jersey.....	32	958	3,209	576	1,305	1,795	7,015	11,316	18,331	1,157
Pennsylvania.....	111	4,147	10,838	2,865	7,016	6,857	25,557	56,129	81,686	3,634
East North Central.....	384	7,304	19,240	4,736	10,738	10,724	46,618	76,736	123,354	6,968
Ohio.....	70	1,477	3,621	1,025	2,350	2,161	8,497	14,930	23,427	1,136
Indiana.....	50	1,015	2,552	645	1,490	1,383	6,421	10,749	17,170	933
Illinois.....	93	2,453	7,117	1,479	3,320	3,473	16,848	25,409	42,257	2,856
Michigan.....	98	1,573	3,997	1,064	2,411	2,502	8,864	17,376	26,240	1,470
Wisconsin.....	64	786	1,962	523	1,158	1,205	5,988	8,272	14,200	573

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947—Continued

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Ice cream and ices—Continued										
West North Central	156	2,970	\$7,480	1,914	4,161	\$4,348	\$16,133	\$30,283	\$46,416	\$2,840
Iowa	41	665	1,312	437	908	756	3,555	6,037	9,592	304
Missouri	42	900	2,756	603	1,306	1,561	5,880	9,780	15,669	1,123
South Atlantic	164	4,959	11,435	3, (4)	6,865	5,841	28,090	46,738	74,828	4,643
District of Columbia	8	826	2,100	345	770	818	4,105	6,135	10,240	522
Virginia	27	686	1,549	461	955	827	3,755	6,278	10,033	430
North Carolina	26	985	2,056	609	1,454	1,083	4,651	9,880	14,531	728
East South Central	103	2,263	4,611	1,450	3,252	2,589	10,616	17,485	28,101	2,604
Tennessee	39	1,089	2,206	745	1,684	1,338	4,986	8,753	13,739	1,111
Alabama	26	629	1,255	357	773	621	2,997	4,246	7,243	731
West South Central	133	2,528	4,851	1,755	4,034	2,943	11,753	21,048	33,701	2,737
Texas	73	1,297	2,538	829	1,879	1,405	6,588	12,056	18,644	1,690
Mountain	53	1,079	2,370	686	1,492	1,343	5,571	9,135	14,706	1,123
Montana	7	166	350	97	217	181	1,355	1,355	2,204	72
Idaho	7	156	346	86	208	171	778	1,420	2,108	(4)
Colorado	13	127	296	93	211	167	915	1,331	2,246	256
Utah	13	354	671	215	416	370	1,456	2,468	3,924	208
Pacific	131	2,409	6,988	1,630	3,579	4,247	15,807	27,083	43,700	2,872
California	94	1,954	5,736	1,304	2,815	3,393	13,003	23,060	36,072	2,332
Ice cream, ices, and fluid milk, total 1										
Northeast	752	45,075	124,994	21,064	50,118	51,655	228,635	459,633	688,268	33,358
Massachusetts	132	5,062	16,552	2,533	6,101	6,538	28,672	62,310	90,091	3,724
New York	15	570	1,580	250	575	574	3,030	6,101	9,131	230
Pennsylvania	75	3,443	2,677	394	934	1,149	5,005	10,743	15,748	651
Wisconsin	76	908	8,116	1,529	3,752	3,863	14,860	32,060	46,010	2,141
East North Central	243	10,691	30,389	5,345	12,738	13,087	54,044	112,469	167,113	7,017
Ohio	70	4,704	13,632	2,150	5,171	5,515	25,575	51,551	77,126	3,438
Indiana	32	1,543	4,076	786	1,705	1,746	6,466	12,943	19,400	824
Illinois	33	1,635	4,544	992	2,175	2,738	8,449	16,703	25,212	1,533
Michigan	59	1,773	5,735	874	2,267	2,520	9,264	20,398	29,092	1,107
Wisconsin	49	1,030	2,402	543	1,330	1,168	4,860	10,814	15,704	915
West North Central	101	6,658	19,025	2,926	7,112	6,813	35,045	58,817	93,862	4,226
Minnesota	19	980	2,679	463	1,027	1,072	4,708	10,258	14,006	607
Iowa	21	492	1,172	270	596	599	2,712	4,042	7,054	306
Missouri	21	3,818	11,761	1,345	3,366	3,261	20,715	31,908	52,713	2,065
South Dakota	5	178	497	107	356	314	872	1,725	2,587	146
Kansas	22	832	2,095	506	1,184	1,105	4,133	6,836	10,909	554
South Atlantic	73	6,346	14,848	3,052	7,388	5,953	27,730	60,520	88,250	5,508
Virginia	11	807	1,860	392	900	712	2,869	7,548	10,417	793
West Virginia	6	314	771	162	379	352	2,128	3,681	5,800	276
North Carolina	21	2,103	4,848	1,159	2,686	2,122	8,055	20,331	29,280	1,119
Georgia	13	891	1,943	400	934	746	4,131	8,617	12,748	1,030
East South Central	33	1,735	4,033	911	2,205	1,851	8,017	15,765	23,782	1,013
Tennessee	8	618	1,497	280	627	492	2,261	5,012	8,173	359
Alabama	9	560	1,472	260	650	501	3,562	6,223	8,786	314
West South Central	77	5,643	14,207	2,467	6,388	5,007	20,714	53,341	83,055	4,001
Arkansas	4	192	470	82	222	150	691	2,101	3,102	258
Louisiana	6	737	1,953	263	668	528	3,864	7,050	11,514	359
Oklahoma	20	909	2,049	407	1,085	801	4,007	7,987	11,994	681
Texas	47	3,805	9,735	1,715	4,413	3,528	20,932	35,513	56,445	3,603
Mountain	40	1,200	2,797	700	1,561	1,580	5,723	11,071	16,704	943
Colorado	17	594	1,336	404	862	937	3,090	4,630	7,090	240
New Mexico	8	371	832	171	400	311	1,476	3,274	4,740	200
Pacific	53	7,140	23,143	3,130	6,025	10,226	30,090	85,322	124,412	5,126
Washington	14	1,177	3,998	584	1,360	1,850	7,401	14,683	21,984	784
California	35	5,866	18,914	2,495	5,153	8,226	31,185	69,731	100,916	4,283
Special dairy products, total 1										
Northeast	130	7,367	18,472	6,119	13,377	13,874	47,843	243,608	291,451	3,782
New York	36	757	1,907	598	1,393	1,330	6,566	20,262	32,828	284
East North Central	17	490	1,064	378	962	826	4,140	13,073	17,819	211
Illinois	9	5,142	13,491	4,286	9,334	10,132	35,384	165,740	201,124	2,043
Wisconsin	35	1,155	3,082	988	2,076	2,396	7,278	38,733	46,011	707
Wisconsin	35	2,055	6,702	2,231	4,863	5,186	18,070	103,754	121,824	1,158
West North Central	13	300	580	264	536	486	1,127	15,075	16,202	114
Missouri	6	202	375	175	369	308	821	11,414	12,235	45
South	14	770	1,526	634	1,398	1,151	3,145	22,393	25,538	320
West	9	398	968	337	716	775	1,621	14,138	15,760	112
Special dairy products and fluid milk, total 1										
New England	373	19,556	61,392	8,931	21,251	24,170	102,862	228,383	331,245	11,558
Rhode Island	17	1,190	3,747	398	958	926	6,305	13,771	20,076	643
Connecticut	4	438	1,380	144	341	285	2,357	5,582	7,939	83
Connecticut	6	341	1,105	103	239	292	1,950	3,806	5,769	419
Middle Atlantic	73	5,043	16,295	2,534	5,931	7,483	25,144	60,303	91,447	3,842
New York	19	1,687	5,475	786	1,785	2,227	8,518	21,802	30,320	960
New Jersey	6	547	1,826	351	795	1,075	3,856	12,848	16,704	578
Pennsylvania	48	2,809	8,994	1,417	3,851	4,181	12,770	31,053	44,423	2,374
East North Central	147	5,391	17,431	2,518	6,078	7,110	28,885	53,706	82,081	3,334
Ohio	39	1,725	5,521	800	2,095	2,458	8,990	17,193	26,183	903
Indiana	36	963	3,313	438	1,043	1,195	4,861	10,574	15,435	554
Illinois	21	754	2,637	430	922	1,116	5,661	9,410	15,071	711
Michigan	15	366	1,214	175	436	525	1,686	4,294	5,980	157
Wisconsin	36	1,583	4,746	675	1,582	1,816	7,087	12,325	20,012	1,006

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947—Continued

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Special dairy products and fluid milk—Continued										
West North Central.....	17	735	\$2,413	251	614	\$718	\$3,890	\$7,607	\$11,497	\$291
South Atlantic.....	36	3,072	9,434	1,263	3,442	3,246	17,854	35,469	53,323	1,390
West Virginia.....	6	467	1,306	223	595	665	1,861	3,647	5,508	237
North Carolina.....	8	302	752	191	495	458	1,783	2,698	4,481	217
East South Central.....	33	1,190	2,830	515	1,177	1,011	5,032	11,475	16,507	697
Kentucky.....	8	203	526	70	168	151	873	1,561	2,434	160
Tennessee.....	17	745	1,851	340	752	627	3,011	7,645	10,656	413
West South Central.....	12	1,071	3,272	436	1,160	967	5,510	11,110	16,629	496
Texas.....	5	479	1,486	171	512	400	2,525	5,245	7,770	268
Mountain.....	7	262	690	110	249	258	1,031	3,027	4,058	112
Pacific.....	31	1,663	5,271	906	1,642	2,451	9,202	25,825	35,027	753
California.....	26	1,421	4,689	802	1,383	2,080	8,355	23,604	31,959	634
Plastic cream and bulk products, total ¹	510	17,218	45,756	12,275	29,518	31,415	115,871	574,305	690,176	17,269
New England.....	23	869	2,170	655	1,798	1,538	4,372	32,641	37,013	472
Middle Atlantic.....	89	4,439	13,035	3,315	8,158	8,641	36,759	143,827	180,586	3,584
New York.....	59	3,129	9,031	2,449	6,035	6,316	24,486	107,932	132,418	2,891
East North Central.....	183	5,810	14,790	4,032	9,619	10,652	35,319	214,044	249,363	6,303
Ohio.....	36	1,708	3,418	972	2,361	2,243	6,617	30,285	42,902	784
Indiana.....	19	550	1,523	412	1,015	1,037	4,190	19,585	23,775	492
Illinois.....	23	838	2,779	714	1,685	2,337	9,710	43,948	53,658	438
Michigan.....	31	1,151	2,932	750	1,826	2,035	5,601	32,681	38,582	1,351
Wisconsin.....	74	1,563	4,138	1,184	2,732	3,000	9,201	81,245	90,446	3,238
West North Central.....	99	1,686	3,962	1,213	3,045	2,832	10,723	62,896	73,610	2,102
Minnesota.....	50	477	1,236	408	955	1,031	3,709	20,382	33,151	677
Iowa.....	15	207	476	145	361	336	1,072	10,801	11,873	261
Missouri.....	11	603	1,382	394	1,007	877	3,773	16,105	19,878	801
Nebraska.....	8	120	229	88	223	174	699	2,294	2,933	54
Kansas.....	12	229	542	148	427	347	1,348	3,852	5,200	245
South Atlantic.....	21	1,087	2,570	718	1,513	1,460	5,336	27,200	32,536	1,152
Virginia.....	5	552	1,482	276	631	589	2,185	9,265	11,460	728
East South Central.....	7	179	393	137	360	316	953	4,603	5,648	192
West South Central.....	18	688	1,467	347	798	615	3,449	8,342	11,791	399
Texas.....	14	512	1,203	278	673	488	2,689	7,137	9,826	365
Mountain.....	18	224	508	151	354	314	1,118	4,471	5,589	235
Colorado.....	10	147	346	91	233	197	794	1,966	2,760	159
Pacific.....	52	2,330	6,861	1,677	3,873	5,047	17,810	76,221	94,031	2,830
Washington.....	9	224	683	179	445	548	1,766	9,055	10,824	333
Oregon.....	11	453	1,413	268	849	682	4,922	12,660	17,582	317
California.....	32	1,559	4,765	1,230	2,579	3,817	11,122	54,503	65,025	2,180

¹ Withheld to avoid disclosing figures for individual companies.
² For each producing State not shown separately in the table (see GENERAL EXPLANATIONS "Disclosure of Data for Individual Companies"), there are shown below the number of establishments and, in parentheses, the number of employees for States represented by three or more companies, when possible.

Creamery butter: *Northeast*, Vermont, 3; Pennsylvania, 13; *West North Central*, North Dakota, 57 (905); South Dakota, 74 (490); *South*, Maryland, 4 (57); Virginia, 9 (267); West Virginia, 2; North Carolina, 1; Georgia, 2; Tennessee, 11 (258); Alabama, 1; Louisiana, 1; *Mountain*, Wyoming, 6; New Mexico, 2; Utah, 6 (85); Nevada, 3 (41).

Creamery butter and fluid milk: *Northeast*, Maine, 2; Massachusetts, 1; Connecticut, 1; New York, 4 (542); *West North Central*, North Dakota, 28 (417); South Dakota, 12 (127); *South Atlantic*, Maryland, 1; West Virginia, 1; North Carolina, 4 (79); Georgia, 1; *East South Central*, Kentucky, 4; Tennessee, 2; *West South Central*, Arkansas, 2; Louisiana, 1; Texas, 11 (480); *Mountain*, New Mexico, 2; Arizona, 1; Utah, 1; Nevada, 3 (47); *Pacific*, Oregon, 11 (180); California, 5 (454).

Natural cheese: *New England*, Maine, 1; New Hampshire, 1; Massachusetts, 5 (37); Connecticut, 4; *Middle Atlantic*, New Jersey, 3 (20); *East North Central*, Ohio, 30 (479); Indiana, 20 (503); Michigan, 41 (308); *West North Central*, South Dakota, 3; Nebraska, 2; *South Atlantic*, Virginia, 1; West Virginia, 1; North Carolina, 1; Georgia, 1; *West*, Montana, 6 (133); Wyoming, 1; Colorado, 5; Arizona, 1; Washington, 8 (149); California, 28 (355).

Natural cheese and fluid milk: *Middle Atlantic*, New York, 4 (98); New Jersey, 4 (220); Pennsylvania, 3 (490); *East North Central*, Indiana, 6 (318); Michigan, 8 (87); *West North Central*, Iowa, 7; Nebraska, 1; Kansas, 1; *South*, West Virginia, 2; Tennessee, 1; Alabama, 1; Louisiana, 1; Oklahoma, 1; Texas, 2; *West*, Wyoming, 1; Colorado, 6 (91); Utah, 2; Washington, 1; Oregon, 1; California, 1.

Concentrated milk: *New England*, Massachusetts, 4 (38); Rhode Island, 2; Connecticut, 1; *West North Central*, Iowa, 9 (138); North Dakota, 1; South Dakota, 3; Nebraska, 3; *South Atlantic*, Maryland, 2; Virginia, 3 (180); West Virginia, 1; North Carolina, 1; South Carolina, 1; Georgia, 2; Florida, 2; *East South Central*, Kentucky, 7 (545); Alabama, 2; Mississippi, 6; *West South Central*, Arkansas, 4 (103); Oklahoma, 4 (39); Texas, 9 (297); *Mountain*, Montana, 2; Idaho, 3 (148); Colorado, 5 (84); New Mexico, 1; Arizona, 1.

Concentrated and fluid milk: *New England*, Maine, 2; New Hampshire, 1; Massachusetts, 5 (1,725); Rhode Island, 1; *East North Central*, Indiana, 4 (158); Michigan, 4 (356); *West North Central*, Minnesota, 4 (673); Missouri, 4 (183); South Dakota, 1; Nebraska, 3; *South*, Delaware, 1; Virginia, 2; West Virginia, 1; North Carolina, 1; Georgia, 1; Tennessee, 1; Louisiana, 1; *West*, Montana, 1; Idaho, 1; Wyoming, 1; New Mexico, 1; Oregon, 2.

Ice cream and ices: *New England*, Maine, 12 (321); New Hampshire, 5 (60); Vermont, 5 (116); Rhode Island, 18 (274); *West North Central*, Minnesota, 32 (687); North Dakota, 2; South Dakota, 5; Nebraska, 16 (308); Kansas, 18 (210); *South Atlantic*, Pennsylvania, 22 (853); Delaware, 6 (102); West Virginia, 11 (347); South Carolina, 13 (307); Florida, 26 (371); Georgia, 25 (482); *East South Central*, Kentucky, 22 (277); Mississippi, 16 (268); *West South Central*, Arkansas, 17 (321); Louisiana, 29 (595); Oklahoma, 14 (315); *Mountain*, Wyoming, 2; New Mexico, 3 (47); Arizona, 7 (196); Nevada, 1; *Pacific*, Washington, 21 (187); Oregon, 16 (268).

Ice cream, ices, and fluid milk: *Northeast*, Maine, 3 (47); New Hampshire, 2; Rhode Island, 2; Connecticut, 7 (290); New Jersey, 6 (516); *West North Central*, North Dakota, 5 (182); Nebraska, 8 (160); *South Atlantic*, Delaware, 1; Maryland, 9 (1,690); District of Columbia, 1; Virginia, 8 (160); Georgia, 2; Florida, 1; *East South Central*, Alabama, 7; Mississippi, 1; *West South Central*, Louisiana, 1; Oklahoma, 6; *Mountain*, Montana, 2; Wyoming, 1; Colorado, 1; Utah, 3 (231); *Pacific*, Washington, 2; Oregon, 3.

Special dairy products: *Northeast*, Vermont, 1; Massachusetts, 5; Rhode Island, 1; New Jersey, 4 (134); Pennsylvania, 8 (103); *East North Central*, Ohio, 11 (955); Indiana, 2; Michigan, 1; *West North Central*, Minnesota, 3 (46); Iowa, 2; Kansas, 2; *South*, North Carolina, 1; Georgia, 2; Tennessee, 6 (259); Alabama, 1; Mississippi, 1; Oklahoma, 2; Texas, 1; *West*, Idaho, 1; Utah, 2; Oregon, 1; California, 5 (186).

Special dairy products and fluid milk: *New England*, New Hampshire, 2; Vermont, 2; Massachusetts, 3 (259); *West North Central*, Minnesota, 5 (486); Iowa, 2; Missouri, 4; Kansas, 6 (90); *South Atlantic*, Delaware, 1; Maryland, 9 (1,690); District of Columbia, 1; Virginia, 8 (160); Georgia, 2; Florida, 1; *East South Central*, Alabama, 7; Mississippi, 1; *West South Central*, Louisiana, 1; Oklahoma, 6; *Mountain*, Montana, 2; Wyoming, 1; Colorado, 1; Utah, 3 (231); *Pacific*, Washington, 2; Oregon, 3.

Plastic cream and bulk products: *New England*, Maine, 3; New Hampshire, 2; Vermont, 14 (480); Massachusetts, 2; Rhode Island, 1; Connecticut, 1; *Middle Atlantic*, New Jersey, 2; Pennsylvania, 28; *West North Central*, South Dakota, 3 (50); *South Atlantic*, Maryland, 7 (138); District of Columbia, 2; West Virginia, 2; North Carolina, 2; South Carolina, 2; Georgia, 1; *East South Central*, Kentucky, 1; Tennessee, 3 (102); Mississippi, 3; *West South Central*, Arkansas, 1; Louisiana, 1; Oklahoma, 2; *Mountain*, Idaho, 1; Wyoming, 4; Utah, 3 (34).

TABLE 3.—DETAILED STATISTICS FOR THE UNITED STATES: 1947
 [Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS]

ITEM	Industry										
	Creamery butter	Creamery butter and fluid milk	Natural cheese	Natural cheese and fluid milk	Concentrated milk	Concentrated and fluid milk	Ice cream and ices	Ice cream, ices, and fluid milk	Special dairy products	Special dairy products and fluid milk	Plastic cream and bulk products
ALL ESTABLISHMENTS											
Number of establishments	1,633	524	1,711	100	428	134	1,521	752	130	373	510
All employees:											
Number (average for the year)	20,564	17,424	12,320	4,250	16,635	11,444	35,807	45,075	7,367	19,556	17,218
Salaries and wages, total	\$44,373	\$45,238	\$23,320	\$12,377	\$42,870	\$31,584	\$92,000	\$124,094	\$18,472	\$61,302	\$45,756
Production and related workers:											
Number (average for the year)	15,242	9,944	10,535	2,157	13,982	5,586	23,106	21,064	6,119	8,931	12,275
Man-hours, total	35,295	24,366	24,975	5,609	33,711	13,428	52,770	50,118	13,377	21,251	20,518
Wages, total	\$31,883	\$22,885	\$23,024	\$6,165	\$34,838	\$14,905	\$52,222	\$51,655	\$13,874	\$21,170	\$31,415
Value added by manufacture	\$107,248	\$83,518	\$63,257	\$28,081	\$148,771	\$71,440	\$228,049	\$228,635	\$47,843	\$102,862	\$115,871
ESTABLISHMENTS REPORTING DETAILED STATISTICS											
Number of establishments	1,485	514	1,296	91	428	131	1,241	714	130	351	405
All employees:											
Number (average for the year)	20,096	17,373	11,582	4,204	16,635	11,429	33,813	44,812	7,367	19,454	17,178
Salaries and wages, total	\$43,492	\$45,099	\$25,692	\$12,256	\$42,870	\$34,650	\$98,281	\$124,509	\$18,472	\$61,183	\$45,000
Production and related workers:											
Number (average for the year)	14,791	9,898	9,807	2,102	13,982	5,572	21,314	20,808	6,119	8,831	12,235
Man-hours, total	34,387	24,413	23,465	5,503	33,711	13,401	49,025	49,606	13,377	21,051	20,438
Wages, total	\$31,026	\$22,780	\$21,132	\$6,044	\$34,838	\$14,873	\$48,832	\$51,199	\$13,874	\$23,067	\$31,310
Value added by manufacture	\$102,647	\$83,293	\$55,791	\$27,828	\$148,771	\$71,388	\$220,900	\$228,100	\$47,843	\$102,320	\$115,440
Number of employees for pay period ended nearest Oct. 15:											
All employees:											
Male	19,936	17,530	11,275	4,265	16,089	11,365	32,958	45,102	7,220	19,702	16,828
Female	15,239	14,657	9,809	3,752	14,354	9,950	24,680	38,086	5,148	17,700	14,652
Production and related workers:											
Male	14,400	9,839	9,418	2,225	13,374	5,417	20,210	20,666	5,046	8,986	11,738
Female	11,783	8,086	8,535	2,113	12,500	5,149	15,092	18,258	4,264	8,714	11,173
Force-account construction workers:											
Male	2,617	1,153	883	112	874	268	5,127	2,408	1,682	272	565
Female	111	44	71	6	50	16	85	116	4	4	70
Administrative, supervisory, sales, and all other:											
Male	5,425	7,647	1,786	2,034	2,665	5,932	12,654	24,320	1,274	10,712	5,011
Female	3,350	5,927	1,204	1,633	1,805	4,787	9,614	19,714	881	9,042	3,401
All employees, number by month:											
January	18,563	16,231	10,249	3,965	15,294	10,736	28,214	41,634	7,186	18,768	15,891
February	18,781	16,376	10,490	3,991	15,606	10,813	28,751	41,881	7,203	18,820	16,178
March	19,193	16,673	11,052	4,017	16,276	10,928	30,069	42,518	7,547	18,916	16,581
April	20,029	17,081	11,781	4,081	17,137	11,205	32,842	43,952	7,551	19,030	17,270
May	20,921	17,629	12,535	4,169	17,823	11,479	36,143	46,370	7,307	19,403	17,870
June	21,851	18,243	13,197	4,271	18,462	12,041	39,433	47,722	7,735	19,777	18,805
July	21,541	18,341	13,121	4,381	18,329	12,193	40,359	47,802	7,648	19,954	18,602
August	21,210	18,343	12,648	4,416	17,683	12,075	39,013	47,953	7,015	20,026	18,019
September	20,413	17,934	11,879	4,390	16,771	11,799	37,485	46,574	7,338	19,800	17,421
October	19,936	17,530	11,275	4,265	16,089	11,365	32,960	45,102	7,220	19,702	16,828
November	19,398	17,212	10,468	4,223	15,345	11,236	30,559	43,861	7,045	19,520	16,429
December	18,700	16,862	9,961	4,205	14,644	11,214	28,871	42,822	6,992	19,424	16,050
Cost of materials, fuel, electricity, and contract work	\$726,059	\$266,282	\$366,255	\$64,741	\$688,836	\$195,410	\$360,251	\$458,089	\$243,008	\$227,838	\$673,783
Materials, parts, containers, and supplies	716,152	262,284	362,171	64,025	577,433	192,790	362,021	450,487	241,973	224,043	604,795
Fuels, total	4,977	2,164	2,725	393	9,607	1,601	2,222	3,587	1,036	1,830	6,368
Bituminous coal	2,394	789	1,836	164	6,247	721	728	1,435	837	618	3,814
Coke	311	59	100	10	126	78	63	130	20	100	250
Fuel oils	21	3	3	1	1	1	9	1	1	2	3
Gas	1,510	713	548	123	2,201	473	851	705	155	480	1,020
Other fuels	430	378	122	37	852	203	274	550	51	118	474
Purchased electric energy	311	222	116	58	181	216	297	733	2	404	184
Contract and commission work	3,053	1,657	1,199	323	1,758	938	4,077	3,954	501	1,357	2,384
Value of inventories:											
Beginning of year, total	\$28,980	\$12,161	\$22,025	\$2,152	\$35,040	\$7,250	\$55,028	\$35,416	\$34,256	\$9,354	\$15,140
End of year, total	22,212	7,146	17,014	850	21,019	3,867	13,208	11,642	10,000	2,180	8,106
Materials, supplies, and work in process	6,768	5,015	5,011	1,302	14,021	3,392	41,820	23,774	17,206	4,165	6,944
Finished products	35,810	12,501	26,336	2,303	41,223	7,123	48,931	32,150	43,097	6,752	16,000
Materials, supplies, and work in process	27,864	6,889	18,925	803	25,480	3,230	12,647	10,130	10,553	2,010	8,528
Expenditures for plant and equipment:											
New plant and equipment	\$16,191	\$11,765	\$12,385	\$2,973	\$15,111	\$7,628	\$36,026	\$33,358	\$3,782	\$11,558	\$17,209
Construction and major alteration of fixed plants	4,537	2,930	4,316	784	3,525	1,707	5,386	7,158	1,267	3,104	5,378
Buildings	3,937	2,714	4,065	767	2,927	1,181	4,932	6,001	1,130	2,984	4,718
Other construction	600	216	251	17	598	526	454	407	137	180	600
Machinery and equipment	11,654	8,835	8,069	2,189	11,586	5,921	30,640	26,200	2,515	8,304	11,891
Production machinery and equipment	8,502	5,507	6,687	1,225	9,193	3,392	14,943	13,905	2,165	4,820	6,588
Other machinery and equipment	3,152	3,328	1,382	964	2,393	2,529	15,697	12,295	350	3,474	2,303
Used plant and equipment, and land	545	604	382	245	600	403	2,201	1,884	140	484	673

TABLE 3.—DETAILED STATISTICS FOR THE UNITED STATES: 1947—Continued

ITEM	Industry										
	Creamery butter	Creamery butter and fluid milk	Natural cheese	Natural cheese and fluid milk	Concentrated milk	Concentrated and fluid milk	Ice cream and ices	Ice cream, ices, and fluid milk	Special dairy products	Special dairy products and fluid milk	Plastic cream and bulk products
ESTABLISHMENTS REPORTING DETAILED STATISTICS—Continued											
Number of highway-type motor vehicles owned or leased:											
Trucks.....	¹ 4,216	² 5,689	³ 2,016	⁴ 1,468	⁵ 1,317	⁶ 3,816	⁷ 8,399	⁸ 15,428	403	⁹ 8,164	¹⁰ 2,775
By manufacturer's rated capacity:											
Under 1 1/2 tons.....	1,227	2,931	416	709	402	2,040	2,985	7,670	145	4,306	868
1 1/2 tons.....	2,365	2,083	1,219	535	476	1,021	3,637	5,334	166	2,964	1,034
Over 1 1/2 tons and less than 3 1/2 tons.....	584	584	337	163	347	602	1,534	2,156	66	780	614
3 1/2 tons and less than 5 tons.....	11	71	19	44	48	119	118	114	12	78	115
5 tons and over.....	29	20	25	17	44	25	125	154	14	40	144
By body type:											
Van.....	872	748	387	156	242	737	699	1,591	72	650	674
Stake or platform.....	1,460	628	1,083	100	336	153	645	1,063	103	357	397
Panel or light delivery.....	1,093	3,263	308	890	352	2,666	2,942	10,018	183	5,937	1,140
All other trucks.....	791	1,050	238	322	387	260	4,113	2,756	45	1,211	564
Truck tractors.....	135	114	57	32	454	119	230	384	52	156	303
Trailers and semitrailers.....	135	132	61	45	¹¹ 499	187	¹² 250	¹³ 505	63	312	¹⁴ 423

¹ Includes 370 refrigerated-type bodies.
² Includes 479 refrigerated-type bodies.
³ Includes 119 refrigerated-type bodies.
⁴ Includes 174 refrigerated-type bodies.
⁵ Includes 216 tank-type and 184 refrigerated-type bodies.
⁶ Includes 146 tank-type and 167 refrigerated-type bodies.
⁷ Includes 4,931 refrigerated-type bodies.
⁸ Includes 1,920 refrigerated-type bodies.
⁹ Includes 278 refrigerated-type bodies.
¹⁰ Includes 258 refrigerated-type bodies.
¹¹ Includes 444 tank-type bodies.
¹² Includes 244 refrigerated-type bodies.
¹³ Includes 121 tank-type and 258 refrigerated-type bodies.
¹⁴ Includes 174 tank-type bodies.

TABLE 4.—SELECTED GENERAL STATISTICS BY SIZE OF ESTABLISHMENT, FOR THE UNITED STATES: 1947

[Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS. Data which cannot be shown without disclosing information for individual companies have been combined with figures for other groups. A ^d appears in the column where the figure has been omitted and the combined figure is printed in italics]

INDUSTRY AND ITEM	Total, all establishments	Establishments with an average of—									
		1-4 employees	5-9 employees	10-19 employees	20-49 employees	50-99 employees	100-249 employees	250-499 employees	500-999 employees	1,000-2,499 employees	2,500 employees and over
Creamery butter:											
Number of establishments.....	1,633	680	435	257	180	61	18	2			
Number of employees (average for the year).....	20,564	1,803	2,834	3,430	5,406	4,027	3,064	^(d)			
Value added by manufacture.....	\$107,248	\$10,209	\$12,926	\$17,106	\$29,271	\$21,729	\$16,007	^(d)			
Creamery butter and fluid milk:											
Number of establishments.....	524	64	139	127	120	35	26	11	2		
Number of employees (average for the year).....	17,424	189	932	1,752	3,026	2,511	4,045	4,369	^(d)		
Value added by manufacture.....	\$83,518	\$1,406	\$4,383	\$8,353	\$16,490	\$11,758	\$20,410	\$20,718	^(d)		
Natural cheese:											
Number of establishments.....	1,711	1,121	278	151	126	28	7				
Number of employees (average for the year).....	12,320	2,168	1,784	2,109	3,590	1,837	832				
Value added by manufacture.....	\$63,257	\$17,758	\$9,766	\$9,419	\$15,214	\$8,488	\$2,612				
Natural cheese and fluid milk:											
Number of establishments.....	100	12	17	24	22	14	9	1	1		
Number of employees (average for the year).....	4,259	38	111	332	632	985	2,161	^(d)	^(d)		
Value added by manufacture.....	\$28,081	\$204	\$446	\$1,303	\$2,408	\$6,032	\$16,728	^(d)	^(d)		
Concentrated milk:											
Number of establishments.....	428	56	50	63	134	70	37				
Number of employees (average for the year).....	16,635	156	384	844	4,489	5,438	5,324				
Value added by manufacture.....	\$148,771	\$2,015	\$3,304	\$6,207	\$35,990	\$56,906	\$44,349				
Concentrated and fluid milk:											
Number of establishments.....	134	4	8	17	43	35	16	6	5		
Number of employees (average for the year).....	11,444	9	57	241	1,337	2,430	2,459	1,673	3,238		
Value added by manufacture.....	\$71,440	\$44	\$338	\$1,080	\$7,082	\$12,711	\$12,804	\$8,537	\$28,844		
Ice cream and ices:											
Number of establishments.....	1,521	405	348	324	284	120	50	9	1		
Number of employees (average for the year).....	35,807	968	2,332	4,538	8,279	8,408	7,672	5,610	^(d)		
Value added by manufacture.....	\$228,049	\$5,357	\$10,350	\$23,224	\$48,181	\$58,126	\$56,706	\$20,105	^(d)		
Ice cream, ices, and fluid milk:											
Number of establishments.....	752	50	93	153	222	121	83	20	9	1	
Number of employees (average for the year).....	45,075	144	645	2,192	6,973	8,453	12,898	6,243	7,527	^(d)	
Value added by manufacture.....	\$228,635	\$907	\$2,916	\$9,151	\$31,875	\$42,547	\$67,157	\$36,791	\$37,291	^(d)	
Special dairy products:											
Number of establishments.....	130	32	18	15	21	24	15	3	2		
Number of employees (average for the year).....	7,367	73	126	213	644	1,683	2,485	2,143	^(d)		
Value added by manufacture.....	\$47,843	\$431	\$1,066	\$1,900	\$3,307	\$13,134	\$15,065	\$12,940	^(d)		
Special dairy products and fluid milk:											
Number of establishments.....	373	33	62	79	95	50	43	8	3		
Number of employees (average for the year).....	19,556	91	420	1,101	2,923	3,642	6,625	4,754	^(d)		
Value added by manufacture.....	\$102,862	\$596	\$1,909	\$5,044	\$15,275	\$17,846	\$34,539	\$27,653	^(d)		
Plastic cream and bulk products:											
Number of establishments.....	510	71	96	103	142	70	21	7			
Number of employees (average for the year).....	17,218	214	670	1,451	4,586	4,707	3,181	2,409			
Value added by manufacture.....	\$115,871	\$1,894	\$4,397	\$8,206	\$26,238	\$26,574	\$30,946	\$17,616			

TABLE 5.—VALUE OF PRODUCTS SHIPPED, BY BROAD CLASSES OF PRODUCTS, FOR THE UNITED STATES: 1947

[The first column shows the total value of shipments of dairy products by all industries. The other columns show: (A) the distribution of these totals, by industry, (B) products classified in other industries (secondary to the dairy products industries) shipped by the dairy products industries, and (C) miscellaneous receipts of the dairy products industries]

[Money figures in thousands of dollars]

PRODUCT	All industries	Industry											
		Creamery butter	Creamery butter and fluid milk	Natural cheese	Natural cheese and fluid milk	Concentrated milk	Concentrated and fluid milk	Ice cream and ices	Ice cream, ices, and fluid milk	Special dairy products	Special dairy products and fluid milk	Plastic cream and bulk products	Other industries
Total shipments by the industries		\$844, 713	\$350, 221	\$457, 935	\$93, 981	\$737, 607	\$267, 397	\$611, 755	\$688, 268	\$291, 451	\$331, 245	\$690, 176	
A. Dairy products	\$5, 328, 922	817, 131	343, 138	444, 314	93, 889	735, 056	265, 871	607, 623	685, 188	287, 222	330, 625	689, 020	\$29, 845
Creamery butter.....	932, 726	665, 550	135, 951	10, 582	4, 663	18, 122	8, 045	5, 434	20, 062	3, 697	2, 258	36, 751	17, 611
Natural cheese.....	455, 494	19, 659	8, 574	370, 328	16, 260	1, 828	3, 504	681	7, 382	8, 772	4, 403	13, 816	287
Dried products.....	153, 653	28, 511	4, 057	2, 695	25	76, 196	6, 142	308	1, 600	3, 417	221	29, 670	851
Canned milk.....	427, 939	251	891		(^d)	406, 804	11, 334		1, 400	1, 267	63	5, 727	(^d)
Bulk evaporated and condensed products.....	157, 521	8, 566	1, 524	2, 775	(^d)	80, 785	0, 000	1, 528	2, 687	(^d)	515	39, 708	05
Ice cream and ice milk mix.....	115, 150	6, 788	3, 301	920	325	47, 404	21, 572	0, 337	7, 152	(^d)	1, 400	12, 340	(^d)
Ice cream and ices.....	802, 002	16, 074	19, 515	1, 493	400	3, 092	6, 469	553, 522	170, 140	1, 449	2, 778	11, 370	0, 091
Malted milk powder.....	11, 602	756		(^d)		(^d)	(^d)		(^d)	7, 501		(^d)	(^d)
Process cheese and related products.....	234, 327	4, 304	1, 140	6, 689	(^d)	(^d)	(^d)		636	220, 437	289	(^d)	320
Other special dairy products, n.e.c.....	116, 487	1, 332	6, 060	2, 249	2, 638	3, 029	5, 988	1, 175	25, 039	33, 711	19, 209	14, 006	101
Milk and cream sold for further processing.....	620, 631	47, 472	21, 564	33, 069	6, 699	78, 931	36, 593	4, 287	36, 069	2, 001	14, 666	330, 630	1, 150
Milk and cream sold for consumption.....	1, 225, 859	8, 008	136, 444	900	61, 431	1, 049	156, 391	7, 178	303, 308	303	281, 358	170, 025	284
Other dairy products.....	22, 107	6, 438	725	(^d)	33	5, 715	657	2, 500	(^d)	127	17	4, 404	5
Dairy products, not specified by kind.....	53, 418	3, 422	2, 402	5, 128	1, 206	1, 102	854	21, 004	9, 617	325	3, 289	4, 409	
B. Secondary products		15, 382	6, 157	638		1, 786	939	3, 339	1, 196	1, 730	90	532	
Manufactured ice.....		395	435	7		35		1, 434	706	114	22	212	
Dressed poultry.....		6, 086	3, 291	367			370	172	80	53	1		
Eggs, dried, frozen, and liquid.....		7, 569	2, 245			1, 294		25	204			50	
Other secondary products.....		1, 332	186	204		457	509	1, 708	197	1, 558	67	270	
C. Miscellaneous receipts ¹		12, 200	926	12, 983	92	765	587	793	1, 884	2, 499	530	624	

^d Withheld to avoid disclosing figures for individual companies.

¹ Contract and commission work and nonmanufacturing activities.

DAIRY PRODUCTS

TABLE 6.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939

[All figures in thousands]

PRODUCT	Unit of measure	1947		1939	
		Total shipments and interplant transfers		Production	
		Quantity	Value f.o.b. plant	Quantity	Value
Creamery butter.....	Pound.....	1,329,457	\$322,726	1,773,083	\$443,788
Natural cheese, total.....			455,494		107,015
Cottage, pot, and bakers' cheese ¹	Pound.....	389,486	60,368	144,701	10,265
Other natural cheese (cheddar, colby, brick, cream, foreign types, etc.).....	do.....	2,014,467	2,305,126	695,594	96,750
Dried products.....	do.....	1,140,240	153,653	551,848	29,751
Canned milk.....	do.....	3,375,970	427,939	2,215,586	125,149
Bulk evaporated and condensed products ²	do.....	2,279,949	157,521	658,579	23,846
Ice cream and ice milk mix (liquid equivalent).....	Gallon.....	81,550	115,150	40,612	28,114
Ice cream and ices, total.....			802,002		276,009
Ice cream and other frozen dairy foods (sherbets, frappes, custards, etc.).....	Gallon.....	588,858	792,063	302,338	276,009
Water ices.....	do.....	9,454	9,939		
Malted milk powder.....	Pound.....	40,567	11,602	19,381	3,011
Process cheese, cheese food, cheese spread, and related products.....	do.....	598,564	234,327	296,284	48,714
Other special dairy products, n.e.c., total.....			116,487		n.a.
Buttermilk, chocolate milk, eggnog, and other dairy drinks ⁴	Quart.....	453,366	74,420	n.a.	n.a.
Nondairy drinks (orangeade, etc.) ⁵	do.....	31,903	4,862	n.a.	n.a.
Other special dairy products, n.e.c. ⁷			37,205		12,367
Milk and cream sold for further processing, total⁶.....			620,631		n.a.
Cream (liquid, plastic, and frozen).....	Pound (40% butter fat).....	1,238,494	380,817	n.a.	n.a.
Milk sold to other dairy plants.....	Pound.....	5,178,221	239,814	n.a.	n.a.
Milk and cream sold for consumption, total⁸.....			1,225,859		n.a.
Milk.....	Quart.....	6,104,706	1,045,663	n.a.	n.a.
Cream.....	do.....	273,999	180,198	n.a.	n.a.
Other dairy products ⁹			22,107	n.a.	n.a.
Dairy products, not specified by kind.....			53,418	n.a.	n.a.

n.a.—Not available.

¹ Includes curd shipped to other plants for creaming.

² Does not include natural cheese made into process cheese in the producing establishment. See text for industry.

³ Includes evaporated milk shipped to other plants for canning.

⁴ For 1939, "Other special dairy products, n.e.c." includes the value of dry ice cream mix and cheese spread; these products are included with ice cream mix and process cheese for 1947.

⁵ Partially estimated.

⁶ Represents only part of total sales of these products, since fluid milk plants manufacturing no butter, cheese, concentrated milk products, or ice cream were not canvassed in 1947. See text for industry.

⁷ Principally dry casein, process butter, milk sugar, and malted milk products.

⁸ Includes bulk milk sold to hotels, restaurants, institutions, etc.

⁹ Principally byproduct buttermilk, skim milk, and whey (sold in liquid form).

¹⁰ As an indication of the kinds of products included in this figure, see table 5 for distribution by industry.

CANNING, PRESERVING, AND FREEZING

This report shows 1947 Census of Manufactures statistics for establishments primarily engaged in canning, preserving, and freezing of all foods, except meats and dairy products. These establishments have been classified in six industries as described below.

The seasonal packing plants classified in these industries are characterized by sharp fluctuations in the number of persons employed. The total number of individuals employed during one pay period nearest the 15th of each month (the figure called for on the census questionnaire), therefore tends to be higher than the average for the pay period. Thus, the employment figures in tables 1-4 probably overstate the average number employed, but by a lesser amount than employment data compiled from reports relating to longer periods. The man-hours statistics (tables 2 and 3) are more reliable as an indication of labor input than are the figures on numbers of employees.

Because of the difficulty of securing adequate data on shipments from most of the establishments included in this group of industries, value of production rather than value of shipments was called for on the census questionnaires (except for the dehydrated fruits and vegetables industry).

Canned Sea Food (*Standard Industrial Classification Industry No. 2031.*)—This industry comprises establishments primarily engaged in cooking and canning fish, shrimp, oysters, clams, crabs, and other sea foods. Establishments primarily engaged in shucking and packing fresh oysters in nonsealed containers are classified in trade industries.

The 1947 census questionnaire required no details regarding the kinds of sea food canned; the detailed statistics on production of canned sea food shown in table 6 were obtained from the U. S. Fish and Wildlife Service. Comparison of Census with Fish and Wildlife statistics indicates that the establishments included in the census accounted for approximately 97 percent of the total continental United States production of canned sea food.

Cured Fish (*Standard Industrial Classification No. 2032.*)—This industry comprises establishments primarily engaged in smoking, salting, drying, or otherwise curing fish for the trade.

Canning and Preserving, Except Fish (*Includes Standard Industrial Classification No. 2033, Canned Fruits, Vegetables, and Soups; Preserves, Jams, and Jellies, and part of No. 2015, Poultry and Small Game Dressing and Packing, Wholesale.*)—This industry comprises establishments primarily engaged in canning fruits and vegetables, and fruit and vegetable juices (including soups) and in manufacturing preserves, jams, and jellies. Important products of the industry include canned vegetables (including canned baked beans and tomato cocktail); fruit and vegetable juices (canned, bottled, and in bulk); canned spaghetti; canned soups (except sea foods—Industry 2031); canned poultry products; canned fruits (including fruit

salad and fruit cocktail); and preserves, jams, jellies, fruit butters, and maraschino cherries.

The 1947 census questionnaire for this industry differed from that used in previous censuses in that complete detail regarding the quantity and value of products packed, by container size, was obtained for the first time (see table 6). The data shown in that table represent calendar year production except for Florida and Texas citrus canners, who reported production for the 1947-48 canning season.

Dehydrated Fruits and Vegetables (*Full Standard Industrial Classification title and number: Dried and Dehydrated Fruits and Vegetables, 2034.*)—This industry comprises establishments primarily engaged in sun-drying or artificially dehydrating fruits and vegetables, including packaged soup mix prepared from dehydrated vegetables.

A large part of the total output of dried fruits (except apples) is dried on farms and packed in establishments classified in wholesale trade in the Standard Industrial Classification. Such establishments were not included in the 1947 Census of Manufactures, although many were included in the 1939 and previous censuses. Since the census covered only about 15 percent of the total output of dried fruits other than apples, no detailed statistics on production of such fruits are shown in table 6. Production data are available in "Agricultural Statistics," published annually by the Department of Agriculture.

Pickles and Sauces (*Full Standard Industrial Classification title and number: Pickled Fruits and Vegetables; Vegetable Sauces and Seasonings; Salad Dressings, 2035.*)—This industry comprises establishments primarily engaged in pickling, brining, and sulphuring fruits and vegetables, and in manufacturing salad dressings, vegetable relishes, sauces, and seasonings. Important products of this industry include pickles; catsup (canned, bottled, and in bulk); brined and sulphured fruits and vegetables; prepared horseradish; sauerkraut in bulk; prepared mustard; tomato chili and other vegetable sauces; mayonnaise; cooked salad dressing and raw salad dressings, such as French, Thousand Island, and Russian.

The industry includes salting stations producing brined pickle stock, and finishing plants at which the stock is treated with vinegar, spices, etc.

Frozen Foods (*Full Standard Industrial Classification title and number: Frozen Fruits, Vegetables, and Sea Foods, 2037.*)—This industry comprises establishments primarily engaged in quick-freezing and cold-packing (freezing) vegetables, fruits, fish, and shellfish.

The industry does not include establishments primarily engaged in packing fruits and vegetables for freezing, but not freezing the product; cold storage warehouses freezing foods for others; nor farms and ranches producing frozen foods. The omission of such establishments affects the statistics on production of frozen fruits particularly, as indicated in the footnotes for table 6. Frozen food locker plants and other establishments freezing for individual consumers also are not included.

The production statistics shown in table 6 do not include fruits and vegetables frozen for later use in canning or preserving in the same plant. Foods frozen for use in another plant are, however, included.

TABLE 1.—GENERAL STATISTICS FOR THE UNITED STATES: 1947 AND EARLIER CENSUS YEARS

[Money figures in thousands of dollars. For explanation of column captions see GENERAL EXPLANATIONS]

INDUSTRY AND CENSUS YEAR	Number of establishments	All employees		Production and related workers		Value added by manufacture ¹	Cost of materials, fuel, electricity, and contract work ²	Value of products shipped ³
		Number (average for the year) ⁴	Salaries and wages, total ⁵	Number (average for the year) ⁶	Wages, total ⁷			
Total for canning, preserving, and freezing:								
1947	3,826	201,627	\$418,669	181,004	\$339,224	\$916,621	\$1,552,803	\$2,469,424
1939	3,058	n.a.	n.a.	135,087	89,308	319,153	523,175	842,328
1937	3,093	n.a.	n.a.	155,118	101,215	319,611	546,727	866,338
1935	3,018	140,811	98,070	129,633	76,922	261,798	448,434	710,232
1933	2,336	101,320	60,186	94,267	49,712	185,880	294,668	480,548
1931	2,839	n.a.	n.a.	88,775	59,224	204,944	350,409	555,353
1929	3,345	123,566	108,718	112,478	83,778	315,889	515,302	831,191
1927	2,773	103,748	92,172	93,574	70,415	239,351	398,077	637,428
1925	2,722	105,922	94,955	96,396	74,661	252,364	424,767	677,131
1923	2,799	92,646	85,336	81,678	63,334	235,884	330,021	565,905
1921	2,225	69,008	60,137	59,675	42,114	142,127	259,704	401,831
1919	4,280	104,102	91,213	89,923	66,444	162,628	412,660	628,288
1914	4,220	83,660	38,668	74,071	27,197	83,782	159,658	243,440
1909	3,767	67,728	26,945	59,068	19,082	55,278	101,823	157,101
1904	3,168	62,572	21,567	56,944	16,336	47,319	83,147	130,466
1899	2,570	61,211	17,184	57,012	13,705	35,667	63,668	99,335
Canned sea food:								
1947	254	20,153	37,207	18,929	31,755	96,807	129,712	226,519
1939	214	16,928	9,284	15,735	7,228	25,434	40,022	65,456
1937	217	n.a.	n.a.	16,358	7,117	24,595	38,973	63,668
Cured fish:								
1947	127	2,431	5,111	2,143	3,763	9,948	21,129	31,077
1939	114	2,344	2,616	1,893	1,670	4,643	10,972	15,615
1937	104	n.a.	n.a.	1,696	1,460	4,650	9,192	13,842
Canning and preserving, except fish:								
1947	2,265	135,974	288,443	121,916	234,886	609,939	1,030,815	1,640,754
1939	1,899	n.a.	n.a.	93,693	62,867	227,399	339,056	569,455
1937	2,359	n.a.	n.a.	123,961	81,970	251,245	419,951	671,196
Dehydrated fruits and vegetables:								
1947	146	3,976	8,145	3,662	6,834	18,155	32,924	51,079
Pickles and sauces:								
1947	743	21,730	48,221	18,584	36,153	122,395	242,524	364,919
1939	511	15,705	15,931	12,464	9,827	41,087	80,492	121,579
1937	392	n.a.	n.a.	11,140	9,336	35,868	73,723	109,591
Frozen foods:								
1947	201	17,363	31,542	15,770	25,833	59,377	95,699	155,076
1939	61	n.a.	n.a.	3,334	1,899	4,625	8,423	13,048
1937	21	n.a.	n.a.	1,963	1,332	3,253	4,888	8,141

n.a.—Not available.

¹ Value of products less cost of materials, supplies, fuel, electricity, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

² Figures for years prior to 1935 do not include cost of contract work.

³ For all years except 1929, value of products made; for 1929, value of products shipped. See GENERAL EXPLANATIONS—Value of products shipped.

⁴ "Canned sea food" and "Cured fish" formerly constituted one industry. Separate figures are, therefore, not available prior to 1937.

⁵ The figures for 1939 and 1937 were obtained by combining the figures for the industries formerly designated "Canned and dried fruits and vegetables" and "Preserves, jams, and jellies" and adjusting the 1939 figures to make them comparable with those for 1947. Value added for 1939, before adjustment and on a basis comparable with 1937, was \$242.4 million.

⁶ "Canning and preserving, except fish," "Pickles and sauces," and "Frozen foods" formerly constituted one industry. Separate figures are, therefore, not available prior to 1937.

⁷ The 1939 figures for "Dehydrated fruits and vegetables" are omitted because they are not comparable with the 1947 figures. See text on industry. The 1939 figures are included, however, in the "Total for canning, preserving, and freezing."

⁸ The figures for 1939 and 1937 were obtained by combining the figures for the former industries "Pickled fruits and vegetables, etc.," and "Salad dressings."

⁹ Previously published figures for 1939 have been revised to include statistics for 25 establishments primarily engaged in cold-packing fruits and vegetables. Value added for 1939, before revision and on a basis comparable with 1937, was \$3.9 million.

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947

[Money figures and man-hours in thousands. For explanation of column captions see GENERAL EXPLANATIONS]

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Canned sea food, total ¹	254	20,153	\$37,207	18,929	30,147	\$31,755	\$96,807	\$129,712	\$226,519	\$5,206
Northeast	59	3,677	7,379	3,380	6,657	6,205	19,067	18,742	37,809	1,104
Maine	45	2,646	4,655	2,462	4,628	4,021	16,272	12,092	27,364	1,004
North Central	5	119	189	102	187	147	346	423	769	10
South	69	5,218	4,606	4,955	5,920	3,958	8,123	10,840	18,009	386
Maryland	7	648	859	618	1,039	770	1,364	1,085	3,049	30
Virginia	8	529	873	449	970	713	1,293	1,171	2,434	22
North Carolina	6	88	95	79	124	81	170	198	368	52
South Carolina	4	321	288	313	468	242	407	301	768	16
Louisiana	22	2,340	1,434	2,250	2,082	1,251	2,752	4,773	7,525	117
Pacific	121	11,139	25,023	10,492	17,383	21,445	69,271	90,701	108,972	3,607
Washington	48	1,707	3,867	1,596	2,668	3,286	9,891	18,317	28,208	457
Oregon	19	1,296	2,646	1,201	2,004	2,343	6,656	11,091	18,647	424
California	54	8,136	18,510	7,695	12,651	15,816	52,724	69,393	122,117	2,810
Cured fish, total ¹	127	2,431	5,111	2,143	3,789	3,763	9,948	21,129	31,077	430
Northeast	57	891	2,420	744	1,467	1,047	5,209	12,767	17,970	123
New York	28	526	1,688	441	913	1,106	4,006	9,569	13,575	37
North Central	30	409	834	338	652	587	1,761	2,813	4,504	148
Illinois	11	224	527	183	380	342	823	1,647	2,470	47
South and West	40	1,181	1,851	1,061	1,670	1,529	2,988	5,549	8,537	159
California	6	150	433	128	261	344	743	1,866	2,309	27
Canning and preserving, except fish, total ¹	2,265	135,974	288,443	121,916	243,424	234,886	609,939	1,030,815	1,640,754	77,888
New England	107	3,141	6,149	2,707	5,610	4,743	14,280	27,870	42,150	1,226
Maine	57	1,837	3,007	1,666	3,382	2,629	7,042	12,191	19,233	624
Massachusetts	37	1,000	2,719	856	1,876	1,828	6,208	14,071	20,369	533
Middle Atlantic	309	25,784	61,152	23,054	48,915	49,475	131,249	250,366	381,614	12,084
New York	173	9,452	20,065	8,457	16,133	16,314	44,764	79,181	123,935	6,099
New Jersey	42	8,088	23,696	7,177	15,475	16,636	53,409	100,756	154,185	2,374
Pennsylvania	94	8,244	17,361	7,420	15,307	15,525	33,086	70,428	103,514	4,511
East North Central	561	30,775	65,251	26,728	54,530	51,868	135,639	228,228	368,864	13,247
Ohio	105	2,620	4,462	2,282	4,215	3,857	9,937	18,371	28,308	1,255
Indiana	155	6,570	13,788	5,870	12,172	11,898	25,870	51,059	70,929	1,935
Illinois	84	8,331	21,397	7,233	14,709	17,456	48,762	82,543	131,205	2,098
Michigan	67	4,028	9,158	2,995	5,802	5,779	16,318	30,862	47,180	2,040
Wisconsin	150	9,220	16,446	8,348	17,632	13,378	34,762	45,390	80,152	4,440
West North Central	140	5,692	9,508	5,274	10,396	7,956	21,633	32,600	54,323	2,090
Minnesota	37	2,999	5,558	2,842	6,023	4,791	14,411	14,531	28,042	1,297
Iowa	35	1,355	2,214	1,216	2,295	3,392	3,392	6,285	12,675	497
Missouri	69	861	848	778	1,441	1,441	1,741	4,376	6,117	229
South Atlantic	482	20,674	32,307	18,844	35,508	25,478	63,441	120,048	184,380	10,052
Delaware	28	1,677	2,704	1,528	3,028	2,229	5,328	8,934	14,292	870
Maryland	164	7,570	12,427	6,739	12,332	9,146	23,828	37,015	61,743	2,533
Virginia	131	3,038	3,359	2,894	4,839	2,860	5,905	14,024	20,019	1,090
South Carolina	12	176	226	171	376	204	449	640	1,095	43
Georgia	30	1,873	1,890	1,784	2,725	1,693	3,435	4,713	8,148	300
Florida	99	5,982	11,220	5,385	11,660	9,021	23,318	51,393	74,621	5,022
East South Central	51	2,119	2,797	1,018	3,304	2,216	6,520	14,193	20,713	497
Tennessee	25	1,246	1,563	1,137	1,955	1,270	3,029	8,010	11,939	333
Mississippi	6	214	247	187	380	191	342	710	1,082	40
West South Central	221	8,267	8,918	7,043	12,823	7,150	20,248	35,409	55,657	3,813
Louisiana	12	430	618	362	725	433	1,420	1,712	3,132	(¹)
Texas	100	5,006	5,675	4,622	7,961	4,406	12,557	23,682	36,639	2,380
Mountain	74	3,241	5,585	2,904	5,287	4,635	11,513	16,726	28,230	1,463
Montana	5	106	167	91	134	124	615	782	1,207	29
Idaho	8	422	840	366	677	657	1,826	2,015	3,841	301
Colorado	18	771	1,104	745	1,174	995	2,100	3,840	5,040	316
Utah	35	1,788	3,227	1,650	3,044	2,668	6,320	9,228	15,548	683
Pacific	320	36,281	96,776	32,754	67,051	81,350	205,416	304,389	609,806	32,507
Washington	52	5,321	11,517	4,885	9,345	10,091	23,633	39,609	63,242	2,870
Oregon	50	4,581	10,583	4,200	8,357	9,167	20,592	32,526	53,118	2,938
California	218	26,379	74,676	23,669	49,349	62,101	161,191	232,254	393,446	27,004
Dehydrated fruits and vegetables, total ¹	146	3,976	8,145	3,662	7,318	6,884	18,155	32,924	51,079	1,750
Middle Atlantic	18	479	1,100	414	795	778	1,540	5,340	6,886	106
Pennsylvania	3	23	20	22	25	17	63	97	160	8
North Central	10	451	1,018	392	797	691	2,606	4,375	6,981	188
South and West	118	3,046	6,027	2,850	5,726	5,365	14,009	23,203	37,212	1,456
California	87	1,701	3,541	1,586	2,924	3,078	9,016	17,845	27,761	351

See footnotes at end of table.

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TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947—Continued

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Pickles and sauces, total ¹	743	21,730	\$48,221	18,584	38,880	\$36,153	\$122,305	\$242,524	\$364,919	\$11,445
New England	25	476	1,250	350	769	704	2,298	5,573	7,871	819
Massachusetts	14	315	874	215	477	411	1,127	3,894	5,021	92
Middle Atlantic	185	4,011	11,672	4,133	8,759	8,429	27,169	59,374	86,543	3,583
New York	117	3,120	7,810	2,595	5,357	5,380	15,295	34,284	49,570	3,152
New Jersey	29	1,210	2,092	1,024	2,296	2,080	7,757	19,277	27,034	245
Pennsylvania	39	581	1,170	514	1,106	969	4,117	8,813	9,930	186
East North Central	205	7,054	14,958	6,255	12,988	11,753	36,697	71,343	108,040	3,127
Ohio	38	1,445	2,958	1,266	2,603	2,389	5,214	10,107	15,321	1,184
Indiana	33	1,623	2,900	1,481	3,128	2,537	6,171	15,188	21,359	826
Illinois	44	1,475	3,905	1,258	2,494	2,837	14,895	30,047	44,044	421
Michigan	58	1,316	2,512	1,194	2,608	2,040	4,480	8,257	12,737	343
Wisconsin	32	1,195	2,593	1,050	2,155	1,950	5,937	7,742	13,079	353
West North Central	56	1,000	2,028	843	1,635	1,430	4,212	7,669	11,881	210
Missouri	18	348	723	278	526	457	1,026	3,703	5,329	112
Kansas	6	205	430	179	380	340	913	1,510	2,423	28
South Atlantic	73	2,165	3,797	1,881	3,674	2,778	10,235	23,231	33,466	480
Maryland	24	695	1,452	561	1,081	923	3,610	6,091	10,301	155
Virginia	10	182	321	163	354	269	670	2,315	2,983	22
North Carolina	10	460	695	422	778	501	1,401	1,802	3,203	111
Georgia	9	528	850	477	903	705	3,390	10,340	13,730	100
East South Central	15	771	1,638	600	1,182	841	4,250	5,847	10,097	156
Alabama	6	122	182	110	208	125	542	620	1,162	11
West South Central	45	1,358	2,541	1,024	2,117	1,563	10,409	17,385	27,794	236
Texas	25	551	974	495	1,078	820	7,570	10,244	17,814	86
Mountain	24	460	788	419	700	670	1,417	2,529	3,040	148
Colorado	16	371	626	342	631	548	1,047	2,145	3,192	99
Pacific	115	3,520	9,540	3,079	6,966	7,985	25,708	49,573	75,281	2,085
Washington	15	340	719	317	600	639	1,835	4,795	6,030	206
Oregon	10	239	534	223	408	438	904	2,238	3,142	121
California	90	2,950	8,287	2,539	5,958	6,908	22,969	42,540	65,509	2,359
Frozen foods, total ¹	291	17,363	31,542	15,770	28,946	25,833	59,377	95,699	155,076	9,166
New England	23	1,481	3,366	1,334	2,959	2,812	6,095	11,577	17,072	394
Maine	11	678	1,255	624	1,358	1,069	1,944	3,042	4,986	208
Massachusetts	12	803	2,131	710	1,601	1,743	4,151	8,535	12,086	186
Middle Atlantic	47	3,654	7,525	3,312	7,153	5,922	11,120	17,414	28,534	2,754
New York	26	1,452	2,652	1,285	2,560	2,148	3,329	7,204	10,553	837
North Central	20	1,605	2,959	1,434	3,062	2,670	5,595	8,627	14,222	260
Michigan	13	830	1,247	781	996	1,122	2,557	5,444	8,001	214
South Atlantic	33	2,272	2,307	2,123	2,838	1,912	4,348	5,896	10,244	980
Delaware	3	356	309	347	276	269	923	820	1,743	150
Maryland	8	489	508	472	941	477	940	1,343	2,283	119
Virginia	10	655	627	606	723	519	1,187	1,973	3,160	129
East South Central	21	518	453	478	676	392	1,363	2,192	3,555	370
Tennessee	10	291	293	265	463	256	647	1,337	1,984	325
Mississippi	7	191	117	179	148	100	373	540	913	41
West South Central	25	1,045	1,114	909	1,363	744	3,073	6,362	9,435	434
Louisiana	12	647	445	463	455	247	1,500	3,122	4,622	205
West	110	6,788	13,818	6,180	10,895	11,381	27,783	43,631	71,414	3,974
Colorado	7	168	232	159	292	192	600	899	1,499	39
Washington	42	2,399	4,895	2,190	3,930	4,047	10,209	17,185	27,385	1,327
California	37	2,004	4,241	1,799	2,879	3,396	7,153	11,130	18,283	1,612

^d Withheld to avoid disclosing figures for individual companies.
¹ For each producing State not shown separately in the table (see GENERAL EXPLANATIONS "Disclosure of Data for Individual Companies"), there are shown below the number of establishments and, in parentheses, the number of employees for States represented by three or more companies, when possible.
Canned sea food: *Northeast*, Massachusetts, 5 (897); Rhode Island, 1; Connecticut, 1; New York, 6 (102); New Jersey, 1; *North Central*, Michigan, 1; Wisconsin, 2; Minnesota, 1; Missouri, 1; *South*, Georgia, 2; Florida, 2; Alabama, 2; Mississippi, 15 (1,019); Texas, 1.
Cured fish: *Northeast*, Maine, 16 (166); Massachusetts, 6 (83); Connecticut, 1; New Jersey, 5; Pennsylvania, 3 (76); *North Central*, Ohio, 4 (38); Michigan, 3 (16); Wisconsin, 7 (59); Minnesota, 5 (72); *South and West*, Maryland, 4 (376); District of Columbia, 1; Virginia, 3 (103); North Carolina, 2; Florida, 1; Louisiana, 13 (248); Texas, 1; Washington, 8 (169); Oregon, 1.
Canning and preserving, except fish: *New England*, New Hampshire, 2; Vermont, 3 (46); Rhode Island, 1; Connecticut, 7 (123); *West North Central*, Nebraska, 5 (315); Kansas, 4 (162); *South Atlantic*, District of Columbia, 1; West Virginia, 11 (297); North Carolina, 6; *East South Central*, Kentucky, 15 (443); Alabama, 5 (210); *West South Central*, Arkansas, 95 (2,407); Oklahoma, 14 (424); *Mountain*, Wyoming, 1; New Mexico, 3; Arizona, 4 (65).
Dehydrated fruits and vegetables: *Middle Atlantic*, New York, 14; New Jersey, 1; *North Central*, Ohio, 1; Illinois, 6 (194); Michigan, 1; Minnesota, 1; Iowa, 1; *South and West*, Maryland, 1; Virginia, 1; West Virginia, 1; North Carolina, 1; Georgia, 1; Mississippi, 1; Louisiana, 2; Idaho, 7 (580); Arizona, 1; Washington, 13 (455); Oregon, 2.
Pickles and sauces: *New England*, Maine, 2; Rhode Island, 2; Connecticut, 7 (100); *West North Central*, Minnesota, 17 (280); Iowa, 12 (124); South Dakota, 1; Nebraska, 2; *South Atlantic*, Delaware, 3 (83); District of Columbia, 3 (56); South Carolina, 7 (88); Florida, 7 (84); *East South Central*, Kentucky, 3; Tennessee, 4 (66); Mississippi, 2; *West South Central*, Louisiana, 14 (754); Oklahoma, 6 (53); *Mountain*, Montana, 1; Idaho, 1; Arizona, 2; Utah, 4 (62).
Frozen foods: *Middle Atlantic*, New Jersey, 7 (1,581); Pennsylvania, 14 (621); *North Central*, Ohio, 1; Illinois, 2; Wisconsin, 3 (35); Minnesota, 3; Missouri, 4 (72); *South Atlantic*, North Carolina, 4 (75); South Carolina, 1; Georgia, 4 (516); Florida, 3; *East South Central*, Kentucky, 1; Alabama, 3; *West South Central*, Arkansas, 2; Texas, 11; *West*, Idaho, 2; Arizona, 2; Utah, 4 (88); Oregon, 22 (2,031).

TABLE 3.—DETAILED STATISTICS FOR THE UNITED STATES: 1947
 (Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS)

ITEM	Industry					
	Canned sea food	Cured fish	Canning and preserving, except fish	Dehydrated fruits and vegetables	Pickles and sauces	Frozen foods
ALL ESTABLISHMENTS						
Number of establishments.....	254	127	2,285	140	743	291
All employees.....						
Number (average for the year).....	20,153	2,431	135,074	3,076	21,730	17,363
Salaries and wages, total.....	\$37,207	\$5,111	\$288,443	\$8,145	\$48,221	\$31,542
Production and related workers:						
Number (average for the year).....	18,929	2,143	121,016	3,662	18,594	15,770
Man-hours, total..... thousands.....	30,147	3,789	243,424	7,318	38,890	28,946
Wages, total.....	\$31,755	\$3,763	\$234,886	\$6,834	\$36,153	\$23,833
Value added by manufacture.....	\$96,807	\$9,948	\$609,939	\$18,155	\$122,305	\$59,377
ESTABLISHMENTS REPORTING DETAILED STATISTICS						
Number of establishments.....	254	127	1,092	146	558	201
All employees.....						
Number (average for the year).....	20,153	2,431	134,001	3,076	20,896	17,363
Salaries and wages, total.....	\$37,207	\$5,111	\$286,339	\$8,145	\$46,480	\$31,542
Production and related workers:						
Number (average for the year).....	18,929	2,143	120,118	3,662	17,777	15,770
Man-hours, total..... thousands.....	30,147	3,789	239,825	7,318	37,262	28,946
Wages, total.....	\$31,755	\$3,763	\$232,898	\$6,834	\$34,510	\$23,833
Value added by manufacture.....	\$96,807	\$9,948	\$605,320	\$18,155	\$119,006	\$59,377
Number of employees for pay period ended nearest Oct. 15:						
All employees.....	27,559	2,754	154,356	6,033	25,475	16,156
Male.....	12,182	1,449	84,197	2,918	14,241	8,154
Female.....	15,377	1,305	70,159	3,115	11,234	8,002
Production and related workers.....	20,399	2,466	140,150	5,699	22,211	14,487
Male.....	11,436	1,248	74,622	2,710	11,070	7,054
Female.....	14,063	1,218	65,528	2,989	10,235	7,433
Force-account construction workers.....	46		540	29	19	65
Administrative, supervisory, sales, and all other.....	1,114	288	13,657	305	3,245	1,604
Male.....	700	201	9,635	179	2,246	1,035
Female.....	414	87	4,022	126	999	569
All employees, number by month:						
January.....	15,747	2,420	100,787	4,070	18,213	12,526
February.....	13,886	2,269	88,862	3,183	17,315	10,348
March.....	15,008	2,270	83,225	3,042	17,238	9,984
April.....	15,579	2,242	86,822	2,486	17,080	10,630
May.....	16,871	2,348	85,075	2,780	17,574	17,228
June.....	15,865	2,281	104,722	2,362	19,307	24,213
July.....	20,202	2,122	177,901	2,934	22,181	20,424
August.....	27,362	2,420	252,587	5,322	25,068	20,773
September.....	27,815	2,649	274,020	6,313	33,271	24,344
October.....	27,559	2,754	154,356	6,033	25,475	16,156
November.....	24,781	2,549	106,037	5,118	22,126	14,283
December.....	22,019	2,781	93,008	3,070	18,430	12,407
Cost of materials, fuel, electricity, and contract work.....	\$129,712	\$21,129	\$1,023,098	\$32,024	\$237,798	\$95,099
Materials, parts, containers, and supplies.....	126,950	20,911	1,007,563	31,920	235,238	93,330
Fuels, total.....	1,038	113	11,269	710	1,521	579
Bituminous coal.....	258	15	5,308	85	702	142
Anthracite.....	12	2	229	4	42	16
Coke.....	1		67	7	14	
Fuel oils.....	549	65	2,744	403	369	493
Gas.....	122	22	2,210	199	340	89
Other fuels.....	66	19	621	12	65	47
Purchased electric energy.....	476	99	4,102	233	700	1,291
Contract and commission work.....	1,248	6	1,064	61	339	227
Value of inventories:						
Beginning of year, total.....	\$23,403	\$6,001	\$409,952	\$10,283	\$60,780	\$40,472
Finished products.....	16,208	1,768	255,176	6,860	20,938	30,860
Materials, supplies, and work in process.....	7,195	4,233	154,776	3,423	39,842	9,612
End of year, total.....	29,633	5,585	524,202	7,890	70,343	43,450
Finished products.....	21,254	1,095	368,271	4,702	41,000	33,094
Materials, supplies, and work in process.....	8,379	3,890	155,931	3,188	36,334	9,456
Expenditures for plant and equipment:						
New plant and equipment.....	\$5,206	\$430	\$77,888	\$1,750	\$11,445	\$9,166
Construction and major alteration of fixed plants.....	1,591	188	20,277	400	4,457	3,122
Buildings.....	994	154	23,988	389	4,283	2,978
Other construction.....	597	34	2,289	71	174	146
Machinery and equipment.....	3,615	242	51,611	1,290	6,989	6,044
Production machinery and equipment.....	3,128	149	46,875	1,211	6,285	5,391
Other machinery and equipment.....	487	93	4,736	79	703	653
Used plant and equipment, and land.....	5,874	33	5,012	10	396	791
Number of highway-type motor vehicles owned or leased:						
Trucks.....	410	107	4,652	157	1,128	717
By manufacturer's rated capacity:						
Under 1½ tons.....	100	90	1,471	40	332	164
1½ tons.....	190	87	2,264	70	581	410
Over 1½ tons and less than 3½ tons.....	76	24	872	20	103	108
3½ tons and less than 5 tons.....	19	11	81	6	26	8
5 tons and over.....	25	5	164	9	21	27
By body type:						
Van.....	44	16	260		153	43
Stake or platform.....	205	32	2,663	105	323	467
Panel or light delivery.....	78	119	988	30	428	102
All other trucks.....	63	30	732	21	224	105
Truck tractors.....	22		766	10	114	66
Trailers and semitrailers.....	24		1,106	17	120	160

TABLE 4.—SELECTED GENERAL STATISTICS BY SIZE OF ESTABLISHMENT, FOR THE UNITED STATES: 1947

[Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS. Data which cannot be shown without disclosing information for individual companies have been combined with figures for other groups. A ^d appears in the column where the figure has been omitted and the combined figure is printed in italics]

INDUSTRY AND ITEM	Total, all establishments	Establishments with an average of—									
		1-4 employees	5-9 employees	10-19 employees	20-49 employees	50-99 employees	100-249 employees	250-499 employees	500-999 employees	1,000-2,499 employees	2,500 employees and over
Canned sea food:											
Number of establishments.....	254	20	24	33	65	58	35	15	3	1	
Number of employees (average for the year).....	20,153	39	176	481	2,224	4,186	5,210	4,896	2,841	(d)	
Value added by manufacture.....	\$96,807	\$135	\$639	\$1,973	\$7,601	\$18,269	\$21,627	\$24,514	\$22,049	(d)	
Cured fish:											
Number of establishments.....	127	35	28	34	20	7	2	1			
Number of employees (average for the year).....	2,431	77	194	460	658	1,053	(d)	(d)			
Value added by manufacture.....	\$9,948	\$320	\$1,107	\$2,427	\$3,013	\$3,081	(d)	(d)			
Canning and preserving, except fish:											
Number of establishments.....	2,265	250	295	482	607	319	215	70	21	3	3
Number of employees (average for the year).....	135,974	573	2,001	6,803	19,158	21,973	32,070	24,057	13,311	3,707	12,321
Value added by manufacture.....	\$609,939	\$1,909	\$6,391	\$22,045	\$64,962	\$82,407	\$147,615	\$119,687	\$71,171	\$15,708	\$78,044
Dehydrated fruits and vegetables:											
Number of establishments.....	146	47	25	24	34	6	8	2			
Number of employees (average for the year).....	3,976	113	178	336	1,106	449	1,794	(d)			
Value added by manufacture.....	\$18,155	\$456	\$603	\$1,569	\$4,045	\$3,930	\$7,552	(d)			
Pickles and sauces:											
Number of establishments.....	743	248	140	106	138	62	38	8	3		
Number of employees (average for the year).....	21,730	517	924	1,470	4,187	4,483	6,114	2,483	1,552		
Value added by manufacture.....	\$122,395	\$2,362	\$3,987	\$5,676	\$17,433	\$27,808	\$36,950	\$21,974	\$6,195		
Frozen foods:											
Number of establishments.....	291	16	45	50	83	45	44	7		1	
Number of employees (average for the year).....	17,363	46	324	723	2,789	3,174	6,629	3,698		(d)	
Value added by manufacture.....	\$59,377	\$228	\$1,643	\$2,800	\$8,300	\$9,789	\$22,774	\$18,843		(d)	

TABLE 5.—VALUE OF PRODUCTS, BY BROAD CLASSES OF PRODUCTS, FOR THE UNITED STATES: 1947

[The first column shows the total value of products of the specified industry, divided among: (A) products classified in (primary to) the industry, (B) products classified in other industries (secondary to the specified industry), and (C) miscellaneous receipts. The second column shows the value of the primary products of the specified industry reported by establishments in other industries. The third column shows the total value of the primary products of the specified industry reported by all manufacturers]

[Money figures in thousands of dollars]

CANNED SEA FOOD INDUSTRY	Produced by—			DEHYDRATED FRUITS AND VEGETABLES INDUSTRY	Shipped by—		
	Canned sea food industry	Other industries	All industries		Dehydrated fruits and vegetables industry	Other industries	All industries
Total production by the industry	\$226,519			Total shipments by the industry	\$51,079		
A. Canned sea food.....	203,505	\$8,469	\$211,974	A. Dried fruits, vegetables, and soup mix.....	47,674	\$5,183	\$52,857
B. Secondary products.....	20,755			Dried fruits.....	24,495	3,086	27,581
Cured fish.....	2,591			Dehydrated vegetables and soup mix.....	23,179	2,097	25,276
Frozen packaged sea food.....	4,366			B. Secondary products.....	2,024		
Marine animal oil products.....	8,795			C. Miscellaneous receipts.....	1,381		
Other secondary products.....	5,003			Contract and commission work.....	415		
C. Miscellaneous receipts.....	2,259			Scrap and salable refuse.....	148		
Contract and commission work.....	28			Nonmanufacturing activities.....	818		
Scrap and salable refuse.....	1,033						
Nonmanufacturing activities.....	1,198						
CURED FISH INDUSTRY	Produced by—			PICKLES AND SAUCES INDUSTRY	Produced by—		
Cured fish industry	Other industries	All industries	Pickles and sauces industry		Other industries	All industries	
Total production by the industry	\$31,077			Total production by the industry	\$364,919		
A. Cured fish.....	20,413	\$3,979	\$33,392	A. Pickles, sauces, and salad dressings.....	316,631	\$133,615	\$450,246
B. Secondary products.....	761			Pickles and pickle products.....	87,354	18,293	105,647
C. Miscellaneous receipts.....	903			Catsup and other tomato sauces.....	53,407	41,638	94,945
Contract and commission work.....	75			Meat sauces, except tomato.....	10,461	5,397	15,858
Scrap and salable refuse.....	216			Salad dressings.....	136,883	60,107	196,990
Nonmanufacturing activities.....	612			Other pickle and sauce products.....	9,180	1,998	11,178
				Products not specified by kind.....	13,337	312	13,649
				B. Secondary products.....	44,812		
				Canned vegetables and specialties.....	12,575		
				Canned juices.....	3,200		
				Other canned foods.....	7,043		
				Jams, jellies, and preserves.....	6,720		
				Vinegar and cider.....	2,444		
				Other food products.....	12,830		
				C. Miscellaneous receipts.....	4,476		
				Nonmanufacturing activities.....	4,476		
CANNING AND PRESERVING, EXCEPT FISH, INDUSTRY	Produced by—			FROZEN FOODS INDUSTRY	Produced by—		
Canning and preserving, except fish, industry	Other industries	All industries	Frozen foods industry		Other industries	All industries	
Total production by the industry	\$1,640,754			Total production by the industry	\$165,076		
A. Primary products of the industry.....	1,484,196	\$82,940	\$1,567,136	A. Frozen fruits, vegetables, and fish.....	132,001	\$20,186	\$152,187
Canned fruits.....	344,200	7,701	351,901	Frozen packaged sea food.....	25,801	4,001	29,802
Canned seasonal vegetables.....	364,552	10,560	375,112	Frozen fruits and juices.....	43,383	12,084	55,467
Canned nonseasonal vegetables and specialties.....	224,329	11,328	235,657	Frozen vegetables.....	59,791	9,141	68,932
Canned fruit juice.....	103,170	5,028	108,198	Frozen foods, kind not specified.....	3,836		3,836
Canned vegetable juice.....	36,773	2,374	39,147	B. Secondary products.....	16,073		
Canned baby foods.....	(d)	(d)	71,104	Canned fruits.....	4,810		
Jams, jellies, and preserves.....	130,471	22,165	152,636	Canned seasonal vegetables.....	4,874		
Soups and other primary products.....	205,538	12,264	217,802	Other canned foods.....	2,743		
Primary products, kind not specified.....	(d)	(d)	15,579	Other secondary products.....	3,026		
B. Secondary products.....	149,993			C. Miscellaneous receipts.....	6,102		
Canned meats.....	21,574			Contract and commission work.....	300		
Canned sea food.....	6,783			Scrap and salable refuse.....	310		
Pickles and pickle products.....	16,562			Nonmanufacturing activities.....	5,484		
Catsup and other tomato sauces.....	40,946						
Meat sauces, except tomato.....	2,909						
Frozen fruits and juices.....	10,174						
Frozen vegetables.....	8,974						
Flavoring extracts and sirups.....	5,299						
Vinegar and cider.....	6,500						
Other secondary products.....	30,272						
C. Miscellaneous receipts.....	6,565						
Contract and commission work.....	483						
Scrap and salable refuse.....	456						
Nonmanufacturing activities.....	5,646						

^d Withheld to avoid disclosing figures for individual companies.

¹ Total reported by establishments included in the Census of Manufactures. See table 6 for total value of U. S. production.

TABLE 6.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939
 (All figures in thousands)

PRODUCT	Unit of measure	1947		1939	
		Production ¹		Production ¹	
		Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant
Canned sea food, total ²					
Salmon (excluding Alaska pack)	Pound	503,460	\$218,057	403,023	\$60,839
Sardines, Maine (herring)	do	63,842	31,987	34,994	7,341
Sardines, California (pilchards)	do	57,544	27,678	44,872	7,075
Tuna, solid meat	do	74,367	16,538	139,864	9,554
Tuna, flakes and grated	do	79,575	61,231	65,901	17,837
Mackerel, including jack mackerel	do	37,894	29,378	9,087	2,243
	do	78,973	15,019	40,023	2,589
Whiting (silver hake)	do	10,616	1,423	(³)	(³)
Anchovies	do	6,246	1,377	(³)	(³)
Other species of fish	do	14,790	2,965	5,424	773
Fish cakes and loaf	do	12,650	3,271	5,464	756
Roe, caviar, and other fish products	do	3,434	1,844	835	711
Whole and minced clams (drained weight)	do	1,594	1,346	3,117	1,015
Clam chowder, juice, etc	do	34,574	7,304	20,975	2,544
Crabs	do	2,726	2,705	640	260
Oysters (drained weight)	do	5,780	4,304	9,136	2,415
Shrimp (drained weight)	do	7,085	8,192	20,651	5,398
Other sea food	do	11,761	1,495	2,040	328
Cured fish, total			33,392		12,236
Smoked salmon	Pound	9,830	5,546	7,085	2,315
Other smoked fish	do	23,894	8,383	21,080	4,355
Salted and pickled fish, total	do	63,092	16,202	44,684	5,566
Sold for further processing	do	9,338	1,763	n.a.	n.a.
Sold for consumption	do	53,754	14,439	n.a.	n.a.
Cured fish, kind not specified	do		3,261		n.a.
Canned fruits, total					
Apples	Case ⁴	69,259	351,901	49,501	120,766
Applesauce, total	do	2,579	11,603	2,786	4,226
No. 303	do	6,638	17,589	3,312	3,928
No. 2	do	307	672	309	n.a.
No. 10	do	5,358	13,495	2,000	n.a.
Miscellaneous tin and glass	do	772	2,484	282	n.a.
Apricots, total	do	201	938	721	n.a.
No. 1 tall	do	3,442	17,721	3,772	9,409
No. 2 1/2	do	516	3,455	n.a.	n.a.
No. 10	do	1,928	10,043	1,542	n.a.
Miscellaneous tin and glass	do	756	2,705	1,083	n.a.
Berries, except cranberries, total	do	242	1,518	n.a.	n.a.
No. 300	do	1,441	7,831	1,608	4,357
No. 2	do	201	1,002	n.a.	n.a.
No. 10	do	734	3,582	775	n.a.
Miscellaneous tin and glass	do	352	1,902	521	n.a.
Cherries, red pitted, total	do	164	1,365	n.a.	n.a.
No. 2	do	2,616	13,370	3,047	6,179
No. 10	do	1,873	8,922	1,913	n.a.
Miscellaneous tin	do	682	4,085	969	n.a.
Miscellaneous glass	do	48	251	162	n.a.
Cherries, except red pitted and maraschino, total	do	13	112	3	n.a.
No. 1 tall	do	743	5,137	1,551	5,356
No. 2	do	77	655	n.a.	n.a.
No. 2 1/2	do	134	738	154	n.a.
No. 10	do	203	1,465	708	n.a.
Miscellaneous tin and glass	do	192	1,087	299	n.a.
Cranberries and cranberry sauce, total	do	137	1,184	n.a.	n.a.
No. 300	do	4,817	20,461	2,036	4,570
Miscellaneous tin and glass	do	3,953	14,938	n.a.	n.a.
Figs, total	do	664	5,523	n.a.	n.a.
No. 1 tall	do	831	5,352	402	1,171
No. 2 1/2	do	157	1,040	n.a.	n.a.
Miscellaneous tin and glass	do	346	1,910	75	n.a.
Grapefruit segments, total	do	328	2,402	n.a.	n.a.
No. 2	do	4,234	12,376	4,380	6,750
Miscellaneous tin	do	3,995	11,836	3,605	n.a.
Fruit cocktail (including mixed fruits and fruit for salad), total	do	239	840	775	n.a.
No. 8Z tall	do	10,169	73,080	4,748	18,998
No. 1 tall	do	386	1,900	n.a.	n.a.
No. 2	do	3,139	26,926	n.a.	n.a.
No. 2 1/2	do	304	1,379	140	n.a.
No. 10	do	5,210	35,090	1,353	n.a.
Miscellaneous tin and glass	do	584	3,404	444	n.a.
Olives, ripe and green ripe, total	do	546	4,381	n.a.	n.a.
No. 1 tall	do	1,888	15,950	772	3,116
No. 303	do	1,090	10,455	n.a.	n.a.
No. 10	do	245	1,469	4	n.a.
Miscellaneous tin	do	314	2,317	121	n.a.
Miscellaneous glass	do	202	1,398	n.a.	n.a.
Peaches, total	do	37	321	12	n.a.
No. 8Z short	do	20,287	96,899	12,548	31,254
No. 8Z tall	do	172	599	n.a.	n.a.
No. 300	do	293	981	n.a.	n.a.
No. 1 tall	do	544	1,361	n.a.	n.a.
No. 2	do	1,813	10,946	n.a.	n.a.
No. 2 1/2	do	293	1,116	286	n.a.
No. 10	do	14,411	71,190	8,140	n.a.
Miscellaneous tin	do	2,404	8,136	2,062	n.a.
Miscellaneous glass	do	53	230	n.a.	n.a.
	do	304	1,840	22	n.a.

See footnotes at end of table.

TABLE 6.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939—Continued

PRODUCT	Unit of measure	1947		1939	
		Production ¹		Production ¹	
		Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant
Canned fruits—Continued					
Pears, total	Case ⁴	5,755	\$39,086	5,180	\$15,644
No. 1 tall	do	505	4,089	n.a.	n.a.
No. 2	do	190	881	480	n.a.
No. 2½	do	3,962	27,798	2,081	n.a.
No. 10	do	848	4,739	890	n.a.
Miscellaneous tin and glass	do	250	1,629	n.a.	n.a.
Plums and purple plums, total	do	2,140	8,609	2,080	4,918
No. 2½	do	1,140	4,328	1,312	n.a.
No. 10	do	386	1,296	844	n.a.
Miscellaneous tin and glass	do	614	2,985	833	n.a.
Other fruits, total ⁵	do	1,879	7,337	381	890
No. 2	do	550	2,720	32	n.a.
No. 2½	do	524	1,512	93	n.a.
No. 10	do	284	1,046	83	n.a.
Miscellaneous tin	do	295	788	147	n.a.
Miscellaneous glass	do	223	1,271	20	n.a.
Canned seasonal vegetables, total	do	122,887	375,112	85,531	144,257
Asparagus, total	do	4,016	24,195	2,791	10,699
No. 8Z tall	do	113	666	n.a.	n.a.
No. 1 picnic	do	905	7,342	761	n.a.
No. 300	do	980	3,710	n.a.	n.a.
No. 2	do	648	4,122	697	n.a.
No. 2 tall	do	899	5,761	n.a.	n.a.
No. 10	do	180	1,105	120	n.a.
Miscellaneous tin and glass	do	291	1,489	n.a.	n.a.
Beans, fresh lima, total	do	2,148	9,283	2,004	4,822
No. 2	do	1,575	6,699	2,055	n.a.
No. 10	do	170	859	172	n.a.
Miscellaneous tin	do	403	1,725	437	n.a.
Beans, green and wax, total	do	12,794	40,714	8,374	13,530
No. 2	do	8,534	26,127	6,400	n.a.
No. 2 tall	do	710	2,674	n.a.	n.a.
No. 2½	do	459	1,499	259	n.a.
No. 10	do	2,694	8,927	872	n.a.
Miscellaneous tin and glass	do	397	1,487	n.a.	n.a.
Beets, total	do	3,405	7,683	2,610	3,620
No. 303 glass	do	576	1,493	n.a.	n.a.
No. 2	do	1,724	3,765	1,178	n.a.
No. 10	do	778	1,725	396	n.a.
Miscellaneous tin and glass	do	327	700	n.a.	n.a.
Carrots, total	do	991	2,166	1,833	2,009
No. 2	do	371	832	659	n.a.
No. 10	do	512	1,115	332	n.a.
Miscellaneous tin and glass	do	108	219	842	n.a.
Corn, cut, total	do	29,348	87,732	10,845	20,306
No. 1 picnic	do	485	1,999	539	n.a.
No. 2 vacuum	do	5,093	15,999	n.a.	n.a.
No. 303	do	2,268	6,579	1,365	n.a.
No. 2	do	17,574	52,501	11,640	n.a.
No. 10	do	1,990	5,749	683	n.a.
Miscellaneous tin and glass	do	1,938	4,906	n.a.	n.a.
Greens, except spinach, total	do	1,014	1,696	407	651
No. 2	do	435	803	349	n.a.
Miscellaneous tin	do	579	893	118	n.a.
Mixed vegetables ⁶	do	3,826	9,640	2,232	3,558
No. 303	do	1,715	3,488	544	n.a.
No. 2	do	1,600	4,588	1,220	n.a.
Miscellaneous tin and glass	do	511	1,573	468	n.a.
Peas, fresh green, total	do	34,899	102,631	17,787	34,355
No. 1 picnic	do	1,270	5,223	1,140	n.a.
No. 303	do	8,704	26,405	3,550	n.a.
No. 2	do	18,335	52,364	11,340	n.a.
No. 10	do	2,512	7,801	1,050	n.a.
Miscellaneous tin and glass	do	4,078	10,778	701	n.a.
Pumpkin and squash, total	do	2,938	6,890	2,374	3,448
No. 2	do	247	520	283	n.a.
No. 2½	do	1,830	4,418	1,540	n.a.
No. 10	do	742	1,666	502	n.a.
Miscellaneous tin	do	119	286	49	n.a.
Spinach, total	do	3,216	7,923	4,160	6,966
No. 2 tall	do	632	1,591	n.a.	n.a.
No. 2	do	1,095	2,412	1,684	n.a.
No. 2½	do	659	1,881	1,133	n.a.
No. 10	do	716	1,715	411	n.a.
Miscellaneous tin and glass	do	114	324	n.a.	n.a.
Tomatoes, total	do	23,263	71,650	23,385	34,188
No. 1 picnic	do	900	2,087	1,526	n.a.
No. 1 tall	do	185	925	n.a.	n.a.
No. 2	do	13,204	34,308	13,484	n.a.
No. 2 tall	do	497	1,954	n.a.	n.a.
No. 2½	do	5,150	20,364	5,056	n.a.
No. 10	do	3,384	11,288	2,662	n.a.
Miscellaneous tin and glass	do	263	733	n.a.	n.a.
Other seasonal vegetables, total ⁷	do	1,029	2,891	n.a.	n.a.
No. 2	do	769	2,077	n.a.	n.a.
Miscellaneous tin and glass	do	260	814	n.a.	n.a.

See footnotes at end of table.

TABLE 6.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939—Continued

PRODUCT	Unit of measure	1947		1939	
		Production ¹		Production ¹	
		Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant
Canned nonseasonal vegetables and specialties, total	Case ⁴	78,102	\$235,657	48,977	\$79,530
Beans, with pork or sauce, including baked, total.....	do.....	31,846	90,591	19,459	31,604
No. 1 picnic.....	do.....	1,152	4,577	1,175	n.a.
No. 300.....	do.....	15,495	37,887	n.a.	n.a.
No. 303.....	do.....	1,639	4,136	1,574	n.a.
No. 2.....	do.....	8,323	24,078	1,307	n.a.
No. 2 1/2.....	do.....	1,625	6,268	2,705	n.a.
No. 10.....	do.....	626	2,125	311	n.a.
No. 303 glass.....	do.....	900	2,833	n.a.	n.a.
Miscellaneous tin and glass.....	do.....	2,086	8,687	n.a.	n.a.
Beans, other dry varieties, except soy, total.....	do.....	9,128	25,747	6,371	9,234
No. 1 picnic.....	do.....	492	2,731	132	n.a.
No. 300.....	do.....	1,374	3,313	n.a.	n.a.
No. 303.....	do.....	797	2,232	242	n.a.
No. 2.....	do.....	5,409	14,102	3,049	n.a.
No. 10.....	do.....	436	1,570	282	n.a.
Miscellaneous tin.....	do.....	254	787	n.a.	n.a.
Miscellaneous glass.....	do.....	366	1,012	n.a.	n.a.
Hominy, total.....	do.....	3,743	7,099	1,912	2,325
No. 2.....	do.....	1,774	3,129	388	n.a.
No. 2 1/2.....	do.....	1,389	2,986	1,143	n.a.
Miscellaneous tin and glass.....	do.....	580	984	381	n.a.
Mushrooms, total.....	do.....	1,399	7,911	1,176	2,897
No. 2 1/2 mushroom.....	do.....	415	1,175	n.a.	n.a.
No. 4 1/2 mushroom.....	do.....	856	4,379	n.a.	n.a.
No. 8 1/2 mushroom.....	do.....	67	1,124	n.a.	n.a.
Miscellaneous tin and glass.....	do.....	61	1,233	n.a.	n.a.
Pimientos, total.....	do.....	1,414	4,611	981	2,245
No. 4 1/2 pimiento.....	do.....	965	2,240	n.a.	n.a.
No. 7 1/2 pimiento.....	do.....	287	785	n.a.	n.a.
No. 2 1/2.....	do.....	70	711	115	n.a.
Miscellaneous tin.....	do.....	44	335	n.a.	n.a.
Miscellaneous glass.....	do.....	48	540	n.a.	n.a.
Sauerkraut, total.....	do.....	4,313	8,705	4,864	6,439
No. 2.....	do.....	1,128	2,169	779	n.a.
No. 2 1/2.....	do.....	2,716	5,710	3,502	n.a.
No. 10.....	do.....	370	635	314	n.a.
Miscellaneous tin and glass.....	do.....	99	191	269	n.a.
Spaghetti.....	do.....	6,285	21,058	5,173	8,722
Sweet potatoes, total.....	do.....	1,237	3,485	204	451
No. 3 vacuum.....	do.....	658	1,969	n.a.	n.a.
No. 2 1/2.....	do.....	341	1,002	71	n.a.
Miscellaneous tin.....	do.....	238	514	n.a.	n.a.
Tomato paste, total.....	do.....	9,283	39,229	2,277	6,105
No. 6 1/2.....	do.....	6,390	22,713	n.a.	n.a.
No. 2 1/2.....	do.....	106	531	22	n.a.
No. 10.....	do.....	2,482	14,126	476	n.a.
Miscellaneous tin.....	do.....	305	1,859	n.a.	n.a.
Tomato pulp and puree (for sale as such), total.....	do.....	4,252	12,802	3,612	4,835
No. 1 picnic.....	do.....	463	1,429	445	n.a.
No. 10.....	do.....	2,954	8,938	1,928	n.a.
5 gal.....	do.....	396	1,015	n.a.	n.a.
Miscellaneous tin and glass.....	do.....	439	1,420	n.a.	n.a.
Other nonseasonal vegetables and specialties, total ²	do.....	5,202	14,419	2,888	4,673
No. 300.....	do.....	1,261	2,996	n.a.	n.a.
No. 2.....	do.....	152	552	942	n.a.
No. 10.....	do.....	2,756	7,033	102	n.a.
No. 303 glass.....	do.....	544	1,766	n.a.	n.a.
Miscellaneous tin and glass.....	do.....	489	2,072	n.a.	n.a.
Canned fruit juice, total	do.....	52,510	108,198	15,513	22,189
Apple juice, total.....	do.....	1,759	4,440	337	483
Quart glass.....	do.....	1,004	3,037	n.a.	n.a.
Miscellaneous tin.....	do.....	446	773	296	n.a.
Miscellaneous glass.....	do.....	309	630	n.a.	n.a.
Grape juice, total.....	do.....	3,405	18,797	2,980	7,111
5 gal. tin.....	do.....	457	1,564	n.a.	n.a.
Pint glass.....	do.....	1,510	6,950	n.a.	n.a.
Quart glass.....	do.....	1,027	8,893	n.a.	n.a.
Miscellaneous tin and glass.....	do.....	411	1,390	n.a.	n.a.
Grapefruit juice, total.....	do.....	12,148	20,049	8,993	9,585
No. 2.....	do.....	4,721	6,671	4,821	n.a.
No. 3.....	do.....	1,298	3,924	n.a.	n.a.
No. 3 cylinder.....	do.....	5,689	8,764	n.a.	n.a.
Miscellaneous tin and glass.....	do.....	440	690	n.a.	n.a.
Lemon juice, total.....	do.....	344	1,207	84	179
Orange juice, total.....	do.....	21,010	30,636	1,507	1,923
No. 2.....	do.....	10,175	9,045	439	n.a.
No. 3.....	do.....	485	1,716	n.a.	n.a.
No. 3 cylinder.....	do.....	9,609	18,163	n.a.	n.a.
Miscellaneous tin and glass.....	do.....	741	1,712	n.a.	n.a.
Orange and grapefruit juices, blended, total.....	do.....	7,975	14,312	n.a.	n.a.
No. 2.....	do.....	3,068	5,357	n.a.	n.a.
No. 3.....	do.....	311	909	n.a.	n.a.
No. 3 cylinder.....	do.....	4,226	7,448	n.a.	n.a.
Miscellaneous tin and glass.....	do.....	370	508	n.a.	n.a.

See footnotes at end of table.

TABLE 6.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939—Continued

PRODUCT	Unit of measure	1947		1939	
		Production ¹		Production ¹	
		Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant
Canned fruit juice—Continued					
Prune juice, total	Case ⁴	1,871	\$7,845	178	\$234
Quart glass	do	1,605	7,151	n.a.	n.a.
Miscellaneous tin and glass	do	266	694	n.a.	n.a.
Other fruit and berry juices and nectars, total ²	do	3,998	10,912	n.a.	n.a.
No. 211 cylinder	do	1,031	4,183	n.a.	n.a.
No. 2	do	1,723	3,730	n.a.	n.a.
No. 3 cylinder	do	316	850	n.a.	n.a.
Miscellaneous tin and glass	do	928	2,131	n.a.	n.a.
Canned vegetable juice, total	do	18,691	39,147	n.a.	n.a.
Tomato juice, total ¹⁰	do	18,500	38,710	13,754	20,439
No. 6Z	do	281	502	n.a.	n.a.
No. 8Z tall	do	391	911	n.a.	n.a.
No. 1 picnic	do	352	1,200	1,709	n.a.
No. 211 cylinder	do	193	639	n.a.	n.a.
No. 300	do	1,692	2,888	n.a.	n.a.
No. 2	do	4,592	9,173	1,219	n.a.
No. 2 tall	do	400	900	n.a.	n.a.
No. 3 cylinder	do	6,537	14,438	n.a.	n.a.
No. 10	do	1,364	2,533	1,627	n.a.
Miscellaneous tin	do	2,135	3,968	n.a.	n.a.
Miscellaneous glass	do	563	1,549	n.a.	n.a.
Other vegetable juices	do	191	437	n.a.	n.a.
Canned baby foods, total	do	28,418	71,164	n.a.	n.a.
Fruits, strained, total	do	9,898	22,018	850	1,706
4 oz	do	3,366	6,788	n.a.	n.a.
4 1/4-5 oz. glass	do	6,532	15,230	n.a.	n.a.
Fruits, chopped	do	1,650	5,028	n.a.	n.a.
Vegetables, strained, total	do	6,055	13,129	3,800	8,974
4 oz	do	1,961	3,922	n.a.	n.a.
4 1/4-5 oz. glass	do	4,094	9,207	n.a.	n.a.
Vegetables, chopped	do	1,213	3,413	n.a.	n.a.
Baby desserts, strained, total	do	2,184	4,672	n.a.	n.a.
4 oz	do	1,003	2,005	n.a.	n.a.
4 1/4-5 oz. glass	do	1,181	2,667	n.a.	n.a.
Baby desserts, chopped	do	215	620	n.a.	n.a.
Other baby foods, strained	do	4,809	12,884	n.a.	n.a.
Other baby foods, chopped	do	2,394	9,340	n.a.	n.a.
Jams, jellies, and preserves, total			152,636		39,119
Jams and preserves, pure	Pound	328,372	75,820	n.a.	n.a.
Jams and preserves, imitation	do	25,451	3,767	n.a.	n.a.
Jellies, pure	do	180,146	34,192	n.a.	n.a.
Jellies, imitation	do	52,088	8,800	n.a.	n.a.
Marmalades, citrus, pure	do	42,475	6,970	n.a.	n.a.
Fruit butter	do	105,974	10,172	n.a.	n.a.
Maraschino cherries	do	5,073	13,835	n.a.	n.a.
Jams, jellies, and preserves, kind not specified	Gallon		1,084	n.a.	3,292
Soups and other canned fruits, vegetables, etc., not elsewhere classified, total			217,802		3,140
Mince-meat	Pound	28,437	5,413	30,848	n.a.
Bulk fruit and vegetable juice	Gallon	2,630	1,921	n.a.	n.a.
Soups and other products ¹¹	Case ⁴	41,734	210,468	n.a.	n.a.
Canned foods, preserves, etc., kind not specified ¹¹			15,570		n.a.
Dried fruits, total			27,581		3,512
Dried apples	Pound	n.a.	4,183	60,773	n.a.
Other ¹²	do	26,780	23,398	n.a.	n.a.
Dehydrated vegetables and soup mix, total			25,276		521
Dehydrated vegetables	do	77,369	12,112	5,640	n.a.
Dehydrated soup mix	do	40,339	13,164	n.a.	n.a.
Pickles and pickle products, total ¹⁴			105,647		44,876
Cucumber pickles:					
Dill	Gallon	21,422	18,140	n.a.	n.a.
Sour	do	6,315	5,124	n.a.	n.a.
Sweet	do	17,188	27,238	n.a.	n.a.
Fresh pack	do	11,590	11,354	n.a.	n.a.
Pickle products (relish, mixed pickles, etc.)	do	18,907	16,705	n.a.	n.a.
Other pickles (tomatoes, peppers, etc.)	do	6,551	4,358	n.a.	n.a.
Green olives, bulk	do	1,833	3,598	n.a.	1,639
Green olives, bottled, including stuffed	do	4,562	16,735	n.a.	0,127
Sauerkraut, bulk ¹⁵	do	4,146	1,042	n.a.	2,101
Pickle products, kind not specified	do		663	n.a.	n.a.
Catsup and other tomato sauces, total			94,945		30,007
Catsup, total	Case ⁴	19,772	69,990	10,957	22,538
No. 10	do	2,036	9,197	987	n.a.
Miscellaneous tin	do	91	306	215	n.a.
12-14 oz. glass	do	17,349	59,083		n.a.
Miscellaneous glass (principally 16 and 17 oz.)	do	296	1,310	9,755	n.a.
Chili sauce, total	do	1,876	8,471	1,438	3,082
No. 10	do	226	1,359	139	n.a.
10-12 oz. glass	do	1,581	6,695		n.a.
Miscellaneous tin and glass	do	69	517	1,302	n.a.

See footnotes at end of table.

TABLE 6.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939—Continued

PRODUCT	Unit of measure	1947		1939	
		Production ¹		Production ¹	
		Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant
Catsup and other tomato sauces—Continued					
Other tomato sauces, total	Case ⁴	6,509	\$16,478	2,101	\$4,387
No. 10	do	138	526	31	n.a.
6-8 oz. tin	do	3,514	8,388		
No. 8Z tall	do	2,535	6,141		
Miscellaneous tin	do	121	401	2,070	n.a.
10-12 oz. glass	do	113	526		
Miscellaneous glass	do	88	496		
Meat sauces, except tomato, total					
Prepared mustard	Gallon	16,149	21,858	n.a.	10,842
Worcestershire and similar sauces for meat	do	4,197	9,531	n.a.	7,600
Salad dressings, total					
Salad dressing, mayonnaise type	Gallon	39,262	201,990	n.a.	48,650
Mayonnaiso	do	33,319	80,335	n.a.	21,594
Sandwich spread (dressing base)	do	6,979	93,246	n.a.	18,036
French dressing	do	3,652	17,258	n.a.	4,847
Other salad dressings (Russian, tartar sauce, etc.)	do	881	8,761	n.a.	3,273
Salad dressings, not specified by kind	do		1,759		
Other pickle and sauce products ¹⁶					
Pickles and sauces, kind not specified ¹⁷			11,157		3,445
Frozen packaged sea food					
	Pound	115,464	13,640	n.a.	n.a.
Frozen fruits and juices, total ¹⁸					
Apples	do	300,682	55,467	n.a.	n.a.
Blackberries and dewberries	do	26,536	2,654	n.a.	n.a.
Red raspberries	do	15,627	2,353	n.a.	n.a.
Strawberries	do	21,594	4,730	n.a.	n.a.
Other berries	do	83,987	22,725	n.a.	n.a.
Red sour cherries	do	21,882	4,062	n.a.	n.a.
Red sour cherries	do	55,178	8,694	n.a.	n.a.
Peaches	do	26,969	3,360	n.a.	n.a.
Other fruits	do	38,905	4,343	n.a.	n.a.
Fruit juices	do	6,917	1,933	n.a.	n.a.
Fruits, kind not specified	do	3,097	613	n.a.	n.a.
Frozen vegetables, total ¹⁸					
Asparagus	do	354,409	68,932	n.a.	n.a.
Green and wax beans	do	9,886	3,061	n.a.	n.a.
Fresh lima beans	do	30,872	6,238	n.a.	n.a.
Broccoli	do	67,555	16,873	n.a.	n.a.
Brussels sprouts	do	10,280	2,405	n.a.	n.a.
Caullflower	do	6,730	1,967	n.a.	n.a.
Caullflower	do	5,777	1,488	n.a.	n.a.
Fresh green peas	do	132,054	23,177	n.a.	n.a.
Spinach	do	19,628	2,892	n.a.	n.a.
Cut sweet corn	do	35,846	5,363	n.a.	n.a.
Other vegetables	do	34,581	5,251	n.a.	n.a.
Vegetables, kind not specified	do	1,200	227	n.a.	n.a.
Frozen foods, kind not specified					
			3,836	n.a.	n.a.

n.a.—Not available.
¹ Shipments, rather than production, for 1947 data on dried fruits and vegetables.
² Source: *Canned Fish and Byproducts*, bulletin of United States Fish and Wildlife Service (see text on industry). For 1939, the published quantity figures have been revised to conform to the 1947 method of computing net weights. Note that establishments included in the census produced canned sea food having a value of \$211,974,000 (see table 5).
³ None packed in 1939.
⁴ Quantities were reported in dozens for 1947, and in actual cases for 1939. The 1947 figures have been converted to cases, using the following factors: 1 to the case: 5 gal. 6 to the case: No. 10. 12 to the case: No. 3 cylinder. 36 to the case: Baby foods. 48 to the case: 4Z, 6Z, 8Z (all types), No. 1 picnic, No. 1 tall, No. 211 cylinder. 24 to the case: All other.
 Quantity figures for the "miscellaneous tin and glass" items, and items not shown by container size, have been converted to standard cases for 1947, because of wide variation in the sizes of the containers. For fruits, standard cases are 24 1/2's; for other products, 24 2/3's. Since the corresponding 1939 figures for the miscellaneous items represent actual cases, they are not closely comparable with the 1947 figures.
⁵ Pineapple, apple pie mix, nectarines, grapes, crabapples, grape pulp, etc.
⁶ Succotash, carrots and peas, vegetable salads, etc.
⁷ Okra, artichokes, broccoli, brussels sprouts, cabbage, caullflower, celery, etc. Included with "Other nonseasonal vegetables" for 1939.
⁸ For 1947, potatoes, potato products, dried peas, macaroni, noodles, green chili, etc. For 1939, includes both seasonal and nonseasonal vegetables, not elsewhere classified.
⁹ Pineapple juice, tangerine juice, and apricot, peach, plum, and prune neclar.
¹⁰ Includes mixtures containing at least 70 percent tomato juice.
¹¹ Poultry products and other canned products, not elsewhere classified, combined with soups to avoid disclosure of figures for individual companies. Number of standard cases is partially estimated.
¹² Includes total sales (\$11 million) of 272 small establishments classified in the "Canning and Preserving, Except Fish" industry for which no detailed breakdown of sales was tabulated.
¹³ Not including fruits dried on farms (see text on industry).
¹⁴ For 1939, includes value of unfinished pickles made in salting stations, reported as separate establishments; for 1947, the value of unfinished pickles is included in "Other pickle and sauce products."
¹⁵ Canned sauerkraut is included with "Canned nonseasonal vegetables and specialties."
¹⁶ For 1947, includes unfinished pickles and sauces, not elsewhere classified, such as prepared horseradish, catsup sold in bulk, and other sauces.
¹⁷ Includes total sales (\$8 million) of 185 small establishments classified in the "Pickles and sauces" industry, for which no detailed breakdown of sales was tabulated.
¹⁸ Not including products frozen on farms or in public cold storage warehouses. For 1947, production in such establishments was of minor importance except for berries, cherries, and spinach. Data on total U. S. pack are published by the National Association of Frozen Food Packers.

GRAIN-MILL PRODUCTS

This report shows 1947 Census of Manufactures statistics for establishments primarily engaged in dry-milling grains, in manufacturing feeds and cereal preparations, and in preparing flour mixes from purchased materials. These establishments have been classified in five industries as described below.

The aggregate cost of materials and value of shipments for this group of industries contain a considerable amount of duplication, due to the use of the products of the Flour and Meal Industry as materials by some of the others. For example, the cost of materials of the Prepared Animal Feeds Industry includes a large part of the millfeeds produced by the Flour and Meal Industry. There is relatively little duplication in the cost of materials and value of shipments for individual industries, however.

Flour and Meal (*Full Standard Industrial Classification title and number: Flour and Other Grain-Mill Products, 2041.*)—This industry comprises establishments primarily engaged in milling flour or meal from grain, except rice (Industry 2044). Such flour and grain mills may also produce cracked grain used as cereal or stock dry feed, or blended and prepared flours, principally from products ground in the same establishment. Important products of this industry include wheat flour (white; semolina; farina; granular; graham; whole-wheat; blended, phosphated, enriched, self-rising, and other prepared flour) (including mixes described below in Industry 2045, "Blended and prepared flour"), rye, buckwheat, corn and other flour; corn meal; corn grits and flakes for brewers' use; and bran and middlings. The few establishments primarily engaged in the manufacture of grain ground, rolled, chopped, or crimped, and poultry scratch feeds which were classified in this industry in previous censuses, have been classified in the Prepared Animal Feeds Industry. Such producers accounted for about 2 percent of the total value of products of this industry in 1939.

Prepared Animal Feeds (*Full Standard Industrial Classification title and number: Prepared Feeds for Animals and Fowls, 2042.*)—This industry comprises establishments primarily engaged in manufacturing prepared feeds for animals and fowls. Prepared feeds include those made from milled grains; animal, marine, and vegetable proteins; alfalfa meals, bone meal, calcium carbonate, manganese, and other mineral supplements; fish liver oils, distillers' solubles, and other vitamin supplements. Some of these establishments grind some or all of the grain they use, and others purchase all their materials. Mills primarily engaged in cracking grains, now included in this industry, were included in the Flour and Meal Industry in previous census years.

Establishments primarily engaged in custom grinding of feeds were not included in the 1947 census. Small farm supply dealers, whose sales of merchandise such as farm equipment

and branded feeds exceeded sales of mixed feeds of their own manufacture, were included if they produced 2,000 tons or more of feed during the year, and if they maintained separate records on their manufacturing activities.

In 1947, for the first time, a detailed breakdown of feed sales by kind of feed was requested. Small mills, which in many instances mix feeds a few tons at a time to customers' specifications, frequently did not have records which would supply this information. In some cases estimates were provided by the manufacturer and in others their production has been listed as "kind not specified."

Detailed statistics on materials used in prepared feeds also were obtained for the first time in 1947. Manufacturers usually were able to report the quantity and value of grain and other materials purchased but were unable in some cases to separate amounts used for mixed feeds from that sold as whole grain. An estimated separation was requested where the value of grain sold constituted a large proportion of the total sales. However, the total quantity and value of materials are probably slightly overstated by the inclusion of a small percentage of grains not used in the manufacture of products.

Cereal Preparations (*Part of Standard Industrial Classification No. 2043.*)—This industry comprises establishments primarily engaged in manufacturing breakfast foods, coffee substitutes, and other cereal preparations from grain, including flaked corn and wheat, shredded and cracked wheat, rolled oats, and puffed wheat and rice. The small number of establishments primarily engaged in manufacturing corn grits and hominy for human consumption are classified in the Flour and Meal Industry rather than in this industry as in the Standard Industrial Classification because the bulk of such products is produced by dry corn millers classified in the Flour and Meal Industry. The general statistics for 1947 and previous years are still reasonably comparable because the establishments involved are of minor importance.

Rice Cleaning and Polishing (*Standard Industrial Classification No. 2044.*)—This industry comprises establishments primarily engaged in cleaning and polishing rice, and in manufacturing rice flour or meal. Important products of this industry include brown rice, milled rice (including polished rice), rice polish, rice bran, and rice flour. Mills doing business on a custom, exchange, or toll basis are included, and were instructed to value shipments at the net selling value of their products.

Blended and Prepared Flour (*Standard Industrial Classification No. 2045.*)—This industry comprises establishments primarily engaged in the preparation of self-rising or blended flour from purchased flour. Important products of this industry include plain blended flour, and phosphated, self-rising, and other kinds of prepared flour such as biscuit, cake, doughnut, and pancake flour. Establishments primarily engaged in grinding flour from grain are classified in Industry 2041.

The quantity of blended and prepared flour made by mills classified in other industries, including the Flour and Meal Industry, exceeds that made in the Blended and Prepared Flour Industry.

GRAIN-MILL PRODUCTS

TABLE 1.—GENERAL STATISTICS FOR THE UNITED STATES: 1947 AND EARLIER CENSUS YEARS

[Money figures in thousands of dollars. For explanation of column captions see GENERAL EXPLANATIONS]

INDUSTRY AND CENSUS YEAR	Number of establishments	All employees		Production and related workers		Value added by manufacture ¹	Cost of materials, fuel, electricity, and contract work ²	Value of products shipped ³
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total			
Total for grain-mill products:								
1947	4,206	113,217	\$311,736	86,063	\$216,229	\$1,001,692	\$4,225,044	\$5,226,736
1930	3,746	73,511	99,339	56,606	56,606	325,960	914,502	1,240,464
1937	3,537	63,081	81,878	51,138	58,173	287,933	1,194,937	1,482,870
1935	3,313	61,045	74,404	48,016	48,011	269,183	1,063,492	1,332,675
1933	2,795	50,176	53,580	40,749	38,749	237,602	632,453	870,055
1931	3,374	n.a.	n.a.	39,810	46,981	264,841	725,064	989,905
1929	4,953	60,450	92,955	45,328	58,218	350,332	1,336,707	1,687,039
1927	4,619	60,862	91,050	45,166	57,226	302,630	1,355,616	1,658,246
Flour and meal:								
1947	1,243	39,458	118,940	30,722	85,680	410,468	2,101,075	2,611,543
1939 ⁴	2,143	35,978	49,375	24,771	28,370	143,882	506,061	649,943
1937	2,238	32,977	44,008	26,390	30,186	133,599	722,711	856,310
1935	2,193	33,805	41,860	26,495	27,105	136,997	716,222	853,219
1933	1,932	28,713	31,374	23,207	22,591	134,332	432,671	567,003
1931	2,412	n.a.	n.a.	22,840	27,298	136,950	461,091	598,041
1929	4,022	35,792	55,667	27,028	35,072	191,996	868,873	1,060,269
1927	4,035	40,128	59,791	29,982	37,559	176,049	972,711	1,148,760
1925 ⁵	4,413	42,775	62,693	31,988	39,700	172,636	1,125,379	1,298,015
1923	5,232	48,029	68,035	35,194	41,704	162,605	885,972	1,048,577
1921	6,485	48,187	68,818	35,378	43,143	185,930	993,810	1,179,740
1919	10,708	63,832	82,901	45,481	50,888	253,253	1,799,181	2,052,434
1914	10,788	52,966	40,963	39,718	24,593	125,410	752,270	877,680
1909	11,691	51,484	33,981	39,453	21,464	116,008	767,576	883,584
1904	10,051	46,525	27,175	39,110	19,822	93,062	618,971	713,033
1899	9,476	37,748	21,643	32,226	10,285	78,279	428,117	501,396
Prepared animal feeds:								
1947	2,699	55,347	143,301	40,266	93,579	394,236	1,736,027	2,130,263
1939	1,383	24,177	31,803	15,401	16,253	99,240	302,640	401,880
1937	1,126	19,190	24,486	14,397	15,839	76,706	338,505	415,211
1935	942	15,427	18,349	11,606	11,068	58,040	230,522	288,662
1933	710	11,340	11,496	8,791	7,866	39,273	122,070	161,343
1931	796	n.a.	n.a.	8,449	9,402	47,187	162,734	209,921
1929	750	14,384	22,400	10,223	12,821	74,833	327,920	402,753
1927	447	11,378	17,475	7,632	9,703	55,117	244,676	299,793
Cereal preparations:								
1947	64	11,276	30,689	9,496	25,160	130,188	154,478	284,666
1939	70	9,033	13,647	7,458	9,857	70,349	58,034	128,383
1937	71	n.a.	n.a.	7,725	10,419	65,680	85,181	159,891
1935	110	9,204	11,531	7,890	8,526	64,248	82,433	149,681
1933	103	8,135	9,064	7,115	7,270	56,011	55,015	111,026
1931	111	n.a.	n.a.	7,018	9,005	72,156	69,427	141,583
1929	121	8,158	12,231	6,488	8,876	73,751	101,472	175,223
1927	77	7,210	11,032	6,028	8,417	63,815	91,748	155,563
1925	90	n.a.	n.a.	6,168	7,942	57,502	92,577	150,079
1923	92	7,627	10,438	6,410	7,878	48,287	84,458	132,745
1921	82	7,853	12,189	5,749	7,178	43,482	74,559	118,041
1919	105	10,874	14,258	7,634	8,509	41,385	117,838	159,223
1914	137	7,613	6,094	5,177	3,134	23,218	36,767	59,985
Rice cleaning and polishing:								
1947	88	4,072	9,990	3,267	6,700	43,432	181,309	224,741
1939	72	3,218	3,094	2,346	1,533	8,561	33,802	42,363
1937	61	2,781	2,592	2,218	1,356	8,037	38,816	46,853
1935	68	2,609	2,664	2,025	1,312	9,899	34,214	44,113
1933	50	1,988	1,646	1,636	1,022	7,986	22,697	30,683
1931	55	n.a.	n.a.	1,503	1,276	8,547	31,813	40,360
1929	60	2,116	2,658	1,589	1,449	10,350	38,444	48,794
1927	60	2,146	2,752	1,524	1,546	7,649	46,481	54,130
1925	63	1,681	2,220	1,296	1,098	7,651	45,847	53,498
1923	69	2,365	2,520	1,764	1,379	6,855	40,213	47,068
1921	76	2,644	3,107	1,940	1,707	7,034	34,179	41,213
1919	86	3,209	3,441	2,113	1,032	13,404	76,634	90,038
1914	59	1,691	1,284	1,253	646	2,423	20,616	23,039
1909	71	1,739	1,177	1,239	564	2,870	19,501	22,371
1904	74	1,928	1,189	1,492	641	2,982	13,315	16,297
1899	80	820	448	651	266	1,148	7,576	8,724
Blended and prepared flour:								
1947	122	3,064	8,807	2,312	5,110	23,368	52,155	75,523
1939	78	1,105	1,410	706	593	3,928	13,966	17,894
1937 ¹⁰	41	n.a.	n.a.	408	373	3,909	0,725	13,634

n.a.—Not available.

¹ Value of products less cost of materials, supplies, fuel, electricity, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

² Figures for years prior to 1935 do not include cost of contract work.

³ For 1947 and 1929, value of products shipped; for all other years, value of products made. See GENERAL EXPLANATIONS—Value of products shipped.

⁴ Data for employees other than production workers reported by the "Cereal preparations" and "Blended and prepared flour" industries are not included in the figures for "All employees" for 1937. The figures do include, however, data for production and related workers reported by these industries.

⁵ The figures for 1939 include data for two establishments making soy flour. Although soy flour is now classified in the "Soybean oil mills" industry, the data for these two establishments have been included in the 1939 figures for "Flour and meal" to avoid disclosure of their figures.

⁶ The figures for 1899-1925 are not strictly comparable with those for later years because they include data for establishments which make prepared animal feeds from grain ground in the same establishment. Such establishments have been classified in "Prepared animal feeds" since 1927.

⁷ The figures for years prior to 1927 are not sufficiently comparable with those for later years to be shown in this table because they do not include data for manufacturers of prepared feeds who grind the grain consumed.

⁸ The figures for 1937-47 exclude data for self-rising flour, whereas the figures for earlier years include data for this product. Value added in 1937, including data for self-rising flour, was \$89.6 million.

⁹ Prior to 1914, "Cereal preparations" was combined with "Food preparations, n.e.c."

¹⁰ The figures for 1937 are for self-rising flour only. Blended flour made from purchased flour was not classified as a manufactured product prior to 1937. No comparable figures are available prior to 1937.

CENSUS OF MANUFACTURES: 1947

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947

[Money figures and man-hours in thousands. For explanation of column captions see GENERAL EXPLANATIONS]

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Flour and meal, total ¹	1,243	39,458	\$118,940	30,722	74,412	\$85,680	\$410,468	\$2,101,075	\$2,511,543	\$27,784
Northeast	152	3,373	10,957	2,731	6,424	8,339	52,280	241,105	293,385	981
New York	40	2,677	8,928	2,067	4,808	6,842	47,341	211,101	268,442	665
East North Central	222	6,681	20,129	5,130	12,050	14,061	60,498	303,812	364,310	12,843
Illinois	48	2,876	8,836	2,246	5,247	6,453	33,721	138,434	172,155	7,750
Michigan	47	889	2,717	650	1,490	1,796	5,866	33,690	39,556	3,082
Wisconsin	17	635	1,485	424	951	1,072	4,564	24,110	28,674	273
West North Central	235	13,667	43,010	10,844	27,101	31,713	167,328	876,798	1,034,126	6,060
Minnesota	53	3,696	12,478	3,010	7,815	9,494	40,021	270,873	310,894	1,735
Missouri	53	3,416	9,911	2,750	6,649	7,858	30,000	185,711	221,801	2,140
North Dakota	9	498	1,558	385	1,190	1,190	7,326	31,469	38,795	107
Nebraska	30	1,257	4,001	843	1,969	2,246	12,092	60,903	73,895	404
Kansas	69	4,335	13,836	3,475	8,089	9,896	55,623	302,283	357,000	2,000
South Atlantic	273	2,859	6,101	2,299	5,166	4,140	18,088	83,352	101,440	803
Maryland	29	483	1,226	360	879	841	6,996	21,235	28,231	114
East South Central	165	2,442	5,420	2,004	4,853	4,086	18,437	81,434	99,871	1,139
Tennessee	69	1,213	2,656	1,001	2,331	1,954	8,882	43,083	51,965	281
West South Central	75	4,970	14,743	3,666	8,958	9,713	50,209	245,696	295,005	1,919
Texas	37	3,033	9,113	2,194	5,361	5,830	29,955	154,377	184,332	1,124
Mountain	73	2,109	6,687	1,554	4,026	4,769	17,763	90,776	117,529	1,023
Montana	13	415	1,328	319	807	1,035	3,848	23,270	27,118	224
Idaho	13	331	958	260	686	714	2,903	13,800	16,703	129
Utah	21	491	1,615	318	810	1,053	4,206	24,168	28,464	278
Pacific	47	3,357	11,993	2,494	5,834	8,859	35,875	160,102	204,077	2,416
Washington	17	1,575	5,887	1,150	2,717	4,340	16,253	84,452	100,705	1,209
Oregon	17	895	3,192	673	1,567	2,347	11,674	45,886	55,590	460
California	13	887	2,914	671	1,550	2,172	7,948	40,764	48,712	767
Prepared animal feeds, total ¹	2,689	55,347	143,301	40,266	92,751	93,579	394,236	1,736,627	2,130,263	34,791
New England	65	1,870	4,978	1,435	3,186	3,461	15,200	88,900	104,100	1,435
Middle Atlantic	378	8,298	24,818	6,104	14,104	16,810	72,327	382,013	454,940	3,800
New York	147	5,056	16,528	3,654	8,334	11,140	51,032	280,409	331,441	2,824
New Jersey	55	932	2,456	686	1,565	1,680	6,906	25,385	32,201	377
Pennsylvania	176	2,310	5,834	1,764	4,205	3,984	14,389	70,819	91,208	698
East North Central	551	11,828	32,547	7,219	16,163	17,010	81,230	357,748	438,987	7,041
Ohio	137	3,107	8,387	2,356	5,387	6,061	23,853	132,040	155,890	1,536
Indiana	126	1,862	4,651	1,311	2,953	3,263	11,408	65,410	76,824	1,142
Illinois	127	5,407	15,192	2,449	5,229	5,802	36,202	113,940	160,142	3,288
West North Central	694	10,061	24,668	7,486	17,990	17,214	76,118	256,380	332,507	8,001
Minnesota	153	1,747	4,510	1,317	2,966	3,117	16,112	50,923	73,035	1,422
Iowa	151	2,091	1,363	3,255	3,100	3,100	17,581	48,632	66,213	1,208
Missouri	114	2,725	6,633	2,018	4,799	4,542	22,188	89,321	111,509	2,065
South Atlantic	234	5,732	12,562	4,417	10,339	8,230	33,570	162,926	190,400	3,082
Virginia	49	1,095	2,846	772	1,806	1,411	5,813	31,650	37,493	721
North Carolina	57	1,395	2,870	1,153	2,645	2,002	8,227	37,739	45,006	498
South Carolina	16	314	608	250	615	429	1,692	8,500	10,102	76
Georgia	33	915	1,867	726	1,878	1,164	5,495	22,737	28,232	307
East South Central	110	4,173	9,085	3,322	7,803	6,050	27,345	135,502	162,847	2,081
Kentucky	28	584	1,096	475	1,098	1,013	3,341	10,439	22,780	216
Tennessee	53	2,124	4,289	1,609	3,692	2,582	15,534	66,714	82,248	1,022
Alabama	17	917	2,345	793	1,992	1,802	4,704	33,022	37,726	631
Mississippi	12	548	1,055	445	1,021	653	3,766	19,327	20,003	812
West South Central	207	5,175	11,388	4,038	9,419	7,506	28,664	127,905	150,509	2,297
Arkansas	35	594	1,163	461	1,010	725	3,244	19,382	22,026	356
Texas	114	3,225	7,145	2,425	5,759	4,727	18,591	81,386	99,077	1,427
Mountain	141	1,758	4,289	1,464	3,474	3,211	12,511	33,941	46,452	1,283
Idaho	19	195	482	159	369	360	1,324	5,217	6,541	162
New Mexico	11	117	234	102	226	191	908	1,781	1,089	16
Pacific	309	6,452	18,968	4,781	10,273	13,097	47,262	190,103	237,365	4,082
California	205	4,828	14,424	3,512	7,426	9,719	37,711	148,938	186,049	3,707
Cereal preparations, total ¹	64	11,276	30,689	9,496	19,540	25,160	130,188	154,478	284,666	3,842
New England	5	111	300	75	131	166	708	1,430	1,430	20
Middle Atlantic	12	1,903	5,390	1,646	3,645	4,437	21,825	21,270	43,101	760
East North Central	14	6,670	18,049	5,582	10,939	15,156	79,743	74,404	164,147	2,403
West North Central	11	2,275	6,120	1,943	4,265	4,832	24,477	53,018	77,405	496
South	8	102	228	77	201	168	1,140	2,065	3,214	56
West	14	215	593	173	359	411	2,286	2,993	5,279	47
Rice cleaning and polishing, total ¹	88	4,072	9,999	3,267	7,788	6,700	43,432	181,309	224,741	3,125
South	78	3,628	8,443	2,906	7,045	5,573	34,461	143,248	177,709	2,520
Louisiana	48	1,772	3,437	1,459	3,283	2,287	14,267	62,600	76,807	1,224
Texas	14	1,073	3,304	817	2,084	2,110	14,017	48,072	62,089	795
Pacific	10	444	1,556	361	743	1,127	8,971	38,061	47,032	605
California	10	444	1,556	361	743	1,127	8,971	38,061	47,032	605

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947—Continued

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Blended and prepared flour, total	122	3,064	\$8,807	2,312	4,557	\$5,110	\$23,368	\$52,155	\$75,523	\$1,856
Northeast.....	26	1,382	3,813	1,100	1,770	2,554	10,621	20,178	30,789	880
East North Central.....	25	457	2,074	266	630	704	4,604	9,526	14,130	134
Ohio.....	5	54	160	44	95	114	607	1,414	2,021	10
West North Central.....	9	99	416	61	127	135	1,159	2,253	3,412	90
South.....	40	829	1,705	670	1,579	1,210	4,412	15,498	19,910	260
Texas.....	9	158	327	137	299	233	802	2,048	2,850	24
West.....	22	297	799	215	451	507	2,572	4,700	7,272	502

¹ For each producing State not shown separately in the table (see GENERAL EXPLANATIONS "Disclosure of Data for Individual Companies"), there are shown below the number of establishments and, in parentheses, the number of employees for States represented by three or more companies, when possible.

Flour and meal: *Northeast*, New Hampshire, 1; Vermont, 1; Rhode Island, 2; Connecticut, 2; New Jersey, 1; Pennsylvania, 105 (723); *East North Central*, Ohio, 66 (1,147); Indiana, 44 (1,234); *West North Central*, Iowa, 16 (400); South Dakota, 6 (65); *South Atlantic*, Delaware, 4 (16); District of Columbia, 1; Virginia, 103 (825); *West Virginia*, 7 (113); North Carolina, 76 (688); South Carolina, 23 (162); Georgia, 28 (455); Florida, 2; *East South Central*, Kentucky, 76 (989); Alabama, 13; Mississippi, 2; *West South Central*, Arkansas, 5; Louisiana, 1; Oklahoma, 32 (1,837); *Mountain*, Wyoming, 2; Colorado, 13 (689); *New Mexico*, New Mexico, 7; Arizona, 4 (54).

Prepared animal feeds: *New England*, Maine, 4 (61); New Hampshire, 6 (141); Vermont, 17 (628); Massachusetts, 27 (822); Connecticut, 11 (218); *East North Central*, Michigan, 68 (518); Wisconsin, 93 (934); *West North Central*, North Dakota, 12 (31); South Dakota, 16 (141); Nebraska, 111 (1,441); Kansas, 137 (1,885); *South Atlantic*, Delaware, 12 (324); Maryland, 33 (657); West Virginia, 10 (241); Florida, 24 (701); *West South Central*, Louisiana, 14 (675); Oklahoma, 44 (681); *Mountain*, Montana, 9 (91); Wyoming, 2; Colorado, 60 (705); Arizona, 13 (362); Utah, 23 (246); Nevada, 4; *Pacific*, Washington, 50 (749); Oregon, 54 (875).

Cereal preparations: *New England*, Vermont, 1; Massachusetts, 4; *Middle Atlantic*, New York, 8 (1,543); New Jersey, 1; Pennsylvania, 3; *East North Central*, Ohio, 4 (883); Illinois, 5 (1,019); Michigan, 5 (4,768); *West North Central*, Minnesota, 4 (257); Iowa, 2; Missouri, 2; Nebraska, 3; Kansas, 1; *South*, North Carolina, 1; South Carolina, 1; Kentucky, 2; Tennessee, 1; Arkansas, 1; Louisiana, 1; Oklahoma, 1; Montana, 1; Colorado, 2; Arizona, 1; Washington, 2; Oregon, 2; California, 6 (107).

Rice cleaning and polishing: South, Tennessee, 1; Arkansas, 15.

Blended and prepared flour: *Northeast*, Massachusetts, 2; New York, 17 (1,006); New Jersey, 1; Pennsylvania, 6 (146); *East North Central*, Indiana, 1; Illinois, 15 (382); Michigan, 3; Wisconsin, 1; *West North Central*, Minnesota, 1; Iowa, 1; Missouri, 6 (72); Nebraska, 1; *South*, Maryland, 2; Virginia, 2; North Carolina, 3 (11); South Carolina, 2; Georgia, 3 (23); Florida, 1; Kentucky, 5 (281); Tennessee, 9 (267); Alabama, 2; Mississippi, 2; *West*, Colorado, 1; Arizona, 1; Utah, 1; Washington, 1; California, 13 (270).

TABLE 3.—DETAILED STATISTICS FOR THE UNITED STATES: 1947

(Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS)

ITEM	Industry					ITEM	Industry				
	Flour and meal	Prepared animal feeds	Cereal preparations	Rice cleaning and polishing	Blended and prepared flour		Flour and meal	Prepared animal feeds	Cereal preparations	Rice cleaning and polishing	Blended and prepared flour
ALL ESTABLISHMENTS						ESTABLISHMENTS REPORTING DETAILED STATISTICS—Continued					
Number of establishments.....	1,243	2,089	64	88	122	Cost of materials, fuel, electricity, and contract work.....	\$2,085,015	\$1,713,515	\$154,478	\$181,309	\$52,155
All employees:						Materials, parts, containers, and supplies.....	2,073,074	1,700,210	151,798	180,516	51,823
Number (average for the year).....	39,468	55,347	11,276	4,072	3,064	Fuels, total.....	2,911	4,658	1,479	180	126
Salaries and wages, total.....	\$118,940	\$143,301	\$30,689	\$9,999	\$8,807	Bituminous coal.....	1,143	784	854	7	22
Production and related workers:						Anthracite.....	70	145	106	1	1
Number (average for the year).....	30,722	40,260	9,406	3,267	2,312	Coke.....	8	24	6	1	1
Man-hours, total..... thousands.....	74,412	92,751	19,540	7,788	4,557	Fuel oils.....	1,005	1,877	152	39	86
Wages, total.....	\$85,680	\$93,579	\$25,160	\$6,700	\$5,110	Gas.....	492	1,178	267	73	16
Value added by manufacture.....	\$410,468	\$394,236	\$130,188	\$43,432	\$23,368	Other fuels.....	193	650	95	67	1
ESTABLISHMENTS REPORTING DETAILED STATISTICS						Purchased electric energy.....	8,911	7,052	1,199	355	151
Number of establishments.....	888	2,221	64	88	122	Contract and commission work.....	119	1,595	2	252	55
All employees:						Value of inventories:					
Number (average for the year).....	38,608	53,453	11,276	4,072	3,064	Beginning of year, total.....	\$278,916	\$181,924	\$28,457	\$40,122	\$11,144
Salaries and wages, total.....	\$117,442	\$130,464	\$30,689	\$9,999	\$8,807	Finished products.....	37,251	44,694	6,929	11,328	2,141
Production and related workers:						Materials, supplies, and work in process.....	241,665	137,230	21,528	28,794	9,003
Number (average for the year).....	29,781	38,428	9,406	3,267	2,312	End of year, total.....	371,493	209,084	32,413	44,010	11,732
Man-hours, total..... thousands.....	72,639	89,085	19,540	7,788	4,557	Finished products.....	47,891	55,409	6,890	18,066	2,566
Wages, total.....	\$84,204	\$89,824	\$25,160	\$6,700	\$5,110	Materials, supplies, and work in process.....	323,602	153,675	25,523	25,953	9,166
Value added by manufacture.....	\$406,833	\$387,075	\$130,188	\$43,432	\$23,368	Expenditures for plant and equipment:					
Number of employees for pay period ended nearest Oct. 15:						New plant and equipment.....	\$27,784	\$34,791	\$3,842	\$3,125	\$1,856
All employees:						Construction and major alteration of fixed plants.....	12,601	14,704	909	1,700	727
Male.....	39,651	54,124	11,406	6,191	3,320	Buildings.....	12,104	13,527	609	1,371	637
Female.....	36,316	49,405	7,429	5,458	2,135	Other construction.....	497	1,177	300	329	90
Production and related workers:						Machinery and equipment.....	15,183	20,087	2,933	1,425	1,129
Male.....	30,700	38,658	9,631	5,337	2,483	Production machinery and equipment.....	13,013	14,788	2,732	1,252	888
Female.....	29,350	37,463	6,304	4,737	1,559	Other machinery and equipment.....	2,170	5,299	201	173	241
Force-account construction workers, and all other.....	1,350	1,105	3,327	600	924	Used plant and equipment, and land.....	960	1,838	31	681	32
Male.....	8,722	14,973	1,832	842	837	Number of highway-type motor vehicles owned or leased:					
Female.....	6,737	11,451	1,122	709	676	Trucks.....	1,887	6,003	105	74	141
Female.....	1,086	3,522	710	133	261	By manufacturer's rated capacity:					
All employees, number by month:						Under 1 1/2 tons.....	422	1,363	37	20	37
January.....	37,882	50,966	11,421	4,256	3,378	1 1/2 tons.....	807	2,855	43	30	41
February.....	37,720	50,896	11,198	4,204	3,120	Over 1 1/2 tons and less than 3 1/2 tons.....	436	1,283	20	23	39
March.....	37,833	51,890	11,099	3,738	2,848	3 1/2 tons and less than 5 tons.....	89	171	4	1	10
April.....	37,706	51,356	11,555	3,280	2,848	5 tons and over.....	133	331	1	1	14
May.....	37,180	53,211	10,791	2,839	2,764	By body type:					
June.....	37,697	55,754	10,833	2,718	2,754	Van.....	422	668	6	3	63
July.....	38,900	50,527	11,104	2,713	2,813	Stake or platform.....	770	3,214	47	35	27
August.....	39,556	55,894	11,954	3,202	2,812	Panel or light delivery.....	365	884	37	8	42
September.....	38,521	55,168	12,158	4,985	3,035	All other trucks.....	330	1,237	15	28	9
October.....	39,651	54,124	11,466	6,191	3,320	Truck tractors.....	460	832	7	5	6
November.....	39,573	52,862	11,230	5,893	3,301	Trailers and semitrailers.....	502	1,026	7	7	5
December.....	39,259	52,118	10,451	4,759	3,392						

GRAIN-MILL PRODUCTS

105

TABLE 6.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939

[All figures in thousands]

PRODUCT	Unit of measure	1947		1939	
		Total shipments and interplant transfers		Production for sale	
		Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant
Wheat flour, plain, total ¹	100 lb. sack	271,404	\$1,598,178	198,906	\$410,784
White	do.	254,318	1,501,146	187,967	388,481
Whole wheat	do.	4,714	26,614	4,287	8,880
Semolina	do.	9,164	50,928	6,652	13,423
Other, including farina	do.	3,208	19,490	(?)	(?)
Blended and prepared flour, total	do.	47,374	363,999	25,845	75,596
Plain blended	do.	2,326	13,838	1,425	3,221
Phosphated	do.	19,679	119,734	7,270	15,943
Self-rising	do.	14,994	101,608	13,283	32,080
Other prepared flour (pancake, etc.)	do.	10,375	128,819	3,867	24,352
Blended and prepared flour, made in flour mills	do.	40,096	272,388	19,399	47,608
Plain blended	do.	1,869	10,718	790	1,657
Phosphated	do.	19,031	114,546	6,628	14,351
Self-rising	do.	12,955	83,868	10,574	24,895
Other prepared flour (pancake, etc.)	do.	6,241	63,256	1,407	6,705
Blended and prepared flour, not made in flour mills ¹	do.	7,278	91,611	6,446	27,988
Plain blended	do.	457	3,120	635	1,664
Phosphated	do.	648	5,188	642	1,592
Self-rising	do.	2,039	17,740	2,709	7,185
Other prepared flour (pancake, etc.)	do.	4,134	65,563	2,460	17,647
Wheat bran, shorts and middlings	Ton.	5,285	320,580	4,391	89,813
Corn meal, total	100 lb. sack	11,838	65,694	14,147	22,696
Whole	do.	5,997	33,628	n.a.	n.a.
Degermed	do.	5,841	32,066	n.a.	n.a.
Other grain-mill products, n.e.c., total			129,280		n.a.
Rye flour	100 lb. sack	1,930	12,541	2,844	4,092
Rye millfeed	Ton.	23	1,121	n.a.	n.a.
Corn grits and hominy for human consumption	100 lb. sack	4,841	24,929	2,275	3,520
Corn grits and flakes for brewers' use	do.	6,911	37,509	4,035	5,410
Hominy feed and other corn milling byproducts	Ton.	529	36,117	n.a.	n.a.
Oat millfeed and other oat milling byproducts	do.	237	11,346	n.a.	n.a.
Other grain-mill products ²			5,717		1,623
Grain-mill products, not specified by kind			31,605		4,454
Poultry and livestock feeds, total	Ton.	22,293	1,982,981	n.a.	n.a.
Grain (ground, rolled, chopped, or crimped)	do.	1,584			
Poultry feeds:					
All scratch feeds	do.	1,755			
Chicken mash and pellets, under 25% protein:					
Layer and breeder	do.	4,318			
Starter	do.	960			
Grower	do.	1,173			
Broiler	do.	1,522			
Turkey mash and pellets, under 25% protein	do.	547			
Other poultry feeds under 25% protein	do.	612			
Supplements and concentrates, 25% protein and over	do.	832		n.a.	
Livestock feeds:					
Dairy, under 25% protein	do.	4,684			
Dairy, 25% protein and over	do.	608			
Beef and range cattle	do.	436			
Sheep and goat	do.	71			
Pig and hog, under 25% protein	do.	771			
Pig and hog, 25% protein and over	do.	707			
Horse and mulo	do.	534			
Other livestock feeds ³	do.	757			
Poultry and livestock feeds, kind not specified	do.	447			
Dog and cat food, total	Pound	1,107,849	96,359	732,095	33,467
Canned	do.	427,137	38,389	501,378	22,948
Biscuits, pellets, and meal	do.	680,712	57,970	230,717	10,519
			87,102		n.a.
Miscellaneous feeds, total			18,257	615,484	7,750
Mineral mixtures	Pound	399,799		419	8,083
Alfalfa meal, total	Ton.				
Sun-cured	do.	397	15,944	n.a.	n.a.
Dehydrated	do.	723	34,311	n.a.	n.a.
Other prepared feeds, n.e.c. ¹	do.		18,590	n.a.	n.a.
Prepared feeds, kind not specified			³ 47,029		

See footnotes at end of table.

TABLE 6.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939—Continued

PRODUCT	Unit of measure	1947		1939	
		Total shipments and interplant transfers		Production for sale	
		Quantity	Value f.o.b. plant	Quantity	Value f.o.b. plant
Cereal preparations, total			\$221, 758		\$108, 458
Ready to serve, total	Pound	713, 147	148, 134	576, 493	67, 065
Corn	do.	207, 360	35, 130	n.a.	n.a.
Wheat	do.	306, 632	60, 059	290, 530	37, 665
Other grains and mixed grains	do.	199, 155	52, 945	n.a.	n.a.
To be cooked before serving, total	do.	773, 054	69, 003	712, 123	36, 407
Corn	do.	2, 809	320	n.a.	n.a.
Oats	do.	504, 657	42, 919	n.a.	n.a.
Wheat	do.	165, 093	19, 818	153, 453	10, 463
Other grains and mixed grains	do.	100, 495	6, 636	n.a.	n.a.
Cereal coffee substitute	do.	n.a.	3, 772	n.a.	n.a.
Cereal preparations, kind not specified	do.		159	n.a.	n.a.
Milled rice, total ¹	100 lb. bag	22, 102	215, 804	14, 883	39, 615
By type of rice:					
Heads	do.	17, 275	184, 026	11, 850	31, 873
Second heads	do.	2, 340	15, 072	858	2, 097
Screenings	do.	1, 594	9, 070	1, 160	2, 217
Brewers	do.	893	5, 227	915	1, 628
By type of container:					
Bags, 100 lbs. and over	do.	18, 230	169, 282	n.a.	n.a.
Containers of 3 lbs. or less	do.	3, 504	43, 005	n.a.	n.a.
Other containers	do.	278	2, 917	n.a.	n.a.
Rice milling byproducts, total			8, 358		2, 749
Bran	100 lb. bag	2, 749	6, 413	2, 078	1, 887
Polish	do.	223	665	363	390
Other byproducts ¹⁰	do.		1, 280		692

n.a.—Not available.

¹ Total production, including the quantity produced and used in the same mills in the manufacture of blended and prepared flours amounted to 305.5 million sacks in 1947. (For more detail, see the Census "Facts for Industry" Series M16A, Flour Milling Products.)² Included with white flour.³ Includes a small quantity of prepared flour, kind not specified.⁴ Includes production in cereal plants, largely from purchased flour.⁵ Includes buckwheat and corn flour.⁶ Includes feed for rabbits, mink, foxes, laboratory animals, etc.⁷ Includes crushed oyster shells, egg shells, dried citrus pulp, and miscellaneous prepared materials used as feeds or feed adjuncts.⁸ Includes total sales (\$29,673,000) of 468 establishments classified in the "Prepared animal feeds" industry, for which no detailed breakdown of sales was tabulated.⁹ Figures for 1947 represent calendar year shipments except that establishments accounting for the following percentages of total shipments reported for years ending as specified: June 30, 1947, 1%; July 31, 1947, 1%; September 30, 1947, 11%; May 31, 1948, 6%; June 30, 1948, 1%.¹⁰ Meal, flour, ground hulls, and products, not specified by kind.

GRAIN-MILL PRODUCTS

TABLE 7.—SELECTED MATERIALS CONSUMED BY THE PREPARED FEEDS INDUSTRY, BY DIVISIONS AND STATES: 1947²

[All figures in thousands]

DIVISION AND STATE	Total cost	Barley		Corn (except corn meal)		Oats		Sorghum grain		Soybeans		Wheat		Other grains (rye, buckwheat, etc.)		Corn meal	
		Quantity (bushels)	Value	Quantity (bushels)	Value	Quantity (bushels)	Value	Quantity (bushels)	Value	Quantity (bushels)	Value	Quantity (bushels)	Value	Quantity (bushels)	Value	Quantity (tons)	Value
United States.....	\$1,414,634	30,553	\$48,463	137,503	\$252,337	112,591	\$123,981	16,637	\$33,445	7,230	\$22,656	41,384	\$103,530	2,004	\$4,263	695	\$53,324
New England:																	
Maine.....	935	(c)	(c)	(c)	(c)	(c)	(c)									(c)	(c)
New Hampshire.....	6,534	(c)	(c)	(c)	(c)	(c)	(c)									(c)	(c)
Vermont.....	44,891	430	800	3,924	4,651	3,924	4,651									(c)	(c)
Massachusetts.....	19,766	197	352	1,190	2,718	1,641	1,654									(c)	(c)
Connecticut.....	5,582	(c)	(c)	1,025	2,199	563	1,608									(c)	(c)
Middle Atlantic:																	
New York.....	235,876	2,855	4,618	22,639	47,607	24,432	27,589	(c)	(c)	130	381	3,099	8,133			117.0	9,065
New Jersey.....	21,367	219	385	2,379	5,375	2,449	2,908					1,192	3,383			16.7	1,313
Pennsylvania.....	65,424	1,033	1,477	6,862	15,313	5,477	6,493	198	387	(c)	(c)	1,810	4,274	289	734	41.0	3,189
East North Central:																	
Ohio.....	112,144	1,098	1,748	11,941	25,332	7,239	8,070	345	698	(c)	(c)	1,241	3,087	106	188	22.9	1,567
Indiana.....	50,177	200	333	3,197	6,286	2,365	2,473	(c)	(c)			917	2,217	(c)	(c)	(c)	(c)
Illinois.....	94,602	1,187	2,063	7,204	15,137	4,898	5,106	198	373	38	104	721	1,825	(c)	(c)	(c)	(c)
Michigan.....	5,377	(c)	(c)	635	1,462	358	440	(c)	(c)			170	467	(c)	(c)	(c)	(c)
Wisconsin.....	32,515	269	467	8,736	17,383	5,244	5,343	(c)	(c)			365	968	(c)	(c)	(c)	(c)
West North Central:																	
Minnesota.....	41,047	393	1,312	2,277	4,865	4,214	4,558	48	104	(c)	(c)	1,093	2,821	62	164	10.2	812
Iowa.....	39,180	(c)	(c)	2,825	5,985	4,238	4,357	219	500			568	1,420	(c)	(c)	5.2	345
Missouri.....	70,669	329	542	5,060	10,072	4,533	4,620	760	1,455			1,012	2,410	(c)	(c)	47.7	3,152
North Dakota.....	1,547	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)			(c)	(c)	(c)	(c)	(c)	(c)
South Dakota.....	20,135	(c)	(c)	223	426	190	187	(c)	(c)			274	615	(c)	(c)	(c)	(c)
Nebraska.....	21,632	130	222	1,414	2,776	609	599	706	1,408	(c)	(c)	122	268	(c)	(c)	(c)	(c)
Kansas.....				4,459	1,366	1,259	1,366										
South Atlantic:																	
Delaware.....	19,252	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)			78	187			(c)	(c)
Maryland.....	16,770	232	407	2,239	4,704	1,374	1,626	126	311			370	769			(c)	(c)
Virginia.....	27,782	179	291	2,551	5,919	1,511	1,884	(c)	(c)			2,215	5,776			16.5	1,224
West Virginia.....	3,833	(c)	(c)	870	1,650	297	319	(c)	(c)			381	922			(c)	(c)
North Carolina.....	35,282	159	241	2,809	5,909	1,769	1,767	214	434			4,703	12,593			19.7	1,557
South Carolina.....	7,243	(c)	(c)	666	1,576	585	1,607	(c)	(c)			486	1,343			(c)	(c)
Georgia.....	13,450	(c)	(c)	1,933	4,291	1,065	1,104	56	114			703	1,813			3.0	237
Florida.....	9,883	(c)	(c)	877	2,042	1,357	1,520	(c)	(c)			173	455			5.4	419
East South Central:																	
Kentucky.....	16,854	74	126	2,478	4,979	888	886	54	124			1,228	3,038			4.9	320
Tennessee.....	51,784	621	966	4,814	9,722	5,453	5,984	373	700			916	2,457			(c)	(c)
Alabama.....	23,702	(c)	(c)	4,873	10,488	(c)	(c)	433	887			484	1,262			(c)	(c)
Mississippi.....	14,100	189	314	2,750	6,287	1,717	1,853	138	225			246	595			(c)	(c)
West South Central:																	
Arkansas.....	15,249	110	179	3,092	6,191	2,421	2,588	198	379			100	249			5.8	475
Louisiana.....	8,218	(c)	(c)	1,576	3,053	1,090	1,140	(c)	(c)			90	184			(c)	(c)
Oklahoma.....	11,018	60	101	1,063	3,954	433	460	594	1,144			135	314			(c)	(c)
Texas.....	65,173	563	873	3,340	10,396	7,332	7,336	4,016	8,869			4,364	10,063	235	474	22.1	1,641
Mountain:																	
Montana.....	1,548	122	160	87	193	249	230					(c)	(c)			(c)	(c)
Idaho.....	1,541	(c)	(c)	(c)	(c)	(c)	(c)	121	203			95	207			(c)	(c)
Colorado.....	6,355	515	822	1,360	3,053	495	501	(c)	(c)			(c)	(c)			(c)	(c)
New Mexico.....	3,073	709	1,056	282	116	103	142	282	503			180	390			(c)	(c)
Arizona.....	8,277	776	1,255	(c)	(c)	122	125	(c)	(c)			528	1,270			(c)	(c)
Nevada.....																	
Pacific:																	
Washington.....	16,648	776	1,414	1,045	2,649	1,743	2,148	(c)	(c)			1,459	3,728			(c)	(c)
Oregon.....	15,263	884	1,536	896	2,099	1,248	1,609	116	262			963	2,534			(c)	(c)
California.....	130,441	15,208	23,510	10,129	23,238	3,327	3,997	4,278	7,739			7,579	18,128	160	244	3.1	261
Undistributed ³	242	536	963	6,327	13,759	4,730	5,214	3,102	6,636	7,062	22,201	78	172	653	1,488	352.6	27,646

See footnotes at end of table.

TABLE 7.—SELECTED MATERIALS CONSUMED BY THE PREPARED FEEDS INDUSTRY, BY DIVISIONS AND STATES: 1947²—Continued

DIVISION AND STATE	Tankage		Fish meal and scrap		Dried skim milk and buttermilk		Dried whey		Beet pulp (plain and molasses)		Citrus pulp		Alfalfa meal		Molasses		Bone meal and minerals	
	Quan- tity (tons)	Value	Quan- tity (tons)	Value	Quan- tity (pounds)	Value	Quan- tity (pounds)	Value	Quan- tity (tons)	Value	Quan- tity (tons)	Value	Quan- tity (tons)	Value	Quan- tity (tons)	Value	Quan- tity (tons)	Value
United States.....	103	\$11,941	187	\$25,647	62,420	\$5,101	118,088	\$8,123	68	\$2,609	39	\$1,871	1,019	\$64,776	528	\$25,600		\$19,176
New England:																		
Maine.....																		
New Hampshire.....																		
Vermont.....																		
Massachusetts.....																		
Connecticut.....																		
Middle Atlantic:																		
New York.....																		
New Jersey.....																		
Pennsylvania.....																		
East North Central:																		
Ohio.....																		
Indiana.....																		
Illinois.....																		
Michigan.....																		
Wisconsin.....																		
West North Central:																		
Minnesota.....																		
Iowa.....																		
Missouri.....																		
North Dakota.....																		
South Dakota.....																		
Nebraska.....																		
Kansas.....																		
South Atlantic:																		
Delaware.....																		
Maryland.....																		
Virginia.....																		
West Virginia.....																		
North Carolina.....																		
South Carolina.....																		
Georgia.....																		
Florida.....																		
East South Central:																		
Kentucky.....																		
Tennessee.....																		
Alabama.....																		
Mississippi.....																		
West South Central:																		
Arkansas.....																		
Louisiana.....																		
Oklahoma.....																		
Texas.....																		
Mountain:																		
Montana.....																		
Idaho.....																		
Colorado.....																		
New Mexico.....																		
Arizona.....																		
Utah.....																		
Nevada.....																		
Pacific:																		
Washington.....																		
Oregon.....																		
California.....																		
Undistributed ¹	20	2,246	7	894	12,899	1,010	35,840	2,559	7	418	18	937	28	1,349	47	2,063		356

See footnotes at end of table.

GRAIN-MILL PRODUCTS

TABLE 7.—SELECTED MATERIALS CONSUMED BY THE PREPARED FEEDS INDUSTRY, BY DIVISIONS AND STATES: 1947²—Continued

DIVISION AND STATE	Corn, gluten feed and meal		Hominy feed and meal		Brewers' and distillers' spent grains		Mill feeds and screenings		Cottonseed cake and meal		Soybean cake and meal		Linseed cake and meal		Other oil cake and meal		Meat scrap	
	Quantity (tons)	Value	Quantity (tons)	Value	Quantity (tons)	Value	Quantity (tons)	Value	Quantity (tons)	Value	Quantity (tons)	Value	Quantity (tons)	Value	Quantity (tons)	Value	Quantity (tons)	Value
United States.....	667	\$46,184	346	\$25,424	462	\$29,605	2,769	\$163,387	287	\$24,147	2,392	\$199,258	205	\$16,722	159	\$12,091	560	\$59,943
New England:																		
Maine.....	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
New Hampshire.....	4.1	289	(d)	(d)	(d)	(d)	18.1	1,128	(d)	(d)	6.2	480	(d)	(d)	(d)	(d)	2.5	237
Vermont.....	29.9	2,218	28.0	2,069	18.3	1,275	107.7	7,284	1.7	155	44.5	3,908	(d)	(d)	(d)	(d)	12.1	1,385
Massachusetts.....	6.4	506	3.8	442	3.3	271	51.0	3,554	(d)	(d)	24.3	2,169	(d)	(d)	(d)	(d)	6.8	1,792
Connecticut.....	3.3	242	2.0	157	(d)	(d)	7.9	313	(d)	(d)	6.4	550	(d)	(d)	(d)	(d)	3.9	410
Middle Atlantic:																		
New York.....	205.8	18,760	117.9	8,631	144.9	9,235	506.7	29,633	11.9	1,025	417.9	33,847	51.5	4,267	26.3	2,003	67.9	7,095
New Jersey.....	4.2	318	(d)	(d)	8.8	661	27.7	1,851	(d)	(d)	19.9	1,928	1.6	147	(d)	(d)	13.1	1,307
Pennsylvania.....	40.7	3,075	11.9	891	21.2	1,346	120.0	6,061	9.3	797	120.4	10,730	8.9	735	10.7	925	29.5	2,927
East North Central:																		
Ohio.....	79.8	5,183	38.9	2,663	55.0	3,274	281.8	14,890	25.5	2,172	270.1	22,313	11.5	968	6.3	402	42.3	4,387
Indiana.....	15.0	1,016	6.4	477	10.6	718	69.3	4,217	7.7	708	188.4	15,347	4.2	388	1.9	133	26.9	2,862
Illinois.....	51.0	3,292	36.1	2,895	35.1	2,121	153.0	8,810	12.6	1,085	272.3	21,646	12.5	1,033	11.0	938	70.7	8,204
Michigan.....	3.6	256	1.7	121	3.0	140	7.6	494	(d)	(d)	11.0	910	(d)	(d)	(d)	(d)	4.7	485
Wisconsin.....	7.9	547	2.8	152	3.5	229	28.5	1,637	(d)	(d)	28.4	2,355	5.0	393	(d)	(d)	12.5	1,434
West North Central:																		
Minnesota.....	13.8	1,105	(d)	(d)	1.8	116	131.8	7,398	3.2	268	104.1	8,607	16.3	1,378	2.1	166	17.9	1,988
Iowa.....	5.6	441	(d)	(d)	2.9	214	77.2	5,334	6.7	586	105.7	8,963	19.2	1,370	2.8	248	26.2	2,777
Missouri.....	39.0	2,718	3.8	240	(d)	(d)	161.5	9,748	28.2	2,432	113.4	9,404	5.5	441	4.4	290	28.1	3,146
North Dakota.....	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
South Dakota.....	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Nebraska.....	4.4	301	(d)	(d)	5.8	423	34.4	1,990	7.6	725	67.5	5,417	9.6	744	1.2	100	1.2	133
Kansas.....	6.8	451	3.0	175	3.0	175	71.2	4,271	2.6	220	38.7	3,326	1.5	127	1.4	110	7.2	780
South Atlantic:																		
Delaware.....	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Maryland.....	13.6	1,093	(d)	(d)	11.8	594	29.9	1,935	5.8	554	26.8	2,955	1.3	113	(d)	(d)	5.1	517
Virginia.....	9.3	633	1.8	140	(d)	(d)	54.1	3,272	2.8	238	34.2	2,900	(d)	(d)	7.1	466	10.0	1,040
West Virginia.....	(d)	(d)	(d)	(d)	(d)	(d)	4.2	273	(d)	(d)	2.9	259	(d)	(d)	(d)	(d)	(d)	(d)
North Carolina.....	13.5	968	4.2	341	1.7	796	44.0	3,011	10.5	870	28.1	2,534	(d)	(d)	(d)	(d)	8.2	853
South Carolina.....	(d)	(d)	(d)	(d)	2.7	147	(d)	(d)	2.4	186	8.1	619	(d)	(d)	5.1	408	(d)	(d)
Georgia.....	5.1	373	4.1	349	4.1	281	24.0	1,450	9.9	810	6.3	536	(d)	(d)	(d)	(d)	1.4	160
Florida.....	7.0	500	2.5	186	6.2	455	18.7	1,062	6.8	522	8.2	721	(d)	(d)	4.6	369	4.2	446
East South Central:																		
Kentucky.....	3.9	274	6.2	417	13.5	1,090	32.5	2,133	2.8	234	20.1	2,096	(d)	(d)	(d)	(d)	1.9	184
Tennessee.....	26.3	1,733	13.8	915	(d)	(d)	126.9	7,348	20.3	1,800	87.1	6,687	2.6	207	3.7	291	12.7	1,324
Alabama.....	6.2	417	(d)	(d)	(d)	(d)	32.5	2,105	14.3	1,160	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Mississippi.....	4.2	267	(d)	(d)	8.4	506	25.1	1,493	6.5	1,543	9.4	734	(d)	(d)	(d)	(d)	1.1	130
West South Central:																		
Arkansas.....	5.1	367	(d)	(d)	(d)	(d)	33.2	1,702	7.7	612	8.2	698	(d)	(d)	(d)	(d)	1.7	187
Louisiana.....	1.4	106	(d)	(d)	(d)	(d)	11.6	786	5.2	437	6.3	603	(d)	(d)	(d)	(d)	(d)	(d)
Oklahoma.....	23.2	1,679	6.5	427	(d)	(d)	34.2	2,175	2.9	268	12.2	1,122	(d)	(d)	(d)	(d)	4.7	522
Mountain:																		
Montana.....	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Idaho.....	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Colorado.....	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
New Mexico.....	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Arizona.....	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Utah.....	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Nevada.....	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Pacific:																		
Washington.....	(d)	(d)	(d)	(d)	(d)	(d)	30.2	1,468	(d)	(d)	15.0	1,427	2.1	168	(d)	(d)	4.4	428
Oregon.....	(d)	(d)	(d)	(d)	(d)	(d)	50.0	2,618	(d)	(d)	15.6	1,455	1.4	123	3.1	211	8.7	922
California.....	2.0	172	3.3	223	(d)	(d)	175.8	10,905	24.8	1,955	105.0	9,414	20.6	1,478	40.7	3,054	59.8	6,326
Undistributed ³	25	1,884	62	3,711	48	3,259	60	3,611	(d)	(d)	77	6,754	23	2,028	7	543	16	1,797

¹ Value less than \$100,000.

² Materials consumed in establishments reporting detailed statistics. Shipments by such establishments amounted to 94% of the total value of shipments of the "Prepared feeds" industry.

³ Undistributed figures (included in total cost for each State) are the totals of State figures withheld.

BAKERY PRODUCTS

This report shows 1947 Census of Manufactures statistics for establishments primarily engaged in the manufacture of bakery products. These establishments are classified in two industries, as described below.

Bread and Other Bakery Products (Except Biscuit, Crackers, and Pretzels) (*Standard Industrial Classification No. 2051.*)—This industry comprises establishments primarily engaged in manufacturing bread, cakes, hand-made cookies, doughnuts, pies, pastries, and similar "perishable" bakery products. Establishments primarily engaged in producing "dry" bakery products such as biscuit, crackers, and pretzels are classified in Industry 2052.

In all recent census years except 1947, the bakery products industry was defined as including all commercial establishments manufacturing bakery products (except those in which the value of products for the year was less than \$5,000). The 1947 census covered all establishments primarily engaged in manufacturing, as defined in the 1945 revision of the Standard Industrial Classification. The principal change resulting from the application of the standard classification in the bakery field was the reclassification of retail bakeries engaged in producing and selling baked goods on the premises (unless classified as retail multi-outlet bakeries) into the retail trade division. In preparation for the 1947 census a preliminary questionnaire, which called for information on method of distribution and the maximum number of employees during 1947, was mailed to some 25,000 establishments. This figure includes a large amount of duplication because many establishments appeared under more than one name. It also includes a number of restaurants, hotels, institutions, etc., for which no data were tabulated. Detailed census questionnaires were not mailed to bakeries which reported on the preliminary questionnaire that they distributed chiefly at retail through one retail outlet. As shown in table 8, there were 11,104 such establishments in 1947, employing about 50,000 persons. These figures are based on a special tabulation of the preliminary questionnaires.

In addition to the retail single outlet bakeries, the 1947 census excluded hotel, restaurant, and institutional production of baked goods. Such production was included to some extent in previous censuses.

The substantial decline in the number of establishments in the Bakery Products Industry from 1939 (see retabulated figures in table 1) to 1947 is due largely to the fact that many small bakeries which distributed house-to-house in 1939 discontinued such services before 1947. Such bakeries, although still in operation, were classified as retail single outlet establishments in 1947 and were thus outside the scope of the *Census of Manufactures*.

Subindustries.—There are distinct differences among bakeries in the value and type of products made, relative cost of distribution, and the cost and type of materials used. Since these differences affect the interrelationships of the census statistics, Industry 2051 has been divided into five subindustries, as follows:

Bakeries Selling Primarily to Grocers (*Subindustry 2053.*)—Shipments of this subindustry are reported in terms of wholesale prices. The principal products are bread, cakes, and rolls.

Bakeries Selling Primarily to Hotels, Restaurants, and Institutions (*Subindustry 2054.*)—Shipments of this group are also valued at wholesale prices; the principal products are pies and other sweet goods.

Retail Multi-Outlet Bakeries (*Subindustry 2055.*)—The products of bakeries in this subindustry are sold principally through retail outlets under the same ownership. Bakeries operated by restaurant chains are included. Retail outlets are not included, except when attached to bakeries. The 1947 census questionnaire provided for the reporting of value of shipments in terms of actual amounts received for the products manufactured, and the value of shipments is largely in terms of retail prices. Some of the larger establishments, however, reported a "transfer value," the nearest available equivalent to a wholesale price. Sweet goods are of primary importance in this industry.

Bakeries Selling Primarily Through House-to-House Routes (*Subindustry 2056.*)—Shipments of this subindustry are valued at retail prices for the most part, although transfers between plants of some of the larger companies were expressed in terms of wholesale prices. Bread, cakes, and sweet rolls are the products of most importance. As shown in table 1, driver-salesmen and other employees outnumber production workers in this subindustry.

Grocery Chain Bakeries (*Subindustry 2058.*)—The value of shipments of this subindustry is based on a transfer price which is nearly equivalent to the wholesale price. In some of the tables in this report, grocery chain bakeries were combined with Subindustry 2053 to avoid disclosing figures for individual companies.

Products and materials consumed.—Two questionnaires were used for the Bakery Products Industry in 1947, a long and a short form. The long form called for detailed statistics on the quantity and value of products and the quantity and cost of selected materials consumed. The short form which did not require detailed information on products or materials, was used for the smallest establishments and also for some companies whose records were inadequate for completion of the long form. The short form was used for 1,586 establishments reporting aggregate sales of \$73.4 million. A number of companies using the long form were unable to report products in detail; establishments in this category numbered 658, with total sales of \$73.4 million. In using the product statistics in table 6, attention should be given to the amounts included in items described as "not reported in detail."

About 17,000 reports showing detailed products and materials figures were obtained in the 1939 census, but examination of the 1939 returns indicates that a high proportion of the detailed figures was estimated. The fact that the 1939 census was conducted by field enumeration rather than by mail points to the probability that the enumerators were better able to obtain estimates from the manufacturers than were the 1947 census staff through correspondence.

Biscuit, Crackers, and Pretzels (*Standard Industrial Classification No. 2052.*)—This industry comprises establishments primarily engaged in manufacturing biscuit (except raised biscuit), crackers, sponge goods, sweet goods, machine-made cookies, pretzels, and similar "dry" bakery products. Establishments primarily engaged in producing "perishable" bakery products are classified in Industry 2051.

BAKERY PRODUCTS

111

TABLE 1.—GENERAL STATISTICS FOR THE UNITED STATES: 1947 AND EARLIER CENSUS YEARS
[Money figures in thousands of dollars. For explanation of column captions see GENERAL EXPLANATIONS]

INDUSTRY AND CENSUS YEAR	Number of establishments	All employees		Production and related workers		Value added by manufacture ¹	Cost of materials, fuel, electricity, and contract work	Value of products shipped ²
		Number (average for the year) ³	Salaries and wages, total	Number (average for the year) ⁴	Wages, total			
Bread and other bakery products:								
1947 total.....	6,707	233,310	\$655,970	150,055	\$351,126	\$1,100,836	\$1,316,055	\$2,416,891
Bakeries selling primarily to grocers.....	3,455	136,867	397,262	85,600	198,529	673,861	819,724	1,493,585
Bakeries selling primarily to hotels, restaurants, and institutions.....	1,564	26,078	72,091	20,263	47,658	120,393	150,990	271,333
Retail multi-outlet bakeries.....	1,064	20,802	58,313	18,540	43,129	104,868	114,944	210,812
Bakeries selling primarily through house-to-house routes.....	624	30,724	98,752	14,894	35,702	140,805	132,132	281,037
Grocery chain bakeries.....	90	11,939	29,561	10,758	26,108	51,909	98,265	150,174
1939 ⁵	10,325	217,000	298,000	180,202	236,576	573,837	491,498	1,065,335
1939 ³	18,043	247,691	330,666	201,593	262,002	643,597	567,427	1,211,024
1937.....	16,874	231,258	304,309	210,597	265,354	538,598	429,267	1,217,865
1936.....	18,720	207,771	265,763	189,182	222,645	471,736	580,728	1,052,464
1933.....	14,483	169,378	195,446	155,229	174,423	390,340	370,992	770,332
1931.....	17,364	n.a.	n.a.	154,764	212,353	543,373	450,631	979,804
1929.....	20,410	183,926	279,770	166,970	240,354	621,622	629,999	1,261,021
1927.....	17,009	154,245	230,846	139,018	202,197	500,406	585,304	1,145,710
1926.....	17,490	142,255	216,008	128,084	187,660	462,920	560,748	1,023,668
1923.....	18,572	142,269	213,496	127,496	125,949	425,221	485,169	911,118
1921.....	20,084	132,611	195,324	117,026	169,329	386,895	515,563	902,463
1919.....	24,919	131,504	168,886	107,251	132,171	337,771	610,105	947,876
1914.....	25,797	113,976	79,681	99,016	66,072	171,825	230,584	402,409
Biscuit, crackers, and pretzels:								
1947.....	326	46,058	100,223	37,526	78,361	264,073	275,240	540,222
1939.....	356	35,930	42,059	29,173	28,550	118,743	82,050	200,793
1937.....	310	31,877	35,146	28,791	28,641	110,543	97,755	208,298
1935.....	348	32,169	32,060	29,241	25,888	93,295	89,313	182,608
1933.....	347	29,475	26,238	27,153	22,250	92,972	56,473	149,445
1931.....	354	n.a.	n.a.	28,397	26,078	141,197	68,946	210,143
1929.....	375	38,556	44,676	33,871	34,208	167,389	107,101	274,490
1927.....	220	37,387	43,120	32,982	34,029	141,058	107,932	248,990
1925.....	194	36,918	41,129	32,377	31,946	137,250	107,268	244,527
1923.....	167	39,868	40,500	35,117	31,358	122,437	89,351	211,788
1921.....	149	36,435	38,571	31,474	29,110	104,463	83,046	187,509
1919.....	176	41,230	38,171	34,341	26,066	100,887	103,134	204,021
1914.....	166	30,082	16,953	25,036	10,794	45,810	43,674	89,484

n.a.—Not available.
¹ Value of products less cost of materials, supplies, fuel, electricity, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.
² For 1947 and 1929, value of products shipped; for all other years, value of products made. See GENERAL EXPLANATIONS—Value of products shipped.
³ The 1939 figures in roman type are based on retabulations of 1939 census schedules classified in accordance with 1947 industry definitions and, except for production worker data, are comparable with the figures for 1947 (see text on industry). The italicized figures for 1939 have not been retabulated and are comparable with the figures for earlier years.
⁴ Estimated by applying to retabulated data on number and wages of production workers the following ratios, respectively, computed from published 1939 statistics: (1) Total number of employees to number of production workers in establishments classified as "wholesale" and "wholesale and retail" and (2) Wages paid to all employees to wages paid to production workers in the same categories.
⁵ Figures are for wage earners, including driver-salesmen, and are not comparable with 1947. Analysis of a sample of 1939 returns indicates that somewhat over 40 percent of these wage earners were driver-salesmen.
⁶ "Biscuit, crackers, and pretzels" was formerly a part of the discontinued classification "Bread and other bakery products." Separate figures are therefore not available for years prior to 1914.

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947
[Money figures and man-hours in thousands. For explanation of column captions see GENERAL EXPLANATIONS]

INDUSTRY, DIVISION, AND STATE	Number of establishments	'All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Bakeries selling primarily to grocers, total¹	3,455	136,867	\$397,262	85,600	186,462	\$198,529	\$673,861	\$819,724	\$1,493,585	\$62,647
New England.....	232	9,140	26,444	5,255	11,473	12,237	39,392	51,069	91,061	3,467
Maine.....	24	852	2,127	570	1,219	1,175	3,681	4,774	8,455	432
New Hampshire.....	10	444	1,287	217	489	463	2,379	2,424	4,803	340
Vermont.....	9	378	982	247	600	518	1,629	2,245	3,874	213
Massachusetts.....	115	4,711	13,960	2,633	5,772	6,361	20,225	27,457	47,682	1,273
Rhode Island.....	23	1,227	3,759	670	1,422	1,602	5,087	6,327	11,414	530
Connecticut.....	51	1,328	4,329	918	1,971	2,118	6,391	8,442	14,833	679
Middle Atlantic.....	806	30,468	92,519	19,521	42,226	47,768	157,146	178,629	335,775	11,444
New York.....	400	13,618	42,768	8,566	18,206	21,954	77,009	83,851	160,860	4,706
New Jersey.....	116	5,086	16,110	3,176	7,185	8,403	24,302	30,553	54,860	2,296
Pennsylvania.....	290	11,764	33,641	7,779	16,835	17,411	55,835	64,220	120,055	4,442
East North Central.....	764	30,492	91,695	18,647	40,423	44,964	145,156	181,224	326,380	11,704
Ohio.....	185	7,932	22,961	4,776	10,556	10,903	36,000	46,091	82,091	2,779
Indiana.....	108	3,325	9,827	2,156	4,640	5,006	15,922	20,042	35,964	1,552
Illinois.....	219	9,651	30,079	5,789	12,094	14,693	47,393	55,604	102,997	3,648
Michigan.....	152	6,228	19,584	3,753	8,455	9,584	30,613	41,219	71,832	2,519
Wisconsin.....	100	3,356	9,464	2,173	4,678	4,778	15,228	18,268	33,496	1,206
West North Central.....	348	13,979	39,498	8,522	18,185	19,221	66,565	84,437	151,002	6,225
Minnesota.....	61	2,411	6,740	1,495	3,207	3,388	11,810	15,482	27,292	1,575
Iowa.....	69	2,746	8,585	1,625	3,417	4,022	13,685	17,488	31,173	1,484
Missouri.....	94	4,642	13,192	2,794	5,777	6,275	21,864	27,454	49,318	1,575
North Dakota.....	25	431	914	298	660	494	2,270	2,898	5,168	189
South Dakota.....	19	453	1,104	337	768	681	2,589	2,625	5,214	152
Nebraska.....	29	1,501	4,246	828	1,970	2,017	6,636	8,948	15,584	528
Kansas.....	61	1,795	4,717	1,145	2,388	2,344	7,711	9,542	17,253	742

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1947

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947—Continued

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Bakeries selling primarily to grocers—Continued										
South Atlantic.....	306	17,592	\$46,520	11,092	24,600	\$22,790	\$83,828	\$106,972	\$188,000	\$9,312
Delaware.....	10	321	1,173	181	403	531	2,062	2,076	4,138	101
Maryland.....	43	2,261	6,168	1,380	3,058	2,987	10,346	13,476	23,822	940
District of Columbia.....	11	1,354	4,474	792	1,705	2,113	6,350	8,371	14,721	284
Virginia.....	41	2,506	6,163	1,695	3,783	3,147	10,212	15,073	25,285	1,202
West Virginia.....	57	2,251	6,314	1,426	3,283	3,174	12,166	15,088	27,254	1,453
North Carolina.....	58	3,206	7,371	2,154	4,734	3,796	13,720	17,265	30,085	1,521
South Carolina.....	17	1,011	2,707	636	1,405	1,297	4,953	5,728	10,081	779
Georgia.....	23	2,250	5,816	1,320	3,038	2,559	11,945	13,220	25,174	1,176
Florida.....	46	2,432	6,334	1,499	3,290	3,186	12,074	14,766	26,840	1,856
East South Central.....	144	7,850	19,425	5,163	11,711	9,695	34,645	46,188	79,833	4,204
Kentucky.....	38	1,559	4,196	1,093	2,271	2,077	6,532	9,581	16,113	814
Tennessee.....	50	3,030	7,877	2,018	4,574	3,806	14,532	18,227	32,759	1,906
Alabama.....	28	2,002	4,618	1,353	3,317	2,455	8,675	11,316	19,991	730
Mississippi.....	28	1,259	2,734	720	1,549	1,267	4,906	6,004	10,070	784
West South Central.....	379	11,335	29,377	7,190	16,363	14,594	55,694	67,831	123,525	6,812
Arkansas.....	33	1,178	3,055	705	1,520	1,383	5,480	6,342	11,831	829
Louisiana.....	81	2,532	6,131	1,681	3,730	3,398	11,133	14,828	25,001	1,049
Oklahoma.....	79	1,785	4,737	1,118	2,404	2,330	7,906	10,274	18,270	710
Texas.....	186	5,840	15,454	3,586	8,649	7,483	31,076	39,387	67,493	4,223
Mountain.....	213	4,493	11,465	3,118	7,017	6,646	21,458	26,547	48,005	2,582
Montana.....	33	683	1,344	434	1,071	906	2,962	3,549	6,507	167
Idaho.....	28	541	1,314	363	846	805	2,582	3,334	5,910	103
Colorado.....	50	1,401	3,600	900	1,946	1,825	5,888	7,237	13,125	594
New Mexico.....	33	444	1,009	330	834	650	1,980	2,758	4,747	243
Arizona.....	18	531	1,529	363	764	866	3,244	3,328	6,572	782
Utah.....	22	668	1,062	472	983	1,078	3,482	4,656	8,138	508
Pacific.....	263	11,518	40,319	7,092	14,365	20,614	69,977	79,127	140,104	8,807
Washington.....	68	2,095	6,487	1,406	2,913	3,790	10,001	13,400	23,403	900
Oregon.....	45	1,633	5,411	1,064	2,170	2,887	8,827	10,042	19,469	1,103
California.....	150	7,790	28,421	4,622	9,282	13,937	51,140	55,685	100,234	5,008
Bakeries selling primarily to hotels, restaurants, and institutions, total¹	1,564	26,978	72,091	20,263	44,686	47,658	120,393	150,990	271,383	8,356
New England.....	162	1,968	4,754	1,492	3,455	3,247	8,169	10,920	19,080	616
Massachusetts.....	91	1,205	2,916	853	1,895	1,858	4,850	6,780	11,030	355
Rhode Island.....	18	188	417	146	327	301	728	1,039	1,707	45
Connecticut.....	37	359	918	281	641	704	1,702	1,873	3,575	86
Middle Atlantic.....	360	8,611	24,772	6,343	14,059	16,510	40,102	51,433	91,625	2,725
New York.....	195	5,454	16,721	4,053	8,944	11,081	29,061	33,874	60,625	1,689
East North Central.....	323	5,829	15,759	4,382	9,445	10,238	24,088	32,357	57,345	1,405
Ohio.....	86	1,954	5,027	1,408	2,907	3,195	7,601	10,335	17,830	576
Illinois.....	89	2,217	6,957	1,682	3,650	4,422	10,027	13,672	24,209	557
Michigan.....	67	799	2,009	629	1,375	1,375	4,448	4,448	8,023	301
West North Central.....	149	1,732	4,191	1,283	2,726	2,662	6,060	8,687	15,350	720
Missouri.....	46	775	2,234	530	1,178	1,240	3,258	4,225	7,483	321
Kansas.....	27	206	370	160	339	257	604	913	1,607	21
South Atlantic.....	140	2,413	5,360	1,920	4,425	3,566	10,190	12,711	22,901	928
Maryland.....	27	392	864	301	665	624	1,320	2,531	3,851	321
District of Columbia.....	10	265	829	194	470	610	1,098	1,222	2,820	56
Virginia.....	18	273	533	229	529	373	1,011	1,204	2,307	170
North Carolina.....	18	314	591	240	529	394	1,180	1,276	2,466	87
Georgia.....	20	340	681	264	564	430	1,471	1,432	2,903	97
Florida.....	28	387	880	322	734	634	1,544	2,284	3,828	92
East South Central.....	53	683	1,209	532	1,162	856	2,394	2,820	5,223	285
Kentucky.....	15	147	261	122	279	166	620	704	1,324	14
Tennessee.....	19	327	620	244	523	390	1,087	1,303	2,300	235
Alabama.....	12	171	288	129	278	212	584	678	1,262	32
West South Central.....	148	2,092	4,760	1,666	3,665	3,193	8,801	10,923	19,814	605
Louisiana.....	22	438	1,064	349	735	716	1,885	2,281	4,116	188
Texas.....	75	1,196	2,878	913	2,073	1,731	5,404	6,530	11,940	335
Mountain.....	48	454	897	344	702	667	1,661	2,280	3,950	50
Colorado.....	13	132	252	104	229	183	407	500	967	7
Pacific.....	181	3,166	10,389	2,301	5,047	6,809	17,239	18,841	36,080	956
Washington.....	30	450	1,366	337	699	996	2,590	2,302	4,901	198
Oregon.....	20	259	712	203	442	477	1,190	1,375	2,666	65
California.....	131	2,457	8,311	1,761	3,906	5,372	13,480	15,074	28,554	993
Retail multi-outlet bakeries, total¹	1,064	26,802	58,313	18,540	40,009	43,129	104,868	114,944	219,812	6,074
Northeast.....	460	12,101	26,360	8,258	18,060	19,254	47,307	56,408	103,835	2,813
Massachusetts.....	86	2,482	4,967	1,835	3,931	4,048	9,739	11,878	21,017	200
Rhode Island.....	23	272	535	198	380	454	969	1,204	2,467	17
Connecticut.....	32	813	1,609	454	984	1,156	3,411	3,755	7,106	230
New York.....	141	4,604	11,169	2,900	6,553	7,651	21,024	23,285	44,300	1,434
Pennsylvania.....	129	3,630	7,081	2,466	5,387	5,117	10,404	14,118	24,622	694
North Central.....	316	8,616	18,515	5,933	12,758	13,772	33,030	34,715	67,746	1,886
Indiana.....	13	171	327	111	245	228	505	701	1,206	15
Illinois.....	57	1,914	4,964	1,208	2,590	3,265	8,472	9,707	18,470	361
Michigan.....	32	1,887	4,275	1,533	3,273	3,746	8,440	8,694	17,130	558
Wisconsin.....	54	704	1,279	515	1,083	942	1,923	2,430	4,302	94
Minnesota.....	37	814	1,571	570	1,182	1,172	2,983	3,007	6,050	271
Iowa.....	15	230	422	150	330	313	834	804	1,438	11
Missouri.....	23	335	641	264	584	520	1,221	1,127	2,348	94
South Dakota.....	4	51	79	39	88	67	181	126	307	6
Nebraska.....	9	134	237	87	174	164	359	434	793	14

See footnotes at end of table.

BAKERY PRODUCTS

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947—Continued

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Retail multi-outlet bakeries—Continued										
South Atlantic.....	72	1,380	\$2,445	878	1,868	\$1,645	\$4,142	\$4,395	\$8,537	\$241
Virginia.....	14	214	387	148	335	249	570	675	1,245	49
West Virginia.....	6	132	243	54	130	96	325	275	600	28
North Carolina.....	4	108	172	59	143	99	303	343	646	6
Georgia.....	7	125	212	96	201	161	381	374	755	17
East South Central.....	27	388	668	270	586	496	1,130	1,316	2,455	83
Kentucky.....	9	111	198	76	170	163	321	367	688	10
West South Central.....	55	979	1,778	712	1,747	1,316	3,114	3,581	6,695	271
Louisiana.....	13	181	365	125	266	271	800	678	1,478	44
Oklahoma.....	5	61	94	36	75	66	140	138	278	11
Texas.....	34	713	1,284	532	1,365	960	2,121	2,692	4,813	212
West.....	134	3,338	8,557	2,489	4,990	6,646	16,076	14,469	30,545	780
Colorado.....	5	148	250	80	163	166	365	415	780	10
Washington.....	15	560	1,301	341	658	892	1,919	1,821	3,740	112
California.....	84	2,147	5,908	1,746	3,524	4,795	11,900	10,105	22,005	531
Bakeries selling primarily through house-to-house routes, total¹										
	624	30,724	98,752	14,894	32,553	35,702	149,805	132,132	281,937	10,505
New England.....	118	4,464	13,776	2,293	4,855	5,316	20,896	19,106	40,002	1,213
Vermont.....	5	17	29	12	22	26	115	93	208	-----
Massachusetts.....	64	2,770	8,773	1,346	2,855	3,104	12,670	11,404	24,074	645
Rhode Island.....	15	208	696	126	192	272	864	848	1,712	25
Connecticut.....	29	883	2,821	427	885	1,048	3,698	3,822	7,520	199
Middle Atlantic.....	320	12,824	40,105	6,363	14,281	15,477	62,657	57,057	120,614	4,507
New York.....	90	4,325	14,168	2,180	4,919	5,571	23,275	20,058	43,333	1,423
New Jersey.....	58	1,306	3,788	826	1,877	2,085	10,222	7,985	18,217	841
Pennsylvania.....	181	7,193	22,149	3,357	7,485	7,821	29,160	29,004	59,064	2,243
East North Central.....	105	7,384	24,379	3,376	7,206	8,016	37,084	28,659	65,743	2,084
Ohio.....	56	4,207	13,915	1,902	4,028	4,503	21,913	16,242	38,155	1,150
Indiana.....	21	1,419	4,338	699	1,624	1,614	6,156	5,885	12,041	377
Wisconsin.....	4	662	2,039	244	517	532	2,898	1,877	4,775	233
West North Central.....	7	1,553	5,138	666	1,341	1,539	7,486	5,824	13,310	625
South.....	36	2,928	8,434	1,370	3,078	2,973	11,749	12,705	24,454	1,224
Maryland.....	7	1,236	3,602	548	1,307	1,230	5,207	5,740	10,947	422
Louisiana.....	8	36	55	27	68	44	102	137	239	6
West.....	29	1,571	6,920	826	1,792	2,381	9,933	7,881	17,814	862
Grocery chain bakeries, total¹										
	90	11,939	29,561	10,758	21,870	26,108	51,909	58,265	150,174	4,090
Biscuit, crackers, and pretzels, total¹										
	326	46,058	109,223	37,526	78,197	78,361	264,973	275,249	540,222	14,241
New England.....	12	2,028	4,653	1,511	3,071	2,997	11,017	12,589	23,606	652
Middle Atlantic.....	115	13,823	33,022	11,883	24,350	26,323	87,242	83,199	170,441	3,774
Pennsylvania.....	73	5,487	12,253	4,550	9,161	9,288	26,465	25,741	52,206	1,167
East North Central.....	63	11,723	29,683	9,172	19,504	19,620	68,205	76,392	144,597	2,817
Ohio.....	17	3,028	7,456	2,301	5,322	4,701	19,440	24,153	43,593	892
Indiana.....	5	1,007	2,852	702	1,525	1,613	4,113	5,393	9,506	199
Illinois.....	21	4,063	11,902	3,651	7,476	7,893	27,690	28,012	55,702	928
Michigan.....	13	2,055	4,918	1,819	3,076	3,905	12,229	13,495	25,724	336
Wisconsin.....	7	970	2,555	699	1,505	1,418	4,733	5,330	10,072	462
West North Central.....	40	5,950	13,944	4,520	9,704	9,063	30,684	32,253	62,937	2,661
Minnesota.....	10	954	2,147	743	1,572	1,425	5,770	4,925	10,695	130
Iowa.....	6	1,022	2,655	756	1,621	1,605	5,971	5,488	11,459	746
Missouri.....	15	2,711	6,244	2,114	4,598	4,335	13,865	14,111	27,976	1,296
South Atlantic.....	18	3,442	7,356	2,850	5,880	5,412	18,930	18,760	37,690	710
Maryland.....	4	970	2,091	784	1,549	1,411	4,170	3,704	7,874	214
East South Central.....	18	1,770	3,424	1,495	2,840	2,501	8,896	7,525	14,421	618
Tennessee.....	8	860	1,791	724	1,422	1,351	4,063	4,138	8,201	238
West South Central.....	23	2,371	4,910	1,817	3,985	3,503	12,597	12,905	25,502	560
Texas.....	10	1,310	2,911	1,096	2,434	2,202	8,581	8,374	16,955	390
West.....	37	5,051	12,222	4,278	8,863	8,942	29,402	31,625	61,028	2,549
Washington.....	9	700	1,613	563	1,091	1,097	3,565	3,298	6,863	171
California.....	19	2,879	7,234	2,482	5,048	5,349	18,506	20,389	38,895	2,187

¹ For each producing State not shown separately in the table (see GENERAL EXPLANATIONS "Disclosure of Data for Individual Companies"), there are shown below the number of establishments and, in parentheses, the number of employees for States represented by three or more companies, when possible.

Bakeries selling primarily to grocers: *Mountain*, Wyoming, 24 (264); Nevada, 5 (61).

Bakeries selling primarily to hotels, restaurants, and institutions: *New England*, Maine, 7 (189); New Hampshire, 4 (36); Vermont, 5 (21); *Middle Atlantic*, New Jersey, 44 (1,059); Pennsylvania, 121 (2,098); *East North Central*, Indiana, 55 (610); Wisconsin, 26 (249); *West North Central*, Minnesota, 25 (416); Iowa, 23 (108); North Dakota, 6 (33); South Dakota, 12 (95); Nebraska, 10 (99); *South Atlantic*, West Virginia, 12 (78); South Carolina, 7 (364); *East South Central*, Mississippi, 7 (38); *West South Central*, Arkansas, 15 (95); Oklahoma, 36 (303); *Mountain*, Montana, 9 (91); Idaho, 4 (36); Wyoming, 4; New Mexico, 7 (35); Arizona, 5 (21); Utah, 4 (72); Nevada, 2.

Retail multi-outlet bakeries: *Northeast*, Maine, 1; New Hampshire, 7 (98); Vermont, 3; New Jersey, 38 (354); *North Central*, North Dakota, 6 (68); Ohio, 61 (2,158); Kansas, 5 (54); *South Atlantic*, Delaware, 3 (30); Maryland, 14 (256); District of Columbia, 7 (198); South Carolina, 6 (70); Florida, 11 (238); *East South Central*, Tennessee, 8 (107); Alabama, 4 (113); Mississippi, 6 (57); *West South Central*, Arkansas, 3 (24); *West*, Montana, 2; Idaho, 2; Wyoming, 1; New Mexico, 2; Arizona, 5 (79); Utah, 3 (63); Nevada, 1; Oregon, 14 (270).

Bakeries selling primarily through house-to-house routes: *New England*, Maine, 2; New Hampshire, 3; *East North Central*, Illinois, 14 (361); Michigan, 10 (735); *West North Central*, Minnesota, 1; Iowa, 2; Missouri, 2; Nebraska, 1; Kansas, 1; *South*, Delaware, 1; District of Columbia, 1; Virginia, 1; West Virginia, 3 (120); North Carolina, 1; Georgia, 3 (241); Florida, 2; Kentucky, 2; Tennessee, 1; Oklahoma, 2; Texas, 4 (339); *West*, Colorado, 3 (180); Arizona, 1; Washington, 8 (169); Oregon, 3; California, 14 (1,147).

Grocery chain bakeries: Maine, 1; Massachusetts, 10 (686); New York, 8 (1,479); New Jersey, 3; Pennsylvania, 10 (1,932); Ohio, 6; Indiana, 3; Illinois, 5 (735); Michigan, 5 (1,058); Wisconsin, 2; Missouri, 6 (1,098); Nebraska, 1; Kansas, 1; Maryland, 2; District of Columbia, 1; Virginia, 3 (209); North Carolina, 2; Georgia, 2; Florida, 1; Kentucky, 2; Tennessee, 1; Louisiana, 1; Texas, 4 (260); Colorado, 1; Arizona, 1; Utah, 1; Washington, 1; Oregon, 1; California, 5.

Biscuit, crackers, and pretzels: *New England*, Maine, 1; Massachusetts, 11; *Middle Atlantic*, New York, 28 (7,200); New Hampshire, 14 (1,130); *West North Central*, North Dakota, 1; South Dakota, 1; Nebraska, 4 (593); Kansas, 3; *South Atlantic*, Virginia, 1; West Virginia, 2; North Carolina, 2; South Carolina, 2; Georgia, 4 (1,267); Florida, 3 (69); *East South Central*, Kentucky, 3; Alabama, 5 (553); Mississippi, 2; *West South Central*, Arkansas, 4 (297); Louisiana, 4 (338); Oklahoma, 5 (326); *West*, Colorado, 3; Utah, 2; Oregon, 4 (310).

CENSUS OF MANUFACTURES: 1947

TABLE 3.—DETAILED STATISTICS FOR THE UNITED STATES: 1947

(Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS)

ITEM	Bread and other bakery products, total	Industry					Biscuit, crackers, and pretzels industry
		Bakeries selling primarily to grocers	Bakeries selling primarily to hotels, restaurants, and institutions	Retail multi-outlet bakeries	Bakeries selling through house-to-house routes	Grocery chain bakeries	
ALL ESTABLISHMENTS							
Number of establishments.....	6,797	3,455	1,584	1,004	624	90	326
All employees:							
Number (average for the year).....	233,310	136,807	26,978	26,802	30,724	11,039	46,058
Salaries and wages, total.....	\$655,979	\$397,262	\$72,091	\$58,313	\$98,752	\$20,561	\$109,223
Production and related workers:							
Number (average for the year).....	150,055	85,600	20,263	18,540	14,894	10,758	37,526
Man-hours, total..... thousands.....	325,580	186,462	44,686	40,000	32,563	21,870	78,197
Wages, total.....	\$352,295	\$198,529	\$47,658	\$43,129	\$35,702	\$20,108	\$78,301
Value added by manufacture.....	\$1,100,836	\$673,861	\$120,393	\$104,868	\$140,805	\$51,900	\$264,973
ESTABLISHMENTS REPORTING DETAILED STATISTICS							
Number of establishments.....	5,208	2,808	1,040	807	463	90	326
All employees:							
Number (average for the year).....	224,123	133,112	24,709	24,216	30,147	11,039	46,058
Salaries and wages, total.....	\$638,371	\$390,305	\$68,047	\$52,832	\$97,020	\$20,561	\$109,223
Production and related workers:							
Number (average for the year).....	141,809	82,034	18,052	16,121	14,344	10,758	37,526
Man-hours, total..... thousands.....	308,242	179,347	40,271	35,300	31,454	21,870	78,197
Wages, total.....	\$336,877	\$192,295	\$43,840	\$38,802	\$34,003	\$20,108	\$78,301
Value added by manufacture.....	\$1,067,958	\$600,328	\$112,235	\$96,837	\$147,644	\$51,000	\$204,073
Number of employees for pay period ended nearest Oct. 15:							
All employees.....	227,207	134,983	25,175	24,475	30,689	11,885	49,516
Male.....	170,227	111,499	19,802	14,257	25,751	8,358	23,836
Female.....	47,980	23,484	5,813	10,218	4,938	3,527	25,680
Production and related workers.....	142,917	83,116	18,444	16,220	14,496	10,042	40,757
Male.....	111,386	65,884	14,270	12,135	11,418	7,079	17,020
Female.....	31,531	17,231	4,174	4,085	3,078	2,963	23,731
Force-account construction workers.....	148	43	30	48	12	15	23
Administrative, supervisory, sales, and all other:							
Male.....	84,142	51,825	6,701	8,207	16,181	1,228	8,730
Female.....	67,693	45,572	5,062	2,074	14,321	604	0,787
Total.....	16,449	6,253	1,639	6,133	1,860	504	1,949
All employees, number by month:							
January.....	218,515	129,542	24,341	23,848	29,284	11,500	46,016
February.....	218,510	129,230	24,435	24,040	29,454	11,351	44,032
March.....	220,616	130,467	24,597	24,391	29,531	11,030	44,692
April.....	222,458	131,202	24,701	24,522	29,881	12,152	44,842
May.....	225,581	133,336	24,020	24,032	30,467	12,526	43,385
June.....	226,740	134,686	24,716	24,247	30,471	12,020	44,409
July.....	225,643	134,704	24,502	23,506	30,427	12,444	45,531
August.....	224,708	134,697	24,350	23,405	30,450	11,797	45,698
September.....	225,754	135,104	24,582	23,903	30,359	11,800	46,944
October.....	227,207	134,983	25,175	24,475	30,689	11,885	49,516
November.....	226,243	134,191	25,232	24,561	30,451	11,808	49,729
December.....	226,157	134,006	25,101	24,820	30,847	11,074	47,665
Cost of materials, fuel, electricity, and contract work.....	\$1,275,667	\$802,928	\$140,156	\$105,305	\$128,623	\$98,265	\$275,240
Materials, parts, containers, and supplies.....	1,243,727	782,833	136,644	102,595	125,085	90,520	271,003
Fuels, total.....	21,475	13,361	2,356	1,774	2,010	1,074	3,174
Bituminous coal.....	2,000	1,417	199	81	101	142	141
Anthracite.....	1,129	642	180	104	200	23	219
Coke.....	436	232	104	62	48	278	820
Fuel oils.....	7,184	4,396	905	789	756	690	1,362
Gas.....	6,849	3,941	797	789	882	35	213
Other fuels.....	3,897	2,733	221	45	803	071	1,067
Purchased electric energy.....	9,953	6,301	1,096	994	891	37	15
Contract and commission work.....	512	383	60	32	37		
Value of inventories:							
Beginning of year, total.....	\$141,627	\$81,130	\$17,585	\$13,898	\$10,388	\$12,030	\$45,270
Finished products.....	5,440	2,679	1,406	743	420	120	0,452
Materials, supplies, and work in process.....	136,187	78,451	16,119	13,145	15,968	12,510	35,827
End of year, total.....	136,027	82,649	15,481	13,030	15,614	0,153	64,177
Finished products.....	5,489	3,111	1,131	720	435	102	10,709
Materials, supplies, and work in process.....	130,428	79,538	14,350	12,310	15,179	0,051	44,378
Expenditures for plant and equipment:							
New plant and equipment.....	\$91,672	\$82,647	\$8,356	\$6,074	\$10,505	\$4,090	\$14,241
Construction and major alteration of fixed plants.....	20,289	14,465	2,345	1,510	1,840	120	5,001
Buildings.....	18,762	13,531	2,093	1,342	1,076	120	4,794
Other construction.....	1,527	934	252	177	104		207
Machinery and equipment.....	71,383	48,182	6,011	4,565	8,665	3,970	9,180
Production machinery and equipment.....	41,405	26,920	4,038	3,301	3,383	3,703	7,379
Other machinery and equipment.....	29,978	21,262	1,973	1,194	5,282	267	1,801
Used plant and equipment, and land.....	5,249	3,727	572	480	401		880
Number of highway-type motor vehicles owned or leased:							
Trucks.....	58,748	39,374	4,944	1,458	12,892	80	2,363
By manufacturer's rated capacity:							
Under 1½ tons.....	42,394	25,939	3,707	917	11,820	11	567
Over 1½ tons and less than 3½ tons.....	14,530	12,441	1,072	306	708	3	1,545
3½ tons and less than 5 tons.....	1,434	857	116	119	330	12	225
5 tons and over.....	272	77	40	80	21	54	12
By body type:							
Van.....	118	60	9	36	13		14
Stake or platform.....	3,491	2,779	302	245	110	55	1,112
Panel or light delivery.....	562	434	48	17	63		41
All other trucks.....	51,037	33,900	4,330	1,142	12,232	24	1,165
Truck tractors.....	3,058	2,261	256	54	487	1	45
Trailers and semitrailers.....	1,059	822	43	15	174	5	93
Total.....	1,173	934	52	15	107	5	104

¹ Includes 102 tank type.

TABLE 4.—SELECTED GENERAL STATISTICS BY SIZE OF ESTABLISHMENT, FOR THE UNITED STATES: 1947

[Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS. Data which cannot be shown without disclosing information for individual companies have been combined with figures for other groups. A ^d appears in the column where the figure has been omitted and the combined figure is printed in italics]

INDUSTRY AND ITEM	Total, all establishments	Establishments with an average of—									
		1-4 employees	5-9 employees	10-19 employees	20-49 employees	50-99 employees	100-249 employees	250-499 employees	500-999 employees	1,000-2,499 employees	2,500 employees and over
Bakeries selling primarily to grocers:											
Number of establishments.....	3,455	893	618	527	638	402	309	54	14		
Number of employees (average for the year).....	136,867	2,219	4,086	7,337	20,688	28,838	46,833	18,066	8,790		
Value added by manufacture.....	\$673,861	\$9,459	\$14,322	\$25,228	\$88,406	\$144,381	\$245,263	\$95,070	\$51,732		
Bakeries selling primarily to hotels, restaurants, and institutions:											
Number of establishments.....	1,564	563	388	307	210	73	37	5	1		
Number of employees (average for the year).....	26,978	1,240	2,437	4,195	6,277	5,117	5,648	<i>2,064</i>	(^d)		
Value added by manufacture.....	\$120,398	\$5,311	\$9,182	\$15,895	\$26,919	\$25,106	\$27,418	<i>\$10,592</i>	(^d)		
Retail multi-outlet bakeries:											
Number of establishments.....	1,064	158	288	300	235	48	22	7	5	1	
Number of employees (average for the year).....	29,802	432	1,978	4,133	6,876	3,330	3,277	2,250	<i>4,526</i>	(^d)	
Value added by manufacture.....	\$104,868	\$1,690	\$6,045	\$13,865	\$23,316	\$12,277	\$17,758	\$8,936	<i>\$20,381</i>	(^d)	
Bakeries selling primarily through house-to-house routes:											
Number of establishments.....	624	252	113	79	67	40	40	19	13	1	
Number of employees (average for the year).....	30,724	536	745	1,093	2,219	2,849	6,589	6,561	<i>10,122</i>	(^d)	
Value added by manufacture.....	\$149,805	\$2,198	\$2,580	\$3,623	\$8,773	\$11,694	\$31,639	\$39,142	<i>\$49,856</i>	(^d)	
Grocery chain bakeries:											
Number of establishments.....	90		7	5	19	15	28	13	3		
Number of employees (average for the year).....	11,039		52	66	621	1,071	<i>10,129</i>	(^d)	(^d)		
Value added by manufacture.....	\$51,909		\$188	\$261	\$3,268	\$5,037	<i>\$45,155</i>	(^d)	(^d)		
Biscuit, crackers, and pretzels:											
Number of establishments.....	326	49	47	43	52	32	47	31	21	3	1
Number of employees (average for the year).....	46,058	129	322	579	1,538	2,318	7,931	11,325	<i>21,916</i>	(^d)	(^d)
Value added by manufacture.....	\$264,973	\$499	\$1,204	\$1,708	\$6,346	\$10,933	\$36,745	\$60,494	<i>\$147,044</i>	(^d)	(^d)

TABLE 5.—VALUE OF PRODUCTS SHIPPED, BY BROAD CLASSES OF PRODUCTS, FOR THE UNITED STATES: 1947

[The first five columns show the value of shipments of the bakery industries, divided among: (A) products classified in (primary to) the industries, (B) products classified in other industries (secondary to the bakery industries), and (C) miscellaneous receipts. The sixth column shows the value of shipments of the primary products of the bakery industries reported by establishments in other industries. The seventh column shows the total value of shipments of the primary products of the bakery industries by all reporting manufacturers]

[Money figures in thousands of dollars]

PRODUCT	Shipped by—						
	Bakery products (except biscuit, crackers, and pretzels) industry				Biscuit, crackers, and pretzels industry	Other industries	All industries
	Wholesale		Retail				
	Selling to grocers and grocery chain bakeries	Selling to hotels, restaurants, and institutions	House-to-house	Retail multi-outlet			
Total shipments by the bakery industries.....	¹ \$1,643,759	\$271,383	\$281,937	\$219,812	\$540,222		
A. Bakery products.....	¹ 1,621,026	269,891	276,597	214,976	528,172	\$7,225	\$2,917,887
Bread.....	¹ 978,457	52,653	130,908	37,365	2,439	34	1,196,856
Rolls, cakes, pies, and pastries.....	¹ 504,077	179,186	124,642	136,381	5,682	1,433	1,011,401
Bakery products, not reported in detail.....	¹ 63,473	36,717	13,104	37,949	101	481	151,825
Biscuit, crackers, and pretzels.....	¹ 20,019	1,335	7,943	3,281	519,950	5,277	557,805
B. Secondary products.....	11,155	257	1,095	3,406	11,613		
Ice cream and ices.....	1,111	129	235	1,668			
Potato chips.....	¹ 1,096	13	(^d)	(^d)	1,825		
Other food products.....	¹ 8,948	115	² 860	² 1,738	9,788		
C. Miscellaneous receipts.....	¹ 11,578	1,235	4,245	1,430	437		
Scrap and salable refuse.....	¹ 5,202	² 322	2,451	455	110		
Nonmanufacturing activities.....	6,376	913	1,794	975	327		

^d Withheld to avoid disclosing figures for individual companies.

¹ Includes data for grocery chain bakeries (total shipments of \$150,174,000) to avoid disclosing figures for individual companies.

² Includes a small amount of potato chips.

³ Includes a small amount of receipts for contract and commission work.

TABLE 6.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939

[Quantity and value figures in thousands]

PRODUCT	Bakery products (except biscuit, crackers, and pretzels) industry				Biscuit, crackers, and pretzels industry	Other industries	1947 total	1939 total ¹
	Wholesale		Retail					
	Selling to grocers and grocery chain bakeries	Selling to hotels, restaurants, and institutions	House-to-house	Retail multi-outlet				
Bread, total value	\$973,457	\$52,653	\$130,908	\$37,365	\$2,439	\$34	\$1,196,866	n.a.
White pan:								
Pounds.....	7,230,748	271,499	812,727	175,717	21,224	242	8,521,157	7,218,843
Value.....	\$783,046	\$31,297	\$101,132	\$19,915	\$2,145	\$25	\$937,600	\$491,521
White hearth:								
Pounds.....	211,099	37,375	37,537	20,106			306,117	
Value.....	\$25,757	\$4,357	\$5,054	\$2,714			\$37,882	
Whole wheat, cracked wheat, and other dark wheat breads:								
Pounds.....	727,296	29,764	101,034	33,705	(?)	<i>1,612</i>	803,411	1,731,225
Value.....	\$84,497	\$3,588	\$12,990	\$4,204	(?)	<i>\$109</i>	\$105,487	\$128,210
Rye, including pumpernickel:								
Pounds.....	448,748	63,331	55,897	44,865	(?)	<i>550</i>	613,391	
Value.....	\$56,183	\$7,775	\$7,851	\$6,130	(?)	<i>\$68</i>	\$78,010	
Raisin and other specialty breads:								
Pounds.....	138,842	11,158	21,221	20,094	261		192,476	462,580
Value.....	\$19,443	\$1,487	\$3,505	\$3,342	\$36		\$27,813	\$37,428
Bread, not reported in detail, value.....	\$4,531	\$4,149	\$367	\$1,051			\$10,008	(?)
Rolls, cakes, pies, and pastries, total value	\$564,077	\$179,186	\$124,642	\$136,381	\$5,682	\$1,433	\$1,011,401	n.a.
Rolls, bread type:								
Pounds.....	664,253	165,228	48,417	62,459	(?)	<i>2,434</i>	942,701	
Value.....	\$102,891	\$25,402	\$10,503	\$13,410	(?)	<i>\$437</i>	\$152,243	1,068,302
Sweet yeast goods:								
Pounds.....	305,770	96,743	110,086	97,310	(?)	<i>2,410</i>	612,328	\$140,135
Value.....	\$70,652	\$27,404	\$39,598	\$34,856	(?)	<i>\$650</i>	\$182,109	
Doughnuts, cake type:								
Dozens.....	192,450	64,542	23,244	27,001	1,445	0	309,501	336,019
Value.....	\$46,318	\$16,202	\$8,053	\$8,414	\$312	\$4	\$86,203	\$55,375
Soft cakes:								
Pounds.....	873,587	84,337	128,406	113,056	9,705	426	1,210,207	953,195
Value.....	\$267,806	\$24,841	\$48,766	\$45,033	\$4,013	\$204	\$309,603	\$180,131
Pies:								
Pounds.....	197,478	307,791	33,506	61,314	(?)	<i>552</i>	600,641	n.a.
Value.....	\$45,678	\$70,840	\$11,447	\$18,501	(?)	<i>\$284</i>	\$146,750	\$75,121
Pastries, all types, value.....	\$5,178	\$5,086	\$2,122	\$7,709	(?)	<i>\$97</i>	\$20,702	\$24,346
Cookies, hand-made:								
Pounds.....	35,791	15,704	7,797	17,172	(?)	<i>4,132</i>	80,596	111,086
Value.....	\$9,035	\$5,022	\$2,827	\$6,358	(?)	<i>\$973</i>	\$25,115	\$10,716
Rolls, cakes, pies, etc., not reported in detail, value.....	\$6,619	\$3,789	\$426	\$2,100		<i>\$132</i>	\$13,066	(?)
Bakery products, not reported in detail, value ⁴	\$63,473	\$36,717	\$13,104	\$37,940	\$101	\$481	\$151,825	\$27,214
Biscuit, crackers, and pretzels, total value	\$20,019	\$1,335	\$7,943	\$3,281	\$519,950	\$5,277	\$557,805	\$213,755
Cookies, machine-made:								
Pounds.....	64,305	(?)	18,620	8,548	921,382	<i>14,391</i>	1,027,216	
Value.....	\$15,832	(?)	\$7,441	\$2,804	\$297,507	<i>\$3,618</i>	\$327,102	
Crackers, sponge, grahams, sprayed varieties, and low-sugar content biscuit:								
Pounds.....	(?)	(?)	(?)	(?)	951,020	<i>\$2,770</i>	983,700	
Value.....	(?)	(?)	(?)	(?)	\$206,380	<i>\$6,957</i>	\$213,320	
Pretzels:								
Pounds.....	(?)	(?)	(?)	(?)	68,835	<i>5,333</i>	74,108	52,331
Value.....	(?)	(?)	(?)	(?)	\$16,054	<i>\$1,323</i>	\$17,377	\$6,002
Retail outlets in operation Oct. 15.....	⁵ 1,493	733	497	5,733			8,456	8,013
House-to-house routes in operation Oct. 15.....	2,300	213	10,771	297			13,681	18,472

n.a.—Not available.

¹ The 1939 figures include the production of retail single-outlet bakeries and are not closely comparable with the 1947 data. Production of such bakeries amounted to about 10 percent of the total for 1939, but this percentage cannot be applied to specific products; the percentage accounted for by small bakeries is undoubtedly much larger in the case of specialty breads, pastries, doughnuts, and hand-made cookies, and smaller for other items (see text).

² Combined with "other industries," to avoid disclosure of figures for individual companies. Combined figures are in italics.

³ Combined with "Bakery products, not reported in detail."

⁴ Represents total sales of companies unable to report products in detail. The value of products included other than bread, rolls, cakes, and pastries is negligible.

⁵ In addition, 9,830 outlets were reported by grocery chain bakeries.

TABLE 7-A.—SELECTED MATERIALS CONSUMED, BY KIND: 1947

[All figures in thousands]

MATERIAL	Total for the industries	Bakery products (except biscuit, crackers, and pretzels) industry					Biscuit, crackers, and pretzels industry
		Wholesale			Retail		
		Selling to grocers	Selling to hotels, restaurants, and institutions	Grocery chain bakeries	House-to-house	Retail multi-outlet	
Wheat flour:							
Sacks (100 pounds)	97,023	60,951	5,585	5,116	7,870	3,213	14,238
Value	\$670,383	\$358,719	\$35,728	\$31,238	\$48,797	\$21,043	\$74,865
Sugar, cane and beet:							
Pounds	1,139,096	540,207	119,177	62,513	84,615	93,973	238,521
Value	\$97,904	\$46,022	\$10,103	\$5,578	\$7,236	\$8,147	\$20,820
Lard:							
Pounds	350,597	167,176	29,079	12,250	25,862	13,123	103,107
Value	\$93,032	\$44,038	\$7,826	\$3,296	\$8,696	\$3,835	\$27,541
Shortening:							
Pounds	315,872	128,469	44,257	21,520	32,023	34,205	55,398
Value	\$99,778	\$40,150	\$13,943	\$7,515	\$10,321	\$11,278	\$16,571
Other fats and oils:							
Pounds	125,238	25,810	7,360	(d)	(d)	10,560	70,943
Value	\$37,700	\$7,781	\$2,461	(d)	(d)	\$5,258	\$18,790
Dried milk:							
Pounds	223,029	148,849	20,245	16,251	19,838	9,858	8,893
Value	\$29,588	\$18,736	\$2,880	\$2,257	\$2,548	\$1,585	\$1,581
Frozen eggs:							
Pounds	196,702	92,663	24,474	20,759	22,429	27,238	9,139
Value	\$66,169	\$30,682	\$8,374	\$6,576	\$7,679	\$9,757	\$3,104
Dried eggs:							
Pounds	926	365	131	(1)	90	52	288
Value	\$1,215	\$448	\$156	(1)	\$107	\$67	\$347
Percent of coverage ²	92.7	93.7	80.2	98.0	94.0	80.6	98.8

d Withheld to avoid disclosing figures for individual companies.

(1) Less than 500.

² Value of shipments of establishments reporting kinds of materials consumed, as a percentage of the total value of shipments of all establishments.

TABLE 7-B.—ESTIMATED CONSUMPTION OF FLOUR BY THE BAKERY INDUSTRIES, BY STATES: 1947

[In thousands of 100-pound sacks]

DIVISION AND STATE	Amount reported as consumed ¹	Estimated consumption of all plants included in the census ²	Estimated total consumption in bakeries (including one-shop retailers) ³	DIVISION AND STATE	Amount reported as consumed ¹	Estimated consumption of all plants included in the census ²	Estimated total consumption in bakeries (including one-shop retailers) ³
United States	97,023	104,810	123,364	South Atlantic:			
New England:				Delaware	304	360	375
Maine	609	629	675	Maryland	1,614	1,793	2,030
New Hampshire	291	306	379	District of Columbia	941	987	1,037
Vermont	191	202	242	Virginia	1,402	1,551	1,689
Massachusetts	3,998	4,339	4,951	West Virginia	1,198	1,222	1,310
Rhode Island	648	675	782	North Carolina	1,433	1,519	1,621
Connecticut	1,080	1,230	1,483	South Carolina	589	608	682
Middle Atlantic:				Georgia	1,853	1,946	2,069
New York	11,593	12,507	15,171	Florida	1,266	1,498	1,754
New Jersey	3,209	3,452	5,123	East South Central:			
Pennsylvania	9,836	9,552	10,469	Kentucky	1,120	1,163	1,349
East North Central:				Tennessee	1,872	1,942	2,092
Ohio	7,208	7,556	8,644	Alabama	858	922	987
Indiana	2,708	2,917	3,311	Mississippi	545	592	659
Illinois	6,070	6,528	8,134	West South Central:			
Michigan	4,408	4,757	5,594	Arkansas	607	661	730
Wisconsin	1,868	1,987	2,599	Louisiana	1,332	1,583	1,781
West North Central:				Oklahoma	1,043	1,237	1,410
Minnesota	1,671	1,785	2,399	Texas	4,360	4,817	5,395
Iowa	1,795	2,006	2,435	Mountain:			
Missouri	3,899	4,091	4,606	Montana	278	358	432
North Dakota	328	376	468	Idaho	152	283	333
South Dakota	212	313	405	Wyoming	87	97	127
Nebraska	970	1,006	1,173	Colorado	1,077	1,150	1,303
Kansas	904	1,010	1,194	New Mexico	185	236	289
				Arizona	357	394	466
				Utah	504	518	598
				Nevada	33	53	68
				Pacific:			
				Washington	1,497	1,607	1,953
				Oregon	1,077	1,178	1,391
				California	6,949	7,311	9,197

¹ Includes consumption indicated by plants classified in the Bread and other bakery products and the Biscuit, crackers, and pretzels industries which submitted detailed data on consumption of various specified materials.

² Computed by increasing reported consumption (column 1) by percentage which sales of establishments not reporting detailed data on materials consumption bore to sales of establishments reporting detailed materials consumption data.

³ Computed by increasing column 2 by percentage which maximum employment of establishments excluded from the census (single retail outlet bakeries—see table 8) bore to average total employment of all establishments included in the census. It was necessary to use employment data because no sales data were available for single retail outlet bakeries.

This method of estimation assumes that flour consumption per employee is the same in retail single-outlet bakeries as in bakeries included in the Census. There is reason to believe, however, that the amount of flour consumed per employee is considerably less in retail bakeries than in wholesale bakeries. Consequently, the estimates tend to overstate actual flour consumption in bakeries.

TABLE 8.—BAKERIES (EXCEPT BISCUIT, CRACKERS, AND PRETZELS): NUMBER AND NUMBER OF EMPLOYEES, BY DIVISIONS AND STATES: 1947¹

DIVISION AND STATE	Total		Retail single-outlet (not included in the census)		Retail				Wholesale				Grocery chain	
					House-to-house		Retail multi-outlet		Selling to grocers		Selling to hotels, restaurants, and institutions			
	No. estabs.	Employment	No. estabs.	Max. empl.	No. estabs.	Av. empl.	No. estabs.	Av. empl.	No. estabs.	Av. empl.	No. estabs.	Av. empl.	No. estabs.	Av. empl.
United States.....	17,901	282,983	11,104	49,673	624	30,724	1,064	26,802	3,455	136,867	1,564	26,978	90	11,939
New England.....	1,552	23,234	877	3,343	118	4,464	152	3,504	232	9,140	162	1,098	11	785
Maine.....	66	1,608	31	123	2	(d)	1	24	7	852	7	180	1	(d)
New Hampshire.....	70	1,028	46	199	3	251	7	98	10	444	4	30		
Vermont.....	51	534	29	89	5	(d)	3	(d)	9	378	5	21		
Massachusetts.....	860	13,789	494	1,935	64	(d)	86	2,482	115	4,711	91	1,205	10	(d)
Rhode Island.....	182	2,195	103	300	15	208	23	272	23	1,227	18	188		
Connecticut.....	323	4,080	174	697	29	883	32	613	51	1,528	37	359		
Middle Atlantic.....	5,090	79,937	3,266	15,464	329	12,824	308	8,597	806	30,468	360	8,611	21	3,073
New York.....	2,479	37,279	1,045	7,799	90	(d)	141	4,604	400	13,618	195	5,454	8	(d)
New Jersey.....	992	12,963	733	4,596	58	(d)	38	354	110	5,086	44	1,050	3	(d)
Pennsylvania.....	1,619	29,695	888	3,060	181	7,193	129	3,639	290	11,764	121	2,098	10	1,032
East North Central.....	4,200	67,155	2,860	12,887	105	7,384	217	6,924	764	30,492	323	5,820	21	3,630
Ohio.....	1,044	20,412	650	2,947	56	(d)	61	2,158	185	7,032	86	1,954	6	(d)
Indiana.....	369	6,770	169	925	21	(d)	13	171	108	3,325	55	610	3	(d)
Illinois.....	1,602	19,681	1,118	4,803	14	361	57	1,914	210	9,051	80	2,217	6	735
Michigan.....	780	12,963	492	2,256	10	735	54	1,887	152	6,228	67	709	5	1,058
Wisconsin.....	595	7,329	431	1,956	4	(d)	32	704	100	3,350	20	249	2	(d)
West North Central.....	1,828	25,320	1,217	5,200	7	1,553	99	1,602	348	13,070	140	1,732	8	1,104
Minnesota.....	503	5,556	379	1,668	1	(d)	37	(d)	61	2,411	25	416		
Iowa.....	279	4,121	180	905	2	(d)	15	(d)	59	2,746	23	108		
Missouri.....	511	8,922	340	1,306	2	(d)	23	335	94	4,642	40	775	6	(d)
North Dakota.....	77	714	40	182			6	68	25	431	6	33		
South Dakota.....	96	883	61	284			4	51	19	453	12	95		
Nebraska.....	150	2,630	100	458	1	(d)	9	(d)	29	1,501	10	90	1	(d)
Kansas.....	212	2,494	117	397	1	(d)	5	(d)	61	1,795	27	200	1	(d)
South Atlantic.....	1,162	27,540	614	2,733	19	2,228	72	1,380	306	17,592	140	2,413	11	1,194
Delaware.....	19	394	5	16	1	(d)	3	(d)	10	321				
Maryland.....	268	5,111	175	713	7	(d)	14	256	43	2,201	27	392	2	(d)
District of Columbia.....	43	2,282	13	110	1	(d)	7	(d)	11	1,354	10	265	1	(d)
Virginia.....	157	3,839	80	363	1	(d)	14	214	41	2,506	18	273	3	(d)
West Virginia.....	126	2,767	48	186	3	120	6	132	57	2,251	12	78		
North Carolina.....	146	4,165	63	273	1	(d)	4	108	58	3,206	18	314	2	(d)
South Carolina.....	71	1,664	41	219			6	70	17	1,011	7	364		
Georgia.....	124	3,470	69	279	3	(d)	7	125	23	2,250	20	340	2	(d)
Florida.....	208	3,848	120	574	2	(d)	11	(d)	46	2,432	28	387	1	(d)
East South Central.....	446	10,894	216	1,160	3	(d)	27	388	144	7,850	53	683	3	(d)
Kentucky.....	160	3,000	84	458	2	(d)	9	111	38	1,559	15	147	2	(d)
Tennessee.....	138	3,895	59	343	1	(d)	8	(d)	50	3,030	10	327	1	(d)
Alabama.....	82	2,486	38	200			4	(d)	28	2,002	12	171		
Mississippi.....	76	1,513	35	159			6	57	28	1,250	7	38		
West South Central.....	1,108	17,272	507	2,135	14	416	55	979	379	11,335	148	2,092	5	316
Arkansas.....	89	1,464	38	167			3	24	33	1,178	15	95		
Louisiana.....	214	3,689	89	447	8	(d)	13	181	81	2,532	22	438	1	(d)
Oklahoma.....	217	2,610	95	360	2	(d)	5	(d)	79	1,785	36	363		
Texas.....	588	9,500	285	1,161	4	(d)	34	713	180	5,840	75	1,196	4	(d)
Mountain.....	584	6,761	295	1,152	4	(d)	21	(d)	213	4,493	48	454	3	(d)
Montana.....	84	829	40	143			2	(d)	33	583	9	(d)		
Idaho.....	62	690	28	104			2	(d)	28	641	4	(d)		
Wyoming.....	50	378	21	90			1	(d)	24	264	4	(d)		
Colorado.....	167	2,306	95	377	3	(d)	5	148	50	1,401	13	132	1	(d)
New Mexico.....	65	597	23	110			2	(d)	33	444	7	(d)		
Arizona.....	64	787	34	123	1	(d)	5	70	18	531	6	(d)	1	(d)
Utah.....	76	999	46	167			3	(d)	22	668	4	72	1	(d)
Nevada.....	16	175	8	38			1	(d)	5	61	2	(d)		
Pacific.....	1,841	24,870	1,252	5,599	25	(d)	113	2,080	263	11,518	181	3,166	7	(d)
Washington.....	312	4,206	190	867	8	(d)	15	500	68	2,095	30	450	1	(d)
Oregon.....	208	2,729	125	465	3	(d)	14	279	45	1,033	20	289	1	(d)
California.....	1,321	17,935	937	4,267	14	(d)	84	2,147	150	7,790	131	2,457	5	(d)

¹ Withheld to avoid disclosing figures for individual companies.

² The data for retail single-outlet bakeries represent the maximum employment for the year of 1947 as reported on preliminary questionnaires (see GENERAL EXPLANATIONS) and on the long and short forms submitted by establishments that were excluded by census definition from "Manufacturing." The data for all other bakeries are from tabulations of schedules included in the census and show the average total employment. While the two sets of data are not strictly comparable, the differences between "maximum employment," as reported for the single-shop retailers, and the "average total employment" for all other bakeries are minor.

SUGAR; CONFECTIONERY AND RELATED PRODUCTS

This report shows 1947 Census of Manufactures statistics for establishments primarily engaged in the production of raw cane sugar, refined cane sugar, beet sugar, confectionery, chocolate and cocoa products, and chewing gum. These establishments have been classified in six industries described separately below.

Because of substantial differences between shipments and production in the sugar industries, value added by manufacture for these industries for 1947 was derived by subtracting the cost of materials, supplies, fuel, electricity, and contract work from computed value of production calculated by multiplying the quantities produced by the unit values of shipments. For other industries, value added was derived by subtracting cost of materials, supplies, fuel, electricity, and contract work from value of product shipped.

Raw Cane Sugar (*Full Standard Industrial Classification title and number: Cane Sugar, Except Refining, 2061.*)—This industry comprises establishments primarily engaged in manufacturing raw sugar, sirup, or finished (granulated or clarified) cane sugar from sugarcane. Sugar refineries primarily producing refined cane sugar from raw sugar are classified in the cane-sugar refining industry.

The raw sugar mills included are located in Louisiana and Florida, and no data are included for mills located in the Territories and Possessions. Farm sirup mills and the raw sugar mill operated by the Louisiana State Penitentiary, usually producing approximately 1 percent of the total output, also are not included.

Domestic cane, grown on plantations in Louisiana and Florida during the first 9 months of the year, is harvested and processed during the last 3. In some instances the processing carries over to the early months of the following year. Establishments in this industry reported on the basis of the 1947 crop year rather than for the calendar year where the two did not coincide. Employment data were reported for the calendar year in all cases.

Cane-Sugar Refining (*Standard Industrial Classification No. 2062.*)—This industry comprises establishments primarily engaged in refining purchased raw cane sugar.

Beet Sugar (*Standard Industrial Classification No. 2063.*)—This industry comprises establishments primarily engaged in manufacturing sugar from sugar beets.

Beet sugar production is highly seasonal, with the processing of sugar beets starting in late summer and generally lasting into January of the following year. Establishments in this

industry reported for the 1947 "campaign" or processing year rather than for the calendar year where the two did not coincide, but employment data were reported for the calendar year in all cases.

Parity or price support payments made to sugar beet growers by the Commodity Credit Corporation through the beet processors are not included in the statistics for either the cost of materials or the value of products shipped.

Confectionery Products (*Full Standard Industrial Classification title and number: Candy and Other Confectionery Products, 2071.*)—This industry consists of establishments primarily engaged in manufacturing candy and other confections such as chocolate candies (fancy package, bulk, or count), chocolate-covered bars, marshmallows, lozenges, fudge, candied and crystallized fruits, candy-covered nuts, salted nuts, stuffed dates, popcorn balls, and related products. Establishments primarily engaged in manufacturing solid chocolate bars are classified in Industry 2072, and chewing gum in Industry 2073.

Retail shops which sell most of the candy they make at retail prices from the manufacturing premises have been excluded from the 1947 Census of Manufactures. In previous years a separate report on the manufacturing activities of retail shops was obtained if confectionery manufactured was valued at \$20,000 or more.

The value of products of this industry is based primarily on wholesale prices. Some of the manufacturers who sell their output at retail prices through company-owned stores reported retail values, but this did not appreciably affect the value figures for the industry. According to Department of Commerce estimates, sales of the manufacturer-retailer group account for less than 5 percent of the sales of the industry.

Chocolate and Cocoa Products (*Standard Industrial Classification No. 2072.*)—This industry comprises establishments primarily engaged in manufacturing chocolate and cocoa butter from cocoa beans, and in the further manufacture of cocoa, solid chocolate bars, and chocolate coatings.

Important products of this industry include chocolate (unsweetened, sweet, milk), chocolate coatings (sweet, milk, and liquor), powdered cocoa (unsweetened, sweetened, or mixed with other substances), cocoa butter, and chocolate sirups. Establishments primarily engaged in manufacturing instant chocolate and cocoa from purchased chocolate and cocoa are classified in the food preparations, n. e. c., industry, and those manufacturing chocolate candies (fancy package, bulk, or count) in the confectionery products industry.

Chewing Gum (*Standard Industrial Classification No. 2073.*)—This industry comprises establishments primarily engaged in the manufacture of chewing gum from such materials as crude gum or chicle, essential oils, flavoring extracts, sugar, etc.

TABLE 1.—GENERAL STATISTICS FOR THE UNITED STATES: 1947 AND EARLIER CENSUS YEARS

[Money figures in thousands of dollars. For explanation of column captions see GENERAL EXPLANATIONS]

INDUSTRY AND CENSUS YEAR	Number of establishments	All employees		Production and related workers		Value added by manufacture ¹	Cost of materials, fuel, electricity, and contract work ²	Value of products shipped ³
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total			
Raw cane sugar:⁴								
1947	82	4,635	\$8,550	4,022	\$6,507	\$17,700	\$41,505	\$60,135
1939	78	5,294	3,731	4,217	2,573	10,510	22,100	32,000
1937	72	4,819	3,209	4,221	2,380	8,500	19,800	28,300
1935	74	3,714	2,258	2,044	1,530	8,000	17,400	25,400
1933	67	2,718	1,578	2,371	1,228	6,630	11,504	18,233
1931	68	n.a.	n.a.	2,032	1,333	3,973	10,008	13,081
1929	70	2,723	2,102	2,319	1,042	6,103	12,223	18,320
1927	53	1,204	932	971	639	2,179	5,830	8,000
1925	94	2,478	1,838	2,005	1,411	1,849	11,580	13,435
1923	122	3,674	2,480	2,820	1,728	0,218	20,003	27,181
1921	134	3,311	3,018	2,724	2,290	0,020	16,941	22,001
1919	202	6,880	5,675	6,101	4,009	13,608	44,143	57,741
1914	181	4,372	2,053	3,632	1,561	5,077	15,068	21,035
1909 ⁵	214	5,115	2,600	4,127	1,803	9,326	21,205	30,021
Cane-sugar refining:								
1947	25	17,376	47,172	15,093	38,974	98,112	728,744	818,430
1939	27	16,828	21,412	14,133	16,197	55,983	280,000	345,000
1937	23	15,718	10,942	14,024	15,073	62,000	315,000	377,000
1935	18	15,263	17,190	13,832	13,914	41,000	202,000	333,000
1933	19	12,786	15,141	11,495	12,237	55,539	281,536	337,075
1931	19	n.a.	n.a.	11,855	15,547	59,370	335,933	305,303
1929	21	15,655	22,410	13,912	17,850	68,990	438,300	507,380
1927	21	15,742	22,353	13,906	17,707	45,852	551,594	597,440
1925	21	16,359	23,913	14,502	18,955	50,737	540,800	600,033
1923	20	17,474	25,753	15,254	20,044	44,362	681,880	726,242
1921	20	17,784	25,020	15,457	19,463	40,001	420,001	460,002
1919	20	20,915	28,153	18,202	22,710	68,843	602,144	730,087
1914	18	12,553	10,326	11,253	7,823	25,314	204,085	280,300
1909 ⁵	19	10,339	7,275	9,300	5,621	22,341	220,288	248,020
Beet sugar:⁴								
1947	74	13,412	35,569	11,634	29,058	118,048	187,485	202,872
1939	85	12,324	16,408	10,410	12,361	49,445	68,000	117,000
1937	87	10,937	15,099	9,366	11,733	38,000	55,000	63,000
1935	77	10,798	12,532	9,232	9,338	24,000	58,000	82,000
1933	84	11,907	13,057	10,708	10,884	51,000	70,127	127,133
1931	67	n.a.	n.a.	6,241	7,548	23,347	62,325	85,072
1929	82	8,943	12,819	7,496	10,021	37,503	70,000	108,553
1927	79	8,872	12,725	7,402	9,710	25,910	70,017	104,027
1925	89	10,403	15,281	8,872	12,088	45,301	87,038	132,339
1923	84	9,602	14,394	7,571	10,103	47,404	70,820	118,314
1921	92	16,008	27,043	13,602	22,658	17,241	121,869	130,110
1919	85	14,189	20,336	11,781	15,008	62,127	87,029	140,150
1914	60	9,633	8,865	7,007	6,000	21,200	41,399	62,005
1909	58	8,388	6,578	7,204	4,808	20,857	27,265	48,122
1904	51	4,726	3,491	3,693	2,487	9,907	14,487	24,304
1899	30	2,320	1,440	1,970	1,092	2,520	4,804	7,324
Confectionery products:								
1947 ⁶	1,686	75,165	167,886	64,883	123,046	413,852	531,073	644,025
1939	1,252	61,111	69,124	40,740	41,085	127,026	170,730	207,702
1937	1,226	59,230	55,040	53,722	43,441	123,058	182,781	305,830
1935 ⁶	1,314	58,083	51,751	52,109	39,252	106,151	153,738	250,880
1933	1,218	55,991	40,614	50,009	32,991	97,669	114,164	211,833
1931	1,566	n.a.	n.a.	51,262	42,153	130,400	144,748	284,167
1929	2,021	72,718	80,028	63,501	56,443	178,078	215,192	303,270
1927	1,903	73,142	81,545	63,163	56,081	173,551	218,373	301,027
1925 ⁶	1,631	74,255	77,861	63,600	55,235	173,648	205,433	379,081
1923	2,014	74,561	79,124	63,485	54,882	163,537	202,719	300,260
1921	2,254	72,496	72,016	61,004	50,210	130,926	174,072	313,908
1919	3,149	90,836	85,706	70,493	54,461	195,292	252,434	447,720
1914 ⁷	2,317	60,881	32,165	51,610	20,644	50,993	93,693	153,686
Chocolate and cocoa products:								
1947 ⁶	31	9,605	27,480	7,708	19,174	98,276	251,631	349,907
1939	39	8,831	13,030	6,464	7,711	35,559	63,450	99,018
1937	40	8,473	10,408	7,402	8,129	28,215	74,131	102,340
1935 ⁶	44	9,383	10,368	8,201	7,906	26,640	66,407	93,047
1933	54	7,181	7,542	6,460	6,115	20,182	41,672	67,754
1931	55	n.a.	n.a.	5,677	6,040	37,301	50,045	87,346
1929	59	7,068	10,276	6,240	7,778	30,992	70,549	110,541
1927	69	7,345	10,125	6,427	7,339	32,300	60,423	122,723
1925 ⁶	60	8,477	11,343	7,128	7,992	33,120	73,522	106,642
1923	58	8,378	11,481	6,876	7,730	34,688	60,843	95,531
1921	55	8,010	10,345	6,652	7,278	32,515	49,134	81,049
1919	48	10,256	13,309	9,083	9,270	37,504	101,754	139,258
1914	36	5,039	3,489	4,160	2,036	11,230	24,483	35,713
1909	27	3,394	2,230	2,820	1,260	6,807	15,523	22,300
1904	25	2,381	1,285	2,090	822	4,007	9,723	14,300
1899	24	1,603	897	1,314	526	2,780	6,877	9,666

See footnotes at end of table.

SUGAR; CONFECTIONERY AND RELATED PRODUCTS

121

TABLE 1.—GENERAL STATISTICS FOR THE UNITED STATES: 1947 AND EARLIER CENSUS YEARS—Continued

INDUSTRY AND CENSUS YEAR	Number of establishments	All employees		Production and related workers		Value added by manufacture ¹	Cost of materials, fuel, electricity, and contract work ²	Value of products shipped ³
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Wages, total			
Chewing gum:								
1947	37	6,940	\$19,192	5,472	\$13,440	\$74,937	\$73,349	\$148,286
1939	27	3,693	5,437	2,627	3,286	43,153	17,630	60,783
1937	25	2,839	3,935	2,401	2,967	39,834	16,888	56,722
1935	26	2,794	3,604	2,315	2,417	32,781	14,985	47,766
1933	31	2,574	2,759	2,252	2,232	20,055	12,599	41,654
1931	35	n.a.	n.a.	2,147	2,403	34,516	16,824	51,340
1929	37	2,852	4,195	2,265	2,733	36,929	23,231	60,160
1927	40	3,257	4,414	2,524	2,727	34,833	27,168	62,001
1925	41	2,639	3,469	2,180	2,538	29,870	17,968	47,838
1923	45	2,541	3,174	2,052	2,233	25,384	15,487	40,871
1921	50	2,557	3,343	1,994	2,149	18,957	19,908	38,865
1919	62	4,033	4,527	3,190	2,680	26,038	25,202	51,240
1914	74	2,668	1,649	2,048	828	9,838	7,322	17,100

n.a.—Not available.

¹ Value of products less cost of materials, supplies, fuel, electricity, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture. For the sugar industries, see GENERAL EXPLANATIONS—Method of calculating value added by manufacture for selected industries in 1947.² Excise taxes are not included in cost of materials or value of products for the sugar industries. Previously published figures for these industries for 1935, 1937, and 1939 have been adjusted to exclude estimated excise taxes.³ For 1947 and 1929, the figures represent value of products shipped, except in the case of the sugar industries for 1929 where they represent value of products made; for all other years, the figures represent value of products made. See GENERAL EXPLANATIONS—Value of products shipped.⁴ The figures for 1931-47 cover the seasons beginning in the respective census years, and for prior years for the seasons ending in those years. Thus the figures given for 1939 cover the season 1939-40, whereas the figures for 1921 apply to the season 1920-21. In 1925, 1927 and 1929, however, most of the establishments in "Raw cane sugar" and a few establishments in "Beet sugar," reported for the seasons 1925-26, 1927-28, and 1929-30, instead of 1924-25, 1926-27, and 1928-29.⁵ No comparable figures are available for earlier years. Prior to 1909, "Raw cane sugar" and "Cane sugar refining" constituted a single industry.⁶ In 1947, 1935, 1925 and prior years, some confectionery manufacturers failed to make separate returns for their chocolate departments, which were consequently included in the statistics for the "Confectionery products" industry. Only three establishments failed to make separate reports in 1947.⁷ "Confectionery products" and "Chewing gum" formerly were combined in one industry. Separate statistics for each are therefore not available for years prior to 1914.

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947

[Money figures and man-hours in thousands. For explanation of column captions see GENERAL EXPLANATIONS]

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Raw cane sugar, total ¹	82	4,635	\$8,550	4,022	10,217	\$6,597	\$17,709	\$41,595	\$60,135	\$5,061
South	82	4,635	8,550	4,022	10,217	6,597	17,709	41,595	60,135	5,061
Cane-sugar refining, total ¹	25	17,376	47,172	15,093	39,074	38,974	98,112	728,744	818,430	5,902
Northeast	9	7,659	23,114	6,538	14,585	18,673	41,128	341,273	381,204	3,323
New York	5	3,671	11,647	3,147	7,062	9,421	22,008	160,585	100,000	1,848
East North Central	3	93	277	69	145	187	706	4,038	4,830	(⁴)
South and West	13	9,624	23,781	8,486	18,344	20,114	56,218	383,433	432,336	(⁴)
Beet sugar, total ¹	74	13,412	35,569	11,634	25,935	29,958	118,048	187,485	262,872	12,520
East North Central	13	1,763	3,710	1,486	3,092	3,048	6,803	13,050	20,023	1,029
Michigan	9	1,275	2,811	1,091	2,285	2,293	5,104	10,412	23,814	932
West North Central	11	1,692	4,470	1,474	3,215	3,701	14,408	18,690	30,352	684
West	50	9,907	27,383	8,074	19,628	23,200	96,087	155,130	203,497	10,807
Montana	5	944	2,049	821	1,884	2,231	8,068	13,401	20,370	1,061
Colorado	17	3,012	7,997	2,516	5,985	6,536	28,252	37,050	48,074	2,829
Utah	5	725	2,159	638	1,484	1,869	5,021	11,027	13,729	1,305
California	10	2,788	7,703	2,506	5,480	6,448	21,410	40,319	60,011	1,340
Confectionery products, total ¹	1,686	75,165	167,886	64,883	130,694	123,046	413,862	531,073	944,925	25,602
Northeast	571	29,575	64,066	26,062	52,650	47,030	155,202	102,716	347,918	9,022
Massachusetts	101	7,339	16,719	6,440	12,480	11,277	32,209	40,659	72,868	2,188
New York	210	9,525	21,858	8,497	17,270	16,997	50,545	61,429	111,074	3,861
Pennsylvania	183	9,608	17,698	8,457	17,058	13,601	49,854	63,830	103,693	2,112
East North Central	333	21,021	55,300	17,055	36,767	40,284	154,387	108,051	353,338	8,080
Indiana	16	897	2,134	735	1,586	1,401	3,977	8,512	12,480	441
Illinois	141	15,938	44,977	13,402	27,917	32,091	132,802	106,011	209,713	7,805
West North Central	95	4,802	9,927	4,013	8,321	7,118	22,700	26,749	40,440	1,122
Minnesota	36	1,173	2,095	1,051	2,091	1,664	6,011	6,201	12,212	327
Iowa	18	519	1,011	458	912	726	3,126	3,126	5,265	110
Missouri	29	2,621	5,760	2,079	4,395	4,037	11,754	14,238	25,902	630
South and West	687	19,707	38,593	17,153	32,900	28,005	81,563	112,657	194,220	5,878
Maryland	30	644	1,047	588	1,121	813	2,814	3,406	6,220	208
Virginia	23	1,955	3,080	1,787	3,310	2,471	5,075	14,830	19,011	587
North Carolina	22	534	941	475	989	733	2,072	2,001	4,073	346
Georgia	45	2,796	4,824	2,488	4,141	3,521	10,601	14,022	24,623	620
Florida	23	302	544	262	501	424	864	989	1,853	41
Kentucky	14	566	1,160	464	1,038	718	2,805	2,335	5,140	59
Alabama	18	408	537	378	699	459	1,040	2,073	3,713	148
Mississippi	13	154	183	126	230	125	205	421	710	8
Arkansas	9	282	390	238	487	208	672	768	1,430	23
Louisiana	24	549	803	504	1,005	645	2,104	2,569	4,073	76
Oklahoma	23	329	673	303	607	627	1,347	2,357	3,704	163
Colorado	16	472	900	349	855	654	1,784	1,682	3,466	41
Utah	15	724	1,695	630	1,013	1,020	4,110	2,742	6,868	123
California	166	5,010	12,415	4,084	8,065	8,779	25,010	35,176	60,792	1,017
Chocolate and cocoa products, total ¹	31	9,605	27,460	7,708	15,933	19,174	98,276	251,631	349,907	6,018
Northwest	22	8,943	24,063	7,242	14,907	17,847	87,802	220,597	314,300	5,406
New York	8	2,680	8,249	2,131	4,405	5,744	24,523	71,148	95,071	2,544
Pennsylvania	7	4,809	12,625	3,982	8,208	9,268	45,070	114,601	160,577	2,253
Other divisions	9	657	2,517	466	1,026	1,327	10,474	25,034	35,608	607
California	3	183	650	188	275	410	2,602	5,105	7,707	95
Chewing gum, total ¹	37	6,940	19,192	5,472	11,583	13,446	74,937	73,349	148,256	4,595
Northeast and North Central	29	6,591	18,575	5,143	10,874	12,024	71,630	71,005	142,701	4,009
New York	12	3,002	8,854	2,164	4,072	5,768	33,022	31,300	64,022	1,104
Pennsylvania	7	1,185	3,270	937	2,032	2,189	9,187	11,550	20,743	1,070
South and West	8	349	617	329	709	622	3,301	2,284	5,555	526

⁴ Withheld to avoid disclosing figures for individual companies.
¹ For each producing State not shown separately in the table (see GENERAL EXPLANATIONS on "Disclosure of Data for Individual Companies"), there are shown below the number of establishments and, in parentheses, the number of employees for States represented by three or more companies, when possible.
Raw cane sugar: South, Florida, 2; Louisiana, 80.
Cane-sugar refining: Northeast, Massachusetts, 2; Pennsylvania, 2; East North Central, Indiana, 1; Illinois, 1; Wisconsin, 1; South and West, Maryland, 1; Georgia, 1; Louisiana, 8 (4,156); Texas, 1; California, 2.
Beet sugar: East North Central, Ohio, 3; Wisconsin, 1; West North Central, Minnesota, 2; Iowa, 1; South Dakota, 1; Nebraska, 0; Kansas, 1; West, Idaho, 7 (1,365); Wyoming, 4; Washington, 1; Oregon, 1.
Confectionery products: Northeast, Maine, 6 (29); New Hampshire, 4 (12); Vermont, 4 (78); Rhode Island, 5 (258); Connecticut, 9 (572); New Jersey, 40 (2,154); East North Central, Ohio, 99 (1,502); Michigan, 37 (1,269); Wisconsin, 40 (1,415); West North Central, North Dakota, 1; South Dakota, 1; Nebraska, 4 (270); Kansas, 0; South and West, Delaware, 2; District of Columbia, 5 (118); West Virginia, 7 (55); South Carolina, 13 (234); Tennessee, 24 (926); Texas, 126 (2,315); Montana, 3 (9); Idaho, 2; New Mexico, 2; Arizona, 4 (27); Washington, 38 (1,093); Oregon, 20 (208).
Chocolate and cocoa products: Northeast, Massachusetts, 3 (1,160); New Jersey, 4 (299); Other divisions, Illinois, 3 (219); Wisconsin, 2; Washington, 1.
Chewing gum: Northeast and North Central, Massachusetts, 3 (501); New Jersey, 1; Ohio, 2; Illinois, 2; Michigan, 2; South and West, Tennessee, 2; Texas, 2; California, 4.

SUGAR; CONFECTIONERY AND RELATED PRODUCTS

123

TABLE 3.—DETAILED STATISTICS FOR THE UNITED STATES: 1947

[Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS]

ITEM	Industry					
	Raw cane sugar	Cane-sugar refining	Beet sugar	Confectionery products	Chocolate and cocoa products	Chewing gum
ALL ESTABLISHMENTS						
Number of establishments.....	82	25	74	1,686	31	37
All employees:						
Number (average for the year).....	4,035	17,376	13,412	75,165	9,605	6,940
Salaries and wages, total.....	\$8,550	\$47,172	\$35,569	\$167,886	\$27,480	\$19,192
Production and related workers:						
Number (average for the year).....	4,022	15,093	11,634	64,883	7,708	5,472
Man-hours, total..... thousands.....	10,217	33,074	25,935	130,694	15,933	11,583
Wages, total.....	\$9,597	\$38,974	\$29,958	\$123,046	\$19,174	\$13,446
Value added by manufacture.....	\$17,709	\$98,112	\$118,048	\$413,852	\$98,276	\$74,937
ESTABLISHMENTS REPORTING DETAILED STATISTICS						
Number of establishments.....	82	25	74	1,205	31	37
All employees:						
Number (average for the year).....	4,635	17,376	13,412	72,827	9,605	6,940
Salaries and wages, total.....	\$8,550	\$47,172	\$35,569	\$164,515	\$27,480	\$19,192
Production and related workers:						
Number (average for the year).....	4,022	15,093	11,634	62,584	7,708	5,472
Man-hours, total..... thousands.....	10,217	33,074	25,935	126,207	15,933	11,583
Wages, total.....	\$9,597	\$38,974	\$29,958	\$119,941	\$19,174	\$13,446
Value added by manufacture.....	\$17,709	\$98,112	\$118,048	\$407,234	\$98,276	\$74,937
Number of employees for pay period ended nearest Oct. 15:						
All employees.....	5,839	17,723	28,453	83,658	10,387	8,345
Male.....	5,565	15,074	26,580	81,654	7,185	3,941
Female.....	274	2,649	1,873	62,002	3,182	4,404
Production and related workers.....	5,137	15,568	26,190	73,033	8,431	6,760
Male.....	4,095	13,457	24,857	26,251	5,972	2,988
Female.....	142	2,111	1,333	46,782	2,459	3,781
Force-account construction workers.....	164	148	176	108	0	0
Administrative, supervisory, sales, and all other.....	638	2,007	2,087	10,515	1,936	1,567
Male.....	406	1,469	1,547	5,295	1,213	944
Female.....	132	538	540	5,220	723	623
All employees, number by month:						
January.....	3,836	15,950	12,028	71,862	9,284	5,719
February.....	2,917	15,212	7,152	69,897	9,323	5,923
March.....	2,973	16,222	6,488	70,519	9,256	6,232
April.....	3,046	16,043	6,678	69,260	9,255	6,338
May.....	2,900	17,741	7,607	66,361	9,121	6,578
June.....	2,903	18,245	8,330	63,452	9,132	6,498
July.....	3,111	18,434	9,291	61,827	9,104	6,732
August.....	3,376	18,439	11,539	66,454	9,511	7,355
September.....	3,405	18,373	13,192	73,399	10,059	7,634
October.....	5,839	17,723	28,453	83,658	10,387	8,345
November.....	10,705	17,936	28,439	87,671	10,378	8,241
December.....	10,644	17,280	21,734	88,285	10,421	7,639
Cost of materials, fuel, electricity, and contract work.....	\$41,595	\$728,744	\$187,485	\$523,203	\$251,631	\$73,349
Materials, parts, containers, and supplies.....	40,294	720,614	175,870	516,996	248,957	72,675
Fuels, total.....	1,080	7,927	11,340	3,056	1,503	368
Bituminous coal.....	8	3,875	6,942	902	1,092	211
Anthracite.....	6	645	1	49	11	3
Coke.....	1	1	1,121	13	0	0
Fuel oils.....	652	1,360	546	1,115	329	96
Gas.....	484	2,013	2,663	757	66	27
Other fuels.....	30	33	68	160	5	1
Purchased electric energy.....	133	195	275	2,700	1,105	287
Contract and commission work.....	88	8	0	451	66	19
Value of inventories:						
Beginning of year, total.....	\$11,687	\$51,333	\$101,928	\$109,666	\$44,875	\$35,344
Finished products.....	9,818	19,600	86,287	22,626	14,607	3,184
Materials, supplies, and work in process.....	1,869	31,733	15,661	87,040	30,368	32,160
End of year, total.....	8,386	81,907	134,045	120,680	64,260	33,823
Finished products.....	6,573	32,686	113,989	28,284	16,078	3,493
Materials, supplies, and work in process.....	1,813	49,221	20,056	92,396	48,182	30,330
Expenditures for plant and equipment:						
New plant and equipment.....	\$5,061	\$5,902	\$12,520	\$25,602	\$6,013	\$4,595
Construction and major alteration of fixed plants.....	1,938	1,321	1,637	7,476	1,483	862
Buildings.....	1,811	1,175	1,344	6,578	1,468	805
Other construction.....	127	146	293	898	15	57
Machinery and equipment.....	3,123	4,581	10,883	18,126	4,530	3,733
Production machinery and equipment.....	2,954	4,171	9,683	15,935	4,271	3,418
Other machinery and equipment.....	169	410	1,200	2,190	259	315
Used plant and equipment, and land.....	69	690	195	1,422	42	161
Number of highway-type motor vehicles owned or leased:						
Trucks.....	225	179	609	971	70	30
By manufacturer's rated capacity:						
Under 1½ tons.....	68	45	98	482	24	9
1½ tons.....	103	26	301	315	14	15
Over 1½ tons and less than 3½ tons.....	38	38	95	117	11	6
3½ tons and less than 5 tons.....	11	9	13	34	6	0
5 tons and over.....	6	61	2	23	15	0
By body type:						
Van.....	21	58	8	162	16	5
Stake or platform.....	81	34	195	115	14	9
Panel or light delivery.....	43	24	75	570	32	13
All other trucks.....	80	63	231	124	8	3
Truck tractors.....	73	88	28	49	15	1
Trailers and semitrailers.....	77	98	43	61	14	1

TABLE 4.—SELECTED GENERAL STATISTICS BY SIZE OF ESTABLISHMENT, FOR THE UNITED STATES: 1947

[Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS. Data which cannot be shown without disclosing information for individual companies have been combined with figures for other groups. A ^d appears in the column where the figure has been omitted and the combined figure is printed in *italics*]

INDUSTRY AND ITEM	Total, all establish- ments	Establishments with an average of—									
		1-4 em- ployees	5-9 em- ployees	10-19 em- ployees	20-49 em- ployees	50-99 em- ployees	100-249 em- ployees	250-499 em- ployees	500-999 em- ployees	1,000- 2,499 employees	2,500 employees and over
Raw cane sugar:											
Number of establishments.....	82	5	7	7	29	20	13	1			
Number of employees (average for the year).....	4,035	10	39	104	1,090	1,358	2,034	(^d)			
Value added by manufacture.....	\$17,709	\$20	\$55	\$244	\$4,180	\$4,509	\$8,695	(^d)			
Cane-sugar refining:											
Number of establishments.....	25			1	3		1	5	8	7	
Number of employees (average for the year).....	17,376			(^d)	119		(^d)	1,695	6,064	9,498	
Value added by manufacture.....	\$98,112			(^d)	\$921		(^d)	\$11,238	\$36,376	\$49,577	
Beet sugar:											
Number of establishments.....	74					8	57	8	1		
Number of employees (average for the year).....	13,412					703	9,600	3,109	(^d)		
Value added by manufacture.....	\$118,048					\$3,613	\$70,633	\$34,802	(^d)		
Confectionery products:											
Number of establishments.....	1,686	544	307	285	252	122	117	38	14	7	
Number of employees (average for the year).....	75,165	1,216	2,035	3,844	7,989	8,410	18,194	13,287	9,347	10,837	
Value added by manufacture.....	\$413,852	\$4,295	\$7,080	\$14,623	\$35,962	\$40,087	\$96,309	\$88,195	\$67,240	\$50,401	
Chocolate and cocoa products:											
Number of establishments.....	31			1	8	8	7	2	2	2	1
Number of employees (average for the year).....	9,005			(^d)	305	531	888	(^d)	3,044	(^d)	5,737
Value added by manufacture.....	\$98,276			(^d)	\$4,187	\$12,164	\$8,466	(^d)	\$15,710	(^d)	\$57,769
Chewing gum:											
Number of establishments.....	37	3	3	8	8	2	4	5	3	1	
Number of employees (average for the year).....	6,940	(^d)	53	110	283	(^d)	916	1,721	3,877	(^d)	
Value added by manufacture.....	\$74,937	(^d)	\$263	\$927	\$1,890	(^d)	\$6,773	\$16,974	\$48,110	(^d)	

TABLE 5.—VALUE OF PRODUCTS SHIPPED, BY BROAD CLASSES OF PRODUCTS, FOR THE UNITED STATES: 1947

[The first column shows the total value of shipments of the specified industry, divided among: (A) products classified in (primary to) the industry, (B) products classified in other industries (secondary to the specified industry), and (C) miscellaneous receipts. The second column shows the value of shipments of the primary products of the specified industry reported by establishments in other industries. The third column shows the total value of shipments of the primary products of the specified industry by all reporting manufacturers]

[Money figures in thousands of dollars]

RAW CANE SUGAR INDUSTRY	Shipped by—			CONFECTIONERY PRODUCTS INDUSTRY	Shipped by—		
	Raw cane sugar industry	Other industries	All industries		Candy and other confectionery products industry	Other industries	All industries
Total shipments by the industry	\$60, 135			Total shipments by the industry¹	\$944, 925		
A. Raw cane sugar products.....	58, 569		\$58, 569	A. Candy and other confectionery products.....	904, 559	\$32, 316	\$936, 875
Raw sugar.....	35, 813		35, 813	Bar goods ²	294, 584	1, 583	296, 167
Other cane mill products.....	22, 756		22, 756	Other 5- and 10-cent specialties.....	70, 502	1, 594	72, 096
B. Secondary products and receipts for nonmanufacturing activities.....	1, 566			Package goods.....	221, 442	6, 398	227, 840
C. Miscellaneous receipts.....	(d)			Bulk goods.....	174, 100	3, 857	177, 957
Nonmanufacturing activities.....	(d)			Salted nuts.....	67, 789	7, 437	75, 226
				Other candy and confectionery products.....	41, 126	4, 972	46, 098
				Candy and confectionery products not specified by kind.....	35, 016	6, 475	41, 491
				B. Secondary products ³	30, 479		
				C. Miscellaneous receipts.....	9, 887		
				Contract and commission work.....	(d)		
				Nonmanufacturing activities.....	(d)		
CANE-SUGAR REFINING INDUSTRY	Shipped by—			CHOCOLATE AND COCOA PRODUCTS INDUSTRY	Shipped by—		
Cane-sugar refining industry	Other industries	All industries	Chocolate and cocoa products industry		Other industries	All industries	
Total shipments by the industry	\$818, 430			Total shipments by the industry	\$349, 907		
A. Cane-sugar refinery products.....	817, 048	\$1, 132	\$818, 180	A. Chocolate and cocoa products.....	347, 802	\$1, 709	\$349, 511
Refined cane sugar, dry and liquid.....	802, 410	1, 132	803, 542	Chocolate coatings.....	(d)	(d)	150, 796
Other refinery products.....	14, 638		14, 638	Other chocolate and cocoa products.....	(d)	(d)	198, 715
B. Secondary products and miscellaneous receipts.....	1, 382			B. Secondary products and miscellaneous receipts.....	2, 105		
C. Miscellaneous receipts.....	(d)			C. Miscellaneous receipts.....	(d)		
Contract and commission work.....	(d)			Scrap and salable refuse.....	(d)		
Nonmanufacturing activities.....	(d)			Nonmanufacturing activities.....	(d)		
BEET SUGAR INDUSTRY	Shipped by—			CHEWING GUM INDUSTRY	Shipped by—		
Beet sugar industry	Other industries	All industries	Chewing gum industry		Other industries	All industries	
Total shipments by the industry	\$262, 872			Total shipments by the industry	\$148, 286		
A. Beet sugar products.....	262, 872		\$262, 872	A. Chewing gum and chewing gum base.....	(d)	(d)	\$150, 900
Beet sugar.....	233, 333		233, 333	B. Secondary products.....	(d)		
Other beet sugar factory products.....	29, 539		29, 539				

^d Withheld to avoid disclosing figures for individual companies.

¹ The Department of Commerce conducts monthly and annual surveys of this industry, for which confectionery is defined as including solid chocolate bars and excluding salted nuts. According to the 1947 Census of Manufactures, total sales of the products covered by these surveys were 2,603 million pounds valued at 955.7 million dollars. These figures include estimated sales for single shop manufacturing retailers not covered by the Census of Manufactures.

² Excludes solid chocolate bars, which are a product of the chocolate industry.

³ Includes chocolate and cocoa products; chewing gum; ice cream and ices; flavoring extracts and flavoring sirups; and other food preparations, not elsewhere classified.

TABLE 6.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939

[Money figures in thousands of dollars]

PRODUCT	1947				Production ¹ (short tons)	1939	
	Shipments					Production	
	Short tons	Value including excise taxes	Excise taxes	Value excluding excise taxes		Short tons	Value including excise taxes ²
Raw cane sugar	206,111	\$35,813		\$35,813	208,655	417,314	\$22,000
Other cane mill products, total		23,330	\$574	22,756			10,618
Plantation granulated sugar	18,021	2,025	181	2,744	21,467	50,471	4,380
Other grades of sugar (clarified, turbinado, crystals, etc.)	43,585	6,527	393	6,134	25,364	38,257	2,771
Sugar cane sirup ³	31,171	3,610		3,610	n.a.	20,077	1,051
Molasses, except blackstrap	47,211	2,940		2,040	n.a.	36,103	810
Blackstrap molasses	147,958	6,754		6,754	n.a.	180,883	1,281
Bagasse	223,504	524		524	n.a.	119,000	303
Other products		50		50			13
Refined cane sugar, total		858,466	54,924	803,542			386,680
Hard sugar, total	4,776,195	790,212	50,952	739,260	4,793,585	3,800,125	350,053
Shipped in consumer sizes (including all cube and tablet sugar), total	2,299,124	386,184	21,536	361,048	n.a.	1,623,474	152,248
Shipped in bulk containers and in bulk, total	2,477,071	404,028	20,416	377,612	n.a.	2,206,651	204,705
Refined white granulated sugar	4,533,460	744,975	48,384	690,591	4,536,338	n.a.	n.a.
Consumer sizes (25 pounds or less)	2,192,513	365,280	23,465	341,824	n.a.	n.a.	n.a.
Bulk containers (50- and 100-pound bags and barrels)	2,302,777	375,107	24,618	350,579	n.a.	n.a.	n.a.
Bulk (tank cars or trucks)	28,170	4,480	301	4,188	n.a.	n.a.	n.a.
Cube and tablet sugar	20,291	4,440	217	4,223	20,494	n.a.	n.a.
Confectioners' powdered sugar	232,444	40,707	2,351	38,440	236,753	n.a.	n.a.
Consumer sizes (10 pounds or less)	86,320	16,455	854	15,601	n.a.	n.a.	n.a.
Bulk containers	146,124	24,342	1,497	22,845	n.a.	n.a.	n.a.
Soft or brown sugar	145,574	24,494	1,301	23,193	143,342	236,383	20,251
Consumer sizes (10 pounds or less)	69,717	12,734	686	12,068	n.a.	n.a.	n.a.
Bulk containers	75,857	11,760	725	11,035	n.a.	n.a.	n.a.
Sugar sirups and liquid sugars (dry basis) ⁴	184,710	30,054	1,790	28,204	184,530	n.a.	5,010
Invert sugar (dry basis)	83,728	13,706	791	12,915	84,041	n.a.	4,457
Other cane sugar refinery products, total		14,638		14,638			1,784
Refiners' sirup, except barrel sirup	49,150	6,477		6,477	n.a.	n.a.	828
Refiners' blackstrap, filtered blackstrap and barrel sirup	191,174	8,161		8,161	n.a.	n.a.	950
Beet sugar, total	1,460,891	248,817	15,484	233,333	1,726,816	1,622,772	125,407
Granulated sugar	1,440,776	245,268	15,277	229,991	1,712,700	1,622,772	125,407
Shipped in consumer sizes (25 pounds or less)	441,461	76,987	4,806	72,001		384,784	30,106
Shipped in bulk and bulk containers (50- and 100-pound bags and barrels and in tank cars and trucks)	999,315	168,281	10,381	157,990		1,237,988	95,211
Confectioners' powdered sugar	20,115	3,549	207	3,342	14,017	(^b)	(^b)
Other beet sugar factory products, total		29,539		29,539			n.a.
Whole or straight house molasses	250,448	6,750		6,750	n.a.	n.a.	n.a.
Shipped for desugarization	124,215	2,908		2,908	n.a.	n.a.	n.a.
Shipped for other uses	126,233	4,662		4,662	n.a.	n.a.	n.a.
Discard molasses	125,392	3,253		3,253	n.a.	n.a.	n.a.
Molasses beet pulp	199,265	8,420		8,420	n.a.	100,474	2,630
Dried beet pulp	97,910	5,921		5,921	n.a.	97,827	2,027
Wet beet pulp	7 1,869,000	3,283		3,283	n.a.	1,634,810	1,293
Other products		1,092		1,092	n.a.		3,030

See footnotes at end of table.

TABLE 6.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939—Continued

PRODUCT	1947		1939	
	Total shipments and interplant transfers		Total production for sale and interplant transfers	
	Quantity (M lbs.)	Value f.o.b. plant	Quantity (M lbs.)	Value f.o.b. plant
Candy bars, except solid chocolate, total ²	811,487	\$296,167	n.a.	n.a.
Chocolate covered	761,716	250,728	404,986	\$57,132
Other bars	149,771	45,439	n.a.	n.a.
5-cent and 10-cent specialties (other than bars and cough drops), total	227,900	72,096		
Hard	91,210	33,254		
Gums and jellies	24,252	6,058	n.a.	n.a.
Caramels	20,166	7,690		
Panned goods	14,640	4,660		
Other 5-cent and 10-cent specialties ³	68,632	20,416		
Package candy, total	435,993	227,840		
Package goods to retail at:				
\$1 or more per pound	157,258	128,522	n.a.	n.a.
50 cents to 99 cents per pound	108,824	55,660		
Less than 50 cents per pound ⁴	169,911	43,752		
Bulk candy, total	576,315	177,957		
Chocolate covered	161,586	76,958		
Nonchocolate bulk candy, total	414,729	100,999		
Hard	122,012	30,057		
Gums and jellies	69,352	15,453		
Cream work	41,733	9,570	n.a.	n.a.
Lozenges	11,702	2,085		
Caramels	44,559	8,159		
Toffees	3,804	1,370		
Peanut brittle	16,561	4,520		
Other nonchocolate bulk candy ⁵	105,006	28,570		
Salted, roasted, or blanched nuts, total	189,879	75,226	n.a.	18,744
Packaged	106,487	50,121	n.a.	n.a.
Bulk ⁶	83,392	25,105	n.a.	n.a.
Other candy and confectionery products, total	159,548	46,098	n.a.	n.a.
Penny goods	89,472	22,242	n.a.	n.a.
Cough drops, sugar-type ⁷	29,874	8,528	n.a.	n.a.
Glaze, candied and crystallized fruit and nuts ⁸	40,202	15,288	n.a.	5,824
All other confectionery products and confectionery products, not specified by kind ¹¹		41,491		n.a.
Chocolate coatings, total ¹²	423,290	150,796	339,530	32,195
Sweet	226,378	76,627	226,704	21,229
Milk	161,589	60,576	74,268	7,601
Liquor	35,323	13,593	38,558	3,365
Other chocolate and cocoa products, total		198,715		66,765
Solid chocolate, except coatings, total ¹³	290,503	126,429	200,592	36,473
Sweet	69,258	26,655	40,043	5,654
Plain milk	135,023	57,232	87,216	16,019
Milk with nuts, etc.	85,382	42,542	69,560	13,953
Kind not specified			3,773	847
Coconut powder, total ¹⁴	172,124	38,311	153,441	13,200
Unsweetened:				
Consumer sizes ¹⁵	41,802	9,460	60,693	5,809
Bulk containers	100,785	19,465	74,835	4,492
Sweetened or mixed with other substances	29,527	9,386	17,913	2,809
Cocoa butter	25,723	16,860	57,205	6,880
Chocolate sirups	95,483	10,197	(16)	6,010
All other chocolate products, and chocolate products not specified by kind		6,918		4,202
Chewing gum and chewing gum base, total		150,900		59,262
Chewing gum, not medicated	206,578	149,510	n.a.	59,262
Chewing gum base	n.a.	1,390	n.a.	n.a.

n.a.—Not available.

¹ The 1947 production figures for refined cane sugar differ slightly from data published by the Department of Agriculture, largely because the census figures include the production of certain Louisiana sugar mills which are not classified as refineries by the Department of Agriculture, and exclude production by beverage base and confectionery manufacturers for their own use.

² Excise taxes for 1939 included in this table are estimated at \$0.9 million for cane sugar mill products, \$44 million for refined cane sugar and \$17 million for beet sugar.

³ Includes only sirup made in raw sugar and commercial sirup mills. Farm sirup mills were considered to be outside the scope of the census.

⁴ Figures for 1947 do not include liquid sugar and sugar sirups produced by confectionery and beverage base manufacturers for their own use.

⁵ Data for confectioners' powdered sugar included with granulated.

⁶ Value understated because of inclusion of a substantial amount of interplant transfers at nominal values.

⁷ Quantity for 1947 taken from reports of the Bureau of Agricultural Economics, U. S. Department of Agriculture. Quantities were not uniformly reported to the Census Bureau.

⁸ Solid chocolate bars are not included. See footnote 13.

⁹ Including small quantities not specified by kind or retail price class.

¹⁰ Not including sugar-type cough drops valued at \$3,366,000 shipped by the Pharmaceutical Preparations Industry.

¹¹ Includes total shipments (\$15 million) of 481 small establishments, classified in the confectionery industry, for which no detailed breakdown of shipments was tabulated.

¹² Includes production by confectionery manufacturers for their own use, to the extent that such production was reported separately. Confectionery manufacturers who did not report separately in 1947 accounted for about 2 percent of the total production of coatings in that year.

¹³ 1947 figures include 245,088 thousand pounds of consumer size solid chocolate bars valued at \$108,707,000.

¹⁴ For 1947, figures shown represent the output of plants classified in the chocolate and cocoa products industry. 1939 figures include small quantities made (from purchased chocolate) by plants classified in other industries.

¹⁵ For 1947, containers of 2½ pounds or less; for 1939, cans of all sizes.

¹⁶ Not available in pounds; 6,825 thousand gallons reported.

BEVERAGES

This report shows 1947 Census of Manufactures statistics for establishments primarily engaged in the production of soft drinks, malt beverages, malt, wines, brandy, whiskey, and other distilled, rectified, and blended liquors. These establishments have been classified in five industries, described separately below.

Bottled Soft Drinks (*Full Standard Industrial Classification title and number: Bottled Soft Drinks and Carbonated Waters, 2081.*)—This industry comprises establishments primarily engaged in manufacturing bottled soft drinks (non-alcoholic beverages) and carbonated waters. Establishments primarily engaged in manufacturing fruit and vegetable juices are classified in Industry 2033, fruit sirups for flavoring in Industry 2095 and cider in Industry 2096. Establishments primarily engaged in bottling natural spring waters are classified in trade industries.

The value of shipments figures for this industry represent delivered values for the most part, rather than value f.o.b. plant, since most of the manufacturers operate their own delivery service. This fact is reflected in the relatively low number of production workers compared with the total number of employees, as shown in tables 1-3.

Malt Liquors (*Standard Industrial Classification No. 2082.*)—This industry comprises establishments primarily engaged in manufacturing all kinds of malt liquors such as ale, beer, porter and stout, and malt extract. Establishments primarily engaged in bottling purchased malt liquors are classified in trade industries.

Tax-paid withdrawals and exports of malt liquors, as reported by all manufacturers to the Bureau of Internal Revenue, are shown in table 6-A for comparison with census data on shipments.

Malt (*Standard Industrial Classification No. 2083.*)—This industry comprises establishments primarily engaged in manufacturing malt from barley and other grains.

Wines and Brandy (*Includes Standard Industrial Classification Industry No. 2084, Wines; and part of No. 2085, Distilled, Rectified, and Blended Liquors.*)—This industry comprises establishments primarily engaged in manufacturing wines, brandy, and fruit spirits for wine fortification.

Manufacturers and others processing wines and brandy are licensed by the Bureau of Internal Revenue as wineries, fruit distilleries, bonded wine storerooms, bonded field warehouses, and rectifying plants. Frequently, however, two or more licensed premises are under the same ownership at the same location, and were counted in the census as one establishment. A substantial number of the establishments holding licenses were located on farms, had no employees, were primarily engaged in nonmanufacturing activities, or for other reasons were outside the scope of the census. Consequently, the number of licensed premises shown in the annual reports of the Commissioner of Internal Revenue is considerably larger than the number of establishments shown in this report. The small wineries and other establishments omitted in the census were distributed among the States in much the same proportion as the establishments included in this report, indicating that the employment and other data shown herein may be taken as

representative of the industry. Comparison of census data with Bureau of Internal Revenue figures on production indicates that the wineries covered by the census accounted for about 90 percent of the total 1947 production of wine; coverage of fruit distilleries was substantially complete. Tax-paid withdrawals of wines and brandy, as reported by all processors to the Bureau of Internal Revenue, are shown in table 6-A for comparison with data on tax-paid shipments of establishments included in the census.

The value of shipments and cost of materials figures for this industry contain a considerable amount of duplication, because of the extent to which products are shipped between establishments in the industry. Both finished and unfinished wines are shipped from wineries "in bond" (see table 6-A) to establishments which age, blend, clarify, bottle, or otherwise process the product, pay the Federal tax, and ship the finished wine to dealers. The quantity and value of a given lot of wine may therefore be reported in the census by two or more establishments, first in bond and later as tax-paid. Because of such duplication, total value of shipments and cost of materials are not shown for this industry.

Distilled Liquors, Except Brandy (*Part of Standard Industrial Classification Industry No. 2085, excluding fruit distilleries.*)—This industry comprises establishments primarily engaged in the manufacture of alcoholic liquors (except brandy) by distillation and rectification, and in manufacturing cordials and alcoholic cocktails by blending processes or by mixing liquors and other ingredients. Important products of this industry include grain alcohol (wine spirits), straight and blended whiskies, rum, gin, cordials, liqueurs, and prepared alcoholic cocktails. Establishments primarily engaged in manufacturing industrial alcohol are classified in Industry 2829.

Manufacturers and bottlers of these products are licensed by the Bureau of Internal Revenue as registered distilleries, tax-paid bottling houses, rectifying plants, and Internal Revenue bonded warehouses. Frequently, however, two or more licensed premises are under the same ownership at the same location, and were counted in the census as one establishment. For this reason, and also because certain establishments listed by the Bureau of Internal Revenue were primarily engaged in nonmanufacturing activities or otherwise fell outside the scope of the census, the number of licensed premises shown in the annual reports of the Commissioner of Internal Revenue is considerably larger than the number of establishments shown in this report. Establishments omitted include several of the rectifying plants and Internal Revenue bonded warehouses. Production and bottling of liquors, as reported to the Bureau of Internal Revenue, are shown in table 6-A for comparison with similar data for establishments included in the census.

There is duplication in the value of shipments and cost of materials figures for this industry because some of the products of distilleries (chiefly spirits) are used, in the same year in which produced, as raw materials of rectifying and bottling plants. Such duplication is roughly estimated for 1947 at between 5 percent and 10 percent of the total value of shipments.

TABLE 1.—GENERAL STATISTICS FOR THE UNITED STATES: 1947 AND EARLIER CENSUS YEARS

[Money figures in thousands of dollars. For explanation of column captions see GENERAL EXPLANATIONS]

INDUSTRY AND CENSUS YEAR	Number of establishments	All employees		Production and related workers		Value added by manufacture ¹	Cost of materials, fuel, electricity, and contract work	Value of products shipped ²
		Number (average for the year) ⁴	Salaries and wages, total ⁵	Number (average for the year) ⁶	Wages, total ⁷			
Bottled soft drinks:								
1947	5,618	79,397	\$194,305	41,214	\$83,291	\$420,711	\$327,485	\$748,196
1939 ¹	4,504	54,994	76,832	21,265	20,345	211,844	153,935	305,770
1937	3,920	34,683	46,406	27,979	30,981	164,399	112,380	276,779
1935	3,175	22,250	29,244	16,778	17,343	97,204	62,094	159,298
1933 ²	2,903	18,497	10,480	15,123	14,197	69,424	41,873	111,297
1931	4,250	n.a.	n.a.	23,005	30,082	136,522	70,045	212,567
1929	5,154	36,072	57,896	28,281	38,314	167,298	103,026	270,324
1927	4,769	34,119	53,259	26,072	36,101	147,204	95,430	242,694
1925	4,210	34,662	52,508	27,394	36,053	139,295	98,466	237,761
1923	4,514	37,329	56,080	29,274	37,689	129,158	99,572	228,730
1921	3,336	18,876	24,197	14,651	16,286	54,491	61,086	115,577
1919	5,194	22,738	24,094	17,440	16,393	66,741	68,690	135,341
1914 ³	5,463	19,401	12,958	15,506	8,864	31,022	20,779	58,401
1909	4,916	16,317	9,748	13,147	6,902	27,042	16,466	43,508
1904	3,408	12,455	6,831	10,879	5,488	20,249	10,092	30,251
1899	2,703	10,211	5,240	8,788	4,080	14,704	8,555	23,269
Malt liquors:⁶								
1947 ⁴	440	82,534	292,405	63,658	210,228	808,946	503,908	1,317,854
1939	605	61,185	122,265	30,088	62,231	363,180	162,897	526,077
1937	653	57,409	105,400	47,037	79,275	335,188	201,917	537,105
1935	600	47,725	82,839	39,169	60,615	280,112	139,918	420,030
1933 ⁵	525	29,454	41,780	23,501	33,480	153,707	70,194	229,961
1921	531	22,872	41,519	18,551	29,366	67,034	55,016	122,050
1919	729	43,486	68,071	34,259	45,170	285,112	94,793	379,905
1914 ³	1,204	n.a.	n.a.	62,026	53,244	250,319	129,681	380,000
1909	1,414	66,086	64,010	54,579	64,579	278,134	95,596	374,730
1904	1,530	57,192	51,857	48,137	34,540	223,439	74,907	298,346
1899	1,507	46,005	38,815	30,459	25,776	185,317	51,598	236,915
Malt:								
1947 ⁴	53	2,524	9,550	2,069	6,806	53,885	202,995	256,230
1939	52	1,902	4,137	1,459	2,693	19,183	39,296	83,479
1937	56	1,964	4,267	1,644	2,923	18,512	76,118	94,030
1935	54	1,717	3,581	1,439	2,348	18,706	56,412	75,118
1933 ⁵	30	1,000	1,563	848	1,283	7,261	20,662	27,923
1931	27	n.a.	n.a.	540	866	5,322	13,920	19,242
1929	28	741	1,670	590	1,057	4,679	18,924	23,603
1927	23	624	1,356	500	904	3,087	17,187	20,274
1925	23	695	1,381	568	903	4,083	19,986	24,069
1923	22	665	1,222	487	742	3,277	13,154	16,431
1921	26	800	1,602	616	924	3,547	17,458	21,005
1919	55	1,705	2,803	1,352	2,845	7,727	31,613	39,340
1914 ³	97	2,471	3,131	1,989	1,828	8,934	39,199	48,133
1909	114	2,185	2,232	1,760	1,348	7,788	30,464	38,252
1904	141	2,498	2,204	2,054	1,457	6,668	23,621	30,289
1899	146	2,280	1,654	1,900	1,183	4,557	14,817	19,374
Wines and brandy:								
1947	418	7,697	21,896	5,824	13,681	95,015	(11)	(11)
1939 ¹²	348	n.a.	n.a.	2,337	2,272	15,020		
Distilled liquors, except brandy:								
1947	226	30,422	80,498	25,740	61,825	472,357	397,878	870,235
1939 ¹³	230							
1937	361	15,836	19,704	13,309	14,144	111,980	145,578	257,558
1935 ¹⁴	391	16,771	18,069	14,035	12,888	118,357	133,648	252,005

n.a.—Not available.
¹ Value of products less cost of materials, supplies, fuel, electricity, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture. For "Malt," see GENERAL EXPLANATIONS—Method of calculating value added by manufacture in 1947.
² For 1947 and 1929, the figures represent value of products shipped, except in the case of "Distilled liquors, except brandy" in 1947 where they represent value of products made; for all other years, the figures represent value of products made. Value figures do not include Federal or State excise taxes, except as noted in footnote ⁶. See GENERAL EXPLANATIONS—Value of products shipped.
³ For "Bottled soft drinks" and "Malt liquors," the comparability of the figures for "All employees" and "Production workers" is affected by the fact that in 1947 and 1939 manufacturers were asked to report the total number of employees on the pay-rolls, including truck drivers engaged in distribution, whereas in earlier years they were asked to report only employees engaged, directly or indirectly, in manufacturing activities.
⁴ Data for establishments primarily engaged in making "near beer" are included in the figures for "Malt liquors" for 1899-1921 and 1947 and in the figures for "Bottled soft drinks" for 1923-30. In 1921 the output of the former industry consisted almost entirely of "near beer."
⁵ Data for establishments primarily engaged in production of grape juice are included in the figures for 1899-1933 but not for later years.
⁶ For "Malt liquors," the figures for 1899-1909 and 1919-21 include Internal Revenue taxes, whereas the figures for other years do not include these taxes.
⁷ For "Malt liquors," the figures for 1933-47 but not for earlier years, include data for establishments primarily engaged in manufacture of malt extracts and sirups.
⁸ Data for malt houses operated by breweries are included in the figures for "Malt liquors" for 1899-1933 and in the figures for "Malt" for 1935-47.
⁹ 1914 was the last normal preprohibition year covered by the census.
¹⁰ The figures for 1914 do not include Internal Revenue taxes amounting to \$62.1 million.
¹¹ Value of products shipped and cost of materials, etc., are omitted for this industry because each of these measures contains extensive duplication. The duplication arises because the products of some establishments are used as materials by other establishments classified in the same industry. (See text on industry and also GENERAL EXPLANATIONS—Duplication in cost of materials and value of products.)
¹² The returns for 1939 have been retabulated to provide figures comparable with those for 1947. No comparable figures are available for earlier years.
¹³ The statistics previously published for 1939, which do not cover the bottling of unrectified liquors, are not sufficiently comparable to the statistics for other years to be shown in this table.
¹⁴ Since the rectifying and blending of distilled liquors was first canvassed in 1935, the figures for prior years, which cover only the production of distilled liquors, are not sufficiently comparable to those for later years to be shown in this table.

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947

(Money figures and man-hours in thousands. For explanation of column captions see GENERAL EXPLANATIONS)

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Bottled soft drinks, total 1	5,618	79,397	\$194,305	41,214	90,882	\$83,291	\$420,711	\$327,485	\$748,196	\$66,748
New England	417	5,141	12,608	2,048	5,875	5,527	24,551	18,108	42,710	4,433
Vermont	17	142	290	89	192	166	598	535	1,133	112
Massachusetts	191	2,586	6,378	1,282	2,843	2,071	12,023	8,055	21,578	2,140
Connecticut	84	1,100	2,931	579	1,328	1,376	5,768	4,215	9,083	643
Middle Atlantic	906	13,017	34,203	7,273	15,582	10,958	68,503	49,141	117,734	8,414
New York	343	5,345	14,027	3,110	6,807	7,869	31,100	22,540	53,546	3,067
New Jersey	173	2,888	7,693	1,561	3,207	3,830	14,005	8,943	22,048	2,110
Pennsylvania	390	4,784	11,583	2,602	5,448	6,259	23,482	17,658	41,140	3,237
East North Central	971	14,555	38,560	7,816	16,066	10,441	77,086	50,840	137,535	12,001
Ohio	221	3,813	10,027	2,059	4,607	4,474	20,107	15,375	35,572	3,353
Indiana	151	2,198	5,728	1,157	2,511	2,903	11,100	9,073	21,073	2,074
Illinois	284	4,194	11,372	2,197	4,445	4,757	23,290	17,093	40,083	3,423
Michigan	153	2,749	7,671	1,458	3,074	3,078	14,806	10,034	25,800	2,501
Wisconsin	182	1,601	3,762	945	2,029	1,829	8,233	5,874	14,107	1,050
West North Central	632	6,887	16,408	3,599	8,051	7,200	30,300	20,124	65,403	7,226
Minnesota	116	1,259	3,223	628	1,395	1,358	5,606	5,421	12,027	2,073
Iowa	115	1,163	2,785	627	1,430	1,318	6,334	4,006	11,000	630
Missouri	179	2,530	6,027	1,239	2,812	2,495	14,219	11,283	25,512	1,884
Kansas	99	810	1,844	478	1,030	838	3,828	3,583	7,411	711
South Atlantic	921	15,292	35,048	7,606	17,314	13,553	80,806	67,494	148,300	11,004
Maryland	64	1,304	3,426	636	1,303	1,337	6,820	5,448	12,374	1,424
Virginia	124	2,207	5,256	1,040	2,488	1,810	11,827	10,178	22,005	2,146
North Carolina	180	3,357	7,728	1,551	3,580	2,770	18,571	15,223	33,704	2,046
South Carolina	114	1,636	3,112	840	1,872	1,277	7,702	7,129	14,831	708
Georgia	179	2,758	5,798	1,322	3,030	2,103	15,310	11,805	27,121	1,870
Florida	156	2,115	4,861	1,142	2,577	2,165	10,371	9,693	20,004	1,090
East South Central	473	7,436	15,159	3,790	8,743	6,186	38,044	30,958	60,002	5,177
Alabama	126	2,131	4,320	1,099	2,521	1,773	10,123	8,702	18,826	1,426
Mississippi	112	1,539	2,795	859	1,878	1,298	7,432	6,342	13,774	1,079
West South Central	698	10,015	21,053	5,061	11,456	8,084	50,030	41,135	92,074	8,803
Louisiana	92	2,148	4,589	1,040	2,404	1,790	11,840	9,260	21,118	1,564
Texas	387	5,627	12,394	2,763	6,194	4,710	27,039	22,429	50,308	5,463
Mountain	239	1,970	4,720	1,134	2,484	2,320	10,018	8,807	19,785	1,018
Idaho	24	186	514	92	209	203	1,018	872	1,800	419
Pacific	351	5,084	15,948	2,287	4,711	6,413	32,715	22,749	55,464	6,092
California	231	4,025	12,556	1,732	3,509	4,802	20,280	17,721	44,001	4,864
Malt liquors, total 1	440	82,534	292,405	63,668	142,091	210,228	808,946	508,908	1,317,864	110,892
New England	19	2,805	9,335	2,025	4,305	6,087	20,850	14,877	35,727	2,010
Massachusetts	14	1,946	6,429	1,356	2,930	4,222	14,536	9,114	23,650	1,021
Middle Atlantic	119	26,107	98,681	10,142	42,931	60,076	226,052	160,817	386,800	27,872
New York	46	13,109	50,310	9,027	20,588	31,210	108,232	70,754	178,086	16,851
New Jersey	12	5,802	23,221	4,445	9,813	17,231	55,210	36,450	91,089	3,032
Pennsylvania	61	7,136	25,150	5,670	12,530	18,229	62,601	53,613	116,214	7,089
East North Central	187	27,749	93,556	21,956	48,622	69,462	280,048	180,674	450,322	40,862
Ohio	37	6,199	19,109	4,833	10,503	13,620	53,019	30,258	84,177	9,824
Indiana	12	3,083	9,796	2,065	5,032	7,882	24,430	17,111	41,547	3,419
Illinois	39	5,479	18,370	4,106	8,690	12,823	50,985	20,098	80,683	6,324
Michigan	24	3,667	14,187	2,682	6,001	6,550	34,338	21,740	50,084	6,000
Wisconsin	55	9,321	32,094	7,070	17,736	26,577	110,070	61,861	181,831	10,308
West North Central	36	10,063	35,229	8,421	19,438	28,206	113,500	70,770	184,378	10,309
Minnesota	17	2,781	9,385	2,216	5,009	7,005	27,110	15,030	42,740	3,773
Missouri	12	6,192	22,735	5,352	12,000	10,092	75,007	49,100	126,103	10,840
South	45	8,646	28,538	6,465	14,140	19,120	70,110	48,450	124,566	10,833
Maryland	8	2,040	6,983	1,435	3,052	4,292	17,066	10,437	28,093	2,010
Virginia	3	195	475	157	332	342	1,224	836	2,000	27
Kentucky	6	1,651	5,409	1,392	3,095	4,007	12,864	7,026	20,480	2,841
Louisiana	6	1,432	4,731	1,196	2,804	3,610	13,480	7,752	21,241	3,087
Mountain	22	1,417	4,413	1,115	2,408	3,202	15,022	10,317	26,339	1,026
Montana	8	302	984	230	503	688	2,481	1,652	4,133	200
Pacific	32	5,747	22,653	4,544	10,148	17,476	67,065	42,988	110,653	10,474
California	16	4,144	16,691	3,305	7,552	13,213	48,401	27,630	70,031	7,215

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS BY DIVISIONS AND STATES: 1947—Continued

INDUSTRY, DIVISION, AND STATE	Number of establishments	All employees		Production and related workers			Value added by manufacture	Cost of materials, fuel, electricity, and contract work	Value of products shipped	Expenditures for new plant and equipment
		Number (average for the year)	Salaries and wages, total	Number (average for the year)	Man-hours, total	Wages, total				
Malt, total ¹	53	2,524	\$9,550	2,069	4,466	\$6,896	\$53,885	\$202,995	\$256,230	\$6,864
Middle Atlantic.....	8	247	1,021	177	408	621	3,203	14,285	18,692	(^d)
East North Central.....	27	1,677	6,404	1,379	2,064	4,633	38,163	141,723	178,033	5,472
Illinois.....	5	420	1,761	354	742	1,301	10,108	34,046	44,151	436
Wisconsin.....	19	1,149	4,280	943	2,024	3,068	26,462	101,502	125,991	4,887
West North Central.....	11	428	1,393	372	788	1,126	8,909	38,624	47,990	131
West.....	7	172	732	141	306	510	3,010	8,363	11,615	(^d)
Wines and brandy, total ¹	418	7,697	21,896	5,824	11,717	13,681	95,015			10,905
Northeast.....	88	1,692	5,494	1,202	2,627	2,915	18,645			675
New York.....	70	1,408	4,619	1,005	2,223	2,471	12,949			449
North Central.....	54	750	2,119	508	1,063	1,090	5,730			248
Ohio.....	31	294	781	189	422	408	1,651			85
Illinois.....	6	141	491	94	196	200	1,723	(?)	(?)	71
Michigan.....	9	210	522	154	298	208	1,055			38
South.....	33	410	893	307	619	483	3,293			334
West.....	243	4,845	13,390	3,807	7,408	9,193	70,347			9,648
Washington.....	15	144	440	103	207	279	1,223			58
California.....	218	4,650	12,828	3,661	7,127	8,833	68,926			9,568
Distilled liquors, except brandy, total ¹	226	30,422	80,498	25,740	52,014	61,825	472,357	397,878	870,235	22,903
Northeast.....	63	6,358	16,721	5,177	9,896	11,944	74,050	67,341	141,997	5,931
Massachusetts.....	11	585	1,683	424	879	1,004	3,833	6,384	10,217	212
New Jersey.....	13	582	1,832	381	771	1,016	6,839	4,604	11,443	32
Pennsylvania.....	24	4,677	11,851	3,919	7,336	8,810	59,047	48,251	107,298	5,424
North Central.....	52	10,067	28,920	8,634	17,770	22,937	144,816	137,378	282,194	7,928
Indiana.....	8	3,827	11,215	3,277	7,445	9,371	65,081	58,303	123,384	2,154
Illinois.....	14	4,120	11,433	3,719	7,080	9,553	63,374	51,097	114,471	5,051
South.....	91	13,269	33,238	11,388	23,600	26,044	241,921	188,470	428,391	8,573
Maryland.....	21	3,113	7,898	2,702	5,561	6,460	38,447	45,960	84,407	901
Kentucky.....	62	9,963	24,993	8,637	17,802	19,384	202,416	139,588	342,004	7,627
West.....	20	728	1,619	541	748	900	10,964	6,689	17,653	471

^d Withheld to avoid disclosing figures for individual companies.

¹ For each producing State not shown separately in the table (see GENERAL EXPLANATIONS "Disclosure of Data for Individual Companies"), there are shown below the number of establishments and, in parentheses, the number of employees for States represented by three or more companies, when possible.

Bottled soft drinks: *New England*, Maine, 57 (463); *New Hampshire*, 30 (306); *Rhode Island*, 38 (544); *West North Central*, North Dakota, 20 (256); *South Dakota*, 25 (231); *Nebraska*, 78 (638); *South Atlantic*, Delaware, 13 (179); *District of Columbia*, 10 (565); *West Virginia*, 91 (1,211); *East South Central*, Kentucky, 111 (1,549); *Tennessee*, 124 (2,217); *West South Central*, Arkansas, 109 (1,102); *Oklahoma*, 110 (1,138); *Mountain*, Montana, 30 (194); *Wyoming*, 13 (103); *Colorado*, 58 (496); *New Mexico*, 40 (320); *Arizona*, 36 (310); *Utah*, 30 (282); *Nevada*, 8 (73); *Pacific*, Washington, 65 (628); *Oregon*, 55 (431).

Malt liquors: *New England*, *New Hampshire*, 1; *Rhode Island*, 2; *Connecticut*, 2; *West North Central*, Iowa, 3 (242); *Nebraska*, 4 (848); *South*, Delaware, 2; *District of Columbia*, 1; *West Virginia*, 1; *North Carolina*, 1; *Georgia*, 1; *Florida*, 6 (632); *Tennessee*, 2; *Oklahoma*, 1; *Texas*, 7 (1,584); *Mountain*, Idaho, 4 (90); *Wyoming*, 3 (122); *Colorado*, 3 (596); *Arizona*, 1; *Utah*, 2; *Nevada*, 1; *Pacific*, Washington, 12 (1,334); *Oregon*, 4 (269).

Malt: *Middle Atlantic*, New York, 6; *New Jersey*, 2; *East North Central*, Ohio, 1; *Michigan*, 2; *West North Central*, Minnesota, 9; Iowa, 1; Missouri, 1; *West*, Montana, 1; Washington, 1; California, 5.

Wines and brandy: *Northeast*, Connecticut, 3 (33); *New Jersey*, 11 (156); *Pennsylvania*, 4 (95); *North Central*, Wisconsin, 2; Minnesota, 1; Iowa, 1; Missouri, 4 (44); *South*, Maryland, 3 (79); Virginia, 5 (77); *North Carolina*, 4 (40); *Georgia*, 3 (44); *Florida*, 3; *Kentucky*, 1; *Arkansas*, 8 (34); *Louisiana*, 1; *Texas*, 5 (34); *West*, Colorado, 3; *New Mexico*, 2; *Oregon*, 5 (31).

Distilled liquors, except brandy: *Northeast*, Maine, 2; *New Hampshire*, 1; *Connecticut*, 6 (108); *New York*, 6 (348); *North Central*, Ohio, 10 (1,221); *Michigan*, 4 (160); *Wisconsin*, 5 (49); *Minnesota*, 2; *Iowa*, 1; *Missouri*, 7 (156); *South Dakota*, 1; *South*, Virginia, 4 (76); *Georgia*, 1; *Tennessee*, 1; *Louisiana*, 2; *West*, Colorado, 1; *New Mexico*, 1; *Washington*, 1; *Oregon*, 1; *California*, 10 (995).

² Value of products shipped and cost of materials, etc. are omitted for this industry because each of these measures contains extensive duplication. The duplication arises because the products of some establishments are used as materials by other establishments classified in the same industry. (See text on industry and also GENERAL EXPLANATIONS—Duplication in cost of materials and value of products.)

TABLE 3.—DETAILED STATISTICS FOR THE UNITED STATES: 1947
[Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS]

ITEM	Industry					ITEM	Industry				
	Bottled soft drinks	Malt liquors	Malt	Wines and brandy	Dis-tilled liquors, except brandy		Bottled soft drinks	Malt liquors	Malt	Wines and brandy	Dis-tilled liquors, except brandy
ALL ESTABLISHMENTS						ESTABLISHMENTS REPORTING DETAILED STATISTICS—Continued					
Number of establishments	5,618	440	53	418	226	Cost of materials, fuel, electricity, and contract work	\$306,795	\$508,908	\$202,905	(1)	\$300,716
All employees:						Materials, parts, containers, and supplies	298,477	480,533	108,412	(1)	387,304
Number (average for the year)	79,397	82,534	2,524	7,697	30,422	Fuels, total	4,158	13,738	3,324	632	7,613
Salaries and wages, total	\$196,285	\$292,405	\$9,550	\$21,896	\$80,498	Bituminous coal	940	7,583	814	42	0,334
Production and related workers:						Anthracite	215	813	271	4	n.a.
Number (average for the year)	41,214	63,668	2,069	5,824	25,740	Coke	29	10	495		n.a.
Man-hours, total	90,882	142,001	4,466	11,717	52,014	Fuel oils	1,350	3,938	1,554	330	1,081
Wages, total	\$85,271	\$210,228	\$6,896	\$13,681	\$61,825	Gas	780	880	104	230	56
Value added by manufacture	\$420,711	\$808,946	\$53,885	\$95,015	\$472,357	Other fuels	847	805		29	142
ESTABLISHMENTS REPORTING DETAILED STATISTICS						Purchased electric energy	3,479	5,106	1,142	001	1,704
Number of establishments	4,356	440	53	311	200	Contract and commission work	681	531	113	83	5
All employees:						Value of inventories:					
Number (average for the year)	73,907	82,534	2,524	7,273	30,169	Beginning of year, total	\$50,346	\$130,100	\$50,837	\$180,022	\$405,082
Salaries and wages, total	\$183,695	\$292,405	\$9,550	\$21,042	\$80,010	Finished products	7,456	31,013	17,940	141,257	240,473
Production and related workers:						Materials, supplies, and work in process	42,800	99,177	32,897	38,795	165,200
Number (average for the year)	35,844	63,668	2,069	5,415	25,508	End of year, total	72,320	167,884	74,350	114,529	491,016
Man-hours, total	80,157	142,001	4,466	10,906	51,089	Finished products	11,927	30,997	23,700	87,569	313,929
Wages, total	\$73,105	\$210,810	\$6,896	\$12,886	\$61,390	Materials, supplies, and work in process	60,393	127,887	50,650	20,969	177,087
Value added by manufacture	\$401,030	\$808,946	\$53,885	\$92,334	\$470,923	Expenditures for plant and equipment:					
Number of employees for pay period ended nearest Oct. 15:						New plant and equipment	\$69,748	\$110,802	\$6,804	\$10,905	\$22,903
All employees	80,234	86,445	2,562	8,093	32,909	Construction and major alteration of fixed plants	17,804	47,600	4,072	5,190	12,559
Male	73,727	83,014	2,424	6,222	20,025	Buildings	10,262	45,113	3,911	4,140	11,088
Female	6,507	3,431	138	1,871	12,284	Other construction	1,542	2,493	161	1,050	1,491
Production and related workers	37,610	66,876	2,117	6,227	28,165	Machinery and equipment	48,944	63,296	2,792	5,709	10,344
Male	35,111	66,510	2,100	4,892	17,459	Production machinery and equipment	21,685	48,434	2,084	5,244	9,540
Female	2,499	365	17	1,335	10,706	Other machinery and equipment	27,259	14,852	108	405	804
Force-account construction workers	113	133	6	57	320	Used plant and equipment, and land	8,567	10,232	67	509	3,408
Administrative, supervisory, sales, and all other	42,511	19,437	439	1,809	4,424	Number of highway-type motor vehicles owned or leased:					
Male	38,564	16,371	318	1,273	2,850	Trucks	35,468	8,000	33	680	357
Female	4,007	3,068	121	536	1,574	By manufacturer's rated capacity:					
All employees, number by month:						Under 1½ tons	6,305	772	7	187	95
January	61,779	77,180	2,450	8,346	34,580	1½ tons	22,093	3,238	8	250	173
February	61,554	76,628	2,471	7,586	33,290	Over 1½ tons and less than 3½ tons	0,375	3,174	0	03	78
March	62,828	77,278	2,497	7,602	32,470	3½ tons and less than 5 tons	409	720	4	19	6
April	66,406	78,580	2,517	7,125	30,457	5 tons and over	316	1,080	5	31	5
May	69,422	80,384	2,508	6,646	27,623	By body type:					
June	75,258	84,259	2,556	6,277	24,351	Van	1,250	2,171		35	58
July	81,800	87,074	2,475	6,246	24,588	Stake or platform	7,347	3,322	11	244	106
August	88,134	89,053	2,538	6,534	25,811	Panel or light delivery	5,076	2,594	7	101	93
September	86,057	88,802	2,552	7,781	27,448	All other trucks	21,780	912	15	140	100
October	80,219	86,445	2,562	8,093	32,909	Truck tractors	550	630	1	37	84
November	76,806	84,083	2,564	7,836	34,802	Trailers and semitrailers	655	888	1	47	100
December	74,120	80,451	2,579	7,227	33,634						

n.a.—Not available.
 1 Omitted because of duplication between cost of materials and value of products shipped. See text on Industry.
 2 Includes \$207,483,000 for whiskey, spirits, and containers used in bottling.
 3 Includes 153 tank-type trucks.

TABLE 4.—SELECTED GENERAL STATISTICS BY SIZE OF ESTABLISHMENT, FOR THE UNITED STATES: 1947
[Money figures in thousands of dollars. For explanation of line captions see GENERAL EXPLANATIONS. Data which cannot be shown without disclosing information for individual companies have been combined with figures for other groups. A ^d appears in the column where the figure has been omitted and the combined figure is printed in italics]

INDUSTRY AND ITEM	Total, all establishments	Establishments with an average of—									
		1-4 employees	5-9 employees	10-19 employees	20-49 employees	50-99 employees	100-249 employees	250-499 employees	500-999 employees	1,000-2,499 employees	2,500 employees and over
Bottled soft drinks:											
Number of establishments	5,618	1,766	1,588	1,272	763	159	68	11			
Number of employees (average for the year)	79,397	4,336	10,423	17,330	22,346	10,553	9,087	4,423			
Value added by manufacture	\$420,711	\$19,486	\$44,502	\$81,881	\$121,687	\$65,189	\$60,655	\$27,311			
Malt liquors:											
Number of establishments	440	6	12	20	100	96	109	57	23	5	3
Number of employees (average for the year)	82,534	22	77	409	3,393	6,956	17,005	20,802	15,000	9,223	9,578
Value added by manufacture	\$808,946	\$86	\$379	\$2,074	\$20,379	\$50,209	\$130,810	\$213,026	\$155,817	\$68,352	\$121,005
Malt:											
Number of establishments	53	3	2	12	17	11	8				
Number of employees (average for the year)	2,524	7	(d)	196	553	698	1,070				
Value added by manufacture	\$53,885	\$80	(d)	\$2,710	\$10,081	\$12,184	\$28,824				
Wines and brandy:											
Number of establishments	418	170	66	78	63	34	6				
Number of employees (average for the year)	7,697	335	447	1,070	1,802	2,464	1,483				
Value added by manufacture	\$95,015	\$4,501	\$5,515	\$13,268	\$24,375	\$32,795	\$14,501				
Distilled liquors, except brandy:											
Number of establishments	226	21	16	25	63	43	34				
Number of employees (average for the year)	30,422	56	114	369	2,024	3,254	5,396	2,078	0	3	
Value added by manufacture	\$472,357	\$183	\$409	\$2,450	\$9,035	\$21,608	\$70,944	\$69,440	\$5,911	\$10,320	\$173,516

TABLE 5.—VALUE OF PRODUCTS SHIPPED, BY BROAD CLASSES OF PRODUCTS, FOR THE UNITED STATES: 1947

[The first column shows the total value of shipments of the specified industry, divided among: (A) products classified in (primary to) the industry, (B) products classified in other industries (secondary to the specified industry), and (C) miscellaneous receipts. The second column shows the value of shipments of the primary products of the specified industry reported by establishments in other industries. The third column shows the total value of shipments of the primary products of the specified industry by all reporting manufacturers]

[Money figures in thousands of dollars]

BOTTLED SOFT DRINKS INDUSTRY	Shipped by—			WINES AND BRANDY INDUSTRY	Shipped by—		
	Bottled soft drinks industry	Other industries	All industries		Wines and brandy industry	Other industries	All industries
Total shipments by the industry	\$748,196			Total shipments by the industry	(1)		
A. Soft drinks.....	741,062	\$4,614	\$745,676	A. Wines and brandy.....	\$166,977	\$1,694	\$168,671
B. Secondary products.....	4,355			B. Secondary products and miscellaneous receipts.....	441		
Flavorings.....	3,767			C. Miscellaneous receipts.....	(d)		
Other secondary products.....	588			Contract and commission work.....	(d)		
C. Miscellaneous receipts.....	2,779			Scrap and salable refuse.....	(d)		
Contract and commission work.....	125			Nonmanufacturing activities.....	(d)		
Nonmanufacturing activities.....	2,654						

MALT LIQUORS INDUSTRY	Shipped by—			DISTILLED LIQUORS, EXCEPT BRANDY, INDUSTRY	Produced by—		
	Malt liquors industry	Other industries	All industries		Distilled liquors, except brandy, industry	Other industries	All industries
Total shipments by the industry	\$1,317,854			Total production of the industry	\$870,235		
A. Malt liquors and other brewery products.....	1,312,707	\$5,622	\$1,321,329	A. Liquors and byproducts.....	861,476	\$6,844	\$868,320
B. Secondary products.....	4,669			Distilled and bottled liquors, except brandy.....	843,135	1,649	844,784
Yeast.....	1,519			Distillers grains and solubles.....	18,341	5,195	23,536
Manufactured ice.....	1,214			B. Secondary products.....	7,567		
Other secondary products.....	2,236			Wines and brandy.....	1,546		
C. Miscellaneous receipts.....	178			Industrial ethyl alcohol.....	3,596		
				Other secondary products.....	2,425		
				C. Miscellaneous receipts.....	1,192		

MALT INDUSTRY	Shipped by—		
	Malt industry	Other industries	All industries
Total shipments by the industry	\$256,230		
A. Malt and malt byproducts.....	255,300	\$806	\$256,106
B. Secondary products.....			
C. Miscellaneous receipts.....	930		

^d Withheld to avoid disclosing figures for individual companies.

¹ Value of products shipped is omitted for this industry because it contains extensive duplication. The duplication arises because the products of some establishments are used as materials by other establishments classified in the same industry. (See text on industry and also GENERAL EXPLANATIONS—Duplication in cost of materials and value of products.)

TABLE 6-A.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939

[All figures in thousands]

PRODUCT	Unit of measure ¹	Internal Revenue statistics ² (quantity)	1947				1939	
			Shipments and interplant transfers ³			Production	Quantity	Value ⁵
			Quantity	Total value	Excise taxes ⁴			
Soft drinks, total				\$745,676		\$745,676		\$361,691
Case goods, carbonated.....	Case	883,155	729,407		720,407	472,763		354,187
Case goods, still.....	do	14,966	13,304		13,304	6,293		4,045
Bulk goods, carbonated.....	Gallon	10,589	2,830		2,830	10,879		3,216
Bulk goods, still.....	do	138	135		135	941		243
Malt liquors, total	Barrel	88,027	86,991	2,090,213	\$800,129	1,290,084	52,880	511,440
Case goods, total ⁷	do	59,753	58,860	1,550,336	544,417	1,005,919	n.a.	n.a.
Canned beer.....	do	n.a.	6,497	194,155	57,661	136,495	n.a.	n.a.
Canned ale.....	do	n.a.	606	16,370	4,763	11,607	n.a.	n.a.
Bottled beer.....	do	n.a.	47,144	1,214,508	436,296	778,212	n.a.	n.a.
Bottled ale.....	do	n.a.	4,660	124,102	45,324	78,778	n.a.	n.a.
Other bottled.....	do	n.a.	53	1,200	373	827	n.a.	n.a.
Barrels and kegs, total ⁷	do	28,274	28,131	539,877	255,712	284,165	n.a.	n.a.
Beer.....	do	n.a.	25,515	489,230	231,079	257,251	n.a.	n.a.
Ale.....	do	n.a.	2,606	50,422	23,638	26,784	n.a.	n.a.
Other.....	do	n.a.	10	225	95	130	n.a.	n.a.

See footnotes at end of table.

TABLE 6-A.—QUANTITY AND VALUE OF PRODUCTS, TOTALS FOR THE UNITED STATES: 1947 AND 1939—Continued

PRODUCT	Unit of measure ¹	1947				1939	
		Internal Revenue statistics ² (quantity)	Shipments and interplant transfers ³			Production	
			Quantity	Total value	Excise taxes ⁴	Value less tax	Quantity
Other brewery products, total			\$31,245		\$31,245		\$9,757
Cereal beverages.....	Barrel	41	844			158	1,504
Malt extract.....	Pound		66,835	7,046	7,046	92,309	5,562
Brewers' grains, total.....			n.a.	23,016	23,016	n.a.	2,601
Dry.....	Ton		269	14,834	14,834	n.a.	n.a.
Wet.....			n.a.	8,182	8,182	n.a.	n.a.
Other brewery products.....				339	339	n.a.	n.a.
Malt, total ⁶	Pound		3,686,610	238,877	238,877	2,227,201	55,570
Transferred by malt houses to breweries under same ownership.....	do.		372,005	25,053	25,053	204,870	7,013
Other shipments.....	do.		3,314,605	213,824	213,824	1,032,331	48,557
Malt sprouts and other byproducts.....	do.		637,419	17,229	17,229	n.a.	2,690
Wines and grape concentrate, total					159,157	n.a.	n.a.
Tax-paid shipments:							
Still table wines (14% or less), total.....	Wine gal.	22,604	17,571	25,963	\$2,921	23,042	n.a.
Grape wines, red.....	do.	n.a.	12,336	17,422	2,048	15,374	n.a.
Grape wines, white.....	do.	n.a.	4,529	7,184	734	6,450	n.a.
Fruit and berry wines.....	do.	n.a.	706	1,357	139	1,218	n.a.
Still dessert wines (over 14%).....	do.	69,357	54,423	96,111	34,201	61,850	n.a.
Sparkling wines.....	do.	1,010	1,010	9,401	3,074	6,327	n.a.
Vermouth.....	do.	1,424	1,216	3,248	792	2,456	n.a.
Wines, kind not specified.....	do.		1,071	1,715	449	1,266	n.a.
Shipments in bond:							
Still table wines (14% or less), total.....	do.		20,480	12,384		12,384	n.a.
Grape wines, red.....	do.		13,842	7,885		7,885	n.a.
Grape wines, white.....	do.		6,157	3,973		3,973	n.a.
Fruit and berry wines.....	do.		481	521		521	n.a.
Still dessert wines (over 14%).....	do.		68,337	44,114		44,114	n.a.
Sparkling wines.....	do.		102	324		324	n.a.
Vermouth.....	do.		228	224		224	n.a.
Wines, kind not specified ¹¹	do.		n.a.	6,027		6,027	n.a.
Grape concentrate.....	Gallon		577	1,143		1,143	n.a.
Brandy, neutral spirits and neutral brandy, total						9,514	n.a.
Tax-paid shipments:							
Beverage brandy.....	Tax gal.	1,143	421	6,355	3,840	2,515	n.a.
Shipments in bond:							
Beverage brandy.....	do.		1,175	3,086		3,086	n.a.
Neutral spirits and neutral brandy.....	do.		3,912	3,913		3,913	n.a.
Distilled liquors, except brandy, total							
Whiskey (raw), total.....	Proof gal.	246,443	245,363	190,401		190,401	112,012
Bourbon.....	do.	143,316	137,996	138,752		138,752	80,904
Rye.....	do.	n.a.	100,069	104,320		104,320	n.a.
Corn and malt.....	do.	n.a.	21,434	25,355		25,355	22,440
Gin (distilled in registered distilleries).....	do.	n.a.	15,594	9,077		9,077	n.a.
Spirits, except fruit ¹²	do.	5,473	5,468	2,701		2,701	6,517
Rum.....	do.	97,390	99,639	47,490		47,490	17,139
	do.	2,264	2,260	1,458		1,458	1,362
Distillers' dried grains and solubles.....	Ton		399	23,536		23,536	135
Bottled liquors, total							
Whiskey, total.....	Wine gal.	157,313	153,576	1,845,882	1,377,209	648,721	n.a.
Blends of straight whiskeys, rectified.....	do.	n.a.	4,432	53,225	35,899	17,329	n.a.
Other rectified whiskey.....	do.	n.a.	133,768	1,527,740	1,084,956	442,793	37,301
Unrectified, except bottled-in-bond.....	do.	8,272	6,537	95,268	89,589	44,718	n.a.
Bottled-in-bond.....	Proof gal.	10,243	8,839	100,640	69,478	100,102	n.a.
Gin, total.....	Wine gal.	13,663	13,510	136,049	110,907	25,952	n.a.
Rectified.....	do.	5,434	5,313	35,966	68,498	17,488	n.a.
Unrectified.....	do.	5,229	5,197	50,963	42,409	8,464	3,414
Cordials and liqueurs.....	do.	3,058	2,974	31,875	17,900	13,885	n.a.
Other liquors (rum, brandy, etc.).....	do.	n.a.	1,014	11,215	7,333	3,882	3,101
Liquors, kind not specified ¹¹			n.a.	n.a.	n.a.	5,962	n.a.

n.a.—Not available.

¹ Cases of soft drinks contain 24 small bottles or 12 large bottles. Bbls. of malt liquors contain 31 gals. A wine gal. is a std. U. S. gal. of 231 cu. in. A proof gal. is a wine gal. of 100 proof spirits (50% alcohol by volume). Wine gals. may be converted to proof gals. by multiplying the number of wine gals. by the proof of the liquor involved. A tax gal. is equiv. to the proof gal. for liquors of 100 proof or more, and equiv. to the wine gal. for liquors of less than 100 proof.

² Bureau of Internal Revenue statistics are shown in this column for comparison with census data. See text for types of establishments included in the census. For malt liquors, Internal Revenue figures represent tax-paid withdrawals plus exports. For wines and brandy, tax-paid withdrawals. For distilled liquors, except brandy, production. For rectified and unrectified liquors, quantity bottled.

³ For distilled liquors, except brandy, production. For rectified and unrectified liquors, quantity bottled, including Federal taxes, and State taxes paid by the manufacturer.

⁴ Excluding excise taxes.

⁵ Adjusted to include estimated quantity for 1,262 establishments which reported only total dollar sales. Sales of these establishments amounted to 5.5% of the total value of soft drinks. See table 6-B for flavor and size breakdown.

⁶ These figures represent shipments from breweries; the amount bottled in other establishments is shipped from breweries as barrel goods rather than case goods.

⁷ Over 99% barley malt; rye and wheat malt combined with barley malt to avoid disclosure of figures for individual companies.

⁸ Production for 1947 reported as 3,611 million lbs.

⁹ The differences between these figures and the corresponding Bureau of Internal Revenue figures represent the amount on which the tax was paid by establishments not included in the census. Most of the beverage brandy withdrawn for consumption during the year was bottled at rectifying plants not included in the census. Bonded whiskey is included in the census figures to the extent that it was bottled at internal revenue bonded warehouses attached to manufacturing establishments.

¹⁰ Including total value of shipments (\$5,162,000) of 117 establishments classified in the Wines and Brandy Industry, for which no detailed breakdown of shipments was tabulated.

¹¹ Includes some brandy for fortification.

¹² For 1947, the Bureau of Internal Revenue quantity figure represents net production at registered distilleries, not including redistilled spirits. The Census figure includes some redistilled spirits.

¹³ Including total value of shipments (\$2,526,000) of 26 establishments classified in the Distilled Liquors, Except Brandy Industry, for which no detailed breakdown of shipments was tabulated.

TABLE 6-B.—SHIPMENTS OF SOFT DRINKS, BY CONTAINER SIZE AND FLAVOR: 1947

[All figures in thousands]

PRODUCT	Cases of 24 bottles				Cases of 12 bottles		Cases, bottle size not reported	Total cases	Value
	6 and 7 ounce bottles	8, 9, and 10 ounce bottles	12 ounce bottles	16 ounce bottles	20-24 ounce bottles	28-32 ounce bottles ¹			
Bottled soft drinks, total	536,295	34,861	171,205	1,355	11,907	75,125	67,373	898,121	\$742,711
Carbonated, total	525,735	33,583	170,422	1,351	11,823	74,257	65,979	883,155	729,407
Containing kola extract.....	387,954	3,967	131,745	309	879	4,622	3,449	512,925	415,350
Orange.....	22,301	9,943	6,512	164	406	4,619	360	44,305	35,309
Lemon, lime, lemon-lime.....	53,777	1,651	1,208	80	1,835	5,368	256	64,175	50,592
Root beer and sarsaparilla.....	6,308	4,859	14,715	53	2,263	6,568	74	34,900	29,260
Ginger ale.....	4,506	2,414	2,125	19	3,091	24,260	79	36,494	37,288
Grape.....	19,860	2,668	2,302	43	83	1,704	-----	26,650	21,176
Carbonated water and club soda.....	3,154	491	2,303	46	1,410	11,795	555	19,754	19,685
Other carbonated.....	33,471	5,568	5,698	99	1,376	10,028	457	56,897	45,881
Flavor not reported.....	14,354	2,022	3,814	538	485	5,293	² 60,749	87,255	74,866
Still, total	10,560	1,278	783	4	79	868	² 1,394	14,966	13,304
Orange.....	6,372	943	310	3	55	419	728	8,830	7,559
Other still.....	4,188	335	473	1	24	449	666	6,136	5,745

¹ Includes a small number of 64-ounce bottles sold 6 to a case.

² Includes estimated number of cases for 1,262 establishments which reported only total dollar sales. Sales of these establishments amounted to 5.5% of the total value of soft drinks.