

Elementary Classes.

MEMBERS who have joined these classes are requested as far as possible to send their replies to each letter of instructions before the issue of the next, so that the Director may be able to deal with their replies in the latter communication. When it is not possible for members to do this, the replies will be dealt with by the Director in the next letter which issues after their receipt by him. Owing to the large number of members who have joined the classes, it is impossible for him as a rule to write specially regarding the replies in between the issues of the letters.

H. G. TOMKINS,
Director.

Extracts from Publications.

The Spectrum of the Corona.—The interdependence of physics and astrophysics is emphasised by an article appearing in No. 458 of *The Observatory* in which Prof. J. W. Nicholson suggests that the spectrum of the Corona may be given a physical interpretation, based on the assumption that the "Coronium" atom is a simple one, in which the actions of the component electrons may be theoretically determined. The majority of terrestrial atoms are too complicated to be thus analysed, with our present knowledge of mathematics, but among celestial atoms, Prof. Nicholson suggests there may be atoms of sufficiently simple construction to enable the mathematician to determine their structure, and so deduce from first principles the nature of the spectrum emitted by them. In "Nebulium" and "Coronium" he believes such simple atomic structures are to be found.

If, according to theory, the model simple atom consists of a number of negative electrons revolving about a positive nucleus, it can be deduced that the wave-lengths of the radiations emitted can have a series of values of which the cube roots are in arithmetical progression. Such series are found in the spectrum of the Corona, and the theory allows an interpretation of nearly all the lines in the spectrum to be set up.

[*Nature.*