

currents to the winds useful for navigation may be ascertained, would seem to be as legitimate a task as sounding the depths of the oceans and determining the currents and temperatures prevailing there. But if our Navy Department will not authorize this, a private expedition should be organized to investigate the questions mentioned in my letter to SCIENCE on 'A New Field for Kites in Meteorology.' Since then, Professor Hildebrandson, of Upsala, who is an eminent authority on the circulation of the atmosphere, writes me that a meteorologist on a steamship provided with kites, and also with small balloons to ascertain the drift of the upper winds when there are no clouds, by making atmospheric soundings between the area of high barometric pressure in the North Atlantic and the constant southeast trades south of the equator, and in this way investigating the temperature and flow of the so-called anti-trades, could solve in three months one of the most important problems in meteorology. If any of your readers will furnish the steamer required, I stand ready to carry out these investigations.

A. LAWRENCE ROTCH.

BLUE HILL METEOROLOGICAL OBSERVATORY,
HYDE PARK, MASS.,
November 18, 1901.

PERMANENT SKIN DECORATION.

IF Mr. H. Newell Wardle* had referred to Mr. H. Ling Roth's great compilation, 'The Natives of Sarawak and British North Borneo,' he would have found the Bornean process of tattooing described and the implements figured. From actual experience I can assure Mr. Wardle that in Sarawak, at all events, the pattern is gently printed on the skin from a wooden block and the pigment is driven into the skin by means of an ordinary tattooing needle which is hit by a slender iron rod. This is the typical Tahitian 'tatu.' Examples of the apparatus employed will be found in the splendid Furness-Hose collection in the Free Museum of Science and Art in Philadelphia.

A. C. HADDON.

LIFTING HOT STONES.

TO THE EDITOR OF SCIENCE: In the late number of *Nature* Professor S. P. Langley calls

* SCIENCE, Vol. XIV., p. 776.

attention to an old Tahitian priest who walked in bare feet over the heated stones of a pit prepared for cooking. Mr. Andrew Lang calls attention also to the fact that this was a ceremonial performance, preparatory to the cooking.

The United States National Museum is in receipt of a letter from Lieutenant Campbell E. Babcock, U. S. A., stationed at Vancouver Barracks, Washington State, enclosing a communication from Chief Peter Wildsho, of the Cœur d'Alene Indians in Idaho. Peter in his simple way is telling how fifty years ago his ancestors cooked their food in basket pots by means of hot stones. At the close of the description is the following in Peter's own words: "An amazing little story is connected with this basket for cooking food with hot stones. The medicine-man was considered a very powerful being by his tribe. He could take away the life of a man at his word or cure a sick or dying person. His power depended on the wild beasts that are fierce and powerful, and he carried constantly around his body some parts of the animal, such as a piece of the tail." This man to show his power stripped himself and painted his body. While he was singing and dancing, accompanied by all the Indians, he went to the basket containing cold water and sang, and, while all were watching him in awe, he slowly took the red-hot stones in both hands and dropped them into the basket of cold water. The water was heated and not a blister or burn was to be seen on his hands.

O. T. MASON.

THE HITTORF JUBILEE.

The Academy of Sciences at Berlin has issued the following terse summary of the life-work of the venerable Hittorf:

HERRN JOHANN FRIEDRICH HITTORF* zum
Fünfszigjährigen Doctorjubiläum am XXI. October
MDCCCLXXXVI.

HOCHGEHRTER HERZ COLLEGE!

Indem die Königliche Akademie der Wissenschaften Ihnen zu der Jubelfeier Ihrer Promotion herzliche Glückwünsche sendet, erinnert sie sich dankbar des hervorragenden Antheils Ihrer Arbeit an dem Fortschreiten Ihrer Wissenschaften, der Physik und der

* Usually known as Wilhelm Hittorf.