Totem is adopted into near kinship we merely see, in the not-killing and eating, that which follows naturally the rule of human kinship. But if the main motive in abstaining from eating Totem 'is to conciliate,' then Totemism is so far religious as a method of dealing with superiors, for in a broad sense religion includes all acts toward the superior as such. But Totemism, so far as it makes the native coercive to his fellow animals by force of cunning magic, certainly is unreligious.

As to Exogamy, while this may arise similarly with abstinence from killing and eating, and is thus a saving from supposed incest, as Mr. Frazer says, we would also see that marriage within a Totem group might have the undesirable result of a Totem animal as offspring instead of a human child. Mr. Frazer reports something analogous in his book on Totemism (page 16): "Bakalai think that if a man were to eat his Totem the women of his clan would miscarry and give birth to animals of the Totem kind or die with an awful disease."

It would be of interest to know whether there is a Totemic instinct and whether it emerges in civilized children. I think it might be found, especially among street Arabs and others early thrown on their own resources. As to Totemism bearing on the domestication of animals, the researches of McGee and others in the United States favor domestication of animals from commensalism. (Cf. also domestication of snakes as ratters in the Philippines.) Totemism certainly acts analogously to a limited close period by restricting those who shall kill and eat certain food animals; but the Totemic idea of controlling by spell is contrary to the idea of direct subjection, and would scarcely lead to it. The Totem group are merely those who stay at home, and by their intimate relationship weave the spells by which the prey is made plenteous and convenient to the hunter.

In Totemism and also Fetichism—which is but a means to Totemic power—we see the first groping of the human mind toward causal relation and its practical application; but so grossly animistic, especially in its kinship idea, as to be difficult of understanding by civilized man with his scientific mode of thought. The

Totemic control of nature by making oneself akin, is antipodal to the depersonalizing scientific method. Totemism is the human animal fascinating his prey by kinship rite and spell.

HIRAM M. STANLEY.

LAKE FOREST, ILL., May 29, 1899.

AROUSAL OF AN INSTINCT BY TASTE ONLY.

EDITOR OF SCIENCE: The following observation is submitted on the chance that it may be of use. A dead mouse was given to two kittens eight weeks old. They showed no interest in it from sight or smell, but as soon as they were made to taste the mouse they went into a fighting passion, which remained as long as the mouse was tasted. When they were forced to give up the mouse, all interest was lost and could not be aroused even by smell. Yet as soon as the tongue again touched the mouse the kitten fell into the same passion of fighting. One test showed marked results. Giving the mouse to one kitten, I held it, scratching vigorously, in one hand, while with the other hand I made the other kitten touch and smell the mouse and finally taste it. As long as the second one did not taste the mouse it showed no interest, but it began to fight vigorously at the moment of tasting. As soon as the first kitten was made to release its hold on the mouse it at once ceased to show any interest.

E. W. SCRIPTURE.

CURRENT NOTES ON METEOROLOGY.

INFLUENCE OF THE GREAT LAKES ON PRECIPITATION.

The Meteorological Chart of the Great Lakes for June (U. S. Weather Bureau) presents a chart of the normal annual precipitation of rain and snow in the drainage basins of the Great Lakes, with a set of tables and a brief summary prepared by A. J. Henry. The conclusion reached as to the influence of the Lakes on precipitation is as follows: With the possible exception of Lake Superior, the lakes do not seem to have a very marked influence on the precipitation over adjacent land areas. There is more precipitation on the south than on the north side of Lakes Superior, Erie and Ontario, the differ-