

that "the language used has been carefully studied with a view to simplicity and clearness," and explains how there came to be in his eye such a mote as "angular-point," without making the most distant reference to a store of *beams* sufficient for a rather massive engineering structure.

The choice and arrangement of the matter, too, cannot be commended. Elementary integrations are performed at full length, which may be done by the reader himself if he knows anything of integration, and which are useless if he does not. The expression for the radius of curvature in terms of  $dy/dx$  and  $d^2y/dx^2$  is used at p. 252, and it is not until forty pages farther on that we find the usual elementary explanation of rectangular co-ordinates, the construction of a curve from knowing simultaneous values of  $x$  and  $y$ , and the meaning of  $dy/dx$ . This defect is really not distinct from the other: both are the consequence of a certain logical haziness of mind which may not, and we believe does not, detract from the author's skill as an engineer, but which is certain to be fatal to his success as an exponent of engineering science.

Had the main matter of the book been worthless or commonplace it could have been summarily dismissed; but there is so much evidence in it of ability and power of work that one eagerly wishes to see the style and structure of it improved. We trust a second edition may be called for, and that for the preparation of it the author may be induced to associate himself with some one having the necessary logical clearness and pedagogic skill to make it what it might easily be—an admirable text-book.

#### LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.]

[The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to insure the appearance even of communications containing interesting and novel facts.]

#### School Museums

WHILE the very valuable display of educational appliances is still on view at the Health Exhibition, I should like to draw attention to the school museums which are becoming now an important element in the teaching of science. In Mr. Lant Carpenter's papers they were only slightly alluded to, though he did full justice to the technical exhibits. In the recent Instructions to Her Majesty's Inspectors it is laid down that an infant school which deserves to be considered "excellent" and to receive a corresponding merit grant should have a cabinet of objects which it is suggested should be partly collected by the children themselves. This of course is making teachers anxious to form such collections, and the London School Board supplies a cabinet wherever there is a promising nucleus for such a museum; it also supplies to any teacher that desires it a small box of chemical apparatus for making simple experiments on these objects, with instructions for the use of the different pieces of apparatus. One of these sets of apparatus forms part of the exhibit of the London Board. Of course the collection of the infants' department will be of a miscellaneous character, but in the museums that are now being formed in many of the boys' and girls' departments something better may be aimed at. The School Cabinet in Room No. 4 is filled principally from the schools in the neighbourhood of South Kensington. There are stuffed birds and a small crocodile, together with neatly-mounted skulls of animals, and specimens of corals, shells, and sponges, all from the collections at Park Walk, Chelsea. From other schools there are the skeleton of a rabbit dissected by a boy of eleven years of age, insects, reptiles, and other objects. There is also a collection from the Silver Street School at Kensington, contributed by scholars, teachers, and managers, comprising colonial products of various descriptions, specimens of different kinds of wood, many of them cut from the trees blown down by the great storm that was

so destructive in Kensington Gardens in the autumn of 1881. There are also specimens of horseshoes with their appropriate nails, and illustrations of the successive processes in the manufacture of iron, cotton, and jute. These are all properly named and labelled by the schoolmaster. The lowest shelf of the cabinet contains illustrations of the geology of Peckham, ranging from the sands and gravels of the ancient Thames, the London Clay, the Woolwich and Reading beds, and the Thanet Sands, down to the Chalk. These form part of a fine collection at the Nunhead Passage Board School, Peckham. From the same school also there is a separate cabinet of minerals, which is displayed in the corridor. Some of the training colleges have formed good museums, as is evidenced by the collection from the Wesleyan College in Westminster.

In the further development of these museums two things may well be borne in mind:—(1) In addition to the more miscellaneous collections got together by the children and friends of the school, there should be supplied typical specimens for more systematic instruction. The Japanese exhibit such a collection of zoological types. (2) The special industries of the neighbourhood should be well illustrated in these museums. That this is well carried out in France and Belgium is shown by the contributions to the Exhibition from these countries, and especially by that of the Brothers of the Écoles Chrétiennes.

At the Educational Conference an afternoon was devoted to this subject. Dr. Jex-Blake described a Museum of Science and Art which has been formed at Rugby School, and in the discussion which followed particulars were also given of the loan collections for schools now being organised by the Liverpool School Board, of the Communal Museums, which are an important development of the French School Museums, and of a large Educational Museum which has lately been organised at Madrid. All these show the gradual, but sure, advance which is being made all along the line in the objective teaching of natural science.

August 14

J. H. GLADSTONE

#### The Red Glows

I HAVE recently been staying at Zermatt and have observed the great corona or circle round the sun mentioned by your correspondent, Mr. T. W. Backhouse, in NATURE for August 14 (p. 359). It was very distinct on July 29, both at Zermatt and at the Garnergrat, and likewise on the four following days. On August 3 rain fell in the evening, but the night became cloudless; on the 4th the corona had gone. I noted the following points:—(1) The colour of the circle was like the red of clean copper when it has become coated with suboxide; this faded away into what appeared brown against the blue sky. (2) Immediately surrounding the sun and between it and the circle the sky was blue. (3) The spectroscope directed towards the blue sky or a white cloud showed a complete absence of the bands lying near B, C, and D, which indicate the presence of water vapour. (4) A band appearing like a broad line was observed between D and E, distinct, but of lesser density than it usually appears at lower elevations. (5) There did not appear to be any marked difference in the intensity of the colour of the corona when viewed on the same day at altitudes varying between 6000 and 10,000 feet. (6) After rain had fallen on the evening of August 3 the almost cloudless sky altered in appearance; in that part close to the sun it appeared whitish, and the whiteness diminished as the distance from the sun increased, until it had faded away into blue. (7) On occasions when there were fleecy clouds in the sky during the visibility of the corona, the clouds as they approached the corona appeared of a pale but very vivid green. This colour effect was due to contrast.

Savile Club, August 15

W. N. HARTLEY

#### Remarkable Raised Sea-Bed near Lattakia, Syria

IN reference to the changes which have taken place along the coast of Syria and Palestine in recent times, the following letter from Dr. Post, of the Syrian Protestant College, Beirut, descriptive of beds of shells now living in the Mediterranean may prove of interest.

Geological Survey Office, Dublin

*On a Deposit of Marine Shells in the Alluvium of the Lattakia Plain, in Syria*

The Plain of Lattakia extends from Jeblah, a few hours south, to the chalky ridge which forms the southernmost of the roots