

## A Unique Survey

“Are there any Indian mounds about here?” This was the question asked by a vigorous, sun-burned man who, nearly a half century ago, first landed from a river steamer at one of the towns of northeastern Iowa. On receiving an affirmative answer—for Indian mounds were too numerous on the Mississippi bluffs to escape the attention of even the least observing—he shouldered his engineer’s level and, with leather-bound notebooks dangling in a pouch at his side, quickly disappeared in the steep, forest-covered hills. Apparently but few people learned his name or his real errand. None learned the deeper motive of his work or the vast extent of the survey in which he was engaged.

That his survey was to involve, first and last, more than ten thousand miles of travel on foot, not to mention the tens of thousands of miles traversed by rail, steamer, and with horse and buggy, was enough in itself to make his effort unique. That his objective, the accurate mapping of Indian mounds and other antiquities, was so lacking in any material aim and yet sustained for fifteen years on purely private resources and initiative also places the survey in the category of those things that happen only once.

Theodore Hayes Lewis, born in Richmond, Vir-

ginia, in 1856, removed early to the Chillicothe region of Ohio, where he both went to school and taught school in the midst of the great mound groups made famous during the forties by the archeological discoveries of Squier and Davis, and there he acquired his deep interest in American antiquities. Always with a desire to devote his life to research in archeology, but without finding the possibilities of a livelihood in this field, he followed somewhat aimlessly in various places a number of different callings, both in the North and in the South. While still in his twenties, a fortunate turn of events brought him to St. Paul, Minnesota, where he met a civil engineer who, although more than twenty years his senior and without the rugged physique called for in the survey of American antiquities, was possessed, nevertheless, of a strong desire to do constructive work in archeology.

Alfred James Hill, born in London in 1823, apparently acquired his interest in archeology through contact with Stonehenge and other British antiquities. He came to America early enough to serve in the Corps of Topographical Engineers of the Union army during most of the Civil War. Both at Red Wing, Minnesota, where he lived for a time, and at St. Paul, where the last forty years of his life were spent, he was much impressed by the numerous Indian mounds and greatly disturbed that these antiquities were being so rapidly destroyed. He surveyed a few mound groups in the vicinity of

St. Paul and with his own hands, skilled in draftsmanship, drew out their plans in beautiful and permanent form. For information from afar, however, he resorted at first to correspondence to bring in the necessary facts. As this method proved unsatisfactory, he began to dream of that unknown man who might be hired to make the field surveys while he as an engineer should turn the collected data into permanent plats of the rapidly disappearing ancient monuments.

It was a fortunate thing for the archeological records of many of the States in the Mississippi Valley when finally, about 1880, the robust youth from Richmond, eager for and competent in field work, met the trained engineer who possessed both the professional talent and the financial ability to guide and support an archeological survey—years before any public institution thought of such an undertaking, and fortunately early enough to find a majority of the antiquities still intact. Hill and Lewis soon entered into a formal contract; active field work was started by Lewis in 1881 and continued without interruption until the death of Hill in 1895. As both men were bachelors, the home of Hill became the headquarters of both and thus the house at 406 Maria Avenue, St. Paul, became the center of the most extensive archeological activities ever privately initiated and supported on the American continent.

The survey, as originally planned, was to include

the eleven north central States in so far as they lay north of the great Cahokia mound opposite St. Louis, that is to say, Minnesota, North Dakota, South Dakota, Wisconsin, Iowa, Illinois, Indiana, Nebraska, Missouri, Kansas, and Michigan. The Province of Manitoba was later included. Inasmuch, however, as Lewis was a Southerner and an out-of-doors man and ill content, therefore, to endure the discomfort and the inactivity of the long northern winters, he spent most of the winter months in the southern States, where his observations added much information concerning the antiquities of Arkansas, Kentucky, Tennessee, Mississippi, Alabama, Georgia, and southern Ohio. Thus the survey reached eighteen States and Manitoba.

Covering so vast an extent of territory, it was inevitable, of course, despite the fact that both men worked faithfully for fifteen years, that the survey should be very thin in many places and that it should leave large regions entirely untouched. It was most intensive in Minnesota, southern Wisconsin, northeastern Iowa, and in certain areas in the eastern parts of the Dakotas. Data were recorded for a grand total of thirteen thousand and eighty-seven mounds, and the presence and approximate numbers of many others were noted which, cultivation having started, were no longer in a state permitting of accurate survey. Moreover, some fifty inclosures were surveyed (small and large ceremonial areas surrounded by earthen ramparts, or village sites

surrounded by both ramparts and ditches); further about a hundred large tissue-paper sheets of original, full-size rubbings of rock carvings, mostly from the cliffs overlooking the Mississippi River, were added by Lewis to enrich his already impressive accumulation of archeological facts; and finally, the neat plats of mound groups, inclosures, and individual mounds (the effigy, or animal-shaped, mounds were drawn on a large scale and a separate plat devoted to each), all from the deft hand of Hill on data furnished by Lewis, reached a total of nearly a thousand sheets. Not regarded by either man as a part of the survey proper, but nevertheless of great importance, are some hundreds of letters to Hill, written from the field by Lewis, which were fortunately kept with the survey manuscripts.

Where do these precious materials now rest and why, even among archeologists, does one hear so little of the long-continued labors of Lewis and Hill? In the first place, the manuscripts of the survey remained for ten years in the hands of the Hill heirs, and a decade is enough to produce partial oblivion, especially as the survey was quietly made and its nature and extent known to very few persons other than its makers. In the second place, when the survey materials, through a fortunate purchase by the State of Minnesota, were finally deposited in the library of the Minnesota Historical Society at St. Paul, interest in mounds, the chief objective of the survey, had shifted somewhat toward antiquities

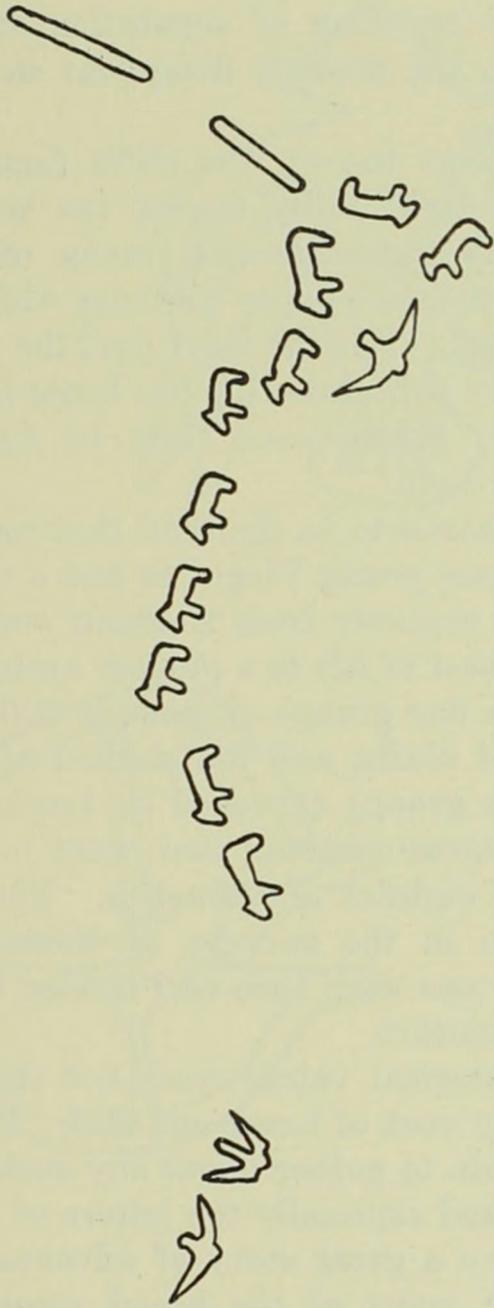
of other forms. Also it is possible that some students find work in the field more congenial than weeks spent at a library table over thousands of pages of manuscripts. At any rate, with the exception of part of the Minnesota materials, nearly all of the great survey remains to this day unpublished—a vein of gold to any archeologist who attempts to study the territory covered more than a generation ago by the footsteps of Lewis.

The reason is obvious enough. It is only necessary to compare the areas surveyed by Lewis with the same territory as it stands to-day. In Iowa, for example, all along the Mississippi bluffs from the Minnesota line to Dubuque, the region of the effigy mounds in which both surveyors were particularly interested, the timber belt has grown ever narrower as time passed, and in places the plow has very nearly reached the edge of the great gorge. The result is the near or total destruction of many a fine group of mounds that Lewis surveyed. How fine it is, under the circumstances, to learn from the notebooks of Lewis and the drawings of Hill the full facts concerning those beautiful animal mounds that formerly stood on the bluffs near the mouth of the Turkey River!

In the opposite corner of Iowa, on the Big Sioux in Lyon County, it is still possible to count on the great Blood Run village site a total of sixty-four mounds. In 1889 Lewis actually surveyed one hundred and forty-three mounds on this site, as well as

the fifteen-acre inclosure at the south end of the ancient village. It is just as well to know, when one visits the site to-day, that forty years of cultivation have obliterated the inclosure, as well as more than half of the mounds.

An even more remarkable story of mounds is told in a penciled note in one of the field books. Visiting in 1892 the "prairie" or river terrace, some three miles long by one mile wide, on which stands the village of Harper's Ferry in Allamakee County, Lewis found the terrace covered with mounds, nearly all of which were under cultivation. He surveyed only five mounds, four bear effigies and one round-base or conical mound, but fortunately made a count and record of the others: "This group consisted of 107 tailless animals [*probably bear mounds*], 67 birds, 98 embankments that were probably animals, 154 embankments [*linear mounds*] and 240 round mounds the largest of which is now about 6 feet high. Total number of effigies in sight including 4 surveyed, 276. Total number of mounds including surveyed, 671. Add 229 small round mounds (estimated) that have been destroyed by cultivation makes a total of 900 mounds of all classes." This note is believed to be the record of the largest mound group ever erected by the prehistoric inhabitants of America. In August of 1927, the writer walked over the entire extent of this terrace and was able to count only eighteen mounds, a few even of these rather doubtful. The soil is quite sandy and, once



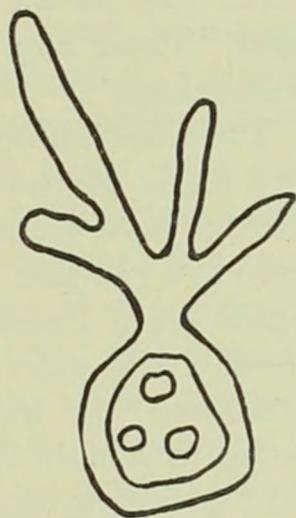
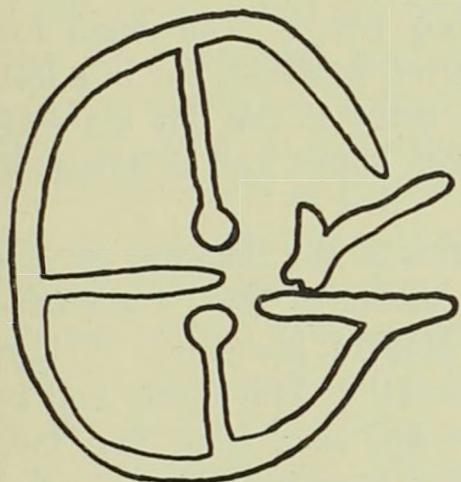
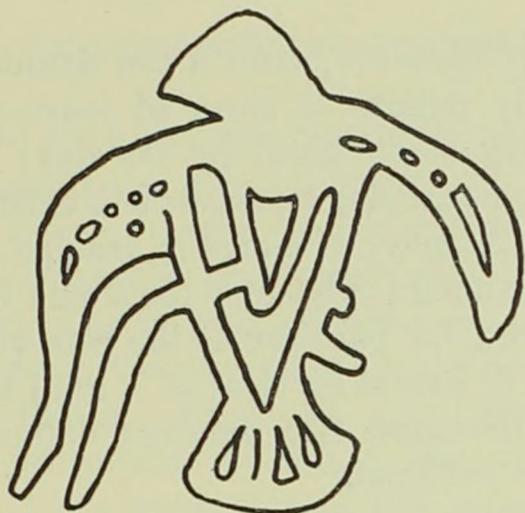
EFFIGY AND LINEAR MOUNDS ON A MISSISSIPPI RIVER BLUFF TWO AND A HALF MILES  
NORTH OF MCGREGOR, FROM THE LEWIS-HILL SURVEY

deprived of their covering of vegetation and put under cultivation, the mounds disappear in a few years.

The rock carvings too on the cliffs facing the Mississippi have fared badly during the last half century, and it is fortunate that many of these were transferred to tissue-paper rubbings while they were still undefaced. For the most part the originals are now nearly obliterated by the large painted or carved initials placed over them by the joy-seekers of a later race.

Thus one has reason to be thankful that some decades ago a vigorous young Virginian and a well-to-do and competent engineer from England were willing to devote the best of life to a pioneer archeological survey. Some fine groups of mounds still stand on the Mississippi bluffs, and the student of these discovers that the groups surveyed by Lewis yield to-day the same measurements that went into the field books of the eighties and nineties. This fact creates confidence in the surveys of those other mounds that long ago were torn and leveled by the processes of agriculture.

And the archeological values were not the only ones created by the work of Lewis and Hill. Human interests are certain to gather about any such long-continued effort, and especially the letters of Lewis to Hill do preserve a great story of adventure, as of exploration, in many of the broad reaches of the Mississippi Valley. And moreover it is the story



PETROGLYPHS ON A CLIFF FACING THE MISSISSIPPI RIVER NEAR  
LANSING, FROM THE LEWIS-HILL SURVEY

of an age that now, after a few decades only, seems extremely remote—a story of journeys on foot, or in “livery rigs” hired by the day; of small-town hotels and boarding houses where existence was fully bereft of luxury; of gangs of tramps who made living in the open inadvisable for a man working alone; of expert work paid for at the rate of three dollars per day of actual service; of a total expenditure of sixteen thousand two hundred dollars, wages and expenses included.

With unembellished rhetoric Lewis characterizes some of the “accommodations” that arouse the ire of the traveller. “There is only one at Clayton”, he writes on May 27, 1885, “kept by a Swiss and as dirty and filthy as a hog pen”. The small town did not furnish all the grief, however, for in a letter from Prairie du Chien there is the flat statement that “These men who run hotels and B houses are damb hogs”.

The political animosities of the time are revealed in a letter written in December of 1887, a non-presidential year, from New Madrid, Missouri: “Things here are red hot—Democratic. Have only had two fights since I came here and paid \$5.00 fine, but I think I am solid now, for they would rather fight some one who will not fight back. . . . If it is going to remain frozen I cannot do anything in the way of diging, and if there is as much hell in every town as there is in SE Mo I want to get back north as soon as possible.” As Lewis was himself a

Southerner, he was presumably an unprejudiced witness.

The letters of the early nineties reveal the atmosphere and conditions out of which free silver emerged and Coxe's army was recruited. In an effort to reduce expenses on account of the financial stringency beginning in 1893, an attempt was made to work by boat the Mississippi shores of Iowa, Missouri, lower Illinois, Kentucky, and Tennessee. This proved unprofitable as well as dangerous, for what was saved in transportation was spent in hiring some one to guard the boat at night. From his camp in his little four by seven tent at Ottawa, Illinois, Lewis writes that he is still a sufferer from the effects of being hit by a stone in a midnight fracas over the boat near Burlington.

A final quotation from a letter written on November 11, 1894, at Columbus, Kentucky, is representative of much of the correspondence of the last years of the survey: "At the present time in free America there are sections of the route that are more dangerous now to pass over than they were in Soto's time, and it will take some one with tact and skill as well as courage to tackle these sections. Along the Mississippi the 'river rats' and tramps make the route dangerous. Along the upper Tennessee the 'moon-shiners' are the curse to the country." To dangers from rough characters there were added before the month closed some trying experiences in two gales on the Mississippi. In his small boat

Lewis barely managed to weather them out, being closer, as he says, "to the 'kingdom to come'" than he ever cared to risk again.

On the whole, however, the records of this notable survey tell a story of hard and serious work, begun early in the spring of each year and continued until the snow and cold of winter forced the surveyor to seek shelter within doors or in the gentler climate of his sunny South. But with the coming of another working season he shouldered his level and once more began to read accurately his compass indications and to record the results of measurements in his leather-bound notebooks. The great fifteen-year effort, initiated and sustained by two serious-minded bachelors who lived in St. Paul, remains unique in the history of North American archeology. Its results, when fully known, will help to prove that not all the worth-while and interesting antiquities of the world center about the valleys of the Nile and the Euphrates.

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