

WASHINGTON LETTER.

THE department of agriculture is showing a renewed interest in the sorghum and sugar industries of the country. Professor Wiley, the chemist of the department, has sailed for Europe, where he will spend as much time as is necessary in the investigation of the present condition of these industries in various countries, and a study of the latest improvements in machinery and methods. The results likely to arise out of Professor Wiley's visit will doubtless be of considerable importance as enabling the department to contribute to the success of the experiments that are being made in the United States.

Much interest is just now exhibited in scientific circles in experimental seismology. The rooms of the Philosophical society were crowded at its last meeting, the principal topic being the discussion of the observations made at the time of the Flood Rock explosion. Although perplexing, and to some extent inconsistent, the results promise to be of considerable value. Captain Dutton, in whose hands this subject is placed by the director of the geological survey, proposes to take advantage of dynamite explosions, which are frequently occurring in the excavation of a tunnel near the city, to continue the investigation of the question of the velocity of transmission of the disturbance, and it is earnestly desired that he may be allowed all needed facilities.

It is reported that Baba Gopal Vinayak Joshee, a Brahman pundit, and fellow of the Theosophical society of Bombay, is the guest of Dr. Elliott Coues of this city. An enterprising reporter for one of the city papers has interviewed both the distinguished theosophist and his host, no less distinguished in that line, and, if they are correctly reported, has been made the medium for the transmission of information of the most vital importance to an expectant and anxious public.

All the 'working processes' of this wonderful philosophy were concealed from the newspaper man, however, and for two reasons, which, in his calmer moments, he cannot but regard as somewhat personal. One was that "this knowledge in the hands of bad men would be a terrible thing;" the other, that "a mind not yet cultivated to follow out this high train of thought might be driven insane by it."

A good deal was said about 'astral visits' and that sort of thing, and experiments and results were recounted, in comparison with which the work of the Society for psychical research, with its cards and its guessed numbers, appears absolutely childish; in fact, it must be relegated to the stone age.

Preparations are being made for the meeting of the American public health association, to be held in this city early in next month (Dec. 8-11). A strong local committee has been appointed, including, among others, several leading physicians of the army and navy. The meeting is likely to bring together a large number of the leading sanitarians of the country. The association is but little more than ten years old, but it is one of the most active and influential in the world. Z.

Washington, D.C., Nov. 16.

LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

The swindling geologist.

PROFESSOR SALISBURY's letter in *Science* for Nov. 6 gives the present location of a miscreant who has been plundering cabinets and libraries throughout the country for the last two or three years, and who has been making decent people even more unhappy by assuming their names than by stealing their books. His present address is County Jail, Elkhorn, Wis. *Esto perpetua.* This is the address; but as to the name, who knows? For the last six months he has dragged through the mire the honored name of Leo Lesquereux, to the great annoyance of the venerable owner. Before this he was Prof. F. A. Arendel of the Pennsylvania survey. Other names under which he has stolen and swindled are N. U. Taggart, E. Douglass, E. D. Whitney, E. D. Strong, etc. Three of these names have the initials E. D., in which fact there may be some significance.

The Milwaukee police record says of him that he has but one hand, wearing a false hand on one arm. This fact may help to identify him. He seems to have a remarkable amount of geological knowledge, and especially on fossil botany. Where did he get this knowledge? Who trained him? Who was his father? Who was his mother? Has he a sister? Has he a brother?

These are questions that many victims desire to have answered, in whole or in part. E. O.

Columbus, O., Nov. 9.

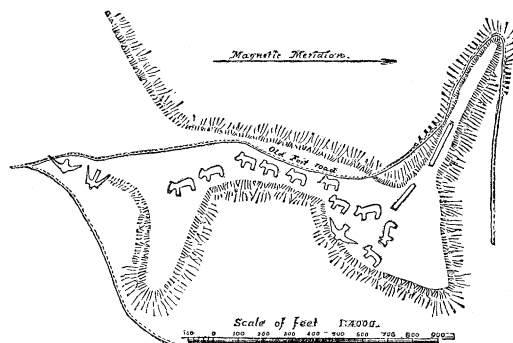
Effigy mounds in Iowa.

Near the village of North McGregor, Clayton county, Iowa, on the south-western quarter of section 3, T. 95, R. 3 W., is situated probably the largest group of 'effigy' or imitative mounds west of the Mississippi. These earthworks are built on a dividing ridge, and are elevated about 500 feet above the river. The surrounding country is broken and rugged, the bluff on the east side along the Mississippi River being perpendicular in many places. To the north-west lies Yellow River, and on the south-west Bloody Run. This remarkably fine group was surveyed by me on the 25th and 26th of May, 1885; and a few details, illustrated by a topographical plan, may perhaps be acceptable to those readers of *Science* who are interested in North American antiquities.

These mounds number fifteen in all, consisting of two long embankments, ten animals, and three birds, and they occupy a *terre-plein* of just about 2,000 feet in length. The first embankment is 190 feet long, 18

feet wide, and $1\frac{1}{2}$ feet high; the second, 138 feet long, 18 feet wide, and $1\frac{1}{2}$ feet high.

The animals represented vary from 79 to 109 feet in length, and are from two to three feet in height. No two are exactly alike in outline, though the difference is more in the shape of the head than in the general form. It will be noticed that they are all tailless, though, of the whole number of beasts surveyed by me to the present time, fully two-thirds have tails. Considered as works of construction,



they being in relief, these animals are very fine; but, taking the size and shape of the legs and head in proportion to the body, they are decidedly clumsy. Indeed, with a few exceptions, the animal-shaped mounds of western Wisconsin, also, are no exception to this rule. It is probable that each leg, as built, was intended to represent a pair of legs rather than a single one, and this may account for their clumsiness.

The birds of this group are each different in form, and are more symmetrical than the animals, which is usually the case. Though symmetrical, the wings of bird effigies are nearly always much longer than they should be in proportion to the length of the body and head as compared with natural birds.

An ornithological friend (Dr. Thomas S. Roberts of Minneapolis) has furnished me a list showing the actual length—from point of bill to the end of longest tail-feather—and breadth, from tip to tip of wings, fully outstretched, of some forty-six North American birds. Taking this length as the unit, I find the proportions of four of them to be as follows; viz,—

Of the Magpie (the lowest).....	1 : 1.28
“ Wild turkey.....	1 : 1.29
“ Bald eagle.....	1 : 2.365
“ Fish-hawk (the highest)....	1 : 2.80

Now, on examining the diagrams of forty-three undoubted bird-effigies surveyed by myself, it appears that fifteen are over the extreme natural limit given above—the ratio of one of them being as high as 1 : 7.20, and that of the very lowest not less than 1 : 1.50. The actual size of this longest ‘bird’ is, length of body, 77 feet; and from tip to tip of wings, 554 feet.

It will thus be seen that to classify these earthen imitations of birds according to any natural system is almost an impossibility, and, with a few exceptions, it is the same with the effigies of animals, reptiles, etc. An instance may be given of one near Viola, Wisconsin, which looks more like a deer than any other animal. Its head is turned as if looking over

its back, but the tail spoils the whole effect, on that supposition; it being 140 feet in length, nearly twice the length of the body (74 feet).

There are effigies undoubtedly representing turtles and lizards; there is also a class to which either name can be applied. The question is, To which category do they belong?

In view of all these facts, therefore, it would appear that attempts to speculate about the object or uses for which these fantastic earthworks were constructed, or concerning the precise kind of animal, etc., represented by the effigies, might be considered, in the present state of our knowledge of the subject, a little premature. As matters of fact, however, it may be stated that an examination of some hundreds of these mounds justifies the drawing of two conclusions, first, that the creatures point or head, with a very few exceptions, in a southerly direction; second, that when situated near a stream the feet of the quadrupeds are towards the water.

At intervals, between Guttenberg and Yellow River, there are mounds and embankments which occur either singly or in groups, but there are only two other points in that stretch where effigies occur. About one mile south and east of the group described in this article there is a single bird-effigy. Near Sny McGill, about three miles above Clayton, there is a group of 92 mounds; two of them represent animals, and two birds; the remainder are round mounds and embankments. While I was surveying this group, Mr. Frank Hodges of Clayton opened one of the larger tumuli, and found a number of skeletons in it.

T. H. LEWIS.

St. Paul, Minn., Nov. 2.

Coleoptera of America.

The note in *Science* (vi., 382) conveys a very erroneous idea as to the result of recent studies upon the number of species of North American beetles.

The number given in Austin's supplement is 9,735 (not 9,704, as stated in *Science*); but as the supplement was to be used in connection with Crotch's list, it was numbered continuously with it, and no allowance was made for the reduction and duplication of numbers. Taking these into consideration, the supplement contains but little over 8,850 species.

The list just issued by the American entomological society contains over 260 unnumbered names which should be added to the 9,238 when this list is compared with previous ones. Recent studies have increased, not reduced, the number of species of North American beetles.

SAMUEL HENSHAW.

Boston, Nov. 7.

Marsh's Dinocerata.

In my review of Professor Marsh's work on the Dinocerata occurs a blunder for which I wish to apologize (*Science*, June 12, 1885, p. 489). This error is as follows: “In the figure of Dinoceras, however, the humerus is incorrectly drawn (compare plate 28, fig. 2).” The figure here referred to is the humerus from the *inside*, that in the restoration is of course seen from the *outside*, and the two are in no sense comparable. I cannot explain how such an oversight came to be made, but now that my attention has been called to it, it is only proper to make the correction. This is, however, a very non-essential part of my criticism, which in other respects I do not wish to modify.

THE REVIEWER.