

Frederick H. Smith, Milton.
 Augusta H. Tilden, New Lebanon.
 Luther Hasbouck, New Paltz.
 Edward S. Moore, Norwich.
 Ashmer R. Collins, Norwood.
 John R. Davis, Oakfield.
 Joseph P. Kiernan, Pawling.
 John E. Walker, Philmont.
 Lee Van Vredenburgh, Rhinebeck.
 Edwin Clute, Schenectady.
 John G. Rose, Sinclairville.
 Verne Seebeo, South Dayton.
 Francis D. Lynch, Stony Point.
 James H. Burns, Troy.
 Marion E. Wroten, Trudeau.
 Edith L. Kent, Tuxedo Park.
 Peter Marcinkowski, Wallkill.
 Philip J. Smith, Webster.
 Mary R. Newlands, West Point.

NORTH DAKOTA.

John P. Hardy, Fargo.
 Jessie M. Hamill, Oakes.
 Thomas F. Cooper, Parshall.

OHIO.

Arda M. S. Allensworth, Amsterdam.
 Harry H. Maxson, Germantown.
 Andrew J. Price, Glouster.
 Lee B. Milligan, Lowellville.
 Wendell E. Brettell, Rock Creek.
 John L. Carr, South Charleston.
 Roy S. Rush, Wickliffe.

TEXAS.

George W. Morris, New Boston.
 Mae Murray, Sonora.

VERMONT.

Frank L. Start, Jeffersonville.

WASHINGTON.

Inez G. Spencer, Creston.
 Andrew J. Cosser, Port Angeles.
 Gertrude Cosgrove, Sprague.
 Alberta Hough, Valley.

WEST VIRGINIA.

Joseph N. Alderson, Alderson.
 James W. Wilson, Barboursville.
 Burton B. Rohrbough, Belington.
 Leonidas W. Bartlett, Buckhannon.
 Hamer H. Berry, Burnsville.
 William B. Stewart, Chester.
 William D. Roush, Clendenin.
 Harry T. Bumgarner, Elizabeth.
 William W. Johnson, Glenville.
 John R. Schaeffer, Gorman.
 Bertha W. Smith, Holden.
 Benjamin L. Brown, Kingwood.
 Henry L. Bowling, Lewisburg.
 Joseph F. Thompson, Martinsburg.
 Oliver A. Locke, Milton.
 Mary E. Davin, Montgomery.
 William S. Wray, Northfork.
 Thomas G. Burke, Oak Hill.
 William A. Curry, Omar.
 William G. Keyes, Philippi.
 William B. McNutt, Princeton.
 John J. Kerwood, Ripley.
 Charles G. Ogden, Salem.
 Grover F. Hedges, Spencer.
 Preston H. Kelly, Thurmond.
 Karl G. Davis, Wallace.
 Clelia T. Henritze, War.
 Lawrence M. Rowan, White Sulphur Springs.

WYOMING.

Elmer H. Schreck, Gillette.

WITHDRAWALS.

Executive nominations withdrawn from the Senate November 21, 1918.

POSTMASTERS.

John D. Fulton, to be postmaster at Lengeloth, Pa.
 George W. Finley, to be postmaster at Spalding, Nebr.

HOUSE OF REPRESENTATIVES.

THURSDAY, November 21, 1918.

The House met at 12 o'clock noon.

The Chaplain, Rev. Henry N. Couden, D. D., offered the following prayer:

Our Father in heaven, we pray that out of the fiery furnace through which the world is passing that a larger, purer, nobler type of man shall emerge, with a clearer vision of Thy character and Thy purposes.

"And I saw a new heaven and a new earth: for the first heaven and the first earth were passed away. And I, John, saw the Holy City, new Jerusalem, coming down from God out of heaven, prepared as a bride adorned for her husband."

We pray that the vision may become a reality; that men may live together in harmony, peace, and unity; that God shall be all in all and life become a precious thing, to be upheld and sustained; and glory and honor and praise be Thine forever. In His name. Amen.

The Journal of the proceedings of Monday, November 18, 1918, was read and approved.

SWEARING IN OF A MEMBER—WILLIAM F. BIRCH.

Mr. BROWNING. Mr. Speaker—

The SPEAKER. For what purpose does the gentleman rise?

Mr. BROWNING. There is present to-day Mr. WILLIAM F. BIRCH, who was elected to fill the unexpired term of the late JOHN H. CAPSTICK, and I ask unanimous consent that he may be sworn in.

The SPEAKER. Did the gentleman receive a majority?

Mr. BROWNING. There is no contest, and I have a certificate in my hand, from the county clerk, of his election.

The SPEAKER. The gentleman from New Jersey [Mr. BROWNING] asks unanimous consent that the successor of Mr. CAPSTICK be sworn in without his credentials.

Mr. GARRETT of Tennessee. I understood him to say that he had his credentials.

Mr. BROWNING. I have a certificate from the county clerk. The State board has not met, and he could not get his credentials from the secretary of state.

Mr. GARRETT of Tennessee. May I ask the gentleman if there was any contest?

Mr. BROWNING. There is none. There is no objection whatever.

The SPEAKER. Is there objection to the request of the gentleman from New Jersey [Mr. BROWNING]? [After a pause.] The Chair hears none.

Mr. WILLIAM F. BIRCH appeared before the bar of the House and took the oath of office prescribed by law.

MESSAGE FROM THE SENATE.

A message from the Senate, by Mr. Waldorf, its enrolling clerk, announced that the Senate had receded from the amendment No. 28 to the bill (H. R. 11945) making appropriations to enable the Secretary of Agriculture to carry out during the fiscal year ending June 30, 1919, the purposes of the act entitled "An act to provide further for the national security and defense by stimulating agriculture and facilitating the distribution of agricultural products, and for other purposes."

The message also announced that the Senate had passed bills of the following titles, in which the concurrence of the House of Representatives was requested:

S. 3944. An act for the relief of Emma H. Ridley;

S. 3986. An act to acquire the manuscript of Charles Chaillé-Long containing an account of the unveiling of the McClellan statue;

S. 2171. An act to abolish the United States land office at Springfield, Mo.;

S. 1661. An act for the relief of Albert H. Campbell;

S. 68. An act to amend section 269 of chapter 231 of the act of March 3, 1911, entitled "An act to codify, revise, and amend the laws relating to the judiciary";

S. 4271. An act for the relief of the Commissioner of Internal Revenue;

S. 1590. An act providing for an increase of salary for the United States marshals and for the United States district attorneys for the western and eastern districts of Louisiana;

S. 4178. An act providing additional time for the payment of purchase money under homestead entries of lands within the former Fort Peck Indian Reservation, Mont.;

S. 4858. An act to provide method of settlement for materials, stores, and supplies transferred between different bureaus, departments, or agencies of the Government, and for other purposes; and

S. 4272. An act for the relief of the Commissioner of Internal Revenue.

The message also announced that the Senate had passed without amendment the bill (H. R. 10818) to authorize the county of Loudon, in the State of Tennessee, to construct a bridge across the Tennessee River near Loudon, Tenn.

The message also announced that the Senate had passed without amendment the bill (H. R. 282) amending the public-buildings act approved March 4, 1913, providing for the purchase of a site for a public building at Nogales, Ariz.

ENROLLED BILLS SIGNED.

Mr. LAZARO, from the committee on Enrolled Bills, reported that they had examined and found truly enrolled bills of the following titles, when the Speaker signed the same:

H. R. 10818. An act to authorize the county of Loudon, in the State of Tennessee, to construct a bridge across the Tennessee River near Loudon, Tenn.; and

H. R. 282. An act amending the public-buildings act approved March 4, 1913, providing for the purchase of a site for a public building at Nogales, Ariz.

ENROLLED BILLS PRESENTED TO THE PRESIDENT FOR HIS APPROVAL.

Mr. LAZARO, from the Committee on Enrolled Bills, reported that this day they had presented to the President of the United States, for his approval, the following bills:

H. R. 10818. An act to authorize the county of Loudon, in the State of Tennessee, to construct a bridge across the Tennessee River near Loudon, Tenn.; and

H. R. 282. An act amending the public-buildings act approved March 4, 1913, providing for the purchase of a site for a public building at Nogales, Ariz.

ADJOURNMENT OF SESSION.

Mr. KITCHIN. Mr. Speaker, I move the immediate consideration of the resolution which I send to the Clerk's desk.

The SPEAKER. The Clerk will report the resolution.

The Clerk read as follows:

House concurrent resolution 61.

Resolved by the House of Representatives (the Senate concurring). That the President of the Senate and the Speaker of the House of Representatives be authorized to close the present session of the Congress by adjourning their respective Houses on the 21st day of November, 1918, at 5 o'clock p. m.

Mr. GILLETT. May I ask the gentleman a question?

Mr. KITCHIN. Certainly.

Mr. GILLETT. Has the gentleman assurance that this will be passed by the Senate?

Mr. KITCHIN. I have. I have conferred this morning with Senator MARTIN and Senator LODGE. The hour of 5 o'clock is fixed because there are three Senators who desire to make speeches to-day, and they will not finish until some time about 5. They agreed to the hour of 5.

Mr. GILLETT. Is it customary to fix the precise hour?

Mr. KITCHIN. That is the custom. That has heretofore been done in the resolutions for adjournment sine die. My idea is that we will recess as soon as we pass this until 12.30, unless the Senate has passed the resolution and sent it over. Then we will pass the resolution appointing a committee to wait on the President, notifying him we are about to adjourn—a formal resolution—and then we will take a recess until 5 minutes to 5 o'clock.

Mr. WINGO. When we meet between now and 5 o'clock, is the gentleman disposed to give an opportunity for the consideration of emergency matters to which there is no objection?

Mr. KITCHIN. I do not think, under the agreement, that we could do that. I hope the gentleman will not ask it, because, while I would be glad for them to be considered—

Mr. WINGO. Here is the situation: I do not suppose there is any doubt that when we entered into the so-called gentleman's agreement it was understood that for all practical purposes that agreement would conclude on the 12th day of November. The gentleman knows it is generally understood that the President will leave here before there will be an opportunity to sign bills of an emergency character that might be passed on the 2d day of December. There are some small bills—I have one myself—and my attention is called to the emergency whereby a great public enterprise, that had been held up by the Capital Issues Committee, if it does not get affirmative action extending the time of a former act will suffer to the extent of \$50,000 in bonuses that have been put up and if not used have to be refunded on the 1st day of January. I think it will not violate the spirit of the gentleman's agreement for us to consider emergency matters of that kind between now and 5 o'clock. If it is the judgment of the House that it does, then there is but one recourse left, and that is to bring the

Members back here if they want to adjourn this Congress and leave these emergency matters unattended to until December 2. I am opposed to adjournment, aside from the necessity of considering the bill I have mentioned.

Mr. GILLETT. May I ask the gentleman a question?

Mr. WINGO. Yes.

Mr. GILLETT. Why make such a proposition as he suggests where he says the result will not come before the 1st of January? Why could we not do it easily when we meet on the 2d of December?

Mr. WINGO. For this reason: When you meet on the 2d of December, then you will have to get unanimous consent to consider a matter of that kind.

Mr. GILLETT. Of course that would be easier than now.

Mr. WINGO. No; it would not be easier than now.

Mr. GILLETT. Oh, yes—

Mr. WINGO. Let me answer the gentleman as to his suggestion of unanimous consent. I do not think we could get it through then; and even if we could get it through the House on the 2d day of December it would be impossible to get it to the President before he goes to Europe, because, as I understand, he contemplates going to Europe, according to the press reports, on December 3.

Mr. GILLETT. Even if that should be true, let me suggest to the gentleman that if we brought a quorum back for that purpose he would never get unanimous consent from that quorum.

Mr. WINGO. Possibly not.

The SPEAKER. The question is on agreeing to the resolution.

Mr. WINGO. Mr. Speaker, I think we ought to have some understanding as to what we can do under this situation. There are others who have emergency matters. Let me suggest to the gentleman from North Carolina that if he contemplates taking a recess until 12.30 we take a recess until 12.30, and then—

Mr. KITCHIN. The reason why we introduced the resolution now is because the Senate might pass the resolution immediately, and they would then send it right back. We want to know before we appoint the committee to wait on the President.

Mr. WINGO. Mr. Speaker, will the gentleman withhold that long enough for me to see if I can get unanimous consent for the consideration of another matter?

Mr. KITCHIN. I think that under the terms of the agreement and understanding of the House such matters as the gentleman refers to should not be taken up. The agreement that we entered into—

Mr. WINGO. No such agreement was ever entered into with me.

Mr. KITCHIN. The agreement was that we should recess until the Senate disposed of the revenue bill or until Congress reconvened.

Mr. WINGO. That was predicated upon the assumption of November 12 as the date for reconvening.

Mr. KITCHIN. Of course, I have no objection to the gentleman's request to consider it; but, even supposing nobody here should object to it, there are 150 or 200 more Members who are away, and if they were present they might object to it. It is to protect them.

Mr. WINGO. It is to protect them from legislation passed in their absence?

Mr. KITCHIN. Yes. The gentleman from Massachusetts asked the question expressly whether any extension of remarks or any request for unanimous consent for consideration of special measures would be sanctioned, or would be in violation of the agreement, except the legislation that we excepted, as the gentleman knows, and except in cases of necessity, in which event the minority leader and the majority leader should notify the absent Members to return. When the gentleman from Massachusetts asked that question, I answered, "Yes; it would be in violation of the agreement," and stated that no such business would be taken up under unanimous consent. The whole House agreed to it, and the whole matter is in the Record. As majority leader I feel that I, so far as the whole House is concerned, ought to see to it that the agreement is kept. I have been very much embarrassed by having to object to several unanimous-consent requests, to which I would not have objected unless we had this agreement and had not Members left with the understanding that these matters would not be taken up and that unanimous consent would not be given. Of course, if the gentleman will look into it, he will appreciate my position in the matter.

Mr. WINGO. Of course, I appreciate the fact that the gentleman owes a duty to the House according to his understanding of

the agreement. But the point I want to make to the gentleman is, that there is not the slightest doubt that in the gentleman's mind at the time we made that agreement it was with the understanding that it would conclude on the 12th day of November.

Mr. KITCHIN. No; we had incorporated in the agreement that nothing should be taken up until the Senate finally disposed of the revenue bill and voted on it, and that in the meantime the House should vote on the question of adjournment from the time we discussed it up to the 12th of November. That was one of the things we could take up without calling the other Members back.

Mr. WINGO. Of course, if the gentleman insists, I feel that possibly under the circumstances in his position he feels obligated to make an objection.

Mr. KITCHIN. I will not object to the gentleman's getting it up when Members get back here any more than any other Member may object.

Mr. CAMPBELL of Kansas. Mr. Speaker, will the gentleman yield to me?

Mr. KITCHIN. With pleasure.

Mr. CAMPBELL of Kansas. I suggest to the gentleman from Arkansas that after the convening of Congress in December there will be but little legislation reported from the committees, and those matters will be matters that are matured and are on the calendar and ready, and they can have almost immediate consideration at that time.

Mr. WINGO. Of course, some gentlemen are older in their experience than I am, but my observation has been such that the gentleman holds out very poor hope to me. But I appreciate the situation of the gentleman from Massachusetts and the gentleman from North Carolina and that their interpretation of the gentleman's agreement is different from mine. They feel that they should protect their respective sides, and that being true, I feel that I should not embarrass them by pressing the matter to-day. While I am opposed to adjournment and shall vote against it, I realize that with the leaders on both sides agreed they can force an adjournment to-day. I am in favor of going right on with this session without adjournment. I am ready to stay here and attend to business just as I have continuously during this session.

The SPEAKER. The question is on agreeing to the resolution.

The resolution was agreed to.

STIMULATION OF AGRICULTURE.

Mr. CANDLER of Mississippi rose.

The SPEAKER. For what purpose does the gentleman from Mississippi rise?

Mr. CANDLER of Mississippi. Mr. Speaker, I ask for the present consideration of the following concurrent resolution, which I ask to be reported.

The SPEAKER. The gentleman from Mississippi asks for the present consideration of the concurrent resolution, which the Clerk will report.

The Clerk read as follows:

House concurrent resolution 60.

Resolved by the House of Representatives (the Senate concurring), That in the enrollment of the bill H. R. 11945, entitled "An act to enable the Secretary of Agriculture to carry out during the fiscal year ending June 30, 1919, the purposes of the act entitled 'An act to provide further for the national security and defense by stimulating agriculture and facilitating the distribution of agricultural products,' the Clerk be, and he is hereby, authorized and directed to strike out, in line 1 of Senate amendment No. 31, "section 27" and insert in lieu thereof "section 6," that the sections of the bill may appear in consecutive numerical order; and also to relieve from a typographical error in the conference disposition of Senate amendment No. 15, make the amount therein mentioned \$150,000.

The SPEAKER. Is there objection?

Mr. GILLETT. Reserving the right to object, I suppose this is one of the bills that was excepted from the unanimous-consent agreement?

Mr. CANDLER of Mississippi. It is. It was specifically excepted in the "gentleman's agreement."

Mr. GILLETT. What is the reason for these changes in the engrossed bill?

Mr. CANDLER of Mississippi. This resolution is simply to correct two errors which have gotten into what is generally called "the Candler food production bill," which passed the House May 23 and passed the Senate September 19 and was sent to conference. When the Senate receded from Senate amendment No. 28, which was the rent proposition, that went out of the bill. The proposed sections included in that Senate amendment were those from 6 to 27, inclusive. When they went out, then it left that break in the numbering, one section being 6

and the next one 27. This is merely to correct that, in order that the sections may be consecutive and in numerical order.

Mr. GILLETT. It is merely a verbal correction, then?

Mr. CANDLER of Mississippi. Merely a verbal correction. Then the second proposition is this: The House in the bill as passed made an appropriation of \$480,000 for the news service of the Agricultural Department, and the Senate struck that out. In conference the conferees agreed to an appropriation of \$150,000. In writing it up, by a typographical error of the stenographer, he made it read "\$150.00" instead of "\$150,000." This resolution is for the purpose of correcting those two errors.

Mr. WALSH. Mr. Speaker, reserving the right to object, I understand that if consent is not given for the consideration of this resolution the news service of the Department of Agriculture will have only \$150 for the ensuing year.

Mr. CANDLER of Mississippi. That is correct.

Mr. WALSH. Does not the gentleman think that will be a very generous appropriation for that service?

Mr. CANDLER of Mississippi. I do not think so. After full and careful consideration of the matter, the Senate conferees and the House conferees unanimously agreed to the appropriation of \$150,000, and I believe at least that amount is necessary and can be usefully expended.

Mr. WALSH. Yes; but after very full and careful consideration the House, under the leadership of the gentleman from Mississippi [Mr. CANDLER] and the chairman of the Committee on Agriculture [Mr. LEVER], decided that \$480,000 was necessary. Now we have got down to \$150, and it would seem to me that we ought not to pass this resolution, but ought to let them try to get along on \$150.

Mr. CANDLER of Mississippi. If the gentleman will permit, "we" have not cut it down to \$150 at all. The House conferees and the Senate conferees unanimously agreed to \$150,000, and it passed the Senate at \$150,000 and passed the House at \$150,000; but the stenographer in writing it up put his period at the wrong place and wrote it "\$150.00" instead of writing it as it was intended to be written and as it passed both the Senate and House, "\$150,000." When it is the concensus of opinion not only of the conferees but of the House and Senate that the appropriation should be \$150,000, and when that amount has passed both the House and Senate and been reduced clearly by error to the small sum of \$150, I do not think the gentleman will object. To object would defeat the evident purpose and will of both the House and Senate, because both bodies agreed to and passed the \$150,000 appropriation.

Mr. WALSH. Mr. Speaker, in view of the statement of the gentleman from Mississippi, and further in view of the fact that the eminent, distinguished, and honored chairman of the Committee on Public Information is soon going away from here, and realizing how hungry people are for news, I will not object to giving this news service.

Mr. CANDLER of Mississippi. Many thanks to the distinguished gentleman, my good friend from Massachusetts [Mr. WALSH.]

The SPEAKER. Is there objection?

There was no objection.

The resolution was agreed to.

On motion of Mr. CANDLER of Mississippi a motion to reconsider the vote by which the resolution was agreed to was laid on the table.

Mr. KITCHIN. Mr. Speaker, I ask unanimous consent that the House stand in recess until 15 minutes to 1 o'clock.

The SPEAKER. The gentleman from North Carolina asks unanimous consent that the House take a recess until 12.45. Is there objection?

HOLIDAY RECESS.

Mr. GARRETT of Tennessee. Mr. Speaker, reserving the right to object, I should like to make an inquiry of the gentleman from North Carolina.

The SPEAKER. The gentleman from Tennessee will proceed.

Mr. GARRETT of Tennessee. I should like to ask the gentleman from North Carolina if any thought has been given to the question of a holiday recess—that is, for the Christmas holidays?

Mr. KITCHIN. I will say to the gentleman that we have given some thought to that, and in my judgment I believe at this time, under the peculiar circumstances, we ought to waive the usual week or 10 days' Christmas holiday, and perhaps take 2 or 3 days, because we will be rushed to death with legislation, appropriation bills, and the revenue bill, and I understand there will be considerable contest over that. It seems to me the wiser thing for us not to insist on a week or 10 days' Christmas holiday.

Mr. GARRETT of Tennessee. Mr. Speaker, of course, it has been the custom for many years—I do not know how long—to have a considerable recess at Christmas time. That interval has usually been taken advantage of by many Members to attend to their personal business affairs. It seemed to me proper to propound the inquiry at this time, to the end that if there was any thought not to have the usual Christmas holidays, Members might have notice of that fact and be enabled during the time between now and the first Monday in December to give the required attention to their personal business matters.

Mr. KITCHIN. I am glad the gentleman from Tennessee has called the attention of the House to this matter. We will adjourn now, so that Members can take the 10 days' or 2 weeks' time to attend to matters necessary at home, whereas they have been doing it heretofore at the Christmas holidays. They may use the time between now and the first Monday in December, with the understanding that in all probability we will have to dispense with the usual 10 days' or 2 weeks' holiday at Christmas.

Mr. GARRETT of Tennessee. The next session, of course, is the short session. The appropriation bills will be unusual in character, and I agree with the gentleman that we ought to dispense with a long holiday, but I do not wish to make myself offensive to the Members when that time shall come. I thought it well enough to discuss it now, and I wish to say to the gentleman that I shall feel inclined to object to any unanimous consent at that time for the taking of any prolonged or protracted recess.

Mr. KITCHIN. I have conferred with the minority leader, Mr. GILLET, and we are both of the opinion that we ought to dispense with the Christmas holidays this year, owing to the peculiar situation and the conditions during the short session.

Mr. MADDEN. Will the gentleman yield?

Mr. KITCHIN. I yield to the gentleman from Illinois.

Mr. MADDEN. It has been suggested by a great many people with whom I have had conversations, who are not Members of the House but citizens of the United States, in view of the fact that the Capital of the Nation is to be taken over to Versailles, France, and that the President will be in session over there, whether it might not be difficult for us to get the bills to him for his signature, and that therefore it might be more than ever essential that a Christmas holiday of some length should be taken. Of course, I do not want myself to spend too much time in taking a long holiday.

Mr. BENJAMIN L. FAIRCHILD. Why not hold the sessions of the House and Senate in France?

Mr. MADDEN. It has been suggested also that we might commandeer five or six battleships and take the Congress over to France at the same time that the President is there, so that we might be able to advise him on the intricate problems that he will have to deal with.

Mr. HARRISON of Mississippi. Does not the gentleman think that if we all work together and cooperate during the next three months we need not have any extra session of Congress next year?

Mr. KITCHIN. Possibly that is true. I thank the gentleman from Illinois [Mr. MADDEN] for his suggestion. I had not really thought about it, but before we meet here in December I will give thought and consideration to what the gentleman suggests and see if we can not arrange to have Congress go right along at the same time. [Laughter.]

Mr. MADDEN. I notice that they have taken over the cables and are to take the Bureau of Public Information to France, so I suppose that the cables will be utilized entirely for the subject matter which Mr. Creel and his committee will have to send back to the American people, and I thought if we could save the expense of that by going over it would be a wise thing to do.

Mr. KITCHIN. Some one back of me suggests that they might cable to us what to do every day. [Laughter.]

The SPEAKER. The gentleman from North Carolina asks unanimous consent that the House stand in recess until 12.45 p. m. Is there objection?

There was no objection.

Accordingly (at 12 o'clock and 28 minutes p. m.) the House stood in recess until 12 o'clock and 45 minutes p. m.

AFTER THE RECESS.

The recess having expired, the House was called to order at 12.45 p. m.

Mr. KITCHIN. Mr. Speaker, it seems that the adjournment resolution in the Senate had to be sent to the Appropriations Committee on objection to its present consideration. I ask unanimous consent that the House stand in recess until 1.15 o'clock p. m.

Mr. WALSH. Reserving the right to object, can not the gentleman make it a little later?

Mr. KITCHIN. Well, I will say 1.30 p. m.

The SPEAKER. The gentleman from North Carolina asks unanimous consent that the House stand in recess until 1.30 p. m. Is there objection?

There was no objection.

RECESS.

Accordingly (at 12.47 o'clock p. m.) the House stood in recess until 1.30 o'clock p. m.

AFTER THE RECESS.

The recess having expired, the House was called to order at 1.30 o'clock p. m.

MESSAGE FROM THE SENATE.

A message from the Senate, by Mr. Waldorf, its enrolling clerk, announced that the Senate had passed without amendment the following concurrent resolution:

House concurrent resolution 61.

Resolved by the House of Representatives (the Senate concurring), That the President of the Senate and the Speaker of the House of Representatives be authorized to close the present session of Congress by adjourning their respective Houses on the 21st day of November, 1918, at 5 o'clock post meridian.

ENROLLED BILLS SIGNED.

Mr. LAZARO, from the Committee on Enrolled Bills, reported that they had examined and found truly enrolled bills of the following titles, when the Speaker signed the same:

H. R. 11945. An act to enable the Secretary of Agriculture to carry out during the fiscal year ending June 30, 1919, the purposes of the act entitled "An act to provide further for the national security and defense by stimulating agriculture and facilitating the distribution of agricultural products," and for other purposes; and

H. R. 12998. An act to amend section 3528 of the Revised Statutes.

ENROLLED BILLS PRESENTED TO THE PRESIDENT FOR HIS APPROVAL.

Mr. LAZARO, from the Committee on Enrolled Bills, reported that this day they had presented to the President of the United States, for his approval, the following bills:

H. R. 11945. An act to enable the Secretary of Agriculture to carry out during the fiscal year ending June 30, 1919, the purposes of the act entitled "An act to provide further for the national security and defense by stimulating agriculture and facilitating the distribution of agricultural products," and for other purposes; and

H. R. 12998. An act to amend section 3528 of the Revised Statutes.

COMMITTEE TO NOTIFY THE PRESIDENT.

Mr. KITCHIN. Mr. Speaker, I offer the following resolution and ask unanimous consent for its immediate consideration.

The Clerk read as follows:

House resolution 451.

Resolved, That a committee of three Members of the House be appointed by the Speaker to join a similar committee to be appointed by the Senate to wait upon the President of the United States and inform him that the two Houses have completed the business of the present session and are ready to adjourn unless the President has some other communication to make to them.

The resolution was agreed to.

The SPEAKER appointed as the committee to wait upon the President Mr. KITCHIN, Mr. BYRNS of Tennessee, and Mr. MONDELL.

RECESS.

Mr. KITCHIN. Mr. Speaker, I ask unanimous consent that the House stand in recess until 4.50 o'clock p. m.

The SPEAKER. The gentleman from North Carolina asks unanimous consent that the House stand in recess until 4.50 o'clock p. m. Is there objection?

There was no objection.

Accordingly the House stood in recess until 4.50 o'clock p. m.

AFTER THE RECESS.

At 4 o'clock and 50 minutes p. m., the recess having expired, the House was called to order by the Speaker.

DEPARTMENT EMPLOYEES SUBJECT TO MILITARY SERVICE.

The SPEAKER laid before the House a report from the Secretary of Agriculture in response to House resolution 379.

Mr. GARRETT of Tennessee. Mr. Speaker, is that the last of these reports?

The SPEAKER. The Chair can not answer the gentleman, but is rather inclined to think that it is.

Mr. WALSH. That is the second one that has come from the Department of Agriculture.

The SPEAKER. It will be printed in the CONGRESSIONAL RECORD.

Mr. GARRETT of Tennessee. Mr. Speaker, is all of that to be printed in the RECORD?

The SPEAKER. That was the order of the House, that they should all be printed there.

Mr. GARRETT of Tennessee. What does the gentleman from Illinois [Mr. MADDEN] desire to have done with it?

Mr. MADDEN. Of course the war is over, but I think these reports ought to be referred to the respective committees to which they belong.

The SPEAKER. The order of the House was that these reports should be read and printed in the CONGRESSIONAL RECORD and lie on the Speaker's table until the last one of them was in.

Mr. MADDEN. I do not believe that they are all in yet.

The SPEAKER. The Chair does not know.

Mr. GARRETT of Tennessee. This particular report would involve a tremendous amount of printing and a tremendous amount of expense. Is the gentleman from Illinois willing to permit it to lie on the Speaker's table without being printed in the RECORD?

Mr. MADDEN. No; the House made the order that all should be printed as they came in and should lie on the Speaker's table.

Mr. GARRETT of Tennessee. Would the gentleman be willing to have a modification of that order in respect to this?

Mr. MADDEN. No; I think it ought to be printed. I think we ought to know who these men are. That is the order.

Mr. TAYLOR of Colorado. Mr. Speaker, I think it ought to go into the RECORD. I think we ought to know who these people are.

The SPEAKER. It is ordered to be printed and to lie on the Speaker's table.

The report above referred to is as follows:

DEPARTMENT OF AGRICULTURE,
Washington, November 20, 1918.

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

SIR: In compliance with House resolution 379, I have the honor to transmit herewith a statement showing the number of men in the service of the Department of Agriculture who were, on June 5, 1917, between the ages of 21 and 31 years, for whom requests for deferred classification have been asked by the department and allowed, the name and home address of each such person, the character of the work he is performing, and the length of time he has been in the service. This statement includes those employees for whom deferred classification was recommended by the department and allowed by the draft boards, and who are still in the service of the department. It does not include those employees in whose cases the draft boards did not act favorably upon the department recommendation for deferred classification or those in which the recommendation of the department for deferred classification was withdrawn because of later developments which made it possible to release the employees concerned.

The statement shows that 815 employees now in the service of the department were deferred solely on the ground that they are necessary to the adequate and effective operation of the service in which they are engaged and that they could not be replaced without substantial, material loss and detriment to the adequate and effective operation of such service. In addition, 248 employees for whom deferred classification was recommended by the department were also deferred for other reasons, such as dependency, physical disability, and the like.

Respectfully,

D. F. HOUSTON,
Secretary.

WEATHER BUREAU.

OBSERVERS AND ASSISTANT OBSERVERS ENGAGED IN AEROLOGICAL WORK.

Deferred classification has been requested by the department and allowed by draft boards in the case of seven observers and assistant observers of the Weather Bureau engaged in Army aerological work provided for by a special appropriation of \$100,000 included in the Regular Army appropriation act. This work is closely coordinated with similar activities of the Signal Corps of the Army and includes the making of upper-air observations in the aid of aviation and, incidentally, for the benefit of balloonists and artillerymen. The work is of a highly technical nature, and the men engaged in it must not only be experienced in the handling of kites, theodolites, and other scientific apparatus but must also have had intensive training and be skilled in the complicated mathematical work necessary in computing and reducing the observations. It would be impossible to replace these men without jeopardizing the work, as, even if men with the necessary education and fundamental requirements were obtainable, it would take many months of training for them to be able to accomplish what is required.

Name, home address, character of work (see general statement), and length of service.

Frank J. Ravendick, Ellendale, N. Dak. Has charge of the Army aerological station at Ellendale, N. Dak. Seven years eight months.

William S. Cloud, Washington, D. C. Computer in office of official in charge of entire aerological work, Washington, D. C. Received university training. Three years.

Charles S. Ling, Drexel, Nebr. Assists in the Army aerological work at Drexel, Nebr. Five years ten months.

John A. Reihle, Broken Arrow, Okla. Has charge of the Army aerological station at Broken Arrow, Okla. Attended college one year. Eight years one month.

Orville E. Russell, Broken Arrow, Okla. Assists in the Army aerological work at Broken Arrow, Okla. Attended college one year. One year ten months.

Charles O. Schick, Grossbeck, Tex. Assists in the Army aerological work at Grossbeck, Tex. Five years eight months.

Frank I. Whitney, Ellendale, N. Dak. Assists in Army aerological work at Ellendale, N. Dak. Three years ten months.

Archie R. Dorr, Twin, Wash. Is an experienced line repair man and telegraph operator at Twin, Wash., on the Tatoosh-Port Angeles Weather Bureau telegraph line. The vessel-reporting stations of Neah Bay, North Head, and Tatoosh Island, Wash., are connected by this telegraph line. There is close and confidential cooperation between the Weather Bureau and the officials of the Army and Navy in connection with this work, and in some instances the bureau's telegraph and cable lines form the only means of communication for Army and Navy business in the important seacoast sections in which they are located. The repair men along these lines, in addition to their knowledge of the topography of the country and their skill in construction and repair work, must be expert telegraphers. Furthermore, they must be men who have demonstrated their loyalty and trustworthiness. Men who could fill their places are unobtainable. Six years eleven months.

Clement R. White, Cape Henry, Va. Is an experienced telegraph-line repair man at Cape Henry, Va. The Weather Bureau maintains a vessel-reporting station at Cape Henry, with telegraph and cable line connections. There is close and confidential cooperation between the Weather Bureau and the officials of the Army and Navy in connection with this work, and in some instances the bureau's telegraph and cable lines form the only means of communication for Army and Navy business in the important seacoast sections in which they are located. The repair men along these lines, in addition to their knowledge of the topography of the country and their skill in construction and repair work, must be expert telegraphers. Furthermore, they must be men who have demonstrated their loyalty and trustworthiness. Men who could fill their places are unobtainable. Eight years four months.

Walter F. Feldwisch, North Head, Wash. Is an expert vessel reporter and telegraph operator at North Head, Wash. The Weather Bureau maintains a vessel-reporting station at North Head, with telegraph and cable line connections. There is close and confidential cooperation between the Weather Bureau and the officials of the Army and Navy in connection with this work, and in some instances the bureau's telegraph and cable lines form the only means of communication for Army and Navy business in the important seacoast sections in which they are located. The vessel reporting can be done effectively only by men of long experience, as they must be able to detect the name, nationality, and ownership of a vessel several miles distant. Furthermore, they must be men who have demonstrated their loyalty and trustworthiness. Men who could fill their places are unobtainable. Seven years three months.

Oscar C. Rauh, Washington, D. C. Employed as expert instrument maker in the Washington office and engaged in the construction of special and delicate apparatus required in the Army aerological work. The instruments can not be obtained from manufacturers, and it is possible to employ only men of long training and exceptional skill in their construction and repair. It would be impossible to fill this employee's place, as even in normal times only a few men were available, and these have long since been absorbed in branches of the Army and Navy for somewhat similar technical instrumental work. Prior to appointment in Weather Bureau had 14 years' training and experience in construction of delicate instruments with the firm of Buif & Buif, Boston, Mass. Ten months.

Joseph Leshansky, Sand Key, Fla. This employee is an expert vessel reporter at Sand Key, Fla. The Weather Bureau maintains a vessel-reporting station at Sand Key, with telegraph and cable connections. There is close and confidential cooperation between the Weather Bureau and the officials of the Army and Navy in connection with this work, and in some instances the bureau's telegraph and cable lines form the only means of communication for Army and Navy business in the important seacoast sections in which they are located. The vessel reporting can be done effectively only by men of long experience, as they must be able to detect the name, nationality, and ownership of a vessel several miles distant. Furthermore, they must be men who have demonstrated their loyalty and trustworthiness. Men who could fill their places are unobtainable. Three years eight months.

BUREAU OF ANIMAL INDUSTRY.
VETERINARY INSPECTORS (MEAT INSPECTION).

The following veterinary inspectors engaged in meat inspection are graduates of recognized veterinary colleges and have qualified for the positions they held through civil-service examination. After appointment they were given the usual instructions in meat-inspection work by trained employees. Through various assignments everyone has become proficient in this class of work. Their work consists of performing ante-mortem and post-mortem inspections for the purpose of passing carcasses, parts, and organs that are healthful, wholesome, or fit for human food, and condemning those which are unhealthful, unwholesome, or unfit for human food; supervising the handling of meat and meat food products to insure compliance with the meat-inspection regulations; conducting sanitary inspection of establishments in which such inspections are conducted, especially the department to which they are assigned; and attending to such other duties as may be required of them by the meat-inspection regulations and various instructors.

As a result of the present emergency, meat inspection has assumed a position of especial importance, as it is necessary to assure that the meat supplied to the Army, Navy, and the allies and the civilian population of this Nation is healthful, wholesome, and fit for food.

Due to the fact that this service has lost a very large number of veterinary inspectors, it is necessary to conduct the work with a force which is composed of many new employees who must receive much training before they can render the best service. Although all available veterinary inspectors listed by the Civil Service Commission have been appointed, as well as all veterinarians who would accept temporary appointment, there is a large number of vacancies in the ranks of veterinary inspectors. It is necessary that these employees be retained in the service in order that an adequate and effective service may be maintained.

Name, home address, and length of service.

E. M. Aldrich, Omaha, Nebr. One year seven months.
Herman F. Baum, Brooklyn, N. Y. Seven months.
Arthur I. Bevan, Moultrie, Ga. Three years five months.
Robert N. Birdwhistell, Cincinnati, Ohio. Three years five months.
W. S. Buchanan, Chicago, Ill. Four years.
Coleman P. Callaway, Fort Worth, Tex. Two years eight months.
R. J. Dugman, Wausau, Wis. Ten years one month.
Guy P. Everley, South St. Joseph, Mo. Six years eight months.
Nathan Feldman, Chicago, Ill. One year five months.
Clyde A. Gardner, Brooklyn, N. Y. Three years five months.
Charles H. Grunwald, South St. Joseph, Mo. Two years eight months.

George J. Gruenewald, Cleveland, Ohio. Three years six months.
 Richard Harvey, Indianapolis, Ind. One year eight months.
 John W. Hermann, Pittsburgh, Pa. Four years eight months.
 S. D. Hobbs, Jacksonville, Fla. Three years six months.
 Ray Hoefling, Austin, Minn. Three years four months.
 Rush M. Johnson, Indianapolis, Ind. Three years.
 Howard M. Kalodner, Philadelphia, Pa. One year two months.
 Lawrence P. Kirch, Indianapolis, Ind. Three years ten months.
 Cecil S. Lemon, Augusta, Ga. Three years eight months.
 C. M. Lombard, Chicago, Ill. Ten years.
 Robert L. Mason, Wheeling, W. Va. Eleven months.
 Frank W. Miller, Chicago, Ill. Nine years six months.
 George E. Mitchell, Newark, N. J. Two years eight months.
 Robert Moonan, Chicago, Ill. Four years six months.
 Charles E. Mootz, Wheeling, W. Va. Four years.
 James W. Norris, Boyd, Md. Five years one month.
 Hugh Max O'Rear, Indianapolis, Ind. Three years two months.
 Sabin L. Rles, Ottumwa, Iowa. Four years six months.
 Garrie W. Riley, Orangeburg, S. C. One year three months.
 C. A. Schuler, Sioux City, Iowa. Four years two months.
 Floyd A. Scott, Austin, Minn. Six years six months.
 Otto W. Seher, Fort Worth, Tex. Three years eight months.
 Walter W. Shurtle, Indianapolis, Ind. Seven years two months.
 T. W. Stewart, South Sioux City, Iowa. Three years ten months.
 Martin A. Sweeney, Chicago, Ill. Three years eight months.
 E. N. Tierney, Andalusia, Ala. Six years eight months.
 Clemence C. Walch, Leavenworth, Kans. Ten years eight months.
 John G. Warwick, West St. Paul, Minn. Four years.
 John H. Whalen, Chicago, Ill. Seven years.

LAY INSPECTORS (MEAT INSPECTION).

The following lay inspectors engaged in meat inspection qualified for the positions they hold through civil-service examinations. Upon entering the service they were placed under seasoned and experienced employees to receive instructions in the conduct of the work. With the usual number of different assignments, they developed into efficient employees.

Their work consists of assisting veterinary inspectors in performing ante-mortem and post-mortem inspections; supervising the preparation of meat and meat food products; reinspecting meats during processing and after such processing is finished; passing such meats and meat food products as are clean, wholesome, and fit for food, and to which no prohibited substances have been added, and retaining and condemning such as are unclean, unwholesome, or unfit for food, or which contain prohibited substances.

The work performed by this class of employees covers a most important part of the meat-inspection service, and there can be no question that the meat inspection as conducted by this department, especially under present conditions, is a highly necessary measure to insure the wholesomeness and fitness for food purposes of the meat supply, and through it the health of the men in our Army and Navy, our allies, and the people of this country. A considerable number of this class of employees are now assigned to directly cooperate with the Army and Navy by assignment to Army camps, cantonments, forts, naval-training stations, navy yards, and supply points to reinspect meat and meat food products and to supervise their delivery.

Many of the most efficient lay inspectors have within a comparatively short time left the service, and it has been necessary for the most part to fill these vacancies with inexperienced men. All the eligibles certified for the position by the Civil Service Commission have been appointed, and every effort has been made to secure all possible men capable of doing this class of work and who would accept temporary appointment. Nevertheless, many vacancies have not been filled. Each of the men is performing a vital part of the inspection work, and the loss of any of them would result in materially lowering the efficiency of the service, and would be difficult, if not impossible, to overcome.

Name, home address, and length of service.

Frederick H. Atkins, South St. Joseph, Mo. Six years five months.
 Clark M. Attebery, East St. Louis, Ill. Two years seven months.
 Plato H. Boller, Salt Lake City, Utah. Three years.
 Orley R. Bourland, East St. Louis, Ill. One year six months.
 William J. Brennan, Chicago, Ill. Four years four months.
 Thomas J. Brett, Somerville, Mass. Nine years six months.
 Charles G. Carpenter, Moultrie, Ga. Three years.
 F. Clampitt, Sioux City, Iowa. Three years eight months.
 Elmer H. Cole, Somerville, Mass. Three years.
 N. J. Cunningham, Chicago, Ill. One year ten months.
 Timothy F. Danforth, Chicago, Ill. Four years five months.
 Franklin O. Elmore, Wheeling, W. Va. Three years.
 Earl T. Farrington, East St. Louis, Ill. Six years six months.
 James J. Fitzpatrick, Chicago, Ill. One year six months.
 F. T. Graskowiak, Omaha, Neb. Three years six months.
 Martin F. Hanley, Indianapolis, Ind. Three years six months.
 Charles Harlow, Cincinnati, Ohio. Three years.
 Floyd Howard, Fort Worth, Tex. Two years six months.
 Robert Hunter, Jr., Cincinnati, Ohio. Three years nine months.
 Guy G. Jarvis, Peoria, Ill. Four years four months.
 William R. Kelly, Fort Worth, Tex. One year ten months.
 Patrick J. Kenny, Paterson, N. J. Two years seven months.
 G. M. Lint, Chicago, Ill. Three years nine months.
 Duane A. Lyon, Chicago, Ill. Four years one month.
 Sumner B. McMasters, Austin, Minn. Four years four months.
 Myrtis A. Magee, Chicago, Ill. Three years six months.
 Jacob P. Maxwell, Omaha, Neb. Two years seven months.
 Oliver C. Miller, Mason City, Iowa. One year eight months.
 Ira S. Modrell, Wheeling, W. Va. Three years.
 Edward Lee More, South St. Joseph, Mo. Five years six months.
 Daniel J. Murphy, Somerville, Mass. Five years two months.
 James A. Nelmes, Fall River, Mass. Three years eight months.
 George W. Nickerson, Chicago, Ill. Four years seven months.
 George M. C. Oehler, Ottumwa, Iowa. Four years eleven months.
 August Patterson, Jacksonville, Fla. Three years six months.
 David P. Powell, Waterloo, Iowa. Three years six months.
 Edgar P. Pulley, St. Joseph, Mo. Six years nine months.
 Joseph V. Rollins, Austin, Minn. Two years six months.
 W. R. Rose, Chicago, Ill. One year nine months.
 Frank I. Runnels, Mason City, Iowa. Two years seven months.
 Ray A. Schooley, Cincinnati, Ohio. Three years.
 William E. Seacord, East St. Louis, Ill. One year seven months.
 John T. Shelton, Chicago, Ill. Four years nine months.
 M. C. Searer, Chicago, Ill. Six years ten months.
 Henry O. Singer, Chicago, Ill. Four years six months.

William J. Small, South St. Joseph, Mo. Six years five months.
 James J. Smith, Fort Worth, Tex. One year nine months.
 Robert M. Spurlock, Fort Worth, Tex. Two years seven months.
 Le Ray Stanley, Fort Worth, Tex. Six years three months.
 John Calvin Thompson, Chicago, Ill. Three years three months.
 Edward J. Toomey, Chicago, Ill. Two years eleven months.
 Floyd E. Turley, South St. Joseph, Mo. Six years four months.
 Theodore S. Van House, Peoria, Ill. Two years eight months.
 W. H. Voth, Sioux City, Iowa. Three years nine months.
 Carl H. Wagner, East St. Louis, Ill. Eight years nine months.
 Harry C. Whalen, Newark, N. J. Two years six months.
 Forrest F. Wynne, South St. Joseph, Mo. Four years five months.

VETERINARY INSPECTORS (TICK ERADICATION).

The following veterinary inspectors engaged in tick-eradication work are graduates of recognized veterinary colleges and have qualified for the positions they hold through civil-service examination. After appointment they were given the usual instructions in tick-eradication work by trained employees. They have been assigned to territories and have shown that they are capable of rendering efficient service.

The eradication of ticks is a work of very great importance, as it has been positively shown that a tick-free section will produce more and better meat and better products than it would if infested with ticks. Congress itself has recognized the value of this work as a war measure by providing for the control and eradication of the diseases and pests of live stock, which includes the cattle tick, under the food-production act. To properly and successfully conduct this work, specially trained veterinary inspectors are required, such as those herein listed, as they are familiar through actual assignment with the sections in which the work is to be conducted.

To train new men requires considerable time. Furthermore, it is not believed possible to obtain new men for this work should the veterinary inspectors now attached to the service be removed, as there are no veterinary inspectors certified by the Civil Service Commission and no veterinarians in private practice are available who will accept temporary appointment. To lose any of these veterinarians, therefore, would materially embarrass the service and considerably retard this most valuable work.

Name, home address, and length of service.

Raymond A. Blackman, Whiteville, N. C. Four years six months.
 Theodore Brand, Rayville, La. One year two months.
 Harold S. Brundage, Georgetown, S. C. Two years eight months.
 John F. Chipman, Leesburg, Fla. Three years six months.
 Ashley J. Clark, Natchez, Miss. Two years seven months.
 R. E. Cropper, Greenville, Ga. One year six months.
 Harry R. Getz, Mena, Ark. Three years ten months.
 Walter J. Gray, Houma, La. One year five months.
 Roy A. Gregory, De Witt, Ark. Three years two months.
 Jacob J. Jones, Pascagoula, Miss. Three years two months.
 Albert H. Julien, Camilla, Ga. Three years three months.
 Arthur J. Knillans, Windsor, N. C. Three years.
 Cleo L. Lash, Bay St. Louis, Miss. One year six months.
 Carl F. Lipp, Leesville, La. Three years three months.
 George R. Loudon, Oberlin, La. Two years eight months.
 Lyman E. McDonald, Live Oak, Fla. Two years seven months.
 Wilbur McPherson, Liberty, Miss. Two years seven months.
 Eugene E. Murphy, Franklin, La. Two years eight months.
 Joseph S. O'Hare, Plymouth, N. C. Six years seven months.
 Dudley B. Pellette, Colfax, La. One year eight months.
 C. G. Rabenstein, Atlanta, Ga. Four years three months.
 Ray V. Rafnel, Baton Rouge, La. Five years eleven months.
 Charles F. Rathbun, Pine Bluff, Ark. Seven years.
 John Redmond, Enterprise, Ala. Three years two months.
 Allen W. Rice, De Queen, Ark. Three years two months.
 Floyd C. Reid, Arkadelphia, Ark. Two years eight months.
 William R. Scott, Sulphur, Okla. Four years five months.
 William J. Selkin, Evergreen, Ala. Four years one month.
 Claude, Sevy, Covington, La. Four years two months.
 S. H. Still, Richland, Ga. Six years eight months.
 Henry A. Taggart, Deland, Fla. Two years eight months.
 Paul Vaughn, Montgomery, Ala. Six years eight months.
 Albert W. Vornhede, New Orleans, La. Two years two months.
 Clifford Young, McGehee, Ark. One year one month.

VETERINARY INSPECTORS (HOG-CHOLERA CONTROL).

The following veterinary inspectors engaged in hog-cholera control work are graduates of recognized veterinary colleges and have regularly qualified for the positions they hold through civil-service examination. After appointment they were given the usual instructions and training in hog-cholera control work by experienced employees. They are all rendering satisfactory and efficient service.

The control of hog cholera is of vital importance in connection with the increased production of pork. Congress has recognized the value of this work as a war measure by providing funds for its prosecution under the food-production act. To obtain satisfactory results, experienced and specially qualified men must be employed. To train new men for this work requires much of the time of others who are experienced. The supply of veterinarians is practically exhausted. Consequently, the loss of any of these men would mean a reduction of the force.

Name, home address, and length of service.

Leslie H. Baker, Houston, Tex. Three years six months.
 Joe H. Bux, Little Rock, Ark. Nine years five months.
 Amer C. Drach, Fort Dodge, Iowa. Six years two months.
 Joe Walter Giffey, Geneva, Neb. Five years three months.
 Edgar A. Grubb, Sacramento, Cal. Four years eleven months.
 William M. Hobdy, Palestine, Tex. Three years six months.
 Frank B. Jones, Springfield, Mo. Six years ten months.
 R. E. Moody, Eureka, Kans. One year one month.
 Robert Jones Frank, Fort Worth, Tex. One year five months.
 James Henry Murphy, Sullivan, Ind. Eleven years eight months.
 William Poselner, Woodward, Okla. Four years two months.
 Orion L. Sumner, Upper Sandusky, Ohio. One year five months.
 Charles T. Tawney, Corunna, Mich. Four years eleven months.
 Fulton Rex Woodring, Chillicothe, Mo. Three years two months.

VETERINARY INSPECTORS (TUBERCULOSIS ERADICATION).

The following veterinary inspectors engaged in tuberculosis-eradication work are graduates of recognized veterinary colleges and have regularly qualified for these positions through civil-service examination. After appointment they were given the usual instructions and training in this kind of work and are all now rendering very satisfactory and highly efficient service.

These employes are engaged in the eradication of tuberculosis from the cattle herds of this country. The great importance of this work, especially at the present time, is apparent and has been recognized by Congress through provision of special appropriations under the food-production act for its more effective conduct. The stamping out of tuberculosis means enlarged meat and dairy production, besides conserving the supply now available. To conduct this work requires men who have received a special training, and to lose any of the present inspectors would very materially cripple the service. This is especially true at this time, since the supply of veterinarians is exhausted. It becomes especially necessary, therefore, that these men be retained in the service.

Name, home address, and length of service.

Emery E. Coshov, Indianapolis, Ind. One year one month.
William C. Drake, Oklahoma City, Okla. Four years.
Solon Gillen, Madison, Wis. Two years eleven months.
J. N. Holzer, St. Paul, Minn. Four years eight months.
James Vernon Lyon, Chicago, Ill. Three years ten months.

VETERINARY INSPECTORS (SUPERVISION OF ESTABLISHMENTS MANUFACTURING SERUMS, TOXINS, ETC.).

The following inspectors are engaged in the supervision of establishments manufacturing biological products. After appointing they were given the usual instructions and training in supervising establishments manufacturing such products. They have become highly trained men in this branch of the work and are capable of rendering especially efficient service.

These employes supervise the production of serums, toxins, viruses, and other biological products, especially anti-hog-cholera serum. This supervision insures the production and distribution of safe and effective curative and preventive products. These products are employed in combating and controlling disease in meat-producing animals. The production of anti-hog-cholera serum in ordinary times is of great importance, but under present conditions it becomes of extreme importance in protecting the supply of pork of this country against loss from disease. Specially trained inspectors are required in order to properly supervise these establishments. They must fully understand all the details of the production of this class of products. To train men for this work requires much time, and, furthermore, the supply of veterinarians is practically exhausted.

Name, home address, and length of service.

Walter Boyce, Superior, Nebr. Six years eight months.
Charles P. Schneider, Indianapolis, Ind. Four years seven months.
Robert Thumann, Kansas City, Mo. Five years three months.
John W. Woods, St. Joseph, Mo. Three years eight months.
Frank A. Bittner, Wichita, Kans. Two years nine months.
Harry M. Edwards, Omaha, Nebr. Three years nine months.
George L. Farrington, Sioux City, Iowa. Six years six months.
C. H. Grove, Oakland, Cal. Four years three months.
Elbert Sturm, Wichita, Kans. Two years six months.

VETERINARY INSPECTORS (DOURINE ERADICATION).

The following veterinary inspectors are engaged on dourine-eradication work. This work requires employes with considerable training and skill and is a class of work which can only be performed in a satisfactory manner by veterinarians. Owing to the scarcity of competent veterinary inspectors it would be practically impossible to replace these inspectors if they were called into the military service, and it would cause a material loss to the horse industry to lose their services.

Name, home address, character of work (see general statement), and length of service.

Melvin W. Miller, Albuquerque, N. Mex. Three years four months.
John J. Staab, Albuquerque, N. Mex. Three years six months.
Burl O. Fisher, Harlem, Mont. One year eight months.
Ben H. Steigleder, Albuquerque, N. Mex. One year six months.
Clarence N. Miller, East Las Vegas, N. Mex. Engaged on sheep-scabies eradication work in New Mexico. This work requires men of considerable training, and consists in the inspection of sheep for scabies, together with the supervision of the dipping of animals affected with or exposed to this disease. Sheep-scabies eradication work is very important at the present time, as the disease, if allowed to spread, will materially reduce the production of wool and mutton. It would be extremely difficult to fill the places of the men engaged on this work were they called into active military service. Five years nine months.

Davis B. Allen, Calais, Me. Engaged in the work of inspecting live stock offered for importation from Canada. The regulations provide for the tuberculin testing of all dairy and breeding cattle from Canada. It is believed that tuberculosis is very common among pure-bred animals in Canada, and it is important to maintain along the Canadian border a force of inspectors skilled in the work of inspection and in the application of the tuberculin test. The department is encouraging in every way possible the eradication of tuberculosis from herds of pure-bred animals in this country, and it would be most unfortunate at this time if, through a lack of competent inspectors or a relaxation of requirements, cattle infected with tuberculosis should enter the United States and disseminate tuberculosis in herds of pure-bred animals in this country. Three years one month.

George H. Ehlers, Scobey, Mont. Engaged in the work of inspecting live stock offered for importation from Canada. The regulations provide for the tuberculin testing of all dairy and breeding cattle from Canada. It is believed that tuberculosis is very common among pure-bred animals in Canada, and it is important to maintain along the Canadian border a force of inspectors skilled in the work of inspection and in the application of the tuberculin test. The department is encouraging in every way possible the eradication of tuberculosis from herds of pure-bred animals in this country, and it would be most unfortunate at this time if, through a lack of competent inspectors or a relaxation of requirements, cattle infected with tuberculosis should enter the United States and disseminate tuberculosis in herds of pure-bred animals in this country. Four years six months.

Earl L. Willman, Buffalo, N. Y. Detailed to cooperative influenza-control work with the War Department. This work consists of supervising the cleaning and disinfection of stock cars, stockyards, barns, and other premises used in the handling of Army horses and mules. This class of work requires men of training along special lines, and the work accomplished has resulted in a material reduction in the losses of Army horses and mules through the decrease in the amount of infection from influenza. It would be practically impossible to replace these

men if they were called to active military service and such action would seriously affect the conduct of influenza-control work. Three years two months.

Max P. Medved, Kansas City, Kans. Detailed to cooperative influenza-control work with the War Department. This work consists of supervising the cleaning and disinfection of stock cars, stockyards, barns, and other premises used in the handling of Army horses and mules. This class of work requires men of training along special lines, and the work accomplished has resulted in a material reduction in the losses of Army horses and mules through the decrease in the amount of infection from influenza. It would be practically impossible to replace these men if they were called to active military service and such action would seriously affect the conduct of influenza-control work. Six years seven months.

E. D. Allen, Chicago, Ill. Assigned to stockyards work at Chicago, Ill. This work consists principally of the inspection of cattle, sheep, and swine for contagious, infectious, or communicable diseases. It requires training and skill. Eight years eight months.

Horace Brandon, Chicago, Ill. Assigned to stockyards work at Chicago, Ill. This work consists principally of the inspection of cattle, sheep, and swine for contagious, infectious, or communicable diseases. It requires training and skill. Two years eleven months.

Albert C. Osborn, Louisville, Ky. Assigned to stockyards work at Louisville, Ky. This work consists principally of the inspection of cattle, sheep, and swine for contagious, infectious, or communicable diseases. It requires training and skill. Four years three months.

James W. Murdoch, Omaha, Nebr. Supervises the stockyards work at the Omaha, Nebr., station. Has under his direction about 20 employes engaged in inspecting animals for contagious diseases, such as foot-and-mouth disease, hog cholera, scabies, anthrax, and glanders. These employes also apply the tuberculin test to cattle and supervise the immunization of swine for interstate movement for purposes other than immediate slaughter. Dr. Murdoch has had extended experience in contagious-disease work. The services of such experienced men are necessary to guard against outbreaks of serious contagious diseases in public stockyards. Six years eight months.

James E. Regan, New York, N. Y. Employed in connection with the sanitary handling and control of hides, skins, hair, wool, and other animal by-products offered for entry into the United States through the port of New York. In order to comply with the regulations requiring the disinfection of cars, boats, yards, and premises it is necessary that a careful supervision be maintained. This can only be performed by men experienced in such work. In view of the prevalence of anthrax and the existence of foot-and-mouth disease and rinderpest in various countries the regulations relative to the disinfection of hides, skins, or other animal by-products must be carefully administered. Great difficulty has been experienced in retaining inspectors in the service having the necessary qualifications for this work and their call into Army service would seriously hamper the work of the bureau. One year ten months.

George Kernohan, Washington, D. C. Employed in the bacteriological laboratories of the bureau in producing tuberculin and mallein. Through his training, and particularly his experience in the laboratories here, has become an expert in the propagation of tuberculosis and glanders bacilli, used in preparing tuberculin and mallein, which is manufactured in great part for the use of the United States Army. This work, which involves the handling of virulent microorganisms, requires skill and reliability. Dr. Kernohan, with some assistance, is making all the glanders cultures that are needed to produce mallein for the Army. Graduate Kansas State Veterinary College. Prior to present appointment practiced veterinary medicine and was employed as inspector by Kansas State Live Stock Sanitary Commission. Also served as veterinary inspector in the bureau of animal industry at Kansas City and national stockyards for two years. Then took post-graduate course in bacteriology and served as instructor in general bacteriology at the University of Kansas. Two years eleven months.

H. H. Ladson, Clarendon, Va. Assists in the study of contagious abortion of cattle, a problem in cattle conservation of first importance, since it is directly concerned with the production of calves by avoiding premature birth, thereby assuring a maximum calf crop. This work is chiefly field work. The bureau is finding it practically impossible to secure veterinarians, either through the civil-service register or by temporary appointment, to effectively carry on its work. Graduate of a recognized veterinary college. Three years three months.

Harry W. Schoening, Washington, D. C. Engaged as diagnostician of dourine and glanders, two of the most important diseases of equines, which it is imperative to control. Has developed expertise in serum diagnosis which comes only from years of actual experience in the work. These diseases are not possible of early detection in any other manner than by these tests. It would be impossible to dispense with Dr. Schoening's services at the present time without seriously jeopardizing the measures for the control of the diseases mentioned. He has also supplied material to the War Department for diagnostic work in glanders. Graduate of a recognized veterinary college. Ten years eleven months.

Benjamin Schwartz, Washington, D. C. Conducts important investigations concerning parasitic diseases of live stock, which work requires men specially educated and trained in zoology. His knowledge is required almost daily in giving information concerning the extermination and control of parasitic diseases of meat-producing animals, conditions which, if permitted to go uncontrolled, would result in serious loss. Great difficulty has been experienced in securing men qualified for this branch of work, and it is questionable whether any man could be found to take his place should he be called for military service. Graduate College of the City of New York, B. A.; also received M. A. degree from Columbia University, having specialized in zoology. Studied at the Cold Springs pathological laboratory two summers. Prior to present appointment was for nearly a year a scientific assistant in the Bureau of Fisheries and for one term was instructor in biology in the University of Arkansas. Two years nine months.

Samuel Adler, Kansas City, Mo. Assists at the Kansas City meat-inspection laboratory in the examination of meats and meat food products for harmful ingredients, and to determine whether they are properly labeled. A large amount of the work during the past year consisted of the examination of samples of meat food products prepared for military consumption to detect poisons. This is very important work, and it is practically impossible to secure men trained along these lines. At the present time the eligibles for such positions are in the draft age, and even when appointed are only connected with the work a short time when they are inducted into the military service. Graduate Alabama Polytechnic Institute, B. A. and M. S. in chemistry; also attended Columbia University, of New York, two summers. Two years five months.

Walter F. Schroeder, New York, N. Y. Has charge of the fat and oil work in the New York meat-inspection laboratory of this bureau. Has had a number of years' experience in this work, and a new man appointed

to replace him would require considerable time to gain the same proficiency. The bureau has experienced great difficulty in securing chemists and employees to do chemical work. Graduate Pennsylvania State College, B. S. Seven years three months.

Winfield B. Fromer, Richmond Hill, N. Y. Engaged in the examination, for many deleterious substances, of special military meat food products. Has gained considerable proficiency in this work, and a new man appointed to take his place would require training before he could carry out this work satisfactorily. Graduate Syracuse University, B. S. Before entering the department service taught chemistry two years and served one year in a commercial laboratory. Four years three months.

Roger M. Mehurin, Washington, D. C. Performs analytical chemical work in the meat-inspection laboratory, specializing in the determination of heavy metals in meat food products, in which work he has become an expert. It is impossible to secure men trained in this special line of work, and if any chemist was appointed to take his place it would require from six to eight months' training in the laboratory before he could satisfactorily do the work. Had three years' training in chemistry prior to his appointment in the bureau. Four years two months.

DAIRY FARMING EXTENSION AGENTS.

These men are employed jointly by the United States Department of Agriculture and the extension divisions of the various State agricultural colleges to conduct dairy-farming extension work, or to direct such work in the field. In the war emergency it is imperative that dairy production of milk and the utilization by means of the dairy cow of feeds men are concentrating their efforts along the line of more economical production of milk and the utilization by means of the dairy cow of feeds which can not be used as human food. They are acquainted with the conditions and the people in their respective States and have their work outlined, and it would be a serious drawback if they were drafted, because there would necessarily be a break in the work before the vacancies could be filled and the new men become familiar with existing conditions. Furthermore, the dairy division has endeavored during the past year, with practically no success, to secure additional men sufficiently trained to do this work. Very few men of maturer years, or women either, are available whose training and experience fit them for this work.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

Campbell A. Hutton, Knoxville, Tenn. Graduate University of Tennessee, B. S. in agriculture; was assistant in dairying in that university two terms; had charge of dairy-herd record work at Tennessee Experiment Station; and was dairy editor of the University of Tennessee Farmer during this period. Prior to entering department service was assistant dairy and poultry agent for Southern Railway Co. for two years. Three years seven months.

Frank M. Colcord, Corvallis, Ore. Graduate University of Illinois, B. S., and University of Nebraska, M. S.; was emergency supervisor of county-agent work Nebraska in 1917. Ten months.

H. T. Converse, Spartanburg, S. C. Graduate New Hampshire College, B. S. Prior to entering department service engaged in farming one year; was herdsman and manager two years and assistant in the dairy-extension division of Clemson College one term. Three years two months.

Albert A. Fredericks, Baton Rouge, La. Graduate Louisiana State University, B. S. Ten months.

Edward J. Haslerud, St. Paul, Minn. Attended Minnesota College of Agriculture about three years. Before entering department service was tester in a cow-testing association for six months. Eight months.

W. L. Kellogg, State College, Pa. Graduate Pennsylvania State College, B. S. Was official in testing and cow-testing association work one year. Three years nine months.

William E. Peterson, Manhattan, Kans. Graduate University of Minnesota, B. S. and M. S. Was supervisor of garden work public schools of Minneapolis one year, and served with the dairy division of the University of Minnesota one year. Nine months.

Joseph P. La Master, Starkville, Miss. Graduate University of Kentucky, B. S. Prior to entering department was bacteriologist for the Elmendorf Dairy. Three years three months.

Harry G. Stevens, West Lafayette, Ind. Graduate Ohio State University, B. S. in agriculture. Prior to entering department was employed as dairy herdsman. One year ten months.

Josephus P. Quinerly, Auburn, Ala.; Graduate North Carolina Agricultural and Mechanical College, B. S. Prior to entering department was foreman for Naval Academy dairy, Annapolis, Md.; assistant dairy and poultry agent Southern Railway Co.; and manager Elmview Farms, Grifton, N. C. Three years two months.

Walter E. Tomson, Bozeman, Mont. Graduate Kansas Agricultural College, B. S., and was assistant in dairy husbandry and instructor in dairy husbandry at that institution for five years. Eight months.

J. A. Waldron, East Lansing, Mich. Graduate Michigan Agricultural College, B. S. Prior to present appointment was for various periods herdsman at the college; instructor in agriculture high school, Carlton, Minn.; engaged in farming; and was extension worker in the Michigan Agricultural College. One year eleven months.

CREAMERY EXTENSION SPECIALISTS.

The creamery extension specialists of the dairy division assist creamery operators in overcoming losses and in improving the quality of their product. They also teach them how to make use of the by-products, thus adding to the food supply of the country. There are very few men available who have the training and experience to qualify them to do creamery extension work. Hence, if any of the men now engaged in the work were drafted it would be impossible to replace them with men having equal efficiency without considerable loss of time in training them to do the work. During the existing emergency it is essential that all dairy products be so handled that there will be no losses, and that dairy production be maintained at its present level, or even increased.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

C. E. Newlander, Auburn, Ala. Graduate Cornell University, bachelor of science. For four years prior to entering department service was instructor in dairy manufactures, Michigan Agricultural College. One year one month.

W. F. Gerholz, Buhl, Idaho. Attended Wisconsin Dairy School one term. Prior to present appointment was for five years employed as manager and maker of cheese for several companies. Nine months.

Vern R. Jones, St. Albans, Vt. Graduate Washington State College, B. S., and was instructor in dairying at the college one term; post graduate student Cornell University and instructor in dairying two terms; received degree of M. S. in agriculture from Cornell; was assistant professor in dairying South Dakota State College one term. One year one month.

Owen E. Williams, Washington, D. C. Engaged in investigating the manufacture of ice cream, one of the ways of converting dairy products into food. The work is essential. At present he is working on the substitution of glucose and similar products for cane sugar in ice-cream manufacture; also on the preparation of butter fat, so that it may be preserved and transported long distances, the latter work having application to butter fat for reconstituting milk from skim-milk powder. It would be impossible to secure a man of his training and experience to take up this work. Graduate Kansas State Agricultural College B. S. Was then employed for one year as instructor in charge of dairy husbandry at the Baron de Hirsch School, Woodbine, N. J. Five years ten months.

Edwin H. Krause, Lincoln, Nebr. Engaged in stimulating the production of cottage cheese from skim milk and buttermilk, which otherwise would be wasted. He is well trained for this work. Graduate Ohio State University, B. S. Then engaged in dairy farming two seasons. Nine months.

T. C. Haddon, Rock Hill, S. C. Engaged in stimulating the production of cottage cheese. He is well trained for this work. Graduate Clemson Agricultural College, B. S. in agriculture. Prior to department service was teacher of agriculture and science two terms and assistant in agriculture Winthrop Normal and Industrial College two terms. Nine months.

Albert C. Weimar, Washington, D. C. Investigates the manufacture of cheese, attempting to develop methods of manufacturing types whose importation has been shut off by the war. His experience in this department also has qualified him for extension work. Graduate University of Wisconsin, B. S. in agriculture. Two years prior to entering department service was president of the Lacrosse Pasteurized Milk Co. Eight months.

Floyd R. Farnham, West Raleigh, N. C. Engaged in cheese-factory extension work in the mountain regions of the South, inaugurated by the department about four years ago. Mr. Farnham has been instrumental in the organization of 20 cheese factories, some of which still depend on him in a large measure for advice and guidance and expert knowledge of cheese making. Cheese specialists are exceptionally scarce, and it would be very difficult to secure anyone to fill this position. Attended Pennsylvania State College; was instructor in creamery manufacture at that college one term and was buttermaker there one term. Three years nine months.

MARKET MILK SPECIALISTS.

Market milk specialists are engaged in work on the sanitation of milk supplies, a most important matter in the conservation of human health as well as the conservation of dairy products. They cooperate with local authorities in teaching farmers how to produce more wholesome milk. This improvement enhances the keeping qualities of dairy products and prevents loss through spoilage. Practically their entire time during the past year has been devoted to cooperation with the United States Public Health Service in improving the milk supplies in the vicinity of Army cantonments. It would be practically impossible at this time to replace these employees. The dairy division has had unfilled vacancies in this work for nearly a year.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

Harry N. Thomas, Washington, D. C. (in field greater portion of time. Graduate University of Nebraska College of Agriculture, B. S. in agriculture; instructor in agriculture, Beatrice (Nebr.) High School, 1916; county agricultural agent, Dawes County, Nebr., one season. One year.

Clarence S. MacBride, Washington, D. C. (travels all the time). Graduate University of Wisconsin, B. S. in agriculture. Prior to entering department was dairy instructor for State of Washington. One year three months.

Russell S. Smith, Washington, D. C. (travels greater part of time). Graduate University of Maine, B. S. Prior to Government service was State dairy and milk inspector in Maine. Three years eight months.

Clifford W. Wescott, Patten, Me. Graduate University of Maine College of Agriculture, B. S. Prior to entering department was State dairy inspector of the Maine department of agriculture. Six and one-half months.

Benjamin Vener, Springfield, Mass. Works chiefly on milk-plant management, dealing with city milk plants. The work reduces losses of milk due to wasteful methods and careless handling. It results in more wholesome milk being delivered to consumers. It cuts down operating expenses by teaching more efficient use of machinery and labor. Graduate Massachusetts Agricultural College, B. S. For two years prior to entering department service was sanitarian, chemist, and efficiency expert to Tait Bros., Springfield, Mass. Eight months.

R. J. Posson, Washington, D. C. (in field greater portion of time). Engaged in collecting and tabulating data regarding milk production. Includes personal work with farmers to determine most economical methods of feeding and caring for dairy cows. Results in a definite understanding as to the requirements in milk production and leads to more economical methods of production. Graduate University of Nebraska, B. S. Two years ten months.

H. P. Davis, Alexandria, Va. For a year and a half after entering department was engaged in dairy extension work. Since that date has had charge of the editorial work of the dairy division. In addition has charge of the feeding experiments at the Huntley (Mont.) Irrigation Experiment Station at the Ardmore (S. Dak.) Dry-Land Experiment Farm, and at the Iberia (La.) Live Stock Experiment Farm. Graduate University of Missouri; received master's degree from Pennsylvania State College; was assistant in dairying at University of Illinois; and assistant in experimental dairy husbandry and instructor in dairy husbandry with Pennsylvania State College. Three years eleven months.

Thomas W. Mosely, Washington, D. C. Is engaged in the organization of bull associations. The bull-association movement has for its object the improvement of dairy cattle through the joint ownership of meritorious pure-bred dairy bulls, and it has proved to be one of the most effective means of increasing the quality and productiveness of dairy cows. It is imperative during the war emergency that dairy production be maintained at the present level and even increased. This can best be done with better cows. The Bureau of Animal Industry for the

past year has endeavored, with practically no success, to secure men sufficiently trained to do this work. Very few men of maturer years are available whose training and experience fit them for bull-association organization work. Graduate University of Nebraska, B. S. in agriculture; graduate student University of Chicago, one summer; and assistant in the dairy laboratories of the University of Nebraska, two terms. Five years.

Frank W. Kehrli, Salt Lake City, Utah. Has charge of bull-association work in the West. This has for its object the improvement of dairy cattle through the joint ownership of meritorious pure-bred dairy bulls, and it has proved to be one of the most effective means of increasing the quality and productiveness of dairy cows. It is imperative during the war emergency that dairy production be maintained at its present level and even increased. This can best be done by the improvement of the productive capacity of the cows of this country. It is difficult to secure men of maturer years whose training and experience fit them for this work. Graduate Oregon Agricultural College, B. S. Was field dairyman for this college in cooperation with the Department of Agriculture for three years. Three years nine months.

Elmer V. Ellington, Washington, D. C. (in field all the time). Has charge of dairy extension activities of the Bureau of Animal Industry in the Middle West, supervising the work of 25 extension workers. This position requires, in addition to high-class training, rare qualities for tact, judgment, and executive ability. Mr. Ellington has had special training for this work through years of employment in this department. During the past year the bureau has had practically no success in securing men of this training and experience. Very few men of maturer years, or women either, are available whose training and experience fit them for this work. Graduate University of Missouri, B. S. in agriculture. For various periods was extension dairyman, assistant professor of dairying, and professor of dairying at the University of Idaho. Three years two months.

Joseph B. Shepherd, Ballston, Va. Assists in the dairy extension office of the Dairy Division. Attends to all inquiries regarding feeding, dairy-herd management, and selection of dairy cattle; also the construction of silos and dairy buildings. Graduate University of Nebraska, B. S. in agriculture. Prior to entering department service was employed by the Great Western Sugar Co., Scottsbluff, Nebr. Nine months.

G. E. Braum, Mount Vernon, Wash. Engaged in collecting and tabulating data regarding milk production and in personal work with farmers to determine the most economical methods of feeding and caring for dairy cows. This work results in a definite understanding as to the requirements in milk production and leads to more economical methods of production. Graduate Pennsylvania State College, B. S. Prior to entering department service conducted practical work in Somerset County, Pa., one year. One year.

Ralph P. Hotis, Vergennes, Vt. Engaged in collecting and tabulating data regarding milk production and in personal work with farmers to determine the most economical methods of feeding and caring for dairy cows. This work results in a definite understanding as to the requirements in milk production and leads to more economical methods of production. Graduate Massachusetts Agricultural College, B. S. Served for various periods before entering department as manager of a stock farm, instructor in agricultural economics, Massachusetts Agricultural College, and dairyman for the Woodlake Stock Farm, Minneapolis, Minn. One year three months.

Phillip A. Wright, Washington, D. C. Performs analytical work in connection with silage investigations, which includes particularly the utilization of new crops for silage. Has had long experience in this kind of work. Graduate Middlebury College, B. S.; student in Yale University, two terms; also received degree of M. A., University of Missouri. Seven years three months.

Roy R. Graves, Chevy Chase, Md. Engaged in investigations in the breeding of dairy cattle. Has outlined and started some extensive experiments along this line. A number of animals of high butter-fat production have been secured, and it is expected that some valuable results will be obtained. Graduate Kansas State Agricultural College, B. S.; received degree of M. S., University of Missouri. Prior to present appointment was manager of a dairy farm, dairyman in this department, and professor of dairy husbandry at Oregon Agricultural College. Two years.

Paul W. Clemmer, Washington, D. C. Performs bacteriological work in connection with various dairy products. This work is conducted with a view to eliminate the waste of dairy products by spoilage and to improve their quality. Graduate Pennsylvania State College, B. S. Prior to entering department service was assistant chemist, Pennsylvania experiment station, and assistant bacteriologist, department of health, Cleveland, Ohio. Three years.

Courtland S. Mudge, Washington, D. C. Performs bacteriological work in connection with various dairy products. This work is conducted with a view to eliminate the waste of dairy products by spoilage and to improve their quality. Graduate Brown University, Ph. B., A. M., and Ph. D. Before entering department service was for various periods graduate instructor in biological chemistry at Brown University; instructor in chemistry at Rhode Island School of Design, Providence, R. I.; and bacteriologist in the research laboratories of the National Canners' Association, Washington, D. C. One year ten months.

Clifford L. McArthur, Washington, D. C. (Travels greater part of time.) Performs bacteriological work in connection with various dairy products. This work is conducted with a view to eliminate the waste of dairy products by spoilage and to improve their quality. Graduate Oklahoma Agricultural and Mechanical College, B. S.; received degree of M. S. from the University of Idaho, and took summer course at the University of Chicago and postgraduate work at Rush Medical School. Was bacteriologist for the Oregon Agricultural College. Three and one-half months.

Harper F. Zoller, Washington, D. C. Is working on methods for making casein suitable for gluing purposes in aeroplane construction from centralizer buttermilk, a product now largely wasted. The production of casein in this country must be increased about 50 per cent to meet the shortage due to the lack of imports and increased demand on account of aeroplane construction. It is almost impossible to secure chemists with proper training for this work. Graduate Lenox College, B. S.; received degree of M. S. from University of Illinois. Before entering department was for various periods research assistant in astronomy and graduate assistant in chemistry in the University of Illinois; professor of physical science, University of Puget Sound; and instructor in organic chemistry, Kansas State Agricultural College. One year one month.

David D. Gray, Fort Collins, Colo. Has charge of the horse-breeding work being conducted by this department in cooperation with the Colorado Experimental Station at Fort Collins, Colo. Graduate Kansas State Agricultural College, B. S. Prior to entering department had one year's experience in veterinary work. One year.

V. O. McWhorter, Dubois, Idaho. Has charge of the sheep experiment station of the Bureau of Animal Industry at Dubois, Idaho, and has been connected with work in sheep investigations for four years. During the past three years he has been trained especially to take charge of the range sheep investigations project. These investigations have been under way for nine years and are now yielding results of immediate value to the producers of wool and mutton in this country. Graduate Washington State College, B. S. in agriculture. Four years.

Sewall Wright, Washington, D. C. Has been employed in scientific work relating to animal genetics; also is a thoroughly qualified mathematician and statistician and has been engaged during recent months in some extremely important statistical work bearing directly on war activities. Graduate Lombard College, B. S.; received degree of M. S. from University of Illinois and S. D. from Harvard. Two years ten months.

Ben F. Brandon, Beltsville, Md. Is assistant in charge of the animal-husbandry portion of the experimental farm of the department at Beltsville, Md. His duties are those of farm superintendent, covering a wide range of farm activities. The experimental farm plays a fundamental part in the work of the Animal Husbandry Division and naturally is vitally connected with the war-emergency program. Graduate Purdue University, B. S. in agriculture. Had practical farm experience prior to entering department. Two years.

SPECIALISTS IN SWINE PRODUCTION.

The department is making every effort to increase the production of pork in the United States. An intensive campaign is now under way in the eight corn-belt States, where many farmers have begun raising hogs for the first time. In the Southern States additional men, appointed under the authority conferred by the food-production act, have been placed as assistants to the regular force of swine-husbandry agents, to stimulate production of pork and to increase the pig-club membership. The importance of this work is manifest in view of the fact that pork constitutes more than one-half of all the meat produced in this country and is the mainstay in the ration of the laboring man and the soldier. The need for increasing the supply of fats is particularly acute. Animal fats can be increased more quickly by increasing the number of hogs than in any other manner.

Deferred classification has been requested by the department and allowed by draft boards in the case of the following employees engaged in this type of work:

Name, home address, character of work (see general statement), and length of service.

John T. Tingle, Fort Collins, Colo. Graduate Mississippi Agricultural and Mechanical College, B. S. in agriculture; served one term as principal of agricultural high school. Eight months.

Tom E. Wise, Auburn, Ala. Graduate Iowa Agricultural College, B. S. in agriculture; also had farm experience. Eight months.

William E. Schneider, Denver, Colo. Graduate Colorado Agricultural College, B. S. in agriculture. Eight months.

Leonard J. Allen, Corvallis, Oreg. Graduate Oregon Agricultural College, M. S. As a pig-club agent has been instrumental in accomplishing valuable results. Two years nine months.

De Witt T. Meek, Stillwater, Okla. Prior to entering department had considerable practical experience with live stock, and for a time was secretary of the Federal Live Stock Association of Oklahoma. Two years six months.

Charles R. Bowers, Auburn, Ala. Graduate Oklahoma Agricultural and Mechanical College, B. S. in agriculture; took post-graduate work in animal husbandry. Eight months.

Peter E. Spinks, Agricultural College, Mississippi. Graduate Mississippi Agricultural and Mechanical College, B. S. in agriculture. One year.

Lewis H. Fudge, St. Paul, Minn. Graduate Ohio State University, B. S. in agriculture. One year.

SPECIALISTS IN BEEF-CATTLE PRODUCTION.

Beef-cattle production is one of the most important lines of work of the Bureau of Animal Industry. Specialists have been placed in different sections of the country to assist farmers and cattlemen in conserving all good breeding cows and to emphasize the necessity of breeding for a maximum calf crop, preparing permanent pastures, building silos, and preserving all available feedstuffs. The corn belt possesses an enormous supply of feed in its corn fodder which has never heretofore been completely utilized. It is estimated that there is in the Southeast this year sufficient feed to take care of between 400,000 and 500,000 cattle, in addition to the number normally provided for. Many problems in beef-cattle production require investigation by specially qualified experts, and it is generally recognized that the experimental work conducted by this department has been the basis of the great development of the beef-cattle industry in the South following the eradication of the cattle tick.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

Gilbert L. Cleland, Canton, Miss. Graduate Kansas Agricultural College. Prior to present appointment had practical farm training and one year's experience in swine and beef-cattle production work. One year six months.

L. W. Summers, Orangeburg, S. C. Graduate Alabama Polytechnic Institute; acted as instructor in the Agricultural College of Virginia, and previous to entering the department service was engaged in farming in South Carolina. Two years.

F. T. Peden, Springdale, N. C. Graduate North Carolina College of Agriculture. Has had practical farm experience. Four years eight months.

Smith W. Greene, Collins, Miss. Graduate Purdue University. Had practical farm experience before entering department. One year five months.

Frank W. Farley, Washington, D. C. Graduate University of Illinois, B. S. Three years.

Carrol J. Goodell, Washington, D. C. (travels in field most of time). Graduate Purdue University, B. S. in agriculture. Spent his early life on a farm and managed a farm for five years prior to entering department service. Three years ten months.

SPECIALISTS IN POULTRY PRODUCTION.

The work upon which these employees are engaged offers one of the quickest means of increasing the meat supply of the country. The production of a large supply of poultry and eggs for domestic consumption will result in releasing greater quantities of beef and pork for the use of our Army and the allies. Every effort is being made to encourage the production of poultry on general farms and in back yards

in order to turn waste material into food for human consumption. These specialists work in cooperation with the State agencies and have been giving chief attention to the great poultry-producing sections of the Middle West, which presents the greatest opportunity for securing the largest and most immediate results. As a necessary concomitant of these extension activities, studies are also being made of various problems relating to the feeding, breeding, and management of poultry.

Deferred classification has been requested by the department and approved by draft boards in the case of the following employees engaged in this work:

Name, home address, character of work (see general statement), and length of service.

Alfred R. Lee, Bladensburg, Md. Graduate of Rhode Island State College, B. S. in agriculture. Has general supervision of the poultry-feeding experiments at the Beltsville farm in connection with the war emergency work and the administrative work in the Washington office. Eight years nine months.

R. C. Blake, Oklahoma City, Okla. Graduate of Massachusetts Agricultural College, B. S. in agriculture. Has had wide experience in the management of poultry farms. Seven months.

R. H. Wilkins, Washington, D. C. Graduate of Illinois State University and Cornell University. Was poultry instructor and investigator in Massachusetts and Kentucky for two years prior to present appointment. Ten months.

Leo J. Brosemer, Lafayette, Ind. Prior to present appointment was manager of a commercial poultry plant, poultry-club agent for the department in Tennessee, and associate editor of the *Reliable Poultry Journal*. Two years four months.

Carl F. Wehman, Bryan, Tex. Attended Pennsylvania State College three years, specializing in poultry. Had three years' practical experience in farming and poultry breeding. Eight months.

Phillip H. Hayes, Stillwater, Okla. Graduate of Oklahoma Agricultural and Mechanical College, B. S. in agriculture. During his college course did considerable work on the poultry farm in connection with the feeding, care, incubation, and other matters relating to poultry production. Nine months.

Sheppard Haynes, Beltsville, Md. Assists in poultry work being conducted at the Beltsville farm. The poultry experimental work at the farm is a vital part of the emergency war program because of its bearing upon the poultry industry of the country. Prior to entering department service had about ten year's practical experience in feeding, breeding, and management of poultry. One year five months.

FOREST SERVICE.

FOREST SUPERVISORS.

A forest supervisor is in direct administrative charge of one or more national forests, with an average area to look after of more than 1,000,000 acres. He has control of a ranger force of from 5 to 20 men, and is responsible for their training, leadership, direction, and support. He negotiates all timber sales for his forest, except those of small size, which are handled by the rangers, and those of very large size, which are handled by the district forester or the forester. After sales are negotiated he is responsible for their administration. He plans and supervises trail, telephone, and other improvements for his forest. He issues grazing and special-use permits, and is responsible to the public, to his ranger force, and to the district forester for the efficient handling of a large volume of business. All funds on the national forests are expended under the immediate direction of the forest supervisor, necessitating an accurate grasp of the fiscal regulations. He is expert in both office and field work. A supervisor within draft age, in many instances, is technically trained for his work. During the war especially heavy duties devolve upon him, because with a depleted subordinate force he is under the necessity of efficiently handling as large a timber business as before the war and a greatly increased grazing business, since it has been the effort throughout the national forests to increase the grazing to the utmost limit in order to augment the country's supply of meat. In every case where deferred classification for a forest supervisor has been requested there are special considerations which make it impossible to replace him without substantial material loss and detriment to the work.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

Edward P. Ancona, Taos, N. Mex. Deputy forest supervisor, Carson National Forest. Graduate Pennsylvania State College, B. S. Employed one summer on State forest in Pennsylvania and about a year on chestnut-blight work in same State. Entered Forest Service in a reconnaissance party on the Snuqualmie Forest. Five years five months.

Elliott S. Barker, Taos, N. Mex. Forest supervisor, Carson National Forest. Graduate New Mexico Normal University; also six months in Illinois College of Photography. During school vacations worked at ranching and sawmilling. Entered Forest Service as assistant forest ranger. Nine years five and one-half months.

Charles N. Hammond, Hot Springs, Ark. Deputy forest supervisor, Arkansas National Forest. Graduate Pennsylvania State College, B. S. in forestry. Prior to appointment was employed by the Pennsylvania Chestnut Blight Commission, and also assisted in a timber reconnaissance on the Crater Forest. Four years four months.

B. F. Heintzleman, Eugene, Oreg. Deputy forest supervisor, Cascade National Forest, with all qualifications for filling any supervisor vacancy that may occur in district 6. Graduate Pennsylvania State Forest Academy; two years Yale Forest School. For one year in charge of State forest reservation in Pennsylvania. Prior to present appointment employed as forest guard on Kaniku Forest. Eight years three months.

Jay Higgins, Halsey, Nebr. Forest supervisor, Nebraska National Forest. Graduate University of Nebraska, B. S. in forestry. Entered Forest Service as a guard on one of the Colorado forests. Prior to appointment had experience in sawmill and nursery work. Ten years one month.

Arthur F. C. Hoffman, Pagosa Springs, Colo. Forest supervisor, San Juan Forest. Graduate Iowa State College, B. S. in forestry. During the summer of 1909 engaged in timber estimating, mapping, planting, and collecting data for volume and yield tables. During the summer of 1910 employed by the Forest Service as student assistant, being engaged in extensive timber reconnaissance on the White River Forest. Seven years two and one-half months.

Leslie T. Mahurin, Glenwood Springs, Colo. In addition to handling a large amount of administrative work on the Holy Cross National Forest, assumes many responsibilities comparable to those of a deputy supervisor. Six years four months.

Charles D. Simpson, Montpelier, Idaho. Forest supervisor, Caribou National Forest. Graduate four-year course in chemistry University of Minnesota, specializing in botany and economics and special course in stock judging, veterinary science, and agronomy. Had previous practical experience in stock raising; also worked as forest guard in the employ of the Minnesota State forestry service. Four years eleven and one-half months.

John W. Spencer, Collbran, Colo. Forest supervisor, Battlement National Forest. Graduate Emporia College (Kans.), B. S.; Yale Forest School, M. F. Entered Forest Service as a field assistant on the Crook Forest. Prior to appointment had experience in timber cruising, mapping, and surveying. Seven years three and one-half months.

James C. Whitham, Miles City, Mont. Forest supervisor, Sioux National Forest. Graduate Iowa State College, B. S., specializing in forestry. Entered Forest Service as a forest guard. Seven years four months.

DISTRICT FOREST RANGERS.

A district forest ranger is responsible for protecting from fire one or more districts of a national forest, usually involving an area of from 100,000 to 250,000 acres. In most instances privately owned lands are intermingled with the Government holdings. The district ranger conducts with the public the business arising on his district, including timber sales, the management of grazing, special uses of various sorts, and the free use of timber. He frequently has one or more assistants on timber-sale work, and in the fire season he may have as many as three or four patrolmen working under his direction. In fighting fires he may suddenly be thrown into the control of from 100 to 300 men. The success of a district ranger depends upon a number of factors, important among which are complete knowledge of his district, including the location of corners and land lines dividing private from Government lands, and wide acquaintance with the local people. In some instances a man may be so highly qualified for his place that he can not be replaced without the most serious detriment to the business of the forest and annoyance to the local public. It is of the utmost importance that at least 50 per cent of the district rangers on any forest be experienced men, since it is hazardous to depend upon inexperienced men for more than half the ranger districts. In all cases where affidavits were filed for district rangers it was because of the conditions above indicated.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

Wayne F. Alexander, Livingston, Mont. Forest ranger, West Boulder ranger district, Absaroka National Forest. Attended a short course in forestry at Missoula and business college. Entered the Forest Service as a guard. Had previous experience in logging camps and in handling horses. Five years two months.

Karl C. Allan, Kilgore, Idaho. Forest ranger, district 2, Targhee National Forest. Prior to entering the Forest Service had considerable experience in stock raising. Four years nine months.

Charles E. Brackett, Nicholia, Mont. Forest ranger, Sheep Creek ranger district, Beaverhead National Forest. Attended Yankton (S. Dak.) College and Ranger School, University of Montana. Has had long experience in the Forest Service and is a particularly valuable grazing man. Prior to entering Government service had considerable experience in handling live stock. Seven years one-half month.

James P. Brown, Silver Bow, Mont. Forest ranger, Fleeceer district, Deerledge National Forest. Graduate Pennsylvania State College, B. S. in forestry. Worked in nursery for Pennsylvania Railroad Co.; also experience in tree planting in West Virginia. Five years.

William F. Cochran, Columbine, Colo. Forest ranger, Three Forks ranger district, Routt National Forest. Prior to present appointment was employed three summers as temporary laborer and fire guard in the Forest Service. Had previous experience in surveying. Three years one-half month.

Charles K. Cooperrider, Cowles, N. Mex. Forest ranger, Pachuclala-La Mesa ranger district, Santa Fe National Forest. Graduate Ohio University, B. S. Taught three years in high school, one year college, and served one year as high-school principal. Entered the Forest Service as assistant forest ranger. Two years eleven and one-half months.

Fred W. Croxen, Winslow, Ariz. Forest ranger, Bly ranger district, Coconino National Forest. Short course in forestry and animal husbandry at Iowa Agricultural College. Entered Forest Service as an assistant forest ranger. Had previous experience in cattle ranching, lumbering, and tree planting. Six years ten months.

John C. Davis, Alturas, Cal. Forest ranger, Devil's Garden district, Modoc National Forest. Was forest guard one summer before permanent appointment. Prior to appointment had practical experience in stock raising. Two years ten months.

Walter W. Douglas, Merrimac, Cal. Forest ranger, Merrimac district, Plumas National Forest. Had practical experience in building cabins, trails and roads, and telephone lines, and in timber cruising, before entering service; also in handling cattle, both on summer and winter range. Four years eight and one-half months.

William B. Fay, Hesperus, Colo. Forest ranger, La Plata ranger district, Durango National Forest. Had experience in road surveys and road work and in handling stock. Entered Forest Service as a guard. Four years six and one-half months.

Leland Fouts, MacFarland, Tenn. Assistant forest ranger, Hiwassee ranger district, Cherokee-Georgia purchase area. Served as guard in Forest Service two years before permanent appointment and had prior experience in lumbering. Four years five months.

Frank Gray, Cedar, Colo. Forest ranger, Glade ranger district, Montezuma National Forest. Attended State Normal, Alva, Okla., one year, and State Normal, Springfield, Mo., one year, and afterwards taught school. Prior to entering the Forest Service had experience in stock raising. Two years two months.

James I. Hatch, Gallina, N. Mex. Forest ranger, Gallina ranger district, Santa Fe National Forest. Entered Forest Service as a forest guard. Prior to appointment had practical experience in lumbering. Five years four months.

Harry D. Hauser, South Pass, Wyo. Forest ranger, Washakie National Forest. Served as field assistant and as guard in the Forest Service before permanent appointment. Had previous sawmill experience. Three years seven months.

William E. Hedges, Natural Bridge Station, Va. Forest ranger, South Side ranger district, Natural Bridge purchase area. Employed on ranger duties since entering Forest Service. Prior to appointment had experience in surveying, lumbering, handling stock on range, and sawmilling. Two years three months.

Louis R. Hillmon, New Meadows, Idaho. Forest ranger, districts 6 and 7, Weiser National Forest. Prior to appointment was employed two winters at timber work in lumber camps in Idaho. Six years.

William E. Jackson, Denver, Colo. Forest ranger. Attended Anacanda (Mont.) College four years; United States Naval Academy, two years; Kansas State University, two years; University Forest School, two years. Five years seven months.

Wallwin T. Job, Kanab, Utah. Forest ranger, Kaibab National Forest. Prior to appointment worked with surveying party and in surveyor's office approximately 6 months; also had 10 months' experience in ranch work. Eight years nine months.

Robert Johnson, Wensper, Idaho. Forest ranger, district 1, Lemhi National Forest. Previous experience on cattle ranch. Three years eight months.

John V. Leighou, Dolores, Colo. Forest ranger, assigned to timber sale work on Montezuma National Forest. Attended Bloomsburg (Pa.) State Normal one year; Bucknell University, two years; Pennsylvania State College, three years, graduating B. S. in forestry. Prior to appointment to present position had lumbering experience and worked in a reconnaissance crew on Bighorn Forest. Five years two months.

Harvey J. Lickel, Trout Lake, Wash. Forest ranger, Mount Adams ranger district, Columbia National Forest. Attended South Dakota State Normal School three and one-half years; Oregon Agricultural College, two and one-half years; University of Washington, rangers' short course in forestry. Was reared on a stock farm; entered Forest Service as a forest guard. Seven years 10½ months.

Benjamin H. Lowe, Moon, S. Dak. Forest ranger, Limestone ranger district, Harney National Forest. Entered Forest Service as a guard. Had previous experience in lumbering. Two years nine months.

Corley B. McFarland, Landax, Ore. Forest ranger, west boundary ranger district, Cascade National Forest. Graduate Southern Iowa Normal School. Had stock-raising, logging, and lumbering experience prior to Government employment. Entered Forest Service as forest guard and has been employed on permanent improvement and protection work. Eight years three and one-half months.

Neal O. McKinley, Rye, Colo. Forest ranger, Greenhorn ranger district, San Isabel National Forest. Entered Forest Service as guard. Had previous experience in lumbering. Two years six and one-half months.

Woodford Grady Miller, Innaha, Ore. Forest ranger, Innaha ranger district, Wallowa National Forest. Had experience in sheep raising and sawmill work prior to entering department service; appointed to Forest Service as a forest guard. Five years one month.

Sanford Mills, Dubois, Wyo. Forest ranger, Washakie National Forest. Lived on ranch until entering Forest Service and was experienced in handling live stock. Five years eight months.

George E. Moore, Currant, Nev. Forest ranger, district 3, Nevada National Forest. Three years at Utah Agricultural College. Prior to appointment had general sawmill experience. Two years seven months.

Stephen A. Nash-Boulden, Descanso, Cal. Forest ranger, Descanso district, Cleveland National Forest. Experienced in grazing and ranching. Served as forest guard for one summer before permanent appointment. Has been a forest ranger during entire period in service. Four years five and one-half months.

Rosco C. Nicholson, Clayton, Ga. Forest ranger, Clayton ranger district, Savannah purchase area. Attended Georgia Agricultural College business course one year, mining and engineering course two and a half years. Served in Forest Service two summers as forest guard before permanent appointment. Four years three months.

Berry W. Phelps, Fraser, Colo. Forest ranger, Byers district, Arapaho National Forest. Two years at Gates Academy, Neligh, Neb., scientific course; course in surveying and mapping, International Correspondence Schools. Had considerable experience in logging operations and at sawmills, also in handling stock, previous to entering Forest Service. One year five months.

Frank F. Poley, Sulphur Springs, Colo. Forest ranger, Arapaho National Forest. From spring of 1910 to fall of 1914 employed as temporary laborer, foreman of planting crews, and forest guard in the Forest Service. Five years three and one-half months.

Robert G. Schreck, Ely, Minn. Forest ranger, Superior National Forest. Graduate Iowa State College, B. S. in forestry. Prior to permanent appointment worked for four summers as forest guard. Three years seven and one-half months.

Joseph L. Sheppard, Evanston, Wyo. Forest ranger, employed on important timber-sale operations on Wasatch National Forest. Previous to entering Forest Service had experience in handling live stock. Three years two months.

Lionel H. Sherman, Dayton, Wyo. Forest ranger, Tongue ranger district, Bighorn National Forest. Entered Forest Service as a forest guard. Previous experience in handling live stock. Four years six months.

I. M. Varner, Soda Springs, Idaho. Forest ranger, district 8, Cache National Forest. Attended University of Idaho two years. Prior to appointment had nine years' experience in lumbering; also experience in surveying. Was forest guard two summers before permanent appointment in Forest Service. Three years seven months.

Henry G. White, Detroit, Ore. Forest ranger, Detroit ranger district, Santiam National Forest. Since entering Forest Service has been engaged chiefly in trail and telephone construction, scaling, and fire protection. Seven years one and one-half months.

Norman C. White, Bly, Ore. Forest ranger, Bly ranger district, Fremont National Forest. Practical experience in surveying prior to entering Forest Service, where he has been employed as forest guard, chiefly on grazing and timber work. Six years five and one-half months.

Arthur A. Wood, Lost City, W. Va. Forest ranger, Potomac ranger district, Shenandoah Purchase Area. Entered Forest Service as a forest guard. Prior to appointment had practical experience in stock raising. Five years two months.

FOREST EXAMINERS.

A forest examiner is a technically trained forester who is assigned to a national forest to assist the supervisor in estimating timber, in laying out and making timber sales, and in the administration of sales after they are negotiated. He assists in all other forest operations and activities, such as planting and all manner of special forest studies, and also assists in the general administration work as the need may arise. The forest examiner is the supervisor's technical expert in timber matters. If assigned to a district office, a forest examiner is usually employed on special timber work, such as general timber reconnaissance, or the study of silvicultural problems, or he may be assigned from forest to forest for work under the direction of the forest supervisor. So large a proportion of the forest examiners formerly in the Forest Service

have entered the military service that it would be impossible to replace any of the men for whom deferred classification has been requested without equivalent loss in some other direction.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

R. H. Easterbrooks, Laramie, Wyo. Forest examiner, engaged in timber-sale work on the Medicine Bow Forest. Attended University of Illinois one year; University of Michigan, four years. Had previous experience in lumbering, surveying, tree planting, timber cruising, and fire fighting. Two years five and one-half months.

Oliver F. Ericson, Austin, Ore. Forest examiner, Whitman National Forest. Graduate Bethany College (Kans.), A. B.; University of Washington (Wash.), M. S. F. Before entering service was employed during school vacations on forest reconnaissance work. Five years two months.

Andrew Hutton, Laramie, Wyo. Forest examiner, assigned to timber-sale work on the Rio Grande National Forest. Graduate Pennsylvania State College, B. S. in forestry. Was employed two summers by Forest Park Reservation Commission of New Jersey, surveying boundary lines, marking lines, locating corners, cabin buildings, etc. Three years one and one-half months.

B. E. Leete, Custer, S. Dak. Forest examiner. Graduate Yale, B. A., and Yale Forest School, M. F. Two years eleven and one-half months.

Allen W. Murdock, Hot Sulphur Springs, Colo. Forest examiner, Arapaho National Forest. Graduate University of Michigan, A. B. and M. S. F. Spent college summer vacations two years as fire warden in Michigan and one year as field assistant on Whitman Forest. Four years two and one-half months.

Wallace J. Pearce, Fort Collins, Colo. Forest examiner, Colorado National Forest. Attended Colorado College two years. Engaged in trail, telephone, and fire-guard work. Entered Forest Service as an assistant on the Pike Forest nursery. Four years one month.

Ward Shepard, Albuquerque, N. Mex. Forest examiner, district office, Albuquerque, N. Mex., assisting the chief of operation. Graduate Harvard, A. B., and Harvard Forest School, M. F. Entered Forest Service as forest assistant. Five years.

Edwin H. Steffen, Yreka, Cal. Forest examiner, in charge of silviculture activities on Modoc Forest. Graduate Iowa State College, B. S. F. Prior to present appointment served in Forest Service as guard and as forest assistant in technical forest work. Five years six and one-half months.

Charles Steuart, Mancos, Colo. Forest examiner, Montezuma National Forest. Graduate Colorado College, P. E., and Yale Forest School, M. F. Entered Forest Service as a field assistant. Had previous experience in timber cruising. Four years one and one-half months.

Myron W. Thompson, Denver, Colo. Forest examiner, in charge of the office of silviculture (Denver), substituting for regular incumbent now on military leave in France; only experienced man available with complete knowledge of timber-sale conditions of district 2. Graduate Massachusetts Agricultural College, B. S., and Yale Forest School, M. F. During college vacations worked in forestry field parties. Entered Forest Service as forest assistant. Six years eleven and one-half months.

Earl W. Tinker, Deadwood, S. Dak. Forest examiner, Black Hills National Forest. Graduate Michigan Agricultural College, B. S. F.; Yale Forest School, M. F. Two years eleven and one-half months.

Ernest T. Wolf, Cody, Wyo. Forest examiner. Graduate Iowa State College, B. S. F. Prior to permanent appointment served one summer as field assistant in Forest Service. Had previous practical experience in woods and lumber yards. Four years.

GRAZING EXAMINERS AND GRAZING ASSISTANTS.

Grazing examiners and grazing assistants are technically trained grazing experts. When assigned to a national forest they make an expert examination or survey of the range resources, the range allotments to different classes of stock, and the methods followed in handling the stock on the range, and recommend changes in numbers of stock, class of stock, methods for their handling, and needed range improvements, in order to eliminate destructive overgrazing or unnecessary undergrazing throughout the forest. Where important changes in grazing management are necessary following the survey the grazing examiner or grazing assistant assists the supervisor in seeing that they are properly made. If assigned to a district office he serves as the district forester's technical expert on the grazing capacity of ranges and methods of range utilization. When assigned to research he collects data and develops improved methods of range management for application in range administration. Grazing examiners and grazing assistants may be assigned from forest to forest, from forest to district office, or from one district to another wherever the need for their services is most urgent.

At the beginning of the war all available grazing examiners and grazing assistants were assigned to make a close but rapid examination of the national forest ranges with a view to decide where it would be possible to take care of more stock without greatly endangering the permanent welfare of the range. The special work of these men has had much to do with the emergency increases of cattle and sheep on the national forests in 1918, amounting to about one-half million sheep and one-quarter million cattle. The maintenance of these increased numbers of stock without danger of unwarranted damage to the range and to live-stock production next year, and in future years, necessitates a close watch of range and stock by grazing experts. The work of grazing examiners and grazing assistants differs in the degree of technical as well as administrative responsibility.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

Mark Anderson, Ogden, Utah. Grazing examiner. Attended Academy of Idaho three years; University of Idaho, two years' work at Forestry School. Prior to permanent appointment, served as forest guard one summer. Five years five and one-half months.

Raymond J. Becraft, Ogden, Utah. Grazing examiner, district office, Ogden, Utah. Graduate Weber Academy, Ogden, Utah; student, Utah Agricultural College one year, agriculture and botany; and at Utah Agricultural College one year. Two years four months.

William R. Chapline, Jr., Washington, D. C. (In the field about seven months in every year.) Grazing examiner. Graduate University of Nebraska, B. S., specializing in forestry and botany. Before receiving permanent appointment was employed by Forest Service for part time during three years. Experience in Forest Service as planting assistant, nursery work, field assistant, and forest guard. Six years one-half month.

Lynn H. Douglas, Denver, Colo. Grazing examiner, district office, Denver. Graduate University of Nebraska, B. S. Had practical experience in lumbering and worked one summer with Ohio Forestry Commission before appointment to present position. Has studied the ranges of district 2 and knows more about them than any other man. Seven years two months.

F. D. Douthitt, Alameda, Cal. Grazing examiner. Studied forestry, botany, and allied subjects at University of Nebraska. Since entering Forest Service has specialized on range investigations and administration. Five years four months.

Walter L. Dutton, Baker, Oreg. Grazing examiner, Whitman National Forest. Graduate Oregon Agricultural College, B. S. Employed as forest guard during college vacation. Five years two months.

Leon C. Hurtt, Missoula, Mont. Grazing examiner, district 1. Graduate University of Nebraska, B. S., in forestry. Served as forest guard in the Forest Service two summers before permanent appointment. Three years six months.

John Craig Kuhrs, Oakridge, Oreg. Grazing examiner, Deschutes National Forest. Attended public and high schools and three years at Pennsylvania State College. Entered Forest Service as guard. Seven years six and one-half months.

Theodore B. Nichols, Ogden, Utah. Grazing assistant. Graduate University of Nebraska, B. S. and M. A. Employed by Forest Service during college vacations as field assistant and forest guard for four years previous to permanent appointment, exclusively on range-management work, in which he is ranked as a specialist. Four years five months.

Jesse L. Peterson, Portland, Oreg. Grazing examiner, assigned to the district office at Portland, Oreg., spending entire time on work looking to increase of range carrying capacity, betterment of range management, etc. Six years six months.

ENGINEERS AND ASSISTANT ENGINEERS IN FOREST PRODUCTS.

Engineers and assistant engineers in forest products conduct tests to determine the mechanical or strength properties of wood as a material, such as bending and compression strength, stiffness, hardness, etc., and tests to determine the physical properties of wood as a material, including such factors as shrinkage as influenced by moisture, rate of transmission of moisture, etc. Supplemental tests are also conducted of various special wood products and of methods of kiln-drying to aid in the practical application of results. The war activities of these men have included a wide range of tests to form the basis for the selection, conditioning, and use of wood for airplanes, ships, vehicles, boxes, gunstocks, etc. In the case of airplanes, for example, strength and other tests furnish the basis for the determination of suitable species; for design in which weight, strength, etc., are vital factors; for specifications covering both raw materials and finished parts to permit the elimination of poor and the retention of satisfactory material and parts; for developing methods of kiln-drying and for checking the methods so developed; for developing built-up material, such as ply wood, laminated parts, jointed parts, etc. The work of engineers and assistant engineers differs in the degree of technical as well as administrative responsibility.

A very serious situation exists at the forest-products laboratory on account of the difficulty of securing and holding technical men with the proper training and experience to conduct the investigations called for by the Army and Navy and other agencies of the Government in the prosecution of the war. The technical men at the laboratory have all been trained along highly specialized lines, and it would be difficult if not impossible to replace them. They have been selected with great care, but many of them are within the draft age for the reason that it has not been possible to secure older men with the necessary qualifications and experience. In view of the importance and urgency of the work which the laboratory has been called upon to do, and the scarcity of qualified men available for it, it is highly necessary that everything possible be done to retain the experienced men already there.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

William S. Broome, Madison, Wis. Assistant engineer in forest products. Graduate department of civil engineering, Texas Agricultural and Mechanical College. Served as rodman and instrument man on various railroads in the South and West; considerable experience in valuation and construction work on these roads. Five and one-half months.

Lorraine J. Markwardt, Madison, Wis. Engineer in forest products. Graduate University of Wisconsin, B. S. in civil engineering, and consulting engineer. Three years nine and one-half months.

Harry J. Rosenthal, Madison, Wis. Assistant engineer in forest products. Graduate Purdue University, B. S. Employed one and one-half years in the engineering department in the city of Rockford, Ill., and as construction engineer for the Inland Steel Co. for a like period. Three months.

J. D. Studley, Madison, Wis. Assistant engineer in forest products. Graduate school of forestry, University of Washington, specializing in forest products. Worked at Seattle timber-testing laboratory and in the mill and on the kilns of the Bryant Mill Co., Seattle. Prior to present appointment was employed four field seasons by Forest Service on cruising, timber sale, homestead-claims examination, patrol, maintenance, construction, and improvement work. Eight and one-half months.

Lars A. Welo, Madison, Wis. Engineer in forest products. Graduate North Dakota Agricultural College; graduate University of Illinois, M. S.; candidate for Ph. D., University of California; taught in high school two years; employed two years as draftsman, engineering department, North Dakota Agricultural College; engaged five years in graduate work and research in physics. Two months.

James O. Bixby, Madison, Wis. Has immediate charge of the section of computing, and in that capacity is engaged in supervising the calculation of final results from original test data secured in the various sections, but especially in timber tests. Since entering the Forest Service has been connected mostly with timber-testing work, and consequently has become thoroughly familiar with the methods of handling the data secured and their preparation for presentation in reports, publications, etc. It has taken years to acquire this degree of familiarity

with the work, and at the present time, when the timber-testing work has been more than quadrupled on account of national-defense problems, his training and experience is invaluable in the analysis, interpretation, and application of the data, much of which have been collected over the past 15 years. Attended School of Mechanical Engineering, Purdue University, two years; similar course in University of Wisconsin, one and a half years; student assistant in timber-testing work at the Purdue Laboratory, two years. Eleven years.

Melvin E. Diemer, Madison, Wis. As chemist in forest products conducts investigations of the chemical properties of woods and other forest products and of the application of the results in such industries as pulp and paper making, hardwood distillation, manufacture of ethyl or grain alcohol from wood waste, preparation of naval stores, treatment of woods to prevent decay or to reduce fire hazard, etc. The war activities of this employee have included a rather wide range of special problems, dealing with improved processes for the manufacture of pulp and paper; efforts to increase the production of such war essentials as acetate of lime resulting from hardwood distillation; the use of various forest products in gas warfare, both offensive and defensive; attempts to increase the production of ethyl or wood alcohol from wood waste in order to reduce the demands for grain; development of waterproof glues in order to permit a better utilization of wood in airplanes, etc. Graduate University of Wisconsin, B. A., M. A. (chemistry), and Ph. D. (chemistry). Served for one year as part-time instructor in chemistry in the University of Wisconsin, and for two years was engaged principally in scientific photographic work for University of Wisconsin. Six years seven months.

Matthew E. Dunlap, Madison, Wis. As architectural assistant in forest products, was engaged prior to the war in an investigation of methods of fireproofing wood by means of surface coatings, impregnations, and improved methods of design. Since the war started has been engaged entirely on national-defense problems of immediate importance, chiefly in airplane construction, namely, a study of the relation between the humidity of the air and the moisture content of wood, study of methods of finishing woods to make them resistant to moisture, and study of certain problems involved in the manufacture of wooden screw plugs for shrapnel. The data obtained is being used by certain branches of the Army and Navy. He could not be replaced at this time without serious delay in the work and material loss to the Nation. His work is particularly related to much-needed improvements in the manufacture and finishing of airplane propellers. Graduate College of Architecture, University of Illinois; subsequently employed as architectural engineer in Chicago. One year six months.

Ralph Reginald Randell, Portland, Oreg. As assistant district engineer, is in charge of water-power problems in district 2. In addition, assists the district engineer in matters relating to road construction and the general operations of the branch of engineering, the duties of which have been recently largely increased. Graduate University of Washington, B. S. and C. E. Employed as rodman, junior topographer, and junior engineer in United States Geological Survey; entered Forest Service as junior engineer. Four years four and one-half months.

Stanley Skidmore, Madison, Wis. As laboratory aid and engineer, directs the work of a force of 12 men, in which capacity he is responsible for the proper execution of the timber-testing work as outlined by the technical staff. His long experience along this line has made him familiar with the technique of timber testing, the operation and care of testing machines, and the preparation of material for test. Five years six and one-half months.

Ray C. Tuttle, Madison, Wis. As examiner in forest products, conducts important war emergency work at the Madison Laboratory. In order to make the results of these investigations available for use by the Army, the Navy, and other governmental and private agencies, they must be incorporated in reports, which must be technically correct and readily understandable. This requires review by a man who is both a trained engineer and a good writer. The work of technical review which this employee is doing is an essential part of the war investigations at the Madison Laboratory, and, in view of the scarcity of technically trained men, it would be very difficult to secure a properly qualified man to fill his place. Graduate University of Wisconsin, B. S.; two years in College of Engineering and three years in College of Letters and Science, with special courses in English and Journalism. Six months.

BUREAU OF CHEMISTRY.

Name, home address, character of work, and length of service.

Elliott Q. Adams, Washington, D. C. Has been instrumental in designing a number of devices which have proven of great assistance in the study of a method for the manufacture of phthalic anhydride on a large scale. This article is one of the most important intermediates used in the preparation of synthetic dyestuffs. Has also designed certain pieces of apparatus in connection with the study of anthracene, which has been of material assistance. Has collaborated in a study of the absorption of gases by charcoal. The apparatus which Dr. Adams has designed in the latter connection has proven of great service, and it is felt that his work will be of great importance in gas-defensive warfare. Because of his knowledge of optical instruments he has been of much service to the chemists of the Signal Corps. He has also studied several compounds which are of importance in aerophotography and has been able to give the Signal Corps much information of great value along this line. The very important lines of investigation which have been brought to a conclusion by him could not have been completed had he been called in the draft. Graduate in chemical engineering, Massachusetts Institute of Technology. For several years was research assistant with the General Electric Co. Was also teaching fellow one year, assistant one year, and instructor two years in the department of chemistry at the University of California. One year one month.

Joseph A. Ambler, Washington, D. C. Has been engaged upon a very valuable line of work in the study of phthalic anhydride and a study of charcoal, which have a direct relation to work connected with the successful prosecution of the war. Completed chemistry course at the Sheffield Scientific School, receiving degree of E. H. B.; also took special course in chemistry at the Yale Graduate School, receiving degree of Ph. D. Prior to entering department was laboratory assistant three years at the Sheffield Scientific School, professor of chemistry three years at Acadia University, Nova Scotia, and for two months was research chemist for the Standard Aniline Products Co., Wappinger Falls, N. Y. One year five and one-half months.

Howard R. Smith, Washington, D. C. Is now engaged in studies of chlorophyll in connection with our investigations looking to the establishment of a dye industry in this country. Has been engaged most of the time since entering the bureau on the analysis of food products in connection with the enforcement of the food and drugs act. Has done

valuable experimental work in packing canned tomatoes; also made a special study of certain essential oils, and is expert in their examination. Graduate of Case School of Applied Science; B. S. in chemistry. Five years seven months.

Herbert A. Lubs, Washington, D. C. Assists in color investigations, giving special attention to chlorination and dyes. Some of these dyes are of special use in bacteriological work. Graduate Newberry College (South Carolina), B. A.; took four years' post-graduate work in chemistry at Johns Hopkins University, receiving degree of Ph. D. Prior to present appointment was organic chemist for four months in the hygienic laboratory, United States Public Health Service, and for two years was employed as organic chemist in Swiss-cheese investigations in the dairy division, Bureau of Animal Industry. Three years eight and one-half months.

Harry E. Roethe, Washington, D. C. Has charge of investigations in the control of smut-dust explosions and fires which occur in thrashing machines and which have caused serious losses. No one else is available to undertake this work. In addition to the project on smut-dust control in thrashers, Mr. Roethe is engaged in the investigation of the control of dust explosions and fires in cotton gins. Is the only engineer in the bureau who has been called upon to conduct investigations of this nature. This work, as well as that in relation to smut-dust control, is of an emergency character. Graduate University of Wisconsin, College of Agriculture, B. S., majoring in agricultural engineering. Since graduation has had considerable experience and training in connection with machinery and mechanical devices. Has been in charge of gas-engine operation for the Fuller & Johnson Manufacturing Co., Madison, Wis., engaged in the manufacture of gasoline and kerosene engines. Was employed by the International Harvester Co. as traveling farm-machinery expert, engaged in installing, inspecting, and repairing farm machinery and equipment, especially thrashing machines, in the vicinity of Davenport, Iowa. Has had special experience with the J. I. Case Thrashing Machine Co. in connection with the manufacture and testing of gas tractors. Eleven and one-half months.

Harold H. Brown, Washington, D. C. Is engaged in the prevention of grain-dust explosions, which has a direct application to the conservation of food, and which is conducted under special emergency appropriations. It is extremely difficult to obtain chemists with the technical knowledge necessary to properly conduct these investigations. Graduate Syracuse University, specializing in chemistry and physics; also obtained Ph. D. degree from University of Minnesota, his special work being in organic industrial chemistry and the chemistry of wood products. Subsequently was employed by the Pittsburgh Glass Co. for one year, taught various branches of special chemistry for three years, and for about nine months did research work in problems of explosibility of grain dust at the Bureau of Mines. Three years nine months.

Hylton R. Brown, Washington, D. C. Engaged in developing inert-gas application as a preventive of dust explosions and fires in grain mills and elevators. This work is of an especially high character and has direct application to the conservation of foods. Much difficulty is experienced in securing chemists having the requisite technical knowledge to undertake investigations of this character. Graduate Pennsylvania State College, B. S., taking the milling engineering course. Subsequently was employed four years doing general milling work at Williamsburg, Pa.; also spent one year in practical milling work at the Washburn-Crosby Co.'s mill at Buffalo, N. Y. One year one and one-half months.

W. Bruce Mather, Washington, D. C. Engaged in the emergency campaign in the prevention of grain-dust explosions and fires in mills and elevators. This work has a direct relation to the conservation of foods. The bureau has experienced great difficulty in obtaining chemists with the technical knowledge and training necessary to carry this work forward. Graduate Pennsylvania State College, B. S., taking work in milling and mechanical engineering. For two years was high-school teacher in chemistry and mathematics. Was employed for short periods with the engineering department of the Anglo-American Mill Co., Owensboro, Ky., and with the Benton Roller Mills. Seven and one-half months.

Walter F. Clarke, Washington, D. C. Engaged in working on the detection of metals in foods, also assisting in cooperative investigation of steel for tin plate, which, if it is anticipated, will result in a considerable saving in tin plate as well as perishable foods. This work has very close connection with the conservation of foods. Graduate Hampden-Sydney College, A. B.; pursued postgraduate studies in chemistry and physics at Johns Hopkins University during six sessions; subsequently did a great deal of special work in chemistry. One year nine months.

Ralph W. Frey, Washington, D. C. Engaged in both research and routine work on leather, paying special attention to the securing of data for the War Department on the serviceability of shoe leather for the American armies. He is the only man in the bureau familiar with all phases of these investigations. Graduate George Washington University, B. S. in chemistry. For a few months he served in the chemical laboratory of the Midvale Works at Philadelphia, Pa. Four years five and one-half months.

Kenneth P. Monroe, Washington, D. C. Engaged in the preparation of invertase for use in the department's experiments on cane sirup. There is no other available chemist in the bureau conversant with this process. Dr. Monroe has also been working in the laboratory on the utilization of vegetable-ivory waste, with particular reference to the production of mannose from it and the preparation of useful derivatives from this mannose. One of these derivatives is mannite, which is much needed in the preparation of an explosive, namely, nitromannite. The experiments already conducted indicate that vegetable-ivory waste offers an extremely fertile field for the production of mannite on a large scale. It is therefore very important that the research work on this subject be carried out as rapidly as possible. The bureau has no other chemist who is entirely conversant with the various lines of work now being carried on by Dr. Monroe. Graduate University of Chicago, B. S. in chemistry; also received Ph. D. degree from Columbia University. Served two years as instructor in chemistry at the Oklahoma State University. One year one and one-half months.

Victor E. Grottlisch, Washington, D. C. Is one of two employees of this bureau trained to conduct research and demonstration work on naval stores. Is the only man familiar with assembling the permanent resin types devised by the bureau. This work is important and necessary. Graduate University of Cincinnati, with degree of chemical engineer. For two years prior to entering department was instructor in general chemistry, physics, and engineering chemistry at the Mechanics' Institute, Rochester, N. Y., and for a short period was chemist for the Eastman Kodak Co. at Rochester. Three years eight months.

Harold J. Humphrey, New York, N. Y. Engaged in various lines of food inspection, particularly in connection with milk. In cooperation

with other Government agencies, the bureau is investigating continually the supply of milk and milk products furnished to our own Government and to the allies. Mr. Humphrey has conducted a number of investigations along this line. No one to whom the bureau could turn at the present time could take charge of these assignments. In addition, Mr. Humphrey has collected evidence in connection with cases now pending in court. Should he be drafted into military service it is probable that these cases would have to be dropped, as they could not be prosecuted without the evidence which only Mr. Humphrey could furnish. Graduate Cornell University; had practical experience as a bacteriologist before entering department service. One year.

Julian K. Dale, Washington, D. C. Has charge of the field work in the emergency sirup investigations under the food-production act. This work is very important at the present time and demands a specially qualified investigator to properly carry it on. In several Southern States the production of sirup has been backward because of the technical difficulties involved. One of these is that cane juice, if concentrated too far, will crystallize. It has been Dr. Dale's work to find a practical method to prevent this crystallization, and, on the other hand, to prevent fermentation due to the fact that the cane juice was not concentrated far enough. He has been able to work out a method for overcoming both these difficulties and has been enabled to produce a sirup that is superior in quality to the ordinary commercial product. He has devoted a good deal of time to the demonstration of this method for the purpose of stimulating the production of sugar cane. These methods, if followed, will prevent much of the present loss in sirup manufacture due to the spoilage of a considerable portion of each year's crop. There is no one in the bureau who could immediately take up this work were Dr. Dale to leave. Graduate Princeton University; took three years of graduate work, receiving degree of M. A.; a year later received degree of Ph. D. in chemistry. He also taught chemistry in this university for two years while doing graduate work. Five years.

Fredolf T. Anderson, New York, N. Y. Is engaged in the examination and inspection of foods, which has to do with the detection of adulteration and sophistication. Due to the unsettled conditions and high prices, this work is of special importance at the present time. At least one year's training would be necessary to school a new man to carry on the work which Mr. Anderson is doing. Graduate University of Minnesota, B. A. and C. E. Did considerable practical work in the laboratories of the university while a student. Three years eleven months.

Walter F. Baughman, Washington, D. C. Is engaged chiefly in the examination of various waters under the food and drugs act. It would take a number of months to train a man with equal technical ability in this particular line. Graduate University of Pennsylvania, B. S. Subsequently held a position as chemist for the Ohio Watch Co. Five years eight months.

Victor B. Bonney, Berkeley, Cal. Is engaged in analytical work in connection with food and drugs control, which is of special importance at this time, owing to the fact that under the present high prices the temptation to adulterate and sophisticate food and drugs is greater than during normal times. Graduate Washington State College, B. S. in chemistry. Was instructor in chemistry in this institution one year and spent eight months in the fuel laboratory of the Bureau of Mines at Pittsburgh. Three years seven and one-half months.

John H. Bornmann, Chicago, Ill. Is engaged in food inspection work, and in addition has carried on an extensive investigation of the composition of different corn meals. He is skilled along special lines of investigation. His work is especially important at the present time, having to do primarily with foods. Graduate University of Illinois, B. S. and M. S.; also taught chemistry two years at the same institution. Five years seven and one-half months.

Lloyd A. Bosworth, Santurce, P. R. Engaged principally in the food work being conducted by the Bureau of Chemistry. This work is of greater importance than ever at the present time, as an extremely close watch must be kept on the various food products to prevent various forms of adulteration and manipulation. Graduate University of Wisconsin, B. S. in chemistry; took one year of special graduate work in organic chemistry, with research in alkaloids, at the same time teaching organic chemistry; was also a student assistant in general chemistry one year. Prior to entering department service held the position of assistant chemist at the Geneva Experiment Station for two months. Ten months.

Fortune N. Chisolm, Savannah, Ga. Engaged in inspection work in connection with the interstate shipment of foods and drugs. Under present conditions this work is of more importance than ever before. Graduate Mississippi Agricultural and Mechanical College, B. S. in chemistry and engineering; also studied pharmacy six months at the Southern College of Pharmacy at Atlanta, Ga. Previous to entering the bureau held the position of Mississippi State feed and fertilizer inspector. One year ten months.

James O. Clarke, Savannah, Ga. Engaged in carrying on investigations of the methods of determining water in foods and feeding stuffs. This is a very important line of work at the present time, due to the fact that such items should receive closer supervision than ever before, as the temptation to adulterate them is greater because of the scarcity and high prices of these commodities. Graduate Georgia School of Technology, B. S. in engineering chemistry. For four years was assistant State chemist of Georgia. Ten and one-half months.

Charles W. Crawford, Washington, D. C. Was engaged in the examination of food and drug products at the New Orleans Laboratory of the Bureau of Chemistry, but on account of his special knowledge of the problems arising under the food and drugs act has been transferred to the office of the chief of this bureau to assist in the handling of correspondence arising under the act as well as to take care of interstate cases instituted thereunder. Graduate Oklahoma Agricultural and Mechanical College, B. S.; also took one year's postgraduate work, receiving degree of M. S. Subsequently was assistant chemist and instructor in chemistry at this institution for one year, assistant State chemist and instructor in chemistry at the Washington State College for one year, agriculturist at Apache four years, and chemist with the International Refining Co. in Oklahoma one year. One year four months.

Herbert W. Dault, Washington, D. C. Engaged in research work of a high quality as applied to methods of determination of nitrogen; also executive work in assisting in the operation of one of the laboratories of the Bureau. Attended Washington University two years; also pursued studies in chemistry at Harvard University, receiving degrees of B. S. and M. S. Subsequently was employed as analytical chemist by the Mallinckrodt Chemical Works one year and was associated with the Commonwealth Edison Co., of Chicago, as analytical and research chemist part of a year; was also instructor at the University of North Dakota four years. Five years one-half month.

Fred L. Elliott, New Orleans, La. Engaged in the examination of food and drug products. This work is of unusual importance at the present time on account of the close scrutiny necessary to detect

adulteration and sophistication of these products. Graduate Louisiana State University Agricultural and Mechanical College; took one and a half year's postgraduate work in chemistry at Cornell University; also one summer's postgraduate course in organic and electrical chemistry at University of Chicago. Subsequently was instructor in chemistry in the Mississippi Agricultural and Mechanical College for two and one-half years and one summer was assistant chemist in the Mississippi State Laboratory. Five years.

Jacob Feldbaum, Chicago, Ill. Conducts food analysis, factory inspection, and other special investigations. Is skilled in special methods of investigation. His work has to do with the detection of frauds in food products, which assumes special importance at the present time. Graduate College of the City of New York, B. S. in chemistry; also pursued postgraduate research work at same college two years. Four years.

Leslie W. Ferris, Takoma Park, Md. Engaged in research work on dairy products, devising a method for the chemical detection of the use of "neutralizers" in butter. From present indications it would appear that he has a method that will not fail to detect these "neutralizers." Such work is of great importance to the Bureau of Chemistry, especially at this time when, because of scarcity and high prices of food products, manufacturers are tempted to manipulate and sophisticate these articles. Graduate Haverford College, B. A., majoring in chemistry; took one year's postgraduate work in chemistry at same institution. For about five months was chemist in the laboratory of the Dupont Powder Works. Five years five months.

Abraham J. Finks, Washington, D. C. Engaged in special work in the analysis and preparation of protein. Were he removed from this work, it would take at least one year to train a new man to take his place, even if it were possible to obtain a chemist of the necessary qualifications. There are few men in this country engaged in this line of work. Graduate Massachusetts Institute of Technology. Since entering the department has received degree of B. S. in chemistry from the George Washington University. Two years one month.

Carl D. Geldel, Minneapolis, Minn. Engaged in the analysis and investigation of foods. At present, due to the unsettled condition of the food market, the products being offered for sale require closer attention and supervision than ever before. Graduate University of Wisconsin, M. S., taking course in food and scientific chemistry; did postgraduate work at that institution. Afterwards was assistant in chemistry and bacteriology, State Laboratory of Hygiene, Wisconsin; and was appointed bacteriologist and chemist for the Wisconsin State Dairy and Food Commission. In his chemical course at the University of Wisconsin specialized in food analysis under one of the best food chemists in the country. One year.

Thomas G. Gleason, New York, N. Y. Conducts special investigations relating to the occurrence and determination of heavy metals in foods. It would require not less than two years of training to develop a new man to take up this work. There is no other chemist now available for work of the character performed by Mr. Gleason. Graduate Harvard University, B. S., specializing in chemistry and mathematics. Four years ten and one-half months.

Charles B. Gnadinger, Chicago, Ill. Engaged in general analytical work on food products, paying special attention to imported products. This work to-day requires greater accuracy and closer investigation than ever before. Graduate University of Kentucky, B. S. in industrial chemistry. Six years two months.

Raymond Hertwig, Berkeley, Cal. Engaged upon analytical work in connection with the enforcement of the Federal food and drugs act. This work is of especial importance at the present time because the high price of foods makes it a great temptation to adulterate them. It is therefore exceedingly important that men trained in food analysis be retained upon that work. At the same time it is very difficult under present conditions to replace these men. Graduate Purdue University, B. S.; took some postgraduate work at Chicago University, specializing in chemistry. For two years was instructor in chemistry at Colorado Agricultural College. Four years seven and one-half months.

Joseph M. Humble, Bellevue, Ky. Assists in the analysis of foods in connection with the enforcement of the food and drugs act. Graduate State College of Kentucky, B. S. in industrial chemistry. For several years after graduation was engaged as a commercial chemist in various industries. Four years eight and one-half months.

John B. Hummer, Baltimore, Md. Is one of the well-trained and experienced food and drug inspectors of the bureau engaged in the enforcement of the food and drugs act. At the present time it is practically impossible to secure experienced inspectors. It is necessary to take green men and train them to the work. Because of the importance of efficient inspection work, it is highly important that the bureau retain as many of its experienced men as possible. Mr. Hummer has collected evidence in connection with cases now pending in court. Should he be drafted into military service, it is probable that these cases would have to be dropped, as they could not be prosecuted without the evidence which only he could furnish. Seven years eight and one-half months.

Walter E. Kirby, New York, N. Y. Engaged chiefly upon the inspection and examination of imported foods. Also conducts a line of original work upon the detection of refined olive oil in virgin olive oil, in which he has been very successful. This work has a direct connection with the enforcement of the food and drugs act. Graduate Princeton University, B. S. and M. A., doing research work in inorganic chemistry; was also a lecture table assistant in college. Five years nine months.

Henry A. Lepper, Washington, D. C. Engaged in the practical application of a method for the detection of spoilage in tomato products. Also makes analyses of food samples for Government purchase. This work is very essential in connection with the enforcement of the food and drugs act and in checking the purity of food products purchased by the Government. Graduate George Washington University, B. S. Served as assistant chemist in the United States Geological Survey prior to present appointment. Four years six and one-half months.

Herman Lind, Brooklyn, N. Y. Is an experienced food and drug inspector, thoroughly familiar with trade conditions in the vicinity of New York. Possesses a knowledge of this field which can not be found in any other available person. Has developed and figures as a prospective witness in a number of pending court cases and is developing others. Should he be drafted into military service it is probable that these cases would have to be dropped, as they could not be prosecuted without the evidence which only Mr. Lind could furnish. Seven years six and one-half months.

Robert S. Hollingshead, San Francisco, Cal. Assists in the analysis of samples at the San Francisco laboratory in connection with the enforcement of the food and drugs act, and Mr. Hollingshead is one of the most experienced chemists in the western district. Graduate Cornell University, A. B.; did postgraduate work at that institution one year.

For two years was assistant at Cornell University filtration plant, for a short time assistant chemist in the food laboratory of the New York State Department of Agriculture, member of the faculty of the University of Georgia two years, and assistant chemist at the Florida Experiment Station. Four years one month.

Hugo G. Loesch, Buffalo, N. Y. Assists as food analyst in the enforcement of the food and drugs act, for which work he is especially well adapted. Graduate Columbia College, B. S.; attended School of Chemistry of Columbia University two years and received degree of chemist. Before entering the service of the bureau was employed as chemist in connection with the manufacture of dyestuffs. Nine months.

Howard E. Palmer, Washington, D. C. Engaged upon research work requiring the highest degree of exactness and ability. It is aimed that the work shall produce methods of practical use in food work. The results of this research will be very valuable in the enforcement of the food and drugs act and in food conservation. Graduate Yale University, B. A., in chemistry and allied sciences; attended the Yale Graduate School three years, specializing in chemistry and receiving degree of Ph. D. Was employed for two years as assistant chemist by a commercial concern, and was engaged as assistant chemist in the Bureau of Standards two years previous to entering the service of the Bureau of Chemistry. Three years ten months.

Homer D. Poore, New York, N. Y. Engaged in analysis of citrus fruits; is also doing considerable work in connection with the investigation of citrus by-products. This work is of particular importance at this time when every effort is being made to increase and conserve the food supply. Graduate in the chemistry course of the Worcester Polytechnic Institute, obtaining degree of B. S. Six years.

Sidney F. Sherwood, Washington, D. C. Engaged upon work in connection with the application of the food and drugs act to sugar products. He has had long experience in this work. Graduate George Washington University, B. S. Fifteen years five months.

Edward E. Smith, Washington, D. C. Is performing experiments upon the practical and scientific effects of nitrogen oxide in the bleaching of flour. This work is of special importance in connection with the enforcement of the food-and-drugs act. Much of the work that Mr. Smith has done would have to be repeated should he leave the service of the bureau. Graduate University of Idaho, B. S. in chemical engineering. Was engaged as a commercial chemist for approximately one year before entering the service of the department. Three years ten and one-half months.

Wendell Vincent, Seattle, Wash. Has charge of the Seattle food-and-drug inspection station of the Bureau of Chemistry. The services of such men are most urgently needed in connection with the enforcement of the food-and-drugs act, and never more so than at the present time. Mr. Vincent has collected evidence in connection with cases now pending in court, which cases would probably have to be dropped should he leave the service, as they could not be prosecuted without the evidence which only Mr. Vincent could furnish. Graduate University of Colorado, B. A. Three years three and one-half months.

John B. Wilson, Washington, D. C. Engaged in chemical work relative to the proper preparation and preservation of foods. His education, training, and other qualifications especially fit him for this work. A new chemist entering the bureau to undertake the duties now performed by Mr. Wilson would require months of training. Graduate Ohio State University, B. A., specializing in chemistry. Six years eleven months.

Milton G. Wolf, New York, N. Y. Is stationed at the New York laboratory of the Bureau of Chemistry and has had several years' training in the inspection of imported foods, particularly those requiring examination as to conditions, such as presence or absence of filth, mold, and various other forms of decomposition. Has become an expert in this line of work and it would not be possible to secure a new man having the same degree of proficiency. It would require not less than one year of intensive training to enable an experienced man to fill his place with any degree of satisfaction. The work Mr. Wolf is doing is of greater importance than ever before, and there is a greater volume of this work at the New York laboratory than at any other place in the country. Graduate New York University, B. S. in chemical engineering. During two summers was associated with the National Lead Co., of Brooklyn, N. Y., as assistant chemist. Four years seven months.

Erich W. Schwartz, Washington, D. C. Engaged in carrying on investigations that are of direct importance in connection with the enforcement of the food and drugs act. Has been studying the action of sodium citrate, a substance largely used for the anticoagulant in the transfusion of blood. Has also been studying the action of a number of other drugs of importance. Graduate University of Illinois, A. B.; also University of Chicago, M. D. Was instructor in physiology and pharmacology at Bellevue Hospital Medical College two years. One year eleven months.

J. Lewis Clay, East Orange, N. J. Is an experienced drug analyst and has expert knowledge in the analysis of patent medicines. The degree of proficiency attained by Mr. Clay can only be found in men possessing a peculiar aptitude for that kind of work, in addition to several years' experience. The bureau has been greatly handicapped because a number of older men experienced in drug analysis have recently left the service. The field stations have particularly suffered in this respect. These field stations are called upon regularly to make examinations of imported and interstate shipments of drug products, and this work can only be carried on by trained analysts. Mr. Clay is assigned to the New York station, which has a larger number of samples to examine than any other station of the bureau. Graduate School of Pharmacy, Northwestern University; also pursued work in chemistry at a private school and took one summer's course in analytical chemistry at the Armour Institute of Technology; in addition, took several academic courses. Prior to entering department did considerable commercial work in the manufacturing of pharmaceutical substances; was an assistant in chemical laboratories; also instructor in chemistry. One year one month.

Willis H. Cole, Brooklyn, N. Y. Engaged in the examination of imported and interstate drug products in the New York laboratory. It is very difficult, if not impossible, to secure competent drug analysts. There is no civil-service register at the present time for chemists having the necessary qualifications for this work. Graduate Polytechnic Institute (Brooklyn); B. S. in chemistry. Prior to present appointment was chemist for Moller & Schumann Co., of Brooklyn, N. Y., varnish makers. Seven months.

Clare O. Ewing, Washington, D. C. Has charge of the pharmacognosy laboratory of the Bureau of Chemistry. Has assisted in collecting data for the establishing of standards for crude drugs and spices and data used as subjects for the revision of United States Pharmacopoeia IX and Circular 19, Standards of Purity for Food Products. Has served as referee on the testing of chemical reagents for the past three years for the Association of Official Agricultural Chemists. The

work he performs is important, and there is nobody in the bureau as well qualified as Mr. Ewing to take his place. Graduate Ohio State University, B. S. in pharmacy; also took one year's postgraduate work at same university, obtaining degree of M. S. in chemistry. Four years nine and one-half months.

Ernest H. Grant, Elmhurst, N. Y. Engaged in the analysis of food and drug products, with which work he has had very wide experience, being especially skilled in the analysis of drug preparations, such as proprietary medicines. During the past year has prepared a set of methods for the detection of medical purgative drugs. The work being done by Mr. Grant is of greater importance than ever before because of the fact that, due to the high prices and scarcity of these products, the temptation for firms to adulterate or manipulate their products is greater than it has been in the past. It is necessary, therefore, for the proper safeguarding of the public that extremely close attention be given to food and drug products entering the markets today. Graduate Ohio State University, B. S. in chemical engineering. Was assistant chemist for the Merrell Chemical Co. one summer. Eight years.

Carl H. Lowry, New York, N. Y. Assists in drug analyses. Expert drug analysts are extremely necessary to the adequate and effective prosecution of the bureau's work, and under present conditions they are exceedingly hard to find. Graduate Ohio State University, college of pharmacy, B. S. C. in pharmacy. Ten months.

Samuel Palkin, Washington, D. C. Assists in the drug laboratory of the bureau, doing considerable research work along special lines, as well as regular routine work. The work performed in the drug laboratory is of greater importance now than ever before, because, on account of the high prices and scarcity of drugs on the market, the temptation to adulterate and manipulate the drugs is so great that constant examination and supervision is required to protect the public. Was student one year at New York University, school of applied science, chemical-engineering course; graduate Hill University, Ph. B., taking course in chemistry; also received degree of M. S. at George Washington University, majoring in chemistry; Ph. D. at same university. Seven years five months.

Clarence D. Wright, Washington, D. C. Devotes his time chiefly to the analyses of drug products arising under the food-and-drugs act and to some Post Office Department cases. Graduate Clark College (Worcester), A. B., majoring in physics and chemistry; also received degrees of A. M. and of Ph. D. from same institution, specializing in chemistry. For one year was assistant in chemistry at Clark College and for a year was research assistant to one of the professors there. Was also connected with the research laboratory of the General Electric Co., of Schenectady, N. Y., one year. Six years six months.

Carl B. Stone, Washington, D. C. Engaged in the analysis of insecticides and fungicides in connection with the enforcement of the insecticide act. It is extremely important that the work in connection with the enforcement of this act be carried on with more than ordinary vigilance during the period of the war, on account of the temptation on the part of manufacturers to adulterate their insecticides and fungicides, due to the difficulty of obtaining the necessary ingredients and to their high prices. This matter becomes doubly important because of the great necessity under the existing conditions for increasing crop production. Graduate Bethany College (Lindsborg, Kans.), A. B.; also took postgraduate course in chemistry at Nebraska University, during which time was also assistant in the chemical laboratories and instructor in general chemistry. Prior to entering department service was assistant chemist with the Great Western Sugar Co., of Lovell, Wyo. Seven months.

Milo L. Somerville, Hyattsville, Md. Engaged in the analysis of insecticides and fungicides in connection with the enforcement of the insecticide act. It is especially important that the work in connection with the enforcement of this act be carried on with more than ordinary vigilance during the period of the war, on account of the temptation on the part of manufacturers to adulterate their insecticides and fungicides, due to the difficulty in obtaining the necessary ingredients and to their high prices. Graduate Indiana University, A. B., specializing in chemistry. For approximately one year was chemist for the Oliver Iron Mining Co. Seven months.

Charles M. Smith, Washington, D. C. Is an expert insecticide and fungicide chemist and has been engaged in most of the department's research work in connection with lead arsenate, which at the present time is the most important insecticide for leaf-eating insects. Is now working on the chemistry of the calcium arsenate and has obtained much new and valuable information relative thereto. The calcium arsenates have only recently been developed as insecticides and promise to open up an entirely new field in the use of arsenical sprays. This is of particular importance at this time, since it permits the use of lime in place of lead, which not only is high priced but is much needed in the manufacture of munitions. Graduate University of Pennsylvania, B. S. Before entering the service of the department was employed as chemist in the Philadelphia Storage Battery Co. Seven years two months.

Elmer J. Nealon, Washington, D. C. Performs chemical work in connection with the enforcement of the insecticide act. He has had long and varied experience in this work. It would require several years to train a man so that he would be equally valuable to the bureau. Graduate Ohio State University, B. A. For a short time previous to entering the department was assistant chemist in the water-purifying works at Columbus, Ohio. Five years six months.

Edward L. Griffin, Washington, D. C. Is the most experienced organic chemist in the bureau, having to do with insecticides and disinfectants, and performs the analytical work in connection with the most complicated products. Is the analyst witness in a number of important cases now pending before the courts, which would have to be dropped in case Mr. Griffin severed his connection with this bureau. Graduate University of Kansas, A. B., B. S. in chemical engineering, and M. S., major work being in organic chemistry. For two years was instructor in chemistry at this institution. Four years eleven and one-half months.

Henry C. Bowman, Indianapolis, Ind. Engaged in investigations relating to the handling of turkeys and chickens in the Imperial Valley of California. This is a most important and relatively new source of meat supply, the work being a part of the special emergency food-production campaign. Graduate University of California, B. S. in agriculture, specializing in animal husbandry; also took a graduate course at this institution one term. Thirteen and one-half months.

Arden D. Greenlee, Indianapolis, Ind. Has charge of special emergency field work in connection with demonstration poultry and egg packing houses. This work has a very direct bearing upon the meat supply of this country, and Mr. Greenlee is the only man available who is qualified by experience and training to supervise it. Completed a course in chemistry with the International Correspondence

Schools; did two years' work at the Ohio State University College of Arts, Philosophy, and Science, with electives in chemistry. Was superintendent's assistant at the Ohio State University one year. Took considerable work in chemistry and graduated with the degree of B. S. at the University of Pennsylvania. Nine years six months.

Edwin C. Heinsohn, Indianapolis, Ind. Is investigator in poultry and egg handling. His knowledge is of great value at the present time in helping to save losses due to defective transportation facilities. It would be impossible to replace Mr. Heinsohn without material loss to the work now in progress, because it is impossible for a man to acquire the information that he now has except by experience in the service. The work in which he is engaged is in direct line of increasing the production and conserving the food supplies of the country. Graduate Cornell University, B. S. Three years.

Ralph L. Skinner, West Lafayette, Ind. Assists in poultry and egg handling investigations and demonstration, being engaged at present on work in southern California, because of the pressing need for the prevention of loss of a large crop of turkeys now being marketed there. This work is of great importance at the present time. Graduate Purdue University, B. S., specializing in poultry. One year two and one-half months.

Howard R. Hill, Philadelphia, Pa. Engaged on war-emergency work in connection with the better handling, transportation, and storage of fish. It is necessary to have a man trained along fundamental scientific lines to conduct the broad and effective campaign for better methods in fish handling. It was difficult to find a man suited for this work, as men with training in this particular line of work are extremely scarce. Mr. Hill is the only man in the bureau engaged in this line of investigation. Attended University of Chicago two years; graduated from Carroll College, A. B.; attended University of Illinois Agricultural College one term; received M. S. degree in zoology at University of Illinois Graduate School after one year's study, his major work having to do with fish parasites and diseases. Seven and one-half months.

George D. Horton, Philadelphia, Pa. Engaged in bacteriological work in connection with fish investigations. Present knowledge of the scientific fundamentals for the good handling of fish is crude. Previous to entering this bureau Mr. Horton had engaged in lines of work which gave him an unusually good training. He is now engaged in investigations which promise to be of great economical importance in the utilization of fish resources. This line of work is entirely new. Graduate Connecticut Agricultural College, B. S., in agriculture; also received degree of M. S. in bacteriology at Yale University. Nine months.

Herbert B. Switzer, Chicago, Ill. Is making a special study of the manufacture of powdered milk products, which are used in large amounts by the Army. As a result of this study it has been possible to bring official action looking to the correction of certain serious abuses which are shown to exist. Mr. Switzer is the only bacteriologist of the bureau assigned to the territory in the Central States in connection with the enforcement of the food and drugs act. A very great part of the food production and manufacture of the country originates in his territory. Ten and one-half months.

Benjamin S. Levine, Washington, D. C. Engaged in research and testing work on the mildew-proofing of fabrics and leather. In addition to the value of this work to the farmer, it is of special importance to the Nation at this time in connection with the preservation of materials used as tents, wagon covers, clothing, shoes, and many other articles used by the military branches of the Government. Mr. Levine is the only man in the bureau familiar with this work. Graduate Trinity College (Hartford, Conn.), B. S.; also received degrees of M. S. and Ph. D. from Brown University. Prior to entering department was health bacteriologist in Brown University, industrial bacteriologist for a Providence chemist, and teacher of textile chemistry in the textile department of the Rhode Island School of Designs. Two years ten months.

Victor Bircrner, Washington, D. C. Has devoted his time to the study of obscure organic products in foodstuffs and to the cultural side of the investigations of the production of glycerine by fermentation through yeast. There is no one else in the bureau who could carry on this work. Graduate University of Leipzig and University of California. Subsequently was connected with the Institute of Fermentology in Chicago for one year. Three years two and one-half months.

Harry L. Lourie, New York, N. Y. Is the only experienced micro-analyst now connected with the analytical staff at the bureau's New York laboratory. Has completed a large series of analyses, which involve possible court actions, in connection with which his testimony will undoubtedly be frequently required within the next year or two. Graduate Harvard University, B. S. Previous to entering department was assistant in chemistry at the Central Evening High School at Boston and was employed for a considerable time as chemist of the Carnegie Steel Co., Youngstown, Ohio. Eight years eight months.

Walter K. Makemson, Washington, D. C. Engaged in the micro-analysis of foods, this work having to do primarily with canned goods. He has been specially trained for the work. Its importance is apparent because of its direct connection with the production and conservation of foods. Graduate Michigan Agricultural College, B. S. and M. S. Attended University of Michigan one year. Nine and one-half months.

Ernest E. Stanford, Washington, D. C. Has assisted in the study of the morphology and chemistry of the cotton plant, in the inspection of crude drugs, and in microchemical analyses; has also assisted in the general microphotographic work, in which he has been very successful. Graduate Massachusetts Agricultural College, B. S.; did graduate work at the North Carolina College of Agriculture and Mechanical Arts for two years, receiving degree of M. S. Was assistant in botany and plant pathology and bacteriology at the North Carolina Agricultural Station for two terms. One year three months.

BUREAU OF MARKETS.

GRAIN SAMPLERS.

The proper enforcement of the grain-standards act requires that the Department of Agriculture supervise the grading of grain by licensed grain inspectors. Grain inspection is a highly technical work, and only a limited number of men are qualified from the standpoint of experience to properly perform grain-sampling duties. At the present time the Bureau of Markets is in need of some 72 grain samplers, in addition to those now on the rolls, to efficiently carry out the requirements of the grain-standards act. The civil-service register for grain samplers has only a limited number of men available, and of this limited number a large proportion are either in class 1 of the draft or are not suitable for the work. It has been the experience in the enforcement of the grain-standards act that grain samplers can not be properly fitted to do the work without considerable training. In addition to the 72 samplers

needed at the present time, the bureau is constantly receiving resignations from the grain-sampler force. To lose any of the experienced samplers who are now on the roll would very seriously interfere with the efficient enforcement of the grain-standards act. The grain-standards act at present is performing an especially important function in connection with the regulations of the Food Administration Grain Corporation, which requires that all transactions in wheat must be on the basis of the Federal grades.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

William D. Bennett, Toledo, Ohio. Graduate Cornell College of Agriculture, B. S. Was raised on a farm where grain was one of the main products. One year.

John E. Bohn, St. Louis, Mo. Graduate University of Missouri, B. S. Took postgraduate work at the institution, specializing in marketing and rural organization work. During summer vacations was employed by the St. Louis Merchants' Exchange as grain sampler, his duties including the sampling of cars of grain at elevators, mills, and railroad yards, and noting and recording of the condition thereof. Ten months.

Willis E. Combs, Boston, Mass. Graduate Cornell University College of Agriculture, B. S., making a special study of moisture determination and the grading and handling of grain. One year four months.

Francis A. Cumings, Minneapolis, Minn. Was employed three years by the E. H. Pugh Sampling Bureau at Cass Lake, Minn., and for five years as grain sampler by the Minnesota State grain inspection department. One year three months.

Hazen P. English, Kansas City, Mo. Graduate Michigan Agricultural College, specializing in farm crops and grain judging. Was reared on a farm and has had practical experience in the handling of grain. Ten months.

John H. Frazier, Detroit, Mich. Prior to entering department service had seven years' experience in sampling and grading of grain, being familiar with the details necessary for making moisture tests and for keeping records of samples and inspections. One year three months.

Harold S. Hellman, New York, N. Y. Before entering department service had four years' experience as a deputy grain inspector with the Buffalo Corn Exchange, being familiar with the details of handling, sampling, inspecting, and grading of grain, and had experience in the methods obtaining in transferring grain from cars and boats to elevators and from elevators to transportation lines. One year three months.

Wayne D. Mathews, Fort Worth, Tex. Previous to present appointment was employed by the Kansas State grain inspection department, first as inspector's helper, later as grain sampler, being engaged in securing samples of grain at railroad yards, steamship docks, warehouses, and elevators. In noting the condition and quality of grain, in keeping records and making reports thereon, and in making analyses of samples in the laboratory. Nine months.

Walter J. Morgan, Salt Lake City, Utah. Graduate Oregon Agricultural College, B. S. During summer vacations was employed upon grain farms. Ten months.

John F. Mueller, Indianapolis, Ind. Graduate College of Agriculture, University of Minnesota, B. S., specializing in agronomy, farm crops, weeds, and seed testing and grain judging. Ten months.

Herbert E. Nelson, Duluth, Minn. For four years previous to present appointment was employed by the grain inspection department of the Minneapolis Railway and Warehouse commission as grain sampler, his duties including the sampling of loads of grain at railroad yards, mills, elevators, and steamship docks, preparation of reports, and keeping of records. Ten months.

Thomas J. O'Brien, Milwaukee, Wis. Prior to appointment in the department was employed by the Illinois State grain inspection department as grain sampler, his duties including the sampling of cars of grain at mills, elevators, railroad yards, and steamship docks, noting the condition and quality of the grain, making records and reports, and conducting laboratory moisture determinations. Ten months.

David E. Overlock, Chicago, Ill. For two years before entering department service was employed by the Illinois State grain inspection department as grain sampler and grain helper; his duties consisting of the sampling of cars of grain at mills, elevators, railroad yards, and steamship docks, noting condition and quality thereof, keeping records, making reports, conducting of moisture determinations in the laboratory, making separations of damaged grain, and investigating other factors involved in the grading of grain. Ten months.

William A. Pahl, Minneapolis, Minn. For five years prior to present appointment was employed by the Omaha Grain Exchange, first as helper and sampler, later as grain inspector. His duties consisted of sampling cars of grain at mills, elevators, and railroad yards, and assisting with inspection work and laboratory analyses. Ten months.

Bertram J. Rogers, Toledo, Ohio. Graduate New York State College of Agriculture, where his work has included special studies in growing, grading, and handling grain. He was reared on a farm and has had much practical experience along agricultural lines; also two years' experience as a public-school teacher. One year four months.

William D. Smith, New Orleans, La. Before taking up present duties had five years' experience in the handling and shipping of grain with H. I. Baldwin & Co., Decatur, Ill. One year three months.

James P. Stanfield, Louisville, Ky. Before appointment in this bureau was employed for five years by the West Tennessee Grain Co. at Obion, Tenn., as bookkeeper and local grain buyer; his duties including the buying of grain from farmers in that territory, its sampling, inspecting, and grading. Ten months.

Gregory L. Straight, Kansas City, Mo. Prior to entering the department had five years' experience in the sampling, handling, and inspection of grain, part of which time was with the Kansas City Board of Trade; was also connected with the Kansas State grain inspection department. One year three months.

Ralph W. Taylor, Louisville, Ky. Previous to present appointment had four and one-half years' experience as manager in the buying, receiving, and shipping of grain at cooperative warehouses and one and one-half years' experience as sampler in the Illinois State inspection department. One year three months.

Carl A. Waslen, Minneapolis, Minn. Attended Carlton College and Colorado College for two years, taking an engineer's course, specializing in botany, soils, and wood. Two years prior to appointment in this department was employed by the Burdick Sampling Co. at Glenwood, Minn., and by the Duluth Board of Trade as grain sampler; his duties consisting of the sampling of cars of grain at mills, elevators, and railroad yards, noting its condition, and making records and reports thereon. Ten months.

James W. Wesson, Nashville, Tenn. Graduate University of Kentucky, A. B. and B. S., specializing in agricultural economics and

marketing investigations. For one year prior to appointment in this department was employed as assistant instructor in agricultural resources and marketing investigations at the University of Kentucky. Ten months.

John W. Wetz, New York, N. Y. Graduate Cornell University, B. S. in agriculture. Was reared on a farm and has had active practical experience in the harvesting, handling, storing, and shipping of grain and other farm products. Nine months.

John J. Ahearn, Cincinnati, Ohio. Has charge of the Cincinnati branch office of the Bureau of Markets in connection with the market news service on fruits and vegetables. His knowledge of railroad affairs has made him particularly valuable in the Cincinnati market, as this is an important diversion point. Previous to present employment was for several years with the Pennsylvania Railroad in New York City, handling fruit and vegetable deliveries and assisting with the auction sales on their piers. One year nine months.

Harold C. Albin, Washington, D. C. (spends considerable time in the field.) Assistant in handling and transportation investigations with fruits and vegetables. His withdrawal from this work would seriously interfere with the emergency food conservation campaign now under way. Graduate University of Illinois, B. S. Previous to present appointment had been connected with the Bureau of Chemistry for approximately two years, engaged in handling and transportation work, particularly as relates to poultry, eggs, etc. Three years.

Frank W. Allen, Washington, D. C. (spends considerable time in the field.) Is engaged in a campaign to increase the storage facilities for fruits and vegetables in Colorado, in cooperation with the State marketing office and the State council of defense. There is urgent need for this work in Colorado and other States, and it is practically impossible to secure men with adequate training and experience along these lines; Graduate University of Missouri, B. S. In agriculture; three years; research work Iowa State College. Before his present appointment was assistant professor in the Washington State Agricultural College in charge of fruit handling and marketing work. Eight months.

William F. Allewelt, Washington, D. C. (spends considerable time in the field.) Has been rendering practical service in demonstrating to growers and shippers in Michigan the value and requirements of the potato grades. Other States have asked for assistance from the department in conducting work of a similar character to that performed in Michigan. Only men with special training can successfully conduct such work. He is also rendering service in connection with the enforcement of the standard-container act. Graduate Pennsylvania State College, B. S. in horticulture. Prior to present appointment had several years' experience in growing and handling vegetables. One year two months.

George H. Baston, Washington, D. C. Has charge of the investigations laboratory in which the acidity determinations of the grain-standardization project are carried on, and is responsible for outlining, directing, and supervising the work of the force employed thereunder. His work has included an investigation to determine the practicability of substituting in part flours made from grains other than wheat for the wheat flour. He has participated in all the main activities of the grain-standardization project, both field and laboratory, and has assisted in formulating standard grades for both corn and wheat. He also has supervision of the investigational work relating to the bleaching of oats commercially, and at present is assisting in perfecting tentative standards for oats. Graduate George Washington University, having specialized in chemistry. Prior to present appointment was employed four years in the Bureau of Chemistry on investigational work relating to the chemistry of cereals and milling and baking tests of wheat and flour; detailed to the Forest Service one season to make special field investigations relative to the composition of soils in the national forests of the Northwest, and was assistant in grain standardization, Bureau of Plant Industry, for five years. Eleven years.

Harold S. Bird, Washington, D. C. (Spends considerable time in the field.) Engaged in investigations relating primarily to methods of car loading and transportation of perishable food products, the results of which to date indicate serious mistakes in methods of loading these products in different sections of the country, resulting in heavy loss in transit and at market terminals. It is urgently necessary for the effectiveness of this work, which is essentially connected with the war work, that these investigations should be continued and extended. It is also equally important that the demonstrations of the results secured be given the widest publicity. Graduate Michigan Agricultural College, B. S., specialized in horticulture and pomology. Three years.

Ralph H. Brown, Washington, D. C. Has had considerable grain experience in an executive capacity, and is now giving assistance in the rendering of decisions relating to questions involved in the enforcement of the grain-standards act. It is important that the grain-supervision work be maintained on an efficient basis, especially in view of the bureau's cooperation with the Food Administration Grain Corporation, and this can be done only through the retention of trained and experienced men. Nine months.

John A. Burgess, Pittsburgh, Pa. Has charge of the Pittsburgh branch office of the Bureau of Markets. He not only collects information regarding conditions in the live stock and dressed meat trade in Pittsburgh, but releases the market reports of the bureau in the territory served by the branch office in Pittsburgh. Graduate Ottumwa (Iowa) Public State College, B. S. Prior to entering the Government service was employed in a large meat-packing plant at Ottumwa, Iowa, where he acquired experience in marketing dressed meats and meat products, qualifying him to cope with the reporting conditions in the wholesale dressed-meat trade in the large meat-consuming cities. Nine and one-half months.

Charles A. Burmeister, Washington, D. C. Engaged in work in connection with the market news service on live stock and meats. This market report service consists in furnishing telegraphic reports of live-stock receipts and prices at Chicago, which information is distributed by leased wire to the bureau's various local offices and is used exclusively by the telegraph companies and press associations in their commercial news services. He is also regularly engaged in investigational work connected with the live stock, slaughtering and meat packing industry of the country. Graduate Texas Agricultural and Mechanical College. Subsequent to graduation and prior to entering the Government service was engaged in the live-stock industry as manager of his father's ranch in Texas, where he gained a thorough knowledge of the industry in the range States. Seven years.

Earl A. Chenault, Richmond, Va. Has charge of the Richmond, Va., office of the grain and hay reporting market service of the Bureau of Markets. This is war emergency work, its main object being to put the producers of grain and hay who have surpluses of such stocks in touch with dealers and others desiring them. Reports are issued biweekly, giving in detail the amounts of grain and hay on hand, the amounts

shipped in and out of each county, and the carload prices. These reports are distributed by mail to all people who express a desire to receive them. Graduate Ohio State University, B. S. in agriculture. One year ten months.

Doak B. Carrick, Washington, D. C. (spends considerable time in the field). Engaged primarily in emergency work in connection with the handling of apples and other fruits and vegetables injured by freezing in transit, with a view to reducing to a minimum the losses of these products in transportation. Also engaged in developing methods of handling which apply to the successful storage of perishable food products by preservation in freezing storage. These investigations relate directly to the conservation of fruits and vegetables, and have a particular war bearing at the present time. To a considerable extent they provide the basis for other lines of work connected with the storage project which relate primarily to the refrigeration of these products, both in transportation and storage. Graduate Wake Forest College, (North Carolina), A. B.; also received degree of Ph. D. from the New York State College of Agriculture. In connection with investigations for his doctor's thesis, made an extended study of the effect of freezing on plant tissues. Seven months.

James H. Collins, Washington, D. C. (spends considerable time in the field). Has filled varied and important assignments in connection with the surveys of fruit and vegetable markets conducted by the Bureau of Markets, and the inauguration and development of the market-news service covering these products, including the conduct of special investigations. During the past year has represented the department in a comprehensive study of the marketing problems of Maricopa County, Ariz., conducted by this bureau in cooperation with the University of Arizona. As a result of this survey definite action will be taken looking to the stabilizing of agriculture in the valley. After the completion of this survey in Arizona, Mr. Collins was placed in immediate charge of the bureau's investigation of transporting farm products by motor truck. The motor-truck transportation problem is of especial importance at the time. Graduate University of Arkansas, B. S., specializing in agriculture. Three years nine months.

Joshua M. Chilton, Washington, D. C. Assists in the enforcement of the provisions of the United States grain-standards act in Washington and at such points in the field as his services may be required. On account of his experience in handling the varieties of grain which pass through the markets in the South and Southwest, was at first detailed to act in charge of the twenty-fifth Federal grain-supervision district, with headquarters at Memphis, Tenn. Memphis is one of the gateways to the large consuming area of the Southeast. There is inspected in this market approximately 25,000,000 bushels of grain annually. The importance of carrying on the work in connection with the grain-standards act is fully recognized. Prior to present appointment was in the employ of the Missouri State inspection department for nine years; for two years supervising the weighing and handling of grain at terminal elevators, thereby gaining an intimate knowledge of the methods employed in handling, cleaning, clipping, mixing, and grading all kinds of grain at the large elevators; and seven years in sampling and making analyses necessary to determine the true grade of grain. Subsequently was employed one year by a grain concern in St. Louis as grain salesman on the floor of the merchants' exchange, and during a part of the year as its traveling representative. His experience has included the classification and grading of almost every variety of grain and has afforded him an opportunity to become thoroughly familiar with the grain industry. Nine months.

Saxon D. Clark, St. Louis, Mo. Has charge of the St. Louis branch office of the Bureau of Markets, in connection with its news reports on fruits and vegetables. Graduate Massachusetts Agricultural College. Prior to entering department had one year of practical experience in the Maine Apple Growers' Association. One year two months.

Charles F. Creswell, Washington, D. C. (Spends considerable time in the field.) Has charge of the cottonseed activities of this bureau, being the only representative of the bureau who has been in close touch with the various phases of the cottonseed industry. For the past year has been engaged in economic investigations conducted for the purpose of eliminating the large amount of foreign matter which annually is transported and purchased with cotton seed, and which results in damaged cotton seed and a lower quantity and quality of edible products, as well as requiring the utilization of about 4,000 extra freight cars each year. Has also been engaged in the development of practical commercial standards for cotton seed and the elimination of serious economic losses and wasteful practices existing in the trade. In cooperation with the Food Administration has assisted materially in the formulation of rules and regulations established to govern the cottonseed industry. High school, business college, and law university graduate; has pursued other collegiate work, including a correspondence course in agriculture at Pennsylvania State College, and has had practical farm and railroad experience. Nine years six months.

George H. Dacy, Washington, D. C. (Spends considerable time in the field.) Engaged in general live-stock and meat-marketing investigations. His broad knowledge of agricultural conditions and ability as a writer make his services particularly valuable, especially in the work undertaken and carried on in conjunction with the Federal Trade Commission in collecting at leading points information relative to the marketing of live stock at local packing plants and the large centralized markets. Is at present assisting in the preparation for publication of the material obtained in this investigation. From the very inception of this important live stock and meat work, both marketing and market reporting, the Bureau of Markets has met with extreme difficulty in securing men with proper training and experience to fill the positions. Graduate University of Wisconsin, B. S. and M. S. in agriculture. Prior to entering Government service operated a farm of his own and wrote on agricultural topics for a number of publications. While employed as a writer for one of the leading agricultural journals traveled extensively over the country and acquired a broad knowledge of farming conditions and methods of handling and marketing agricultural products. He devoted special attention to live-stock marketing problems. One year.

William H. Darrow, Providence, R. I. Has charge of the local market-reporting service at Providence, R. I., which he inaugurated and developed, and which has proved a decided success. This service seeks to encourage the consumption and conservation of locally raised products and assists in the elimination of waste through efficient distribution of the local food supply. Producers, dealers, and consumers are daily advised as to market conditions, and farmers and housewives, as well as dealers, avail themselves of the service. It is proving of great importance in utilizing vegetables when particularly plentiful and liable to waste. Graduate Middlebury College, B. A., and Cornell University,

M. A., in pomology and agricultural chemistry. Was instructor in horticulture in the University of Maine for a year and spent three years in practical horticultural work. Ten months.

George C. Edler, Washington, D. C. Is chief assistant to the specialist in seed marketing and has direct supervision of the compilation and revision of material submitted by field reporters for publication in the Seed Reporter. Also handles special assignments in connection with the work of this project. Is thoroughly familiar with every phase of the seed industry. There are very few firms in the country employing men in the capacity in which he has had experience, and the field from which it is possible to recruit men of his specialized commercial training is exceedingly limited. Graduate University of Illinois, B. S. in agriculture. Prior to entering Government service was employed in seed work, both on the farm with seed growers and with seed dealers; spent four years with a seed company in Minneapolis as traveling salesman and buyer of farm seeds, also having charge of the seed-corn department. One year ten months.

Vernon P. Fawcett, Spokane, Wash. Has charge of the Spokane (Wash.) office of the grain and hay market reporting service of the Bureau of Markets. This is strictly war-emergency work, its main object being to put the producers of grain and hay who have surpluses of such stocks in touch with dealers and others desiring them. Reports are issued biweekly, giving in detail the amounts of grain and hay on hand, the amounts shipped in and out of each county, and the carload prices. These reports are distributed by mail to all people who express a desire to receive them. Graduate University of Idaho, B. S. in agriculture, specializing in agronomy, horticulture, and botany. Was reared on a farm and during the latter portion of his college course assisted in the analyses of seeds in the agronomy department of the university. For three years prior to his entrance into the Government service acted as State seed commissioner of Idaho. Nine months.

Adelbert D. Gail, Jr., New York, N. Y. Has charge of the New York branch office of the Bureau of Markets, operated in connection with the collection and distribution of market information on fruits and vegetables. The enormous receipts of this market, drawn from every section of the country, make it an exceedingly difficult one to cover. Attended the University of Pennsylvania three years. For three years he was a member of the firm of J. H. Gail, of Buffalo, in which capacity he gained valuable experience in the marketing of perishable products and had an opportunity to become familiar with the problems relating to the marketing of these products. For a period prior to present appointment was employed as advertising representative of a large publishing company. Three years nine months.

John C. Gillilan, Washington, D. C. Has charge of the work of checking the railroad superintendents who report each night the loadings of live stock on their respective divisions. Supervises the activities of a large force, both in Washington and in the field, engaged upon this work. From 350 to 400 railroad division superintendents telegraph live-stock loadings nightly to the bureau, and the speed with which the necessary corrections, because of delinquencies on the part of the superintendents, must be made is a considerable factor to their value. Mr. Gillilan also supervises the force which compiles the information received from the railroad superintendents in a summary to be transmitted each morning to all branch offices for release. Graduate University of Minnesota, B. S. One year of graduate work in University of Minnesota in agricultural economics. Ten months.

Willis G. Goodenow, Fargo, N. Dak. Engaged in investigations carried on at Agricultural College, North Dakota, relative to milling and baking values of wheat and flour. His training and experience as a milling engineer make him especially valuable at this time in connection with the effort being made to correlate the investigational work of this department with that of other departments relating to the conservation of the wheat supply of the country. Graduate Pennsylvania State College, having specialized in flour-milling engineering. Prior to appointment in the Bureau of Markets was employed as scientific assistant in the Bureau of Chemistry; also had seven years' experience as assistant milling engineer in commercial work. One year five months.

Homer A. Harris, Washington, D. C. (spends considerable time in the field). Has been employed on responsible independent field assignments which have included potato distribution reports at Idaho Falls, Idaho; handling the market-news service at Plant City, Fla., and Monett, Mo., during the commercial movement of the strawberry crop; supervision of the service during the peach movement in Fort Valley, Ga.; and the maintenance of an office at Macon, Ga., to distribute market reports on watermelons. Attended agricultural college three years and had several years of commercial experience in the fruit business. One year ten months.

Bryon G. Hays, Kansas City, Mo. Assists in the administration of the local office of the live-stock and meats project at Kansas City, Mo., and in collecting and releasing daily market information relating to the live-stock and meat trade. Much difficulty has been experienced in getting together an adequate and efficient force to handle the increasingly important work connected with this service, particularly to man the local offices, especially at the large centralized markets of Chicago, Kansas City, and other central-western points. Graduate College of Agriculture of the University of Nebraska, B. S. Prior to present employment had considerable experience in judging and buying live stock for a commission firm at Omaha. Nine months.

Stanley G. Hilton, Washington, D. C. (In field considerable part of time). Engaged in conducting investigations of the warehousing of grain and in the administration of the United States warehouse act, including the preparation of rules and regulations for enforcement thereof. Has had a thorough training in the fundamentals of handling and storing grain and has assisted in the consideration of the complex problems arising in connection with this work, including the study of types of elevators and warehouses, the insurance of grain in storage, and the methods of handling and caring for this product. The proper warehousing of grain is of paramount importance in the conservation of this important product in the present emergency. Much difficulty has been experienced at all times in securing men with the requisite training for this work. One year.

Frederick J. Hughes, Washington, D. C. For the past two years has handled all the appointment and civil-service work and all the records of the personnel of the Bureau of Markets. This work has become unusually heavy during the past several months and probably will remain so for an indefinite period. For the past 18 months consistent efforts have been made to train an understudy for Mr. Hughes, but for various reasons it has been impossible to develop and retain any satisfactory candidate for such a position. Mr. Hughes has a thorough knowledge of the civil-service laws, rules, and regulations, and of the precedents and policies of the department and of the bureau in dealing with appointments and promotions. Three years eight months.

Clarence E. Killingsworth, Washington, D. C. (spends considerable time in the field). Employed primarily on cotton-spinning tests conducted by the department and incidentally on work connected with the cotton-standardization and cotton-marketing projects. At present is engaged on experimental-spinning tests which are being conducted by the United States Department of Agriculture in cooperation with the War Department and the Department of Commerce, for the purpose of developing a suitable airplane fabric from cotton to replace the linen fabric now being used. It is highly important to develop from cotton as promptly as possible a suitable airplane cloth to be used in the manufacture of airplanes. Completed textile course in the Mississippi Agricultural College; also had experience in erecting machinery in carding and spinning rooms in northern and southern cotton mills. He has had considerable experience in the actual commercial manufacture of cotton fabrics. Three years.

Clarence W. Kitchen, Washington, D. C. Has been associated with the market-surveys project since the inauguration of the market-news service in 1915, and has had comprehensive training in almost every branch of the work of this project. Has assisted in the opening of numerous new stations and suggesting improvements in the service of those already opened. When the rapid growth of the news service necessitated an extension of the administrative work of the project in Washington in January, 1917, Mr. Kitchen was assigned to the task. At present he is in immediate charge of the assignment of field forces and the daily administrative duties of permanent branch offices. Owing to his broad experience gained by actual contact with the work since its inception, it would be exceedingly difficult to replace him. Five years nine months.

Harvey E. Larsen, Boston, Mass. Investigates, in cooperation with the Boston Market Gardeners' Association, problems of marketing and distributing locally grown truck-farm products, the cost of marketing by this method as compared with others, and the value of reporting local market conditions and prices through the local press. The market conditions in practically all large New England cities, especially Boston, have become very acute, and the local truck growers and members of State Council of Defense made a very urgent request to this bureau for assistance in solving the problems. This service is proving very valuable as a means of meeting emergency marketing problems. It is one of the most effective means of stimulating the consumption of locally grown produce, lowering prices, and conserving foodstuffs. Graduate University of Wisconsin, M. S., having completed all the marketing work which the university offers. Prior to entering the department service, received valuable experience in commission dealing in the commission district of Chicago, and for several years was connected with the farm-crop department of the Michigan Agricultural College. Eleven months.

George Livingstone, Washington, D. C. Has charge of the Federal grain supervision under the United States grain-standards act, directing the work of the grain supervisors and their assistants in the 36 Federal grain-supervision districts of the country, and has general supervision over all the grain and hay marketing activities of this bureau, through which the emergency work of the department in issuing market reports on these commodities is directed. Assisted in the preparation of the rules and regulations promulgated for the enforcement of the United States grain-standards act and of other regulatory publications issued in connection with the enforcement of that act. Has directed the promulgation of standards for shelled corn and wheat, personally supervising the holdings of hearings on grain standards and directing the investigation of the practices of marketing grain at country and at terminal points. Graduate Ohio State University, B. S. in agriculture; took graduate work at Cornell University and at Halle-Wittenberg. For several years was assistant professor of agronomy at the Ohio State University, and was tendered the position of chief of the newly created department of farm crops at that institution, which position he declined for the purpose of entering the service of this bureau. Three years.

Brice M. Mace, Jr., Washington, D. C. Has supervision of the administration of the branch offices opened in connection with the live-stock and meat-reporting service of the Bureau of Markets. It is very difficult at this time to obtain the services of men possessing the administrative ability combined with a knowledge of live-stock marketing methods. Graduate Cumberland University, Lebanon, Tenn., B. S.; studied law at the University of Chicago; and is at present taking an M. A. course in economics at George Washington University. Was reared on a Tennessee stock farm and was in charge of city and county school systems for seven years. Nine months.

Nathan Menderson, Washington, D. C. (spends considerable time in the field). Engaged on grades and standards work. This work is of very great importance to southern peanut growers, because practically no effort has been made by the department looking to the establishment of standard grades for peanuts. The purpose of this work is to enable the recommendation to growers of the best methods of handling and grading their peanuts and also to determine what will constitute practical market grades for both shelled and unshelled peanuts. Peanuts are now becoming an important food product, and their standardization and improved methods of grading and marketing is of decided importance, not only to the large producing sections of the South but also the consumer. Graduate Yale University, A. B., and Cornell University, M. A. Prior to entering the Bureau of Markets was employed by the Bureau of Plant Industry in connection with the introduction and development of new vegetables in the South. Three years six months.

Benjamin C. Moomaw, Washington, D. C. (spends considerable time in the field). Assists the project leader in charge of State cooperation in marketing work, in coordinating the various projects of the bureau with the State cooperative activities. Also assists in a study of the cooperative marketing work being carried on by the bureau in the Southern States, rendering help to the field agents in these States in the development of their activities and in the improvement of their methods. Graduate Washington and Lee University. Prior to entering the Bureau of Markets was for six years actively engaged in orcharding in the State of Virginia and in marketing apples, both in this country and abroad. For one year was institute lecturer in fruit growing for the Virginia department of agriculture and immigration and later extended this work to other branches of agricultural interests. Served as a director and president of the Virginia Fruit Growers' Association for several years. One year nine months.

Joe D. Morgan, New Orleans, La. Has been engaged in making field and laboratory investigations relative to the method of handling, grading, and transporting commercial grain; acted temporarily as grain supervisor under the grain-standards act. At present has charge of the grain-standardization investigations being made at New Orleans. In connection with this work, assists in the investigations relative to the causes and prevention of explosions and fires in grain elevators,

mills, and various kinds of machinery used in the handling of grain. These investigations have a direct relation to the efforts being made to conserve the wheat supply of the United States, both by prevention of grain loss by fire and the deterioration of commercial grade on grain caused by smut in wheat. During the past thrashing season Mr. Morgan has assisted in the cooperative project relating to smut dust control in wheat at thrashing time, investigating special devices recommended by experts of the department and determining the effect of the application of these devices to thrashing machinery. Graduate Montana State College of Agriculture and Mechanic Arts, B. S. in biology. Two years ten months.

Julius H. Peters, Boston, Mass. Assists in the conduct of the telegraphic market news service on live stock and meats at Boston. He is fully familiar with the intricate details relating to reporting meat-trade conditions, which has a direct bearing on the food supply in the present emergency. Graduate Iowa State College, B. S. Was employed as instructor of agricultural economics at this institution parts of two terms and as teacher of agriculture at the Atlantic (Iowa) High School for one year. One year two months.

William C. Quick, Washington, D. C. (spends considerable time in the field). Has been continuously associated with investigations regarding the handling, transportation, and storage of fruits and vegetables. Supervises important lines of work in the Pacific Northwest directly related to the conservation and marketing of fruit crops grown there. He is thoroughly familiar with the fruit industry and with the proper construction and management of storage houses for apples. The conservation of foodstuffs is a question of primary importance, and the work upon which Mr. Quick is now engaged bears directly on that problem. Graduate University of Arkansas, B. S. in agriculture. Three years eight months.

Sam H. Ray, Kansas City, Mo. In charge of the live stock and meat reporting station at Kansas City. Devotes much of his time to devising means whereby this service may be improved. Has rendered much assistance in connection with the installation of the telegraphic market reports on estimated receipts and prices of live stock at Chicago, Ill. He is by training, experience, and ability well fitted for his present work. Graduate Texas Agricultural and Mechanical College; took post-graduate course at the University of Illinois. Prior to entering the Bureau of Markets, had six years' experience in ranching in Texas; was employed two years as instructor in animal husbandry in the First District Agricultural College at Jonesboro, Ark.; and was in the service of the Bureau of Animal Industry, where he was selected to investigate the beef industry of Guatemala. Three years eleven months.

Frederick W. Read, Kansas City, Mo. Has assisted in the development of the cold-storage reporting system of the bureau. After the organization of the work, covering some 70 commodities, Mr. Read was assigned to take charge of all the market news work in Florida, including both the permanent market station at Jacksonville as well as the numerous field stations throughout the State. Was subsequently placed in immediate supervisory charge of the work of this project in the district bounded by the Rocky Mountains and the Mississippi River. It is believed that this system will greatly relieve the Washington office of a vast amount of administrative detail. Graduate Massachusetts Agricultural College, B. S. Graduate student Harvard University School of Arts and Sciences; two years. Prior to entering the Bureau of Markets was assistant in farm management, Bureau of Plant Industry, and instructor in agricultural economics, Massachusetts Agricultural College, for short periods. Two years eight months.

Stephen A. Regan, Washington, D. C. Assisted in the preparation of the Government's standards for wheat and in investigations relative to the handling of grain in bulk rather than in sacks. Besides having a wide general experimental knowledge of all classes and grades of wheat, is especially familiar with all matters relating to the wheat-growing area throughout the Pacific Northwest. Assisted in the work of organizing the grain-standards supervision work, having for a period acted as Federal grain supervisor in charge of the Denver office, and for a period as grain supervisor in charge of the San Francisco office. When, in January, 1918, Dr. J. W. T. Duvel, in charge of the grain-standardization work in the Washington office, was designated to proceed to Australia and other Australian points for the purposes of special investigations, Mr. Regan was brought to Washington to take Dr. Duvel's place during his absence. Graduate College of Agriculture, University of Idaho, B. S. in agriculture. Prior to entering the service of the department served for one season as State food commissioner of Idaho. Two years nine months.

Howard B. Richardson, Washington, D. C. (spends considerable time in the field). Has been engaged primarily in cotton standardization and spinning test work and assisting with the manufacturing tests made by the department for the purpose of determining the spinning value of the different grades, staples, and other qualities of upland, sea-island, and Arizona-Egyptian cottons. At present engaged on the experimental spinning tests being conducted by the department in cooperation with the War Department and the Department of Commerce for the purpose of developing suitable airplane fabric from cotton to replace the linen fabrics now being used. Has represented the bureau at various points in the cotton handling and marketing activities. Completed a three-year course in mechanical engineering at the Massachusetts Institute of Technology and a three-year course in cotton manufacturing with the American Correspondence School. Prior to his appointment in the Bureau of Markets served nearly four years as laboratory aid in the Bureau of Plant Industry. Seven years eight months.

Patrick J. Roach, Minneapolis, Minn. Last year had charge of the Minneapolis office of the Bureau of Markets in connection with the market surveys project. As the Minneapolis office is in the center of an important potato-producing section, he gave special attention to reports on this commodity, with the result that this season he has been assigned to more important potato-producing sections to give specialized service on this product to the growers in these districts. He started the season at Eagle Lake, Tex., and is now handling the distribution of reports in the Fort Smith, Ark., district. Prior to entering Government service had many years' experience in the produce business. One year nine months.

Otto W. Schleussner, Los Angeles, Cal. Has been in immediate charge of the work of developing a national market news service on fruits and vegetables since its inauguration in 1915. When it was decided to inaugurate the news service and inspection service on the Pacific coast this spring Mr. Schleussner was selected to supervise the combined work of these two projects in the territory west of the Rocky Mountains. It seemed advisable to handle this work as a distinct problem, inasmuch as the marketing problems of Pacific coast growers are different from those encountered in any other part of the country and must be handled separately. He exercises supervisory control over the permanent branch offices on the Pacific coast, includ-

ing a number of the most important producing points. He also serves in an advisory capacity in considering general policies relating to the fruit and vegetable marketing activities of this bureau. Graduate Michigan Agricultural College, B. S. in agriculture. Prior to his appointment in the Bureau of Markets had wide experience in business in various lines—truck farming, inspection work, and commercial dealings with fruits and vegetables in the markets and in the producing districts. Three years four months.

Alfred B. Smeby, Washington, D. C. (spends considerable time in the field). Was first assigned to the development of a new system of reports on live-stock movements. Introduced experimentally at Lancaster, Pa., about a year ago. This project involved the perfecting of arrangements with farmers, railroad agents, live-stock buyers, the trade at the Lancaster stockyards, and others to obtain accurate information concerning the "in and out" movement of beef cattle in 18 counties known as the Lancaster district. When the service was successfully installed at Lancaster he was detailed to Rocky Ford, Colo., to inaugurate a similar service covering the Arkansas Valley cattle and lamb feeding districts. He was later called to Washington to assume charge of important work pertaining to current bulletins on live stock and meats and was placed in full charge of the bureau's weekly live-stock and meat-trade news bulletin, supervising the reporting service on the movements of live stock in the feeding and grazing districts of the United States. He is at present on an indefinite assignment reporting the Chicago hog market. Prior to entering Government service was engaged in the newspaper publishing business for six years, five years as market writer and associate editor of the Sioux City (Iowa) Daily Live Stock Record and live-stock editor of the Sioux City Tribune. One year two months.

Edwin W. Stillwell, Washington, D. C. Engaged in important administrative work in connection with the details of the technical daily telegraphic reports and other work incident to the assembling and issuance of market news on the movements and prices of fruits and vegetables. The administrative work requires a combination of qualifications in order to handle it successfully. Graduate Iowa State College, B. S. in horticulture, specializing in pomology and marketing. Eleven months.

Charles B. Tubergen, Pittsburgh, Pa. (spends considerable time in the field). Has handled distribution reports for a number of important perishable products at various points. Is at present in charge of the important field station at Onley, Va., where his duties other than administrative consist in the collection and distribution of marketing information. The market news work in which he is engaged has expanded very rapidly and Congress has appropriated large sums of money to continue it. Graduate Michigan Agricultural College. For five years subsequent to graduation was in the employ of the New York State Experiment Station at Geneva, and for one year was employed in the office of the California Fruit Growers' Exchange at Chicago. Nine months.

Gustav P. Warber, Washington, D. C. (spends considerable time in the field). Has recently made an exhaustive study of the production of casein in this country, the information being desired for the use of the Shipping Board and the War Industries Board as a guide in determining the policy of these boards with reference to importation of that product and with reference to the needs of the Army and Navy for airplane construction. His principal work at the present time is connected with a comprehensive study of the marketing and handling of milk throughout the United States by means of the distribution of schedules and by personal investigations. Graduate University of Minnesota, B. S. and M. A. in agriculture. Served as assistant in the division of agricultural economics, University of Minnesota, for three years, during which time he pursued the study of special problems in the field of agricultural economics. Three years eleven months.

Bert W. Whitlock, Salt Lake City, Utah. Is grain supervisor in charge of the Salt Lake City office, which is a particularly important assignment because of the variety of grain produced and shipped from the territory covered. The supervisory activities for the district are centralized in the Salt Lake office, and from that point extensive investigations are conducted to supplement the information now available for use in the determination of standards. The department is unable to secure competent men for all of the positions of grain supervisor. The department is cooperating with the United States Food Administration authorities in their work with grains under the food-control act. This necessitates exceedingly important and heavy work among the grain trade by the grain supervisors of the Bureau of Markets, both at the Washington office and in the field. Graduate Kansas State University, B. S. in agriculture, specializing in grain marketing, grain grading, and milling technology; also served at this institution as student assistant in milling technology and as student assistant in chemistry. Prior to entering the Government service held several important appointments in the State grain laboratories of Montana, having direct charge of the milling and baking investigations. Was also appointed deputy State grain inspector. Eleven months.

John F. Wilmet, Washington, D. C. Engaged in work in connection with the enforcement of the United States grain-standards act and other projects dealing with the marketing of grain. He is thoroughly familiar with the provisions of the act and also with the requirements of the rules and regulations of the Secretary of Agriculture under the act. Has attended all the hearings held in connection with the different phases of the enforcement of the act and the establishment of grades for grain promulgated thereunder. Mr. Wilmet is also in charge of the work of compiling estimates for grain projects, special reports required by Congress, and similar work requiring a thorough knowledge of department and bureau policies, legal training, and familiarity with the technical requirements under the grain-standards act. Prior to assuming his present duties held responsible positions in the administrative offices of the Bureau of Plant Industry, the office of the Secretary, and the Bureau of Markets. Is graduate of the Georgetown University Law School. Has been admitted to the bar of the District of Columbia and the State of Louisiana. Nine years eight months.

Furman B. Wise, Washington, D. C. (spends considerable time in travel status). Has specialized in investigations relating to the handling, grading, and transportation of rice, conducting both field and laboratory investigations in Washington, New Orleans, La., and in the rice-growing sections throughout the entire United States. Renders assistance in handling matters relating to this crop, with special reference to its commercial grade. His services are also utilized in giving assistance as to the best means of distributing the rice crop, with a view to its increased use for food. Graduate Agricultural and Mechanical College of South Carolina, B. S.; also University of Wisconsin, M. S. Six years ten months.

BUREAU OF PLANT INDUSTRY.

Name, home address, character of work, and length of service.

Glen B. Ramsey, Orono, Me. Engaged in the investigation of potato diseases in Maine. He has recently taken the leadership in pathological extension work in Maine and is engaged in putting into practice in that State, with the cooperation of the State extension forces, the methods of control for important diseases of truck crops, particularly potatoes, that have been worked out. Entire time devoted to the various phases of this work, including the oversight of field demonstrations, the instructing of State and county agents and farmers in methods of plant-disease control, and the preparation of necessary literature on the subject, this being a part of the program of food conservation through the control of plant diseases. Graduate Indiana University, A. B. and A. M., specializing in botany, mycology, and plant pathology. Prior to entering the department service held a teaching fellowship in botany at Indiana University, was instructor in botany at the University of Maine, and assistant plant pathologist of the Maine Agricultural Experiment Station. Two years three months.

Roscoe E. Blair, Bard, Cal. Has been serving as superintendent of the Yuma Experiment Station, near Bard, Cal., and in conducting demonstration work among farmers on the Yuma reclamation project. His duties as farm superintendent include the supervision of all the investigational work of the Yuma station and some field work among settlers on the Yuma reclamation project with particular reference to the production of long-staple cotton. This work is of special importance at the present time, when the demand for long-staple cotton for both civil and military purposes is exceeding the supply. The Yuma station is located in a section devoted to intensive farming, as shown by the fact that the average production per acre for that district (the Yuma reclamation project) in 1917 was valued at \$105. The work of the station has been a very important factor in the development of local agricultural industries, particularly as regards the two most important industries, cotton and alfalfa seed. He has served also as representative of the Office of Demonstrations on Reclamation Projects on the Yuma project, it having been found impossible so far to secure a suitable man for the work of that office. Graduate Kansas State Agriculture College. Prior to entering the department was employed for a brief period as assistant in the department of horticulture at the Kansas Experiment Station. Seven years eleven months.

Leonard E. Newman, Concord, N. H. Has charge of cooperative work on the control of the white-pine blister-rust work in New Hampshire. This includes general control work throughout the State, specific local cooperative work with 43 townships, and the direction of the activities of about 75 employees. This blister-rust disease threatens the destruction of the white pine, which is the most valuable and important forest tree in the northeastern section of the United States. The situation is critical; present failure of the cooperative control work in New Hampshire would cause irreparable damage and might easily mean failure for the blister-rust campaign in the entire region. For the continuation and success of the work in New Hampshire it is important that Mr. Newman be retained in his present position, as he is the only experienced man left who is thoroughly familiar with the work in that State, he having been with the work ever since it was inaugurated. Graduate Biltmore Forest School. Had three years' experience in general forestry work in the Northwest and in New Hampshire before entering the department service. Two years one month.

Louis J. Gillespie, Washington, D. C. Engaged in working out the relation between crops and soil acidity, involving highly technical experience and training in connection with hydrogen-ion concentration. There are only a limited number of men available for this type of work in the United States, and if he were separated from the service for any reason this line of work would have to be suspended indefinitely. He is showing a decided relationship between the hydrogen-ion concentration in soils and the prevalence of certain diseases affecting prominent food crops. Graduate Brown University, Ph. B. and Ph. D. Served as assistant in physics, Brown University; instructor in chemistry, Rhode Island School of Design, Providence; fellow in bacteriology, Rockefeller Institute of Medical Research; and bacteriologist, New York Department of Health, for various periods before entering department service. Four years ten and one-half months.

Rolla N. Harger, Washington, D. C. Engaged in chemical work, requiring highly specialized training, in the Office of Soil-Fertility Investigations. It has been found impossible under the present conditions to obtain men of similar training and experience. Since September, 1917, has also been engaged in making investigations of an unusual character in cooperation with gas-warfare investigations, Bureau of Mines, acting for the Ordnance Department. This special research is invaluable to the prosecution of this line of offensive warfare. Graduate Washburn College (Topeka, Kans.), A. B.; did graduate work in chemistry at Kansas University two terms, receiving M. A. degree. Before entering department was laboratory instructor in chemistry at Washburn College three years and laboratory instructor in chemistry at Kansas University two years. One year one month.

Wofford B. Camp, Gaffney, S. C. Engaged in California upon work having in view the increased production of the long-staple Egyptian type of cotton in the United States by the utilization of the improved varieties and cultural methods that have been developed through the experimental work of the department. On account of the reduced production of this type of cotton in Egypt and difficulties of communication and transportation there could be no assurance that enough extra staple cotton would be available in the United States even for the strictly military purposes of aeroplane wings, balloon fabrics, and automobile tires. The production of sea-island cotton has become entirely an uncertainty on account of the boll weevil. The field operations in California consist of locating and caring for plantings of the improved varieties in promising locations, in cooperation with new cotton-growing organizations that are being established, and giving necessary advice and assistance required in properly establishing this new long-staple industry in the Southwest. This work involves the direct and active personal supervision of the experimental plantings, which are located throughout the San Joaquin and Sacramento Valleys of California, and includes necessary instruction of farmers in methods of planting, thinning, selecting, roguing, picking, and other operations connected with production, breeding, and preservation of the purity and uniformity of the varieties. The cultural methods of handling these new long staples in the Southwest are different than those used in other regions, and there are no other men obtainable who have had special training like that of Mr. Camp or who are qualified to undertake it. Graduate of Clemson Agricultural College, B. S. Was raised on a farm and was continually in the environment of farm life and work before entering the department. One year eleven and one-half months.

Walton G. Wells, Sacaton, Ariz. Engaged on work directly related to the increased production of cotton of the Egyptian type in the irrigated sections of Arizona and California. The fact that importation of this type of cotton from Egypt has recently been much restricted and that the Arizona and California product is the only available substitute for sea-island cotton, which is of vital importance to the military program of the United States requires that every effort be made to stimulate production of American-Egyptian cotton in Arizona and California. This cotton is already being extensively employed in the manufacture of high-grade tire fabrics and is being tested for use in the production of balloon fabrics for the Army. In the event of a serious curtailment of the sea-island crop as a result of boll-weevil ravages American-Egyptian is the best available substitute for sea-island cotton in the manufacture of balloon, gas-mask, and airplane fabrics. Increased production of American-Egyptian cotton is contingent upon (1) the maintenance of a large supply of pure and selected seed for planting and (2) familiarizing the growers with the best methods of production which have been worked out by the department. Mr. Wells has had a longer and more intimate contact with both of these lines of effort than any other man now in the Government service. He is the only employee of the department available for continuous service in the field who has sufficient familiarity with the Egyptian cotton plant to carry on effectively the vitally important work of seed selection. The work is both urgent and continuous in its nature and does not permit of the delays and interruptions which the training of an inexperienced substitute would entail. Six years two months.

Norbert R. Mueller, Washington, D. C. Has charge of the extensive experiments in drug-plant growing which are being conducted in cooperation between this department and the University of Wisconsin, the continuance of which is regarded as exceedingly important in the present emergency. The Bureau of Plant Industry, through its cooperation with a number of universities which maintain drug gardens in connection with their schools of pharmacy, is working to secure the production of as large quantities as possible of several essential drugs. Mr. Mueller not only has had immediate charge of the work of producing these drug crops at the University of Wisconsin but visits these other institutions, as necessity may arise, to give expert supervision and advice and assist in promoting the work. There are very few men in the country who have had any practical experience in the line of work in which Mr. Mueller is engaged. It has been found necessary to increase Mr. Mueller's responsibilities by assigning him to emergency field work in connection with the castor-bean crop in addition to his regular assignment to the production of important drug plants. These duties include collaborating with officials of the Signal Corps, War Department, cooperating with county agents, advising growers, etc., in order to insure castor-bean production on the large acreage required to provide supplies needed in the manufacture of lubricating oil for airplane motors. The withdrawal of Mr. Mueller's services would mean the practical abandonment of any productive features of the department's drug plant work in the northern Mississippi Valley, which is of great importance in producing adequate supplies of important drugs for military needs, and would hinder the cooperative work in producing sufficient castor oil for airplane use. Graduate of University of Wisconsin (pharmacy course), B. S.; was graduate student, same institution, one term, receiving M. S. degree. Prior to present appointment was for various periods registered pharmacist, had charge of drug-plant work at Wisconsin Pharmacy Experiment Station, was in charge of field party hermetism investigations in Wisconsin River Valley, and fellow in pharmacy at University of Wisconsin. Two years.

Edgar C. Young, Timmonsville, S. C. Has entire responsibility for the handling of the drug-plant crop in South Carolina during the present season. The work that would suffer through his withdrawal is that dealing with the cooperative studies of drug-plant and oil-seed crop production in South Carolina. The increasing dearth of supplies of certain important drugs formerly imported has made it of vital importance to insure the successful production of crops of these drugs in this country. One of these vitally important drugs is cannabis, which will be needed in large quantities both by the medical and the veterinary services of the Army, as well as in the treatment of illness and alleviation of suffering in private practice. At the present time the main reliance for cannabis of the pharmacopoeial standard in this country rests upon the production of the South Carolina crop. This country is now also called upon to furnish supplies of this important drug for export. The withdrawal of Mr. Young from the South Carolina drug-plant work can not fail to imperil the production of the cannabis crops, which requires a type of treatment and handling that can not be obtained from inexperienced help. It would further involve the loss of a large amount of experimental data of peculiar interest and value at the present time, when facts concerning the production of drugs and oils in this country are in urgent demand because of the failure of supplies which have heretofore come from abroad. Graduate of Clemson Agricultural College, B. S. in agriculture; took postgraduate work at Clemson one term. Was reared on a farm and has had considerable experience in handling farm labor. Before entering his present duties conducted field experiments on cotton at Pee Dee Experiment Station during one season and was assistant in botanical and bacteriological laboratories at Clemson College one term. One year three months.

Harry A. Scoth, Corvallis, Oreg. Has charge of forage-crop experiments being conducted in cooperation with the Oregon Agricultural Experiment Station at Corvallis, Oreg., with particular reference to the production of seeds of vetches and other special forage crops. This work is highly important, especially in view of the fact that ordinary sources of supply in Europe are cut off, and it is therefore essential that American sources for seed be developed. The work with forage crops is also highly important in connection with the dairy industry of western Oregon and western Washington. Graduate of Oregon Agricultural College, B. S. and M. S. For two terms was employed as farm foreman and was fellow in agronomy at the Oregon Agricultural College. Two years four and one-half months.

Fred W. Geise, Washington, D. C. Is investigating the fertilizer value of the greensand marl deposits of eastern United States as a source of potash for agricultural purposes. His work consists chiefly of technical laboratory and greenhouse studies, carried on at Washington. His withdrawal at this time would seriously cripple the work and endanger results which, it is hoped, may find practical use during the present season. Graduate Wesleyan University (Nebraska), A. B.; took special course in biology at University of Wisconsin; received M. S. degree University of Chicago. Was raised on a farm and is familiar with farming practices in the Middle West. Eleven months.

Oscar R. Mathews, Bellefourche, S. Dak. The superintendent of the Bellefourche (S. Dak.) station is an employee of the office of Western Irrigation Agriculture, the station being under the management of that

office. The superintendent is fully occupied with the work in irrigation agriculture and has not been specially trained in dry-land agriculture nor familiar with the details of the work that is being conducted by the office of Dry-Land Agriculture. Mr. Mathews is the only representative of the last-named office at the Bellefourche station and is responsible for the conduct of the work of crop production under dry-land conditions, which work has already proved its value by its results. This work involves soil preparation, seeding, cultivation, harvesting the crops, study of yields, effects of cultivation, rotations, etc. He also has charge of the soil moisture and other chemical and physical determinations in the laboratory on the field station and has kept the records of the meteorological observations. This work is directly concerned with the increasing of the food supply, particularly wheat, of the country by determining the possibilities of production in this section of the country and the methods by which these possibilities can be most profitably realized. Graduate South Dakota Agricultural College, B. S. and M. S. Nine years.

Joseph B. Kuska, Colby, Kans. Has charge of extensive investigations in methods of crop production under dry-land conditions at the Colby (Kans.) substation of the Kansas State Experiment Station in cooperation with the State. Under the terms of this cooperative agreement the department agrees to provide a trained assistant in dry-land agriculture who shall be responsible for and have immediate charge of the experimental work. Mr. Kuska has had charge of such work since its inauguration in the spring of 1914. Graduate University of Kansas, B. S. Spent early life on a farm. Four years six months.

Charles H. Ruzicka, Williston, N. Dak. As superintendent of the Williston (N. Dak.) dry-land field station has charge of an extensive series of experiments being conducted under a cooperative agreement with the North Dakota Experiment Station to determine the best methods of crop production for that section. Under this agreement the department furnishes the superintendent of the station. Wheat and flax production are of first importance in this section, and any advance the experimental work may make in the solution of the many problems concerned in their production adds directly to the total production of these and other essential foodstuffs and raw materials. Graduate North Dakota Agricultural College, B. S. in agriculture; has also had practical farm experience. Prior to present appointment spent two seasons examining and appraising lands in western North Dakota and eastern Montana for the Northern Pacific Railway Co.; taught one year in associated agricultural high schools at Millaca, Minn.; and was two years with the North Dakota Better Farming Association. Five years six months.

Charles T. Dearing, Washington, D. C. (Most of his time is spent in the field.) Has charge of the muscadine-grape investigations of the bureau, which involves a study of cultural methods and requirements and the breeding of better varieties. His work also includes the development of methods of utilization of grapes in the home. Heretofore the use of the muscadine type of grape has been restricted to the making of wine, canning, and preparation in the fresh state in a few different culinary ways. Mr. Dearing has developed exceedingly satisfactory methods of making unfermented julees, jellies, jams, and other products, and these have been presented at a large number of meetings, in cooperation with the office of Extension Work in the South, through a large portion of the muscadine-grape-growing territory. Graduate University of Missouri. Eight years five months.

Charles Sando, Washington, D. C. His duties are largely of a biochemical nature and consist of making analyses of fruits and vegetables to determine the changes which have taken place when held under different conditions, including storage. Similar investigations are carried on by Mr. Sando with reference to the conditions of fruits or vegetable products grown under different conditions for the purpose of correlating cultural methods with the behavior of the products in storage. Another phase of his work is a study of fruit and vegetable pigments as an index of different degrees of maturity, the degree of maturity being an essential factor to consider in connection with the behavior of the product in storage and subsequent thereto when removed for consumption. Graduate Maryland Agricultural College; took advanced work in organic chemistry at the University of Michigan. Three years one and one-half months.

Elmer Snyder, Fresno, Cal. Engaged upon studies of cultural and production problems in connection with American Evvitis grapes and investigations of Vinifera grapes in California. The latter project has been under way for the past two years, and together with another member of the bureau staff he has been primarily responsible for the results of the investigational work being carried on in some 10 or 12 experimental vineyards located at different points in California. Perhaps the most important feature of his work is in connection with the development of a dried-currant industry. The foundation work, with which Mr. Snyder is very closely identified, has been laid for the development of a currant industry in California which promises to take the place of an imported product amounting annually to 30,000,000 or more pounds. His duties also consist of taking annual series of notes covering blossoming records, growth records, yield records, and observations on numerous methods of culture and the behavior of a great number of varieties under test. Graduate New York State College of Agriculture. Three years.

George K. K. Link, Washington, D. C. (greater part of time spent in the field.) Advises the inspectors of the Bureau of Markets and the War and Navy Departments relative to the investigations of losses in market and storage and studies means of prevention, working with other pathologists who are at the points of production. This work is an essential part of the food-conservation program, closely affiliated with investigations at the points of production, and operating directly to reduce the present losses of perishable vegetables. The economic interests involved in this work are very great. The losses on a single car amount to from \$100 to \$400, a large part of which is preventable by measures applied in the field or packing house. A continued effort is made to disseminate this information among the producers and to bring about all possible improvement. Graduate University of Chicago, B. S.; graduate student University of Nebraska, one term, receiving A. M. degree; also received Ph. D. degree from the University of Chicago. Assisted in the chemical and botanical laboratories at Chicago University; served as an assistant in botany at the Kansas Agricultural College; adjunct professor of agricultural botany and assistant in the experiment station of the University of Nebraska; professor of plant physiology and physiologist of the Nebraska Agricultural Experiment Station; and during the six years prior to present appointment has devoted his entire time to university teaching and to investigation and extensive work at the experiment station of Nebraska along the line of potato diseases, a great part of this time being spent in field work in the irrigated and dry-land sections of western Nebraska. Eight months.

Gustav A. Meckstroth, Washington, D. C. Engaged in bean-disease investigations, having charge of a field station. The protection of the bean crop against disease is a matter of very urgent war service. He has had charge of this work for more than a year, and a good beginning has been made. The bean crop is one of the most important of the vegetable crops of the country, and it has been especially subject to losses due to diseases during recent years. Graduate Ohio State University, B. A. and M. A. For various periods prior to present appointment, taught in public schools; assisted in laboratory in general botany, Ohio State University; was an agent of the department in connection with white-pine blister-rust inspection; taught general botany and plant pathology at Pennsylvania State College; and assisted in plant pathological work at Pennsylvania experiment station. Was raised on a farm and engaged in general farming in Ohio until college course was finished. One year three and one-half months.

Luther P. Byars, Washington, D. C. Mr. Byars is a project leader and specialist engaged in the investigation of nematode diseases of cotton, truck, and forage plants. Has in charge the Federal investigation on the control of root knot, a disease which reduces the value of southern crops by many millions of dollars annually, and is engaged in a campaign of crop conservation with a program of root-knot control from the Atlantic States to Texas. Experiments are in progress which must run continuously for a series of years. On these the department has spent a great deal of money for installation and care, and the results will be lost if they are suspended. No one is available to take Mr. Byars's place should he leave the service. Experts in nematology are rare. Graduate Clemson College, received M. S. degree from University of Wisconsin, and examination for Ph. D. degree has been successfully passed and degree will be granted upon completion of thesis. Was assistant in plant pathology at the South Carolina experiment station one year, assistant in botany at the University of Wisconsin two years, and plant pathologist at South Carolina experiment station one year. Prior to taking up permanent work in the department was employed by this bureau to do nematode-disease survey work on sugar beets and other plants. Four years seven months.

Arthur J. Mix, Washington, D. C. (greater part of time spent in field). Engaged in emergency work in the control of truck and forage-crop diseases in cooperation with the extension organization of one of the northwestern States. His duties include personal instructions to county agents and farmers, the holding of farmers' institutes and county-agent meetings, the preparation and distribution of printed matter, and the supervision of demonstrations of disease-control methods. The position requires a man well trained in plant pathology and experienced in demonstration work. Graduate Hamilton College, A. B.; also received Ph. D. degree from Cornell University. For four years held a fellowship at Cornell University, during which period he conducted an educational campaign during the growing season in disease and insect control and the general care of orchards. For one year was assistant botanist at the New York experiment station, Geneva, investigating potato diseases; and for two years was instructor in plant pathology at the University of Kansas. Two and one-half months.

William L. Doran, Amherst, Mass. Is extension pathologist for the State of Massachusetts and is engaged in putting into practice in that State, with the cooperation of the State extension forces, the methods of control of important diseases of truck crops that have been worked out. The work to which he is assigned is a necessary link in the food-conservation program. The position of extension pathologist is one requiring a man of thorough training in plant pathology and related subjects and wide experience. Graduate Massachusetts Agriculture College, B. S., specializing in botany and chemistry; did postgraduate work in plant pathology one year and received degree of M. S. During college course worked on farms in summer, especially with marketing and florist crops; lived 18 years on a farm; instructor in botany, New Hampshire State College, and assistant botanist, New Hampshire Agricultural Experiment Station, one year. Seven months.

Ivan C. Jagger, Washington, D. C. (greater part of time spent in field). Is pathological adviser on truck-crop diseases for the Southern States, having general charge, on the part of the Bureau of Plant Industry, of the cooperative extension activities in the South along this line. He plans campaigns for the control of diseases of truck crops, visits the bureau workers in the States and the cooperating State officials, prepares circulars and bulletins, conducts correspondence, and in other similar ways carries on the campaign for food conservation through the control of plant diseases. Graduate Cornell University, B. S. in agriculture; graduate student and industrial fellow in department of plant pathology, same institution, one year; graduate student in University of Wisconsin one year, receiving M. S. degree after specializing in plant pathology; graduate student and instructor in department of plant pathology at Cornell one term. Before entering department spent four summers in the field in New York State carrying out experiments on the control of diseases of vegetables; for five years was assistant professor of plant pathology, University of Rochester and Cornell University, all his time being given to investigation of diseases of vegetables both in greenhouses and in field in the vicinity of Rochester, N. Y. Three months.

Max W. Gardner, Washington, D. C. (greater portion of time spent in field). Engaged in assisting the food products inspectors of the Bureau of Markets in the inspection of carload lots of perishable vegetables at terminal markets, the purpose of this work being to determine the causes of the large losses which occur in transit and to assist in the prevention of these losses through the introduction of control measures. This work is an important part of the program of food conservation through the control of plant diseases and requires men highly trained in plant pathology and possessing unusual teaching ability. Graduate Michigan Agricultural College, B. S.; also received M. S. and Ph. D. degrees from University of Wisconsin. Prior to present appointment served for various periods as pathologist and chemist, Keokuk Canning Co.; assistant plant pathologist to the Pennsylvania State Chestnut Blight Commission; assistant in plant pathology, Michigan Agricultural Experiment Station; and during three summers held a three months' appointment in this bureau as assistant in charge of cucumber-disease investigations in Wisconsin; was also instructor in plant pathology, University of Michigan. Two years nine months.

Howard G. MacMillan, Washington, D. C. (temporary summer address, Greeley, Colo.). Engaged in the investigation of control methods for potato diseases in Colorado and has charge of important field stations. Has spent three years in the work and now has results which he believes will effect important improvements in the control of potato diseases in the irrigated West. Graduate Brown University, Ph. B.; also received M. S. and Ph. D. degrees from University of Wisconsin. Prior to present employment was employed for short periods by the Bureau

of Plant Industry in connection with chestnut-blight investigations in the control of fruit diseases. Three years ten months.

Lawrence O. Watson, Florence, S. C. Is pathological adviser in charge of work on disease control for cotton and truck crops in all Southern States, representing the Bureau of Plant Industry in all its relations to southern extension work along these lines. Has also been engaged for a number of years in breeding and disseminating disease-resistant cotton and cowpeas and is the man on whom the bureau depends for the preservation and conduct of this important project. Has built up an efficient corps of cooperators and pushed with especial activity since the war the more extended use of resistant cotton as a means of disease control. Has organized and now directs this disease-control work in cooperation with the State authorities in North Carolina, South Carolina, Georgia, Louisiana, Texas, Arkansas, Florida, Alabama, Mississippi, and Oklahoma. The work, though new, is already having an influence on crop production. The county agents are continually in need of help from the experienced pathologists of this bureau. Graduate Clemson Agricultural College, B. S. in agriculture; one year of graduate work at the University of Illinois. Was raised on a farm and is familiar with the details of farm work. Before entering upon department duties was for two years assistant chemist in State analytical work at Clemson College, S. C.; served as assistant to the county auditor at intervals during vacation periods and was assistant botanist at the South Carolina Agricultural College one year. Seven years.

John C. Walker, Washington, D. C. (greater part of time spent in field). Engaged in the investigation of onion diseases and in pathological inspection work in cooperation with the Bureau of Markets and the War Department investigating pathological problems connected with the handling and transportation of vegetables. Graduate University of Wisconsin, M. S. and Ph. D.; took one semester of graduate work at Cornell University. Was born and raised on dairy and truck farm and had practical experience in growing cabbage, onions, potatoes, sugar beets, and other truck crops prior to entering the department. College work was directed chiefly to studies in plant pathology, especially diseases of truck crops. Eight and one-half months.

Jenkin W. Jones, Biggs, Cal. Has charge of the Biggs (Cal.) cereal field station of the Bureau of Plant Industry. This is the only experiment station devoted to the rice industry in the entire western United States. The experiments carried on there include the determination of the best varieties of rice for California conditions, the best times, rates, and methods of sowing rice to obtain the maximum production, the best methods, times, and rates of irrigation to conserve irrigation water and at the same time insure a large production, rotation systems to free rice lands from weeds, etc. The station is comparatively new, but is recognized as the source of all authentic information on rice growing in California. The many farmers who are taking up rice growing for the first time in 1918 are very largely dependent upon the station for their information. Graduate Utah Agricultural College, B. S. in agriculture. Was raised on a farm and prior to entering department had charge of a demonstration farm at Harlowton, Mont. Five years ten months.

Harry Braun, Washington, D. C. As a scientific assistant in the laboratory of plant pathology, is engaged in research studies on the new wheat disease in the Middle West known as "black chaff." He does both field and laboratory work and is at present the only well-trained man the laboratory of plant pathology has in the field. It is important that the work be pushed as rapidly as possible, owing to the number of States involved and the serious nature of the disease. Men fitted to prosecute such a research are hard to find, practically all of them being within the draft age. Mr. Braun worked last season on this wheat disease and knows the problems involved. Graduate Cornell University, B. S.; took postgraduate course at same institution, specializing in plant pathology; also did graduate work at Columbia University in botany one term, receiving M. A. degree. Prior to present appointment was for various periods assistant, department of plant pathology, Cornell University; student assistant and scientific assistant, Office of Cotton, Truck, and Forage-Crop Diseases Investigations, this bureau. One year nine and one-half months.

John W. Pace, Mobile, Ala. Has been engaged in connection with the cooperative campaign for the eradication of citrus canker in Alabama for more than two years and has proved to be unusually efficient inspector and superintendent, and experience has shown that it would be impossible to replace him with any satisfactory person. He has immediate supervision of the inspection and eradication work in Baldwin County, Ala., and occasional supervision over the work in Mobile County. In Baldwin County approximately a million Satsuma orange trees are planted. Since 1914 the citrus industry of the South has been menaced by the presence of the Japanese disease of citrus canker, which is not only very destructive to trees that become infected, but also destroys the commercial value of fruit. At present quarantine prevents the shipment of fruit from infected districts. It is becoming almost impossible to find new inspectors for responsible positions in the canker eradication work, which makes it imperative to retain the inspectors who have proved their ability to inspect citrus plantings and detect canker and who have the necessary executive ability to plan and supervise the work of others. Graduate Alabama Polytechnic Institute, B. S. Was raised on a farm. Two years six months.

Alma Wilson, Logan, Utah. Engaged as pathological adviser, in cooperation with the State extension forces of Utah, in putting into practice the methods of control developed for important diseases of truck crops. This work is important and is a necessary link in the food-conservation program. The position of extension pathologist is one requiring a man of thorough training in plant pathology and related subjects and wide experience. Graduate University of Utah, B. S. Was instructor in general botany at Utah Agricultural College four semesters, laboratory instructor in plant pathology two semesters, and laboratory instructor in plant physiology five semesters. Had two years' research experience in potato diseases at the Utah Experiment Station and some experience in plant-disease survey and in plant-disease extension work in Utah prior to entering department service. Six and one-half months.

BUREAU OF ENTOMOLOGY.

Name, home address, character of work, and length of service.

John E. Graf, Macclenny, Fla. Directs the field work being conducted at the various field stations of the Bureau of Entomology in connection with the campaign for the eradication and control of the sweet-potato weevil and coordinates the department's activities with similar work undertaken by State organizations. The work is closely allied to the emergency food production conservation program, inasmuch as the

sweet-potato weevil has been spreading unchecked until the present year and is becoming extremely threatening. The sweet potato is a staple food not only of the people of our Southern States but on the Army ration. Graduate Pomona College, with one year's postgraduate work at that institution. Six years eleven months.

C. H. Batchelder, Orono, Me. Demonstrates methods of controlling serious insect pests of staple crops. Men of the type capable of performing entomological extension work are extremely difficult to find, and the importance of the work, judged by their results obtained through their efforts, makes it extremely desirable to retain their services. Mr. Batchelder is the only extension entomologist now operating in the State of Maine. Graduate of an approved college, having taken the course in entomology; also had practical experience before entering the department fitting him for service as demonstrator and public speaker. Three months.

William T. Ham, Pullman, Wash. Demonstrates methods of controlling serious insect pests of staple crops. Graduate of an approved college, having taken the course in entomology; also had practical experience before entering the department fitting him for service as demonstrator. Five months.

Olden K. Courtney, Macclenny, Fla. Has charge of the operations at one of the bureau's field stations in connection with the eradication campaign against the sweet-potato weevil. Mr. Courtney is especially familiar with local conditions in the section in which he is employed. Graduate of an accepted agricultural college, having specialized in entomology. Five months.

Charles E. Smith, Baton Rouge, La. Has charge of the operations at one of the bureau's field stations in connection with the eradication campaign against the sweet-potato weevil. Graduate of an accepted agricultural college, having specialized in entomology. Three years.

ASSISTANTS IN TRUCK-CROP INSECT INVESTIGATIONS.

These employees are men of considerable experience in the Bureau of Entomology, who by reason of demonstrated ability in research, life-history studies, and investigations in control measures in connection with truck-crop insects have been placed in charge of bureau field stations in various localities. The character of the research investigations which they are conducting demands that men experienced and trained in the particular lines be employed in their prosecution. All these employees are working on problems of research closely allied to the present conservation program.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

Roy E. Campbell, Alhambra, Cal. Has charge of field station dealing especially with sugar-beet insects. College graduate, having specialized in entomology. Five years.

Fred A. Johnston, Kingsville, Tex. Has charge of one of the bureau's field stations in connection with the eradication campaign against the sweet-potato weevil. College graduate, specializing in entomology. Eight years.

Corwin P. Stahl, Spreckels, Cal. Engaged in study of insect transmission of curly top of sugar beets, probably the most serious disease of this crop in the United States. College graduate, specializing in entomology. Six years.

Francis M. Wadley, Wichita, Kans. Has charge of general truck-crop insect investigations at the bureau's field station at Wichita, Kans. College graduate, specializing in entomology. Four years.

C. F. Moreland, Baton Rouge, La. In connection with the sweet-potato weevil eradication campaign, is engaged in a survey of the food plants of this insect in order to determine all the facts possible regarding its feeding habits. This investigation is very essential to the effective prosecution of control measures. Mr. Moreland is fitted for this character of work by reason of his special botanical training and especially his familiarity with the flora of southern Louisiana. Graduate Louisiana State University, B. S. and M. S.; prior thereto attended Washington and Lee University one year. Was raised on a farm. Prior to entering department service was instructor in botany at the Louisiana State University. Two months.

A. J. Ackerman, Bentonville, Ark. Has charge of field experimental work in the control of apple insects in the Ozarks. This work has a direct bearing on increased food production. Graduate Massachusetts Agricultural College, B. S. Four years.

L. C. Antles, Grand Junction, Colo. Has charge of the bureau's investigations of the codling moth in the Grand Valley, Colo., which involves large-scale spraying operations in the control of this insect. Graduate Colorado Agricultural College, B. S.; also took postgraduate work at the Pennsylvania State College. Before entering the department service had three seasons' experience in orchard-insect work in the Grand Valley, Colo. Two months.

EXTENSION AGENTS IN DECIDUOUS FRUIT INSECT CONTROL.

Deferred classification has been requested by the department and allowed by draft boards in the cases of the following agents engaged in extension work in deciduous fruit insect control. This work involves the giving of demonstrations of the proper methods of controlling insects affecting deciduous fruits. It has a direct bearing on increased food production, and, in view of the scarcity of men trained along this line, it would be very difficult to replace those now in the employ of the department.

Name, home address, character of work (see general statement), and length of service.

J. M. Robinson, Raleigh, N. C. Graduate, University of Miami, B. S.; also received degree of M. S. from the Ohio State University. Nine months.

Oliver I. Snapp, Agricultural College, Miss. Graduate, Virginia Polytechnic Institute, B. S.; also took postgraduate work in entomology at the Maryland State College of Agriculture. One year nine months.

E. W. Atkins, Ames, Iowa. Is specialist in beekeeping in cooperation with the extension services of Missouri, Iowa, Kansas, and Nebraska. This work includes field demonstrations and lectures among beekeepers, in cooperation with county agents. It has been increasingly difficult to find men of the proper training and experience for this type of extension work. Five vacancies now exist in the staff engaged upon this work, which so far it has been found impossible to fill. Graduate Ontario Agricultural College, Guelph, Ontario. Prior to entering department served as deputy apitary inspector in Ontario and as specialist in apiculture at the Nebraska Experiment Station; also was engaged as commercial beekeeper in Ontario. Seven months.

D. J. Caffrey, Hagerstown, Md. Has charge of the laboratory investigations on wireworms and cutworms; also work on European cornstalk borer in New England. These pests are responsible for tremendous losses in food crops. Graduate Massachusetts Agricultural College; also did postgraduate work at that institution. Prior to present appointment was for three months assistant to the entomologist of Massachusetts Experiment Station and for two years assistant to the State entomologist of Connecticut. Five years one month.

Frank S. Chamberlin, Quincy, Fla. Has charge of a substation at Quincy, Fla., investigating the tobacco budworm and other important tobacco insects. Received two years' training at the Worcester Polytechnic Institute and graduated from Massachusetts Agricultural College, B. S. For two summers before entering the department held the position of deputy State nursery inspector of Massachusetts. Eleven and one-half months.

T. R. Chamberlin, Salt Lake City, Utah. Conducts control experiments with respect to the efficacy of certain cultural methods in the control of alfalfa weevil. Is the only fully experienced assistant remaining on this investigation, the two other older assistants having recently left the service, one for military duty and the other to engage in State work. Attended University of Utah. Five years six months.

Bert R. Coad, Tallulah, La. Has charge of the bureau laboratory, which conducts investigations of the cotton-boll weevil in the Mississippi Delta. He has had years of training in the boll-weevil work. Graduate University of Illinois, majoring in entomology. Served under the State entomologist after graduation for some time before entering the department. Six years six months.

ASSISTANTS IN COTTON-BOLL WEEVIL CONTROL.

These assistants are engaged in practical experiments in the control of the cotton-boll weevil, especially in the determination of the proper methods of using arsenate of lead. It is necessary to retain their services, at least during the present crop season, on account of the difficulty that has been experienced in obtaining men familiar with the cotton-boll weevil problem. These men have been especially trained for the work upon which they are engaged.

Name, home address, character of work (see general statement), and length of service.

Webb B. Williams, Tallulah, La. Attended Mississippi Agricultural and Mechanical College for several years, specializing in entomological work. Two years seven and one-half months.

F. C. Craighead, East Falls Church, Va. Concerned primarily in the conservation, through the prevention of insect damage, of forest products, especially those used by the Army and Navy. Very much timber especially valuable to the Army and Navy is rendered unusable because of insect injury. The investigations conducted by Mr. Craighead have made and are making it possible to recommend control measures which will prevent this damage. The position is one which no training other than that gained through experience can be of immediate service. Graduate Pennsylvania State College, B. A.; took postgraduate work at George Washington University. Seven years.

C. W. Creel, Forest Grove, Ore. In charge of a large and important field station located at Forest Grove, Ore., and of all the investigations of the bureau on the clover-flower midge, alfalfa-seed chalcis, Hessian fly, and grasshoppers under way in the Pacific Northwest. Is directing a special campaign during the present season for the suppression of grasshoppers, the Coulee cricket, and the clover-flower midge in an effort to produce a full crop of red-clover seed. Graduate University of Nevada, B. S.; subsequently was assistant to the State entomologist of Nevada two years. Seven years four months.

W. M. Davidson, Sacramento, Cal. Engaged in the investigation of predatory insects, especially the ladybird beetles, in cooperation with the California State Horticultural Commission. This work involves careful life-history studies of the insects in question and their liberation in orchards on a practical scale where they are likely to become established. Graduate Leland Stanford University, B. S. Seven years four months.

A. B. Duckett, Bladensburg, Md. At the present time is the only well-trained assistant in the stored product insect branch of the Bureau of Entomology. He not only takes charge of the office during the absence of the branch chief, but has recently been assigned the very important task, in cooperation with the War Department, of reporting to the chief storage officer of the port of New York the condition of Federal supplies purchased and stored at the Bush Terminals in New York. This is a distinct war service. Graduate Maryland State College of Agriculture. Six years three and one-half months.

William O. Ellis, Riverton, N. J. Has charge at Riverton, N. J., of the bureau's investigations of the recently introduced Japanese beetle. This work involves careful life-history studies of the insect, its behavior, and experimental work in the field to effect its control. Mr. Ellis is also assisting in the work of the eradication of the beetle now under way. Graduate Lebanon Valley College (Annville, Pa.), A. B.; pursued postgraduate studies at the Iowa State College, specializing in advanced botany and general and research entomology; also took postgraduate work at Cornell University, specializing in economic entomology and advanced zoology. One year.

W. T. Emery, Wichita, Kans. Engaged as the ranking assistant in the Hessian-fly investigations located at Wichita, Kans., and is conducting biological work in connection with these activities, with which he alone is entirely familiar. Graduate Kansas State University, A. M. Subsequently was assistant to the Kansas Entomological Commission for one year. Four years one month.

A. I. Fabis, Brownwood, Tex. Has charge of the bureau's laboratory at Brownwood, Tex., where investigations of pecan insects are being carried out in that region. This work involves careful life-history studies of the important insect enemies of this crop and the carrying out in the field of large-scale experiments in their control. Graduate College of the City of New York, B. S.; also completed one year's work in entomology at Cornell University. Four years four months.

R. J. Fiske, Roswell, N. Mex. Has charge of the bureau's investigations of the codling moth in the Pecos Valley, N. Mex., involving careful life-history studies of the insect and large-scale field experiments in its control. Graduate Massachusetts Agricultural College, B. S.; previous to entering the department was acting in charge of the entomological work of the Porto Rican Agricultural Experiment Station. Three years ten months.

A. L. Ford, Manhattan, Kans. Engaged as special field agent in extension work for the State of Kansas. Was assigned to this work at the urgent request of the State director of extension and State entomologist, in order to prevent the suspension of the entire ento-

mological extension program, and is conducting important demonstration work on the control of insects affecting the production of winter wheat. Graduate Kansas State Agricultural College, M. S. For three years previous to present appointment was assistant in entomology at this institution. Ten months.

John B. Gill, Monticello, Fla. For five years has had charge of the bureau's investigations of pecan insects in the South, with headquarters at Monticello, Fla. This work involves careful life-history studies of the important insect enemies of the pecan and the carrying out in the field of large-scale experiments in the control of these insects. Eight years.

Rudolf W. Glaser, Forest Hills, Mass. For several years he has had charge of the investigation of the wilt disease which destroys gypsy-moth caterpillars. This has required a technical study in order to determine the causative organism of wilt. He is now working on a bacterial disease introduced from Japan, which affects gypsy-moth caterpillars. These experiments are only partially completed. Five years two months.

Charles C. Hill, Carlisle, Pa. Has charge of a branch of the Hessian-fly investigations east of the Alleghany Mountains. The work he is performing is of a peculiarly technical nature. Student at Harvard College; graduate Massachusetts Agricultural College, B. S. Prior to entering department was nursery inspector in Massachusetts for one year. Four years.

Thomas E. Holloway, New Orleans, La. Has charge of the bureau laboratory at New Orleans, La., where investigations of the sugarcane insects and the Argentine ant are undertaken. Is at present in Cuba obtaining parasites for introduction into the United States for the control of the sugarcane moth borer. The moth borer is one of the principal enemies of cane, and now menaces the future of the sugarcane industry in this country. The only possible hope of controlling this pest is by the introduction of parasites. Graduate Texas Agricultural and Mechanical College. Engaged in entomological work for the Texas Experiment Station two years before entering the service of the department. Nine years.

Robert H. Hutchison, Washington, D. C. Mr. Hutchison is the bureau's authority on the house fly and its control. He has also been engaged upon an investigation regarding the life history and control of the body and head lice commonly called "cooties." The cootie problem has opened up many fields for investigation, and unless the work is continued the matter may be dropped completely and important and necessary information will not be obtained. He is also cooperating with the Chemical Warfare Service in connection with tests that are being made of all poisonous gases now used in warfare with a hope that possibly some gas may be available which could be used for freeing the men wearing masks of all cooties. Also, at the request of the Medical Department, he is testing an unusual apparatus for the control of the cootie. In cooperation with the Quartermaster's Department, Mr. Hutchison is engaged in experiments to determine the effect of all processes of laundry and dry-cleaning establishments for the control of the cootie. He is thoroughly familiar with the technique of breeding the cootie, and has a thorough grasp of the whole subject. Graduate La Fayette College (Pa.); took postgraduate work at the University of Pennsylvania. Four years eleven and one-half months.

H. G. Ingerson, Lakewood, Ohio. Has charge of the bureau's investigations of grape insects, with headquarters at Cleveland, Ohio. This work involves careful life-history studies of the insects and carrying out in vineyards of large-scale experiments in their control. It is also necessary for Mr. Ingerson to visit various vineyardists in the grape-growing territory and instruct them in methods of insect control. Graduate Pennsylvania State College, B. S. Four years two months.

Dwight Isely, Bentonville, Ark. Has for some years had charge of the bureau's investigations of grape insects in the northeast Pennsylvania grape belt. At present is assigned to an investigation of apple insects in the Ozarks, with headquarters at Bentonville, Ark. This work involves careful life-history studies of important apple insects and the carrying out in the field of large-scale experiments in their control. Graduate Fairmont College (Wichita, Kans.), A. B.; received degree of M. A. from Kansas University. Four years.

Dettmar W. Jones, Melrose Highlands, Mass. Engaged on experimental work in connection with the introduction of parasites of the gypsy moth and the brown-tail moth and is carrying on special investigations on several introduced species. Four years.

Willard V. King, New Orleans, La. For several years represented the Bureau of Entomology in the studies of pellagra undertaken by the Thompson-McFadden Commission. For several seasons following this work had charge of the bureau's work in Montana on the Rocky Mountain spotted-fever tick. The winter seasons were spent by Dr. King in malaria-mosquito investigations in New Orleans, where he made an unusual record. During 1916 he discovered that a species of mosquito which has heretofore not been considered an efficient carrier of malaria, can do so. He also conducts special investigations on the body louse and is a recognized authority on medical entomology. Graduate Montana Agricultural College; also received degree of Ph. D. from Tulane University. Nine years.

Max Kisliuk, Jr., Miami, Fla. Engaged in control work on the army worms, which are doing serious injury to plantings of castor beans in Florida; also in working out measures for controlling other castor-bean insects. The Signal Corps of the Army has made large contracts for plantings of castor beans in order that a sufficient supply of oil may be available as a lubricant for airplane motors. Conditions on these plantations are so serious that the bureau is concentrating all the men it can spare on the problem. Graduate Maryland Agricultural College; did postgraduate work at the Ohio State University, receiving his master's degree from the latter institution. One year eight and one-half months.

E. W. Laake, Dallas, Tex. Engaged in work on live-stock insect pests and in cooperative experiments with the Bureau of Animal Industry in the control of insects in meat-packing establishments. Graduate Texas Agricultural and Mechanical College, B. S. Four years eleven and one-half months.

M. C. Lane, Forest Grove, Oreg. Has assisted in the grasshopper control and investigational work in the northwestern part of the country. At present is engaged in the clover-seed chalcis campaigns in the Pacific Northwest. Graduate Massachusetts Agricultural College, B. S., majoring in entomology. Prior to department appointment was a deputy nursery inspector of Massachusetts and had practical experience in bee management. One year six months.

B. R. Leach, Winchester, Va. Has charge of the bureau's laboratory at Winchester, Va., where investigations are being carried out on the important apple insects in that region. The comparative merits of dust and liquid sprays in the control of these insects is being worked

out. Mr. Leach has had considerable experience along this line. Graduate Cornell University, B. S. Four years four months.

T. F. McGehee, Tallulah, La. Is first assistant in the cotton-boll weevil investigations conducted at Tallulah, La. He has had experience in this investigation during the past four years. Graduate Mississippi Agricultural and Mechanical College. Four years ten months.

R. B. McKeown, Medford, Oreg. Assists in codling-moth investigations in the Rogue River Valley, Oreg., with headquarters at Medford. Graduate Colorado Agricultural College, B. S. One year.

William M. Mann, Washington, D. C. Has devoted practically all his time to studying and classifying ants referred to the Bureau of Entomology, and recently has completed a very thorough survey of Cuba and the Bahamas to determine injurious insects, including ants, which might be introduced either through commerce or on nursery stock into the United States. Can speak the languages in vogue in practically all of the countries requiring special investigation to determine injurious insects likely to be introduced, and is also familiar with the conditions existing in these countries. Attended Washington College of Agriculture two years; also two years at Leland Stanford Junior University, receiving the degree of B. A. from the latter institution; subsequently received the degree of D. S. from Harvard University. Prior to entering the Government service spent six years in studying ants under the direct supervision of Dr. W. M. Wheeler, who is the world's recognized authority on this group of insects. In addition, has devoted two summers to study at the Marine Biological Laboratory, and for two years held a traveling fellowship from Harvard for ant work in the Fiji and Solomon Islands and Australia. Other explorations were made by him in Brazil, Bolivia, Mexico, Haiti, Arabia, Syria, Bahama Islands, and various parts of the United States. Ten months.

Harold Morrison, Washington, D. C. Is entomological explorer in charge of an insect survey of the West Indian Islands and Central and South American countries. This survey has particular relation to fruit flies and other insect pests of plants and plant products likely to be brought into the United States through the agency of commerce from the regions designated. He is also in charge of the collection of fruit flies and other pests from the regions named which are being collected and forwarded to the Bureau of Entomology from time to time by various official entomologists, directs the correspondence and the work of various collaborators, and makes personal surveys to check up the work and to supplement it with such specific studies as may be necessary to secure the desired information over the entire field. He has already completed a preliminary survey of the Virgin Islands, San Domingo, and Cuba, and, in addition, has made a specific study of the citrus black fly, a dangerous insect which has not yet gained a foothold in the States, in Cuba, Jamaica, and the Canal Zone. The importance of keeping out injurious insects affecting tropical and subtropical fruits which have not yet gained entrance into the continent is well recognized. Graduate Cornell University, B. A.; also received the degree of M. A. from Leland Stanford University. For five years was assistant to the State entomologist of Indiana, devoting most of his time to the inspection of foreign and domestic nursery stock and the determination of insects and plant diseases. Prior to present appointment was entomological inspector of the Federal Horticultural Board. Two years three and one-half months.

G. F. Mozzette, Miami, Fla. Has charge of field work in the study of the life history, habits, and means of control of fruit flies and other insect enemies of mango, guava, avocado, and other subtropical fruits which are being commercially developed in southern Florida. He also cooperates with the Federal Horticultural Board and has charge of the inspection and safeguarding of plants grown in the plant-introduction garden at Miami, Fla., maintained by the Bureau of Plant Industry. This project covers an important field of special fruit development in southern Florida and is particularly important because of the location at Miami of one of the department's principal plant-introduction gardens, and because of the proximity of this region to Cuba and the Bahamas, which under existing traffic conditions renders it very subject to possible invasion by a number of serious fruit insect enemies, which are known to occur in the West Indies. Graduate Oregon Agricultural College, B. S.; did one year's postgraduate work at University of California. Prior to present appointment was assistant entomologist at the Oregon Agricultural Experiment Station for two years, and served for one year as entomological inspector in the Federal Horticultural Board. Eleven months.

Paul R. Myers, Carlisle, Pa. Is ranking assistant attached to Hessian-fly investigations east of the Alleghany Mountains. Prior to present employment was assistant in the department of agriculture of Pennsylvania four years and assistant in the United States National Museum four years. Four years.

E. J. Newcomer, Portland, Oreg. Engaged in investigations of important peach insects. Graduate Leland Stanford University, A. B., also took postgraduate work in entomology at this institution. Four years one month.

C. M. Packard, Berkeley, Cal. Has complete charge of the Hessian-fly investigations in California. Also cooperates in the grasshopper-control work carried on in that State. Graduate Massachusetts Agricultural College, B. S. Was assistant in horticulture at the college two years. Five years.

J. H. Paine, Washington, D. C. Engaged in orchard insect-survey work. This work involves making observations on important deciduous-fruit insects. In addition, Mr. Paine is an insect photographer. Graduate Leland Stanford University, B. S. Five years six months.

H. R. Painter, Charleston, Mo. Assistant in investigations of the Hessian fly, chinch bug, and billbug at the bureau's station at Charleston, Mo. Graduate, Oklahoma Agricultural and Mechanical College, B. S. Was subsequently assistant State entomologist of Oklahoma. Two months.

F. W. Poos, Charlottesville, Va. Conducts field operations in connection with the experimental control of the wheat jointworm, which has been very injurious throughout the winter-wheat belt for the past two years. Graduate University of Kansas, M. A. Was assistant to the Kansas entomological commission one year, and agent for the Florida State plant commission one year. One year.

P. A. Porter, Wallingford, Conn. Has been engaged in life-history studies of parasites attacking deciduous-fruit insects. Has accumulated considerable data in connection with the life histories of these parasites. Graduate Massachusetts Agricultural College, B. S. One year.

Dean A. Ricker, West Lafayette, Ind. Engaged as assistant in the long-term experiments in connection with the investigation of the Hessian fly and white grub, having charge of field plots and other work in

northern Indiana. Graduate Massachusetts Agricultural College, B. S. Was assistant in gypsy-moth control work one year prior to present appointment. Three years.

L. P. Rockwood, Forest Grove, Oreg. Is ranking assistant at the bureau's Forest Grove (Oreg.) laboratory. Is engaged in active field work in connection with the campaign for the increased production of red-clover seed through the suppression of the clover-seed chalcids and clover-flower midge. Graduate Massachusetts Agricultural College, B. S. Was employed one year as assistant in mosquito-control work in Massachusetts. Six years.

S. A. Rohwer, East Falls Church, Va. Has charge of the eastern field station of the branch of forest insects. The primary problems investigated by him are (a) phenological records on plants and insects in relation to the bioclimatic law, and (b) work on insect galls for the purpose of obtaining an American substitute for those galls which heretofore have been introduced and form a necessary ingredient in the manufacture of record inks, especially those used in the Treasury Department. These galls also supply necessary properties in certain useful dyes and form one source of supply of gallic and tannic acids. This work is of such a nature that it can be conducted only by one who can qualify by the training gained through experience. Attended University of Colorado, specializing in biology and allied sciences, work at nature; received special training under the direction of two very prominent American entomologists. Eight years ten months.

John V. Schaffner, Jr., Sherborn, Mass. Has been conducting experimental work in the field in the control of gypsy and brown-tail moths, and for the past three or four years has had charge of a section of the work. Six years seven months.

E. R. Selkregg, Washington, D. C. Has charge of life-history investigations of the oriental peach moth at Arlington Farm, Va., which involves careful life-history studies of the insect as a basis for determining means of control. This insect has recently been discovered and is proving to be a serious pest of peach, pear, apple, quince, and other fruits. Graduate Massachusetts Agricultural College, B. S. Four years.

Melvin B. Shepherd, Melrose Highlands, Mass. Has been employed for past five years in colonizing imported parasites of the gypsy and brown-tail moth and making collections from colonies liberated in order to determine the success of the plantings. Has a thorough knowledge of the location of different parasite colonies throughout the infested area in New England, also the methods used in handling parasitic material at the laboratory. Six years seven months.

E. H. Siegler, Wallingford, Conn. Has been continuously engaged in investigations of deciduous-fruit insects and their control, and is a specialist in apple-insect investigations, being in charge of this line of work for the bureau in different localities. Is at the present time in charge of the bureau's laboratory at Wallingford, Conn., devoted to the investigation of important apple insects. This work includes a large amount of careful life-history studies of orchard insect pests, and especially the carrying out in the field of large-scale spraying, dusting, and other experiments in insect control. Graduate Pennsylvania State College, B. S. Seven years one month.

Arnold P. Sturtevant, Washington, D. C. Engaged in a study of the causes and treatment of bee diseases. Also examines samples sent in by beekeepers from all parts of the United States for determination. The Bureau of Entomology has full knowledge of work done by experiment stations and other agencies, and no other bacteriologist could be secured to do this work. Graduate Clark University; did post-graduate work at Massachusetts Institute of Technology. Prior to present appointment was assistant to professor of bacteriology Massachusetts Institute of Technology; was also specialist in bee diseases, experiment station, Amherst, Mass. One year six months.

Chester F. Turner, West Lafayette, Ind. Has charge of Hessian-fly investigations at Nashville, Ill. Graduate Kansas State Agricultural College, B. S. Subsequently was nursery inspector in Kansas and assistant in gypsy-moth control in Massachusetts one year. Four years seven months.

R. H. Van Zwaluwenburg, Hagerstown, Md. Engaged in a campaign for the control or extermination of the European cornstalk borer, a dangerous European pest which has recently become established in eastern Massachusetts. Graduate Massachusetts Agricultural College, B. S., majoring in entomology. Prior to present appointment was entomologist at the insular experiment station, Mayaguez, Porto Rico. Eight months.

W. B. Wood, Washington, D. C. Has charge of experimental work being carried out on the Arlington farm in the control of the oriental peach moth, which involves large-scale spraying experiments in the application of insecticides to determine the best means of controlling this insect. Mr. Wood has had a wide range of experience in life-history studies and control operations in connection with deciduous-fruit insect investigations. Graduate Kansas Agricultural College, B. S. Seven years two months.

T. Scott Wilson, San Antonio, Tex. Is the sole assistant attached to the entomological field laboratory located at San Antonio, Tex. Is conducting an insect survey of Texas in cooperation with the State and bureau extension entomologists. Is also cooperating with these specialists in the insect-control work. Graduate University of Kansas, A. B. Subsequently was teacher of zoology and biology one year. Five years three months.

H. K. Plank, Seaview, Wash. Has charge of the bureau's laboratory at Seaview, Wash., where investigations of cranberry insects are being carried out in cooperation with the Washington Agricultural Experiment Station. Graduate Pennsylvania State College of Agriculture, B. S. Four years two months.

BUREAU OF BIOLOGICAL SURVEY.

BIOLOGICAL ASSISTANTS IN RODENT-CONTROL WORK.

Prairie dogs, ground squirrels, jack rabbits, pocket gophers, and other rodent pests occupy hundreds of millions of acres of public domain and private lands in the West. A considerable part of 17 States is occupied by these pests, which exist in such enormous numbers that they are highly destructive both to crops and to grazing. The losses in food crops alone are estimated from \$8,000,000 to \$9,000,000 annually in North Dakota, \$20,000,000 in Montana, and approximately \$30,000,000 in California. The losses in the other States involved are in proportion to the cultivated areas.

Through the investigations of its field experts the Bureau of Biological Survey has developed methods of destroying these pests on a large scale and at small cost, even with the present high prices of material. The methods employed by this bureau in rodent-control work

have been developed within the past three or four years, and, as a result, the only available specialists who have a sufficient knowledge of the work to handle it effectively are the extremely limited number of men who have been employed in it.

Each of these assistants is in charge of rodent campaigns in the destruction of these pests over vast areas. Through cooperation with the State extension services thousands of farmers are working under the direction of these experts in exterminating rodent pests. In North Dakota during the present season 33,000 farmers are working in the campaign organized by one of these men, and it is expected that more than 13,000,000 acres of land will be largely freed from ground squirrels and that a great increase in the grain output of that State will result. The bureau's expert, in combination with the State extension service, is planning a still greater campaign next year. In Montana about 20,000 farmers are engaged in a rodent campaign under the direction of one of these men. In New Mexico the State council of defense has allotted money to be expended under the direction of one of the bureau's assistants in a campaign against noxious animals in order to increase the food output of that State the present year, and the result has been so gratifying that the chairman of the council has requested that this cooperation be repeated the coming year.

Everywhere in the States where the bureau is working the communities are putting up many thousands of dollars and the farmers are cooperating in constantly growing numbers, owing to the obvious saving of food resulting from the wholesale destruction of rodents which maintain themselves throughout the season by feeding upon planted crops. There is a demand for more than double the number of experts that are now available for this work. To take away the few competent men engaged on these projects would leave the bureau without the necessary force to carry on the work and would deprive it of the necessary experts to train the additional men needed, as well as to continue the important campaigns now in progress.

The State directors of extension work, farmers, and others in the States where this work is being conducted agree in the opinion that it is directly adding many millions of dollars to the food output of the country each season. The effects of the work are so apparent that the public demand for assistance and assignment of experts to guide local campaigns far exceeds the bureau's ability to comply.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

Winney E. Crouch, Boise, Idaho. Graduate North Dakota College of Agriculture. One year eleven months.

Gilbert F. Bateman, Tucumcari, N. Mex. Attended the Colorado Agricultural College two years, specializing in biology. One year four months.

Ray T. Jackson, Laramie, Wyo. Graduate Colorado College of Agriculture. Five years eight months.

Donald A. Gilchrist, Flagstaff, Ariz. Graduate Colorado College of Agriculture. Three years seven months.

Urban S. Ebner, Fargo, N. Dak. Graduate North Dakota College of Agriculture. Two years eleven months.

Charles F. Bliss, Albuquerque, N. Mex. Graduate Pennsylvania State College, B. S., specializing in forestry; also took special training in advanced physiology and ecology at the University of Minnesota, obtaining a degree of M. S. in forestry. Seven years eleven months.

Benjamin B. Richards, Provo, Utah. Graduate Kansas Agricultural College. Two years three months.

James Silver, Jr., Denver, Colo. Graduate Colorado College of Agriculture. Five years.

Cedric R. Landon, predatory-animal inspector, San Angelo, Tex. Has had charge of the bureau's predatory-animal campaigns in Texas three years. Has developed an efficient force of hunters and managed the work successfully. He has secured the hearty support of the ranchmen and live-stock associations, which are supplying funds for the employment of additional hunters under his supervision. His experience with conditions on the Texas ranges and his knowledge of the available competent hunters, as well as his acquaintanceship among the live-stock growers and their confidence in him, are assets of great value in connection with the work in that region. It is difficult to find experienced men for the predatory-animal work even under normal conditions. Three years seven months.

BUREAU OF CROP ESTIMATES.

FIELD AGENTS.

Each field agent of the Bureau of Crop Estimates is required to keep so thoroughly in touch with the agricultural conditions in his territory that he can not only make accurate reports to the department for publication month by month, but that he may be considered the highest authority on such matters in his State. These objects are accomplished by (1) travel and close study to learn at first hand acreages planted, relative changes in condition of crops, and probable yield; (2) personal interviews with the best-informed men in each section; (3) extensive circularization of the territory, for which purpose large lists of individuals trained in reporting crop conditions are maintained; and (4) the maintenance of detailed records acquired by crop-reporting methods in previous years, as well as records from all other sources possible, such as assessors' returns, census reports, etc., so compiled as to facilitate comparison and study. These duties are incidental to the issuance of the regular crop report each month. In addition, special reports are frequently required to be made, which usually involve special trips to restricted areas, preparation of mimeographed inquiries, tabulation of returns, and report to Washington.

Deferred classification has been requested by the department and allowed by draft boards in the case of five field agents of the Bureau of Crop Estimates. Each is an experienced man, whom it would be difficult to replace, and whose services in connection with the present and prospective food supply are of great importance during the continuance of the war. Unquestionably the retention of these men in their present positions is necessary to the adequate and effective operation of the crop-reporting service, and none of them could be replaced without substantial material loss. Furthermore, each represents an investment by the Government of a large sum of money in preliminary training, getting acquainted with his territory, and becoming familiar with methods and sources of estimating crops and live stock, which can be acquired only in the service of the Bureau of Crop Estimates. If any of these men should leave the bureau, several months would be lost in obtaining a successor through the Civil Service Commission, and a year or more would be required to train his successor to the point where his judgment would be sufficiently developed to be of value.

Name, home address, character of work (see general statement), and length of service.

Aaron E. Anderson, Lincoln, Nebr. Graduate Kansas State Agricultural College, degree of B. S. in agriculture; first 18 years of life spent on farm. Four years.

Hal F. Bryant, Charleston, W. Va. Graduate University of Kentucky, B. S. in agriculture. Three years four months.

Guy Fitzpatrick, Missoula, Mont. Graduate Minnesota College of Agriculture, B. S. Five years eight months.

Harry O. Herbrandson, Watertown, S. Dak. Graduate North Dakota Agricultural College, B. S. in agriculture. Four years.

Julius H. Jacobson, Blackfoot, Idaho. Graduate Utah Agricultural College, B. S. Prior to present appointment was engaged one year in practical farming; three and one-half years, agriculture, Department of the Interior; and four years assistant in dry-land agriculture, Bureau of Plant Industry, Department of Agriculture. Five years four months.

FRUIT AND TRUCK CROP SPECIALISTS.

Crop specialists, as a rule, maintain no lists of reporters. Most of their information is gained by travel and by interviewing large numbers of individuals. The information thus gathered is used to supplement and as a check against similar information gathered from other sources by the bureau or its field agents. The territory of crop specialists is more extended than that of field agents. The productive region for fruit and truck crops is divided according to the number of assistant crop specialists available. The truck crop specialists are assigned certain territories extending across the country from South to North, and their travel is regulated by the progress of the trucking season from South to North. Their reports are submitted weekly by telegraph to the chief truck crop specialist at Washington and are considered in connection with information obtained from other sources, resulting in the issuance by the bureau of weekly and semi-monthly truck crop reports. The fruit crop specialists devote special attention to surveys of apple and peach growing sections. Their travel is continuous, and the results of their observations, together with the returns from printed inquiries among orchardists, are embodied in monthly reports.

Deferred classification has been requested by the department and allowed by draft boards in the case of four crop specialists. Each is well qualified for the work to which he is assigned, before receiving appointment having passed a rigid civil-service examination requiring a basic knowledge of scientific agriculture, statistical methods, etc. The withdrawal of any one of these men would result in substantial, material loss and detriment to the adequate and effective operation of the crop-reporting service. Furthermore, like the field agents, these crop specialists represent an investment by the Government of a large sum of money in preliminary training, getting acquainted with their territory, and becoming familiar with methods and sources of estimating fruit and truck crops, which can be learned only in the service of the Bureau of Crop Estimates.

Name, home address, character of work (see general statement), and length of service.

Charles G. Carpenter, New Orleans, La. Assistant truck crop specialist, whose territory extends throughout the United States. One year two months.

J. Clifford Folger. Fruit crop specialist, whose territory extends throughout the United States. Graduate Washington State College of Agriculture, bachelor of science in horticulture; candidate for doctor of physics in agricultural economics. Two years.

R. G. Risser, San Francisco, Cal. Assistant truck crop specialist, whose territory extends throughout the United States west of the Mississippi. One year six months.

Samuel M. Thomson, Washington, D. C. Assistant fruit crop specialist, traveling extensively throughout the United States. Graduate Cornell University; bachelor of science. Prior to present appointment had several years' service and wide experience with fruit crops in the Office of Farm Management of this department. Four years three months.

STATES' RELATIONS SERVICE.

COOPERATIVE AGRICULTURAL EXTENSION WORK.

The cooperative extension act of May 8, 1914, provided for a nationwide system of instruction for the farming population in agriculture and home economics outside of the schools and colleges. It established a close copartnership between the Federal and State agencies in the organization and administration of the extension service. When a state of war was declared it was realized that the cooperative extension system, with its combination of Federal and State administrative officers and specialists, county agents, home demonstration agents, farm bureaus, and other local organizations furnished a ready and effective means for the nation-wide dissemination of the needed facts as well as for practical demonstrations of the best methods of increasing agricultural production and securing the most economical utilization of the products of the farm. Recognizing the importance of this great system, Congress appropriated \$4,348,460 for its immediate development. This involved the rapid extension of the work to all sections of the Union and necessitated the employment of a large number of additional county agents, home demonstration agents, club agents, and the like, at the very time when the department was losing many of its most effective and trained employees.

The cooperative extension service, as now developed, consists of a well-organized field force reaching into most of the agricultural counties in the United States, through which the Department of Agriculture, and other Federal agencies acting in cooperation with it, as well as State and county agencies, are able to reach the farmers in a very direct way and to assist them in the difficult problems presented during the continuance of the war. In each State there is a director of extension, with administrative assistants and specialists. There is also a county agricultural agent in each of 2,450 counties, and a county home demonstration agent in each of 1,800 counties.

The county agents work with and through various organizations, such as farmers' associations, farm bureaus, county councils of agriculture, county councils of defense, and the like. In a large part of the United States the organization extends to every community in each county, with voluntary workers in each community organization acting in consonance with the National and State forces in the matter of food production and conservation. Through this organized force the needs of the Nation in food production are made known to the farmers, and they are assisted in planning their work so as to best meet these needs. In this way the farmers are aided in locating supplies of seed, in securing fertilizer and farm implements, in the prevention of outbreak of animal diseases, in the control of plant diseases and insect pests, in the utilization of better farm implements to save labor, and community coopera-

tion to supply labor, and in securing the assistance of city and town people in supplying the labor needs of farmers. They are also assisted in dealing with problems of marketing and storage, prevention of waste, conservation, saving of fuel, etc. Assistance is rendered to farm women in the problems of gardening, dairying, poultry raising, canning, preserving, drying, and otherwise conserving food for future use, as well as the utilization of food and the substitution of foods which are plentiful for those which are scarce.

These agents also render valuable assistance in liberty loan, Red Cross, war savings, and other campaigns and aid local draft boards in considering of furloughs from the Army for agricultural purposes. They supply the Department of Agriculture with accurate information regarding production, outbreaks of disease among animals and plants, outbreaks of insect pests, and difficulties in marketing, and keep the Government posted generally regarding all matters affecting agriculture within the counties.

STATE AGENTS AND COUNTY AGENT LEADERS AND ASSISTANTS.

State agents in charge of county-agent work are usually selected from men who have been successful county agents. Their duties are to supervise the work of their assistants, and through them of the agents, to carry the food-production program of the Federal department and the State agricultural colleges to the farmers of the State, and of each county through the organized efforts of the district and county agents, and to assist them in adapting it to the agricultural possibilities of the county. They maintain relationships with the specialists at the agricultural college and in the Federal Department of Agriculture and adapt their campaigns to the work of the county agents. They receive, compile, and summarize the reports of the agents and report upon the work to the extension director and to the department.

Assistant State agents or district agents and assistant county-agent leaders have a prescribed territory consisting of a number of counties in which county agents are located. Under the administrative direction of the director of extension and the State agents these men travel from county to county and supervise the work of the county agents. They perfect the necessary financial arrangements before a county agent is employed, check up on the agent's method of conducting his work, give him instructions, and guide him on questions of policy, and assist him in all problems of organization. They also aid the county agent in carrying to the people any agricultural plan or campaign outlined by the department and the college. They perfect the plans for the work of specialists coming from the colleges and the department to assist county agents and, in short, deal with all the problems and all the types of work of the county agent in an administrative way.

As a rule, a district agent supervises the demonstration work of from 12 to 25 counties.

Deferred classification has been requested by the department and allowed by the draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

Thomas L. Asbury, Madison, Ga. Graduate Georgia State College of Agriculture, B. S. Was reared on farm and has had practical experience in dairying and general farm work. Two years eleven and one-half months.

Spencer B. Cleland, St. Paul, Minn. Graduate Minnesota College of Agriculture. Since graduation has done farm-survey work in Minnesota. Three years ten months.

James M. Gray, Asheville, N. C. Graduate Agricultural and Mechanical College of North Carolina, B. S.; took postgraduate studies. Was reared on a farm. While in college spent two summers on farm and two summers in college dairy. Managed farm one year. Three years six months.

Dewitt T. Hardin, Chattanooga, Tenn. Graduate Clemson College; also received M. S. A. degree in University of Tennessee. Reared on a farm. Assisted in short-course work; official tester for the Tennessee Experiment Station two years. Four years three months.

Albert L. Love, Nashville, Tenn. Graduate Mississippi Agricultural and Mechanical College, B. S.; attended summer schools Mississippi Agricultural College and University of Chicago; took postgraduate course Mississippi Agricultural College; one year, George Washington University. Was reared on a farm; has worked and managed several farms in Mississippi and is familiar with general-crop production. Taught school four years. Three years five months.

Paul W. Monohon, Orono, Me. Graduate University of Maine, taking agricultural course. Was assistant to dean of College of Agriculture, Orono, Me., one year; also assistant to director of extension. One year ten months.

William E. Morris, Olivia, Minn. Graduate Wisconsin College of Agriculture. Was assistant in feed and fertilizer inspection and dairy tests, Wisconsin Experiment Station, two terms; also had charge of animal husbandry and dairy department of the La Crosse County School of Agriculture. Four years ten months.

George E. Piper, Manhattan, Kans. Graduate Michigan Agricultural College, B. S. Prior to present appointment edited agricultural supplement for Associated Publishers Syndicate; was foreman on a 6,000-acre live-stock and grain ranch in Montana. Three years three months.

Harvey C. Ray, Little Rock, Ark. Spent four years at the State School, Missouri, Lincoln Institute; two years postgraduate course at Tuskegee Institute, Ala.; specialized in general agriculture and farming. For three years was superintendent of agricultural department, Langston University, Langston, Okla. Was raised on a farm, and has a very practical knowledge of all kinds of farm operations. Three years six months.

Carl M. Rose, Lexington, Miss. Graduate Mississippi Agricultural and Mechanical College; took postgraduate work in agriculture at Cornell University. Prior to present appointment was for two years manager of a large plantation in Mississippi; afterwards served as county agent. Nine months.

Phil Sheldon, Lincoln, Nebr. Attended University of Nebraska College of Agriculture. Ten months.

Lewis A. Toan, Rochester, N. Y. Graduate Cornell University, B. S. A. Was farm manager four years after leaving college. Taught agriculture in high school one year. Was manager Monroe County Farm Bureau four years. Eleven months.

Hu S. Vandervort, Morgantown, W. Va. Graduate West Virginia University, B. S. in agriculture; postgraduate work, same institution. Was reared on a farm. Prior to present appointment served as county agent three years. Two years eleven months.

Wylie R. Ward, Omaha, Nebr. Attended Wesleyan University one year; graduate College of Agriculture, University of Nebraska, B. S. Was instructor in agronomy at University of Nebraska two terms. Ten months.

Lawrence A. Wickland, Omaha, Nebr. Graduate Nebraska University, B. S., in agriculture; taught school. Seven months.

N. C. Wickland, Omaha, Nebr. Graduate Nebraska University, B. S. Taught school four years before and one year after graduating; also engaged in farming. Ten months.

Collett E. Woolman, Baton Rouge, La. Graduate University of Illinois, B. S. in agriculture. Spent six months abroad studying agriculture in England, France, Germany, and Holland. Farm reared, with extensive practical farm experience. Four years nine and one-half months.

COUNTY AGENTS AND ASSISTANT AGENTS.

A county agent is a joint employee of the United States Department of Agriculture, the State agricultural college, and the county government, or some organization in the county. Generally he is a graduate in agriculture of a State agricultural college, has had practical experience in farming, and possesses personal qualifications for leadership in agriculture.

His duties are to secure the cooperation of farmers in conducting on their farms, with their own laborers, tools, and equipment, and at their own expense, cooperative demonstrations to illustrate better farm practices in the raising of crops, feeding of live stock, and, in many cases, in farm management and marketing. He disseminates information generally to farmers—either to individuals upon request or through organized communities, meetings, etc. As a general rule he has the cooperation of some county or community organization of farming people, whereby he is enabled to reach the largest possible number of persons. These organizations also give the farmers an opportunity to take an active part in planning the program for the county-agent work so as to meet the real needs of agriculture in the respective communities. Where there are existing organizations of farmers he works through them, if possible. He brings to the farmers of the county on their own farms the agricultural information of the Department of Agriculture and the State agricultural colleges. His entire efforts are directed toward improving agricultural conditions, the introduction of the best methods, and the solution of difficult problems confronting the farmers.

An important part of his duties relates to the introduction and development of the live-stock industry, the standardization of breeds, and the organization of farmers for the control of live-stock diseases, such as hog cholera and blackleg. In this work he cooperates with the live-stock disease-control agencies of the State and Nation. He teaches farmers how to prevent damage from insects and organizes them to control insect pests and plant diseases whenever outbreaks occur. He cooperates in this work with the entomological and pathological specialists and those in charge of insect and plant-disease control.

During the war he has a large number of other duties. The agricultural campaigns or programs are carried out locally under his leadership. It is his duty to advise farmers regarding the needs of the Nation with reference to production, marketing, conservation, and the like and to suggest ways of meeting them.

This work is done through some county organization, whether it be farmers' associations, a county farm bureau, a county council of agriculture, or the county council of defense. He helps locate supplies of seed where needed; advises farmers, with the assistance of specialists, on problems of marketing and on the purchase of supplies, such as fertilizers, tools, equipment, etc.; deals with the farm-labor situation, under the direction of the farm-help specialists of the Department of Agriculture; and generally takes charge of all extension work in the county regarding food production, prevention of waste in production, storage, and marketing.

The farm-labor situation has presented many difficulties since the United States entered the war. The county agents have rendered valuable assistance in dealing with the problem, especially in determining the farm-labor needs of the county, registering available laborers, and supplying farmers with labor at the time needed. They have also emphasized the necessity of cooperation among farmers in the use of labor, machinery, and equipment.

The county agents have actively cooperated in the Red Cross, liberty loan, war saving, and other special war campaigns. Because of the wide experience that these men have already had and the contacts that they have established in the counties it would seriously interfere with the food-production and conservation campaigns if their services were to be discontinued. The work performed by them requires not only practical experience in farming but technical knowledge as well.

Assistant county agents have training and experience similar to that of the county agents. They are located in populous agricultural counties, working as assistants to and under the direction of the county agents.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

Andrew H. Barnett, Camden, Ala. Graduate Alabama Polytechnic Institute, B. S. A. Has practical knowledge of farm work and the care and breeding of live stock. Two years four months.

William D. Barton, Prattville, Ala. Graduate Alabama Polytechnic Institute, B. S. A.; also took a summer course in chemistry. Had practical farm experience; for two years after leaving college managed farm of an agricultural school. Three years seven months.

Frank R. Curtis, Demopolis, Ala. Graduate Alabama Polytechnic Institute. After graduation worked on his own farm for a short time; was then assistant manager of a plantation of 5,000 acres. Four years seven months.

Lloyd J. Hawley, Troy, Ala. Graduate Alabama Polytechnic Institute. Had practical farm experience. Three years nine months.

Robert C. Lett, Tuscaloosa, Ala., Box 606. Attended Alabama Polytechnic Institute. Has had practical farm experience. Four years five months.

James A. McLeod, Union Springs, Ala. Graduate Alabama Polytechnic Institute, B. S. in animal industry. Had practical experience in farming before entering college. Was assistant in animal industry at Alabama Polytechnic Institute 15 months after graduation. Three years.

Lewis C. Pace, Eutaw, Ala. Graduate Agricultural College of the University of Tennessee, B. S. Had practical farm experience. Taught agriculture in an agricultural high school one year after leaving college. Nine months.

George H. Stewart, Wetmore, Ala. Graduate Alabama Polytechnic Institute; took postgraduate work at University of Wisconsin. Had practical farm experience. Ten months.

Joseph P. Wilson, Andalusia, Ala. Graduate Alabama Agricultural College, B. S. Had practical farm experience. Taught school four years after leaving college. Two years three months.

Emmitt S. Barrentine, Mammoth Spring, Ark. Graduate Mississippi Agricultural and Mechanical College, B. S.; took postgraduate work. Has had practical farm experience. Had three years' experience in teaching rural schools. Nine months.

Stanley D. Carpenter, Harrison, Ark. Graduate Mississippi Agricultural College, B. S. Has had practical farm experience. Taught in agricultural high school two years. Was employed one year with the Florida State plant board in citrus-canker eradication work. Nine months.

James E. Critz, Marion, Ark. Graduate Mississippi Agricultural College, B. S. Had practical experience in all kinds of farm work. Was teacher in agricultural high school a year and a half. One year six months.

George R. Ely, Little Rock, Ark., old courthouse. Graduate State Agricultural College of Pennsylvania, B. S. Taught animal husbandry in agricultural school three years. Was for 16 months seed and fertilizer inspector for the commissioner of agriculture in Arkansas. Has had practical farm experience. Four and one-half months.

Joel Lambert, Pine Bluff, Ark. Has practical knowledge of all farm operations. Six years seven months.

Herbert A. McPherson, McGehee, Ark. Graduate Mississippi Agricultural and Mechanical College, B. S. Has had actual farm experience. Was for two years plantation manager. One year two months.

Collin D. Gunn, Starke, Fla. Graduate Florida Agricultural College, B. S. Has had practical farm experience. One year eight months.

Tom B. Brandon, Claxton, Ga. Graduate Clemson Agricultural College, B. S. For two years before entering college had full charge of his father's farm. Eight months.

Walter S. Brown, Hlawassee, Ga. Graduate Georgia State College of Agriculture, specializing in animal husbandry. Has had 12 years' experience in practical farming and stock raising. Has taught in rural schools. Thirteen and one-half months.

Esten G. Cromartie, Hinesville, Ga. Spent two years at Eleventh District Agricultural School, Douglas, Ga., two years at Gordon Institute, Barnesville, Ga., and one year at University of Georgia, receiving B. S. degree in agriculture at the latter institution. Worked in the office of the Georgia State board of entomology and in the field in boll-weevil work, and assisted in cotton experiments over the State. Taught in agricultural school. Eight months.

Hendrick L. Cromartie, Albany, Ga. Attended Georgia State College of Agriculture. Spent 10 years on his father's farm; also had charge of a 400-acre farm before engaging in demonstration work. Four years four months.

Wade P. Huie, College Park, Ga. Graduate Georgia Agricultural College, A. B. and B. Ph. Has had extensive practical farm experience. Nine months.

William H. Sorrells, Leesburg, Ga. Graduate Georgia State College of Agriculture. Had one year's experience as principal of rural high school prior to present appointment. Eight months.

Russell O. Bate, Cynthia, Ky. Attended University of Tennessee for short courses in agriculture. Has had practical experience in farming. One year eleven months.

Armiel Carman, Clinton, Ky. Graduate University of Kentucky, B. S. in agriculture. Had practical farm experience. One year eleven and one-half months.

Robert S. Clough, Benton, Ky. Graduate University of Missouri, B. S. in agriculture. Has had practical farm experience. Was school-teacher and superintendent of schools. One year nine months.

Angus N. Gordon, Henderson, Ky., care of chamber of commerce, Graduate University of Kentucky, B. S. in agriculture. Had practical farm experience. Was instructor in agriculture at University of Kentucky for a short time. Two years one month.

William J. Harris, Bardwell, Ky. Graduate University of Kentucky, B. S. in agriculture. For a year was manager of a 15,000-acre plantation in South Carolina. Was instructor of animal husbandry in the College of Agriculture, University of Kentucky, and agricultural editor for the Lexington Herald. Eight months.

Howard H. Harrison, Stanton, Ky. Received course in agriculture at Berea College. Has had practical farm experience. Taught agriculture at Onelda Institute, Onelda, Ky., one year. While a student at Berea College assisted in county-agent work. One year two and one-half months.

Charles L. Hill, Calhoun, Ky. Graduate Oregon Agricultural College, B. S. Had experience working in large orchards in Oregon during summer vacations. For three years after graduation engaged in farming. Nine months.

Samuel J. Lowry, Jr., La Grange, Ky. Attended Berea College; graduate University of Kentucky, B. S. in agriculture. After graduation managed 500-acre farm for two years and managed a seed farm for several months. One year eleven and one-half months.

John L. Miller, Campbellsville, Ky. Attended Washington and Lee University one year and Peabody College four terms. Spent summer vacations on the farm while attending college. Taught school one year. Six months.

Gordon B. Nance, Smithland, Ky. Graduate University of Kentucky, B. S. in agriculture. Familiar with all farming operations. Supervised city school gardens one year. Seven months.

Warner W. Owsley, Louisville, Ky., Board of Trade Building. Graduate University of Kentucky, B. S. in agriculture. Has had practical farm experience. For one season was tester for county cow-testing association. Seven months.

Wayland Rhoades, Independence, Ky. Graduate University of Kentucky, B. S. in agriculture; was student assistant in dairying. Spent some of his vacations on his father's farm, two summers on the Kentucky Agricultural Experiment Station farm, and one summer managing his father's farm of 275 acres. Three years three months.

Fred H. Spickard, Dixon, Ky. Student in agriculture University of Kentucky. Has had 10 years' experience in farming and teaching. Seven months.

Charles L. Taylor, Bardstown, Ky. Attended Western Kentucky State Normal School, taking the work offered in agriculture and assisting in the work of the school farm; also student in agriculture one year at University of Wisconsin. Had practical farm experience. Four years five and one-half months.

John T. Taylor, Louisville, Ky., care Board of Trade, Graduate University of Kentucky, B. S. in agriculture. Has had practical farm experience. Three years seven months.

Berlie Winton, Hawesville, Ky. Graduate in agriculture Berea College. Has had practical farming experience and has taught school. Seven months.

Felix Bachemin, Jr., Covington, La. Graduate College of Agriculture, Louisiana State University. Has had experience as a teacher in rural high schools. As county agent, devotes a large part of his time to boys' club work. Eleven and one-half months.

Claud A. Brewer, Oberlin, La. Graduate Mississippi Agricultural and Mechanical College; four months' postgraduate work. Was for a time instructor in agricultural schools. Had practical farm experience. Two years six months.

Louis A. Broussard, box 742, Lake Charles, La. Graduate in agriculture Louisiana State University. After leaving school managed a plantation in southern Louisiana. Three and one-half months.

Thomas H. Casanova, Abbeville, La. Graduate Mississippi Agricultural and Mechanical College; also took postgraduate work. Had practical farm experience. Two years nine months.

Corliss C. Chapman, De Ridder, La. Graduate Louisiana State Normal; took special course in rural-school work, with agriculture. Taught agriculture five years, including three years as principal of an agricultural school. While in this position was active in boys' and girls' club work in cooperation with extension workers. Three years nine months.

Harry J. Chatterton, Homer, La. Graduate Alabama Polytechnic Institute. For several years engaged in agricultural high-school work in Louisiana. Managed father's farm two years. Conducted beef-feeding experiments for the Bureau of Animal Industry, United States Department of Agriculture, and the Alabama Experiment Station two years prior to present appointment. Ten months.

William M. Crumpton, Ruston, La. Graduate Mississippi Agricultural and Mechanical College. Taught agriculture one year after graduation. Has excellent farm experience. Five months.

Adolph Bernard Curet, New Roads, La. Graduate Mississippi Agricultural and Mechanical College. Is an experienced, practical farmer. One year seven and one-half months.

Sidney J. Durand, Ville Platte, La. Graduate State Normal School and took agricultural short course at Louisiana State University. Taught three years in public school and five and one-half years in high school. Had practical farm experience. Eight months.

William A. Givens, Ruston, La. Graduate College of Agriculture of Louisiana State University. Has had practical farm experience. One year three and one-half months.

Thomas J. Griffin, Houma, La. Graduate Louisiana State Normal School. Had practical farm experience. Was principal and agricultural teacher of an agricultural school. Nine months.

Bush M. Jackson, Monroe, La. Graduate Clemson Agricultural College, degree in agriculture. Has had extensive practical farm experience. Two years.

Lou H. La Rue, Jennings, La. Graduate in agriculture Missouri State University. Taught agriculture one and one-half years, during which period much of his time was devoted to boys' and girls' club work in that section. Familiar with practical farm work. Nine months.

Lewis H. Martin, New Orleans, La. Graduate Louisiana State University, also graduate New York State College of Agriculture. Has had practical farm experience. Was manager of a large ranch in southern Louisiana two years. Three years ten months.

Alfred A. Mendoza, Opelousas, La. Graduate in agriculture Louisiana State Normal. Was principal of rural schools, where he conducted club work and school gardens. Experienced in practical farm work. Four months.

Beraud L. Mestayer, Garyville, La. Took teachers' course at Louisiana State Normal, specializing in agriculture. Later employed as agricultural teacher in the various high schools, and while so employed did considerable work among farmers in his community along demonstration lines. Two years.

Thomas H. Milliken, Bastrop, La. Graduate College of Agriculture, Louisiana State University. Has had extensive practical farm experience. Ten months.

Joseph O. Montegut, Gonzales, La. Graduate Louisiana State Normal; attended three summer schools in agriculture at Louisiana State University. Has had extensive farm experience. One year two months.

Thomas W. Patten, Arcadia, La. Graduate Mississippi Agricultural and Mechanical College. Taught agricultural subjects and sciences in county agricultural high school. Had extensive farm experience. Ten months.

Paul D. O. Perkins, Lake Charles, La. Has had large and varied practical farm experience. Was superintendent of the Angleton substation, Texas Agricultural Experiment Station, prior to present appointment. Four years eleven months.

Clarence P. Scurlock, Mansfield, La. Received technical training in agriculture at Iowa State College. Taught for four years in rural schools. Four months.

Emmett S. Shumate, Jonesboro, La. Received technical training at Louisiana Industrial Institute and Louisiana State University. Has had practical farm experience. Six months.

Robert L. Slonn, Colfax, La. Graduate, agricultural course, North Carolina Agricultural and Mechanical College; took postgraduate work in the same institution. Has had extensive practical farming experience. Taught in agricultural high school. One year one month.

Fenwick A. Swann, Marksville, La. Graduate College of Agriculture, Louisiana State University. Has had extensive practical farm experience. Three years ten and one-half months.

Everett L. Talbot, St. Martinsville, La. Graduate Louisiana State University. Was high school principal four years. Eight months.

George C. Vidrine, Houma, La. Graduate Southwestern Louisiana Industrial Institute. Has had several years' practical farming experience. One year.

Francis H. Whitaker, Winnsboro, La. Graduate Mississippi Agricultural and Mechanical College. Taught agriculture in high school two years. Had practical experience in farming. Ten months.

Erwin O. Anderson, Denton, Md. Graduate Michigan Agricultural College, B. S.; also received M. S. in agriculture from University of Wisconsin. Has had practical farm experience. Was assistant professor of farm management at Pennsylvania State College. Eleven months.

Eston F. Fox, College Park, Md. Graduate Juniata College, Huntingdon, Pa., A. B.; also took advanced work in agriculture, Maryland State College. Taught in rural school one year and was instructor in high school two years. Devotes practically all his time to boys' club work. Seven and one-half months.

Pinckney A. Hauver, Frederick, Md. Graduate Maryland State College, B. S. in agriculture. Has had practical farm experience. Prior

to present appointment was teacher of agriculture in high schools; was also county club agent one summer. One year four and one-half months.

Oliver C. Jones, Centerville, Md. Graduate Pennsylvania State College, B. S. in agriculture. Has been engaged in farming all his life. One year six months.

Clarence Z. Keller, Princess Anne, Md. Graduate Pennsylvania State College, B. S. in agriculture. Spent his summer vacations in practical farm work, the last summer having entire charge of a 200-acre farm. Prior to present appointment was instructor in agriculture for two years in high school, during which time he organized boys' clubs and community and county fairs. One year one month.

Louis H. Martin, Princess Anne, Md. Graduate Hampton Institute. Engaged four years in practical farm work. One year three and one-half months.

Albert G. Middleton, Oakland, Md. Graduate Pennsylvania State College, B. S. in agriculture. Spent summer vacations on farms. After graduation managed two farms. Taught agriculture one year in high school. One year three and one-half months.

Riley G. Arnold, Sardis, Miss. Graduate Alabama Polytechnic Institute, B. S. A. After graduation taught agriculture for three years. Three years.

Thomas W. Bailey, Ashland, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Had experience managing farms before taking up the county-agent work. Two years six months.

Milson M. Bedenbaugh, Booneville, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. After graduation taught for three years in an agricultural high school and had charge of the high-school demonstration farm. Nine months.

John T. Belue, Lauderdale, Miss. Graduate Alabama Agricultural College, B. S. Has had practical farm experience. One year seven months.

William M. Boggan, Columbia, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Prior to present appointment was principal of an agricultural high school and managed high-school demonstration farm. Two years four and one-half months.

Oscar C. Bottoms, Philadelphia, Miss. Graduate Alabama Polytechnic Institute, specializing in animal husbandry. Has had practical experience as manager of a dairy farm. One year five and one-half months.

Ridley W. Cannon, Decatur, Miss. Graduate Burritt College (Tenn.), B. S. and H. M.; was also student at the University of Mississippi during three summers. For seven years prior to present appointment served as principal of an agricultural high school. Six and one-half months.

Harry G. Carpenter, Rolling Fork, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. At the time of his appointment as county agent was managing a 60-cow dairy farm. Four years four months.

Horace A. Carpenter, Belzoni, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Prior to present appointment taught in an agricultural high school and managed the school demonstration farm. Two years seven months.

John W. Carpenter, Jr., Greenville, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Was instructor in agricultural engineering for the extension division of the Mississippi Agricultural and Mechanical College for three years prior to present appointment. Nine and one-half months.

Thomas I. Cook, Prentiss, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S.; took postgraduate course in dairying. Two years four months.

Fred L. Craft, Noxapater, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. For a year prior to present appointment was employed by the Bureau of Plant Industry, United States Department of Agriculture, as special agent in the eradication of citrus canker in Florida. Six months.

George C. Cypress, Braxton, Miss. Had two years' special instruction in agriculture at Tuskegee Institute, Alabama; also had practical farm experience. One year nine and one-half months.

Van V. Eason, Louisville, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Has had experience as manager of a dairy farm. Two years two and one-half months.

Henry G. Grantham, Mize, Miss. Graduate Mississippi Agricultural and Mechanical College. One year four months.

Newton D. Guerry, Jr., Okolona, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Prior to present appointment was special agent of the Bureau of Entomology. Had practical farm experience. One year four months.

Arthur G. Hamilton, Calhoun City, Miss. Graduate Mississippi Agricultural and Mechanical College. Prior to present appointment was agriculturist in an agricultural high school. Has had practical farm experience. One year four months.

Harvey C. Heath, Holly Springs, Miss. Graduate Alabama Polytechnic Institute, B. S. A. Has had practical farm experience. Three years four months.

Joel D. Howerton, Natchez, Miss. Graduate Mississippi Agricultural and Mechanical College. Taught in agricultural school. One year seven months.

Cecil A. Hughes, Macon, Miss. Graduate College of Agriculture, University of Illinois. Has had practical farm experience. One year eleven and one-half months.

Frank Hurst, Forest, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Prior to present appointment taught in the agricultural high school and managed the school demonstration farm. One year one month.

Fred J. Hurst, Magnolia, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Has had practical farm experience. One year seven months.

Henry H. Leggett, Brookhaven, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S.; took postgraduate work at the Iowa Agricultural College. Has had practical farm experience; at the time of his appointment was manager of a farm. Eight months.

Wesley R. Lomnick, Gloster, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. and M. S.; attended a short course in plant pathology at the University of Florida. Was employed for one and one-half years by the Bureau of Plant Industry as plant pathological inspector in connection with citrus-canker eradication. One year seven months.

Nate S. Martin, Ripley, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Has had practical farm experience. Seven and one-half months.

Donald A. McCandliss, Gulfport, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Three years six months.

Jodie S. McKewen, Winona, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Prior to present appointment had two years' experience as teacher in agricultural high school and manager of the high-school demonstration farm. One year five and one-half months.

Charles L. McNeil, Senatobia, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Has had 10 years' practical experience in farming, two of them as manager of a 1,200-acre plantation. Seven months.

Enoch C. McReynolds, Kosciusko, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. For two years prior to present appointment was teacher in an agricultural high school and manager of the school demonstration farm. One year three months.

Maurice E. Miller, Charleston, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S.; took postgraduate work in animal husbandry at the University of Wisconsin. Has had practical farm experience. One year three months.

Will C. Mims, New Albany, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Was instructor in agriculture in an agricultural high school for one year. Has had practical farm experience. Four years two and one-half months.

William M. Minge, Lucedale, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Has had practical farm experience. Two years five and one-half months.

George T. Neill, Raymond, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Prior to present appointment was teacher in agricultural high school and manager of the high-school farm. Six months.

James W. Newton, Mayersville, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Has had experience as a practical farmer. One year one month.

James R. O'Neal, Greenwood, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Prior to present appointment managed a large plantation. One year five months.

James C. Reddoch, Quitman, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Has had practical experience in farm work. Seven and one-half months.

Charles S. Rich, Monticello, Miss. Took a four-year course in agriculture at the Mississippi Agricultural and Mechanical College. Has had excellent experience as a practical farmer. Eight months.

Robert C. Riggan, Iuka, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. For two years prior to present appointment was teacher in an agricultural high school and manager of the high-school farm. Seven months.

John N. Robbins, Fulton, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. For four years prior to present appointment was instructor in agriculture in an agricultural high school and manager of the high-school farm. Seven months.

Julian E. Sides, Agricultural College, Miss. Graduate Mississippi Agricultural and Mechanical College. Has had practical farm experience. Four years two and one-half months.

Frank M. Smith, Mendenhall, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S.; took two years' postgraduate work at this institution for four and one-half years prior to present appointment, and teacher in agriculture and manager of the demonstration farm at one of the high schools of Mississippi. One year five months.

Albert G. Spinks, Coffeeville, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Has had practical farm experience. Two years two and one-half months.

Claude G. Steele, Marks, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S.; took one year's postgraduate work in horticulture in this institution. Two years three months.

Junie M. Thomason, Batesville, Miss. Graduate Alabama Polytechnic Institute, B. S. A. Has had practical farm experience and was for one year teacher in agriculture in an agricultural high school. One year three months.

John E. Vaughn, Tylertown, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. For two years prior to present appointment was teacher in agricultural high school and manager of high-school farm. Nine months.

Samuel M. Yeates, Moorhead, Miss. Graduate Mississippi Agricultural and Mechanical College, B. S. Has had practical farm experience. Prior to present appointment was teacher in agriculture in an agricultural high school. Five years three months.

Cleveland C. Bearden, Beaufort, N. C. Graduate Mississippi Agricultural and Mechanical College, B. S.; also graduate student in plant pathology and citrus culture, University of Florida. Prior to present appointment was farm superintendent, taught agriculture in high school one year, and was agent for State Plant Food Board of Florida, working on plant diseases and insect diseases. Nine months.

John Deal, Hayesville, N. C. Took a one-year special course in agriculture at the North Carolina Agricultural and Mechanical College. Has had practical farm experience. Four and one-half months.

Willard T. Kyzer, Kinston, N. C. Graduate South Carolina Agricultural College, B. S. Has had practical farm experience. Six and one-half months.

Warren M. Laughinghouse, Columbia, N. C. Took a two-year course in agriculture at the North Carolina Agricultural and Mechanical College. Has had practical farming experience, including management of a large farm for four years. Nine months.

Robert R. McIver, Sanford, N. C. Pursued course in agriculture at the North Carolina Agricultural and Mechanical College two and one-half years. Has had practical farm experience. Two years four months.

Ewing E. Millsaps, Jr., Dobson, N. C. Graduate North Carolina Agricultural and Mechanical College, B. S. Managed farm two years before entering college. One year.

William B. Pace, Shalotte, N. C. Graduate Mississippi Agricultural and Mechanical College. Has had practical farm experience, also worked on college farm. For two years after graduation taught agriculture in high school. One year one month.

Carl C. Proffitt, Rutherfordton, N. C. Graduate of agriculture, North Carolina Agricultural and Mechanical College. Had one year's experience as teacher of agriculture in high school, in which position he had full charge and management of a 50-acre farm. One year eleven months.

Eugene R. Raney, Windsor, N. C. Graduate Mississippi Agricultural and Mechanical College; took one year's postgraduate work at same institution. Worked on farm during vacations. Was employed by Department of Agriculture one summer in silo-construction work in Mississippi. One year one month.

John H. Spears, Danbury, N. C. Graduate in agriculture, North Carolina Agricultural and Mechanical College. Managed father's farm prior to present appointment. Seven months.

Needham B. Stevens, Plymouth, N. C. Graduate North Carolina Agricultural and Mechanical College, B. S.; took postgraduate course in the same institution, specializing in animal husbandry and agronomy. Engaged in farming one year. During one summer was employed as herdsman for the North Carolina Agricultural and Mechanical College. Three years six months.

Molloy C. Vaughn, Newbern, N. C. Graduate Mississippi Agricultural and Mechanical College, B. S. Was employed as agent for the Bureau of Plant Industry and Inspector for the State Plant Board of Florida for two years prior to present appointment. Four months.

Marion R. Bryant, Purcell, Okla. Graduate Oklahoma Agricultural and Mechanical College, B. S. in agriculture. Has had practical farm experience. Nine months.

Frank H. Dillenback, 313 Federal Building, Guthrie, Okla. Graduate Kansas Agricultural College, B. S. Eleven and one-half months.

William J. Green, Stillwater, Okla. Graduate Oklahoma Agricultural and Mechanical College, B. S. in agriculture. Has had practical farm experience. Devotes entire time to boys' club work. One year ten months.

Otto J. Moyer, Stillwater, Okla. Graduate Oklahoma Agricultural and Mechanical College, B. S. in agriculture. Devotes practically his entire time to boys' club work. Nine and one-half months.

Arthur R. Smith, 11 Federal Building, Muskogee, Okla. Graduate Oklahoma Agricultural and Mechanical College, B. S. Has had practical experience as a dairy farmer. After graduation spent some time in Wisconsin and other Northern States studying live stock and other agricultural problems.

Carroll S. Adams, Beaufort, S. C. Graduate New Hampshire College of Agriculture and Mechanic Arts, B. S.; special student University of Kentucky; student assistant in horticulture, University of Kentucky. Prior to present appointment was assistant professor of horticulture, University of Kentucky; assistant horticulturist, Kentucky Experiment Station; and had two years' practical experience in commercial market gardening. Six months.

Charles W. Baker, Kingstree, S. C. Graduate Clemson Agricultural College; also received M. A. degree from Wisconsin Agricultural College. Worked on farm during vacations while attending college and had other farm experience. Two years four months.

Samuel E. Evans, Bennettsville, S. C. Graduate Clemson Agricultural College; received master's degree from University of Wisconsin. Taught agriculture in an agricultural school, managed an experimental farm in connection with agricultural high school, and had other practical farm experience. Three years eight months.

Charner S. Patrick, Anderson, S. C. Graduate Clemson Agricultural College. After graduation taught agriculture in an agricultural school. Has had practical farm experience. Three years eleven months.

James A. Riley, Chester, S. C. Graduate Clemson Agricultural College; also received M. A. degree from Agricultural College of Wisconsin. Has practical farm experience. Four years ten months.

Francis W. Risher, Walterboro, S. C. Graduate Clemson Agricultural College. Worked one year in the office of the director of experiment stations; taught agriculture in agricultural school. Has practical farm experience. Two years one month.

Z. Douglas Robertson, Estill, S. C. Studied agriculture two years at University of Virginia; also received master's degree at College of Agriculture, University of Wisconsin. After graduation taught agriculture in high schools and operated a farm. Organized a large number of local communities for better agriculture. Eight and one-half months.

William E. Stokes, box 135, Edgefield, S. C. Graduate Clemson Agricultural College. Was assistant professor of agronomy, New Hampshire Agricultural College, for two years. Has had practical farm experience. Nine and one-half months.

William G. Admond, Crossville, Tenn. Attended University of Tennessee. Has had practical farm experience. Nine and one-half months.

John H. Agnew, Alamo, Tenn. Graduate in agriculture, University of Tennessee. Has practical farm experience. Ten months.

Woodson S. Baldwin, Clarksville, Tenn. Graduate University of Tennessee, B. S. in agriculture. Has had practical farm experience. Two years nine months.

Archie V. Bears, Fayetteville, Tenn. Graduate Mississippi Agricultural and Mechanical College, B. S. Experienced in farming operations. Two and one-half years.

Frank R. Bradford, Dandridge, Tenn. Graduate Laneview College (Tenn.) and studied agriculture three years in the University of Tennessee. Has been a practical farmer all his life. Ten and one-half months.

Marvin D. Brock, Courthouse, Memphis, Tenn. Graduate University of Tennessee, B. S. in agriculture. During last year at the university was assistant in the department of agronomy. Spent all his life on the farm and managed farm for about six years. One year nine months.

John E. Dall, Blountsville, Tenn. Graduate University of Tennessee, B. S. in agriculture. Is a practical farmer. Two years.

Benton McM. Elrod, Brownsville, Tenn. Educated at Berea College; also received B. S. degree in agriculture from University of Tennessee. Is a practical farmer. Two years two months.

Charles C. Flanery, Winchester, Tenn. Studied agriculture two years at Berea College; also four years in agriculture at University of Tennessee, receiving B. S. from latter institution. Has had practical farm experience. Eleven months.

Jay C. Grimes, Madisonville, Tenn. Graduate University of Tennessee, degree in agriculture. Has been practical farmer all his life. One year ten months.

Peter C. Hambaugh, Newport, Tenn. Graduate in agriculture, University of Tennessee. Has had practical experience in farm work. One year two months.

Leonard J. Kerr, Selmer, Tenn. Studied agriculture three years at University of Tennessee. Has worked on farm since leaving school and gained a practical knowledge of farming. Eleven months.

Frank H. Hines, Rutledge, Tenn. Graduate University of Tennessee, B. S. in agriculture. For a short time was nursery inspector for the university. Has had practical farm experience. Three years ten months.

Joe W. Lovell, Centerville, Tenn. Graduate University of Tennessee, B. S. A. Is experienced in general farm work. Taught school two years. Assisted in demonstration work prior to present appointment. Ten months.

Hugh A. Powers, Lexington, Tenn. Graduate University of Tennessee. Taught agriculture in county high schools. Has been a practical farmer all his life. Two years five months.

Elzie S. Roberds, Ripley, Tenn. Graduate Mississippi Agricultural and Mechanical College. Taught at that institution after graduation, and later was director of the agricultural department of an agricultural high school. Four years three months.

James L. Robinson, Jacksboro, Tenn. Graduate in agriculture, University of Tennessee. Taught school. Has practical knowledge of general farm work. Two years ten months.

Thomas L. Robinson, Murfreesboro, Tenn. Graduate University of Tennessee, B. S. in agriculture. He worked on a stock farm until he entered university. Prior to present appointment served as official tester of cows for advanced registry two years; was dairy demonstrator on an agricultural train one summer; also taught agriculture in high schools. One year.

Walter O. Sharp, Sevierville, Tenn. Graduate University of Tennessee, B. S. in agriculture; also attended summer courses at university. Taught for a time. Practical farm experience. Eleven months.

Oakley M. Shelby, Dover, Tenn. Graduate University of Tennessee, B. S. A. Was employed as field assistant in tobacco-insects investigation three summers. Is familiar with the production of general farm crops and the raising of live stock. One year.

Everett R. B. Shockley, Nashville, Tenn. Graduate Agricultural and Industrial State Normal School, Nashville, Tenn. Worked as farm superintendent at this institution. Eight months.

Henry H. Thomas, Greenville, Tenn. Graduate East Tennessee Normal School. Taught agriculture in county high schools. Has had practical experience in the management of live stock and general farm operations. One year one month.

Felix G. Vickers, Tazewell, Tenn. Pursued agricultural course at University of Tennessee two years and attended summer sessions five years. Taught in rural schools four years. Had practical farm experience. One year two months.

Wilford F. Weir, Clinton, Tenn. Graduate in agriculture, University of Tennessee. Taught school four years. Previous to present appointment had several years' practical experience in farming. One year two months.

Andrew J. Winegar, Knoxville, Tenn. Graduate Carson-Newman College, B. A.; also graduate University of Tennessee, B. S. A. Has practical knowledge of farm work. Two years.

Elbert B. Wright, Lewisburg, Tenn. Attended College of Agriculture, University of Tennessee, three years. Has had practical farm experience. Eleven months.

Kentley G. Baker, Kerrville, Tex. Graduate Kansas State Agricultural College, B. S. Two years five months.

Stephen W. Harris, Groesbeck, Tex. Is well qualified in agriculture. Prior to present appointment was employed by the Forest Service. Six months.

James B. Sneider, Rusk, Tex. Graduate Texas Agricultural and Mechanical College, B. S. Has had special training in horticulture and farm gardening. Six and one-half months.

Clive Templeton, Longview, Tex. Graduate Texas Agricultural and Mechanical College, B. S. Two years six months.

Bernard O. Bradshaw, Covington, Va. Graduate Ontario Agricultural College, Guelph, Canada; also did special work at Virginia Polytechnic Institute. Has had much active experience in farm work. Four years eight months.

Shirley L. Cole, Stafford, Va. Student in special courses in agriculture, Virginia Polytechnic Institute. Had charge of the greenhouse at the college two years. Prior to present appointment was engaged for four years in private orchard work and general farm work. Three years five months.

Gordon A. Elean, Sheppards, Va. Graduate Hogue Academy, Blackstone, Va. Has had practical farm experience. Six months.

Kenny N. Ellis, Waverly, Va. Took two years' course in agriculture at Virginia Polytechnic Institute. Has had practical farm experience. Three years six months.

Weldon H. George, Runnymede, Va. Has an agricultural certificate from the Hampton Institute, where he did considerable work in connection with farm machinery, creameries, and incubators. Is familiar with general farming problems. One year eight and one-half months.

Robert F. Jones, North Emporia, Va. Took a five years' course at Virginia Normal and Industrial Institute, Petersburg, Va. Has practical knowledge of farming. Three years four months.

Wilbur K. Moffett, South Boston, Va. Graduate Pennsylvania State College, B. S. in agriculture. Has had valuable experience in general and dairy farming. Six months.

Farrar V. Shelton, Charlotte Court House, Va. Graduate Virginia Polytechnic Institute, B. S. in agriculture. Has had farming experience. One year six months.

Jollie H. Tibbs, Finca, Va. Graduate Michigan Agricultural College, B. S. in agriculture. Was four years principal of a large agricultural high school. Has had practical farm experience. Nine months.

R. E. F. Washington, Roxbury, Va., box 51, R. D. 1. Graduate Hampton Institute. Has been a successful farmer. Six years.

Robert L. Buchanan, Parkersburg, W. Va. Graduate University of West Virginia and Michigan Agricultural College. Engaged in forage-crop investigations, Washington State Experiment Station, one year. Experienced in practical farm work. Two years eleven months.

William D. Click, Hamlin, W. Va. Graduate in agriculture, Berea College. Familiar with general farming operations. Prior to present appointment was employed four months in farm management investigations by the United States Department of Agriculture. Three years six months.

H. R. Cokely, Moorefield, W. Va. Graduate West Virginia University, B. S. in agriculture. Taught school four years. Had practical experience in general farming. One year one and one-half months.

Benjamin F. Creech, Spencer, W. Va. Is college graduate, taking degree of B. S. Engaged in active farm work six years. Prior to present appointment spent three summers in field work for the Office of Farm Management, United States Department of Agriculture. Ten months.

Frank M. Foote, Beckley, W. Va. College graduate. Has had extensive experience in practical agriculture. Three years eleven and one-half months.

Arthur F. Hedges, Glenville, W. Va. Graduate in agriculture, University of Wisconsin; one year postgraduate work. Was head of department of agriculture, Northland College, and managed farm in connection with that institution; also had other practical farm experience. Eleven months.

Samuel F. Hinkle, Webster Springs, W. Va. Graduate Ohio State University, B. S. in agriculture. Prior to present appointment had two years' experience on a farm. One year one month.

Burt Johnson, Marlinton, W. Va. Had two years' work in agriculture at Berea College; also took two years' course in agriculture at University of Wisconsin. Is thoroughly familiar with farming operations. Three years three months.

H. W. Prettyman, Keyser, W. Va. Graduate West Virginia University, B. S. in agriculture. Served as assistant county agent before entering upon present duties. Has had farm experience. One year two months.

Harley D. Rohr, Grafton, W. Va. Graduate College of Agriculture, University of West Virginia. Had experience as teacher in rural schools and taught agriculture in the high school three years. Engaged in farm work. One year two months.

James E. Romine, Buckhannon, W. Va. Graduate University of West Virginia, B. S. in agriculture. Has practical knowledge of farming. One year eleven and one-half months.

Webster H. Sill, Bethany, W. Va. Graduate Pennsylvania State College, B. S. A. Familiar with all kinds of farm operations. Was school teacher one year. Prior to present appointment was employed for short periods by the Bureau of Entomology and the Office of Farm Management, United States Department of Agriculture. Four years eleven months.

Oliver H. Standard, Clay, W. Va. College graduate. B. S. in agriculture. Prior to present appointment owned and operated a small farm. One year five and one-half months.

Carl J. Williams, Sacramento, Cal. Graduate College of Agriculture, University of California. Prior to present appointment was assistant to farm advisers of California two years. One year four and one-half months.

L. A. Bevans, Danbury, Conn. Attended Massachusetts Institute of Technology one term; graduate Massachusetts Agricultural College, B. S. Was teacher of agriculture in high schools two terms. Nine months.

E. A. Brown, Hartford, Conn. Graduate Cornell University, B. S. Taught agriculture in high school one and one-half years. Three years four months.

Harry G. Avery, Shoshone, Idaho. Attended Kansas Agricultural College three terms. For three years managed 700-acre farm in Kansas and for one year teacher of agriculture in high school. One year two months.

Herbert H. Beler, Coeur d'Alene, Idaho. Graduate College of Agriculture, University of Idaho, B. S. Prior to present appointment was employed for various periods in forest service; also as buttermaker for Caldwell Cooperative Creamery, Caldwell, Idaho; and in charge of Boise Valley Cow-Testing Association, Boise, Idaho. One year three months.

R. R. Lancaster, Rupert, Idaho. Attended University of Missouri one term and Kansas Agricultural College two terms. Prior to present appointment served in United States Army six years and for short periods during summer on farms of University of Missouri and Kansas Agricultural College and experiment station. One year one month.

John E. White, St. Anthony, Idaho. Graduate Utah Agricultural College, B. S. Was teacher of agriculture in high school four years. Eight months.

G. L. Reed, Brookville, Ind. Graduate Purdue University, B. S. Eight months.

E. L. Shoemaker, Versailles, Ind. Graduate Purdue University; taught agriculture two years. Seven months.

R. E. Wilson, Peru, Ind. Graduate Purdue University, B. S. in agriculture. Eight months.

H. E. Ackerson, Monticello, Ind. Graduate Purdue University, B. S. in agriculture. Ten months.

B. B. Adams, Rockville, Ind. Graduate Michigan Agricultural College. Had charge of soils and crops department, Winona Agricultural College, one term. Ten months.

Ralph E. Arnett, Dayville, Ind. Graduate Iowa College of Agriculture, M. S. Was assistant in animal-husbandry department of that institution. Managed farm two years. One year.

Ross N. Atkinson, Evansville, Ind. Graduate Purdue University, B. S. in agriculture. Nine months.

Donald D. Ball, Washington, Ind. Graduate Purdue University, B. S., in agriculture. Nine months.

Paul R. Bausman, Monticello, Ind. Graduate Purdue University, B. S. A. Was deputy inspector, State chemist department, Purdue University, two years. Six months.

H. S. Benson, Sullivan, Ind. Graduate Purdue University, B. S. A. Subsequently was supervisor of vocational agriculture in Owensville, Ind., schools. Eight months.

P. D. Brown, Greensburg, Ind. Graduate Kentucky University College of Agriculture, B. S. One year five months.

Chas. A. Buechner, Knox, Ind. Graduate Purdue University, B. S. A. Prior to present appointment was manager, Fame Canning Co., Tipton, Ind. Ten months.

L. M. Butler, Vincennes, Ind. Graduate Purdue University, B. S. A. Agricultural instructor high school one term and instructor in animal husbandry and dairying at Winona College of Agriculture two years. Ten months.

V. V. Clarke, Plymouth, Ind. Graduate Purdue University, B. S. Has managed farm one year. Nine months.

Howard J. Clinebell, Terre Haute, Ind. Graduate University of Illinois, B. S. Was crop investigator Purdue University extension department one summer prior to present appointment. Nine months.

Myron E. Cromer, Frankfort, Ind. Graduate Purdue University, B. S. A. Teacher of agriculture in high schools three years. Seven months.

T. C. Cravens, Martinsville, Ind. Graduate University of Illinois, B. S. A. Five months.

H. W. Crowe, Brazil, Ind. Graduate Purdue University, B. S. A. Ten months.

Samuel S. Davis, Kentland, Ind. Graduate University of Illinois, B. S. and M. S. Managed a farm two years. Ten months.

G. A. Ellis, Franklin, Ind. Graduate Iowa College of Agriculture, B. S. in animal husbandry. Teacher in agricultural schools two years. Ten months.

F. S. Fouts, Greencastle, Ind. Graduate Purdue University, B. S. A. Nine months.

Whitney K. Gast, Logansport, Ind. Graduate Purdue University, B. S. Has managed farm one year. Nine months.

R. M. Gilbert, Indianapolis, Ind. Graduate Purdue University, B. S. Taught agriculture in Minnesota schools one year. Has managed farm five years. Two years ten months.

A. L. Hodgson, Winchester, Ind. Attended Texas Agricultural and Mechanical College two years; graduate University of Wisconsin, B.

S. A. Worked on father's farm; taught rural school two years. Eleven months.

C. M. Job, Columbus, Ind. Graduate Indiana University, A. B. and B. S.; also attended Purdue University School of Agriculture one term. Ten months.

A. T. Morrison, Connersville, Ind. Graduate Pennsylvania State College, B. S. A. Was assistant instructor University of Illinois one term. One year two months.

George X. Reed, Boonville, Ind. Graduate Cornell College, Mount Vernon, Iowa, B. S.; also Iowa State College, B. S. Was principal Delmar Junction High School one year; farm management enumerator and demonstrator one summer. One year nine months.

G. W. Rosencrans, Covington, Ind. Graduate Miami University; received M. S. degree from University of Wisconsin. Taught school one year. Two years eight months.

Harold R. Smalley, Angola, Ind. Graduate Purdue University, B. S. and M. S. For two years was assistant in soil and crops department Purdue University experiment station. Five years.

E. L. Shoenaker, Versailles, Ind. Graduate Purdue University, B. S. Teacher of agriculture two years. Seven months.

Charles A. Burge, Greenfield, Iowa. Graduate Iowa State College, B. S. in animal husbandry; attended University of California farm school one year. Ten months.

Fred F. Clark, Wyoming, Iowa. Graduate Iowa State College, B. S. A. Prior to present appointment was assistant in agricultural extension at this institution. One year eight months.

Clyde H. Combs, Fayette, Iowa. Graduate Iowa State College, B. S. in animal husbandry. Ten and one-third months.

George Dunlop, Orange City, Iowa. Graduate Iowa State College, B. S. A. Engaged in extension work in farm crops at that institution prior to present appointment. One year five and one-half months.

Bert L. France, Emmetsburg, Iowa. Graduate Iowa State College, B. S. Engaged in farming four years. Three years six months.

E. F. Graf, Iowa City, Iowa. Graduate Iowa State College. One year.

Glenn Hazen, Mount Pleasant, Iowa. Graduate Iowa State College, B. S. in animal husbandry. Ten and one-half months.

Henry P. Kelley, Griswold, Iowa. Graduate University of Illinois, B. S. Engaged in farming two years. Seven and one-third months.

Carl N. Kennedy, Des Moines, Iowa. Graduate Iowa State College, B. S. in animal husbandry. Instructor in animal husbandry Texas Agricultural and Mechanical College two years; assistant professor in animal husbandry Oregon Agricultural College. One year four months.

A. H. Pickford, Wapello, Iowa. Graduate Iowa State College of Agriculture. Managed father's farm one year. For two years prior to present appointment was instructor in agriculture and engaged in extension work. Ten months.

W. O. Roessler, Sigourney, Iowa. Graduate University of Illinois, B. S. Agricultural instructor in high school one year. Ten and one-third months.

C. C. Scott, Rockwell, Iowa. Graduate Iowa State College, B. S. Engaged in teaching and farming two years. Five months.

Lew P. Sewell, Bedford, Iowa. Graduate Iowa State College, B. S. Agricultural instructor three years. Four and one-half months.

J. P. Stack, Creston, Iowa. Graduate Kansas Agricultural College, B. S. Engaged in soil-survey work one season; instructor, farm crops, Kansas Agricultural College one term; agriculturist Great Western Sugar Co. one year. Five and one-half months.

J. F. Thomas, Hampton, Iowa. Graduate Iowa State College, B. S. in dairying. Prior to present appointment was instructor at the University of Maine and assistant in dairy-extension work at Iowa State College. Five and one-half months.

E. M. Torblaa, Clarion, Iowa. Graduate Iowa State College, B. S. in animal husbandry. One year five and one-half months.

Theo. Thorson, Tripoli, Iowa. Graduate Iowa State College of Agriculture, B. S. Was instructor of dairying University of Nebraska. Five and one-half months.

Harley Walker, Burlington, Iowa. Graduate Iowa State College, B. S. Was instructor in agricultural school and engaged in farming prior to present appointment. One year ten months.

D. H. Zenimire, Marengo, Iowa. Graduate Iowa State College, B. S. A. Taught agriculture at Iowa State College two years. Subsequently was assistant secretary Iowa Corn and Small-Grain Growers' Association. Three and one-half months.

George W. Kable, Corvallis, Oreg. Attended University of Washington four years. University of California one and one-half years, and University of Nebraska one year; received B. S. degree from University of California. Was assistant irrigation engineer State College of New Mexico two years and managed a ranch one year. Ten months.

Orville B. Burtis, Solomon, Kans. Graduate Kansas State College of Agriculture, B. S. Has had practical experience as farm manager. Two years five months.

Alfred L. Clapp, Council Grove, Kans. Graduate Kansas State Agricultural College, specializing in agronomy. Was foreman agronomy farm at this institution one year, managed ranch in Colorado one year, and was high-school instructor one year. One year three months.

A. D. Folker, Topeka, Kans. Graduate Iowa Agricultural College, B. S. Managed 400-acre farm and has been active in farmers' institutes and other farm organizations. Four years.

Preston O. Hale, Cottonwood Falls, Kans. Graduate Kansas Agricultural College. Assisted in feeding experiments at the college; managed large stock farms one year. One year five months.

John V. Helper, Dodge City, Kans. Graduate Kansas State Agricultural College, B. S. Taught agriculture one year. Ten months.

H. L. Hildwein, Kingman, Kans. Graduate Kansas State Agricultural College, B. S. Engaged in general farm work two years. Ten months.

A. E. Jones, Mankato, Kans. Graduate Kansas State Agricultural College, B. S. Was agricultural instructor in high school one year; managed home farm. One year.

Ralph Kenney, Manhattan, Kans. Graduate Ohio State College, B. S. Subsequently was assistant in agronomy Kent State College and Experiment Station; also assistant professor, farm crops, Kansas State Agricultural College. Six months.

Edward Larsen, Pratt, Kans. Graduate Kansas State Agricultural College, B. S. After graduation engaged in farming and breeding purebred Hereford cattle. Six months.

George W. Sidwell, Leoti, Kans. Graduate Kansas State Agricultural College, B. S. After graduation taught school and engaged in farming. Six months.

A. G. Van Horn, Kansas City, Kans. Graduate Kansas State Agricultural College, B. S. Managed a dairy farm after leaving college. Eight months.

H. J. Adams, McPherson, Kans. Graduate Kansas State Agricultural College, B. S., specializing in animal husbandry. Ten and one-third months.

Joseph H. Bodwell, Foxcroft, Me. Graduate University of Maine, College of Agriculture, B. S. One year ten months.

Richard B. Dodge, Orono, Me. Graduate College of Agriculture, University of Maine. One year one month.

Norman S. Donahue, Belfast, Me. Graduate University of Maine, College of Agriculture, B. S. Was principal and teacher of agriculture in Hartland Academy, Hartland, Me., for one term. Nine and one-half months.

Roger L. Gowell, Warren, Me. Graduate University of Maine, College of Agriculture, B. S. One year ten months.

John L. Scribner, Presque Isle, Me. Graduate University of Maine, College of Agriculture. One year one month.

Robert M. Stiles, Hartland, Me. Attended College of Agriculture, University of Maine, two terms. Managed farm four years. One year ten months.

Ralph H. Gaskill, Danvers, Mass. Graduate Massachusetts Agricultural College, B. S. After graduation was instructor in agricultural school. Eleven months.

H. L. Barnum, Lake City, Mich. Graduate Michigan Agricultural College, B. S. Managed farm. One year four months.

Elton B. Hill, Menominee, Mich. Graduate Michigan Agricultural College, B. S. Was instructor in agricultural school one year. Two years.

Carl M. Kidman, Onaway, Mich. Graduate Michigan Agricultural College, B. S. Prior to present appointment engaged in farm work one year, taught school three years, and engaged in farm-management survey field work. One year two months.

Emil L. Kunze, Sault St. Marie, Mich. Graduate Michigan Agricultural College. Taught agriculture and chemistry two terms at high and normal schools; also assisted in farm-crops department Michigan Agricultural College. One year.

Arnold L. Olson, Munising, Mich. Graduate Michigan Agricultural College, B. S. Teacher of agriculture in high school one year. Eight months.

B. P. Pattison, Escanaba, Mich. Attended Michigan Agricultural College four years. For one year was professor of animal husbandry at University of West Virginia. Engaged in farm work one year. One year one month.

C. L. Rose, Evart, Mich. Graduate Michigan Agricultural College, B. S. Managed farm six years. Eight months.

F. L. French, St. Paul, Minn. Graduate Iowa State College, B. S. Director of agriculture in high school one term. Seven months.

Frank L. Gerten, St. Paul, Minn. Attended College of Agriculture, University of Minnesota, four years. Taught agriculture in high school two years. Also engaged in active farming. One year one month.

A. W. Malcolmson, Olivia, Minn. Graduate College of Agriculture, University of Minnesota; graduate student and instructor in animal husbandry at this institution one year. Nine months.

A. C. O'Banion, Moorhead, Minn. Graduate Iowa State College of Agriculture, specializing in animal husbandry and agronomy. Was high school instructor in agriculture two years. One year four months.

Robert R. Smith, St. Paul, Minn. Graduate College of Agriculture, University of Minnesota. One year one month.

Alvin I. Foard, Farmington, Mo. Graduate Missouri College of Agriculture, B. S. Engaged in farm-management survey work one summer. Was instructor in agriculture in normal school one year. One year five months.

E. M. Harman, Columbia, Mo. Graduate University of Missouri, B. S. Was official tester for dairy department University of Illinois one year. Four months.

W. C. Swarner, Tipton, Mo. Graduate University of Missouri, B. S. Five months.

John R. Hall, Harrisonville, Mo. Graduate Missouri College of Agriculture, B. S. Engaged in farming since graduation. Six months.

Glenn S. Hensley, Farmington, Mo. Graduate Missouri College of Agriculture, B. S.; was student assistant in farm crops. Ten months.

W. R. Gordon, Townsend, Mont. Graduate West Virginia University, B. S. Teacher of agriculture in high school one term. Ten and one-half months.

D. W. Mendenhall, Glendive, Mont. Graduate North Dakota Agricultural College, B. S. Taught agriculture in high school and agricultural school two years after graduation. One year three months.

James E. Hogue, Lincoln, Nebr. Graduate University of Nebraska, B. S. Has been connected with farming operations all his life. Seven months.

George Newswanger, Omaha, Nebr. Graduate University of Nebraska, B. S. Was in charge of animal-husbandry work at Scottsbluff substation, Mitchell, Nebr. Ten months.

P. C. Newswanger, Omaha, Nebr. Graduate Colorado College, B. S.; also attended University of Nebraska one year. Three months.

Noel N. Rhodes, Omaha, Nebr. Attended Nebraska School of Agriculture three years; also University of Nebraska College of Agriculture three years. Eleven months.

L. Boyd Rist, Lincoln, Nebr. Graduate College of Agriculture, University of Nebraska, B. S. Two years two months.

Fred L. Taylor, Lincoln, Nebr. Graduate College of Agriculture, University of Nebraska, B. S. Was agricultural instructor in high school after graduation. One year six months.

W. W. Sim, Lincoln, Nebr. Graduate University of Notre Dame and University of California, B. A. and B. S. Managed and owned several farms. Four months.

John J. Sjogran, Omaha, Nebr. Graduate Nebraska College of Agriculture, B. S. Was agricultural instructor in high school two years after graduation. Four months.

Joseph Willis Wilson, Mason, Nev. Graduate University of Nevada, B. S. in agriculture. Engaged in farming and stock raising after graduation. Eleven months.

C. A. Smith, Manchester, N. H. Graduate Michigan Agricultural College, B. S. Managed a farm eight years and for one year was assistant superintendent of farm of an agricultural school. One year.

W. C. Stokoe, Lancaster, N. H. Graduate Cornell University; engaged in practical farming and taught agriculture nearly three years. One year two months.

F. A. Carroll, Trenton, N. J. Graduate Rhode Island State College. Was supervisor Coos County (N. H.) Cooperative Cow-Testing Association one year, assistant in dairying cooperative work between United States Department of Agriculture and Delaware College one year, and engaged in farming two seasons. One year two months.

L. A. Cooley, Toms River, N. J. Graduate Rutgers College, B. S. Spent two summers in farm work. Ten months.

Walter M. Ellison, Silver City, N. Mex. Attended Cornell Institute four years and New Mexico College of Agriculture five years. Was instructor in high schools two years. Eleven months.

James G. Hamilton, Los Lunas, N. Mex. Graduate University of New Mexico, B. S. A. For two years was assistant in agronomy at New Mexico Agricultural College, his duties being those of superintendent of the college experiment farm and instructor in farm machinery. One year four months.

Richard L. Strong, Estancia, N. Mex. Graduate Agricultural College, Fort Collins, Colo., B. S. Engaged in practical farming three years after graduation. Eleven months.

Homer P. Powers, Socorro, N. Mex. Graduate New Mexico College of Agriculture. Engaged in farming one year prior to present appointment. One year.

Stuart Stirling, Carrizozo, N. Mex. Graduate New Mexico College of Agriculture, B. S. Ten months.

Emmett M. Yates, Tucuman, N. Mex. Graduate Missouri State University, B. S. Was high school principal three years, working on farms in summers. Eight months.

Errol Stanley Bird, Canton, N. Y. Graduate New York State College of Agriculture, Cornell University, B. S. For two years after graduation was farm adviser, Rome State Custodial Asylum, and for six months manager of 750-acre farm. One year three months.

Oscar H. Chapin, Walton, N. Y. Attended Cornell University seven terms. Has had practical experience in dairy and general farming. Five months.

Arthur D. Davies, Herkimer, N. Y. Graduate Cornell University, B. S. Eleven months.

Jasper F. Eastman, Binghamton, N. Y. Graduate Massachusetts Agricultural College, M. A.; also received degrees of B. A. and M. A. from University of Illinois. For seven years was instructor in agronomy at State School of Agriculture, Morrisville, N. Y. Two years five months.

Nicholas G. Farber, Troy, N. Y. Graduate Cornell University, B. S. Taught agriculture in high school two years. Engaged in farm-bureau work. One year two months.

C. W. Gilbert, Catskill, N. Y. Graduate New York State College of Agriculture, Cornell University, B. S. Eleven months.

Hawley B. Rogers, Jamestown, N. Y. Graduate New York State College of Agriculture, B. S. Four years four months.

Edwin P. Smith, Norwich, N. Y. Graduate Rochester University; also received B. S. A. degree from Cornell, assisted in extension work one winter, and managed a 400-acre farm prior to present appointment. Three years five months.

Ralph Q. Smith, Belmont, N. Y. Graduate Ohio State College, B. S. A. Taught school two terms; engaged in farming one summer and assisted State agriculture-extension department in several counties in Ohio. One year four months.

Charles A. Taylor, Herkimer, N. Y. Attended Cornell Agricultural College one year; three summers at Cornell Summer School. Managed home farm two and one-half years. For three years taught agriculture. Three years six months.

J. R. Teall, Syracuse, N. Y. Graduate Cornell University, A. B. Managed farm while at college. Was manager Cayuga County Farm Bureau three years. Four years three months.

E. V. Underwood, Oswego, N. Y. Graduate Cornell University, B. S. A. Taught agriculture one year. Was also manager of Oswego Farm Bureau. Three years eleven months.

Theodore W. Vann, Elmira, N. Y. Graduate New York College of Agriculture, B. S. Managed farm six months. Was assistant manager of farm bureau, Oswego County, six months prior to present appointment. One year eight months.

Edw. C. Weatherby, Auburn, N. Y. Graduate Cornell University, B. S. Managed home farm of 250 acres. One year five months.

Elmer R. Zimmer, Oswego, N. Y. Took special course at Cornell University two years. Was instructor in animal-husbandry department, College of Agriculture, Cornell University, three terms; also manager Tioga County Farm Bureau. Two years four months.

Arthur H. Neumann, Dickinson, N. Dak. Graduate University of Wisconsin, B. S. A. For various periods was assistant in soils research, University of Wisconsin; analytical soil chemist, University of Wisconsin; and in charge of chemistry and agriculture at State School of Science, Wahpeton, N. Dak. Three months.

Elmer E. Barnes, Paulding, Ohio. Graduate Ohio State University, B. S. A. Engaged in farming and taught district school three years. Was assistant in agricultural chemistry and soils department, Ohio State University, for one semester. Five months.

Walter Ell McCoy, Springfield, Ohio. Graduate Ohio State University, B. S. A. Was employed by extension department, Ohio State University, one year. Four years eleven months.

William Watson Brownfield, Cambridge, Ohio. Attended Ohio State University three years. Was farm manager three years. One year seven months.

F. S. DeLashmuth, Columbus, Ohio. Attended Ohio State University three years. Engaged in dairy-extension work and as instructor in dairy department, Ohio State University, one year. Eleven months.

Clayton L. Long, Cleveland, Ohio. Attended Ohio State University one term. Was extension horticulturist and poultryman at this institution one term and instructor in horticulture and extension horticulturist, New Hampshire State College, two terms. One year.

Arthur R. Chase, The Dalles, Oreg. Attended Agricultural College of Iowa one term and Oregon Agricultural College two terms, receiving B. S. degree from the latter institution. Taught rural schools three terms, and was county school supervisor one year. Also worked on ranches five summers. Conducted corn contests for Oregon two years and potato contests one year, and organized rural parent-teachers' circles and one grange. Two years four months.

W. M. Brennan, Mitchell, S. Dak. Graduate Iowa State College, B. S. Spent all his life on farm and managed an 800-acre ranch for three years after graduation. Nine months.

A. L. Bushy, Plankinton, S. Dak. Attended South Dakota State College four years; also Purdue University, receiving degrees of B. S. and M. S. from latter institution. Was teacher, Purdue University, four years. Five months.

P. J. Crandall, Alexandria, S. Dak. Graduate University of Wisconsin, B. S. Instructor in agriculture three years. Five months.

J. H. Hamilton, Mitchell, S. Dak. Attended Michigan Agricultural College four years. Teacher of agriculture four years. Six months.

George B. Kennard, Sioux Falls, S. Dak. Graduate South Dakota State College, B. S. A. After graduation taught agriculture in high school. Lived all his life on farm. Nine months.

Dick Lewallen, Presho, S. Dak. Graduate Kansas State Agricultural College, B. S. A. For two years after graduation taught school and directed summer garden work. Two years eleven months.

Harry E. Rilling, Wessington Spring, S. Dak. Graduate South Dakota State College of Agriculture. Was assistant in agronomy at the college two years. Spent one year in farming after graduation. One year.

L. M. Caldwell, Hayti, S. Dak. Graduate South Dakota State College, B. S. Was agricultural instructor in high school two years, engaging in extension work during summer months and half time during school year. Seven months.

E. C. Bird, Armour, S. Dak. Graduate Oberlin College, A. B.; also attended University of Wisconsin. Three years.

R. E. Johnston, Hot Springs, S. Dak. Graduate South Dakota State College, B. S.; for two summers was student assistant in agronomy. Worked three years on farm before attending college; after graduation managed a farm three years. One year ten months.

George R. Mayland, Rapid City, S. Dak. Graduate South Dakota State College, B. S.; also received degree in agriculture; managed a farm three years. Six months.

N. Risjord, Miller, S. Dak. Graduate North Dakota Agricultural College, B. S. Engaged in farming during summer months. After graduation taught agriculture and organized farmers' clubs, farmers' exchanges, etc., in connection with high-school work. Three months.

Colman Wagner, Selby, S. Dak. Graduate South Dakota State College, B. S. Has spent nearly all his vacations on farm and is familiar with farm life; has managed a farm since graduation. Six months.

Low Mar Price, Price, Utah. Graduate Utah Agricultural College. One year.

Harrison B. Woodbury, Nephi, Utah. Graduate University of Utah; attended Utah Agricultural College one term. Was engaged in farming three years, and was employed as horticulture inspector one year. Nine months.

I. N. Bartlett, Middlebury, Vt. Graduate University of Vermont and State Agricultural College, B. S. Nine months.

Morton F. Downing, Rutland, Vt. Graduate University of Vermont and State Agricultural College, B. S. Was instructor in agronomy and farm manager at an agricultural school for three years and was employed by the University of Vermont extension service for three months. Three years three months.

Harold F. Johnson, Newport, Vt. Graduate University of Vermont and State Agricultural College; B. S. in agriculture. Served with Vermont agriculture extension service and dairy department of University of Vermont three years. One year three months.

L. A. Wood, St. Johnsbury, Vt. Graduate Cornell College of Agriculture, B. S. Prior to present appointment was employed three months as assistant in the Office of Farm Management, this department. Two years nine months.

R. B. Coglon, Pullman, Wash. Graduate Toronto University; subsequently was lecturer in agriculture at University of Saskatchewan one year; county agricultural agent, North Dakota Better Farming Association, one year; State seed commissioner, Idaho Experiment Station, two years; assistant director of county agriculturists for Idaho one year; and county agriculturist, Lane County, Oreg., one year. Two years four months.

John W. Adrian, Stockton, Cal. Graduate College of Agriculture, University of California, B. S. Spent life on farm. Nine and one-half months.

Ernest L. Conant, Sacramento, Cal. Attended University Farm School, Davis, Cal., one year. Managed farm and ranch two years. Prior to present appointment was assistant to county horticultural commission, Santa Clara County. Seven and one-half months.

Edwin L. Garthwaite, Eakersfield, Cal. Graduate College of Agriculture, University of California, B. S. Eight months.

William A. Kent, Modesto, Cal. Graduate University of California, B. S. Was laboratory assistant in department of soils at the college. Nine and one-half months.

George W. Kretsinger, San Diego, Cal. Graduate University of California, B. S. Had general farm experience covering several years. Nine and one-half months.

Donald E. Martin, Berkeley, Cal. Graduate University of California; B. S. in agriculture. One year.

W. A. McCutchan, Fresno, Cal. Graduate College of Agriculture, University of California. Nine months.

Myron A. Rice, Berkeley, Cal. Graduate College of Agriculture, University of California, B. S. One year two months.

John E. Stiles, Berkeley, Cal. Graduate College of Agriculture, University of California, B. S. One year two months.

Frank G. Tiffany, Willows, Cal. Attended Stanford University one year. Received degree of B. S. at College of Agriculture, University of California. Owns and manages ranch. Nine and one-half months.

Hermann F. Brueck, Stockton, Cal. Graduate College of Agriculture, University of California, B. S. Spent two years on large ranch after graduation. Eight months.

C. W. Hammans, Storm Lake, Iowa. Graduate Iowa State College, B. S. in animal husbandry. Was superintendent of agricultural high school three years. Nine and one-third months.

L. T. Nutty, Marion City, Iowa. Graduate Iowa State College of Agriculture, B. S. in animal husbandry. Ten and one-half months.

J. S. Quist, Des Moines, Iowa. Raised on live-stock farm. Attended Fremont Normal one term. Prior to present appointment was supervisor of garden work, Blair, Nebr. Ten months.

John L. Lantow, Paola, Kans. Graduate Kansas State Agricultural College, B. S. Has had practical farm experience. Ten and one-third months.

H. C. Hensley, Jackson, Mo. Graduate University of Missouri, B. S. Was instructor in agriculture in Madison City schools two years. Two years six months.

E. H. Leker, St. Charles, Mo. Graduate University of Missouri, College of Agriculture, B. S. Eight months.

Edw. A. Livesay, Columbia, Mo. Attended Virginia Polytechnic Institute six years and University of Missouri one year, receiving B. S. (C. E.) from the former and M. S. (Agr.) from the latter. Was student assistant in physics Virginia Polytechnic Institute one term. Engaged in general farming one term. Ten months.

A. R. Hecht, Lincoln, Nebr. Attended University of Nebraska four years. Was tester in charge of cow-testing association one year; was also official cow tester for University of Nebraska dairy department. Engaged in general farming one summer. Nine months.

Ben F. Hensel, Lincoln, Nebr. Graduate Nebraska State Agricultural College, B. S. Worked on farm six years. Conducted a soil survey of Wayne and Phelps Counties, Nebr. Seven months.

Arthur W. Tell, Lincoln, Nebr. Graduate University of Nebraska, B. S. in agriculture. Taught school two years before entering college. Seven months.

R. J. Bugbee, Woodsville, N. H. Graduate New Hampshire College. Market gardener and greenhouse manager one year. Engaged in emergency food campaign in State. Nine months.

A. B. Bucholz, Hudson, N. Y. Graduate Hobart College, B. S.; also received M. S. degree from Cornell University College of Agriculture. Employed by New York State Department of Agriculture six years. Ten months.

Robert V. Call, Cooperstown, N. Y. Graduate Cornell University, B. S. Six months.

John F. Chapin, Watertown, N. Y. Graduate Cornell University. Managed farm and orchards four years. Nine months.

Wilbur D. Chase, Cooperstown, N. Y. Prior to present appointment was engaged six months as assistant county agent and was engaged in emergency food campaign. Eleven months.

Fred P. Foster, Canandaigua, N. Y. Graduate Cornell University, B. S. Managed and worked general farm. Was animal-husbandry specialist Holstein-Friesian Register Co., Vermont, prior to present appointment. Three months.

J. L. Laycock, Rochester, N. Y. Graduate New York State College of Agriculture, B. S. Worked on farm during vacations. Operated 200-acre farm three years. For four months was manager of county farm bureau. Eleven months.

Fred D. Palmer, Lisle, N. Y. Graduate Cornell University, agricultural course. Worked two years on home farm and was manager of a farm one year. Eight months.

Fred R. Walkley, Auburn, N. Y. Graduate Cornell University, B. S. Taught agriculture one year. Five months.

W. L. Kadderly, Corvallis, Oreg. Graduate Oregon Agricultural College, B. S. in agriculture. Engaged in farm management demonstration work four months prior to present appointment. One year seven months.

George H. Baldwin, Kingston, R. I. Graduate Rhode Island State College, B. S., agricultural course. For two years prior to present appointment was assistant manager for Dexter asylum farm. Nine months.

H. E. Bartram, Winooski, Vt. Graduate University of Vermont and State Agricultural College, B. S. Taught agriculture in high school two years and was assistant in plant pathology department, University of Vermont, and State Agricultural College experiment station four years. Eight months.

Frank D. Jones, Burlington, Vt. Graduate University of Vermont and State Agricultural College, B. S. Conducted home farm and was active in home community prior to present appointment. Eight months.

C. S. Fletcher, Spokane, Wash. Graduate State College of Washington. Taught agriculture four years. Seven months.

O. V. Patton, Pullman, Wash. Graduate State College of Washington, degree in horticulture. Taught in high school one semester. Was assistant fruit inspector for Walla Walla, Wash., approximately two years. Eight months.

CLUB WORKERS.

The club workers are a part of the regular extension staff of the State college of agriculture and are employed cooperatively by the Department of Agriculture and the State college of agriculture and the county farm bureau.

These club workers, through the farm bureau, meet with groups of boys and girls, plan with them projects in food production and conservation and other practical work which the children carry on at their homes, organize them into clubs to receive practical instruction related to these projects, and secure an adult local leader to direct the work of the children. The workers organize corn clubs, potato clubs, garden clubs, garden and canning clubs, market-garden clubs, pig clubs, calf clubs, baby-beef clubs, sheep clubs, bread clubs, garment-making clubs, etc. The club worker assists these groups of boys and girls in keeping records of cost and production, in giving public demonstrations, in holding summer club festivals, in making exhibits of their products, and in holding at the close of the year an achievement day. The club worker travels about the county meeting with the groups and leaders and giving expert advice, direction, and instruction on better methods in production and conservation.

Deferred classification has been requested by the department and allowed by the draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

J. E. Carrigan, Burlington, Vt. Graduate University of Vermont and State Agricultural College, B. S. Was employed as assistant in Vermont agricultural-extension service. Served as county agent two years and later as assistant county agent leader before entering upon present duties. Three years two months.

R. N. Kebler, Marquette, Mich. Graduate Michigan Agricultural College, B. S. Was high-school teacher of agriculture. Prior to present appointment was county club leader one summer. One year.

Walber B. Krueck, West Lafayette, Ind. Graduate University of Wisconsin College of Agriculture. After graduation was instructor in animal husbandry, Purdue University School of Agriculture one term; also engaged in live-stock work at Purdue University. Nine months.

Harold G. Mattoon, Pittsfield, Mass. Graduate Massachusetts Agricultural College, B. S. Engaged one season in eradication of white-pine blister rust, and for short period as Massachusetts State nursery inspector and as assistant county agent and assistant secretary for county farm bureau. Ten months.

William P. Martin, Baton Rouge, La. Graduate Mississippi Agricultural and Mechanical College, specializing in animal husbandry; has had extensive practical farm experience. Two years.

Edw. B. Oxley, Tucson, Ariz. Graduate University of Arizona, B. S. Was assistant State club leader in Nevada prior to present appointment. Seven months.

Leland S. Parke, Tucson, Ariz. Graduate Iowa State College, B. S. A. Prior to present appointment was agricultural inspector of United States Reclamation Service in the Salt River Valley for one and one-half years. Ranged in California and Arizona one year. Three years six months.

Charles E. Potter, Bozeman, Mont. Attended Bethany College, West Virginia, two years; also senior in West Virginia College of Agriculture. Assistant in dairy department of latter institution. Was superintendent of county schools two years; also district superintendent and county club leader one year. One year three months.

H. H. Williamson, College Station, Tex. Graduate Texas Agricultural and Mechanical College, B. S. in agriculture. Also attended the advanced courses at the Iowa State Agricultural College. Six years three months.

FARM-MANAGEMENT DEMONSTRATORS.

Farm management demonstrators are employed cooperatively by the State agricultural colleges and the United States Department of Agriculture. They deal with the business side of farming and aid farmers in improving the efficiency of their operations. By means of accurate comparisons of the business of individual farmers with that of their more efficient neighbors, they are stimulated to greater food production per acre, per animal, and, what is more important, per man. The group method of demonstration has been so developed that in most cases farmers are able themselves to make these comparisons between their business and that of their neighbors.

In almost any community of the United States will be found a number of farmers who are doing from a third to a half more production work per man than are many of their neighbors. One way to deal with the labor problem is to transfer men from other communities. Another way is to teach farmers how to reorganize their farm rotations and live-stock production so as to use more efficient equipment and labor methods. The farm-management demonstrators are leaders in this class of work.

One of the principal purposes of the farm-management demonstration service is to assist farmers in adapting Federal and State programs to conditions existing in their communities.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

William L. Cavert, St. Paul, Minn. Graduate Cornell University, B. S. A. After graduating was engaged two years in farm-survey work. Three years ten months.

Harold J. Evans, Georgetown Station, N. Y. Graduate Cornell University, B. S. For five months was assistant county agent. Eleven months.

Charles H. Graves, East Lansing, Mich. Graduate New York State College of Agriculture, Cornell University, B. S. Prior to present appointment was employed as agricultural engineer with Forestal (Ltd.), Buenos Aires, Argentina. Ten months.

P. E. McNaill, Manhattan, Kans. Graduate Kansas State Agricultural College, B. S. in engineering, B. S. in agriculture, and M. S. in agriculture. Did practical electrical work in soils at the experiment station. Three years ten months.

Walter J. Tubbs, Burlington, Vt. Graduate Cornell University, B. S. Prior to present appointment was assistant county agent. One year ten months.

Pascal K. Whelpton, Washington, D. C. Graduate Cornell University Agricultural College, B. S. Worked on a farm for three years; employed in farm management extension work in Connecticut three months; was instructor in agriculture in high school four months. Two years four months.

SCIENTIFIC EMPLOYEES OF INSULAR EXPERIMENT STATIONS.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work, and length of service.

Clarence W. Carpenter, Honolulu, Hawaii. Employed as pathologist at the Hawaii Experiment Station, where he organized the plant-disease work. Has made a survey of some of the more important diseases of economic crops, and during the present crisis has conducted a campaign for the control of plant diseases of bananas, which threaten that important food crop, and is engaged in a study of their causes and means of control. A familiarity with tropical conditions, such as he has gained through the two years he has been in Hawaii, is very necessary in carrying on the work with plant diseases. Graduate University of Vermont, B. S. and M. S., having specialized in bacteriology and chemistry. Had practical experience while a student as assistant in the laboratory of hygiene of the Vermont State Board of Health and in the bacteriological-pathological laboratories of the Vermont Experiment Station. Prior to present appointment, was assistant in plant pathology in the Bureau of Plant Industry, working on cotton and truck-crop diseases. Specialized on potato and other diseases, and published a number of papers on his investigations. Five years seven months.

Mazwell O. Johnson, Honolulu, Hawaii. Has charge of the chemical work of the Hawaii Agricultural Experiment Station. Mr. Johnson has made special studies of some of the peculiar soil problems met with in Hawaii. As a result of his discoveries, several thousand acres of land which were formerly unproductive have been added to the area devoted to food crops. He has been very active in emergency work relating to drying of food products, in working out fertilizer formulas for food crops, and in preparing publications. His three years' experience in the islands has given him an excellent grasp of the soil, fertilizer, and other problems and of the special conditions met with. Graduate Purdue University, B. S. in chemical engineering; also received M. S. degree from George Washington University. Prior to present appointment was assistant chemist in the Meat Inspection Division of the Bureau of Animal Industry, and for short periods was employed in a technical capacity by commercial concerns. Four years four months.

Wilton T. White, Fairbanks, Alaska. Has charge of the station at Fairbanks, in the interior of Alaska, where experimental work with farm crops, and especially with cereals, is conducted on a scale comparable to commercial farming. Unusual difficulty has been experienced in securing suitable men for the Alaska stations, which require not only adequate training but practical experience and resourcefulness in meeting contingencies due to the remote location. Graduate Kansas State Agricultural College, B. S. Taught agriculture one year before graduation. Had charge of a 640-acre farm in Kansas, devoted to grain and stock farming, three years prior to entering department service. Eleven months.

BUREAU OF SOILS.

Name, home address, character of work, and length of service.

J. N. Carothers, Washington, D. C. As electrochemist in the Bureau of Soils, has developed and perfected a process for smelting phosphate rock in an electric furnace and collecting phosphoric acid so produced in an electric precipitator. Installed and operated such an installation on a commercial scale at Hoboken, N. J., demonstrating the commercial feasibility of the process for users of pure acid. Has recently completed a piece of work in connection with the War Industries Board

involving the design of an electric furnace suitable for the production of phosphorus direct from phosphate rock. At present, is installing apparatus for an investigation of the possibility of fixing atmospheric nitrogen by means of the electric arc, using a current of very high tension and frequency. This work has a direct bearing on the problem of munitions as well as on that of fertilizer supplies. Graduate Clemson College, B. S., in agriculture and chemistry; Missouri University, graduate courses in agronomy and engineering. Prior to present appointment employed as chemist, assistant superintendent, and director of plant workmen, Southern Electrochemical Co., Nitrole, S. C.; later with the Southern Electrical Chemical Co. and Interstate Chemical Corporation, developing a process for smelting phosphate rock in electric furnace. Two years eleven months.

Albert R. Merz, Washington, D. C. In charge of the project of surveying the blast-furnace industry to determine present operating conditions. This involves the analysis of samples of the materials charged into the furnaces and of the slag drawn off. Such samples have been secured from practically all the blast furnaces of importance in the country, and the work of examination is proceeding actively. It is already evident that the amount of potash potentially available from this American source is very large, probably at least equaling the total amount ever imported from Germany prior to the war. Graduate University of Virginia, B. S. and M. S. Prior to present appointment was chemist Raymond Mining Co., Stuarts Draft, Va., dealing with manganese and iron ores; assistant chemist Pennsylvania State Agricultural Experiment Station, fertilizer control, butters, milks, miscellaneous work; assistant chemist Southern Cotton Oil Co., Savannah, Ga., cotton-seed meal, hulls, glycerine, pancolene, B. fat, soap stock, coal; assistant chemist E. I. du Pont de Nemours & Co., dynamite, fulminate of mercury, nitroglycerine, miscellaneous work; chemist, Railroad Valley Co., Tonopah, Nev., brines, salts, waters, muds, and rocks, with especial reference to potash; and conducted nitrate investigations on desert basin deposits. Since entering the Bureau of Soils, has been engaged in the analyses of salines of the United States, investigations on kelps, analyses of phosphatic materials, preparation of concentrated fertilizers, and investigation on nitrates of the Great Basin. Six years one month.

William H. Fry, Washington, D. C. Engaged in the identification, by means of the petrographic microscope, of minerals in soils, fertilizers, fertilizer materials, or samples of unknown composition. By means of the petrographic microscope it is possible for one skilled in its use to quickly and surely determine the presence or absence of any ordinary minerals without a tedious chemical examination, and, in the case of soils, to determine the form in which the elements are present, which can not be determined by any other means. The work is essential to the soil investigations being carried on for this reason. There are very few petrographers in the United States (not more than 10), and it would not be possible to replace Mr. Fry except by obtaining a petrographer from some other department of the Government or other institution doing equally important work. Graduate University of North Carolina, A. B., major in mineralogy and petrography; graduate student University of North Carolina, one year. Prior to present appointment was assistant in geology University of North Carolina two years and instructor in geology one year; also mineralogist North Carolina geological and economic survey one year. Six years five months.

SCIENTISTS IN SOIL SURVEY.

Each of these employees is in charge of a soil-survey field party employed in mapping the soils of certain selected agricultural areas throughout the United States. This requires ability to identify and technically classify soils, to locate them topographically, and to indicate their relative agricultural value and adaptation. It involves a technical knowledge of geology, of soils, and of plane-table traverse work, requiring quite a comprehensive knowledge of agricultural conditions and methods, together with the ability to analyze conditions and express them accurately in report form for publication.

This work has a direct bearing on the existing situation by reason of the fact that the results constitute an exceedingly important factor in crop production. The individual States recognize this and are co-operating extensively with the Department of Agriculture in the work, furnishing funds and men to the equivalent of that supplied by the department, and are using the data secured in their efforts looking toward intelligent activity and increased production of necessary food crops. This fundamental work is also valuable to the extension service in these States in their regular as well as their emergency work. The results are in constant use by the Army in the location of camp sites, in sanitation, in military maneuvers, and plans for the national defense. The Bureau of Soils is actively cooperating with the War Department and securing military information in addition to the regular soil-survey data, furnished directly to the War Department, relating to roads, bridges, houses, topographic features, character of soils, and drainage conditions.

The number of men trained in this line is limited, and the field for them is confined to the demands of the department and States cooperating in this work. The service has always been able to absorb all the trained men available. The department's force has been built up gradually and systematically and is the cumulative result of years of selection and training. Twenty-one men were lost during the past year from this force, which is 40 per cent of the normal field force. In spite of the most strenuous efforts, it has been possible to fill only 10 of these vacancies.

Deferred classification has been requested and allowed by draft boards in the cases of the following scientists in soil survey:

Name, home address, character of work (see general statement), and length of service.

[Washington, D. C., is the official headquarters of all the scientists in soil survey herein listed, but practically their entire time is spent in the field.]

John H. Agee, Washington, D. C. Graduate University of Tennessee, B. S. in mining engineering. Prior to present appointment two seasons of field-work investigations of phosphate deposits with Tennessee geological survey and one year in cooperative soil-survey work for the State of Tennessee. Six years five months.

A. C. Anderson, Washington, D. C. Graduate North Dakota Agricultural College, B. S. in agriculture. Prior to present appointment classified land for Northern Pacific Railway and engaged five years in cooperative soil-survey work for State of North Dakota. Two years ten months.

M. W. Beck, Washington, D. C. Graduate Pennsylvania State College, B. S. in agronomy. Prior to present appointment two seasons

as laboratory assistant, soil research laboratory, Pennsylvania State College. Five years nine months.

E. W. Deeter, Washington, D. C. Graduate Pennsylvania State College, B. S. Prior to present appointment, two years soil mapping in field for State of Pennsylvania; assistant instructor in soils. Five years.

C. E. Deardorff, Washington, D. C. Graduate University of Missouri, B. S. in agriculture; post-graduate work. Prior to present appointment, three years cooperative soil survey for Missouri. Two years one month.

J. E. Dunn, Washington, D. C. Graduate Columbia Normal Academy, Missouri. Graduate University of Missouri, B. S. in civil engineering. Prior to present appointment taught school two years; two years' experience State soil-survey work; one year Reclamation Service; raised on farm. Five years ten months.

F. A. Hayes, Washington, D. C. Graduate University of Nebraska, M. A.; two years postgraduate work in geography and conservation. Prior to present appointment was employed four seasons in Forest Service; one season in cooperative soil-survey work for Nebraska. One year six months.

F. Z. Hutton, Washington, D. C. Graduate Pennsylvania State College, B. S. in agronomy, specializing in soils and farm management. Three years ten months.

R. C. Jurney, Washington, D. C. Graduate University North Carolina, B. A. Prior to present appointment spent two years in cooperative soil-survey work for North Carolina. Three years four months.

N. M. Kirk, Washington, D. C. Graduate Pennsylvania State College, B. S., specializing in horticulture and animal husbandry; vacations in practical farm work. Five years ten months.

E. T. Maxon, Washington, D. C. Took one year's advanced work in New York State Normal School; graduate College of Agriculture, Cornell University, B. S.; one year assistant department of soil technology. Prior to present appointment was for two years assistant in State soil survey. Five years eight months.

A. H. Meyer, Washington, D. C. Graduate University of Wisconsin, B. S. in agriculture; postgraduate work in soils, meteorology, and climatology. Prior to present appointment engaged two seasons in Wisconsin soil survey. Seven years one month.

A. L. Patrick, Washington, D. C. Graduate State Normal School, Stroudsburg, Pa.; graduate Pennsylvania State College, B. S. in agriculture; assistant instructor in soil and physical laboratory. Prior to present appointment had field experience in State soil-survey work. Five years.

Lee Roy Schoenmann, Washington, D. C. Graduate University of Wisconsin, B. S. Prior to present appointment had three years' State soil-survey work. Six years eight months.

E. H. Smies, Washington, D. C. Graduate Kansas State College, B. S. in agronomy; student assistant in soils, laboratory, and field. Five years.

W. I. Watkins, Washington, D. C. Graduate University of Missouri, B. S. Prior to present appointment worked in soils and fertilizer in laboratory and field; assisted in State soil-survey work. Three years ten months.

E. S. Vanatta, Washington, D. C. Graduate University of Missouri, B. S. in agriculture, specializing in agronomy and animal husbandry. Prior to present appointment engaged three years in cooperative soil-survey work for Missouri. Seven years.

L. V. Davis, Washington, D. C. Graduate University of Missouri, B. S.; postgraduate work in soil investigations. Prior to present appointment was assistant in State cooperative soil-survey work. Four years five months.

H. W. Hawker, Washington, D. C. Received high-school and business education. Six years eleven months.

OFFICE OF THE SECRETARY.

Name, home address, character of work, and length of service.

Floyd R. Harrison, Washington, D. C. As Assistant to the Secretary, Mr. Harrison is the principal executive officer in the immediate office of the Secretary of Agriculture. Educated in public schools of Petersburg, Va., and later took courses at the Emerson Institute, the Drillery Shortland School, and Strayer's Business College, Washington, D. C.; then completed three-year law course at Georgetown University and was graduated with the degree of LL. B. Was appointed in the Department of Agriculture September 1, 1906, and has served as Secretary to the Solicitor, Chief Clerk of the Bureau of Chemistry, executive clerk to the Assistant Secretary, private secretary to the Assistant Secretary of Agriculture, confidential clerk to the Secretary of Agriculture, private secretary to the Secretary of Agriculture, and Assistant to the Secretary. Eleven years nine months.

Arthur H. Fast, Washington, D. C. As assistant to the solicitor of the department is engaged upon legal work incident to the administration of the United States warehouse act. He has been engaged for several months in preparing regulations for cotton warehouses, which work required considerable personal investigation of methods of storing and handling cotton so as to enable him efficiently to perform his duties and dispose of legal questions arising under the statute. He has acquired much information along the lines of his official duties which is of very great value to the department. For one to take his place would mean that he would have to spend a long time in studying and acquainting himself with the work before he could perform the duties with efficiency. At the present time the office of the solicitor is undermanned. Difficulty in finding lawyers suitably qualified who are willing to accept appointments is constantly increasing. College graduate, with degrees of A. B. and LL. B.; took special course in public speaking. Prior to entering the department was for two years teacher in public high school and for two years engaged in private law practice. Two years four months.

Harlan D. Smith, Washington, D. C. Has charge of the office of information, in which capacity he supervises the preparation of all press material, the department's weekly news letter, and many circulars, and assists in the preparation and distribution of posters and other material. Is a trained newspaper man and is particularly skilled in the popular treatment of scientific subjects. The office of information is the principal source of material for newspaper and periodical publication concerning the activities of the department. Besides supplying daily and weekly newspapers, general periodicals, and class publications, it is of special service to the agricultural press in digesting, condensing, and reviewing important bulletins. He is the only man now available for conducting this important function of the department. Three years.

OFFICE OF FARM MANAGEMENT.

Name, home address, character of work, and length of service.

E. H. Thomson, Takoma Park, D. C. As assistant chief of the office of farm management assists the chief of the office in supervising the investigational activities and acts for the chief in his absence on all questions dealing with the work of the office. In addition to these duties he has direct supervision of the section of farm organization, which includes the farm-survey work, investigations of farm machinery and equipment, cooperative farm-management investigations, and various special farm organization problems. Graduate of Cornell University, College of Agriculture, B. S. in agriculture; did graduate work last half of session year and two years following, receiving degree of M. S. in agriculture; took full course in agriculture, with special emphasis on dairying and farm management. Prior to entering departmental service lived on a farm. Eight years nine months.

R. G. Hainesworth, Washington, D. C. As head draftsman, is engaged on highly technical work in the preparation of maps, charts, and other material having to do with the publication of the Atlas of American Agriculture and the publication of the Atlas of the World Agriculture. Has been connected with this project for a number of years and is in charge of the compilation and preparation of a very large amount of material entering into this work. This material has been used very extensively in the war emergency, not only by the Department of Agriculture, but by other branches of the Government, particularly the Shipping Board. The termination of this employee's appointment would be a very material loss, necessitating considerable delay in furnishing information required by the various executive departments. Five years four months.

Robert W. Meyers, Philadelphia, Pa. As farm-help specialist for the State of Pennsylvania Mr. Meyers assists farmers in securing an adequate supply of farm labor for their operations. In this work he cooperates actively with the county agents and with the representatives of the Department of Labor. Seven months.

DIVISION OF ACCOUNTS AND DISBURSEMENTS.

John M. Kemper, jr., Washington, D. C. Aside from occupying the bonded statutory position of deputy disbursing clerk, the responsibilities of which require a person in whom the disbursing clerk reposes the utmost confidence, this employee assists the Chief of the Division of Accounts and Disbursements in compiling and preparing the various financial reports required of the Secretary of Agriculture from time to time by Congress and in the preparation of the annual estimates of appropriations. This work requires an intimate knowledge of the appropriations of the Department of Agriculture and the financial transactions of the Treasury Department, which information can be gained only through years of experience such as this employee has had. He also keeps the record of allotments to the various bureaus of the department made in conformity with law by the Secretary from the regular appropriations and the war emergency appropriation provided by Congress for stimulating agriculture and facilitating the distribution of products. Mr. Kemper has been trained under the personal supervision of the Chief of the Division of Accounts and Disbursements in this work of the Department of Agriculture for years. Ten years six months.

FEDERAL HORTICULTURAL BOARD.

ERADICATION OF COTTON BOLLWORM.

Plant quarantine inspectors (field clean-up work).

The pink bollworm of cotton, undoubtedly the worst known insect pest of cotton, has obtained a limited foothold at a number of points in the State of Texas. This department, under an emergency appropriation, is making a vigorous attempt to exterminate the insect at these restricted points, and has accumulated, with great difficulty under existing conditions, a number of technically trained men to direct such field work of inspection and extermination. This work is of the utmost importance to the future of the cotton crop of the United States, and it would be extremely difficult, if not impossible, to replace the men engaged in this work should they be lost to the department. These men have all gained experience and developed capacity in this work, which involves technical knowledge of the pink bollworm and ability to recognize evidences of infestation by it in the field, in addition to the practical supervision of large numbers of laborers in the physical work of destroying cotton and other field clean-up and disinfection operations. Although a nonassembled continuing civil service examination for plant quarantine inspector was announced November 14, 1917, the list of eligibles resulting from this examination has not yet been sufficient to meet the needs. Even if it were possible to obtain a sufficient number of qualified persons, they could not, for a considerable length of time, take the places of the men now engaged in this work without substantial material loss and detriment to the adequate and effective operation of the service.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work (see general statement), and length of service.

Herald M. Brundrett, Houston, Tex. Graduate Texas Agricultural and Mechanical College, B. S. in agriculture, specializing in entomology and horticulture. During one year was employed as instructor in entomology in the college. One year.

Clifton C. Halbedel, Houston, Tex. Graduate Texas Agricultural and Mechanical College, B. S. One year one month.

Wrathall K. Hanson, Houston, Tex. Graduate Texas Agricultural and Mechanical College, B. S. in agriculture. Prior to entering department service was employed for a short period by the American Refrigerator Transit Co. as fruit inspector. Seven and one-half months.

Lowell F. Locke, Houston, Tex. Graduate New Mexico Agricultural College, B. S. in agriculture, course including entomology. Prior to present appointment worked at a dry-land experiment station at Tucumcari, N. Mex., for about 10 months, keeping soil, moisture, crop, weather, and other records. Six and one-half months.

Walter Ohlendorf, Houston, Tex. Graduate Texas Agricultural and Mechanical College, B. S.; took a post-graduate course at Cornell University, qualifying for M. S. degree. Prior to present appointment was employed for a year and a half by the Texas Department of Agriculture, being engaged in demonstration work in insect control, investigation work on insects, agricultural-exhibit work, nursery inspection, and other work of a similar nature. Six and one-half months.

Karl H. Townsend, Houston, Tex. Received high-school education and studied Spanish one year; also studied chemistry and trigonometry

at George Washington University three years. Prior to present appointment was employed by the Bureau of Plant Industry for 11 years. During the last seven years of his service in the latter bureau was employed for a considerable portion of time in work which gave him a good deal of training in the making of field observations along scientific lines. Has been engaged upon his present duties eight months. Eleven years eight months.

Plant quarantine inspectors (inspectors at ports of entry).

The quarantine service of this department in relation to the pink bollworm at the ports of entry on the Mexican border controls the entry of all cars, freight, and personal baggage from Mexico into the United States and supervises the disinfection of such cars, freight, and baggage. This work requires a special technical training in entomology and also in the methods and practices of fumigation and general disinfection. This quarantine service to be efficient must be continuous and under the direction of experienced men, and its interruption or the breaking in of new men involves a risk of the entry of the pest being guarded against and a nullifying of all previous work. The men now engaged in this work have shown peculiar aptness therefor and are men of energy, ability, and tact. The prevention of the entry of the pink bollworm through the agency of such traffic may mean the prevention of enormous future losses to the cotton crop of America; a crop, furthermore, of very vital war interest. A nonassembled continuing civil-service examination for plant quarantine inspector was announced November 14, 1917, but the list of eligibles resulting from this examination has not yet been sufficient to meet the needs. Even if it were possible to obtain a sufficient number of qualified persons, they could not for a considerable length of time take the place of the men now engaged in this work without substantial material loss and detriment to the adequate and effective operation of the service.

Deferred classification has been requested by the department and allowed by draft boards in the following cases:

Name, home address, character of work, and length of service.

Edgar S. Jewell, Laredo, Tex. Prior to his present appointment was employed by the Federal Horticultural Board in connection with the Maine potato quarantine; also did some work for the Bureau of Plant Industry in connection with potato-disease experiments in Maine. Three years.

Uphian C. Loftin, Lerdo, Durango, Mexico. Entomological assistant in charge of the station established in the Laguna district of Mexico for a study of the pink bollworm of cotton. These studies are to be the basis of control operations and are of the greatest importance in relation to the future handling of the very serious pink-bollworm problem. His loss at this time would interrupt this very valuable piece of work, and in view of the conditions of isolation under which he lives it would be most difficult to find anyone to take his place. Graduate North Carolina Agricultural and Mechanical College, B. S.; post-graduate work at the University of Florida, consisting of courses in soil, physics, embryology, and entomology, leading to degree of M. S.; served as a laboratory assistant to the entomologist of the Florida Experiment Station in connection with a number of citrus investigations, velvet-bean spraying, and other insect investigations. During five summer vacations was employed by the North Carolina Agricultural and Mechanical College Experiment Station in the dairy, bacteriological, and veterinary departments. Prior to present appointment was engaged as entomological assistant in the Bureau of Entomology in the investigation of sugar-cane insects. For several months was stationed in Cuba searching for parasites of sugar-cane insects for importation into the United States. This work was of a novel nature and methods had to be devised as it proceeded, requiring special study and special ability. Five years.

Kenneth B. McKinney, Lerdo, Durango, Mexico. Is detailed to the station established in the Laguna district in Mexico for a study of the pink bollworm of cotton. These studies are to be the basis of control operations and are of the greatest importance in relation to the future handling of the very serious pink-bollworm problem. His loss at this time would interrupt this very valuable piece of work, and in view of the isolation under which he lives it would be most difficult to find anyone to take his place. Graduate University of Tennessee, giving special attention to entomology. Prior to present appointment was engaged on tobacco-insect work for the Bureau of Entomology under temporary appointments averaging about six months each for a period of over four years. Three years.

INSECTICIDE AND FUNGICIDE BOARD.

Name, home address, character of work, and length of service.

J. Louis Monarch, Washington, D. C. Performs the duties of an executive assistant. Has charge of many details involved in the development of cases under the insecticide act, and in the absence of the executive officer performs the administrative work of the Insecticide and Fungicide Board, including the direction of inspectors and sample collectors. The most important feature of his work is to review the scientific data presented by the several branches of the board in connection with alleged violations of the insecticide act and to cooperate with them in the preparation of charges. Has been employed by the board for seven years, and it would be extremely difficult, if not impossible, to secure a man of similar training and experience. Graduate of Georgetown Law School and admitted to the bar of the District of Columbia. Prior to entering the service of the board was employed in the office of the solicitor of this department. Nine years.

REPORT OF COMMITTEE TO WAIT UPON THE PRESIDENT.

Mr. KITCHIN. Mr. Speaker, your committee appointed to wait upon the President and notify him that the House was ready to adjourn and ask if he had any further communication to make, has, in company with a like committee on the part of the Senate, performed that duty. The President wishes us to inform the House that he has no further communication to make at this time.

ADJOURNMENT.

The SPEAKER. The hour of 5 o'clock having arrived, in accordance with the resolution heretofore adopted, the Chair declares the House adjourned without day.

Accordingly (at 5 o'clock p. m.) the House adjourned without day.

EXECUTIVE COMMUNICATIONS, ETC.

Under clause 2 of Rule XXIV, executive communications were taken from the Speaker's table and referred as follows:

1. A letter from the Secretary of the Treasury transmitting supplemental estimate of appropriation required by the Department of State for the fiscal year ending June 30, 1919 (H. Doc. No. 1338); to the Committee on Foreign Affairs and ordered to be printed.
2. A letter from the Secretary of the Treasury, transmitting estimate of appropriation to be included in the deficiency bill or some other act which may be considered at an early date (H. Doc. No. 1340); to the Committee on Appropriations and ordered to be printed.
3. A letter from the Secretary of War, transmitting a draft of a bill increasing the travel allowances of officers of the Army (H. Doc. No. 1341); to the Committee on Appropriations and ordered to be printed.
4. A letter from the Secretary of War, transmitting tentative draft of a bill designed to provide increased compensation for all candidates for commission in the Air Service (Aeronautics) while receiving instruction involving flights (H. Doc. No. 1342); to the Committee on Military Affairs and ordered to be printed.
5. A letter from the Secretary of War, transmitting report of The Adjutant General of the Army relative to the financial and other affairs of the United States Disciplinary Barracks at Fort Leavenworth, Kans., and for the Pacific and Atlantic branches thereof, for the fiscal year ended June 30, 1918 (H. Doc. No. 1343); to the Committee on Military Affairs, and ordered to be printed.
6. A letter from the Secretary of War, transmitting with a letter from the Chief of Engineers report on preliminary examination of Tillamook Bay and River and Hoquarten Slough, Oreg., with a view to securing the most feasible channel from the entrance to the city of Tillamook (H. Doc. No. 1344); to the Committee on Rivers and Harbors and ordered to be printed with illustrations.
7. A letter from the Commissioners of the District of Columbia transmitting a detailed statement of the expenditures from the appropriation for contingent expenses of the government of the District of Columbia for the fiscal year ended June 30, 1918 (H. Doc. No. 1345); to the Committee on the District of Columbia and ordered to be printed.
8. A letter from the Secretary of War directing attention to the importance of the provisions of H. R. 12376 (H. Doc. No. 1346); to the Committee on Reform in the Civil Service and ordered to be printed.
9. A letter from the Secretary of the Navy, transmitting a statement showing for the first four months of the current fiscal year the average number of employees in each bureau and office of the Navy Department proper, at Washington, receiving increased compensation at the rate of \$120 per annum and the average number by grades receiving the same at each other rate (H. Doc. No. 1347); to the Committee on Appropriations and ordered to be printed.
10. A letter from the Secretary of the Navy, transmitting a statement showing, by bureaus and offices, as of date November 15, 1918, the number and designation of persons employed under the appropriation for additional temporary employees, Navy Department (H. Doc. No. 1348); to the Committee on Appropriations and ordered to be printed.
11. A letter from the chief clerk of the Court of Claims, transmitting a copy of the findings of the court in the case of Nancy A. Lockwood, Edna M. Miller, and Charles K. Miller, heirs of Benjamin K. Miller, deceased (H. Doc. No. 1349); to the Committee on War Claims and ordered to be printed.
12. A letter from the chief clerk of the Court of Claims transmitting a copy of the findings of the court in the case of George Jabez Daniels, son and sole heir of Jabez J. Daniels, deceased, against the United States (H. Doc. No. 1350); to the Committee on War Claims.
13. A letter from the chief clerk of the Court of Claims transmitting a copy of the findings of the court in the case of Alice W. Rash, daughter of Humphrey W. Woodyard, deceased, against the United States (H. Doc. No. 1351); to the Committee on War Claims.

PUBLIC BILLS, RESOLUTIONS, AND MEMORIALS.

Under clause 3 of Rule XXII, bills, resolutions, and memorials were introduced and severally referred as follows:

- By Mr. WINGO: A bill (H. R. 13153) extending the time for the construction of a bridge across the Arkansas River, at the foot of Garrison Avenue, at Fort Smith, Ark.; to the Committee on Interstate and Foreign Commerce.

By Mr. SWIFT: A bill (H. R. 13154) providing for the issuance of certificates of record to the nearest of kin of deceased enlisted men and women of the world war; to the Committee on Naval Affairs.

Also a bill (H. R. 13155) providing for the issuance of certificates of record to the nearest of kin of all deceased soldiers and nurses of the world war; to the Committee on Military Affairs.

By Mr. FRENCH: A bill (H. R. 13156) to extend protection under the civil-rights act approved March 8, 1918, to soldiers and sailors beyond the period set forth in said act; to the Committee on the Judiciary.

By Mr. DILLON: A bill (H. R. 13157) prescribing the duties of the Federal judges in cases tried by a jury; to the Committee on the Judiciary.

By Mr. SWIFT: A bill (H. R. 13158) to incorporate the United States Platinum Corporation and to aid in the development of the mineral resources of Alaska, and for other purposes; to the Committee on the Public Lands.

By Mr. ALEXANDER: A bill (H. R. 13159) to further regulate radio communication; to the Committee on the Merchant Marine and Fisheries.

By Mr. FRENCH: A bill (H. R. 13160) to extend the provisions of the homestead laws touching credit for period of enlistment to the soldiers, nurses, and officers of the Army, and the seamen, marines, nurses, and officers of the Navy and the Marine Corps of the United States who have served or will have served during the war between the United States and Germany and Austria; to the Committee on the Public Lands.

By Mr. SINNOTT: A bill (H. R. 13161) for the erection of a statue in honor of Ferdinand Foch, marshal of France, in Washington, D. C.; to the Committee on the Library.

By Mr. VESTAL: Joint resolution (H. J. Res. 352) authorizing and permitting enlisted men of the Army, Navy, and Marine Corps to retain their uniforms; to the Committee on Military Affairs.

By Mr. LUNDEEN: Resolution (H. Res. 452) authorizing and directing certain committees of the House to make investigations relative to employment of labor; to the Committee on Rules.

PRIVATE BILLS AND RESOLUTIONS.

Under clause 1 of Rule XXII, private bills and resolutions were introduced and severally referred as follows:

By Mr. ALEXANDER: A bill (H. R. 13162) to authorize the changing of the name of the steamship *Charlotte Graveract Breitung*; to the Committee on the Merchant Marine and Fisheries.

By Mr. CURRY of California: A bill (H. R. 13163) for the relief of Robert L. Brantley; to the Committee on Military Affairs.

By Mr. BENJAMIN L. FAIRCHILD: A bill (H. R. 13164) granting an increase of pension to William Riley; to the Committee on Invalid Pensions.

By Mr. FIELDS: A bill (H. R. 13165) granting an increase of pension to David Tipton; to the Committee on Invalid Pensions.

By Mr. FRENCH: A bill (H. R. 13166) for the relief of Kentuck Corbett; to the Committee on War Claims.

By Mr. GREEN of Iowa: A bill (H. R. 13167) granting an increase of pension to Osmer A. Rose; to the Committee on Invalid Pensions.

By Mr. GRIFFIN: A bill (H. R. 13168) granting a pension to Matilda Lovey; to the Committee on Invalid Pensions.

By Mr. KRAUS: A bill (H. R. 13169) granting an increase of pension to Alexander Little; to the Committee on Invalid Pensions.

By Mr. LESHNER: A bill (H. R. 13170) granting a pension to Elizabeth Sides; to the Committee on Invalid Pensions.

By Mr. SANDERS of Indiana: A bill (H. R. 13171) granting a pension to Elizabeth Hamilton; to the Committee on Invalid Pensions.

By Mr. CLARK of Missouri: A bill (H. R. 13172) granting a pension to Sarah M. Johnson; to the Committee on Pensions.

PETITIONS, ETC.

Under clause 1 of Rule XXII, petitions and papers were laid on the Clerk's desk and referred as follows:

By Mr. DALE of New York: Resolutions of the Pattern Makers' Association of New York and vicinity asking for the passage of the Smith-Bankhead bill providing for the vocational rehabilitation of workmen disabled by industrial accidents; to the Committee on Education.

Also, petition of John I. D. Bristol, of Milwaukee, Wis., urging the passage of House bill 5407; to the Committee on Military Affairs.

By Mr. DALE of Vermont: Petition of Danville (Vt.) Grange, No. 325, Patrons of Husbandry, favoring repeal of the postal-zone law; to the Committee on Ways and Means.

By Mr. ESSEN: Resolution adopted by Branch No. 3 of the National Association of Post Office Laborers, of St. Louis, Mo., in favor of House bill 9906, providing for an increase in the salary of post-office employees; to the Committee on Post Offices and Post Roads.

By Mr. LUNDEEN: Memorial of a mass meeting of citizens of Minneapolis protesting against armed intervention in Russia and asking immediate recognition of the soviet government; to the Committee on Foreign Affairs.

By Mr. MOORE of Pennsylvania: Resolutions and suggestions for the upbuilding of an American merchant marine; to the Committee on Interstate and Foreign Commerce.

By Mr. STEENERSON: Petitions in favor of H. R. 5407 and S. 4914 by the following: J. A. Narum, J. J. Wade, and Henry N. Jensen, of Detroit; H. E. Webber, of Fergus Falls; Willard S. Ward, of Minneapolis; T. M. McCall, Mrs. H. E. Newland, and Walter F. Banks, of Crookston, all in the State of Minnesota; to the Committee on Military Affairs.

Also, petition urging early action and favorable reconsideration of S. 130, relating to officers' retired pay, etc., signed by the following: Charles Kittleson, M. Hunt, and Charles Davis, Civil War veterans; to the Committee on Military Affairs.

By Mr. VARE: Motion adopted at meeting of United Business Men's Association of Philadelphia, requesting passage of bill for the retirement of civil Government employees; to the Committee on Interstate and Foreign Commerce.

By Mr. YOUNG of North Dakota: Petition of R. H. Wood and seven other citizens of Lakota, and of a number of citizens of Fargo, N. Dak., praying for permission to the Pan Motor Co., of St. Cloud, Minn., to sell the balance of its capital stock; to the Committee on Interstate and Foreign Commerce.