made different, since we both collected them together, I shooting as many as did he, and our notes were of course the same, and as he was the official ornithologist I very naturally drew on him for the correct data, since my work was given to him for his paper. If Mr. Stone will look back he will remember that we saw a large number of small birds about Col. Glenns' camp which we both thought were finches and thrushes. We actually obtained very few specimens, hardly enough to say that birds were or were not abundant, and our short stay at each point (half a day to a week) hardly warranted us in drawing too fine conclusions. In regard to the Trogan, I have a note of another bird which I saw in the cactus thicket which I believe was a Trogan, although I will not be certain of the fact. It is quite natural that the note books of two naturalists should vary. I am certain that my bird, which was *not* shot, had a 'rose-colored breast.'

In regard to the rarified atmosphere observed on Mt. Orizaba, I still affirm that "my head swam and my eyes became bloodshot" and my companion, Mr. Stone, *complained* of the same symptoms, and also of pain in the stomach. This my note book shows. The figure of *Tyrannus vociferus* was inadvertently made to represent *T. tyrannus* by my brother, who made the greater number of the drawings. I do not find that I state anywhere that the figures were drawn especially for this work.

Lastly, let me state that the accusation of plagiarism made by Mr. Stone is quite unjust, as I trust I have shown in this communication. The paper referred to by him (notes on the Round-tailed Muskrat) was of but 2½ pages, and when information was used from Mr. Chapman's paper, he was given due credit.

Of the thirty odd papers which have appeared under my name this is the first that has caused me to be accused of plagiarism. It seems a very late date to call up a paper written seven years ago, when some of my more recent papers might answer the purpose fully as well. Finally, let me state that every statement made in my little booklet has been written from notes taken on the day each incident happened, and at *no* time has my imagination been brought into play, nor have I depended upon my memory. If Mr. Stone's notes vary from mine it is simply the very natural result of two persons taking notes independently. Mr. Stone's chief criticism seems to be the fact that his copy did not contain the reference slip of which I spoke. This I will send him. The real errors, of which there are many, will be corrected in a future edition.* FRANK C. BAKER.

CHICAGO ACADEMY OF SCIENCES.

SCIENCE AND CYCLOPÆDIAS.

TO THE EDITOR OF SCIENCE—*Sir:* Unpleasant as it is to criticise any book, I think I am justified in asking you to publish a few words concerning the new edition of Johnson's Cyclopædia. It appears to me that science is treated so insufficiently that attention should be called to it.

An article of about five pages *against* the scientific truth known as 'Evolution' is included in Vol. III. I think the Johnson Company cannot give the names of three men of recognized scientific position who could be induced to write in opposition to evolution. But no article appears *against* 'homœopathy,' although the entire scientific world has condemned it.

In the department of biography, the names of Platt and Croker may be found; but Eimer, (Weismann's great opponent) Mendeléeff, Ecker, Bütschli, Horsley (Victor), Nägeli, and a host of other eminent men who have contributed towards our knowledge of nature's laws, are omitted.

'Chemotaxis,' 'actinomycosis,' 'appendicitis,' 'metalloid,' and 'metagenesis' are not mentioned in this new cyclopædia. As the last two words have been used with more than one meaning, it is especially important that reference books should contain them.

'Panmixia' is explained in *eleven* lines in the article in favor of evolution by Mr. Kingsley.

I have been unable to find one word concerning that destructive little insect, 'orgyia lencosigma,' which must have interested many people for several summers past.

*I believe in exposing plagiarism wherever found, but do not see where that term can be applied to myself, in view of the facts which I have given. At the time my proof was read I was seriously ill with typhoid fever, and other parties corrected it.

The following evidence is offered with the object of showing by comparison that the space devoted to scientific subjects is utterly insufficient for the enlightenment of the general public.

'Degeneration' (two articles)—less than one and a-half cloumns.	'Pronunciation of foreign names' (exclusive of Latin and Greek names) over five columns.
'Parthenogenesis' one-half column, ending with 'the whole subject is obscure, however.' The reader is referred to Von Seibold, 'Parthenogenesis' and to Weismann, 'Essays on Heredity.' Both these works are far too technical to be intelligible to the general reader.	'Plattdeutsch' over four columns.
'Amphibia' one-half column.	'Pastoral Poetry' almost three columns.

Under 'Eclecticism' the reader is imformed that a certain Dr. Newton founded the theory of cellular pathology and introduced antisepticism in surgery. The scientific world has given the credit of the former discovery to Virchow, and of the latter to Lister. Now I ask, for purposes of information, what did Robert S. Newton (whose biography is not given in Johnson's Cyclopedia) write, or publish, upon cellular pathology, prior to the publication of Virchow's work in 1858? To credit anybody except Lister with the introduction of antisepticism is positively absurd.

'Monometallism' and 'bimetallism' are not to be found in this new cyclopædia under the proper headings; indeed, there are not even cross-references to 'money.'

The Johnson Cyclopædia is advertised by means of a sixteen-page circular, which bears neither publisher's nor author's name, a large part of it being devoted to abuse of what I have found a valuable, though by no means perfect, reference book, the *genuine* Encyclopædia Britannica. The writer of this sixteen page advertisement wishes his readers to believe that one half of the Britannica is of no use to Americans, if it is to anybody. I understand that Messrs. Appleton never place their name upon advertising circulars criticising the publications of other firms. I ask, in all fairness, is this honorable, or even reasonable?

I am not interested in any cyclopædia, nor in any publishing house, and this letter would not have been written had I seen any detailed, impartial criticism of the Johnson Cyclopædia.

LAWRENCE IRWELL.

BUFFALO, N. Y.

[Scientific subjects seem to be adequately treated in Johnson's Cyclopædia. The circular mentioned by our correspondent is, however, very objectionable, and the Johnson Co. should take steps to prevent its further circulation. J. McK. C.]

SCIENTIFIC LITERATURE.

An Atlas of the Fertilization and Karyokinesis of the Ovum. By EDMUND B. WILSON, PH. D., with the coöperation of Edward Leaming, M. D., F. R. P. S. New York, Published for the Columbia University Press, by Macmillan & Co. 4to with ten plates. Price $4.00.

This work is of a very high order, and both by its merit and its opportuneness is a noteworthy contribution to science. The basis of the work is Professor Wilson's able investigation of the early history of the ovum of one of our sea-urchins (*Toxopneustes variegatus*, Agassiz). The investigation was long and difficult, and its success is due in the first instance to the patient testing of many reagents until one was found which preserved the living organization of the ovum with a minimum of change. This reagent was a mixture of 80 parts of concentrated aqueous solution of corrosive sublimate and 20 parts glacial acetic acid. As the eggs are very minute, hundreds of them, all in the same stage, were imbedded at once, and sectioned together, leaving chance to determine that some of them be cut in favorable planes. The sections were made as thin as practicable, and were colored by Haidenhain's iron haematoxyline stain, also a reagent recently introduced. Of the many thousands, or perhaps hundreds of thousands of sections, the best have been sought out, and about two hundred of them photographed. From this collection of negatives, forty have been selected and reproduced as phototypes.

The photographs were all made by Dr. Edward Leaming, who in a prefatory note de-