

The fact that there have been 77 resignations from the scientific force of the United States Geological Survey, Department of the Interior, during the last year—17 per cent. of the force—suggests inadequacy of compensation, and the percentage of resignations in the clerical and non-scientific force was even larger. This statement of course does not include separations to enter military service. The largest inroad upon the Geological Survey efficiency comes from the oil companies; the final result of the pioneer work of the federal geologists in applying geologic methods to the search of oil and gas is that a large proportion of the leading oil geologists the world over are United States Geological Survey graduates. Indeed, the future decline in popularity of the Geological Survey as a recruiting station for oil-company personnel will be due simply to the fact that the experienced oil geologists who remain in the government service are from personal preference immune to outside offers.

The relations between government salaries and outside salaries of geologists has been definitely determined in a compilation of the records of 29 geologists who left government service after receiving an average salary of \$2,271. The average initial salary of these men in private employ was \$5,121, and after about two years of average service this compensation averaged \$7,804, and eight of these geologists receive \$10,000 or more. The disparity is even greater if consideration is given to the large financial returns from investments made by the private geologists in connection with their professional work, a privilege properly denied by statute to the official geologist.

That the value of these men as specialists and consulting geologists is far greater to the country at large than to private corporations is undeniable. Furthermore, it is important to note that most of these geologists had persisted to the limit of endurance with a magnificent spirit based on their love of scientific research and their desire to contribute to the sum of geologic knowledge. Most of them have been forced out of the service by sheer financial necessity. Unless adequate measures are taken to ameliorate the situation, the geologic staff is destined to suffer far greater deterioration of morale and depletion in its ablest, most responsible, most experienced and most valuable members. The Geological Survey is passing into a stage when, with greater need than ever for systematic geologic work in the country, it is ceasing to be attractive to the young men of greatest ability, training and promise. This situation de-

serves prompt and effective remedy, for it threatens most seriously to cripple this branch of the public service.

#### REDUCED RAILWAY FARES TO MEETINGS OF SCIENTIFIC AND LEARNED SOCIETIES

MR. FREDERIC S. HAZARD, assistant secretary of the American Association for the Advancement of Science, and representatives of the American Historical Association and other societies meeting at Cleveland have been in correspondence with the U. S. Railway Administration in regard to reduced fares which have not been granted. In their letter they say:

We respectfully submit that this narrow interpretation of the term "educational" constitutes a discrimination against the learned and scientific societies of the country which is prejudicial not only to their interests but to the general cause of education in America viewed in any comprehensive way.

It is well known that these societies are not in any sense political, commercial or money-making, but are solely scientific and educational. Their membership, especially that part of it which usually attends their meetings, is largely composed of teachers in universities, colleges and the public schools and of men and women engaged in scientific research. To these members the benefit derived from annual contact with their colleagues is of no small importance, and is reflected in their work in the classroom or laboratory. To the public-school teachers the meetings afford almost the only opportunity of coming into close touch with the leading specialists and advanced teachers in their respective fields. It is impossible to overestimate the advantage to the educational system of the country that has come from these annual gatherings of teachers and investigators; from the point of view of content it is certainly as important as is, from the point of view of method and administration the advantage that has been gained from the meetings of the purely pedagogical societies.

But it should be emphasized that the scientific societies have always laid stress upon the pedagogical aspects of their work. They constantly provide in their meetings for special sessions devoted to the teaching of their various disciplines. Some of them have long maintained standing committees on teaching, and have published reports which have been adopted throughout the country as the basis

of school work in the respective subject. Furthermore, these societies have frequently been recognized as of public utility by the government. The Department of Agriculture, for example, grants special leave to its employees in order that they may attend the meetings of the American Association for the Advancement of Science. The War Department, to cite another instance, has detailed officers to attend the meetings of the American Historical Association and of the American Association for the Advancement of Science.

The assistant director of railroads writes:

In view of the arguments presented by you for favorable action it seems appropriate to set before you the considerations that prompted the government to grant reduced rates for conventions. It was a very serious question whether the government would be justified in putting them into effect at all. Past experience has shown that as a whole such reduced fares have operated to reduce railroad revenues and to increase the cost of transportation because the giving of them encouraged people who were planning to make business trips to adjust their trips so as to take advantage of the reduction. This resulted in diminishing the amount of travel, and consequently increasing its cost, prior to the time such reduced fares were put into effect, and in congesting the travel during the time such reduced fares were in effect, thereby increasing the cost during that period also. In the present time, when railroad costs just as all other industrial costs are exceedingly high, it seemed clear that the government would not be justified in putting into effect reduced rates which would result in an important diminution in the net earnings received from the business. On the other hand, it was deemed desirable to encourage the attendance at certain conventions and to afford to persons who wished to attend them and who would be unable to go except for reduced rates the opportunity to do so. The classes of conventions decided upon were religious, charitable, fraternal, military and educational. This classification was adopted with a full realization of the difficulties which would result and that the action might be considered an arbitrary one. It was felt, however, that it was based upon sound grounds and, under all the circumstances, is consistent and defensible. It was plain that the term "educational" taken in its broad sense could be construed to cover a very large number of conventions. For example, those of doctors, lawyers, dentists, business colleges, etc. It was, therefore, necessary to restrict its definition, and this was done by confining it to those con-

ventions having to do with elementary education, such as meetings of school teachers, and among these meetings was included the National Educational Association.

#### THE ST. LOUIS MEETINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

The announcement sent out from the office of the permanent secretary of the American Association for the Advancement of Science says:

The American Association for the Advancement of Science and many national scientific societies affiliated with it will hold its seventy-second meeting in St. Louis, from December 29, 1919, to January 3, 1920, under the auspices of the educational institutions of the city. All meetings will be held in the Soldan High School, corner Union Boulevard and Kensington Avenue. Dr. Simon Flexner, of the Rockefeller Institute for Medical Research, will preside. The address of the retiring president will be given by Dr. John Merle Coulter, of the University of Chicago, at the opening general session of the association, and will be followed by an informal reception to members of the association and of the affiliated societies.

This seventy-second meeting of the American Association, which was established in 1848, will be marked by the importance of its program and by the increased interest manifested in all branches of the natural and the applied sciences. It will embrace a program devoted very largely to definite working problems of reconstruction. When the association last met in St. Louis, fifteen years ago, the membership of the association was only 4,000. The membership of the association at present numbers nearly 15,000 and the coming meeting will be one of the most important gatherings of scientific men hitherto held in this country or elsewhere.

The occasion should be taken to strengthen the association and its work in the central states, which have in recent years assumed such leadership in scientific research. We may be sure that the scientific men of Washington University and the city of St. Louis will do their part. It would be well if the meetings might be celebrated by affiliation with the association of the strong state and city academies of the central states and the organization of a central branch of the association on the lines that have proved so successful on the Pacific coast.