burst over Edenderry, and the telegraph clerk, on going to work. his instrument, was instantly struck senseless to the ground.

Now, are the two bands beyond (*i.e.* below) the violet often seen? for I never before observed them; or are they due to an

unusual amount of electrical tension in the atmosphere? And is the second incident an unusual occurrence in telegraph offices? F. G. S. P.

# Earthquake in Jamaica

On the night of the 20th inst., at twenty minutes past nine, a sharp shock of earthquake was felt throughout the island, accompanied by a loud rumbling noise. The undulations were from the north. ROBT. THOMSON

Cinchona Plantation, Jamaica, August 23

#### An Inquiry

CAN any of the readers of NATURE inform me whether Dr. Anderson, who in the capacity of naturalist, accompanied Captain Sladen's expedition from Bhamo to Momein in 1868, published any papers upon the scientific results of the journey?

If I am not mistaken, Dr. Anderson was a candidate for the Chair of Natural History in Edinburgh last year, and died before the election.

F. R. S.

## PROF. HAYDEN'S EXPEDITION

WE learn from *Harper's Weekly* that advices from Prof. Hayden's exploring expedition in the Yellow Stone Lake region have been received up to the 8th of August last, and contain a satisfactory exhibit of progress. After establishing the depôt of supplies already referred to on the Yellow Stone River, about one hundred and forty miles below the lake, the party ascended the river, and reached the lake on the 26th of July, where they made a new camp. They then began at once to survey the lake with the most approved apparatus, by the aid of a boat taken along for the purpose, and expected to be able to ascertain the exact contour, as well as the principal depths. They had already found several places in the lake where the depth reached three hundred feet, especially along the line of a certain channel-way, and they confidently expected to find soundings of at least five hundred feet.

They explored one of the islands in the lake, which they called Stevenson's Island, and found it to contain about fifteen hundred acres, densely wooded, and with thick and almost impenetrable underbrush, consisting largely of gooseberry and currant bushes, loaded down with ripe fruit. On the threshold only of the wonderful natural phenomena in the way of geysers, boiling springs, &c., described by Lieut. Doane and Governor Langiord, they were satisfied that the description fell far short of the reality, which they, indeed, despaired of being able to pourtray, even with the aid of photographic views and sketches.

One of these geysers once in thirty-two hours threw up a column of water about eight feet in diameter to a height of over 200 feet. Hundreds were met with having columns of from ten to fifty feet high, some playing all the time, and others only at intervals. The hottest springs were found to vary in temperature from 188° to 198°, the boiling point at that altitude amounting to about 195°. Most of the springs were ascertained to be divisible into two principal classes, one class containing silica, sulphur, and iron, and the other silica and iron only.

The elevation of the lake was determined to be about 8,500 feet; the altitude of the surrounding peaks being, of course, very much greater. An abundance of trout was found in the waters, of exc llent flavour, although much infected with intestinal worms. Game was scarce imme-

diately around the lake; but at a short distance it was said to be very abundant. In addition to the topographical and geological collections, others were being made in all branches of natural history, for a full account of which, as well as a description of the phenomena in general, we shall look with interest to the forthcoming report of the expedition.

### MR. GEORGE HODGE

WE greatly regret to record the death, at Seaham Harbour, on the 7th of September, after a short illness, at the age of thirty-eight, of this accomplished naturalist. Although from his retiring and unassuming disposition, little known beyond the naturalist circles of the north, George Hodge realised, as few do realise, the objects of a local naturalist. Living on a portion of the north-east coast, the marine fauna of which was practically uninvestigated when he first settled there, he made its patient and honest study the business of the scanty leisure left him by heavy business responsibilities. How far he succeeded is best evidenced by the Natural History Transactions of Northumberland and Durham, his favourite medium of publication for his careful observations and exquisite drawings of the lower animal forms During a temporary residence in Newcastle, he was honorary secretary to the Natural History Society, and was to the last a valued member of its committee.

Mr. Hodge was a most enthusiastic dredger; if he could get a boat to sea on a fine day (this being even more of a desideratum with him than with most men, as he was rather easily upset), he was perfectly happy. The last two dredging expeditions conducted by the Tyneside Naturalists' Field Club, with grants from the British Association, were undertaken chiefly by him in conjunction with Mr. G. S. Brady. The Echinodermata were his favourite subjects of study, but he was also specially interested in the Zoophytes, Pycnogons, Crustacea, and marine Acari, among all of which he had done good work. To his influence chiefly may be ascribed the establishment of the very useful and flourishing Natural History Club of Seaham Harbour, in whose proceedings he always took great interest.

## ELEMENTARY PRACTICAL GEOMETRY

"A Father" has asked me by name in your A<sup>s</sup> columns what book I can recommend as laying a foundation for the geometry of the future, I suppose I ought to answer him, though I cannot do so by a simple reference to a book. I think the main object of early geometrical teaching should be to lay a foundation of familiar facts on which the science will afterwards be built up. This is unquestionably the true scientific method in teaching all subjects; and as yet it has never, or very rarely, been applied in Geometry. For example, no intelligent teacher of botany will begin by classifying flowers, or teaching theories about their structure; he begins by giving his class flowers to dissect, and then they will know what he is talking about; and teachers of chemistry who follow any other plan find themselves inevitably compelled to cram their pupils. The question is, *how* is this method to be applied in Geometry? I know from various sources that there is a pretty wide-spread conviction that it ought to be so applied, but there is a difficulty that meets teachers at once : there does not seem to be enough of practical geometry that is sufficiently easy for children and practical geometry, as presented in text books, is dull and uninteresting, as well as rather hard. Still my conviction remains that to lay a foundation of knowledge of facts is as necessary in Geometry as in other sciences, though the range of facts easily observed is somewhat less, and the science becomes much sooner a deductive