

THE AMERICAN MUSEUM
OF NATURAL HISTORY

SEVENTY-SIXTH ANNUAL REPORT
FOR THE YEAR 1944

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THE CITY OF NEW YORK
Issued May 1, 1945

"For the purpose of establishing and maintaining in said city [New York] a Museum and Library of Natural History; of encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction."

FROM THE ACT OF INCORPORATION,
APRIL 6, 1869

SEVENTY-SIXTH ANNUAL REPORT OF THE PRESIDENT

*To the Trustees of
The American Museum of Natural History
and to the Municipal Authorities of the City of New York*

THE war has stimulated people's interest in the whole world of nature, including the various peoples inhabiting the earth. This renewed interest is indicated at the Museum by great increases in membership, in visitor attendance, and in the number of subscribers to the Museum's popular publications. Anyone mingling with the great crowds on Saturdays, Sundays, and holidays is struck with the eagerness and intelligence which our visitors display in their choice of subject and their attention to it. Of course, our most recently completed and beautiful habitat group halls—the Asiatic, African, North American, and Pacific Bird Halls—are always crowded. But so also are the halls of more specialized instruction, such as the Hall of Comparative Anatomy and the recently renovated Mexican Hall.

The science of visual instruction is still young, and Museum plans for the modernization of at least 20 great halls, including such subjects as the ecology of nature, geology, soil, forestry and botany, paleontology, insects, fishes, reptiles, birds, mammals, and man, present a challenge which only the most careful scientific research and the very best in exhibition method and technique can adequately meet.

A further indication of the interest in the natural

sciences is shown by the great interest in the platoon program of the Department of Education, which provides guidance instruction for school children for an entire school day. Dr. Charles Russell estimates that the demand for this program is at least four times as great as our present services permit. Dr. John E. Wade, Superintendent of Schools, and the Department of Education are directly interested in the development of this valuable addition to the New York public school curriculum. No work undertaken by the Museum in recent years is of greater social significance or more in keeping with the original purposes of the founders of the institution.

The three main contributions to the war effort by the Museum—the Planetarium courses in celestial navigation and star identification, landfall recognition work shops supervised by the Navy Bureau of Aeronautics, and the canteen clubroom for service men and their families—have continued most effective services.

Financially, while it is satisfactory to report that the Museum closed the year with its books in balance and with a moderate surplus, I must call attention to the fact that the very substantial savings in annual expenditures, occasioned by positions vacated through war services and through inability to procure supplies of various sorts, will end when the war ends. It should also be noted that our scientific staff is at a minimum number and our expedition and exhibition program virtually at a standstill. On these facts it is apparent that the need for increased endowment is as great as ever.

The loyal group of men and women comprising Museum fund raising committees obtained 1,139 contributions for maintenance totaling \$75,065.08 and in the past eight years have obtained 6,377 contributions for a total of \$734,413.70 for the same purpose. These

sums, coming in as they do in addition to City income, income from endowment, and membership income are indeed life blood to the institution. Let us assure these loyal friends in all categories of our great gratitude.

Substantial gifts to capital funds were received from the estates of Elizabeth Douglas, Robert J. Goodenough, Hewlitt Scudder, Murray W. Scoville, and Eudora Hull Spalding. Let us hold these names in grateful memory.

Notable gifts for research, exhibition, endowment, and other special purposes were received from Richard Archbold, Clarence L. Hay, Robert E. McConnell, George M. Moffett, William Procter, Beverley R. Robinson, Frederick M. Warburg, C. V. Whitney, and Brayton Wilbur.

Important accessions were received from Richard E. Berlin, Silvie DeG. Coster, Cyril F. dos Passos, Childs Frick, Chris E. Olsen, Allan L. Wolfe, and from the late Henrietta Sands Merrick. We are particularly grateful to these special friends but wish also to express gratitude to the hundreds of Museum supporters who have also been of aid and service.

In connection with the 1945 budget recently adopted by the Management Board, a five-year budget for the Museum, projecting expenditures and receipts to 1950, was considered. After taking into account a substantial percentage increase of expenditures which might be occasioned by an inflationary price rise, this projection indicates that the Museum can operate on its present basis without serious encroachment upon capital funds. The study, however, emphasizes the need of additional endowment, not only to hold the present line but to provide improvements and developments which must be undertaken. Capital account at the close of the year had a market value of \$14,808,155.13. I see no reason to

lower the figure of \$10,000,000 necessary additional endowment submitted to the trustees last year.

After two years' consideration, the Management Board and the administration have approved post-war building plans which will shortly be filed and which involve the complete rehabilitation of the fifty-year old 77th Street buildings, with new heating, lighting, and ventilation throughout. This rehabilitation necessitates the removal of the gable roof, the attic, seventh floor, and floors 6 and 5, and the construction of a mezzanine throughout present floor 4. Since exhibition will be confined to floors 1 and 2, the window spaces on 77th Street will be blocked up. These structural changes require a new treatment of the entire 77th Street façade which, in the architect's latest plans, appears to be effectively accomplished.

The other main features of the plan are the erection of a substantial new three story building from Columbus Avenue east to the present auditorium, thus providing essential modern storage facilities, as well as new first and second floor exhibition space, tying in with the present dead ends; the conversion of the present Hall of Ocean Life into a large, modern auditorium with over twice the seating capacity of the present one; and the relocation and modernization of the scientific library.

The plan will necessitate the complete relocation, installation, and probably re-cataloguing of substantially all of our vast collections, with the exception of birds, as well as relocation and modernization of virtually all the exhibitions in the old buildings, a truly herculean job. When concluded, within the period of the next ten years, the Museum will enjoy a commanding position among the natural history museums of the world.

Although no one can foresee exactly when construction will start, how finances will be arranged, or what contribution the Museum will be able to make,

both the Management Board and the administration are convinced that ways and means must be found to carry out the plans. Having glimpsed what the Museum might be, in terms of new and effective public service, no one will ever be satisfied with having the Museum remain as it is.

During the next few years, the administration will be extremely busy in perfecting plans for the change, and very little or no new exhibition can be undertaken. This time lag I believe to be a great advantage, since it will enable a truly great scheme to be developed, combining the latest scientific knowledge with the most effective exhibition techniques.

In connection with these plans, there will be great opportunities for donors to establish memorials. The new Columbus Avenue building, with a fine entrance, might in itself be a memorial. The proposed auditorium, with a seating capacity of 2300 and entirely modernized projection and acoustical arrangements, could also serve as a splendid memorial. In the proposed exhibition program, comprising many new halls, there will be particularly significant opportunities for appropriate memorials to those who have served their country in this war. In this connection I might add that important scientific publications, as well as research projects, afford other opportunities for most worthwhile and permanent memorials. In due time, an attractive illustrated booklet will be prepared for friends of the Museum, showing all the proposed developments, which will also serve as a basis for an appeal for funds.

Three years have elapsed since the Trustee Survey Committee promised an administrative reorganization. This reorganization has been completed and I wish to report briefly thereon, following in general order the report of the Trustee Survey Committee dated December 4, 1941:

(1) The Management Board, consisting of seven trustees annually elected thereto and five ex-officio members from the officers of the corporation and from the City representatives, was established in January, 1942. The trustees are familiar with the work of the Management Board through its monthly reports and are themselves the best judges of the manner in which the Board has discharged its responsibilities.

(2) The new Director, Albert E. Parr, took office in June, 1942, and has very ably and effectively directed the affairs of the Museum as its chief administrative officer.

(3) Advisory boards have aided in the solution of various Museum problems—the Scientific Council, composed of heads of departments under the chairmanship of the Dean of the Scientific Staff; the Plan and Scope Committee, a committee appointed by the administration, with two trustee members; and the Budget Committee, also a committee appointed by the administration, with two trustee members.

(4) The Museum books and records have been reorganized as a result of a study thereof by Messrs. Lybrand, Ross Bros. & Montgomery.

(5) The retirement age for all staff members at the age of 68 has been put into effect. While this change has occasioned great personal regrets when eminent and beloved scientists, seemingly in the best of health and spirits, have become emeriti, nevertheless the rule has been adhered to in all cases in a spirit of the greatest loyalty to the institution. All retiring scientists are encouraged to remain at the Museum to continue their research work. The trustees endeavor to take care of individual cases of hardship and it is confidently felt the retirement rule will promote better departmental administration and prove an encouragement to the work of younger men.

(6) Scientific Departments. After prolonged study,

an evaluation and a development program for all departments, in reference to their research functions and collections, was adopted by the Management Board. This basic charter for the scientific work of the Museum, reported to the trustees by the Director in November, 1942, has proved of inestimable value to the Museum and provides a well balanced and sensible development. Further to strengthen the scientific work of the Museum, on the recommendation of the Director, the Management Board adopted the policy of a minimum budget for scientific work, upon which there should be no financial encroachments, together with a career schedule of scientific salaries, based on those of comparable educational institutions in the metropolitan district. In further recognition of the importance of the scientific work of the institution, allowances for research and publication, as well as for departmental supplies, have been substantially increased. With these measures, the tendency during a period of forced economy to sacrifice the scientific departments for the administrative and public work of the Museum was checked and the importance of the scientific work properly recognized. In the future, the Museum should be able to enlist the services of the most promising young scientists.

(7) The pension system has been studied, the two separate pension funds were consolidated, and the new pension fund was made actuarially sound by a substantial contribution from Museum capital funds.

(8) The annual budget has been revamped in method of preparation, in form of presentation, and in substance. Inequalities of pay between positions of equal merit and work have been adjusted. Necessary advances have been made to keep up with the increased cost of living, as well as to reward merit. The plan of projecting a five-year budget has been adopted in an attempt to anticipate trends, both in receipts and expenditures.

(9) The complete rearrangement, as requested by the trustees, of Museum space, halls, offices, exhibits, and storage facilities has been worked out in connection with the new building plans.

I should like to add that the so-called business activities of the Museum—the Planetarium, the magazines *Natural History* and *Junior Natural History*, the cafeterias, book shop, and popular publications—have been operating on an all-over profitable basis for the past two years. For this fine result we are most grateful to the many able and loyal men and women who have carried on these activities, often with entirely inadequate personnel.

Of course, in completing so thorough a program of reorganization, many difficulties had to be overcome and many honest differences of opinion reconciled. There has been the greatest cooperation throughout. That the program has been loyally and enthusiastically accepted and adhered to speaks well for the fine morale throughout the Museum.

In closing, let me say that both within and without the Museum there is increased belief that the Museum has a great mission to perform for this nation in scientific accomplishment, as well as in ever broadening public service. Perhaps it is this belief that has sustained the faith of all connected with the Museum during these difficult war years. I wish to express my personal gratitude for the cooperation and help that I have uniformly received from the Park Commissioner, his staff, my fellow trustees, the fund raising committees, and the men and women working within the walls of the Museum.

A. PERRY OSBORN
Acting President

TIMES AND THE MUSEUM

BY A. E. PARR, DIRECTOR

THROUGH THE PAST TOWARDS THE FUTURE

THE vigor of a scientific and educational institution depends upon the extent to which it aligns itself with national traditions and seeks its intellectual nourishment in the experiences of the nation it serves. Institutions that express only the special interests of their sponsors, however valid and unselfish in intent, generally fail of growth and development. If they do not satisfy a genuine and commonly felt craving for knowledge and guidance they find no successors to the benefactors by whose enthusiasm and generosity they were first created. They become static and soon lose their place among cultural institutions if they do not disappear altogether.

Seventy-five years ago the American Museum of Natural History was founded with the modest intention of providing the City of New York with an institution similar to those already possessed by "nearly all the capitals of Europe, and more important cities in our own land." To achieve this purpose the Museum began its existence with the "purchase, in Europe, [of] the largest and most valuable collection of objects of Natural History, which has been offered for sale in many years."

Fortunately the Museum very soon departed from this pattern of imitation and developed its own truly American personality, in accordance with its name, under the wise and far-sighted guidance of President Morris K. Jesup. It was an extremely happy circumstance for the entire future growth of the Museum that President

Jesup should be so finely and so strongly attuned to the people's need and desire for information concerning the natural environment of human existence in the young nation which had barely begun to become acquainted with its own country. Perhaps our indebtedness to President Jesup for the soundness of his vision in thus leading the Museum into the foreground of public interest in the days of its early youth even exceeds our indebtedness for his many generous gifts and for the great bequests that bear his name.

In a colonial empire such as that of Great Britain the pressure of public curiosity and interest naturally leads to an emphasis upon the study of nature in distant lands and the museums grow strong by the manner in which they respond to this demand. In an intensely seafaring nation such as Norway it is the study of the life of the oceans which wins praise and support and vigorous growth for its institutions.

In the early days of the American Museum there was no other nation in the world with interests and experiences similar to those of the United States. Institutional patterns that had proved highly successful elsewhere were therefore not well suited for the service of American education and research. By his intuitive and immediate recognition of this fact President Jesup was able to give the American Museum a truly American character almost from the start, thus saving the institution from a long and painful process of gradual adaptation which might otherwise have greatly retarded its growth.

Recent and contemporary American experience of nature and man during the nineteenth century differed particularly in two important respects from the experiences of which European nations were still conscious.

The European nations had already been settled in their countries too long for personal memory or concern about racial or cultural differences between "original" inhabitants and new settlers. The last great waves of migrations in Europe took place centuries ago and the differences had been gradually absorbed in the development of fairly homogeneous nations of mixed origins. Ethnological studies within the countries' own boundaries therefore had little or no place within the program of institutions designed to serve the cultural needs of European nations until these studies had reached the refinement, and racial relations had reached the degradation, of the twentieth century. At least this was true of any European nation with cultural institutions which might conceivably serve as models for the development of an American museum during the 1870's. Even in the institutions of the colonial empires ethnology still remained largely a marginal subject in the public spheres of interest, chiefly handled in the manner of the curio or trophy cabinet.

In America the wars with the Indians had scarcely ended. Memories of battle were still vivid in the minds of living men. The conflict was far from having reached a final and permanent settlement. There had been no fusion of races into a unified nation. The newcomers and the original inhabitants still remained culturally and racially completely foreign to one another. With a clear understanding of the great intellectual duty and the great opportunity to be of educational service which this situation offered the young museum, President Jesup immediately turned his greatest energy and his greatest generosity towards the goal of assembling all possible information and material evidence of the native ethnology and archaeology of our country and our

nearest neighbors on the new continent. Through these efforts the Department of Anthropology immediately became, and it still remains, the largest department of the American Museum. Its collections in New World ethnology and archaeology quickly became outstanding, and the men who served them preëminent in their fields. The department also became the main training ground from which other scientific and educational institutions recruited their personnel. The prestige of the men who laid the foundations of American anthropology in the service of our Museum does not easily fade from the institution with which they were associated. Nor do their successors allow it to lose its luster.

The new world situation with its intensification of social and international problems now gives the anthropological sciences even greater tasks to perform in research and education than they have ever faced before. The American Museum hopes to enable its Department of Anthropology to meet these greater tasks in greater force both in the foreign and in the domestic fields of the subject.

The second outstanding difference between American and European national experiences with the natural environment was that which developed from the influence of virgin forests upon human affairs. In Europe this influence culminated in the Middle Ages. The vast forests of medieval and pre-medieval Europe did not only dictate the physical, social, and economic ways of life of their inhabitants, but have also been credited with a profound influence upon their habits of thought, their mythology, and their emotional life. There is no isolation so complete, so crushing, or so inspiring as that of an inhabited clearing in the uncharted vastness of primeval woods.

In Europe, however, this stage had already been left far behind long before the nineteenth century. The relationship between forests and land under cultivation had reached a fairly stable and final pattern, with no urgent problems to impress themselves very strongly upon the minds of the people. Forestry therefore received only scant or no attention in European museums generally.

Not so in America. In so far as their relations to the forests were concerned the American people had been forced to telescope into less than two centuries a development which had taken several thousand years in Europe. At the end of the third quarter of the last century we were still in the midst of this gigantic struggle by which the future pattern of our natural environment was, and still is, to be determined. The American people were therefore still keenly conscious of their forests, not simply as stable and permanent features of the landscape, but as active and changeable influences upon their personal and national life. The forests were the greatest obstacles which they themselves or their nearest ancestors had had to overcome in wresting a foothold for themselves and their families in by far the largest part of the regions in which the nation had then become established. The forests were also an apparently unlimited source of wealth. Many could also recall having lived off the game of the woods, and many still did. The grandeur of virgin timber was still in vivid memory.

In his sponsorship of the Museum's great collection of American woods President Jesup thus again acted in ideal accord with the genuine interests of the nation, and by the departure from the pattern of other institutions created by this unique emphasis upon domestic

anthropology and upon forestry, the Museum under Jesup's leadership acquired a distinctive and truly American character in which we may find the original source of the strength that has carried it forward.

As the science of forestry developed it grew away from the methods which can best be applied in the laboratories and collections of a museum. Although it retains the invaluable Jesup collection of woods and plans to install greatly improved educational exhibits in this subject, the Museum therefore no longer has a scientific research department in forestry. But this does not in any manner detract from the value of President Jesup's and the Museum's share in getting the science of forestry off to its splendid start in the New World, and into its proper place in the consciousness of the American people.

During this early period, the American Museum also spent a great deal of effort upon the general collection and study of natural history objects, notably of mineralogy, geology, mammals, and birds. But these activities were all on a smaller or less intensive scale than those in anthropology and forestry and in a more traditional pattern with less definite emphasis upon the problems of the New World, although we find J. A. Allen, in the eighty's (as curator of birds and mammals), urging very strongly the desirability of large and extensive collections from our own country.

It was not until Henry Fairfield Osborn, who became Mr. Jesup's successor as President, turned the interest and enthusiasm of himself, and of the eminent colleagues whom he gathered to the Museum, towards the demonstration and interpretation of the theory of evolution that the Museum entered a new field in which its activities would seem to have been as truly responsive

to the public interest and demand as they were in anthropology.

Although the theory of evolution was European in origin it can almost be said to have become American by adoption at least during the period which roughly coincided with Dr. Osborn's presidency of the Museum. For reasons beyond the writer's capacity to state there would seem to have been a psychological predisposition for greater concern about the ancestry of man among the American people than in any other nation. The debate took more violent forms, was more widespread, and has lasted longer in our country than anywhere else. This apparently natural inclination was further stimulated by the fact that, although the theory was European, most of the evidence was to be found in America.

Again the American Museum was fortunate to find in Dr. Osborn a successor to President Jesup whose bent of mind was in equal harmony with the trend of public interest. Under the leadership of President Osborn the Museum acquired the largest and most valuable collection of fossil vertebrates to be found anywhere during the period when the subject of vertebrate evolution was foremost in public and scientific thought, and its scientific publications became of world-wide importance in the discussion. The influence of these great activities extended beyond the Department of Paleontology. The problems of the nature and descent of man gave added stimulus and public interest to the work in physical anthropology. The need for interrelation of the vast amount of new information about all branches of the vertebrate family of animals led to the creation of a Department of Comparative Anatomy which added greatly to the national and international prestige of the Museum by the brilliant contributions of

its members. The culmination of this epoch may be seen in the famous Central Asiatic Expeditions of the 1920's.

But a science with such definitely drawn boundaries as those of paleontology and evolution does not contain within itself the unsprouted seeds for continuous renewal of its place in public interest that are always to be found within the wider fields of such subjects as anthropology and general biology, which will continue to extend the branches of their new growth into the foreground of human interest as long as life remains.

Towards the end of the first quarter of the twentieth century the world had begun to accept the theory of evolution as a settled question to the extent that it probably ever will be accepted. It was no longer a burning issue in common thought. The spectacular evidence of the life that existed before the days of modern man will always continue to excite intense curiosity, but the questions which are answered by these discoveries have lost their urgency in the minds of men, and new problems calling for the attention of scientific and educational institutions have taken their place.

Nevertheless, no true science ever reaches the end of its usefulness, its educational value, or its own pursuit of truth. Once established, all sciences must therefore be carried forward by the efforts of the individuals and institutions best fitted for the task. The possession of its tremendous collections and the outstanding qualifications of the young scientists now giving them their attention therefore make it an obligation for the American Museum to continue its activities in paleontology parallel with the development of the new fields in which its services are also required. The Museum does not intend to fail in this obligation.

After the end of the first World War the United States experienced a brief but previously unequaled period of prosperity. This, together with the taste for seeing the world engendered by the experience of the war itself, led to an era of intensive travel over all parts of the globe, which, in turn, caused a shift in the interest of the public from the life of the past to the life they were likely to see, and to be able to collect specimens of, on their own voyages. Again the American Museum and its friends responded to the trend, and it was particularly during this period that it acquired its superb collections of living forms, especially birds and mammals, and laid the foundations for the magnificent exhibits best exemplified in its new halls of mammals, in which the great visions of Carl Akeley have been made into reality by those who gave their generous support to the realization of these plans and carried Mr. Akeley's work forward after his untimely death.

It was also during this period, and in accordance with its general trend, that the Museum's scientific collections of birds reached their present unrivaled state of completeness and perfection. These collections today exceed those of any other institution in the world, both by their size, by their quality, and by the facilities with which they are equipped, thus placing a great responsibility upon the Museum to carry on its scientific and educational work in ornithology.

But again the times changed. The prosperity became a depression which, in addition, coincided with new and violent experiences in the domestic relations between man and nature within the boundaries of our own country. Dust-bowls and aggravated floods became national problems on a previously unknown scale. The problems arising from the rate of exploitation of natural

resources and the despoliation of natural beauty impressed themselves upon the minds of the American people as never before. The natural history of our own country again became more important than that of any other part of the world.

It was a very fortunate circumstance that the new Hall of North American Mammals could be completed at this time. But beyond that partial response the Museum had had neither the time nor the funds to adjust itself to the new tasks which lay before it, when our entry into the second World War again changed the situation. Only in the Department of Insects had the Museum steadfastly held its main attention focused upon the living animals of our own country in its research, its exhibits, and its other educational activities.

It is, of course, not possible at this time to say precisely what the Museum's new scientific and educational tasks in the post-war world will be. But it seems quite clear that the new role our country must play in international affairs will call for an expansion of our anthropological activities into foreign as well as domestic fields. It also seems certain that the return of peace must lead to a revival of our concern with the nature of our own country, since there has been no permanent settlement of the domestic problems and difficulties which beset our nation in its relations to the environment before the war.

Simultaneously with the many changes in emphasis, which the various subjects have undergone both in public interest and in the Museum's own efforts, there has also been a gradual change in the purposes and methods of education, with which the Museum has not entirely caught up, and this must be one of the main considerations in our future plans.

It is perfectly clear from the records that the fulfilment of educational needs was the primary purpose and argument for the establishment of the American Museum. Albert S. Bickmore, a scholar of considerable attainments, who drew up the first recommendations and plans for the creation of the new institution and became the first occupant of the position now designated as the directorship, functioned mainly as an educator rather than a research worker. But it was also realized that education, unless it is to remain only on the most elementary levels, cannot successfully be divorced from the original sources of information in the knowledge of trained and active scientists. Like other happy marriages, this sound relationship between teaching and research is not without its minor frictions, but neither can live without the other. The person primarily concerned with education will always have a tendency to demand that science direct its research and organize its knowledge according to the teaching methods he wants to use and the subjects he considers it desirable to deal with. The scientist, on the other hand, tends to look upon education merely as an instrument for the diffusion of the particular kind of knowledge he himself has preferred to acquire. There is justification for both attitudes, and it is by their reconciliation within its general program that an educational institution grows strong and useful in its services. Thus the need for a scientific department may arise from an educational demand for knowledge, and a necessity for teaching may grow from the eminence of a scientist whose influence can be fully transferred to our cultural tradition only by the living word and by personal contact with the functioning of his mind. Or the value of scientific collections may require the teaching of their subject in order that they may attain their full usefulness.

In the educational program of the American Museum, all of these considerations have been given full scope. Already in 1880, a separate department of Public Instruction was created under Dr. Bickmore with the primary purpose of familiarizing the teachers of the public schools with the exhibits to be found in the Museum, so that they in turn might guide their pupils in the use of the collections on display. The courses offered by Dr. Bickmore met with remarkable success among the teachers, as shown in all the reports for this period, and the importance of his work in establishing the Museum's place in general education can scarcely be overestimated.

As the Museum grew in size it became more and more difficult to convey to those not in daily contact with its operation a sufficiently intimate knowledge of its plan and of the meaning of its exhibits to enable them to act effectively as the guides of others. The system of having the Museum's own personnel conduct the public school classes through its exhibits was therefore gradually developed and brought to a high degree of educational efficiency under Dr. Bickmore's successors in the Museum's Department of Education. More than 1,350,000 pupils have so far participated in these conducted tours, which are now organized as an entire day spent in the Museum's exhibits, its lecture rooms, and its school cafeteria.

Due to the efforts and initiative of Dr. George H. Sherwood and the generosity of the Museum's friends, the Department of Education was able to secure for its own use a large separate building on Museum grounds, which it has occupied since 1926. From this headquarters it now pursues its task of organizing, adapting, and translating the scientific knowledge of the Museum

into the terms of general education and so present it to the public, especially to the students of the New York school system. In this effort the department can draw upon the knowledge and whole-hearted cooperation of the entire scientific staff and make use of the Museum's collections, while it enjoys an entirely free hand in formulating its program according to educational needs only. Its activities have extended into many fields, such as education for the blind and special training for the armed forces during the present war. Its lantern slides, motion pictures, and study materials are constantly circulating throughout the school system. The Museum looks forward to a continued vigorous growth of this department.

But the educational activities have not been confined to those of the separate Department of Education. The Museum's "Popular Publications" have reached a very wide public, about 80,000 copies having been sold, not counting the pocket guides to the Museum. The *Natural History* magazine, which first came into being in 1900, has reached a new degree of excellence, both in the quality of its appearance and in its contents, with a circulation now approaching 40,000 copies.

In advanced education the Museum's collections and the abilities of its outstanding scientists have always found application in the teaching of special courses, usually as part of the curriculum of one of the neighboring institutions of higher education, particularly Columbia University. This has been especially the case in anthropology, paleontology, and comparative anatomy.

When the Museum first began gathering its great collections together there were still so many new and startling things to discover that merely observing, recording, and interrelating the amazing variations in form

and color produced by nature seemed sufficient to satisfy the curiosity of both the scientists and the laymen who visited the Museum's exhibits. As the forms of nature began to become familiar, interest began to shift to the question of how the forms functioned, at the same time as the emphasis in general education changed from the acquisition of knowledge to the attainment of understanding. The public became appreciative of the fact that a mere knowledge of what an animal looked like did not tell them what it really was or how it functioned. And yet there was still far too much territory left to cover for the scientific departments engaged upon the study of the forms of nature to permit them to turn their attention to new aspects of their subjects at that time. To meet this new educational demand and genuine intellectual curiosity about a phase of natural history which was obviously destined for a continual growth in importance, the American Museum in 1928 created a Department of Experimental Biology which has now become the Department of Animal Behavior. Through the brilliant work of G. Kingsley Noble this department immediately won wide acclaim in the scientific world, and its exhibits aroused great interest among the public. The growth of the department's prestige continues undiminished and its importance in the Museum's educational program must steadily increase as we try to meet the demand for exhibits interpreting the internal mechanisms by which nature functions.

The role and the obligations of the Museum have been very well expressed in the annual reports for 1940 and 1937, in two statements by its president, F. Trubee Davison:

[Page Twenty-two]

“The struggle of the democracies against the dictatorships is not only a fight for freedom to live, a fight to satisfy physical and emotional hunger, but it is just as importantly at present, and even more importantly for the future, a fight for the freedom to think.

“In this struggle the museum stands at the forefront of the institutions designed to satisfy intellectual hunger. The museum is not limited like the public school to the young. The museum is not dedicated like the college or university solely to the educated. The museum does not, like the library, serve only the literate. The museum deals with all peoples on all levels and can and does reach out to meet the intellectual hunger of all people of every degree on all levels of intellectual attainment. It is a democracy’s most important agency for the spread of honest understanding of life.” (1940)

“We, along with all other living creatures, are part of the great design of nature,—in one sense an insignificant part, even though we have been endowed with greater mental and spiritual qualities than any other forms of life. Those things which affect the rest of nature, likewise generally affect us. Those things which are happening to man today or will happen in the future, all find their roots in the past.

“It is the Museum’s task, and that of other research organizations, to discover these truths and to make them available to man, so that he may more intelligently work out his destiny.” (1937)

Guided, inspired, and encouraged by this faith and this confidence in the importance of our task the staff and administration are now applying their best efforts to the presentation of a plan and a program which will enable the American Museum of Natural History to achieve the goal and perform the duties thus envisioned for it.

IN THE PRESENT

The seventy-fifth year in the history of the Museum was also the second year in the history of the present administration, and a critical examination of developments during these two years may therefore be proper and wise in order to put an early stop to our mistakes and to reaffirm our methods and policies where they have proved fruitful or promising for the welfare and progress of our institution.

The near-completion of the architectural plans is one of the definite achievements of this two-year period, and the Museum is deeply indebted to Mr. Aymar Embury for the able and cooperative manner in which he has carried out this difficult task. The depression and the war which followed hit the American Museum at a very critical time in the development of its physical plant and have left the institution in a very unbalanced and unsatisfactory condition, with the work only half or less than half finished. Our facilities are up to the highest standards only in a few sections of our buildings, such as those containing the splendid halls of African and of North American Mammals, and in the Whitney Wing with its fine exhibition halls and its excellently arranged and equipped laboratories and storage spaces for the care of our great collections of birds. In all other sections our buildings are not only inadequate in regard to space but also unsuitable for modern methods of use and operation. Most of these sections are more than 50 years old and have been neither expanded nor improved upon during this long period.

The difficulties affect every aspect of the Museum's activities. Our storage facilities are so inadequate that we actually have valuable collections boarded up in our back yards. The library, which is the heart of any

educational and scientific institution, has no room for expansion or for efficient cataloguing and administration, and many of our books are already stored in places where they are not easily accessible and cannot be given the proper physical care. Our largest auditorium holds less than half of the audience waiting to hear our lectures of more general interest, and is moreover extremely unsatisfactory in regard to acoustics and other features. Our exhibition areas are spread over four stories, aggravating Museum fatigue in an undesirable and unnecessary degree, and presenting great handicaps for the planning of interesting Museum tours. In one large section of our buildings the visitors are forced to walk back the way they came through several halls in order to get from one subject to the next.

With all these problems and handicaps to contend with the Museum is very grateful to the Commissioner of Parks, through whose initiative and support we have been given opportunity to prepare architectural plans for post-war additions and alterations that will overcome all the difficulties which have just been described.

The main feature of the plan is the creation of two very large and windowless lower floors on which all our exhibits can be concentrated and arranged in such a manner that our visitors may take continuous tours through our halls according to their individual interests, without the necessity of back-tracking, and with the confusing and fatiguing interruptions of having to move from floor to floor reduced to a minimum. The absence of windows will secure the absolute control of illumination which is essential for the creation of true illusion in the composite exhibits and proper conditions of observation of the single objects. The plan will further provide a modern auditorium with twice the capacity of the present one

and with proper acoustical design. An efficient two-story unit for the library, increased restroom and restaurant facilities, adequate and effective space for offices, collections, and laboratories will also be created.

In view of the Museum's present circumstances and the advantages to be gained by the proposed changes, it is therefore obvious that the execution of the post-war plans as a whole will vastly improve our ability to serve the public interests both in education and in research, within the limits set by economic considerations and by the need to make use of existing structures. But it is also important that the significance of these limitations should be clearly understood in judging the results to be accomplished. It must be fully recognized and accepted that modernization of old buildings can never completely achieve the degree of efficiency for modern use which can be attained by entirely new construction. But all improvements physically possible will be incorporated in the final details now being worked out on the basis of the general plans already adopted. In regard to the expansion of space for the storage, care, and study of scientific collections, this has of necessity been largely confined to the increases required to make adequate provisions for the Museum's present collections and activities, but not for any new undertakings or very long continued growth within existing departments.

It is essential for the efficient operation of a museum to have a complete physical separation between exhibits and research collections. When research material is stored in exhibition halls, the need to provide easy access to the study specimens entirely prevents the application of modern interior designs to the treatment of the hall itself, due to the necessity of adhering to the standard

sizes and stiff rectangular shapes of the storage units used underneath. It thus excludes the educationally most effective, and esthetically most attractive, methods of display. It also interferes very badly with the efficiency and therefore with the results of our activities in research and in advanced education for which the public exhibits are not sufficient.

Most of the apparently great expansion in space provided for the storage of our research collections of minerals will thus be immediately absorbed by the removal of these collections from the exhibition hall in which they are all kept at the present time. This is also true in a high degree in regard to anthropological material and to a greater or less extent in almost all departments.

But it is also true that an active collection is not adequately provided for unless it has room to insert some new material in systematic order as it gradually comes to hand. In the statement that the proposed plans make adequate provisions for present needs it is therefore also implied that they make room for reasonable growth in the most immediate future. And, since the proposed plans will put the Museum in a position to make further additions to its storage and study facilities at only a fraction of the cost and effort which would be involved on the basis of its present plan and structure, the problem of further expansion likely to be needed in another decade or two can wisely be left to the future. The attainment of this advantageous position for further growth is one of the most valuable and significant features of the entire design, representing a great step forward in the development of the Museum and a strong argument for the execution of the plans.

While responding to the necessity and great possibilities of post-war planning, the administration also yielded more than wisely to an extraordinary demand for innovations in internal designs independent of the execution of the post-war plans. In order to carry this double load in one department of Museum activities it became necessary to devote an undue amount of effort and attention to the development of future plans, leaving too little time and energy for the solution of more urgent but less spectacular problems.

Only in two instances have the interior plans for new exhibits been capable of immediate execution because they involved only a new or modified use of supplies and equipment already in hand. In the new Hall of Mexican and Central American Archaeology, which was opened in February, 1944, the Department of Anthropology achieved a remarkable success in spite of all the limitations imposed by war-time conditions. These new exhibits have received the strongest acclaim both from the general public and from those with special knowledge of Museum work and of the subject dealt with. The Museum has also been able to proceed at once with the installations in the Sanford Hall of Birds, since the cases needed for these exhibits were acquired a long time ago. This hall should be completed within a year. Rearrangements and redecoration in the Whitney Hall of Oceanic Birds have greatly enhanced the attractiveness of this beautiful unit among the Museum's halls.

Among the plans which must await future opportunities for execution, two hold particular interest and promise and will be given the earliest attention. One, designed as an introduction to the anthropological subjects, visualizes the installation of a series of exhibits illustrating the epic of man's ascent to civilization and

the dynamics of his cultural life and cultural relations. The other calls for an attempt to demonstrate the manner in which all forces of nature converge upon each other in the formation of a familiar landscape and in the control of its living and dead contents. The early future realization of this latter plan is especially assured by a generous promise of financial support received from Colonel Frederick Warburg during the year just passed.

The temptation to dream of future voyages while the ship rides at anchor is always strong, but there is greater wisdom in first looking after the boat and crew. This, unfortunately, was not the order of events during the two years with which we are here concerned. But now, at the end of this period, we are finally beginning to catch up with the problems that did not receive the share of attention they should have been given from the start, and our activities therefore seem more soundly balanced in retrospect than they actually were in the course of action.

On the recommendation of the Director the economic and administrative status of the scientific staff has been put on a basis of equality with the status of the faculties of the leading universities. A firm policy governing the normal advancement of all employees in the curatorial departments has been adopted in order to assure reasonable economic recognition of merit and service, regardless of other opportunities in such highly specialized fields as those in which a museum must engage its workers. While the number of scientific positions has undergone a considerable reduction, the means to carry on work in the positions that remain have been substantially increased, and the Council formed by the chairmen of the various curatorial departments has been enabled to implement its own decisions with funds at its own disposal.

The extremely difficult problem of making sound provisions for the retirement of Museum employees has been successfully solved, thanks to the wise and unremitting efforts of the Pension Board under the chairmanship of Beverley R. Robinson, and the new plan now in force is on a self-sustaining basis.

An important innovation in the Museum's organization outside of the general management divisions, introduced by the present administration, was the establishment of a staff architect's office to deal with interior layouts and general designs for the exhibition halls, and with similar tasks and problems. The value of having such a unit within our own organization has already been amply demonstrated and will become still more obvious after the head of this new department, Mr. Victor Ronfeldt, returns from military service.

With the total number of staff positions of necessity greatly reduced from its earlier high level, it also became desirable to effect a simplification of the departmental structure by merging into larger units those departments which had become too small to make separate administration the most efficient way of handling their problems. All the Museum's collections and activities in the various branches of the geological sciences, from mineralogy to vertebrate paleontology, have thus been combined in a single Department of Geology and Paleontology, corresponding to the usual organization of these subjects in colleges and universities. The Departments of Fishes and of Invertebrates have both been mainly concerned with marine biology and almost entirely limited to the study of life in aquatic environments, fresh or salt. It was therefore a logical step to combine them into a new Department of Fishes and Aquatic Biology, which in turn corresponds to the usual plan of oceanographic

institutions or biological stations on seashore or lakeside.

The divisions of operation and general administration, under the management of the Vice-Director, deserve great credit for the efficient manner in which they have been able to carry their work forward in spite of the great difficulties of these trying years. Many ingenious innovations and improvements of organization and procedures have had to be introduced in order to overcome the handicaps of a one-third reduction in personnel, coupled with war-time restrictions and complications in all matters of supply and with greatly increased book-keeping burdens and problems of negotiation imposed by new legislation.

All departments, and all members of the staff individually, have used every opportunity to be of assistance in the national emergency. Taken all together these contributions, large and small, are too many to enumerate here, but the Hayden Planetarium under the late Prof. William H. Barton, Jr., and Museum's own Department of Education, under Dr. Charles Russell, deserve special mention for outstanding services to the war effort.

1944

The outstanding events in the history of the Museum during 1944 were those which have already been described as the outcome of experience, studies, and preparations made during the last few years rather than during the last year alone. These events included the final adoption of new long-range policies in regard to staff positions, the establishment of a new pension plan for all employees, the near-completion of the post-war building plans, and the reopening of the Hall of Mexican and Central American Archaeology after a complete revision of its exhibits and esthetic improvements of its

methods of display. Apart from these developments, the year 1944 was one of quiet but nonetheless significant and gratifying achievements in various lines of normal museum effort, notably in the activities of the Department of Education directed towards the public school children of New York City, and in the amount of original research still published by the curatorial staff and its associates, despite war-time restrictions and the burden of special war-time demands upon the time of our scientifically trained personnel.

Under the energetic and imaginative leadership of Dr. Charles Russell the Museum's work with the pupils of the public school system has proved so highly successful that our institution is now in danger of suffering one of the common penalties for a job well done. A demand has been created far beyond our capacity to satisfy with the existing personnel in the Department of Education, although Dr. Russell estimates that other considerations such as Museum space and opening hours would permit a four-fold increase of our present services if enough teaching assistance could be made available. In 1944 the fall schedule of the platoon program for elementary school pupils was so over-booked that even the entire schedule for 1945 was completely filled by the end of October. While our doors are of course always open for any class wishing to study our exhibits under its own guidance, it is very regrettable for us to find ourselves in a position of having to turn down large numbers of applications for participation in the tours and courses planned and conducted by our own staff on the basis of a familiarity with the geography of the Museum, and with the contents, purposes, and educational uses of its exhibits, which cannot be expected from a public school teacher whose knowledge of the Museum can be based

only upon occasional visits. Since the problem is entirely one of direct service to the public schools it is hoped that a solution may be found through cooperation with the City Board of Education. A total of 67,932 school children took part in the platoon program during 1944.

New features were also added to the program for secondary school pupils, with the Junior High School Film Forums probably representing the innovation of greatest general interest. At these forums a short motion picture of educational significance is followed by a general unrehearsed discussion of its message and its meaning, with the junior high school students themselves as the only participants apart from the adult conductor of each forum. These forums serve a three-fold purpose. They teach the subjects with which they deal. They teach the methods of debate by which public opinion is formed in a democracy. And they teach tolerance through friendly exchanges of opinion in a 'teen-age audience in which every race and creed is represented.

The Department of Education also continued its Navy Terrain Model Workshop through the year, with seven regular sessions of 40 days each, which resulted in the training of 131 officers of the Navy, Army, and Marine Corps for highly confidential and important work. Special groups of from 25 to 200 members, mainly Scouts and Raiders, were also given special spot instruction lasting from one to three days.

The courses in navigation and star identification for Navy personnel conducted by the Hayden Planetarium stand out as probably the most important contributions to the war effort made by the Museum during 1944. The great merits of this program, so ably planned and inaugurated by the late chairman of the Planetarium,

William H. Barton, Jr., have been gratefully acknowledged by the officers of the service for which the courses have been introduced. It has been explicitly stated that the lectures given in the Planetarium dome and in the Hall of the Sun (Copernican Room) have demonstrated many basic principles of the science of navigation more clearly and with greater efficiency than would have been possible by the use of any other methods or facilities. Approximately 12,000 naval officers and midshipmen attended the navigation courses in 1944.

Pre-flight lectures for high school students received an additional attendance of 5,546 pupils, and the regular sky shows for the general public were visited by 387,000 persons. Courses in astronomy for the high school teachers of New York City deserve special mention among the other educational activities of the Planetarium.

Total Museum and Planetarium attendance during 1944 reached a figure of over 2,000,000, which represents an increase of more than 12 per cent over the attendance during 1943, thus continuing the upward trend at an accelerated pace. Museum memberships and subscriptions to *Natural History* magazine also increased in the same proportion, to a total of 34,106.

It is encouraging to observe that there has been a slow but steady increase in the extent to which the Museum staff participate in the formal teaching of their subjects in the colleges and universities of the New York area. It is one of the unfortunate disadvantages of museum work that absentee teaching by means of exhibits robs the teacher of the direct intellectual contact with his audience which is such a valuable feature of life in the classrooms. Up to a certain point—which has scarcely yet been reached in a single instance at the American Museum—classroom teaching therefore becomes a very desirable

task for the museum curator, serving to broaden and refresh his views on both education and research. Teaching on advanced educational levels also offers the most effective means of guiding the flow of new knowledge springing from museum research into the broader stream of general learning and cultural consciousness.

It has been an old tradition of natural history museums to attempt to match the color of dirty fingermarks in their general décor, and to seek a "natural" color for the background of the objects they display. While there are valid arguments behind the first of these two practices, it greatly underestimates the importance of the general tone and atmosphere of a room for the best enjoyment of whatever the room may contain. The second practice has often been rationalized by a rather ingenious theory to the effect that the choice of an indifferent background color would in some mysterious manner make the exhibits themselves more objective in their presentation and therefore scientifically more correct. Probably the true explanation of this predilection for drab buffs and oatmeal grays lies in the meaning of the word "neutral," which is used in their description. Their "neutrality" consists chiefly in their inability to provoke any strong objections from anyone, although they may add to the boredom of all. These dual principles of museum decoration have recently been challenged by many institutions, especially among the art galleries. The remodeling of the Hall of Mexican and Central American Archaeology was the first occasion on which the American Museum broke with the tradition of color neutrality on a large scale, both within and around the exhibits. A further step in the same direction was taken when a strong red color, boldly complementary

to the prevailing green in the habitat groups, was used in the redecoration of the Whitney Hall of Oceanic Birds, in order to stimulate interest and help bring out the beauty of the exhibits by a deliberate use of contrast rather than harmonious uniformity. While differences of opinion naturally become unavoidable as soon as we leave "neutral" ground in our use of color, there can be no question that by so doing we ~~have~~ greatly increased our visitors' awareness of what there is to be seen and what they actually stop to see, and that for nearly all of them we have also increased the esthetic satisfaction derived from their trip to the Museum. The effective use of color, instead of a mere avoidance of color effects, was one of the two main purposes for the establishment of the staff architect's office, and the new plans developed during 1944, particularly those for the Sanford Hall of Birds, are even more strikingly characterized by their colors than by their shapes. This emphasis upon color treatment is of course also in part due to the fact that the forms must make use of cases and materials already available, while colors can be created with few restrictions arising from problems of supply.

There is very good reason to feel proud of the many contributions to new knowledge and to a better understanding and use of the sciences which the Museum was still able to make during 1944 in spite of the difficulties of the times. The titles of over 100 scientific articles and books are included in the bibliography for the year. Among the major items in this list are two reports on the archaeology of Mexico and of Peru, by members of the Department of Anthropology; a monograph on the classification of the bees and a volume on the butterflies of Puerto Rico and the Virgin Islands resulting from the

work in the Department of Insects; a book on "Tempo and Mode in Evolution" by the chairman of the Department of Geology and Paleontology published by the Columbia University Press. Among the numerous other papers of less physical volume but no less significance, the many contributions from the Department of Animal Behavior and also from the Departments of Birds, Fishes, Reptiles and Amphibians continue a fine record of achievements in research.

Text and information prepared by members of the Museum staff appeared in many of the manuals, guides, and similar publications printed for the primary, or for the exclusive, use of the armed forces. The Department of Mammals particularly has been of valuable service in such undertakings, aided by the fact that it is the department with the greatest previous experience in strategic regions.

The publication of a "World Wide Planisphere" by William H. Barton, Jr., the late chairman of the Hayden Planetarium, deserves special mention as the first chart of the stars which has been so prepared and presented that it can be used in any latitude and is equally suitable for navigators and astronomers. A very useful textbook on "Basic Problems in Navigation" written by Mr. Barton in collaboration with Charles O. Roth, Jr., of the Planetarium staff was also published during the year.

Otto H. Haas of the Department of Geology and Paleontology made rich collections of fossil invertebrates during a visit to newly exposed sites in Indiana. Toward the end of the year, T. C. Schneirla of the Department of Animal Behavior left for a six months' expedition to the Tehuantepec region of Mexico to study the behavior of the army ants. Various members of several departments visited the Archbold Biological Station in

Florida for brief periods of collecting and field studies. But, with these few exceptions, new research during 1944 was entirely confined to problems that could be studied in the Museum's own laboratories.

A valuable series of Djuka objects, received by gift from Richard E. Berlin, formed the most interesting new addition to the Museum's collections. The Djuka culture expressed in these artifacts was the result of a transplantation of African people to South America, where they succeeded in regaining their freedom and establishing a population and a culture of their own, adapted to a new environment in the jungles of Surinam.

Funds and pledges of support received from Robert E. McConnell and George M. Moffett, at the end of the year, made it possible for the Museum to undertake the sponsorship of a survey of the existing knowledge concerning the relationship between life and the chemistry of the environment. This project will get under way in 1945 and will be more fully described later and in the next annual report.

Our recollections of 1944 are unhappily marred by memories of the loss of several of the most respected and beloved members of the staff. The death of William H. Barton, Jr., Chairman of the Hayden Planetarium, at the age of 51, and of Henry Cushier Raven, Curator of Comparative Anatomy, at 55, puts an untimely end to two distinguished careers in the full vigor of their intellectual development.

Mr. Barton's service in the Planetarium began before its opening to the public, and he succeeded to the chairmanship in 1942. It was entirely due to his initiative, and in a large measure due to his personal energy, ingenuity, and inventiveness that the Hayden Plane-

tarium was able to propose and to undertake the educational activities by which it has contributed so significantly to the war effort. Mr. Barton lived long enough to observe the gratifying success of his efforts, but not long enough to reap the full honors which should accrue to him.

When Mr. Raven succumbed to a malarial infection first contracted in an expedition to Borneo in 1912, he was just in the midst of bringing together and preparing for publication the results of many years of patient and painstaking research of the highest quality and significance in the science of comparative anatomy. The Museum has fortunately been able to arrange for the future publication of a volume in Mr. Raven's memory which will contain the splendid manuscripts left from his own hand, supplemented by scientific contributions from many of his friends and associates in research.

William K. Gregory retired in May from the active chairmanship of the two Departments of Fishes and of Comparative Anatomy after nearly 45 years of association with the Museum. His brilliant contributions to research, education, and the public discussion of scientific and philosophical problems have added immeasurably to the growth and prestige of our institution, and we are happy to note that he will continue these activities in our laboratories as a curator emeritus.

Charles M. Breder, Jr., was appointed to succeed Dr. Gregory as chairman of the Department of Fishes, which was later expanded to become the Department of Fishes and Aquatic Biology. Upon his return from service in the army George Gaylord Simpson was promoted to the chairmanship of the reorganized Department of Geology and Paleontology in which all the geological sciences are now integrated.

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[Page Forty-two]

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REPORT OF THE TREASURER

The Balance Sheet showing the financial condition at December 31, 1944, and a Summary Statement of the income and expenditures and surplus of the General Funds and Restricted Funds for the year 1944 follow:

THE AMERICAN MUSEUM
BALANCE
DECEMBER 31,

ASSETS

ENDOWMENT AND OTHER NON-EXPENDABLE FUNDS

ENDOWMENT FUNDS:

Cash	<u>\$351,267.14</u>	
Securities:		
Bonds	\$6,328,996.43	
Preferred stocks	2,170,052.51	
Common stocks	3,468,094.22	
Real estate mortgages, etc.	914,795.57	
Promissory notes	36,953.16	
	<u>\$12,918,891.89</u>	

Real estate property	<u>\$223,586.20</u>	\$13,493,745.23
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TRUST FUNDS:

Cash	<u>\$7,889.29</u>	
Securities:		
Bonds	\$589,678.41	
Real estate mortgages	230,423.51	
	<u>\$820,101.92</u>	827,991.21

TEMPORARY TRUST FUNDS:

Cash	<u>\$15,912.05</u>	
Securities:		
Bonds	\$61,223.12	
Common stocks	15,000.00	
	<u>\$76,223.12</u>	92,135.17

\$14,413,871.61

CURRENT FUNDS

GENERAL FUNDS:

Cash:			
In bank	\$237,634.97		
On hand	<u>2,910.00</u>	\$240,544.97	
Accounts receivable		35,292.67	
Due from other funds (contra)		5,000.00	
Loans receivable		<u>72,545.62</u>	\$353,383.26

RESTRICTED FUNDS:

Cash in bank	\$203,907.21		
Accounts receivable	<u>28,033.71</u>	231,940.92	

AUXILIARY ACTIVITIES:

Cash:			
In bank	\$93,418.78		
On hand	<u>665.00</u>	\$94,083.78	
Accounts receivable		3,650.54	
Due from other funds (contra)		500.00	
Inventories		38,868.49	
Prepaid expenses		5,925.76	
Fixed assets		<u>3,266.01</u>	146,294.58

731,618.76

AGENCY FUNDS

PENSION FUND:

Cash in bank		\$122,695.45	
Accounts receivable		27.32	
Securities:			
Bonds	\$2,104,414.08		
Preferred stocks	235,617.93		
Real estate mortgages, etc.	<u>29,189.50</u>	2,369,221.51	\$2,491,944.28

OTHER AGENCY FUNDS:

Cash in bank		\$11,535.34	
Accounts receivable		<u>3,648.85</u>	15,184.19

2,507,128.47

\$17,652,618.84

OF NATURAL HISTORY SHEET

1944

FUNDS AND LIABILITIES

ENDOWMENT AND OTHER NON-EXPENDABLE FUNDS

ENDOWMENT FUNDS:

Principal of funds with income available for—

Restricted purposes	\$6,464,767.86
Unrestricted purposes	2,624,466.88
	<u>\$9,089,234.74</u>

Principal of funds functioning as
endowment available for—

Restricted purposes	\$48,501.27
Partially restricted purposes	1,110,394.64
Unrestricted purposes	3,245,614.58
	<u>\$4,404,510.49</u>
	\$13,493,745.23

TRUST FUNDS:

Principal of funds with income
available for—

Restricted purposes	\$66,775.09
Unrestricted purposes	761,216.12
	<u>827,991.21</u>

TEMPORARY TRUST FUNDS:

Principal of funds available for
restricted purposes

92,135.17
<u>\$14,413,871.61</u>

CURRENT FUNDS

GENERAL FUNDS:

Suspense Account	\$15,557.00
Deferred income	1,300.00
Post-war building fund	185,159.71
Post-war equipment fund	3,165.00
Notes payable	100,000.00
	<u>\$305,181.71</u>
Contributed capital	15,000.00
	<u>\$320,181.71</u>

Surplus	\$27,751.55	
Reserve for 1944 obligations	5,450.00	
	<u>33,201.55</u>	\$353,383.26

RESTRICTED FUNDS:

Balances of funds	231,940.92
-------------------	------------

AUXILIARY ACTIVITIES:

Accounts payable	\$15,227.35	
Suspense account	101.50	
Due to other funds (contra)	5,500.00	
Deferred income	68,124.31	
	<u>\$88,953.16</u>	
Surplus	57,341.42	146,294.58

731,618.76

AGENCY FUNDS

PENSION FUND:

Principal of funds	\$2,490,985.04
Welfare fund	1,009.24
	<u>\$2,491,944.28</u>

OTHER AGENCY FUNDS:

Balances of funds	15,184.19
-------------------	-----------

2,507,128.47

\$17,652,618.84

THE AMERICAN MUSEUM OF NATURAL HISTORY

Statement of Income and Expenditures and Surplus for the Year Ended December 31, 1944

GENERAL FUNDS

INCOME:

Appropriations from the City of New York	\$480,436.90	
Income from capital funds	620,296.37	
Income from outside trusts and foundations	42,007.01	
Membership dues	45,485.00	
Sales and services	32,347.81	
Contributions of trustees, members, foundations, and others	68,329.83	
Transfers from capital funds	27,245.32	\$1,316,148.24

EXPENDITURES:

Executive, administrative, and general expenses	\$330,326.12	
Care and use of collections and supervision of exhibitions	305,931.53	
Education and exhibition	147,359.55	
Operation and maintenance of physical plant and other general services	487,657.70	1,271,274.90
Excess of income over expenditures		44,873.34
Deficit at January 1, 1944		11,671.79
Surplus at December 31, 1944		<u>\$33,201.55</u>

RESTRICTED FUNDS

INCOME:

Income from capital funds	\$31,688.33	
Sales and services	54,861.89	
Contributions of trustees, members, foundations, and others	108,518.41	\$195,068.63

EXPENDITURES:

Executive, administrative, and general expenses	\$4,397.32	
Care and use of collections and supervision of exhibitions	119,072.59	
Education and exhibition	37,417.71	160,887.62
Excess of income over expenditures		34,181.01
Balance of funds at January 1, 1944		197,759.91
Balance of funds at December 31, 1944		<u>\$231,940.92</u>

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The membership enrollment at the close of 1944 was 29,152, divided as follows:

Associate Members.....	23,692	Honorary Life Members.....	76
Annual Members.....	3,974	Fellows.....	99
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Corresponding Members.....	34	Patrons.....	168
Supporting Members.....	9	Associate Benefactors.....	44
Contributing Members.....	6	Associate Founders.....	8
Life Members.....	863	Benefactors.....	15
Endowment Members.....	1		

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THE MUSEUM

General attendance.....	1,356,452
Lectures, meetings, special exhibits, concerts, etc.....	262,874
Total.....	1,619,326

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Paid admissions.....	280,000
Classes, through the Board of Education, free.....	75,000
Men and women in uniform, free.....	32,000
Special lectures, navigation lectures to Naval officers, etc.....	18,000
Total.....	405,000

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[Page Sixty-two]

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THE AMERICAN MUSEUM OF NATURAL HISTORY

INCORPORATED BY THE

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The Corporation consists of a self-perpetuating Board of thirty-five Trustees, elected for terms of five years. Also, *ex-officio*, the Mayor, the Comptroller, the Commissioner of Parks of the City of New York, and a representative of the Board of Education of the City of New York.

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HISTORY

PRESIDENCY OF JOHN DAVID WOLFE, 1869-1872.

- 1869 Museum incorporated. Constitution adopted as drafted by Joseph H. Choate.
- 1870 First home secured, the Arsenal, Central Park.
- 1871 The City of New York appropriated \$700,000 for building. (Section I.)

PRESIDENCY OF ROBERT L. STUART, 1872-1881.

- 1874 Cornerstone of first section of building laid by President Ulysses S. Grant.
- 1878 Contract adopted between Trustees and Department of Parks, as drawn up by Andrew H. Green and Joseph H. Coate.
- 1880 Educational work with the schools inaugurated by Professor Albert S. Bickmore.

PRESIDENCY OF MORRIS K. JESUP, 1881-1908.

- 1892 Museum opened to the public on Sundays.
- 1887-1905 The City of New York appropriated \$4,218,820.94 for eight new building sections, II-VIII, and XV.
- 1907 Museum opened free to the public every day in the year.
- 1908-1917 Mr. and Mrs. Jesup bequeathed \$6,000,000 to the Museum.

PRESIDENCY OF HENRY FAIRFIELD OSBORN, 1908-1933.

- 1908 Constitution amended making the Mayor, the Comptroller, and the President of the Department of Parks, *ex-officio* members of the Board of Trustees.
- 1921 Greater New York Charter amended, placing the Museum on the same basis as Public Schools with respect to Corporate Stock Appropriations by Chapter 618 of the Laws of 1921, State of New York.

• HISTORY—(continued)

- 1921—1925 The City of New York appropriated \$2,233,800 for new sections, IX-XI, and equipment and alterations of old sections.
- 1924 The State of New York provided for the Theodore Roosevelt Memorial. Cost \$3,500,000. (Original Chapter 615 Laws of 1924.) (Building Section XII.)
- 1929 Appropriation of \$3,550,000 by the City of New York for construction of African Wing, Power Plant and Service Building, and Whitney Wing. (Sections XIII, XVII, and XIX.)
Contribution of \$750,000 by Harry Payne Whitney for one-half cost of Whitney Wing. (Section XIX.)
- 1932 Completion of the African Wing. (Section XIII.)
- 1933 Completion of the Whitney Wing. (Section XIX.)

PRESIDENCY OF F. TRUBEE DAVISON, 1933—

- 1934 Contribution of \$156,000 by Charles Hayden for purchase of Zeiss Projection Planetarium and Copernican Planetarium.
The American Museum of Natural History Planetarium Authority erecting Planetarium Building with funds (\$650,000) secured through loan from the Reconstruction Finance Corporation. (Section XVIII.)
- 1935 Opening of the Hayden Planetarium. (Section XVIII.)
- 1936 Dedication of the Theodore Roosevelt Memorial. (Section XII.)
- 1942 Constitution amended making a representative of the Board of Education of the City of New York an *ex-officio* member of the Board of Trustees.

CAPITAL FUNDS

The Capital Funds were established in 1884. They now amount to \$14,413,871.61 (book value). The Trustees especially desire to insure the permanent growth and welfare of the Museum through an increase of the General Endowment Fund. The additional sum of \$10,000,000 is needed at present.

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