2548. Also, petition of Grand Lodge of the Ancient Order of the United Workmen of Missouri, urging the granting of a bonus to soldiers and nurses of the World War; to the Committee on Ways and Means.

2549. By Mr. FOCHT: Petition of Frank O. Hommon Post, No. 24, American Legion, Huntingdon, Pa., and Victory Post, No. 25, American Legion, of Selinsgrove, Pa., urging a bonus for the ex-service men of the World War; to the Committee on Ways and Means.

2550. Also, petition of Henry Wilson Post, No. 129, Grand Army of the Republic, of Milton, Pa., favoring House joint resolution 1 and Senate joint resolution 52; to the Committee

on the Judiciary.

2551. By Mr. FULLER of Illinois: Petition of Board of Managers of Illinois Society Sons of the American Revolution, favoring the teaching only of the English language in elementary schools; to the Committee on Education.

2552. By Mr. JOHNSTON of New York: Petition of the Medical Society of the County of New York, urging universal military training, etc.; to the Committee on Military Affairs.

2553. By Mr. LONERGAN: Petition of the Common Council

of Meriden, Conn., favoring daylight saving in the eastern time zone; to the Committee on Interstate and Foreign Commerce.

2554. By Mr. O'CONNELL: Petition of the Hagemeyer Trading Co., of New York, urging the passage of House bill 13015; to the Committee on Ways and Means.

2555. Also, petition of Borden & Lovell, of New York, regard-

ing the Lever Act; to the Committee on Agriculture.

2556. By Mr. ROGERS: Petition of Lowell Post, No. 87, American Legion, Lowell, Mass., favoring a \$50 per month bonus for exservice men and women; to the Committee on Ways and Means. 2557. By Mr. ROWAN: Petition of Hagemeyer Trading Co., of New York, favoring the passage of House bill 13015 and

Senate bill 4027; to the Committee on Ways and Means. 2558. Also, petition of Hagemeyer Trading Co., of New York, favoring the passage of House bill 13015; to the Committee on Ways and Means.

2559. By Mr. SIEGEL: Petition of the Building Trades Employers' Association of the City of New York, protesting against the passage of House bill 12320; to the Committee on Immigration and Naturalization.

2560. By Mr. SINCLAIR: Petition of the North Dakota Society of Engineers, favoring the passage of legislation for a national department of public works; to the Committee on Expenditures in the Interior Department.

2561. Also, petition of Frank Gordhamer Post, Bowman, N. Dak., favoring soldier-bonus legislation; to the Committee on

Ways and Means.

2562. By Mr. SMITH of Idaho: Petition of Northwestern Mining Association of Spokane, Wash., urging the enactment of legislation confining the use of silver to subsidiary coins as proposed in the McFadden bill; to the Committee on Coinage, Weights, and Measures.

2563. Also, petition of board of Commissioners, Bliss highway district, Bliss, Idaho, urging Federal aid in construction of high-

ways; to the Committee on Roads. 2564. By Mr. TAGUE: Petition of Lewis Mears Co. and C. A. Browning Co., of Boston, Mass., opposing the passage of House bills 12379 and 12646; to the Committee on Banking and Currency.

2565. By Mr. TINKHAM: Petition of sundry citizens of the State of Massachusetts, favoring the passage of the Raker bill providing for the parole of Federal prisoners (H. R. 1112); to the Committee on the Judiciary.

2566. By Mr. YOUNG of North Dakota: Petition of the Bismark Commercial Club, of Bismark, N. Dak., urging a recount in the census; to the Committee on the Census.

SENATE.

WEDNESDAY, March 24, 1920.

(Legislative day of Tuesday, March 23, 1920.)

The Senate met at 12 o'clock noon, on the expiration of the

WAR WITH GERMANY.

Mr. THOMAS. Mr. President, I shall detain the Senate but a moment concerning a subject which is naturally attracting much public attention at this time. I refer to the House resolution the purpose of which is to declare peace between the United States and Germany. This morning's Post informs the public that-

After a conference yesterday between Senator Lodge and Representa-tive PORTER, chairmen of the Senate and House Committees on Foreign Relations, the conviction grew among Members of both parties in Con-gress that President Wilson will not be able to prevent an end being

made to the existing state of technical war between the United States and Germany. A simple resolution, separate from the Versailles treaty, declaring a state of peace, it was claimed yesterday, will pass both Houses by large majorities, and, according to the present outlook, may reach the two-thirds necessary under the Constitution to override a presidential veto.

Mr. President, I am as heartily and anxiously in favor of the establishment of actual peace between the United States and the Central Empires at the earliest possible moment as any man can be. I am more than willing to stretch any doubt regarding the power of Congress to enact such a resolution as that referred to in the article from which I just read and entertain the resolution. But I am fairly well convinced that the Congress possesses no such authority under the Constitution, and my apology for intruding the subject upon the attention of the Senate this morning is solely due to the fact that there seems to be a general and rapidly growing impression that we have that power and should exercise it. Hence, if the impression be unchallenged and it should then be developed that no such authority is devolved upon Congress a resulting disappointment must follow for those who look confidently to an early period when, by act of Congress, a technical state of war will no longer exist.

There are but three known ways of effecting peace, if the authorities upon international law are reliable. One is by conquest, another by negotiation, and a third by abandonment of hostilities, and none of these even hint at the existence of legislative power in America to so declare. Doubtless the House of Commons should possess that power, as it is the custodian of the superme sovereignty of the British Empire. But no such power inheres in the American Congress.

The subject seems to have escaped the consideration of writers upon international law, doubtless because of the very proper

assumption that no such authority exists.

I had occasion when the Knox resolution was introduced to devote a little time to an investigation of the subject, as it then occurred to me that such a power was entirely inconsistent with the right to wage war and with the powers of the President as Commander in Chief of the Army and Navy.

The proceedings of the Constitutional Convention were secret. The only record of its deliberations is the diary of Madison, together with some fugitive reports of discussions here in Yates's Secret Debates. But a little information upon the subject is to be secured from them.

Mr. Madison says that, on August 17, on the motion for adding "and peace" after "war," it was unanimously negatived, the motion, of course, being to amend the phrase to declare war by adding "and peace," so that if adopted the amended clause would read "to declare war and peace."

In volume 1 of Elliott's Debates, page 246, is this recital:

It was moved and seconded to add the words "and to make peace" to the fourteenth clause, which passed unanimously in the negative.

I gather from this recital that the original proposal upon the subject embodied the word "make" in place of the word "declare," because this report continues:

On motion to insert "declare" in place of "make," the vote was 8 affirmative to 1 negative.

Mr. Madison's note reads:

Connecticut voted in the negative; but on the remark by Mr. King that "make" war might be understood to "conduct" it, which was an Executive function, Mr. Ellsworth gave up his objection and the vote was changed to "aye."

Mr. Ellsworth's note reads as follows:

There is a material difference between the cases of making war and making peace. It should be more easy to get out of war than into it.

I may inject here the opinion that if Mr. Ellsworth had lived well into the twentieth century he would have been disabused of that impression. He continued:

War also is a simple and overt declaration; peace is attended with intricate and secret negotiations.

It appears, therefore, Mr. President, that the question was actually considered by the Constitutional Convention while framing that document, and that the effort to invest Congress with the power to make peace concurrently with the power to declare war not only failed but was ultimately rejected by the unanimous verdict of all the delegates.

In the Federalist I find this reference to the subject, which is indirect. I read an extract from the Federalist, No. 74, by

Hamilton:

The President of the United States is to be "Commander in Chief of the Army and Navy of the United States and of the militia of the several States when called into the actual service of the United States." The propriety of this provision is so evident in itself and it is at the same time so consonant to the precedents of the State constitutions in general that little need be said to explain or enforce it. Even those of them which have in other respects coupled the Chief Magistrate with a council have for the most part concentrated the military authority in him alone. Of all the cares or concerns of government, the direction of war most peculiarly demands those qualities which distinguish the exercise of power by a single hand. The direction of

war implies the direction of the common strength, and the power of directing and employing the common strength forms a usual and essential part in the definition of the Executive authority."

In Paul Leicester Ford's edition of the Federalist is this note of comment on above:

In this brief paragraph is dismissed the gravest problem which our Government has yet encountered regarding the presidential power. Had Mr. Bagehot investigated with any care the history of the wars of 1812 and 1861 he would probably have found our Government sufficiently "elastic," for, as Mr. Bryce remarks, the powers of the President in war time, "and especially in civil war," expand with "portentous speed." Indeed, Lincoln went so far as to assert that "as Commander in Chief of the Army and Navy in time of war I suppose I have the right to take any measures which may best subdue the enemy."

Of course I assume that the resolutions which formed the subject of press comment are joint and not concurrent. Indeed, they could be nothing else, and be considered at all, since the resolution declaring war was a joint resolution approved by the President in April, 1917, thus requiring a similar resolution to repeal it. If that be so, of course the presidential approval is essential to the resolution. Of course peace by joint resolution approved by the Executive, who has the sole power to wage war, is entirely feasible.

I have been, as I said, led to submit these considerations to the Senate solely because of the impression that seems to be gaining ground in the public mind that Congress is endowed, among other things, with the power to make peace wholly independent of the Executive, either because it is an essential part of its authority or because it is necessarily implied in our power to declare war; an impression without foundation, in my judgment, and calculated to mislead the public judgment to our detriment if it shall remain unchallenged.

MESSAGE FROM THE HOUSE.

A message from the House of Representatives, by D. K. Hempstead, its enrolling clerk, announced that the House had passed a bill (H. R. 13108) making appropriations for the naval service for the fiscal year ending June 30, 1921, and for other purposes, in which it requested the concurrence of the Senate.

ABOLITION OF HOUSING CORPORATION.

Mr. FERNALD. Mr. President, I wish to clear up a parliamentary situation between the two Houses.

On December 17 a bill-H. R. 7656-passed the House abolishing the United States Housing Corporation. It was sent to this body and referred to the Committee on Public Buildings and The Committee on Public Buildings and Grounds

reported another bill, which passed the Senate, S. 3738. What I wish to do is to report from the Committee on Public Buildings and Grounds House bill 7656 with an amendment striking out all after the enacting clause and inserting the text of Senate bill 3738, as reported favorably from that committee.

Mr. SMOOT. And the Senator asks unanimous consent for its consideration?

Mr. FERNALD. I ask unanimous consent that the bill may

be put upon its passage.

The PRESIDENT pro tempore. The Senator from Maine asks unanimous consent for the present consideration of the bill which he has just reported. Is there objection?

Mr. GRONNA. If the consideration of the bill leads to no debate, I have no objection.

Mr. FERNALD. It certainly can lead to no discussion, for

Mr. FERNALD. It certainly can lead to no discussion, for a similar bill has already passed the Senate.

There being no objection, the Senate, as in Committee of the Whole, proceeded to consider the bill (H. R. 7656) to repeal the act entitled "An act to authorize the President to provide housing for war needs," approved May 16, 1918, and to repeal all acts and parts of acts amendatory thereof, and to provide for the disposition of all preparts acquired under and by wintred. for the disposition of all property acquired under and by virtue of the same, reported from the Committee on Public Buildings and Grounds with an amendment to strike out all after the enacting clause and to insert:

enacting clause and to insert:

That the power and authority to provide housing, local transportation, and other general community utilities as granted by sections 1, 2, 3, and 4 of the act entitled "An act to authorize the President to provide housing for war needs," approved May 16, 1918, shall cease and determine as of the date of the approval of this act: Provided, however, That the power and authority granted by the said act of May 16, 1918, to requisition any improved or unimproved land or any right, title, or interest therein, on which houses, bulldings, improvements, local transportation, and other general community utilities and parts thereof have been constructed, shall remain vested in the President, to be exercised when necessary to protect the interest of the Government, and to cease with the termination of the war when formally proclaimed by the President.

SEC. 2. That the various offices, bureaus, divisions, and branches of the public service and of the various corporate or other agencies exercising the powers granted by the said act of May 16, 1918, and other acts and parts of acts amendatory theerof, and all that pertains to the same, including such officers, clerks, and employees employed therein, as in the opinion of the Secretary of the Treasury are necessary to carry out the purposes of this act, also the official records and papers on file in and pertaining to the business of the said offices,

bureaus, divisions, and branches of the public service and of the various corporate or other agencies and relating to the exercise of the said powers, together with the furniture, equipment, and supplies used in connection therewith, shall be transferred to the Treasury Department on the 80th day of June, 2020, for the exercise of the power and authority prescribed in said act of May 16, 1918, and other acts and parts of acts amendatory thereof, shall continue available for the Backly year ending June 30, 1920, for the exercise of the power and authority prescribed in said act of May 16, 1918, and other acts and parts of acts amendatory thereof, shall continue available for the Treasury Department during the fiscal year ending June 30, 1921.

Size, 3. That the Secretary of Labor be, and he is hereby, directed to deliver to the Secretary of the Treasury on the 20th day of June, 1920, and and authority granted by the said act of Congress approved May 16, 1918, and other acts and parts of acts amendatory thereof, remaining undisposed of on June 30, 1920, together with all deeds, contracts, evidence of security or indebtedness; Provided, That the same shall be transferred in such legal form as is required to vest the legal or evidence of security or indebtedness; Provided, That the same shall be transferred in such legal form as is required to vest the legal or the Treasury by the Secretary of Labor as provided for by section 3 of this act the Secretary of the Treasury is hereby authorized—

(a) To sell and convey the real estate, improvements, and furnish reasonable effort shall be made to sell the dwelling houses direct to prospective individual home owners who are citizens of the United States, and who desire the houses for their own occupancy: Provided States, and who desire the houses for their own occupancy: Provided States, and who desire the houses for their own occupancy is recorded to the secretary of the Treasury shall have full power and authority the secretary of the Treasury shall have full power and

SEC. 8. That the Secretary of Labor immediately upon the passage of this act shall cause to be instituted such legal steps as are necessary to wind up the affairs of the United States Housing Corporation, so as to dissolve the said corporation and all other corporate agencies heretofore and now exercising the powers and authority granted by the act of Congress approved May 16, 1918, and other acts and parts of acts amendatory thereof, and to make effective on June 30, 1920, the transfer to the Treasury Department provided for by this act: Provided, That on June 30, 1920, the Secretary of Labor shall report to Congress in accordance with the provisions of the act of Congress approved July 1919, entitled "An act making appropriations for the sundry civil expenses of the Government for the fiscal year ending June 30, 1920, and for other purposes" (United States Housing Corporation), and in addition thereto shall furnish a detailed statement showing all real and personal property acquired under and by virtue of the provisions of the act of Congress approved May 16, 1918, and other acts and parts of acts

amendatory thereof; showing the use to which each piece of property was applied and showing all property disposed of, together with the cost and the amount received from the sale of the same: Provided further, That the Secretary of Labor shall furnish a copy of the said report to the Secretary of the Treasury.

The PRESIDENT pro tempore. The question is on agreeing

to the amendment.

Mr. SMOOT. Mr. President, merely for the RECORD, I desire to ask the Senator from Maine if this bill is in the identical language of the bill which he states has heretofore passed the

Mr. FERNALD. Yes, sir; it is. The PRESIDENT pro tempore. Without objection, the amendment is agreed to.

The bill was reported to the Senate as amended, and the

amendment was concurred in. The amendment was ordered to be engrossed and the bill to be

read a third time.

The bill was read the third time and passed. Mr. FERNALD. I move that the Senate request a conference with the House of Representatives on the bill and amendment, and that the Chair appoint the conferees on the part of the Senate.

The motion was agreed to, and the President pro tempore appointed Mr. FERNALD, Mr. SPENCER, and Mr. TRAMMELL conferees on the part of the Senate.

THE LINCOLN MEMORIAL.

Mr. WARREN. From the Committee on Appropriations I report back favorably without amendment the joint resolution (H. J. Res. 316) relating to supervision of the Lincoln Memorial. It consists of a few lines, and will, I am sure, occupy no time. I ask for its immediate consideration.

There being no objection, the Senate, as in Committee of the Whole, proceeded to consider the joint resolution, which was

read, as follows:

Resolved, etc., That in the exercise of its control and direction for the construction of the Lincoln Memorial authorized by act of Congress approved February 9, 1911, the commission created by said act shall designate to perform the duty of special resident commissioner, to represent the commission in the oversight of the work, the Hon. John Temple Graves, recently appointed a member of the Lincoln Memorial Commission, as the successor of the Hon. Joseph C. Blackburn, deceased, and for the special service of the member so designated he shall be entitled to receive compensation at the rate of \$5,000 per annum out of the appropriations for the construction of such memorial.

The joint resolution was reported to the Senate without amendment, ordered to a third reading, read the third time, and passed.

BILLS INTRODUCED.

Bills were introduced, read the first time, and, by unanimous consent, the second time, and referred as follows:

By Mr. SMITH of South Carolina:

A bill (S. 4123) for the relief of Jesse C. Dennis and William Rhett Eleazer; to the Committee on Post Offices and Post Roads.

A bill (S. 4124) granting an increase of pension to James W. Gray, jr.; to the Committee on Pensions. By Mr. CALDER:

A bill (S. 4125) for the relief of a certain estate; and A bill (S. 4126) for the relief of Edward C. Roser; to the Committee on Claims.

By Mr. HARDING:

A bill (S. 4127) for the relief of certain estates; to the Committee on Claims.

A bill (S. 4128) granting a pension to John F. Flaherty; to the Committee on Pensions.

THE MERCHANT MARINE.

Mr. McNARY submitted an amendment intended to be proposed by him to the bill (H. R. 10378) to provide for the promotion and maintenance of the American merchant marine, to repeal certain emergency legislation, and provide for the disposition, regulation, and use of property acquired thereunder, and for other purposes, which was referred to the Committee on Commerce and ordered to be printed.

AMENDMENTS TO APPROPRIATION BILLS.

Mr. SUTHERLAND submitted an amendment proposing to appropriate \$3,500 for salary of the Librarian of the Senate Library, etc., intended to be proposed by him to the legislative, etc., appropriation bill, which was referred to the Committee on Appropriations and ordered to be printed.

Mr. CAPPER submitted an amendment proposing to increase the appropriation for salaries, travel, and other necessary expenses of employees of the Agricultural Department outside the city of Washington engaged in field investigations from \$168,076 to \$370,000, etc., intended to be proposed by him to the Agricultural appropriation bill, which was ordered to lie on the table and be printed.

He also submitted an amendment proposing to increase the appropriation for salaries, travel, and other necessary expenses of employees of the Agricultural Department outside the city of Washington engaged in field investigations from \$168,076 to \$216,562, etc., intended to be proposed by him to the Agricultural appropriation bill, which was ordered to lie on the table and be printed.

Mr. HARRISON submitted an amendment proposing to increase the appropriation for investigations of insects affecting truck crops, etc., from \$110,000 to \$131,760, intended to be proposed by him to the Agricultural appropriation bill, which was

ordered to lie on the table and be printed.

Mr. GAY submitted an amendment proposing to increase the appropriation to enable the Secretary of Agriculture to carry into effect the provisions of the act of April 26, 1910, known as the insecticide act, from \$85,000 to \$117,000, etc., intended to be proposed by him to the Agricultural appropriation bill, which was ordered to lie on the table and be printed.

COTTON IN STORAGE.

Mr. SMITH of South Carolina. I send to the desk a Senate resolution for which I ask immediate consideration. It simply asks for certain information from the Census Bureau, which it is very important the Senate should have.

The PRESIDENT pro tempore. The Secretary will read the

resolution.

The resolution (S. Res. 340) was read, considered by unanimous consent, and agreed to, as follows:

Resolved, That the Director of the Census is hereby requested to furnish to the Senate at the earliest possible time the number of bales of so-called unspinnable cotton including gin cut, water packed, perished fiber, and linters, in public storage and at concentrating points.

CONGRESSIONAL COMMISSION TO VIRGIN ISLANDS.

Mr. KENYON. I ask that the testimony taken by the commission which was appointed to visit the Virgin Islands be printed, and I ask that the request be referred to the Committee on Printing

Mr. SMOOT. Perhaps it would be better to request that the testimony be referred to the Committee on Printing with a view

to having it printed as a public document.

Mr. KENYON. I desire to make that request if it is the usual form followed in similar instances

Mr. SMOOT. It is the usual form. Mr. KENYON. Then I make the r Then I make the request as suggested by the Senator from Utah.

The PRESIDENT pro tempore. Without objection, the request made by the Senator from Iowa is granted, and the testimony will be referred to the Committee on Printing for action.

HOUSE BILL REFERRED.

H. R. 13108. An act making appropriations for the naval service for the fiscal year ending June 30, 1921, and for other purposes, was read twice by its title and referred to the Committee on Naval Affairs.

AGRICULTURAL APPROPRIATIONS.

The Senate, as in Committee of the Whole, resumed the consideration of the bill (H. R. 12272) making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1921.

The reading of the bill was resumed.

The next amendment of the Committee on Agriculture and Forestry was, under the subhead "Forest Service," on page 34, line 25, before the word "clerks," where it occurs the second time, to strike out "nineteen" and insert "twenty-six"; on page 35, line 1, before the word "clerks," to strike out "twenty-one" and insert "twenty-eight." and insert "twenty-eight."

The amendment was agreed to.

Mr. CHAMBERLAIN. Mr. President, I desire to make a few observations on this measure. I do not know that it is necessary to do so in order to aid its enactment, because I believe that the Senate will pass the bill anyway; but I desire to make some comments in reference to the protection of forests, and incidentally the cooperation between the States and the Federal Government in the use of the Air Service.

This bill very properly takes care of the forests in the several States of the Union, and on page 98 it proposes to add to the amount provided for in the bill as it came from the House for the cooperation of the Federal Government with the States.

As the bill came from the House it provided:

Fighting and preventing forest fires: For fighting and preventing forest fires, \$250,000, or so much thereof as may be necessary, but not to exceed \$150,000 of this fund shall be expended except in cases of extraordinary emergency.

That has been added to by an amendment of the Senate committee. I desire to commend the course of the committee in that regard, and I think their action will be sustained by the Senate.

Mr. GRONNA. Mr. President, will the Senator yield?
The PRESIDENT pro tempore. Does the Senator from Oregon yield to the Senator from North Dakota?

Mr. CHAMBERLAIN. Yes.

Mr. GRONNA. I desire to say to the Senator from Oregon that the amendment to which he refers was proposed by his colleague, the junior Senator from Oregon [Mr. McNarv], and is designed to provide \$60,000 for the maintenance of an airpatrol service, in order to enable the War Department to cooperate with the Forestry Service.

Mr. CHAMBERLAIN. I understood the amendment had been suggested by my colleague, and I am glad the committee acted favorably upon it. The provision proposed to be added by the

Senate committee is-

And to enable the Secretary of Agriculture to cooperate with the War Department in the maintenance of an air patrol for fire prevention and suppression on the national forests of the Pacific coast and the Rocky Mountain regions, \$60,000; in all, \$310,000.

The problems of the war and of the period since the war have emphasized more than at any previous time the importance of forests to our industries. We have had such an abundance of available timber resources in this country that we have not appreciated the part that these have played in our everyday life. Until comparatively recently it has been possible to obtain lum-

ber in abundance at reasonable prices.

We have, however, been drawing on our original supplies, and even to-day 85 per cent of the lumber found in the general market comes from original timber—that is, from trees from 125 to 250 or more years of age. As one timber center has been cut, the extension of transportation has enabled the opening up of new areas. Thus, we have seen the original forests of the Northeastern States exhausted, then the Central States, then the Lake States, and the center of lumber production finally transferred to the great pine forests of the Gulf States. comes as something of a shock to the country to learn that these supposedly inexhaustible pine forests are approaching an end. The original bodies of pine timber in the South-that is, those which are of importance for large quantity production-will be cut out within 10 to 15 years at the present rate of production. This does not mean that every tree will be cut, but that the old growth forests which support the great lumber mills will be largely cut out.

EFFECTS OF FOREST DEPLETION.

The effects of forest depletion are felt long in advance of the cutting of the last tree. The effects are felt just as soon as the production of a given region begins to fall off to a point where the timber from that region is no longer of importance as a competitive factor in the market. We are still cutting white pine in Minnesota, but that region has long ceased to be a factor in the competitive market and the stumpage has progressively risen to \$12 to \$16 a thousand.

Precisely this is happening in the South to-day, as the Senator from Louisiana [Mr. Gay], who sits near me, I think, will testify. Until recently southern pine has dominated the principal markets of the country. This means chiefly the markets of the East, because the largest per cent of the consumers of lumber live east of the Rocky Mountains. Recently southern yellow pine has been rapidly yielding to the Pacific coast timbers, especially Douglas fir from Oregon and Washington, in the chief competitive fields, so that to-day in many of the central western markets Douglas fir is being used in increasing quantities and southern yellow pine is gradually being withdrawn as a competitive factor. The high price of lumber in the general market is determined not by southern yellow pine, as formerly, but by Douglas fir from the Pacific coast. That is, the purchaser of lumber to-day pays the equivalent of the value of Douglas fir plus freight from the Pacific coast.

INCREASING IMPORTANCE OF WESTERN TIMBER

This means that for the grades of lumber which can be obtained only from the original forest the country must turn more and more to the Pacific coast. It means that the forests of the Pacific Northwest assume a national significance. They represent a great asset for the Nation which every wood-consuming industry and every purchaser of lumber has a direct interest in seeing properly husbanded, carefully utilized, and perpetuated. We may well deplore the reckless waste with which our eastern forests have been progressively used up and destroyed. The very economic consequences of this dissipation of the eastern forest resources which are now being felt so generally emphasize the absolute necessity for the Nation itself to vigorously take hold of the forestry problem.

The first step in this is to prevent further devastation of such forests as the country has left, and the place to begin is to safeguard the forest resources which are owned by the people themselves—that is, the national forests. The committee of

the Senate, and I may say also the committee of the House, have shown by their action that they do not propose to be niggardly in taking steps for the protection of our forests, realizing, as they do, and as they have done for a number of years past, that our forests constitute one of the greatest elements of value to the whole Nation.

THE NATIONAL FORESTS.

The dissipation of our forest resources has resulted primarily from faulty public-land policies. We may be proud of the results of our homestead laws, based, as they were, upon the wise principle of getting the agricultural lands of our country into the hands of the small-home builder. In the early days, however, recognition was not given to the fact that there are large areas wholly unsuitable for agriculture and settlement, which serve their best purpose in the long run in the production of timber. The result was that in the early days no attention whatever was paid to the forests of the public domain. Fires were allowed to burn unchecked and millions of dollars worth of damage was done every year. Enormous timber frauds were perpetrated on the Government under which great areas of public forests wholly unsuited to agriculture passed into the hands of great timber barons.

A number of years ago the policy regarding our public forests was changed and large areas were set aside as national forests, now aggregating about 155,000,000 acres. The forestry policy of the Government, the policy that was adopted of setting aside these forest areas, was condemned and denounced as an unwise policy at the time it was inaugurated; and Members of the Senate will remember that Mr. Gifford Pinchot, who was one of the early advocates of the larger withdrawals, was denounced in many parts of this country for the policy he was urging. I assert, however, that if it had not been for that policy, which withdrew these magnificent forests from private acquisition by a few great timber barons, the forest lands of this country would have been lost to the general public and placed in the hands of a few individuals. I think, now, the people are beginning to commend the policy that was then adopted, instead of condemning those who were the authors of it.

These large areas have been under the administration of the Forest Service in the Department of Agriculture for approximately 15 years. During that time there has been built up a system of fire prevention which involves various improvements in the forests, such as trails, fire lines, lookout points, telephone communications, and so forth. It involves also an organization of men prepared to detect fires and to extinguish such as start.

Adjacent to the national forests and interlocked with them are State lands and private lands. It has been recognized that fire prevention requires a coordinated system applicable to all lands regardless of ownership. It is fruitless for one owner to employ preventive measures on his lands when his neighbor's land is unprotected and a constant menace. In the Northwestern States the Forest Service, the States, and private owners have worked out such a coordinated system of fire protection, which is effective so far as it goes.

We have not fully mastered forest fires. Although excellent work has been done by the Government and other agencies in the Northwest in their efforts to prevent fires, there is still every year a loss far beyond what the public can afford to have occur. It is not merely a question of pecuniary loss in timber, but the destruction of a usable product which requires from 75 to 150 or more years to produce. This is quite aside from the damage which is actually being done every year to the watersheds of rivers of enormous importance to irrigation and

manufacturing enterprises.

It should be recalled that the forests of the Northwest are almost wholly coniferous. It should be recalled also that we have a long dry season. In some years there may be no rain at all in certain places for periods as long as 90 days. Under such conditions the soil dries out to a great depth and the surface cover becomes thoroughly desicated. At such times there are apt to be heavy and constant winds. A small fire set by lightning, by a careless smoker, or from a locomotive spreads under these conditions very rapidly and if not quickly extinguished soon becomes a real conflagration.

Great progress has been made in recent years in educating the public to better care in the matter of fire in the woods. The danger from the negligence of campers has been greatly reduced, but a certain number of fires are inevitable every year from carelessness, that is lightning

ventable cause of fires—that is, lightning.

This last year, in spite of the best efforts of the Forest Service, there were 6,800 fires started in the national forests that had to be fought by the protective force. A good many

of these fires were quickly discovered and extinguished before they had covered more than a few acres. Over 70 per cent of these fires were put out before they reached 10 acres. Several hundred fires, however, were in localities where they could not be discovered quickly or could not be reached quickly, and these did a very large amount of damage.

The greatest damage was in the northwestern region, where

some of the most valuable timber remaining in the country is

located.

The immensity of it is hard to realize; and it is for that reason that I am undertaking to place this statement in the RECORD, so that in the consideration of the protection of the forests in the future the Congress may have some of these figures before them. There was burned over altogether approximately 2,000,000 acres within the national forests, with a damage amounting to about \$4,000,000. In addition, it cost the Government approximately \$3,000,000 to meet the great emergency of last season. The summer of 1919 was the dryest in the Northwest of any year since 1889. The conditions were therefore unusual. We must, however, expect severe droughts from time to time, and must be prepared to prevent such disasters as occurred last year.

These losses are greater than the country can possibly afford. We must not permit millions of dollars' worth of timber, or even hundreds of thousands of dollars' worth of timber, to be

Mr. STERLING. Mr. President, will the Senator yield? The PRESIDENT pro tempore. Does the Senator from Oregon yield to the Senator from South Dakota?
Mr. CHAMBERLAIN. I yield.

Mr. STERLING. I wondered whether the losses from forest fires during the last year or possibly two years were not greater because of a depleted Forest Service force, many of the men

having gone to the war, for example?

Mr. CHAMBERLAIN. That was a factor, of course; but I will say to the Senator that volunteers were ready at any time in the States, men who were not fitted for military duties, to assist in putting out these fires.

Mr. NUGENT. Mr. President—

The PRESIDENT pro tempore. Does the Senator from Oregon

yield to the Senator from Idaho? Mr. CHAMBERLAIN. I yield.

Mr. NUGENT. May I suggest to the Senator one further reason, and that is that a very considerable number of experienced forest men left the service, because of the comparatively small salaries paid to them, and entered other fields of industry, and that it was next to impossible to build up a sufficiently efficient organization last year to cope with these

Mr. CHAMBERLAIN. The Senator is correct about it. only did these young men go into the service, as suggested by the Senator from South Dakota, but the men at the head of the Forestry Service went over and did their bit in protecting the forests of France and others upon which the Allies were compelled to rely for timber to carry on the war.

Take Forester Graves, for instance, as one, and others who were immediately under him. They went over, and some of them were decorated for the splendid service they rendered the Allies in the war, so that there was, as both Senators have suggested, some reason for the losses which occurred last

Every stick of our timber is needed. More than that, however, these are measurable damages. The national forests are at the headwaters of our rivers and streams upon which the West depends for water for irrigation, for power, and various other purposes. Many instances can be pointed out where the destruction of forests by fire has already had a serious influence on the character and volume of the stream flow. This is well illustrated in years like 1919, when the streams dried up quickly where the slopes had been stripped of their forests, and there was a much more sustained flow where the forests had not been injured.

VALUE OF THE TIMBER.

The volume of timber standing in the national forests in the Northwest and in California aggregates something like 400,000,000,000 feet, board measure. This represents fully three-fourths of the timber which is still in the hands of the Nation. At a valuation of \$1 a thousand this represents a tangible value of \$400,000,000, and it is a value which is increasing each year; and I may add here that the value I have placed on it as an estimate is extremely low.

In addition to the Government timber there is an immense amount of State and private timber which should also be safeguarded as a resource available for industrial use. It has been

estimated that private timber in the region in question amounts to from twelve to fifteen hundred billion feet, board measure. Every private owner has a definite responsibility to handle his lands in such a way that there will not be injury to the public. He must not be permitted to devastate his property and thereby jeopardize his neighbors and the public at large. In practice, however, the individual private owner is helpless unless there is cooperation and assistance of the public.

The character of the public forestry problem is such that the public itself must take the lead. It is absolutely necessary that the public adequately protect its property and take the leadership in the organization of a fire protective system, in which all private owners will be required to participate generously, making such contributions as are equitable and necessary. The public interest in the protection of all the forests of the country is such that it can well afford to contribute liberally, at least in the protection of its own property and in cooperating so as to bring about an efficient protective system on lands which are privately owned.

NEED OF AIR PATROL.

Forest patrol by aircraft is proposed not as a substitute for the system which is now in effect. I am calling attention to this, Mr. President, because a disposition has been shown upon the part of Congress, after billions of dollars have been expended in the development of the airplane, now to abandon it. This disposition is being shown notwithstanding the fact that Great Britain, Italy, and France are spending immense sums for the purpose of developing the airplane to its highest possible development, and for the training of aviators as well. Here is a use to which the airplane may be put in the United States which will not only encourage the development of the airplane but will lead to the training of men who shall operate airplanes in times of peace and in war. I am going to call the attention of the Senate particularly to the splendid work that was done experimentally by airplanes during the fires of last season, which were very destructive; and if it had not been for this service cooperating with the State services and with the Forest Service of the Government, nobody can tell what the losses might have been in the great forests of the Northwest.

What is sought is to supplement the present system so as to make it more effective and to enable us really to conquer the greatest menace to our forest resources. The present system of detecting fires has definite limitations which prevent a 100 per cent efficiency. Supplemental air patrol is just what is needed to overcome the difficulties of the ordinary ground-preventive

system.

The experience in California and other States last summer has demonstrated a number of important facts regarding air patrol.

California was the seat, the home, of the airplane, in a measure, because there were more fields there for the use of the airplane than anywhere else; so that, taking it as a point of beginning, there were greater possibilities than in the other States.

1. A moving observer can pick up many fires which are hidden from a stationary observation point. Frequently a fire in a canyon or on the far slope of a mountain may gain considerable headway before the smoke rises high enough to be observed from the ordinary lookout point. The quick discovery of a single fire may result in enough saving to cover the entire amount asked for by the Department of Agriculture for this work.

The possibilities of the airplane were very clearly shown in the magazine sections of nearly all of the large papers the other day in a picture of an airplane flying over the crater of the sleeping volcano Lassen, in California, taken by another airplane photographing the one below. This proves that the airplane can get right to the point for anything that is needed to be seen in the forests and in the danger sections of forest

2. Frequently a distant fire is discovered from a lookout point, but it is impossible to determine its character and the probable number of men needed to extinguish it with any degree of accuracy. Under such circumstances a guess is made and a crew is sent out, which may prove to be either too many or too few. If the country is an undeveloped one, it may take from one to three days to reach the fire, when it will have become a conflagration. If too many men are sent, there has been a waste of money; if too few men are sent, the fire gets out of hand and a great loss ensues. It would require but a very short time for an airplane to inspect and report upon such a fire, enabling the dispatch of men and equipment adequate to extinguish it.

3. The airplane is of great value in directing the work of fire suppression. In the case of a large fire it may take 24 hours or more to make a study of the situation to determine just where the fire fighters should be located. With an airplane this can be determined in a very short time. The same is true in watching the work as the fire fighting progresses. Costly mistakes may thus be avoided and in the long run a great saving made.

4. The moral value of the air patrol is very great. The prevention of carelessness among people who use the woods is one of the greatest needs of to-day. The air patrol is a constant advertisement of the need of care in the woods. It has also an important effect on law enforcement. The existence of such a system, with airplanes flying about, is a notice served on every law breaker in the country.

5. Incidental to the active patrol work, the aviators should be able to do a great deal of mapping, which would be of immense service, not only in the protective work but in the handling of the various other administrative problems of the

COST OF THE ENTERPRISE.

The design is to make the forest patrol incidental to the training of the aviators. It is not proposed to build up a special and additional service in the Army for forest patrol. The Army will have to maintain a certain establishment anyhow, with its planes and all of the incidental expense of operation. If at the same time this establishment can render a civil as well as a military service, it is a great gain to the Government.

There are certain expenses, however, which the Army should not properly be charged with, and the War Department has asked the Forest Service to assume these expenses. They amount altogether to \$60,000, and that is the amount included in this These cover the expenses of employees of the Service located at the different bases and subbases of the Air Service, men who constitute a sort of liaison between the Air Service and the regular patrol service of the forests. are also expenses connected with certain improvements, as in the construction of pigeon lofts for the carrier pigeons used in sending messages and improvement of emergency landing fields. The Air Service will furnish the pigeons which will be needed, but the Forest Service will be expected to maintain them. And, finally, there will be expenses connected with the conferences, which should be held at least once a year and probably oftener, of forest officers and members of the Air Service to plan their work and to receive personal instructions in working out the various technical problems.

Mr. OVERMAN. Mr. President—
The PRESIDENT pro tempore. Does the Senator from Oregon yield to the Senator from North Carolina?

Mr. CHAMBERLAIN. I yield.

Mr. OVERMAN. Under the amendment which the Senator is discussing I notice that this Air Service is limited to the national forests of the Pacific coast and the Rocky Mountain section. If it is good for that section, why would it not be good for other sections?

Mr. CHAMBERLAIN. There is not any question about that, but this is particularly for the national forests, which hold the largest body of timber.

Mr. OVERMAN. I understand, but they are all national

forests, wherever located.

Mr. CHAMBERLAIN. I would be glad to have the bill amended so that the Air Service might function anywhere.

Mr. OVERMAN. That is the reason why I asked the question.

Mr. CHAMBERLAIN. The only reason why it was confined to that section was because it is the only section that seemed to be demanding it at the hands of the committee; and besides, as I have stated to the Senator and have tried to show here, practically all the timberlands which now belong to the people as a whole are located in the national forest reserves in the West.

Mr. OVERMAN. There is no doubt about that, but there are some reserves in the southern country that ought to be protected.

Mr. CHAMBERLAIN. I am in accord with the Senator's views, and we will cooperate with Senators from any section of

the country in having the service extended.

Mr. OVERMAN. I know the Senator is always broad and liberal in such matters, and that is the reason why I asked him the question. I hope he will pardon me for interrupting

Mr. CHAMBERLAIN. I am glad to be interrupted, and if the Senator will draw an amendment that will assist in extending the use of this air patrol to other sections, I will promise him that I shall do all I can to get it through, because, aside from forestry protection, it will aid in the training of aviators and in preparing for war in case war ever comes.

Now, Mr. President, I want to call attention briefly to the history of the development of the use of the airplane in forestry protection.

HISTORY OF AIR PATROL.

Mr. C. E. Rachford, acting district forester, in a report on airplane forest-fire patrol, gives the history of the movement in California so clearly that I quote from it as follows:

California so clearly that I quote from it as follows:

The first mention of the use of the airplane, so far as is now known, in connection with forestry fires, dates back to 1999, when a resolution adopted at a meeting of the forest supervisors held in El Paso, Tex., called attention to the possibilities of this method of fire patrol on the national forests. The first actual use of aircraft in this connection was made in Wisconsin in 1915. At that time a Curtiss four-passenger flying boat, equipped with a Curtiss eight-cylinder V-type 100-horsepower motor, owned and operated by a Mr. L. A. Vilas, made daily flights, rising from Big Trout Lake over some of the Wisconsin State forests. The ship so used had an air speed of 62 miles and a climbing capacity of 1,000 feet in three minutes. Flying at an average altitude of 1,000 feet above the terrain, the operator was enabled to get a view of about 40 miles in every direction. He returned to his original base, which was Big Trout Lake, to land and report to the State forestry officials any fires that he might detect.

Early in 1919 the Forest Service requested of the War Depart-

Early in 1919 the Forest Service requested of the War Department that cooperation in fire protection by means of airplane fire patrol be given by the Air Service as an experimental measure and on national forests in the vicinity of regularly established aviation fields. This request was met by the War Department and Air Service personnel, both in Washington and at local fields, with an exceedingly gratifying spirit of willingness.

Organized and sustained aerial forest fire patrol was, therefore, first attempted during the season of 1919. The service was first inaugurated in California. The work was performed by the Air Service using its personnel and equipment. It was on an experimental basis, with the idea of determining the feasi-bility of using aircraft for this purpose by the actual establishment and operation of regular patrols rather than by means of a few test flights.

Beginning June 1 air patrol was begun from Mather Field, near Sacramento; from March Field, near Riverside; and from Rockwell Field, near San Diego. The individual routes as established and followed were as follows:

From Mather Field there were two routes, the first going via Placerville, Auburn, and Nevada City to Oroville, with a return trip in the afternoon over the same route. This covered the major portion of the Tahoe and the north end of the Eldorado National Forests. The second patrol was from Mather Field to Placerville; thence south over the Eldorado Forest to Chinese, on the Stanislaus Forest; the return being over the same route in the afternoon; and the territory covered including the south half of the Eldorado and the greater portion of the Stanislaus Forests.

From March Field two routes were established. The first covering a circle on the Angeles Forest, touching on its west the San Antonio Canyon, zigzagging eastward along the south slope of the San Bernardino Mountains to about the mouth of Mill Creek; thence returning to the base at March Field. The second route circled eastward to the south side of Mill Creek, on the Angeles Forest, swinging south over Banning, and covering the west slope of the San Jacinto Mountains and the heads of the San Jacinto River, on the Cleveland Forest, turned back to These routes thus covered the Angeles and a portion of the Cleveland National Forests.

From Rockwell Field: One patrol route, covering the central portion of the Descanso district and the northeastern side of the range on the Palomar district, thus completing a patrol of the

entire Cleveland Forest.

Thus, beginning July, five daily patrols covering national forest areas of exceptionally high values were in operation, and twice each day five ships covered the better part of some 6,000,-000 acres of rough, mountainous, heavily timbered country. The average nonstop run was in the neighborhood of 160 miles,

the average round trip some 320 miles.

The opening of the hunting season in northern California in August witnessed a critical flare-up of fires. An unusual number of fires was reported, and for various reasons several of them assumed alarming proportions. The California situation became critical, and in view of past experience and of the situation then prevailing in Idaho, Montana, Oregon, and elsewhere, additional precautionary measures became necessary. Extension of the air patrol to cover practically all the national forests in California was asked by the Forest Service and was as promptly granted by the Western Department Air Service. Two new bases, one at Red Bluff and the other at Fresno, were promptly established.

Existing air patrol routes were modified. The Curtiss planes were replaced by De Haviland 4s, and on September 1 complete patrol twice daily of 15 out of the 17 national forests in California was inaugurated. No patrol was attempted east of the Sierras on the Inyo and Mono National Forests because of the relative lack of fire risk.

From Red Bluff the first of these new routes led east and north around Mount Lassen, across Hayden Hill, to the landing field at Alturas. The afternoon run went west across the Modoc to the Shasta lava beds and the vicinity of Mount Shasta, south on the divide between the Pitt and McCloud Rivers to Round Mountain, east to the eastern edge of the Lassen, and south and west again to Red Bluff. The second patrol out of Red Bluff went west to the California Forest, north along a divide west of the Sacramento Canyon to Delta, thence west over the Sawyers Bar country, in the Klamath, over the Salmon River and Klamath River country, and back to the field at Montague. The afternoon run, which was, by the way, the longest single leg on any patrol in California, covered the country from Montague west and south over the Salmon River country, south for the full length of the Trinity National Forest on the coast side and south for the full length of the California Forest on the coast side to a landing field at Lakeport. From Lakeport the return to Red Bluff was made via the valley side of the California Forest.

The first patrol from Fresno went east into the high country, north over Huntington Lake and the Yosemite to the landing point at Chinese, which was the southern run of the second of the Mather Field patrols. The return trip was made over the same route in the afternoon. The second Fresno patrol went east over the high country, south across the Sequoia Park and the Sequoia Forest to Bakersfield. The return trip was made again over the same route in the afternoon.

On or about September 1 the daily sustained airplane patrol was being given to 15 of the 17 national forests in district 5, and in addition to the service rendered by regular forest patrols. aviators on cross-country flights, and student and other balloon observers at Arcadia were under instructions to report promptly to the proper authorities any and all fires which they might discover.

In addition to these regular patrols by airplane, the Balloon School at Arcadia stationed a balloon at an elevation of about 3,000 feet where a view was had of the country on the south slope of the San Gabriel watershed between San Dimas and La Canada. This watershed was chosen because of its extreme importance to the citrus and other agricultural interests in the general vicinity of Los Angeles.

EQUIPMENT, PERSONNEL, LANDING FIELDS, ETC.

Beginning June 1 the Curtiss or JN-4-D plane was used on the patrols out of Mather Field. These planes were not equipped with wireless or with any special means of communication. It was, therefore, impossible to report fires discovered until after the planes had landed, either at the home field or at the landing field, at the end of the run. From March and Rockwell Fields the JN-4-H planes were used. These ships were equipped with wireless telegraph. Beginning, approximately, September 1 the De Haviland 4 was substituted throughout the State for the other two types mentioned. No wireless equipment was available on the De Havilands and reporting was done entirely after landing. The De Haviland plane proved apparently more satisfactory than the earlier type used because it could more easily negotiate the altitudes it was necessary to make in the central Sierra and northern California regions, and because, both on account of its speed and its larger gas capacity, it could cover more territory in a given length of time than could the Curtiss planes.

As a matter of fact, Air Service equipment and personnel was used throughout, except that the Forest Service furnished guards for the planes at temporary bases, such as Red Bluff and Fresno, and at landing fields outside of established bases, as at Chinese, Oroville, Alturas, and so forth, except, also, that local transportation at the bases and landing fields was furnished by the Forest Service or by the communities interested in securing the location of the fields.

Observation was accomplished by Air Service personnel, except, as quite often happened, forest officers took flights either for the experience, to get first-hand information as to the possibilities of airplane patrol, or on special occasions to get firsthand definite information about the fire situation in general or about conditions on some individual fire.

Wireless equipment was used somewhat from the two southern fields, as already mentioned. Carrier pigeons were also used to some extent in the South, as were notes attached to small parachutes and dropped from the planes.

The personnel in each plane for northern California made a practice of carrying a gun, canteen filled with water, and emer-

gency rations for two men for seven days. Maps of various types were furnished by the Forest Service. The map most generally used by the Redding patrol was the General Land Office base map of California on a scale of 12 miles to the inch. For the patrol out of Mather Field specially prepared strip maps were used. Information for these maps was taken from the forest-recreation maps, from the General Land Office maps, and from other sources, and the maps were put in such shape that they might be used in connection with the regular roll-holder attachment. On the patrols in southern California, sheets 1, 2, and 3. This is issued on a scale of 1 to 250,000. It was ruled off into squares of 2 miles each, the abscissa being numbered and the ordinate lettered, so that a given fire would be reported as in block 24 T, for example. For the sake of durability, all maps were mounted on cloth, and for convenience in use in flying they were first cut to fold to a size suitable to fit the pockets of a flying suit, not greater than 6 by 8. All lettering and numbering was, for convenience, extended so as to appear on each fold of the sheet.

The landing fields at the end of each patrol were provided in each case by the city or town authorities. To be satisfactory such landing fields had to be level or with a constant grade not over 3 per cent, smooth enough that a Ford could run over them at 25 miles an hour, 2,000 feet long and from 600 to 800 feet wide, free from obstructions, such as telephone poles, wires, trees, and so forth. Facilities for gas, oil, and water were provided locally for each field, as was telephone communication with field. Meals while away from headquarters were provided by the State forester, and at the Red Bluff base a Forest Service man was designated as liaison officer and was stationed continuously at the base. Instructions were issued providing that all emergency landings were to be reported immediately by the regular lookouts, and necessary arrangements were made to succor and transport the pilot, guard the plane, and guide and assist the wrecking crew. Prompt transmission of the pilots' reports was provided for, as was also, toward the latter part of the season, a daily return report, so that all pilots might check their fire locations with the actual locations as determined on the ground. Emergency landing fields were very seldom used. for the ships seemed apparently to be in excellent condition throughout the summer, and very little serious trouble was encountered. That ranches and natural openings, such as meadows in the high country, were used on occasion is demonstrated by the experience fairly early in the season of one of the patrols operating out of Mather Field on the run to Chinese Flat. The pilot in this case had covered about two-thirds of his run when suddenly the entire right bank of his motor stopped like a shot, The pilot, from an altitude of 7,000 feet, picked a small opening as an emergency landing place and dropped some 5,000 feet into a strange field hardly bigger than a dinner plate. The landing was made without a scratch to himself and with only minor casualties to the plane, although in order to make a "safe" landing it was necessary to pivot on one wing, tearing it somewhat, and at the same time dishing the wheel.

ACTUAL ACCOMPLISHMENTS OF AIRPLANE PATROL.

The outstanding feature of airplane patrol in California during 1919 was the fact that with no previous planning daily and practically uninterrupted service was continued from June 1, the date originally set, until October 31, the end of the fire season. In fact the patrol was so regular that the press of California, in commenting upon it, carried a story to the effect that miners and ranchers living back in the mountains actually set their watches each morning as the patrol

For the period June 1 to August 30 five patrols—all that had been asked for-covered twice each day an acreage of some 5,035,142 acres of land within five national forests, and in addition an unestimated acreage of private lands outside the forests was also covered. The Government timber patroled during this period is estimated at 20,219,565,000 feet, board measure, worth some \$40,439,130. In accomplishing this work a total of approximately 745 flights actually covered 92,605 miles. There were discovered, located, and reported a total of 118 fires, 23 of them being both discovered and reported in advance of the regular Forest Service detection organization, which was, since the airplane was experimental only, still on

Beginning September 1 airplane patrol was extended to cover 15 out of the 17 national forests in the State. From September 1 to October 31 daily airplane patrol covered then some 21,-484,368 acres of land within the national forests, on which was growing 105,112,460,000 feet of Government timber, worth some \$210,224,920. In addition to the figures given above, a very appreciable acreage of private timberlands outside the national

forests was covered by the patrol, and it is entirely probable that the figures for stumpage and for the value of that stumpage might appropriately be doubled if the total amount and value of all timber covered by airplane patrol in California were sought.

The total number of flights, number of miles covered, fires discovered, and so forth, for the entire season—June 1 to October 31—is, according to data received, as follows:

Field.	Number flights.	Number miles.	Total number fires dis- covered.	Number fires dis- covered first.
Mather		47,658 68,549 36,854 29,239 19,709	155 147 24 107 9	
Total		202,009	442	27

Further consideration of actual accomplishments is discussed under the heads of prevention, detection, location, report, and suppression.

Prevention: There is but one source of unpreventable fireslightning. All others are caused through some human agency and might, therefore, be prevented had the general public been properly educated and had the necessary preventive measures been taken by Federal, State, and private interests. It follows, then, that to give the necessary publicity to the fire question is a matter of extreme importance. It is hard to overestimate the value of the airplane as an educational factor in fire prevention. It is an object which naturally lends itself to publicity in the daily press.

CONTINUATION OF AIR PATROL.

Experimental airplane forest-fire patrol in Oregon and California has proven a success, notwithstanding the fact that the work was undertaken without previous experience, either by the aviators or by the Forestry Service, with limited equipment and personnel, and without any opportunity of preparation on the part of the Air Service, and without preparation, proper planes, funds, knowledge of airplanes, limitations, and possi-bilities by the Forestry Service. It has proven such a success that an airplane forest-fire project covering the national forests of the Western States has been proposed by the Air Service to the Secretary of War through the Chief of Staff. The project contemplates the organization of five airplane squadrons by the Air Service, to be known as forest-patrol squadrons, each of these squadrons to have a personnel of 32 officers and 132 enlisted men and 19 airplanes. Under the proposed project the squadrons will be stationed during the forest-fire season at appropriate and feasible places in California, Oregon, Washington, and Montana, with subbases, amongst other places, at Eugene, Medford, and La Grande in Oregon; at Spokane and Camp Lewis in Washington; at Boise in Idaho; at Cody in Wyoming; at Helena and Missoula in Montana.

The Forest Service, acting in cooperation with private owners of timber, will, of course, contribute to the work of providing necessary maps for use on patrol, ground for bases, subbases, emergency landings, telephone communication between bases and subbases, and protection agencies, the necessary personnel for receiving and dispatching reports at bases, subbases, and landings, lofts for pigeons and for the training of the birds, instructions to its personnel by attendance at a course to be conducted by Air Service officials at such places as may be designated, in order to qualify them for their duties under the cooperative plan.

The patrol will cover, more or less extensively, the Federal, State, and private timber in the States of Washington, Oregon, California, Idaho, Montana, and northwest Wyoming, and it is estimated that the timber in these States amounts to approximately 1,524,000,000 feet board measure, which is worth, at a most conservative valuation, not less than \$1 a thousand feet. It is divided between the States as follows: Oregon, 547,000,000; Washington, 395,000,000; Idaho, 130,000,000; Montana, 68,000,-000; Wyoming, 2,000,000; California, 382,000,000.

The several States in which are situated these forest reserves, as well as individual owners of timberlands, realizing the great value of this timber, have been cheerfully cooperating with the Forestry Service, and will the more cheerfully continue this cooperation because they realize the great possibilities of protection against forest fires by the use of airplane patrol.

The national forests in Oregon patroled by the airplane patrol

in 1919 were:

Area and valuation of national forests in Oregon.

Name.	Area.	Value.	
Cascade Crater Oregon Sautiam Siskiyou Sisklyou Umpqua	Acres. 1,091,485 1,079,325 1,140,866 719,983 1,255,250 833,441 1,221,391		
Total	7,344,741	1 \$79,431,250	

¹ Total value of estimated stumpage at about \$1 per thousand feet b. m. TRAINING OF AVIATORS.

The World War demonstrated that the airplane was absolutely essential to success in modern warfare. It was the eye of the Army, observing the movements of troops, photographing the terrain over which battles were to be fought, and directing the fire of the artillery. The Allies and the Central Powers vied with each other in the development and the improvement of the different classes of airplanes necessary for military use, and, realizing the necessity of further development, the British, French, Italian, and other Governments are appropriating large sums of money to continue the aviation service, to develop higher types of planes, and to train aviators. The United States alone has seemed reluctant to continue this work in time of peace, failing to profit by the expensive lessons of the war, which found us wholly unprepared in airplane development and production; nor did the expenditure of over a billion dollars enable us to place more than a few hundred planes on the battle front before the armistice was signed.

Here, however, is a practical use to which the Air Service may be put, the airplane developed, and aviators trained, so that in the event of war we will not only have the highest type of machines but the highest class of trained men to operate them.

Mr. President, this is all I have to say. I simply wanted to call the attention of Congress to the actual work done by the air fire patrol and the immense saving made to the country by reason of the participation of the fire patrol with the Forestry Service, in cooperation, of course, with the States and with private owners. I hope that as this bill comes up for consideration each year Congress will realize more fully the importance of the national forests to our industrial life and that larger appropriations, if necessary, will be made in order that the national forests may be absolutely and fully protected for all time to come.

Mr. GAY. I desire to offer an amendment to the pending bill. I ask to have it lie on the table and be printed.

The PRESIDING OFFICER (Mr. OVERMAN in the chair). Without objection, it is so ordered.

Mr. HARRISON. I desire to offer an amendment to the pending bill, which I ask to have printed and lie on the table.

The PRESIDING OFFICER. That action will be taken, The question is on agreeing to the amendment reported by the committee, which will be stated.

The Assistant Secretary. On page 35, line 2, under "Forestry Service," it is proposed to strike out "nine" and insert "twenty-nine," so as to read:

Twenty-nine clerks, at \$1,500 each.

The amendment was agreed to.

Mr. UNDERWOOD. Mr. President, in connection with the pending bill, being a great supply bill to aid agriculture, I do not think there is any more important question to the agricultural interests of the country than an adequate supply of nitrogen. There is a most important bill now pending before the Committee on Agriculture and Forestry seeking to vitalize the war expenditures of the Government for the collection of nitrogen so that it may be used for agricultural

There has been published in some of the hearings a letter that I would like to have appear in the RECORD. It is a letter from the Secretary of War to the Senator from New York [Mr. Wadsworth] in reference to that bill, and inclosing a letter from Mr. Arthur Glasgow, who had charge, to a large extent, of the development of these nitrate plants. Instead of taking the time of the Senate now to read those letters into the RECORD, I ask unanimous consent that they may be printed in connection with my remarks.

The PRESIDING OFFICER. Without objection, it is so ordered.

The letters are as follows:

WAR DEPARTMENT, Washington, October 29, 1919.

Hon. James W. Wadsworth, Jr.,

Chairman Committee on Military Affairs,

United States Senate.

Hon. James W. Wadden, Jr.,

Chairman Committee on Military Affairs,

United States Senate.

My Dear Senator Waddeners: I inclose a proposed bill providing a method of conducting operations at the United States plant No. 2, at Muscle Shoals, Ala., authorizing the expenditure of such additional sums as are necessary to equip the plant to turn out fixed nitrogen in available form for agricultural uses. I shall be grateful if you will introduce the bill into the Senate, where a discussion can be had upon it from both points of view, namely, first, the importance of maintaining this great enterprise as a military asset for the production of nitrogen for explosives, independently of importations; and, second, the contribution which can be made to the farmers of the country by increasing the available supply of nitrogen for fertilizer.

The investment of the Government in this great plant approximates \$70,000,000. In addition to that, under authority already granted by the Congress and by direction of the Fresident, a dam is being constructed at Muscle Shoals which will incidentally improve navigation of the Tennessee River, but the primary purpose of which is the development of an immense water power to be used in connection with the fixation of nitrogen, should the electrical process remain the most economical for that purpose. This investment can only be salvaged by continuing the operation of the enterprise and by improving the processes, with a view to further economics and consequent reduction in price for available nitrogen for agricultural purposes. If we allow the plant to stant idle it will not only deteriorate, but will become obsolescent, while if it can be continued in operation the forward steps in the development of the process can be currently installed, and, should any emergency need arise, the plant will be up to date and ready for immediate use. Because this property now belongs to the War Department. The choice of such an instrument is dictated by the greater freedom with which the commercial basis

Brighton Hotel, Washington, D. C., October 22, 1919.

The SECRETARY OF WAR, Washington.

The Secretary of War, Washington, D. C., October 22, 1919.

Dear Mr. Secretary: 1. With the return of our Military and Agricultural Commissions from Europe, our investigations have at last reached conclusions which can now be interpreted into definite recommendations regarding the disposition of United States Nitrate Plant No. 2, at Muscle Shoals.

A convincing feature of these recommendations is that each and every line of investigation, however distinct and whatever the predisposition of investigation in modern warfare has been found vastly to surpass all expectations. The cause of the Allies was in constant jeopardy, because of the necessity of importing militarts from Chile; it does not need Lord Fisher's recent articles, regarding the future of submarine warfare, to demonstrate the uncertainty of importing military supplies. But, while the fundamental requirement of national defense demands self-sufficiency in explosives, this necessity places the United States.

The capture of atmospheric nitrogen, in efficiently utilizable form, now completing, are brought into continuously developing service, they and their products are likely to be obsolescent and useless in the strenuous competition of future warfare. The only way to secure that these plants shall be always immediately available for most efficient military service, and for most efficient econom

Second. The period from June 1, 1921, until the completion of the hydroelectric-power development: During this interim the operating fee is no longer payable, and the royalty payable to the American Cyanamid Co. (nominally about \$6.33 per ton of dry cyanamid, or 26 per cent more than the combined operating fee and royalty previously payable) is subject to arbitration. Inasmuch, however, as royalty is measured by supercarning power, it seems certain that little if any royalty would be assessed for the use of a process which does not pay Government bond interest upon the reproduction value of the essential plant required.

Third. The continuing period of cheap water power subsequent to the completion of the hydroelectric development: During this future period we shall have not only the relief from royalty due to arbitration but the more positive relief due to the expiration of patents. It is to be noted that the Air Reduction Co.'s royalty of 57 cents per ton of dry cyanamid is payable until January 13, 1931.

6. You are so thoroughly acquainted with the problem under discussion that I need not trouble you with the detailed evidence and reasoning upon which we base the following statements, leading to our final recommendations:

7. Inasmuch as there is no considerable present market for the nitrogen

upon which we base the following statements, leading to our final recommendations:

7. Inasmuch as there is no considerable present market for the nitrogen products of the Muscle Shoals plant as it now stands—namely, for cyanamid and ammonium nitrate—it is essential to adapt the plant to the manufacture of a product which is immediately saleable in large quantities, in order to carry the burden of slowly building up a demand for these less saleable products; otherwise the operating and overhead expenses of this great plant will swamp the enterprises financially before markets can be developed for these products. To this end the manufacture of sulphate of ammonia is the most efficient means; and in the Tennessee Copper & Chemical Corporation we have a neighbor who is urgently in need of purchasers of large quantities of sulphuric acid, not to speak of sulphuric acid manufacture on our own account. We therefore recommend the installation of a neutralizing plant for the manufacture of 110,000 tons of sulphate of ammonia per annum, being one-half of the total capacity of the plant, together with coordinate storage and other facilities, at a total structural cost for this sulphate department of about \$1,500,000. This is included in paragraph 18, dealing with new construction for peace-time operation.

8. It is convenient to reckon the capacity of the Muscle Shoals plant by the number of carbide furnaces in use. There are 12 furnaces altogether, each capable of producing carbide for 22,225 tons of dry cyanamid per annum. At full capacity of plant, 10 of these furnaces are working, two being always in reserve for repairs, etc. The local steam power plant at present capacity will operate eight of these furnaces, and, inasmuch as power brought from the Government's unit at the Warrior River station of the Alabama Power Co. is unduly expensive, it is not intended to operate more than eight furnaces (or 80 per cent of the total capacity of the plant), until the cheap hydroelectric power is available.

9. Our present expec

9. Our present expectation is to utilize the capacity of eight carbide furnaces approximately as follows:
Four furnaces (or 40 per cent of plant capacity) for the manufacture of 86,000 tons of ammonium sulphate;
One furnace (or 10 per cent of plant capacity) for the manufacture of 22,225 tons of dry cyanamid—making 24,445 tons of hydrated and olled cyanamid;

One furnace (or 10 per cent of plant capacity) for the manufacture of 22,225 tons of dry cyanamid—making 24,445 tons of hydrated and olled cyanamid;

Two furnaces (or 20 per cent of plant capacity) for the manufacture of 22,000 tons of ammonium nitrate;

One furnace (or 10 per cent of plant capacity) for the manufacture of cyanamid, ammonium sulphate, ammonium nitrate, or intermediate product, according to demand.

When the hydroelectric power is completed the remaining two furnaces will be applied to the manufacture of the then most advantageous product, possibly ammonium phosphate.

Meanwhile every effort will be made to cultivate the use—firstly, of cyanamid, and secondly, of ammonium nitrate, in preference to ammonium sulphate, because the cost per unit of nitrogen is much less in those forms than in the form of ammonium sulphate.

10. To ascertain the financial results of the general plan of operation outlined above we must figure in terms or ammonium sulphate, that being a readily salable commodity of well standardized value. The prewar price of ammonium sulphate was about \$60 per ton; it is our best judgment that the post-war prices will average over \$70 per ton. Sulphate of ammonia contains about 20.6 per cent and dry cyanamid about 21.1 per cent of nitrogen, whereas ammonium nitrate contains nearly 35 per cent, or more than double the nitrogen content of sodium nitrate from Chile. Moreover, cyanamid contains over 60 per cent of lime, which is a valuable fertilizer in many soils. On the basis of nitrogen content alone, with sulphate of ammonia selling at \$70 per ton, hydrated and olled cyanamid (containing 19.2 per cent of ritrogen) would be worth \$65 and ammonium nitrate would be worth \$117.50.

11. Unfortunately the toxic features of cyanamid combined with its other disabilities and the hydroscopic qualities of ammonium nitrate interfere with their use for fertilization, as fertilizers as now manufactured and applied. It is therefore necessary to give the farmers and fertilizer manufacturers a suffici

industry:

"We can not sell you ammonium sulphate at less than the market rate, governed by the law of supply and demand; but, if you are willing to take the trouble to use your nitrogen fertilizer in the form of cyanamid or ammonium nitrate, we can make you imediately the very great savings described above. We, for our part, undertake to remove the physiological disadvantages of cyanamid by hydrating and olling, and to relieve the hygroscopicity of ammonium nitrate by coating; and we expect to make further reductions in the prices of cyanamid and nitrate when cheap water power becomes available."

13. Having established the probable selling prices, we must now know the probable costs of the several products, in the three periods described in the beginning of this discussion.

Prior to June 1, 1921, if operating continuously eight of the carbide furnaces (or 80 per cent of the ultimate capacity of the plant), the costs per ton would be as follows:

1920. CONGR	EDD	IUN	AL.	RECURD—SENATE. 4783
	Cyan- amid (hy- drated and oiled).	Nitrate.	Sul- phate.	This \$2,900,050 is 5 per cent interest on \$58,000,000, while ammonium suiphate, at \$65 per ton (instead of \$70), still costs 61½ per cent more per unit of nitrogen than cyanamid, at \$37.50 per ton, and 21½ per cent more than ammonium nitrate, at \$90 per ton. 18. To adapt the present plant (which is built exclusively for the production of ammonium nitrate for military explosives) to the manufacture and sale of cyanamid, ammonium sulphate, ammonium nitrate and intermediate products will require the following new construction
Production costs. Bagging expense Sales expense Research and Washington office.	1.75 1.15 .95	\$80.48 2,00 3.08 2.55	\$49.45 .50 1.87 1.54	and equipment, in addition to some \$1,000,000 which must yet be expended for military purposes out of present funds: Oiling and hydrating equipment for 200 tons of cyanamid daily. Sulphate of ammonia plant, buildings, and equipment, capacity 300 tons daily. 900,000
Cost of product	32.87	88.11	.53, 36	Storage and bagging for all products, buildings, and equip-
To these must be added royalties and fees to June 1, 1921, as follows: Royalty to Air Reduction Co	. 52 2. 30 2. 25	1.16 5.11 5.00	. 59 2. 62 2. 56	ment
Total	5.07	11.27	5.77	Total fund for new construction 3, 000, 000
Total steam-power costs prior to June 1, 1921	37.91	99.38	59.13	19. The working capital required for 10 furnaces, or full capacity of plant, will be:
available (say, until December, 1922, or 18 mon per cent to "Cost of product" for the first perio operating fee royalties and contingencies, makin Total costs from June 1, 1921, until water power Nitrate Sulphate 15. When water power becomes available at 6 hour, and with all royalties eliminated, the respect will be: Cyanamid Nitrate Sulphate The royalty payable to Air Reduction Co. until Cyanamid Nitrate Sulphate Nitrate Sulphate	0.75 m tive wa	ill per ter-pow	\$36. 16 96. 92 58. 70 kilowat er costs \$24. 57 68. 50 43. 81	Total working capital
The nominal royalty to American Cyanamid Co.	after J	nne 1, 1	921. is:	New construction
CyanamidNitrateSulphate			\$5.75	Working capital 6, 600, 000 General purposes fund 2, 500, 000
Sulphate			6.18	Total appropriation 12, 100, 000
But this is subject to arbitration (see par. 5) patent rights. It is believed that 10 per cent added to the above to cover all contingencies, including royalties, wargin of safety. This makes the inclusive water Cyanamid Nitrate. Sulphate. 16. It must be borne in mind that the estimate two periods, ending when water power becomes a ber, 1922), are based upon the continuous operafurnaces, or 80 per cent of the ultimate capacity obvious that a new industry of these huge dim spring into being: the creation of this unique ma	" water will pre-power so of convailable tion of the ensions	er-power ovide a eosts: est for t e (say, f eight e plant will n	\$27.03 75.35 48.19 the first Decem- carbide . It is	This will realize the utmost peace-time advantages of the war invest ment of \$70,000,000 in United States nitrate plant No. 2 and of the current investment of \$18,000,000 in hydroelectric and navigation de velopment, while at the same time it will promote national security by making this plant always the most advanced example of the art—supply ing current military requirements and a model for efficient multiplication case of need. 22. In addition to granting the necessary funds, namely, \$12,100,000 as above, our act of Congress should give us authority to conduct these extraordinary operations so as to utilize the existing plants and this new money with the highest possible efficiency. In other words, we should have authority to establish the administrative organization which will give the best results in such an enterprise. My original memorandum of January 7, 1919, dealing with this subject, expressed

obvious that a new industry of these huge dimensions will not thus spring into being; the creation of this unique manufacturing organization and the marketing of this great output must be matters of careful and gradual growth. In fact, this growth will doubtless continue until the water power becomes available, before reaching the full 80 per cent capacity of the present steam-power plant. For this reason the figures for the steam-power costs in the first and second periods are academic rather than practical; they are useful as illustrating the great advantages attaching to cheap water power, rather than as a measure of profit and loss during the initiation of the business. In common with the creation of any new industry, the Muscle Shoals enterprise must sustain initial losses. These are provided for by the "General purposes fund," described in paragraph 20.

17. For any useful conclusion regarding the future financial possibilities of the plant, we must look to the permanent water-power costs, subsequent to, say, January 1, 1923.

Taking the "Inclusive water-power costs," given in paragraph 14 above, and reducing the selling prices of cyanamid, ammonium sulphate, and ammonium nitrate, respectively, to \$40, \$65, and \$90 per ton, we have the following balance sheet, with eight furnaces, or 80 per cent of the capacity of the plant, in operation:

	Tons per an- num.	Cost.	Per ton sale.	Profit.	Total profit.
Cyanamid	49,000 22,000 86,000	\$27.00 75.35 48.20	\$37, 50 90, 60 65, 00	\$10.50 14.65 16.80	\$514,500.00 322,300.00 1,444,800.00
Annual profit for 8 furnaces (80 per cent)					2, 281, 600.00

When the whole plant is in operation the balance sheet becomes:

	Tons per an- num.	Cost.	Per ton sale.	Profit.	Total profit.
Cyanamid Nitrate Sulphate	73,500 22,000 107,500	\$27.00 75.35 48.20	\$37.50 90.00 65.00		\$771,750.00 322,300.00 1,806,000.00
Annual profit for 10 furnaces (100 per cent)					2, 909, 050. 00

welopment, while at the same time it will promote national security by making this plant always the most advanced example of the art—supplying current military requirements and a model for efficient multiplication in case of need.

22. In addition to granting the necessary funds, namely, \$12,190,000, as above, our act of Congress should give us authority to conduct these extraordinary operations so as to utilize the existing plants and this new money with the highest possible efficiency. In other words, we should have authority to establish the administrative organization which will give the best results in such an enterprise. My original memorandum of January 7, 1919, dealing with this subject, expressed the unanimous opinion of all concerned that such an undertaking could not be properly administered by the Army; and my original recommendation was that the fixed-nitrogen administration should be a self-contained bureau of the War Department, under the Immediate control of the Secretary of War, but quite independent of the Army. This recommendation was then expanded to include interdepartmental control. But we now revert to my original advice, with the important exception that the fixed-nitrogen administration should be incorporated instead of being a bureau of the War Department.

23. In other words, we recommend that a corporation should be formed to take over all of the fixed-nitrogen assets of the War Department, together with the funds obtained from Congress, and to perform all of the duties of administering these plants and funds in peace time, while continually enhancing their military value. There could be a nominal amount of common stock, of no par value, issued to the United States at par, from time to time as required, to provide the necessary additional funds of \$12,100,000 described in paragraph 21 above. The Secretary of War would be chairman of the board; Mr. Roberts and Col. Burns might be president and vice president, respectively, as well as directors; the Chief of Ordnance might be another d

Mr. UNDERWOOD. In addition to that, to show the vital importance of early action on this question, I desire to call to the attention of the Senate a statement by Mr. Frank I. Mann, of Gilman, Ill., a farmer of great ability and learning, which is contained in a letter he wrote to his brother, Hon. James R. MANN, of Illinois. It is not long, and I will therefore ask that the Secretary read that portion of the letter which I have marked.

The PRESIDING OFFICER. The Secretary will read, as requested.

The Assistant Secretary read as follows:

The PRESIDING OFFICER. The Secretary will read, as requested.

The Assistant Secretary read as follows:

Ever since I learned of the Muscle Shoals project, when in Tennessee a few years ago, I have felt quite an interest in its success, because of the great opportunity it seemed to present for an increased and economical production of crops by supplying a cheaper form of fixed nitrogen. The value of nitrogen and phosphorus in the production of crops has not been properly realized. Take an example of corn, for instance: In 100 pounds of corn there are but about 33 pounds of materials which were taken from the soil; the balance of the dry weight is made of compounds formed from carbon taken from the air by the leaves of the plants and formed into sugars, starches, oils, etc. The amount of these carbon compounds that can be formed are measured, however, by the amount of materials that could be secured from the soil. If the same plants, which produced 100 pounds of corn, could have secured another 33 pounds of soil materials—mostly phosphorus and nitrogen—they could have formed another 100 pounds of corn, without any further effort on the part of the grower, and the yield would be increased 100 per cent. On the best corn-belt soils we find it is comparatively easy to double the yields of crops by doubling the phosphorus available to the crops, where there is sufficient nitrogen to match such an amount of phosphorus. The soils which contain such an amount of phosphorus. The soils which contain such an amount of introgen, however, are small in area. On the early glaciated and the unglaciated soils nitrogen is in small amount, and the crops will grow in proportion as they can secure nitrogen, except on the natural rich soils, which are usually alluvial and limited in extent. As a rule, the soils south of the Ohio and Missouri Rivers are unglaciated and low in nitrogen, except the alluvial types. A large part of southern Illinois, Indiana, Missouri, Kansas, Iowa, and Ohio is composed of soil types on which crops—a cont

Mr. UNDERWOOD. Mr. President, I think Mr. Mann in that letter puts his finger on the vital problem that is now confronting the American people, and that is the high cost of living. The way to decrease the high cost of living, which in the end comes largely from the cost of products of the farm, is to enable the farmer to produce more with less labor. There is only one way to accomplish that, and that is by an adequate supply of cheap fertilizer, and an adequate supply of cheap fertilizer is absolutely dependent upon a supply of nitrogen.

During the war the Government, at a cost of \$72,000,000, built a great plant for war purposes in order that it might make powder at cost. It is finished; it is prepared to run. It merely needs legislation to carry it from the field of war to the field of agriculture, to enable it to be used in the interest of manufacturing nitrogen and in the manufacture of fertilizer to supply the farmer with the means that he must

have to reduce the high cost of living,

I do not say this in any way critical of the Senate or of the committee having charge of these matters, but I feel that it is of great importance to the country, and I think now is the proper time to call it to the attention of the Senate and the country with the hope that we may expect at a very early day favorable report from the Committee on Agriculture and Forestry of the bill and its early passage by the Senate.

The reading of the bill was resumed.

The next amendment was, in the items for the Forest Service, on page 35, line 6, before the word "clerks," to strike out "one hundred and twenty-two" and insert in lieu thereof "sixty-two," so as to make the line read:

Sixty-two clerks, at \$900 each,

The amendment was agreed to.

The next amendment was, on page 36, line 16, in the total, to strike out "\$2,488,180" and insert in lieu thereof "\$2,-487,980," so as to read "In all, \$2,487,980."

The amendment was agreed to.

The next amendment was, on page 37, line 5, after the word erected," to insert "or improved," so as to read:

General expenses, Forest Service: To enable the Secretary of Agriculture to experiment and to make and continue investigations and report on forestry, national forests, forest fires, and lumbering, but no part of this appropriation shall be used for any experiment or test made outside the jurisdiction of the United States; to advise the owners of woodlands as to the proper care of the same; to investigate and test American timber and timber trees and their uses, and methods for the preservative treatment of timber; to seek, through investigations and the planting of native and foreign species, suitable trees for the treeless regions; to erect necessary buildings: Provided, That the cost of any building erected or improved shall not exceed \$1,000.

Mr. SMOOT. Does not the Senator think this limitation on buildings erected not to exceed \$1,000 ought also to apply to any improvements that may be made upon the buildings?

Mr. GRONNA. I will say to the Senator that it is not the intention to use as much as \$1,000 to complete any building. It was stated to the committee that there were some of the buildings which were not yet completed and for that reason the word "improved" was put in. If the Senator thinks we ought to put a further limitation upon the amount to be expended for

improvements, of course I shall have no objection.

Mr. SMOOT. The wording as it is submitted would allow the Forestry Service to begin the erection of a building for \$1,000. They could go as far as \$1,000 would carry them in the erection of the building, and then immediately turn around and spend \$1,000 for improvements. In other words, under the language suggested by the committee \$1,000 would be virtually

\$2,000.

Mr. KENDRICK. Mr. President—
The PRESIDING OFFICER. Does the Senator from Utah yield to the Senator from Wyoming?

Mr. SMOOT. I yield.

Mr. KENDRICK. I have the impression that the committee was informed that there was a limitation of \$500 upon the cost of these buildings, as was provided in other bills. The buildings are intended for forest stations, and it has been found, under the increased cost of construction, that \$500 is not actually sufficient to construct the stations. It is easy to understand that it would be a very difficult matter to build anything like a comfortable habitation for less than a thousand dollars, even though it might be built of timber, as such buildings often are. For this reason the amount was increased.

Mr. SMOOT. The amount authorized for the erection of a building is increased to a thousand dollars, and to that I have no objection; but under the words "or improved," which are here inserted, it means that on the very buildings, the erection of which has been begun on a basis of \$500, there may now be expended an additional sum of \$1,000, making the aggregate fifteen hundred dollars. In the case of buildings hereafter to be erected, which are supposed to be erected for a thousand dollars, as soon as they are erected, in some form or other, another thousand dollars may be expended upon them. believe the Senator would desire that to happen; I will not say that it will happen; yet with the wording as it now is that is what could happen.

Mr. GRONNA. Mr. President-

The PRESIDING OFFICER. Does the Senator from Utah yield to the Senator from North Dakota?

Mr. SMOOT. I yield. Mr. GRONNA. If the Senator from Utah will permit me, this is what the Department of Agriculture, referring to this language, stated to the committee:

The new language is desired to rectify a legal difficulty that prevents the improvement of buildings constructed under the appropriation act of previous years, in which the building limitation was less than that provided in this bill. The limitation on the cost of buildings in the national forests was formerly \$500. This was later increased to \$650, and this last year again it was increased. The Comptroller of the Treasury has held that a building constructed or partially constructed under either of these limitations can not be improved or completed under a higher limitation than that in effect during the fiscal year in which the construction of the building was begun. The rapidly advancing cost of materials and the increase in the wages of workmen have made it impossible to complete or to make necessary additions to some of the buildings within the existing limitations. It is important that the construction of these buildings be completed in order that they

may be used in connection with the protection and administration of the national forests. The insertion of the words "or improved," as suggested, would make this possible.

Mr. SMOOT. Mr. President, it is true it would make it possible. It would, however, authorize a great deal more than what the Secretary has stated as set forth in the communication just read by the Senator from North Dakota.

Mr. GRONNA. So far as I am personally concerned I have no objection to further amending the language so as to provide that the cost of a building shall not be more than a certain amount, whatever the Senator from Utah thinks it ought to be.

Mr. SMOOT. I desire the Senator to understand that I am not objecting to the expenditure of a thousand dollars on any

building which is to be erected.

Mr. GRONNA. I understand that.

Mr. SMOOT. But with the wording "or improved" in the bill it means that on each of the buildings which are already erected or which have already been constructed there may be expended another thousand dollars. If the Senator from North

Dakota will allow this to go over——
Mr. GRONNA. I think we can dispose of it now. I suggest that we amend it by saying that for the erection or improvement of any building the cost shall not be more than \$1,000, or that no more than \$1,000 shall be expended in all.

Mr. KENDRICK. Mr. President—

The PRESIDING OFFICER. Does the Senator from North Dakota yield to the Senator from Wyoming?

Mr. GRONNA. Certainly. Mr. KENDRICK. It occurs to me that there might arise a complication if that change in the language were made, from the fact that some of the stations which have been built heretofore have proven entirely inadequate and unsatisfactory. In such cases it might require as much as \$1,000 to improve or rebuild those stations, and the change suggested by the chairman of the committee might interfere with that plan.

Mr. SMOOT. The Senator from Utah recognizes that fact; but that is not all that this provision does. Under the original wording a building which might be started, we will say, on the 1st of July, 1920, under the authorization in this bill, could not have expended upon it more than \$1,000; but if the proposed amendment is adopted they could plan immediately for the expenditure of \$2,000—\$1,000 for improvement and \$1,000 for the erection of the building. I do not think the Senator wants that.

Mr. KENDRICK. If they were proceeding under the old law, they could not exceed the sum of \$1,500 in any event.

Mr. SMOOT. That is on buildings that have already been

Mr. KENDRICK. And I take it also that that would be true only in unusual cases, because, as I understand the language of the bill, it is intended to rebuild as houses for the forest rangers the stations that have been in use for some time and which are now unsatisfactory.

Mr. GRONNA. Mr. President, if the Senator from Utah will

yield further

Mr. SMOOT. I yield.

Mr. GRONNA. I think by a careful reading of this language it will be found that not to exceed \$1,000 can be expended for any of these buildings. It reads:

That the cost of any building erected or improved shall not exceed \$1,000.

That means, whether it is a newly erected building or a building that is being improved, it shall not cost to exceed \$1,000. It seems to me to be perfectly plain that the cost can, in no event, exceed \$1,000.

Mr. SMOOT. Certainly in the case of a building erected under this bill the cost can not exceed \$1,000; but suppose the

building is already erected——
Mr. GRONNA. It does not say that the improvement shall cost not to exceed \$1,000; it says that the building shall not cost more than that amount.

Mr. SMOOT. It says, "or improved shall not exceed \$1,000." Mr. GRONNA. Let me read it again:

The cost of any building-

Leave out the word "erected."

The cost of any building improved shall not exceed \$1,000.

It is perfectly plain that the total cost can not exceed

Mr. SMOOT. Mr. President, I will ask the Senator to let the amendment go over for the present.

Mr. GRONNA. Very well.

The PRESIDING OFFICER. Without objection, the amendment will be passed over.

The reading of the bill was resumed.

The next amendment of the Committee on Agriculture and Forestry was, on page 38, line 19, after the word "Arizona," to

strike out "\$8,079" and insert "\$9,779," so as to make the clause read:

Apache National Forest, Ariz., \$9,779.

The amendment was agreed to.

The next amendment was, on page 38, line 21, after the word "Arkansas," to strike out "\$10,730" and insert "\$15,730," so as to make the clause read:

Arkansas National Forest, Ark., \$15,730.

The amendment was agreed to.

The next amendment was, on page 38, line 24, after the word "Montana," to strike out "\$5,437" and insert "\$7,597," so as to make the clause read:

Beartooth National Forest, Mont., \$7,597.

The amendment was agreed to.

The next amendment was, on page 40, line 14, after the words "South Dakota," to strike out "\$2,830" and insert "\$5,470," so as to make the clause read:

Custer National Forest, Mont. and S. Dak., \$5,470.

The amendment was agreed to.

The next amendment was, on page 42, line 9, after the word Wyoming," to strike out "\$6,450" and insert "\$9,450," so as to make the clause read:

Medicine Bow National Forest, Wyo., \$9,450.

The amendment was agreed to.

The next amendment was, on page 43, line 11, after the word California," to strike out "\$19,803" and insert "\$24,203," so as to make the clause read:

Plumas National Forest, Calif., \$24,203,

The amendment was agreed to.

The next amendment was, on page 43, line 20, after the word California," to strike out "\$9,774" and insert "\$10,774," so as to make the clause read:

Santa Barbara National Forest, Calif., \$10,774.

The amendment was agreed to.

The next amendment was, on page 44, line 6, after the word California," to strike out "\$12,660" and insert "\$16,360," so as to make the clause read:

Siskiyou National Forest, Oreg. and Calif., \$16,360.

The amendment was agreed to.

The next amendment was, on page 45, line 18, after the word "act," to strike out "\$76,850" and insert "\$84,750," so as to make the clause read:

Additional national forests created or to be created under section 11 of the act of March 1, 1911 (36 Stat. L., p. 963), and lands under contract for purchase or for the acquisition of which condemnation proceedings have been instituted for the purposes of said act, \$84,750.

The amendment was agreed to.

The next amendment was, on page 46, line 8, after the word "forests," to strike out "\$2,068,762" and insert "\$2,100,262," so as to make the clause read:

In all, for the use, maintenance, improvement, protection, and general administration of the specified national forests, \$2,100,262: Provided, That the foregoing amounts appropriated for such purposes shall be available interchangeably in the discretion of the Secretary of Agriculture for the necessary expenditures for fire protection and other unforeseen exigencies: Provided further, That the amounts so interchanged shall not exceed in the aggregate 10 per cent of all the amounts of appropriated. so appropriated.

The amendment was agreed to.

The next amendment was, on page 47, line 5, after the word equipments," to strike out "\$150,000" and insert "\$161,100," so as to make the clause read:

For the purchase and maintenance of necessary field, office, and laboratory supplies, instruments, and equipments, \$161,100.

The amendment was agreed to.

The next amendment was, on page 47, line 16, after the word "companies," to strike out "\$173,260" and insert "\$223,260," so as to make the clause read:

For investigations of methods for wood distillation and for the preservative treatment of timber, for timber testing, and the testing of such woods as may require test to ascertain if they be suitable for making paper, for investigations and tests within the United States of foreign woods of commercial importance to industries in the United States, and for other investigations and experiments to promote economy in the use of forest products, and for commercial demonstrations of improved methods or processes, in cooperation with individuals and companies, \$223,260;

Mr. GRONNA. Mr. President, I have been requested by the Senator from Wisconsin [Mr. Lenboot] to ask to have this paragraph passed over. He is not present to-day. I refer to the paragraph beginning with line 7 and going to line 16, on page 47.

The PRESIDING OFFICER. Without objection, the paragraph will be passed over.

The reading of the bill was resumed, beginning with line 18, page 47.

The next amendment of the Committee on Agriculture and Forestry was, on page 48, line 5, after the word "lands," to strike out "\$35,000" and insert "\$103,728," so as to make the

For silvicultural, dendrological, and other experiments and investigations independently or in cooperation with other branches of the Federal Government, with States and with individuals, to determine the best methods for the conservative management of forests and forest lands, \$103,728;

The amendment was agreed to.

The next amendment was, on page 48, line 10, after the word "use," to strike out "\$105,000: Provided, That \$25,000 may be used by the Secretary of Agriculture for the purpose of ascertaining the appraised value of pasturage upon the national for-ests, which appraised value, when determined, may, in the discretion of the Secretary of Agriculture, be made the basis of the charge for grazing permits upon such forests," and insert "\$80,-000," so as to make the clause read:

For estimating and appraising timber and other resources on the national forests preliminary to disposal by sale or to the issue of occupancy permits, and for emergency expenses incident to their sale or use, \$80,000;

Mr. SMOOT. Mr. President, I want to call the attention of the Senator from North Dakota to this amendment. I am in hearty sympathy with striking out the proposed proviso, just as the committee has done; but when the bill gets into conference the Senate must not yield upon this item, and if there is any likelihood of its doing so I should very much prefer to allow the House provision to go in with an amendment; but under no circumstances would I want them to yield with the House provision stricken out. Therefore I simply take this opportunity to say to the chairman of the committee that if the Senate conferees yield upon this item, I shall feel constrained to call the matter to the attention of the Senate when the conference report comes before the Senate, and ask that the conference report be rejected.

Mr. GRONNA. Mr. President, let me see if I understand the Senator from Utah. My attention was diverted for a moment.

Mr. SMOOT. The Senator from Utah agrees with what the committee has done.

Mr. GRONNA. In striking out the proviso? Mr. SMOOT. Yes; in striking out the proviso. It is just as the Senator from Utah would have it, and just the way I think those who have studied the situation in detail would have it; but I want to say to the Senator that if this proviso goes back in conference, then I shall ask to have the conference report rejected by the Senate.

Mr. GRONNA. I understand that. The Senator is satisfied

with the appropriation of \$80,000, is he?

Mr. SMOOT. The appropriation is all right. Everything is as it should be, based upon the action of the Senate.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the committee.

The amendment was agreed to.

The reading of the bill was resumed.

The next amendment of the Committee on Agriculture and Forestry was, on page 48, line 20, after the words "provided for," to strike out "\$25,000" and insert "\$31,280," so as to make the

For other miscellaneous forest investigations, and for collating, digesting, recording, illustrating, and distributing the results of the experiments and investigations herein provided for, \$31,280.

The amendment was agreed to.

The next amendment was, on page 48, line 25, after the word "forests," to strike out "\$400,000" and insert "\$450,000," so as to make the clause read:

For the construction and maintenance of roads, trails, bridges, fire lanes, telephone lines, cabins, fences, and other improvements necessary for the proper and economical administration, protection, and development of the national forests, \$450,000.

The amendment was agreed to.

The next amendment was, on page 49, line 18, after the word "expenses," to strike out "\$3,324,662" and insert "\$3,517,270," so as to make the clause read:

In all, for general expenses, \$3,517,270.

The amendment was agreed to.

The next amendment was, on page 50, line 8, after the word "Service," to strike out "\$5,812,842" and insert "\$6,005,250," so as to make the clause read:

Total for Forest Service, \$6,005,250.

The amendment was agreed to.

The next amendment was, under the subhead "Bureau of Chemistry," on page 52, line 13, after the word "organism," to

strike out "\$66,400" and insert "\$70,400," so as to make the clause read:

For conducting the investigations contemplated by the act of May 15, 1862, relating to the application of chemistry to agriculture; for the biological investigation of food and drug products and substances used in the manufacture thereof, including investigations of the physiological effects of such products on the human organism, \$70,400.

The amendment was agreed to.

The next amendment was, on page 52, line 22, after the word "food," to strike out "\$52,880" and insert "\$62,880," so as to make the clause read:

For investigating the handling, grading, packing, canning, freezing, storing, and transportation of poultry, eggs, fish, shrimp, oysters, and other shellfish, and for experimental shipments of these products, for the utilization of waste products, and the development of new sources of food, \$62,880.

The amendment was agreed to.

The next amendment was, on page 54, line 1, after the word "therein," to strike out "\$579,361" and insert "\$629,861," so as to make the paragraph read:

For enabling the Secretary of Agriculture to carry into effect the provisions of the act of June 30, 1906, entitled "An act for preventing the manufacture, sale, or transportation of adulterated, or misbranded, or poisonous, or deleterious foods, drugs, medicines, and liquors, and for regulating traffic therein, and for other purposes"; to cooperate with associations and scientific societies in the revision of the United States Pharmacopoeia and development of methods of analysis, and for investigating the character of the chemical and physical tests which are applied to American food products in foreign countries, and for inspecting the same before shipment when desired by the shippers or owners of these products intended for countries where chemical and physical tests are required before the said products are allowed to be sold therein, \$629,361: Provided, That not more than \$4,280 shall be used for travel outside of the United States.

The amendment was agreed to.

The next amendment was, on page 54, after line 3, to insert:

The next amendment was, on page 54, after line 3, to insert:

The Secretary of Agriculture shall, from and after the taking effect of this act, execute and perform all the powers and duties conferred on the Secretary of the Treasury by the act approved March 2, 1897 (29 Stat. L., p. 604), entitled "An act to prevent the importation of impure and unwholesome tea," as amended by the act approved May 16, 1908 (35 Stat. L., p. 163), entitled "An act to amend an act entitled 'An act to prevent the importation of impure and unwholesome tea,' approved March 2, 1897": Provided, That the bonds given to the United States as security in pursuance of section 1, as amended, shall be subject to the approval only of the collector of customs at the port of entry; that in place of the Board of United States General Appraisers provided for by section 6 of the act, there shall be designated by the Secretary of Agriculture three employees of the Department of Agriculture to serve as the United States board of tea appeals with all the powers and duties conferred by the act on the Board of United States General Appraisers. There is hereby appropriated, out of any money in the Treasury not otherwise appropriated, the sum of \$40,000 for carrying into effect the provisions of the aforesaid act until the end of the fiscal year ending June 30, 1921, including payment of compensation and expenses of the members of the board appointed under section 2 of the act and all other necessary officers and employees.

Mr. SMOOT. Mr. President, that is new legislation, and really

Mr. SMOOT. Mr. President, that is new legislation, and really

I do not think it ought to be put upon this bill.

Mr. GRONNA. May I interrupt the Senator to say that this is done at the request of the Secretary of the Treasury? When the law was passed providing for the inspection of tea there was no Agricultural Department; that is, it was not an executive department when that law was first passed.

Mr. SMOOT. The first act, as I remember it, was in 1897,

and the amendatory act was approved May 16, 1908.

Mr. GRONNA. It was made an executive department in 1889. Of course, there was an Agricultural Department, but it was not an executive department. I have a letter here from the Secretary of the Treasury, Mr. Glass, in regard to this subject.

Mr. SMOOT. I would like to have the letter read. I do not see why there should be transferred to the Agricultural Department an appropriation of \$40,000 for the purpose of carrying out this change when we have already made an appropriation to do this work, and it has been done by and through the Treasury

Department for years past.

Mr. GRONNA. Let me say to the Senator that we are appropriating \$5,000 less than the money heretofore expended by the Treasury Department for this very work, and the very man employed in the Treasury Department for this purpose will take care of this work in the Agricultural Department. Tea is a food product, as the Senator knows, and it ought to be under the Department of Agriculture. It never ought to have gone to the Treasury Department, and it never would have gone there but for the reason which I have stated.

Mr. SMOOT. This applies only to impure teas imported into

the United States, and the question of importation has always been handled by the Treasury Department. But I shall be glad to listen to the letter of the Secretary. The PRESIDING OFFICER. The Secretary will read the

The letter referred to was read, as follows:

TREASURY DEPARTMENT,
OFFICE OF THE SECRETARY,
Washington, September 29, 1919.

Hon. ASLE J. GRONNA, Chairman Committee on Agriculture and Forestry, United States Senate.

Hon. Aske J. Gronna, Chairman Committee on Agriculture and Forestry, United States Senate.

My Drar Senator: Inclosed you will find a draft of a provision prepared jointly by the Agricultural Department and my department which I would recommend be inserted in the Agricultural appropriation bill for the fiscal year 1921. This provision provides for the transfer of the administration of the act of March 2, 1897 (29 Stat., 604), as amended by the act of May 6 (35 Stat., 163), from the Treasury Department to the Agricultural Department. No changes are made in the act itself except those of an administrative nature.

This act prohibits the importation of any merchandise as tea which is inferior in purity, quality, and fitness for consumption to standards to be fixed and established annually by the Secretary of the Treasury, and provides that such merchandise finally determined to be inferior in purity, quality, or fitness for consumption to such standard shall be exported or destroyed under customs supervision. This act, unlike most pure-food laws, provides for a physical standard of quality as well as purity. The reason for this is because tea must have a standard of quality if it is to be successfully guarded as a food product, as it is possible to have an absolutely pure tea and yet it might be unfit for consumption. The commercial teas are made from the tender leaves of the tea plant. These young leaves contain the stimulating alkaloid caffeine and a complex constituent which give the commercial teas their value and flavor. It has been determined that the lower leaves, which, while pure, would be absolutely devold of any real tea flavor and which at the same time would be so strong in tannin as to be unfit for consumption. In other words, although all tea is made from the leaves of the tea plant, all tea leaves that are made into tea can not be considered as commercial tea, and to prevent the United Statesfrom being the "dumping ground" that it was before the present law was enacted Congress very wisely passed t

chandise is contained in the act of Congress approved June 26, 1845 (U. S. Stat., v. 9, p. 237), entitled "An act to prevent the importation of adulterated and spurious drugs and medicines." By the terms of this act the Customs Service of this department is charged with its enforcement.

Probably the next legislation of this kind was the act of Congress approved March 2, 1883 (U. S. Stat., v. 22, p. 451), entitled "An act to prevent the importation of adulterated and spurious teas." The Customs Service of this department was also charged with the administration and enforcement of the provisions of this act.

The next legislation, directed to the prevention of the importation of impure, adulterated, and unwholesome merchandise, is contained in the act of Congress approved August 30, 1890 (U. S. Stat., v. 26, p. 414), entitled "An act providing for the inspection of meats for exportation, prohibiting the importation of adulterated articles of food and drink, and authorizing the President to make proclamation in certain cases, and for other purposes." Under the terms of this statute, the Secretary of Agriculture is charged with its enforcement, so far as it relates to the exportation of meats, and the Secretary of the Treasury is charged with its enforcement, so far as it relates to the exportation of meats, and the Secretary of the Treasury is charged with its enforcement, so far as it relates to the importation of adulterated articles of food and drink.

The next legislation on the subject is contained in the act of March 2, 1897, supra, which took the place of the tea act of 1883, above referred to, and which was continued under the jurisdiction of the Treasury Department, and the next is the Agricultural appropriation act of March 1, 1899 (U. S. Stat., v. 30, ch. 325, p. 951). This latter act authorizes the Secretary of Agriculture is in the act of May and the next is the Agriculture in the act of May act and the next is the Agriculture and interact of the treasury is charged with its enforcement, whereas in t

under the food-and-drugs act of June 30, 1906 (26 Op. A. G., 166). In this opinion the Attorney General shows that no repugnancy exists between the special tea-inspection act of March 2, 1897 (29 Stat., 604), and the general food-and-drugs act of June 30, 1906 (34 Stat., 768), preventing them from standing together, and that an importation of tea is, therefore, subject to both acts, in that it must equal the standards of quality and purity established by the Secretary of the Treasury under the tea-inspection act and is also subject to the provisions of the food-and-drugs act regarding adulterations, labeling, misbranding and guaranty.

In the opinion of this department both of these acts are necessary to safeguard the public in the matter of tea, and while the one can not be substituted for the other, as they deal with tea in different particulars, at the same time, if the administration of the "tea law" were placed under the Department of Agriculture the work could be coordinated in the department in which this class of work properly belongs.

belongs.

If your committee has any doubts as to the advisability of this proposed course or desires information, this department will be glad to have a representative familiar with the matter appear before the committee.

A similar letter has been addressed to the chairman of the Committee on Agriculture, House of Representatives.

Respectfully,

CARTER GLASS, CARTER GLASS, Secretary of the Treasury.

D. F. Houston, Secretary of Agriculture.

Mr. SMOOT. Mr. President, this item carries an appropriation of \$40,000. I am sure there will be no \$40,000 taken off any appropriation made for the Treasury Department because of the transfer of this work. It is virtually the expenditure of an additional \$40,000, and I do not know what this appropriation will lead to, but no doubt to greater appropriations in the future with no improvement over present conditions. I do not know how much it will increase in the next few years—nobody can tell; but I do know, Mr. President, that this will not make one penny's difference in the appropriation that will be made for the Treasury Department, and therefore in embarking upon this we are embarking upon a new sea for the expenditure of money.

I can see, of course, that there is some justification for having the testing of tea, as it is a food product, made by the Agricultural Department; but I can not see why the Agricultural Department could not detail a man, or whatever number of employees it would take, to do the necessary testing and have it done under the Treasury Department, which has all of the authority and powers granted to it under existing law.

I recognize the fact that the statement in the letter just read is true, that pure tea is not always wholesome tea, but the amendment goes further than that question. The existing law covers the question of the impurity of tea, and the unwholesomeness of the same, and all classes of that character of tea can be and should be, and are as I understand it, prevented from entering the ports of the United States.

Mr. KENYON. Is not all the machinery set up now? I have never been able to understand just why this transfer should be

made. It seems to me to be all right as it is now.

Mr. SMOOT. The transfer is to be made just because it is a food product. If you are going to carry out this principle, we might just as well give the power to the Agricultural Department and the officials of that department to inspect every kind of food product imported into the United States. Then we would have two sets of officials and two sets of investigations made of all the foodstuffs that would enter into the United States, first, as to their purity and wholesomeness; and, second, as to their value and what rates of duty should be imposed.

Mr. KENYON. Is it not true that the Board of General Ap-

praisers now carry on this work?

Mr. SMOOT. They do. Mr. KENYON. And under this amendment we are appointing a new organization to do the work which has heretofore been done by the Board of General Appraisers'

Mr. THOMAS. Not only a new board but a new appropriation.

Mr. GRONNA. Oh, no.
Mr. SMOOT. I have no doubt that Mr. Mitchell will have this work in hand hereafter, and I have no doubt that there will be a new overhead organization built up in time. The appropria-tion asked for proves that fact and, as I said, not one penny will be deducted from the appropriations for the Treasury Department

Mr. GRONNA. Mr. President-

Mr. SMOOT. I yield to the Senator. Mr. GRONNA. Why does the Senator say that? Is it not possible for Congress to strike out the appropriation which is now carried for the purpose of doing this work?

Mr. SMOOT. No; because the appropriation made for it is in the lump-sum appropriation.

Mr. GRONNA. Then let us reduce the lump-sum appropriation \$40,000. That is easy.

Mr. SMOOT. That is easier said than done.

Mr. GRONNA. Will the Senator permit me to have another letter read? In view of what the Senator stated, I will ask to have the letter from Mr. Mitchell read.

The PRESIDING OFFICER. The Secretary will read as requested.

The Reading Clerk read as follows:

(Memorandum.)

MARCH 10, 1920.

Subject: Reason why in proposed transfer of tea law the board of tea appeals shall be composed of three employees of the Agricultural Department designated by the Secretary.

The Board of United States General Appraisers was first provided for in the customs administration act of June 10, 1890, which was amended on several occasions, and which was reenacted in the tariff act of 1909. (See sec. 12.) In both the original act and the reenacted act the functions of this board are stated to be solely to review dissatisfactions with any decison of the collector of customs as to the rate or amount of duties chargeable upon imported merchandise. In the reenacted act the Board of General Appraisers and the members thereof were possessed of all the powers of a circuit court of the United States. There was nothing in the tariff act of 1909, which reenacted the act of 1890, which requires the United States Board of General Appraisers to review the findings of the tea examiners, provided for in the tea-inspection act of March 2, 1897, which deals solely with the quality and purity of imported teas, and which has nothing to do with rates or amounts of duty on tea, became a law, it provided for the members of the Board of United States General Appraisers to act as the board of tea appeals to review the findings of the tea examiners in case of appeals from the findings of the tea examiners; it also provides that the findings of this board shall be final; that three members of this board were designated in the tea law to review the findings of the tea examiners was solely a matter of convenience, and not because they had any special training by reason of their membership on the Board of United States General Appraisers.

In the provision of this bill now before the Senate transferring the tea-inspection act of March 2, 1897, from the jurisdiction of the Treasury Department to that of the Agricultural Department, it is provided that the Secretary of Agriculture shall designate three employees of the Board of United States Genera

GEORGE F. MITCHELL, Supervising Tea Examiner.

* Norg.—While the present law does not require the personnel of the board of tea appeals to be changed each year, nevertheless it has been the custom to place three different members on the board of tea appeals each year, so that all nine members of the Board of United States General Appraisers might participate equally in this extra work.

Mr. GRONNA. Mr. President, I have no other interest in this provision except that, as it was explained to me by Mr. Mitchell, I believed it was in the interest of economy, and from a reading of the letters from the Secretary of Agriculture and the Secretary of the Treasury, both approving it, it seemed to me that it was a wise thing to do. Anyone who has had anything to do with teas knows that it is rather a large question, and that it is a very important one. Tea is a food product, and it is used as a beverage perhaps fully as much as coffee.

There will be no additional expense. It is simply a transfer from the Treasury Department to the Agricultural Department. I do not agree with the Senator from Utah that it means an increase of appropriations. In making up the estimates it is possible that the Treasury Department has for this year estimated for the work. I know nothing about that, but it is reasonable to suppose that it is the last time it will do so.

Of course, as legislation I realize it is subject to a point of order if anyone cares to make it. I am simply presenting it as I understand it, and I believe that it would ultimately be in the interest of economy and in the interest of the public.

Mr. THOMAS. Mr. President, I listened with some care to

the communications that were read from the Secretary's desk, and I do not recall anything which indicates that the law as it at present exists has not been properly administered.

Naturally all laws relating to customs and to importations are, and should be, under the jurisdiction of the Bureau of Customs, which is supposed to be composed of men of experience

and capacity to discharge properly the very important duties that are devolved upon that bureau. If I am correct in my recollection, the wish of the Agricultural Department is not based upon any complaint of improper or defective administration of the law and its various amendments by the bureau under the supervision of the Secretary of the Treasury.

It is to be assumed that the board of appraisers having charge of the administration of these acts are equipped at present with facilities to enable them to function properly. that is so, then surely the appropriation provided by this amendment of \$40,000 is in addition to an appropriation already in existence and which is being drawn upon by the board of appraisers. That is, for the time being, a duplication of appropriation, since no expression appears in the amendment to the contrary.

I am satisfied, as the Senator from Utah has intimated, that the practical effect of this amendment, if it becomes a law, will be to add another to the various agencies which have grown up in the various departments and have for their respective purposes the administration of specific laws, and I have no particle of doubt that ultimately it will ripen into a bureau or a division having its separate equipment of employees and of appropriations, and, like all others, arrogating as much power to itself as is possible as time shall pass.

Inasmuch, therefore, as no complaint appears and no charge is made regarding a maladministration of the law as it now stands, I am compelled to make a point of order against the amendment as an attempt to incorporate general legislation

upon an appropriation bill.

Mr. GRONNA. Mr. President, before the Chair rules on the point of order, I had overlooked the fact that the bill, on page 56, as passed by the House, has a provision very similar to the provision against which the Senator now makes the point of order. I want to inquire of the Chair if the amendment is subject to a point of order when practically the same provision is carried in the bill as it came from the House? There is only a slight difference, I will say to the Senator from Colorado, in the two provisions.

Mr. HARRISON. In other words, this is an amendment of

the provision in the House text?

Mr. GRONNA. Exactly.

Mr. HARRISON. And it is not subject to a point of order? Mr. GRONNA. I believe not. When I recalled that the provision was carried substantially in the bill as passed by the House, I believe that I was mistaken in saying that the amendment is subject to a point of order. It is not new matter. It

comes from the House, and the committee have simply amended it, and I do not believe it is subject to a point of order.

The PRESIDING OFFICER (Mr. STERLING in the chair). Standing alone, the Chair would be inclined to hold the amendment subject to the point of order; but being an amendment of a House provision, the Chair thinks it is not subject to the point of order, and therefore overrules the point of order. The question is on agreeing to the amendment.

Mr. THOMAS. I should like to have it put to a vote.

On a division, the amendment was agreed to.

The reading of the bill was resumed, and was interrupted by, Mr. SMOOT. Mr. President, the Senate committee amendment is not the same as the provision in the House bill.

Mr. GRONNA. The Senator from Utah was absent when I

stated to the Chair that upon examining the bill, on page 56, there would be found a provision in the House bill practically identical with the Senate committee amendment, but amended in some particulars, as the committee had a perfect right to amend For that reason it is not subject to a point of order, and the Chair has so decided.

Mr. SMOOT. If that is the case, then we ought to have accepted the House provision as it was with an amendment.
Mr. GRONNA. That is what we have done.

Mr. SMOOT. But the committee went to work and struck out entirely the provision on pages 56 and 57 as if the House had not acted and they put a new provision in its place. I first thought it was simply a transfer of the item to a different part of the bill, but I find it is not that. I do not want to call for a quorum—
The PRESIDING OFFICER. The Chair stated that stand-

ing alone he would be inclined to rule that the amendment was subject to the point of order, but in view of the matter on pages 56 and 57, which is substantially the same, as the Chair understands from the Senator from North Dakota as the item reported by the committee, it was not subject to the point of

order, and the Chair so ruled.

Mr. SMOOT. The ruling of the Chair would have been—
Mr. GRONNA. I do not wish to take the Senator off his feet

or off the floor, but I desire to say that this question has been

ruled upon, and other business has been transacted while the Senator was absent from the Chamber.

Mr. SMOOT. Then, I can call for a quorum.

Mr. GRONNA. If the Senator desires that, it is all right, but I do not want to go back. The point of order was raised; the Chair has decided the question and has been sustained, and, I repeat, other business has been transacted.

The PRESIDING OFFICER. The Chair will say to the Sen-

ator that he has ruled on the question.

Mr. GRONNA. It is too late now to make the point of order. Mr. THOMAS. The only business which has been transacted has been to submit the question to a vote. Mr. SMOOT. That is all.

The PRESIDING OFFICER. The Secretary had resumed and was proceeding with the reading of the bill. The PRESIDING OFFICER.

Mr. SMOOT. I shall reserve the right to have a decision on this matter when the bill reaches the Senate.

The reading of the bill was resumed.

The next amendment of the Committee on Agriculture and Forestry was, on page 55, line 15, after the word "fungicides," to strike out "\$20,000" and insert "\$25,000," so as to make the clause read:

For the investigation and development of methods of manufacturing insecticides and fungicides, and for investigating chemical problems relating to the composition, action, and application of insecticides and fungicides, \$25,000.

The amendment was agreed to.

The next amendment was, on page 55, line 23, after the word "waste," to strike out "\$6,000" and insert "\$9,000," so as to make the clause read:

For the investigation and development of methods of utilizing woolscouring waste, \$9,000.

The amendment was agreed to.

The next amendment was, on page 55, line 24, after the word "expenses," to strike out "\$855,401" and insert "\$967,401," so as to make the clause read:

In all, for general expenses, \$967,401.

The amendment was agreed to.

The next amendment was, at the top of page 56, to strike out:

The next amendment was, at the top of page 56, to strike out:

Enforcement of the tea importation act: The Secretary of Agriculture shall, from and after the taking effect of this act, execute and perform all the powers and duties conferred on the Secretary of the Treasury by the act approved March 2, 1897 (29 Stat. L., p. 604), entitled "An act to prevent the importation of impure and unwholesome tea," as amended by the act approved May 16, 1908 (35 Stat. L., p. 163), entitled "An act to amend an act entitled 'An act to prevent the importation of impure and unwholesome tea,' approved March 2, 1897": Provided, That the bonds given to the United States as security in pursuance of section 1, as amended, shall be subject to the approval only of the collector of customs at the port of entry; that in place of the Board of United States General Appraisers provided for by section 6 of the act, there shall be designated by the Secretary of Agriculture three employees of the Department of Agriculture to serve as the United States board of tea appeals with all the powers and duties conferred by the act on the Board of United States General Appraisers. There is hereby appropriated, out of any money in the Treasury not otherwise appropriated, the sum of \$40,000 for carrying into effect the provisions of the aforesaid act until the end of the fiscal year ending June 30, 1921, including payment of compensation and expenses of the members of the board appointed under section 2 of the act and all other necessary officers and employees.

The amendment was agreed to.

The amendment was agreed to.

The next amendment was, on page 57, line 3, after the word "Chemistry," to strike out "\$1,321,591" and insert "\$1,393,591," so as to make the clause read:

Total for Bureau of Chemistry, \$1,393,591.

The amendment was agreed to.

The next amendment was, under the subhead "Bureau of Soils," on page 57, line 9, before the word "clerks" where it soils, of page 31, fine 3, before the word "clerks" where it occurs the first time, to strike out "five" and insert "seven"; in the same line, before the word "clerks" where it occurs the second time, to strike out "ten" and insert "thirteen"; in line 10, after the words "class one," to strike out "seven clerks, at \$1,000 each"; in line 13, before the word "draftsmen," to strike out "give and insert "thirty". out "six" and insert "eight"; and in line 14, before the word "one," to strike out "two draftsmen, at \$1,000 each."

The amendment was agreed to.

Mr. POMERENE. Mr. President, I desire to say that I understand there has been a very material reduction in the amount of the appropriation for the Bureau of Soils. A certain part of this money, as I understand, has been expended in making surveys of soils and for other examinations.

Mr. GRONNA. Let me say to the Senator that the Senate committee struck out altogether the provision which will be found at the bottom of page 58 and at the top of page 59, involving an appropriation of \$178,900. Several Senators, how-ever, have requested when we reach this paragraph that it may be passed over, and I have no objection to that.

Mr. POMERENE. I simply wish to make a suggestion. attention was called to the matter in the first place by Prof.

Charles Thorn, who is the director of the Ohio Agricultural Experiment Station at Wooster, Ohio. I know he is a very high-class man, not only professionally but personally, and I have every confidence that he would not make any complaint in this regard if he did not feel that his duty to the people of the State of Ohio required him to do so. He is very anxious to have this item restored, and while I confess that I am not very familiar with it, I do know that the Bureau of Soils has been doing excellent work, and that they are constantly appealed to by the farmers in all sections of the State.

Mr. GRONNA. I agree with the Senator from Ohio that a great number of high-class men are very much in favor of this appropriation. I have received several letters from my own State from some very excellent men in reference to the subject, protesting bitterly against the elimination of this paragraph. If it were not for the fact that we are trying to economize, the action proposed would not be taken; in normal times the committee would not think of striking out this provision, but it is

believed that this work can be deferred.

As the Senator knows, in connection with the soil survey work men go throughout the various States, and I was told that most of the money under this item would be expended in my own State—and I dislike to have to acknowledge that on the floor of the Senate, as I know it will go into the Record—but I said "it makes no difference if it does go to my State." I have the names of a number of counties in my State in which it was intended

to make soil surveys

Mr. POMERENE. I mean no reflection on the Senator's State, but I think a good part of the appropriation ought to go there, as well as to other States. It is said our farmers do not understand intensive farming, and there is some foundation for that claim, particularly in certain sections. I think that we are not only benefiting the farmers themselves, but we are benefiting the entire population of this country when we do anything to-ward the betterment of the soil and the study of fertilizers in connection with the soil, and I think that it is false economy to

cut out an appropriation of this character.

Mr. GRONNA. Mr. President, I do not disagree with the Senator. I believe that it is a valuable work; it is important that men should go out and examine the soil and make out their charts and their analyses so that they may be used by the people in the various sections of the country wherever a survey is made; but this work can be deferred for at least a year or two. and if we can save many appropriations of \$100,000 or \$200,000 in the aggregate they will make up a great total running into the millions. It is for that reason only that the committee has recommended striking out this item; there is no excuse for such action, I will say to the Senator, except in the interest of

Mr. POMERENE. Mr. President, I think that same argument could be made against practically every other item in this bill. I can only repeat that I regard it as false economy when by an expenditure of a little money in this way we can benefit the agricultural interests and thereby the interests of the entire country. Although we have not yet reached it, I hope that the amendment will not be agreed to when it comes to be considered.

Mr. SMITH of South Carolina. Mr. President, may I ask the

chairman of the committee a question?

Mr. GRONNA. Certainly. Mr. SMITH of South Carolina. I understood him to say that he had requested that the paragraph referred to by the Senator from Ohio be passed over.

Mr. GRONNA. Yes; the Senator from Mississippi [Mr. Har-RISON] and also the Senator from South Dakota [Mr. STERLING]. who is now occupying the chair, have requested that this particular paragraph be passed over when it is reached.

Mr. POMERENE. I am glad we have the sympathy of the

Mr. SMITH of South Carolina. Mr. President, it may be necssary for me to be absent during a part of the consideration of this bill, and I wish to take this occasion to say that I have been surprised at the number of letters which have been received in regard to this very point. They have not come from my State to any extent, although I have received some, but from perhaps 20 States, and, while not addressed to me directly, they have been shown to be my others, or I have been told about them. I am amazed to find how great a desire is expressed by the farmers throughout the country that this particular work of cooperating with the Federal Government in the surveying and plotting of the soil should be continued in order that information may be furnished as to the constituent elements of the soil, the character of fertilizer needed, the best processes of drainage, whether tile or open ditch, and numerous other matters

Mr. POMERENE. I am quite satisfied the Senator would

receive complaints from his State-

Mr. SMITH of South Carolina. I have,

Mr. POMERENE. But he has been so diligent in telling them that they need nitrates down there that everybody knows that fact in South Carolina; but they do not know what character of fertilizer they need in some of the other States; and so at the present time I am appealing to the Senator from South Carolina

for aid to have this provision retained.

Mr. SMITH of South Carolina. The farm survey in my State, I presume, has covered as much territory as in other States. I understand that there are very few counties that have not been surveyed under the cooperation of Clemson College and the Federal Government, and the character of the work has been very satisfactory. I presume those counties that have not been surveyed are of such homogeneity with those that have been surveyed that they are more or less in a position to benefit by the observations in other counties; but I can understand how a wonderful benefit has accrued to my State from this work, resulting in the saving of millions of dollars, both in informing the farmers as to the character of the soil and what was needed to improve it, as well as in regard to drainage and other matters affecting putting it in condition for the best return.

I am glad to hear the chairman of the committee say that this matter will be still further considered; and I want to take this occasion, in case I should be absent, to say that so far as I am concerned, having gotten the information that I have, I would be rather in favor of restoring this appropriation, even

if we had to curtail somewhere else.

Mr. SMOOT. Mr. President, if the appropriation just spoken of, amounting to \$178,900, for the investigation of soils, is stricken from the bill, then I think I shall want to offer some amendment as to the salaries in the bureau. In other words, the work that is required here in the District of Columbia that comes to the department after the soil survey is made within the States would be considerable, and I do not think we will need as many clerks if this work is not carried on as we will if it is; so I give notice now that if we do strike out this item I shall want to return to the other one.

Mr. GRONNA. Mr. President, I think I ought to state for the RECORD that when this paragraph was stricken out by the Senate committee Mr. Harrison, the Assistant to the Secretary of Agriculture, was assisting the Senate committee, and, of course, he protested most bitterly; but so far as the number of men employed in this particular work is concerned, I will say to the Senator that it is only the number required outside of the

Bureau of Soils.

Mr. SMOOT. Perhaps the Senator did not understand me. The men that are employed directly for this work in the field are paid out of the \$178,900, but that work after it is done in the field is reported to the department here in Washington, and then the work of disseminating the information and the result from the expenditure of the appropriation is done by the clerks in the bureau.

Mr. GRONNA. Yes: I agree that there would be more work to do if we give these field agents the money to go out and make the examination. There would, of course, be increased work, and if that is not done it might be possible that we could reduce

the clerks by one or two.

Mr. McKELLAR. Mr. President, with reference to the item of \$178,900 stricken out by the committee for the investigation of soils, I have had a number of letters from my State against striking out this appropriation. They say that it is one of the most valuable of the appropriations; that it is doing the farming industry of our State an immense amount of good by giving the farmers information as to what kind of fertilizer is necessary for their soil, and they do not think it ought to be stricken out; and I hope the Senate will not agree to the amendment striking it out.

Mr. SMOOT. Mr. President, every Senator knows that wherever there is an agricultural college there is going to be a protest against striking this item out of the bill. It goes into the States and passes through the agricultural departments of the States, and we know very well that wherever there is an item stricken from the appropriation bill there will be a protest; but I did not base my statement as to the value of this work merely on the fact that there was a protest from any State or from any institution within the State.

Mr. McKELLAR. Of course I know that the Senator is correct about basing a protest on that fact, and that would not be a sufficient basis for the action of the Senate; but if this is a good work, and is for the benefit of the farmers in the various farming States, as I am advised that it is, I think we ought to keep this item in. I think if it has been heretofore found to be a good work, the mere fact that it is done through agricultural colleges is no reason why it should be stricken out.

The PRESIDING OFFICER. The Secretary will resume the reading of the bill.

The reading of the bill was resumed.

The next amendment of the Committee on Agriculture and Ferestry was, on page 57, line 17, before the word "two," strike out "one messenger or laborer, \$480"; in line 18, after the word "each," to insert "one messenger or laborer, \$660"; and in line 20, after the words "in all," to strike out "\$78,060" and insert "\$78,040," so as to read:

One messenger, \$840; 2 messenger boys, at \$480 each: 1 messenger or laborer, \$660; 3 laborers, at \$600 each; 1 laborer, \$300; 1 charwoman or laborer, \$480; in all, \$78,040.

The amendment was agreed to.

The next amendment was, on page 58, line 11, after the word survey," to strike out "\$23,110" and insert "\$25,610," so as to make the clause read:

For chemical investigations of soil types, soil composition, and soil minerals, the soil solution, solubility of soil, and all chemical properties of soils in their relation to soil formation, soil texture, and soil productivity, including all routine chemical work in connection with the soil survey, \$25,610.

The amendment was agreed to.

The next amendment was, on page 58, after line 20, to strike

For the investigation of soils, in cooperation with other branches of the Department of Agriculture, other departments of the Government, State agricultural experiment stations, and other State institutions, and for indicating upon maps and plats, by coloring or otherwise, the results of such investigations, \$178,900.

Mr. SMITH of South Carolina. Let that be passed over. Mr. GRONNA. I ask that the amendment be passed over. The PRESIDING OFFICER. The amendment will be passed

Mr. SMOOT. Mr. President, I should like to ask the chairman of the committee if he knows what the result has been from past appropriations for exploration and investigation within the United States to determine possible sources of supply of potash, nitrates, and other natural fertilizers. That appropriation has been carried in the bill for quite a number of years past, and I should like to know whether any report has ever been made.

Mr. GRONNA. Mr. President, I can not say that I have read many of these reports. I will say, however, that that question came up before the committee, and we took up this very paragraph, among others, and discussed it with Mr. Harrison, and one of the experts in the Department of Agriculture called me out of the Chamber one day and called my attention to the im-

portance of this work.

A great deal of criticism has been made with reference to the expenditure of money for the manufacture of potash from kelp. It has been generally understood that the results have been bad. We were informed that the Department of Agriculture will sell this year from the plant in California, where they manufacture potash from kelp, more than a million dollars' worth of potash; and when we take into consideration the fact that the Government of the United States did not go into this work merely for the purpose of making it a commercial proposition, but that it is an important scientific work, and when we realize what it has been, especially during the war, it seems to me that this kind of work ought to go on.

The paragraph which we are passing upon just at the moment provides only for research, and I will say to the Senator from Utah that I believe very great and important work is being done both with reference to nitrates and with reference to pot-

Mr. SMOOT. The appropriation, however, is not made for research. All that it is made for is for exploration and investigation to determine possible sources of supply of potash, nitrates, and so forth.

Mr. GRONNA. Yes; that is true. Mr. SMOOT. I think almost any Senator here can tell you that there are sources in the United States from which these

materials can be derived.

Mr. SMITH of South Carolina. Mr. President, if the Senator will allow me, I do not think he has put a broad enough meaning on the phrase "determine possible sources." The chairman of the committee is right when he says that they investigate the availability of the sources. They may find potash in some of the rocks. There are reports out in reference to it. I have one now where they report on the matter of kelp, I think, in the Senator's State. They investigated some of the potash rock there, and they also have investigated the green shales both of the New England States and of the Southern States, to ascertain their potash content, and the practicability of extracting it in commercial quantities.

Mr. SMOOT. We all know that. When that investigation is completed, and a report is made, I think it will show that if the

potash deposits that are known now in the United States are developed, this country can be furnished with potash for the next thousand years.

Mr. SMITH of South Carolina. The Senator is aware of the fact that the freight from the Pacific coast and from his State to the great fertilizer-using sections of this country is prohibitive.

Mr. SMOOT. That is exactly why it seems to me that this appropriation ought to be for a different purpose than that

named in the hill.

Mr. SMITH of South Carolina. But, if the Senator will allow me to conclude, that freight will not be prohibitive if the fact can be established that potash can be economically produced in those sections, because I think that since Congress has charge of the public carriers of this country, if America has a supply of this material, certainly we ought to be able to bring it across the continent and furnish it to our people as cheaply as it can be brought across the ocean from the potash wells of Germany and sold here. I think, therefore, that this investigation is entirely justified; and not only that, but it is my impression now-I have not the old law before me-that this is a smaller appropriation than has been carried heretofore.

Mr. SMOOT. What I had in mind was this: Whenever an appropriation is made for any particular purpose in any appropriation bill, it remains there forever unless some one calls attention to it. Nobody is more interested in the original appropriation for this purpose than I. I thought it was very wise, and I think now that perhaps it would be a splendid thing for Congress to make an appropriation to find out the best methods of extracting potash and the best methods of handling it, rather than to make an appropriation here to determine the possible sources of supply in the United States. Take the State of Wyoming: There is enough potash rock in the State of Wyoming to furnish potash to the United States for the next 100 years, and that rock is in sight to-day. It is worth nothing unless it is for its potash content.

Mr. SMITH of South Carolina. But the method of extracting

it is too costly.

Mr. SMOOT. They have already erected a large plant there, and I think it more than likely that it will not be very long until that plant is perfected to the point where thousands of tons of the very highest grade of potash will be produced in that State. I would rather see an appropriation made for the purpose of determining the best method of extracting the potash, and how to get it to the States that need it than to have an appropriation here to determine the possible sources of supply of potash.

Mr. SMITH of South Carolina. Would not the Senator think this money was well spent if this investigation goes on solely for the purpose of discovering new sources of supply, if they do discover a valuable source of supply contiguous to the territory that uses it in such great quantities? I am sure the dis-covery of the green shales on the Atlantic seaboard was a valuable one and also the by-product from this blackstrap molasses.

Mr. SMOOT. Of course, we all understood that before. The only question was as to its location and the transportation ques-

tion involved.

Mr. SMITH of South Carolina. I would not be surprised at any time if these investigations reveal a source we now know

Mr. GRONNA. I do not wish to take the Senators from the floor, but this is not a committee amendment. It is a provision

which comes from the House.

Mr. SMOOT. That makes no difference. The amendment of the committee was presented, and any Senator can speak upon it.

Mr. GRONNA. But the Senator was considering the paragraph beginning in line 18.

I was, but I can speak on any part of the Mr. SMOOT. Il I desire. I am not out of order, I will say to the Senator. Mr. THOMAS. Mr. President, I do not want to prolong the

discussion needlessly, but this appropriation is such an admirable illustration of the way the United States does business that I

feel justified in briefly commenting upon it.

The purpose of this paragraph is to appropriate \$36,840 for exploration and investigation within the United States to determine possible sources of supply of potash, nitrates, and natural fertilizers. In other words, Government agents and so-called Government experts will be authorized under this appropriation, and have been authorized under similar appropriations, to make investigations and explorations; and what do they amount to? In the first place, there is no inducement to discover or ascertain the subject matter of the appropriation, for once it has been accomplished the occupation of the official is lost and gone; he must either seek new sources of activity or he must continue his search. I do not know of any instance—there may be some, but I can recall none-where work of this kind, carried on by Government officials under Government appropriations, ever accomplished anything. The great deposits of metallic ores and of rare minerals have been exploited and exposed by private initiative, and that initiative has been stimulated by the prospect of That is elemental in human nature, and it always will be.

As the Senator from Utah has said, there is plenty of potash in the United States, and there is sufficient talent and genius, chemical and otherwise, now dormant in the United States to make these deposits commercially available. The difficulty is, however, that no private incentive exists to attract private investigation along these lines. The Government has segregated these lands from private occupation and does not permit them to be exploited except under conditions that are not attractive to the men who would like to engage in that sort of business. Senators representing States needing this identical fertilizer to my certain knowledge have joined in the enactment of just that sort of legislation, with the best of motives, of course, and unquestionably from a desire to subserve the interests of the country, but unfortunately they have paralyzed that enterprise which is necessary to secure these much-needed natural resources.

The great phosphorus beds of Florida were not discovered by Government agency. It was private enterprise, stimulated by the desire for gain, which brought those valuable elements into the market and which has done so much to stimulate agricultural interests the world over. I prophesy that you can make this appropriation for the next 25 years and you will have noth-

ing to show for it at the end of that time.

If the Government will say to the Amercan citizen, as it once said, "Go upon the public domain, investigate it, examine it, exploit it, and if you discover anything which is sufficiently attractive, locate it, and we will give you a patent," there will be some incentive for private enterprise to enter this field of activity. A few years ago I knew of a number of men who went into Wyoming, two or three of them engineers and chemistry for the ists, for the purpose of investigating the potash deposits, and locating and developing them if their investigations were satisfactory. They made tests of the rock, all practical tests, and satisfied themselves of the prospect of a good business, and made their locations under the laws of the United States accordingly. When their locations came to Washington for patent, they were subjected to investigation, and after the investigation they were turned down. That is under the new dispensation, the offspring of Mr. Gifford Pinchot and the cult of the Pinchot association. The result is that these great potash beds have not been subjected to exploitation. The Government will not do it; the Government can not do it.

The way in which to ascertain where these beds are, what their possible sources of supply may be, and how they are best to be developed is the good old way of relying upon individual initiative and depending upon the confidence which the indi-vidual has in himself. Instead of that we have the modern Government way, to withhold all the resources of nature from the people, suspect the honesty and integrity of every citizen desiring to investigate, adopt a leasehold policy, and fix royalties at a point which no sensible or prudent man cares to consider, and then make an appropriation under the terms and conditions of which a lot of scholastic gentlemen, excellent people, theorists, may go out with their microscopes and other paraphernalia and examine into the crystallizations of rock and

report progress

Nowadays, Mr. President, we shoot vermin and predatory animals by Government order, and we have extended our civil service so far as to arm officials with shotguns and pay them so much a day to kill skunks and prairie dogs. A man earns just as much sitting by a good fire and shooting such animals as are attracted by curiosity or otherwise within his range as he will by going out and doing a day's business. I have no doubt the time will come when all these various agencies will be similarly exercised and provided for, and just so long as it is done we will depend upon foreign countries for very essential elements needed in agriculture and in the other pursuits of life. Let us go back to the good old way of doing business, where men are men, who do not need the Government for a wet nurse whenever anything is to be done requiring the exercise of capacity or involving the danger of expense. I think that this entire item should be eliminated from the bill, because it is in the end nothing but a sheer waste of the public money.

The reading of the bill was resumed.

The next amendment was, on page 59, line 16, after the word expenses," to strike out "\$462,975" and insert "\$286,575," so as to make the clause read:

In all, for general expenses, \$286,575.

The amendment was agreed to.

The next amendment was, on page 59, line 17, after the word "Soils," to strike out "\$541,035" and insert "\$364,615," so as to make the clause read:

Total for Bureau of Soils, \$364,615.

The amendment was agreed to.

The next amendment was, under the subhead "Bureau of Entomology," on page 59, line 23, before the word "clerks" where it occurs the second time, to strike out "ten" and insert "eleven"; in line 25, before the word "clerks," to strike out "eight" and insert "six"; on page 60, line 3, after "\$1,200," to strike out "1 entomological preparator, \$1,000" and insert "4 entomological preparators, at \$1,000 each"; in line 9, after the word "each," to strike out "1 laborer, \$540; 1 laborer, \$480"; and in line 11, after the words "in all," to strike out "\$132,810" and insert "\$134,390," so as to make the clause read:

and insert "\$134,390," so as to make the clause read:

Salaries, Bureau of Entomology: One entomologist, who shall be chief of bureau, \$5,000; 1 chief clerk and executive assistant, \$2,250; 1 administrative assistant, \$2,250; 1 editor, \$2,250; 1 financial clerk, \$1,800; 5 clerks, class 4: 11 clerks, class 3; 18 clerks, class 2; 25 clerks, class 1; 6 clerks, at \$1,000 each; 1 insect delineator, \$1,600; 2 insect delineators, at \$1,400 each; 2 entomological draftsmen, at \$1,400 each; 2 entomological draftsmen, \$1,200; 4 entomological draftsman, \$1,080; 1 photographer, \$1,200; 4 entomological preparators, at \$1,000 each; 4 entomological preparators, at \$840 each; 8 entomological preparators, at \$720 each; 1 laborer, \$1,080; 2 messengers or laborer, at \$900 each; 1 messenger or laborer, \$40; 3 messengers or laborers, at \$720 each; 6 messenger boys, at \$480 each; 2 charwomen, at \$480 each; 3 charwomen, at \$240 each; in all, \$134,390. \$134,390.

The amendment was agreed to.

The next amendment was, on page 61, line 3, after the word available," to strike out "Provided, That \$9,600 of said sum " available," shall be available for the investigation of insects affecting the pecan and method of control of same," so as to make the clause

For investigations of insects affecting deciduous fruits, orchards, vineyards, and nuts, \$178,500, of which \$30,000 shall be immediately available.

The amendment was agreed to.

The next amendment was, on page 61, line 11, after the words "Argentine ant," to strike out "\$125,000" and insert "\$170,000," so as to make the clause read:

For investigations of insects affecting southern field crops, including insects affecting cotton, tobacco, rice, sugar cane, etc., and the cigarette beetle and Argentine ant, \$170,000, of which sum \$25,000 shall be immediately available.

The amendment was agreed to.

The reading of the bill was resumed, the last paragraph read being as follows:

For investigations of insects affecting truck crops, including insects affecting the potato, sugar beet, cabbage, onion, tomato, beans, peas, etc., and insects affecting stored products, \$110,000.

Mr. HARRISON. I have an amendment that I want to offer to the paragraph just read. Are individual amendments now in

The PRESIDING OFFICER. They are not.

Mr. HARRISON. I do not want to lose my right to offer an amendment to that provision.

The reading of the bill was resumed.

The next amendment was, on page 62, line 2, after the word "insects," to strike out "\$52,330" and insert "\$62,330," so as to make the clause read:

For investigations, identification, and systematic classification of miscellaneous insects, including the study of insects affecting the health of man and domestic animals, household insects, and the importation and exchange of useful insects, \$62,330.

The amendment was agreed to.

The next amendment was, on page 62, line 7, after the word "expenses," to strike out "\$740,670" and insert "\$795,670," so as to make the clause read:

In all, for general expenses, \$795,670.

The amendment was agreed to.

The next amendment was, on page 63, line 3, after the word "expenses," to strike out "\$200,000" and insert "\$302,650," so as to make the clause read:

Preventing spread of moths, Bureau of Entomology: To enable the Secretary of Agriculture to meet the emergency caused by the continued spread of the gypsy and brown-tall moths by conducting such experiments as may be necessary to determine the best methods of controlling these insects; by introducing and establishing the parasites and natural enemies of these insects and colonizing them within the infested territory; by establishing and maintaining a quarantine against further spread in such manner as is provided by the general nursery-stock law, approved August 20, 1912, as amended, entitled "An act to regulate the importation of nursery stock and other plants and plant products, to enable the Secretary of Agriculture to establish and maintain quarantine districts for plant diseases and insect pests, to permit and regulate the movements of fruits, plants, and vegetables therefrom, and for other purposes," in cooperation with the authorities of the different States concerned and with the several State experiment stations, including rent outside of the District of Columbia, the employment of labor in the city of Washington and elsewhere, and all other necessary expenses, \$302,656.

Mr. POMERENE. Mr. President, if I may have the attention of the chairman of the committee for a moment, in this appropriation under the title "preventing the spread of moths," the House appropriated \$200,000. It is proposed to increase that by the Senate committee amendment to \$302,650. May I ask what was the appropriation last year?

Mr. GRONNA. It was \$304,000, I will say to the Senator.

Mr. POMERENE. I have had a large number of communications from Ohio bearing on the subject and one of them from the entomologist from the Ohio Agricultural Experiment Station. He suggests that \$400,000 would not go any further in the prosecution of this work than the appropriation of last year, due to the increased cost of the work. I think the work is so very important that I should dislike very much to see the department crippled for want of funds.

Mr. GRONNA. I will say to the Senator that the committee took that into consideration, but the experts who appeared before our committee believed that they could get along with \$302,000 as provided in the amendment. We realize that much important work is being done by the experts, and that it is necessary to provide ample funds for the continuance of the

work.

Mr. THOMAS. May I inquire of the Senator having charge of the bill what progress is being made in this investigation toward the accomplishment of the end desired? These moths

seem to flourish along with the appropriations.

Mr. GRONNA. I will say to the Senator that the country infested with these moths has been, as the Senator knows, mostly in the Eastern and New England States. I understand, from the reports and from the statements made by the experts, that a great deal of work has been done; in fact, they have been able to keep the insects from spreading. I could read from the report which I have here showing that at one time the gypsy moth had gone as far west as New York.

The Senator, of course, realizes, perhaps better than I do, the difficulty of exterminating or eradicating this moth. It is not an easy matter to do. It is a good deal like the boll weevil in the South. We have not been able to eradicate completely the boll weevil, but the department has been able to eradicate it in certain sections and the department has also been able to

keep it from spreading.

Mr. THOMAS. Of course, the Senator knows that they are erecting monuments to the boll weevil down in Alabama.

Mr. GRONNA. The Senator from Colorado told me the other day that they are erecting such monuments. Nevertheless, it is important that sufficient sums of money shall be appropriated to eradicate these pests. It must be done.

I want to say to the Senator from Ohio that I believe the work can be done with the amount provided for in the amend-

Mr. POMERENE. The Senator from Colorado has asked a question with reference to the gypsy moth. I have here before me a signed statement by Mr. N. H. Shaw, secretary of agriculture of the State of Ohio; Mr. E. C. Totten, chief of the Bureau of Horticulture; Prof. Herbert Osborne, professor of entomology, Ohio State University; and T. H. Parks, extension entomologist of the Ohio State University. In discussing this subject, after speaking of the crippling of the department because of insufficient funds, it is stated that:

cause of insufficient funds, it is stated that:

This is particularly true in the case of the gypsy-moth work, where the reduction of one-third from the amount previously appropriated is little less than a calamity. However, this reduction, if consummated, would be in line with the disastrous and expensive policy of temporizing that has hitherto marked legislative efforts in connection with the control of this pest.

Beginning about 1890 the State of Massachusetts made liberal annual appropriations, until the insect was well under control and, in fact, far on the way toward cradication, when the cry of "economy" caused the legislature to cut off the appropriations. This false economy and the resulting cessation of control work for a period of four years was directly responsible for a rapid increase and spread of the insect and the necessity for the expenditure of large sums by State and Federal Governments since 1902. Now that the work is again beginning to show results the cry of "economy" is again heard, which, if successful in its purpose, will practically nullify and bring to naught the really remarkable results attained through the expenditure of State and Federal funds. When this insect again becomes serious, as it unquestionably will if the appropriations are reduced, we will have to begin again, not where we left off in 1920 but back where we were in 1902.

The request for an addition of one-third to the amount previously appropriated was in our opinion very conservative, for the additional

The request for an addition of one-third to the amount previously appropriated was in our opinion very conservative, for the additional sum is not commensurate with the advance in the cost of labor and materials.

I think that practically demonstrates the situation, at least as it appears to these men who have given special attention to the subject.

Mr. THOMAS. I am glad to know that some progress is being made in that direction. I asked the question very largely

from curiosity, because when the subject of the boll weevil is reached I want to call the attention of the Senate to some eulogies that are being pronounced upon that very interesting little insect in certain parts of the South, where it seems to be regarded more as a benefactor than as a pest.

Mr. SMITH of South Carolina. Mr. President, I think if the Senator from Colorado understood the situation he would not indulge in this seeming humor about the erection of monuments to the boll weevil. People who had been, as we call it, running on the one-crop plan of planting cotton, when the boll weevil came in such disastrous numbers that he killed the cotton crop out so that it was impossible to plant, found that by planting peanuts in certain tracts they could get a better return than they did from their cotton. What would be the condition of the producers of this country if all the territory now planted in cotton were to be planted in the insignificant and negligible crops that have been so very profitable to these people?

The Senator must understand that we are face to face now with the calamity of losing our monopoly of the world's greatest staple through the inroads of this miserable little insect. Sixteen million bales of cotton were produced in 1914 and the rapid spread of this insect over the cotton States has reduced that crop in the last five years to an average of only 11,000,000 bales, entailing a loss in the five years of 20,000,000 bales of cotton running up into billions of dollars, meaning that unless we can find some method of handling it-and we have found no method of stopping his progress over the country there, but we have found a method by which we can make a partial crop—the billion dollars of European gold that has been brought into this country and exchanged for our manufactured and raw cotton will have to be surrendered to some one else.

There are untold millions of dollars in the form of cottonseed meal and cottonseed hulls, which in the Senator's own State are finding a market and a valuable place in competition with his grain and his hay. All cattle raisers as far west and south as Colorado and New Mexico, and all down to the Mexican border, find there is no feed on earth that will put cattle in condition for the market and put on as much fat in a short time as will the use of cottonseed meal. Just night before last we had an illustration of the way the soil is being depleted, and the sources of renewing it by virtue of artificial fertilizers are being exhausted; and the marvelous statement was made that in place of 80 per cent of the by-product known as cottonseed meal, out of which is extracted the oil which has heretofore been used as fertilizer, practically this entire output of the enormous southern cotton crop is now used in the form of cattle feed.

Why should Senators stand here and absolutely eulogize the poor, foolish individuals who, taking the little local view the Senator from Colorado seems to commend, that because they can raise a few bushels of peanuts and a few head of cattle a little more profitably in their locality than they have been able to raise cotton under the boll-weevil conditions, therefore they would erect a monument to the boll weevil because he enabled them to plant peanuts and make a little more than they had made out of the cotton under adverse conditions?

I think the Senate ought to understand here this afternoon that there has appeared now an insect which probably will menace the corn crop of this country, known as the miserable corn borer, threatening the entire corn crop. You can not get the farmers of this country nor disinterested parties to go out and study the habits and varieties of this insect and prepare some way to combat it.

You have the gypsy moth and you have the San Jose scale. have here before me this afternoon a comparative statement of the loss to the apple crop from insects. I presume it would be quite as logical for the apple growers of the Northwest, if temporarily during the apple season they could go out and raise a few angora goats where they had raised apples and make a little more than they had made out of apples, to raise a monument to the little insects that destroy the great apple industry of this country. I take this occasion, Mr. President, to deplore the fact that Senators scrutinize and criticize the number of dollars that are included in agricultural appropriation bills without apparently having an intelligent idea of what has been the result of the expenditure of those dollars in the past years. I think it is the duty of a Senator to scrutinize the expenditure of public money when he is charged with the responsibility of appropriating it, but I think it is equally his duty to understand what is being done with and what is the result of such expenditures.

I confidently state here this afternoon that there is not a department of the Government that has been of as much benefit to the American people as has the Agricultural Department, nor has there been as little extravagance and as little useless expenditure of money in any other department as there has been in the Department of Agriculture. Only the other day there appeared before us the new Secretary of Agriculture, deploring the fact that we had trimmed the Agricultural appropriation bill as we had, particularly in reference to certain divisions and salaries. He furnished a list of some 40 or 50 men, bright, trained scientists, who had worked patriotically and loyally to discharge the responsibilities which were put upon them, to help the great agricultural interests of the country to produce for the benefit of 110,000,000 American people. These men of necessity being responsible for their wives and children, and being in the earning period of their lives, have been offered four or five times as much by private institutions as they were offered under the Government, and so necessarily under existing conditions they have accepted.

He stated that we could not retain the best talent in this country on the meager salaries being paid, and in addition to that have Congress every time the Agricultural bill comes up rawhide these men as being parasites, barnacles on the public, and as

giving no quid pro quo.

I think the committee ought to invite scrutiny of their work. investigation, and criticism; but it has become popular for Senators to stand on the floor of the Senate and laugh to scorn the very source from which three times every day they go and replenish their energy. After having gone into the dining room and eaten the products of the farm and field they then come back and scorn and sneer at the efforts that the Government is making to help those who are the most notoriously helpless of all the great classes of our workmen.

The manufacturers are necessarily organized; they are artificial producers; they can control their seasons and their output. The agriculturist when he has made his investment in the soil and purchased land, stock, and material then has to wait upon the caprices of an uncertain season as to whether or not he will get any return. Yet when we come to make appropriations and to extend help to that class of people there is a perfect chorus of criticism here that we are squandering the people's money when we are only trying to help these men in their struggle against the uncertainty of the seasons and also against the inroads of insects and all kinds of destructive fungus and other plant diseases. We are met with this unjust criticism whenever we bring in an Agricultural appropriation bill.

I do not know to what extent it is possible to eradicate any of these pests; but I do know that millions upon millions of dollars have been added to the meat supply of the countr, by the actually demonstrated eradication of what is known as the cattle tick, the carrier of Texas fever. I know that the Agricultural Department in developing vaccine has added millions upon millions of dollars to the meat supply by holding in check hog cholera. You and I know that the outbreak of the footand-mouth disease a year or two ago was promptly checked and finally stamped out by the Agricultural Department. Who can calculate the millions of dollars thereby saved to the people? Yet whenever any little item comes up on the Agricultural appropriation bill some great economist stands on the floor of the Senate and scrutinizes it, as to whether or not the money has been properly expended.

We ought to give the farmers all the encouragement possible. The total appropriation in this bill is less than the cost of one battleship, and yet every battleship in America is dependent upon the appropriations contained in this bill. I think it is time for us all to join hands and do what we can to encourage the man with the hoe.'

Mr. THOMAS. Mr. President, the Senator from South Carolina is always supersensitive when any criticism is made or any information is requested regarding items of appropriation in the Agricultural appropriation bill. There is no question that the Department of Agriculture has accomplished a great deal of good in the country and has been the source of infinite benefit to the farming communities throughout the land. It is equally true, however, that the Agricultural bill has become the nestingplace for more little, unnecessary, and seemingly experimental appropriations than any other one appropriation bill that we have to consider. I have had occasion heretofore to criticize a number of these so-called appropriations, and so long as I am here I propose to exercise my right of criticizing others.

I try to distinguish-with what success others must determine-between appropriations that are needful and appropriations which experience demonstrates lead nowhere, as well as approprations that are designed to do for the farmer what he can do a great deal better for himself. I recall an appropriation of several thousand dollars designed to instruct the farmer upon the farm how to make sauerkraut or cottage cheese. that was a very useful appropriation, but I am inclined to think that the average farmer's wife could come down here and give

the Agricultural Department a great deal more instruction along those lines than any so-called expert could give to any farming community in the United States; and so with a great many other appropriations which I might mention, but I will not take the

Mr. McKELLAR. Mr. President, will the Senator yield?

Mr. THOMAS. I yield.

Mr. McKELLAR. Does not the Senator get letters from farmers and farmers' wives in his State very regularly asking for bulletins as to all these matters?

Mr. THOMAS. Oh, yes. Mr. McKELLAR. I will say to the Senator that my own experience has been that the farmers of my State receive very valuable information from the reports of different investigations and from the advice that is given to them and to their families by the Agricultural Department. If we want to save money it seems to me that we can find other departments of the Government in connection with which we might save a great deal more than by attempting to save the small appropriations that go to the Agricultural Department. It is the most important institution that we have to deal with, and we ought, in my opinion, to build it up in every possible way.

Mr. THOMAS. Mr. President, the thing that we are discussing is always the most important when it comes to economy; it

makes no difference what it is.

Mr. McKELLAR. Does not the Senator, in all fairness, think that the agricultural interests of this country are the most important of all its interests?

Mr. THOMAS. I think that it is one of the most important

interests in the country.

Mr. McKELLAR. I take issue with the Senator, for I think it is the most important, because without it we could not live

Mr. THOMAS. The Senator does not take issue with me at all; the Senator expresses his opinion, and I express mine; at least, I answer his question. The Senator asks me if I do not get requests for bulletins from people in my State. I answer, "Yes, I do;" and I receive a great many other requests. I receive requests for appropriations under this bill which I have not the audacity to present to the committee, and I have no doubt that many similar requests come to other Senators. is the difficulty. The people are becoming so dependent upon the Government of the United States that they are losing all initiative, and the time is rapidly coming when even the farmers, who are noted for their initiative, will have the same sense of self-dependence, and will come to the Government of the United States for relief from every conceivable ill which is either actual

or apprehended. It would appear possibly from the comments that have been made by the Senator from Tennessee and the Senator from South Carolina that I am making a specialty of attacking the

Agricultural appropriation bill. Mr. McKELLAR. I hope the Senator will not include me in

that category.

Mr. THOMAS. And that I allow all other bills considered

by the Senate to pass without criticism.

Mr. SMITH of South Carolina. Mr. President, the Senator is the least among the sinners in that respect, although he is one of

Mr. McKELLAR. If the Senator will yield to me for just a moment, I hope he will not think that I was alluding to him especially. I was merely taking issue with a particular state-

ment made by the Senator.

Mr. THOMAS. I did not say that the Senators were accusing me; I said that from what had been uttered by them such an inference might be drawn by others. I have tried to prevent the building of all of the \$37,000,000 battleships that so far have been the subject of legislation by Congress. I think every dollar expended from now on upon a battleship is so much money thrown away. The day of the battleship is gone, long ago. Sir Percy Scott, of the British Admiralty, predicted that the submarine-and this was before the German war-would in active warfare render the battleship obsolete; but we are still appropriating money for them and still building them, while we are neglecting the air, the control of which will be absolutely essential to our national security. We are economizing upon what is obvious as a result of this war and squandering money like drunken sailors upon other things that are either obsolete or unnecessary at this time.

Mr. McKELLAR, Will the Senator yield?

Mr. THOMAS. I certainly do.

Mr. McKELLAR. If the Senator desires to consider the question of economy—and I think that question should be uppermost in the minds of all of us—I call his attention to a bill reported out by the Committee on Military Affairs, of which

he and I are both members, under which, if enacted into law, there will be about \$1,300,000,000 expended next year on our Army-about five times as much as German militarism in the heyday of its glory in peace times cost. If we desire to economize, it seems to me we had better try to bring about economy by stopping the spigot instead of stopping the little leaks that may occur in a bill like this, which involves only about \$33,-000,000, I believe, in comparison with \$1,300,000,000 that is sought by the bill to which I have referred to be appropriated for our Army next year.

Mr. THOMAS. I know that whenever the Army is mentioned, the Senator from Tennessee sees red. He is opposed to

it absolutely.

Mr. McKELLAR. Oh, quite the contrary. That is very unfair.

Mr. THOMAS. Then I withdraw the statement.

Mr. McKELLAR. I am glad the Senator does. I believe we should have an Army, but I do not believe we should fasten

German militarism upon the people of this country.

Mr. THOMAS. Mr. President, we are at one again. I do not believe so either. I am in favor of reducing the actual expenses of the Government in every department to the very lowest point commensurate with the national safety and the national need. I want to see the knife applied as far as we can do it with safety and security to the Army, to the Navy, and to all the other departments, not excepting the Agricultural Department. I know that what I want and what will be done will be as far apart as the poles. I have often had occasion to say that the microscopic, undiscoverable point in national legislation is the point where we should begin to economize. can not find it. It is not there. No microscope was ever constructed of sufficient enlarging power even to locate it. We know how all of these criticisms are met, and we know the results. In the matter of economy we are apt, as they do in the matter of taxes, to pass it on, and it is passed on in circular form, so that it continues a spiral movement and never gets anywhere.

This is not the time to continue any discussion in regard to the boll weevil. I am sorry that I mentioned the subject, since the mere mention of it created such a tremendous flurgy. I do intend to say something when that part of the bill is reached. because I am not convinced that many of the appropriations which this and previous bills have carried have been of that demonstrated usefulness which a continuing appropriation should have, and which experience must justify or else disap-

I regret to see the scientific, experienced, expert employees of the Agricultural Department leave the public service. I think it is a great misfortune. I regret to see the experienced officers of the Navy and of the Army forced out of the Government employment for the same reason—that is to say, that the amount of their compensation is not commensurate with the needs of life. I have never criticized, and I hope I never shall criticize, proper compensation for those employees in the Government service who follow a line of technical work, who have prepared to do it, who are dependent upon the work as their life work, and who can be retained only by giving them a sufficient remuneration to enable them to live. They, however, are suffering from the enormous congestion in all these departments of a superfluity of civil-service employees. They are making vicarious atonement for the policy and practice of the Government in crowding employees into the various departments until they are so congested that the work itself frequently languishes. True economy requires, and ought to receive, scientific treatment; and the number of ordinary employees should be reduced to the very lowest degree commensurate with the public needs. On the other hand, these scientific men, these experts in the various lines of public endeavor, should be continued in the cervice, notwithstanding the fact that it may result in an immediate temporary increase of expenditures.

I think I have made myself clear upon that branch of the subject.

Mr. SIMMONS. Mr. President, I have no disposition to join in any criticism of the Senator from Colorado [Mr. Thomas] because of his criticisms of this bill. I am sure that he is entirely conscientious in the position which he takes. But, Mr. President, ever since I have been in this body I have noticed a greater disposition to criticize and pick flaws in the Agricultural bill than is evidenced toward any other appropriation measure that comes before this body. At times I have been very much astonished by the fact that frequently Senators representing agricultural States seem disposed to seize upon every little item of appropriation in the Agricultural bill for the purpose of criticism.

If you will except the river and harbor bill, no bill appropriating money is as much the subject of this sort of captious and frequently unwarranted and unjust criticism as the little bit that we are able to give for the benefit of the farmers of this

Everybody knows that outside of the relatively small amounts that we appropriate to aid in the instruction of men who are engaged in agriculture we are not able to legislate in a way directly to help the farmer. There is very little tariff legisla-tion we can enact that will be effective that will directly benefit the farmer. There is a great deal of tariff legislation that we can enact and do enact that seriously injures the farmer; and it does seem to me, in view of the fact that by reason of the limitations under which we act here we are able to do so little for the farming interest of this country—the interest that lies at the very foundation of our prosperity-that Senators ought not to begrudge to the farmers the crumbs that fall from our legislative table.

Mr. President, our tariff bills come up here laden sometimes with thousands of different items intended to encourage and stimulate and develop the industries of this country, and we very frequently discuss only briefly the great and far-reaching schedules of those measures. Through our legislation we are enabled to extend, and we do extend, substantial aid to almost every other industry in this country-direct, positive aid-not by way of instruction but by way of helping to make profitable the other industries of this country. When we come to the farmer, we can not extend the same direct, effectual aid.

What is the situation, Mr. President? We find that every great industry in this country, except that of agriculture, is to-day able to command all the labor that is reasonably required for its prosecution; and yet the men who are engaged in producing the things that we need and upon which we subsist, and who are engaged in producing the raw materials out of which the clothes that we wear are made, can not secure anything like an adequate supply of labor to efficiently carry on their business. and every Senator who is here representing an agricultural State will tell you to-day that the prospects are that the next crop in this country is going to be disappointingly short, because labor is leaving the farm and going where? Going into the other industries of the country. Why? Of course, Mr. President, labor always goes where it can get the biggest wage, and the man who makes the biggest profit can pay and does pay the biggest wage; and it is because the farmers can not afford to pay the same price for labor that the other industries of this country pay that these other industries have all the labor they need and the farmers have less than they need.

Mr. President, I say that we are in danger in this country of overstimulating some channels of the activities of the people of the country. You can so overstimulate by legislation and other processes certain lines of work and industry in this country as to starve the agriculturist of his labor; and when you do that, you strike a blow at the very foundations of our prosperity.

I would not say one word against proper legislation here to develop the industries of this country, but I do warn Senators that we can go so far in artificially stimulating the activities of the people in certain lines that it will recoil upon those who are engaged in other lines. What good will it do us to manufacture all the goods that the world needs at this time if as a result our entire population flocks to the cities and flocks to the factories and flocks to the mines? What shall we gain by making all the goods the world needs at this time if by so doing we find our fields neglected and we are not able to produce the food upon which we subsist and the raw materials out of which clothes are made in this country? I can not conceive of a more disastrous situation than that, especially at a time when, if we can not ourselves produce the foodstuffs that we require, there is no quarter of the world from which we can obtain them at a reasonable price.

I do not mean to inveigh against any and every person who objects to an item in the Agricultural bill; but I am making these remarks in order solemnly to call the attention of the Senate of the United States and the people of the United States to the situation in which the farmers of this country are now placed with reference to labor, due to the fact that labor can find so much more profitable employment in other lines of activity in this country, and to inquire whether it would not be better to do a bit more for the farmer if we can, stimulating him somewhat, if practicable, in his efforts to supply us with the necessary things of life rather than to go too far in artificially stimulating the activities of the people who are engaged in other industries.

Mr. THOMAS. The Senator from North Carolina has asked a general question, and I would like to reply to him by asking another. Can the Senator suggest any method of legislation, either through the Agricultural appropriation bill or otherwise, that would prevent this exodus from the farm the consequences of which he very justly apprehends; and if so, what would his recommendation be? I am painfully aware of the fact that the farmers of the United States are short in labor, and I greatly fear that as time passes that shortage will increase rather than otherwise. I do not know of any method of legislation, no mat-ter what you do with your Agricultural appropriation bill, that

would take care of that.

Mr. SIMMONS. The Senator will recall that I said that there was very little we could do; but what little we can do, let us do.
Mr. THOMAS. What little can we do? Will the Senator mention a thing in this Agricultural appropriation bill that will stop the flow of labor from the farm and reverse the current? If he

can, I will vote for it.

Mr. SIMMONS. No; I can not mention any specific thing that might be done through the Agricultural appropriation bill.

But I can suggest, Mr. President, that gentlemen should not, by their course in the Senate and in the other branch of this Congress, try to strike out of that bill the little that we do

provide and are able to give to the farmers.

A great deal has been accomplished in this country in the interest of agriculture, Mr. President, in recent years, through the Agricultural Department. We have advanced wonderfully in our system of cultivation in this country, and as a result of the instruction which that department has given, the information which the department has afforded, the demonstrations which that department has made possible in this country in the way of illustration as to the manner in which crops may be most profitably cultivated, attended, tilled, harvested, housed, and marketed, a great deal has been accomplished in the interest of agriculture. Any man who is acquainted with farming in this country to-day knows that the farms are more productive than they were in the past. I do not know, and I have not said, that we could do anything to at once stop this movement of labor from the farm to the factory and the town. But I have said, Mr. President, and I repeat it, that if there is any chance for us to do anything to further equip and aid the farmer to increase the productiveness of his business, and further aid him to improve his methods of cultivation, we ought to do it, and the relatively small sums that we expend here upon the Agricultural Department in order to better enable that department to furnish helpful and necessary information to the farmers of the country ought not to be begrudged by anybody. The sums here appropriated will carry benefit. This may be all we can do. But, Mr. President, on the other hand, it behooves us to be very careful, in view of the little we can do directly for the farmer, not to overstimulate the other industries of this country and as a consequence further accentuate the unbalanced condition of the people of this country.

Mr. SMITH of South Carolina. If the Senator will allow me, I would just like to state that we are not likely to en-

courage the young men and the laborers to stay on the farms by discouraging all we can any appropriation or any help to the farmer. One method of helping them will be to withhold unjust criticism.

Mr. THOMAS. Mr. President, I merely wish to add to the discussion the reflection that the logic of the Senator from North Carolina [Mr. Simmons] would seem to lead to the proposition that no matter what appears in the Agricultural appropriation bill, it should be accepted by the Senate and

enacted into law.
Mr. McKELLAR. Mr. President, I want to indorse what the Senator from North Carolina [Mr. Simmons] has well said about this bill, speaking generally. What gave rise to this flurry in the debate was, I understand, the appropriation concerning the boll weevil. I am very frank to say that we do not have that very dastardly little animal down in my State. We have been fortunate enough in Tennessee not to have this insect; but I happen to know from personal inspection the great ravages it has made in the lands below, in Mississippi, Louisiana, Alabama, and in other far-southern portions of our country, and it is getting nearer to us all the time. It is an important matter, just as Senators have said. Whole farms have been rendered useless for raising cotton because of it, and it is perfectly right and perfectly natural that an appropriation should be made by the Government to stamp out this evil if it can be stamped out.

Speaking generally about the provisions of this bill, I have always thought that the appropriations made in the Agricultural appropriation bill were, comparatively speaking, almost

stingy. Before the conditions of the last three or four years, brought on by the war, my recollection is that the Agricultural appropriation bill carried but five or six millions of dollars, and since the war has come on, when it was necessary to stimulate production all over our land, the appropriations in this bill have been largely increased, and I think the war has taught us that all the money we have spent in the stimulation of production of agricultural products in our land has been money well spent. Indeed, I do not believe that the Congress can spend money for a better purpose, one which will bring a greater return, than money for this purpose.

Several years ago, in making a campaign, I went into every county, I believe, in my State, and it happened to be in the harvest time, and I saw the results of the experimental work that was being carried on by the Department of Agriculture in all those counties in my State. My State is an agricultural State. These experimental agents, agents of the Government, giving instruction, giving lessons to the farmers, and showing them how to make the most out of their farms, how to cultivate the crops that they had, what crops were best suited to the kinds of land, and all their manifold activities, have increased production almost beyond measure. In addition to that, many crops were raised that were not raised before, and in that way production was largely increased by reason of the work of these agents of the Government and of this department.

For these reasons I know of a certainty that this work ought to be fostered. I am not speaking for any particular item of the bill. I never served on the Committee on Agriculture and do not know anything especially about the various items. But I do know that the work generally is a great work, and a work

that ought to be encouraged.

The idea of spending \$33,000,000 on the most important thing we have in this country, and spending billions on others that are less important to the welfare and happiness of our people, is almost a monstrosity, in my judgment. I think we could well afford to spend much more to enable the farmers of this country to produce more and more each year, and I know that the work of this department has been along that line, and has had that effect for many years past, and we ought to see to it that it is kept up and that the necessary appropriations are

There may be some individual instances where misappropriations are made. There may be some individual appropriations that fall short of what is expected. There may be some that we do not get results from. I have not the slightest doubt that

we make mistakes about them.

Anyone who is inclined to find fault can unquestionably find that mistakes have been made in the use of some of these appropriations. But, Mr. President, where is the man who is worth anything who has not made mistakes? We all make mistakes. No man gets anywhere unless he does make mis-The very word "experiment" shows that mistakes are expected to be made at times. But simply because we do make mistakes, simply because there are errors made, is no reason why we should discontinue this great work, and I feel as if it ought not only to be continued but that we ought to add to it,

wherever it is necessary, all along the line.

Mr. SIMMONS. Mr. President, I should like to ask the chairman of the committee a question. A Member of the House from the South met me a few days ago and suggested that what is known as the pink bollworm has entered the cotton territory. Its activities at this time, he said, are confined to one or two counties, but it is apprehended that unless it is checked it will very rapidly spread, probably much more rapidly than did the boll weevil, and that probably it is a more destructive insect than the boll weevil. He said that the bill makes provision for some appropriation for the eradication of that insect, but he made this additional statement, that the Agricultural Department-and I am quoting him because I have not had opportunity personally to investigate the matter—is of the opinion that about the only effectual way of combating that insect is the total destruction of the crop which it attacks; and the Member suggested that if a part of the fund which the committee proposes to appropriate to combat it were set apart for the compensation of the owners of such crops as had to be destroyed it would be much more effectual.

Of course, I know that in adopting the course this Member suggested we would be entering upon a very dangerous field of legislation; but there are precedents for it. My recollection is that where cattle that are affected with certain virulent diseases have to be killed in order to prevent the spread of the diseases, we make provision for the compensation of the owners of the cattle so slaughtered. That is somewhat on all fours, if not altogether so, with the proposition advanced to me by the Member of the House of whom I have spoken.

I ask the chairman of the committee if that matter has been presented to him, and if any consideration has been given to it. Mr. GRONNA. Mr. President, the question of indemnity to

farmers where the crop has to be destroyed in eradicating the pink bollworm was not presented to the committee, and it was not discussed. I will say to the Senator, however, that the Senate committee has made a liberal increase in this bill for eradicating the insect known as the pink bollworm. We think it is absolutely necessary that the appropriation should be made.

Mr. SIMMONS. I am very much in favor of such an appro-

printion

Mr. GRONNA. It may be considered by some that it is an unnecessary expense; but, after hearing the experts and after hearing the men who had actually seen the work of this insect, the committee were unanimous in recommending that this increased appropriation should be made. I do not think that we can at this time make any allowance or create an indemnity fund to reimburse the farmers.

Mr. SIMMONS. The Senator will not understand me as urging that. I simply wished to call the matter to his attention, and to inquire whether it had been called to his attention by anyone else, and to ask that he would look into it. I think it

is worthy of investigation.

Mr. GRONNA. I agree with the Senator that it is worthy of investigation.

Mr. SIMMONS. If it be true that the Agricultural Department thinks that the course suggested to me by the House Member is the only effective way of eradicating this pest, of course it will be wise public policy to require the destruction of any crop that may be attacked. People are deeply interested in that industry, and if a crop is destroyed, in the interest of the whole industry, the one man whose crop happens to be the

victim of this pest ought not to suffer a total loss.

Mr. GORE. Mr. President, I would remind the chairman of the committee that no claim was really presented covering anything in the way of indemnity to the people who have lost their crops. The matter was mentioned by the Senator from Louisiana [Mr. RANSDELL], who is a member of the committee. The pink bollworm has made its presence known in Texas and in Louisiana. In Louisiana the State itself and the counties make provision for indemnifying the farmer for loss. In fact, they are encouraging farmers to substitute other crops, with a view to the possible eradication of the pink bollworm. supposed to be a more deadly pest than the boll weevil itself.

I might say in behalf of the Department of Agriculture that the appropriation for the current fiscal year, as I recall it, was The department felt that it had the work sufficiently in hand to recommend a reduction of \$200,000, asking in their estimate, as I recall it, but \$386,000 for the next fiscal year. An outbreak in Louisiana constrained them to ask for \$586,000 for the next fiscal year as well as for the current year. It turned out that several carloads of seed in the infected locality had been shipped to other communities, and it is desirable and, in fact, necessary, to pursue that seed and, if possible, recover and The department has that work in view. It is highly desirable to bring about the complete eradication.

Mr. SIMMONS. The gentlemen who spoke to me about the matter did not suggest a specific appropriation for the purpose, but suggested the wisdom of permitting the department to use a certain portion of the fund that should be appropriated for the purpose of indemnity in case, in its judgment, it would be neces-

Mr. GORE. I will say that the Senator from Louisiana [Mr. RANSDELL] suggested that he did not think there would be any necessity for that; that the State and counties and communities were meeting that matter.

Mr. MYERS. Mr. President—

Mr. GORE. I yield to the Senator from Montana.

Mr. MYERS. Does the Senator say the State of Louisiana is doing something to suppress this evil?

Mr. GORE. Yes.

Mr. MYERS. I am glad to hear it. This is the first time I have heard in a long time of a State doing anything that might be done by the Federal Government.

Mr. GORE. I will say to the Senator that the States cooperate with the Federal Government in a great many activities provided for by the Agricultural appropriation bill. In fact, the destruction of tubercular cattle and the losses resulting from that source are shared by the States and the Federal Government. Of the money appropriated for the eradication of the boll weevil, the States and counties and localities not only put up dollar for dollar, but various localities and organizations contribute much more than is contributed by the Federal Government

It strikes me that it is not always true that prevention is better than cure, but certainly it is with respect to these pests affecting agriculture. Many of them sometimes pass beyond control. There are certain pests in this country to-day toward which we are establishing what the doctors call a tolerance. We have lost hope of their complete eradication. I might say that the corn borer is one of them. This bill carries an appropriation of half a million dollars to arrest and restrict the corn borer, for the eradication is hopeless. The insect is a calamity. Any appropriation that would bring about the eradication of that pest would be a national economy. It can not be done. has not yet reached the great corn belt in the Central West, but if it ever reaches that great agricultural empire the losses to this country would be incalculable and would minimize any effort of any appropriation that might have been made to restrict its advance toward that section.

The question was raised a moment ago as to what the General Government could do for the farmers. We realize there is not a great deal the Government can do to help the farmer directly. There are a great many things the Government can avoid doing that would hurt the farmer. The farmers of this country have never been the beneficiaries of special privileges. It must be said to their credit that they have never sought to become the beneficiaries of special privileges. The farmers have been fortunate when they could escape and they will be fortunate when they can escape becoming the victims of those who have been invested with special privileges by the Government. The farmer is one man who has occasion to feel that he is lucky when he gets justice.

Mr. SHEPPARD. Mr. President, the pink-bollworm situation is so critical that the Department of Agriculture will hold a hearing next week in this city on the question of quarantining the country against the States of Louisiana and Texas in an endeavor to arrest the spread of the pink bollworm from those

States to other States in the neighborhood.

As Senators well know, the labor shortage and the inclemency of the season make it certain that the cotton crop this year will be small, and if this pink-bollworm pest can not be arrested there is imminent danger of the destruction of a large part of this year's crop. I do not see how we can consistently destroy the plantings of a farmer in arresting this pest without making some kind of remuneration.

The Senator from Oklahoma stated that the State of Louisiana had made provision for property damaged or destroyed through efforts to arrest this pest. I do not know how it is as to Louisiana. I ask the Senator from Louisiana [Mr. Gay] if the State of Louisiana has made any appropriation in this respect

Mr. GAY. I will say to the Senator from Texas that the State of Louisiana has made no appropriation up to this time. The legislature will meet in May, and I understand that legislation will be proposed at that time. Representatives from various cotton States have had a meeting in Louisiana only recently to discuss methods of eradicating the worm. I have a letter from the Commissioner of Agriculture of the State of Louisiana. He says, in part:

There is only one way of stamping out the pink bollworm, and that is by not planting cotton, but we expect to compensate the parties that are prevented from growing cotton for the next year or two.

That, I believe, will be done by putting a tax upon the cotton producers of 50 cents a bale in order to compensate those planters in the one parish where this bollworm has so far shown for the losses that they will experience from not being able to plant.

So far a very small section of one parish in the Louisiana has been affected, and I regret to say that this worm seems to have come from the State of Texas, where it has existed for several years.

Prompt and energetic measures are necessary, and the Government of the United States should be liberal in helping to combat this new menace to the great cotton crop of this country.

Mr. SHEPPARD. Nothing will be done in the way of remuneration in Louisiana until June?

Mr. GAY. Not until the legislature meets in May.
Mr. OVERMAN. Mr. President, may I ask the Senator from Texas [Mr. Sheppard] if he can state the difference between the boll weevil and the pink bollworm? I want to know what the pink bollworm is. We have in our State what the farmers complain of as a pest known as the pink spider.

Mr. SHEPPARD. I am not sufficiently versed in scientific matters or in entomology to give the Senator an exact descrip-

Mr. SMITH of South Carolina. The bollworm is very similar to the corn borer. It bores into the boll before it is matured, destroys the seed before they are matured in the boll, and there fore destroys the life of the fiber and the boll becomes blackened and there is no fiber in it. It is a misnomer to call it the boll weevil. That has the shape of the blue weevil. It attacks the little bud before the flower comes and punctures it and deposits the egg, and the larvæ there destroy the bloom.

The only process by which they have been able to get cotton in the weevil-infested section is by early planting, extraordinary stimulation of the plant by labor and fertilization. If you get a boll a quarter grown or just get it set good, as they call it, you will have that boll come to maturity. The presence of the bollworm means neither bolls nor blooms.

Mr. SHEPPARD. Is it not a fact that the pink bollworm is the most destructive cotton pest that has yet appeared?

Mr. SMITH of South Carolina. Yes; it takes a whole crop. It does not leave any boll or any fiber at all.

Mr. SHEPPARD. I have brought out the fact that, so far as the State of Louisiana is concerned, no provision has been made for remuneration and can not be made for some months. In Texas the legislature passed a law providing that remuneration might be made, but made no appropriation when it enacted the law. The Texas Legislature does not meet again until next January. Consequently Congress is face to face with a crisis in this matter and should make some provision in order to meet it. I intend, when we reach this particular phase of the bill, to offer an amendment along the line I have indicated.

Mr. POMERENE. Mr. President, I want to move an amendment to the pending amendment. I move to substitute the figures "\$400,000" for the figures "\$302,650." I do that for the reason that the officers who have written me on the subject have stated that heretofore the appropriation for several years was approximately \$300,000, and that \$300,000 would not do as much work as \$400,000 would do now. I do not want to see the work of attempting to eradicate the gypsy moth crippled in any wise.

I think it would be mighty poor economy to do it.

We have heard Senators from the South speak of the boll weevil, and I share their concern in the attempts to eradicate that pest, but the boll weevil is to cotton what the gypsy moth is to the northern section of this country, particularly in and about Massachusetts. There is very great danger of having this pest spread; indeed, it has spread. I have called attention to what has been its history in Massachusetts; and it is because the Massachusetts authorities relaxed their efforts to eradicate the pest that it has increased and spread. For that reason I offer the amendment to the committee amendment.

The PRESIDENT pro tempore. The question is on the amendment proposed by the Senator from Ohio to the committee

amendment.

Mr. POMERENE. I ask for a division on the amendment. The question being put on a division, Mr. Pomerene's amendment to the committee amendment was rejected.

The PRESIDENT pro tempore. The question is upon agree-ing to the committee amendment. Without objection, it will be agreed to.

The reading of the bill was resumed.

The next amendment of the Committee on Agriculture and Forestry was, on page 63, line 4, after the word "Entomology," to strike out "\$1,073,840" and insert "\$1,232,710," so as to make the clause read:

Total for Bureau of Entomology, \$1,232,710.

The amendment was agreed to.

The amendment was agreed to.

The next amendment was, under the subhead "Bureau of Biological Survey," on page 63, line 11, before the word "clerks," to strike out "nine" and insert "ten"; in line 12, before the word "clerks," to strike out "thirteen" and insert "fourteen"; in the same line, after the words "class 1," to strike out "1 clerk, \$1,100" and insert "2 clerks, at \$1,100 each"; in line 14, before the word "clerks," to strike out "four" and insert "two"; in the same line, after the word "each," to strike out "1 clerk, \$840: 1 clerk, \$720"; in line 18 after the word "each," "1 clerk, \$840; 1 clerk, \$720"; in line 18, after the word "each," to strike out "1 messenger boy, \$360"; and in line 19, after the words "in all," to strike out "\$68,870" and insert "\$68,850," so as to make the clause read:

Salaries, Bureau of Biological Survey: One biologist, who shall be chief of bureau, \$4,000; 1 chief clerk and executive assistant, \$1,800; 1 administrative assistant, \$2,250; 1 executive assistant, \$1,800; 2 clerks, class 4; 4 clerks, class 3; 1 clerk, \$1,500; 10 clerks, class 2; 1 clerk, \$1,260; 14 clerks, class 1; 2 clerks, at \$1,100 each; 1 clerk, \$1,080; 3 clerks, at \$1,000 each; 2 clerks, at \$900 each; 1 preparator, \$1,200; 1 preparator, \$1,200; 1 preparator, \$900; 1 messenger, \$720; 1 photographer, \$1,200; 1 game warden, \$1,200; 2 messenger boys, at \$480 each; 1 laborer, \$600; 2 charwomen, at \$240 each; in all \$68,850.

The amendment was agreed to.

The next amendment was, on page 64, line 11, after the words "United States," to strike out "\$34,600" and insert "\$39,735," so as to make the clause read:

For the maintenance of the Montana National Bison range and other reservations and for the maintenance of game introduced into suitable localities on public lands, under supervision of the Biological Survey,

including construction of fencing, wardens' quarters, shelters for animals, landings, roads, trails, bridges, ditches, telephone lines, rockwork, bulkheads, and other improvements necessary for the economical administration and protection of the reservations, and for the enforcement of section 84 of the act approved March 4, 1909, entitled "An act to codify, revise, and amend the penal laws of the United States," \$39,735, of which sum \$2,500 may be used for the purchase, capture, and transportation of game for national reservations,

The amendment was agreed to.

The next amendment was, on page 65, line 1, after the word "gophers," to strike out "ground squirrels," so as to read:

For investigating the food habits of North American birds and other animals in relation to agriculture, horticulture, and forestry; for investigations, experiments, and demonstrations in connection with rearing fur-bearing animals; for experiments, demonstrations, and cooperation in destroying wolves, coyotes, prairie dogs, gophers.

Mr. MYERS. Mr. President, I wish to be heard on that amendment. I hope the committee amendment will not prevail. I do not think the words "ground squirrels" should be stricken out, and I hope the chairman of the committee will not insist upon the amendment. I had a call the other day from Dr. Fisher, of the Department of Agriculture, and he objected very strongly to the amendment.

Mr. GRONNA. Mr. President, I will say to the Senator from Montana that I believe the committee will agree with the Senator that the committee amendment should be rejected.

Mr. MYERS. Then, I have nothing more to say, and I hope the amendment will be defeated. I ask that the question may be put on the adoption of the committee amendment.

The PRESIDENT pro tempore. The question is on agreeing to the committee amendment.

The amendment was rejected,

The reading of the bill was resumed.

The next amendment of the Committee on Agriculture and Forestry was, on page 65, line 5, to reduce the appropriation "for investigating the food habits of North American birds and other animals in relation to agriculture, horticulture, and forestry," and so forth, from \$456,040 to \$441,040.

Mr. MYERS. Mr. President, I notice that in this case the Senate committee has reported in favor of striking out "\$456,040" and inserting "\$441,040." In conversation with me, Dr. Fisher said he hoped the proposed reduction of that item to the sum of \$441,040 would not be acceded to. He felt that the larger sum, the sum allowed by the House, should be appropriated, if the item were to provide for extermination of ground squirrels, and I agree with him. I have had a number of communications from Montana in relation to ground squirrels, which are about as bad in Montana as are the wolves, coyotes, prairie dogs, or gophers. In Montana ground squirrels do quite as much damage as any of the other animals or rodents mentioned. I have had a number of petitions and requests from Montana very urgently asking that an item be inserted in the bill in order that it may be particularly devoted to exterminating ground squirrels. Now that we have retained the words "ground squirrels" in the bill, naturally the item calls for more with ground squirrels in than it would with ground squirrels out. I hope the larger sum may be allowed.

I think the excess allowed by the House over that recommended by the Senate committee very reasonable. I am sure there is need for the larger sum.

Mr. SMOOT. Mr. President, as I understand the matter, with the words "ground squirrels" included in the bill \$15,000 were proposed to be appropriated by the other House for their extermination; and \$15,000 having been spent in the past, that amount will be required under this appropriation if the item in regard to destroying ground squirrels is restored. What Dr. Fisher told me was that the \$456,040 which the House had appropriated should be restored. When the Senate committee struck out the words "ground squirrels" they deducted \$15,000 from the House appropriation because of the fact that \$15,000 was to be spent for that purpose.

Mr. MYERS. Mr. President, the Senator from Utah is correct. There was a \$15,000 reduction proposed which Dr. Fisher opposed, and I am in accord with him. Parties in Montana, too, have written me to the same effect. I ask that the committee amendment be rejected and that the figures be restored to the

amount fixed by the House.

Mr. McNARY. Mr. President, I only speak of the matter as one of the members of the committee. As I recall, a specific lump sum was appropriated for the eradication of these various pests, but there was no itemized or specific sum allowed the department and included in this appropriation for the extermination of ground squirrels. So I do not believe that the restoration of the ground-squirrel item in any way affects the total

the ground-squirrel item in any way affects the total.

Mr. SMOOT. Mr. President, if we are going to restore the item, it will be necessary to have some kind of an appropriation

to enable the work to be done. I know that the amount that was assigned in the last appropriation bill for the extermination of ground squirrels was \$15,000, and I know also that if that work were provided for it was the intention of the department to assign \$15,000 to it during the fiscal year. Fifteen thousand dollars were taken off the amount that the House appropriated; so that if the department is called upon to do the work, then it will be necessary to restore the \$15,000.

Mr. MYERS. The Senator from Utah is undoubtedly correct

Mr. MYERS. The Senator from Utah is undoubtedly correct about that. I hope the amount fixed by the House may be granted and urge that the committee amendment be not adopted.

Mr. GRONNA. Mr. President, the Senator from Oregon [Mr. McNary] correctly states the conditions. No one who appeared before the Senate Committee on Agriculture made any objection to striking out any provision in regard to particular pests or rodents or whatever they may be called. It was suggested that we ought to strike out the item in regard to gophers. The whole general scheme was discussed.

Mr. WILLIAMS. Mr. President, will the Senator yield to me for a few moments?

Mr. GRONNA. I yield.

Mr. WILLIAMS. I expect to leave to-night for home, and for

that reason I have come in somewhat out of order.

I wish to say in connection with the pink bollworm problem that it threatens the cotton production of the United States, and, as a consequence, indirecly the cotton industry of the world, more than anything that has ever menaced us. The Mexican boll weevil, as bad as it has been, has been child's play in comparison with it, and yet the Mexican boll weevil has perhaps cut the cotton crop down, despite the immense motives for increased production, one-third of what it otherwise would have been, and has increased the price to a very great extent.

All over the South numberless plantations have been turned from cotton farms into stock farms; numbers of acres of land have been taken out of cultivation of cotton and put into pasturage. I for one have had that experience with my own home place; and throughout a good part of southern Mississippi and southern Louisiana and Texas the production per plantation, although not the production per acre, has been cut down half. We have managed to keep up the production per acre by reducing the acreage, intensifying the cultivation, and hurrying up the crop so as to get it fruited and bearing before the boll weevil was ready to depredate upon the plant. Now, the pink bollworm, which is another curse coming up from Mexico, is infinitely worse than the Mexican boll weevil and will do infinitely more harm unless it can be almost immediately checked.

Mr. President, I think you know, as I think every Member of the Senate knows, that I have very seldom spoken on any subject from the standpoint of a personal or a class interest. I do not regard this as a personal or class matter because it does not affect the man who raises cotton alone but it affects the man who buys cotton to weave into cloth, and it affects the man who buys the cloth to clothe himself and his children. There could not be any greater world calamity than a permanently high price for cotton goods, and there will be not only a permanently high price for cotton goods but we will have profiteering added, so long as there is an underproduction of cotton owing to any natural calamity like this not to be controlled by the farmer himself.

I am very much in favor of every possible form of economy. I have been thoroughly disgusted with the multiplicity of the demands from every class and quarter for increased appropriations out of the United States Treasury. Every industry, every class, every form of patriotism, almost, is seeking to be capitalized and to put its hands into the Treasury. It is, therefore, a little bit out of keeping with my usual thought to ask an increased appropriation upon any subject, and I would not do so but for the fact that this is so important to the main foreign export business of the United States. Cotton gives us and maintains our balance of trade in normal times, and America's strength in the industrial world very largely grows not only out of the raw cotton which she produces but out of the manufactured product which she makes nearer the fields, with less freight charge, and therefore can, in competition with other countries, sell at lower prices, provided it is a high enough quality of goods.

So it would be a national calamity not to remember in this connection the old adage that "a stitch in time saves nine"; and if we should be a little penny-wise and pound-foolish with regard to this pink bollworm now, we might regret it very much, not only in the cotton fields of the South but in the cotton mills of New England and everywhere else, and in the homes of the people as well, because ultimately, of course, the father of the

family must pay for the finished product that started in the field and was concluded in the factory.

Mr. GRONNA. Mr. President, will the Senator yield?

Mr. WILLIAMS. I yield.

Mr. GRONNA. I agree with the Senator that it is a very important matter, and I want to say that the Senate committee increased the appropriation for the eradication of the pink boll-worm from \$288,560 to \$588,560. In other words, we increased it \$300,000, in round numbers.

Mr. WILLIAMS. Over the amount estimated?

Mr. GRONNA. Over the amount proposed by the House.

Mr. WILLIAMS. I have been necessarily compelled to be ignerant of some of the details of the pending appropriation bill, but I had understood that the proposition upon the part of the committee was not to give what the House had given.

Mr. GRONNA. The Senate committee increased it \$300,000. Mr. WILLIAMS. I want to say that much, at any rate, about the importance of it all; and if that is enough, then it is enough, of course.

Mr. SHEPPARD. Mr. President, I want to say that the question now is whether any provision is to be made to remunerate the owners of property damaged and destroyed in eliminating the pest. That is the question we have to face now.

Mr. WILLIAMS. I have taken it for granted that if one of the suggested methods of fighting the pest was adopted, a part of the money appropriated would be devoted to the indemnification of the men who suffered by it. Down in Texas, along the border, it may be necessary to fix a sort of a quarantine line and to prevent the cultivation of cotton for a year or two above a certain line. If that is done, undoubtedly some reckoning ought to be made of the losses of those people while they are suffering from the lack of employment of their land and of their labor. There ought to be some provision made in the bill whereby the amount appropriated may be so divided as to indemnify losses that necessarily grow out of a quarantine land campaign against the worm.

DEATH OF REPRESENTATIVE BROWNING, OF NEW JERSEY.

A message from the House of Representatives, by D. K. Hempstead, its enrolling clerk, announced to the Senate the intelligence of the death of Hon. WILLIAM J. BROWNING, late a Representative from the State of New Jersey, and transmitted resolutions of the House thereon.

The PRESIDENT pro tempore. The Chair lays before the Senate resolutions from the House of Representatives, which will be read.

The resolutions were read, as follows:

e resolutions were read, at In the House of Representatives of the United States, March 24, 1920.

Resolved, That the House has heard with profound sorrow of the death of Hon. WILLIAM J. BROWNING, a Representative from the State of New

Resolved, That a committee of 18 Members of the House, with such Members of the Senate as may be joined, be appointed to attend the funeral.

funeral.

Resolved, That the Sergeant at Arms of the House be authorized and directed to take such steps as may be necessary for carrying out the provisions of these resolutions, and that the necessary expenses in connection therewith be paid out of the contingent fund of the House.

Resolved, That the Clerk communicate these resolutions to the Senate and transmit a copy thereof to the family of the deceased.

Resolved, That, as a further mark of respect, this House do now adjourn

Mr. LODGE. I offer the following resolutions, and ask that they be read.

The resolutions (S. Res. 341) were read, considered by unanimous consent, and unanimously agreed to, as follows:

Resolved. That the Senate has heard with profound sorrow the announcement of the death of Hon. William J. Browning, late a Representative from the State of New Jersey.

Resolved, That a committee of six Senators be appointed by the presiding officer to Join the committee appointed by the House of Representatives to take order for the superintending of the funeral of Mr. Browning at Camden, N. J.

Resolved, That the Secretary communicate a copy of these resolutions to the House of Representatives.

The PRESIDENT pro tempore. Under the second resolution the Chair appoints Mr. Frelinghuysen, Mr. Edge, Mr. Fernald, Mr. FRANCE, Mr. HARRIS, and Mr. GAY the committee on the part of the Senate.

Mr. LODGE. Mr. President, I move, as a further mark of respect to the memory of the deceased Representative, that the Senate do now adjourn.

The motion was unanimously agreed to; and (at 4 o'clock and 35 minutes p. m.) the Senate adjourned until to-morrow, Thursday, March 25, 1920, at 12 o'clock meridian.

HOUSE OF REPRESENTATIVES.

Wednesday, March 24, 1920.

The House met at 12 o'clock noon.

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

Our Father, who art in Heaven, we stand before Thee with bowed heads and sorrowing hearts, under the flag at half-mast. Suddenly, without warning, a Member of this House, a hard worker, a willing worker, a patriotic worker, passed from earth to the Great Beyond. The tenure of life is uncertain. We pray that his friends and loved ones may be strengthened and upheld by Thy loving arm in this hour of grief, that we may all be prepared, so that when the call comes we may answer, "Here am I, Lord; do as Thou wilt, for I am Thy child, erring, yet loving, grateful." Be with us now and always, and bring us finally to Thee, Our Father in Heaven, through Jesus Christ our Lord. Amen.

The Journal of the proceedings of yesterday was read and approved.

DEATH OF REPRESENTATIVE BROWNING, OF NEW JERSEY.

Mr. HUTCHINSON. Mr. Speaker, it is my sad duty to announce to this House the death of the Hon, WILLIAM J. Brown-ING, a Member of the House from the State of New Jersey, who passed away suddenly this morning.

I shall ask the House at a later date to set aside a day when proper tribute may be paid to the life, character, and public service of the distinguished deceased. At this time I offer the following resolution.

The SPEAKER. The Clerk will report the resolution.

The Clerk read as follows:

House resolution 503.

Resolved, That the House has heard with profound sorrow of the death of Hon. WILLIAM J. BROWNING, a Representative from the State of New Jersey.

Resolved, That a committee of 18 Members of the House, with such Members of the Senate as may be joined, be appointed to attend the funeral

Resolved, That the Sergeant at Arms of the House be authorized and directed to take such steps as may be necessary for carrying out the provisions of these resolutions, and that the necessary expenses in connection therewith be paid out of the contingent fund of the

Resolved, That the Clerk communicate these resolutions to the Senate and transmit a copy thereof to the family of the deceased. The SPEAKER. The question is on agreeing to the resolu-

The resolution was agreed to unanimously.

The SPEAKER. The Chair appoints the following committee, which the Clerk will report.

The Clerk read as follows:

Mr. Hutchinson, Mr. Hamill, Mr. Scully, Mr. Eagan, Mr. Bacharach, Mr. Lehlbach, Mr. Ramsey, Mr. Ackerman, Mr. Radcliffe, Mr. McGlennon, Mr. Minahan of New Jersey, Mr. Butter, Mr. Britten, Mr. Kelley of Michigan, Mr. Mudd, Mr. Padgett, Mr. Riordan, and Mr. Oliver.

ADJOURNMENT.

The SPEAKER. The Clerk will report the concluding reso-

lution.

The Clerk read as follows:

Resolved, That as a further mark of respect this House do now adjourn

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

The resolution was agreed to unanimously.

Thereupon (at 12 o'clock and 10 minutes p. m.) the House adjourned until to-morrow, Thursday, March 25, 1920, at 12 o'clock noon.

EXECUTIVE COMMUNICATIONS, ETC.

Under clause 2 of Rule XXIV, a letter from the Secretary of the Treasury, transmitting supplemental estimate of appropriation required by the District of Columbia for the purchase of land as a site for a plant for the disposal of miscellaneous refuse (H. Doc. No. 698), was taken from the Speaker's table, referred to the Committee on Appropriations, and ordered to be printed.

PUBLIC BILLS, RESOLUTIONS, AND MEMORIALS.

Under clause 3 of Rule XXII,

Mr. McCLINTIC introduced a bill (H. R. 13253) to grant the consent of Congress to the Elmer Red River Bridge Co. to construct a bridge across the Red River, which was referred to the Committee on Interstate and Foreign Commerce.