signs becomes (1, -2), which is the positive electron. The neutron is (0, 1), since the general formula for any nucleus is  $(np)_z n_I$  or  $H_z^0 n_I$  in which n is a neutron, and the atomic number Z for the neutron is zero.

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#### ISOTOPIC NOMENCLATURE

There has been an increasing amount of discussion relative to suitable words and symbols for the designation of isotopes. Already the words "protinium" and "deuterium" have been used to denote the hydrogen isotopes of mass 1 and 2, respectively. Also the formula of ammonium containing one atom of hydrogen of mass 2 has been written  $NH_2D$  and  $NH_2\overline{H}$ .

At present experimental evidence points to the fact that many of the elements are composed of at least three isotopes. Furthermore, it appears to be only a matter of time before many of the isotopes will be prepared in a pure state and in sufficient quantity to examine their properties. In the meantime, however, considerable confusion may arise, assigning to isotopes symbols and names which are not only at variance with common usage but will also tend to create an elaborate nomenclature.

Two examples should serve to make this point clear. There are at present at least 80 isotopes known. First, if each of these isotopes is assigned a name unassociated with its element the memory of the average chemist will be greatly taxed. Second, if we assign a numerically derived name, such as "protinium" or "deuterium," we might call an isotope of mass 86 hakloskyhogdoekostium (ἐκτος καὶ ὀγδοηκοστός) and yet be uncertain, unless the context supplied the information as to whether isotope of mass 86 of strontium or krypton was meant, for both have an isotope of this mass.

It would seem to the writer to be more advantageous for the present to run the risk of being verbose but exact and designate an isotope as follows: Hydrogen of mass 2, or oxygen of mass 17, and use the simple words hydrogen, oxygen, strontium, etc., to designate the usual isotopic mixture found of the element in question. If the amounts of the isotopes have been varied to a marked degree, then write out the percentages of the various isotopes present.

In chemical formulas the use of the symbol of the element together with the suitable number or numbers in exponential position, and with the use of structural formulas to clarify isomeric relationships would still appear advisable, rather than injecting new symbols or signs just at present.

And last but not least it is recommended that a suitable international committee be appointed which

would rule upon changes in nomenclature, should the occasion arise, and thereby avoid getting into a confused nomenclature such as the one in organic chemistry, from which we are now being rescued by the Commission on the Reform of the Nomenclature of Organic Chemistry.

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### REACTION TO MOSQUITO BITES FOLLOW-ING TREATMENT FOR COLD IN HEAD

For some years past the writer has been raising mosquitoes for experimental purposes. These have been fed on the forearm, and no ill effects have been observed. There has been practically no swelling or discomfort, and within a very few minutes the slight redness at the site of the puncture disappeared. Recently the writer contracted a severe cold in the head, and on advice, took alkaline salts as a treatment. A teaspoonful of Citro Carbonate of Magnesia was taken every hour for several hours, so that the urine gave an alkaline reaction on litmus paper. At this time the mosquitoes were fed as usual, and within ten minutes, at the site of every puncture, appeared a white swelling, six to ten millimeters in diameter, surrounded by a red aureole and accompanied by an almost intolerable itching. These swellings lasted for about half an hour and gradually disappeared. During the time the system was alkalized, each feeding was followed by the appearance of these swellings, accompanied by intense discomfort. At the time of writing, three weeks after the last dose of Citro Carbonate of Magnesia, the mosquitoes are still being fed, but once more without the occurrence of swellings, discoloration or itching. The mosquitoes, Aedes egypti, emerged in December, and the same individuals were used during the whole time covered by these observations. The writer is curious as to the connection between this treatment for cold and the reaction to the mosquito bites which followed.

G. ALLEN MAIL

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## MORTALITY AMONG TROPICAL FISH

A HIGH infant and adult mortality rate among different varieties of tropical fish was completely checked by the addition of viosterol to a diet already containing desiccated shrimp, beetle and ground fresh liver. Deeper pigmentation and increased activity were noted. Several fish whose vertebral columns had softened and deformed recovered their rigidity after addition of the viosterol. However, the deformity persisted.

The viosterol and its oily medium were mixed with

the desiccated food and the mixture placed in a feeding ring. The portion that the fish failed to eat in a short time was removed.

In the absence of any controlled test I can only remark on the interest of this information.

J. I. SPIRA

Dr. Sidney Brown initiated the use of this food.

CHICAGO, ILL.

# THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

#### THE WORK OF THE PRESS

So far as the press is concerned, the meetings of the association are centered in the press room. The press representatives can find in the press room sufficient material available for their use so that there is no necessity for them to listen to the reading of any of the papers or addresses. Furthermore, a much better, more adequate and more accurate account of an address or paper can be prepared from the manuscript than from notes taken while it is being read. Therefore, unless a copy of a paper or address is in the press room, that paper or address in all probability will receive no notice in the press.

This year an unusually small proportion—scarcely more than one fifth—of the papers read were sent in advance to the Press Service. There were 1,540 papers (including exhibits, demonstrations, etc.) listed in the program, of which 325 (21 per cent.) by 303 different authors were received in advance.

If the 74 papers that were not received until after the meeting (partly because of having been mailed with insufficient postage) are added to the number sent in, and the 113 mathematical papers, which can not be handled successfully in the usual routine, be subtracted from the total number of papers listed, there were 1,427 papers presented, of which 399 (28 per cent.) were sent in.

The number of papers listed and received, arranged by groups, were as follows:

|  | PAPERS |          |
|--|--------|----------|
| SECTION OR GROUP   | LISTED | RECEIVED |
| Exhibits and Demonstrations                                | ) 10 ( | 5        |
| Exhibits and DemonstrationsGeneral Sessions and Committees | } 18 } | 6        |
| Joint Sessions   | 96     | 21       |
| Mathematics (A)  | 113    | 0        |
| Physics (B)  | 94     | 17       |
| Chemistry (C)  | 7      | 3        |
| Astronomy (D)  |        | 7        |
| Geology and Geography (E)                                  | 16     | 12       |
| Zoological Sciences (F)                                    | 436    | 60       |
| Botanical Sciences (G)                                     | 227    | 82       |
| Zoology and Botany (F and G)                               | 100    | 19       |
| Anthropology (H)   | 32     | 11       |
| Psychology (I)   | 38     | 16       |
| Social and Economic Sciences (K)                           | 23     | <b>2</b> |
| Historical and Philological Science                        | 8      |          |
| (L)  | 15     | 6 .      |
| (L)<br>Engineering (M)                                     | 21     | 5        |
| Medical Sciences (N)                                       | 19     | 5        |
| Agriculture (O)  | 195    | 23       |
| Education (Q)  | 39     | 19       |
| Science in general (X)                                     | 23     | 6        |
| m 1  |        |          |
| Totals   | .1.540 | 325      |

In addition to the typewritten manuscripts and abstracts listed above, many excellent printed abstracts were sent in. But for press use printed abstracts are by no means so good as typewritten abstracts. They convey the impression that the material has already been published, or may have received press notice; they can not be distributed with the others in the official blue covers, without which abstracts and manuscripts are regarded with more or less suspicion; and many of the press representatives, especially the representatives of the local papers, will not take the trouble to read them. If copies of the manuscripts of the printed abstracts were sent to the Press Service it would help greatly in securing adequate notice of the papers.

Abstracts are of much less value for press use than complete papers, because as a rule they do not provide sufficient background for a press story. Unless the press representative who reads the average abstract happens to be more or less familiar with the subject-matter the abstract is not of much interest to him. But abstracts are very useful in presenting briefly the main points of interest in a paper.

Unfortunately, only single copies of many of the papers and abstracts were received this year. Two copies of each are desired in order that up to the time of the meeting one may be retained in the press room at Washington and the other sent to the city in which the meeting is to be held. Press representatives in both cities therefore have an opportunity of studying the material in advance of the meeting. During the meeting both copies are in use in the press room.

It is, of course, impossible to notice in the press all the papers given during a meeting, or even any large proportion of them. After the meeting all the papers are gone over with great care, and news items prepared from them appear throughout the year under the date line of the city in which the work was done. Some of them are also used as material for feature articles.

Papers sent to the Press Service are for press use only. They are not returned after the meetings. Every effort is made to see that they are given due consideration by the press representatives. They are regarded as confidential, and no one other than the press representatives is allowed to see them.

The Press Service does not prepare abstracts or