

**INDEPENDENT OFFICES
APPROPRIATION BILL FOR 1944**

HEARINGS

BEFORE THE

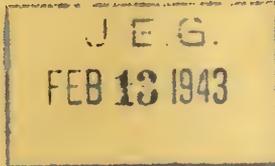
**SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES**

SEVENTY-EIGHTH CONGRESS

FIRST SESSION

ON THE

**INDEPENDENT OFFICES
APPROPRIATION BILL FOR 1944**



WEDNESDAY, JANUARY 13, 1943.

SMITHSONIAN INSTITUTION

STATEMENTS OF DR. CHARLES G. ABBOT, SECRETARY, SMITHSONIAN INSTITUTION; DR. ALEXANDER WETMORE, ASSISTANT SECRETARY, IN CHARGE NATIONAL MUSEUM; H. W. DORSEY, ADMINISTRATIVE ASSISTANT TO THE SECRETARY; J. E. GRAF, ASSOCIATE DIRECTOR, NATIONAL MUSEUM; M. W. STIRLING, CHIEF, BUREAU OF AMERICAN ETHNOLOGY; COL. HARRY A. McBRIDE, ADMINISTRATOR AND BUDGET OFFICER, NATIONAL GALLERY OF ART; AND DR. G. S. FORD, AMERICAN HISTORICAL ASSOCIATION

GENERAL STATEMENT

Mr. WOODRUM. We will take up now the appropriations for the Smithsonian Institution. Dr. Abbot, we shall be very glad to have a general statement from you at this time.

OPERATIONS UNDER PRIVATE FUNDS

Dr. ABBOT. Mr. Chairman, the Smithsonian Institution has two kinds of responsibility. In the first place, it is responsible to the donor and to the succeeding donors who have made up the private endowment for the increase and diffusion of knowledge among men.

In the second place, it is responsible to the National Government for the administration of the National Zoological Park, the National Museum, the several galleries of art, the Bureau of American Ethnology, the Astrophysical Observatory, and the Bureau of International Exchanges.

In the first line of expenditure of the income of the private funds, we advance or increase knowledge by research, and we spread it abroad and diffuse it by publication. The experience of the last century has shown that any kind of knowledge is useful. We cannot tell at the moment whether it is going to be useful immediately or in the long years later. But every sort of knowledge, even though at the time it seems to be quite useless in its character, has been of use later on to society. So that I have not felt, in the matter of research or in the matter of publications from the private funds, that we ought to yield too much to those who think that we ought to confine ourselves to researches and publications which are immediately useful. And yet in this emergency we have inclined more that way.

The armed services have required very large numbers, for instance, of those sets of tables, meteorological tables, and physical tables, which the Smithsonian Institution gets out from the income from its private funds. We have made large additional editions for their use.

Then, again, we have started a new series called The War Background Series. Six numbers of that have already come out and are in very great demand. They deal with the ethnology and with other relations of those distant parts both on land and water, to which our armed services are now going. They are very popular, so that we

have been obliged to get out large editions and we are really expending more than the usual allotment from the private funds for publication for these purposes.

Then, too, we are endeavoring to cooperate with the State Department in its wish to promote excellent relations with the Latin-American countries to the south of us. We have invited Dr. Beals from the University of California, of Los Angeles, who is under the pay of this Institution for a year, to set up a society for ethnology and geography among all of the peoples of the Americas. Already about 350 paid subscribers have joined the society and they are starting a quarterly magazine.

Then, too, we have cooperated with the National Research Council, and with other learned bodies to set up the ethnogeographic board. We pay the salary of the director and we give them space in the Institution, and they are found to be almost invaluable to the armed services.

We command knowledge which is related to all parts of the world, and we have been able, through this ethnogeographic board, to answer almost instantly the questions, possibly thousands in number, which have come from the armed services.

So in these ways we are trying to make the operations under the private funds as useful to the public as we can in this emergency.

COLLECTION, CARE, AND PROTECTION OF SPECIMENS

Then turning to the other feature of the responsibility of the Institution, we have in the National Museum, alone, a collection of upward of 17,000,000 specimens which have been obtained partly by expeditions and partly by gifts through the past century. These are valued at possibly two to three hundred million dollars in money, but they are invaluable because they never can be duplicated. And some of them are invaluable, being type specimens. It has been a long and delicate piece of work to select from this lot of precious objects those which should be removed, at this time, for fear of air raids. That has occupied our staff for a good many man-years, but toward the end of November that operation was concluded.

The Museum specimens are perishable. They are under the danger of being destroyed by fungi, by insects, by light: the temperature and humidity have to be attended to so that continual care and periodic inspection have to be undertaken.

They comprise something like 30 branches of science and the kinds of care which have to be taken to preserve them are different for different kinds of specimens.

Thus we have a great many small units, comprising generally a curator, an assistant curator, and a clerk—but at present in some units neither the assistant curator nor the clerk is available. In this way we have a great many—30 or 40—small units, of 3 to 5 persons, or 2 to 5 persons, in the Institution. Projects of saving manpower and the like are very difficult to us because you cannot divide a unit which consists of 1 man or 2 men, or the like, and take one-eleventh of it away. We require numerous small units because the objects which these units serve are so different. Different kinds of protection and care of specimens are required, so that those who are expert in

one line are not expert in others. This is a real difficulty to us in connection with the efforts now being made to reduce manpower.

The buildings also have to be kept in repair sufficient to make them safe for the specimens, and heating and lighting has to be attended to, and a watch force has to care for protection 24 hours a day.

Then, the museums are open to the public, so that not only in the National Museum, but in the Zoological Park and the National Collection of Fine Arts, we have over 2,000,000 people a year who are visitors. You will be interested to know that about one-fourth of them are men in uniform from the services. The demand for the viewing of those small portions of our collections which are on exhibition has kept up surprisingly well. Of course, the tourist trade has diminished, but there are a great many people here in Washington, and they are very much interested. The service men are particularly interested.

Our experts are a fountain of knowledge to the services. We have hundreds of inquiries which our people, who have been to all parts of the world, and who have a familiarity with ethnology and with other features of these distant parts, where our armed services are now operating, are able to answer. We have scarcely any sort of question that can be imagined which we do not have put to us for a reply, and Dr. Wetmore, I hope, will a little later tell you of some of those interesting cases.

Then, too, we have some linguists on our staff who have been working a large portion of their time, for months and months—some of them 14 and 15 and 16 months—a large portion of their time, in translating languages like Japanese and other eastern oriental languages which are known to comparatively few persons in this country. They are also servicing maps which were prepared in Japanese or Chinese characters, and unintelligible to the armed services without translation.

We have several laboratories; a laboratory for the analysis of minerals, for example, which is largely occupied in connection with the study of the sources for ores required for getting the metals needed in the preparation of the munitions of war.

ASTROPHYSICAL OBSERVATORY

In the Astrophysical Observatory and its subsidiary, the Division of Radiation Organisms, are laboratories where the staff and the equipment are adapted for the measurement of radiation. We have devoted these almost exclusively for months now to researches which have been assigned to us by the Army and the Navy. For they have some special researches which our experience and our special equipment are particularly adapted to undertake.

As to the observatory, we have continued the field work in the three stations—one in California, one in New Mexico, and one in Chile—for the reason that the observations are just now becoming of particular interest. I think I told the committee last year that there were discovered in the variation of the sun a number of regular periodicities, and by the use of these we are able to predict what will happen to the variations of the sun in the years 1943, 1944, and 1945. It looks as if it will be the most interesting period which will have occurred in solar-radiation research in the last quarter of a century. If we should omit the continuation of these field observations during these 3 years,

we would deprive the world forever of the knowledge of what looks to be the most interesting period in sight in the observation of the sun.

OPERATIONS OF THE BUREAU OF INTERNATIONAL EXCHANGES

The Bureau of International Exchanges has been restricted in its operations, as far as some of the countries with whom we are at war and some of the countries which have been taken by the forces of Germany; but it has continued regularly its sendings to Great Britain. British Colonies are very urgent, especially Australia and New Zealand, for the continuation of the service. Large sendings have been made to them in recent time and also to Soviet Russia which has made strong representations. A large shipment of exchanges has gone there recently.

Thus the operations of the Bureau of International Exchanges have been, although somewhat less than heretofore, really surprisingly near the usual mark, even at the present time.

CONSOLIDATION OF APPROPRIATION ITEMS

The appropriation this year is proposed by the Bureau of the Budget to be consolidated. Some years ago there were as many as 13 different appropriation acts. That was reduced in recent times a good deal, and now it is proposed to reduce them to 1.

That does not change the break-down of the appropriation. The committee will still have the knowledge of the items which are proposed, but it will enable certain economies to be made in bookkeeping, in connection with the disbursing office, and in connection with the applications to the civil service for the transfer, occasionally, of clerks or the like, from one of our branches to another.

AMOUNT OF ESTIMATE, FISCAL 1944

The CHAIRMAN. Doctor Abbot has recent legislation affected the availability of the appropriation?

Dr. ABBOT. Mr. Chairman, the estimate which comes down from the Bureau of the Budget is identical with the appropriation for 1943, but this does not tell the whole story. Owing to the necessity providing the costs of Public, 694 and Public, 200, from our appropriations the funds available for our normal work have been reduced this year in the sum of about \$30,000 and for 1944 the reduction is estimated to be somewhat in excess of \$50,000.

INSUFFICIENCY OF ESTIMATE TO CARE FOR PROMOTIONS UNDER RAMSPECK ACT AND OVERTIME PAY

In 1943 we are trying to save from the ordinary run of expenses the amount of money necessary to pay Public, 694 on an 11-month basis. In 1944 we are to meet this same sum on a 12-month basis, and in addition we will have two items concerned with the Ramspeck promotions; the first, the amount of money necessary to place on an annual basis the Ramspeck promotions received part-time during the fiscal year 1943 and, second, to pay Ramspeck promotions given in 1944 on a part-time basis. So that for 1944 the estimate is as follows:

To pay the cost of Public, 694 on an annual basis, \$35,868.

Mr. WOODRUM. What is Public, 694?

Dr. ABBOT. The Custodial Pay Raise Act.

Ramspeck promotions for 1943 on an annual basis in 1944, \$8,944, and Ramspeck promotions for 1944, \$5,650.

So that the total extra expenditures for 1944, which it is proposed to be absorbed in the appropriation, will be \$50,462 or approximately 5 percent of the whole.

Mr. Chairman, you will recall that in 1932 and in 1933 the appropriations for the Smithsonian Institution, which even then, as we regarded it, were inadequate, were cut in the 2 years combined by 33 percent. In some items we have never gotten back as yet to the sum which we had in 1932.

So it is proposed, Mr. Chairman, to reduce the available support still further to the extent of about 5 percent in 1944.

Mr. WOODRUM. What about the overtime pay raise? That is another place where the saw will be used on you, too; is it not?

Dr. WETMORE. The estimate on overtime for the full institution amounts to about \$154,000.

Mr. WOODRUM. Is that for 1943 or 1944?

Dr. WETMORE. 1944.

Mr. WOODRUM. What about 1943?

Mr. GRAF. About \$90,000.

Mr. WOODRUM. For 1943?

Mr. GRAF. Yes.

Mr. WOODRUM. Do you expect to absorb that?

Dr. WETMORE. This is so new with us, and we have been working on the preparations for this hearing, that we have not gotten into this other matter fully as yet. We are expecting to take that up within the next week, to determine just what the necessary cost will be.

Mr. FITZPATRICK. What is the total amount of your appropriation?

Dr. WETMORE. \$1,129,040 of which \$922,640 is allotted to personal services. We have available for general use \$117,900 to cover all of the necessary upkeep for buildings, maintenance, and all other expenses except for printing and binding; in other words, that is the total amount free, and that is largely obligated for routine expenses.

INCOME FROM PRIVATE ENDOWMENT

Mr. FITZPATRICK. You get other moneys besides that, do you not?

Dr. WETMORE. No, sir.

Dr. ABBOT. We have a private endowment, from which, according to the provisions of the founder, the income is to be expended "for the increase and diffusion of knowledge among men." We have been able within that provision to assist the Government very materially. For instance, I assign to Dr. Wetmore about \$10,000 from the income of the private funds each year in order to enable his men to make their collecting expeditions with more success, in view of the difficulty of meeting all the Treasury requirements in expenditures of public funds. I also make available to Mr. Stirling in ordinary years, in connection with his expeditions, a matter of two or three thousand dollars.

Mr. FITZPATRICK. That has been cut down quite a bit, has it not?

Dr. ABBOT. Our normal expeditions at the present time have practically been discontinued. But as I explained a moment ago—perhaps before you came in—we are spending for publication of our new war background series much in excess of our usual printing allotment from the private funds and I have had to trench upon certain small reserves which I had set aside for emergencies.

We have no other sources which are available for these continuing expenditures of compensation of personnel, which, as you saw by the report made just now by Dr. Wetmore, comprise nearly 90 per cent of the whole annual appropriation.

There is no other source of maintenance of the Government bureaus we administer except the annual Congressional appropriations. These bureaus, after all, are Government bureaus under our administration.

I would like at this time, Mr. Chairman, if I may, to speak off the record on one other matter.

(Discussion off the record.)

Mr. WOODRUM. Thank you, Dr. Abbot.

Dr. Wetmore, is there anything you wish to add?

ADJUSTMENT AND REARRANGEMENT OF SPECIMENS

Dr. WETMORE. In the past year under the existing situation of war, we have set up in the Institution the usual protection service of the type familiar to all of us; in addition, we have made a great many adjustments in the arrangements of the collections and stored materials housed in the upper floors of our buildings so as to have greater protection from fire in the event of sudden, unexpected attack.

The Secretary has stated the high valuation placed on our collections. We have removed from our buildings many objects of a kind and character that it would not be possible to replace under any circumstances, if they were destroyed; these we have stored now in four separate places under adequate guard as a further measure of safety. The selection and packing of this material has taken much time and labor on the part of our staff.

VISITORS TO INSTITUTION

With the funds available at the present time for the opening of our exhibitions to the public it is necessary to close for one-half day each week. Formerly the half-day closing was arranged for Sunday morning. With the coming of large numbers of service men to the city it became evident that most of these men arrived for the week end, usually coming on Saturday. By Sunday morning they would be out looking around to see what they could of the city to find that most of the public buildings were closed at that time. By Sunday evening they had ordinarily to return to camp.

We have made a readjustment, therefore, to shift the half-day closing from Sunday to Monday morning so that our halls since last spring have been open for all day Sundays with gratifying results in attendance. Even as bad as it was last Sunday, with the

stormy weather and also with the sudden increased restriction of travel because of gasoline and rubber rationing we had 5,409 people in our buildings. The ordinary Sunday attendance since March has run from 6,000 to 14,000 persons.

Our public exhibitions in these present times play a definite role for education and for maintenance of morale of importance not only to the service men mentioned who come here for the week end or who are stationed here regularly, but also for war workers and others who are in civilian status. Our halls offer interest, education, and mental relaxation with great variety and sufficient space for all without undue crowding.

As the Secretary has remarked, there is now no tourist travel to Washington in the sense that there was formerly, but in spite of this our last fiscal year's attendance was more than 2,000,000, and in the last calendar year, we had 1,443,000 visitors. This is the record under much restriction due to war conditions.

The additions to our collections rather surprisingly, have continued almost without check. Most of this material, as I have told this committee on previous occasions, comes to us through gift. The increment for the past year was approximately 285,000 specimens.

COLLECTIONS OF RUBBER AND MINERAL MATERIALS

I have brought with me a few things that I would like to display to you to indicate something of the value and of the interesting variety found in these national possessions. A few of these are not of recent accession, but some from the materials that we have had for a good many years. They have especial interest at the moment because of current conditions.

For example, in 1851, the Government dispatched an expedition under two lieutenants of the Navy to the Amazon River in South America to make a survey of that great region to determine its capacity and value for commerce. Lieutenant Herndon and Lieutenant Gibbons brought back from their explorations among other things, this sample of rubber [indicating], gathered and prepared by natives. This has been in our collections since about 1853. This particular specimen, a bottle formed of crude rubber, of the Heved type has been of considerable interest to the agencies concerned with rubber conservation and supply at the present time. It is quite remarkable that in spite of its age it retains its characteristics.

Here is another sample taken a little later in the sixties, in the same general region, a rubber of a different kind, of the Castilloa type. These are the two types characteristic of the Amazon region and tropical America in general.

And speaking of rubber gatherers, these men go into the remotest jungles where there are found strange and curious Indian tribes. Here is a feather head dress from one of the tribes living in the Oriente of Ecuador, made of bright colored feathers of tropical birds.

With reference to our mineral collections we have certain funds in the Smithsonian endowment that have been given to us with the understanding that the income only would be used for the purchase of additions to our mineral collections. We are continuing pur-

chases from such funds, but are not buying otherwise at the present time.

This is a blue topaz from Brazil, with a weight of 54 carats, that we recently secured with the income from the Chamberlain fund. The blue color is unusual as most topazes are pink, brown, or yellowish. This particular specimen is valued at more than \$750. With it I have this specimen of aquamarine, also from Brazil, and likewise an unusual example of its kind.

Naturally, in our work now we are paying more and more attention to those minerals that at the present time are of strategic importance. In our collections there has been made search to determine localities where minerals that are now of strategic value have been secured in the past in order that some inquiry may be made as to the opportunity for developing new deposits in sections where mines may not be operating now.

Bauxite, a name with which you are certain to be familiar, is one of the minerals that is a source of aluminum. Bauxite like this sample [indicating] is found in some localities in the eastern part of this country, though there may not have been a great deal of development as yet. This particular sample came from a clay pit dump in Augusta County, Va. It is a very good sample though no large deposit of it is known. It may indicate that a useful deposit might be found there later.

I said something to you last year about tin in the form of cassiterite, which is fairly common in some parts of Mexico. One of our mineralogists has been in Mexico for the past year in charge of parties making search for tin and other strategic minerals. Here is an example of the ordinary form of cassiterite, such as I have shown this committee before. With it I have a large crystal of cassiterite, a specimen that comes from Brazil, one of the finest that we have seen. The two differ considerably in form.

In connection with the work in Mexico just mentioned we are planning toward the end of next month to send a paleontologist down to cooperate with Mexican representatives in the determination of the age of certain rock formations as assistance in the search for various valuable minerals.

One of the highly valuable minerals at the present time and one which is greatly needed is tungsten. The sample which I now show you is of scheelite, a source of tungsten. This sample is one of the largest crystals yet found to our knowledge. This mineral is encountered in small amounts and is extremely valuable. It has the property of glowing under certain wave lengths of fluorescent ultraviolet light, so that men go out on the old mine dumps at night with portable fluorescent lamps in search of small pieces of scheelite and so retrieve it for the market.

We have made an interesting search through our own collections with this same type of light, going over the entire collection of ores, as a matter of fact, with the result that we have found one sample of scheelite that had been overlooked that may be of some economic importance.

All of these things tie in with the work that the Secretary has mentioned with regard to the war effort.

We have on our technical staff scientists of considerable range of knowledge. These men are called upon constantly for specialized information for use in the war. In this work we have contracts with many agencies and have call for a great variety of data.

AMERICAN HISTORICAL ASSOCIATION

Mr. WOODRUM. We would be glad to have a brief statement from you, Dr. Ford.

Dr. FORD. The historical association for which I speak is itself, so to speak, dependent, relatively on the Smithsonian, and, by act of Congress, it reports through the Smithsonian on the sort of activities which are covered in the American Historical Association section of the bill. So that we come to you to justify this commission to us through the allotment from the Smithsonian. And we accept whatever allotment that is made, as they accept what allotment you give.

That practically covers the story, Mr. Chairman; I mean with respect to that matter.

May I just add another word or two?

Mr. WOODRUM. Yes.

Dr. FORD. Dr. Abbot mentioned the value of all scientific knowledge. I am the editor of the Review, and I have just read a paper on Thomas Jefferson as a scientist. One of the things that struck my mind was what Mr. Jefferson said about the necessity of America developing its independence in the scientific field and in the invention field. Anybody who is looking ahead knows that we have to do just that, and we have that obligation to the world. All citizens now should be concerned with the findings of research which are now coming out of the war effort. Many things nobody could foresee the value of have now suddenly become of importance in the war effort, and many of them are most important for us to promote. I would say that this Congress and I think the 40 legislative bodies in the States with whom I have had some contacts from the administrative and educational institutions have the obligation to see that the first war casualty is not the very civilization that we are fighting to preserve.

Mr. WIGGLESWORTH. How much did you have for this fiscal year, Dr. Ford?

Dr. FORD. About \$10,000.

Dr. ABBOT. \$10,200.

Mr. WIGGLESWORTH. \$10,200.

Dr. FORD. Yes.

Mr. WIGGLESWORTH. You are asking for \$10,600 for the fiscal year 1944?

Dr. FORD. That is just the prorated part of the printing allotment. There is no increase in the whole allotment for printing.

Mr. WIGGLESWORTH. What did you actually publish with the \$10,200?

Dr. FORD. We will publish three volumes, at least, possibly four. First a report of the proceedings and affairs of the American Historical Association and a report on the conditions of the historical studies in the United States. That is our charter obligation.

Mr. WIGGLESWORTH. Three volumes of that?

Dr. FORD. No; one volume of that, and that one volume is to cover the historical investigations. Suddenly we are called upon by various agencies of the Government for men, for personnel in the O. S. S. and this is a reference book. Here are men who are working areas all over the world, and they want these findings.

A very interesting thing came to attention the other day of a young German scholar, working in Germany before the war in one of the castles where he was sent belonging to a man named Tallerand, which by the way is still equally famous because of the connection with the Gould family. This young German found that 2 years of Tallerand's life were spent in America. When the French Revolution came on he changed to a revolutionist, and then he changed again to meet the change in France, and then he changed again and stuck with Napoleon until Napoleon fled, and he changed again.

He was for 2 years in America during that time, and was one of the first real-estate planners that we had in America. He put out more schemes for the development of the West—which was then western New York—than anybody has ever done.

It will be made of that kind of material.

Mr. WIGGLESWORTH. What would you publish in the fiscal year 1944 if the request here is granted?

Dr. FORD. That will have to depend upon the material that is available. It will be a judicious choice.

SMITHSONIAN INSTITUTION

SALARIES AND EXPENSES

Mr. WOODRUM. We will take the items for the Smithsonian Institution, the first of which is for salaries and expenses, as follows:

Salaries and expenses: For all salaries and expenses for continuing preservation, exhibition, and increase of collections from the surveying and exploring expeditions of the Government and from other sources; for the system of international exchanges between the United States and foreign countries; for continuing ethnological researches among the American Indians and the natives of Hawaii and the excavation and preservation of archaeological remains; for maintenance of the Astrophysical Observatory, including assistants, and making necessary observations in high altitudes; and for the administration of the National Collection of Fine Arts; including personal services in the District of Columbia; traveling expenses, including not exceeding \$2,500 for expenses of attendance of meetings concerned with the work of the Institution when specifically authorized by the Secretary of the Smithsonian Institution; printing and binding, not exceeding \$88,500, of which not to exceed \$12,000 shall be available for printing the report of the American Historical Association; purchase, repair, and cleaning of uniforms for guards and elevator conductors; repairs and alterations of buildings and approaches; not exceeding \$5,500 for preparation of manuscripts, drawings, and illustrations for publications; and not exceeding \$6,500 for purchase of books, pamphlets, and periodicals, \$1,129,040.

JUSTIFICATION OF ESTIMATES

Dr. ABEOT. With your permission we submit the following justification statement, which is offered for the record:

JUSTIFICATION OF ESTIMATES

The appropriation which follows is made for the support of the Smithsonian Institution, created by act of Congress, approved August 10, 1846, by the terms of which the bequest of James Smithson's fortune was accepted to found an

establishment for the "increase and diffusion of knowledge among men." The increase of knowledge is effected by fundamental research in the pure and natural sciences, and the diffusion of knowledge by publications, exhibits, correspondence, and radio.

The direction of this organization is entrusted to a Board of Regents of 14 members, including the Vice President of the United States, the Chief Justice of the United States, three members each from the Senate and House of Representatives, and 6 citizen members. The executive officer and director of the Institution's activities is the secretary.

The functions of the Smithsonian are divided among seven bureaus, as follows: (1) The United States National Museum, the depository of the national collections, which have grown until, at the present time, there are more than 17,500,000 items included in the Museum's catalogs; (2) the National Collection of Fine Arts, which includes the Freer Gallery of Art, and covers those matters in the field of art outside the plan of the National Gallery of Art; (3) the Bureau of American Ethnology, concerned with collecting and publishing data relating to the American Indians and the natives of Hawaii; (4) the International Exchange Service, initiated in 1851, which transmits to foreign countries reports and proceedings of the Congress, messages of the President, and reports and publications of departments and agencies, including the Smithsonian Institution, in exchange for similar official state papers of the other nations of the world; (5) the National Zoological Park which maintains collections of living animals, and exhibits to the public about 2,500 mammals, reptiles, and birds; (6) the Astrophysical Observatory, which investigates solar radiation and other astronomical phenomena at three observatories in the Western Hemisphere, and which includes the Division of Radiation and Organisms; (7) the National Gallery of Art, which has been created as an autonomous bureau within the Smithsonian Institution.

The National Gallery of Art has a separate appropriation from the other Smithsonian Bureaus. The National Zoological Park is carried in the appropriation bill for the District of Columbia. The other bureaus of the Smithsonian are included in the appropriation here under consideration, in which there is provision for the central administrative office, and a unit for the operation, maintenance, and repair of the buildings of the main Smithsonian group, their equipment and furnishings.

CONSOLIDATION OF APPROPRIATIONS

This appropriation includes those activities previously carried on under the appropriations designated as follows: General expenses, Smithsonian Institution; preservation of collections, Smithsonian Institution; and printing and binding, Smithsonian Institution. The specific projects included thereunder are:

1. The Administrative Office,
2. International Exchange Service (for Governmental and scientific documents),
3. Bureau of American Ethnology,
4. Astrophysical Observatory,
5. Maintenance and Operation of Buildings,
6. The National Collection of Fine Arts,
7. United States National Museum (preservation of collections),
8. Printing and binding.

The consolidation of all of these activities into one appropriation is a final step in a reorganization which was begun some years ago when appropriations to provide funds for the Smithsonian Institution were distributed under 13 separate acts. From that situation several stages in consolidation have been effected to bring about more orderly arrangement until the appropriations finally were reduced to three, being as indicated above.

In the first consolidation several very small appropriations were combined in the interest of better administration and to save the time of the Congress and the Bureau of the Budget. A second consolidation was effected in 1932 under which the appropriations for building repairs, furniture and fixtures, and heating and lighting, were combined into the one appropriation for maintenance and operation. The third step was made in 1939 when the appropriations for salaries and expenses, international exchanges, Bureau of American

Ethnology, Astrophysical Observatory, maintenance and operation, and National Collection of Fine Arts were combined into the appropriation "general expenses."

The final consolidation now proposed, under which all funds will be provided under one act, will make possible greater efficiency in the administration of the entire Institution. It is especially important at this time with changing activities due to the war. Under this plan it will be possible to make emergency shifts of personnel should need arise for urgent duties of a temporary nature, without the delays incident to transfers between appropriations. It will also permit utilization of the relatively small funds available to the Institution where they are most urgently needed. The change, in short, will expedite the handling of all activities. Since a break-down into project statements accompanies the estimates, it will be possible always for the Congress or the Budget Bureau to check the estimates and expenditures by projects, and so to obtain ready and proper understanding of the details of our varied operations.

THE SMITHSONIAN AND THE WAR

The forced entry of this country into global war has created a demand for specialized knowledge far beyond that of former wars. This demand provides opportunity for the Smithsonian to be of wider service. While the Institution is not a primary war agency, it has been enabled to furnish material aid in the war effort by assistance to the armed forces and other agencies, and also to further the important field of inter-American cooperation.

Some of our staff have joined specialized units of the armed forces, putting to use the knowledge and background gained by work at the Institution. Others have furnished specific information to the armed forces or to other war agencies. A portion of our personnel is giving service on a part-time basis in varying amount, and will be so engaged for the duration. From the Museum there is being furnished information on various subjects of military importance in anthropology, zoology, botany, geology, and engineering. These data are highly varied, covering such diverse fields as the behavior and customs of peoples who may soon be temporary wards of this country, memoranda on useful and injurious animals and plants of war areas, on critical materials, on sources of foods, substitute products, the identity of woods and their useful qualities in boat and other construction, and in general, identification of diverse natural history materials. The National Zoological Park is furnishing to the medical services information on such poisonous animals as insects and snakes.

The Astrophysical Observatory is utilizing its specialized equipment and personnel in testing materials for the Army and the Navy. A wide variety of information is furnished to the armed services on request, most of this being channeled through the Ethnogeographic Board, a nongovernmental agency located in the Smithsonian Building, sponsored jointly by the National Research Council, the American Council of Learned Societies, the Social Science Research Council, and the Smithsonian Institution. This Board, which was created to furnish to our war agencies, both military and civilian, information needed as to any strategic area and its inhabitants, has been giving excellent service in making available without delay, a wide variety of specialized information which would otherwise require much time for its collection. The Bureau of American Ethnology is working in close cooperation with the Ethnogeographic Board in furnishing information on aboriginal peoples in combat areas, and there is constant call on the National Museum for information in other fields.

Records maintained for a period of 8 months show that in that time over 700 requests for information have been made on Smithsonian personnel for matters concerned with the war effort.

Appropriations, salaries and expenses, Smithsonian Institution

Expended, 1942.....	\$1,005,234
Appropriated, 1943.....	1,129,040
Nonrecurring items for 1943.....	
Base for 1944.....	1,129,040
Estimate, 1944.....	1,129,040

GENERAL STATEMENT

The work under this appropriation deals with the activities of the several bureaus administered by the Smithsonian Institution, and includes the general administrative office, the maintenance and operation of buildings, and printing and binding. The work under these separate projects is explained as follows:

1. *The Administrative Offices.*—This project provides for the general administration, under the direction of the Secretary of the Smithsonian Institution, of the governmental bureaus in the charge of the Institution. It covers the salaries and necessary incidental expenses for this office, whose responsibility it is to direct and further the work of these bureaus, to insure their economical administration, and to coordinate their operations.

2. *International Exchange Service.*—In effecting the world-wide distribution of its first publications, the Smithsonian Institution established foreign agencies by means of which it was enabled materially to assist institutions and individuals of our country in the distribution of their publications abroad, and also foreign establishments and individuals in the distribution of their publications in the United States.

In 1886, some years after the organization of the Smithsonian system of exchanges, there were concluded at Brussels between the United States and a number of other countries two exchange conventions. The first, Convention A (Stat. XXV, 1469), provides for the immediate exchange of office journals. The Smithsonian Institution was charged by the Congress with the duty of carrying out the provisions of those conventions on the part of the United States (Stat. XIV, 573—congressional resolution approved March 2, 1901, increasing the number of documents for exchange to not exceeding 100 copies; Stat. XLIII, 1106—Printing Act approved March 2, 1901, further increasing the number to 125 copies; and Stat. XXV, 1169—congressional resolution approved March 4, 1909, setting aside copies of the Congressional Record for exchange with foreign parliamentary bodies).

The responsibility of this Bureau is the transmittal of official, scientific, and literary publications between the United States Government and establishments and individuals of our country, and foreign governments, establishments, and individuals, in accordance with the treaty. In the course of its work it procures for the Congress of the United States, and for American establishments and individuals, publications of foreign governments and other works printed abroad, which are received in exchange for American publications of a similar nature. The exchanges which are transmitted abroad include reports and proceedings of the Congress, messages of the President, reports and publications of the departments including everything of whatever nature published either by direct order of Congress or by any of the departments of the Government, together with the publications of American establishments and individuals which are sent as donations or exchanges. The work of the Bureau is essentially that of a forwarding agency. In addition it has, within the means at present available, frequently assisted foreign establishments and municipalities in obtaining American publications relating to specific subjects necessary in their work.

This exchange service, initiated by the Smithsonian Institution in 1851, has through this interchange of scientific and intellectual information been a potent means of promoting cultural relations between the United States and foreign countries.

3. *Bureau of American Ethnology.*—The work of the Bureau of American Ethnology consists of research on the American Indians. This research involves two principal lines of approach—studies of living groups in which facts and details are secured concerning their ethnology, linguistics, and physical anthropology, and studies of prehistoric groups, primarily through archeological excavations with the object of reconstructing the movements, culture, and manner of life of pre-Columbian peoples.

The method of conducting these researches consists of basic field work supplemented by laboratory studies, documentary investigations, and preparation of the results for publication. As the result of these researches much information has been gained on early man as a resident of the New World. This is an important subject, for until the arrival of the Spaniards at the end of the fifteenth century no major events had transpired to confuse the picture of a single race of man (the Indian) working out its destiny without influence from

other centers, such as have complicated and rendered almost unintelligible the study of Old World cultures.

In the Americas, anthropologists can follow much more clearly than abroad the rise and decline of great civilizations and the factors, internal and external, that have brought them about. Studies have been traced on the strong and weak points of such nations as the Maya, the great intellectual democracy; on the Incas of Peru with a communistic, highly socialized government; on the Aztecs with their highly organized militaristic dictatorship; and on the League of the Iroquois, an example of a pure democracy. There has been found much information on the Indian as an agriculturist, and it appears that we may find it expedient to utilize as food and drugs a much larger proportion than now of the plants used by the Indian.

The Bureau, through its own researches, its library, and its manuscript and photographic collections, possesses the most complete collection of information on the American Indian now gathered in one place. This background of information is not only of great utility in dealing with aboriginal populations during the present emergency, but will be highly valuable later in post-war adjustments, especially when the desires, aspirations and needs of peoples must be considered.

4. *Astrophysical Observatory.*—The work of the Astrophysical Observatory is of a twofold nature: (1) It carries on investigations to observe and evaluate the percentage variations of the sun's output of radiation on which depend all life and weather on this planet, and (2) it investigates living organisms (plants and animals) where radiation enters as an important factor.

Under (1) there is conducted an analysis of the observations obtained from the three field observing stations and the headquarters observatory, work that has been conducted in an unbroken sequence for 22 years, and for parts of the 15 preceding years. It has been demonstrated that the sun's radiation varies in intensity, and 14 regular periodicities have been found in this variation, effects of all of which may be recognized in weather. An analysis of these periodicities makes it possible to show that weather is controlled by the sun's variation and that this information could be used as a foundation for long range weather forecasting, especially as regards drought conditions. In utilizing material of this kind its value is enhanced by its completeness, so that its usefulness increases steadily as the years of observation are continued. A specially interesting period is approaching in 1945, we predict, and the next years are far more important to be observed than usual.

The sun's radiation also varies from day to day as the sun rotates on its axis, and presents surfaces of varying brightness toward the earth. These day to day solar variations affect weather for 10 days following, and have been used with good success in preliminary tests of a 10-day forecasting method.

Under (2) there is carried on an analysis of plant growth and photosynthesis to which radiation is indispensable. The investigations include special reference to the intensity, wave length, and duration of exposure to light. The immediate problems concerned are to obtain quantitative data under rigidly controlled conditions, of light, temperature, humidity, the gaseous content and nutrient composition of the entire environment of the organisms studied, in order to determine the exact role played by each on living things.

While this work is of an extremely technical nature, it has most important economic implications. Green plants under the influence of light carry on a chemical process, photosynthesis, upon which all life depends. They first unite carbon dioxide and water to form the simple sugars. These products are then elaborated into starch and other carbohydrates, into proteins, organic acids, and fats. In their curious forms these products are not only the basis of the world's present day food supplies but also make up the coal beds and oil fields which are the main fuel resources of mankind. Light plays an all-important role in the manufacture of these substances so that knowledge of the exact mechanism and conditions involved furnishes data of inestimable value to be used as a basis for practical economic studies in agriculture and in manufacturing pursuits in keeping with the needs of our country.

In recent months the Washington facilities of the Astrophysical Observatory in both of its branches have been employed almost wholly for investigations requested by the Army and the Navy.

5. *Maintenance and operation of buildings.*—The activities conducted under the funds provided in this allotment cover the operations of the carpenter, sheet-metal, and paint shops, of building repair, and of the superintendent's and

engineer's offices, including mechanics for the maintenance and repair of the water and sewer systems, installations concerned with heating, lighting, and power, and operation of our telephone exchange. There are also covered such activities as the construction and repair of storage and exhibition cases for our museum specimens, and a wide variety of drawers, trays, and other equipment needed in the preservation, classification, and arrangement for ready reference of our huge and varied collections. The expenditures include the salary of the mechanical staff, purchase of electricity for light and power, supplies of metal, glass, pain, and wood necessary in construction, repair, and maintenance of the usual equipment required in the operations of the various mechanical shops. From this allotment there are purchased laboratory and office furniture and a great variety of glass, wood, metal, and paper containers used in safeguarding our specimens.

A very considerable portion of the funds under this allotment is required for fixed maintenance charges such as the purchase of electricity, painting, and repair items, alcohol, and other chemicals for preserving our collections. There is thus small leeway to meet unexpected expenditures and to provide for the growing costs incident to constructing storage cases and to purchasing containers essential to the care of the collections. Since our present buildings are from 32 to 96 years old, there is constant need for regular repairs and replacement. The utmost economy is required in order to maintain the plant in operating condition, and to insure that the exhibition collections may be continuously open to the public.

6. *The National Collection of Fine Arts.*—The act of August 10, 1846, establishing the Smithsonian Institution, provided for a gallery of art among its activities, and made the Institution responsible for "all objects of art * * * belonging to the Government." This collection was by court decision designated as the National Gallery of Art, and was so known until the joint resolution of March 24, 1937, which accepted the gift of the great Mellon collection, and gave to that collection the name "National Gallery of Art" and renamed the original art collection "The National Collection of Fine Arts." The present National Gallery of Art, housing the Mellon collections and others that have been added to it, is found in a special building erected for it at Sixth Street and Constitution Avenue, and is maintained under a separate appropriation from the one here under discussion.

Under the National Collection of Fine Arts the Institution is charged with the care, exhibition, and maintenance of all objects classed as fine arts in its custody, exclusive of those which are included under the specifications of the act establishing the present National Gallery of Art.

The National Collection of Fine Arts is at present located in inadequate space assigned to it as a temporary measure in the Natural History Building of the United States National Museum.

The work under the National Collection of Fine Arts comprises the stimulation of public knowledge and interest in art by the exhibition of the paintings, statuary, and other objects contained in this collection; by the holding of special temporary exhibitions of the work of different artists or art organizations; by the publication of catalogs containing information on the collection, and by furnishing information on art topics by correspondence and otherwise.

The Freer collection, the gift of Charles L. Freer, is housed as a separate unit in a building provided by Mr. Freer. This collection is unique and can never be duplicated. It contains many ancient paintings by celebrated Chinese and Japanese artists of former times, and American paintings comprising examples of the work of some of our foremost artists, among them Whistler, Abbott Thayer, Dewing, and Tryon. The collection is also rich in oriental bronzes, ceramics, carvings, sculptures, and other objects of eastern art, besides many valuable and rare manuscripts, a notable example of the latter being an early copy of the Gospels.

7. *United States National Museum (preservation of collections).*—This appropriation includes funds for the United States National Museum, for the increase, preservation, study and exhibition of "the collections of natural history including animals, plants, geological and mineralogical specimens, of commerce, engineering and industry, graphic arts, and of history, belonging to the Federal Government" (act of August 10, 1846), as well as those on deposit from the Smithsonian Institution and from private individuals. These national collections in anthropology, biology, geology, history, engineering, and the crafts, are the material objects which illustrate man's progress in science, culture, and

the history of our Government. They are a repository for records of the progress and accomplishments of our inventive genius, and of our progress as a Nation. The National Museum functions as a bureau of standards on problems in the field of natural history. These standards in classification furnish a reliable key to man's published accomplishments and are thus an important aid in preventing the duplication of scientific effort in applied science.

New material that must be preserved is now received at the rate of a quarter to a half million specimens a year. At the present time over 17,500,000 items are included in the catalogs of these collections, which represent one of the most complete and valuable gatherings of such material to be found in the world. Since the utility of such collections is closely related to their completeness, their value to the economic life of this country is increasing steadily with their growth. It would be impossible ever to duplicate these materials.

The Museum collections are divided into two principal groups. Those for the direct education of the public are maintained on exhibition, and the rest are reserved for scientific investigation and for the use of future generations. The exhibition materials are housed in the halls of the Museum in suitable cases where they may be seen and inspected with safety from injury or damage. More than 2,000,000 persons viewed them during the last fiscal year. The study collections, by far the larger and more valuable portion, are maintained in cases in the laboratories and work rooms where they are so arranged as to facilitate their availability for scientific investigation. They are used by the staff, by scientists from other Government departments, and by specialists who come from all parts of the United States and of the world to obtain the basic scientific information they provide. The regular receipt of new material requires constant attention by the staff since the usefulness of these specimens is dependent on their proper classification which makes them available for scientific study. As one of the continuing responsibilities of this Museum is to preserve these perishable things for future generations, they must be protected continuously from deterioration in any form. Many are subject to fungus diseases or insect attack and these must be given regular inspection and treatment. Beyond the technical responsibilities that have been enumerated, the Museum must maintain services that include library service, correspondence, records, and photography, needed to give full reply to the thousands of inquiries that come both from specialists and from laymen throughout the country. It must also maintain guard and labor personnel to protect and clean the buildings.

During the present period, with the Nation at war, these collections have importance even greater than in times of peace. They are consulted regularly for special information required by the war agencies, and also are visited by thousands of persons who find in the Museum halls education and recreation in these times when rubber and gasoline shortages restrict travel farther afield. At the present time about 25 percent of the visitors are men in uniform. The public exhibitions of the National Museum have great importance in the maintenance of public morale in addition to their value in reference and education.

8. *Printing and binding.*—Funds made available by this appropriation include also provision for printing and binding for the Smithsonian Institution and the American Historical Association, being divided as follows:

Smithsonian Institution.....	\$77, 880
American Historical Association.....	10, 620
Total appropriated, 1943.....	88, 500

That portion available to the Smithsonian Institution provides for printing the Annual Report of the Board of Regents (required by law) and necessary printing for the United States National Museum, Bureau of American Ethnology, National Collection of Fine Arts, the National Zoological Park, the International Exchanges, and the Astrophysical Observatory. Items printed include annual reports; bulletins, comprising works of a monographic nature and scientific studies of Museum specimens; proceedings, which are original papers setting forth newly acquired facts in biology, anthropology, and geology; labels; and blank forms. Beyond this, provision is made for binding books and periodicals in the various branches of the Smithsonian Library, which together constitute one of the largest repositories of scientific literature in the country.

The publications of the American Historical Association consist of the proceedings of the association, documentary material, and a report upon the condition of historical studies in America. The last-named takes the form of an annual bibliography of books and articles on United States and Canadian history.

In the present emergency publication for the Smithsonian Institution is limited to those studies that will assist in the promotion of closer scientific cooperation among the peoples of the American republics. Other matters are being postponed.

The publications of the Smithsonian Institution are the principal outlet for the "diffusion of knowledge," one of the prime functions of the Institution as defined in James Smithson's original foundation. The printed publications are sent to libraries and educational institutions throughout the world, where they are utilized as important sources of information and working tools by biologists, anthropologists, geologists, engineers, and historians, many of whom are engaged in practical problems of direct interest to agriculture, industry, and applied science. The publications are important in spreading widely the basic scientific data found in the national collections and in recording the results of the Institution's scientific investigations, explorations, and field work.

The Smithsonian publications are perhaps unique among Government documents from the standpoint of permanency. This is attested by the fact that some of the Institution's series have been continuously issued now for as long as 66 years, while the Smithsonian annual reports, containing selected articles setting forth the yearly advance in science, have been issued for 96 years. Requests are received daily for copies of the older and out-of-print bulletins and reports.

The largest part of the printing funds are allotted to the National Museum and the Bureau of American Ethnology. The researches conducted by these agencies are concerned essentially with the discovery and preservation of data bearing on man's history in America, on his natural environment, and on his arts and industries, together with scientific studies of the vast array of species of animals and plants that now or in the past have inhabited the world. These studies now are directed toward the Western Hemisphere. The function of these publications, therefore, is primarily scientific—they place on record for students of present and future generations new discoveries in these fields of science and correlate these with what has been found before.

Scientific facts are of value only when they are available; hidden in unpublished manuscripts they lose their potential usefulness. It is thus important to make available the discoveries of the scientists of the Institution and of the others who study the materials in its vast collections. Undue delay in publication brings a direct loss to the world of science, for it means that scientists must either pursue their studies with insufficient information or they must duplicate in part investigations already completed but unavailable for their use.

EXPENDITURES FOR 1942

Mr. WIGGLESWORTH. I would like to ask Dr. Abbot, or Dr. Wetmore some questions: First, what were your actual expenditures for the fiscal year 1942? Do you have those figures with you?

Dr. WETMORE. The actual expenditures for 1942 were \$1,115,022. That is somewhat lower than the amount actually available, simply because of the fact that toward the end of that fiscal year, with priorities and various shortages, there were materials that we expected to purchase that were not available.

Also during the latter part of that period we had a considerable turn-over in the lower paid groups, in the custodial service particularly, both among guards and laborers, because of the larger salaries offered to them elsewhere with which we could not compete. That condition has now been corrected under Public, 694.

INTERNATIONAL EXCHANGE SERVICE

Mr. WIGGLESWORTH. How much have you had this year and how much are you asking in this request for International Exchange Service for 1944?

Dr. WETMORE. For the fiscal year 1943 the appropriation was \$35,903; and the estimate is submitted for the same amount for 1944.

Mr. WIGGLESWORTH. You have already given some evidence of the demands by other countries for that service. To what extent is it compulsory under international agreements, and to what extent is it in your opinion of value in the light of the war?

Mr. DORSEY. Last summer I attended a conference over in the Library of Congress concerning this situation. The State Department is particularly interested in carrying on this work under our treaty obligations with the South American countries. Some of the publications were being held up by the censor and the State Department was embarrassed by this fact because we were under treaty obligations with South American countries for the exchange of these documents. Australia has recently written that the scientific and technical information contained in these American publications is needed not only for the use of Australians but by our own forces in that country.

Mr. WIGGLESWORTH. We are obligated to use the \$35,900 for that?

Mr. DORSEY. Yes.

Mr. WIGGLESWORTH. In full?

Mr. DORSEY. The estimate is practically all based on treaties and international exchange agreements.

Mr. WIGGLESWORTH. But are we obligated to spend that amount, the full amount, under the treaty?

Mr. DORSEY. The work is practically all based on these treaties and international exchange agreements.

BUREAU OF AMERICAN ETHNOLOGY

Mr. WIGGLESWORTH. How much did you have for the Bureau of American Ethnology for this year and how have you requested for next year?

Dr. WETMORE. For this year there is available \$58,552. The estimate for 1944 is for the same sum.

Mr. WIGGLESWORTH. What have you to say concerning the value of that work or whether it is considered of an emergency character in the war effort?

Mr. STERLING. The policy of the Bureau of Ethnology continues very much the same, but it has branched out rather widely from the normal type of American Indian research.

The men used in this work are anthropologists, whose training fits them for much broader fields than the study of Indians. They are now working on other anthropological and geographical problems to such extent that probably more than 80 percent of their time is being put on direct war work.

This work is divided into two main lines of activity. One is in cooperation with the State Department, where we are working on Latin American problems largely under the direction of Dr. Julian Steward.

We are establishing a series of cultural centers which were requested by several of the Latin American countries; five or six at the present time. It is expected that eventually such centers may be established in all Latin American countries. These centers involve a program of work including sanitation, education, exchange professorships, and the like.

In addition there is the project of which Dr. Beals is in charge, concerning which Dr. Abbot spoke earlier. This is the establishment of a society for anthropology and geography which will involve the cooperation of most Latin American scholars interested in these subjects.

Our other major field of activity consists of a close cooperation with the Ethnogeographic Board on work of direct military application. Three of our regular staff members are giving their full time to this work, in which we furnish spot information to the Army and the Navy and other Government agencies as requested.

The Board maintains a roster of scientists, which is drawn from the rosters of all of the scientific organizations of the country. This includes universities, research groups, and other organizations, so that practically anyone of any consequence who has been in remote parts of the world can be located instantly in these files and contacted within a brief period. If we do not happen to have the information within our group we are in position to get it within a 12-hour period if it is necessary and to deliver it immediately to the military services.

Mr. WIGGLESWORTH. Your justification states:

The work of the Bureau of American Ethnology consists of research on the American Indians. This research involves two principal lines of approach—studies of living groups in which facts and details are secured concerning their ethnology, linguistics, physical anthropology, and studies of prehistoric groups through archeological excavations with the object of reconstructing the movements, culture, and manner of life of pre-Columbian peoples.

Is that a correct statement?

Mr. STIRLING. That is a correct statement of normal activity, but on account of the war emergency we have taken the liberty to digress from most of our regular work to make use of the staff in such manner will best assist in the war effort.

Mr. WIGGLESWORTH. I do not find a single word in the justifications as presented referring to war functions.

Dr. ABBOT. Mr. Chairman, a general statement as to the war work of the Institution will be found at page 6 of the justification, and we have not thought it desirable to give particular statements on this subject for the separate bureaus.

Mr. STIRLING. We have retained the phraseology as applied to our work in normal times, not knowing how long the war will continue, and, of course, we are still doing work along regular lines as time permits, but we feel that this other work is more important now and we are giving as much time as we can to it.

PRINTING AND BINDING

Mr. WIGGLESWORTH. How much did you have for printing and binding in the current fiscal year?

Dr. WETMORE. For the current fiscal year, \$88,500.

Mr. WIGGLESWORTH. That is including the allocation to the American Historical Association?

Dr. WETMORE. Yes. The estimate for 1944 is for the same sum, \$88,500; which also is inclusive of the allotment that is to go to the American Historical Association.

Mr. WIGGLESWORTH. Will you insert in the record some breakdown that will show that appropriation was expended, and how it is expected to be expended for the next fiscal year?

(The statement requested follows:)

APPROPRIATION FOR THE SMITHSONIAN INSTITUTION FOR 1944

PRINTING AND BINDING

During the present war period the Institution's publications will be restricted mainly to those papers which aid in promoting cultural relations with Latin America. Most of the National Museum papers to be printed in the years 1943 and 1944 will deal either with life forms of our neighboring countries to the south or with subjects of particular interest to the scientists and economic workers of those countries. The Bureau of American Ethnology publications now planned for those years will emphasize the cooperative archeological work being done in Mexico, which is of great interest to the Mexican Government. The present World War utilizes science in all its branches to an unprecedented degree, and the Smithsonian annual report, with its survey of each year's scientific progress, is of vital importance in stimulating a wider popular appreciation and support of scientific research.

The scientific publications of the Institution form one of its chief means of carrying out its primary function, the "increase and diffusion of knowledge." The bulletins and proceedings of the National Museum record the researches of the staff in biology, geology, and anthropology, and the bulletins of the Bureau of American Ethnology contain the results of ethnological investigation on the Indians of the Americas. These series, although mainly technical in character, provide basic new knowledge which is used eventually by economic workers for the welfare of man.

The editions of our papers are not large, and the majority of them go to permanent libraries where they remain for consultation by those interested. Others are placed in the hands of special workers carrying on researches in their subjects. The papers are of permanent value and are sought by investigators everywhere, so that they are of constant use in many fields.

For the year 1944 an allotment of \$10,620 is planned for the American Historical Association. Of the remainder \$14,500 is allocated for the annual report of the Board of Regents of the Smithsonian, with its general appendixes; \$44,500 for printing the bulletins and proceedings papers of the National Museum, including an allotment of \$5,000 necessary for binding in the Museum libraries; \$17,480 for the publications of the Bureau of American Ethnology; and \$1,400 for miscellaneous printing of forms, labels, and some binding of books for all the bureaus, including the International Exchange Service, the National Collection of Fine Arts, and the Astrophysical Observatory.

The allotments for printing for the year 1943 are the same as the above.

The total sum estimated is required for our necessary publications which now have especial value in furthering closer relations with the other American republics.

ETHNOLOGICAL RESEARCH AMONG AMERICAN INDIANS

Mr. WIGGLESWORTH. One other question: In the language for this new appropriation, as drawn here, I see a provision for surveying and exploring expeditions of the Government, for ethnological research among the American Indians, and for excavation. Those, I assume,

are normal functions. I wonder to what extent it is contemplated, as a matter of policy, to perform them under present conditions.

Dr. ABBOT. Mr. Chairman, that work has mainly ceased. There is some going on in cooperation with the State Department in promoting good relations with the Latin-American countries. Under that, Mr. Stirling himself will go to Mexico in a little while to continue some very interesting archeological work there. But I think, in general, the archeological work has been mainly set aside.

Mr. STIRLING. Yes; we are not doing any archeological work now outside of the Latin-American field, and that only where it is done in connection with cooperative work with the Latin-American governments. In fact, the only instance now is this work I am doing in Mexico in cooperation with the Mexican Government.

Mr. WIGGLESWORTH. Is that a Rockefeller project?

Mr. STIRLING. No; that is financed by the National Geographic Society.

Dr. WETMORE. The Mexican Government officials are definitely interested in the continuance of this work. They have been much gratified that it has been possible to continue it for another year.

NATIONAL GALLERY OF ART

Mr. WOODRUM. Now, Colonel McBride, will you tell us something about the National Gallery of Art?

Colonel McBRIDE. Yes, sir. Most of our story is included in this general statement.

Mr. WOODRUM. You will file that for the record?

Colonel McBRIDE. Yes, sir.

SALARIES AND EXPENSES

Mr. WOODRUM. Your appropriation is just the same—\$541,365:

Salaries and expenses, National Gallery of Art: For the upkeep and operation of the National Gallery of Art, the protection and care of the works of art therein, and all administrative expenses incident thereto, as authorized by the Act of March 24, 1937 (50 Stat. 51), as amended by the public resolution of April 13, 1939 (Public Resolution Numbered 9, Seventy-sixth Congress), including personal services in the District of Columbia (except as otherwise provided in sec. 4 (c) of such Act); traveling expenses, including not exceeding \$1,000 for expenses of attendance at meetings concerned with the work of the National Gallery of Art, when specifically authorized by the treasurer of the gallery; periodicals, newspapers, lawbooks (not to exceed \$150), and books of reference; not to exceed \$250 for payment in advance when authorized by the treasurer of the gallery for membership in library, museum, and art associations or societies whose publications or services are available to members only, or to members at a price lower than to the general public; purchase, repair, and cleaning of uniforms for guards and elevator operators; leather and rubber articles and gas masks for the protection of public property and employees; not to exceed \$5,000 for printing and binding; maintenance, repair, and operation of one passenger-carrying automobile; purchase or rental of devices and services for protecting buildings and contents thereof; and maintenance and repair of buildings, approaches, and grounds, § : *Provided*, That section 3709 of the Revised Statutes, or the Classification Act of 1923, as amended, shall not apply to the restoration and repair of works of art for the National Gallery of Art, the cost of which shall not exceed \$15,000.

Colonel McBRIDE. Yes, sir.

JUSTIFICATION OF ESTIMATES

SALARIES AND EXPENSES

Expended 1942-----	\$493, 507
Appropriation 1943-----	541, 365
Estimate 1944-----	541, 365
Increase for 1944-----	0

The National Gallery Building and the Mellon collection of works of art were given to the Nation and accepted by Congress on the condition, among others, that the National Gallery of Art shall at all times be properly maintained by appropriations to be provided by the Congress. In the President's message to Congress dated February 1, 1937, he stated in part:

"The works of art thus offered to the Government constitute one of the finest and most valuable collections in existence containing only objects of the highest standard of quality. It is with a keen sense of appreciation of the generous purpose of the donor and the satisfaction that comes with the knowledge that such a splendid collection will be placed at the seat of our Government for the benefit and enjoyment of our people during all the years to come, that I submit this matter to the Congress."

Section 4 (a) of the act of March 24, 1937, provides that "The faith of the United States is pledged that, on completion of the National Gallery of Art by the donor in accordance with the terms of this Act, and the acquisition from the donor of this collection of works of arts, the United States will provide such funds as may be necessary for the upkeep of the National Gallery of Art and the administrative expenses and costs of operation thereof, including the protection and care of works of art acquired by the Board, so that the National Gallery of Art shall be at all times properly maintained and the works of art contained therein shall be exhibited regularly to the general public free of charge."

Section 7 of the trust indenture dated June 24, 1937, providing for the construction of the building for the Gallery and the gift of the Mellon collection, states that the above provision is "an express condition of the trust of said collection of works of art, hereby created." This same condition appears in the trust indenture covering the gift of the Kress collection, as well as that of the Widener collection, recently installed in the Gallery. Therefore, budget estimates should be sufficient to meet the trustee obligations to these donors.

No expense was spared in the construction of the building for the National Gallery, which cost over \$15,000,000, and the uniformly high quality of the works of art in the National Gallery has caused it immediately to take its place as one of the two or three leading galleries in the world. The recent installation of the famous Widener Collection, including some 100 paintings, 46 magnificent pieces of sculpture, tapestries, and important works of art in other fields, has now been completed, and the public—in the midst of this crucial period in world history—is now able to gain inspiration and enjoyment from this collection, which has rarely, if ever, been equaled—in quality or in scope—in any period of collecting in Europe or America. The President of the United States, in acknowledging the offer of Mr. Joseph E. Widener to give his collection to the National Gallery of Art and thus to the people of the United States, said "Your gift will make it possible for the people of the United States to enjoy the rich heritage of culture which we are striving to preserve." In his message to Congress of August 20, 1942, the President stated that "the Widener collection is probably the greatest private art collection in existence today. * * * Its addition to the Mellon collection and the Kress collection now in the National Gallery would be most appropriate. Indeed, it was for the very purpose of encouraging such gifts that the National Gallery of Art was established * * *"

One expert said that with the opening of the Widener collection at the National Gallery "Washington becomes the most important art center of the Western Hemisphere,"

finishing, hanging, and guarding of 10 additional galleries. Furthermore, Mr. Chester Dale has placed on indefinite loan a splendid collection of French nineteenth century masterpieces, and an important collection of French paint-

The opening to the public of the Widener collection has necessitated the

ings has also been loaned through the French Government from French museums and collections. These paintings occupy 9 additional galleries which have been opened to the public during the past year. Other galleries were opened from time to time for special exhibitions of which there have been 7 in the past year. Several of these exhibitions dealt entirely with phases of the war effort.

The number of visitors to the Gallery is much greater than originally estimated. It had been thought that the Gallery would attract some 1,500,000 visitors in its first year of operation, but 1,000,000 people passed through its doors in a little over 4 months. Over 2,000,000 visitors came to the Gallery in its first year—a unique record for institutions of this kind—and by December 31, 1942, a year and 9 months after the opening, the total attendance will exceed 3,000,000.

Included in the past year's attendance has been a steady flow of men in the armed forces, including many representatives of the Allied Nations. The most recent count indicated that 23 percent of the Gallery visitors are in uniform—over 5,000 a week. For the benefit of these guests, the Gallery is open until 10 o'clock on Sunday evenings; and the Founders' Room has been adapted as a lounge for the exclusive use of men in the military service. This room—30 feet by 45 feet—is furnished with writing desks, reading tables, chairs, and sofas. Stationery is supplied without charge from private funds, as well as books, magazines, and newspapers.

In order that the general public, as well as servicemen, may be given some brief guidance and instruction on the works of art, the Gallery staff conducts two daily "survey" tours of the collections. This practice has grown so valuable and popular that it has been somewhat expanded to include two 10-minute talks daily during the noon period on the Picture of the Week and a special tour on Saturday afternoon for service men. In the Gallery lecture hall, the Gallery staff offers week-end lectures illustrated by lantern slides of works of art in the National Gallery and elsewhere and, more recently, by motion pictures borrowed from various sources. To date, 90,000 people have attended the activities offered by the Gallery's educational staff. Thus the National Gallery is not only collecting and exhibiting works of art of the greatest importance, but is also interpreting them to its visitors—making the Gallery a cultural center of the community and of the country.

On a national basis, this interpretative work has included a project worked out with the General Federation of Women's Clubs of America—reproductions of paintings and sculpture in the national collection being circulated throughout the country accompanied by appropriate explanatory texts prepared by the Gallery's staff. In addition, at the request of the American Federation of Arts a color slide lecture prepared by the Gallery is now being widely circulated through colleges and high schools.

EXPLANATION OF ESTIMATES

The trustees of the National Gallery of Art are the Chief Justice of the United States (chairman), the Secretary of State, the Secretary of the Treasury, the Secretary of the Smithsonian Institution, and five general trustees: Mr. David K. E. Bruce (president), Mr. F. Lammot Belin (vice president), Mr. Duncan Phillips, Mr. Joseph E. Widener, and Mr. Samuel H. Kress. Other principal executive officers of the Gallery are Donald D. Shepard, general counsel; David E. Finley, director, and Harry A. McBride, administrator.

In compliance with the bylaws of the board of trustees, the budget estimates for the National Gallery for the fiscal year 1944 were approved at a meeting of the board held on September 3, 1942. In the opening of the building to the public on March 18, 1941, and in subsequent operation, it has been found that previous estimates for the necessary staff and operating expenses have been quite accurate. Nevertheless, it was inevitable that, once in actual operation, certain adjustments would have to be made. For instance, it has been found necessary—due to the greatly increased attendance on Saturdays, Sundays, and holidays, as well as on special occasions, such as the opening of exhibitions or new collections—that the guard force originally estimated be increased in order to give adequate protection to the works of art. It has also been necessary to increase the number of checkroom attendants.

One of the main obligations of the Gallery is, of course, the protection of the works of art, the building, and grounds; and it is therefore of great importance that the number of guards be sufficient for that purpose at all times. The opening

of new galleries, especially in such instances as the famous Widener collection, and the 5 additional hours the Gallery is open to the public each Sunday evening throw a heavy added burden on the protective service and make the employment of additional guards necessary if funds and competent personnel are available.

It may be pointed out that of the total number of personnel (paid from Government funds) included in these estimates for the National Gallery for the fiscal year 1944—75 percent are for the crafts, protective, and custodial staffs, the remainder for the staffs of the various offices. The total annual cost of \$417,365 for personnel may be compared with the corresponding figures for the Metropolitan Museum in New York for 1941 of about 580 employees at \$1,239,869.

It should be noted that an unusually large percentage of the employees of the National Gallery are in the custodial and protective branches, and it is therefore felt that it will be impossible to absorb the large additional sums necessary for the payment of mandatory increases in salaries in the crafts, protective, and custodial service. The problem of personnel, and especially of the guard force, of the National Gallery therefore remains a serious one.

While the allowance estimated for supplies for 1943 and 1944 is materially less than that required for 1942, it is believed that by practicing strict economy it may be possible to carry on with reduced expenditure well into 1944—at which time we hope that conditions will be more normal and a safer operating level than is possible under present war conditions will be reached.

MAINTENANCE, ETC., PASSENGER-CARRYING AUTOMOBILE

Mr. WOODRUM. Now tell us something about this language permitting you to maintain, repair, and operate a passenger-carrying automobile. What is the necessity for that?

Colonel MCBRIDE. That is a passenger-carrying automobile presented to the Gallery for use at the evacuation center in North Carolina, where we have taken some 80 of the most precious paintings for safekeeping during the war. As this place is isolated, a car was necessary for transportation.

Mr. WOODRUM. It contemplates the maintenance and operation of a car which was given to you?

Colonel MCBRIDE. Yes, sir.

Mr. WOODRUM. Is there anything else, Colonel, you want to say in addition to what is in the justification?

Colonel MCBRIDE. Very briefly, sir. We have been very fortunate this year in the matter of acquisitions. The famous Dale collection is now in loan to the Gallery. It consists of 42 additional paintings. We have also received 90 important French paintings from French museums, which were in this country, and are now on exhibition at the Gallery. Also, very recently, we received the famous Widener collection composed of 98 paintings and 45 pieces of sculpture. These outstanding acquisitions made it possible for us to open 20 new galleries during the past year and, of course, that immediately brought up the question of extra guards and extra laborers.

AMOUNT REQUIRED TO MEET SALARY INCREASES, ETC.

Although the figures shown in the estimate for this year as compared with the present year are the same, under our ordinary operation and maintenance, it really amounts to a reduction of about 14 percent.

Mr. WOODRUM. That is on account of what?

Colonel MCBRIDE. These items include the three laws providing increases in salary and the 10 extra guards which are necessary for the 20 new galleries we have opened to the public.

Mr. WOODRUM. Suppose you put that break-down in the record.
Colonel McBRIDE. Yes, sir.
(The break-down is as follows:)

Estimate of amounts required in 1943 and 1944 to meet mandatory increases in salaries, cost of opening new galleries, and other similar additional expenses

	1944	1943
Within-grade promotions required by Public Law 200 (Aug. 1, 1941).....	\$4,520	-----
Promotions of employees in Crafts, Protective, and Custodial Service required by Public Law 694 (Aug. 1, 1942).....	39,100	\$35,841
Reallocations of positions by Civil Service Commission.....	5,120	4,450
Guards (10 additional at \$1,500) required for new galleries.....	15,000	17,500
Vacation pay (to cover those entering the military service with maximum or near maximum leave whose positions had to be filled promptly).....		1,298
Sunday night opening:		
Personnel:		
Other than guards.....	\$2,457	
Guards.....	7,447	
Electricity.....	970	
Total.....	10,874	10,874
Total.....	74,614	59,963

¹ For 6 months January-June.

The personnel problem of the National Gallery of Art differs from that in many Government agencies. The National Gallery is self-contained and employs its own guard, mechanical, and laboring staffs rather than having these staffs supplied by the Public Buildings Administration. This is a provision of the act establishing the National Gallery, which places the entire responsibility for operation and maintenance under the board of trustees.

Thus, 75 percent of the employees are in the crafts, protective, and custodial service, and under the custodial pay raise act (Public Law 694, approved August 1, 1942), \$39,100 will be required for the payment of these increased salaries in 1944.

For the payment of the mandatory within-grade promotions required by Public Law 200 (August 1, 1941), \$4,520 will be required, and for increased salaries required by reallocations of positions by the Civil Service Commission, \$5,120. Thus there is a total increase of \$48,740 which the Gallery will be required by law to pay to its employees in 1944. This amounts to a 12 percent increase in cost of personnel.

The Gallery is operating at an almost irreducible level insofar as personnel is concerned, but during the present year it has received two of the most famous collections of works of art in the world—the Widener collection and the Chester Dale collection. It has also received on loan 90 important paintings from French museums. In order to exhibit these collections, it has been necessary to open 20 additional galleries to the public. If these collections are to be properly displayed and protected, the employment of 10 guards in addition to those now employed will be necessary.

Since the outbreak of the war, the Gallery has done everything in its power to be of service to men in the uniformed services and to war workers in Washington. It opened a large lounge, reading and writing room for servicemen, and extended its hours on Sunday to 10 p. m., so that servicemen and their friends would be able to enjoy the Gallery on that evening. As evidence that this service is appreciated, it may be noted that between 6,000 and 7,000 servicemen visited the Gallery during the past week. The cost of this war service in extra guards, checkroom attendants, information clerks, and electricity amounts to \$10,874 per annum. These items thus total \$74,614 for 1944. The Gallery is forced to function with the minimum personnel required to meet the conditions of the trust indentures and to maintain the building and grounds.

The above figures and items do not take into account the additional expenditure for overtime compensation under the recent act (Public Law 821, approved December 22, 1942), for which it is assumed additional funds will be provided by Congress.

Mr. WOODRUM. Is there anything else, Colonel?

Colonel McBRIDE. Our general statement contains information about what the National Gallery is doing in war activities. For instance, the Gallery is open until 10 o'clock every Sunday night and, Sunday before last, there were 15,000 visitors, over 6,000 of whom were in uniform. We are thus doing all we can for the servicemen. There is a servicemen's lounge in the Gallery there where they may read and write.

ESTIMATED VALUE OF ACQUISITIONS

Mr. DIRKSEN. What is the estimated value of all acquisitions now in the Gallery?

Colonel McBRIDE. About \$110,000,000.

Mr. DIRKSEN. Does that include the Dale and the Widener collections?

Colonel McBRIDE. No, sir; it includes the Widener, but not the Dale.

Mr. DIRKSEN. The Widener collection has been wholly acquired by the Gallery, then?

Colonel McBRIDE. Yes, sir; the Dale collection is on an indefinite loan.

LONG-RANGE WEATHER FORECASTING

Mr. DIRKSEN. Now, I wanted to ask Dr. Abbot a question. Several years ago, Dr. Abbot, you did considerable work in this field of solar radiation and the sun-spot theory in relation to long-range weather forecasting. I remember you sent me that monograph from Harvard and some other material which I read. I think you projected that up to 1941. I got tremendously interested, then sort of lost track of it. The work in that field is still continuing?

Dr. ABBOT. It is, and with still more interest.

Mr. DIRKSEN. Is there any current literature available on the subject?

Dr. ABBOT. Yes.

Mr. DIRKSEN. Will you send it to me?

Dr. ABBOT. Yes.

Mr. CASE. I would like to get that, too.

Mr. WOODRUM. Are there any questions of Colonel McBride?

LIMITATION ON EXPENDITURE IN THE DISTRICT OF COLUMBIA

Mr. WIGGLESWORTH. Colonel, why has the Budget cut out of the language the limitation on your expenditure in the District of Columbia?

Colonel McBRIDE. I think they did that in several appropriations in which that language appeared. I do not know why, sir.

Mr. WIGGLESWORTH. There would be no objection on your part if we put in a limitation of \$1,600 on travel, I take it?

Colonel McBRIDE. No, sir; that would be all right. The Gallery is being operated at the minimum now in personnel, guards, and so forth, and doing it as economically as we possibly can.

Mr. WOODRUM. Thank you very much, gentlemen.





