

colonial style to harmonize with older buildings at the college, with two stories and a basement. The

new structure, to be known as the Johnson Medical Building, will cost \$60,000.

DISCUSSION

DISSEMINATION OF SCIENTIFIC KNOWLEDGE

SOME few hundred years ago all scientific knowledge was recorded and disseminated by means of books and by word of mouth. As scientific activity increased this method became inadequate, and scientific knowledge became recorded and disseminated largely in the form of journals. Lately science has become still more active and even this method has become somewhat inadequate. It seems too slow in many cases, and with the journals reaching an alarming number the literature becomes too voluminous for the average scientific man to cover. The printing of preliminary reports in weekly journals and the publishing of abstract journals has helped the situation somewhat. But even this is not adequate.

Many scientific men feel that further improvements should be made in our system of disseminating scientific knowledge. The first improvement suggested is to make scientific knowledge more up to date. The time which elapses between the completion of a scientific report and the appearance of the report in print is generally much too long.

The second improvement suggested is to provide some means whereby the scientific man can find and read with comparative ease all current scientific literature in either abstract or detailed form. Even within the narrow boundaries of the special sciences the literature is becoming so extensive that the average worker does not attempt to read it all, and partly for this reason shamelessly neglects most current foreign literature. All workers in a special field of science, as chemistry, for example, are not equally interested in a certain scientific paper. Scientific men may be divided into three groups, according to their degree of interest in a scientific paper. The first group comprises those who are actually working on the problem with which the paper deals. These people want the information promptly and in great detail. In the second group are those who are interested to the extent of reading the full report but do not mind waiting for it to appear in a journal. In the third group are those who are only mildly interested and do not care to read the report in detail, but are quite satisfied to read a summary or abstract.

It is felt that the suggested improvements can best be realized by the publication of journals of previews in the various scientific fields. Each scientific man will write the previews for his own papers. The previews should be very short and contain all the

essential information of the full reports. The previews are submitted to the journal of previews after the full reports have been accepted for publication by a standard journal. Within one month the previews should appear in print. This scheme should satisfy all the conditions outlined above. The workers of the first group will here find prompt information, and will no doubt communicate with the author for the details. The second group will get the same prompt information, and will know where the full report is to appear. The third group will read the previews and feel that they have obtained sufficient information.

Since a journal of previews can not limit itself to a certain number of pages a year but must take all papers it receives, it is somewhat difficult to fix the subscription rate. This difficulty can be overcome, perhaps, by fixing the subscription rate on the page basis rather than on the volume basis. This could be accomplished in two ways: the subscription could be made for a certain number of pages and payment made in advance as is customary; or, at the end of a year (or one half year) the publishers could bill the subscribers for the number of pages they had received.

The publication of a journal of bacteriological previews is actually under consideration. This article is published in the belief that scientific men in other fields have felt a similar need and might be interested in such a journal in their field. To be most useful the preview journal should be international in scope. It would help considerably to eliminate the woeful lack of cooperation and appreciation among the scientific men of the different countries.

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VIABILITY OF DROSOPHILA SPERMATOOZOA IN SEA WATER

IN the course of certain experiments on artificial fertilization of *Drosophila* eggs during the past summer at Woods Hole, data of general interest were accumulated regarding the viability of *Drosophila* spermatozoa under various environmental conditions. On beginning this work, it became obvious that the primary essential for mechanical transfer of sperm masses was a non-toxic fluid medium in which the sperm would remain alive¹ for a sufficient length of

¹ Undulatory movement was arbitrarily taken as a criterion of life, though it is recognized that inactive sperm may be potentially capable of fertilizing eggs.