Judd Doubts Dates Given

He Suggests That Objects Are Not Older Than 1540

Washington, Dec. 12. Neil Merton Judd, anthropologist and curator of American Archaeology of the United States National Museum, who investigated the site and alleged early Roman-Jewish objects in Arizona, made this statement regarding them:

"I have every confidence in the archaeological ability and judgment of Professor Cummings, but I cannot believe from such data as has come to my attention and from my personal observation at the site of these finds in the Fall of 1924 and the Spring of 1925 that these specimens are as old as the dates appearing on them would seem to indicate.

"I believe that no hoax or fraud is involved.

"I believe the overlying earth and stone (caliche) has been formed since the specimens were placed there, but I am confident that the various objects mentioned are all post-Spanish—that is they date after the Spanish conquest of 1540 A. D.

"So much interest is attached to the discovery and there is such a great possibility of making immature judgment that final decision as to the possible age of these specimens should be held in abeyance until the nature of the overlying caliche deposits has been thoroughly examined by competent geologists."

6. 30 Metal Artifacts, 1200 Years Old Inscribed in Latin, Unearthed Near Tucson – Lead Crosses, Scarred Swords 1200 Years Old, Are Genuine, Declare Local Archaeologists

On the same day that the New York Times released its "Puzzling Relics" scoop, the local newspaper published this report, by-lined by Gilbert Cosulich. Arizona Daily Star, *December 13, 1925.*

Inscribed with Latin, Hebrew

Accidentally Unearthed by C.E. Manier and T.W. Bent

May Change History

Left by Race 700 Years Before Columbus Landed, Belief

Graven in Latin and in Hebrew upon ancient crosses and battered swords, a new chapter of early American History, which some scholars declare will prove that Europeans lived and fought and died in Arizona 700 years before Columbus landed at San Salvador, has just been unearthed near Tucson.

The objects that have been excavated bear dates ranging from 560 A.D. to 900 A.D.

These relics—left in Arizona, according to one theory, by a band of Roman wanderers who drifted across the sea in 775 A.D. have been given the stamp of authenticity not only by some of America's greatest archaeologists, but by Nature, the Inexorable Critic, herself.

For, deeply and firmly imbedded in the gravel and caliche, the artifacts have lain

undisturbed for centuries in the bosom of Mother Earth.

No human hand could have "planted" them there in recent times.

Found by Chance

Upon this fact the many scientists who have inspected the excavations are agreed. Among the scholars who are convinced of the antiquity of the objects that have just been unearthed are Dean Byron Cummings, Dr. A. E. Douglass and Dr. Charles T. Vorhies, of the University of Arizona, and Dr. Clifton J. Sarle, who was for eight years professor of geology at the state university. Their statements appear elsewhere in this issue.

The relics were found at the fifth limekiln on the Silverbell road, about seven miles from the heart of Tucson, near the "Nine Mile Water Hole." The tract of land on which the discoveries were made is the property of Thomas W. Bent of 1234 North Fourth avenue.

The first artifact—a cross—was unearthed by Charles E. Manier, of 948 Penn Place, on September 13, 1924.

The discovery came about by pure chance. Manier and his father were driving along the Silverbell road, and as they passed the limekiln, the elder Manier expressed the desire to inspect it. While they were investigating the landmark, they noticed an odd object protruding about two inches out of the side of the hill. They dug the thing out.

Left by Roman Jews

The first step had been taken in a series of excavations that may necessitate the rewriting of the early history of the western hemisphere.

Since that time, Bent and Manier have exhumed nearly 30 artifacts—crosses, two-edged swords, hand spears and a fan-shaped baton. One explanation of the origin of the relics is that they were left by a band of Roman Jews who came to America, which they called "Calalus," in the latter part of the eighth century. Those who believe that these mysterious settlers were Jews point to the Hebrew influence that can be found among the Aztec and Toltec cultures.

One of the Hebraic scholars who have been consulted with regard to the inscriptions, however, believes that the writings point to a later date.

Another suggestion that has been made is that Spanish explorers and missionaries brought the relics with them, having obtained the objects from the Crusaders, who brought them to Spain from the Holy Land.

In the work of excavation, a number of Tucson scientists and other citizens have assisted. Dr. Sarle has taken a particularly active part. Manier and Bent have expressed their appreciation to Mayor John E. White and other city officials for their interests and cooperation. Thanks were also given by the two discoverers to the Tucson chamber of commerce, particularly Secretary A. H. Condron and Kirke T. Moore, to W. A. Knapp of the Sunset dairy and to Mrs. Lola Richardson for assistance of various kinds.

An Arizona Achievement

Closely associated with Bent and Manier in the work of excavation has been John S. Bent, brother of Thomas Bent.

Local scientists are to carry on the work of establishing the exact place of the newly found

relics in American history. No outside savants will be called in, save at the request of the Tucson archaeologists and geologists who are at work on the problem.

"The whole thing will be an Arizona achievement," Bent and Manier said.

For 14 months the work of excavation has been carried on quietly for Bent, Manier, Dr. Sarle and the other men engaged in the enterprise did not wish to make a premature announcement. They invited the best scientific talent available to check their work and turn the searchlight of critical scholarship upon their discoveries.

Verdict of Science

And here is the verdict of the scientists who were consulted. "I am convinced that the articles found were from undisturbed deposits and bedded so deeply and compactly in caliche that they must have lain there for a long period of time," said Dean Cummings.

"It seems to me impossible that these articles could have been put into the ground in recent years nor do I see any signs of Spanish influence. Their position in the caliche indicates a great age," stated Dr. Douglass.

"I was satisfied from my own observations that the overlying layers of gravel, caliche and soil had not been disturbed by human agencies in recent or historic times, and that they had every appearance of having been laid down by natural processes," stated Dr. Vorhies.

"So far as I was able to judge, there was no evidence of any recent disturbance of the materials revealed by the excavations. It seemed clear that the materials exposed were as they had been laid down by natural forces," said Dr. Frank H. Fowler, professor of classical literature, University of Arizona.

Migration from Rome

Those who have been at work at the excavations have kept a careful log of their activities. Whenever an object has been unearthed, the precise circumstances of its discovery have been set down, and a list of those present given. By this means, complete verification is possible in every instance.

Literal translations of the Latin inscriptions have been made by Dr. Fowler expressly for the *Arizona Daily Star*, and English renderings of some of the Hebrew writings have been prepared by eastern scholars, at the request of Dean Cummings.

An interesting interpretation of the Latin inscriptions has been made by Mrs. Laura Coleman Ostrander, teacher of history in the public schools of Tucson. According to Mrs. Ostrander, the Latin writing tells of a migration from Rome in 775 A.D., the band of emigrants being under the rule of one Theodorus. They were carried over the sea to "Calalus," an unknown land, where they found and conquered native people whom they called "Toltezus." They engaged in a series of wars and were apparently exterminated, according to one reading of the inscriptions.

The Hebrew writings are so fragmentary that it is impossible to weave a narrative from them.

The riddle is not yet solved. The discoverers of the remarkable relics are merely making their preliminary announcement, after 14 months of labor.

The relics have been found. They have been pronounced genuine—by some of America's best archaeologists. But who left them there and what is the story they tell?

7. Soil Untouched Prior to Find, Avers Vorhies

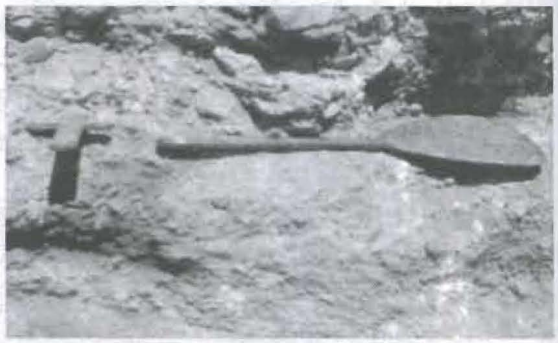
What follows is another part of the local newspaper's coverage at the time of the Tucson Artifacts' "outing" in the national press. Charles T. Vorhies, an entomologist at the University, weighed in on the controversy. Arizona Daily Star, *December 13, 1925, p. 4.*

Human Agencies in Recent Times Never Disturbed Gravel, He Says

The layers of gravel, caliche and soil overlying at least two of the Silver Bell road relics "have not been disturbed by human agencies in recent or historic times."

So declares Dr. Charles T. Vorhies, entomologist at the University of Arizona, who took several photographs of the objects that were being uncovered.

"On April 5, 1925, I was invited by Dr. C. J. Sarle, geologist, to visit certain excavations being made on the Silver Bell road some four or five miles beyond, e.g., northwest of St. Mary's hospital," Dr. Vorhies said. "These excavations, I was informed, were being made by Messrs. Bent and Manier, whom I had not previously met. It was desired that I take photographs of the objects being uncovered. On arriving at the site I was shown the excavation and the two objects, and given free opportunity to examine the objects as then revealed.



The famous "dinosaur sword" (Artifact 12) and a military standard with temples in Jerusalem, Frankish axes, the names Calalus, Britain, Romans and Gaul, along with the date 560 (Artifact 13) were both discovered on the same day, April 4, 1925. The sword was left in situ for this photograph. Arizona Historical Society, The Bent Family Collection, MS 1122 f. 47 (K).

Buried in Caliche

"The objects then showing in the wall of the excavation were two. One appeared to be the hilt of some sort of sword, of which only the hilt and perhaps two inches of the blade were visible. The remainder was firmly imbedded in a stratum of caliche. The other object I can suggest no name for, and can only describe it as a very large paddle- or fan-shaped metal object, having some engraving on its surface. It was completely exposed above, but was lying on a shelf or bed of caliche of the same stratum as that from which the sword hilt protruded. When lifted after photographing, the bed on which it lay had every appearance of being the lower portion of the original matrix.

"Both objects appeared at first sight to be made of copper, but on handling and close

inspection, it could be seen that this appearance was due to a surface layer or discoloration only, the interior as revealed by a few scratches, and by weight, seeming to be of lead or a lead mixture. I remained on the scene while the sword was completely excavated and had both objects in hand for examination.

Photographs Made

"I was satisfied from my own observations that the overlying layers of gravel, caliche, and soil, had not been disturbed by human agencies in recent or historic times and that they had every appearance of having been laid down by natural processes. The caliche layer in which these objects were imbedded was overlain by two other similar layers. There was no appearance of these objects having been placed beneath the ground even at a remote date, by burial.

"I did not personally measure the depth from the original soil surface to the objects themselves, nor see such measurements made, but would estimate it from observations and the photographs about five or six feet. One foot or more of this depth was surface soil, somewhat darker in color, and the remainder was sand, gravel and caliche. The caliche layers were not so hard and well differentiated as caliche strata often are, and while rather readily visible to eye, do not show up in the photographs.

"The following persons previously well known to me were present while the exposures for photographs and the examination of the objects photographed were completed. Dr. C. J. Sarle, geologist. Dr. Frank H. Fowler, professor of classical languages, University of Arizona. Mrs. Frank H. Fowler."

8. Dr. Fowler at Kiln As Relics Are Unearthed

Here we encounter more of the due diligence conducted by the local paper, this time involving the professor of classics hazarding an opinion on dinosaurs. The identification of a "diplodocus" on the swords turned out to be another of Fowler's ill-informed conspiracy theories, like the "fact" that the bad Latin on the artifacts was pitifully cribbed from a handful of books in the University Library. Here is the academic blunder as it happened. No dinosaur whether real or copied from a book has a forked tongue. By this point, a circular reasoning had gripped the experts. Arizona Daily Star, *December 13, 1925.*

No Evidence of Disturbance of Materials, Declares Latin Professor

One of the swords dug up in the lime kiln excavations bears the representation of a "long-necked, long-tailed four-legged animal resembling in a striking way restorations of the diplodocus," according to Dr. Frank Fowler, professor of classical literature at the University of Arizona.

Dr. Fowler was present when the sword was dug out.

"On Sunday, April 5th, 1925, I went to the old lime kiln some six miles northwest of Tucson on the Silverbell road where several articles apparently made of lead have been dug up," Dr. Fowler said.

"Excavation had been carried on in such a way as to leave a vertical face approximately at right angles to the road. This face was about six feet high. An upper layer consisted of about eighteen inches of brown soil. The rest of the face showed a conglomerate of stones, sand, caliche and soil. There were three fairly well marked layers of caliche.

"So far as I was able to judge there was no evidence of any recent disturbance of the materials revealed by the excavations. It seemed clear that the materials exposed were as they had been laid down by natural forces."

"Some eight inches from the bottom of the face resting on a ledge where it was reported that it had been uncovered was an object somewhat resembling a fan with a long handle. This was over two feet long. It lay parallel to the face. A few inches from the end of this projected the hilt of what later proved to be a short sword. The material surrounding this object had, in my judgment, not been disturbed. When dug out, a very distinct mold was left in which the sword had rested. The distinctive mark on the sword was representation of a long necked, long tailed, four-legged animal, resembling in a striking way restorations of the diplodocus."

9. Caliche Shows Age of Relics, Says Douglass

Also polled was the famous tree-rings expert, Andrew Ellicott Douglass (1867-1962). At that time, he had just become Assistant Professor of Physics and Geography at the University of Arizona. He witnessed operations at the find site first-hand. Arizona Daily Star, *December 13, 1925.*

Director of Steward Observatory Present When Artifacts Removed

The position of the Silverbell road relics in the firm caliche "indicates a great age," says Dr. A.E. Douglass, director of the Steward Observatory of the University of Arizona, who has photographed six lead objects unearthed at the excavations.

"I have been very much interested in the recent discoveries near here by Messrs. Bent and Manier, of certain lead alloy crosses and weapons, and have kept in close touch with their excavations since the first discovery in September, 1924," Dr. Douglass said. I have seen six of these lead relics extracted from the firm caliche at depths of from 30 to 60 inches and have photographed each of these in place as they were being uncovered.

"None could have been dug out with the fingers or by a stick, as in ordinary earth."

10. 'Genuine,' Says Dean Cummings of Old Relics

A biography of the Dean of Southwest Arizona was published by Todd Bostwick in 2006, and his early papers are in the collection of the Arizona Historical Society, where the Tucson Artifacts are housed. Cummings' masterwork is perhaps his privately published, and neglected, book The First Inhabitants of Arizona and the Southwest. *The bulk of his papers burnt in a fire at his home after his retirement. His opinion about the Latin inscriptions and archeological context of the artifacts*

was always unswervingly positive. Arizona Daily Star, *December 13, 1925, p. 4.*

Who Left Them and When, University Professor Is Not Ready to Say

"They're genuine!"

So declared Dean Byron Cummings, director of the Arizona state museum and head of the department of archaeology of the University of Arizona, when questioned regarding the relics found by Bent and Manier on the Silverbell road.

Dean Cummings expressed himself as being convinced that the objects found must have lain in the caliche "for a long period of time.

"I have examined the deposits on the Silverbell road west of Tucson," Dean Cummings said recently in a statement to the *Arizona Daily Star*. "I have seen a sword blade removed from the gravel and caliche in which it was bedded five feet three inches below the surface.

"I have translated several of the Latin inscriptions found on the crosses and other swords that had previously been excavated nearby.

"I am convinced that the articles found were taken from undisturbed deposits and bedded so deeply and compactly in caliche that they must have lain there for a long period of time.

"I am convinced that they are genuine; but by whom they were made and how and when they reached Southern Arizona are questions upon which I cannot venture an opinion until I have had more time to study the facts and circumstances of the articles in question."

11. Log of Excavations Kept by Discoverers of Relics

It has been claimed that Bent kept better excavation records than any academic practitioner, even though he was not trained in archeological procedures and had little formal education. All of his papers were bequeathed to the Arizona Historical Society along with the artifacts themselves by his son Thomas W. Bent, Jr. The family stood against anything going to the Arizona State Museum or University of Arizona because of those institutions' indifference and hostility, particularly in the person of Emil J. Haury (died 1992). Arizona Daily Star, *December 13, 1925.*

Realizing the scientific value of minute data and of ample testimony, Thomas W. Bent and Charles E. Manier, discoverers of the Silverbell Road relics, kept a detailed log of their activities during their 14 months of excavation.

In this log not only the various objects are described, but their positions and the witnesses present when their relics were exhumed, are carefully set down.

In this way, future scientists will be able to gage the value of excavations even without visiting the scene of the discoveries.

Several of the leading archeologists not only of the state, but of the nation, were present when a number of the relics were unearthed. These savants have expressed their confidence in the genuineness of the objects found. Their statements are found elsewhere on this page.

First Discovery

From the account given by Bent and Manier we learn that the first cross was discovered by Manier on September 13, 1924, while he was out riding with a party in his car. While passing the lime kiln, which is about six one half miles from the heart of Tucson, on the Bent property, or the fifth kiln on the Silverbell Road, going west, the party stopped, at the suggestion of Manier's father, to investigate the kiln. While doing so, they discovered an odd looking object protruding about two inches out of the side of the hill in which the lime kiln was built. On striking it with a small pick, which he usually carried in his car, Manier noted that it had a metallic sound. His interest was aroused, and he proceeded to excavate the object, and on uncovering it, found it to be a cross of metal about 17 ½ inches long by 13 inches wide. He took the cross with him and on washing it thoroughly, found it be made of lead, silver and copper.

Crack Noticed

A neighbor, D. M. Bruce, of 938 Penn Place, who was present at the time, noticed that the cross had a crack in it. On further investigation, it was discovered that the cross was made in two parts, and had been seated together with a preparation which had the appearance of being a substance similar to beeswax; however, it was not, in fact, beeswax. The two halves of the cross were fastened together with lead rivets, and together, weighed about 90 pounds.

The cross was roughly made, having the appearance of being molded in the rough ground, and on the inner surfaces of the two parts, there was an inscription.

Manier at first thought the inscription Spanish, and called Mrs. A. F. Kinnison, the wife of Professor Kinnison, of the University of Arizona, who lived close by, to look at the inscription, and, if possible, to translate what he thought was Spanish. Mrs. Kinnison, on seeing the inscription, knew that it was in Latin, and Manier immediately took the cross to Professor F. H. Fowler, of the University of Arizona, at the suggestion of Mrs. Kinnison, to have the inscription translated.

The cross was buried in a partly excavated hill and was about 65 inches below the original surface, in a caliche formation. Starting at the surface, the composition of the strata of earth was as follows:

In Virgin Soil

On top, about 30 inches of piled-up loose rock and dirt, and below this, about 29 inches of the original virgin undisturbed soil. The next stratum consisted of about 36 inches of loose caliche, and below this, was a stratum of solid caliche. The cross was found in the loose caliche, well down toward the solid part.

The following day, a party from the University of Arizona conducted some excavation at the same place, finding a piece of flat caliche or plaster about 12 inches across, on which was contained some inscription together with two heads.

This piece was located about two inches below the cross, or about 67 inches below the surface and directly under the cross. It was in the same caliche stratum that the cross was found in.

This excavating party was in charge of Professor Karl Ruppert, of the University of Arizona. C. E. Manier and J.E. Manier were both present at the time the article was exhumed.

The second cross was found by Bent on November 28, 1924, about 28 inches further into the side of the hill from the first one, and west of it. This cross was brought to light under the following circumstances.

Further Excavations

Manier, after discovering the first cross, talked the matter over with Bent, who felt that there must be something else of interest buried at the place where the first cross was found, and convinced Manier that it would be well worth while to excavate further. This was done, with the result that a second cross was found in the same stratum formation of loose caliche, and at the same depth as the first. This cross was dug out by Bent and it was much smaller than the first, weighing only 12 pounds, but in all other respects was the same as the first in shape, and the inscription was written in Latin. The metal composition was different from the first, in that this cross contained only lead and silver.

The tools used in the excavating at this time were a pick and long-handled shovel, the pick being necessary because the caliche was of the well-cemented variety and could not be loosened with the shovel.

In addition to the two men, Mrs. T. W. Bent and Mrs. C. E. Manier were present when this article was exhumed.

Third Cross Found

The third cross, which consisted of only one side, and appeared to have not been completed, was found by Manier, while he and Bent were excavating on November 30, 1924, and was about 24 inches northeast of the first one, in the hill, being at the same level as the first and second crosses, or 58 inches below the surface, and in the same stratum of caliche. This cross was uncompleted and contained very little inscription, weighed 5 ½ pounds, and was 11 ¾ inches in length, with the arm 8 ½ inches across.

The caliche around this cross was well cemented and was removed with a smaller miner's pick.

The fourth cross was found on December 5, 1924, about 92 inches west of the first. This cross was found by one of several Mexican laborers who had been hired by Manier and Bent to do the excavating. It was 58 inches below the original surface and in well-cemented caliche, which was removed through the use of a pick.

The cross was of the same metal as the others found to date, and of the same general shape. The inscription was Roman and in Latin; however, it contained a more complete story than any of the others. This cross weighed 9 ½ pounds, being 11 ½ inches long and 8 ¼ inches wide.

There were present at the time of the discovery C. E. Manier, T. W. Bent and three Mexican laborers.

On January 24, 1925, there were unearthed a fifth and sixth cross at the lime kiln. The larger of the two crosses, which weighed about 30 pounds, was unearthed at shortly after 10

a.m., and the smaller cross weighing about 25 pounds, was unearthed about noon. Both of the crosses were unearthed by Mexican laborers who were doing the excavating.

Crosses Overlooked

Both crosses were found at the same level upon which the first four were found, and about 66 inches below the original level of the earth.

The larger of the two crosses was in a position 152 inches north of the north rim of the limekiln and 98 inches northwest of cross number one.

The smaller cross was 167 inches north of the north rim of the limekiln and 100 inches north and slightly west of cross number one.

The crosses were overlooked in the primary excavating, because on reaching a level of about 58 inches a cemented caliche stratum was encountered, and it was thought that nothing would be found below this. However, on January 24, 1925, Professor Ruppert, of the University of Arizona, suggested that the excavation be carried below the level of 58 inches, to determine positively whether or not any articles had been buried at a greater depth. It was while excavating at the deeper level, or 8 inches lower than the primary excavation, that the two crosses were found. The cemented caliche below the primary level was very hard and difficult to excavate, and it was necessary that it be loosened with picks.

The larger cross was found under this well-cemented stratum, in what appeared to be a pocket of caliche and loose sand that was not so well cemented.

The smaller cross was excavated from the solid-cemented caliche.

Both of the crosses were picked up by the Mexican laborers in their excitement, so the soil or caliche immediately surrounding them was disturbed before photographs could be taken. However, the ground above both articles was of a well-cemented caliche formation.

Made in Pairs

The crosses were made in pairs and fastened faces together with lead rivets, and between, was found a wax preparation for preserving the inscriptions on the inner faces. There was little writing on these crosses, but they contained several pictures of heads, crowns, battle axes and hieroglyphics.

The members of the excavating party were Professor Ruppert, Manier, Bent and four Mexican laborers. All of these were present when both crosses were unearthed, and Eli Abegg, a Mormon elder from Fort Lowell, was also present at the time of the excavation of the smaller cross.

The metal appeared to be the same as contained in all of the other crosses found, and was for the most part lead.

On Friday, February 13, 1925, a Roman sword was unearthed by C. E. Manier. This sword was made of the same material as the crosses, except that it had been tempered, the edge being perfectly straight and true. This sword was about six inches below the depth at which the other articles were found, or 64 inches below the surface, and 48 inches northwest of number one.

There were present Mr. and Mrs. Manier when this article was unearthed. The sword was found in well-cemented caliche, on the edge of an excavation which was continued four feet

below the original excavation.

The sword was 17 5/8 inches long, the blade being 13 ¼ inches long, and it weighed 1¾ pounds.

A spear, or javelin, 18 inches long, and weighing 1½ pounds, was unearthed on March 4, 1925, by Bent, at the same level at which the other articles had been found. This javelin was almost directly east of the first cross and the limekiln.

Spear Unearthed

When first discovered, it appeared to be a piece of pipe protruding from the loose broken-down earth. At this time only about two inches protruded; however, the loose broken–down dirt was cleared away, exposing about eight inches of the handle, which seemed loose. The handle was loose because there was a crack at the beginning of the blade. The blade was solidly imbedded in caliche that was well-cemented.

Dr. A. E. Douglass with the aid of Bent, removed the caliche from above the article with a heavy bladed pocket knife. The caliche was very hard and it required considerable chopping before the entire upper side was completely exposed.

Pictures were taken prior to excavation, and as the work of completely excavating was in progress. The pictures were taken by John S. Bent, Thos. W. Bent and Dr. Douglass.

There were present at the time of the excavating, Dr. C. J. Sarle, Dr. Douglass, John S. Bent, Chas. E. Manier, Thos. W. Bent and Prof. Thomas S. Lovering, of the University of Arizona.

Partially unearthed by John S. Bent, at a level of 59 inches, in solid, well-cemented caliche. This spear was made of the same material as all the other relics, and had a solid handle.

The spear was fully uncovered but not moved from its original mold until after pictures were taken by Dr. Douglass, John S. Bent, Thomas W. Bent and Dr. Sarle. Pictures were taken of the mold also.

This spear, prior to its being removed entirely, was seen by Dr. Douglass, Prof. Sarle, J. W. Daly, Charles E. Manier, John S. Bent, Thos. W. Bent and two Mexican laborers.

Sword Discovered

Next was found a sword 18 inches long and weighing 2 ¾ pounds, made of the same material as the other articles found. This relic was first discovered and partially unearthed by one of the Mexican laborers employed in the excavating. It was 60 inches below the surface in the fourth layer of caliche. It was found at 10:26 a. m., March 28, 1925, and was 32 feet north of the first cross pointing north and south.

At the time the sword was first partially unearthed, there were present Chas. E. Manier and John S. Bent. However, shortly after the discovery Dr. Douglass drove up in company with R. W. Brady and Mr. and Mrs. McMath.

The sword was seen in place by Dr. Sarle and Thomas W. Bent at 4:30, when both of them took pictures of it.

The caliche at the depth of the find was very solidly cemented and at the time of discovery by the Mexican, he was using a pick to loosen it.

Pictures were taken of the mold from which the sword was taken.

Fan-Shaped Relic

A sword and a fan-shaped relic—lead alloy sword and monstrance, or baton—were discovered at 10 a. m. Sunday, April 5, 1925, by Chas. E. Manier and John S. Bent, while excavating. They were using the undercutting method that has been followed in practically all of the excavating done, and they had broken down the wall to a depth of four inches when Bent discovered the fan-shaped relic. This had been torn out of the wall, perhaps by the pick used, and was not discovered at first, due to the loose dirt covering it.

After the dirt was cleared away, what appeared to be a sword hilt was also discovered. It was solidly embedded in the well-cemented caliche and entirely surrounded by this formation. A distance of less than six inches separated these two articles from each other, and both were at a depth of 62 inches from the original surface.

The soil immediately surrounding the articles was cleared away so that pictures could be taken. However, they were not moved until 1:30 p.m. The articles were entirely excavated by Dr. Sarle and Thos. W. Bent. In excavating the sword, it was necessary that Dr. Sarle use considerable force, in order to loosen the caliche from around it. The tools used were a small miner's pick and a heavy screwdriver.

The sword was the same type as the other swords found—that is, the Roman type. However, it was slightly heavier, weighing 2 ¾ pounds. The length of the sword was 17 ½ inches, the blade being 13 ¾ inches long.

Dragons On Hilt

On one side of the hilt was the crown and top (what appear to be) centipedes or small dragons. On the opposite side are the map and two more "centipedes" and dragons.

On the blade of this sword there is a perfectly drawn prehistoric monster—something which has not appeared on any of the other articles. The material from which the sword was made is the same as contained in all the other relics of metal.

The fan-shaped article, which has been called a monstrance, and also a baton, was almost wholly excavated, and it was only necessary to clear away some loose dirt to fully excavate. The length of it was 23 inches, the handle being 12 ½ inches long and the object itself, 10 ½ inches long by 9 inches wide. It weighed 5 ¼ pounds and was made of the same material as the sword. The relic contained many inscribed figures and two dates—560 A. D. and 705 A. D.

This is, perhaps, one of the most valuable, if not the most valuable, of the entire collection.

Dr Sarle arrived a very short time after the discovery. He had come out to the location for the purpose of taking pictures of the surrounding country.

At the time the articles were finally taken from the ground, there were present Thos. W. Bent, John S. Bent, Charles E. Manier, Dr. Sarle, Dr. C. T. Vorhies, Dr. Fowler and Mrs. Fowler, J.P. Lynott, Miss Leavitt and J. W. Daly.

Dr. Neal Judd Present

The articles prior to complete excavation, were seen by Dr. A. C. Wright and Mrs. Wright and Mr. and Mrs. W. A. Knapp.

Pictures were taken by Dr. Sarle and Vorhies, Thos. W. Bent, John S. Bent and Lynott. All of these pictures are part of the records of the data covering the relics found.

On May 26, 1925, at 10:02 a. m., Manier discovered a point protruding from the south wall of excavation, about 58 inches from the top at the same general level at which the other relics were found. At this place there is 16 inches of loose topsoil, and then the caliche formation, which increases in density at increased depths. The spear point was protruding from a particularly well-formed section of caliche, which was very dense and well cemented.

As Dr. Neal Judd, Archaeologist of the Smithsonian Institute, was expected in Tucson on May 27, it was decided to not exhume this article until he could be present. The article in place, as originally discovered, was seen by Dr. Sarle, Dr. Douglass, J. S. Bent, C. E. Manier, Thomas W. Bent, Mrs. Ostrander and two Mexican laborers. Pictures of it were taken by Dr. Douglass and Thomas W. Bent.

On May 27, about 10:30 a. m., Dr. Judd and Dr. Douglass arrived at the excavation, and at that time there were present Dr. Sarle, John S. Bent and C. E. Manier. Soon after this, or at about 10:45, Thomas W. Bent arrived at the excavation.

Pictures Taken

Panoramic pictures were taken by Dr. Sarle prior to exhuming the object. Dr. Douglass and J. S. Bent also took several pictures before the article was fully removed and during the process of exhumation.

Dr. Judd carried on the exhumation, and on its completion a spearhead was uncovered, which had been broken off at the hill. It was 7 ¼ inches long and 2 inches wide.

It weighed 10 ounces. A small miner's pick was used by Dr. Judd in exhuming it, since the caliche was well-cemented and necessitated the aid of a strong tool.

The article had all the appearance of having been used in combat, since it contained marks that had the appearance of having been made though being struck with another weapon, as in fencing.

It was the opinion of most of those present that this article had been used in actual warfare.

On May 26, 1925, while Dr. Douglass, Dr. Sarle, John S. Bent and Thomas W. Bent were examining the wall face in which the spearhead was found, one of the Mexican laborers discovered something protruding from the east face of the excavation, or the wall parallel with the Silverbell Road, and called Manier's attention to it, since Manier was closest to him at that time. Manier, in turn, called all of those present, and on close examination, it was determined that the object protruding from the wall was the broken blade of a sword.

Short Sword Blade

This article was 42 inches from the original top surface. The topsoil was a stratum of 17 inches, and below this, the caliche stratification commenced and continued on down. The article was in a caliche layer that, due to leaching, was not very well cemented; however, a fairly well-cemented caliche completely surrounded the article.

The article was not removed on May 26, 1925, but was exhumed May 27, 1925, by Dr. Judd, at the request of Thomas W. Bent and C. E. Manier.

When the article was completely uncovered it proved to be the forepart of a short sword blade and was 8 ½ inches in length and 2 inches wide, weighing 16 ounces. This part of the sword blade has been used in combat, as had the spear point exhumed just before it. The broken piece of blade was scaled all over, where it had been struck many times with another blade, as in fencing. The edge was deeply nicked in several places.

Pictures were taken by J. S. Bent, Dr. Judd and Dr. Douglass during the process of the unearthing of this article. There were present at the time of the unearthing: Dr. Sarle, Dr. Judd, Dr. Douglass, Thomas W. Bent, Charles E. Manier, John S. Bent and a Mexican laborer.

On July 10, 1925, a sword handle was found by C. E. Manier where it had been thrown out on the pile of loose dirt during a previous period of excavation. Its location in the pile of dirt was 22 ½ feet northeast from the kiln and 20 feet north of the cross first discovered.

Snake Entwined Cross

A sword tip or point 3 ¼ inches long by 2 ¼ inches wide was found August 27, 1925, at 3:30 p.m., by Corella. It was at a depth of 6 feet in a well cemented caliche stratum and 25 7 to 12 feet from the first cross and 25 ½ feet from the kiln(northwest).

Present at the time of this find were C. E. Manier, John S. Bent and three Mexican laborers.

A cross 17 ¾ inches high with arm 8 ¾ inches wide and 3/8 inch thick was found August 29, 1925, at 10:15 a. m. A snake was entwined around this cross.

It was located six feet below the surface in solidly cemented caliche, having been exhumed with a pick. It was found 22 ½ feet northwest from the kiln, and 26 feet from the first cross. It was first unearthed by Antonio Corella, a Mexican laborer.

There were present at the time of the find three Mexican laborers, C. E. Manier, W. A. Knapp, Proprietor of the Sunset Dairy; his son and two of his workmen. Dr. Sarle and J. A. Poindexter arrived about five minutes after the find.

Kirke T. Moore, Al Condron, J. S. Bent, T. W. Bent and Mrs. L. C. Ostrander were all present within a short time after the find.

Hebrew script appeared on the cross.

Cross and Crescent

On August 30, 1925, while a party consisting of J. S. Bent, T. W. Bent and Dr. Sarle were conducting the excavating with the aid of two Indian laborers, there was found a spear 22 ½ inches long, the blade being 2 1/2 inches wide at the broadest point and the handle 1 inch wide. The piece was first discovered by T. W. Bent and was at a point six feet below the top of the earth in what had been well cemented caliche, but had been dislodged by the workmen.

It was located 16 feet northwest of the kiln and 20 9 to 12 feet west from the first cross.

A combination cross and crescent was found on September 1, 1925 at about 9:40 a. m. It was 21 ¼ inches long and was sealed under 6 feet of earth in a layer of solidly cemented caliche and was taken out with a pick. The location of this find was 26 feet northwest of the kiln and 30 feet west from the first cross.

A Mexican laborer first discovered this place. His name was L. A. Burquez.

There were present at the time of the find and during the excavation of this piece: John Bent, Charles E. Manier, J. A. Poindexter, Dr. Sarle, W. F. Richardson of the county highway department, and three Mexican laborers. Directly over the piece there was a large limestone boulder, which would weigh in the neighborhood of 150 pounds and which had by its weight caused the piece to be slightly bent.

The relic contained Hebrew characters.

Handle Found

On September 2, 1925, at 11:00 a. m., there was found a handle 7 inches in length, 5/8 inch wide and ¼ inch thick. It was located at the depth of six feet in solidly cemented caliche and was removed with a small trench pick. It was 30 feet northwest of the kiln and 33 ½ feet west of the first cross. This piece was first located by L. A. Burquez, a Mexican laborer, but was not removed immediately on discovery. Pictures were taken of the piece in place before removal by Dr. Sarle and C. E. Manier.

The piece was entirely exhumed at about noon the next day. Those present at that time were Thomas W. Bent, Dr. Sarle, J. A. Poindexter, Mrs. Ostrander and John S. Bent.

Those present the day before at the time of the original discovery were three Mexican laborers and Dr. Sarle, C. E. Manier and J. A. Poindexter.

A spearhead was found on September 2, 1925, at 1:50 p.m. It was about 5 ¾ inches in length. It was located 29 ½ feet northwest of the kiln and 33 9/12 feet from the first cross. It had been thrown out by one of the laborers while the excavation was in progress, being found later by another laborer. There were present at the time of the find C. E. Manier, John S. Bent, Kirke Moore, L. C. James, Al Condron, secretary of the Tucson chamber of commerce Leighton Kramer, Dr. Sarle and three Mexican laborers.

A sword blade 11 inches long and 2 ¼ inches wide was found September 18, 1925, at 9:45 a. m. It was at a depth of 5 feet 3 inches and 276 feet from the kiln in a northerly direction. It was first discovered in a place by one of the Mexican laborers there being about 1½ inches protruding from the face of the excavation. It was not excavated when found, but witnesses were first summoned and photographs taken of the article while still in place. Photographs were also taken as the excavation progressed.

Cave-In

The sword blade was uncovered by Dr. Sarle and T. W. Bent, and it was necessary to use a miner's hammer and a trench pick to loose the solid cemented caliche in which the article was imbedded. There were present at the time of excavation Dean Byron Cummings of the University of Arizona; Dr. Douglass and Mrs. Douglass, Dr. and Mrs. Sarle, Mrs. Ostrander, Mr. and Mrs. T. W. Bent.

A sword was taken out in three pieces on November 6, 1925, one of the breaks being an old one and the other the result of having been struck with a pick in excavating. This article was found by Placido Ochoa, a Mexican laborer, of 353 South Meyer Street, and was entirely excavated at the time of discovery, as a result of the overhead having caved in.

The find was made at 11:12 a. m., and was located 6 feet 6 inches below the surface, in

solid cemented caliche. It was 39 feet north from the kiln, and 52 feet west from the fence. Its length was 17 inches and its point was broken off and missing.

A tip of a spear 1 15/16 inches long was found on November 6, 1925, at 11:45 a. m., by Ricardo Balancuela, of South Meyer Street, a Mexican laborer. The piece was found in some caliche that had been loosened by him and was being removed on his shovel.

It was approximately 6 feet deep and 30 feet northwest of the lime kiln, and 50 ½ feet from the fence. Present at the time were five Mexican laborers and C. E. Manier.

A sword was found by a Mexican laborer, at a depth of 6 feet, in the solid cemented caliche strata on November 7, 1925, at about 11:00 a. m. He was excavating on the front face and removed the piece on his own initiative and as a result, no data was available except as to location.

There were present at the time C. E. Manier and four Mexican laborers. The length of the sword was 18 inches.

A small spear point was found by J. S. Bent on November 13, 1925, while he was examining the face of the excavation. It was 6 feet deep, in a well cemented caliche and 14 ½ feet northwest of the kiln.

Present at the time were G. H. Bent and J. S. Bent.

The length of the spear point was 1 5/8 inches.

12. Leaden Relics May Mean New Chapter of History

This associated story appeared at the same time as the previous report and was based on interviews with Clifton J. Sarle and Laura Coleman Ostrander, trusted collaborators with Manier and Benton. Sarle and Ostrander later got on the wrong side of University officials and the self-appointed legal expert, the obnoxious George M.B. Hawley. Arizona Daily Star, *December 13, 1925.*

Roman Jews in "Terra Calalus," America, from 775 A. D. to 900
An Announcement of the Discovery of Leaden Artifacts Bearing Inscriptions in Latin and Hebrew
Now Being Unearthed Near Tucson, Arizona.

Leaden artifacts of great antiquity have been unearthed near Tucson, Arizona, during the past year. All of the objects bear significant drawings, a number of them inscriptions in Latin and two in both Hebrew and Latin. Many dates also are given. The story revealed opens a new chapter in the pre-Columbian history of America. It is a record of colonization in America by Europeans in 775 A.D., and a brief chronicle of their life here, covering a period of 125 years.

To many, on first consideration, the claim that the Atlantic was crossed and America colonized by Mediterranean people, 717 years before the coming of Columbus, will seem preposterous. But to others, however startling this discovery may seem, it will appear quite in line with the volume of evidence gleaned in recent years in various fields of investigation, which

points convincingly to Old and New World maritime inter communication back even into the centuries B.C.

Cross Found Near Tucson

A chance find by Mr. Charles E. Manier of a pair of large leaden crosses protruding from a gravel stratum near the base of a low-lying bluff which flanks the westerly side of the floodplain of the Santa Cruz River for several miles below Tucson, was the beginning of this most important discovery. The Silverbell Highway follows approximately the boundary line between this bluff and the floodplain, and one traveling this road passes a number of old lime kilns long abandoned, which were built into the face of this bluff. On September 13, 1924, Mr. Manier, accompanied by his father, who was visiting him from California, was returning along this road from an auto ride, when at the suggestion of the latter, they stopped to examine one of these kilns. This kiln, like the others, was constructed by digging a large well-like pit in the edge of the bluff, which was then lined with adobe blocks and faced with brick. A trench was then excavated leading inward to the base of the kiln where through an orifice the lime, when burnt, was removed. Rain-wash of many seasons had exposed the ends of these crosses in one side of the cut and led to Mr. Manier's fortunate discovery.

Inscriptions Discovered

When discovered these crosses were fastened together in such a manner as to appear as one, and it was only while washing the dirt from them after carrying them to his home in Tucson, and a neighbor had called his attention to an apparent line of division running around the sides of the cross, that they were separated. It was then found that they had been fastened together by leaden pegs. The opposed faces were smoothly finished and coated with a wax-like substance, the removal of which revealed printed inscriptions in Latin drawings and dates. The dates and facts, set forth by translation, aroused Mr. Manier's keenest interest, and he determined to excavate in hopes of finding other material which might add to these astonishing statements and prove or disprove the antiquity indicated by the dates. A few weeks later he joined forces with Mr. Thomas W. Bent and the work was begun. Later, these gentlemen invited C.J. Sarle, until recently and for eight years professor of geology at the University of Arizona, Tucson, to advise them as to the best method of conducting the excavation and to make a study of the field relations of their find, including, if possible, a stratigraphic correlation with the prehistoric aboriginal culture of the region, to which he has given some study. Shortly thereafter, at Dr. Sarle's suggestion, Mrs. Laura Coleman Ostrander, a teacher of history in the Tucson public schools, was invited to collaborate with him in the preparation of both popular and technical articles on their discovery. This article, therefore, should be regarded merely as an announcement.

Excavation Carried Forward

Excavation thenceforward was conducted in such a manner as to maintain at all times as nearly as possible a vertical face from top to bottom in the soil and to a depth a little below the level at which it had been determined the objects occur. In this way objects encountered as excavation progressed would be free from falling earth and most likely to be immediately

sighted, lessening the chance of injury by the workmen. This method also provided for the examination of many of the objects while still imbedded in the soil, and the study of the uninterrupted full five or six feet of overlying soil, the taking of measurements, photographing and the calling of competent and well authenticated witnesses as to the conditions under which the objects were found.

Intermittently as funds have been available, the excavation has been carried on. Today the excavation is roughly triangular in outline. The base of the triangle, 80 feet long, begins at the side of the highway and its apex extends the same distance back into the gravel bluff, well past the limekiln. An old land surface gradually rising towards the back of the excavation, and on which these objects were strewn as they fell from the hands of man over one thousand years ago, has been uncovered. The finds include several other crosses, a paddle-shaped object (ceremonial) and a number of heavy two-edged swords and short hand spears. A number of the weapons are heavily scared and a few are broken as though done in combat, and the general disposition of these finds portrays the confusion of a pitched battle. How much additional material will be found as exploration uncovers more of this old land surface cannot be told. Perhaps we may find the ashes of their fires or the place where they smelted the ore for the lead of their crosses.

Indian Relics Unearthed

It seems not improbable that the long valley of the Santa Cruz River, stretching northwesterly from the Mexican border, may have afforded a comparatively easy pathway, which, together with other advantages, such as aboriginal settlements, directed their footsteps this way. The place where their record has been unearthed may have been chosen by them because of the presence of a spring. Although no spring occurs here today, it was formerly a watering place and is still today known as the "Nine Mile Water Hole." This also may have been the reason that the old lime kiln was built at this particular point in the early eighties. Fifty yards from the excavation are to be seen the remnants of an old adobe building said to have been a caravansary. Great quantities of broken Indian pottery, much of it ornamented with brilliant and artistic painted designs, stone knives and other artifacts of an old pre-Columbian aboriginal culture extend for a considerable distance either way on the far side of the water hole. Flaked arrow points of the type used by the Apaches and other tribes who later roamed the region are frequently found.

Imbedded in Caliche

The surface on which these finds were made was buried from three and a half to six feet in depth, increasing gradually as excavation penetrated the bluff. The objects themselves are generally found firmly imbedded in a lime-cemented gravel, often so resistant that objects have to be removed with a pick. The material overlying in general is coarse, angular and poorly assorted and showing very indistinct stratification. Many water-worn limestone boulders, often too large for a man to lift, lie in a plane just above the relics. This seems a well-defined feature, which may be traced for some distance, showing in the sides of the dry flaring washes, which deeply dissect a plain bounded at its lower edge by the bluff, through which the flood waters

from the flanks of the Tucson Mountains are discharged to the channel of the Santa Cruz. At the top of the section is a well-defined darker stratum often fifteen inches or more thick, a true soil, in which scant vegetation of the dry slopes finds root. Immediately below the soil and formed by evaporation of lime-charged ground water, is a thick zone solidly cemented by deposition of lime by the Mexican name, "caliche," by geologists as desert limestone. In fact, cementation of the sub-soil is the rule and has greatly retarded the work of excavation.

Unbroken Ground

The depth at which these objects are buried, the firm cementation of the gravel stratum in which they occur, the unbroken and undisturbed condition of the caliche shell and overlying soil, form a seal that nature has placed upon these artifacts, not to be counterfeited, and has remained unbroken through the centuries which the dates incised upon these cruciform tablets by the old scribe, who signed himself "O.L.," indicate. The covering of these objects was brought about by rain and stream action bearing the material from higher to lower ground under the impelling force of gravity. Subsequent to the burial of these objects, torrential rains have done much to modify these slopes and have carved them into many minor reliefs.

An episode in the history of the region, possibly later, perhaps antecedent and surviving for several centuries after the passing of these Roman Jews, was the coming of a race of people who left the litter of broken pottery near the water hole. Certainly at this particular locality the aborigines came much later. Fragments of their pottery have been found upon the recent surface scattered in the last formed stratum, the soil even covering the top of the bluff. The underlying strata, the lowest of which concerns us as bearing the artifacts, may in their arrangement and order of formation be compared to the layers of a cake. The bottom layer is laid down first and the top last and the frosting (or soil) added last of all. This pottery is in the main of the type designated by archaeologists from the paints used in the ornamentation, 'red-on-gray,' and there is also some of a later type found here, designated 'black-on-white." These potteries will be recognized by all archaeologists as pre-Columbian and lying as they do as a stratigraphically high horizon, and overlapping this site, is another proof of the greater antiquity of the leaden artifacts.

Could Not Be Forged

The great antiquity of these leaden objects, as shown by the dates, and the unique combination of details, the outgrowth of the peculiar conditions obtaining in the western Old World during the early Middle Ages, in the aboriginal setting of America, could not well be forged or duplicated, and the field relations, which have been carefully studied, confirm the genuineness of the record carried by these artifacts from the excavation as beyond the shadow shadow of a doubt. Furthermore, competent witnesses have been taken to the excavation and shown the artifacts, many of them numbered among the scientific faculty of the University of Arizona, and they have uniformly expressed themselves as convinced of the genuineness of Mr. Manier's discovery.

13. Arizona University Will Study 'Relics'

The next day after its explosive report on "Puzzling Relics," the New York Times published a follow-up story. While Byron Cummings went on record as supporting the authenticity of the "relics," officials at the University of Arizona began to waffle. They would eventually denounce the Tucson Artifacts as forgeries, although no forger was ever identified. Homer LeRoy Shantz (1928-1936), who replaced Cummings as president on June 30, 1928, was suspected of knuckling to pressure from certain members of the Board of Trustees in rejecting the artifacts (Covey, pp. 113-32). This was also a time rife with white supremacist ideology in universities and widespread anti-Semitic activism. The dilemma of Arizona's powerful mining monopoly can well be imagined—how could mines be private property and archeological sites at the same time? And must they now add Jews to Indians as obstacles in the way of exploitation of mineral resources? New York Times, *December 14, 1925.*

Authorities There Hold an Open Mind on Authenticity of "Roman-Jewish" Objects. Dean Cummings Impressed. He Questions Whether Articles Could Have Been "Planted," as Lime Rock Enclosed Them

Tucson, Ariz., Dec. 13. The prevailing opinion in university circles and among other well-informed persons here is that the discovery of leaden crosses, swords and other articles bearing Latin and Hebraic inscriptions in the Santa Cruz Valley, seven miles from this city, if not a complete hoax, indicates nothing more than that the relics were left by Spanish explorers and missionaries in Arizona in the sixteenth century or later.

Except for a small group, no one believes the story that the articles were left by Europeans who preceded Columbus to America by seven centuries. The theory that an expedition of Roman Jews came to America in the eighth century, and left these relics as a history of their settlement here, is generally regarded as a fantastic and absurd dream, with little scientific or logical support.

Dr. C. H. Marvin, President of the University of Arizona, said today that the university does not sponsor the story sent out from here by the discoverers to the effect that the relics indicate Roman Jews came to Arizona in 775 A. D., and remained here until 900 A. D.

"The university does not stand sponsor for the story as presented," said Dr. Marvin. "Our attitude is that we are going to work on the problem to prove or disprove it. I think most of the people interested in this are keeping an open mind until we receive further substantiating evidence."

Until now University of Arizona Professors of Archaeology and Latin have been working on the discoveries as individuals, but the university has not officially taken up the investigation. It probably will do so after the first of January from both the archaeological and geological viewpoints.

To Determine Rock Bed Age

The crux of the problem appears to lie in the geological age of the formation in which the articles have been found. University geologists will endeavor to determine whether the articles were "planted" in the limestone here within recent years, or, if the discoveries are genuine, the approximate century in which they were left there.

So far, the only geological investigation has been made by Dr. Clifton J. Sarle, a Yale graduate, who was Professor of Geology at the University of Arizona, for eight years, but ended his connection with the university three years ago. It was felt that he was not well equipped for teaching, although regarded as an excellent field geologist. Dr. Sarle is now employed as an expert by mining companies in Arizona.

Dr. Sarle is the only scientific man here who supports the theory of a pre-Columbus expedition to America by Roman Jews. He is joined in this conclusion by Mrs. Laura Coleman Ostrander, who is described by the discoverers as "historian of Tucson," but who is merely a history teacher in the Tucson public schools.

The discoverers themselves are not scientists or authorities. They are Charles E. Manier and Thomas W. Bent, ex-service men who contracted tuberculosis in the war and came out here five years ago as totally disabled veterans.

No one here accuses Messrs. Manier and Bent, Dr. Sarle or Mrs. Ostrander of any deliberate attempt to deceive the public regarding the discoveries. It is quite widely felt, however, that they have been misled by over-zeal [sic] into making claims that the evidence now at hand and the known facts about American history fail to support.

'Open Mind' Succeeds Doubt

When the first discovery was made fourteen months ago those who knew about it were inclined, from natural skepticism and from the nature of the Latin inscriptions, to regard the whole thing as a fake. This view has been supplanted in recent months by the "open mind" attitude mentioned by Dr. Marvin. The change has been caused by statements of Dr. Byron Cummings, Dean of the Archaeological Department of the University and Director of the State Museum connected with the university, that the relics are genuine and of great antiquity.

Dean Cummings, however, has been careful not to commit himself to the Roman-Jewish expedition theory, which he does not regard as plausible without further substantiation. He admits that he is puzzled to explain who made the articles, and how and when they reached Southern Arizona. Despite the statements by Dr. Cummings and other university professors that the articles are genuine, however, the opinion persists in educational circles here that there is a strong possibility of the whole thing being a hoax. Dr. Cummings was told this afternoon of the statement made by F. W. Hodge of the Museum of the American Indian, Heye Foundation, that similar finds at Coronado had been proved fakes and that he suspected the Tucson discoveries to be of the same sort; by Dr. Bashford, Dean of the Metropolitan Museum of Art, that he believed the relics to be crude forgeries, and by N. M. Judd of the Smithsonian Institution, who questioned the authenticity of the eighth century date and said he believed the relics, if genuine, were subsequent to 1540 A. D. Mr. Judd has visited the scene of the

discoveries and excavated two of the articles himself. Dr. Bashford [sic] and Mr. Hodge have not been here.

"I don't see how they can be fakes," said Dean Cummings. "Any one who says they are can not have investigated. I saw only one of the articles uncovered, but Dr. A.E. Douglass, Director of the Steward Observatory at the university, and Dr. Frank Fowler, Professor of Classical Literature, have seen several of them taken out. They agree with me that the objects are not fakes and were not 'planted' there, but are of great antiquity. We realize that there will be a great deal of ridicule of these discoveries, but it will not do people any good to ridicule them until they can give us some explanation of how these articles came to be where they were. If they are fakes, where did they come from and who would go to the trouble of depositing them five or six feet below the surface of the earth? What could the motive have been? How could anyone profit by such a hoax?"

Dean Cummings Impressed

Dean Cummings said he had asked permission to read a paper on the discoveries before the section on anthropology at the Kansas City meeting of the American Association for the Advancement of Science from Dec. 30 to Jan. 2nd. He hoped Mr. Hodge would be present and that there would be a full discussion of the genuineness and significance of the relics, with an opportunity to hear and answer scientific criticism of the discoveries.

"The article I saw removed," Dr. Cummings went on, "was a sword blade which had been buried five feet three inches below the surface and had been imbedded in gravel and caliche. Caliche is a term for the formation resulting from lime leeching out of the soil and the lime rock in many places here. It forms beds from a few inches to several feet thick. Out there where the discoveries were made caliche is prominent at the bottom of the stratum in which the articles were found, and above a stratum of sand beds.

"Caliche had formed all around these articles and had hardened around them so that they had to be dug out with a sharp pick or loosened by dynamite. Above the articles was lime rock, which had lain there so long that the feldspar had leached out in little seams in the lime rock, allowing the crystalized lime rock to break into pieces. It takes a long time for it to leech out like this and I am convinced that the articles found were taken from undisturbed deposits and were bedded so deeply and firmly in the caliche that they must have lain there for a long period of time.

"My statement that I feel confident the articles are genuine is based on the conditions under which they were found. I know absolutely that they were not 'planted' there, because 'planted' articles would not be imbedded in such a mass of caliche and because the material lying there had plainly been undisturbed until the excavations were made."

Other Scientists Disagree

Other scientists disagree with Dean Cummings regarding the deductions to be drawn from the hardening of the caliche around the relics. The university geologists, it is understood, will try to find out whether under certain conditions the caliche would not harden around articles "planted" there, and become so much like the caliche in its original state that it would be

almost impossible to tell whether it had been removed and replaced.

Dean Gordon M. Butler of the College of Mines and Engineering and Professor G. E. P. Smith will conduct the geological investigation for the university.

"It is strange, of course, that articles of this kind should have been found where these were found," Dean Cummings continued. "They are of a type different from anything else that we know of having been manufactured in this part of the country at any period. The metal of which they were made is somewhat puzzling. Two assays have been made. One shows lead and antimony only. The other shows lead, antimony, tin and a little gold, a little silver and a little copper."

Dean Cummings said he had sent "rubbings" of the Hebraic inscriptions on the relics to Dr. Harold H. Bender, Professor of Indo European Languages at Princeton University, and that Dr. Bender had written to Dr. Bashford Dean regarding the metal of which the articles were made, asking whether the Metropolitan Museum contained any medieval articles of the same or similar constituency.

"So far as I know, no weapons were made chiefly of lead as early as the eighth century. One of the things on which further inquiry is needed is whether there was any place in Europe where articles of lead alloy were made at such an early period. Bronze was the chief material used in making weapons at that time, and it seems strange that there should be such a preponderance of lead in these articles if they really were eighth to tenth century products.

"Other materials found in the articles were not in use for such articles at that period. Tin and copper go into making bronze, of course, but gold and silver in such articles are not common. It looks very much as if these articles, because of the metals they show, were made from materials melted out of ore. Considering the ore found in this locality, I am inclined to believe they were manufactured here.

Local Manufacture Suspected

Another argument advanced to support the theory that the articles were made here is that little pieces of stone and sand found imbedded in the back of some of the objects are typical of Arizona formations. Included were two pieces of sulphate ore which had been oxidized by exposure.

Dean Cummings said he had translated the Latin inscriptions on the crosses and weapons excavated, and had found them carved in a capital letter script used by Latin scholars up to the eighth century, but not subsequently.

It is pointed out, however, that it would have been easy for any one to copy the style of writing. Those who believe the thing is a hoax say the Latin is very poor; that it was a very poor Latin scholar, if it was a Latin scholar, who wrote it; that translations of certain words cannot be found at all, and that certain statements do not jibe with the age in which they are supposed to have been written.

"I grant you that is a puzzle," Dean Cummings went on. "I do not feel ready yet to give any final opinion. I simply say: 'Here are the facts. They show Roman influence and Jewish influence.' How you get that combination over here in Southern Arizona is beyond me as yet.

"If these inscriptions showed a Spanish influence we might say they were the work of the Spanish fathers who came here in the sixteenth century, but I can't find any trace of a Spanish influence. The Latin is an old capital script such as was in use for records and inscriptions up to the eighth century, but not in common use after that. It was not used by the Spanish fathers.

"There are traditions from several sources of trading expeditions starting out from Europe for unknown lands in the early Christian period and in the time of the Crusades. It is not an impossibility that we may have found in the interior of Arizona the remains of some such trading expedition. Being imbued with the crusading spirit, they may have manufactured these weapons for use against the Indians and these crosses for memorials to their leaders and left them all behind them when they were finally destroyed by the natives. The last of the articles made purports to bear a message that the inevitable day had come and that they were doomed.

"The most plausible conclusion, nevertheless, is that these things were brought here or were made here by the Spanish padres. If they were brought here by the padres, they would have been brought from Spain, perhaps having been taken there by the Crusaders from the Holy Land. If this was the case, they might be expected to show traces of Spanish influences, although not necessarily. The lack of Spanish influence and the depth of the undisturbed deposit are the factors that indicate to me that these objects belonged to a period earlier than the Spanish colonization in this country.

Seek Traces of Early Voyagers

"The places mentioned in the inscriptions are Rome, Great Britain and Calalus, which is described each time as 'Terra Incognita,' or unknown land. There is a possibility that Calalus refers to this country, but there is no evidence to that effect. The names given are of the Latin type, like Theodorus or Jacobus. The second might be Israelitish as well as Roman, but the Roman ending is used. Benjamin and Israel are named as prominent leaders, memorials to these leaders.

"I don't think we have a right to claim that these things were brought to Arizona by the people who made them. There must be a careful investigation of any commercial or other expeditions which started out from Europe for unknown lands during the years mentioned. Mrs. Ostrander has been trying to find traces of such expeditions, but has not as yet got hold of anything that could be called authentic and definite. The records of that period are very meager."

Dean Cummings and other scientists here concede that if any such European expedition had come here in the pre-Columbus period, the Indian lore, which is very extensive, would contain legends passed down from generation to generation about the white strangers and their crosses and swords, and that these legends would have been written down by the white men who came here later.

"Nothing extant indicates any tradition among the Indians about white men having been here between the eighth and tenth centuries," Dr. Cummings went on. "The Navaho Indians

claim their legends go back 1,000 'snows' or years, which would take us back to the year 925, but there is nothing in their stories about such an expedition.

"It is strange," he said, "that nothing, no human bones, were found with these articles. What must be done is what we are planning to do. I have promised to make further excavations in a systematic manner after the holidays. I will try to find the camp site of the people who had these articles. Apparently these weapons and crosses were washed down a slope in times of flood, and I think a camp site will be found nearby where they were washed from."

Professor Bender's Opinion

Dean Cummings has received a letter from Professor Bender at Princeton regarding the inscriptions, reading in part as follows:

"The characters are obviously Semitic, and therefore out of my own Indo-European field, but I have sent them to Professor John D. Davis of the Princeton Theological Seminary. He says they are square-headed Hebrew and that he can read most of them. I am very much interested in so remarkable a find. I would like very much to have your own conclusions as to the origin of the swords and crosses. The only possible thing that occurs to me is the Spanish explorers and Franciscan missionaries, who, I believe, were active in your State in the sixteenth century. But the Hebrew inscriptions—are they survivals of the Crusades or what?"

Dr. Davis wrote:

"The inscribed words are Hebrew, as your correspondent judged, 'written in the familiar square character and often provided with vowel points.' Many words are quite distinct, but for the determination of others a comparison with the original would be necessary."

Dr. Cummings also received the following from Dr. Emil G. H. Kraeling, Professor of Oriental Languages, Union Theological Seminary, New York City:

"The matter is rather curious, to say the least. Since the Hebrew consonants have the vocalization marks in accordance with a system that was not devised until about 750 A. D., it would be rather strange to find it used by Christians 760-900 A. D. The study of Hebrew was almost unknown to Christians during the Dark Ages. On the other hand, [it is] correct usage that could hardly have been expected to get into that vicinity."

Both Dr. Kraeling and Professor Davis gave translations of the Hebrew characters, which are in about thirty groups, while the Latin inscriptions were translated by Dr. Fowler of the University of Arizona.

Twenty-five articles have been excavated by Manier, Bent and their associates. The relics were exhibited today in the Tucson Bank Building, half for the benefit of the Tucson Community Chest and half for the expenses of further investigation. Adults were charged 25 cents and children 10 cents to view the relics and to hear Mrs. Ostrander talk about their significance. Bent took the money at the door. Outside was a large sign, reading:

"Pre-Columbus relics 1,000 years old. Earliest evidence of white man in America, exhibited here for benefit of Community Chest and to carry on investigation."

Frauds in Relics Recalled

Archaeological Faker Caused a Stir in Michigan in 1890

The belief expressed Saturday by F. W. Hodge, specialist in archaeology and history of the Southwest Museum of the American Indian, that the "relics" discovered near Tucson may have been planted by an archaeological faker who has been at work in Arizona, recalls the exposure of the Michigan frauds in 1908 by Professor Francis W. Kelsey of the university of that state.

In an article in The American Anthropologist for the first quarter of 1908, Professor Kelsey tells in great detail of three distinct archaeological frauds, two of which were laid to James A. Scotfield [Scotford], a sign painter of Montcalm County, Michigan.

The first of these began during the latter part of 1890 near the towns of Wyman and Edmore in that same county. The land there, formerly covered by pine forests, had been deforested quite recently and inhabitants in the vicinity began converting it into farms. In October, 1890, a man digging postholes in a field near Wyman found a small cup of clay covered with hieroglyphics. This discovery occasioned great excitement thereabouts and soon the entire population began excavating. More and more objects were discovered. One man, excavating, was entombed by a cave-in and killed.

The "relics" were found at a depth of from one foot to a foot and one-half and covered an area of three or four miles in diameter. The discoveries were authenticated by affidavits of witnesses in many cases.

At Stanton, the county seat of Montcalm County, a syndicate was formed for excavating purposes and for the sale of relics found. Members of the syndicate summoned Professor F. W. Putnam and Professor Alfred Emerson of the University of Michigan to look over the finds. A cursory examination showed that they were false. All were made of unbaked clay, with bogus hieroglyphics in which cuneiform characters appeared at intervals. These were all stamped, and in order to save labor the characters frequently were turned upside down or laid sideways. On the back of one piece the same character was represented in whole lines at a time. There were recumbent lions on the lids of some of the caskets. Of these, one or two had no tails.

The two professors remarked that no primitive artists would have made such an omission. Afterwards other caskets were found and on these the lions had tails. In all there were about thirty caskets measuring from a foot to thirty inches in length and from six to ten inches wide. The covers were ornamented with grotesque figures in bold relief. The sides bore simulations of cuneiform characters and hieroglyphics arranged sometimes with iterations of a single symbol. Similar characters were impressed upon the tablets, of which there were about seventy-five. Most of them were small enough to be held in one hand. Some of the tablets were found in caskets with small pieces of copper evidently made by beating out copper coins and impressed with cryptic characters.

There were a few crude vases and other articles, including a small Sphinx, which, upon examination, was found to have been made of light-colored clay containing so large a

percentage of sand as to make it extremely fragile. The drying had evidently been done in the sun or by exposure to mild heat. There were light cracks along the edges which were sharp and fresh. The material disintegrated rapidly in water, which showed that it could have been in the ground only a short time.

Upon the recommendations of Professors Putnam and Emerson the syndicate was dissolved and pocketed their losses. But many reputable persons in the vicinity continued to uphold the authenticity of the "relics." They explained the jumble of ancient Oriental writing as due to the composite character of a colony comprising Egyptians and Phoenicians, as well as Assyrians, which, in a remote period, found its way across the seas and up the St. Lawrence, through the Great Lakes to Michigan.

In the Summer of 1899 a man whose clothing bore mute evidence of financial reverses appeared in the office of the curator of the University of Michigan. He brought with him two wooden trunks containing miscellaneous "relics," and a large upright box. In the box stood a fragment of baked clay representing a man hooding a large table before him. The front of the box opened like a door. The curator was told that the contents of the trunks and box had been transported from place to place as an itinerant exhibit. The owner offered to sell the whole for $1,000. The curator laughed at the offer whereupon the man said he'd take $100 for the lot. When this offer, too, was refused he asked permission to leave them at the museum until he could send for them. This was granted, but he never returned.

Examination of the trunks showed that they contained caskets and tablets similar to those found in Montcalm County. There were also showbills advertising "The Deposits of 3,000 Years Ago. The Finest Collection of Prehistoric Relics in the United States."

The caskets in this collection differed in only two ways from the first lot. There was an improvement in workmanship and the clay was baked hard. The forger had obviously benefitted by former criticisms to improve his technique. There was a "Deluge" tablet representing the flood in four tiers, which had been repeated from a previous tablet. There was also a pipe elaborately decorated with cuneiforms. Less elaborate was the adornment of a crescent-shaped piece of slate which represented on one side a headdress resembling a jockey's cap and on the other bore the familiar cuneiform characters.

In 1907 the energies of the same forger became evident again. From widely separated points came reports that implements and copper tablets of a unique character were being offered to collectors. In Detroit one collector purchased not less than fifty and added them to a very credible collection of genuine prehistoric relics. The surfaces of the newly found "relics" had been corroded to give the appearance of age. But notwithstanding the difference in material the designs were practically identical with those of previous forgeries. Again there was the "Deluge" in fourbands with only slight variations and on the back of the same tablet was a representation of the Tower of Babel. Another tablet bore a calendar, with crescents and stars and hieroglyphics. A third tablet was a double one like that on which the Ten Commandments were written. This also was covered with cuneiform characters identical with those on previous frauds. There was also a copper crown which was reported to have been found on a skull.

A Detroit newspaper man revealed that Scotfield, who had been active in selling the bogus coppers, was the same man who had led the hunt for "relics" in the first fraud. The name of William A. Scotfield appeared with three others upon testimonials found in the trunks which had been left in the Museum of the University of Michigan. All were in the same handwriting.

More Scientists Skeptical

C. L. Hay and Dr. Gottheil Believe Arizona Finds Spurious

Clarence L. Hay, research associate in Mexican and Central American archaeology of the American Museum of Natural History, said yesterday that the lead relics" found near Tucson impressed him as fraudulent.

"They look very fishy," he said. "If, as Dr. Bashford Dean pointed out, the word 'Gaul' in good English appeared on one of the relics, what more is to be said?"

Dr. Richard J. H. Gottheil, professor of Rabbinical Literature and the Semitic Languages at Columbia University, said he regarded the relics as a hoax.

"They are either a hoax," he said, "or something of comparatively recent date. They certainly do not run back to the ancient date attributed to them. From a glance at the account I would regard the thing as a hoax."

Several noted archaeological hoaxes are summarized as follows in the article on archaeology by C. H. Read in the Encyclopaedia Britannica:

"In spite of the unquestioned and unquestionable character of palaeolithic discoveries in general, it must not be assumed that there has been an absence of falsification, forgery and what the French call 'mystification'; on the contrary, such attempts to meet the demand have been common enough. Apart from Edward Simpson, who was notorious as 'Flint Jack' in the middle of the nineteenth century, many others, both in England and on the continent of Europe, have devoted themselves to this peculiar industry.

"Boucher de Perthes tried to conquer the skepticism of some of his friends who doubted the human origin of the Abbeville flints, by unwisely offering his human bones in the same bed. The Moulin Quignon jaw was accordingly produced, and became the subject of much controversy, but the evidence finally showed that it had come from elsewhere.

"The cave drawings also have found their imitators in modern times. One Meillet, a man of education, took a special pleasure in the production of spurious examples and even published an account of his pretended discoveries. But here, as in all the attempts at imitation of the cave drawings, the modern efforts were betrayed by their poor artistic quality, and a comparison of the new discoveries with the old was generally enough to disclose the forgery. Two drawings on bone of a wolf and a bear, declared to have been found in a cave at Thayngen in Switzerland, were afterward shown to have been copied from a child's picture book.

"In Switzerland, also, a brisk trade was carried on some years ago in false antiquities, said to have come from the lake dwellings; and fantastic types of tools and implements were placed on the market. In Italy, too, a lively discussion has taken place of late years over the authenticity of curiously shaped flint implements from the neighborhood of Verona, while America has provided similar food for discussion in the well-known Lenape stone and the Calaveras skull.

The former bears drawings of the French cave type, while the latter, if genuine, would carry the story of man in the American continent before Pliocene times."

14. Tucson Relics Show Europeans Lived in America Centuries Before Columbus

The state's capital newspaper took a much less defensive, more sympathetic view of the Tucson Artifacts. Everything in Gilbert Cosulich's piece confirmed the finds' genuine importance in the most responsible journalistic tones. Stopping just short of taking pot shots at the Eastern intellectuals who appeared as witnesses on the opposite side, and having none of the boosterism readers might have suspected played a part in the story, the Arizona Republican *built a solid case for this discovery and its implications for American history.* Arizona Republican, *December 27, 1925.*

Experts Say All Findings Are Genuine

Nature herself has placed the seal of authenticity upon the relics recently discovered near Tucson.

So assert a number of archeologists and geologists who were present at the exhumation of the artifacts which some scholars believe will prove that Europeans lived in America seven centuries before Columbus.

And, despite the skepticism of a few Eastern scientists, Tucson savants are holding to their original declarations in favor of the genuineness of the relics.

"I am convinced that the articles found were taken from undisturbed deposits, and bedded so deeply and compactly in caliche that they must have lain there for a long period of time," says Dr. Byron Cummings, director of the state museum and head of the department of archeology of the University of Arizona.

"The inscriptions that I have had time to peruse were written in a style of Latin common not later than the eighth century of our era. I am convinced that they are genuine."

Similar convictions are expressed by Dr. Clifton J. Sarle, until recently and for eight years professor of geology at the University of Arizona, who declares:

"The depth at which these objects are buried; the firm cementation of the gravel stratum in which they occur; the unbroken and undisturbed condition of the caliche shell and overlying soil, form a seal which nature has placed upon these artifacts, not to be counterfeited."

The position of the relics in the firm caliche "indicates great age," says Dr. A. E. Douglass, director of the Steward Observatory of the University of Arizona.

Age Old Swords

The layers of gravel, caliche and soil overlying at least two of the artifacts "have not been disturbed by human agencies in recent or historic times," declares Charles T. Vorhies,

entomologist at the state university.

Thus piles up the expert testimony regarding the authenticity of the finds.

But as to their origin and meaning, there is not the same unanimity among scientists who have examined the artifacts.

According to Dr. Sarle, the swords and crosses and ceremonial objects were left by Roman Jews who came to America, which they called "Calalus," in 775 A.D. They were apparently annihilated about the year 900 A.D. after a disastrous war with the natives whom they had at first impressed into service.

In working out this interpretation of the Latin inscriptions, Dr. Sarle was assisted by Mrs. Laura Coleman Ostrander, a teacher of history in the public schools of Tucson.

On the other hand, other scholars declare that the internal evidence of the inscriptions themselves points to a later date. Among the experts holding this view is Dr. Emil G. H. Kraeling, professor of Oriental languages at the Union Theological seminary of New York City, who asserts that "the Hebrew writing found on the artifacts would hardly be used by Christians in 760-900," since "the study of Hebrew was almost unknown to the Christians during the dark ages." Dr. Kraeling, however, proceeds on the assumption that the wanderers were Christians.

The Hebrew inscriptions are extremely fragmentary, and it is impossible to piece together a continuous narrative from them. Some scholars express the same difficulty with regard to the Latin writings, which they say are merely a series of phrases rather than an unbroken narrative.

Dr. Wade H. Ellis, former attorney general of Ohio, at one time assistant United States attorney general, and now a member of the National Archeological association [AIA?], has expressed the belief that the voyagers may have been Phoenicians, who were noted in olden times as being "long-distance navigators." The combination of Latin and Hebrew inscriptions, Dr. Ellis suggests, points to a Mediterranean influence.

Thirty Relics

There are 30 of the relics. The first was discovered by Charles E. Manier, of Tucson, on September 13, 1924. It was a cross that protruded about two inches from the side of an embankment leading to a lime kiln, near what is known as the "Nine Mile Water Hole." Besides crosses, the artifacts include two-edged swords, hand spears and a fan-shaped baton or monstrance.

In the work of excavation Manier, Thomas W. Bent, the owner of the property, and Dr. Sarle have been most active. These men have kept a careful log of their work, in which record they have invariably noted the persons present during the exhumation of a particular relic.

The meticulous care of the excavators in this respect is one of the most conspicuous badges of good faith in the entire affair.

Here is an example of the log entries:

"... The sword blade was uncovered by Dr. Sarle and T. W. Bent, and it was necessary to use a miner's hammer and a trench pick to loose the solid cemented caliche in which the article

was imbedded. There were present at the time of excavation Dean Byron Cummings of the University of Arizona, Dr. Douglass and Mrs. Douglass, Dr. and Mrs. Sarle, Mrs. Ostrander, Mr. and Mrs. C. E. Manier and Mr. and Mrs. T. W. Bent.

Every single artifact has a similar record. Certainly circumstances of excavation have rarely been chronicled more fully than in the Bent-Manier log.

Are there still more secrets to be wrested from the bosom of Mother Earth at this spot ?

At least one distinguished scientist is inclined to this view that additional artifacts may be found in the same locality.

"I believe it important to continue this search in the expectation that other similar relics will come to light," Dr. Douglass said in a recent written statement.

Believe Other Relics Near

A similar thought has been expressed by Dr. Sarle:

"How much additional material will be found as exploration uncovers more of this old land surface cannot be told. Perhaps we may find the ashes of their fires or the place where they smelted the ore for the lead of their crosses.



Bent's partner Charles Manier poses with A. E. Douglass from the University of Arizona, far right, and the four dedicated workmen who labored throughout the Bent-Manier excavations on January 24, 1925. Arizona Historical Society, The Bent Family Collection, MS 1122 f. 48 (P).

"It seems not improbable that the long valley of the Santa Cruz river, stretching northwesterly from the Mexican border, may have afforded a comparatively easy pathway, which, together with other advantages, such as aboriginal settlements, directed their footsteps this way. The place where their record has been unearthed may have been chosen by them because of the presence of a spring. Although no spring occurs here today, it was formerly a watering place . . . Fifty yards from the excavation are to be seen the remnants of an old adobe building said to have been a caravansary. Great quantities of broken Indian pottery, much of it ornamented with brilliant and artistically painted designs, stone knives and other artifacts of an old, pre-Columbian, aboriginal culture, extend for a considerable distance either way on the far side of the water hole."

In the meanwhile, the relics are being exhibited in the Tucson National bank building. Small admission charges are made, half of the proceeds going to the Community Chest and the other half being set aside to defray the expenses of further research.

The relics are there. They may be scrutinized under the microscope. The circumstances of their exhumation have been set down with great detail, for the information of the entire world of scholarship.

The artifacts have been pronounced genuine by some of America's leading scientists.

But their origin and their meaning are as much a mystery today as when, 15 months ago, Charlie Manier's eye was attracted by "an odd-looking object protruding about two inches out of the side of the hill."

15. Cummings Firmer Than Ever in Belief Tucson Artifacts Are Genuine

When Byron Cummings returned from showing the Tucson Artifacts to various experts over the Christmas holidays, he gave a rare interview to the Arizona Daily Star. *The resulting article represents his definitive views on the finds and their "problems," before he was replaced as university president and increasingly silenced by University of Arizona officials. (Note: I could not find this article without extensive newspaper research and was at first even unaware of its existence. It is not in the clippings files in the Cummings Papers or other collections of the Arizona Historical Society or Arizona State Museum.)* Arizona Daily Star, *January 19, 1926.*

"Eppur si muove!"

Galileo, beset by skeptics, insisted that the earth "moves, nevertheless."

Dr. Byron Cummings, director of the Arizona state museum and head of the department of archeology of the University of Arizona, untroubled by a handful of doubters regarding the Tucson artifacts, asserted yesterday—

"I am firmer than ever in my belief that they are genuine."

Dr. Cummings returned Sunday from a three weeks' tour of the East, during which he

showed the leaden relics that were found beside the Siverbell road some time ago, to some of the country's leading scientists.

The artifacts were scrutinized under the microscope by some of America's greatest chemists.

They were subjected to close tests for radioactivity by United States government experts.

The results in both types of examinations would tend to indicate, at least, that the crosses and swords date from antiquity, the Arizona savant said yesterday.

Dr. Cummings delivered two addresses—one of them on the Tucson relics—at the annual meeting of the American Association for the Advancement of Science, which was held in Kansas City, December 30 to January 2. He also spoke on the Tucson artifacts at the annual gathering of the Washington Academy of Sciences, at Washington, D.C., January 12.

"Most of the critics who examined the relics were greatly interested, asked intelligent questions, expressed themselves as anxious to keep in touch with the investigation and admitted that it presented a real problem," Dr. Cummings said yesterday afternoon.

"I visited Cornell and turned over two of the artifacts [sic] to Dr. [Émile] Chamot, the famous chemical microscopist, for examination. It frequently happens that a microscopic test will reveal whether an object is recent or not, particularly by means of the adhering material.

Evidence Affirmative

"It was found that there was nothing to indicate any recent 'planting' of the artifacts, but, on the contrary, there was affirmative evidence tending to establish the antiquity of the finds.

"While I was in Washington, I had two of the artifacts examined by Dr. [D.C.] Bardwell, a specialist in radioactivity at the United States Fixed Nitrogen laboratory. The theory is that lead allay [sic] usually possesses radioactivity when it is first prepared, and that the absence of such activity is at least an argument in favor of its antiquity.

"No radioactivity was found in either of the artifacts I showed Dr. Bardwell.

"It is, of course, possible—though not probable—that the lead alloy of which the artifacts were made had no radioactivity to begin with."

Dr. A. E. Douglass, director of the Stewart observatory at the University of Arizona, collaborated with Dr. Cummings, at the latter's lecture in Washington, by supplying lantern slides showing the Tucson relics. Dr. Douglass is expected to return to Tucson about February 1.

At Princeton, N.J., a meeting of 15 scholars of classical languages was held at the home of Dr. Harold Herman Bender, professor of philology, and John D. Davis, professor of Hebrew, both of the Princeton Theological seminary. Great interest was manifested by all present in the Tucsn [sic] relics.

Dr. Bender suggested that some of the symbols showed Mithraic influence, Dr. Cummings said.

The Arizona archaeologist did not seem disturbed by the recent suggestions that the relics might have been made by a young Mexican sculptor, who is reported to have lived on the site of the present excavations in 1886.

"Where did this Mexican boy obtain his reported 'wonderful university education'?" Dr.

Cummings queried. "There were no universities in Mexico those days. It seems difficult to understand how this young man could have acquired such a great knowledge of Latin, Hebrew and sculpture."

The conditions under which the artifacts have been found preclude the possibility of their having been left there within a century or two, Dr. Cummings said in his address before the eastern scientists.

Tells of Discovery

In September, 1924, Mr. Chas. E. Manier and his father while inspecting an old lime-kiln about nine miles north-west of Tucson, noticed a bit of metal projecting from the side of the trench that had been cut through the formation to open an entrance to the bottom of the kiln, Dr. Cummings told the savants.

"On digging away the gravel and caliche in which it was embedded, the object proved to be a cross made of lead allay [sic]. It had been cast in crude mould on the surface of ground over which were scattered fragments of ore, caliche and gravel. Made in two parts, the inside of each had been smoothed and engraved with inscriptions in Latin.

"Excavations were then made on to the right and to the left of this trench by Mr. Thomas Bent, who owns the land, and Mr. Manier. Scattered over considerable area at between 2½ and 6 feet below the surface have been found four other double and two single crosses. Besides these crosses there have been uncovered three swords and found parts of swords, three spears and two spear heads, and a peculiar paddle-shaped object that may be called a lab[a]rum. All of these are more or less engraved with inscriptions in Latin and various symbols and drawings. On the two unusual crosses entwined with serpents are found some Hebrew inscriptions and symbols.

"All of these articles were found imbedded in caliche and gravel at practically the same level. None of this superimposed material shows any evidence of having been disturbed since laid down by natural forces. The highway, now known as the Silverbell road, takes a northwesterly course out from Tucson along what was once the old stage and freight route from Tombstone through Tucson to Yuma. On the right stretches the Santa Cruz valley, while on the left the road is flanked by an irregular bench of sand and gravel and loose rocks that has been cut by arroyos and tiny valleys. The ridge between ends in points and low, rounded hills, such as would be left by the slow erosion that has been going on for many, many years, in fact ever since the Tucson mountains were thrown up and formed the low volcanic range that stretches across this country for miles. These points and ridges form the foothills and lower bench of these mountains. This road threads for the most part along the end of this bench which formed the bank of the Santa Cruz when its water spread out over its entire valley.

"Just before one reaches the old 'Nine Mile Water Hole,' the bank on the upper and left-hand side is quite abrupt. In this bend was built the lime-kiln referred to at the beginning of this article. This kiln was constructed by sinking a cylindrical shaft down through the surface soil, gravel and caliche to the depth of about six feet. This shaft was then lined with brick. A trench was cut into it from the edge of the bank. Otherwise the bench is undisturbed.

"It was in this undisturbed material, principally at the right of this trench that these articles were found. One rumor says that the men who cut this trench some 45 years ago found some pieces of metal, but up to date we have been unable to verify this report. It is easy to distinguish the material thrown out upon the surface from the shaft and from the trench when the kiln was constructed and used: but there is no evidence that this formation has even been disturbed either on the level at which these objects were found or in the strata overlying them. This caliche is a lime crust formed irregularly from the superimposed and surrounding soil and rock. It settles into pockets, spreads out into sheets and cements the sand and gravel together in hard masses that can be broken up only by a sharp pick or a charge of dynamite.

Found in Hard Caliche

Many of these objects were imbedded in part or whole in this solid caliche and could be removed only by vigorous effort with a good pick. Some lay in pockets or thin strata of sand which were overlaid with strata of caliche. Lines of gravel and sand extend along horizontally above these articles which, if these articles had been "planted" in recent years and the holes filled up with caliche and gravel, would be broken and the lines of demarcation readily distinguishable. This formation is also similar to that of the entire bench at this point and to that of the projecting hills on either side.

"Just when the torrential rains swept this mass of rock, sand and gravel down from the slopes of the mountains, we may never know; but it looks as though this had once formed a continuous bend along the banks of the river and when the waters subsided and the current changed, the arroyos cut through this bench and the storm rounded off the hills. At the bases of these mountains on both sides of the place where these objects were found, we have encountered two periods of ancient Indian culture. The floors of the homes of the earlier culture lie from 3½ to 5 feet below the surface, while the other is encountered close to and at the surface. The latter seems cotemporaneous with the well-known ruins of the Gila valley which are estimated to be at least some 800 years old. Just how much older the earlier culture is, is hard to determine; but suffice it to say that it is a much cruder culture and was overlaid with from 4 to 5 feet of accumulated deposit before the homes of the later culture were built. Most of these artifacts were found at from 5 to 6 feet below the surface, a slightly lower level than that of the earliest pueblo culture yet encountered.

Thus, there are two outstanding facts in this problem: the articles are covered with from 4 to 5 feet of undisturbed natural deposit and they lie at approximately the same level as the earliest prehistoric pueblo culture of the valley, a culture showing no characteristic in common with these artifacts. The condition of the overlying deposits precludes their having been "planted," and the articles could not have been of Indian manufacture.

Metals Found Here

"The articles are made of lead alloy. Assays show lead and antimony with traces of tin, gold, silver and copper. Ores of this character are mined in the Tucson mountains, a few miles away, and in other mountains farther away to the south. The ores have probably been crushed and crudely smelted, the metals puddled and then used in the manufacture of these weapons and

emblems. Two of the articles, the lab[a]rum and one of the serpent swords may have been manufactured elsewhere and brought into the country. The metal seems to contain more copper and workmanship is rather better. But the probabilities are that even they were wrought here from ore from a different locality. The most of the articles have been cast and then shaped by hammering and smoothing. The scratches made by stone and either a rasp or a file or both, are plainly visible on the surface of some of the objects. Nicks are also to be seen in some of the swords as if they had been struck with similar weapons and with the point of spears. All are crudely fashioned and show such work as you might expect to be produced by men in the desert country of Arizona, with few tools and no mechanical appliances.

"The engraving has been done by a sharp point with a straight stroke in some, while in others the smooth line has been cut and then the edges tooled by a diagonal stroke. In the double crosses, the inside of each half has been smoothed and the inscription cut in the plain surface. Then these surfaces were covered with a thin coating of wax, the two parts fitted together and fastened with lead rivets which were headed down.

"The Latin is the capital script that was in common use for records and religious inscriptions up to about the eighth century A.D. The words are separated by dots, and the construction follows that of the classic Latin of Caesar and Virgil. There are a few mistakes in spelling. Regem is used where one would expect regentem. The nominative is used in one instance where you would expect the accusative. The sentences are brief, and aim to be mere records of facts. One would judge that they had been carved by one who had a limited knowledge of classic Latin and wove expressions with which he was familiar into the record he desired to make. In the matter of proper names you find the Latin form in most instances, but with Gaul the English spelling in one instance and Gaule the early French in two others. This, however, may show an acquaintance with some old records using the form Ga u le and the e was ommitted [sic] by accident in this one instance.

"The places mentioned are Britain, Gaul, Rome and Calalus. Calalus is always given this spelling whether used in the nominative or accusative case and is repeatedly designated a terra incognita, an unknown land. The expression Provehimur pelago—we are carried over the sea, is used several times also, and indicates a journey by water to Calalus.

"The Hebrew inscriptions on the two serpent swords are words and expressions such as Jehovah, peace, mighty empire, etc. For the interpretation of the Hebrew we are indebted to Dr. Davis and Dr. Bender of Princeton and Dr. Kraeling of Union Theological Seminary who were kind enough to examine some rubbings of the Hebrew that we were able to send them and give an opinion of them. We have taken these articles to these scholars and given them a chance to examine them first hand.

Drawings Ecclesiastical

"The drawings and symbols show Jewish and Roman influence and are rather ecclesiastical than military or political. The so-called 'crown' is more like a patriarch's cap, and the patriarch's double cross appears twice. The angels with drawn swords and the serpents suggest the story of the fall of man; while the seven candles hark back to the ancient temple of

Jerusalem. The square and compass indicates a knowledge of Masonry. The drawings of the temple and the suggestion of the fasces are Roman. Other symbols have no parallel as far as we know; but their origin may yet be traced.

"Thus we have manifest in the objects themselves, wide and varied influences. On the face, these evidences would indicate the work of men who, slightly versed in classic Latin, Roman affairs and Jewish history, wished to record this evidence to astonish their contemporaries. But would any people, one or more centuries ago in this remote region, have had time or means or desire either to hoodwink other men by their show of learning or deceive posterity? The white men who lived in and traversed this region even fifty years ago, had very little time for fun or fiction of this elaborate character, if any possessed the ability to have manufactured or inscribed these articles. Life was too strenuous to have permitted such activity. The struggle for mere existence left no time for studying Latin or recording the history of the Israelites.

"Some have suggested that the Spanish padres may have had a station near here and left these records as evidence of their learning. But none of these objects show Spanish id[e]als or influence, a thing which surely would have been manifest had the zealous Jesuit fathers had anything to do with their manufacture or decoration. Besides, these fathers like other pioneers were too busy in marshalling the Indians to raise food and build churches to have resorted to the production of such records. Nothing like them has been found elsewhere in connection with the missions, and would it not be strange to find the padre indulging in such recreation in the arid country of Southern Arizona?

"The condition under which they have been found preclude [sic] the possibility of their having been left there within a century or two. It seems impossible for the formation overlaying them to have assumed its present condition in less than several centuries. This evidence, together with the data found on the articles, indicates that they were left there at some time preceding the coming of the Spanish adventurers and padres into southern Arizona. The articles were commemorative of their leaders, symbols used in the religion, and weapons for their defense against their enemies—such articles as a group of men driven to the last extremity would leave behind them. If this supposition be true, then the bones of these brave men, their camp site and further evidences of their character and customs must lie scattered beneath the caliche in that locality. To uncover these and solve this mystery, is the task to which we are setting ourselves."

16. Leaden Spear-Shaft Found in Location of Famed Artifacts

This report is one of the only notices in the press concerning the flash-in-the-pan university-run excavation of the Silverbell Road site. It concerns artifacts 28 and 29, which turned out to be missing pieces belonging to the previously discovered artifacts 25 and 27, both excavated by the Bent dig team three years before. Notice the finds are called "relics," not artifacts or objects. They were never inventoried by the University. No records were kept of Hand's excavation, and it was abruptly shut down shortly afterwards. Arizona Daily Star, *February 17, 1928.*

Many Scientists Present at Excavation of Newest Silverbell Archaeologic Discovery; Dean Butler Attests to Fact They Are Not 'Planted'

Mr. Cosulich announces the discovery of "two fragments of a leaden spear-shaft found at the third limekiln on the Silverbell Road." John Hand, an employee of the University of Arizona, located the relic pieces, but waited until the experts arrived to photograph and remove them. Dr. Gordon Montague Butler, Dean of the College of Mines and Engineering of the university, extracted the pieces. He also stated that the soil showed no evidence of any recent disturbance.

Dean Cummings states, "The two fragments removed today were found at the same horizon level as those excavated two and a half years ago. There are indications that they were washed down with the soil to their present position."

17. Byron Cummings Was Fooled Once

Reprinted from 1934, this item comes from the 1980s at a time when everyone had made up their mind about the Tucson Artifacts. It tried the finesse the controversy. From The Old Pueblo Chronicle: A 75-Year History of the Old Pueblo Club (1907-1982), *April 12, 1934.*

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Dr. Byron Cummings (OPC), professor of archeology at the University of Arizona, Director of the Arizona State Museum on the UA campus, and President of UA, was famed world-wide as an archeologist but once he became the victim of a Tucson hoax.

Cummings was an instructor of languages, Greek and Latin, and Dean of Arts and Sciences at the University of Utah. He came to the UA in 1915, and rose to its presidency in 1927. He had discovered ancient temples in Mexico and early Indian ruins in this country.

In September, 1924, two Tucson men, C. E. Manier and T. W. Bent, discovered artifacts made of a metallic alloy of lead in an old lime kiln near Silverbell road, north of Tucson. They brought several items of crosses, swords and spears to Cummings. The artifacts were engraved with Latin and Hebrew words.

Cummings and other UA scientists determined that the objects were made prior to 1539, the coming of the Spaniards to this part of the world. They bore different dates ranging from 560 A.D. to 900 A.D. Cummings was convinced of their authenticity, as was Dr. A.E. Douglass (OPC) and Charles T. Vorhies (OPC), UA scientists.

If they are authentic, they would "wholly upset American history," because they were thought to have been carried to this locality by an unknown band of Roman visitors.

The artifacts were displayed in the state museum. The university planned to buy them from

their discoverers. The UA appropriated $15,000 to continue excavations at the site.

But doubts began to arise in the scientific world. In 1926, Dr. Frank Fowler, nationally known architect (?), charged that they were a hoax. The engravings on the pieces, he said, were copied material. Inscriptions on the crosses, he said, could be found word for word and often in the same chronological order in various books on Latin grammar.

In 1928, Harvard archeologist Dr. G. C. Vaillard called them fakes. He said, however, that the "explanation of their discovery under a heavy layer of caliche presented an archeological problem."

There were other charges of fakery from the scientific community. Embarrassing doubts began to form in Dr. Cummings' mind and finally in January, 1930, he concluded that the discoveries were fakes. He wrote a memorandum to the state, recommending that the relics, still on display in the museum, not be purchased. Holes had been cut into the hard caliche and the relics had been inserted. One hole, holding a piece of a spear, was longer than the fragment itself. One cross, originally thought to have been carried by the visiting Romans, weighed 64 pounds, a burdensome piece too heavy to be carried on a march. The most devastating pieces of evidence were that the metal was found to be similar to a common present-day alloy and imbedded in the side of a cross was a piece of copper ore, classed by mining experts as coming from the Bisbee, AZ area.

Cummings was chagrinned but not permanently turned away from further archeological discoveries. He continued to discover and explore ancient Indian ruins. He died in 1954 in Tucson at the age of 93.

Lori Davisson, head researcher at the Arizona Historical Society, says that occasional requests still come from outside of Arizona, asking for information on the "Roman" artifacts. There is little more that she can offer. She says the Manier and Bent descendants, now living in California, say they know nothing of the location of the relics.

Neither apparently, does anyone else.