MANUFACTURES.

DAILY REPORTS AND CORRESPONDENCE.

1. Daily reports.—All special agents must make daily work reports on Form 30 not only for every day they are actually employed and for which compensation is claimed, but for every day during employment, including Sunday, whether or not work or travel is actually performed. Payment of salary and expense accounts will not be made until a report for each day during employment has been made. The daily reports of the agents working under the supervision of chief special agents, together with all schedules taken daily, as herein provided, must be forwarded at the close of the day to the chief special agent in charge of the city or district. The daily reports and schedules secured by agents who do not work under the direction of a chief special agent must be forwarded daily to the Bureau of the Census. The daily report calls for details as to travel on official business. Whenever such travel is necessary, agents are required to use railroad, trolley, or stage, if available, and in cases where livery or automobile is used, the necessity must be fully explained on the daily report of the day such conveyance was used, together with its cost to the office. These side trips may often be avoided by use of mail or phone, and every effort must be made in this direction. Inquiry should develop the size or importance of establishments located in remote sections, and the agent should have such reports mailed to him at some place he must visit in the vicinity of the establishments in question. The agent, therefore, must carefully examine his list of establishments to be canvassed in advance of reaching the locality, and familiarize himself with the inaccessible places long before reaching the city or town from which the actual visit is to be made, and take proper action to avoid expenditure of time and money, excessive and unwarranted, for meager results. Agents must not visit places that can not be reached by railroad, stage, or trolley, to secure a report where the value of products is less than $5,000. (See par. 49.) The mail and the telegraph addresses should be given daily and changes indicated sufficiently far in ad-
vance to enable the office to reach the agents by mail and wire at all times. All telegrams from agents not working under chief special agents, must be addressed to the Census Bureau, not to the Director of the Census.

2. Registered mail.—All reports are to be forwarded by registered mail in the return penalty envelope furnished for that purpose. Attention is directed to section 29, of the Census Act, page 44, wherein it will be seen that there is no restriction as to class or weight of official mail addressed to the Census Office. This provision has been incorporated in the postal regulations.

3. Requests for supplies.—Letters relative to the progress of the work and requests for supplies, Instructions, etc., must be addressed to the Director of the Census, Washington, D. C., unless otherwise specially provided for, as in the case of agents working in a city or territory in charge of a Chief Special Agent. Inquiries or requisitions of any character must not be made upon the daily report, but should be made on the special printed form or in a separate letter.

4. Date of completing work.—Special agents must give sufficient notice of the date they will complete the work to which they are assigned, so that they may be assigned to other territory without loss of time.

LISTS AND CANVASS OF ESTABLISHMENTS.

5. Index cards.—To assist in the canvass of establishments, each special agent will be furnished with index cards (Forms 1 and 1a) containing the names and addresses of establishments to be canvassed in his district. These cards will be arranged and listed alphabetically by cities and towns within each county. The agent must rearrange this list as nearly as possible in the order in which the establishments may be visited with the least expenditure of time and duplication of travel, and send to the Census Office the names of the cities and towns so rearranged. A careful notation must be made on the typewritten list from the office of the disposition of each card and the list must be returned to this office upon the completion of the canvass of the district. If it is found necessary to change the prescribed route to save time, or for other reasons, the office must at once be notified by letter.

On the upper left-hand corner of the index cards will be given the industry classification number for factories which reported in
1919, and on the right-hand margin is stamped the source from which the names of factories other than those that reported in 1919 was obtained, as Trade Directories, Internal Revenue, Forest Service, etc.

For establishments that reported at the census of 1919, the index cards contain information also as to size of the factory by value of products and by average number of wage earners, as reported at that census, expressed in symbols, letter and number, respectively. A key to these symbols follows:

**Value of Products (1919).**

A—$1,000,000 and over.
B—$500,000 to $1,000,000.
C—$100,000 to $500,000.
D—$20,000 to $100,000.
E—$5,000 to $20,000.
F—Less than $5,000.

**Average Number of Wage Earners (1919).**

1—Over 1,000 wage earners.
2—501 to 1,000 wage earners, inclusive.
3—251 to 500 wage earners, inclusive.
4—101 to 250 wage earners, inclusive.
5—51 to 100 wage earners, inclusive.
6—21 to 50 wage earners, inclusive.
7—6 to 20 wage earners, inclusive.
8—1 to 5 wage earners, inclusive.
0—No wage earners.

The reverse side of each card should be examined, as notations may have been placed there which will be of assistance in securing the report.

6. **Unlisted establishments.—**Although the list of establishments has been made as complete as possible, it is impracticable to secure absolute accuracy and completeness, and special agents must be constantly on the alert to discover establishments unlisted, or for which they have no cards. Agents will be held strictly accountable for a complete canvass of the district to which they are assigned. They must make careful inquiry for other manufactories located in their districts for which they have no cards. Where additional establishments are found, reports must be obtained for them (except as provided in par. 14), and in all such cases the note “No index card for this establishment” must be made on the bottom of the title-page of the report.
7. Cards for nonmanufacturing establishments.—It is probable that some establishments for which there are index cards may be found to be engaged in industries (see pars. 25 to 36) which are not included in the census of manufactures. In such cases a notation must be made on the card, and daily report, stating the reason why the report was not secured. It is not sufficient to state: "Not a manufacturing establishment," since that gives the office no definite information from which to determine whether or not the agent's conclusion was correct. The character of the business, therefore, must be briefly and accurately described by a notation, such as "Retail confectioner," "Restaurant," "Carpenter shop," "Carriage and wagon repair shop," "Cleaning and pressing wearing apparel," "Drug store," "Harness repair shop," "Photographer," "Product less than $500," etc.

8. Return of index cards.—Special agents in every instance will be held to a strict accountability for all index cards assigned them. A return must be secured from each establishment or a satisfactory explanation given on the back of the card, as instructed, in paragraph 7, if the establishment is not a manufacturing establishment, or such as: "General office located at ———, where information must be secured;" or "Establishment removed to ———" giving date of removal and being sure to state whether manufacturing was done at the place being canvassed during any part of the year 1921.

Each index card is numbered and the same number is on the typewritten list of establishments. This number must in all cases be written in the upper right-hand corner of the schedule and the left-hand margin of the daily report.

Each index card must be signed by the special agent and returned either attached to the report for the factory or to the daily report with the proper explanation. For certain large cities, where there is a chief special agent, the cards may be retained by such chief special agent until the completion of the canvass.

9. Change in name of establishment.—If there has been a change in the name or location of the factory since the index card was prepared, or if a report is secured for an establishment under a different name from that appearing on the card, the card must be corrected to agree with the new conditions and the daily report must state this change. No erasures, however, are to be made on the index card.
10. Central Offices.—As a rule, “Central office cards” (Form 8-706c) represent establishments of considerable importance, and, for this and many other reasons, should receive the earliest attention practicable by special agents. This is very important and applies not only to agents in charge of metropolitan districts, and all others having special agents under their supervision, but to those working independently, having “Central office cards.”

11. Establishments having office outside agent’s district.—The office has endeavored to ascertain the name and location of all factories for which the census reports will be made from a central office, and the cards for such factories are stamped “Central office.” In some cases where plants are controlled from a central office the Bureau of the Census has been advised that the census report will be made at the plant. In such cases the card has been stamped “Information at the plant,” and the agent is required to secure a complete report. In case the special agent discovers an establishment in his district for which the reports are to be prepared elsewhere, and which has not been indicated on the index card as a “Central office,” the facts must be stated on the index card and also on the daily report and the card returned attached to the daily report. It is important that the name of the company or individual, from whom the report must be secured, and the precise post-office address (street number or room in office building) be stated. If, in such cases, answers to any of the inquiries can be obtained at the factory canvassed, they should be secured and the partially prepared report forwarded with full explanation. These facts should not only be reported to the Census Bureau but also to the agent in charge of the city where the report is to be secured by the use of postal cards, prepared for that purpose. The agent will then take no further action with regard to securing the report unless he receives further instructions.

12. Factories outside, but offices inside, the agent’s district.—Reports must not be secured from the office of any establishment having no factory within the limits of the district being canvassed unless the index card states that the report must be secured at such office or special instructions are received. In the absence of such instructions it may be assumed that the establishment will make report to the agent for the place where the factory is located.

13. Additional factories of same owner, but outside the agent’s district.—It will sometimes be found that the individual
or company reporting also operates a factory, or factories, outside of the agent's district. Where it is found that a report for such factory can be secured only at the office the agent is visiting, he should obtain the report and call attention to it on his daily work report, so that prompt notice may be given to the agent in the district where the factory is located. Each report of a factory outside the district of the agent must be taken under the local name of such factory and show its location by state, county, city, or town, etc. The correct location of the factory is of vital importance and must be carefully reported. If, on the other hand, the reports for these outside factories must be secured only at the factories, a slip should be attached to the report secured for the local factory, giving the location of each of the outside factories, and the name and the place where the information may be obtained, and at once forwarded to the Census Office.

14. Idle establishments.—No report should be secured for establishments which were closed or idle during the whole of the census year nor for establishments that were abandoned or dismantled prior to January 1, 1921. All manufacturing establishments, however, that commenced operations or did any work during the census year ending December 31, 1921, must be reported whether or not they were in operation at the time of canvass or at the end of the year 1921 in accordance with special instructions in par. 26.

METHOD OF SECURING REPORTS.

15. Schedules mailed to manufacturers.—Blank schedules have been mailed to all establishments listed. A number of these establishments have made complete reports by mail, and the cards for these establishments are stamped "Report secured by mail." Cards for such establishments are furnished the special agents to acquaint them with the fact that a return has been received. These cards must be returned by the agent with his daily report for the day he canvasses the neighborhood in which the establishments are located, and the names of the establishments must be given on the daily report (Second section, "cards returned").

If the report received from the establishment by mail is defective, a copy will be sent to the agent for completion. These copies must be carefully preserved and completed or corrected as may be necessary. The corrected copy must be signed as "Corrected by" the agent securing the corrections and returned as an original schedule, together with its accompanying card, or a complete
new schedule secured and returned with the card; in the latter case the words "See copy" must be written on the top margin of the title-page of the new schedule. The defective copy must always be returned, either "corrected" or attached to the new report, if one is secured.

In view of the probability, however, that a number will fail to have answered before the lists are prepared schedules must be sent to these delinquent establishments which reported at the census of 1919. Agents, not in charge of chief special agents, will be given a supply of the General and the Short Form schedules to be mailed by them to the establishments which have not replied. The agent should mail the regular General Schedule, or the proper special schedule, if one is required, to all establishments, except where he may know the value of products to be less than $5,000, in which case the Short Form only should be used. (See Section 1 "Daily reports."

16. Understanding of the schedules necessary.—Before undertaking the field work, it is essential that employees should thoroughly understand the schedules to be used, both the General and the Specials, but particularly the interrelation of the several inquiries in the Schedule. This is not only necessary to determine whether or not the individual reports are fully and properly prepared, but in order that the agent may be able, when called upon, to explain the details fully to manufacturers. The several inquiries of the Schedule are explained separately in these instructions, but their relation one with the other must also be given careful consideration. For instance, see that labor and wages are not only what seems necessary for the production, but make sure that the total number of wage earners in Inquiry 2 are consistent with the wages reported under Inquiry 3; and that the cost of materials used is consistent with the value of products. These features will vary more or less according to the industry reporting, which, of course, must also receive consideration. Wherever there is a seeming inconsistency in the relation of any of the inquiries, an explanation must be given under "Remarks," even if the agent personally has satisfied himself that it is correct.

17. Reports already forwarded by manufacturers.—In some cases the manufacturer will have already forwarded his report to Washington before the agent arrives. If the agent is satisfied that the report has been sent by mail, he must immediately notify the office giving the date of mailing by the manufacturer, enter the
fact on his daily report, and make the following entry on the index card: "Report sent by mail." (______-192--(giving date.)

The agent should avoid acceptance of a promise that the report will be sent to him, or to Washington later, but should secure it in person.

If the agent is unable to secure the report, he should go over the inquiries with the manufacturer, and obtain a definite date when the report will be mailed, which date must be noted in his daily report in order that the office may be in a position to notify the company of the failure to keep its promise in case the report is not received as agreed upon. Such cases, however, must be exceptional, and fully explained, since the duty of the agent is to get the report in person. If the report is partly made out and must be left with the manufacturer for completion, a copy of the report so far as prepared must be sent to the office with explanation.

18. Reports prepared by manufacturers awaiting agent's call.—In case the manufacturer has the report prepared when the agent arrives, he should satisfy himself as to the source and accuracy of the information, and, if necessary, explain the meaning of anything about which the manufacturer seems to be in doubt, and assure himself that the report is complete before it is accepted.

If a manufacturer insists upon sending his report to the Census Bureau by mail instead of giving it to the special agent, the agent, if possible, should see that the schedule is properly prepared, and furnish an addressed official envelope for mailing it to the bureau. He must also give the name of the establishment on his daily report, with the statement that the schedule will be, or has been, sent by mail.

19. Promptness required of agents.—Ordinarily the agent will be able to secure the report on his first visit, or in the case of large or complex establishments requiring more than one visit, should at least begin the actual work of compiling the data on his first visit. For a majority of establishments the report can be secured without necessitating a lengthy interview or a second call. The making of future appointments for the preparation of the report should be avoided, since such appointments are apt to lead to delay.

20. Answers to inquiries to be taken from books of accounts and records.—The information secured must be accurate. In drafting the schedule every effort has been made to frame the inquiries in such a form that the answers to them can generally be taken directly from the books and records of the establishment canvassed. The agent may find a disposition to give general state-
ments or estimates, claiming that they approximate very closely the exact figures. General statements or estimates, however, must not be accepted where it is possible to secure the answers directly from the books and records.

21. Erroneous statements.—The special agent is not to accept answers which he knows, or has reason to believe, are false, as he has a right to a true statement on every matter respecting which he is bound to inquire. In most cases if his informant gives him a round number (e.g., 6,000 or 200,000) it is likely to be only an estimate, and should not be accepted if more precise data can be secured. If statements which are obviously erroneous are persisted in, the special agent should enter upon the report the facts as nearly as he can ascertain them by his own observation or by inquiry of creditable persons, and state the source of the information secured.

22. Compulsory feature of census.—It will generally be found that the person called upon will give the information without objection or delay. Special agents are therefore cautioned not to refer unnecessarily to the compulsory feature of the law. Only where the information required by law is positively refused need the penalties of noncompliance be referred to. The special agent will then quietly but firmly point out the consequences of persistent refusal, quoting, if necessary, the provision of the law as shown on page 43 of these instructions.

23. Information confidential.—Special agents are prohibited by law from delegating to any other person their authority to enter establishments and collect information.

Attention is also called to the penal provisions in the census act, pages 42 and 43 of these instructions, one of which provides that information gained by a special agent or by any other employee in the performance of his duties must not be disclosed to any person not authorized to receive the same, under a penalty not to exceed $1,000 or imprisonment for two years, or both.

If manufacturers or others furnishing data object to giving the report on the ground that it would disclose the secrets of their business, the special agent should assure them that the results of their individual business will not be made public and should call attention to the statement to that effect on the title-page of the schedule and to the provisions of the law. The agent may also explain that the information will not be used for the purposes of taxation, or in any manner to identify the operations of any individual establishment, and will not be disclosed to any bureau of
the Federal Government unless so stated on the schedules. The intent of the law, which will be strictly carried out, is to prevent the disclosure of information which might in any way operate to the detriment of the person or establishment supplying the same.

IN COOPERATION WITH THE GEOLOGICAL SURVEY.

24. Industries covered by the Geological Survey.—The Bureau of the Census and the Geological Survey will cooperate in securing statistics for certain industries in 1921, and unless specially instructed, special agents of the Census are not to secure reports for establishments in the following industries, which will be collected by the Geological Survey:

Antimony smelters.
Carbon black.
Casing-head gasoline.
Cement.
Coke (beehive and by-product ovens).
Copper refineries.
Copper smelters.
Grindstones, whetstones, etc.
Lead refineries.
Lead smelters.
Potash.
Salt works.
Tin smelters.
Zinc smelters.

Industries covered by the Census.—Statistics for the following industries, usually collected by the Geological Survey, at this census will be collected by the Census Bureau on the census schedules, and also on such special schedules as may be supplied by the Survey:

Clay and refractory products (brick and tile, terra-cotta, fire-clay, pottery, etc.).
Ferroalloys.
Gas, manufactured.
Iron and steel, blast furnaces.
Lime.
Sand-lime brick.

Mining and manufactures.—In the collection of statistics for the following industries, namely: Basalt (trap rock); granite; graphite; gypsum and gypsum products; lime; limestone and dolomite; marble; mica; millstones and chasers; sandstone; slate; and talc and soapstone, the Census Bureau will secure schedules covering such manufacturing processes as the surfacing and polishing of marble and granite, the burning of lime, the grinding of limestone, stone crushing, etc. Such schedules will, of course, cover only the manufacturing processes, and will not include the quarry-
ing of the stone. The collection of statistics in this manner is necessary for the purpose of comparisons with previous censuses.

WHAT CONSTITUTES A FACTORY—ESTABLISHMENTS NOT TO BE CANVASSED.

25. Census confined to factories.—The census is confined to manufacturing establishments conducted under the so-called factory system as distinguished from the neighborhood, hand, and building industries. No precise definition of a factory for census purposes can be given, but the following instructions relative to the omission of certain classes of establishments will show the general line of division. In cases where there is reasonable doubt as to whether an establishment should be taken or omitted, a report should be secured, and under "Remarks" give the reason for securing it.

26. Very small establishments.—Do not report small establishments having annual products of less than $500. This does not apply to establishments idle during a portion of the year or new establishments started during the year, and which for that reason did not have products in excess of that amount but are capable, under normal conditions, of producing annual products of $500 or more.

Reports should not be secured for work done in homes, such, for instance, as the manufacture of clothing or gloves, the knitting of socks or garments, the making of rag carpets, for which reports are required when done in factories.

27. Building trades.—Establishments engaged in the various building industries must not be reported. This applies particularly to classes like the following:

Architects.
Bridge building.
Building and construction work.
Carpenter shops and contracting carpenters.
Electric wiring and construction work.
Excavating, well digging, etc.
Masonry, brick and stone builders and contractors.
Moving or razing buildings.
Painting — house, theatrical scenes, automobiles, etc.

Paper hanging.
Paving and the laying of artificial stone, concrete, etc.
Plastering and stuccowork.
Plumbing, gas fitting, steam fitting, etc.
Roofing, laying of roofing of any character.
Railroad construction.
Stage carpentering.
Establishments engaged in manufacturing materials and supplies used in building, however, are to be included—for example, planing mills making supplies for carpenters; brick manufacturers; cutting of marble and stone, whether at quarries or separate establishments; manufactures of paving materials, paints, plumbing supplies, electrical apparatus and appliances; shops where roofing, cornices, etc., are manufactured; coppersmithing and sheet-iron work establishments should be reported. If building materials are manufactured by an establishment which is also engaged in the construction of buildings, bridges, etc., the report should be secured, but relate only to the manufacturing, or shop work, part of the business.

28. Custom work on wearing apparel.—Reports are not required for establishments doing strictly custom work, i.e., work to the order of the individual buyer on wearing apparel of all sorts. This applies to the following classes of establishments, among others:

- Boot and shoe custom and repair shops.
- Custom tailoring, or the manufacture of clothing by persons in their own living quarters.
- Dressmaking.
- Cleaning and pressing garments.
- Fur stores making and repairing garments for individual customers.
- Millinery establishments.

Establishments engaged in manufacturing the same classes of articles for the general trade should be reported—for example, boot and shoe factories; establishments manufacturing ready-made clothing, whether for men or women; establishments manufacturing fur goods for the trade; and establishments manufacturing millinery goods for the trade should be reported. Certain industries, boots and shoes and the ready-made clothing industries being examples, operate under peculiar conditions. In addition to those that cut out the stock and also manufacture, there are establishments that cut out the stock and have all or a part of the manufacturing done by contract, and reports for such establishments must be secured under either condition of doing business. Shops or factories where the work done is entirely on material owned by others must also be reported. Reports, however, must not be secured for establishments having goods made for them, but who do not furnish the materials. Dye works, bleacheries, and print works
engaged in dyeing, bleaching, or refinishing fabrics must be reported.

The phrase "the general trade," as used in these instructions, means those who again sell the goods, whether at wholesale and sometimes, when in considerable quantities at retail, as distinguished from establishments making articles for the personal use of the individual customer.

29. Retail stores.—Retail stores and other establishments which incidentally manufacture small quantities of goods which they sell must not be reported. This applies, among others, to the following classes of establishments:

- Cigar stores.
- Confectionery stores.
- Drug stores.
- Furniture stores.
- Hair-work establishments.
- Hairdressing establishments, etc.
- Jewelry stores.
- Opticians.

Establishments making these same articles for the general trade must be reported.—In particular, some retail druggists operate chain stores and certain opticians also are large manufacturers of the goods which they retail or sell to other dealers, and these should be reported. (The bleaching and dyeing of sponges, done by a few large druggists, should be reported.)

30. Miscellaneous hand trades.—The small hand trades, engaged chiefly in repair work or work to the individual order, should not be reported. This applies, among others, to the following:

- Automobile repairing.
- Bicycle repairing.
- Blacksmith and wheelwright shops. Establishments, however, that manufactured five or more carriages and wagons or other vehicles during the year must be reported.
- Blue printing.
- Harness shops.
- Hectograph or "multigraph" work.
- Jewelry engravers.
- Locksmith and gunsmith shops.
- Photography.
- Picture framing.
- Furniture-repairing and upholstery shops.
- Rag carpets, made at homes and not in factories.
- Sewing-machine repair shops.
- Taxidermists.
- Typewriter repairing.
Tin shops.
Undertakers.
Vulcanizing.

Establishments engaged in these or similar industries, which manufacture goods for the general trade, must be reported.—Thus, boiler works and foundry and machine shops must be reported, also harness and saddlery factories making goods for the general trade, manufacturers of looking-glass and picture frames for the general trade, and tin shops where goods are made in considerable quantities. When engraving is done by lithographing or printing establishments, this work must be included in their total business; diesinking, and plate printing must be reported.

In connection with the manufacture of ice, when ice is produced for sale by cold-storage plants it must be reported. If the cold-storage business is incident to the manufacture of ice, the report may cover the operations of the entire establishment. On the other hand, if the manufacture of ice for sale is incident to the other business, get a separate report for the manufacture of ice.

31. Specially omitted industries.—The following industries, although sometimes referred to as manufacturing industries, are not so considered by the Census Bureau, and no reports must be secured for them:

Costumers making costumes for rent only.
Cotton cleaning and rehandling.
Cotton compressing.
Cotton ginning.
Dentistry.
Dressing, packing, and shipping of poultry. (When done on a large scale, however, or by slaughtering and meat-packing establishments it must be reported.)
Electric light and power stations.
Fisheries. (The canning and preserving of fish and oysters, however, must be reported.)
Florists and floral designs of natural flowers.
Gas, purchased and distributed, should not be reported unless the company also manufactures gas.
Hay and straw baling.
Ice harvesting, natural. (The manufacture of ice must be reported.)
Junk shops.
Kindling wood (hand or power).
INSTRUCTIONS TO SPECIAL AGENTS.

Laundries.

Map mounting.

Packing and shipping of fruits and vegetables (except as provided in par. 34).

Professional services.

Rectifying and blending of liquors.

Retail butchers.

Salting hides.

Tobacco, stemming and rehandling.

Omit reports for stone crushing when done in connection with road building or other construction work. Reports, however, should be obtained for establishments which are engaged in stone crushing as a business and sell the product as such.

In addition to the industries indicated for which reports should not be secured, attention is called to the following, which likewise should not be reported:

Bottling should not be reported unless it is done by establishments in which the liquors, mineral waters, soda waters, syrups, tinctures, beverages, etc., are manufactured. In such cases the report should cover both the manufacturing and bottling operations.

Dairies should not be reported, although they may manufacture butter or cheese from surplus milk and cream. Butter and cheese factories, however, must be reported, although they may sell some milk and cream.

Manufacturing carried on in educational, eleemosynary, and penal institutions must not be reported. If, however, a private manufacturing concern has all or a portion of its work done by convict labor, the amount paid for such labor must be reported under Inquiry 8, as “Amount paid for contract work not done by the regular employees of the factory being reported.”

32. Distinction between farm and factory products.—The manufacture of butter, cheese, cider, vinegar, wine, and other products may be carried on either upon farms or in factories. In the former case the products will be classed as agricultural and no report is required, but in the latter they will be classed with those reported under the head of manufactures. However, when manufactures of this character are conducted on farms where, in addition to the crops of the farm in question, materials purchased from others are also used, they will be classed as factories for census purposes and reports secured. Factories, canning fruits
and vegetables, etc., for the trade must be reported, even though carried on in connection with a farm or ranch.

The pulling and the scouring of wool done in establishments expressly devoted to such work should be reported. Such work done in slaughtering establishments and tanneries should be included in the reports for these establishments.

33. Sugar, molasses, sirup, sorghum.—Mills located on farms for the manufacture of sugar, molasses, sirup, or sorghum, will not be deemed to be "factories" if they confine their operation to the treatment of cane grown on the farm on which they are located. If, however, a mill located on a farm treats cane grown on farms other than the one on which such mill is located, it should be treated as a factory and a report secured. Reports, however, must be secured for all mills in Louisiana and Texas engaged in the production of cane sugar and molasses located on plantations, although only the cane grown on the plantation is treated.

34. Packing and shipping of fruit.—In some localities the conditions pertaining to this industry have reached such a development as to constitute a factory industry. For instance, when the fruit is dipped in hot water or placed in sulphur fumes, or where raisins are seeded and other processes performed. Reports must be secured for operations of this character.

The packing of oysters in hermetically sealed cans should be reported. The packing of oysters in open cans or in other containers where they are not subjected to any preservative process should not be reported unless carried on in connection with the hermetically sealing and preserving of oysters.

35. Reason for omitting establishments specified.—The object of the omission from the census of the classes of establishments indicated by the foregoing lists is to confine the census so far as possible to an enumeration of the factory industries. In many instances the same industry is carried on in large and small establishments, and the distinction made in the size of the establishment to be reported is covered in par. 26. It is in cases where the manufacture is incident to a mercantile business that the agents are most often called upon to exercise judgment in regard to the preparation of the reports, but the sale of products bought from others is mercantile business and is not to be included except under very special conditions (see par. 48).

36. Small custom mills.—Flour, feed, and grist mills and saw-mills' grinding or sawing for toll or for local custom exclusively, must not be reported.
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37. Lumber industry (E. S. and W. S.).—Reports for the lumber industry will be secured by the Forest Service in the following states:

Arizona. 
California. 
Colorado. 
Idaho. 
Montana. 
Nevada. 
New Mexico. 
Oregon. 
South Dakota. 
Utah. 
Washington. 
Wyoming.

The "W S" special 142 is to be used in these 12 states, but for all other states the "E S" special 142 must be used. Special agents of the Census Bureau are not to secure reports for this industry, therefore, in any of the above named states, unless specially instructed to do so. Reports must be secured, however, on the General Schedule for planing mills, not operated in connection with sawmills, wherever located. In reporting establishments engaged in merchant or contract sawing of lumber or in the manufacture of other products from logs or bolts, or those engaged in getting out saw logs or other timber products, the special schedule for "Lumber and timber products" (Form 142) must be used. Among the products to be reported for "Lumber and timber products," are lumber, lath, shingles, crossties, telegraph and telephone poles, tanbark, cooperage stock, and veneers. Two schedules have been prepared for this industry in order to meet the different kinds of wood found in certain so-called eastern and western states (ES and WS, respectively).

38. Pulp wood consumed in 1921.—A card schedule (Form 150a) has been provided for reporting pulp wood used by pulp mills in 1921 and reports must be secured in accordance with the inquiries. This card schedule should be mailed with the special schedules for paper and pulp mills (Form 150) and receive the same general treatment.

39. Turpentine and rosin.—Reports are not to be secured for this seasonal industry (usually closing Mar. 31) except when the agents are specially instructed to obtain them. The operation of stills for the production of turpentine and naval stores is frequently associated with the gathering of crude materials and the care of a turpentine forest, and in such cases a combined report for the entire business may be made unless the books permit an accurate separation of the two branches.

40. Printing and publishing establishments.—Printing and publishing establishments, whether engaged in printing alone, publishing alone or both of these lines of work, must be reported. Writing of books and solicitation of contracts for printing, when no work is done in their preparation, such as printing, binding, etc., however, must not be reported.
41. Manufacture of ice cream.—Reports must be secured for all establishments manufacturing ice cream for the trade. Reports are not required for establishments making ice cream in small quantities to be sold over their own counters at retail.

WHAT CONSTITUTES AN ESTABLISHMENT—DIVIDED ESTABLISHMENTS.

42. Definition of establishment.—The term “establishment,” as a unit of enumeration for this census, with the exceptions noted, is deemed to be one or more factories, mills, or plants owned or controlled by one individual, partnership, corporation, or other owner, located in the same town or city, and for which one set of books of account is kept.

43. Separate sets of books.—When the owner operates two or more plants in the same town or city, and maintains separate sets of books for each, they should be treated as separate establishments; but if one set of books only is kept, they may be treated as one establishment.

44. Separation of industries.—It is necessary to publish separately the statistics for the different industries as defined by the Census Bureau. Therefore, when two or more distinct industries, such as those indicated by the special schedules, are carried on under the same ownership with only a single set of books, separate reports for the different industries must be prepared when practicable in the same way as described in paragraph 45 (see par. 92).

45. Separation of localities.—It is necessary, however, to secure separate statistics for the different states, and also for all cities with a population of 10,000 and over. Therefore, when the same owner operates two or more plants in different states, or cities, or operates one plant in a city and another outside of that city, separate reports covering the plant or plants in each state, or each city of 10,000 population and over must be prepared, though only one set of books is kept for all the plants. If estimates are necessary to make the complete reports for the separate plants, they must be carefully prepared in consultation with the person who furnishes the information and marked “Estimate.”

46. Reports for same ownership.—All reports secured by the special agent for plants conducted under the same ownership, whether covered by a single set of books or by separate sets of books, must be fastened together and proper notation made of the fact in the daily report.
INSTRUCTIONS TO SPECIAL AGENTS.

47. Establishments engaged in manufacturing and also in other business.—A considerable number of establishments will be found which are engaged in manufacturing, and at the same time in some nonmanufacturing branch of business or industry, with only a single set of books covering the combined business. In those cases where the nonmanufacturing branches of business are incident to the manufacturing business, or are insignificant, the schedule may cover the entire business. On the other hand, where the nonmanufacturing business is of importance the agent should prepare a schedule covering only the manufacturing, following the instructions in paragraph 48.

The following will illustrate some combinations of manufacture with other industries:

Mining of iron ore with the manufacture of pig iron.
Cultivation of vegetables and fruits with canning of the same.
Catching of fish and oysters with canning of the same.

In these and similar cases a separate report for the manufacturing business must be carefully prepared, all estimates marked "Estimate," and the basis of the estimates described under "Remarks" or on a separate sheet. Materials produced by the establishment itself and used in its manufacturing may be taken either at the cost of production, or at their market value at the point of consumption. Where the quarrying of granite, marble, slate, limestone, or other minerals is done in connection with their manufacture into finished products at the quarry or mine, the report should be secured in the manner described in paragraph 24.

48. Combined manufacturing and mercantile business.—Some establishments are engaged both in manufacturing and in mercantile business; that is, they not only sell their own products, but also buy the finished products of others for sale. Where the manufacturing is insignificant in quantity and merely incident to the mercantile business, no schedule should be secured. On the other hand, where the mercantile business is insignificant and merely incident to the manufacturing, a single report may be secured covering the entire business, but the facts should be noted on the schedule. In such cases finished products bought for sale should be reported as materials and the sales thereof as manufactured products of the establishment. In some instances factories of considerable size are conducted in connection with large mercantile establishments, such as department stores. Such factories must be reported, and a schedule prepared covering only the manufac-

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turing, although all of the products may be disposed of in the store, which is operated under the same ownership.

PREPARATION OF THE GENERAL SCHEDULE.

49. The General Schedule and the Short Form Schedule, Forms 100 and 100a, respectively, must be used in securing reports, according to the use of each. That is—the regular General Schedule, form 100, is to be used for establishments having products valued at $5,000, and over, except for those requiring "Special Schedules" listed on pages 31 and 32. The Short Form Schedule, form 100a, is to be used only for establishments with products less than $5,000, but $500 or over. The instructions printed on the schedules and in the Book of Instructions to Special Agents must be strictly followed.

INQUIRY 1.—DESCRIPTION OF ESTABLISHMENT.

50. Name of establishment.—Since separate reports are to be obtained for different establishments when conducted under the same ownership, the local name of the establishment should be given as well as that of the owner.

51. Name of owner or operator.—The answer desired is the name of the person, partnership, corporation, etc., operating the establishment, whether such operator owns the plant or leases it.

52. Location of factory.—The exact location of the plant or plants covered by the report must be shown by the answers to this inquiry, and especially to the one "Is factory located within the corporate limits of the city?" Since separate statistics will be presented for certain cities, it is of the utmost importance that precise information relative to these points be given in order that the statistics of manufactures may be correctly presented by cities or other civil divisions. When the establishment is on the boundary line, or part of the plant is located in one civil division and part in another, full information on this subject must be given, stating location of the office, under "Remarks." If there are other unusual complications they should also be explained.

53. Post-office address of the general office.—For the majority of the establishments this will be the same as the Location of the factory, but in many cases it is different, and inquiry should be made to develop this condition if it exists.

54. Character of industry.—The statistics of manufactures will be presented by kinds and by classes of industries. It is of the utmost importance, therefore, that the answer to this inquiry should very clearly show the kind of goods made, or the specific
character of the work done. Where the establishment covers more than one distinct kind of manufacturing operations or products, or is engaged in any nonmanufacturing work, such as transportation, mining, etc., especial care should be exercised to show in the answer to this inquiry all the lines of manufacturing work engaged in or the principal products made. If necessary, additional information may be given under "Remarks." In all cases the particular articles produced should be named in the order of their importance: for example, "cigars, cigarettes, smoking and chewing tobacco," not "tobacco factory," which is too indefinite, or "pig iron, billets, bars, and wire," not "iron and steel." Brass manufacturers, for instance, may represent "hardware," "plumbers' supplies," or some other products for which there are specific classifications. For the manufacture of clothing, neckwear, handkerchiefs, etc., state definitely whether "men's," "women's," or "children's." A general description, such as "clothing," for instance, is not sufficiently specific.

**Inquiry 2.—Persons Engaged.**

55. So far as practicable, for proprietors or firm members, and officers, managers, clerks, and other salaried employees, such data should relate to December 15, 1921.

56. Wage earners, including pieceworkers, by months.—Note carefully that although the inquiry calls for the number on the 15th of the month, or nearest representative day, what is desired is the total number employed on a given day not total number whose names appear on a given pay roll. This will in most cases be a number somewhat smaller, and in certain cases considerably smaller, than the number of names appearing on the pay rolls for the 15th or any other day, owing to the fact that during the period covered by the pay rolls all will not be continuously employed, a considerable number working only certain of the days. Probably in the majority of cases the pay rolls and time records are kept in such a way that it is possible to get the record for a particular day, in which case the record for a representative single day should be taken. If this can not be done, the total number on the pay roll should be counted and noted on the margin, and a careful estimate of the average number employed during the period covered by the pay roll should be used in preparing the report.

57. When estimates may be accepted.—In case pay rolls or other records are not available for a normal or representative day,
a careful estimate must be taken in substitution for data from records, and the fact that the data are based on an estimate should be stated on the margin of the schedule using the word "Estimate."

For establishments employing on an average less than 25 persons, although desirable, it is not imperative to consult the pay rolls or books to secure answers to these inquiries.

58. Officers of corporations who receive no salaries, and directors who receive only a fee for attending meetings, must not be reported. All salaried officials, such as the president, vice president, secretary, and treasurer, who devote all or a considerable proportion of their time to the business, must be included. Officers of corporations should not be reported for the repair shops of steam or electric railways, or for the manufacturing done by large mercantile establishments for which reports are secured for their manufactures.

59. Foremen and overseers.—In some industries it is difficult to preserve this distinction, especially as to foremen and overseers. Foremen and overseers who have charge of a few workmen, but with little additional responsibility or pay, and who at the same time perform work similar to that of other wage earners, are not to be included as salaried employees. To come within the scope of Inquiry 3 they must devote the whole or the greater part of their time to supervision.

60. Traveling salesmen.—If the manufacturing department of an establishment turns over its product to a separate selling department at a given value or price, which value or price is reported in answer to Inquiry 6, the traveling and other salesmen would be employed by the selling department, and their number and salaries should not be reported in this schedule. If, however, the value of the products represents the value reported by the selling department the salesmen of the establishment are to be reported in Inquiry 2(b) and their salaries in Inquiry 3. Under the latter condition also, if salesmen are employed on commission their number and the amounts of their commissions should be reported under Inquiries 2 and 3 with "clerks and other salaried employees."

61. Distinction between salaried employees and wage earners.—No person should be reported as a salaried employee merely because he is hired by the week or month instead of by the day. The distinction should be based primarily upon the character of work done rather than upon the unit of time as the basis of em-
employment. Wage earners are not confined to those who receive day wages, although most wage earners are paid on this basis. It will doubtless be found, for instance, that engineers and firemen in mills and pressmen in newspaper offices are often employed by the week or month, but they should be classed as wage earners rather than as salaried employees. Time keepers, messenger boys, proof-readers, etc., in printing establishments, and the like, whose work is closely related to that of persons who would ordinarily be called clerks, stenographers, and salesmen, may be classed as salaried employees. Drivers on delivery wagons should be classed as wage earners.

62. Wage earners employed indirectly.—In some establishments wage earners who actually work for the establishment in the same building as others may not appear upon its pay rolls, being indirectly employed and paid through superintendents, heads of departments, foremen, and the like. Careful inquiry must be made to ascertain such conditions, and the number of persons so employed and their compensation must be estimated as nearly as possible and included with other wage earners, and the basis of the estimate noted on the schedule.

On the other hand, answers to this inquiry must not include the employees of independent contractors having separate establishments who perform work under contract for the establishment reporting, since such work will be accounted for under Inquiry 3(c), "contract work" not done by employees of the factory reporting. Such contractors, however, should be reported in a separate schedule.

The answers to the inquiry should not include the number of persons working at their homes on piecework, a custom peculiar to glove-making and a few other industries. The amount paid for such work, however, should be included in the report of the company for which the work was done, as "amount paid for contract work not done by the regular employees."

63. Convict labor.—The number of such employees working under contract, piece price, or other system must not be included in reply to Inquiry 2 (c). The amount paid for such service, however, should be included as "contract work."

INQUIRY 2.—WAGE EARNERS EACH MONTH.

64. Number on 15th day of month.—Make entries for all months covered by this report. Take the 15th day of each month, unless it falls on a Sunday or unless the pay roll for that day is
not available. If the establishment was shut down on the 15th of
the month, select a day nearest to that day for which a satisfac-
tory record can be obtained and give the date selected.

INQUIRY 3.—SALARY AND WAGE PAYMENTS.

65. Classes to be reported separately.—The amount paid each
of the two classes of employees a and b should be given separately,
and represent the total amount paid for salaries and wages during
the period covered by the report.

66. Board and rent when furnished as part compensation of
employees should not be included as wages, but the number of such
employees receiving board or rent free should be noted under
"Remarks."

67. Bonuses or percentages of profits when paid to officers,
superintendents, foremen, or wage earners should be included in
the amount of salaries or wages. This does not include dividends
paid on stock in a corporation which officers, employees, or wage
 earners may hold.

68. Contract work.—The answer to this part of inquiry 3, must
include only the expenditures for work on the products reported in
answer to Inquiry 6, when done by or under the supervision of
contractors or by persons working at their homes independently of
the regular employees; it must not include any part of the amount
reported under salaries and wages.

INQUIRY 4.—TIME IN OPERATION.

69. Days in operation during the year.—The answer to this
inquiry should show the entire number of days the establishment
or any portion of it was in actual operation, whether working
full time, part time, or overtime—that is, if the establishment was
operated on a given day for 1 hour, or more, or by two or more
shifts for the entire 24 hours, the answer in either case would be
the same, namely, 1 day. The full possible working time of an
establishment, operating continuously, except on Sundays and
holidays, is about 307 days, depending on the number of holidays.

70. Number of hours per week normally worked by wage
 earners.—"Per shift" refers to the number of hours worked by
each set of wage earners, not the total number of hours worked
per day, when two or more sets of workmen were employed. The
number of hours worked "per week" is called for in order that
the practice of the establishment relative to the working of only
half a day or any other fraction of a day on Saturdays or under other circumstances may be brought out. If both a day shift and a night shift, use day shift.

INQUIRY 5.—MATERIALS.

71. Definition of materials used.—The answer to this inquiry should give the total cost of all materials and mill supplies of every description, whether raw or partly manufactured, and whether entering into the products, used as containers, or consumed during the year in the process of manufacture, including also the cost of fuel used and rent of power.

72. Materials used during year desired.—Note especially that what is desired is the cost of the materials, mill supplies, and fuel actually used during the year, in connection with the products under Inquiry 6. The cost of materials purchased during the year might be entirely different. If the books do not show directly the cost of the materials consumed during the year, it may be computed by adding to the amount paid for materials purchased during the year any decrease in the inventory of materials on hand at the end of the year as compared with the beginning, or by deducting the increase in such inventory.

If the books of the establishment do not show the value of the materials on hand at the beginning and end of the year, but do show the cost of all these articles purchased or acquired during the year, and it is reasonably certain that there is no substantial difference between the values on hand at the beginning and at the end of the year, the figures showing the cost of materials acquired during the year may be used in answer to this inquiry.

The first method, however, should be employed whenever possible. If the latter method is used, the fact should be stated on the margin of the schedule.

73. Materials manufactured and used by same establishment.—Materials and mill supplies produced by the establishment itself during the year covered by the report and used by it in its further operations must not be duplicated by being again reported in its new form as material. An illustration of this may be found in the manufacture of textiles, where yarn may be made during the year by the establishment reporting and consumed in further manufactures by the establishment, since its cost will already have been reported in the raw material and labor connected with its manufacture. If, however, the mill manufactured more yarn
during the year than was used as materials, the excess should, of course, be reported as a product.

Where materials are obtained from another plant operated under the same ownership and for which a separate schedule is required, they should be reported as products in the establishment producing them, and as materials in the establishment acquiring them for further manufacture. The value assigned such materials by the factory using them should be their cost as shown on its books. If, however, no charge is made on the books, an estimate of the market value of the material at the works consuming it should be made and indicated as an "estimate." For example, a concern may own a wood-pulp mill in one state and a paper mill in another state, using the pulp from the pulp mill. If the paper mill is charged for the pulp, either at cost or at a market value or an arbitrary value, the figure actually charged should be used; otherwise, the estimated market value of the pulp delivered at the paper mill.

In all cases of such transfer of products from one establishment to another establishment under the same ownership or general management, and where the two are not treated by their owners or operators as independent establishments, with independent operating accounts, give, under the head of "Remarks," such information regarding the legal and working arrangements of the two establishments, and particularly the financial system followed in the utilization by one establishment of the products of another related one, as will enable the office to determine the nature of this relationship and assure itself that the method followed in filling the schedule for one of the establishments harmonizes with that followed in the schedule for the other, since the reports may be secured by different agents.

74. Cost of fuel.—Include with "materials" as called for, the cost of all fuel used, whether for heat, light, or power, or in the process of manufacture, as in the case of coal used in gas plants.

75. Rent of power.—Include in the cost of materials the total expenditure during the year for power rented from other establishments, whether by direct shafting or belting transmission, steam, electric current, or other method. The cost of gas and electricity for lighting should not be included with rent of power unless its cost can not be segregated from that for power.
INSTRUCTIONS TO SPECIAL AGENTS.

INQUIRY 6.—Products.

76. Quantity and value.—The General Schedule for 1921 calls for the quantity and value of the principal products, and such information should be secured where it is practicable to do so.

Since the General Schedule provides for the quantity and value of the principal products, "All other products" called for by total value in the General Schedule, should, as a rule, represent only a small proportion of the total value of products.

Agents will be given a classification list for 1921 that will show the industries which will be reported separately. While, as a rule, all products of importance should be reported separately, special attention must be given to reporting those named on the classification list. The purpose of this list is to indicate in a general way the character of the articles covered by the several classifications.

When a classification is preceded by a star (*) it indicates that special details as to products are called for, and the report for the establishment must be made on the special schedule provided for that purpose. It often happens that products specifically called for on these special schedules are made in small quantities by establishments whose chief products do not call for a special schedule. In such cases it is essential that the quantity of such products be shown on the General Schedule by the proper unit of measure, as called for on the special schedule provided for such products.

77. Production, not sales, desired.—Inquiry 6 calls for the value of the products made during the year, not the value of the products sold. The sales during the year may be considerably greater or considerably less than the value of the products manufactured during the year. Where the manufacturer has no records showing directly the products of the year, but has records showing the sales, the products for the year may be ascertained by adding to the sales the increase in the stock of finished goods (or stocks in process of manufacture) on hand at the end of the year as compared with the beginning of the year, or by deducting from the sales the decrease in such stocks. In other words, the sales account and the inventory together would have to be consulted in order to obtain the value of the products of the year.

78. Selling value at the works desired.—The value of the products desired is not the cost of their manufacture, but the selling value at the factory or works, which generally exceeds the cost of manufacture.
79. Exclusion of freight.—The value desired for products is the value at the works. In many cases manufacturers sell all or part of their goods delivered at distant points and themselves pay the freight. In such cases the freight charges should, if possible, be deducted from the gross receipts from sales.

80. Deduction of discounts.—Manufacturers sometimes allow large discounts from their gross or list prices. In such cases the net value obtained by deducting these large discounts should be secured and not the gross selling price. Small discounts for cash payments of time accounts are not to be considered in this connection. Products furnished to others without charge in payment of obligations or in fulfillment of agreements, like gas to a municipality for instance, should be reported under products at their estimated value. The value reported for the manufacture of gas should be the receipts, not the list price.

81. Selling departments.—Manufacturing establishments sometimes turn over their products to a selling department at a given value. This factory value may be taken as the value of the products for census purposes instead of the final amount realized by the selling department. In case the value reported represents the selling price received for the goods by the selling department, however, the number of salesmen and their salaries and commissions should be included in Inquiries 2 and 3. In case the value given is the factory value at which the product is turned over to the selling department, such selling expenses should not be included.

82. Exceptions in certain industries.—The above general rules regarding the basis for the value of products are subject to some slight modification in a few industries, as indicated by the supplemental schedule for those industries. In railroad repair shops, for instance, the work is not, as a rule, performed for others, nor are the products made for sale, but are for the use and benefit of the company itself. In this industry, therefore, the value of the product will usually represent simply the cost of production.

83. Itemization of products.—Space is left on the General Schedule for an enumeration by quantity and value of the important items comprising the total products. The total products should in all cases be taken from bookkeeping records, but the records may not always show the quantity and value of the separate items of products as desired. In such cases careful estimates for the principal items will be accepted, but the fact that they are estimates should be noted on the schedule, and the sum of the items as to values should correspond to the total. It may
not be practicable to give a large number of the minor items, and
in such cases these can be grouped together under "All other
products." No considerable portion of the value of products,
however, should be reported under "All other products."

84. Contract work for others.—Many establishments do work
for other establishments which furnish the whole or part of the
materials used. The amount received for such contract work
should always be shown separately under "Products" as "Con-
tract work on materials furnished by others."

85. Custom work and repairing.—Under "Amount received for
custom work and repairing" report the amount received, or the
charges, for custom work, repairing, and job work of all kinds.
Contract work on materials furnished by other manufacturing
establishments, however, should be reported as a separate item.
(See preceding paragraph.)

86. If the amount reported for salaries and wages and cost
of materials exceed value of products.—It may happen that
the sum of the totals of Inquiries 3 and 5 is in excess of the value
of the products reported for Inquiry 6. In such cases the agent
must call the attention of the person furnishing the information
to the fact, which probably will be due to a misunderstanding or
to an error. If there is an error, it should be corrected. If,
however, the figures are correct, the word "Correct" should be
written under the total value of products and an explanation made
under "Remarks" of the conditions which caused the unusual
condition. In this connection consideration should be given to the
fact that such expenditures as rent and taxes, advertising, travel-
ing expenses, ordinary repairs to buildings and machinery, etc.,
which would generally add largely to the cost of production, are
not called for.

Inquiry 6, b, is designed to ascertain whether the factory, as it
existed in 1921, was operated at its full (or 100 per cent) capacity.
The answer should show the per cent that it was operated.

Remarks.

87. Explanation frequently required.—The instructions for
several of the inquiries indicate the character of the information
that should be given here. The space under "Remarks," however,
is reserved, primarily, for the agent to explain unusual conditions
connected with the inquiries or with the report as a whole. It is
expected that such explanation will obviate the necessity of office
correspondence with the establishment. Upon examining the
schedule, after answers have been made to all the inquiries, the
agent may detect inconsistencies or omissions. If it is impossible to correct them, an explanation should be given. All schedules are carefully examined in the office before they are tabulated, and explanations of inconsistencies are indispensable to a proper understanding of the report.

These explanatory statements should be as brief and direct as possible. At the same time they should cover all pertinent facts, and, if necessary, use should be made of an additional blank sheet.

The space under "Remarks" must not be used for correspondence or statements not pertinent to the report.

**Certificate.**

88. Period covered.—Wherever possible the report should cover a period of 12 months, whether the establishment was in active operation during the whole of such period or not, and the answer to this question should show the whole period covered. In case, however, the establishment has been in active operation only a small portion of the 12 months, as often happens in seasonable industries, such as canning, etc., that fact should be stated under "Remarks." In the case of establishments beginning operations for the first time during the year the answer should show the period actually covered. It should be noted, however, under "Remarks" that the data relate to an establishment which began operations during the year.

The ownership of some of the establishments canvassed may have changed hands during the year. If the present owner or operator can furnish data for the entire period, they should be obtained from him, and cover the combined operations of the establishment during the year, while under the management of his predecessor as well as under his own management. If this is done a statement to that effect should be made under "Remarks," giving name and address of predecessor, and business engaged in, if any. If this cannot be done, the former proprietor should be located and the report for the other portion of the year obtained from him. If this is impracticable, the present owner should be asked to give such information as he possesses regarding the general character and volume of business under the former owner, its comparison with what he himself did, and the facts reported by the agent under "Remarks," or on a sheet attached to the schedule covering the present ownership.

The period covered, where possible, should be that of the year ending December 31, 1921. For some seasonal industries, such as
beet sugar and cottonseed oil, the reports should relate to the
seasonal year most nearly conforming to the census year. This is
referred to in the special schedules for the seasonal industries.
In the majority of cases, however, the data can be secured for
the year ending December 31, 1921. Where, however, the busi-
ness year of the establishment does not correspond to the calendar
year, the data may be secured for such completed business year as
corresponds most nearly to the calendar year 1921.

89. Signatures required.—Each report should be signed by the
person responsible for the information furnished, with his official
title and address. The agent who secures the return must also
sign this certificate.

SPECIAL SCHEDULES.

90. List of special schedules.—Special schedules must be pre-
pared for each of the industries indicated:

102. Agricultural implements.
103. Aircraft (airplanes, seaplanes, and airships).
104. Ammunition, firearms, ordnance and accessories.
105. Automobiles (including trucks and tractors).
106. Beet-sugar factories.
107. Boots and shoes.
108. Brass, bronze, copper, and allied products (including aluminum, German silver, and other nonferrous metals and alloys).
110. Buttons.
111. Cane sugar.
112. Cane-sugar refining.
113. Canning and preserving, fish and oysters.
114. Canning and preserving, fruits and vegetables.
115. Carriages and wagons.
116. Cars, steam and electric railroad.

117. Cast-iron pipe.
118. Chemical manufactures.
119. Chocolate and cocoa products.
120. Clay and refractory products.
121. Cordage and twine, jute goods, and linen goods.
122. Cotton goods.
123. Cotton lace goods.
124. Druggists' preparations and patent and proprietary medicines and compounds.
125. Dyestuffs and extracts.
126. Electrical machinery and apparatus.
127. Engines (including steam and electric locomotives).
128. Essential-oil factories.
129. Explosives.
130. Ferroalloys.
131. Fertilizers.
132. Flour, feed, and grist mills.
133. Gas, manufactured.
134. Glass works.
135. Glucose and starch factories.
136. Ice, manufactured.
137. Iron and steel, blast furnaces.
138. Iron and steel, steel works and rolling mills. (Same as “steel works and rolling mills.”)
139. Knit goods.
140. Leather gloves and mittens.
141. Leather, tanned and carried.
147. Lime.
142. Lumber and timber products.¹
143. Machine tools.
144. Machinery. (See par. 91.)
145. Motor cycles and bicycles.
146. Musical instruments.
147. Needles, pins, and hooks and eyes.
148. Oilcloth and linoleum.
149. Paints and varnishes.
150. Paper and pulp.²
150. Pulp-wood consumed (card schedule).
151. Petroleum refining.
152. Phonographs, graphophones, and talking machines (including records, parts, and accessories).
153. Printing and publishing (including job printing offices).
154. Railroad repair shops, steam and electric.
155. Rice, cleaning and polishing.
156. Rubber tires, tubes, and rubber goods, n. e. s.
157. Shipbuilding (including repair yards and the building of rowboats, canoes, etc).
158. Silk manufactures (including commission throwing).
159. Slaughtering and meat packing.
160. Soap.
161. Steel works and rolling mills.
161. Textile machinery.
162. Tin-plate and terneplate works.
163. Turpentine and rosin.
164. Wire.
165. Wood distillation.
166. Wool manufactures (including woolens, worsteds, carpets, felts, wool-felt hats, shoddy, and fur-felt hats).

For a number of these industries there will be comparatively few establishments reported, or be largely localized, and all agents may not be given a full supply of all the special schedules. Request must be made for additional schedules if required.

91. Machinery.—The special schedule “Machinery” should be used for establishments manufacturing “Foundry and machine

¹ E. S. and W. S. (See par. 37.)
² Mills making wood pulp must also prepare card schedule “Pulp wood consumed.”
shop products.” For index cards showing the number (124), reports should be secured on the “Machinery Special.” If no machinery was manufactured, enter the other “Foundry products” under “All other products” on this schedule.

92. Object of special schedules.—The special schedules are designed to develop statistics peculiar to the different industries; therefore the inquiries except 1 to 5 are not uniform.

When two or more of the industries for which special schedules are provided are carried on by the same establishment, and it is practicable to secure for each industry complete separate reports, they should be secured. If this is impracticable, obtain a complete report on the special schedule which most nearly represents the main products of the establishment, and get additional details, as to products only, which are not specifically provided for on that schedule, but are shown in others. In such cases the schedule or schedules containing additional details as to products must have the name and address of the company under Inquiry 1, the same file number as the complete report, and a statement under “Remarks,” that the report merely represents details as to products not provided for on the complete report, to which it should be attached. A few illustrations will serve. For instance a slaughtering and meat packing establishment, for which a special schedule is provided, may manufacture minor products not covered in detail by the special for that industry, but called for in the special for other industries, such as fertilizers and soap which are frequently by-products of slaughtering establishments and are included among the products on the special schedule for that industry, but separate special schedules—“Fertilizers” and “Soap”—for each should also be prepared. Special schedules in such cases are essential and must be used.

93. Administrative and general office schedule described.—Some companies control a number of factories, from a central office, and do not make a distribution of expenses, etc., for the different plants. In such cases the employees at the central office, their salaries and wages, which are not included in the reports for the separate plants, must be shown in a report prepared on Form 101. The inquiries on this schedule correspond with the inquiries on the same subjects in the other schedules for manufactures, and the instructions given for them should be followed. Be careful not to duplicate any of the amounts contained in the reports of the separate plants, and supply the information called for under Inquiry 4, on back of schedule.