

THE HILL-LEWIS ARCHEOLOGICAL SURVEY

Nearly fifty-four thousand miles of travel and more than ten thousand of these on foot! This is the story of a vigorous young man with engineer's level, compass, and leather-bound notebook taking the field and working long seasons alone in quest of information of a most impractical sort. It is the story also of an older man who furnished the means to pursue steadily for fifteen years a quest whose objective was neither bread nor profit. To the wholly ideal task of gathering and preserving knowledge concerning the Indian mounds and other antiquities of the upper Mississippi Valley both men were willing and eager to devote the best of life.

This must be then, and is, a story from another age. For who can deny that even the latter part of the Victorian era is now extremely remote — to all indeed, except those who lived in it, something of a sealed book? To the writer, whose early memories still retain something of "livery rigs," small-town "Grand" and "Palace" hotels, where existence was just barely possible, and gangs of tramps who made living in the open inadvisable for a man working alone, the weeks spent in the summer of 1927 in studying the extensive records of the Northwestern Archeological Survey, now preserved in the manuscript division of the Minnesota Historical Society in St. Paul, seemed like an excursion into another world.

Alfred James Hill was born in London, England, in 1823, came to America in 1854 and settled at Red Wing, Minnesota, and the next year removed to St. Paul, where he remained to the end of his life. He was trained as a civil engineer. In 1862 he enlisted in the Sixth Minnesota Volunteer Infantry and he served during most of the Civil War in the Corps of Topographical Engineers at Washington. After the war he followed his profession of engineering. Being a man of some

means, however, he devoted much of his time to studies in history and archeology, in which he had acquired an interest during his boyhood days in England. For a number of years he served as chairman of a committee of the Minnesota Historical Society on archeology, never spending much time in field surveys himself, but accumulating considerable information about Minnesota and neighboring states through correspondence and the use of questionnaires. His ambition was to find a man competent to make field surveys of the rapidly disappearing antiquities, to plot these on a generous scale with his own skilled hands, and thus to insure the permanent preservation of facts on the basis of which the archeology of the Northwest might sometime be studied and an account of it written. This ambition was fulfilled in 1881 and from that time until 1895, the year of his death, the Northwestern Archeological Survey, as Hill called his chief life interest, was carried on without interruption.¹

Theodore Hayes Lewis was born in Richmond, Virginia, in 1856. He removed early to the Chillicothe region of Ohio, where he both went to school and taught school in the midst of great mound fields made famous by the archeological discoveries of Squier and Davis, and here he acquired his deep interest in archeology. He lived for a time in Arkansas, and for short periods in other southern states, always studying and surveying the local antiquities. About 1878 he removed to St. Paul. Here he devoted his spare time to surveys of the numerous and striking prehistoric mounds in and about this city. He met Hill in July, 1880, carried out several survey projects with him, and late in 1881 entered into a formal contract with

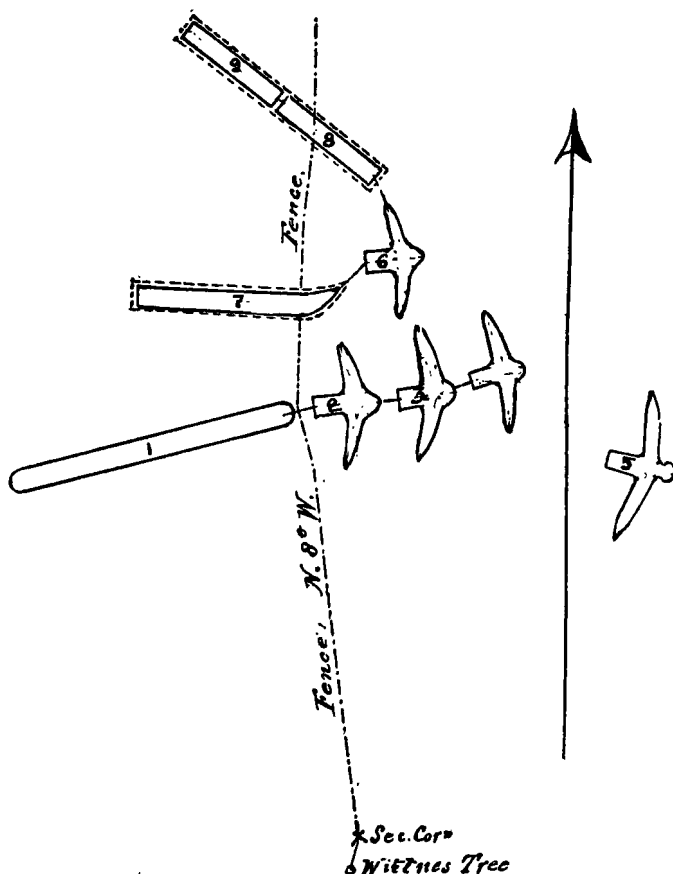
¹ A biographical sketch of Hill appears in Newton H. Winchell's *Aborigines of Minnesota*, vii-ix (St. Paul, 1911). Other brief accounts of Hill's career may be found in *Appletons' Annual Cyclopaedia and Register of Important Events*, 1895, p. 575; and in Albert N. Marquis, *The Book of Minnesotans, a Biographical Dictionary of Leading Living Men of the State of Minnesota*, 308 (Chicago, 1907); and an obituary sketch by J. V. Brower is to be found in the *Minnesota Historical Collections*, 8: 514-517.

him to conduct the field work of the projected archeological survey. At the same time he moved his headquarters to the Hill home at 406 Maria Avenue, St. Paul, which became in the fifteen years that followed the center of the most extensive archeological activities ever privately initiated and supported on the American continent. After Hill's death, Lewis continued in St. Paul for several years as a partner in a publishing business. Apparently he left the city in 1905. The last information concerning him came from Ouray, Colorado, prior to 1911.²

The great extent of the archeological survey work accomplished by Lewis and Hill cannot be appreciated except through an extended examination of the large mass of manuscript material that has been preserved. This consists approximately of the following: forty leather-bound field notebooks well filled with the original entries of the survey; about a hundred plats of mound groups drawn on a scale of one foot to two thousand; about eight hundred plats of effigy mounds (animal-shaped mounds from Minnesota, Wisconsin, Iowa, and Illinois) on a scale of one foot to two hundred; about fifty plats of "forts" (largely village sites of the Mandan type) and other inclosures on a scale of one foot to four hundred; about a hundred large, folded tissue-paper sheets of original, full-size petroglyph rubbings with from one to six or more petroglyphs on each; about a thousand personal letters of Lewis to Hill; four bound "Mound Record" books made by Hill and in his handwriting; eight large, well-filled scrapbooks of clippings on archeological matters made by Lewis; numerous account books, vouchers, and other miscellany. When the writer went through these papers he was engaged in getting out the Iowa materials, and was unable to take time to make an exact count of all the items.³

² See the biographical sketch of Lewis in Winchell's *Aborigines of Minnesota*, ix; and an account in *Who's Who in America*, 1899-1900, p. 429.

³ It should be explained that Professor Keyes made his examination in the interest of a preliminary Iowa archeological survey now being conducted by the State Historical Society of Iowa. *Ed.*



PRIOR LAKE MOUND GROUP, CONSISTING OF FIVE EFFIGIES OF BIRDS WITH WINGS SPREAD AND FOUR EMBANKMENTS
 [Surveyed by Lewis, August 30, 1883. Winchell, *Aborigines of Minnesota*, 194.]

A single sheet of summary found among the miscellaneous papers of the survey, apparently made by Lewis, is eloquent in its significance. Tabulated by years and place of entry the mounds alone that were actually surveyed reach a grand total of over thirteen thousand—to be exact, 855 effigy mounds and 12,232 round mounds and linears. This is more than double the number covered by all three of the major surveys

that preceded the close of the work of Lewis and Hill!⁴ All this mass of material, except for the part used by Newton H. Winchell in compiling *The Aborigines of Minnesota* and a few items used by Lewis in a number of brief published articles, remains unpublished, a mine of gold to anyone engaged in archeological research in the areas covered by the survey.⁵

The survey proper, as originally planned, included 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; and also the province of Manitoba. Inasmuch, however, as Lewis was a Southerner and ill content to endure 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 touches eighteen states and Manitoba. As the different areas were treated very unevenly, it is desirable to trace the general course of the actual surveys. It may be remarked that it is not altogether easy to explain the great fullness and detail of the work in certain widely separated areas and the total lack of data from other areas now considered equally rich. It should be remembered, of course, that the survey was interrupted by the death of Hill and was never considered by

⁴ The published works on these earlier surveys are: E. G. Squier and E. H. Davis, *The Ancient Monuments of the Mississippi Valley* (*Smithsonian Contributions to Knowledge*, vol. 1—Washington, 1848); Increase A. Lapham, "The Antiquities of Wisconsin," published as article 4 in volume 7 of the *Smithsonian Contributions to Knowledge* (Washington, 1855); and Cyrus Thomas, "Report on the Mound Explorations of the Bureau of American Ethnology," published as an "Accompanying paper" in the Bureau of American Ethnology, *Twelfth Annual Report* (Washington, 1894).

⁵ Winchell's volume has for its subtitle *A Report Based on the Collections of Jacob V. Brower, and on the Field Surveys and Notes of Alfred J. Hill and Theodore H. Lewis*. A list of the articles published by Lewis appears on page 576 of this work.

either of its sponsors to be anything but incomplete. And it is probable, again, that the availability of transportation had something to do with the geography of the survey as it now stands. Railroad passes, for example, were apparently procurable at times on certain routes and not at all available on others.

The survey is quite full for Minnesota, where work was done in all but three counties of the state, resulting in records of 7,773 mounds, besides a number of inclosures. Six mounds were surveyed in Manitoba. In the Dakotas the course of the Missouri River was followed for the most part, with surveys of over five hundred mounds in each state, besides some "forts" and inclosures. Following the Missouri southward, much information was gathered from the river counties of Iowa, Nebraska, Kansas, and Missouri. In Wisconsin the survey touched more than two-thirds of all the counties, mostly in the field of the effigy mounds in the southern half of the state, where the records supply detail for no less than 748 effigies and 2,837 other mounds. In Illinois the principal work was done in the northern part of the state within sixty miles of the Wisconsin line, though explorations were also made along the Rock and Fox rivers, and along the Illinois River from Joliet to the Mississippi, thirteen effigy mounds being recorded besides thirty-seven round and linear mounds and a few other antiquities. Iowa was explored most fully in the northeastern counties as far south as Dubuque, yielding data on 61 effigy mounds, 553 other mounds, and several inclosures. A little work was done in a few of the northern counties of Indiana. Surveys in Michigan were largely confined to some circular inclosures in Ogemaw County. It is seen thus that the survey yielded its richest results in Minnesota, the eastern parts of the Dakotas, northeastern Iowa, and the southern half of Wisconsin.

Some three years after the death of Hill a sixteen-page pamphlet on the survey was published by Lewis.⁶ In it he

⁶ *The Northwestern Archaeological Survey* (St. Paul, 1898).

briefly tells of the inception of the project, of his relations with Hill, of the territory covered by the surveys, and of its cost, condition, and deficiencies. A number of interesting side lights are gained from this account that are not reflected in the manuscripts themselves. It appears, for example, that it was Hill's intention to provide by will funds for the continuance of the survey. This will disappeared, so Lewis relates, or at least was not found, a fact that caused the junior maker of the survey some bitterness and engendered in him a belief that the ultimate fate of the material, then adjudged to be the property of certain heirs, would be a resting place in some provincial English museum or some quiet English attic. Fortunately for Mississippi Valley archeology this unhappy fate never became a reality. J. V. Brower, a member of the council of the Minnesota Historical Society and himself a writer of importance in the field of north central history and archeology, shortly before his death in 1905 led a successful movement to convince the legislature of Minnesota of the value of the survey and the desirability of its purchase as a part of the state's historical collections. The purchase was made and the survey was saved, at a cost of \$3,900, to the state that saw its inception. Lewis, apparently with a prophetic vision of the curiosity of a later generation, tells very definitely that its cost to its financial sponsor, Alfred J. Hill, was \$16,200.⁷ Throughout the years of the survey Lewis received three dollars a day for the days actually spent in the field. Various expenses make up the balance. Here again we find ourselves in another world. It is necessary to recall, or to rediscover, the years from 1881 to 1895.

What now of the strength and deficiencies of the survey as an archeologist of today would evaluate it? One shortcoming of the work is mentioned by Lewis himself in the pamphlet noted above.⁸ As it was Hill's plan to have Lewis write up

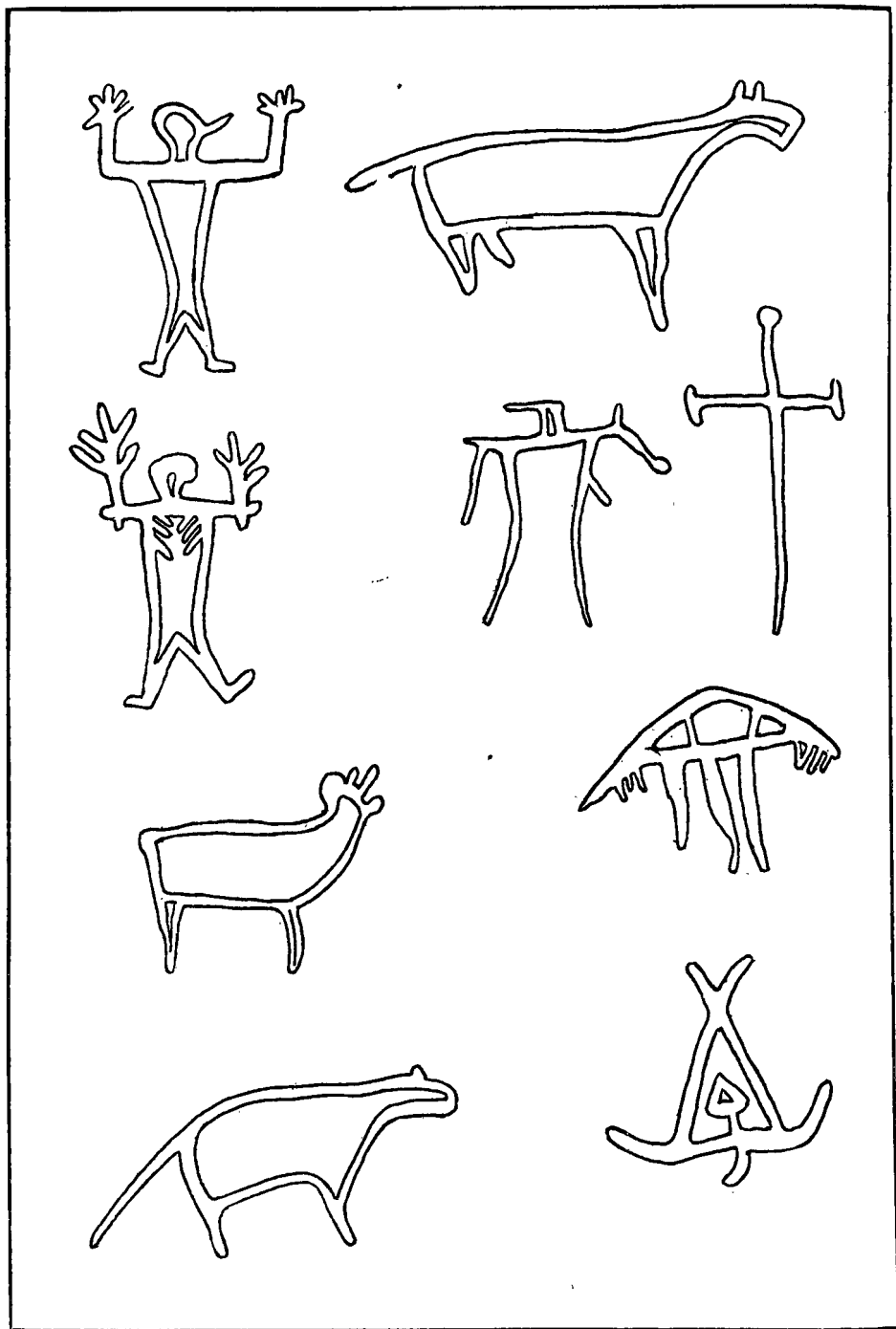
⁷ *The Northwestern Archaeological Survey*, 7.

⁸ In a section entitled "In What the Survey is Deficient," in *The Northwestern Archaeological Survey*, 9.

the text of the completed survey, the latter did not take very full notes on the topographic and other bearings of the various mound groups, apparently leaving the local settings to be filled in from memory. The recovery of these bearings would now necessitate, of course, a large amount of travel.

Another deficiency of the survey originates in a belief shared by both men, but now generally discredited, that the builders of the mounds were a vanished people entirely different from the Indians. This was the common belief of their time, of course, but it had the usual result of leading to an overemphasis upon mound survey as compared with surveys of other antiquities quite as important. Thus there was no systematic effort to locate the old village sites and collect from their abundant refuse the criteria, the pottery fragments especially, that would now be regarded as of primary importance. Indeed, there is nothing in the survey to show that Lewis had any interest in fragmentary relics of any kind, and his letters show that his interest even in the perfect relics collected from the village sites and shell heaps was rather moderate. These relics were not regarded by either man as a part of the survey, but as the private property of Lewis.⁹ It probably should be said, however, in connection with this matter of neglect of certain lines of inquiry, that ancient village sites, important as their phenomena are, are less exposed to destruction than the mounds, whose outlines are seriously damaged by the agricultural operations of a single season. The secrets hidden away in a village site lie mostly below the plow line, but a mound once cultivated cannot be perfectly restored. Perhaps, then, after all, it was not wholly unfortunate that the Lewis

⁹ An effort to locate some thousand perfect relics which Lewis says he collected resulted in finding four cases of specimens labeled "T. H. Lewis Collection" in the basement of the science hall of Macalester College in St. Paul. This collection consists largely of southern material and is not notable. One case of Minnesota specimens collected by Lewis was sold by him to the Reverend E. C. Mitchell of St. Paul and was included among the archeological accumulations presented by the latter to the Minnesota Historical Society in 1905.



PICTOGRAPHS FROM DAYTON'S BLUFF, ST. PAUL
[Winchell, *Aborigines of Minnesota*, 566.]

and Hill survey devoted almost its entire energies to mounds and earth-walled inclosures.

The strength of the survey consists, first of all, in the dependability of Lewis as a gatherer of facts. While he cherished the belief that he was working with the monuments of an extinct race of mound builders, he was worried by no other theories, he knew mounds when he saw them, and he worked as a realist, measuring and recording what he saw with painstaking accuracy and unwearying devotion. It has been the writer's privilege to check over in the field some of the work of Lewis and up to this time no serious error has been found. And the fact that these surveys were made at a time when a large number of mound groups that have since disappeared, or all but disappeared, were still intact, gives the work of Lewis and Hill an incalculable worth. What unique value, too, attaches to those numerous sheets of rubbings of rock-hewn pictographs from the caves and fissures of the Mississippi cliffs, the originals of which have been almost wholly obliterated now by the vandalism of a later time! So far as Iowa is concerned, something like half of the antiquities of the northeastern part of the state are recoverable only from the manuscripts of the Northwestern Archeological Survey.

The work of Lewis also possesses much value in the many incidental references to antiquities not considered worthy of a formal survey or interpreted as merely the remains of modern Indian activities. These references are particularly numerous in the letters, which were not regarded as a part of the survey material at all; and other observations of great interest are sometimes entered in the field notebooks, usually set off in some way from the regular mound survey data on which the later plats were drawn. As shown by one of the field books, for example, Lewis visited on May 4, 1892, the "prairie," or terrace, on which stood the village of Harper's Ferry in Allamakee County, Iowa. This area is rather level and extends along one of the secondary channels of the Mississippi for about three miles, with a width between the river

and the bluffs of from half a mile to a mile. He found nearly all of the terrace under cultivation and made an actual survey of only five mounds, four bear effigies and one conical mound. He did, however, make a count of mounds still discernible and he entered his count in a penciled note: "This group consisted of 107 tailless animal[s] [*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."¹⁰ This note may be the record of the largest mound group ever erected by the prehistoric inhabitants of America. On August 20, 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 of the terrace is quite sandy, and once deprived of their covering of vegetation and put under the plow the mounds disappear in a few years. Another quotation, this time from a letter written at Center City, Minnesota, on November 13, 1885, is also of the kind to make a student of archeology rejoice: "This afternoon was on 'Bone Island.' It has been an old camp ground. There are bones of Deer, Beaver & other animals, also buffalo teeth, broken pottery (made of clay & stone also clay and sand), chert & quartz chips & stone implements (broken)." No student who seriously seeks information can afford to neglect the field books and the letters, for they contain too many observations of the kind just quoted.

Finally, the survey contains, first and last, a great story of human adventure and exploration in many of the broad reaches of the Mississippi Valley. This story is told for the most part, of course, in the letters. If one desires a clear-cut and

¹⁰ Northwestern Archeological Survey, Field Books, 32:13.

unembellished characterization of the wretched small-town hotels and boarding houses of the eighties, he need look no farther than the Lewis correspondence. "There is only one at Clayton [Iowa]," he writes on May 27, 1885, "kept by a Swiss and as dirty and filthy as a hog pen." It is not always, however, the bad accommodations that arouse the ire of the traveler, nor is it always the smallest town that furnishes all the grief, for in a letter of May 18, 1884, dated at Prairie du Chien, Wisconsin, there is a flat statement that "These men who run hotels & B houses are damb hogs." If one desires to recall the keen political animosities of the time, he need only read the letter of December 22, 1887, written from New Madrid, Missouri, in a non-presidential year: "Things here are red hot — Democratic. Have only had to 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 digging, 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." One must recollect that Lewis was himself a Southerner and therefore an unprejudiced witness. If one would learn something of the atmosphere and conditions out of which free silver emerged or Coxey's army was recruited, the letters of the early nineties will supply much material. He writes from South Bend, Indiana, on August 13, 1893: "I have come within an ace of being held up several times. Yesterday we were surrounded at one time by a number of tramps but a small rifle and a seven shooter held them off. If things keeps on in the same line I will be compelled to carry a revolver for self protection. I do not like to carry any thing of the kind." Evidently things did keep on, for the attempt to work by boat the Mississippi shores of Missouri, lower Illinois, Kentucky, and Tennessee during the summer and fall of 1894 proved unprofitable as well as dangerous. What was saved in transportation was spent in hiring some one to guard the

boat at night. A final quotation from a letter written on November 11, 1894, at Columbus, Kentucky, may serve to give the flavor 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 'moonshiners' 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 the Northwestern Archeological Survey naturally 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 notebook. 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. And was this effort, after all, of so very impractical a sort? As time goes on does it not become more and more clear that the antiquities of abiding worth and interest do not all center about the Nile and the Euphrates?

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