becoming twenty-two inches in diameter and having 250 feet b. m. lumber.

The late E. E. Barney, the veteran car builder, of Dayton, Ohio, who was one of the best judges of timber in America. took a very great interest in the catalpa, having published an exhaustive pamphlet, which is now quite rare, giving the results of his investigations, experiments and correspondence, upon the subject.

Many railway officials in early days experimented with catalpa trees, the testimony of several being quoted in booklet form. Mr. Barney spent several dollars in pains-taking thousand research and demonstrated the value of this wood to railway interests.

The late Robert Douglas, of Waukegan, Illinois, also expended a large sum in similar investigations and was thoroughly imbued with the importance of the catalpa to commerce.

# FACTS AND THEORIES ABOUT THE FLINT MINES OF NEHAWKA.

BY E. E. BLACKMAN.

In The Conservative, May 23, there appeared an article quoted from the Nebraska City News, October 16, 1858, "Traces of Ancient Mines," in which the writer, even at that early date, called public attention to the extensive excavations along the Weeping Water in the vicinity of where Nehawka now stands.

From that day to this, the mystery of these strange evidences of ancient occupancy has been left undisturbed, except by a very few enquiring minds in the immediate neighborhood. From time to time public notice has been directed to the spot by these interested parties, but no effort has been made to fathom the mystery, which the early writer pronounced unfathomable, except by Mr. Isaac Pollard, who owns the land where one of these extensive groups of mines is located. Mr. Pollard has made an extensive excavation of a cross-section of this group, which admits of a careful study of the nature of the excavating, which these Aborigines did to procure their flint.

# Evidence and Archaeology.

This early writer seemed to think that "what this race achieved and what it thought, and what due curse, as in one night, swept it from the earth, is, and probably always will be a mystery."

Now, there are straws which tell which way the wind blows; there are coming events which cast their shadows before, and every act leaves an evidence which may be read by the keen-eyed, more plainly than the direction of the wind by the frivolous straw.

This great mine, for instance, will aid us materially in the study of the people who planned and worked it; we know they were mining experts and conducted the work with as much system and science as the twentieth century miner, with all his boasted skill, remained; the vertebra and ribs were

uses today. Flint was the gold of the Aborigine, and he contended against the obstacles of nature as persistently for his coveted flint as does the miner of today, for his all-powerful gold.

The chipped flints are an open book to the archæologist. They show by their form and material the class of people who chipped them. The pottery used is also a true index to their characteristics. These we find in abundance in the vicinity of the mines. Could they both be found in the debris of the mine or on the uncovered floor of the mine, true nature, in a general way, could be told, but so far, diligent search has failed to reveal but a single shard of pottery and not a single perfect type of chipped flint. This is not strange, as so small an area has been opened and further work there may reward our efforts.

#### Character of Flints Found.

The flints found on top of the earth are the "Quivira Type," as found in the Kansas field by Brower; a very rude, coarsely-chipped specimen. I took several hundred specimens, more or less perfect types, during my stay.

There is also found the "Harahey Type" as described and illustrated by Brower. These two types seem to predominate, although a few specimens are found which do not come under either type. The Harahey flint is smooth and fine, being thin and evenly chipped, showing much skill in their manufacture. There is an individuality about these chipped flints, and I am almost ready to go on record as one who believes that they are the work of the same people, although they differ so widely in the skill of manufacture; they were simply made for a different purpose, hence the wide difference in form and skill.

# Lodge Circles.

The lodge circles excavated, showed evidences which bring them under the class of lodge circles, excavated in the "Lowe site" and elaborated in these columns. Here I find the same burned clay masses found at the "Lowe site" and the mystery only deepens. The two types of flints both broken and perfect, rest together, and pottery of three different styles is found. One piece of pottery taken, is as large as your two hands, the largest I have ever seen in this state; many fragments were found nearby, and we hope to construct a nearly perfect vessel. These pieces were found in a lodge circle, two miles south of Nehawka, on the farm of Mr. L. J. Griffith, at a depth of two and a half feet. Two of the potshards have cloth impressions on them.

### Bones Exhumed.

One sepulture was excavated which yielded a few bones in an advanced stage of decay; only the largest bones

entirely decayed; the greater part of the skull secured. was This is about a quarter of an inch thick and has a very low brow; the other peculiarities may be determined after the pieces have been joined and a more careful study made.

This field demands more study than it is possible to devote to it at this time, but Mr. Barrett and Mr. Sheldon, who visited me in camp, were much impressed with the importance of the work being done. They enjoyed two days of real camp life and carried a heavy load of specimens back with them.

#### A Weeping Water Graveyard.

In the near future, we will endeavor to arrange for some illustrations of the types of flint found, and when leisure will permit, I will try to enter more into detail, but during the summer we can barely state briefly what we find.

Mr. A. Tumbley, of Nebraska City, gave me letters of introduction to gentlemen in Weeping Water, and I stopped to investigate a graveyard there. It proved to be a very high mound which had been opened a number of times. I secured two flints and many shards of pottery on the surface, which serve to identify it as belonging to the same people as did those at Nehawka.

We may have small evidences to guide us in archæology, but so we have in any science, and a little care and much searching will yet give us the true history of these Aborigines. One thing is certain, they were not lazy as are the recent Indians, although it seems evident that they were the remote ancestors of the same.

### Theories Regarding the Mines.

Many theories have been proposed relative to these mines from time to time; one of these as related by Mr. E. A. Kirkpatrick, may be of interest in this connection.

A number of years ago as this gentleman was passing through a little town in western Iowa; he met a gentleman who told him the following story:

"I have never been in Nebraska, but once, then I went to the gold mines south of the Platte river about twelve miles. You follow up the stream that empties into the Missouri about twelve miles south of the Platte, for some eight miles, until you come to a little branch which joins it from the north; about two miles due north of this point is a high hill, which is doubtless an ancient gold mine. It is left in deep pits, and the old furnaces were still there when I visited it many years ago. I will tell you how I came to go there: I found an old book in my grandfather's library which told of two men who went to this place to work the old abandoned Spanish mines. They collected a large quantity of gold and were in the way to amass great wealth, when they were attacked the Indians and had to run for their