

hesitate to change where the attitude of autocratic superiors, miserably inadequate pay or other conditions conducing to inexcusable inefficiency menace the entire service you are endeavoring to perform.

(8) Investigate before accepting a new position; do not become a candidate for any position from which the previous incumbent was unfairly or wrongly dismissed, or a position in any institution under the ban of dignified organizations of scientific men.

(9) Insist on such a measure of reasonable participation in the determination of policies in your institution as will best promote effective scientific work.

(10) Do not publish the work of colleagues or subordinates without giving full credit where credit is due; authorship should be determined on the basis of the responsibility for the ideas involved, conception and organization of the project, actual field or research work, and actual compilation and writing of the results.

(11) Avoid, alike, hasty and superficial publication, and the holding of real results indefinitely without publication.

(12) Take the public into your confidence; in the end the public pays the bills and has a right to know what is going on.

(13) Interest yourself in human concerns outside your specialty—politics, religion, economics—your obligation to serve the community along these lines is directly proportional to your training and real ability.

The Committee on Social and Economic Welfare of Scientific Men is composed of the following members: Byron Cummings, acting president, University of Arizona, *chairman*; Frank E. E. Germann, University of Colorado, Boulder; G. A. Pearson, Southwestern Forest Experiment Station, Flagstaff; Walter P. Taylor, U. S. Biological Survey, Tucson. The committee will cooperate with the Committee of One Hundred on Scientific Research of the general association in its work for the advancement of research and research workers.

### THE WORLD LIST OF SCIENTIFIC BIBLIOGRAPHY

THE World List of Scientific Periodicals published by the Oxford University Press has been completed. The London correspondent of the *Journal* of the American Medical Association writes:

Few as large, and certainly no more arduous, tasks in bibliography have ever been accomplished. The first part of this great undertaking was to compile in alphabetical order a list of all periodicals containing the results of scientific research in existence between the years 1900 and 1921. This was published as volume 1 in 1925. It contains the stupendous number of just over 24,000 separate periodicals. But the list was not complete, notwithstanding the exhaustive search of known catalogues made by Dr. Pollard, then keeper of printed books at the British Museum, and in a supplement issued with volume 2 more

than 600 periodicals have been added. The preparation of the second volume necessitated even greater labor and has performed an even more important service to science. The adage "verify your references" is made difficult, sometimes impossible, by the ambiguous abbreviations of titles often given by authors. To overcome these difficulties, several institutions have adopted their own sets of abbreviations. These, however, are for the most part based on a limited series of periodicals, and also differ among themselves. The second volume of the World List consists in the first place of a set of abbreviations consistent and unambiguous for the whole set of nearly 25,000 periodicals. If it could be universally adopted, the temporary inconvenience of changing existing systems would soon be overcome by the permanent advantage to all scientific workers. Even when a reference is given correctly, the seeker after knowledge has to discover where he can find the periodical. To aid in that, twenty-one centers in Great Britain and Ireland have been selected. Symbols have been assigned to the more important libraries in each of these centers, and after the contraction for each periodical is placed the symbol of libraries in which the periodical is to be found. But apart from the direct aid supplied in this way, some remarkable and disconcerting results have appeared, because for a considerable proportion of the periodicals no home in Great Britain and Ireland has been discovered. Even London, with twenty-seven important scientific libraries, misses many publications of high value.

### A CENSUS OF WATER-FOWL

A MONTHLY census of water-fowl at selected points throughout the United States is being planned by the Biological Survey of the Department of Agriculture. It will be an aid in administering the Federal migratory-bird treaty act and the regulations thereunder, for the protection of birds that migrate between the United States and Canada. The undertaking is for the purpose of obtaining accurate information regarding the numbers, distribution and migration of water-fowl throughout the United States, Canada and Mexico. The project is important not only to the country as a whole and to each of the states, but also to all organizations that are primarily concerned with the conservation of game, all sportsmen and all others interested in wild fowl or their conservation.

In carrying out this projected work the Biological Survey plans to establish as many volunteer observation stations as possible, particularly in areas where there is great concentration of water-fowl in winter or during migration. In addition, it is desired to gather all possible information regarding the numbers and distribution of our water-fowl during the breeding season. On the selected areas accurate counts or estimates of ducks, geese, swans and coots are to be made throughout the country each month on the same designated dates. When the numbers of birds