his opinion that the public should be rigidly excluded from the study collections. These should, if possible, be kept away from the exhibition halls, but if this can not be done they should at least be kept from the public view. Drawers with glass tops, placed beneath the cases and accessible to the public are an abomination to the curators and a menace to the safety of the collections, besides serving no good purpose to the public, which is only bewildered by the multitude of similar forms.

The paper by Dr. Boaz opens up some perplexing but also interesting questions of museum administration and it would be of value to hear from others who are working along this line. Many of the problems touched upon will probably be discussed by the American Association of Museums at some of its future meetings, and the writer would suggest that the Chicago meeting in 1908 will be an opportune time to offer some of these problems for debate.

FRANK C. BAKER,
Curator
THE CHICAGO ACADEMY OF SCIENCES

THE PUBLICATION OF AGRICULTURAL RESEARCH

PROFESSOR WEBBER in a recent issue of SCIENCE[1] has crystallized a problem which has been prominent in the minds of experiment-station workers of the United States for the last decade or more, and which has been particularly accentuated by the recent expansion of technical work in the stations by virtue of the Adams Act.

Most active station workers feel the need of additional and better facilities for publication.

As Professor Webber indicates, the issuance of special technical series of bulletins has been a failure and has been almost entirely or altogether abandoned. The publication of a technical bulletin with another edition of the same number in popular abstract, tends to confusion. Some stations issue the more technical, less practical, bulletins in small editions and withhold them from general distribution. This course is objectionable, since the farmer feels slighted when he finds that certain bulletins have not been sent to him. To take the other horn of the dilemma and send all of this technical matter to the farmer, placing before him matter which will ultimately and in the hands of the proper persons be highly valuable, but which it is entirely impossible for him to use or even to judge properly, is certainly not a proper course.

Nor do any of these methods of bulletin publication of technical matter attain the desired end, viz., *to reach the largest number of interested people and to place the matter in permanent and easily accessible form.*

In general, the plan of Professor Webber must meet approval in that it provides a central unified publication center. Personally I believe that there should be one publication which might be known as the *Journal of American Agricultural Research,* a title which commends itself as being definitive and concise, and which is easily abbreviated to *J. A. A. R.* or *Jour. Amer. Agric. Res.,* an abbreviation which is not preempted in the large list used by the *Experiment Station Record.* While primarily intended for publication of the research of experiment-station workers, who should have the first right to immediate publication, the privileges might be extended to all other research concerning American agriculture.

This journal should be issued in numbers consecutively, as they come from the press and be paged consecutively as high at least as the ten-thousandth page. All citations by page will then be exact. The numbers should be of variable size to conform to the dimensions of the single articles contained therein, and such editorial staff and press facilities should be at command as to insure practically immediate publication of matter submitted to the editorial board by various station directors.

Frequent index numbers with extensive cross reference should be issued in order to keep the journal of ready reference utility. Such a journal used in conjunction with the *Experiment Station Record,* as at present conducted, would render all American agricultural research readily accessible.

[1] SCIENCE, Vol. XXVI., p. 509.

I see no need, and indeed it seems to me a great disadvantage, to divide the publication into separate series. Each experiment station and each other large research institution, many libraries and many individuals, will desire the whole publication. Citation should be to the journal as a whole and not to separate series. If division into series be attempted their boundaries will be artificial and their number will be constantly changing and no stability will be secured.

Issuance in series will also inevitably lead to delay. The only advantage of such a series will be that each investigator may receive only the series concerning his particular field. This end may be attained with even greater accuracy by issuing each article as a special number of the journal, and sending to subscribers only such numbers as contain articles pertinent to the subscriber's interest. In this I incline to the view expressed by Bailey[2] and avoid the difficulties raised by Gilmore[3] and by Webber himself.

If there be no separate series of the journal the editorial board would need to be enlarged to include one or more men in each special field of research. These editors should be paid sufficient compensation to make it their duty to give *immediate attention* to each article submitted to them, and thus to facilitate publication.

Numbers upon designated subjects should be sold to station workers at a price sufficient to control actual waste, but low enough to be without burden to the subscriber, as, say, 25 per cent. of actual cost.

F. L. Stevens
Vegetable Pathologist
N. C. Experiment Station

HOLOTHURIAN NAMES

To the Editor of Science: In reference to the letters by Dr. Theo. Gill and Dr. W. K. Fisher in Science for August 7 and September 20, respectively, I would ask whether Dr. Fisher's conclusion that "we can no longer speak of sea-cucumbers as 'holothurians,' nor of the class as *Holothurioidea*" is really justified.

Even if the name *Holothuria* be taken up by the writers on Cœlentera, is there any reason why we should not continue the use of what has now become an ordinary English word? And as regards the name of the class, I would protest against the assumption that this must necessarily be based on the name of one of the families or one of the genera included in the class.

It is generally held that the word ὁλοθούριον, used by Aristotle ("Historia Animalium," I., i., 19, and "Partes Animalium," IV., v., 43), as well as the word *Holothurium,* used by Pliny ("Naturalis Historiæ," Liber I., Cap. xlvii.), refer to a sea-cucumber. This is surely enough to justify the continued use of the class name Holothurioidea.

Since in these days the genus *Holothuria* has become so much split up that it would in any case be difficult to decide for which of its sections the name *Holothuria* should be retained, the disappearance of the name from systematic usage is by no means to be regretted. As for the possible transference of the name *Holothuria* to either a pelagic hydroid or a tunicate, this appears to be eminently one of those cases which should be disposed of by an international committee, such as it was proposed should be established by the International Zoological Congress. I am not aware whether such a committee was actually appointed.

Both your correspondents seem to have overlooked the fact that the absurdities following a rigid adherence to rule in this matter were well put by my colleague Mr. F. Jeffrey Bell in his note "A Test Case for the Law of Priority" (*Annals and Magazine of Natural History,* pp. 108–109; July, 1891).

F. A. Bather
London

[2] Science, Vol. XXVI., p. 512.

[3] Science, Vol. XXVI., p. 511.

SPECIAL ARTICLES

A SUGGESTION FOR A NEW UNIT OF ENERGY[1]

The study of the food of man and of animals as a source of energy to the organism has made rapid progress within recent years. It is, of course, easy to overestimate the value

[1] Read before the Society for the Promotion of Agricultural Science at its annual meeting, May 27, 1907.