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SCIENTIFIC PUBLICATIONS OF THE GOVERNMENT¹ PUBLICATIONS OF THE U. S. PUBLIC HEALTH SERVICE

By Dr. ATHERTON SEIDELL

U. S. PUBLIC HEALTH SERVICE

A GREAT majority of the members of the Washington Academy and its affiliated societies are engaged in research in governmental laboratories. They are the authors of the papers in which by far the larger part of governmental research is described. Although the preparation of these papers is in itself a certain satisfaction, since they are the evidence of worthwhile accomplishments, the real purpose of their publication is to aid others engaged in the advancement of science. This, however, is possible only if the papers find their way to persons engaged in research of a similar kind. This link in the chain of scientific progress is usually given very little attention. Most of us consider that our duty is done when our papers are accepted for

publication. We assume that it is the concern of others to obtain them and not ours to render this task less difficult.

The channels through which papers describing additions to scientific knowledge are most widely distributed are the well-known, regularly appearing, and internationally circulating journals, especially those devoted to specific fields of research. In general, our governmental publications meet these specifications to an exceedingly limited degree. They are usually published irregularly, are of a heterogeneous character, and but a very small proportion of any of them ever get beyond the borders of our country. Descriptions of experimental investigations published in them can thus rarely reach workers in other countries who would be able to use them to advantage.

¹ Papers presented at the January 21, 1943, meeting of the Washington Academy of Sciences.

Fortunately, a large proportion of the scientific papers originating in governmental laboratories are published, with official permission, in journals which insure their distribution to those for whom they were intended. It is only the variable proportion which are reserved for publication in the bulletins, periodicals and serials of the governmental bureaus which largely fail to reach research workers beyond our borders.

An examination of the records of papers originating in the National Institute of Health shows that, of an average of some 434 prepared each year since 1938, only about 125, or less than 30 per cent., were printed in Service publications. Of these, a considerable proportion were of an informational character, hence the number which may be classed as contributions to new knowledge, and thus of particular interest to research workers throughout the world, was relatively small. Their number, however, together with those originating in other governmental institutions is certainly sufficient to justify an examination of the conditions under which they are published and the interests and needs of those to whom they are distributed.

The principal publication of the Public Health Service is the weekly *Public Health Reports*. This contains, (1) statistical information in regard to the prevalence and distribution of communicable diseases, (2) articles relating to the cause, prevention and control of disease, and (3) other pertinent information regarding sanitation and the conservation of public health. It is under the second of these headings that many papers describing the results of highly technical laboratory research are published. The details in these papers are of interest, for the most part, only to workers in similar fields. They are largely wasted upon the great majority of those who receive the publication and who undoubtedly find it helpful for the statistical disease records and informational papers concerning public health administration and amelioration, which it contains.

The mailing list of the *Public Health Reports* is made up principally of persons engaged in public health work. Of a total weekly edition of somewhat more than 7,000 copies, 3,382 go to officers and employees of national, state, and city health departments, 423 go to nurses, and 786 to individuals and institutions. Public libraries receive 860 copies, and medical libraries and universities together receive 561. At present, about 400 copies go to countries other than continental United States and its territories. The distribution in these cases is also largely to health officers and health departments. None, of course, at present, reach the enemy or occupied countries, and a reserve of only 100 copies of each issue is being held to supply the needs of these nations after the war.

The total number of *Public Health Reports* being sent to enemy and occupied countries at the time of our entry into the war was about 200 copies. These were distributed approximately as follows: Germany 32 copies, France 24, Scandinavia 16, Italy 13, Netherlands 10, Russia 6, Belgium 5, Switzerland 4, and all other European countries 36. To China and the Middle East about 40 copies were being sent.

It is estimated that an average of more than 30 strictly scientific papers, making up some 300 pages, or about 15 per cent. of the total contents of the *Public Health Reports* each year, go to a very large number of persons who can have little interest in them, and fail to reach by far the larger proportion of those who would be able to use them for the advancement of science.

In addition to the *Public Health Reports* a series of monographs of a strictly research character are published as *Bulletins* of the National Institute of Health. These are printed in editions of about 2,500 and go largely to libraries, universities and research institutions. The variety of subjects dealt with in these *Bulletins*, their appearance at irregular intervals, and the restricted method of distributing governmental publications beyond our borders, makes it almost impossible for any considerable part of them to reach workers and institutions in other countries. They thus play a very insignificant role as international contributions to the advancement of science.

A publication of our Service, which is very little known, is entitled *Hospital News*. It is published by the planographic method twice a month in an edition of about 1,300 copies and contains brief articles on clinical research, case histories, practices, observations, and reports on improvements in methods and devices. It is a medical periodical of considerable merit, but its circulation, due to administrative limitations, is restricted exclusively to the personnel of the Public Health Service engaged in hospital and relief activities. It is, however, certainly well worthy of a far wider distribution among the medical profession of this and other countries.

Finally, a recent addition to the Public Health Service publications of a purely research character is the *Journal of the Cancer Institute*. This represents the nearest approach so far attained under governmental auspices to the requirements of efficient distribution of scientific papers originating in governmental laboratories. This journal follows the trend of specialization in scientific periodicals in being devoted to a single field of research. It is issued regularly six times per year at a fixed subscription price. Although this journal, like all other government publications, is distributed free to accredited libraries, institutions, and many individuals in the United States,

the Superintendent of Documents has received more than 150 paid subscriptions to it. This case might well be taken as an example of the trend towards which the evolution of governmental publication of

scientific research should proceed. It may be expected that specialized periodicals of this type may eventually provide a self-supporting means of publishing all research originating in governmental laboratories.

THE PUBLICATIONS OF THE NATIONAL BUREAU OF STANDARDS

By J. L. MATHUSA and K. S. GIBSON

A. NUMBER AND CHARACTER OF PUBLICATIONS, INCLUDING JOURNALS, SERIALS AND MISCELLANEOUS

Nine series of publications are issued by the National Bureau of Standards, including the *Journal of Research of the National Bureau of Standards*, Research Papers, Circulars, Handbooks, *Technical News Bulletin*, Commercial Standards, Simplified Practice Recommendations, Building Materials and Structures Reports and Miscellaneous Publications.

1. *Journal of Research, NBS*

The *Journal* is issued monthly and makes available the results of fundamental research (other than confidential work for the Army, Navy and war agencies) in progress in the Bureau's laboratories, including new developments in science and technology.

2. *Research Papers*

These are separate reprints of the articles appearing in the *Journal of Research*. Since the *Journal* covers a variety of subjects, technical groups, research workers and others find it advantageous to obtain the separate papers relating to the subjects in which they are interested. The research papers serve an administrative need in discussing programs of research and in furnishing technical information.

3. *Technical News Bulletin*

This is issued monthly. It contains short articles reporting progress of work, abstracts of articles that appear in the *Journal of Research*, accounts of scientific and technical meetings in which the Bureau staff has participated, and lists of articles by members of the Bureau staff, whether printed in the Bureau's own series or in scientific and technical journals.

4. *Circulars*

The Circulars are compilations of information on various subjects associated with the Bureau's scientific, technical and engineering activities. They include not merely the results of work done at the Bureau, but give information from many other sources. Examples are the National Petroleum Oil Tables; Polarimetry, Saccharimetry, and the Sugars; Static Electricity; Testing Volumetric Glassware; A Test of Lens Resolution for the Photographer. Over 400 of these Circulars have been issued.

5. *Commercial Standards; and 6, Simplified Practice Recommendations*

These are pamphlets issued and revised from time to time as a record of agreements reached with industrial organizations on the qualities, types, and styles of manufactured products. The distinction between the two series is that the Commercial Standards are primarily recommended specifications of quality or performance, whereas the Simplified Practice Recommendations represent voluntary agreements to reduce the number of types and varieties to be given preference in trade practice. Both are developed cooperatively with the industries concerned, through standing committees working with the Bureau on the various projects. During the present emergency the War Production Board and the Office of Price Administration are incorporating the provisions of many of these recommended standards in their mandatory limitation and control requirements, thus conserving strategic materials and manpower.

7. *Handbooks*

These are recommended codes of engineering practice, such as the National Electrical Safety Code, Code for Protection Against Lightning, Protection of Radium During Air Raids, Safety Rules for Electric Fences, Safe Handling of Radioactive Luminous Compounds. They are developed jointly with the industries, engineering standardization groups and national organizations concerned. Over 30 such codes have been issued. In many cases these recommended requirements are given legal status through incorporation in local ordinances by State and municipal regulatory bodies.

8. *Building Materials and Structures Reports*

This series was begun in 1938. It reports the results of work on funds specially appropriated by Congress for the investigation of materials and methods of construction for low-cost housing, including the Government's program of defense housing. The investigations have furnished the Government, the building industry and others concerned information from practically every available source on the engineering properties of materials as incorporated in structural elements and equipment. Recent reports