

Board. The work of the committee will be concerned with savings through simplification, standardization and the use of alternative materials.

IN accordance with a reorganization plan all dairy research will be centered at the New York State College of Agriculture at Ithaca, and the program at the Experiment Station at Geneva will be developed along the lines of horticultural research and related fields.

THE Cutter Laboratories at Oakland, Calif., have arranged to erect a new plant for the production of penicillin.

ACCORDING to the daily press, in order to assist in meeting the shortage of technical help in many of the war plants of the State of New Jersey, Rutgers University is sending instructors directly into factories to conduct in-service training classes. The courses are

tuition free. Workers are saved the time which otherwise they would have to spend commuting between factory and school. This will not interfere with the operation of the university's public war-training centers where general instruction will be carried on in engineering, science and management. A similar plan is being put into effect by the Manhattan College School of Engineering, New York City.

THE *Journal* of the American Medical Association reports that the Faculty of Medical Sciences of Buenos Aires recently opened its new building, occupying a whole block. It consists of twenty floors and will house the faculties of medicine, biochemistry, pharmacology, odontology, the Institute of Pathologic Anatomy, the Pardo Maternity Hospital and the Pavilion for tabetic patients.

DISCUSSION

TWENTY-FIVE-YEAR EFFORT AT SAVING NATURE FOR SCIENTIFIC PURPOSES

NEARLY all interests excepting that of natural science are organized so as to exert pressure upon legislative and executive bodies when there are conflicting interests relative to land use. There are in North America, north of Mexico, more than five hundred local and national scientific biological organizations, most of which under ordinary circumstances are committed to saving of samples of biotic communities or samples of vegetation for the scientific use of present and future generations. It is evident that, if some kind of union of these interested forces could be brought about, a great many movements detrimental to the interests of science and humanity might be checked or retarded. Likewise movements beneficial to science could be accelerated through the influence of a united effort. The writer was appointed chairman of a committee in the Ecological Society of America in March, 1917, and served until 1938. This committee was charged with the listing of natural areas suitable for preservation. This proved to be the beginning of an effort to organize the scientific interests of the United States and Canada for the purpose of preserving nature. The list of natural areas, with related material, was published in 1925 as *The Naturalists' Guide to the Americas*. The closing out of the remaining copies of this publication by the publisher early in 1942 marked the twenty-fifth year of experience with the problems concerned.

An effective type of organization was brought about and has operated successfully for about sixteen years. Experience has shown that two types of committee are essential: (1) A Study Committee to inquire into the use and disposal of lands which included natural

biotic communities, and (2) a Public Contact Committee to urge governmental agencies to act in certain ways. This one can include no employees of the national government. The second committee would be responsible not only for exerting pressure but also for organizing the pressure of the affiliated local societies and national organizations. Such an organized effort was successful in bringing about the establishment of the Glacier Bay National Monument in Alaska. In this case, application was made to the executive department of the United States Government and was said at the time to be one of the most unified demonstrations ever experienced by the officials concerned. There were other partially successful efforts to prevent the despoliation of national parks, monuments, etc.

The organization of the Public Contact Committee included two or more representatives in each political division (states, etc.) to provide an annual list of officers of local organization in their territory. The officers of the organizations changed and they frequently have not understood what they were expected to do and frequently lost interest. Of course the state representatives of the committee who were called upon to report did not always succeed in giving the information. These difficulties were the exceptions and were not at all prevalent. The expense of the committee operation has at all times been considerable and down to 1937, only 29 per cent. of it was paid by the society, even though some contributions of institutions where the committee officers were housed were not included in the total. A considerable part of the expense was provided by contributions of the interested societies who were a part of the organization.

A report, however, was sent to each contributing

society showing what had been attempted and accomplished during the preceding year. The local and contributing societies were appreciative of such publications and reprints as could be supplied from time to time, but there was no regular publication, a fact which interfered with the payment of contributions for the work. In spite of difficulties, it has been demonstrated that it is clearly possible to make the local scientific bodies into an effective force. What appears to be needed is some means of keeping them in contact with the central committee.

In spite of the fact that the majority of members are interested, the Ecological Society of America has not yet developed sufficient interest to put this or any other plan on a permanent workable basis. At the end of the twenty-five-year period, the project is probably no better established than at the end of the first nine years, when the machinery was first put to work in the case of the Glacier Bay National Monument. With the wartime and post-war pressure to destroy nature already mounting, it is well for those interested in its preservation for scientific purposes to look over the machinery by which some of it may possibly be saved.

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ON METHODS OF "STARRING" AMERICAN MEN OF SCIENCE

THE recent discussions in *SCIENCE* regarding the practice of "starring" deserving men of American science seem to have missed the crux of the problem. The question of the usefulness or fairness of such a practice depends entirely upon the accuracy of the method by which the desired end is attained. If it gives predominating chances of selection to certain scientists with the exclusion of others equally worthy of consideration a serious injustice is done and the value of the practice of "starring" is correspondingly decreased. That the present method of "starring" affords a very unfavorable opportunity of selection for many deserving men can be very easily proved.

Forty-two research institutions are represented on a recent list of 82 chemists, nominated for inclusion among the 175 leading chemists of America, from which list 44 are to be selected for "starring" in the seventh edition of the Biographical Directory of American Men of Science. These institutions, with the number of nominees belonging to each, are indicated in the accompanying list.

A few questions that every thoughtful recipient of this list might ask are: (1) What plan of nominations was adopted that gave Massachusetts Institute of Technology 8 times as many nominees for starring as

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|---|---|---|----|
| Massachusetts Institute of Technology | 8 | Brooklyn Polytech. | 1 |
| Illinois | 7 | Rockefeller Inst. | 1 |
| Wisconsin | 5 | Cal. Inst. Tech. | 1 |
| Pa. State Col. | 4 | Monsanto Chem. Co. | 1 |
| California | 4 | Conn. Agr. Expt. Sta. ... | 1 |
| Columbia | 4 | Gen. Aniline Co. | 1 |
| Michigan | 3 | U. S. Dept. Agr. | 1 |
| Northwestern | 3 | New Eng. Ind. Research Foundation | 1 |
| Chicago | 3 | Shell Develop. Co. | 1 |
| Stanford | 2 | Missouri | 1 |
| Minnesota | 2 | Rohm and Haas Co. | 1 |
| Princeton | 2 | Bell Tel. Labs. | 1 |
| Ohio State | 2 | Ethyl Gas Corp. | 1 |
| Merck and Co. | 2 | Brown | 1 |
| Nat. Bur. Standards | 2 | Calco Chem. Co. | 1 |
| Pennsylvania | 2 | Cornell | 1 |
| Harvard | 2 | Harvard Med. | 1 |
| Pittsburgh | 1 | Esso Labs. | 1 |
| Purdue | 1 | U. S. Rubber Co. | 1 |
| Distill. Products | 1 | Nebraska | 1 |
| Eastman Kodak | 1 | | |
| U. S. Bur. Mines | 1 | | 82 |

the California Institute of Technology or any of the other 24 institutions having only 1 nominee? Is this proportion based upon number or productivity of research staff? (2) How does it happen that Yale, Johns Hopkins, Mellon Institute of Industrial Research and scores of other important chemical research institutions are not represented? (3) Has chemical research fallen so low in the institutions not mentioned on this list that they have no candidates worthy of being starred? Such a conclusion is too unreasonable to be considered. (4) Has general interest in the practice of starring men of science become so slight that many directors of research are indifferent about it and do not take the trouble to sponsor candidates? This is perhaps one explanation for the very unbalanced list of "starrable" chemists now being submitted.

Whether the situation as regards chemistry exists also in the lists of nominees for other sciences the writer has no means of knowing. If the same conditions prevail generally then the present system of selecting "stars" for inclusion in the Directory of American Men of Science is of little value and might just as well be discontinued.

There is nothing so fallible as human judgment and if the practice of starring men of science is to be continued it should be based upon purely impersonal methods of selection which are free from the faults of indifference, favoritism, etc., that give rise to unfair representation. Impersonal methods are in fact the only means of enabling a voter to make a selection from a long list of candidates of whom the majority are unknown to him. Among such impersonal criteria may be mentioned numbers of papers published in a given period of years, numbers of patents taken out, rank of position, offices held in scientific societies, honors awarded, etc. Each one of these methods has