

unequally so as to conduce to the same end is difficult to decide. I may add that I have found the required muscles at the waist considerably developed.

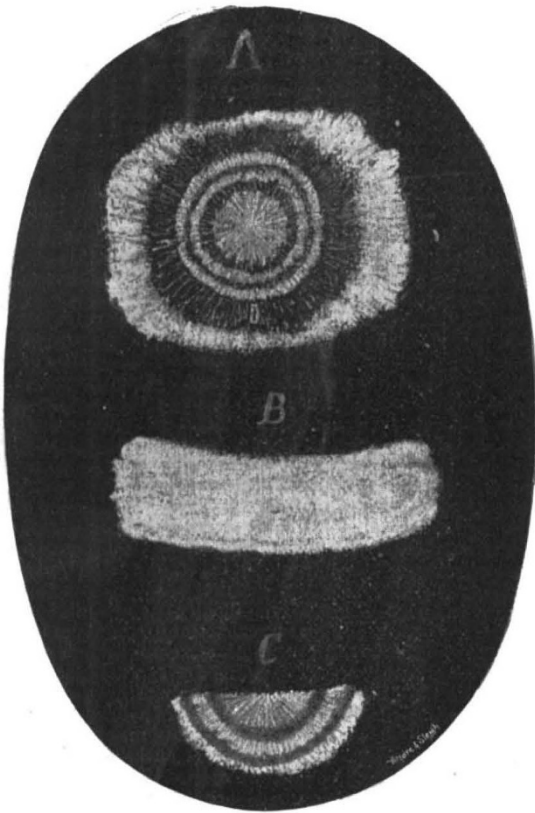
F. W. HEADLEY.

Haileybury, Hertford, July 6.

Remarkable Hailstones.

ON Saturday afternoon, July 9, a very violent storm burst over Harrogate and its neighbourhood, accompanied by remarkably loud thunder and most brilliant and almost continuous lightning.

At first a little rain fell, but it was soon mixed with small hailstones about the size of peas of the usual form. These were quickly followed by hemispheres of the size and character indicated in Fig. C. After a few minutes they rapidly grew to the size of those shown in Figs. A and B, which are drawn very carefully to actual scale. Most were flattened oval discs, as shown in the two drawings, which exhibit top and side view of one hailstone. I went out myself and measured a good



number while they were falling by putting them on a sheet of paper and marking their maximum and minimum diameters. These large stones usually had an opaque spherulitic-like nucleus, followed by two, three, and even a trace of a fourth clear ice shell intervening with opaque ice. Then followed a broad band of clear ice with a few radiating air cavities, finally enclosed in a mass of white granular feathery ice. The number of alternating laminae seemed to be irregular, and must have varied with that of the different vapour strata traversed by each nucleus. The origin of the type (Fig. A from Fig. C) is very obvious. The quantity that fell was enormous, so that a lawn badly kept was entirely white, with the exception of the longer blades of grass that projected. The damage done in the near neighbourhood must amount to some thousands of pounds, and very few are the houses in this town that escaped without windows being broken. I did not time the duration of the fall, but I think it was about an hour.

5, Princes Square, Harrogate. H. J. JOHNSTON-LAVIS.

July 12.

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A Substitute for Ampère's Swimmer.

I HAVE long been dissatisfied with the rules commonly given in order to enable the relation between the direction of a current and that assumed by a magnet in its neighbourhood to be readily brought to mind. It is a small matter, but it causes a great deal of worry to many a student. The vagaries of Ampère's swimmer are "past the wit of man." Prof. Jameson's rule is not bad, but is not really easy to remember; the corkscrew is good, provided that you have a little time to think about it; but I have felt all along that it ought to be possible to devise something simpler than any of these. May I suggest that the following may perhaps be found useful?

If a pen be held in the right hand in the usual way, the penholder may be taken to represent the wire, and the direction of the flow of ink (that is, towards the point of the pen) the direction of the current; if, then, the thumb be stretched a little across the penholder it will represent the magnet, and the thumb-nail its marked or north-seeking pole. The hand may, of course, be twisted round into any position to represent any actual case. The same relation may be still more simply borne in mind by dispensing with the penholder, and merely laying the thumb across the forefinger of the right hand; either of these will then represent the current (flowing towards the finger, or the thumb-nail, as the case may be), the other the magnet.

Whether this is novel I do not know; it is so as far as I am concerned; but I think it is useful.

ALFRED DANIELL.

Advocates' Library, Edinburgh, July 13.

The Jelly-fish of Lake Urumiah.

IN Mr. Curzon's recently-published work "Persia and the Persian Question" (vol. i. p. 533), he writes as follows:—"When the wind blows on Lake Urumiah, sheets of saline foam are seen scudding along the surface, and the salt is left upon the shore in a solid efflorescence, sometimes several inches thick. No fish or molluscs live in the waters, whose sole living contents are a species of *small jelly-fish*, which sustain the swans and wild fowl that are occasionally seen."

When Captain F. R. Maunsell read his interesting paper on Kurdistan to the Royal Geographical Society in June last, I asked him whether he could give me any further information respecting this so-called "jelly-fish," to which he was kind enough to reply as follows:—"In reply to your inquiries regarding the existence of a jelly-fish in Lake Urmia, I have been going through my notes, and find that I visited the lake on July 20 at its west shore, not far from the town of Urmia. I bathed in the lake and found the jelly-fish in great numbers along the shores where the water was shallow. It was only about half an inch in diameter, of a greenish-white, almost colourless, with a small black centre. There are said to be no fish or other living creatures in the water, and I did not see any. As you probably know, the lake is extremely salt, more so than the Dead Sea. The specific gravity is given as 1.155, with 21.4 per cent. of salt. The lake is 4,100 feet above the sea level, and has no outlet. There is a British Consul in Tabriz, which is not far from the east shore of the lake, who might obtain a specimen, and would be able to ensure its getting home safely better than any one else. The lake is very shallow compared with its great size, nowhere being more than from thirty to forty feet in depth."

The only instance of a "jelly-fish" or Medusa as yet known to inhabit an inland sea is that of the *Limnocnida tangajica*, recently described by Mr. R. T. Günther (Ann. and Mag. N. H. ser. 6, xi. p. 274 (1893)). It would be therefore of great interest to obtain specimens of the "jelly-fish" of Lake Urumiah and ascertain what it really is.

3, Hanover-square, W., July 17.

P. L. SCLATER.

Racial Dwarfs in the Pyrenees.

BEING on the Riviera when I received NATURE of January 26 with Mr. Haliburton's letter on the above subject, I proposed to act on his suggestion, and, on my way back to England, to explore the region indicated. To ensure, however, that the proposed exploration should not be a wild-goose chase, I first entered into communication with all the British consuls and French savants likely to have special knowledge of the subject, and more particularly with M. Cartailhac, director of *l'Anthropologie*, and who resides at Toulouse, "within little more than a