p. 232, 1920: *ibid.*, p. 284: 185, p. 11, 1920: 195, p. 22, 1922: 204, p. 295, 1924: *Biochem. Zeitsch.*, 129, p. 594, 1922.

(7) Foster and Moyle, Biochem. Journ., 15, p. 672, 1921.

(8) Winfield, Journ. Physiol., 49, p. 171, 1915.

(10) Azuma and Hartree, Biochem. Journ., 17, p. 875, 1923.

- (11) Foster and Woodrow, Ibid., 18, p. 562, 1924.
- (12) Dudley and Marrian, Ibid., 17, p. 435, 1923.

(13) Himwich, Loebel and Barr, Jour. Biol. Chem., 59, p. 265, 1924.

(14) Hopkins and Winfield, Journ. Physiol., 50, p. v, 1915.

(15) Stephenson and Whetham, Biochem. Journ., 18, p. 498, 1924.

(16) Warburg, Klin. Wochensch., No. 24, 1924.

(17) Dakin and Dudley, Journ. Biol. Chem., 14, pp. 155 and 423, 1913: 15, p. 463, 1913.

(18) Slater, Biochem. Journ., 18, p. 621, 1924.

(19) Hartree and Hill, Journ. Physiol., 56, p. 367, 1922: 58, p. 127, 1923.

(20) Hill and Lupton, Quart. Journ. Med., 16, p. 135, 1923.

(21) Hill, Long and Lupton, *Proc. Roy. Soc.*, 96B, p. 438, 1924; and two other instalments in the press.

GENERAL POLICIES OF THE CARNEGIE CORPORATION¹

DURING the year comparatively little time has been required for the study of specific new enterprises, for the obvious reason that funds were not available to finance them. As a result, the trustees have been free to devote their energies primarily to the formulation for their own guidance of a tentative body of doctrine as to the general policies of the corporation, and more specifically to a consideration of the fields in which, for the present at least, it should concentrate its efforts. Some discussion of the principles underlying these policies may be of service in making more clearly understood the problem which faces the corporation with reference to any particular grant; for this problem is not a simple one, depending wholly, or even primarily, on the merits of that particular proposal, but a very complex one, involving a number of other factors which must also be taken into account before an intelligent decision can be reached. It should be said at the outset that certain of these factors have already been dealt with in the reports of the acting president for 1922 and 1923, and that the following paragraphs are to be regarded, therefore, as supplementary to the discussions in those reports, rather than as an attempt to cover even the most important elements in this many-sided problem.

¹ From the annual report of the president of the Carnegie Corporation of New York.

It may be of interest at this point to give some indication as to the number of those who in any one year have more than a theoretical interest in these questions. Apart from the projects brought up for consideration by the members of the board itself or presented on behalf of the boards of other Carnegie enterprises, the corporation acted last year on 397 applications. Of the cases in which a budget was submitted with the application, the amount asked for came to more than \$40,000,000. In only 68 cases could any grant be made, and of these 33 were renewals of grants made in former years. It would serve no useful purpose to make public a list of the projects declined, but both the applicants and the public may be assured that one and all received consideration by the executive committee, and were brought by it to the official attention of the board, the action taken in each case being made parts of its records.

Turning now to the general questions of policy to which reference has been made, the corporation has given particular attention during the year to the following: the responsibility of educational foundations to the public and to public opinion; the relation between the diffusion of knowledge and the guidance of opinion; factors affecting the limitation of program; and relations with operating agencies.

PUBLIC OPINION

It is now generally recognized that there is no fundamental distinction between the responsibilities of universities supported primarily by public taxation and those of institutions supported primarily by private endowment-both are public institutions. It must also be recognized that educational endowments such as the Carnegie Corporation are essentially public and not private enterprises. Grants made by them are matters of public concern and, other things being equal, they should involve the largest possible degree of public participation in what is recognized on all sides to be a cooperative enterprise. It will not do for those in charge of such endowments to assume that so long as their own motives are completely disinterested, criticism as to their acts and policies should be limited to the wisdom of this or that particular grant. They must recognize that doubts as to the basic social utility of these organizations have long existed in the minds of men and women regarding whose sincerity there can be no question, whatever may be said as to the amount and accuracy of their information. While, for the moment at any rate, the extraordinary results which have been achieved through the grants of these bodies, particularly in the alleviation of human suffering, have operated strongly to increase public confidence,

⁽⁹⁾ Hill, Ibid., 48, p. xi, 1914.

no one can say whether this state of mind is to be permanent. The time may well come when the possibilities of usefulness open to the Carnegie Corporation, for example, will depend in large measure upon the number and distribution of those who can testify on the basis of actual experience that the organization does not regard itself as a dominating or patronizing force in carrying forward any particular program, but merely as one factor, and not the controlling factor, in cooperative enterprises for the advancement and diffusion of knowledge and understanding among the people of the United States. It is not enough for the trustees themselves to realize that the furnishing of funds, important as it is, is secondary to the knowledge and the labor of those who actually transform an idea into a reality; there should also be at least the nucleus of an understanding public opinion on the subject.

DIFFUSION OF KNOWLEDGE AND DIRECTION OF OPINION

While it would be exceedingly difficult and not particularly profitable to draw a hard and fast line between the diffusion of knowledge and the directing of opinion, it is clear on which side of the doubtful zone between the two the interest and the responsibility of the corporation should lie. The deliberate and conscious propagation of opinion is a perfectly legitimate function for the individual, but it is becoming generally recognized that it is not the wisest use to which trust funds can be put- and this entirely apart from the question whether, in any given case, those in charge of such funds may, as individuals, be sincerely and even enthusiastically in favor of the spread of the idea in question. Surely, the discovery and distribution of facts from which men and women may draw their own conclusions offers a field sufficiently wide and sufficiently vital to the welfare of humanity.

LIMITATION OF PROGRAM

The foregoing are but two of many elements to be considered in determining the program of such a body as the Carnegie Corporation. Offhand, an income of six million dollars a year would appear to give freedom for practically an unlimited range of interest under the provision of its charter, but after all, six million dollars makes a very small proportion of one billion, and this latter is the sum which it has been estimated the United States requires or at any rate spends each year upon its philanthropies. The corporation must of necessity restrict its angle of vision and, at the best, it can support only a very small percentage of the projects which are brought to its attention, even from among those regarding whose usefulness to humanity there can be little question. Among the other factors to which consideration must in any case be given is that of the possibility of support from other sources. It would appear to be entirely proper for the trustees to recognize that certain undertakings can look with confidence to support for their general activities from what may be called a regular constituency. A well-established college or university, for example, may turn to its own alumni, and the members of a large and rich community served by some local institution like a library, or museum, or hospital, are more and more generally recognizing their direct responsibilities to such institutions. On the other hand there are enterprises, particularly in fields where experimentation and demonstration are still needed, which can not, certainly in the earlier stages of development, call upon any particular clientele. Many of these can not be undertaken at all unless appeal can successfully be made to the custodians of relatively unrestricted funds like those of the Carnegie Corporation.

There is another side to this question of the limitation of program which is not always borne in mind. When once a foundation has contributed to one or more typical enterprises in any given field, the others in the same field naturally turn to it for aid. Obviously, if it habitually contributes to a wide range of activities, its contribution in any single field must be correspondingly reduced, and those whose applications must of necessity be declined are often severely handicapped in securing funds from other sources, due to the impression that they have been tried and found wanting by the foundation in question. That this impression may be wholly unjustified does not undo the harm. In so far as the program of a foundation is recognized as being limited-not necessarily permanently, but for the time being at any rateto certain definite fields within which all outstanding propositions can be considered on their merits, this unfortunate situation is less likely to develop.

In 1921, sixty-seven per cent. of the number of grants made and seventy-seven per cent. of the total sum voted, outside of the appropriations to other Carnegie enterprises, were in the nature of contributions to campaigns for the general endowment or equipment of institutions or for the general support of organizations. Since that year, the tendency on the part of the corporation has been more and more to support specific projects rather than to make such general contributions. As a result, the corresponding figures for the year now under review are as follows: forty-two per cent. of the number of grants and thirty-three per cent. of the sums voted.

While the application of this policy has naturally proved disappointing to organizations now engaged

in campaigns, it is believed that ultimately it will meet with general approval. The conditions facing the institutions of learning at the close of the war, together with good times, and the habit of generous national expenditure combined to create a series of endowment and building campaigns that swept like an epidemic across the country. A similar process developed in the interest of various associations and leagues and other similar groupings, many of which came into being at about the same period. Without prejudice to the good results obtained in many instances, it must be recognized that such a system of campaigns has its obvious disadvantages. In not a few cases, the campaigns were wastefully conducted, and in others sums received were not wisely spent. Too often the raising of funds for general expenses, and particularly for promotion expenses, becomes commercialized. This type of appeal presents an additional problem from the point of view of the foundations. In so far as these organizations are attempting to concentrate their efforts within certain recognized fields, and thus obtain from their grants cumulative results within those fields, contributions for general purposes, no matter how admirable in themselves, must be recognized as weakening their power to achieve these specific results. Fortunately, however, it is sometimes possible to make a contribution which serves to help the general financial situation of the institution in question and at the same time to carry forward, under particularly favorable circumstances, the development of an idea on which the corporation is, at the moment, concentrating its attention. A case in point is that of Harvard University, referred to on page 20. Within the means at its disposal, the corporation should always be ready to take advantage of such opportunities as they arise.

OPERATING AGENCIES

The Carnegie Corporation is not in itself an operating body. It certainly was not the intention of its founder that it should become so, and it does not seem probable that circumstances will arise which will make this step desirable. To determine the fields in which appropriations may most wisely be made and to select in general terms the special projects within those fields is in itself a sufficiently heavy responsibility for the trustees.

Later on in this report, on pages 13 and 14, some discussion will be found as to the relation of the corporation to other operating agencies. Naturally, however, its relations have been closest with those operating agencies which Mr. Carnegie had himself established, particularly the five of which the active head is, under the charter of the corporation, exofficio a member of its own board. As an evidence of

the closeness of this relationship, it may be pointed out that, since its organization, in all more than \$43,000,000 has been voted by the corporation to these institutions in response to requests from them. These grants have been entirely within the purposes of the corporation as conceived by Mr. Carnegie, who had the foresight to realize that conditions might arise to render insufficient the endowments he had created for these other agencies, though their endowments at the time had seemed amply sufficient for their purposes. Since his death, to mention no other factor, the world-wide reduction in the purchasing power of money would have seriously crippled the work of at least four of these agencies if the corporation had not been in a position to come to their aid.

The Carnegie Corporation does not need money from these sister institutions, but in the solution of its own problems it does need help of other kinds, as in the carrying forward of enterprises which have been initiated by it. Something has already been accomplished along these lines, as the records of annual grants will show, but the trustees might profitably consider a rather searching study as to whether the corporation has taken full advantage of the peculiar relationship to its sister institutions which it enjoys.

OTHER PROBLEMS

The above by no means exhausts the list of problems of policy, really fundamental in their nature, which must be grappled with, and there is no doubt that the two succeeding years of the period of limited resources may be devoted to study with even greater profit than the year just closed. As a single example of the questions which face bodies like the Carnegie Corporation may be taken the question of the temporary annual grant. It is often a real privilege to provide the funds which enable some enterprise of public importance to make not only an appeal but a demonstration to the public which should ultimately support it. But it is rarely, if ever, that the corporation and the beneficiaries find themselves in agreement as to when this "temporary" aid should stop. The latter are persuaded with perfect sincerity that the amount involved, while a matter of life and death to them, is negligible to the corporation. It is not realized that in the aggregate these small sums, like the slender threads by which the Lilliputians bound Gulliver to the ground, become a very serious matter. Nor is it likely to be remembered that the corporation has always before it for consideration other commendable projects which can not be launched without just such help as they themselves have enjoyed.

CONDITIONAL GRANTS

Another problem to which intensive study could profitably be given is the conditional grant. It has its obvious advantages. A relatively small sum so offered will sometimes serve as a primer to produce an explosion of generosity from other sources. On the other hand, when the conditions have to do with certain specified methods of carrying out the project, we enter on debatable ground. The ideas behind the stipulations may in themselves be admirable, but should they not, if made at all, be suggestions rather than stipulations? It may also be questioned whether in some instances a conditional offer does not put too powerful a weapon in the hands of persons perhaps not fully qualified to exercise the responsibility of using it. It would not be difficult to cite instances in which local communities, or alumni, or religious bodies, have been dragooned by the use of this weapon into making contributions beyond their means and beyond the real needs of the institution in question.

RESEARCH

The opportunities open to the corporation in the field of research have been the subject of particular study for several years, but this is a topic which is not—and never will be—exhausted. During the present year, for example, it has been pointed out to the corporation that there are really two stages in most research processes, and that they are not necessarily best carried out by the same individual or the same agency. Breaking the trail is one matter, and broadening that trail into a road is another. The latter process is largely a matter of presentation and dissemination, but none the less it contains, or at any rate it should contain, an important element in research. A study of this whole question may prove to be of especial interest to the corporation.

FREDERICK P. KEPPEL

WILLIAM HENRY EMERSON

WILLIAM HENRY EMERSON was born at Tunnel Hill, Georgia, in June, 1860. He graduated from the United States Naval Academy in 1880. Was Midshipman from 1880 to 1882 and Ensign 1882 to 1884. He then resigned from the navy to pursue special studies at the Johns Hopkins University, from which institution he received the degree of Ph.D. in 1886, having specialized in chemistry. In the same year he accepted the appointment to the professorship of chemistry at the South Carolina Military Academy, Charleston, S. C., which position he resigned in 1888 to become professor of chemistry at the Georgia School of Technology, just then in process of organization. Here he remained until the day of his death, November 13, 1924, a period of thirty-six years. During this time he saw the institution grow from the experimental stage into one of the leading engineering and technical schools of the country. To him especially is due credit for the maintenance of high standards of scholarship, which have characterized the work of Georgia Tech. By temperament and training he was especially equipped to do research work on problems in his chosen field, and longed to do so, but with characteristic spirit he sacrificed opportunity which those who knew him believe would have placed his name high in scientific achievement, in order to carry on the heavy duties devolving upon the head of a department of a growing institution, and the additional great responsibility of the deanship, which he assumed in 1910.

Dean Emerson was awarded the degree of Sc.D. by the University of Georgia in 1912. He was a member of the American Chemical Society, Society for the Promotion of Engineering Education, Phi Kappa Phi (honor society), Georgia Academy of Sciences and Alpha Tau Omega Fraternity.

He published papers covering investigations he had made in the oxidation of mesitylene, the composition of cotton seed oil and also upon the marbles, coal and corundum of Georgia.

Dean Emerson married in 1887, and is survived by two sons and his widow.

J. L. D.

NED HOLLISTER

NED HOLLISTER, superintendent of the National Zoological Park since October 1, 1916, and one of the foremost mammalogists of the world, died on November 3, following an operation.

Mr. Hollister was born at Delavan, Wisconsin, on November 26, 1876, where he received his education and began the study of zoology. From 1902 to 1909 he conducted zoological field work for the U. S. Geological Survey in Texas, New Mexico, Alaska, British Columbia, Washington, Oregon, California, Utah, Nevada, Louisiana and Arizona. In 1910 he began his connection with the Smithsonian Institution, being appointed assistant curator of mammals in the U. S. National Museum, which position he held until 1916 when he was selected for the responsible position of superintendent of the National Zoological Park, Smithsonian Institution.

In 1911 Mr. Hollister was a member of the Canadian Alpine Club Expedition to explore the Mt. Robson region of British Columbia and Alberta, and in 1912 he represented the Smithsonian Institution on the Smithsonian-Harvard Expedition to the Altai Mountains, Siberia and Mongolia. The results of Mr. Hollister's scientific work have appeared in the pub-