with the Society of American Bacteriologists.

Program

"Passive Diphtheritic Immunity in Rabbits," by H. M. Goodman.

"The Changing Flora of Chronic Suppurations: Its Relation to Opsonotherapy," by A. P. Ohlmacher.

"Blackhead: A Coccidial Disease of Turkeys," by P. B. Hadley (by invitation).

"The Cause of the So-called Germicidal Property of Milk," by M. J. Rosenau and G. W. McCov.

"The Significance of Leucocytes and Streptococci in the Production of a High-grade Milk," by Mary E. Pennington.

"A Note on the Occurrence of Leucocytes and Streptococci in Milk," by S. C. Prescott.

> WILLIAM J. GIES, Secretary

PUBLICATION IN GERMAN JOURNALS OF THE RESULTS OF AMERICAN CHEMICAL RESEARCH

In the course of an address on "American Chemical Research," delivered before the American Chemical Society last June, a brief reference was made to the practise of some American chemists of publishing the results of their investigations more or less systematically in German journals. Since the address was printed I have had opportunities of discussing the topic with various friends, several of whom publish in the manner indicated, and it has been suggested that it might be useful—and even interesting—to deal with the question at somewhat greater length.

It will, perhaps, be wise to state at the outset that, in my opinion, there can be no question as to the absolute *right* of an investigator to offer his results for publication when, where, how and to whom he pleases, but "all things that are lawful are not expedient," and it is really on this that the question turns. Closely interwoven with it are two other questions: Should the chemists of America combine to form a

¹ Science, 26, 625 (1907).

society? Should this society publish a journal?

The answers given by the chemists of the country have been unmistakably in the affirmative, consequently, it would appear to be the merest common-sense on the part of all interested, to endeavor to make both the society and its journal the best possible. It has sometimes been urged against the society that its admission requirements are too lenient and that it would be advantageous if its membership were limited to persons possessing some "qualification." Just what the nature of their "qualification" should be it is difficult to discover. Although this idea is, perhaps, attractive at the first glance, a little thought will show many serious objections to it. Only two of these need be mentioned at present. The one concerns the expenses of publication and is dealt with more fully below. The second objection may be expressed by saying that no society can be truly national in its scope and aims unless its membership includes all or nearly all of those professing the subject with which it deals. In the case of the American Chemical Society this battle has been fought and won. In numbers it ranks as the third largest association of chemists in the world and very soon it will take the second place. The fact that the names of all the better-known chemists of the country are on its roll proves that quality has not been sacrificed to quantity.

We may now consider the subject of publication. In his recent address to the American Chemical Society, during the Chicago meeting, President Bogert was understood to say that the Journal of Physical Chemistry and the Journal of Biological Chemistry have each a circulation of about 200, and that they do not pay their expenses; moreover, the editors give their services. No information could be

obtained regarding the American Chemical Journal, although a request for it had been made. It is fair to assume that the wider scope of this last journal is probably correlated with a somewhat larger circulation; the editor's services are also gratuitous, and it is generally understood that, whatever may be the case at present, for many years its publication involved a financial loss. The Journal of the American Chemical Society, on the contrary, does pay expenses, including a small honorarium to its editor. Its solvency is due, of course, to its large subscription list. To put the matter in another way, chemists engaged in research do not pay the cost of publishing their results and, indeed, can not afford to do so. Consequently, in order that they may be truly independent not only of the munificence of individuals, but also of the control which this munificence necessarily involves, it is essential that those chemists who do research should combine with those who are otherwise engaged; the partnership is a thoroughly honorable one on both sides, the one furnishes the money, the other the results.

This mutual dependence has, however, another phase. We can not expect the "man who pays" to continue to pay unless he receives value for his money, but the value of a scientific journal, unlike that of a popular magazine, is dependent entirely on gratuitous contributions. It can not buy its talent, but must take what material is sent to it.

It would appear, therefore, that every paper by an American chemist which is printed in foreign journals is not only a distinct loss to his non-publishing chemical brethren, but it also acts injuriously on the interests of those who are actively engaged in research, because it renders the native journals less valuable and, therefore, tends to restrict their circulation. Moreover,

this loss and injury are greater in direct proportion to the value and general interest of the papers in question. Few who have not looked into the matter realize how much the Zeitschrift für physikalische Chemie owes to its American contributors. A similar state of things prevails in the domain of organic chemistry, which is indebted to American chemists for two of the most interesting and important conceptions which have enriched it within recent years; unfortunately—as I venture to think-they have been developed in the Berichte der deutschen chemischen Gesellschaft, and in Liebig's Annalen der Chemie, respectively.

Some of the most valuable results obtained by a few American chemists appear in the publications of certain of the learned societies. Very frequently the society in question has contributed funds towards the cost of the research. In such cases it is only fair that the society should have an opportunity of making known the discoveries. The "American Academy," which is, doubtless, the most important association of this nature, publishes 850 copies of its Proceedings, 200 of which are supplied to the author. Of the remainder, about 450 go to various libraries and learned societies all over the world and the other 200 to the foreign honorary members and to those members and associate members who desire to receive them. Other people can obtain the articles at a relatively small cost. It is impossible to doubt that the circulation of the *Proceedings* is of a very high order, but I fear that it is equally certain that their contents fail to reach the mass of American chemists, and it is with their interests that I am immediately concerned; the specialist can generally take care of himself. For many years it has been customary for the American Chemical Journal to reprint articles which have appeared in the publications of various societies; possibly a similar course might be followed by other journals.

Of the reasons which have been given in support of the habit of publishing in German journals, three only need be considered very seriously. An article may appear in the "Berichte" six weeks after the copy has been mailed from this side of the water, but if it be sent to one of the American journals the time which elapses before publication is often greater. The fact that the domestic journals are all monthlies, whereas the "Berichte" appears seventeen times per annum, accounts for some of the delay, which, in any case, is not very great. I am informed that the average length of time required for publication in the Journal of the American Chemical Society is five to nine weeks, according to the date of the receipt of the manuscript. As a rule, the delay, as compared with the "Berichte" is not greater than the length of time, three weeks, required for the double journey across the ocean. In the case of very brief papers, or when special reason can be shown for haste, the time mentioned above can almost always be shortened. In my own experience of this journal a paper appeared about two weeks after the copy was sent to the editor. During the Chicago meeting of the American Chemical Society statements were made to me by several people regarding the great delay attending publication in the American Chemical Journal. One gentleman from the middle west declared that a relatively short paper of his would have to wait six months before appearing. In some cases even a longer period is necessary, as I have found, but it was also the custom of the editor of this journal to expedite the printing of papers when the authors showed that their interests would suffer materially from delay.

The second of the three reasons referred to is embodied in the following statement: "Germany is the leader of the chemical world, and papers published there reach directly, with a minimum expenditure of time and trouble, those for whom the contents are specially designed." As regards the first part of this statement, it may be pointed out that Germany is likely to continue to lead the world so long as the results of the best work done in other countries are published within her borders. Are we all to publish everything in German? If not, where is the line to be drawn?

The third reason referred to above surprised me a good deal, but it was made by a high authority. "Few Germans can read English with facility, whereas most English-speaking chemists have no difficulty in dealing with German, and it is not right to say to the Teuton 'if you will not learn my language you shall not know of my work.'" To this it may be replied that the German chemist shows no indication of any anxiety to consider the susceptibilities of other people concerning the language question and, consequently, there is no special necessity to consider his feel-If he can not or will not trouble to learn English let him get his information at second hand, from abstract journals, or let there be duplicate publication in each language. Provided that the paper appears first in English, and a clear indication is given in the German edition that this latter is a reprint, then, personally, I have no serious objection to offer to its duplication. The question is essentially one between the German editor and his subscribers. As regards the general ability of the English-speaking chemists to read German I fear that my friend has overrated them. Enquiry shows that it is very doubtful if fifteen per cent. of the members of the American Chemical Society see the "Berichte" regularly, and probably less than five per cent. read any other German journal. The relatively small number of Americans who belong to the German Chemical Society speaks for itself.

Science is world-wide but "charity beginneth at home." It would appear to be only fair that the country which provides the expenses of an investigation should have the first opportunity of enjoying its results, whether these be in the realm of pure or of applied chemistry. Is it too much to ask those American chemists who are so happy as to combine unusual natural ability with the most favorable opportunities for its cultivation, if they will not make the results of their work more directly and easily available to those of us who are less highly favored? Publication in American journals, even when it involves delay, will in no way diminish the authors' fame and will undoubtedly prove to be a great help and inspiration to their younger and less well-known colleagues.

J. BISHOP TINGLE

McMaster University, Toronto, Canada, March, 1908

SCIENTIFIC JOURNALS AND ARTICLES

Some months ago it was announced that the publication of *The Journal of Morphology* would be resumed under the auspices of the Wistar Institute. The first number of Vol. XIX. has just been issued.

The reorganization of this journal suggested the possible advantages which might accrue from a centralization in one publication office of a number of anatomical and biological periodicals. There seemed to be no doubt that more material could be published with the same funds and that there might be other advantages in publishing a number of journals from one office. The economies are too evident to need enumeration. The most vital point, however, and the one which seems to

offer reasonable doubt is the question of representative editorship. It is essential that our best anatomical and biological periodicals continue as national organs edited by representative anatomists and biologists. The danger of a central office of publication is that the journals, thus centralized, may perhaps become local organs of the institution producing them. This danger must be carefully guarded against.

The Wistar Institute, by means of its advisory board, is making every effort to do national work and for this reason the danger referred to seemed so remote that four other journals, namely, The Journal of Comparative Neurology and Psychology, The American Journal of Anatomy, The Anatomical Record and The Journal of Experimental Zoology. have been assigned to the Wistar Institute. The institute has accepted these journals on condition that the same editorial boards shall continue responsible for the scientific material published, and that these boards be made up of representative men. The institute accepts the responsibility as an opportunity to aid by cooperation in the increase and improvement of the various means for publishing contributions in the field of anatomy and biology, and to relieve the various editors of some of the more arduous duties connected with an editorial office.

Any financial support which the institute may be called on to give will be at the expense of its own research work, and it must be understood that other institutions are not released from their responsibilities by the fact that the Wistar Institute has assumed the burden of publishing these journals in the interests of economy and improvement.

Fortunately, the financial burden is borne, for the present, by private contributions, but it is hoped that institutions and individuals will, nevertheless, take active interest in placing all these journals upon a self-supporting basis.

Acting through its advisory board and through the various editorial boards of the above mentioned journals, the Wistar Institute will make every effort to establish high standards in the various departments of its publi-