

In the Day's Work

No better alarm clock is needed for Waukon than the big bell of St. Patrick's. By tolling slowly at first, it breaks the news gently that it is now six o'clock in the morning. Then with both speed and volume increased it proclaims the necessity and duty of a new day of labor. Six o'clock! That leaves an hour yet before a little group of bronzed men, dinner pails in hand, will be waiting for us on the sidewalk in front of the city hall. Then over gravel or pavement our cars can carry us to any part of Allamakee County before the hour hand points to eight.

It was the eleventh of June when the valley of the Upper Iowa first opened up before us as we drove northward, over Primary Road 13, toward the New Galena mound group, situated on a fine seventy-foot terrace of about twenty acres, a half mile west of the new iron bridge over the Oneota. Rising in the angle where the river runs north, then east, the terrace is buttressed on the south by a high bluff and faces high bluffs and cliffs to the west and north. To the east there is a distant view down the river.

Protected then, and yet open, it was an area

of primary importance to ancient man, and numerous are the evidences of his activities. Village refuse of the usual Siouan type is found scattered over the surface. The mounds were originally thirty-two in number and some of them were quite imposing structures, five feet in height and forty to fifty feet in diameter. Fortunately Mr. Orr surveyed and platted them a quarter of a century ago, when they were in much better condition. To-day, after many years of cultivation, only fifteen mounds can be identified, and the largest of these are so flattened out that they scarcely reach an elevation of two feet. With their present diameter of from seventy to eighty feet, they might easily escape notice.

Search over the surface of several of the mounds, on which the young corn was receiving its first cultivation, revealed the presence of broken bits of human bone. The owner informed us that he had plowed out of a mound the year before some bones and fragments of an Indian pottery vessel. The pieces of pottery saved had been lost or given away. On request he took us to the spot, where we found a few pieces of bone and a potsherd. The latter was shell-tempered Siouan ware, the same as elsewhere on the terrace.

Making the best guess we could as to the original center of one of the larger mounds, we

staked out a thirty-foot square on this focus and sub-divided this into thirty-six smaller squares, five by five feet each. Beginning on the south, the rows were numbered from south to north and, beginning on the west, they were lettered from west to east. Thus a letter and a number in the southwest corner of any square designated its position in the mound. A 1 was the square in the southwest corner of the excavation, and D 4 was the estimated center of the mound. Work began on trench one for the good reason that shadows fall northward in our hemisphere and therefore, if photographs are needed, one may avoid on a sunny day the presence of black shadows. The men were distributed along trench one, earth from square A 1 being thrown west, that from F 1 east, that from B 1 to E 1 to the south. Succeeding trenches were handled in the same general way, after the necessary observations had been made.

It was only the middle of the first forenoon, and Ed McCormick was removing his second spading from the northeast corner of C 1. Klink! The sound of steel against flint was not to be mistaken. Mr. Orr bent over and carefully brushed the earth away from the specimen. Fortunately it wasn't broken. A beautiful seven-inch knife of white, pink, and purple flint, chipped with unusual skill, had been laid in the mound flat with

its point toward the south. One thing only was clear, and that was that the knife was of a Siouan type, without any very definite associations. We were to read that story more clearly a little later.

As we worked northward through the mound, the superficial spadings kept producing scattered fragments of human bones, an occasional potsherd of shell-tempered pottery, small lenses and specks of red ochre. Quite puzzling at first. As the day neared its close, we encountered a feature that seemed more in order. Our vertical sections had consistently shown two and a half feet of mottled, black mound soil and below this the undisturbed sand and gravel of the terrace. About midway of trench three our sections showed a low dome of gravel uplifted into the black soil of the mound, eighteen inches high in the center and running across D 3. To the left in C 3 a corresponding depression of black soil started downward into the gravel and ran across the five-foot section. It was five o'clock, time to clean tools and begin our return journey to Waukon. "Tomorrow morning early we are to find out who built that mound", we said.

Lulls arose in the conversation as Mr. Orr and I drove along the New Galena road next morning. Suddenly Mr. Orr remarked: "I'll bet my old hat those mounds are Siouan."

"All the evidence to date is with you, sir", I replied. So we didn't bet. Instead we planned to work carefully downward into that pit below the floor of the mound, the gravel from which the makers had thrown out in a pile to the east.

It is realized fully, of course, that this is not the place where any perfectly-constructed story should reach a climax. Nevertheless, an account that contains climax and anti-climax, varied by a period or two of deep depression, will correspond much more truly with the experience of a summer of actual archaeological research. It just happened that one of our climaxes came the second day. Very appropriately, however, our greatest thrill of the season did come at the summer's close.

With our stout little hand trowels, we worked down through the tough black soil. Embedded in this, and resting on the terrace gravel two feet and a half below the base of the mound, human bones were encountered. They were packed in close together, clearly deposited in a sort of bundle as we found them. This was not the remains of an original burial.

"You would have lost your hat, wouldn't you, Mr. Orr?"

"It looks like it", he replied, "but we need to find some pieces of pottery to make this a sure case."

We were working on opposite sides of the ossuary. "A pot!" said Mr. Orr, "it may be a whole one!"

About two more hours of work sufficed to uncover Algonkian deposits of very special interest. Five skulls and some fifty long bones had been laid in along two sides of the four-by-five-foot rectangular pit. Very few of the smaller bones were present. Wedged in between the row of skulls and some long bones lay a pottery bowl, complete, and so little checked by the weight of earth above it that it could be removed in only twenty pieces. Very fortunate, indeed!

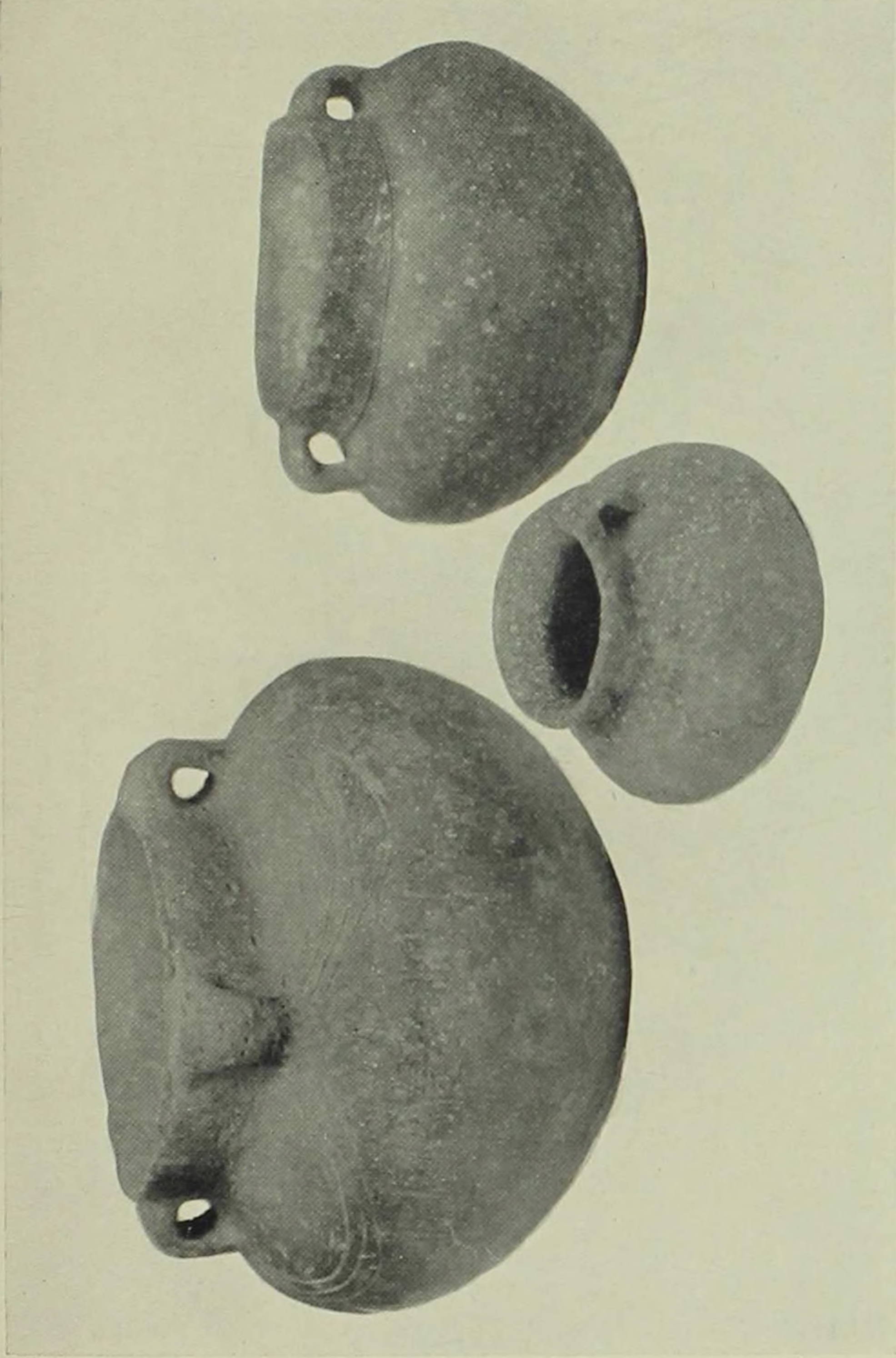
Pottery vessels have been restored from ten times as many fragments. No experienced archaeologist expects to recover undamaged a piece of pottery made by the people of the Woodland. With its grit tempering, granular texture, and light firing, it is too brittle. What it lacks in stability, however, it makes up in richness of decoration. Our little bowl was decorated over its entire surface with stamped, punctate, and incised designs. Two hemispherical copper "buttons", with holes drilled on opposite margins, were also laid in as further offerings. Secondary burials, pottery bowl, copper ornaments, all told the same story — Woodland culture, Hopewellian phase.

The New Galena terrace held us for a total of ten days. Mounds 2, 3, and 8 contained secondary burials only; Mound 4, in addition to an ossuary of unusual size, furnished the fragments of part of a large pottery vessel, the pieces laid in as one would stack chinaware, and two perforated canines of the black bear. Nothing more was needed to establish the Algonkian origin of the New Galena mound group. The measure of our good fortune may be judged from the fact that ordinarily Woodland mounds contain secondary burials of a few bones only, without artifacts. Two mounds out of five explored on this site had produced ancient handiwork of three different types in as many different materials.

It remained only to make a reasonable interpretation of the fragments of human bones found on and about the mounds. This was easy after making the little find contained in the top of the last mound excavated. Lying just two inches below the plow line lay an undisturbed primary burial. On account of its nearness to the surface, there was little left of the skeleton; fragments of skull, however, of the two femurs, and of the two tibia, all lying in their natural position, made clear an original interment, extended straight on the back. The fragments of a shell-tempered pottery vessel at the right knee, the flint knife at

the left thigh (quite similar to the one found during our first forenoon's work), the fourteen triangular arrowheads at the left knee, all testified to the burial here of a rather important man of Siouan stock. Another season or two of cultivation, and bones and pottery and flint would have been scattered over the terrace.

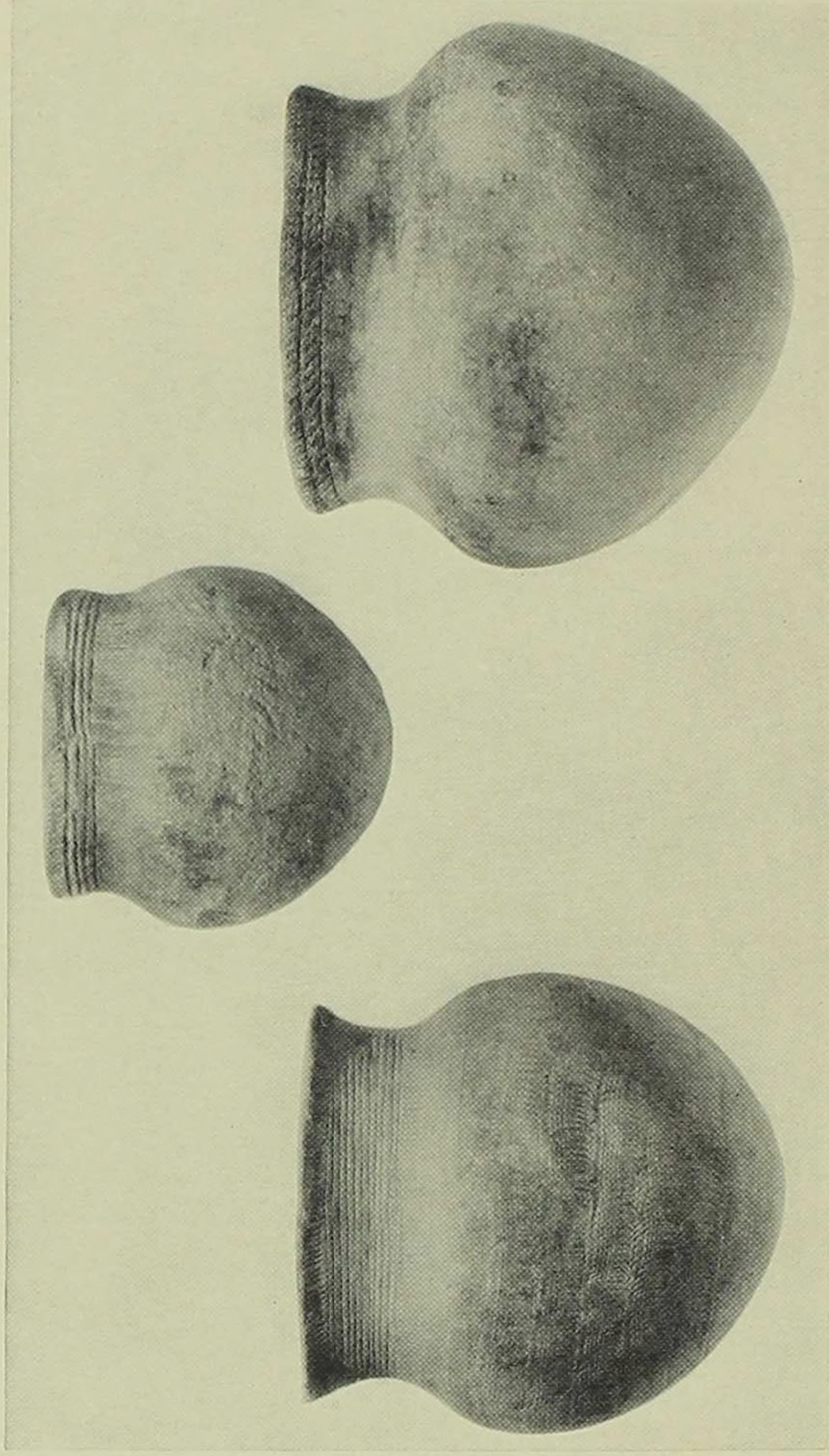
The reader has already, perhaps, made his interpretations. A people of Algonkian stock first used the New Galena terrace as a sacred area where they built the mounds and beneath these, gathered from the primary burials elsewhere, deposited a few bones of their dead, in a few cases laying in with these bones a few examples of their handicraft. The Algonkians did not live among their mounds. For reasons as yet unknown they left this region and a very different people, a people of Siouan stock, came in, lived here, and made occasional burials of their dead, according to their own peculiar manner, in the tops of the little hillocks so conveniently at hand. Other centuries passed, the Siouans moved out, and a third people moved into the valley of the Upper Iowa. These people did not build houses on the terrace, but they raised crops there and their iron plows tore down the mounds and scattered the intrusive burials over the surface. Algonkian beneath Siouan, both beneath the plow and the trac-



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SIOUAN POTTERY VESSELS

Collected on the O'Regan Terrace by Dr. Frederick J. Becker



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WOODLAND POTTERY VESSELS

Collected from the Lane Farm mound group in the summer of 1934

tor of the white man. For the archaeologist it meant a perfect case of culture stratification.

On the left bank of the Oneota, four miles below the New Galena bridge, stands the Elephant, a detached hill that resembles a great pachyderm lying down, with forelegs stretched out in front. This lower portion is a little half-acre terrace, bordered by red cedars and oaks. Years ago some interesting Siouan burials were found on its southern point. We ought to spend a day there and find out the meaning, we thought.

More than a week passed, and we were still laboring beneath the head of the Elephant. Some primary Siouan burials had been studied, but the unsolved mystery was the frequent occurrence of fragments of Woodland pottery in the trenches that uncovered these Siouan bones. There was nothing to do but run a five-foot trench entirely across the little bench and sieve all the earth that came out of it. The net result? Hundreds of Algonkian potsherds; quarts of chips and flakes of flint, quartzite, and chalcedony; clam shells and animal bones; fireplaces and fireplace stones; many notched, shouldered, and barbed arrowheads; and Mike Connors's shovel threw into Ed McCormick's sieve a fine grooved stone ax.

Again we had encountered a superimposition of cultures, but this time Siouan burials thrust

straight into an Algonkian village site. Our trench was carried throughout its length down to bed-rock, two feet and a half at the lower end, six feet at the upper. Village refuse of the Algonkians extended to the very bottom. How long had these Algonkians lived here? Given the local conditions of soil building, we wondered whether any geologist would venture an estimate much under two or three thousand years!

We entered our depression period when we moved over to the Mississippi and started work on the Harpers Ferry terrace. This ancient sandbar of the Mississippi, quite similar to the Prairie du Chien, but smaller, about three-quarters of a mile wide and nearly three miles long, was the location, fifty years ago, of the largest group of Indian mounds ever built on the American continent. When cultivation deprived the mounds of their protective covering of prairie grasses, however, their sandy structure favored their swift obliteration, so that, in 1934, only about twenty mounds could still be located out of the original nine hundred conicals, linears, and effigies. It seemed as if we should try to determine the authorship of these mounds before the Great Group finally disappeared.

It was late July, and we had spent four days of hard work on a single large mound on the

"prairie". A rectangular enclosure of heavy limestone flags had appeared, within them three fragments of human bone, and outside the enclosure a sadly-crushed pottery vessel and a single arrowhead. Though quite satisfactory to Mr. Orr and me, the results of so much digging were not sufficient to keep the spirits of our men from drooping. They wanted to "find something", something real, not just flagstones and potsherds.

Then too the summer's heat had gradually climbed to its maximum. Under the maple trees in Mr. Valley's farm-yard it registered a hundred and five. What it was in the trenches out on the sandy terrace, in the full sunshine, we happily never knew. Reports from the great government locks in construction just two miles across the river to the east, whence came all day the thump-thump of pile-drivers and the chug-chug of donkey engines, did not help very much. "Twelve men 'went down' yesterday", was the report, "and fifteen the day before". I was for suspending operations to await a change of weather, but my men were of a different opinion.

"Watch your men this afternoon, Fred", I advised. The suggestion was superfluous, for Fred Orr always knew how his men were getting along. His emergency kit was always in the trailer too, and he knew how to use it. Toward

three o'clock he noticed that Ed's face was unusually red and Mike's hands trembled slightly.

"Go over to the trees and see how many birds you can count", he commanded. The men stood their shovels against the trench wall and obeyed. In ten minutes they were back again. There had never been anything in their training that suggested rest in the shade during work hours.

"We troid to count thim", said Mike, "but all the burrds we cud see was thorty-wan torkeys and wan auld hin." Their shovels were soon moving in the usual steady rhythm. What a loss it will be to this country when the older generation of Irish shall have disappeared!

Our depression would have been still deeper if we had known then that Ed had laid down his shovel for the last time. That night he received word to report to the University Hospital for treatment of a long-standing ailment. In the morning he was on his way. Next day the operation intended to save his life proved unavailing. Ten days later Mr. Orr and I attended the early-morning services in St. Patrick's and listened with profound regret to the *Dominus Vobiscum* and the final *Requiescat*. Everybody liked Ed.

Two weeks and a half of labor in the burning heat of late July and early August had netted us a few photographs; a considerable number of pot-

sherds and pieces of charcoal; records of flagstone structures, fireplaces and secondary burials; a few implements of flint. Not much space was needed in which to stow it all away, but we believed we had established the Algonkian origin of the Great Group of Indian mounds. As at New Galena, there was no village refuse left by the people who built the mounds. The whole prairie was a place for ceremonies and of monuments devoted only to the dead.

On August 7th we took up work again in the valley of the Upper Iowa, beginning operations on the old Lane Farm terrace, some four miles below the Elephant. This terrace of about sixty acres had figured in American archaeology for over half a century, and from the first, therefore, we were anxious to test out the findings of the Bureau of American Ethnology party that made excavations here in the fall of 1882. The Bureau, organized under the direction of the Smithsonian Institution, published their account in its Fifth Annual Report. In 1934, in order to avoid the payment of excessive damages, we had to postpone work on the Lane terrace until the oats crop was off and the owner had time to decide whether his new field of alfalfa was worth saving.

Fifty years ago a large circular enclosure with an interior ditch stood on the north half of the

Lane terrace, and a mound field of more than a hundred mounds on the south. Apparently these were intact when Colonel Norris and his men started work upon them. Cyrus Thomas, who wrote up the results of Norris's work, thought that two different "tribes" might have lived on the circle area, but that evidence for only one was found on the mound area.

In August and September of the present year, we had almost level fields on which to do our excavating. The circle was barely discernible, and only sixteen mounds could be distinguished at all, some of these only a few inches high. Siouan village refuse was scattered over the entire terrace. Trenches across the circle area showed this to be entirely Siouan. Excavations of six of the mounds revealed Siouan intrusive primary burials, as at New Galena, and beneath these the secondary burials of the Algonkians who built the mounds. A sufficient number of Algonkian artifacts with these original deposits made our conclusions inescapable. These results of ours, just the reverse of those put forward by our predecessors, do not constitute a bit of unkindly criticism. American archaeological criteria were almost unknown a half century ago, and archaeological method had hardly taken its first step. Colonel Norris had not gone deeply enough be-

neath the surface or he had not recognized the markers of the two cultures involved.

Late in August pressure of paper work and other matters called the writer in from the field. Mr. Orr, with the usual force of men except for Ed McCormick, continued the exploration of the Lane Farm terrace. Very appropriately it fell to this pioneer archaeologist of the Oneota Valley to make the season's greatest find. He was directing the excavation of Mound 13, superficially the least promising of all the mounds we had explored. It had an elevation of six inches above the surrounding field. At depths of two and two and a half feet below the natural surface, three secondary burials of bundled bones were encountered. With the first no deposit had been made; with the second was a fine Algonkian pottery vessel, badly crushed, but capable of restoration; beside the third stood two little Woodland pots, delicately decorated, beautiful of form, and as perfect as when they were placed in the ground many centuries ago.

Even steady Mr. Orr, never carried off his feet by any passing event, underlined the word *two* when he reported to me his find. No wonder! Any worker in the field of Algonkian archaeology would consider himself fortunate to recover, after weeks of excavation, all the frag-

ments of a single crushed Woodland vessel. How these two came to remain whole is a good deal of a mystery, for clearly they had for some years been well above the frost line. Without a scratch or damage of any kind, Mr. Orr removed them from the hard earth with which they were surrounded and with which they were filled.

As the days shortened toward the autumnal equinox, it was the writer's privilege to spend two more days with his good men on the Upper Iowa. Retrospect was bound to mingle with the joy of the passing moment. What an enormous amount of honest working power might society have left beside the road during the summer of 1934! How fortunate for the workers and for us, at least, that tools were placed in idle hands! What a beautiful valley this, and how hard it is to leave it! The temperature had dropped during the night almost to the frost-producing level. The valleys of both the Oneota and the Mississippi were filled with fog banks that rolled and shifted and drifted — while the green hills towered above.

CHARLES REUBEN KEYES