For the case of light reflected from the inside of the glass plate the evidence to be obtained from colour is too vague to admit of definite statements. I have not therefore attempted it.

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CARL BARUS.

Fractured Flints from Selsey.

I AM astonished to read in the abstract of the Proceedings of the Geological Society of London, No. 947, giving an account of the meeting held on November 19, 1913, the following statement:—

"Prof. Sollas exhibited a series of specimens to illustrate the production of 'rostro-carinate' forms of flint by natural agencies. . . . The great majority were obtained by Mr. E. Heron-Allen from the beach of Selsey Bill, and it was to these that attention was especially directed. If they were all of human workmanship—Sir E. Ray Lankester's contention—there would be no difficulty in accounting for the characters which they possess in common."

I do not know whether Prof. Sollas is responsible for these words or not. But, in any case, I must state in the most unqualified way that they contain an assertion which is absolutely contrary to fact. I have never published any "contention" about flints from Selsey Bill, excepting a brief description in my paper in the Phil. Trans., Series B, vol. 202 (read on November 16, 1911), of one large rostro-carinate implement and one large pyramidal hammer-stone from that locality. To this brief description follows the remark: "Other specimens of a less decisive character have been found."

The assertion that it is my contention that any of the flints (much less "all") obtained by Mr. Heron-Allen, which I have examined, excepting the two briefly described by me, are of human workmanship is the creation of Prof. Sollas's imagination. I should be glad if Prof. Sollas would state where and when I have been guilty of the contention which, according to the Geological Society's report of his communication, he does not hesitate to attribute to me. I, of course, do not suppose that Prof. Sollas attributes a rash "contention" to me in order that he may have the satisfaction of showing it to be rash, and such as to render what I really have said unlikely to be well founded. At the same time, I think I am entitled to call upon Prof. Sollas either to cite "chapter and verse" in which I have made the specific contention which he supposes I have made, or to express some regret for a misrepresentation which I can only account for by a regrettable lapse of attention on his part in the conduct of an important scientific discussion.

E. RAY LANKESTER.

December 3.

I HASTEN to express my extreme regret at having attributed to Sir E. Ray Lankester an opinion which he does not hold.

In the quotation he gives from his paper in the Philosophical Transactions, Sir E. Ray Lankester omits the concluding sentence, "I hope to publish figures of the Selsey Bill specimens at no distant date." I understood this (naturally it seems to me) to apply to all the specimens, and thus concluded that the difference between the more and the "less decisive" was not so important as, upon the omission of the concluding sentence, it appears to be.

When I selected from Mr. Heron-Allen's collection some of his best specimens, by no means all, he assured me that they had been examined by Sir E. Ray Lankester, and pronounced by him to be of human workmanship, a judgment which appeared to me so natural and consistent with Sir E. Ray Lankester's point of view that no suspicion of a misunderstanding crossed my mind. Had I been in doubt I should have taken the precaution to ascertain from Sir E. Ray Lankester his opinion beforehand.

I am glad that Sir E. Ray Lankester acquits me of any intentional unfairness. I thought, and still think, that of the alternatives I proposed, the one I unfortunately attributed to him was the more logically defensible, but in this again I may be mistaken.

I have written to the secretary of the Geological Society requesting him to correct my statement and to add an expression of my regret to be published in the Quarterly Journal of the society.

December 7. W. J. SOLLAS.

The Structure of the Atom.

I CONCUR with Prof. Rutherford (NATURE, December 11, p. 423) that the work by Moseley in the current number of the *Philosophical Magazine*, which was not published, and was quite unknown to me when I wrote my letter (NATURE, December 4, p. 399), is an important independent confirmation by new physical methods of van der Broek's suggestion. As, however, in a paper published eight months previously (*Jahr. Radioaktivität und Elektronik.*, 1913, x., 193), I had represented in a diagram the places in the periodic table from uranium to thallium, with the mass as the ordinate and the charge as the abscissa, showing that there is unit difference of charge between successive places, I wish to take exception to Prof. Rutherford's statement "that the strongest and most convincing evidence" in support of van der Broek's hypothesis will be found in Moseley's paper. The view had already been far more simply and convincingly established from the chemical examination of the properties of the radio-elements, notably by A. Fleck in this laboratory. Moseley's conclusions are a welcome confirmation, by an independent method, for another part of the periodic table. It can only be described as the strongest and most convincing evidence if the prior chemical evidence is altogether ignored.

FREDERICK SODDY.

Physical Chemistry Laboratory, University of Glasgow, December 12.

The Occurrence of Pilchards in the Eastern Half of the English Channel.

IT is now generally recognised by those who have been interested in the question, that the inshore migration of pilchards in the western fishery area during the summer and autumn of the present year, has presented certain features, which may possibly be attributed to somewhat unusual conditions of food supply and other determining factors. It is therefore a matter of some importance to note that according to the statement of local fishermen, occasional catches of some thousands of pilchards have been made in drift nets off Brighton, Ramsgate, Deal, &c., for several months past.

In the early part of September we examined at Brighton some specimens taken from a catch of about four thousand, and now within the past fortnight, by the courtesy of Mr. E. W. Cowley, the superintendent of the Brighton Marine Aquarium, we have been enabled to ascertain that the fish were still present in the same area. For according to the statement of this gentleman a catch of three thousand was made by a local drifter about two miles off Brighton on November 27, three specimens of which we examined and found to be males with generative organs in "half-ripe" condition.

HAROLD SWITHINBANK.
G. E. BULLEN.

London, December 10.