

would seem always possible to ascertain the direction under these circumstances. The clouds presented a magnificent spectacle, and seemed like gigantic billows upon a boundless ocean. The sun was very hot indeed, and every effort was made to observe a rising motion in the cloud, but entirely without success. Observations of humidity were made with a sling wet bulb, and the air temperature by a thermometer with a bulb about two millimetres in diameter. All the experiences indicated, that, with modern appliances of drag-rope and anchor, ballooning is entirely safe, and is especially adapted for researches in the free air, which are so very important at the present stage of the science of meteorology.

H. A. HAZEN.

Washington, Aug. 13, 1886.

The freezing-point of sea-water.

I submit the following as the result of several very careful determinations of the freezing-point of sea-water, made at North Bluff, Hudson Strait (latitude $62^{\circ} 33' 45''$ north, longitude $70^{\circ} 41' 15''$ west).

The situation of the place of observation was within an inlet, at about a mile from its mouth, into which the waters of the strait had unlimited access. A stream twenty feet wide discharged into the inlet at its head, two miles away.

The determinations were made on March 4, 1885, when the temperature of the air was $-12^{\circ}.6$ F., in the following manner:—

A hole about four feet square having been cut through the ice (2.85 feet thick), the water within it was thoroughly agitated by stirring from below, and during the actual operation slightly agitated. The thermometer was held nearly horizontally, the bulb slightly lower than the rest of the instrument, just below the surface of the water. When the ice film began to form at the surface of the water, the corrected reading of the thermometer (Negretti and Zambra, No. C. 3456) was $26^{\circ}.7$ F., at which point it remained stationary; so that, under the conditions I have mentioned, the freezing-point of sea-water is $26^{\circ}.7$ F.,—a point very much lower than that usually accepted as its freezing-point, and differing from it in a direction contrary to what we should have expected from the generally accepted assumption that northern waters are of less specific gravity than more equatorially situated waters.

It would have added to the value of the result had

I obtained the specific gravity of the water at the time. Later, when I thought to have done so, unavoidable circumstances prevented my doing so.

I might add that a similar determination was made on the opposite shore of the strait with a very closely agreeing result.

W. A. ASHE.

The Quebec observatory, June 7.

The scientific swindler again.

The following from one of the local papers here will show that the peculiar person who has repeatedly been shown up in *Science* is still at large and at work: at least, I presume he is the same person, since it is unlikely that there is more than one such perverse genius abroad. This time he turns up as a deaf-mute, attached to the Smithsonian, and named 'R. M. Vasile.'

"The Syracuse (N. Y.) *Herald* says, 'A highly educated man, who appeared to be deaf and dumb, and who represented himself to be an attaché of the Smithsonian institution at Washington, came here eight or ten days ago, and succeeded in ingratiating himself into the confidence of Prof. W. A. Brownell of the high school, and of other scientific gentlemen. He gave his name as R. M. Vasile. It took him but a short time to prove himself a master of geology, mineralogy, and chemistry, and his proficiency in those sciences lent color to his representation that he had come here to investigate the rocks and minerals of Onondaga county, and also to get together material for a report on its fishes. Professor Brownell obtained from him for a mere trifle a rare and valuable scientific work, and for one dollar and twenty-five cents got a promise from him, that, upon his return to Washington, he would send on a set of trilobites. Having thus won the confidence of the professor, he began to talk of exchanging specimens with his new-made friend; but his offers excited suspicion, and an inquiry sent by telegraph to Washington brought back the information that Vasile was not in the government's employ. Soon afterward the man disappeared, and he has not been heard from since. He left a board-bill at the Kingsley House, and the impression prevails there that he only pretended to be deaf and dumb. His scheme is apparently to borrow books and scientific specimens in one town, and dispose of them in another.'"

ELLIOTT COUES.

Smithsonian inst., June 8.

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