

NATURAL SCIENCE.

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NOTES.

"SCIENCE" vigorously condemns the prevailing form of agricultural reports. These too frequently contain merely records of experiments made, omitting the more important half of the experimenter's work, *the discussion of the results of these experiments*, so as to determine what they really teach.

"Facts are good, but he who will have nothing but facts confines himself to the husks of investigation. . . . When the public funds are to be expended in scientific investigation, the public has a right to demand that the work be put into the hands of those who are not only industrious experimenters, but who are able and willing to test critically the results of their own experiments, and present to the public only results which have endured such testing."

THE study of earthquakes, we suppose, would properly come under the head of physical geography. Hitherto no organized effort has been made to observe them: This is probably due to the comparative rarity, as well as the uncertainty, of their occurrence. Two shocks within as many months during the present year have, however, aroused the attention of American scientists, and it is not unlikely that a few stations may be established and furnished with suitable seismometers.

It is supposed that the temperature of the moon's surface must be at least two hundred degrees below zero, centigrade.

THE souring of milk is due to the presence of a microbe, the lactic bacillus, which may be found in millions in the turning liquid. The point of a pin dipped into curdled milk will take up sufficient of these bacilli to sour

any quantity of fresh milk and curdle it in a few hours. By sowing different kinds of microbes different kinds of transformation may be induced in the milk. For instance, the people in the north of Sweden purposely sow a microbe which has the effect of converting the milk into a jelly which keeps its flavour unimpaired for ten days. Another microbe causes alcoholic fermentation, producing an exceedingly healthful beverage.

TWENTY-FIVE different nations were represented at the conference which met at Washington on October 1st, to fix upon a universal prime meridian. As a result of the discussion which took place, Greenwich was selected by a nearly unanimous vote, France being the only European power which dissented from this conclusion. It was also resolved to reckon longitudes east and west to plus and minus 180°. One great advantage of the selection of Greenwich is that the 180th meridian (on each side of which there is a difference in date of twenty-four hours) occurs in the Pacific ocean, where no inconvenience can possibly be felt by reason of the jump in the local time, except in the Fiji Islands, for which a special arrangement would be necessary. It was also recommended that the hours should be counted from zero to twenty-four. The difficulty of applying this scheme to local time would be found in the present form of the dials of clocks and watches.

THE transparency of the water in the lake of Geneva has been tested by careful experiments. An electric light was lowered to a depth of about 220 feet, when it all but disappeared from view. It was also found that sensitive photographic plates were affected by the sun's rays at a depth of about 820