miles about due south from the western arm of that lake. To state the case is to prove its absurdity. So much for Mr. Pearce Giles's latest version of 'Lake Glazier.' HENRY D. HARROWER.

753 Broadway, New York.

Glaciers and glacialists.

Mr. James D. Dana, in *Science* for Aug. 20, says, "the memoirs of the Museum of comparative zoölogy, founded by Mr. Alexander Agassiz, and not by his father." In 1863, Prof. Louis Agassiz got a first grant of ten thousand dollars from the legislature of Massachusetts for the publication of those memoirs. The first paper is by Theodore Lyman, and was issued in March, 1865. The title is "Memoirs of the Museum of comparative zoölogy, at Harvard college," vol. i., Cambridge, 1864–65, 4°; contents, illustrated catalogue, etc. More than twelve volumes have been issued, the first three during Louis Agassiz's life.

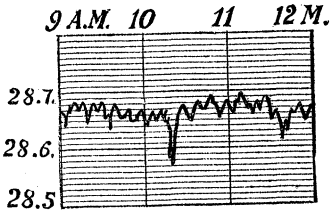
As to the accusation of 'Mr. Marcou's charge against Mr. Alexander Agassiz,' etc., it is almost superfluous — at least for those who have read my paper — to say that I have made no charge of any sort against Mr. Alexander Agassiz, and that his name is not even referred to. JULES MARCOU.

Cambridge, Sept. 11.

[The series was commenced as 'Illustrated catalogue,' and not as 'Memoirs,' each number independently paged; these numbers were not collected into volumes until after Louis Agassiz's death, when the closing number (9) of the second volume, published in 1876, was entitled 'Memoirs,' and the titles to the first three volumes (the third volume consisted of Nos. 7 and 8) first printed and distributed. — ED.]

Barometer exposure.

In accordance with 'Gan's' suggestion in *Science*, viii. p. 255, I herewith present a copy of the barograph record of Blue Hill observatory for the three hours from 9 A.M. to 12 M of Feb. 27, 1886.



The barograph from which this is taken is a Draper barograph, and multiplies three times. Its readings usually differ less than one one-hundredth of an inch from the readings of an adjacent standard Hicks barometer, with which its readings are compared every day. The barograph is situated in the lower room of a two-story tower. The air passes freely from this lower to an upper room, through a register-opening. In the top of this upper room is a trap-door opening out on the roof. The roof is flat, with a low turret around it, and the trap-door opens a little to the north of the centre. A picture of the observatory will be found in *Science*, v. p. 440.

The wind movement during the three hours given on the diagram was 55, 60, and 64 miles respectively, as shown by a Draper anemograph. The wind-velocities were quite large all day of the 27th; and the portion of the curve given in the above diagram is but a sample of the whole barograph curve of that date, only the oscillations at an earlier hour, when the wind-velocity was greater, are more rapid and slightly larger, excepting the sharp depression at 10.20 A.M. This portion of the curve was selected in order to exhibit this sharp depression, which was coincident with the opening of the trap-door in the tower. The barograph was observed immediately before and immediately after the opening of the trap-door. The exact interval between opening the trap-door and observing the barograph is not known, but was probably less than a minute; and I feel no doubt whatever of the coincidence of the fall of pressure with the opening of the trap-door.

Several similar depressions, though not so decided, because the wind-velocity was less, were noted at a later date, when one observer watched the barograph while another opened the trap-door; and the fall of pressure coincident with opening the door was undoubted. The depression shown on the diagram at 11.35 A.M. is found to be coincident with a marked increase in the wind's velocity, lasting several minutes, followed by a more permanent increase after noon.

The following note was written on the barograph sheet of the 27th, immediately after it was removed from the instrument: "The sharp depression at 10.20 A.M. was caused by opening hatch on tower; the other sharp depressions correspond with severe gusts of wind." On this date the up-and-down oscillations of the mercury in the standard Hicks barometer were so rapid that it was almost impossible to set the vernier accurately. Mr. F. V. Pike informs me that he had the same difficulty in reading his standard barometer at Newburyport, Mass. Such oscillations of the barograph as those on the diagram are quite common on Blue Hill. They begin to be noted with wind-velocities of about thirty miles, and increase in range with increased velocity of the wind, though winds from certain directions seem to have more influence in producing them than from other directions. This is probably owing to the position of the apertures. A rapid increase or decrease of the wind's velocity as much as ten miles is, I think, always accompanied here by a corresponding decrease or increase of pressure, which leads me to believe that even small wind-velocities affect the barometer readings; but the small oscillations spoken of above do not occur, because the difference between the velocity of a gust and of a succeeding lull is not great enough to produce them. I see no reasons for believing that the barometer is any more affected by the wind here than elsewhere. 'Gan's' statement that he found small oscillations of the barograph with wind-velocities of about twenty miles, a similar statement by Mr. E. B. Weston of Providence, R. I., and the statement of Mr. Pike that he had found rapid oscillations of his barometer during the high wind of Feb. 27, convince me that the effect of the wind on the barometer is universal. H. HELM CLAYTON.

Blue Hill meteor. observ., Sept. 23.

These serrations furnished by Mr. Clayton are certainly very extraordinary. It will be noticed that the trap-door is not upon a broad, flat roof, and also that there is only one of the effects which can be regarded as .05 below the general trend of the pressure trace. It seems probable that the barometer suspended by long steel springs has a tendency to magnify the effect. If it can be shown that the total