





INDEPENDENT OFFICES APPROPRIATION BILL, 1926

HEARING

BEFORE

**SUBCOMMITTEE OF HOUSE COMMITTEE
ON APPROPRIATIONS**

CONSISTING OF

MESSRS. WILLIAM R. WOOD (CHAIRMAN),
EDWARD H. WASON, JOHN W. SUMMERS, JOHN N. SANDLIN,
AND JAMES F. BYRNES

IN CHARGE OF THE

INDEPENDENT OFFICES APPROPRIATION BILL FOR 1926



Mr. HANGER. The law requires we print annually these decisions, and it is very important that they should be printed. We are printing an increasingly smaller number. We have reduced it now to a point where the supply is insufficient.

Mr. WOOD. Where do you have your printing done, do you have it done at the Government Printing Office?

Mr. HANGER. Yes. Then, I understand, gentlemen, that I will bring the matter of counsel fees in as a deficiency?

Mr. WOOD. Yes.

Mr. HANGER. Should that be done right away or as soon as we can ascertain the amount?

Mr. WOOD. As soon as you can find it, and you had better get it in to the Budget as soon as possible, for the reason that this Congress will adjourn in March. You ought to have some idea about what it is going to cost you by that time.

Mr. HANGER. Yes. I suppose the only other work would be here in the Supreme Court. So we should approach it by way of the Budget?

Mr. WOOD. Yes.

THURSDAY, DECEMBER 18, 1924.

SMITHSONIAN INSTITUTION

STATEMENT OF HON. WALTER H. NEWTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA

Mr. WOOD. Mr. Newton, a Member of the House, wants to make a short statement.

Mr. NEWTON. Mr. Chairman, and gentlemen of the committee, as a member of the Board of Regents of the Smithsonian Institution, I have always taken considerable interest in the appropriations made from year to year, and in making inquiries as to the action of the Bureau of the Budget this year. I find what I think is an ill-considered attention to the needs of the Smithsonian Institution for the present year. There is a cut below the 1925 appropriation of a substantial amount. With reference to the item of printing, I should like also to say a word.

You recall, Mr. Chairman, that a year ago we appeared in reference to the item of printing. An extra amount was given a year ago. It was raised to \$90,000. This year it was thought that we could get along with less, because of the fact that we had caught up, but Doctor Walcott informed me that the Government Printing Office has advised him that the expense of printing this year would be 18 or 20 per cent more than it was for the previous year, as I recall it.

Mr. WOOD. The information that has come to us from two or three sources is that there is going to be an 18 per cent increase, and that the Government Printer bases that increase on the fact that the salaries of employees have been increased because of the reclassification. But he can not justify himself as to the 18 per cent increase upon any such theory, because the salary increase is only about 4½ per cent.

Mr. NEWTON. I do not know how he makes up his figures, but it is the fact that that is what he has advised the Smithsonian Institution. Of course, if that is the case, then the figure allowed would be substantially what was allowed last year, but for less work. The Budget did not take that into consideration at all, and that is a matter that should be given consideration by this committee. We should not be crippled by the curtailment of the printing item.

There is another item that was brought to my attention, in reference to the salary of one of the officials. He puts in six months' time in one capacity and six months in another. The Bureau of the Budget have so handled that as to make it impossible for the Smithsonian Institution to pay him except for six months.

We think you will agree with us, after going over the matter in detail with the officers, that that limitation in reference to salary should be eliminated.

Mr. WOOD. Would that not be a matter for the Reclassification Board to correct rather than for us to correct here?

Mr. NEWTON. I do not think so. That is a matter we wish to present to you and have you go into more detail regarding it.

STATEMENT OF HON. ALBERT JOHNSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. JOHNSON. Mr. Chairman, allow me to interrupt at this point, and I will not ask to be heard further, as Mr. Newton can present the situation in which the Smithsonian Institution finds itself much better than I. I also have the honor to be a member of the Board of Regents.

From a study of these figures I have come to the conclusion that the budget scheme of handling the Smithsonian Institution is practically impossible. If this committee will take the time to consider the proposition it would save time on the floor of the House. It will save an appeal by us, as Regents, to Senator Smoot. He is also a Regent and anxious to see the Smithsonian go ahead. This plan, carried out for a few years, will mean the starvation, the exhaustion, and extinction of the Smithsonian Institution.

Mr. WOOD. I hardly think it is that bad.

Mr. JOHNSON. It is nearly so, compared with the great research activities of other great and newer foundations.

Mr. NEWTON. There is something further I should like to mention to the committee. We have been very fortunate in getting some funds from an outside source to carry on certain work, the limit of which was reached this last year. That work ought to be continued, but it can not through private sources, because we are absolutely foreclosed from that.

I merely want to express, as a member of the Board of Regents, the wish and the hope that the committee will go into these several matters very exhaustively with the officers here, who know the details of the various problems.

Mr. WOOD. We will do that. We have always been considerate of the demands and desires of the Smithsonian Institution. My experience has been that the amount appropriated has been about as well applied as that of any institution we have.

Mr. NEWTON. Judge Moore is also a member of the board. He is present here to-day.

There is just one thing further. An inquiry was made of me as to why the buildings were not open Sunday afternoon. Only one of them was open and I was rather surprised at that, because I have sent people down there. Upon inquiry, I found out that they were not kept open because of lack of funds with which to pay for a watchman on Sunday afternoon. Of course, the buildings ought to be kept open Sunday afternoons, with people coming here from all over the country.

Mr. WOOD. I think, with the number of watchmen they have, they can so arrange things that there would be a watchman there on Sunday.

Mr. NEWTON. We have not the number there that they have around the Capitol.

Mr. WOOD. I think perhaps that is more of an excuse than a necessity.

Mr. NEWTON. I think you will find otherwise.

Mr. WOOD. We will investigate that.

Mr. NEWTON. Thank you, Mr. Chairman.

STATEMENT OF HON. R. WALTON MOORE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF VIRGINIA

Mr. MOORE. Mr. Chairman, would there be any objection to putting into the record not a lengthy letter, which Doctor Walcott has written Mr. Johnson under date of December 17, explaining the situation with reference to the needs of the Institution?

Mr. WOOD. We shall be very glad to have it in the record.

Mr. MOORE. I offer that letter as part of the record. It explains the situation so thoroughly that perhaps it will save explanation on the part of Doctor Walcott.

(The letter referred to is as follows:)

DECEMBER 17, 1924.

DEAR MR. JOHNSON: In response to your request for a statement regarding the Smithsonian estimates for 1926, I give below a table showing, under the separate headings, that the total amount appropriated for the fiscal year 1925, including the interest on the Smithsonian fund, was \$860,601.66. The total amount carried in the Budget for 1926 is \$817,890, and the amount absolutely essential to carry on the work on the same basis as that provided in the appropriations for the current year is \$881,294, or a total increase over the appropriations for 1925 of \$20,693.

	1925 appropriation	1926 Budget	Amount needed, 1926
International exchanges.....	\$49,550.00	\$42,000.00	\$16,260.00
Bureau of American Ethnology.....	57,160.00	52,960.00	57,160.00
International Catalogue of Scientific Literature.....	8,861.66	8,000.00	8,000.00
Astrophysical Observatory.....	21,580.00	21,620.00	31,180.00
Assistant secretary.....	6,000.00	6,000.00	6,000.00
Furniture and fixtures.....	21,800.00	21,800.00	22,920.00
Heating and lighting.....	77,560.00	74,560.00	77,560.00
Preservation of collections.....	434,482.00	430,000.00	446,736.00
Building repairs.....	11,000.00	12,000.00	12,000.00
Books.....	2,000.00	1,500.00	2,000.00
Postage.....	450.00	450.00	450.00
National Gallery of Art.....	20,158.00	20,000.00	21,028.00
Printing and binding.....	90,000.00	67,000.00	90,000.00
Interest on Smithsonian fund.....	60,000.00	60,000.00	60,000.00
	860,601.66	817,890.00	881,294.00

The major part of the increase is due to reallocation of salaries in the various governmental branches of the Institution after the appropriations for 1925 were made.

The increase under the Astrophysical Observatory is due to the transfer by the Budget of one-half of the salary of the assistant secretary, Doctor Abbot, from the exchanges to this roll, and to provide for the maintenance of a solar station in South America hitherto supported by private funds, which have been discontinued, and to continue the present personnel, a part of which it was necessary to cut off in the Budget for 1926 to bring the total salaries within the maximum allowed by the Bureau of the Budget.

In the Budget for 1926 a maximum limitation of salaries has been introduced for the first time under each appropriation. This limitation barely covers the regular personnel on most of the appropriations, and in two instances being insufficient to cover the present force will necessitate the dismissal of necessary employees. In certain appropriations, such as for furniture and fixtures, heating and lighting, and buildings repairs, it has been found necessary during past years to transfer employees from one appropriation to another where there is the greatest need. This would be impossible with the rigid limitation of salaries fixed in the Budget. It would also prevent the temporary employment of additional carpenters and painters on any large jobs, which is often more economical than having the work done by contract. Under "Preservation of collections" it is necessary every year, owing to the fact that the number of watchmen, laborers, and charwomen is barely sufficient to guard and clean the buildings, to employ temporary substitutes to cover leaves of absence.

It is urged that in the interest of economical and effective administration the limitation on salaries be omitted in the small appropriations expended by the Smithsonian Institution and its branches. If this is not possible it is requested that these limitations be increased, as shown below:

	1925 salaries	Limitation salaries in Budget, 1926	Increase requested in 1926 salary limitation to—
International exchanges.....	\$26, 470	\$21, 870	\$23, 000
Bureau of American Ethnology.....	45, 040	43, 840	45, 040
International Catalogue of Scientific Literature.....	7, 785	7, 785	-----
Assistant Secretary.....	6, 000	6, 000	-----
Furniture and fixtures.....	10, 920	11, 920	12, 920
Heating and lighting.....	40, 780	40, 780	42, 000
Preservation of collections.....	421, 998	417, 516	427, 000
Building repairs.....	7, 320	7, 620	8, 500
National Gallery of Art.....	15, 952	16, 822	16, 822

The amount needed for printing and binding for 1926 is \$90,000, the same as appropriated for 1925. The appropriation for 1925 carried an increase to enable the Institution to bring the Smithsonian Annual Report up to date by publishing two reports in the current year (which is being done), but the full amount allowed for 1925, \$90,000, will be needed for 1926 to meet the 15 per cent increase in the cost of printing, of which we have received notice from the Public Printer. The full \$90,000 will, therefore, be barely sufficient to provide for the regular annual amount of printing necessary for 1926.

Very truly yours,

CHARLES D. WALCOTT,
Secretary.

HON. ALBERT JOHNSON,
*Regent of the Smithsonian Institution,
House of Representatives, Washington, D. C.*

THURSDAY, DECEMBER 18, 1924.

STATEMENTS OF DR. CHARLES D. WALCOTT, SECRETARY; DR. C. G. ABBOT, ASSISTANT SECRETARY; MR. H. W. DORSEY, CHIEF CLERK; MR. W. DeC. RAVENEL, ADMINISTRATIVE ASSISTANT IN CHARGE NATIONAL MUSEUM; DR. J. WALTER FEWKES, CHIEF, BUREAU OF AMERICAN ETHNOLOGY; MR. L. C. GUNNELL, ASSISTANT IN CHARGE REGIONAL BUREAU OF THE UNITED STATES INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE

AMERICAN ETHNOLOGY

Mr. Wood. We will take up the item of American ethnology. Doctor Fewkes, will you proceed with your statement?

Doctor FEWKES. Referring to the general statement regarding Smithsonian appropriations just made to the committee by Regents Newton, Johnson, and Moore, and as shown in the communication which they have put in the record, we are allowed by the Budget for 1926, \$52,960. The amount I desire for 1926 is \$57,160, the same as this year. I am not asking for any more, but I want to continue the same amount we had this year in order to meet all my expenses.

A cut in this item, Mr. Chairman, would really hamper the Bureau of Ethnology. Of course, I can only produce what I have money to produce with, and I think, if the reduction is made, it will seriously hamper my work.

It only allows me \$12,000 for all my work, outside of salaries, which is a pretty small amount.

PROGRESS OF INVESTIGATIONS

Mr. WASON. Doctor, will you tell us briefly just what progress you have made last year?

Doctor FEWKES. Last year is a very good index of what I intend to do for next year. We have found that a large number of investigators have gone into the pueblo archaeological field, which is my favorite work, and that field is pretty well crowded.

The pueblo work is being done by others, and it is the policy of the Bureau of Entomology, when we have started work in any locality, to branch off into another locality where there are few workers, in order, in the first place, to satisfy different local communities, and in the second place, to get novel results.

Our work is simply the gathering of knowledge by field observation and the dissemination of it through publications.

This year I started in with Muscle Shoals. When the Wilson dam is completed, water held back will submerge country on the bank of the Tennessee River concealing quite a number of mounds and valuable objects made by the Indians who formerly lived in that vicinity.

I personally went to the Muscle Shoals and had men working there who opened up one of these mounds. By the 1st of January the Indian mounds on the river will be covered, or submerged by 6 feet of water.

We carried on that work for scientific purposes and also at the request of a local archaeological society.

If I can diagnose the condition of things down South there is a great field for scientific work from Florida to the Mississippi River which we have hardly done justice to in archaeological investigations. We have been attracted to other fields, but we have now found that the Gulf States present probably as important problems as any for the study of the history of the Indians as any other field in the United States.

This is the general plan of the work in 1926, namely, to gather material from the different States, starting with Florida, going up through Georgia, Alabama, Mississippi, over across into Louisiana. This work at Muscle Shoals is part of that great problem. I saw that valuable data will be destroyed and so I started work in Alabama.

In addition I took the field in Florida. That is at St. Petersburg, on Tampa Bay, which is the southern limit of the peculiar Indian culture of the Gulf States, and made some extensive observations, a preliminary account of which is published in the series of Smithsonian publications known as Miscellaneous Collections.

I went to Florida myself and had a force working there with the assistance of a gentleman, Mr. Elliot, who contributed a small amount for traveling expenses and pay of workmen. We find that the Creek culture is one of the most wonderful prehistoric cultures we had in North America. The Florida people have been looking, I think, for archaeologists to come and help them out. The Smithsonian Institution has done little in that field, and there is a crying need that we should. Moreover, we will get and publish results. We have already made an impression and have helped form societies and we are really on the way to getting some very fine material.

I am going to follow that work into Mississippi and along the coast into Georgia and write a great unknown chapter in the history of the Indians of this continent.

Of course, in addition, I hope also to do other work in other parts of the country on the customs of living Indians. The culture of our Indians is rapidly going, and this generation will probably see the end of it, but not the end of the study of the Indians.

The archaeology of the Indians who lived before the white man came here is a great field for study. There is much to do in South America, and we published last year a large report on the Indians of British Guiana. We ought to have more work done in South America. It will be a good thing, for it will cement our relationships with the Latin republics down there.

Mr. WASON. But you are not actively working in South America now, are you?

Doctor FEWKES. No; I am working actively in Florida, doing field work myself.

Mr. WASON. Will you tell us if you have completed your work at Pueblo and in Colorado, about which you have spoken in years past?

Doctor FEWKES. I have not completed it, but I would like to have means to keep on with it.

I said in my opening remarks that I find that field is being rapidly crowded with investigators, and I think it is no more than just for the people who pay the taxes that we should go into other fields.

The important investigation we are now making is that of the Muskogean culture, or that of the Creeks, the Indians who fought Andrew Jackson and surrendered to him. Some of them were shipped off into Oklahoma: relatives of the Seminoles, who now inhabit the Everglades.

What I hope to do is to get more information than we have in regard to these people—in regard to the culture of those people who were discovered by De Soto.

I am not following the footsteps of De Soto, but I have started from the same place where he started, near St. Petersburg. This happens to be a place where tourists go. Of course, the people down there are quite pleased that the Smithsonian Institution has taken up the work of this character in Florida.

I want to go on with that work. We have made a good start. We have done it with the money available, and I can go on with an equal amount if you will give us this money—the same amount that we have this year.

Mr. WASON. Did I understand that you can pursue your studies further at Muscle Shoals after January next?

Doctor FEWKES. No. That mound will be covered after January 1, and be 6 feet under water.

Mr. WASON. Provided, of course, that the dam holds.

SALARIES

Mr. SANDLIN. I would like to ask a question. What reason did the Bureau of the Budget give for reducing this appropriation? What item did they point out that you could reduce? Did they give any reason for it or did they arbitrarily cut it?

Doctor FEWKES. They just reduced the appropriation.

Mr. DORSEY. A salary limitation has also been introduced in the Budget for 1926 below the amount we are paying for salaries this year in the bureau, reducing this item from \$45,040 for 1925 to \$43,840 for 1926.

Mr. WASON. You say your salary roll this year is \$45,040?

Mr. DORSEY. \$45,040. That is stated in the letter which Mr. Moore put in the record.

Mr. WOOD. Is this amount of \$43,840 paid to people in the District of Columbia, or is that paid to those working in the field?

Mr. DORSEY. They are sent out from here. They are District of Columbia employees. We have no field force as such.

Mr. WOOD. Under your argument, you have to pay them per diem expense account. If you transferred them to the field, you would not have to do that?

Mr. DORSEY. We pay them a limitation of \$5 a day. We can not pay more than that. We pay them only the actual expenses incurred up to \$5 per day.

Mr. WOOD. If they were in a field force, they would not get that much.

Doctor FEWKES. Of course, in the field work we hire men as laborers.

Mr. WOOD. Do you pay them out of this account?

Doctor FEWKES. I do.

Mr. WOOD. Do you pay them a per diem?

Doctor FEWKES. No.

Mr. Wood. You do not pay them a per diem in addition to their wage?

Doctor FEWKES. A straight wage every day. It is usually three or four dollars per day?

Mr. Wood. You do not pay them in addition a subsistence account?

Doctor FEWKES. No.

ACTIVITIES IN THE STUDY OF PUEBLOS

Doctor WALCOTT. Mr. Chairman, Mr. Wason asked Dr. Fewkes what he was doing in the Pueblo country. We were able under former appropriations in the past few years to devote a couple of thousand dollars a year to the study of the Pueblos.

The National Geographic Society made a suggestion that has resulted in their appropriating \$15,000 a year for the study of the Pueblo Bonita, which is one of the largest and most highly developed pueblos in the southwest. That is under the cooperation of the Smithsonian Institution.

One of our men connected with the Museum directs that work and they have already spent nearly \$60,000 in excavations leading to or clearing away the accumulated rubbish of centuries and also the rubbish resulting from expeditions that have gone there simply to collect curios, who, if they came to a wall that was obstructing them, put dynamite under it and blew it down, so that they could get more quickly into the ruins to find the relics of those peoples.

Under the direction of Mr. Judd, those excavations have gone on until he is getting into the undisturbed portions of the ruins. Two ceremonial chambers were opened up last summer. Everything was practically undisturbed, and we now have in the National Museum, given to the Museum by the Geographic Society, one of the most wonderful collections of pottery and religious emblems, etc., of that day, that has been secured from any of those ancient buildings. It represents a period anywhere from 800 to 1,000 years ago and is an important chapter in the early history of the Indian civilization of the past.

That work is supplementing the work that we have been doing, and, as I say, is paid for by the Geographic Society.

The question of the other Pueblo Indians and all of the southwestern Indians and their cultures is intimately connected with that of the Indian tribes in Mexico and Central America.

The Carnegie Institution has been making investigations in Mexico and Yucatan. They have made an agreement with the archaeological department in Mexico by which they both cooperate. They are expending a large amount every year in the uncovering and preserving of the Maya cities which was the highest civilization we have ever had on this continent prior to the white man. They are spending probably \$20,000 or \$30,000 a year and going into that work which is really supplementing the work we are doing to the north.

That cooperative work is also now being extended into Peru. I think the real incentive of that, or the gradual education of our people up to the desirability of doing it, has come through the work

of the bureau. We now have on the Gulf coast in Florida, Georgia, Mississippi, and Texas, an Indian civilization distinct from that of the Pueblos. That is being investigated and I personally hope that we will obtain cooperation from outside organizations who will supply the necessary funds.

In the work of any of these excavations it needs an intelligent ethnologist for direction. Then they hire men on the ground and pay them just day wages, whatever is the custom in that neighborhood. It requires, as you can well imagine, a good deal of money to take away in baskets, as that is usually the way they do, the dirt that has accumulated around these ruins.

At the Roosevelt Reservoir, on the Roosevelt Dam on the Salt River, there was a great mound when I was out there, with heavy trees growing on it. The engineers said it would be well to take it away, and I said, "All right, if any of you fellows find any Indian villages under that, send me evidences of it." They did that later on. Down in the base of that they found the relics of an Indian town of long, long ago.

They sent in the traces of whatever they found. Now it is all buried under water.

Doctor Fewkes speaks of Florida, where there are some of those wonderful ancient mounds which, in three or four years' time, will be entirely buried. He has already obtained very fine collections and very important evidence, and wants to go on with that work.

We put in relatively little, as compared with the works being done by others. At the Phillips Academy at Andover they have been for several years providing abundant means for excavations. The materials have been brought to Andover and deposited in the museum.

That work is being taken up more and more by the universities, but there ought to be some central, coordinating agency somewhere, and that, at the present time, is in Washington.

Mr. Wood. Let me ask you, Doctor, is it the theory of the scientific gentlemen that these towns, these ancient villages, were subterranean?

Doctor Wolcott. No. They built up their houses. They were the skyscrapers of the day. They were two, three, and four stories high. They built them of this adobe mud with timbers. In the case of this one at the Roosevelt Dam, when they came to excavate and they had to go down to the base, they found most of the remains under parts of the walls that had fallen in. They had slabs of stone on the roof, and under these slabs portions of relics were protected.

They found, in one instance, a skeleton where there were fragments of burnt wood, indicating that the place had been burned. Near that skeleton, or right by it, there were a number of pieces of pottery perfectly preserved. It had escaped.

Just as in the case of Egypt, there is an accumulation through the centuries of wind-driven dust or vegetation, or whatnot, which gathers over these ruins and buries them entirely from sight. The only way you can recognize them is simply by the mound left.

I saw an airplane view the other day of some of those ruins of ancient cities in Mesopotamia. As you look down on them, they

seem to be simply smooth mounds. On one side there is a little piece of wall sticking out. That is all that there is left.

They were built very much more substantially than those which the Indians built in this country.

Mr. WOOD. Have you any statement you want to make with reference to the Institution?

Doctor WALCOTT. No; I do not think so, Mr. Chairman.

SOURCES OF REVENUE OF SMITHSONIAN INSTITUTION

SMITHSON BEQUEST

Mr. WOOD. In addition to the appropriation that is made by Congress each year, what other sources of revenue has the Smithsonian Institution?

Doctor WALCOTT. Smithson, in his will of 1826, left his estate, subject to certain entailments during the lifetime of one or two individuals, to the United States of America, to establish an institution for the increase and diffusion of knowledge.

Congress, on being notified of Smithson's death and the death of his nephew, who was to receive the income of his estate during his lifetime, appropriated \$10,000 to prosecute the claim.

The claim was prosecuted through the court of chancery by Mr. Richard Rush, who had been, I believe, the Attorney General of the United States.

In 1838 he brought back to the United States \$515,000 in gold and deposited it in the Mint in Philadelphia.

That was the foundation of the Smithsonian Institution and comprised its original fund. Congress debated from 1838 to 1846 as to what should be done to carry out the intent of the donor.

In 1846, an act was passed establishing the Smithsonian Institution. This act, provides that the Smithsonian fund, with its accretions of interest, etc., shall be loaned to the United States at 6 per cent per annum, to be paid in perpetuity.

Mr. WOOD. What became, as a matter of fact, of this original fund?

Doctor WALCOTT. I have just read the correspondence and papers relating to the Smithson bequest—that explains the several transactions and with your permission I will insert the correspondence, etc., in the record?

Mr. WOOD. Yes.

The attorneys for the executors of the will of James Smithson notified A. Vail, chargé d'affaires of the United States, in London, of the Smithson bequest, and A. Vail transmitted the communication to John Forsyth, Secretary of State at Washington:

DEPARTMENT OF STATE,
Washington, September 26, 1835.

SIR: I have the honor to acknowledge the receipt of your dispatch of July 28 last (No. 197), relative to a bequest of property to a large amount left to the United States by Mr. James Smithson for the purpose of founding at Washington an institution "for the increase and diffusion of knowledge among men," and to inform you that your letter and the papers which accompanied it have been submitted to the President, who has determined to lay the subject before Congress at its next session. The result of its deliberations, when obtained, shall be communicated to you, with the necessary instructions.

Of the course intended to be pursued in relation to this matter, as above explained, you will take occasion to acquaint the solicitors who appraised you of the existence of Mr. Smithson's will.

I am, sir, your obedient servant,

JOHN FORSYTH.

AARON VAIL, Esq.

Chargé d'Affaires of the United States, London.

The President communicated with Congress, as follows:

WASHINGTON, December 17, 1835.

To the Senate and House of Representatives of the United States:

I transmit to Congress a report from the Secretary of State, accompanying copies of certain papers relating to a bequest to the United States by Mr. James Smithson, of London, for the purpose of founding at Washington an establishment, under the name of the Smithsonian Institution, "for the increase and diffusion of knowledge among men."

The Executive having no authority to take any steps for accepting the trust and obtaining the funds, the papers are communicated with a view to such measures as Congress may deem necessary.

ANDREW JACKSON.

July 1, 1836: The first law passed by Congress relating to the legacy bequeathed to the United States by James Smithson became effective this date and reads as follows:

AN ACT To authorize and enable the President to assert and prosecute with effect the claim of the United States to the legacy bequeathed to them by James Smithson, late of London, deceased, to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the President of the United States be, and he is hereby, authorized to constitute and appoint an agent or agents to assert and prosecute for and in behalf of the United States, and in their name or otherwise, as may be advisable, in the court of chancery, or other proper tribunal of England, the right of the United States to the legacy bequeathed to them by the last will and testament of James Smithson, late of London, deceased, for the purpose of founding at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men, and to empower such agent or agents so appointed to receive and grant acquittances for all such sum or sums of money, or other funds, as may or shall be decreed or adjudged to the United States for or on account of said legacy.

Sec. 2. *And be it further enacted,* That the said agent or agents shall, before receiving any part of said legacy, give a bond or bonds, in the penal sum of \$500,000, to the Treasurer of the United States and his successors in office, with good and sufficient securities, to the satisfaction of the Secretary of the Treasury, for the faithful performance of the duties of the said agency and for the faithful remittance to the Treasurer of the United States of all and every sum or sums of money or other funds which he or they may receive for payment in whole or in part of the said legacy. And the Treasurer of the United States is hereby authorized and required to keep safely all sums of money or other funds which may be received by him in virtue of the said bequest, and to account therefor separately from all other accounts of his office, and subject to such further disposal thereof as may be hereafter provided by Congress.

Sec. 3. *And be it further enacted,* That any and all sums of money and other funds which shall be received for or on account of the said legacy shall be applied, in such manner as Congress may hereafter direct, to the purpose of founding and endowing at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men; to which application of the said moneys and other funds the faith of the United States is hereby pledged.

Sec. 4. *And be it further enacted,* That to the end that the claim to the said bequest may be prosecuted with effect, and the necessary expenses in prosecuting the same be defrayed, the President of the United States be, and he is

hereby, authorized to apply to that purpose any sum not exceeding \$10,000 out of any moneys in the Treasury not otherwise appropriated.
(Stat. V, 64.)

Secretary of State transmits power of attorney to Richard Rush:

DEPARTMENT OF STATE, *July 11, 1836.*

SIR: I have the honor to inform you that the President, in pursuance of an act of Congress passed at their recent session, has been pleased to appoint you the agent of the United States to assert and prosecute their claim to the legacy bequeathed to them by James Smithson, late of London, deceased. Your power of attorney or commission is herewith remitted, with an authenticated copy of the act referred to annexed to it. It is the wish of the President that you should, in the event of your acceptance of this trust, embark for London without unnecessary loss of time, to enter on the duties of the appointment. Previously to leaving the United States, however, it will be necessary, in compliance with the provisions of the accompanying act of Congress, to execute to and deposit with the Secretary of the Treasury, with good and sufficient securities to his satisfaction, a bond or bonds, in the penal sum of \$500,000, for the proper performance of those duties and for the faithful remittance to the Treasury of the United States of such sum or sums of money or other funds as you may receive in virtue of said bequest.

The compensation to be allowed you for your services in this capacity will be at the rate of \$3,000 per annum for your personal services and at the rate of \$2,000 for all contingencies except the law expenses, compensation to begin from the day you report yourself ready to enter on the duties of the office. An account of the law expenses, with vouchers, will be required.

A letter of credit on M. de Rothschild, the banker of the United States at London, authorizing him to pay your drafts for compensation and for the necessary expenses actually incurred in the prosecution of this claim, is also inclosed, limited to \$10,000, being the whole amount appropriated by Congress for that object.

I am, sir, your obedient servant,

JOHN FORSYTH.

September 19, 1837: Secretary of State suggested to Congress \$10,000 as the amount necessary to be appropriated.

October 16, 1837: By act of Congress approved this date (5 Stat. 207) there was appropriated—

“For defraying the expenses attending the prosecution of the claim of the United States to the legacy bequeathed by the late James Smithson, of London, five thousand dollars.”

July 7, 1838: By the sixth section of an act of Congress of this date it is provided (5 Stat. 267) “An act to provide for the support of the Military Academy of the United States for the year 1838, and for other purposes.”

SEC. 6. *And be it further enacted*, That all the money arising from the bequest of the late James Smithson, of London, for the purpose of founding at Washington, in this District, an institution to be denominated the Smithsonian Institution, which may be paid into the Treasury, is hereby appropriated, and shall be invested by the Secretary of the Treasury, with the approbation of the President of the United States, in stocks of States, bearing interest at the rate of not less than 5 per centum per annum, which said stocks shall be held by the said Secretary in trust for the uses specified in the last will and testament of said Smithson, until provision is made by law for carrying the purpose of said bequest into effect; and that the annual interest accruing on the stock aforesaid shall be in like manner invested for the benefit of said institution.

(Stat. V, 267.)

After Mr. Rush notified the Secretary of State that he, Mr. Rush, was in possession of the stocks, bonds, etc., arising from the Smithson bequest marked interest seems to have been taken in Congress and the Treasury Department respecting the disposal of the proceeds from their sale before the money had even reached the United States.

The origin of the act of July 7, 1838, providing for the temporary investment of the Smithsonian fund is found in the Congressional Globe 1837-38, second session, Twenty-fifth Congress:

HOUSE OF REPRESENTATIVES, *Thursday, June 28, 1838.*

SMITHSONIAN BEQUEST

Mr. Abraham Rencher, of North Carolina, on leave, submitted the following resolution, which was agreed to:

"*Resolved*, That the Committee of Ways and Means inquire into the expediency of authorizing a temporary investment of the Smithsonian legacy, as soon as it shall be received by the President of the United States." (Cong. Globe 1837-38, 2d sess., 25th Cong., p. 483.)

HOUSE OF REPRESENTATIVES, *Monday, July 2, 1838.*

Mr. Churchill C. Camberleng, of New York, from the Committee of Ways and Means, reported a bill to provide for the investment of money received under the will of the late James Smithson, of London. (Cong. Globe 1837-38, 2d sess., 25th Cong., p. 483.)

[No action taken.]

Certain correspondence, copies of which follow, will indicate the importance with which the Smithsonian bequest was regarded in the Treasury Department:

TREASURY DEPARTMENT, *July 12, 1838.*

Dr. R. M. PATTERSON,
Philadelphia.

SIR: A draft will be drawn, to-day, by the Treasurer of the United States on the Treasurer of the mint for \$20 [sic] or \$30,000.

This money is required for disbursement in the West and it is desirable, that it should be paid in the smallest coins of gold and silver that can well be spared.

When the Smithsonian legacy shall arrive I am in hopes to be able to replace this sum with the mint and to deposit an additional amount.

I am, etc.,

L. W., *Secretary of the Treasury.*

TREASURY DEPARTMENT, *July 20, 1838.*

Dr. R. M. PATTERSON,
Director of the Mint, Philadelphia.

SIR: Mr. Rush's arrival at New York with the amount of the Smithsonian legacy in foreign gold is expected daily. Mr. Rush has been requested to transfer the money at once to the mint to be deposited to the credit of the Treasurer of the United States. As soon as the exact value shall be ascertained and returned to the Treasurer of the United States by the mint a transfer draft will be issued to place the amount in the mint under the provisions of the twelfth section of the act of 23d of June, 1836.

I am, etc.,

L. W., *Secretary of the Treasury.*

TREASURY DEPARTMENT, *July 27, 1838.*

Dr. R. M. PATTERSON,
Director of the Mint.

SIR: From a letter addressed to the department by Mr. Rush and received this morning, I am led to hope that before the expiration of the month of August next the amount of the Smithsonian legacy will be deposited in the Mint.

In that event I should be pleased if you would coin to the amount of about \$50,000 in eagles. The department will be obliged to draw on the Mint for the pay of Members of Congress during the next session and would like to have some golden eagles to distribute amongst those who prefer them.

I am, etc.,

L. W., *Secretary of the Treasury.*

MINT OF THE UNITED STATES, *July 30, 1838.*

SIR: I have the honor to acknowledge the receipt of your letter of the 27th instant and am pleased to receive your instructions relative to the coinage of eagles. I have ordered immediate measures to be taken for the preparation of the dyes. We shall spare no pains to make our chief coin worthy of the Mint. You are probably aware that the last coinage of eagles was made in 1804.

Very respectfully, your faithful servant,

R. M. PATTERSON, *Director.*

Hon. LEVI WOODBURY,

Secretary of the Treasury.

August 6, 1838: The following notice was published in the *Globe* newspaper and similar information was communicated to a number of bankers by means of letters from the Secretary of the Treasury:

NOTICE

The money bequeathed by the late James Smithson, Esq., of London, for founding an institute in the city of Washington, amounting to about half a million of dollars, will, it is expected, be received during the present month. By an act passed July 7, 1838, the undersigned is directed to invest the same "in stocks of States bearing interest at the rate of not less than 5 per cent per annum." He is now prepared to receive proposals from persons who have stocks of this description to dispose of.

LEVI WOODBURY, *Secretary of the Treasury.*

TREASURY DEPARTMENT, *August 6, 1838.*

The Secretary of the Treasury wrote W. W. Corcoran, as follows:

TREASURY DEPARTMENT, *August 23, 1838.*

SIR: Referring to your offer to sell to the department \$500,000 of 6 per cent Arkansas State bonds at 99.08 per cent, I have to request that you will submit for my examination the law of the State authorizing the issue of the bonds and the form of the bonds. If both be satisfactory, I am willing, on the arrival of the money, to take the net amount (which will not be far from half a million dollars) at the rate offered by you, as it is the lowest bid.

It is expected that the money may be by this time in New York.

I am, very respectfully, your obedient servant,

LEVI WOODBURY, *Secretary of the Treasury.*

W. W. CORCORAN, Esq.,

August 28, 1838: Richard Rush arrived in New York. From May 9, 1838, until July 17, 1838, he was in London, engaged in converting the stocks and bonds turned over to him by the court's order into English sovereigns, causing the sovereigns and certain personal effects of James Smithson to be boxed and transferred to the New York packet *Mediator*. On his arrival in New York he found instructions from the Secretary of the Treasury directing him to transfer the funds to the mint in Philadelphia.

TREASURY DEPARTMENT, *August 31, 1838.*

Dr. R. M. PATTERSON:

SIR: A letter has been this morning addressed to Mr. Rush at New York, urging upon him the necessity of transferring the amount of the Smithsonian legacy to the mint at Philadelphia as soon as practicable. Arrangements have been made by the department for investing it and the State bonds are prepared for delivery, but the money can not be paid until it has been first placed in the mint to the credit of the Treasurer of the United States. It will not be necessary to delay giving a certificate of deposit until the actual value of the deposit is ascertained. A certificate may be given for the estimated value, to be corrected, if necessary, when the exact value is fixed.

Requesting your attention to this matter as soon as the money shall reach you, I remain,

Very respectfully yours,

S. MCKEAN, *Clerk.*

September 1, 1838: Mr. Rush arrived in Philadelphia, deposited in the mint £104,960 8s. 6d., and was given a receipt therefor signed by the director

and Treasurer. The amount in dollars delivered to the mint was found to be \$508,318.46, as specified in the receipt given to Mr. Rush by the director and Treasurer.

MINT OF THE UNITED STATES.

September 1, 1838—4 p. m.

SIR: I have the pleasure to state that Mr. Rush has just arrived at the mint with the amount received by him on account of the Smithsonian legacy.

We will take immediate measures to ascertain its exact value; and your instructions with regard to it, contained in your letter of the 20th of July, shall be attended to.

Very respectfully, your faithful servant,

R. M. PATTERSON, *Director.*

To Hon. LEVI WOODBURY,
Secretary of the Treasury.

TREASURY DEPARTMENT,

September 3, 1838.

Dr. R. M. PATTERSON,
Director of the Mint, Philadelphia.

SIR: Your communication, dated the 1st, advising the department of the receipt of the proceeds of the Smithsonian legacy at the mint, has been received and it is hoped that the necessary certificate of value thereof will reach here by the mail to-night, as some negotiation entered into can not be completed until it is received.

The coinage of gold will, it is hoped, proceed as rapidly as practicable. I shall be obliged to draw on the mint occasionally during the autumn, but I trust not so as to inconvenience or reduce the whole balance very materially below three-fourths of a million before the winter or spring.

I am, etc.,

L. W., *Secretary of the Treasury.*

WASHINGTON, *September 4, 1838.*

R. M. PATTERSON,
Director of the Mint, Philadelphia.

Dear SIR: In making an investment of the Smithsonian fund I shall need \$50,000 from the mint in gold, American coinage. Can it be furnished now? And if not, how soon?

I am, etc.,

L. W., *Secretary of the Treasury.*

MINT OF THE UNITED STATES.

September 5, 1838.

SIR: I have just received your letter of yesterday. As it is night, I am not able to learn the amount of American gold coin that we have at the mint, but I know that a draft of \$50,000 will put us to no inconvenience.

The Smithsonian gold will all be in ingots tomorrow, and I expect that the whole of it will be coined before the close of next month.

Yesterday and to-day we have received 200,000 Mexican dollars from the Bank of the United States. It is already weighed and the value estimated and the amount will be paid in American coins to-morrow, if called for.

Very respectfully, your faithful servant,

R. M. PATTERSON,
Director.

To Hon. LEVI WOODBURY,
Secretary of the Treasury.

TREASURY DEPARTMENT.

September 5, 1838.

Dr. R. M. PATTERSON,
Philadelphia.

SIR: A draft has this day been drawn by the Treasurer of the United States on the treasurer of the mint in favor of Wm. W. Corcoran for \$50,000. The

draft has been forwarded to Mr. Corcoran at New York. He will be in Philadelphia probably on Friday or Saturday and is desirous to get American gold to that amount to bring on with him.

It is expressly understood by Mr. Corcoran that the draft is not to be presented for payment until that amount of gold received on account of the Smithsonian legacy can be received, unless it is convenient to pay it out of the coins now on hand, which it is presumed can be done without delay if you have a large supply coined.

I am, etc.,

L. W., *Secretary of the Treasury.*

P. S.—Your communication dated the 3d containing the certificate of the treasurer was received last night.

TREASURY DEPARTMENT.

September 5, 1838.

W. W. CORCORAN, Esq.,
New York.

SIR: I transmit inclosed a letter from the Treasurer of the United States containing his draft in your favor on the treasurer of the mint for \$50,000.

The director has been informed that you will probably be in Philadelphia on Friday or Saturday next and that it is expressly understood by you that the draft is not to be presented for payment until that amount of the gold received on account of the Smithsonian legacy can be coined, unless it can be conveniently paid out of other coins on hand which it is supposed can be done at once if he has a large supply on hand.

I am, etc.,

L. W., *Secretary of the Treasury.*

ACTING SECRETARY OF TREASURY TO W. W. CORCORAN

TREASURY DEPARTMENT,

September 12, 1838.

The undersigned Acting Secretary of the Treasury of the United States of America hereby certifies that under the provisions of the sixth section of the act of Congress entitled "An act for the support of the Military Academy of the United States for the year eighteen hundred and thirty-eight, and for other purposes," this department has invested money arising from the bequest of the late James Smithson, of London, in the purchase of bonds of the State of Arkansas to the amount of five hundred thousand dollars.

McCLINTOCK YOUNG,

Acting Secretary of the Treasury.

The (above) certificate was at the request of W. W. Corcoran, Esq., from whom the bonds were purchased this day given to him.

MINT OF THE UNITED STATES,

September 24, 1838.

SIR: I have the honor to state that the whole of the Smithsonian legacy, brought to the mint by Mr. Rush at the beginning of this month, is now in American gold coins. The head die for the new eagle is now completed, and the reverse will be finished this week, so that I hope to be able very soon to send you specimens of this coin. We shall have plenty of gold to supply the number you may want. We have had large deposits of bullion and are fully occupied.

Very respectfully, your faithful servant,

R. M. PATTERSON,

Director of the Mint.

To Hon. LEVI WOODBURY, *Secretary of the Treasury.*

TREASURY DEPARTMENT, *October 11, 1838.*

HON. F. GRUNDY,
Attorney General United States.

SIR: I have the honor to request your opinion on certain questions, arising under the acts of Congress of the 4th of July, 1836, and of the 7th of July, 1838 (chap. 252, acts of 1838, and chap. 169, sec. 6, acts of 1838), relating to the legacy of James Smithson.

It will be seen by the accompanying documents that Mr. Rush, the agent of the United States, received under the decree of the court of chancery certain stocks, etc., which, with the sum of £110 2s. 2d. for costs returned to him produced the sum of £106,370 7s. 3d., out of that sum was paid the several sums of £797 15s. 6d., and £6 19s. 4d. for commissions, charges, etc., in procuring and shipping specie to the United States, which per invoice, amounted to £104,960 8s. 7d. and the charges and insurance thereon amounted to £505 3s. 10d.

After the arrival of the specie at New York, the sum of \$2,235.63 was paid by the Bank of America for freight from England and expenses of transportation to the mint.

The act of 1838 directs that all the money arising from the bequest of Mr. Smithson, which may be paid into the Treasury shall be appropriated and invested in stocks by the Secretary of the Treasury.

Having consulted with the solicitor and other officers of the department and from their conflicting opinions there is some doubt as to the construction which should be placed on the acts referred to and I therefore have the honor to submit to you the following questions:

1. Can the appropriation made by the fourth section of the act of 1836 be applied toward the payment of the expenses incurred in transferring from England to the Treasury of the United States, this bequest of Mr. Smithson?

2. Out of the appropriation just referred to, a sum was paid into the Court of Chancery to meet costs. That court decreed that all the costs should be paid out of the funds in the hands of the court. It appeared on the final settlement that the sum of £116 2s. 2d. was ordered to be refunded to the agent of the United States, on account of these costs; this sum was included in the remittance made by him to the United States.

Ought not this amount to be placed to the credit of the appropriation from which it was originally drawn?

3. Are any or all of the payments made for commissions, charges, insurance, freight, etc., to be deducted from the proceeds of the stocks, etc., placed in the hands of the agent; or, in other words, which of the sums received by him are to be paid into the Treasury?

Must it be the gross sum of £106,370 7s. 3d., including the cost returned as above stated; or must it be (deducting such costs) £106,265 5s. 1d., or the sum shipped, £104,960 8s. 7d., which produced at the mint \$505,318.46— or the sum of \$505,082.83, which would be the amount after deducting the sum paid in New York for freight, etc.?

If the second question be answered in the affirmative, an amount equivalent to that of the returned costs, I presume, must be deducted from this sum last mentioned.

4. If either of the amounts, £106,370 7s. 3d., or £106,265 5s. 1d., or £104,960 8s. 7d., be the proper sum to be carried into the Treasury, how is the amount so to be placed in the currency of the United States? Must the calculation be made at the par of \$40 to £9 or the customhouse par of \$4.80 to the pound sterling?

5. Has the department of the agent authority to dispose of the other property and effects of Mr. Smithson, which were brought to the United States, without further legislation by Congress?

I am, etc.,

L. W., *Secretary of the Treasury.*

MINT OF THE UNITED STATES,

November 5, 1838.

SIR: In a letter of the 20th of July you stated that Mr. Rush had been instructed to transfer the amount of the Smithsonian legacy to the mint, to be deposited to the credit of the Treasurer of the United States, and you further say that "as soon as the exact value shall be ascertained and

returned to the Treasurer of the United States by the mint a transfer draft will be issued to place the amount in the mint, under the provision of the twelfth section of the act of June 23, 1836."

The amount was deposited by Mr. Rush according to your instructions, and on the 3d of September the net value was found to be \$508,318.46, as reported to you at the time, and this amount was duly placed in our books to the credit of the Treasury of the United States.

The last step proposed by you, namely, the transfer to the mint under the deposit act of June, 1836, has not yet been taken, and I have deemed it proper to call your attention to it. The money is at present in a somewhat anomalous position.

Very respectfully, your faithful servant,

R. M. PATTERSON.

To Hon. LEVI WOODBURY, *Secretary of the Treasury.*

ATTORNEY GENERAL'S OFFICE,
November 16, 1838.

SIR: I have the honor to acknowledge the receipt of yours of the 11th of October last, requesting my opinion upon various points in relation to the Smithsonian legacy. A separate answer to each of your inquiries is deemed unnecessary, as the opinion I entertain, and am about to express in general terms, will be found to cover most of them.

James Smithson, of London, on the 23d of October, 1826, executed his last will and testament, by which, upon the happening of certain contingencies, he bequeathed to the United States of America all his property, to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men. The Congress of the United States, by an act passed July 1, 1836, accepted the bequest, and directed the President to appoint an agent to assert and prosecute the claim, and by said act pledged the faith of the United States to apply the moneys and other funds which might be received to carry into effect the provisions of said will; and, by the fourth section of said act, it is provided "that to the end that the claim to said bequest may be prosecuted with effect, and the necessary expenses in prosecuting the same defrayed, the President of the United States be, and he is hereby, authorized to apply to that purpose any sum not exceeding \$10,000," etc.

From these provisions it appears to me that Congress intended that there should be no diminution of the funds bequeathed for the purpose specified in said will, but that the whole, whatever they might amount to, should be applied to carry into effect the intention of the testator; and when the object of the bequest is considered, it can not be supposed that Congress would act in any other than a liberal spirit.

My opinion, therefore, is that the amount of the whole money and other funds received by the agent of the United States, under the act of July 1, 1836, without reduction constitute the Smithsonian fund, for the purposes specified in said Smithson's will; and that the whole expenses of prosecuting said claim, receiving, and transporting the same to this country, including any additional expenses which may have been incurred here, ought to be defrayed out of the appropriation made by Congress.

It appears that cash and stocks, which, when converted into money, amounted to £106,490 11s. 9d., were decreed to the United States, as the amount of the legacy and bequest in said will. This sum, after deducting £116 2s. 2d., the amount of costs refunded, is the amount which should be paid to the Treasurer of the United States, to be kept and disposed of according to the provisions of the act of July 1, 1836, and the sixth section of the act of July 7, 1838; and all expenses, of whatever kind or nature, should be paid out of the appropriation made by Congress.

In relation to the disposition of the other personal effects of Mr. Smithson, which have been transferred to this country by the agent of the United States, my opinion is that Congress should direct the disposition of them.

I have the honor to be, sir, your obedient servant,

FELIX GRUNDY.

HON LEVI WOODBURY,
Secretary of the Treasury.

By reason of this opinion certain costs of the prosecution of the suit (pursuant to the act of July 1, 1836), etc., paid from the gross amount received under the bequest, were afterwards appropriated for by Congress and returned to and placed upon the books of the Treasury to the credit of Smithson's original bequest, and by this action the total gross amount of the original bequest was determined to be \$515,169.

March 3, 1839: By act of Congress of this date (5 Stat. ch. 82, 346), it is provided:

"Civil and diplomatic act for 1839: For carrying into effect the acts relating to the Smithsonian legacy, \$10,000, to be paid out of the fund arising from that legacy." (Stat. V, 346.)

From the foregoing citations it will be observed that before the money arising from the bequest of the late James Smithson reached the United States Congress had, by act of July 7, 1838 (5 Stat. 267), directed its temporary investment.

Act September 11, 1841: Act of Congress approved this date (5 Stat. 465) provides:

"*Be it enacted, etc.*, That so much of the sixth section of an act entitled 'An act to provide for the support of the Military Academy of the United States for the year 1838, and for other purposes,' as requires the Secretary of the Treasury to invest the annual interest accruing on the investment of the money arising from the bequest of the late James Smithson, of London, in the stocks of States, be, and the same is hereby, repealed. And the Secretary of the Treasury shall, until Congress shall appropriate said accruing interest to the purposes prescribed by the testator for the increase and diffusion of knowledge among men, invest said accruing interest in any stock of the United States, bearing a rate of interest not less than five per centum per annum.

"SEC. 2. *And be it further enacted*, That all other funds held in trust by the United States, and the annual interest accruing thereon, when not otherwise required by treaty, shall in like manner be invested in stocks of the United States, bearing a like rate of interest.

"SEC. 3. *And be it further enacted*, That the three clerks, authorized by the act of June 23, 1836, 'to regulate the deposits of the public money,' be, and hereby are, directed to be retained and employed in the Treasury Department, as provided in said act, until the state of the public business becomes such that their services can conveniently be dispensed with. (Stat. V, 465.)"

Act March 3, 1843: An act for the relief of Richard Rush (6 Stat. 892):

"*Be it enacted, etc.*, That the Secretary of the Treasury pay, out of any money in the Treasury not otherwise appropriated, to Richard Rush, the sum of \$3,815.73, for extra service in converting the Smithsonian funds received by him as the agent of the United States into gold coin, and for his aid and supervision in transporting the same from London to the mint at Philadelphia. (Stat. VI, 892.)"

March 3, 1845: A joint resolution approved this date (5 Stat. 801) had reference to the States in which the Smithsonian fund had been invested and reads as follows:

"That whenever any State shall have been, or may be, in default for the payment of interest or principal on investments in its stocks or bonds held by the United States in trust, it shall be the duty of the Secretary of the Treasury to retain the whole, or so much thereof as may be necessary, of the percentage to which such State may be entitled, of the proceeds of the sales of the public lands within its limits, and apply the same to the payment of said interest or principal, or to the reimbursement of any sums of money expended by the United States for that purpose."

August 10, 1846: An act to establish the Smithsonian Institution, for the increase and diffusion of knowledge among men. The preamble of this act is as follows:

"James Smithson, Esquire, of London, in the Kingdom of Great Britain, having by his last will and testament given the whole of his property to the United States of America, to found at Washington, under the name of the 'Smithsonian Institution,' an establishment for the increase and diffusion of knowledge among men; and the United States having, by an act of Congress, received said property and accepted said trust; therefore, for the faithful execution of said trust, according to the will of the liberal and enlightened donor," etc.

The act follows. (See R. S. Sec. 5579-5594, inclusive.)

December 13, 1847: In the program of organization of the Smithsonian Institution presented by the Secretary and adopted by the Board of Regents December 10, 1847, it is stated—

"General considerations which should serve as a guide in adopting a plan of organization:

"1. Will of Smithson: The property is bequeathed to the United States of America, to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men."

"2. The bequest is for the benefit of mankind. The Government of the United States is merely a trustee to carry out the design of the testator.

"3. The institution is not a national establishment, as is frequently supposed, but the establishment of an individual, and is to bear and perpetuate his name."

1865: "The executive committee of the Board of Regents of the Smithsonian Institution reports the receipts of \$54,165.38, the annuitant to whom the income from this sum had been paid under the settlement of the Smithsonian estate having died."

February 17, 1865: "United States bonds bearing 7.3 per cent interest were purchased at par for \$54,150. Balance, which could not be invested on account of there being no bonds for less than \$50, \$15.38."

After the Secretary had purchased these bonds and deposited them for safe-keeping with the Treasurer of the United States, it was claimed by the Secretary of the Treasury that this money was not under the control of the Regents of the Institution, inasmuch as the original act of Congress of 1846, establishing the Institution, referred to only so much of the bequest of Smithson as was then in the Treasury of the United States, and that a special act of Congress would be required to apply this money, or the interest on it, to the uses of the Institution.

By act of February 8, 1867 (14 Stat. 391) it is provided:

"An act to receive into the Treasury the residuary legacy of James Smithson, etc.

"*Be it enacted, etc.*, That the Secretary of the Treasury be, and he is hereby, authorized and directed to receive into the Treasury, on the same terms as the original bequest, the residuary legacy of James Smithson, now in United States bonds, in the hands of said Secretary, namely, \$26,210.63, together with such other sums as the Regents may from time to time see fit to deposit, not exceeding with the original bequest the sum of \$1,000,000.

"Sec. 2. *And be it further enacted*, That the increase which has accrued, or which may hereafter accrue from said residuary legacy, shall be applied by the Board of Regents of the Smithsonian Institution in the same manner as the interest on the original bequest, in accordance with the provisions of the act of August 10, 1845, establishing said Institution." (Stat. XLV, 391.)

By act of March 12, 1894, there was added to 5591, R. S., the following:

"And be further amended by striking out of section 5580 the words 'the Governor of the District of Columbia.'

"And be further amended by adding to section 5591 as follows:

"*Provided*, That this shall not operate as a limitation on the power of the Smithsonian Institution to receive money or other property by gift, bequest, or devise, and to hold and dispose of the same in promotion of the purposes thereof." (Stat. XXVIII, 41.)

As stated in the correspondence, after the Smithson money was received an investment of \$500,000 was made in Arkansas bonds September 2, 1838, pending the time when Congress should finally determine what should be done, as no act had been passed for the organization of the Smithsonian Institution.

It appears that the State of Arkansas wished to charter a real estate bank and that the money derived from the sale of the bonds was turned over to this real estate bank, which did not succeed. Arkansas, of course, was morally responsible for the money, and back of that the United States was responsible for the care of the money which Congress had ordered invested in State bonds.

Mr. SUMMERS. How much was turned into the bank?

Doctor WALCOTT. They bought \$500,000 of the bonds, exactly.

Mr. WOOD. There is a tradition down there—I do not know whether you are acquainted with it or not—that there was some gentlemen in the banking business here in Washington at that time who were becoming fearful about their bonds and unloaded them onto the United States.

Doctor WALCOTT. As you have spoken of that, I will say that in the correspondence which will be put in the record (see ante) it is stated that a banker here sold the bonds to the Treasury Department September 12, 1838.

Mr. WOOD. That is my understanding.

Doctor WALCOTT. Congress did nothing further about it in connection with the Smithson fund, as far as we know. Everything in connection with the debates and the discussion in the Congressional Record has been read and the Treasury records have all been examined carefully. There is no record of Congress taking any further action until the passage of the act of 1846.

Section 5590 of the Revised Statutes states:

So much of the property of James Smithson as has been received in money and paid into the Treasury of the United States, being the sum of \$541,379.63, shall be lent to the United States Treasury at 6 per cent per annum interest, and 6 per cent interest on the trust fund of the residuary legacy received into the United States Treasury, payable in half-yearly payments, on the 1st of January and July of each year, is hereby appropriated for the perpetual maintenance and support of the Smithsonian Institution.

Mr. WOOD. As I understand the history of this situation, the Arkansas institution was a State institution?

Doctor WALCOTT. A State institution.

Mr. WOOD. Is there any record of any attempt of the United States to have the State of Arkansas repay to the United States that money?

Doctor WALCOTT. Later on the State of Arkansas and the United States carried on negotiations and the matter was settled. There were other loans that had been invested in State bonds from other trust funds in the Treasury.

Mr. WOOD. How was it settled? Did the United States forgive the debt?

Doctor WALCOTT. A small sum was paid, I believe.

Mr. DORSEY. \$160,000 was paid by the State of Arkansas. There was some question involved of the State's right to public lands of a certain character and they compromised and it was settled in that way.

Doctor WALCOTT. That was the question of taking the swamp lands and the arable lands. It was worked out and settled.

Mr. WOOD. The Smithsonian Institution, then, gets interest annually from the Treasury on this Smithson fund under this act?

Doctor WALCOTT. Congress later provided, section 5591, as follows:

The Secretary of the Treasury is authorized and directed to receive into the Treasury, on the same terms as the original bequest of James Smithson, such sums as the Regents may, from time to time, see fit to deposit, not exceeding, with the original bequest, the sum of \$1,000,000.

The income of that is \$60,000, which the Smithsonian Institution receives annually.

Mr. WOOD. How is that \$60,000 expended, Doctor?

Doctor WALCOTT. That is expended under the direction of the Board of Regents.

Mr. WOOD. Under the Smithsonian budget?

Doctor WALCOTT. Yes.

Mr. WOOD. It is not expended under the Federal Budget?

Doctor WALCOTT. No. Back in 1846, when the Institution was organized—I have not the exact language here, but if I may, I will put it in the record—the position was taken by the Regents that it was a trust fund given by Congress in charge of the Board of Regents. I presume you have the exact language.

Mr. WOOD. Section 5593 of the Revised Statutes provides as follows:

Whenever money is required for the payment of the debts or performance of the contracts of the Institution, incurred or entered into in conformity with the provisions of this title, or for making the purchases and executing the objects authorized by this title, the Board of Regents, or the executive committee thereof, may certify to the chancellor and the secretary of the board that such sum of money is required, whereupon they shall examine the same, and, if they shall approve thereof, shall certify the same to the proper officer of the Treasury for payment. The board shall submit to Congress, at each session thereof, a report of the operations, expenditures, and condition of the Institution.

Is any report made by the officers of the Smithsonian Institution of these disbursements?

Doctor WALCOTT. Yes; in the Smithsonian annual report.

Mr. WOOD. Is there a statement filed with anybody of the manner in which it is expended?

Mr. DORSEY. The annual report of the Smithsonian Institution contains a report of the executive committee of the Board of Regents, which gives the details of the moneys expended. That goes to Congress in the annual report of the Smithsonian Institution.

Mr. WOOD. By whom is that audited? Is that audited by the General Accounting Office?

Mr. DORSEY. No, sir.

Doctor WALCOTT. It is audited by a public accountant.

Mr. WOOD. By what public accountant?

Doctor WALCOTT. A certified public accountant whom the executive committee employs.

Mr. WOOD. There is no governmental audit of it at all?

Doctor WALCOTT. No.

Mr. WOOD. It being a public fund why should there not be the same audit of it by the Government accounting office that all other public funds are subjected to?

Doctor WALCOTT. Mr. Chairman, I can not give you the history of the matter as it goes back to before my time, probably between 1846 and 1855. The method was established in the judgment of the people of that day and it has been pursued ever since.

Mr. WOOD. We did not have any General Accounting Office at that time. This is a public fund and it ought not to be exempt from the supervision of the General Accounting Office. Do you know of any reason why it should be exempt?

Doctor WALCOTT. Mr. Chairman, before answering that question I would like to look it up more thoroughly because I have not studied it.

Mr. WOOD. I should be very glad to have you look it up. There may be some substantial reason why that should be so but I do not see any reason why it should be exempt any more than any other fund from the supervision of the General Accounting Office.

DECEMBER 30, 1924.

DEAR SIR: An examination of the history of the origin, collection, and disposition of moneys belonging to the Smithsonian Institution during the period from October 23, 1826, when provision was first made for that Institution in the last will and testament of James Smithson, up to the present time, also all laws affecting the Institution; the reports of debates in Congress relating to said laws and to proposed legislation that failed of enactment; certain annual report made to Congress by the Institution's Board of Regents fail to disclose anything to justify a conclusion that the accounting officers of the Government have authority to require an accounting by the Institution to the United States for the receipt or expenditure of moneys coming into the Institution from bequests, by gifts, or as semiannual interest provided for by acts of August 10, 1846, and February 8, 1867.

A part of the million dollars deposited in the Treasury and something over \$200,000 held by the Institution in securities comprise trust funds given or bequeathed to the Smithsonian Institution to carry out the specific wishes of the donors. These were attracted to the Institution by reason of the character of its organization and methods for its administration prescribed by the act of incorporation, and which would doubtless not have been intrusted to the Institution had any change been made in the act of organization that would limit in any manner the independence of the Board of Regents in carrying out the trust of Smithson and the donors of other specific funds.

From the official utterances of many of the foremost legislators, members of the Supreme Court of the United States, and Cabinet officers during the period from 1835 to 1899, we find that they did not regard the funds, of the nature described above, as even quasi public moneys, and some of these men had much to do with the scrupulous care with which the method of accounting for its funds was provided for in the organic act founding the Institution and which method stands to this day as it was first provided.

Section 5593, Revised Statutes, provides the method by which the income from the Smithsonian fund shall be drawn from the Treasury on the certification of the chancellor and secretary of the board of regents.

The Annual Report of the Smithsonian Institution submits to Congress a report of the operations, expenditures, and condition of the Institution as required by section 5593, Revised Statutes.

Yours with respect,

CHARLES D. WALCOTT, *Secretary.*

HON. WILLIAM R. WOOD,

*Chairman Subcommittee on Independent Office Appropriation Bill,
United States House of Representatives, Washington, D. C.*

FREER BEQUEST

I notice in this report on page 4 that there are other funds, all of them aggregating \$1,000,000!

Doctor WALCOTT. Those are the general funds; yes, sir.

Mr. WOOD. None of these are audited except in the manner you have described?

Doctor WALCOTT. Those are all the funds that have been given to the regents for the purposes of the increase and diffusion of knowledge.

Mr. WOOD. What was the amount of the Freer appropriation? Is that in this report?

Doctor WALCOTT. That is on the next page.

Mr. WOOD. What is the amount of that?

Doctor WALCOTT. \$3,442,256.25.

Mr. WOOD. Has that fund been expended?

Doctor WALCOTT. That is the capital fund. That is the endowment.

Mr. WOOD. How do you invest that?

Doctor WALCOTT. That is invested in bonds and mortgages except that portion of the Freer fund that came already invested.

Mr. WOOD. What does it consist of, securities?

Doctor WALCOTT. The bulk of it is invested in the Park Davis Co. stock, which is a company of pharmaceutical manufacturers. Mr. Freer made the request that this be continued.

At the time of Mr. Freer's death the stock was selling at about 116. Then came the period of depression in 1918-19 when it went down to the neighborhood of 80. It was in that slump when the securities were turned over to the Smithsonian Institution. The officers of the Park Davis & Co. corporation later declared a 100 per cent dividend, which doubled the stock. That went on the market, and it has since greatly depreciated until it is now selling at 80 or thereabouts. The stock pays 5 per cent on a value of 100 and is a local stock of the city of Detroit. If a thousand shares are put on the market for sale, it depresses the quoted price materially, but investigations as to the value and character of the stock and the values back of it have convinced our committee that it is a good and reasonably safe stock. There are no bonds or other securities out against the company. The executive committee capitalized the stock at 116, the value of the stock on the day of Mr. Freer's death, and 6 per cent income on the amount is now available for carrying out the purposes of Mr. Freer's will.

The surplus above 6 per cent on the original stock is being invested in bonds and real estate mortgages, 50-50, as a sinking fund to protect the stock in the endowment. This plan was started a little over a year ago, and there is about \$157,000 invested in the sinking fund. The present plan is to continue the accumulation of a sinking fund until it equals the value of the bequest at the time of Mr. Freer's death. Bankers in New York, Detroit, and Washington have told me that it would entail a great sacrifice to sell the stock on the market under existing conditions.

The State of Michigan assessed a transfer tax of \$425,000 against the Freer estate on account of its going out of the State of Michigan; in order to pay this tax it was necessary to sell some of the stock, and on this only between 70 and 80 per cent of it was realized. That was on the original stock, which is now worth 160.

Mr. WOOD. The building that was built out of that fund is complete?

Doctor WALCOTT. It is complete and occupied.

Mr. WOOD. How was this money to be used by the Smithsonian Institution?

Doctor WALCOTT. Mr. Freer's will defines clearly what is to be done with it. He provided a curators' fund and for the carrying on of certain educational and exploration work in the Far East and for oriental at investigations in connection with the gallery in Washington. He did not specify just how much was to be expended in any region such as India, Egypt, or China, but defined the general purpose for which the income was to be used.

He provided in his original deed of gift that the maintenance and running of the building should be taken care of by the Government. The income of the fund was for carrying on the educational work of the gallery, making additions to the collections from time to time of objects that might be desirable, and he also provided that in the event of objects not being available, the money could be used for the purchase of American paintings or sculpture to go into the National Gallery of Art.

Mr. WOOD. So far as the building itself is concerned, it is maintained at the expense of the Government?

Doctor WALCOTT. Yes, sir.

Mr. RAVENEL. That includes only heat, light, cleaning, guarding, and upkeep.

Mr. SUMMERS. What was the cost of the building?

Doctor WALCOTT. Very close to \$1,300,000.

Mr. WOOD. Doctor, I wish you would put in the record as a part of your testimony a statement showing the expenditure of the \$60,000 derived from the Smithsonian fund in the last two years.

Doctor WALCOTT. Very well.

INCOME FROM \$1,000,000 DEPOSITED IN THE UNITED STATES TREASURY AT 6 PER CENT

General fund, \$844,140, at 6 per cent, equals \$50,648.40. Expended as per statement attached.

Hodgkins fund, \$100,000, at 6 per cent, equals \$6,000. Expended as per statement attached.

Rhees fund, \$590, at 6 per cent, equals \$35.40; Avery fund, \$14,000, at 6 per cent, equals \$840; Reid fund, \$11,000, at 6 per cent, equals \$660; Poore fund, \$26,670, at 6 per cent, equals \$1,600.20; Sanford fund, \$1,100, at 6 per cent, equals \$66. Accumulative funds for reinvestment.

Hamilton fund, \$2,500, at 6 per cent, equals \$150. For specific use.

Total, \$1,000,000, at 6 per cent, equals \$60,000.

General expenditures, 1923

Buildings:			
Supplies, etc. -----	\$827.93		
Care of, repairs, etc. -----	7,185.15		
			\$8,013.08
Furniture and fixtures:			
Purchases, etc. -----	335.34		
Services -----	1,200.00		
			1,535.34
Library:			
Purchase of books, etc. -----	503.67		
Salaries -----	2,694.00		
			3,197.67
General salaries -----			21,136.85
Stationery -----			419.62
Postage, telephone, and telegraph -----			944.10
Garage:			
Supplies -----	664.47		
Labor, etc. -----	172.16		
			836.63
Incidentals, meetings, freight, etc. -----			1,429.19
Publications:			
Printing and binding, etc. -----	5,680.57		
Supplies -----	251.70		
Salaries -----	7,531.00		
			13,463.27

Researches and explorations: ¹		
Special services.....	\$1,531.15	
Zoological nomenclature.....	937.50	
Travel and field expenses.....	1,596.02	
Supplies, etc.....	554.88	
Salaries.....	516.00	
		\$5,135.55
Hodgkins fund:		
Investigations, publications, purchases, etc.....	3,213.95	
Salaries.....	2,119.87	
		5,333.82
Total		61,445.12

NOTE.—The above expenditures are made from income from General fund and Hodgkins fund, together with interest from reinvestment of income, donations, and balances from previous years.

General expenditures, 1924

Buildings:		
Supplies, etc.....	\$475.69	
Care of, repairs, etc.....	7,191.50	
		\$7,667.19
Furniture and fixtures:		
Purchases, etc.....	172.40	
Services.....	1,126.67	
		1,299.07
Library:		
Purchase of books, etc.....	488.85	
Salaries.....	2,498.17	
		2,987.02
General salaries.....		21,210.88
Stationery.....		453.03
Postage, telephone, and telegraph.....		808.90
Garage:		
Supplies, etc.....	384.57	
Labor, etc.....	205.89	
		590.46
Incidentals, meetings, freight, etc.....		1,798.62
Publications:		
Printing, binding, etc.....	9,052.96	
Supplies, etc.....	409.56	
Salaries.....	7,547.23	
		17,009.75
Researches and explorations: ²		
Special services.....	1,707.00	
Zoological nomenclature.....	900.00	
Travel and field expenses.....	1,750.55	
Supplies, etc.....	371.45	
Salaries.....	516.00	
		5,245.00
Hodgkins fund:		
Investigations, publications, purchases, etc.....	2,001.58	
Salaries.....	1,549.48	
		3,551.06
Resser researches in paleontology (grant from National Academy of Sciences).....		1,262.20
		63,883.18

NOTE.—The above expenditures are made from income from General fund and Hodgkins fund, together with interest from reinvestment of income, donations, and balances from previous years.

¹ Funds for this work include cash donation by Secretary Walcott of \$833.33, in November, 1922.

² Funds for this work include:

Interest of Walcott Research fund.....	\$720.00
Cash donation, November, 1923, by Secretary Walcott.....	833.33

1,553.33

INTERNATIONAL EXCHANGES

Mr. WOOD. The next item is international exchanges. The appropriation asked for is \$42,000.

Doctor WALCOTT. Doctor Abbot will report upon that.

Doctor ABBOT. The reports for the first five months, for the international exchanges, show that the number of packages handled has increased about $7\frac{1}{2}$ per cent over the preceding year for the same months and the items of cost of running the exchanges have not altered much.

The item of ocean freight to England and Japan has increased, as has also the same item to Norway, but in general the item of freight has remained so nearly stationary that there is no more than a few hundred dollars difference against us which comes from that account.

However, the Bureau of the Budget has revised the salary arrangement to some extent, having transferred half of my salary, which was carried by international exchanges, entirely to the astrophysical observatory appropriation, and a reallocation of the reclassification of salaries made since the last fiscal year closed, has made certain changes. So that, taking everything into consideration, the Bureau of the Budget has estimated for 1926, \$42,000, and on the same scale, taking into account these reallocations of salaries, etc., we had for the work last year \$4,260 more. So that, with the increase of $7\frac{1}{2}$ per cent in the amount of business which is offered us to do, we are nearly 10 per cent lower in the amount of funds available to do that business in accordance with the estimates of the Budget for the fiscal year 1926.

Mr. WOOD. You do not have to accept all of the business that is offered you, or make all the exchanges?

Doctor ABBOT. I am glad you asked that question, Mr. Chairman. Something of the same kind was brought up last year.

In the year 1886, and proclaimed January 15, 1889, a convention was entered into by the United States and a number of other countries, whose names I need not now rehearse, which provided:

ARTICLE I. There shall be established in each of the contracting States, a bureau charged with the duty of the exchanges.

ARTICLE II. The publications which the contracting States agree to exchange are the following:

1st. The official documents, parliamentary and administrative, which are published in the country of their origin.

2nd. The works executed by order and at the expense of the Government.

Article VII is as follows:

The bureaus of exchange will serve in an officious capacity, as intermediaries between the learned bodies and literary and scientific societies, etc., of the contracting States, for the reception and transmission of their publications.

It remains, however, well understood that, in such case, the duties of the bureaus of exchange will be confined to the free transmission of the works exchanged and that these bureaus will not in any manner take the initiative to bring about the establishment of such relations.

In establishing the Smithsonian Institution as an agency of exchange, Congress acted much earlier than this treaty. This treaty was probably brought into being for a reason which I will explain in a moment.

A resolution approved March 2, 1867, provides as follows:

That 50 copies of all documents hereafter printed by order of either House of Congress, and 50 copies additional of all the documents printed in excess of the usual number, together with 50 copies of each publication issued by any department or bureau of the Government, be placed at the disposal of the Joint Committee on the Library, who shall exchange the same, through the agency of the Smithsonian Institution, for such works published in foreign countries, and especially by foreign governments, as may be deemed by said committee an equivalent; said works to be deposited in the Library of Congress.

This, I think, probably grew out of the suggestion on the part of the Librarian of Congress which I find recorded in the Smithsonian report for the year 1875, as follows:

In 1867 a proposition was made to the Institution by the Librarian of Congress, relative to establishing a system of exchange of official documents between the Government of the United States and those of foreign nations.

The object was to secure regularly and systematically all reports and other documents relating to legislation, jurisprudence, statistics, internal economy, technology, etc., of all the nations, so as to place the material at the command of the committees and Members of Congress, heads of bureaus, etc.

I find from the Smithsonian report, 1886, that the Librarian of Congress at that time, finding that the matter from foreign countries was being deposited in the Library of Congress in a fragmentary fashion, so that sets were incomplete, an agent was sent abroad at the joint expense of the Library of Congress and of the Smithsonian Institution. He succeeded very largely in filling those gaps in the official sets in the Library of Congress which had grown up owing to the failure on the part of foreign governments to exchange fully all their publications.

But, however, the matter again lapsed, and then I suppose it was, sir, that the treaty relation of 1886 was entered into, for the express purpose of binding the countries officially to this exchange of publications.

So that you see, sir, the Smithsonian Institution, which originally established agencies in foreign countries for its own use in the transmission of publications abroad, and for the reception of foreign publications which it desired, was asked by the Government to undertake this exchange duty for the General Government and the country at large.

The matter of selecting the number of sets of public documents and what documents should be selected, was placed in the hands of the Joint Committee on the Library and the Librarian of Congress. So that, as far as the public documents are concerned, the Smithsonian Institution acts merely as a forwarding agent. It has no business to inquire into the necessity or desirability of it. This is arranged for by your own committee, the Joint Committee on the Library, in consultation with the Librarian of Congress. The same is true of publications of learned bodies, according to Article VII of the treaty of 1886.

Mr. WOOD. Has this committee on the Library, at any time, gone over this to see whether or not the exchanges are worth while, or what exchanges should be made and what exchanges should be dropped, or anything of that kind?

Mr. DORSEY. They do not send full sets to all countries, but discriminate between them, sending only partial sets to some, from which we do not receive returns that would be commensurate with full sets of our publications.

Mr. WOOD. Give us in a word, some information about these exchanges. What are they?

Doctor ABBOT. Fifty-nine full sets of the United States official documents and 38 partial sets are now being sent through the exchange service regularly to the depositories abroad.

Mr. WOOD. What does that comprehend?

Mr. DORSEY. Everything published by order of Congress.

Doctor ABBOT. It would be entirely in accord with acts of Congress that that should be done.

Mr. DORSEY. And with the treaty.

Mr. WOOD. How nearly current is this work now?

Doctor ABBOT. It is very closely up to date. We keep it just as close to date as it is possible to do. Publications are continually coming over from the Government printer and are assigned to the different countries under the direction of the Librarian of Congress and the committee in Congress. To certain of the more important countries, shipments are made every week and to other countries at longer intervals. I think every country receives something once a month.

Mr. WOOD. What is the expense incurred in making these exchanges?

Mr. DORSEY. Do you mean the appropriation made for the international exchanges?

Mr. WOOD. How is it used?

Mr. DORSEY. Last year we spent for transportation \$18,400. Rather, that is the estimate for this year. We spent last year, 1924, \$17,193. Special, miscellaneous, current expenses, \$1,200. Transportation, conveying, equipment, \$2,914. Supplies and materials, \$455, making a total of \$46,076.

Mr. WOOD. It is very largely a matter of transportation?

Mr. DORSEY. It is practically all transportation.

Doctor WALCOTT. Transportation and packing.

Mr. WOOD. There are no salaries involved in this?

Mr. DORSEY. Yes, sir. The salaries amount to \$26,470.

Mr. WOOD. To whom are those salaries paid and for what purpose?

Mr. DORSEY. Clerks, packers. It is paid to the people engaged in transportation and carrying on of the correspondence. There is a good deal of correspondence, Mr. Wood. For instance, if the State Department gets an inquiry from one of our consuls saying that they want certain statistical information, such, for instance, as municipal statistics. They will refer that to our international exchange service and we will write to the mayors of, perhaps, 20 principal cities in the United States and ask for their publications along the line of this inquiry. We get those and send them out.

There is a great deal of correspondence conducted in that way. So, it is not altogether a transportation office.

Mr. WOOD. It seems to me, from the small number of publications that are exchanged, that your clerical force is out of all proportion to the amount of business you do.

Mr. SUMMERS. It might be interesting to know the total number of publications that are handled.

Doctor ABBOT. I have here the last report of the Smithsonian Institution for the fiscal year 1924. United States parliamentary documents sent abroad, 176,290 packages.

Mr. WOOD. What do you mean by packages? How many publications are there in a package?

Mr. DORSEY. There might be a dozen and there might be one. It is a shipment to one address. We have no way of telling that, sir.

Doctor ABBOT. Departmental documents sent abroad, 134,401 packages. Miscellaneous, scientific, and literary publications sent abroad, 107,034 packages. Received from foreign countries a total of 42,933 packages, making a grand total of 460,658 packages forwarded through the exchange.

Mr. WOOD. Then, I suppose, you have the charge of the distribution of the contents of these packages after they are received here. What becomes of them after you get them?

Doctor ABBOT. We have the addresses to which they shall go. A large number of them come to the Library of Congress. The Library of Congress, I suppose, by this time, has 200,000 or 300,000 volumes, it may be even millions, which have come through in this way.

Mr. WOOD. Are any of these furnished to other libraries throughout the country?

Doctor ABBOT. Yes, sir; there are large libraries which receive the documents from abroad.

Mr. WOOD. Regularly or upon request?

Doctor ABBOT. Regularly and also upon request. Certain of them receive them regularly and others upon request.

Mr. WOOD. Very well, proceed with your statement.

Doctor ABBOT. I do not know, sir, but I have practically completed it. The state of affairs is, that in accordance with the instructions which we have to work upon we have been doing a business of about 7½ per cent larger for the first five months of the current year than we did for the corresponding period of the previous year. In accordance with the estimate of the Bureau of the Budget, we are expected to do this business in 1926 for \$4,260 less.

Mr. WOOD. Can you do it?

Doctor ABBOT. I do not think so, on account of the undermanning of our force. We tried to save the salary of a clerk, which position has not been filled for the last year.

Mr. WOOD. Did you present all these details which you have presented here and the necessities for this appropriation to the Budget?

Doctor ABBOT. Yes, sir; we did. As to that place of the clerk: We began to go behind and about a week or two ago, we decided we would employ, for the next six months, a clerk up to the 1st of July. There will be no possibility of continuing him after that time.

with the amount of the appropriation which is proposed in the Budget, even though we do go behind.

Mr. WOOD. When were these estimates submitted?

Mr. DORSEY. September.

Mr. WOOD. Have you made any request to the Budget for a supplemental estimate?

Mr. DORSEY. We sent up at the time the regular estimates were sent in, supplemental estimates of our needs.

Mr. WOOD. Did you go up and present the necessity for it?

Mr. DORSEY. We had a hearing before the Budget.

Mr. WOOD. Upon the supplemental estimates?

Mr. DORSEY. They did not ask us for any information about the supplemental estimates.

Mr. RAVENEL. We were asked to furnish a preliminary estimate, which included everything that we desired or needed. We were then notified that by direction of the president, the total budget for the Smithsonian Institution would be so much, which was about \$40,000 less than the appropriation, and the regular estimates were made based on that cut.

Mr. DORSEY. That is \$40,000 below the current appropriation.

Mr. RAVENEL. \$40,000 below the present year.

Mr. WOOD. That is for all your items?

Mr. RAVENEL. Yes, sir. We had to adjust our estimates so that we could state our position before the Budget on that amount.

Mr. WOOD. Are you going to endeavor to arrange your activities to live within the estimates?

Doctor ABBOT. We do that all the time, sir. I have been in the Smithsonian Institution for about 30 years and we have been squeezing pennies all the time until they squealed. It is our usual policy, and notwithstanding that, the gentlemen of the Budget subjected us to horizontal cuts of 10 per cent. That is the substance of the matter.

Mr. WOOD. I suppose they have to adopt some sort of a policy, if they do not want to subject themselves to criticism. But it seems to me that some of these people could have been subjected to a cut of more than 10 per cent and some of them less than 10 per cent, in that way, perhaps, arriving at a more equitable result.

INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE

Mr. WOOD. The next item is the International Catalogue of Scientific Literature.

Mr. GUNNELL. Mr. Chairman, I have made the statement before this committee each year for the past three years that the actual publication of this catalogue has had to stop on account of international policies and international exchange rates and excessive publishing costs. By the convention held in Brussels, in 1922, the principal nations who had heretofore carried on the work, agreed to keep their regional bureaus in being, so that when the work could be reorganized and publishing costs met, we would not have to make up lost time in going over ground which should have been gone over currently.

That has been the policy. Each year you have given us an appropriation which included about \$1,000 more than was actually required for the present work of the bureau. This sum is normally used to have certain classification done. Pending reorganization, there is no necessity for having this part of the work done, therefore about \$1,000 has reverted to the Treasury. Recently, as Mr. Ravenel said, we received an order from the budget that we should cut \$40,000 from the Institution's appropriation. So that we took about \$800 of that \$1,000 out of the international catalogue appropriation. The appropriation as it stands now, simply keeps the bureau going.

Mr. WOOD. If that \$1,000 reverts back in any event, you are not hurt by that?

Mr. GUNNELL. No. Until the work is reorganized, that money is not needed. That cut of \$800 is all right. We have \$200 left over to keep the wolf from the door, but I hope that will not be taken off.

ASTROPHYSICAL OBSERVATORY

Mr. WOOD. The next item is for the astrophysical Observatory. Who presents that?

Doctor WALCOTT. May I give you a general statement in connection with that?

From a practical point of view, men have become accustomed to considering as important only those things which appear to be of the greatest importance at the time. We have learned as the result of scientific and historical research that determination of events in the near future may be dependent upon circumstances originating in more or less distant regions and far back in the past. We have recently had an illustration in our elections. It is highly probable that the political situation in the United States for the next four years was largely determined by the conditions of a group of our population engaged in occupations to a large extent directly dependent upon agriculture. We know that the character of the crops may depend upon what is usually called exceptional weather conditions; that the state of the earth's atmosphere controlling the weather may be due to minute but determined influences arising from variation and radiation of the sun, and the variations of the sun may be attributable to little understood physical changes within that body. The study of such changes in the sun over a period of time is necessary for understanding other physical processes involved. Such study appears to be making it possible to obtain some understanding of the future of the sun, of our weather, and all that is dependent upon it.

As an illustration of this, the sun has numerous spots upon its surface about once every 11 years. That is, the sun spot period is 11 years. When those sun spots are very numerous, they break the surface of the sun and a great deal more heat comes out. It is something like stirring up a furnace fire. You get more heat from the interior. When these spots turn around toward up, the average heat coming out is greater.

I have here a little diagram of the variation of the sun from 1918 to 1924. On that is shown very clearly that during the period of

high sun-spot frequency, whose maximum occurred about 1917 to 1918, the sun's heat was higher and during low sun-spot frequency it was less. That perhaps accounts for the decided changes of weather that we have been having in those years from 1919 to 1924.

I will not speak further of that just at this moment.

In considering the greater questions of research in relation to the welfare of man, the region occupied by any one nation is usually too limited, and it is necessary for understanding of the problems and of their solution to attack them from widely separated areas. Thus the United States must cooperate with Canada and Mexico in order to write the story of its natural resources, its vegetable and animal life, or its people.

The presence of nations or groups of peoples with political boundaries has little relation to the operations of nature that involve large areas and often the entire earth. This places upon each nation two kinds of duties relative to the study of the problems of human welfare with which it may be concerned:

1. Each nation carries the whole responsibility for guardianship of all data or records within its territorial limits. Such guardianship concerns those things which relate to one nation apart from others and also those which have to do with general questions touching wider regions, including several national units. Inasmuch as understanding of many problems can be solved only by aid of data secured from several national areas, each nation has a moral obligation to the others to protect whatever is of importance to them.

2. The understanding of much that is of first importance depends upon the cooperation of research carried on not only in the nation immediately concerned and for its own advantage, but to make available the information that may be secured in other parts of the earth.

SOLAR RADIATION INVESTIGATIONS

In the case of the investigations being carried on by the Astrophysical Observatory under the direction of Doctor Abbot, we wish to maintain observations of the sun's radiation, which is the source of energy on which all agriculture, all business, all life itself depends. The observations are not of doubtful value. They have passed through the developmental state. Their usefulness to mankind is demonstrated. The question immediately before us is whether these investigations shall be supported in such a manner as to permit of bringing to bear upon them the information that can be secured within our national boundaries and also that which can be best secured in regions of the earth where conditions are most favorable.

At the present time, Mr. Chairman, the United States carries on investigations through the Agricultural Department in all sections of the earth and secures information through the State and Commerce Departments in foreign countries that will be of service to our people, and, in turn, we give all nations freely the results of our research and experience.

It is more than probable that international understanding brought about through mutual contracts and the working together of scientific and intellectual representatives of various peoples with disre-

gard of national boundaries and self-interests will do more toward bringing good feeling among the peoples of the earth than political effort.

That is a general remark, Mr. Chairman, but the reason for my giving these general principles is that we have in this particular investigation which Doctor Abbot has been carrying on, a problem that demands that it be carried on not only within the boundaries of the United States, but also outside of the boundaries of the United States. As stated, we are doing work in foreign countries now through the Agricultural Department. They are seeking for new plants, new vegetable products, new animals throughout the world. And, of course, our State and Commerce Departments are also seeking information abroad.

During the past few years, Doctor Abbot has been developing this solar work, until now it is fully established. He has received through the generosity of a private individual, altogether, the sum of \$90,000, with part of which he has been able to establish and maintain an observation station in Chile. That observation station, and the one which we have in Arizona, can be checked up against the other, which is very necessary to avoid errors arising from imperfect local conditions at one station.

We would like to establish a station in southern Africa and one perhaps in the drier regions of Asia, but that is not immediately before us.

Doctor Abbot has prepared a statement here. I think Mr. Moore asked for a copy of it. Perhaps he will present it. It gives the history of this movement and really what should be done in order to get the greatest results from it for the future development of the causes of atmospheric changes, the more accurate prediction of the weather, and through these, for the general welfare of our people.

If we are able, in the course of a few years, which seems entirely probable now, to predict the weather accurately for from five to fifteen days ahead, it will be of great service to all interests.

Mr. Wood. Our weather man is now under the Department of Agriculture; is he not?

Doctor WALCOTT. Yes.

Mr. Wood. Is there any correlation between Doctor Abbot's department and the Agriculture Department?

Doctor WALCOTT. Mr. Chairman, we asked Professor Marvin, the Chief of the Weather Bureau, for his opinion of this work and there is an accompanying letter here which gives it. There is close cooperation with the Weather Bureau, but they are not doing this kind of work. It is astronomical work and the work of physicists. They have no equipment and they have no men to carry it on.

Mr. Wood. On what do they base their weather predictions?

Doctor WALCOTT. Upon the records that come to them of what is going on.

STATEMENT BY HON. R. WALTON MOORE OF VIRGINIA, A REGENT OF THE SMITHSONIAN INSTITUTION

Mr. Moore. Mr. Chairman, apropos of what Doctor Walcott stated awhile ago, I have here a statement with reference to this

particular branch of the matter that he has prepared and I would like to put it in the record. It summarizes the present conditions and also states the needs.

I will say this, Mr. Chairman: As a practical man, the first paragraph of this statement appeals to me. It is all of the statement that I will read.

In persuading Congress to support the Smithsonian Astrophysical Observatory many years ago, Langley held out the hope that a thorough knowledge of the sun's radiation—that energy which supports all growth and life on the earth—might lead to the possibility of prediction of the good seasons and the bad.

That is the result, of course, to which the workers in the Smithsonian Institution are moving.

Relative to your question awhile ago as to cooperation with the Agricultural Department, this work is quite independent of what is being done there. It is stated in the next paragraph, for instance:

The Smithsonian Institution has invented all the instruments and the methods required for these studies.

I think perhaps to abbreviate the hearing, it might be well to put this in.

Mr. Wood. Yes, I shall be very glad to have it in.

Doctor WALCOTT. Mr. Chairman, as Mr. Moore says, this work is independent of the Agricultural Department.

Mr. Wood. I suggest that you put in the letter of Doctor Marvin also.

Mr. Moore. That is included in the statement.

Doctor ABBOT. Not only that, but there are several other letters. We have a letter here from the chief of the meteorological service of Great Britain, Doctor Simpson, in which he very cordially recommends this work.

Mr. Moore. Suppose we introduce along with that statement these letters?

Mr. Wood. Very well.

(The statement and letters referred to are as follows:)

THE SMITHSONIAN ASTROPHYSICAL OBSERVATORY

In persuading Congress to support the Smithsonian Astrophysical Observatory many years ago, Langley held out the hope that a thorough knowledge of the sun's radiation—that energy which supports all growth and life on the earth—might lead to the possibility of prediction of the good seasons and the bad.

We invented the instruments and the methods required for these studies. We discovered the variation of the sun. After maintaining, at personal sacrifice, observing stations on desert mountains many miles from the nearest desert towns, both winter and summer for years, we are at last close to realizing Langley's dream.

For two years, with financial aid from a friend of the Institution, one of the foremost meteorologists of the world, with several assistants, has worked on the problem of determining the effects of the sun's variation on the temperature and barometric pressure of the earth. The results are definite and convincing. They are just being made ready for publication. Within the next six months they will be available and will create a world-wide demand for the continuance of our work and the expansion of it.

Nobody else in the whole world is making these observations of the variation of the sun but the Smithsonian Institution. Nobody else knows how to make them but our trained observers. If we stop the work it is ended for the whole world.

Hitherto, the congressional appropriations have been insufficient to support this work, notwithstanding its importance to the public. The Smithsonian Institution has thrown into it for six years one-tenth of its private income. Mr. John A. Roebling has contributed for it in the past four years about \$90,000. He has built observatories, installed telephone lines, transported observers, paid for instruments, supplemented salaries to enable men with families to live in those deserts. He declines to continue his support after July 1, 1925, feeling that having brought the research through its developmental stage to a successful outcome, it is now the duty of the Government to continue it for the public welfare.

I. What does the work require yearly to maintain it as hitherto, under present reclassification of salaries:

(1) A central coordinating bureau for computations, publications, purchase of supplies and preparation of instruments at Washington:	
Personnel—	
1 director	\$5, 200
2 physicists, at \$3,800	7, 600
1 computer	1, 680
1 instrument maker	2, 100
1 charwoman	900
(2) An observing station on a mountain in Southwestern United States:	
Personnel—	
1 field director	3, 000
1 assistant	1, 680
(3) An observing station on a mountain in Chile, in South America:	
Personnel—	
1 field director	3, 000
1 assistant	1, 680
(4) Transportation of personnel (average per year)	800
(5) Subsistence of 4 field observers	4, 000
(6) Daily telegraphic reports from field stations	800
(7) Purchase of supplies and transportation of them	5, 000
Total	37, 440

II. What means are in sight for it in 1926:

(a) Smithsonian private funds	6, 000
(b) Recommended by Bureau of Budget	21, 620
Total	27, 620
Deficiency if no relief comes	9, 820
	37, 480

III. Why are we so badly off in 1926 as compared to 1924:

(a) Reclassification first raised our salary roll above appropriation plus bonus by	3, 600
(b) Subsequent revision of reclassification since July, 1924, added	1, 600
(c) Bureau of the Budget required reallocation of one-half of director's salary from international exchanges to Astrophysical Observatory	2, 600
Total increase of salaries since 1924 over which we had no control	7, 800
(d) Loss of Mr. Roebling's support for running expenses, averaging	8, 000
	15, 800

To which add all unmentioned 1924 resources for comparison below:

(e) Appropriation for 1924	15, 500
(e) ¹ Bonus	1, 580
(f) Smithsonian private funds	6, 000

On 1926 scale, comparative amount available in 1924	38, 880
Compare this with figure needed for 1926, at top of page	37, 440

(IV) What do competent judges think about the value of the work?

Copies of letters from the chiefs of our Weather Bureau, the British weather service, from Doctor Bjerkness, the eminent Norwegian meteorologist, and also a unanimous resolution of the National Academy of Sciences passed in response to a request for advice by the Secretary of the Smithsonian Institution are appended.

(V) What shall we do about it?

(1) Ask Congress to appropriate the amount of the estimate which we sent to the Bureau of the Budget for 1926, namely, \$31,180.

(2) If Congress declines, try to raise the necessary funds from private individuals.

(3) If that also fails, cut off the work just as it becomes of incalculable public value.

(VI) Is the provision heretofore proposed adequate?

No. There should be two field observatories additional to the two now operating.

Why? (1) Because many days are lost entirely owing to cloudiness at both stations. (2) Because many days are poorly observed owing to unfavorable conditions of sky at one or both stations. Consequently, we lack, even now, a satisfactory record of the variations of the sun.

(VII) What additional provision should be made?

Two new field stations should be operated continuously in addition to the present two. They should be located in desert mountains of Africa and Asia.

(VIII) What would this cost?

(a) For reconnaissance.....	\$5,000
(b) For apparatus, 2 sets, at \$8,000.....	16,000
(c) For installation, including transportation, buildings, and furnishings, 2 sets, at \$10,000.....	20,000
Initial cost.....	41,000
(d) For yearly upkeep, 2 stations, at \$10,000.....	20,000

No addition to the central bureau at Washington would be needed.

(IX) Do you ask this \$61,000 for 1926?

No. But \$5,000 for reconnaissance could be used in 1926 most profitably.

UNITED STATES DEPARTMENT OF AGRICULTURE,
OFFICE OF THE CHIEF, WEATHER BUREAU,
Washington, April 28, 1924.

Dr. CHARLES G. ABBOT,

Assistant Secretary, Smithsonian Institution,
Washington, D. C.

DEAR DOCTOR ABBOT: Replying to your letter of the 12th instant, I am very glad of the opportunity of expressing my views regarding the desirability of continuing the solar radiation station at Montezuma, Chile, after July, 1925.

When we remember that without the heat and light received from the sun life on the earth would be impossible, it becomes evident that any facts that can be established relative to the sun, and especially as to the rate at which it radiates heat and light to the earth, are of fundamental importance.

With reference to the work of the Astrophysical Observatory of the Smithsonian Institution, I have already made the following statement in the Monthly Weather Review for March, 1920, page 150:

"The solar radiation investigations conducted by Doctor Abbot constitute a monumental research of the highest possible order and command only the admiration of all. * * * The whole question of short and long period solar variability, and the terrestrial response thereto in terms of weather, is obviously one of great importance to applied meteorology and to science generally. It is very necessary, therefore, that the splendid observational work done by the Astrophysical Observatory be generously supported and extended."

At this point I would like to say emphatically that I consider the systematic and continuous observation of the intensity of solar radiation to be of basic and fundamental importance, and I think it is a mistake to try to justify these observations on the ground that they will enable us to improve the forecasting of the weather from day to day. We do not know as yet what may be the ultimate practical value of the knowledge to be gained by a long series of observations, but the collection of the observations is necessary because the data constitute important facts of a fundamental, scientific character, and are pretty certain ultimately to have important practical applications to the welfare of man. The basic research is fully justified on its own merits, leaving the practical application of the information gained to be developed in the future.

For the determination of the law of the variability of solar radiation continuous observations are required for a long period of years at two or more stations as widely separated as possible. The stations of the Astrophysical Observatory at

Montezuma, Chile, and on Mount Harqua Hala, Ariz., seem to be admirably adapted for this observational work, and the observatory staff has the requisite skill and experience to handle the delicate apparatus required and make the necessary complicated reductions. The small sum required to maintain the station at Montezuma, now that it is equipped, will in my opinion be money well invested.

Very truly yours,

C. F. MARVIN, *Chief of Bureau.*

METEOROLOGICAL OFFICE, AIR MINISTRY,
ADASTRAL HOUSE, KINGSWAY,
London, W. C. 2, May 14, 1924.

DEAR DOCTOR ABBOT: I have received your letter dated April 12 asking for my opinion regarding the desirability of maintaining the Montezuma solar station after July, 1925.

Surely on this matter there can be no two opinions. The fluctuations in the amount of radiation emitted by the sun, which you and your collaborators have demonstrated, are of such fundamental importance to astronomical, geophysical, and meteorological science that I can not imagine scientific opinion resting satisfied unless arrangements are made for observing and recording these fluctuations. That we are not able at the moment to apply the knowledge gained to clearly demonstrated, practical and economical purposes does not weight at all with scientific opinion. If astronomical research is a fit subject for the expenditure of money, the branch of astronomy concerned with the variation of solar radiation can not be allowed to suffer for want of funds. I realize that this view is open to the attack that if the work is of so much importance to the rest of the world why should America be called upon to provide all the funds. My only reply is that in the existing state of the world, if America does not supply the funds the work will cease. This is a fact and must be recognized as such.

There is still the question as to the necessity for two stations. Past experience affords the best answer to this question. When you first observed the large fluctuations they were so contrary to general expectation that they could not be credited until they had been confirmed by entirely separate observations, taken under largely different climatic conditions. The simultaneous observations at Montezuma and Harqua Hala have demonstrated the reality of the changes.

In the future when other changes are investigated, especially the smaller day to day changes, the same desire for confirmation will be felt if only one station is in operation. I, therefore, think that it will be a great loss to science, to civilization itself, if the Montezuma station is closed before another equally good station is established to check the observations made in Arizona.

Yours sincerely,

C. C. SIMPSON.

OCTOBER 30, 1924.

Doctor ABBOT,
Smithsonian Institution, Washington, D. C.

DEAR DOCTOR ABBOT:

* * * * *

According to the results of the latter years concerning the variability of the solar constant, the problem of weather forecasting must be considered as a combined terrestrial-cosmic one. Variations so strong as those you have found for the solar constant must necessarily exert decided influences upon the meteorological conditions of the earth. The work of Clayton, which I have not had the opportunity to study in detail, seems to show that under favorable conditions even almost instantaneous local effects of the variation of the solar constant may be stated. And on meteorological charts of that extent now at our disposal, the meteorologist could not avoid discovering the effects of such marked variations in the solar radiation, which is the ultimate cause of every meteorological event.

I therefore think that it would be highly desirable that henceforth the daily measured values of the solar constant should be incorporated in the daily meteorological issue from the United States, and thus be set at the disposal of the meteorologists in their daily work all over the world.

As the number representing the solar constant would merely correspond to one word, the incorporation of it in the meteorological issue would not amount to

much from an economical point of view. And I think it would be also of great moral value, reminding the meteorologist every day of the ultimate physical changes of the changes of the weather.

Yours very sincerely,

V. BJERKNES.

NATIONAL ACADEMY OF SCIENCES,

June 5, 1924.

MY DEAR MR. SECRETARY: Your communication of April 12, 1924, and that of the Assistant Secretary of the Institution in regard to funds for the maintenance after July, 1925, of the Chilean observatory under the direction of the Smithsonian Institution were referred to a special committee of the National Academy of Sciences, and I am inclosing, for your information and such as you may desire to make of it, a copy of the report presented by that committee and approved by the academy.

It will be noted that this report recommends that the National Academy of Sciences "advise and request the National Government, through the Director of the Bureau of the Budget and the Appropriation Committees of Congress, to make financial provision for maintaining the Smithsonian Institution's observatory in Chile without interruption of service." Assuming that the Smithsonian Institution will communicate direct with the Bureau of the Budget, the academy will take no further action unless you find that it can serve you further in the matter.

The value of knowing the variations in heat available from solar radiation to the earth can not be overestimated. I am glad that the academy has been given this opportunity to aid in your efforts to secure funds from Congress for the purpose, and hope that your efforts in this direction will be successful.

Very respectfully yours,

A. A. MICHELSON, *President.*

The Hon. CHARLES D. WALCOTT,
Secretary Smithsonian Institution,
Washington, D. C.

NATIONAL ACADEMY OF SCIENCES,

Washington, D. C., April 30, 1924.

Prof. A. A. MICHELSON,
President, National Academy of Sciences, Washington, D. C.

DEAR SIR: Your committee, charged with the duty of considering the proposed program of the Smithsonian Institution for measuring the heat radiations of the sun, begs to present the following report:

Dr. C. G. Abbot, Director of the Astrophysical Observatory of the Smithsonian Institution, several years ago made the notable discovery that the intensity of the heat received by the earth from the sun varies in remarkable extent and manner. Through the last two years, beginning with February, 1922, the sun's heat radiations to the earth have been continuously subnormal. The consequences of this deficiency in heat received cannot be predicted at this time, but the general subject is undoubtedly one of great importance. We regard it as a national duty and a national opportunity that the observations be continued for a long time to come, and certainly through two complete sun-spot cycles of 11 years each.

The principal stations for securing these observations have been located at points noted for their pure skies and their very great number of clear days in the year—at Mount Harqua Hala in Arizona, in the Northern Hemisphere, and at Montezuma in Chile, in the Southern Hemisphere.

The observing station in Chile has been operating successfully since August, 1918, but funds are not in sight to continue its activities beyond July, 1925.

For the reasons briefly stated above, this committee recommends that the National Academy of Sciences advise and request the National Government, through the Director of the Bureau of the Budget and the Appropriation Committees of Congress, to make financial provision for maintaining the Smithsonian Institution's Observatory in Chile without interruption of service.

Respectfully submitted.

GILBERT N. LEWIS,
R. A. MILLIKAN,
W. W. CAMPBELL, *Chairman.*

OBSERVATION STATION, MONTEZUMA, CHILE

Doctor ABBOT. Mr. Chairman, to be a little more specific as to the situation in which we find ourselves, as Doctor Walcott has said, owing to the generosity of Mr. John A. Roebling, of New Jersey, and also taking into account the \$6,000 yearly from the income of the private funds of the Smithsonian Institution which we devote to this purpose, we have been able to maintain now for six years a station at Montezuma, near Calama, Chile, in South America. It is the best station, I believe, in the whole world for that purpose, owing to the absolute lack of rain in that place. Even in the United States in the Southwest, on the California and Arizona deserts, we do not find anywhere conditions so cloudless as we find in that desert in Chile.

I have just completed a summary of the number of days of good observations at each of our two stations. They run about 180 days per year, or about one-half of the available days in Arizona, and 260, or nearly two-thirds, in South America.

But we have not in view, sir, after July, 1925, the means of continuing this South American station. Our friend, Mr. Roebling, declares that having brought this matter through the developmental stage, and having spent something like \$90,000 in promoting the investigations of the radiation of the sun, the investigation of the temperature and pressure of the United States and Canada, and other parts of the world depending upon it, and having arrived now to the point where we see our end, which Langley put before us, namely, the prediction for substantial times in advance of conditions—having in a word passed through the developmental stage, he believes that a matter so valuable to the people, not only in the United States but of the whole world, ought to be taken care of by Government's carrying the whole appropriation. He declines to continue his support, which, exclusive of his other subsidies, has averaged for the purposes of running expenses about \$8,000 a year for a number of years. He declines to continue that support after July 1, 1925.

He leaves us a going concern and he leaves us to keep it going thereafter. If his support then be withdrawn and no corresponding support is obtained from Congress, we must either discontinue the South American station, which is the best one we have, or we must go out and try to find some other person who will take a different attitude in the matter to what Mr. Roebling has very recently taken, namely, that having gone to the expense of carrying the matter through the developmental stage, he leaves us a going concern in the hands of the Government for public benefit.

I am sorry that the publication of this very interesting work which has been referred to on the part of Mr. Clayton, one of the foremost meteorologists in the world, who was a little while ago the chief forecaster for the Argentine Government, is not ready. He is preparing for publication by the Smithsonian Institution, probably within the next three months—six months at the outside—the statement of the investigations which he has carried on now for nearly two years with assistants. His salary and that of his assistants have been provided by Mr. Roebling for this purpose, which is to correlate the variations of the sun, as we find them,

with the temperatures and pressures and other meteorological circumstances of the United States and Canada.

I saw, the other day, some maps which he has prepared and I can give you an idea of what the results are. He takes all of our solar radiation values for six years past and separates them into groups, the high group, the medium high, the medium, the medium low, the low. Possibly that may not be the exact separation, but that gives you the idea.

There may be of these very high values, 50 days, possibly. In the medium values, we shall get a great many more, probably two or three hundred. He takes the mean high value, and then corresponding to each one of the days on which these high values occurred, he takes for some 30, 40, 50 stations, representing in the best possible way the temperatures and pressures of the United States and Canada, he gets the average values of these meteorological data. He plots, just as you see on the weather map, contour lines giving the areas of equal standing of the mean condition of the barometer, and the mean condition of the temperature, corresponding to the high solar value, the medium, and the low, and he not only does this for the day in question but for the next succeeding day and the day after that, etc., so that he can get the history of what is going to happen if the solar radiation runs high medium or low. From this, he has gotten some extremely interesting data. I am sorry the data is not ready to present to you, and it will not be ready to present for several months.

RESULTS AND FORECASTS FROM SOLAR RADIATION ACTIVITIES

Mr. Wood. Can you give us any example of the practical results that have come from this?

Doctor ABBOT. Yes, sir; also through Mr. Roebing's generosity we have been getting daily telegraphic reports of solar radiation from both stations now for over a year. We have got the work standardized and arranged in such a manner that the boys can observe to-day and do all the computing to-day, for five independent determinations of the intensity of the sun's rays. They telegraph that result to-night. We receive it the first thing as we go to work the next morning and telegraph it to Mr. Clayton, who receives it before noon. That afternoon he sends us—using New York City as the center; there are millions of people around there, and it is one of the most interesting regions in the United States—a forecast, 3, 4, 5, and 25 days in advance, as to the temperature which you may expect in New York City. Not only that, but at the close of each week, he sends us a forecast as to what the character of the week which is to come will be. Also, at the close of each month, he sends us a forecast of what the character of the month which is to come will be.

As it might seem to the practical man he gets better results in his general forecast for the week and the month than he does for the individual day, because, as I may explain, if there be a rapid change of temperature, so that the curve is going to fall rapidly from high to low value, if he misses the exact time by only 12 hours on his prediction 5 days in advance, he will get large differences, even though he predicted a fall for practically the proper epoch. So that very naturally, the relation between the forecast for five days in

advance and the actual event is not so close as we hope it will be, if the work is continued.

But there is not any doubt at all, sir, that there is provision shown there as to the temperatures which will prevail in New York City three, four, and five days in advance.

Mr. WOOD. What do you do with those forecasts?

Doctor ABBOT. We keep them. We are not going in competition with the Weather Bureau.

Mr. WOOD. Does the public get any benefit from it?

Doctor ABBOT. This is an experiment, sir, entered into a little over a year ago through the private support of Mr. Roebling, for the purpose of seeing whether there was anything in it.

Mr. WOOD. Have you kept tab on these forecasts to ascertain what degree of accuracy has been attained?

Doctor ABBOT. Yes, sir; that is the very purpose of sending them to us, so that, three or four days before the event, we would have the whole matter in hand. So that no subsequent change of mind or anything else on the part of the forecaster could affect us. So that we, at the Smithsonian Institution, being an unprejudiced, scientific establishment, will be able to give the correct interpretation of the forecast.

Mr. WOOD. What per cent of accuracy have you found has been attained?

Doctor ABBOT. If we should go into the matter of percentages on these detailed forecasts of which I spoke, three, four, and five days in advance, we should get into a matter which no meteorologist in the whole world has yet decided, as to what would be a proper basis of statement.

I need not go into that affair, because it would take me half an hour to explain.

In regard to the general forecasts however, he predicts, for example, that a certain week or a certain month is going to be one or two degrees above the normal or one or two degrees below normal. That is for one week or month. He predicts that another week or month is going to be generally below normal or above normal.

In regard to those cases, as I recollect it, sir, the percentage of hits is in the neighborhood of 65 to 70 per cent. That is how many pluses and minuses he gets right.

I asked him the last time I saw him how much use he made of the weather map, that is, the information which was available by telegraph from all over the country and the world. He said that for a time he made some use of the weather map.

Perhaps I will have to explain somewhat the nature of the method which he uses. He finds that certain actions of the sun affect instantly certain centers of atmospheric action in our northwestern States or Canada, but that it takes three days, on the average, for the effect of that state of affairs to reach New York City. Three days is the mean time of drift. On some occasions, owing to certain circumstances, the drift may be a little slower or faster.

For a time he used the maps as an indication of what the rate of the drift was going to be. The last time I saw him I asked him how much of his success in long-range forecasting depended upon the variation of the sun and how much on the knowledge of the weather

map. He said that whereas at first he thought he was improving his long-range forecasts by the aid of the weather map, he believed now he would get as good results if he neglected it altogether.

AMOUNT OF APPROPRIATION NEEDED TO CARRY ON WORK FOR 1926

Mr. Chairman, to return to our actual problem, the point is that the Budget proposes for 1926 the amount of \$21,620.

Mr. Wood. They raised you somewhat?

Doctor ABBOT. If we do not discharge any of our force, over \$21,000 will have to be paid under present reclassification for salaries, so that, if we receive what is estimated by the Budget for 1926 we will have a total sum of \$300 or \$400 for the purpose of buying and transporting to the field that photographic plates, which make the records of this work, for the transportation of observers, for their subsistence in the field, for every purpose you can imagine for the support of our stations, including, besides the field stations, the central coordinating bureau at the Smithsonian Institution.

Mr. Wood. How much do you need in addition to this appropriation?

Doctor ABBOT. We asked the Budget for \$31,180. That estimate was made after consulting the National Academy of Sciences, which, according to its charter, is instructed to advise the officers of the Government when they are in a quandary and want to know what ought to be done.

Doctor Wolcott wrote to the president of the National Academy of Sciences, stating the condition much as I have done to you, sir. He asked him what the view of the academy would be.

The president of the national academy referred this communication to a committee consisting of Prof. Gilbert N. Lewis (the eminent physical chemist), Professor Milliken (who was lately awarded the Nobel prize in physics), and Dr. W. W. Campbell (the president of the University of California and director of the Lick Observatory), chairman. In the statement, which has been offered in the hearing by Mr. Moore, the view of this committee of the national academy, which was unanimously approved by the academy as a whole, is stated.

The substance of it is that "the committee recommends that the National Academy of Sciences advise and request the National Government, through the Director of the Bureau of the Budget and the Appropriations Committees of Congress, to make financial provision for maintaining the Smithsonian Institution's observatory at Chile without interruption of service." That service can not be obtained without some changes in the estimate by the Budget.

Mr. Wood. What is the smallest amount?

Doctor ABBOT. We asked the Bureau of the Budget for \$31,180. We stand by our guns. That is what we need and what we would like to get.

Mr. Wood. Have you consulted with Doctor Walcott and other members of the Smithsonian Institution as to whether or not there would be a probability of getting this sum or any portion of it from proceeds of any of these other private bequests?

Doctor ABBOT. We are already taking \$6,000 from the income of the Hodgkins fund, which was given by Thomas G. Hodgkins some time ago for the promotion of researches on the atmospheric

air, and that will be added to this amount, making about \$37,000 in total for this work.

There is in the statement a comparative table which Mr. Moore introduced which shows that with this in addition to the sum we asked for from the Budget, we would be substantially on all fours with our conditions last year, 1924.

ADDITIONAL ASSISTANT SECRETARY

Mr. WOOD. You have an item here for an additional assistant secretary for the Smithsonian Institution. The amount in 1924 was \$1,500 and in 1925 it jumped up to \$6,000. Was the amount appropriated in 1924 for a portion of the year?

Doctor WALCOTT. Yes, sir. That was for one-quarter of the year.

ADDITIONAL FIRE PROTECTION

Mr. WOOD. You are striking out the item for additional fire protection for the Smithsonian Institution and National Museum Buildings, including the laying of the necessary 8-inch watermain and the erection of four fire hydrants in the Smithsonian grounds, \$8,500.

Mr. RAVENEL. That \$8,500 has been expended under the direction of the District Commissioners.

Mr. WOOD. There is no longer any use for this language?

Mr. RAVENEL. That has all been spent.

NATIONAL MUSEUM

CASES, FURNITURE, FIXTURES, ETC.

Mr. WOOD. We will take up this item on National Museum.

Doctor WALCOTT. I will ask Mr. Ravenel to explain this item.

Mr. RAVENEL. The appropriation provided for furniture and fixtures by the Budget is exactly the same as for the current fiscal year. We have increased slightly the salaries of six of the seven employees, which puts them in the average rate of the grade to which they properly belong, which is very desirable. We called attention to the fact that we lost one of the best men we had by transfer to the Government Printing Office and have never been able to replace him on account of the low salary provided. These men are doing the highest grade of cabinet work that is done in the Government service. They build all of the exhibition cases we are now constructing, which are used to take care of the specimens that have been collected in previous years. In 1924, we got 369,814 additional specimens, and among them many of very great value and from entirely new territory. Many birds and animals were secured from China through the assistance of Doctor Graham, who is a missionary. He collected the specimens with cheap native labor, and we paid transportation charges.

We expect to expend the appropriation as follows:

For exhibition cases.....	\$5,891.00
Storage cases for study series.....	11,456.32
Glass jars, vials, etc., for the alcoholic collections.....	1,648.95
Pasteboard boxes and trays for small specimens.....	1,175.34
Office and laboratory furniture.....	1,528.39
Miscellaneous.....	100.00

I might say that in making the increase in salaries there was no increase in the appropriation. We have simply taken it out of the balance of the appropriation; that is, the amount provided for the purchase of material, such as lumber, glass, paint and hardware.

Mr. SANDLIN. I see you cut it all off of the lumber and wood part of the appropriation.

Mr. RAVENEL. We had to reduce the estimate for those things to make up for the salaries, and the salaries were absolutely essential to retain those men.

Mr. WOOD. I guess you can get along this year on that amount, can you?

Mr. RAVENEL. Next year we will have to get along with it.

HEATING, LIGHTING, ETC.

Mr. WOOD. The next item is for heating, lighting, electrical, telegraphic and telephonic service. There has been a cut in that.

Mr. RAVENEL. The heating and lighting appropriation is \$77,560 for the current year, and \$74,560 is provided for 1926.

Mr. WOOD. A cut of \$3,000?

Mr. RAVENEL. A cut of \$3,000. This plant heats, lights, ventilates and furnishes power for all the buildings from Ninth to Twelfth Street, and B NW. to B SW., and whether or not we can get along depends entirely on the cost of coal for next year. We expended for this item \$25,563 last year, which was probably the mildest season ever known in Washington.

Mr. WOOD. If it keeps on this way it will be milder this year.

Mr. RAVENEL. How about next year? That is the year we are interested in.

Mr. WOOD. Do you expect to make that reduction of \$3,000 in the coal?

Mr. RAVENEL. We could not put it anywhere else, because mechanical supplies, engineering and electrical supplies, furnace and foundry supplies will cost at least \$3,535, which is less than we have had to run on before.

Mr. SANDLIN. You took it all off of the coal item?

Mr. RAVENEL. Yes.

Mr. WOOD. That is a good thing to take it off of, because if you can not get through we will have to increase it.

What do you mean by "coal and other solids?"

Mr. RAVENEL. That is the Budget term. We had nothing to do with that. We have to follow their definitions. There are a number of employees on that roll, and if there is a limitation of salaries put in this item it would be impossible for us to hire any extra people, which we have found it necessary to do every year.

Mr. WOOD. You always have some surplus by reason of vacancies, do you not?

Mr. RAVENEL. We have up to the present year, but since things have settled down as far as labor is concerned, we have for the first time since the war had a permanent force that has continued as long as a year. The salaries are a little better. The electricians are paid from \$1,500 to \$1,560, and I hope they will stay for another year, but I doubt it very much, because they can go outside and make as much as \$2,000 or more.

Mr. WOOD. Of course we can not, in the Government, compete with that kind of work on the outside, but after awhile we will be paying more, I expect, on the inside than they are on the outside.

CONTINUING, PRESERVATION, EXHIBITIONS, AND INCREASE OF COLLECTIONS

Next is the item for continuing preservation, exhibition, and the increase of collections from the surveying and exploring expeditions of the Government, and from other sources, etc., \$430,000. That is one of the big items?

Mr. RAVENEL. That appropriation is reduced from \$434,482 for the current year to \$430,000. When the appropriation of \$434,482 was made last year it provided for a salary roll of \$413,762 on the basis of the action of the Classification Board. We are actually paying in salaries at the present time \$421,998 on account of the reallocations made by the Classification Board after the appropriation for 1925 was made, which, under the ruling of the Comptroller General, we have to pay.

Mr. WOOD. The estimate jumped from \$312,500 in 1924 to \$434,482 in 1925. There is a difference of \$122,000, practically. To what is that due?

Mr. RAVENEL. To classification.

Mr. WOOD. Was there that much of an increase—\$122,000?

Mr. RAVENEL. Oh, no, sir. You mean in 1925?

Mr. WOOD. In 1924 you got \$312,500, and in 1925 you got \$434,482, a difference of \$122,000.

Mr. RAVENEL. \$378,140 was the amount for 1924, including the bonus.

Mr. WOOD. These figures only show \$312,500.

Mr. RAVENEL. Yes; because they do not take any account of the extra compensation or bonus.

Mr. WOOD. That does not include the bonus?

Mr. RAVENEL. That does not include the bonus.

Mr. WOOD. How much would the bonus have made it?

Mr. RAVENEL. \$378,140.

Mr. WOOD. Well, \$378,140. Then the difference between \$378,140 and \$434,000 represents the increase in salaries by reason of the reclassification?

Mr. RAVENEL. When they made this appropriation last year it was based on \$413,762 for salaries, which included five additional watchmen, also an increase of \$2,000 for freight and \$2,000 for purchase of specimens.

Mr. WOOD. Then what did they do with the balance between that and \$434,482?

Mr. RAVENEL. That is shown in the second column, for the necessary supplies, travel, freight, etc.

Mr. WOOD. Yes, but the whole total only makes \$378,140, the figure we are talking about.

Mr. RAVENEL. But that does not include, sir, the Government bonus.

Mr. WOOD. Yes, but the \$378,140 does include the bonus?

Mr. RAVENEL. Yes, that is right.

Mr. WOOD. You told me a moment ago that the \$312,000 did not include it, but that with the bonus added it made it \$378,140.

Mr. DORSEY. In salaries we had for 1923 in that appropriation \$360,022.28.

Mr. WOOD. Where do you get that?

Mr. DORSEY. At the bottom of the third column, the total of personal service against \$421,998 for the current year.

Mr. WOOD. What I am trying to get at is whether this difference is made up by the increase in salaries due to reclassification?

Mr. RAVENEL. The amount allotted for salaries was \$413,762. Changes in allocations made by the Personnel Classification Board prior to July 1, increased the salary roll from \$413,762 to \$421,998, which leaves a balance of \$12,484 for supplies and material, postal service, traveling expenses, transportation of things or freight, special and miscellaneous current expenses and equipment. In 1925 and 1926 we have had to cut down all of these items in order to meet these additional allocations.

Mr. WOOD. What are you going to do next year in order to live within the \$430,000?

Mr. RAVENEL. Well, sir, the suggestion of the Budget Bureau is that, if necessary, we reduce the force. A reduction of five watchmen is made in the estimates for next year. If you look through the items for supplies, etc., you will see that we leave out any number of things that we will need.

NUMBER OF WATCHMEN AT FREER BUILDING

Mr. WOOD. How many watchmen have you got for the Freer Building now?

Mr. RAVENEL. We have eight watchmen in the Freer Building, paid by the Government at the present time, and five more were provided, which were essential in order that the Freer Gallery should be adequately protected. There are proportionately as many watchmen for the space in that building as for the museum, but there are 34 separate galleries, and it is necessary to have more men, because many of the objects are small and very valuable, and it is believed that it is essential to have additional guards. We estimated for them last year, and they were approved by both the Budget Bureau and the Appropriations Committee. When it came to the point of how we could operate this year we had to make some cuts to try to meet the advance in salaries due to changes in allocation by the Personnel Classification Board, which were made after the appropriation was enacted, and we were therefore unable to put on these five additional men.

Mr. WOOD. Is the purpose of these watchmen to keep people from stealing things?

Mr. RAVENEL. Yes; and to furnish information to the public.

Mr. WOOD. Do you ever miss anything?

Mr. RAVENEL. We have had thefts of various kinds in the museum, but have been fortunate enough in every instance, except one, to

recover the objects and to convict the thief. A very valuable medal presented by the King of Norway and Sweden to Mr. Maynard years ago was stolen, that cost us \$100 to replace. The thief defaced it, and sold it for old gold.

In another case a large piece of metallic gold presented to the United States Government by the Imaun of Muscat was stolen, cut into small pieces, and sold to a number of pawnbrokers. Most of it was recovered, and the thief, who was an employee of the Museum, was sent to the penitentiary for a year.

We only have 48 watchmen to patrol and guard millions of specimens, which are located in the five large buildings, with a total area of 17 acres of floor space.

Mr. WOOD. Did you ever consider the advisability of having a tower watchman, where a man could have a bird's-eye view of the whole thing?

Mr. RAVENEL. In one building guards are so stationed that they can look down in the halls from the galleries; but even then the number is inadequate for the space. We also have electrical alarms in some of the cases. If a man attempts to open a door of a case, the alarm goes off, and he would be caught without any question. But it would be quite possible for anyone to smash one of the glasses, slip his hand in, and take out a small specimen.

In the last year we have had deposited in the Museum by the Secretary of the Treasury the entire collection of coins and medals which has been in the mint in Philadelphia for years. The value of this collection, based on the current prices of rare coins, would run into a million dollars or over. We have been obliged to further reduce the mobility of the force by keeping one man in the numismatic hall night and day.

SUNDAY OPENING

Mr. WOOD. While we are on this subject, something was said this morning about your not keeping the Institution open down there on Sunday because you did not have watchmen.

Mr. RAVENEL. When the buildings are open during the week the employees working in and passing through the halls add materially to the safety of the collections. When we open the building on Sunday, we require exactly double as many men to guard them as would be needed on week days. I was asked by Representative Newton, one of the Regents of the Institution, why we did not open the Arts and Industries Building on Sunday. Secretary Walcott replied that if a small fund for employing temporary men for a half day could be provided that the building could be opened on Sunday at a cost of \$1,500 per annum, which would enable us to hire 10 men, at \$3 a day. This would also mean a slight increase in the heating and lighting appropriation.

The Natural History Building and the Freer Building are now opened on Sundays from 1.30 to 4.30 p. m., when all of the day watch except two or three are used in those buildings.

These men all labor under a disadvantage in that they are the only watchmen in the Government service who do not get time off for Sunday service. We excuse a few on Sunday for the first half of the day, but their average is only about one day per month or less. In the case of those employed under the Superintendent of Public

Buildings and Grounds, I understand that the men in the buildings get a day off for every Sunday and a day off for national holidays.

Mr. WOOD. Do your men get off on holidays?

Mr. RAVENEL. Never. The buildings are open. That is one reason why our turn-over of watchmen is so very great. We employ 48 men, and I think we have on the rolls during the year anywhere from 75 to 90 men.

Mr. WOOD. Are they under civil service?

Mr. RAVENEL. They are under civil service. The appropriation for "Preservation of collections." Mr. Chairman, is the appropriation upon which all of the major activities of the museum depend. Out of this appropriation the scientific and administrative staffs are paid, also the salaries of the watchmen and laborers, and the expense of cleaning and care of the building, and carries a salary roll for 1926 of \$417,516, which will leave \$12,484 for all those other purposes.

Mr. WOOD. What are those other purposes?

Mr. RAVENEL. Stationery, supplies, freight, travel, equipment, postal service, special and miscellaneous services, scientific equipment. Freight and general supplies are the largest items, the former amounting to \$2,050 and supplies \$7,078. We can not control the question of freight as many of the collections that come to us are the result of expeditions from a distance, which are offered to us with the understanding that we pay all freight charges.

Mr. WOOD. In 1924, if we add up the amounts you have for these several miscellaneous items, it only aggregates about \$14,000 or \$15,000.

Mr. DORSEY. No, sir. \$18,118 against \$12,500 for the next year.

Mr. RAVENEL. And I would say here, sir, that we have 24 cases under consideration by the classification board for reallocation, and most of them I expect to see approved, and if they are passed it will add \$3,600 more to our salaries, which, under the ruling of the comptroller we are obliged to pay.

Mr. SUMMERS. Which of these buildings are open on Sunday?

Mr. RAVENEL. The Natural History Building is open from 1.30 to 4.30 every Sunday in the year, and the Freer Building is open every Sunday and closed Monday. The other buildings are open every day in the year except Sunday.

REPAIRS TO BUILDINGS, ETC.

Mr. WOOD. The next item, for repairs of buildings, shops, and sheds, they gave you a raise of \$1,000.

Mr. RAVENEL. \$1,000 was requested for repointing portions of the marble and brick walls above the roof and in the court of the Freer Building. If taken in hand now it will save much money later on.

Mr. WOOD. That building was just completed recently. Do you have to point it up already?

Mr. RAVENEL. Several dark spots appeared in various parts of the building in the past year, and upon investigation it was found that they were due to the cracking and disintegration of the cement in the marble and brick walls above the roof, brought about by expansion and contraction, which allowed the water to seep through. The superintendent, after carefully looking into the matter, secured a bid from several reliable firms in Washington, who claimed that the

damage could be remedied by repointing the walls with plastic cement at a cost of \$1,000. The increase of \$300 that was given to the mechanics who are employed under that appropriation reduces that \$1,000 to \$700.

Mr. WOOD. Maybe you can get the pointing done for \$700.

Doctor WOLCOTT. I think that roof was put on there about 1916.

Mr. RAVENEL. That building took a number of years to complete.

Mr. WASON. What is the roof material?

Mr. RAVENEL. Tar and felt, and skylights made of glass and steel, with copper flashings.

Doctor WALCOTT. All those large buildings have that kind of trouble. You can not help it.

Mr. RAVENEL. The Natural History Building, which was carefully built by days' work, gave a great deal of trouble. We have spent thousands of dollars in repointing the walls in the courts and the entire north entrance.

Mr. WOOD. It seems like every one of these big buildings always has a faulty roof. I don't understand it.

Doctor WALCOTT. It is due to the expansion and contraction as a result of the heat of the sun and night temperature. If you had a seismograph and could put it out here in the rotunda of the Capitol you would find that this building, when the sun comes out in the morning and passes around the building it rises and expands on the east side, and that expansion follows right around, and it settles back on the east as it rises on the west; and that there is a daily movement in that building.

Mr. WOOD. Is it perceptible to measurement?

Doctor WALCOTT. Oh, yes. I have seen it in one of the buildings up at Harvard University, the large museum buildings there, where it is recorded by the seismograph needle, showing the movement of the building, rising from the expansion due to the sun's heat as it moves from east to west and falling back as it cools in the shadows after the sunlight has passed.

Mr. RAVENEL. We expect to use plastic cement, which will not break as the material previously used.

Doctor WOLCOTT. The Congressional Library gave an awful lot of trouble.

Mr. WOOD. There are a lot of leaks in this building now. I saw where it got in this frieze last winter.

Doctor WOLCOTT. You can not overcome that expansion and contraction.

Mr. RAVENEL. As a rule the appropriation for building repairs is spent on repairs to roofs, skylights, windows, and floors, but in the last two years we have had to depart from that rule, because we have had to make very expensive repairs in the Arts and Industries Building, when the plaster in the dome, which is 80 feet high and 60 feet in diameter, fell. The building was erected in 1878 or 1880, and has given little or no trouble until that time. We replaced it with steel at a cost of approximately \$3,800, so that there is little or no danger of its giving further trouble.

During the past spring the plaster ceiling of the hall on the second floor of the Smithsonian Building, occupied by the division of plants, National Museum, was in such a dangerous condition that for the safety of the employees and the collections installed therein, it was

necessary to remove the old plaster and substitute sheet steel for same. An effort was made to secure outside bids for this work, as the hall was 200 feet long, 60 feet wide, and 28 feet high, and it was not thought desirable to undertake the work with our own force. The bids, however, were so high that the Museum undertook the work, which will probably be completed for \$2,000 or \$3,000 less than the lowest bid received.

Mr. WOOD. You do not plaster these public buildings any more, do you?

Mr. RAVENEL. I do not know, sir. I hope not.

EFFECT ON LIMITATION OF APPROPRIATION FOR PERSONAL SERVICES

Mr. WALCOTT. Mr. Chairman, there is a provision in all of these estimates that we have been considering, which reads:

Of which amount not to exceed so much may be expended for personal services in the District of Columbia.

I would like to have Mr. Ravenel explain the effect of that. It has been referred to, I think, in a letter which was filed here by the regents.

Mr. WOOD. I will be very glad to have you explain it.

Mr. RAVENEL. The amount provided for salaries is the exact amount of the salaries of the regular employees, on furniture and fixtures, building repairs, and heating and lighting. Frequently we find it in the interest of economy to transfer men from the building repairs fund to the furniture and fixtures fund, because the cost of furniture is so high outside that we can not afford to have it done by contract.

Under that limitation we would not be able to transfer them, because it would increase the amount limited for salaries. Neither can we hire temporary men. When the building trades here are not busy, and men are out, we can hire them for Government salaries, and thus save money rather than by letting a contract for large jobs. For smaller jobs we simply transfer our own men. It is cheaper sometimes to do it by day's work and sometimes by contract, but with a definite salary limitation we shall be obliged to do it all by contract whether cheaper or not, because we can not add temporarily to the salary roll.

Under another appropriation we have three elevator conductors. We have five elevators, but are only obliged to run the three for the convenience of the public and the staff regularly. During the summer we hire an extra man for three or four months while the regular elevator men are on leave. The same thing is true of our watchmen, laborers, and charwomen, as we have barely enough to properly guard and clean the buildings when the full force is on; that is, we hire a number of temporary men and women to take the places of such employees while they are on leave.

Mr. WOOD. How does this limitation interfere with that?

Mr. RAVENEL. That limitation covers the exact amount of the salaries of the regular people. When a man goes on 30 days' leave, his salary continues, and we will not be able to hire a substitute, because that would increase the salary roll.

Mr. WASON. We could increase those items a sufficient amount to take care of that.

Mr. WOOD. Suppose, for instance, we take this item on page 110, "of which amount not to exceed \$417,516 may be expended for personal services in the District of Columbia," You say that that represents the exact salary roll of the regular employees there. I differ with that. You say it does.

Mr. RAVENEL. I say it is \$600 over.

Mr. WOOD. That it is \$600 more?

Mr. RAVENEL. It is \$616, to be accurate.

Mr. WOOD. Could that amount be increased within the appropriation so as to provide for a little leeway to employ extra men?

Mr. RAVENEL. That is what we would desire if the limitation is to stand.

Mr. SUMMERS. If the limitation is taken out can you get along?

Mr. RAVENEL. Yes, sir; we can.

Mr. SUMMERS. You can operate, then, if this amount of money is put in?

Doctor WALCOTT. It affects all of them. No business concern would attempt to run its business on that basis.

Mr. WOOD. They have got this limitation in every item. It does not apply in this simply, but in all the others. What was the purpose of the Budget in putting that in there?

Mr. RAVENEL. We knew nothing about it until we were advised after the hearing.

SALARY OF DOCTOR ABBOTT

Mr. WOOD. I expect they had in mind a reduction of the personnel in the District of Columbia. It would result in that thing, would it not, which would be a very salutary thing?

Mr. DORSEY. Mr. Chairman, in the case of Doctor Abbott, his salary was paid out of two appropriations. He has charge of two pieces of work there, the astrophysical observatory and international exchanges. One-half of his salary was charged against international exchanges and one-half against the astrophysical observatory. They have transferred his whole salary to the astrophysical observatory. That is, they have put the other half of it in there, but they have made no provision for it.

Mr. WOOD. What was the other department out of which half of his salary was paid?

Mr. DORSEY. International exchanges.

Mr. WOOD. Did they reduce that appropriation?

Mr. DORSEY. Oh, yes.

Mr. WOOD. Did they put it on the other?

Mr. DORSEY. No, sir. The existing salaries in the observatory appropriation for 1925 are \$19,560. They fixed the salary limitation for 1926 at \$19,600, and have transferred \$2,600, one-half of Doctor Abbott's salary to that, and made no provision to pay for it.

Mr. WOOD. If the figure remains as it now stands, you can only pay him \$2,600?

Mr. WALCOTT. No, sir; we will pay him his whole salary.

Mr. DORSEY. We have had to eliminate entirely the services of the one cleaner we had on the observatory roll, and one-half of the salary of Doctor Abbott's assistant, in order to provide for his whole salary and to come within the prescribed salary limitation..

Mr. WOOD. Did you call the attention of the Budget to that?

Mr. DORSEY. Oh, yes, sir.

Mr. WOOD. What did they say?

Mr. DORSEY. They simply told us that the whole appropriation had been fixed for the observatory at \$21,620; to transfer half of Doctor Abbott's salary over to the Observatory from the exchange appropriation, and that the amount for salaries had been fixed at \$19,600 for 1926.

Mr. WOOD. Can you do it?

Mr. DORSEY. No, sir; we can not do it.

Mr. WOOD. Why? Would it decrease the others too much?

Mr. DORSEY. It means the elimination of one of Doctor Abbott's principal assistants. We are only carrying him in the Budget as it exists for six months of the year 1926. It does away entirely with the services of the only cleaner. These salaries had to be cut in order to get within the limitation fixed for salaries. It simply means that the work does not go on, sir.

ADDITIONAL ASSISTANT SECRETARY

Mr. WOOD. We provided some time ago for an assistant secretary there. Was there ever one appointed?

Doctor WALCOTT. Mr. Chairman, the question of the assistant secretary was taken up promptly after the passage of the bill, and after a long search a gentleman was found that we thought would answer the purpose. He had certain engagements and one of them was going to Europe, and so we waited. When I came back in the fall, in October, I expected to find him there, but found a letter stating that he had not been able to make up his mind. The next thing we heard was that he had accepted appointment in a position in connection with the National Research Council work, and that he could not come. Since then I have been making careful study of the situation.

I found two gentlemen who seemed to be men that from their training and experience would fill the place. I sent for one of them to come here, and after talking it all over he finally said, "What is the salary?" I told him the salary was \$6,000. He said, "I have a wife and three boys coming on and I do not think I can come from New York to Washington. I am now receiving \$10,000 in my present place, and while I am willing to make some sacrifice, I can not make that much."

Another gentleman who seemed to be well equipped I found could not come under 18 months, owing to his present engagements. He would like very much to come and take charge of that work. It requires a very high-grade man, and a man who has had experience and training. He should not be over 40 years old, if possible, and a man who is technically trained, and who has had administration experience, and who is a leader of men, in other words, because the work there is to take supervisory charge of research work, of scientific work that is going on under these different branches of the Smithsonian Institution.

Mr. WOOD. The result is, then, that you have not got anybody?

Doctor WALCOTT. We have not got anybody at present, but we hope to find some one. It is very important that the right man should be found, if it is a possible thing to do it. We do not want to merely fill the position for the sake of filling it, but we want to get the best qualified man we can.

PURCHASE OF BOOKS, ETC.

Mr. WOOD. The item for the purchase of books, pamphlets, and periodicals—there are no salaries involved in that?

Mr. RAVENEL. No salaries involved. There is a reduction there of \$500.

Mr. WOOD. For postage stamps and foreign postal cards, \$450. You still use postal cards, do you?

Mr. RAVENEL. We save money by them, sir.

Mr. WOOD. There is a total reduction in all for the National Museum of about \$6,100.

NATIONAL GALLERY OF ART

Mr. WOOD. How about this National Gallery of Art?

Doctor WALCOTT. Doctor Holmes is in charge of that.

Doctor HOLMES. Mr. Chairman, the National Gallery is a department of the Smithsonian Institution which cares for the works of art acquired by the Nation by gift and bequest. The current business of the gallery, financial and otherwise, comes under the uniform system applied by the institution to all of its departments. I am prepared to answer any questions regarding the gallery that you may wish to ask. For nearly a score of years our gifts and bequests have averaged, including the Freer Gallery, values estimated at one-half million per year.

Mr. SUMMERS. What is the total value of your works of art down there now?

Doctor HOLMES. In the gallery, aside from the Freer Gallery, between four and five million dollars.

Mr. SUMMERS. Which building is that located in?

Doctor HOLMES. In the Natural History Building of the National Museum.

Mr. SUMMERS. That is the new one, where the Roosevelt collection is?

Doctor HOLMES. Yes. We have little exhibition space and the art collections are in large part in storage.

Mr. SUMMERS. There are still a lot of the specimens stored?

Doctor WALCOTT. Of the art collections, I should say two-thirds or more are in storage. They are, however, available to students. If you wanted to see them, some one would go with you. They are hung in the corridors and office rooms all the way from the attic to the basement.

Mr. SUMMERS. During the war they almost abandoned the purposes for which that building was erected and had all sorts of war activities in there.

Doctor WALCOTT. There were some 4,500 clerks in there. All the collections were moved back and made up into a solid mass against the rear wall, then a board partition built.

Doctor HOLMES. So far, we have in the gallery only sculptures and paintings. There are still in the Museum large collections of art works that, if we had space, would be brought into the gallery. About 10 different branches are represented, but we have room only for a part of the paintings and sculptures.

Mr. WOOD. In this item of the National Gallery of Art, your appropriation for 1926 is \$20,158, or a reduction of \$158.

Mr. DORSEY. There is an apparent reduction of \$158, but there was added by transfer from the "Exchange" appropriation one half the salary of a clerk-stenographer, \$870, without any corresponding increase being made in the total gallery appropriation. So in effect here is a reduction of \$158 plus \$870, which makes the net reduction in the appropriation \$1,028. There will therefore be \$1,028 less money available for the general work of the gallery in 1926 than there is in the appropriation for the current year, sir.

Mr. WOOD. That is, if you keep that stenographer.

Mr. DORSEY. Well, that stenographer is the secretary's stenographer, sir. She is in the secretary's office, and is a very necessary employee.

Mr. WOOD. Is the salary of the stenographer provided for in these details here of this expenditure?

Mr. DORSEY. Yes, sir.

Grade 3, \$1,500 to \$1,860; average, \$1,680—assistant clerk-stenographer, 10/12, \$1,740.

But no allowance has been made in the total appropriation for the additional six months (\$870) which she has been transferred to the gallery appropriation.

PRINTING AND BINDING

Mr. WOOD. Your printing item is cut a little.

Doctor WALCOTT. Last year we asked for an extra amount to bring up the annual reports of the Smithsonian Institution, which, during the war, fell nearly three years behind.

Mr. WOOD. We gave it to you.

Doctor WALCOTT. You gave it to us. We are printing two reports in this year. I have the pleasure to state that the report for 1923 is now at the Government Printing Office, being put into page form, and of the report for 1924 all the nearly 200 galleys of proof have been received through the cooperation of the Public Printer. Proof has been sent for correction to all of the 22 authors in various parts of the world, and some has already come back corrected. It is expected that both of these reports will be issued before the middle of the year 1925, and we will then be up to date.

Mr. WOOD. We did a pretty good job for you. They recommended \$67,000 and in 1924 you only had \$60,000. We gave you an increase of \$7,000 for this annual report of the American Historical Association, so I guess you have not any complaint coming about that item, have you? In 1924 you had \$60,000. In 1925 we gave you an increase of \$10,000, \$7,000 of which was for this report. What was the other \$3,000 for?

Mr. DORSEY. We found, Mr. Chairman, that these two reports which you gave us the increase for in the appropriation of \$90,000, that only by cutting down the 1924 report, cutting out some of the articles that should have been included, could we barely get within the \$22,600, which was the amount allotted of that \$90,000 for the Smithsonian report. The Printing Office estimate for the 1924 volume came within \$86 of the balance of the \$22,600. That

was on the basis of the \$90,000 appropriation you gave us last year. This year the Public Printer made a statement that the cost of printing would be increased from 15 to 20 per cent. I think largely on account of reallocation of salaries of Printing Office employees. The 15 to 20 per cent increase varies with the character of the matter. Scientific matter is the higher. So that to do the same amount of printing, the ordinary, regular printing that we have every year, the whole \$90,000 will be needed in 1926. There will be only one Smithsonian Report volume printed in 1926, instead of two as in 1925, but the increased cost of printing will make the \$90,000 necessary for the regular 1926 printing.

Mr. WOOD. Then, in your opinion, how much should that item carry?

Mr. DORSEY. \$90,000 is needed to provide for the annual amount of printing that is necessary.

Mr. WOOD. Is that for matter that has accumulated that ought to have been printed heretofore in order to be current?

Mr. DORSEY. It is largely for the current work of the institution and its branches.

I have a statement here, Mr. Chairman, of the allotments for this year for printing and binding under the Smithsonian Institution:

ALLOTMENTS FOR PRINTING

Smithsonian report, we had \$22,600 available, and \$22,514 has already been requisitioned.

For the National Museum, \$37,500 available, work already at the Printing Office, \$24,908.

For the Bureau of American Ethnology, \$21,000 available, and \$19,333 worth of work already requisitioned.

The American Historical Association, with an allotment of \$7,000, has requisitioned so far \$2,366.

So that with only five months of the year gone by more than three-fourths of the printing money is already obligated.

Mr. WOOD. Then you are about \$22,500 short?

Mr. DORSEY. Yes, sir. We will need the \$90,000 next year in order to get the regular necessary amount of printing matter out.

Doctor WALCOTT. Mr. Chairman, in that connection I would like to state that the publication of the reports of the Bureau of Ethnology have been neglected for years. We are trying to bring them up to date. They are very much sought after, and the material is ready. Later on I hope to submit a supplemental item to the Budget for this.

Mr. WOOD. I wish you would do that before we get through with these hearings. We are going to adjourn these hearings the last of this week, and we will commence again on the 29th, and I think it is only fair to the Budget that you give us every chance to rectify any mistake you think they have made in the Budget, and it is fair to the committee that they have an opportunity to do it. It is the purpose of this committee and ought to be the purpose of every committee here to get in accord with the Budget and the department, if it can, and we must have sympathetic action if we are going to get anywhere and carry out any policy of economy.

FRIDAY, DECEMBER 19, 1924.

UNITED STATES TARIFF COMMISSION

STATEMENTS OF MR. THOMAS O. MARVIN, CHAIRMAN, AND
MR. JOHN F. BETHUNE, SECRETARY

GENERAL STATEMENT

Mr. WOOD. Do you desire to make any general statement with reference to the activities of the Tariff Commission?

Mr. MARVIN. Mr. Chairman, the commission has had the privilege annually of an opportunity of presenting its story to the committee. We appreciate the courtesy that has been extended by the committee to the commission in the consideration of its financial needs.

We have realized that for the last two years there has been urgent need of economy in the Government expenditures, and in the preparation of the commission's estimate of its financial requirements we have kept that thought in mind. But each year, including the preparation of the estimates for the year 1926, the commission has felt that in justice to itself and the work required of it by law it could not perform with reasonable satisfaction its duties for a sum less than \$1,000,000 a year.

REDUCTION IN ESTIMATE FOR 1926

According to the estimate in the Budget, the proposed appropriation for 1926 is \$712,000. We have our experience for the year 1924 as a guide in our judgment of the appropriation that has been proposed. You will notice, please, that the amount expended by the Tariff Commission in the year 1924, in round numbers, is \$713,000.

The proposed appropriation for 1926 is \$712,000. It indicates, Mr. Chairman and gentlemen, that the amount of work that was done during 1924 by the commission is the full limit of effort that can be exerted by the commission during 1926.

We see no way in which we can reduce our expenditures. We see no way in which we can reduce the amount of work that the commission should undertake. In fact, we have suggested that the commission should have an appropriation of \$1,000,000, because we know from our own experience that some of the duties laid upon the commission by Congress we have not been able to perform to the extent that we should like.

As you know, the commission was organized by the act of September 8, 1916. The duties were defined then as of a general investigating character. The commission was required to investigate the effects of the tariff laws on the industries of the United States.

We have not been able during the last year or two, since the additional duties that were included in the tariff act of 1922, to conduct the investigations and prepare all of the surveys in connection with the operation of the act of 1922, that we deem desirable, and that we feel would prove useful to Congress.

Because of the additional duties that were contained in the new sections of the tariff act of 1922, sections 315, 316, 317, and 318, it



