APPENDIX A.—INSTRUCTIONS AND SCHEDULES FOR THE CENSUS OF AGRICULTURE: 1920.

The following pages contain copies of the instructions to enumerators and of the schedules (see pp. 911–916) used in the collection of agricultural statistics at the census of 1920. Some of the most essential instructions were printed on the schedules themselves, but all of the instructions, in detail, were included in two pamphlets entitled "Instructions to Enumerators" and "Supplemental Instructions to Enumerators for Filling Out the Agricultural Schedules." The schedules and instructions for the censuses of 1900 and 1910 are printed in full at the end of the first volume of the report on agriculture for the Thirteenth Census (Volume V of the Reports), and those for the earlier censuses at the end of the first volume of the report on agriculture for the Twelfth Census (Volume V of the Reports).

INSTRUCTIONS TO ENUMERATORS.

THE CENSUS OF AGRICULTURE.

Objects of the census of agriculture.—The Census of Agriculture was authorized for the purpose of obtaining (1) accurate statistics relative to farm land, live stock, and other farm property on January 1, 1920; (2) statistics for the year 1919 concerning crops, livestock products, farm expenses, etc.; and (3) an inventory of live stock elsewhere than on farms on January 1, 1920.

Census schedules are confidential.—The information reported on the Census schedules will be treated as *strictly confidential* under all circumstances. In particular, this information will not be used as a basis for taxation, nor will it be communicated to any tax assessor. The enumerator should make these points clear, especially in dealing with persons who seem to be unwilling to give the information requested.

Schedules to be used.—Two schedules are to be used by the enumerators in taking the 1920 Census of Agriculture: (1) The general farm schedule and (2) the schedule for live stock not on farms or ranges.

The general farm schedule (Form 9–122) will be used in the enumeration of all farms.

The schedule for live stock not on farms (Form 9–123) will be used for reporting domestic animals kept in cities and villages or elsewhere in places not covered by farm schedules.

THE GENERAL FARM SCHEDULE.

In order that they may be readily consulted, certain especially important instructions and definitions have been printed as a part of the schedule. You should study carefully both the schedule and the instructions given in this pamphlet before you try to fill out the first farm schedule. If there is any part of the schedule which the instructions do not make clear, ask the supervisor for your district to explain it to you.

GENERAL INSTRUCTIONS AND DEFINITIONS.

Enumerator's record.—Fill out carefully the blank spaces for the enumerator's record on each schedule. Number the farms, as you visit them, beginning with number 1, and continuing in order through the enumeration district; and enter the number of each farm in the space provided at the top of the schedule. Then enter in the proper spaces the number of the population sheet and the number of the line on that sheet where the name of the farm operator is written. These figures are necessary for identification purposes and must never be omitted. The date on which the farm was enumerated and your signature complete the entries in the first section of the enumerator's record.

The entries in the second section should show the place where the farm operator resides, in detail, as given on the population schedule.

The names of the county and state should be written in full in the proper space on each schedule. Abbreviations will not be permitted, but a rubber stamp may be used if convenient. The number of the supervisor's district and the number of the enumeration district must appear in their proper places, and the figures must be legible and reasonably large.

Source of information.—Obtain information with regard to a farm from the farm operator in every case where this is possible. If it is necessary to accept the statements of a member of his family, or of some other person, be sure that this person is able to give you reliable information.

All questions to be answered in order.—Give the information asked for on the schedule in the order of the inquiries for every crop produced and every kind of animal on the farm. Inability to obtain exact data does not justify failure to answer a question. The most accurate returns that the circumstances permit must be obtained. If farm records or accounts are kept, take figures from these. If such records are not available, careful estimates should in all cases be obtained or made. Where there are no crops or animals corresponding to names listed in schedule, leave the spaces opposite such names blank. Make no entries in spaces marked thus: "X X X."

Definition of "farm."—A farm, for census purposes, is all the land which is directly farmed by one person conducting agricultural operations either by his own labor or with the assistance of members of his household or hired employees. The term "agricultural operations" is used as a general term referring to the work of growing crops, producing other agricultural products, and raising domestic animals, poultry, or bees.

A "farm" as thus defined may consist of a single tract of land or of a number of separate and distinct tracts, and these several tracts may be held under different tenures, as when one tract is owned by the farmer and another is rented by him. Thus if a man who owns 100 acres rents an additional 10 acres from some one else and operates both the 100 acres and the 10 acres, then his "farm" includes the 110 acres.

When a landowner has one or more tenants, renters, croppers, or managers, the land operated by each of these is considered a "farm." Thus, on a plantation, the land operated by each cropper or tenant should be reported as a separate farm, and the land operated by the owner or manager by means of wage hands should likewise be reported as a separate farm. Or, to take an example of a different kind, if a man owning 120 acres of land rents 40 acres to a tenant and farms the remaining 80 acres himself, his "farm" is the 80 acres which he operates, not the 120 acres which he owns, while the 40 acres rented comprise a separate farm to be reported in the name of the tenant.

Small farms.—Do not report as a "farm" any tract of land less than 3 acres, unless agricultural products to the value of $250 or more were produced on such tract in 1919, or unless it required for its agricultural operations the continuous services of at least one person.

Market gardens, dairies, etc.—All market, truck, and fruit gardens, nurseries, greenhouses, poultry yards, places for keeping bees, and all dairies in or near cities, villages, and incorporated towns, even though little land is employed, are, for census purposes, farms, provided they produced in 1919 agricultural products to the value of at least $250 or required the continuous services of at least one person.

Institutional farms.—The lands utilized by public institutions, such as almshouses, insane hospitals, etc., for growing vegetables or fruit, or carrying on other agricultural operations, are, for census purposes, farms. Such farms include only the land used for agri-

cultural purposes, and their value is the value of that land, together with the value of such buildings only as are used mainly for agricultural purposes.

Farms being collectively developed.—In some localities individuals, firms, or corporations purchase considerable tracts of agricultural land, set out fruit trees, construct irrigation works, or make other improvements thereon and then sell the land in small parcels on the installment plan to nonresident investors, contracting at the time of sale to cultivate the land for a certain length of time. Even where a large part of the land has been sold in this way, however, the tract is usually operated essentially as a unit, and should be returned as one farm in the name of the person managing it.

Change in size of farms.—If a tract of land which in 1919 was divided and cultivated by two or more persons is cultivated by one person on January 1, 1920, report it as one farm; or, vice versa, if that which in 1919 was one farm is operated on January 1, 1920, as two or more distinct farms, report as many farms as there are separate owners, managers, or tenants.

Farm operator.—The term "farm operator" is employed by the Census Bureau to designate the person who directly works a farm, as owner, hired manager, tenant, or cropper, conducting agricultural operations either by his own labor alone or with the assistance of members of his household or of hired employees. Note especially that a farm should be returned in the name of such farm operator—that is, the person actually conducting the agricultural operations—even though he may be subject to incidental supervision. Thus when land is rented, the tenant, not the owner, is the farm operator, even though the owner may exercise some supervision over the farming operations.

Change of farm operator.—Do not omit the report of the crops or other products of a farm for 1919 because it has changed operators between the close of the crop year 1919, and January 1, 1920. Such a farm should be reported *in the name of the person operating it on January 1, 1920*, and not in the name of the former operator. Obtain from the present operator the statistics of live stock, implements, machinery, and farm values on January 1, 1920, as for any other farm. If the previous occupant can be reached, secure from him the returns for the crops of 1919; otherwise secure estimates of these crops from the present operator, or from any other reliable source. In the case of farms operated by tenants, this information can generally be best obtained from the owners or their agents, if they are accessible.

Farms located in other districts.—Prepare a schedule for the farm of every farm operator who *lives in your enumeration district*, whether his farm lies wholly in your district, partly in your district and partly in another, or wholly in another. Where the operator's farm lies wholly outside of your district write across the schedule in large letters "FARM NOT IN THIS DISTRICT." If you have received a "Nonresident farmer's slip" from your supervisor relating to this farm, attach it to the schedule. Should no slip have been received, attach a memorandum stating the name of the minor civil division, as township, borough, or precinct, in which the farm is located, together with the number of the enumeration district or the name of the enumerator, if known to you.

If, for any reason, you find that no schedule should be made for a "Nonresident farmer's slip" sent to you, you should return the slip to your supervisor with a memorandum on the back stating why no schedule is returned.

When a farm is located in your district but its operator resides in another district.—Whenever you learn of a farm located in your enumeration district, but operated by an individual residing in another enumeration district, do not try to obtain a schedule for such farm, but fill out in duplicate a "Nonresident farmer's slip" (Form 9-138), and forward both copies to your supervisor, as directed on that slip. This will assist in securing a schedule for every farm.

Two or more schedules for one farm operator.—As a rule one (and only one) general farm schedule should be returned for each farm operator. But to this rule there is one general exception. If a farm operator operates two separate tracts of land as hired manager for two different owners, or one tract as owner, part owner, or tenant, and another as manager, a separate schedule should be returned for each, as each represents a separate enterprise. (See paragraph relative to farms being collectively developed.)

Distinction between farm and factory operations.—The manufacture of butter, cheese, cider, vinegar, or other products may be carried on in buildings and plants operated either (1) in connection with farms or (2) as independent manufacturing enterprises. In the latter case such buildings or plants are to be regarded as factories, to be covered by the Census of Manufactures and not to be included in the Census of Agriculture. But unless it is clear that such a building or plant is operated as a manufacturing enterprise independent of a farm, you should include its value as a part of the value of the farm on which it is located. You should include with the products of the farm, however, only the butter, cheese, cider, or other products made in such establishments from milk produced or crops (apples, grapes, etc.) grown *on the farm*. Where raw materials other than those produced on the farm on which the plant is located are used, state that fact on the margin of the schedule or on a slip attached.

Special rule regarding cane sirup or sugar and sorghum mills.—Where mills exist on farms for the manufacture of cane sirup or sugar, or sorghum sirup, the value of such mills must be included in the farm report if they confine their operations to the treatment of cane or sorghum grown on the farm on which they are located. If, however, a mill located on a farm crushes cane grown on farms other than the one on which it is located, its value should not be included in the general farm schedule.

Special rule regarding canning factories.—Factories canning fruits and vegetables for sale, even though located on a farm and using only the fruits and vegetables grown on such farm are *not* to be reported on the general farm schedule. In reporting the value of fruits, vegetables, etc., grown on the farm and canned in such factories, give their value when delivered to the factory, and not their value after canning.

INSTRUCTIONS FOR SPECIFIC INQUIRIES.

The following paragraphs relate to specific inquiries on the schedule. Inquiries with regard to which no instructions are given are assumed to be self-explanatory.

INFORMATION CONCERNING FARM OPERATOR.

Inquiry 2. Post-office address.—The correct post-office address of the person whose name is given in inquiry 1 should always be obtained by direct Inquiry. Do not assume, because the farm operator resides near some town or village, that he receives his mail through the post office located there.

Inquiry 3. Color or race.—Write "*W*" for white; "*B*" for black; "*Mu*" for mulatto; "*In*" for Indian; "*Ch*" for Chinese; and "*Jp*" for Japanese. In all other cases give the race, as Filipino, Malay, etc.

Inquiry 6. Country of birth.—If the farm operator was born in the United States, simply write "*U. S.*" If he is foreign born, give the name of the State or Province, or of the city or town, as well as the country in which he was born.

Inquiry 7. Time as wage hand.—Give the number of years the farm operator has worked on a farm for wages, whether recently or at any time in the past.

Inquiry 8. Time as tenant.—Give the whole number of years the farm operator has operated any farm as a tenant. Be sure to ask this question, not only of tenant farmers but also of those who now own their farms.

Inquiry 9. Time as farm owner.—Give the number of years the farm operator has operated any farm as an owner. Ask this question of tenant farmers as well as of those who are now owners. The object of these three questions (Inquiries 7, 8, and 9) is to show in a general way what farm experience the farm operator has had in earlier years.

FARM TENURE.

You must address to the operator Inquiries 11, 12, 13, and 14 in the order and in the exact form in which they are printed, and write the replies "*Yes*" or "*No*" as they are given. If, in answer to Inquiry 11, the reply is "Yes," the enumerator must make sure that the question was understood by the operator and that the same answer is not given to Inquiries 12, 13, or 14. Only one of the questions 11, 12, 13, or 14 may properly be answered "*Yes*" under any possible condition of tenure.

Inquiries 11 and 12. Land owned.—Farm land is regarded as "owned" not only where the operator holds direct title to it, but also where it is owned by his wife, where the operator is an heir or one of the heirs to it, where he is trustee or guardian for such heirs, where he has bought the land on a contract for a deed, or where he has purchased a farm sold for debt and holds it subject to redemption by the original owner.

Ranchers using public lands.—Public land used by a rancher without rental is not a part of the operator's farm, and where a rancher owns or leases no land but grazes animals entirely on public domain, write opposite Inquiries 11 and 16 "*No land owned or leased.*"

Inquiry 13. Section 1. Rent paid.—If the answer to Inquiry 13 is "Yes," the question in section 1 under Inquiry 13 must be asked and answered in accordance with explanations *a*, *b*, *c*, and *d*. Give only such information as is requested in these explanations. For example, in case of a share tenant, there should be written on the blank line the words "*½ cotton*," "*⅓ corn*," or such other designation as the circumstances require. If rent is paid in cash, the annual rental in dollars per acre is desired, as "*$5 an acre.*"

If a definite quantity of the crop is paid as rent, the quantity should be stated as it appears in the terms of the agreement under which the operator rents the farm. If the rent to be paid is stated as a certain quantity per acre, then it should be entered on the schedule in that manner; if as so many bushels of grain, bales of cotton, pounds of tobacco, or definite quantities of other products, it should be so reported.

It is very important that this question relating to the rent paid *should be answered carefully and accurately. In particular it is* important to know whether the tenant pays *cash* rent, a *share* of the crops, or a *stated amount* of farm products. Be sure that your answer indicates clearly *which form of rent is paid*, even if you have to estimate the amount.

Inquiry 13. Section 2. Work animals furnished.—All farm operators who have answered "Yes" to Inquiry 13 must also answer the question in section 2 under this inquiry. Work animals, in the sense in which the term is used here, are those used in putting in, cultivating, and harvesting a crop. If the landlord furnishes sufficient work animals to carry on the farm, the answer to this question should be "Yes," even though animals belonging to the tenant may be occasionally used for farm work.

FARM ACREAGE.

Inquiry 16. Total farm acreage.—The acreage reported in answer to this inquiry must include all the land on which the person named in answer to Inquiry 1 conducts farming operations of any kind, whether such land is actually tilled, is lying idle or fallow, is used for pasture, or is in woodland or other unimproved land. Thus there may be included land which is detached from that on which the major portion of the farming operations are conducted and which may not be adapted to profitable farming; but if the land is a part of the farm as originally purchased by the owner, or if it is under the control of the tenant or manager, or is used by him in any way, it should be included in the total acreage of the farm. Such distinct tracts should not be shown separately, but in all divisions of the schedule they should be regarded as a part of the farm and should be treated in the same manner as if all the land were in a single continuous tract.

The total acreage of the farm, as given in answer to Inquiry 16, should equal the sum of the numbers of acres reported in answer to Inquiries 17, 18, and 19. Fractions of an acre should not be entered in answering these inquiries. If the farm consists of less than 1 acre (see "Small farms") it must be reported as 1 acre. If more than 1 acre but less than 2 acres, or more than 2 acres but less than 3 acres, and so on, the nearest whole number of acres should be reported.

Inquiry 17. Improved land.—The definition given in the note under this inquiry on the schedule will make it clear in most instances what land is to be classed as improved land. Questions may arise occasionally with regard to land now in permanent pasture which was formerly cultivated. Such land should not be included as improved land, of course, if it is now grown up to brush or trees, but only if it is still clear and in such condition that it might be plowed and put into crops.

USES OF LAND.

Inquiry 21. Pasture land.—In answer to this inquiry, especially sections 2 and 3, include only land which was used exclusively for pasture during the year 1919. Do not include land that was pastured after the crop was harvested, nor grain fields which were pastured for a time in the spring but which later produced a crop.

FARM VALUES.

Inquiry 22. Total value of farm on January 1, 1920.—Give the value of the land reported in answer to Inquiry 16, whether such land is owned, rented, or managed by the farm operator, and the value of all buildings and improvements attached to the land. The value of implements and machinery should not be included. The farm operator's valuation must be accepted unless you have reason to believe that such valuation is below the actual value of the farm or is grossly exaggerated. In such cases give, as nearly as you can determine, the amount for which the farm, including buildings and improvements, would sell under normal conditions (not at forced sale). The appraiser's valuation, on which taxation of the farm is based, is not generally a safe guide, and it should be used only when it appears to be fair and reasonable. Make it clear to the farm *operator that the values returned on the census schedule are not* to be used for purposes of taxation and are not open at any time to public inspection.

Inquiry 23. Value of farm buildings.—A fair estimate of the present value of the farm buildings is desired, not a replacement value. Do not include, either here or under Inquiry 22, the value of buildings, such as creameries, canning factories, or sirup mills, which, though situated on the farm, are used for manufacturing rather than for farm purposes.

Inquiry 24. Value of implements and machinery.—Report the value of all implements, machinery, etc., used on the farm and permanently (or usually) kept there, whether they belong to the farm operator or not. Machinery owned cooperatively by a group of farmers should be reported on the schedule for the farm where it is usually kept; or if no "usual" place is provided, then on the schedule for the farm where it happens to be on January 1, 1920.

FARM ENCUMBRANCE.

Inquiry 25. Amount of farm mortgage.—This question must be asked of all farm operators who have answered "Yes" to Inquiries 11 or 12—that is, of all farm owners, including those who rent additional land. The debts which should be reported include not only all debts secured by instruments locally called "mortgages," but also all debts represented by judgment notes, confessions of judgment, deeds of trust, deeds with vendor or lien clause, bonds or contracts for title, or any other legal instruments that partake of the nature of mortgages upon real estate. Do *not* include any debts represented by crop liens or mechanics' liens, nor any debts on live stock or on implements and machinery. Where the mortgage on a farm covers buildings and land together (as it usually does), give the whole amount of the mortgage outstanding, in answer to the second part of the question. Do not try to separate that part which is secured on the land only.

Interest rate.—*Only one line is provided on which to report the* rate of interest. If there are two or more debts at different rates of interest, report each debt separately, with the rate of interest on the same. For example, "*$1,000 at 5 per cent and $1,500 at 6 per cent.*" Do not include as interest any commission or other extra charges.

Mortgage returns to be made for owned land only.—The questions of this inquiry, addressed to an operator who has answered "Yes" to Inquiry 12, apply only to that part of the land which the operator owns.

DRAINAGE.

Definition.—For census purposes drainage has been defined as follows: "Drainage of agricultural lands is the act or process of drawing off an excess of water by underground conduits, pipes, or tiles, or by open or covered trenches in the surface of the ground for the purpose of improving the condition of the soil and crops."

Inquiry 30. Area drained.—Report the acreage which is actually benefited or made of more value for agricultural purposes by artificial drainage. This will often be less than the total area from which water flows to the drains. Do not include land on which only temporary work has been done, such as "bedding" the fields or laying out "dead furrows" to hasten the surface flow.

Inquiry 31. Area needing drainage.—Under Inquiry 31 report the area of land in the farm not now suitable for crops which could be made available for cultivation by drainage. Report under section 1, "By drainage only," the acreage which needs no clearing or which is merely covered with grass, weeds, or other annual growth, and under section 2, as needing both "drainage and clearing," the acreage which is covered with trees, stumps, or perennial woody shrubs.

The purpose of Inquiries 32 and 33 is to establish a complete list of drainage and flood-protection enterprises, such as drainage districts, levee districts, county drains, irrigation districts doing drainage work, and *development companies, and to determine the* number of farms in each drainage enterprise.

DOMESTIC ANIMALS, POULTRY, AND BEES ON THIS FARM JANUARY 1, 1920, AND ANIMAL PRODUCTS IN 1919.

Domestic animals on the farm.—Report all domestic animals on the farm on January 1, 1920, whether they belong to the farm operator or not. The phrase *on the farm* (in the case of all farms other than those using the public domain) means regularly *kept on the farm.* If a farmer hires his neighbor's team for a short time, this team is not to be regarded as "on the farm" for census purposes and should not be included in that farm schedule, even though it may happen to be at work on the farm January 1, 1920. But horses or other animals belonging to the hired man or to others, which are boarded or cared for on the farm should be included. Breeding animals owned jointly by two or more farmers and kept in turn on *the various farms should be reported on the farm where they happen* to be on January 1, 1920. In the case of ranchmen using the public domain, animals *on the farm* should be understood to mean all animals belonging to or under the care of the ranchman for whom the schedule is prepared.

Where the owner of a large number of hives of bees distributes them among the farmers of the region, who keep them on their farms, the bees so distributed must be reported on the schedules for the farms where they are found. Care should be taken that

the owner of such bees does not also report them. Similarly, where the owner of cattle gives them out to be taken care of on other ranches or farms, such cattle must be reported on the schedules for the individual farms where they are kept.

Inquiry 39. Total amount of milk produced.—In the column headed "Quantity" should be entered the total number of gallons of milk produced on the farm in 1919, including milk used on the farm in any way, as well as milk sold. You must not use an "average" production in making estimates of milk produced, but must obtain from the farm operator either figures based on records or the closest possible estimate of the actual production. When the amount of milk produced is reported in pounds it must be reduced to gallons before it is entered on the schedule. To make the reduction, multiply the number of pounds by 0.116 (or multiply by 11.6 and divide by 100). Report only the whole number of gallons, omitting decimals.

Inquiry 40. Disposition of milk.—Report under section 1, as milk sold, only such milk as is sold whole or unskimmed. Sales of skimmed milk or buttermilk should be separately reported on some unused line of Inquiry 40. For example, if no cheese is made on the farm, cross out the word "cheese" and write in the words "*skimmed milk*" or "*buttermilk.*"

Under section 2 report only cream sold by the quart or gallon or on some basis other than the butter fat content. Milk or cream sold on the basis of the butter fat contained should be reported as butter fat sold and not as milk or cream sold. To put it another way, if the farmer *receives payment* for a given number of *pounds of butter fat*, it will usually be correct to report the product as butter fat sold.

If the manufacture of butter or cheese on the farm has assumed the proportions of a factory operation requiring the use of power and machinery and the employment of labor exclusively for the operation of the plant, the butter and cheese manufactured should not be reported on this schedule, but only the milk or cream produced on the farm and used as material for their manufacture.

Inquiry 42. Wool shorn.—In certain sections of the country sheep are shorn twice during the year. In such instances report the number of sheep shorn during the year, not the number of fleeces cut, and write the words "shorn twice" on the margin of the schedule.

Inquiry 47. Eggs and chickens.—Note that this inquiry relates to chicken eggs and chickens only, and do not report here any other kinds of eggs or poultry.

Under section 3 report the total number of chickens which were raised on the farm in 1919. Do not include those hatched and sold as "baby chicks," but do include "baby chicks" purchased and raised, as well as all other chickens hatched and raised, whether consumed, sold as broilers or otherwise, or now on hand.

Under section 4 report the number and value of chickens sold, whether sold alive or dressed, again excluding those sold as "baby chicks."

Inquiry 50. Pure-bred animals.—Report on the proper line of this inquiry all *registered* stock on the farm, of the kinds listed, giving the name of the breed and the number of animals of each breed. Animals reported here must also be reported in the proper classes under Inquiries 34, 37, 38, 41, or 45.

Inquiry 51. Young animals raised on the farm in 1919.—You should report all calves, lambs, and pigs born in 1919 and *retained on the farm* (except such as died during the year), whether such animals were sold or slaughtered for food in 1919 or were on the farm on January 1, 1920. Animals purchased are not to be reported.

Inquiry 52. Domestic animals slaughtered on the farm.—This inquiry is designed primarily to obtain the facts with regard to animals slaughtered for home use. You should report such operations for all farms, unless it is entirely clear that the slaughterhouse operations constitute a separate and distinct business.

IRRIGATION.

Inquiry 55. Acreage irrigated.—Report the number of acres in the farm enumerated which were irrigated in 1919. The following definition of irrigated land has been adopted for census purposes: "Land should be classed as irrigated which has water supplied to it for agricultural purposes by artificial means or by seepage from canals, reservoirs, or other irrigated lands; but land which has natural ground water sufficiently near the surface to grow crops should not be classed as irrigated unless water is actually applied. Land which is flooded during high water should be classed as irrigated, if water is caused to flow over the land by dams, canals, or otherwise, but should not be classed as irrigated, if the overflow is due to natural causes alone."

In this connection, you should observe the note at the head of the section on "Crops grown on this farm in 1919," which requires that a cross (X) be placed before the *name of each crop irrigated.*

Inquiry 56. Irrigation enterprises.—If the water used was supplied by a company, a corporation, or any other organization, you should enter the name of such organization or enterprise on the blank line. If water was supplied by a canal or other works belonging to the owner of the farm, the word "*Private*" should be written on this line.

The note under this inquiry calling for the securing of an irrigation schedule in certain cases applies only in the arid and semiarid regions of the West, and enumerators in other sections should ignore this note unless instructed otherwise by the supervisor.

Inquiry 57. Payments for water.—The total amount of payments for water for the season of 1919 should be given in answering this inquiry. This amount should not include any part of the purchase price for equipment or water rights. If the payment for the use of the land included the cost of water to the farm operator, the cost of the water alone should be estimated and reported. For individual enterprises there should be reported the cost of pumping, maintenance, cleaning main ditches, and all other items which could reasonably be charged as a part of the cost of bringing water to the land.

CROPS GROWN ON THIS FARM IN 1919.

Frequently farmers will be found who are renting additional land on January 1, 1920, which they did not rent in 1919, or who changed farms in 1919, after a part or all of the crops were harvested. All crops should be reported *on the schedule of the farmer who is operating the land on January 1, 1920*, no matter whether they were raised by this farmer or by another. This distinction must be carefully noted in order to avoid a duplication of reports.

You should study carefully the list of crops printed on the schedule, in order that you may be sufficiently familiar with them to avoid omitting any of them or duplicating them in writing. If crops other than those listed were raised on the farm, write in the names of such crops, crossing out names not used, if necessary, and report as usual.

Every reasonable effort should be made to obtain figures based on records, or if no records were kept, reliable estimates made by persons directly concerned with the growing of the crops. You should be well informed, however, with regard to the usual production per acre of various crops in your district, and with other factors which will enable you to assist the farmer in making estimates, where this is necessary. Do not offer any assistance, however, unless it is clearly needed.

Unit of measure.—Report all quantities in the unit of measure printed on the schedule. Where quantities are reported to you in other units, reduce the unit reported to the one specified on the schedule. Be careful to show acreage and quantity in the proper column, and to indicate the unit of measure for any unusual crop, or for any crop (for example, the vegetables in Inquiry 66) for which it is not specified on the schedule.

Inquiry 59. Sirup and sugar crops.—Report on the proper lines those crops which are grown solely for the purpose of making sirup and sugar.

Note that similar crops raised and used as feed for live stock must be reported under Inquiry 60. If a part of the crop is used for sirup or sugar, and a part for forage, the acreage and production must be divided and each part reported in its proper place.

Report in sections 2 and 6 the number of gallons of sirup made on the farm or in small neighborhood mills, either for home consumption or for sale. Be careful to report the *total* number of gallons produced from sorghum or cane grown by the farm operator, and not merely his share of the sirup, if the sirup was made "on shares."

Inquiry 60. Hay and forage.—This inquiry is intended to cover all crops of hay, forage, silage, etc., which were raised in 1919 for use as feed for animals. Crops grown for seed and grain must be reported under Inquiry 61. Where both hay and seed were taken from the same acreage, for example, clover hay and clover seed, you must report the total acreage in connection with each product.

Wild, salt, or prairie grasses.—Under section 8 report all wild, salt, or prairie grasses *cut on the farm.* Grass cut on salt marshes, tide lands, and open prairie, which are not a part of the farm, and the acreage of which is not included in the acreage reported in answer to Inquiry 16, must not be reported here.

Inquiry 61. Grains and seeds.—Only grains and seeds which are ripened on the stalk or vine should be reported under this inquiry. This distinction is imperative, and you must make an effort, in all cases where both stalk (or vine) and seeds are harvested, to separate the production and classify each according to its final use. Stalks or vines which are used for hay or dry forage and from which the grain or seed has been separated by threshing or otherwise, must be reported under Inquiry 60. The separated grain or seed must be reported under Inquiry 61. The total acreage should be reported in both cases, regardless of the resulting duplication.

Mixed crops.—Report under section 1 only those mixed crops which are allowed to ripen before harvesting. Where mixed crops were cut green they must be reported under the proper section of Inquiry 60.

Corn.—Under section 2 report all corn which was harvested as ripened grain (except sweet corn and pop corn, which must be reported under Inquiry 66). The quantity harvested must be given in bushels. If the information is given to you in any other unit of measure you must reduce the quantity reported to bushels of

shelled corn. A bushel of shelled corn weighs 56 pounds and is equivalent to 70 pounds of dry corn in the ear or 2 bushel baskets level full, or 1½ bushel baskets heaped of husked ear corn, or 6 level or 4 heaped bushel baskets of unhusked corn.

Other grains and seeds.—The blank line under section 20 is provided for the report of any grain or seed not specifically mentioned in the preceding sections. You should always inquire if grains or seeds other than those named were raised, and if such are found report them under section 20. Velvet beans, however, should be reported under section 6 of Inquiry 64 and cotton seed should not be reported at all.

Inquiries 62 and 63. Potatoes and sweet potatoes.—Report in these two sections the acreage and production of potatoes and sweet potatoes (including those raised for home use) and also the quantity that has been sold or is to be sold. Give all quantities in bushels, as specified on the schedule. If the farm unit of measure is pounds or barrels, reduce to bushels the quantities reported to you in these units.

Inquiry 64. Other field crops.—Report under section 1 the number of acres of cotton grown and the number of bales produced. If the cotton has not yet been ginned, obtain as accurate an estimate as possible of the number of bales produced. Cotton must not be reported in any other manner. Cotton seed, as already stated, need not be reported.

Tobacco.—Report under section 3 the number of acres cut and the number of pounds of tobacco produced on the farm. On the dotted line following the word "tobacco," write the name of the type; for example, "*burley*," "*Havana seed*," etc.

Velvet beans.—Under section 6 report the total acreage harvested, whether the velvet beans were grown alone or were mixed with another crop and harvested with it. Report the acreage of velvet beans mixed with another crop, even though the "mixed crop" has already been reported under Inquiry 61.

Inquiry 65. Farm garden.—Give the total value of all vegetables, including potatoes and sweet potatoes, which were grown in the home garden or elsewhere on the farm *for home use*. This amount should include the value of vegetables canned, pickled, or dried for home use, whether such vegetables have actually been used or not.

Inquiry 66. Vegetables produced in 1919 for sale, not for home use.—Report any of the vegetables listed which were grown for sale, on the farm enumerated. If any vegetables other than those named were grown, write in the names of these vegetables, using the dotted line following the word "other" under section 12, and crossing out one or more of the names not used, to provide additional lines where necessary. Pop corn must be reported in this section of the schedule. In the first column following the list of vegetables should be given the number of acres devoted to each vegetable. If less than one acre of any kind of vegetables was grown for sale, the fraction of an acre, as ¼, ⅛, etc., should be given, the area being estimated, if possible, in all cases where the exact acreage is unknown. Under "Quantity harvested" should be given the number of pounds, crates, boxes, barrels, etc., harvested, and in the following column the name of the unit of measure, as pounds, crates, boxes, etc., which is adapted to the crop reported. In the last column should be given for each vegetable, the total value of the crop in dollars. Fractions of a dollar should not be given and no ciphers should be added after the whole number. For example, a value of $10 should be written "*10*," and not "*10.00*." As a rule, the products of a truck farm—the vegetables, at least—should be reported under this inquiry. An exception should be made in the case of white and sweet potatoes, which should be reported under Inquiries 62 and 63, respectively.

Inquiry 68. Subtropical fruits.—For *citrus fruits* the figures given under "Quantity harvested in 1919" should represent the quantity harvested during the crop season 1918–19—the last completed crop season—which will cover approximately the months of October, November, and December, 1918, and January, February, and March, 1919.

Inquiry 75. Greenhouse and hothouse establishments.—The total number of square feet under glass in greenhouses, hothouses, or similar commercial establishments should be entered under section 1. A private establishment which does not sell any part of its product should not be reported under this inquiry.

Under section 2 should be given the amount received from the sale of flowers and flowering plants raised *either under glass* or *in the open ground*.

Under section 3 report the amount received in 1919 from the sale of vegetables and vegetable plants raised under glass.

THE SCHEDULE FOR LIVE STOCK NOT ON FARMS OR RANGES.

When to be used.—This schedule (Form 9–123) is to be used in reporting all horses, mules, asses, sheep, goats, and swine *not kept on farms or ranges*, and is to be filled out in accordance with the instructions printed on the schedule itself.

SUPPLEMENTAL INSTRUCTIONS TO ENUMERATORS FOR FILLING OUT THE AGRICULTURAL SCHEDULES.

INTRODUCTORY.

These instructions do not change or modify any of the general instructions for filling out the agricultural schedules given in the pamphlet entitled "Instructions to Enumerators." They are either additional to those instructions or they emphasize and call to your special attention certain points of particular importance.

The instructions here given relate to the general farm schedule (Form 9–122), the schedule for live stock not on farms (Form 9–123), and the nonresident farmer's slip (Form 9–138). Every enumerator who expects to fill out a schedule for any farm should read until they are thoroughly understood not only the instructions presented here but also the instructions printed on the last page of the schedule and the instructions in the pamphlet already referred to.

The general farm schedule will be used for reporting all farms, including small places in or near cities and villages which are counted as "farms" for census purposes in accordance with the definition given below. The schedule for live stock not on farms will be used for all live stock which is not reported on some farm schedule. This will include live stock in stockyards and at feeding stations, as well as live stock found in stables, barns, etc., in cities and villages. The nonresident farmer's slip is to be made out for farms operated by persons who at the time of the enumeration are living outside the enumeration district in which the farm is situated.

THE GENERAL FARM SCHEDULE.

The information called for by the general farm schedule, aside from the 10 items of personal information with regard to the farm operator, may be divided into two parts: First, an inventory of farm property as it stands on January 1, 1920; second, a statement of the most important items of farm production for the year 1919. Both sections should furnish information with regard to the same area of farm land, even though the man who is now on the farm and who reports the inventory may not be the man who raised the crops in 1919. The schedule calls for the crops raised on the inventoried land; do not report the crops raised by the farm operator on some other land.

Private business affairs not to be disclosed.—The schedule is not intended to show the farm income or the total farm expenses. It has no connection with the income tax or with taxation of any other kind, nor is it possible to compute from the schedule the amount of the farmer's income. Further, the information reported on this schedule will be treated as strictly confidential under all circumstances. The enumerator should make these facts clear to any farmer who seems to hesitate about giving the information required.

Law requires that questions be answered.—Attention may also be called to that part of the census act which requires all persons over 18 years of age to answer correctly, to the best of their knowledge, all questions on the census schedule relating to the farms of which they or their families are the occupants. (See sec. 23 of the census act.) When you have occasion to refer to the requirements of this law, it should be done tactfully, so as to avoid argument or unnecessary show of authority.

Time as wage hand (Inquiry 7).—This question, "How many years, if any, did you work on a farm for wages?" must be asked of the operator of every farm which you report. On the schedule you must write the answer—either the number of years which the farmer has worked on any farm for wages, or the word "*None*," if that is his answer to your question. The space provided for the answer to this question must never be left blank.

For the purpose of this inquiry the word "year" means crop year or season. It is not necessary that the farmer should have worked on a farm the full time during each of the 12 months of the year. On the other hand, if he worked as a wage hand on a farm only occasionally or irregularly throughout the year, such time should not be included. Time which a man may have worked on a farm before reaching the age of 21 should not be counted in answering this inquiry, unless he actually received wages which he kept and used as his own.

Time as tenant (Inquiry 8).—The question, "How many years have you been or were you a tenant?" must also be put to every person for whose farm you prepare a schedule, and the answer must be written in as specified for Inquiry 7. The time should be the total number of years which the operator has farmed as a tenant, whether he has spent the entire period of tenancy on a single farm or has moved at more or less frequent intervals. The number of years must be reported for every farmer who at any time in life has been a tenant, even though he may now be the owner of a farm.

Time as farm owner (Inquiry 9).—The question, "How many years have you farmed as an owner?" must also be answered on every schedule which you prepare. The time as owner should

include the number of years which the farmer has operated any farm land of his own, even though he may have hired additional land for a part or all of the time.

Definition of farm and farm operator.—It is essential that every enumerator in an agricultural district should understand from the start exactly what constitutes a farm for census purposes. If he does not have this clearly in mind, he will not know for what tracts of land he is to obtain a farm schedule.

The census definition of a farm and of a farm operator, as given in the "Instructions to Enumerators," are very closely connected. A farm is defined as all the land which is operated or farmed by one person; that is, by one farm operator. This farm operator may be the owner of the farm or he may be a tenant or a hired manager. He may own some land and hire additional land; if he farms both the owned land and the hired land, both together make up his farm.

The land constituting one farm may consist of a single tract of land or of a number of separate tracts. In general, all the land operated or farmed by one farmer should be counted as one farm, even though it may include a number of separate tracts with a considerable distance between.

Small farms.—A tract of land containing less than 3 acres should not be counted as a farm unless it produced agricultural products to the value of $250 or more in 1919, or required for its agricultural operations the continuous services of at least one person. Most of the farms of less than 3 acres will represent intensive enterprises, such as market or truck gardens, greenhouse establishments, poultry yards, and city or village dairies.

City farms.—You should be on the lookout constantly for small farms like this when working in or near cities, towns, and villages. Note that it is not necessary that any part of the $250 worth of products mentioned above should have been sold. For example, a man living on a half-acre lot in the suburbs of a city may have had a cow, some chickens, a garden, and a few fruit trees and grape vines. These may have produced milk, eggs, vegetables, and fruit in 1919, worth, together, more than $250, all of which products may have been consumed in his own household and nothing sold. This tract, should, nevertheless, be reported as a farm, according to the definition.

Plantations.—In the South, plantations of various sizes will be found, some of which contain hundreds of acres. Usually a part of the land will be operated by the owner and the rest of it will be divided up into small farms, operated by tenants. Even though the plantation owner may exercise considerable supervision over the farms of these tenants, often furnishing all the live stock, farming implements, etc., each tenant should be reported as a farm operator and a separate schedule should be prepared for the land which he operates.

Thus a man may own a plantation containing 600 acres. He may operate 150 acres himself and the other 450 acres may be divided into 15 tracts, each operated by a tenant or "cropper." Sixteen farm schedules should be prepared for this plantation, one for the land operated by the owner himself, and one for that operated by each of the 15 tenants.

So far as practicable, the information for each of the tenant farms should be secured from the tenant himself. In many cases, however, the owner of the plantation will be able to give more accurate information than the tenants themselves. In such cases the information should be secured from what seems to be the most reliable source—perhaps a part from the tenants and a part from the landlord.

You may find some difficulty in answering the question with regard to mortgage debt (Inquiry 25) for this plantation. Suppose that the entire plantation is valued at $80,000, that it is mortgaged for $32,000, and that you have reported $30,000 as the value of that part of the plantation operated by the owner, including the value of the buildings. Now what debt should be shown on the owner's schedule under Inquiry 25? Certainly not the entire $32,000, for this amount represents the debt on 600 acres, and is more than the total value of the 150 acres reported on this schedule. Since $30,000 is three-eighths of the total value of the plantation, three-eighths of the total debt, or $12,000, should be reported as the debt on the owner's "farm."

Mortgage debt is not to be reported for tenant farms, so you need do nothing further with the balance of the mortgage covering the land operated by the 15 tenants.

In all cases where a mortgage covers both land operated by the owner and land rented out to tenants, so that you have to figure out what part of the mortgage applies to the land operated by the owner, you should write in the margin of the schedule the total value of the plantation mortgaged and the total amount of the mortgage, as, in the example just given, "*Total value of plantation, $80,000; total debt, $32,000.*"

Farm acreage (Inquiries 16-19).—The question of farm acreage is closely related to the definition of a farm. The total acreage to be given under Inquiry 16 on the general farm schedule should represent the area of all the land operated or farmed by the farm operator. Separate or outlying tracts which are used for any farm purpose should be included, even though they are used only for pasture or to supply wood or timber. In fact, any outlying tract of land which was purchased as a part of the farm by the present farm owner and which he regards as a part of his farm should be included, even though little use is made of it in connection with the farm. Timberland or other nonagricultural land purchased by a farmer as a separate transaction, however, and not used for pasturage or for any other farm purpose, should not be included.

Classification of farm land.—The total farm acreage is to be divided into three classes, namely, improved land, woodland, and "other unimproved land," as described under Inquiries 17, 18, and 19 on the schedule. This classification is very important, and should be made as accurate as possible. The sum of the numbers of acres given for these three classes should in every case equal the total number of acres reported under Inquiry 16.

Improved land.—Improved land, to put it briefly, should include all land under cultivation or suitable for cultivation, any other land on which hay is cut, land occupied by orchards or vineyards, and the land occupied by the farm buildings and yards.

Woodland.—All land occupied by trees or young growth which has, or will have, value as wood or timber should be reported as woodland.

Other unimproved land.—This classification will take in all land in the farm which is neither improved land nor woodland. It will include rough land suitable only for pasture, swamp land, land covered with shrubs or brush which can not be expected to produce wood or timber, etc.

Change of farm operator.—You may have some difficulty in securing schedules for farms which have changed hands between the 1919 harvest and the date of the census. The new owner or tenant will be able, of course, to report farm acreage, farm values, live stock, and the other inventory items just as well as if he had been on the farm for a long time. The information with regard to the crops raised in 1919, however, he may not be able to give, except in the form of a rough estimate. And he will know even less about live-stock products, such as wool, milk, butter, poultry, and eggs.

In some cases the new occupant of the farm will have made careful inquiry with regard to the production of the previous year. If he has done this and appears to be fairly well informed, you should accept his estimates without further question. In case the present occupant is not able to make estimates for the 1919 production on the farm, you should obtain the most reliable information possible from other sources. When the man who operated the farm during 1919 still lives in the neighborhood, the necessary information may be obtained from him. In case of farms operated by tenants, the information with regard to the farm products for the season of 1919 can often be obtained from the landlord or his agent.

In every case you should use your best judgment in securing from any available source the most accurate figures obtainable for the crops and live-stock products of the year 1919.

Farm tenure (Inquiries 11-15).—The questions with regard to farm tenure on the general farm schedule for 1920 have been made very simple. They form one of the most essential parts of the schedule, however, and you should always secure complete information on this subject.

The first step in obtaining this information is to ask the farm operator the four questions on the schedule under Inquiries 11, 12, 13, and 14. One of these questions should be answered "*Yes;*" the other three should be answered "*No.*" If the farmer owns all the land which he farms, he will answer "*Yes*" to Inquiry 11. If he owns a part of the land which he operates and hires additional land, he will answer "*Yes*" to Inquiry 12. If he operates the farm as a hired manager he will answer "*Yes*" to Inquiry 14. In either of these three cases you need ask no further question on the subject of farm tenure.

Amount paid as rent.—If the farmer hires all the land which he farms, and therefore answers "*Yes*" to Inquiry 13, you should then ask what is paid as rent. This question (Inquiry 13-1) is very important, and should be answered without fail for every farmer renting his entire farm. The kinds of answers to be expected are indicated in the explanatory notes *a*, *b*, *c*, and *d*, printed under the question on the schedule.

Form in which rent is paid.—It is especially important that the answer to Inquiry 13-1 should show whether the tenant pays *cash*, or a *share* of the crops, or a *stated amount* of farm products for the use of the land. The answer should indicate clearly *which form* of rent is paid, even though it is necessary to estimate the amount, or to express it in a form not exactly like any of the four types indicated.

A man who rents a farm can pay his rent in at least four different ways:

a. He may give a share or a part of the crops which he raises, as $\frac{1}{3}$ of the corn, $\frac{1}{2}$ of the hay, etc.;

b. He may pay all cash, as $500 for the entire farm, or $10 per acre;

c. He may give both a share of the crops raised and a certain amount of money, as $\frac{1}{4}$ of the corn, or $\frac{1}{3}$ of the cotton, and in addition a cash payment, as $4 per acre, or $200 for all the land rented;

d. He may give a certain number of bushels, bales, etc., as 250 bushels of corn or 8 bales of cotton, without any regard for the amount he may be able to produce on the land which he rents.

The Census Bureau must have information which will enable it to put every farm which is rented in one of these four classes.

Under headings *b* and *c*, of Inquiry 13-1, the number of dollars per acre is called for. If cash rent is paid, not by the acre, but for the farm as a whole, as $400 or $1,250, you may, instead of giving the amount per acre, report the whole amount paid. If you do this, be sure to write on the schedule the words "*Total rent paid*" as well as the number of dollars paid.

Question as to rent paid must be answered.—If the question with regard to what is paid as rent (Inquiry 13-1) is left blank on the schedule for a tenant farmer, you will probably be required to obtain the information at a later date.

Work animals furnished by landlord.—Tenant farmers should also be asked the second additional question under Inquiry 13, as to whether the landlord furnishes all the work animals. If the landlord furnishes enough work animals to put in, cultivate, and harvest the crops on the farm, the answer to this question should be "*Yes*," even though animals belonging to the tenant may be used occasionally for farm work.

Report tenure for farm on which operator now lives.—You should note carefully that all questions under tenure, relating to land owned or rented, refer to the land which constitutes the farm on which the farm operator is living at the time you visit him in January, 1920. He should not give answers relating to some other land which he may have farmed in 1919.

Uses of land (Inquiries 20 and 21).—In this section of the schedule there are six questions, four of them relating to improved land. The first question under Inquiry 20 (Crop land) calls for the number of acres in grain, corn, hay, or other crops harvested in 1919, including the area in gardens, orchards, and vineyards. The number of acres to be reported here is the total number of acres reported under "Crops grown in 1919" (Inquiries 59-75) plus the number of acres contained in orchards, vineyards, and gardens.

If there is a duplication in the acreage of corn cut for forage or fodder (Inquiry 60, sec. 10) and raised for grain (Inquiry 61, sec. 2), or of clover and alfalfa cut for hay and raised for seed, or if there is any other similar duplication, the number of acres so duplicated should be omitted in computing the total area of land in crops.

The second question calls for the area which was not harvested because of crop failure.

Under the third question report all crop land which was neither cultivated nor pastured in 1919.

The second question under Inquiry 21 also relates to improved land and calls for the acreage of such land which was used only for pasture during the year 1919. The sum of the numbers of acres reported in answer to these four questions should never exceed the number of acres of improved land reported in answer to Inquiry 17. Usually it will be a few acres less, since the area occupied by buildings, yards, etc., is included in improved land but not in crop land.

The number of acres of woodland pasture reported in section 1 under Inquiry 21 should not exceed the total number of acres of woodland reported under Inquiry 18. Likewise the number of acres of "other land" used for pasture reported in section 3 under Inquiry 21 should not exceed the number of acres of "other unimproved land" reported in answer to Inquiry 19.

Farm values (Inquiries 22-24).—The section on farm values is another one which is of fundamental importance. The total value of the farm, which is to be given in answer to Inquiry 22, should be the present value of the land which is farmed by the farm operator, whether he be owner, tenant, or manager, and should include the value of buildings and improvements. The enumerator should ask for the amount for which the farm would sell if it were being sold under normal conditions—not at forced sale.

Value of farm buildings.—Inquiry 23 calls for the value of all farm buildings, which value has already been included in the total value of the farm. This will ordinarily be an estimated value and should represent a reasonable fraction of the total value of the farm. No attempt should be made to find out the original cost of the buildings nor the amount it would cost to replace them, as this amount will frequently be much more than the present value of the buildings, and in some cases even more than the total value of the farm, including the buildings.

Values reported not to be used for purposes of taxation.—The enumerator should assure the farm operator that the values returned on the census schedules are not to be used for purposes of taxation and will not in any case be communicated to tax assessors. In many sections property is uniformly assessed for taxation at a figure considerably below its true value—sometimes not more than three-fourths or two-thirds of its real value. This fact is generally recognized, and it is expected that a farmer listing his property for taxation will report values somewhat less than the actual values in accordance with the current custom. This being the case, a farmer should not hesitate to report to the census enumerator the full value of his farm or live stock simply because he may have reported to the tax assessor a lower figure for the same property.

Farm encumbrance (Inquiry 25).—In filling out the schedule stop when you come to this inquiry and look at the answers you have given to Inquiries 11 and 12. If you have answered "Yes" to either of those questions, you must give in answer to the first part of this inquiry one word, either "Yes" or "No," as the case may be. *Do not leave blank* the space provided for the answer to this question. If there is any mortgage on the farm, give also the amount of the debt and the rate of interest which is paid.

Dairy cattle (Inquiry 38).—You are to classify all cattle either as beef cattle or as dairy cattle, according to the principal purpose for which they are kept. Cows kept principally for beef may be milked for short periods during the year, and cows kept principally for milk will, of course, eventually be slaughtered for beef.

Milk produced (Inquiry 39).—Under this inquiry there is but the single question asking for the total number of gallons of milk produced in 1919. Do not think because of that fact, or because it may be difficult to get the exact information, that the question is of little importance.

As very few farmers keep an accurate record of their milk production, your answer to this question on most schedules will be an estimate. Your estimate, however, instead of being a wild one or a mere haphazard guess, can be and must be made with care and a reasonable degree of accuracy. As a means of making estimates, therefore, where you find them necessary, study and use the following method.

Suppose that during January, February, and March—90 days—the farm operator had two cows which gave on an average 1½ gallons each per day. That makes 270 gallons. In April, with 30 days, he had 3 cows giving the same average amount. That makes 135 gallons more. Then in May, June, July, August, September, and October—184 days—he had 4 cows, and the average per day for these months was 2 gallons a cow. That makes 1,472 gallons during these months. In November and December, with 61 days, he had 3 cows which were still averaging 2 gallons a day, making 366 gallons more. That makes a total of 2,243 gallons. While this number is not absolutely exact, you would be willing to admit that it was a very close estimate.

Relation between live stock and live-stock products.—The number of live stock to be reported is the number on the farm on January 1, 1920; the animal products to be reported are those produced on the farm in 1919.

Ordinarily, if dairy cows are reported under Inquiry 38, milk will be reported under Inquiry 39; if sheep are reported under Inquiry 41, wool will be reported under Inquiry 42; and the same relation will hold for goats, chickens, and bees; that is, if an animal is reported on the schedule, a corresponding animal product will be reported, or vice versa.

To this general rule there will be found some exceptions, as, for example, where a farmer, after shearing his sheep in the spring of 1919, sold them to another farmer or to a butcher, or where he bought a flock of sheep in the fall of 1919 and had them on his farm on January 1, 1920. The schedule for the farm in the first case will properly show wool under Inquiry 42 but no sheep under Inquiry 41; in the second case it will properly show sheep under Inquiry 41, but no wool under Inquiry 42.

There is still another condition under which the animals reported on January 1, 1920, and the animal products in 1919 will appear to be inconsistent on a schedule, but will nevertheless be correct. This is where you find a person on a farm in January, 1920, who operated some other farm in 1919. You will obtain from the occupant of the farm the number of animals which he has at the time of your visit in January, 1920, while you will report the animal products which were produced in 1919 by the previous occupant of this farm.

Thus under Inquiry 38 you may report 5 cows on January 1, 1920, and under Inquiry 39 report 180 gallons of milk produced in 1919 because you may have found out that the present occupant of the farm did not move there till December, 1919, and that the former occupant of the farm had only one cow which gave on an average 1½ gallons of milk per day for about 4 months in the year.

Crops sold or to be sold.—The last item on the schedule for most of the important crops, including hay and forage, grains and seeds, potatoes, and orchard fruits, is the "quantity sold or to be sold." In the column under this heading should be reported the quantity of the *crop raised* in 1919 which has been sold or is to be sold. Except for citrus fruits, where the crop to be reported is that harvested in the crop season 1918-1919, you should not include here any products raised in 1918 which may have been sold in 1919. What is desired is to find out what part of the crops raised in 1919 has been sold, or will be sold rather than fed out or otherwise used on the farm. The amount which has been sold can easily be ascertained in most cases; the amount which is to be sold will usually have to be estimated, except where the farmer expects to sell the entire crop. The sum of these two figures, the amount already sold, and the additional amount the farmer expects to sell, should be entered on the schedule under "Quantity sold or to be sold."

Unit of measure for crops.—Report all crops in the unit of measure specified on the schedule. If the farmer reports to you the number of *pounds* of wheat which he raised in 1919, or the number of *sacks*, reduce this quantity to bushels before entering it on the schedule. And likewise for all other crops.

Mixed crops.—You may occasionally find a farmer who raised two crops on the same land at the same time, which were harvested separately, as corn and beans, corn and peas, or corn and peanuts. Thus a farmer may have planted 10 acres to corn and peas, and he may have harvested a crop of each from this 10 acres. Report for each the total quantity produced and give to each crop one-half the number of acres, more or less, as the farmer in his best judgment may direct.

Two crops on the same land.—If two crops were grown on the same land in 1919, but not at the same time, as, for example, oats or wheat followed by corn, millet, potatoes, beans, or other crops, you should report the full number of acres of each crop raised.

In addition to this you may find two crops harvested from one planting, as corn for grain and corn fodder or forage, or clover hay and clover seed. In all cases of this kind you should report the total number of acres of each crop which was harvested, regardless of the resulting duplication in the number of acres. The total acreage should be reported for both wherever a full crop of grain and a full crop of forage were taken from the same land. Where only a partial crop of grain is harvested, as may be the case where a part of the ears are picked from corn which is to be used for silage, a corresponding fraction of the total acreage should be reported for the grain. For example, if about half the ears were picked from a 10-acre field of corn cut for silage, report 10 acres for silage under Inquiry 60–9 and 5 acres for corn raised for grain under Inquiry 61–2. Cases of this kind will occur very infrequently, however, and, as a general rule, it may be assumed that the total acreage in a corn field should be reported both under Inquiry 60, if the forage is used, and also under Inquiry 61.

Mature crops grazed or hogged off (Inquiry 60–13).—You are to report under this heading such crops only as reach maturity and are then hogged off or grazed instead of being harvested in the usual manner. Do not report any crops which were first harvested and afterwards pastured, as, for example, where peanuts were pulled and hogs then turned into the field to get any peanuts left in the ground.

Cotton (Inquiry 64–1).—Cotton is to be reported in running bales. These bales weigh approximately 500 pounds each. If the cotton has been packed in round bales, report its equivalent in square bales of 500 pounds each, rating two round bales equivalent to one square bale. In all cases where round bales are reported, write on the margin of the schedule "*Round bales.*" Where only a part of the cotton has been ginned, it will be necessary to estimate the number of bales yet to be ginned; this will include an estimate, in some cases, for cotton that has not even been harvested.

Potatoes and sweet potatoes (Inquiries 62 and 63).—If these crops were grown, report their production in answer to Inquiries 62 and 63, respectively, including the supply raised for home use. The value of potatoes or sweet potatoes grown in the garden or elsewhere for home use should be included in the answer to Inquiry 65 (Farm garden), even though the quantity has already been reported under Inquiry 63 or 64.

Vegetables grown for home use and for sale (Inquiries 65 and 66).—Where vegetables were produced strictly for commercial purposes, as on a truck farm, they will, of course, be reported in answer to Inquiry 66, while if they were grown strictly for home use their value only will be reported in answer to Inquiry 65. Where any considerable quantity of a given vegetable was sold, the whole crop should be reported under Inquiry 66 as raised for sale, even though a part was used by the farmer's family. If the amount sold was merely a small surplus remaining after the home needs were met, however, or if only an occasional lot was sold, the vegetable should be considered as raised for home use and simply included as a part of the home garden to make up the total value reported under Inquiry 65.

Small fruits (Inquiry 70).—The small fruit or berries which are to be reported here are only those which are cultivated. Spend no time trying to get the number of acres or the quantity harvested for berries growing wild or uncultivated, such as huckleberries in woodland or strawberries and blackberries in old fields, along roadsides, or elsewhere. In many instances such berries may be of some value, but this inquiry is confined to berries which were produced in 1919 under cultivation.

SCHEDULE FOR LIVE STOCK NOT ON FARMS.

When to use this schedule.—In order to secure a complete enumeration of all domestic animals, a special schedule has been provided for those *not on farms or ranges*. On this schedule are to be reported all cattle, horses, mules, asses, sheep, goats, and swine kept in the city or village barns or stables, in stock yards, in feed lots not connected with any farm, in house yards, and in any other places not covered by farm schedules.

When to use a farm schedule.—All domestic animals on farms are to be reported on the general farm schedule. You should be thoroughly familiar with the census definition of a farm, so that you may readily decide when to use the general farm schedule and when to use the schedule for live stock not on farms. You should note in particular that any place on which there were produced in 1919 as much as $250 worth of agricultural products, such as milk, eggs, poultry, and garden truck, is considered a farm and should be reported on the general farm schedule.

All domestic animals to be enumerated.—In order that no live stock may be overlooked by the enumerator, the question whether any animals of the kinds named on the schedule are kept on the premises should be asked at each dwelling house enumerated on the population schedule and at all other places, such as factories, stores, stables, etc., where there is any possibility of live stock being kept.

Stockyards.—Live stock in stockyards, at finishing stations, etc., is to be enumerated on the schedule for live stock not on farms. All the stock on hand in any one establishment—that is, in the stockyards under one management in a given city—should be reported on one line of the schedule. Where a firm operates stockyards in more than one city, the stock in each city will be reported by the enumerator in that city.

All stock on hand in the stockyards on the morning of January 1, 1920, should be reported, regardless of ownership. Stock on cars standing on sidings awaiting unloading or shipment should be included. Enumerators should not make any attempt, however, to report stock *actually in transit.*

It is realized that there will sometimes be difficulty in classifying animals in stockyards according to the various age and sex groups which are called for by the schedule. The records of shipments and receipts, for example, may not show cows and steers separately, or may not distinguish between animals 2 years old or over and those between 1 and 2 years old. In cases where there are no specific records to show the number of stock in each age and sex group, and where it is not practicable to ascertain the exact number, the stockyard officials can readily make a very close estimate. Such an estimate should be accepted where it is not practicable to get the figures for the separate classes in any other way.

NONRESIDENT FARMER'S SLIP.

One of these slips should be made out (instead of a schedule) for any farm in the enumerator's district which is *operated* by a person living in *another district* at the time of enumeration. This does not apply where the farm operator is merely away from home for a short time; but where the man who operates the farm during the crop season has gone away for the winter, leaving no one directly in charge of the farm, a nonresident farmer's slip should be made out rather than a schedule. The nonresident farmer's slips should be made out in duplicate and both copies sent to the supervisor.

The supervisor will retain one copy for his files and forward the other to the enumerator in the district where the farm operator lives. This enumerator must then secure a schedule from the farm operator designated, if he has not already done so; or if he finds that a farm schedule is not really called for, he should state the reasons for not securing a schedule on the back of the slip and return it to the supervisor.

CONCLUSION.

All questions to be answered.—No question on the farm schedule should be left blank by reason of the difficulty of getting exact information. When it is impracticable to get exact information, an estimate should always be made. Get the farmer to make an estimate, if possible, giving him such assistance as he absolutely needs. If he is unable to make any definite estimate, make the estimate yourself on the basis of such information as he can give you. Even a rough estimate or a "guess" is better than a blank space.

Accurate information to be secured.—On the other hand, no reasonable effort should be spared to obtain exact statements, where this can be done. If records have been kept exact figures based on these records should be required. Enumerators should not accept estimates in place of exact figures simply because it is less work to make an estimate than it is to figure up the records.

Importance of studying instructions.—Some of the most important definitions and instructions are printed on the schedules themselves. In addition you have the pamphlet of "Instructions to Enumerators" and the supplemental instructions given above. With all this material you should be thoroughly familiar before you attempt to fill out the first farm schedule; and you should refer freely to the printed instructions to settle all doubtful points which may come up, especially during the first few days of your work.

[Page 1 of the General Farm Schedule.]

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UNITED STATES CENSUS OF AGRICULTURE

[A2-575]

ENUMERATOR'S RECORD.

Number of farm in order of visitation .....

Sheet and line on population schedule on which name of farm operator is written:

Sheet No. .....

Line No. .....

Enumerated by me this ..... day of ....., 1920.

.....
Enumerator.

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
SAM. L. ROGERS, DIRECTOR

FOURTEENTH CENSUS OF THE UNITED STATES

AGRICULTURE—UNITED STATES

WILLIAM L. AUSTIN
CHIEF STATISTICIAN FOR AGRICULTURE

GENERAL FARM INFORMATION, JANUARY 1, 1920
FARM PRODUCTION CROP YEAR, 1919

ENUMERATOR'S RECORD.

State .....

County .....

Supervisor's district No. .....

Enumeration district No. .....

Township or other division of county:

.....
(Insert name of township, town, precinct, district, or other division, as the case may be.)

Name of incorporated city, town, or village within the above-named division:

.....

INFORMATION CONCERNING FARM OPERATOR.

1. Name .....
2. Post-office address .....
3. Color or race ..... 4. Age ..... 5. Sex .....
6. Country of birth ..... (If foreign born, give state or province.)
7. How many years, if any, did you work on a farm for wages? .....
8. How many years have you been or were you a tenant? .....
9. How many years have you farmed as an owner? .....
10. How long have you operated this farm? Years ..... Months .....

FARM TENURE, JANUARY 1, 1920.

(See "Farm Tenure" and "Definition of Farm" in "General Explanations and Instructions.")

11. Do you *own* all of this farm? ..... (Answer Yes or No.)
12. Do you *rent* from others *part but not all* of this farm? ..... (Answer Yes or No.)
13. Do you *rent* from others *all* of this farm? ..... (Answer Yes or No.)
    1. If you rent *all* of this farm, what do you pay as rent? .....
       a. If a share is paid, give the fractions as ½, ⅓, ¼, etc.
       b. If cash is paid, give the amount in dollars paid per acre.
       c. If both share and cash are paid, give the share and the amount in dollars paid per acre.
       d. If a definite quantity (*not a share*) of corn, cotton, or other products is paid regardless of the yield, give the fixed amount in bushels, bales, pounds, etc.
    2. Does the person from whom you rent furnish *all* the work animals? ..... (Answer Yes or No.)
14. Do you operate this farm for others as a hired manager? ..... (Answer Yes or No.)
15. If you rent any farm land from others, or manage any farm land for others, give name and address of the owner of the land:

    Name .....

    Address .....

FARM ACREAGE, JANUARY 1, 1920.

ACRES.

16. Total number of acres in this farm, January 1, 1920 ..... (Include all outlying or separate fields, meadows, pastures, woodland, or waste lands owned, rented, or managed and operated as a part of the farm, but do not include land rented to or cropped by any other person than the one whose name is given under Inquiry 1.)
17. Number of acres of improved land in this farm ..... (Include all land regularly tilled or mowed; land in pastures that has been cleared or tilled; land lying fallow; land in gardens, orchards, vineyards, and nurseries; and land occupied by buildings, yards, and barnyards.)
18. Number of acres of woodland in this farm ..... (Include all farm woodlots, natural or planted, and cut-over land with young growth. Do not include chaparral, mesquite, or woody shrubs.)
19. All other unimproved land in this farm .....

USES OF LAND IN 1919.

ACRES.

20. **Crop land in this farm:**
    1. Land in grain, corn, hay, or other crops harvested in 1919, including gardens, orchards, and vineyards .....
    2. Land from which no crop was harvested in 1919 *because of crop failure* .....
    3. Crop land lying idle or fallow in 1919 (do not include any land that is to be reported as pasture under Inquiry 21) .....
21. **Pasture land in this farm:**
    1. Of the woodland reported under Inquiry 18, how many acres were pastured in 1919? .....
    2. Land used only for pasture in 1919 which is capable of being plowed and used for crops (without clearing, drainage, or irrigation) .....
    3. Other land used only for pasture in 1919 .....

FARM VALUES, JANUARY 1, 1920.

22. Total value of this farm January 1, 1920 ..... $..... (Give the amount for which this farm would sell. Include the land owned, rented, or managed by you, all buildings and improvements, but not implements and machinery.)
23. Value of all buildings on this farm included above ..... $.....
24. Value of implements and machinery belonging to this farm ..... $..... (Include all tools; wagons; carriages; harnesses; dairy equipment; cotton gins; threshing machines; apparatus for making cider, grape juice, sugar and sirup, or drying fruits; all engines, motors, tractors, automobiles, motor trucks, and other machinery. Exclude all commercial mills and factories. See instructions.)

FARM ENCUMBRANCE, JANUARY 1, 1920.

25. If you own all or part of this farm, was there any mortgage debt or other encumbrance on the land so owned on January 1, 1920? ..... (Answer Yes or No.)

    Total amount of debt or encumbrance on land in this farm owned by you, January 1, 1920 ..... $.....

    Rate of interest paid ..... (Per cent.)

FARM EXPENSES, 1919.

26. Amount expended in 1919 for hay, grain, mill feed, and other products (not raised on this farm) for use as feed for domestic animals and poultry ..... $.....
27. Amount expended in 1919 for manure and fertilizer ..... $.....
28. Amount expended in cash in 1919 for farm labor (exclusive of housework) ..... $.....
29. Estimated value of house or room rent and board furnished farm laborers in 1919, in addition to cash wages reported under Inquiry 28 ..... $.....

DRAINAGE, JANUARY 1, 1920.

30. Area of land in this farm which is provided with artificial drainage (tile, ditches, etc.) ..... (Acres.)
31. Additional area of land in this farm which could be made suitable for crops:
    1. By drainage only ..... (Acres.)
    2. By drainage and clearing ..... (Acres.)
32. Has any part of this farm been afforded drainage or protection against overflow by a drainage or levee district, or by the state, county, or by a private company or individual? ..... (Answer Yes or No.)
33. If answer is "Yes," give name of company, district, etc.:

    .....

[Page 2 of the General Farm Schedule.]

DOMESTIC ANIMALS, POULTRY, AND BEES ON THIS FARM JANUARY 1, 1920, AND ANIMAL PRODUCTS IN 1919.

(Report all animals on this farm, whether belonging to the farm operator or not.)

34. Horses, January 1, 1920:	Number.	Total Value.
1. Colts under 1 year of age		$
2. Colts 1 year old and under 2 years of age		
3. Mares 2 years old and over		
4. Geldings 2 years old and over		
5. Stallions 2 years old and over		
35. Mules, January 1, 1920:		
1. Mule colts under 1 year of age		$
2. Mule colts 1 year old and under 2 years of age		
3. Mules 2 years old and over		
36. Asses and burros (all ages), January 1, 1920		$

37. Beef cattle, January 1, 1920 (cattle kept mainly for beef production):	Number.	Total Value.
1. Calves under 1 year of age		$
2. Heifers 1 year old and under 2 years of age		
3. Cows and heifers 2 years old and over		
4. Steers 1 year old and under 2 years of age		
5. Steers 2 years old and over		
6. Bulls 1 year old and over		
38. Dairy cattle, January 1, 1920 (cattle kept mainly for milk production):		
1. Calves under 1 year of age		$
2. Heifers 1 year old and under 2 years of age		
3. Cows and heifers 2 years old and over		
4. Bulls 1 year old and over		

	Quantity.	Total Value.
39. Milk produced in 1919:		
1. Total amount of milk produced. Include milk fed to animals, consumed on farm, sold, or otherwise disposed of (100 pounds equal 11.6 gallons).	Gals	X X X
40. Disposition of milk:		
1. Milk sold in 1919	Gals	$
2. Cream sold in 1919	Gals	
3. Butter fat sold in 1919	Lbs	
4. Butter made on farm in 1919	Lbs	X X X
5. Butter sold in 1919	Lbs	
6. Cheese made on farm in 1919	Lbs	X X X

41. Sheep and lambs, January 1, 1920:	Number.	Total Value.
1. Lambs under 1 year of age		$
2. Ewes 1 year old and over		
3. Rams 1 year old and over		
4. Wethers 1 year old and over		

42. Wool shorn in 1919:		
1. Number of sheep shorn in 1919		X X X
2. Total weight and value of fleeces	Lbs	$

43. Goats and kids, January 1, 1920:	Number.	Total Value.
1. Kids under 1 year of age raised for fleeces		$
2. Goats 1 year old and over raised for fleeces		
3. All other goats and kids		

44. Mohair (goat hair) shorn in 1919:		
1. Number of goats shorn in 1919		X X X
2. Total weight and value of fleeces	Lbs	$

45. Hogs and pigs, January 1, 1920:	Number.	Total Value.
1. All pigs under 6 months old		$
2. Sows and gilts for breeding purposes, 6 months old and over		
3. Boars for breeding purposes, 6 months old and over		
4. All other hogs, 6 months old and over		

DOMESTIC ANIMALS, POULTRY, AND BEES ON THIS FARM JANUARY 1, 1920, AND ANIMAL PRODUCTS IN 1919—Continued.

46. Poultry, January 1, 1920:	Number.	Total Value.
1. Chickens		$
2. Turkeys		
3. Ducks		
4. Geese		
5. Guinea fowls		
6. Pigeons		

47. Eggs and chickens:	Quantity.	Total Value.
1. Eggs *produced* in 1919 (include only chicken eggs produced, whether sold, used, incubated, or otherwise disposed of)	Doz.	X X X
2. Eggs *sold* in 1919 produced on this farm	Doz.	$
3. Chickens *raised* in 1919 (include all chickens raised, whether sold, consumed, or on hand)	No.	X X X
4. Chickens *sold* in 1919 (include those raised on this farm *sold* alive or dressed)	No.	$

48. Bees, January 1, 1920:	Number.	Total Value.
1. Hives of bees		$

49. Honey and beeswax:	Quantity.
1. Honey produced in 1919 (include all honey whether used on the farm, sold, or otherwise disposed of)	Lbs
2. Beeswax produced in 1919	Lbs

50. Pure-bred animals, January 1, 1920: (Report the number and breed of any animals on this farm that are registered. All animals reported here must be included under Inquiries 34, 37, 38, 41, or 45.)	Number.
1. Pure-bred mares and mare colts (Give breed.)	
2. Pure-bred stallions and stallion colts (Give breed.)	
3. Pure-bred cows and heifers of all ages (Give breed.)	
4. Pure-bred bulls and bull calves (Give breed.)	
5. Pure-bred sheep and lambs (Give breed.)	
6. Pure-bred hogs and pigs (Give breed.)	

51. Young animals raised on this farm in 1919: (Include all young animals born in 1919, which have been retained on the farm, sold to others, or slaughtered for food. Do not include any young animals purchased or any that died.)	Number.
1. Calves	
2. Lambs	
3. Pigs	

52. Domestic animals slaughtered on this farm for food in 1919:

Kind.	Number slaughtered on this farm.	Meat and meat products sold (pounds).
1. Cattle and calves		
2. Hogs and pigs		
3. Sheep and lambs		

53. Farm facilities, January 1, 1920:	
1. Number of tractors on this farm	
2. Number of automobiles on this farm	
3. Number of motor trucks on this farm	
4. Has this farm a telephone?	(Answer Yes or No.)
5. Is water piped into the operator's house?	(Answer Yes or No.)
6. Has the operator's house gas or electric light?	(Answer Yes or No.)

54. Cooperation in marketing in 1919:	
1. Value of products of this farm sold to or through a farmers' marketing organization in 1919	$
2. Value of all farm supplies purchased for this farm from or through a farmers' organization in 1919	$

[Page 3 of the General Farm Schedule.]

IRRIGATION, JANUARY 1, 1920.

55. If any part of this farm is irrigated, give total number of acres irrigated in 1919 _____ (Acres.)

56. Name of irrigation enterprise supplying water: _____

(If enterprise supplies less than 5 farms, secure irrigation schedule.)

57. Amount expended in 1919 for irrigation water, exclusive of payment for equipment or rights _____ $_____

58. Were any crops grown on this farm in 1919 without irrigation? _____ (Answer Yes or No.)

EXPLANATIONS AND INSTRUCTIONS.

Crops.—Frequently farmers will be found who are renting additional land January 1, 1920, which they did not rent in 1919, or who have changed farms in 1919 after a part or all of the crops have been harvested. All crop figures should apply to the land included in this farm January 1, 1920, as given in answer to Inquiry 16. If the present occupant of this farm did not operate all or any of it in 1919, he should answer the questions to the best of his knowledge for the person who did farm the land.

Acres.—When area of crop is one acre or over, give the nearest whole number of acres; when less than one acre, give fraction of an acre.

Unit of Measure.—Obtain a report of quantities in the measure called for on the schedule, reducing to the unit called for all crops not so reported. Always report the quantity of corn harvested in bushels of shelled corn. A bushel of shelled corn weighs 56 pounds and is equivalent to 70 pounds of dry corn in the ear, or to 2 bushel baskets level full or 1½ bushel baskets heaped of husked ear corn, or 6 level or 4 heaped bushel baskets of unhusked corn.

Lack of Space.—When necessary, cross out the name of any crop not grown, write in name of crop grown, and report acres and products in the usual manner.

Crops in Orchard.—If a crop is grown in an orchard, give acreage only of land actually occupied by the crop.

CROPS GROWN ON THIS FARM IN 1919.

NOTE.—Place X before name of each crop irrigated in answer to Inquiries 59 to 72.

59. Sirup and sugar crops: (Report all cane and beets grown to feed live stock under Inquiry 60: Hay and forage.)	Acres or number.	Quantity produced.
1. Sweet sorghum harvested for sirup (acres)		Tons
2. Sweet sorghum sirup made on farm (Include sirup made for farm operator on shares or otherwise in small neighborhood mills.)	X X X	Gals.
3. Sugar beets harvested for sugar (acres)		Tons
4. Sugar cane harvested for sirup or sugar (acres)		Tons
5. Sugar cane sold for crushing	X X X	Tons
6. Sugar cane sirup made on farm (Include sirup made for farm operator on shares or otherwise in small neighborhood mills.)	X X X	Gals.
7. Maple trees tapped in 1919 (number)		X X X
8. Maple sirup made in 1919	X X X	Gals.
9. Maple sugar made in 1919	X X X	Lbs.

60. Hay and forage:	Number of acres harvested.	Quantity harvested.	Quantity sold or to be sold.
1. Timothy alone		Tons	Tons
2. Timothy and clover mixed		Tons	Tons
3. Clover alone (including lespedeza) (Give name.)		Tons	Tons
4. Alfalfa		Tons	Tons
5. Small grains cut for hay (Include wheat, oats, barley, rye.)		Tons	Tons
6. Annual legumes cut for hay— (Give name.) (Include cowpeas, soy beans, peanuts, and vetches cut for hay.)		Tons	Tons
7. Other tame or cultivated grasses cut for hay (Include Bermuda, Johnson, crab grass, orchard grass, redtop, millet, sudan grass, etc.)		Tons	Tons
8. Wild, salt, or prairie grasses cut on this farm		Tons	Tons
9. Crops cut for silage		Tons	X X X
10. Corn cut for forage or fodder (dry weight)		Tons	X X X
11. Kafir, milo, durra, sweet sorghum, and sugar cane cut for forage or fodder (dry weight)		Tons	X X X
12. Root crops for forage (Include sugar beets, turnips, sweet potatoes, rutabagas, mangels, carrots, etc., grown for forage.)		Tons	X X X
13. Mature crops grazed or hogged off (Give name.) (Include corn, velvet beans, soy beans, peanuts, sweet potatoes, rape, kale, etc.)		X X X	X X X

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CROPS GROWN ON THIS FARM IN 1919—Continued.

61. Grains and seeds: (Report only crops grown for the grain and seed and harvested after ripening. Where crops are grown together but harvested separately, such as corn with peanuts, corn with cowpeas, etc., give a part of the acreage to one crop and a part to the other, according to the best judgment of the farm operator.)	Number of acres harvested.	Quantity harvested.	Quantity sold or to be sold.
1. Mixed crops not separated in harvesting (oats and barley, oats and peas, etc.): (Give name.)		Bu	Bu
2. Corn (Do not include sweet or pop corn.)		Bu	Bu
Wheat:			
3. Winter (fall sown)		Bu	Bu
4. Spring (spring sown)		Bu	Bu
5. Oats		Bu	Bu
6. Barley		Bu	Bu
7. Rye		Bu	Bu
8. Buckwheat		Bu	Bu
9. Kafir, milo, feterita, and durra		Bu	Bu
10. Rough rice		Bu	Bu
11. Flaxseed		Bu	Bu
Grass seed:			
12. Red clover seed, including medium and mammoth		Bu	Bu
13. Other clovers and alfalfa seed: (Give name.)		Bu	Bu
14. Timothy seed		Bu	Bu
15. Seeds of other grasses: (Give name.)		Bu	Bu
16. Soy beans		Bu	Bu
17. Navy, pinto, lima, and other ripe field beans: (Give name.)		Bu	Bu
18. Canada, cow, and other ripe field peas: (Give name.)		Bu	Bu
19. Peanuts		Bu	Bu
20. Other grains and seeds: (Give name.)		Bu	Bu
62. Potatoes (Irish or white)		Bu	Bu
63. Sweet potatoes and yams		Bu	Bu
64. Other field crops:			
1. Cotton		Bales	X X X
2. Broom corn		Lbs	X X X
3. Tobacco: (Give type.)		Lbs	X X X
4. Hops		Lbs	X X X
5. Hemp		Lbs	X X X
6. Velvet beans (total acres alone or mixed with other crops)		X X X	X X X
7. Other crops: (Give name.)			X X X

65. Farm garden:

1. Value of all vegetables, including white potatoes and sweet potatoes, grown in 1919 for *home use only* $_____

66. Vegetables produced in 1919 for sale, not for home use:

KIND.	Number of acres or fraction of an acre harvested.	Quantity harvested.	Unit of measure.	Value.
1. Cabbages				$
2. Cantaloupes and muskmelons				
3. Celery				
4. Cucumbers				
5. Green beans				
6. Green peas				
7. Lettuce				
8. Onions				
9. Sweet corn				
10. Tomatoes				
11. Watermelons				
12. Other: (Give name.)				

[Page 4 of the General Farm Schedule.]

67. Orchard fruits:	Number of trees, Jan. 1, 1920. Not of bearing age.[1]	Of bearing age.	Products of 1919. Total quantity harvested.	Quantity sold or to be sold.
1. Apples			Bu	Bu
2. Peaches			Bu	Bu
3. Pears			Bu	Bu
4. Plums and prunes			Bu	Bu
5. Cherries			Bu	Bu

[1] Do not include under "trees not of bearing age" nursery stock which should be reported in answer to Inquiry 74.

68. Subtropical fruits:	Number of trees, Jan. 1, 1920. Not of bearing age.[1]	Of bearing age.	Quantity harvested in 1919.
1. Oranges			Bxs
2. Lemons			Bxs
3. Grapefruit (pomeloes)			Bxs
4. Figs			Lbs
5. Other: (Give name.)			

[1] Do not include under "trees not of bearing age" nursery stock which should be reported in answer to Inquiry 74.

69. Nuts:	Number of trees, Jan. 1, 1920. Not of bearing age.[1]	Of bearing age.	Quantity harvested in 1919.
1. Almonds			Lbs
2. Pecans			Lbs
3. Persian or English walnuts. (Do not report any other nuts.)			Lbs

[1] Do not include under "trees not of bearing age" nursery stock which should be reported in answer to Inquiry 74.

70. Small fruits:	Number of acres or fraction of an acre harvested.	Quantity harvested in 1919.	Quantity sold or to be sold.
1. Strawberries		Qts	Qts
2. Raspberries		Qts	Qts
3. Blackberries and dewberries		Qts	Qts
4. Loganberries		Qts	Qts
5. Cranberries		Qts	Qts
6. Currants		Qts	Qts
7. Other berries: (Give name.)		Qts	Qts

71. Fruit products, from fruit grown on this farm:	Quantity produced.
1. Dried fruits, *not raisins*, produced on this farm in 1919	Lbs
2. Cider produced in 1919	Gals
3. How much of this cider was made, or will be made, into vinegar?	Gals

72. Grapes and grape products, from grapes grown on this farm:	Number.	Quantity in 1919.
1. Vines *not* of bearing age, January 1, 1920		X X X
2. Vines of bearing age, January 1, 1920		X X X
3. Grapes (total production for all purposes)	X X X	Lbs
4. Grapes (fresh) sold or to be sold	X X X	Lbs
5. Raisins and dried grapes produced on this farm	X X X	Lbs
6. Grape juice produced on this farm	X X X	Gals

73. Forest and forest products:

1. Number of acres of merchantable timber in this farm January 1, 1920 (trees mostly of saw-log size) .....
2. Value of all forest products of this farm in 1919 which have been sold or are for sale ..... $.....
   (Include standing timber sold and cut in 1919, firewood, fence posts, crossties, pulp wood, logs, poles, bark, turpentine, naval stores, and other forest products cut on this farm.)
3. Value of all forest products of this farm in 1919 which have been or will be used on this farm ..... $.....

74. Nursery acreage and products, 1919:

1. Number of *acres* used for growing trees, plants, vines, etc. .....
2. Amount received from sale of nursery products during 1919 ..... $.....

75. Greenhouse and hothouse establishments, 1919:

1. Total square feet under glass, January 1, 1920 .....
   (Include area covered by greenhouses, sashes, and frames.)
2. Amount received from sale of flowers, flowering plants, etc., during 1919 ..... $.....
3. Amount received from sale of vegetables and vegetable plants during 1919 ..... $.....

GENERAL EXPLANATIONS AND INSTRUCTIONS.

Confidential.—The information reported on this schedule will be treated as *strictly confidential* under all circumstances.

Not Connected with Taxation.—The information reported on this schedule will not be used as a basis of taxation, nor communicated to any assessor.

All Questions To Be Answered in Order.—Give data asked for in the schedule for every crop produced and every kind of animal on farm. Inability to obtain exact data does not justify failure to answer a question. The most accurate returns that the circumstances permit must be obtained. If farm records or accounts are kept, take data from them. If such records are not available, careful estimates should in all cases be obtained or made. Where there are no crops or animals corresponding to names listed in schedule, leave the space opposite such names blank.

Farm Operator.—All answers on this schedule should relate to the farm occupied January 1, 1920, by the person named in answer to Inquiry 1, who is here called "farm operator." The term "farm operator" is employed by the Census Bureau to designate a person who directly works a farm, as owner, hired manager, tenant, or cropper, conducting agricultural operations either by his own labor alone or with the assistance of members of his household or hired employees. Note especially that farms should be returned in the name of such farm operator—that is, the person actually conducting the agricultural operations, even though supervision of such operations may be exercised by another person. All answers regarding crops or other products of the farm in 1919, or regarding animals slaughtered in 1919, must relate to the land occupied by the farm operator on January 1, 1920, whether such land was farmed by him during 1919 or not, and should not relate to any other land which the farm operator may have farmed in 1919.

Farm Tenure.—Farm land operated by a person who owns it, by a man whose wife owns it, by the heir or heirs thereto, by the trustee or guardian for such heirs, by a settler on Government land who has not "proved up," by a person who has bought land on a contract for a deed, or by a person who purchased a farm sold for debt and holds it subject to redemption by the original owner, should be reported as land owned in answering Inquiry 11.

If farm land is operated for its owner or for a public institution by a farmer who receives wages or a salary for his service as manager, superintendent, or overseer, it should be reported as operated by a hired manager in answering Inquiry 14.

Definition of "Farm."—A farm for census purposes is all the land which is directly farmed by one person conducting agricultural operations, either by his own labor alone or with the assistance of members of his household or hired employees. The term "agricultural operations" is used as a general term referring to the work of growing crops, producing other agricultural products, and raising animals, poultry, or bees.

A "farm" as thus defined may consist of a single tract of land, or of a number of separate and distinct tracts, and these several tracts may be held under different tenures, as when one tract is owned by the farmer and another tract is rented by him.

When a landowner has one or more tenants, renters, croppers, or managers, the land operated by each is considered a "farm." Thus on a plantation, the land operated by each cropper or tenant should be reported as a separate farm, and the land operated by the owner or manager by means of wage hands should likewise be reported as a separate farm.

The enumerator must not report as a "farm" any tract of land of less than three acres, unless there were produced on such tract products to the value of $250 or more, or unless it required the continuous services of at least one person.

All market, truck, and fruit gardens, nurseries, greenhouses, poultry yards, places for keeping bees, and all dairies in and near cities, villages, and incorporated towns, even though little land is employed, are for census purposes, farms, provided they produced in 1919 agricultural products to the value of at least $250 or required the continuous services of at least one person.

Exceptional Farms or Conditions.—If a farmer raises animals or crops under exceptional conditions, or suffered severely in 1919 from drought, flood, cyclones, or other calamities, write a brief statement of the facts upon top margin of the schedule.

Ranchers Using Public Lands.—Public land used by a rancher without rental is not a part of the operator's farm, and where a rancher owns or leases no land but grazes animals entirely on public domain write opposite Inquiries 11 and 16 "No land owned or leased."

Crosses on Schedules.—Make no entries in spaces marked thus (X X X).

Animals, Fowls, and Crops not Mentioned by Name.—Always ask if any animal or fowl is kept on the farm, or if any crop was raised in 1919, of which no mention has been made. If answer is "Yes," write the name of such other animal, fowl, or crop, in the blank spaces provided or cross out any printed names for which there are no reports, write in the names of the animals kept or crops produced, and report like other animals, crops, etc.

Distinction Between Farm and Factory Operations.—The manufacture of butter, cheese, dried fruits, cider, vinegar, grape juice, or other products may be carried on in buildings or plants operated either (1) in connection with farms or (2) as independent manufacturing enterprises. In the latter case such buildings and plants are to be regarded as factories to be covered by the census of manufactures and not to be included in the census of agriculture. But unless it is clear that such buildings or plants are operated as a manufacturing enterprise independent of the farm, you should include the value of such buildings with that of the farm buildings and the value of such machinery with that of the implements and machinery of the farm on which they are located; you should include as the products of the farm only the butter, cheese, dried fruits, cider, vinegar, or grape juice made in such establishments from milk *produced* or crops (apples, grapes, etc.) *grown* on the farm. Where raw materials, other than those grown on the farm on which the plant is located, are treated, state that fact on the margin of the schedule.

9—123

UNITED STATES CENSUS OF LIVE STOCK NOT ON FARMS OR RANGES

[A3—576]

ENUMERATOR'S RECORD

State _____ County _____

Township or other division of county _____

Name of incorporated city, town, or village within township or other division _____

(SEE OTHER SIDE FOR EXPLANATIONS AND INSTRUCTIONS.)

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
SAM. L. ROGERS, DIRECTOR

FOURTEENTH CENSUS OF THE UNITED STATES, 1920—AGRICULTURE

WILLIAM L. AUSTIN, CHIEF STATISTICIAN FOR AGRICULTURE

LIVE STOCK NOT ON FARMS OR RANGES

JANUARY 1, 1920

ENUMERATOR'S RECORD

Supervisor's District No. _____

Enumeration District No. _____

_____ *Enumerator.*

	Name of proprietor of stable, barn, or other inclosure.	Location of stable, barn, or other inclosure. (Give street and number.)	Class of inclosure. (See note below.)	Horses. 01 Colts under 1 year of age. (Number.)	02 Fillies 1 year old and under 2 years of age. (Number.)	03 Mares 2 years old and over. (Number.)	04 Geldings 2 years old and over. (Number.)	05 Stallions 2 years old and over. (Number.)	Mules. 06 Male colts under 1 year of age. (Number.)	07 Mule colts 1 year old and under 2 years of age. (Number.)	08 Mules 2 years old and over. (Number.)	Asses and burros. 09 All ages. (Number.)	Beef cattle (cattle kept mainly for beef production). 10 Calves under 1 year of age. (Number.)	11 Heifers 1 year old and under 2 years of age. (Number.)	12 Cows and heifers 2 years old and over. (Number.)	13 Steers 1 year old and under 2 years of age. (Number.)	14 Steers 2 years old and over. (Number.)	15 Bulls 1 year old and over. (Number.)	Dairy cattle (cattle kept mainly for milk production). 16 Calves under 1 year of age. (Number.)	17 Heifers 1 year old and under 2 years of age. (Number.)	18 Cows and heifers 2 years old and over. (Number.)	19 Bulls 1 year old and over. (Number.)	Sheep and lambs. 20 Lambs under 1 year of age. (Number.)	21 Ewes 1 year old and over. (Number.)	22 Rams 1 year old and over. (Number.)	23 Wethers 1 year old and over. (Number.)	Goats and kids. 24 Kids under 1 year of age raised for fleeces. (Number.)	25 Goats 1 year old and over raised for fleeces. (Number.)	26 All other goats and kids. (Number.)	Hogs and pigs. 27 All pigs under 6 months old. (Number.)	28 Sows and gilts for breeding purposes, 6 months old and over. (Number.)	29 Boars for breeding purposes, 6 months old and over. (Number.)	30 All other hogs, 6 months old and over. (Number.)	
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NOTE.—Use the following symbols to indicate class of inclosure: B. for barn; L. S. for livery stable; S. Y. for stock yard; F. L. for feed lot; V. L. for vacant lot; H. Y. for house yard.

11—4491

[These explanations and instructions were printed on the back of the schedule, in the space used on the face of the schedule for the title and Enumerator's Record.]

EXPLANATIONS AND INSTRUCTIONS.

CONFIDENTIAL.—The information reported on this schedule will be treated as strictly confidential under all circumstances.

NOT CONNECTED WITH TAXATION.—The information reported on this schedule will not be used as a basis of taxation, nor communicated to any assessor.

WHEN TO USE THIS SCHEDULE.—On this schedule are to be reported all cattle, horses, mules, asses, sheep, goats, and swine, *not kept on farms or on public ranges.* The live stock to be reported here is that kept in stables, barns, stock yards, feed lots, house yards, and on lots in or near cities and villages. To secure a complete enumeration, the question "Is any live stock named on this schedule kept on the premises?" must be asked at each dwelling-house enumerated on the population schedule, and at all other places, such as factories, stores, stables, etc., in your district where there is any possibility of live stock being kept. All live stock is to be enumerated in the name of the person in whose care it is on January 1, 1920, regardless of ownership.

HOW TO FILL OUT THIS SCHEDULE.—In filling out this schedule, one line must be used for each barn, inclosure, yard, lot, or building occupied in whole or in part by live stock on January 1, 1920. The return for a boarding, livery, or sale stable, no matter how great the number of animals kept or by how many different persons they are owned, must be made on a single line. No schedule is to be prepared for barns, inclosures, etc., in which no live stock was kept on January 1, 1920.

WHEN TO USE A FARM SCHEDULE INSTEAD OF THIS SCHEDULE.—Do not report on this schedule the live stock on any "farm," as defined by the census, however small. Report such live stock on the general farm schedule. A farm, for census purposes, is all the land which is directly farmed by one person conducting agricultural operations, either by his own labor alone or with the assistance of members of his household or hired employees. The term "agricultural operations" is used as a general term referring to the work of growing crops, producing other agricultural products, and raising domestic animals, poultry, or bees.

In determining when to use a general farm schedule, note that all market, truck, and fruit gardens, nurseries, greenhouses, poultry yards, places for keeping bees, and all dairies in or near cities, villages, and incorporated towns are, for census purposes, farms, provided they produced in 1919 agricultural products to the value of $250 or required the continuous services of at least one person. Agricultural products, as the term is here used, include all plants, flowers, vegetables, and other crops grown in 1919; all live stock raised during the year; and all milk, eggs, and other live-stock products produced during 1919. If a general farm schedule is required, all questions on that schedule must be answered.

9—130
FOURTEENTH CENSUS OF THE UNITED STATES

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

NONRESIDENT FARMER'S SLIP

CENSUS OF AGRICULTURE, 1920

NOTE.—This slip is to be made out in duplicate and both copies sent to the supervisor. See book of instructions to enumerators.

I.

To the enumerator in whose district is located a farm worked by a nonresident:

If any farm situated in your enumeration district is operated by an individual residing in another enumeration district, fill out the memorandum below in duplicate—that is, on two copies of this slip, giving the name and address of the farmer and, if known to you, the number of the enumeration district in which the farmer resides and the name of the enumerator for that district. Then forward both slips to your supervisor.

Memorandum to the supervisor from an enumerator in whose district is located a farm worked by a nonresident.

....., 1920.

Mr. .....
Supervisor of the Census.

SIR:

The farm worked by the person named below is located wholly in my enumeration district. I have not returned a schedule for this farm, because the farmer who works it resides in another enumeration district. His name and address are as follows:

Name .....

Post-office address .....

County ..... State .....

I believe that this farmer's residence is located in enumeration district No. ....., for which district ..... is the enumerator.
(Write enumerator's name.)

(Signed) .....

Enumerator, District No. .....

II.

Notification from the supervisor to the enumerator in whose district the farmer referred to above resides.

....., 1920.

Mr. .....

Enumerator, District No. .....

SIR:

Please visit the above-mentioned farmer and ascertain if he personally works the farm referred to. If he does, prepare a schedule for his farm in the usual manner, but write across the face of the schedule in large letters "FARM NOT IN THIS DISTRICT." Then date and sign the certificate on the other side of this slip and attach this slip to the schedule. If you find that the farmer here described does not personally work the farm mentioned, write a detailed statement of the result of your investigation on the blank lines on the other side of this slip and mail it to me at once.

.....
(OVER.) *Supervisor of the Census.*

[Back of slip.]

III.

To the enumerator of the district in which the above-mentioned farmer resides:

When you have obtained a schedule from the above-mentioned farmer sign the following certificate and then attach it to the schedule:

Certificate of the enumerator in whose district the above-mentioned farmer resides.

....., 1920.

This certifies that I have prepared the attached schedule for the above-mentioned farm in accordance with the foregoing instructions.

(Signed) .....

Enumerator, District No. .....

If you do not obtain a schedule, give reasons below and return this slip to the supervisor.

....., 1920.

Mr. .....
Supervisor of the Census.

SIR:

After careful investigation, I find that the facts do not justify the preparation of a schedule for this farmer. My reasons for not preparing a schedule are as follows:

.....

.....

.....

.....

(Signed) .....

Enumerator, District No. .....

APPENDIX B.—EXTRACTS FROM SUPERVISORS' CORRESPONDENCE RELATIVE TO DECREASE IN NUMBER OR ACREAGE OF FARMS.

In the following pages are presented extracts from letters received from district supervisors of the census in various states in reply to an inquiry as to the reason for the decrease between 1910 and 1920 in the number of farms reported or in the acreage of farm land, for their respective districts.

ALABAMA.

District 1.—During the years from 1914 to 1916, owing to the low price of cotton and the appearance of the boll weevil, there was a great exodus of farm labor from this section of the country to the northern states. Also, during the years 1917 to 1919, owing to the high wage scale paid by the shipbuilding plants in and around Mobile and by other manufacturing interests, a great many farmers and farm laborers abandoned the farms and obtained employment at these places.

A part of these farms have been turned into stock farms and while a small percentage of labor has returned to the farms, the balance is still away. By reason of the low price of cotton and other farm products, the farmers are likely to be reluctant about returning to the farm. So the present indications are that the greater percentage of these lands are permanently abandoned.

District 2.—As to the cause for the decrease in farms and farm acreage, I am of the opinion that the depression in price of the principal farm product (cotton) in this section of the country in 1914, and the lure, subsequently, of high prices for labor farther north in munition factories and other enterprises drew a large bulk of southern labor from the farms, and hence much of the farm lands were not worked for want of labor.

District 4.—Until 1914 or 1915, there was a system in operation in Alabama something like this: At the beginning of each year a tenant made financial arrangements with either his landlord, his banker, or his supply merchant for supplies for the year in advance, giving in each case a mortgage on his crops to be grown that year and on any other personal property he might own, such as mules, horses, cattle, and farm implements. In the fall of the year the tenant would pick his cotton crop, have it ginned, sell it, and apply the proceeds to the liquidation of the indebtedness incurred as stated. However, when the boll weevil, in its steady progress eastward and northward, reached the fields of Alabama, the landlord, the banker, or the supply merchant found at the end of the year that, through no fault of the tenant, there were no crops raised, as the weevil made a clean sweep. Possibly this was tried another year with more disastrous results, whereupon, from sad experience, this credit was withdrawn. The average tenant, having no other resources, was thus forced to look elsewhere for a means of livelihood.

About this time, through war activities, industrial plants were expanding, calling for more labor. Many tenants promptly accepted this opportunity and abandoned their farm operations for the daily wage at the sawmills, cotton mills, mines, and quarries. In the case of the Negroes many went from the Alabama cotton fields to the munition plants farther north, and the taking of the 1920 census came at a time when this shift from farms to industrial centers had just about been completed.

ARKANSAS.

District 4.—The decrease in Polk and Montgomery Counties was due to the fact that many homesteaders and owners of small tracts of timber lands, having exhausted their supply of merchantable timber, sold their holdings to adjacent property owners or forfeited them to the state.

CALIFORNIA.

District 9.—One reason for the decrease in the number and acreage of farms in Orange County is the extension of the oil industry. Within the last 10 years three new oil fields of considerable area have been developed in the county, and the old oil fields in the northern part of the county have been greatly enlarged. Both in the old fields and in two of the new ones there is considerable acreage that formerly was devoted to farming. Another possible reason for the decrease in farm acreage is the rapid expansion of the towns in the county, notably Huntington Beach, Newport Beach, Santa Ana, Westminster, Garden Grove, Orange, and Anaheim. To each one of these places has been added an area that in 1910 was devoted to farming.

The mines of Mono County, which formerly were the basis of what agriculture there was, have nearly all been abandoned since 1910. The county is largely mountainous and parts of it are almost inaccessible. Hence, when the mines were closed the local market disappeared and the farms reverted to cattle range and waste. Cattle can be marketed from this locality in favorable seasons, but garden and farm products can not.

CONNECTICUT.

District 2.—There is no doubt that the industrial conditions incident to the war were responsible for the abandonment of many small farms in Connecticut during that period. However, there has been a general movement in this state from farm to city. Industry has shown a greater lure to the rising generation and the farms have suffered in consequence.

There was some temporary abandonment of farms, where farms have been put back into operation since the last census, but such cases are few in number.

Many of the farms which have been abandoned have been poorly fitted for agriculture and have been those marginal farms which will revert to woodland or rough pasture. They never were good agricultural propositions and are economically unfit for intensive agricultural development.

FLORIDA.

District 2.—There has been a considerable amount of permanent abandonment of farms in this district, and, in my opinion, it was caused by the scarcity of farm labor. There is but little cotton produced in this section now, and has been but little for the past several years on account of the boll weevil.

ILLINOIS.

District 16.—I think that the decrease in the number of farms in this district since 1910 is caused largely by farmers selling to their neighbor farmers when land advanced in price during the war, and themselves moving to the towns, where there was a demand for labor at high prices.

District 17.—The large decreases have occurred in those counties where most of the coal is mined. There is only one reason for the decrease, as I view it, and that is that the farmers could make more working in the mines than they could at farming. Farming has been very unattractive as compared with the wages of industrial labor in this section.

INDIANA.

District 5.—In my opinion the decrease in the number of farms in Vermilion County is largely due to the buying up of a very large amount of farm land by coal companies operating in this very prominent coal center.

The population of this county has had a very rapid growth, communities springing up all over the county. This also had a tendency to decrease the number of farms.

IOWA.

District 3.—The decrease in the number of farms in Buchanan County is due to the fact that a large number of small farms have been bought up and are now parts of larger farms.

The apparent decrease in acreage is due to some of the land not being cultivated—farms temporarily abandoned at the time the census was taken.

District 8.—There were very few abandoned farms in this district in 1919, but the high farm rent and high wages in cities and towns caused a large number of renters to abandon their farms early in 1920. The enumerators, delayed by epidemics and bad roads, were unable, in many instances, to cover their territory until

February or March, and they then found farms abandoned and sometimes the former occupant had disappeared without leaving an address.

This condition had practically reversed itself in 1921, and all the farms were again occupied.

KANSAS.

District 5.—There is no abandoned farm land in this district. The decrease in the number of farms is due entirely to the increase in the size of holdings. All the land is being used, but it is being used by a smaller number of operators.

Lack of profit in farming operations is the cause of this change. Some farmers have lost their lands by foreclosure of mortgages, others have sold out to avoid bankruptcy. The trend now is toward larger holdings that can be operated more economically than small farms. Small farmers are held back by lack of capital and credit; large operators are in a better position.

District 8.—Those familiar with conditions know the vast operations in oil and gas development in Kansas during the past five or six years, and are also aware that most of the oil produced in Kansas has come from Butler County, where the thousands of oil derricks and the storage tanks have taken up much of the farm land. Many farmers have become rich and moved to the cities, literally abandoning agricultural enterprises. The waters of the streams have been polluted by the oil and salt water from the slush ponds, and many wells have been defiled from the veins of salt water seeping through the earth from wells drilled. This, along with the decidedly unprofitable experience in the live-stock business in recent years, has tended to discourage stock raising and feeding, and this cessation of feeding has in turn stopped the market for kafir and other forage crops, which were generally planted in the eastern section of the county, as the land was not adapted to general farming operations.

In traveling over much of the territory in Butler County recently, I was amazed at the number of deserted farmhouses and of farms which were not being cultivated. This was largely due to the labor problem. With high wages prevailing in the oil fields and steady employment, it has been a problem for farmers here to secure help. Many of the boys, returning from service, secured work in the oil fields in preference to farm work, as corn and kafir, which they could raise without much capital, promised little return to them, and they chose a sure and steady income.

KENTUCKY.

District 11.—During the last 10 years Harlan County has become one vast coal field. In this county I think the decrease in farms and farm acreage is permanent. A large percentage of the people who lived on the mountain sides have sold their land to the coal companies and have gone into the mining camps to work and live. Of course, there are a number of tenants on this company land, but a very small per cent of the land is used for farming.

LOUISIANA.

District 7.—There was an abandonment of farms to a certain extent in St. Landry and Calcasieu Parishes in 1920, due to a very bad crop year in 1919, and to a shortage of labor at the beginning of the year 1920, this shortage being due to a shift of the labor toward the big centers.

Another factor which contributed to the reduction of farms in number, but not in acreage, is the fact that farms formerly operated in small sections by cotton farmers working on shares have been merged into farms of larger area, planted in rice, and worked by day labor under one management.

MAINE.

District 2.—Aroostook County has few, if any, abandoned farms, but many farmers in this county have absorbed adjoining farms. Penobscot County has a large number of abandoned farms. On many of these farms there are fairly substantial buildings which with small expense could be made habitable, yes, comfortable; and the farms themselves by industry could be made profitable. Some parts of Piscataquis County are not attractive for farming, and hence in this county many farms are absolutely abandoned.

MARYLAND.

District 1.—Notwithstanding the very high prices of farm products at the time indicated in your letter (1919 and 1920), it was impossible to secure labor to work on the farms. This district is very near Wilmington, Chester, and other places where war activities and factories were located. The high wages for labor drew a large proportion of the farm labor to these factories.

District 2.—Baltimore County, which covers about half of the district, is adjacent to Baltimore city. During the years from 1910 to 1920, there was a very marked development of properties adjacent to the city, and many tracts which had been previously used as farms were cut into building lots for the purposes of development.

MASSACHUSETTS.

District 2.—Apparently the main cause for farm abandonment was the recent World War, during which farmer boys and farm hands were induced to come to cities, where, with shorter hours and easier work, they could earn more money than they were able to earn on the farms. This necessitated the operation of the farms by old people or very young people. Of course, the methods of farming changed. Smaller crops and smaller production of dairy products were in order. Following this, generally, came the abandonment of the farms because of the inability to secure proper farm labor.

District 4.—Middlesex County, being adjacent to the city of Boston, is rapidly losing its farming area and during the past 10 years hundreds of farms have been taken up for residential purposes. A very large number of farms that were situated in the cities of Arlington, Medford, Somerville, Newton, and Lexington were taken by development corporations and cut up into house lots.

The very high wages that were paid to all kinds of help in the various manufacturing plants in this county and the inability of the owners to work the farms alone led to the temporary abandonment of many of the farms.

From the reports of my inspectors, Middlesex County must have lost by farms taken for building purposes at least 350 farms that were worked in 1910. About 1,000 farms were temporarily abandoned because of high farm labor wages and the inability of farmers to get help to work on the farms, and fully 150 farms were taken in the county for residential purposes by people who had accumulated money during the war and wished a country residence.

District 8.—In Norfolk County, from 1910 to 1920, there were a large number of farmers who left their farms to go to the cities in order to secure the high wages caused by the World War, and, having learned some of the advantages of living in the cities, many decided not to return to the farms. When the 1920 census was taken, the manufacturing industries were still flourishing and employing a large number of men. The farmers who left the farms left them in charge of old people, who are gradually dying off and the farms are being abandoned. Some of these are being bought and fitted up by well-to-do people from the cities for use as summer residences.

In Plymouth County the same conditions prevail as in Norfolk County, and I am of the opinion that the war work can be considered directly responsible for the decrease. I know from personal observation that there are now many abandoned farms in both Norfolk and Plymouth Counties, and I feel that succeeding censuses will show continuing decreases in the number of farms.

MICHIGAN.

District 3.—It is difficult to say to what extent the temporary abandonment of farms in 1919 contributed to this decrease. Without doubt the great industrial activity in our manufacturing centers caused a large number of people to leave the farms and was generally the principal factor in bringing about a marked decrease in the number of farms and the farm acreage. In the counties of Calhoun and Kalamazoo, in this district, the purchase of the Government training camp at Custer cut out several thousand acres which had formerly been used for farming purposes.

District 6.—This section of the state is in the center of the automobile-building district of Michigan. These plants were paying very high wages during the winter of 1919, the summer of that year, and the early part of 1920, which attracted most of the young men from the farms. A considerable amount of land, therefore, was idle during that year. This was a temporary condition and at the present time there are enough laboring men in the rural territory to work the farm lands.

District 9.—The section of Michigan which comprised my district is somewhat complex in its characteristics, combining streaks of very good and very bad agricultural lands and wide reaches of summer resort property. The abandonment of farms, particularly of those in the pine barren regions, was very apparent during the last three years of the decade from 1910 to 1920, and the census was taken when the "back to the city" movement was at its height—during the industrial activity and high wage era.

To-day a fair percentage of the abandoned farms of the better grade are reinhabited, though there has been little movement back to the lean lands. There is noted also a marked tendency to fewer and larger farms as an outgrowth of shifting conditions. Many elderly farmers, when their sons deserted the farms to work in city factories, felt themselves unequal to the work of tilling the soil and when opportunity offered disposed of their lands at sacrificial prices to thrifty neighbors, who annexed the acreage, while the former occupants moved to the cities where their sons were employed.

Mississippi.

District 2.—These decreases were due to the abandonment of farms following the coming of the boll weevil to this section. Then, too, there has been a movement toward the Delta sections and to adjacent states. The younger men have been going to the cities to go into industrial work to some extent.

District 7.—I am convinced that this decrease was caused by the migration of the Negroes and some of the white population on account of the ravages of the boll weevil in southern Mississippi, and the high wages offered during 1918 and 1919 by the manufacturing enterprises of the country, both North and South.

District 8.—There are three reasons for the decreases mentioned: First, the advent of the boll weevil since 1910; second, the migration into towns and cities and away from the farms during and after the war; third, the exodus of the Negroes from this district to the northern communities during the last few years, which has been enormous.

Missouri.

District 2.—At the time the census was being taken and the returns made by the enumerators, I complained to several of them that their schedules were not showing the number of farms which it seemed they should show. Without exception they all informed me that farms had been abandoned, and in several instances gave me the number of abandoned farms in their districts.

This was especially true in Monroe County and Carroll County. I have no way of estimating the number of abandoned farms, but from my own personal knowledge I know quite a number in the counties where I am familiar with conditions that have been abandoned or merged with other farms, making one farm where but a few years ago there were two or three. This was brought about largely by people moving from the farms to the cities and partly during the war by the sons of farmers going to the Army and the farmers selling their farms or doing something else with them.

New Hampshire.

District 2.—Relative to the decrease in the number of farms and farm acreage in the second New Hampshire supervisor's district, I have gone over the matter very carefully and believe the substantial difference between the 1910 and 1920 census is due to the permanent abandonment of farms since 1910. It was brought out very clearly in the last census taking that a number of the abandoned farms were purchased by lumber dealers. Often in the northern part of the state a lumber dealer would buy anywhere from six to fifteen farms in one purchase. In making the returns he would report only one farm. This necessarily would reduce the number of farms materially.

New Jersey.

District 1.—I can account for the decrease in 1919 and 1920 only by the development of many farms for building operations and by the fact that many farms were not operated as such during these years. In Camden County in the last few years there has been a vast development of farm lands for building sites, and along the Delaware River, in Gloucester County—even extending into Salem County—a number of farms have been sold for large manufacturing plants, such as oil, powder, etc. Farm land development for building purposes has been very active in Camden and Gloucester Counties for the past 10 years, and this may account for the decrease in the number of farms since 1910.

District 2.—Burlington County shows a decrease in both the number of farms and farm acreage. Part of this decrease is due to the temporary abandonment of farms caused by the high price of farm labor, but the more vital factors were the development of Camp Dix, one of the war cantonment sites which took over a large acreage, and the gradual development of towns within commuting distance of Philadelphia as suburban residences.

District 5.—Regarding the decrease of farms in Union County in 1920 as compared with 1910, I believe that this decrease is due to the fact that Union County is part of the metropolitan district of New York City, and is only 30 or 40 minutes away from Broadway. This fact, together with the development of good roads in the county, has caused it to grow into a suburban center. The fact that it is so near New York has also invited factories here and these factors have changed it from a farming to a residential county.

There are probably no farms in this county which have been temporarily abandoned. The farms which have been abandoned have, in most cases, been taken for factory or residential sites.

New Mexico.

District 2.—The most direct cause of the decrease in the area of agricultural lands is, no doubt, the constantly increasing height of the water table under these lands, which causes them gradually to become subirrigated or water-logged, and, therefore, unfit for any agricultural use. Owing to the very limited areas of the irrigated sections, it is impossible for the owner or farmer to compensate his loss of acreage by breaking in new lands; hence a gradual diminishing of his farmed area occurs unless he takes steps to remedy the condition by drainage.

The most outstanding example of the loss of agricultural area through the cause above cited will be found in Sierra County, where the impounding of the waters in the Elephant Butte Irrigation Project's Dam has caused a rise in the water table of lands above the dam of from 3 to 7 feet. This rise has caused the entire loss of many of the small farms above the dam.

New York.

District 13.—A great many farms in the better farming sections have been consolidated, but that should not decrease the acreage. In the poorer sections the farms have been abandoned by the farmers for the reason that the young men were called to war or had secured employment in the industrial centers during the war. Present indications are that a change is taking place and that the abandoned farms are now being reoccupied.

District 14.—In my opinion the decrease in the number of farms from 1910 to 1920 was a gradual movement, accentuated during the time of the war, rather than a temporary abandonment of farm lands during 1919 and 1920. The two counties of my district both contained large war industries which drew labor largely from the farms of the district. This caused the abandonment, I believe, of many of the farms.

District 15.—I do not think that the decrease either in the number of farms or in the farm acreage was the result of temporary abandonment of farms for the years of 1919–20, but am of the opinion that it was the result of permanent abandonment in many instances, and also that the decrease in the number of farms is partially explained by the combination of two or more farms into one, which has taken place in this section of the country in the last 10 years.

The decrease in the number of farms and the farm acreage in Broome County is partially explained also by the great increase in the population and area of the city of Binghamton and the villages of Endicott, Johnson City, and Union.

District 17.—One of the reasons for the decrease in the number of farms in this district is that farm laborers went to the city, where they could obtain much higher wages. This left many unoccupied farms. There were also a great many farms which were worked by neighbors, in which case, for census purposes, the two farms were considered as one. I think this condition prevailed largely in 1919 and 1920 and was not general earlier in the decade.

Throughout this district there were also quite a number of farms which have been abandoned entirely. For example, in one part of Cayuga County there are a number of so-called small "muck farms" which were worked by foreigners and which I assume had been reported in previous censuses. These were abandoned, owing to the fact that the demand for labor and the wages paid therefor were so great during 1919 and 1920 that the owners came into the city to work. My opinion is, however, that many of these farms will be taken up again during the coming year.

District 19.—The city of Rochester has taken in 7,500 acres of new territory since 1910, and there are a great number of subdivisions adjoining the city which were formerly farm lands. They are now laid out in lots and there is some talk of taking them into the city. Factories and industrial concerns have located on choice farm lands just outside the city. The villages in Monroe County have grown and they have taken in territory that was formerly in farms. A great many acres were also taken for the Barge Canal, which crosses Monroe County. I do not believe there is an abandoned farm in Monroe County at the present time, nor were there any during the year 1920.

NORTH CAROLINA.

District 3.—The decrease in the number of farms in this district was caused by a temporary abandonment of farm lands in 1919 and 1920. I account for this by the fact that during the years 1917, 1918, and 1919 men left the farms and entered the service of their country both under the flag and in the industrial centers, and that they had not returned to their usual vocation when the census was taken.

District 4.—The reason that the farm acreage in 1920 was smaller than in 1910 is that farmers in this district are farming in a more intensive manner. Where they formerly farmed from 25 to 30 acres to a horse, they now farm from 12 to 15 acres, and fertilize heavily. The number of farms and the acreage in cultivation would have been greater, except for the high wages for manual labor and skilled labor in the towns and cities. Many young men who were raised on the farm and had gone to war did not resume farming with their parents, nor did they take a farm of their own, but did other kinds of work because of the lucrative pay during the year 1919 and the spring of 1920.

OHIO.

District 8.—Many farms throughout the state have been abandoned, except that they are partially farmed by "field renters"—that is, by neighboring farmers who hire and cultivate all or a part of the tillable land. I would judge that there are several hundred empty farm residences in each of the larger counties of the district, and, owing to the lack of farm help, quite a large acreage was not cultivated or used in the years of 1919 and 1920.

District 15.—The decrease in the number of farms and in the farm acreage in Tuscarawas County, in my opinion, is not to be attributed to a temporary abandonment of farms for the seasons of 1919 and 1920, but rather to the general abandonment between 1910 and 1920.

Mining is carried on more extensively in Tuscarawas County than in any other county in northeastern Ohio, and investigation shows that nearly all the acreage under which mines are being operated has been abandoned for agricultural purposes. The cities of New Philadelphia, Dover, Uhrichsville, and Dennison have extended their corporate limits. These factors, along with the general influx to the industrial centers in northeastern Ohio, have caused the decrease in farms and farm acreage in Tuscarawas County.

District 17.—I would say that the principal reason for the decrease in the farm acreage arises from the activity in coal operations that is going on here. Hundreds of farmers have disposed of their farms at high prices, and the steam shovels are skimming the surface for the coal that is beneath. I know of one big farm in this county which contains 1,500 acres carrying on no agricultural operations. The place formerly had tenants. There are none there now. The place is lying idle waiting for the coming of the steam shovel.

OREGON.

District 1.—As to the decrease in land in farms in Clackamas, Douglas, Josephine, Lincoln, Marion, Polk, Washington, and Yamhill Counties, as shown in the 1920 census, I will say that quite a number of farms were abandoned, as the farmers could make more money working for wages than on their farms. I believe this to be a temporary abandonment, however, and that another census will show an increase.

PENNSYLVANIA.

District 7.—Within the period from 1910 to 1920, in Northampton County, the boundaries of municipalities have been enlarged. New municipalities have been formed from farm land. Industrial plants have taken over farm land for other purposes. There has been a drift of population from the minor civil divisions into municipalities, causing a permanent abandonment of farms since 1910.

In Monroe and Pike Counties, summer resorts and hunting and fishing preserves and reforestation have claimed much farm land.

District 11.—Regarding the decrease in the number of farms in the eleventh Pennsylvania district, it is my opinion that the majority of farms were abandoned during the years 1918 and 1919 by reason of the fact that the farm owner or renter could not secure sufficient labor to operate the farms, since labor had either been drafted into the Army or had sought employment in more remunerative positions in the urban sections.

District 14.—While I have actual knowledge of the conditions in Perry County only, I believe they are not different from conditions in the other counties of this district. Anyone traveling along the ridges and the mountains and through the small, poor valleys in Perry County will notice many abandoned houses and many old fields grown up to weeds and scrub pine. Years ago these houses were occupied and these fields cultivated. Families lived on these properties, but, as these lands were poor and produced little per acre, and farm products did not sell for good prices, these families were barely able to eke out their living. Therefore, when industries began to expand, pay better wages, and call for more laborers, and especially when factories began to demand female labor, these families gradually drifted away to the large towns and the cities.

These conditions do not exist, however, in the larger valleys, where the soil is good. The large, good farms are tilled as they were 10, 20, or more years ago, and they are being improved instead of being allowed to deteriorate.

I am convinced that the decrease in the number of farms and the decrease in the farm acreage are due to the permanent abandonment of many farms along the ridges and mountains and in the small valleys.

District 17.—In my opinion the greater part of the decrease is the result of the abandonment of farms since 1910, particularly during the latter part of the 10-year period, when the Army and industrial concerns called so many young men into their service. I do not believe this will be permanent, as many farmers from the Middle West are availing themselves of the cheap land in western Pennsylvania, and many persons of foreign birth are also taking up farming.

In Elk and Forest, both of which counties are in the lumber district, many men would clear a piece of ground and after a time find it so unproductive that they would abandon it. These farms vary greatly in size. They would probably clear 30 or 40 acres on a 150-acre farm, build a shack for a home and a shed for a barn, and after a few years give up the project.

District 20.—It is my opinion that the decrease is due to two causes: First, that smaller farms have been consolidated into larger ones; and second, that some farms have been permanently abandoned as such.

As an illustration of the former, I can cite that near Ebensburg two large coal companies bought up several thousand acres of farm land, some of which acreage is now used in the development and the operation of the coal mines and the rest for farming purposes but operated as one or two farms. Heretofore this acreage was divided into about 15 farms.

SOUTH CAROLINA.

District 2.—The smaller acreage devoted to farming since 1910 in this district is probably due to the fact that during the war large numbers of Negroes left this section to make their homes in the North and the West, attracted by higher wages. Then, too, part of the decrease is due to men being drafted into the Army from the farms. Many of these did not return to agriculture but went into other lines of endeavor. Another thing that would account for the decreased acreage is the coming of the boll weevil, which forced a reduction in cotton acreage, the chief crop of this immediate section.

SOUTH DAKOTA.

District 3.—The reason for the decrease in the number of farms in the counties of Armstrong, Shannon, and Washington, which are all located in Indian Reservations, is that the farms, which in 1910 were reported by the individual owners, are now leased to large cattle owners or companies, and such leases generally include a great number of farms operated as one unit.

The other counties mentioned were all settled by "homesteaders," of which a great number have moved away since 1910, and the small farms have been combined into larger ranches.

VERMONT.

District 1.—The real cause of the abandonment of farms in Vermont, I think, started 40 or 50 years ago, when the working class of people operated more small farms than they do now. In Rutland County, particularly in those sections where there were quarries, the working people built homes on small farms in the vicinity of their work. Gradually the quarries were worked out or ceased operation from one cause or another, and gradually in the same manner these small places were abandoned one after another.

It is my opinion that the large farms have not been abandoned to any extent. The abandonment is chiefly among small places such as those described and among the farms far back from the main roads.

VIRGINIA.

District 2.—Norfolk County shows a loss of 220 farms and 16,319 farm acres. Numbers of farms around Norfolk and Portsmouth cities have been sold for building lots. In fact, I am sure the loss in acreage is covered by this and by the purchases by the Government for war purposes.

The shortage of farm help and the consolidation of farms caused the loss of acreage in the other counties.

WASHINGTON.

District 4.—The decrease in the number of farms may be due to the fact that a large number of the small farmers sold their holdings to persons who already owned. In other words, the small farmer is gradually disappearing and his holdings have been absorbed by the large landowner.

WEST VIRGINIA.

District 5.—The decrease in the number of farms in this district I attribute to the development of the coal-mining industry. The larger rewards of the coal industry and its tributary branches attracted a large number of men from the farms and resulted in the abandonment of a percentage of them. This movement was in progress during the period from 1910 to 1920, and was of a permanent and not merely temporary nature.

WISCONSIN.

District 1.—It seems apparent that temporary abandonment of farm land in Rock County for the season of 1919 existed. In my opinion this was due to the great expansion of industry at Janesville and Beloit, employing hundreds of people. Among these were men who otherwise would have been operating farms in this community.