

SECOND YEARLY MEETING OF THE IOWA ANTHROPOLOGICAL ASSOCIATION

One of the leading purposes of this Association is the holding of a yearly meeting which shall be of general public interest and which shall serve the end of fostering the cause of Anthropology. The Executive Board arranged for the holding of the Second Yearly Meeting on February 10 and 11, 1905. It was thought best not to place more than two sessions in one day. Altogether there were seven leading addresses followed by questions and discussions. In addition to these, there was the luncheon at the Burkley Imperial, the after lunch addresses and reception, the closing symposium, and the annual business meeting. The themes were varied in character and possessed the great advantage of dealing with unusual and strikingly original subjects. Nearly every paper was illustrated either with slides, maps, charts, skulls, bones, photographs, black-board diagrams, or other articles of interest.

The following pages are the Secretary's condensed report of the papers, arranged in the order in which the proceedings and business took place. President Loos called the meeting to order at 8 o'clock on Friday evening, February 10, 1905. He gave a brief explanation of the general purposes of the Association and expressed the gratification of the Association on being able to present to so large an audience so eminent a speaker. He then introduced Professor Frederick Starr of the University of Chicago.

THE HAIRY AINU OF JAPAN

BY PROFESSOR FREDERICK STARR

The idea of movement, life, and activity which ran through the whole Exposition at St. Louis marked especially the Anthropological Department. A special effort was made to bring together groups of the lower peoples of the Globe. To this end a group of the Ainu from Japan was sought. I left St. Louis in January, 1904, and landed in Yokahama on the 9th of February. I went to Tokio the next morning—just one year ago to-day. It was an interesting day to reach this Capital; for it was the day war was declared against Russia. It was a very quiet, solemn time. You could feel that there was great emotion, that the heart of a great people was throbbing. One might think it would be a bad time for a man on a non-political errand to visit Japan. And yet, notwithstanding these stirring conditions, there was not a particle of delay or difficulty; but everything was done that the government or private individuals could do to further and hasten my work, and I was able to return on the very day planned before I left St. Louis.

In the seventh century, in the year 650 A. D., some northern Ainu people were taken to China and presented at the Imperial Court. I think that no Ainu have been taken from their island since that time until the Exposition group was brought to St. Louis in 1904. There was a time when the Ainu occupied the whole of Japan; and in the southern part there are still many Ainu names. Indeed, Ainu names are sprinkled all over the largest island. I believe the Ainu were once the sole population of Japan. Then came border warfare; and just as we have beaten back the Indians, the

Japanese have beaten back the Ainu. There still exist about fourteen thousand of them. They live in villages of from fifty or sixty to three hundred or four hundred people. But Japanese are crowding in upon them and taking up the land, just as we are crowding upon the Indians. I suppose the time will come when they will disappear, just as our Indians are disappearing before the face of the white man.

On reaching the port on the northern shore of the main island, I found a vessel just about ready to start; and in due course of time I landed on the island of Yezo with my interpreter. We saw the Governor, gave him my credentials, and visited Mr. Batchelor, the venerable missionary who has been there so long. Then we struck out over the snow-covered trails. Sometimes we went with sledges, sometimes with carts, and sometimes on foot.

We visited eight or nine of the little villages. Each village was a street with houses on one side and store houses on the other. The door of each house was placed so that it was at the west end, though at the south side. The window looking east has a sacred significance. It distresses the Ainu to have anyone look in through the east window. It disturbed them greatly to have people look into this window at St. Louis. And so they piled up wood to keep the visitors off. These poor people seemed to feel that Americans were really bad because they looked in at the windows. We went through many of their villages. We went into many of their houses.

Etiquette is very fully developed among the Ainu. We would approach the door and stand outside, gurgling in our throats; presently they would hear our gurgling and come

out to see what was wanted. We would go in, and from the place where they invited us to sit we would know whether we were welcome. I knew from their asking me to sit at the east end of the fireplace that I was welcome. Then came the greeting. The Ainu are a hairy people. They have thick hair on the head, heavy beards, and a growth of hair upon the body which is equalled by only one other neighboring people. The men have heavy moustaches. The women have the lip tattooed to represent moustaches. This is done by cutting the lips. After the cutting they apply a preparation of coloring matter derived from bark. The color is a very brilliant green-blue. When the men wish to greet, they make use of their elaborate beards. The man begins by rubbing his hands—perhaps for several minutes. He raises the hands, brings them up to the side of the face, and strokes down that long beard several times, bowing with each stroke. Women recognize their inferiority. When a man meets a woman, he will not stroke his beard for her. On meeting me the women took off their head-dresses and hung them over their arms. On meeting her fellow-men a woman folds her arms and draws her fingers across her tattooed moustache. To observe their admirable manners I would sometimes go down into the place where they were in the hold of the ship and would hold up a lump of sugar. The little girl of three would put up her hand, draw it across her moustache, make a little bow, and hold out her hands a little way—not nearly so far as children would do in America.

My party of Ainu consisted of nine persons. There were two families, each composed of a man, his wife, and child.

There was another man and his wife, and a man whose wife did not come. The chief carried out the proprieties of their race very properly.

Outside of each Ainu house there is a row of whittled sticks. The Ainu men spend a considerable part of their time in whittling. There is a sacred bunch of shavings and a bear's skull near the east window, before which prayers are said. I secured the group of Ainu, noted the details of their life, etc., but I ought to have had a bear to make the outfit complete. The Ainu go bear-hunting in the late fall and in the early spring. When they go in the spring they are very desirous of finding a little cub. If they can get one, they bring it home, and the women feed it just as they do their own babies. This has been denied many times, but it is true. After a while they keep it outside and feed it in a special trough. When the cub is about a year old the Ainu have their feast. The men lasso the bear, drag it into the open, throw it down so that it sprawls on the ground, and strangle it with a pole held across its neck; or they kill it with knives. After it is killed they say all kinds of prayers to it and offer it gifts. Then they have the bear feast; and get very drunk indeed.

It is the custom among the Ainu when a man has been away for the people to have a gathering on his return, when they sit around the fire and sing. They improvise—one singing until he gets tired, and then another. In these songs the man tells the story of his journey, and others tell about the happenings that have taken place in the village during his absence.

The question arises: Who are the Ainu? Whence did

they come? You know the Japanese. You know that they have a yellow skin, oblique eyes, very little or no beard, almost hairless bodies. Here we have a people with white skin, horizontal eyes, wavy hair, heavy beard, and hairy bodies. They are not the ancestors of the Japanese. They are a white race. Now we are fond of thinking that the world was made for the White Men. We are apt to think that every White Man is better than any Red Man or Yellow Man. The Ainu are a white race; but they have lost in the struggle and are going down because they have come into contact with a people more aggressive and progressive than their own.

[At this point Professor Starr introduced a large number of beautifully colored slides and gave brief descriptions of them as they passed. They made clear the type of the Ainu and the life they lead.]

THE INVESTIGATION OF THE OKOBOJI MOUNDS AND THE FINDS

BY DUREN J. H. WARD

In September and October, 1904, newspapers in various parts of the State contained articles about bones and other relics found by summer residents near West Okoboji Lake. Mr. Frank W. Bicknell, editor of *The Mail and Times*, and Mr. Welker Given, of Des Moines, were especially interested and anxious that some scientific investigation should be made with regard to these "finds." The State Historical Society of Iowa desired to have some one go to Okoboji and see what the prospects were for scientific investigation. Accordingly, on October 19, 1904, I was sent to

make observations. Mr. Ramsay, of Humboldt, accompanied me on this prospecting exploration. We spent several days at Okoboji and made all possible inquiries.

We learned that Wm. O'Farrell and John Dunham had done some digging in this Okoboji mound about twenty-five years ago, when they were boys. They found one skull. As a result of this digging, the human remains in the eastern and southeastern portions of the mound had probably decayed more rapidly and completely than elsewhere. Mr. O'Farrell reports that there was formerly a beaten path around the mound at its lower border edge.

We learned also that about two years ago a school girl from Des Moines by the name of Maude Striker was a summer resident at Okoboji, and that her curiosity was so deeply aroused that she and her cousin began some digging in the mound here referred to. Last summer Mr. S. S. Striker (the father of the school girl) and two gentlemen from Cedar Rapids (Messrs. Fred L. and Allan E. Pearson) undertook a further investigation. They dug two large pits in the top of the mound, and it is reported that they found several skeletons—accounts differ as to how many. In another mound near by they also found the remains of several individuals. Burnt wood, bark, a stone axe, bits of copper, a few beads, and small pieces of buffalo skin with hair on were dug up. Some of the bodies seemed to have been buried in a sitting posture and some reclining. A small round bell (resembling slightly a sleigh bell, but much lighter in construction) was found only a foot below the surface. It might once have been on the collar of some little pet dog and lost here in the bushes a score or more of

OKOBOJI MOUND

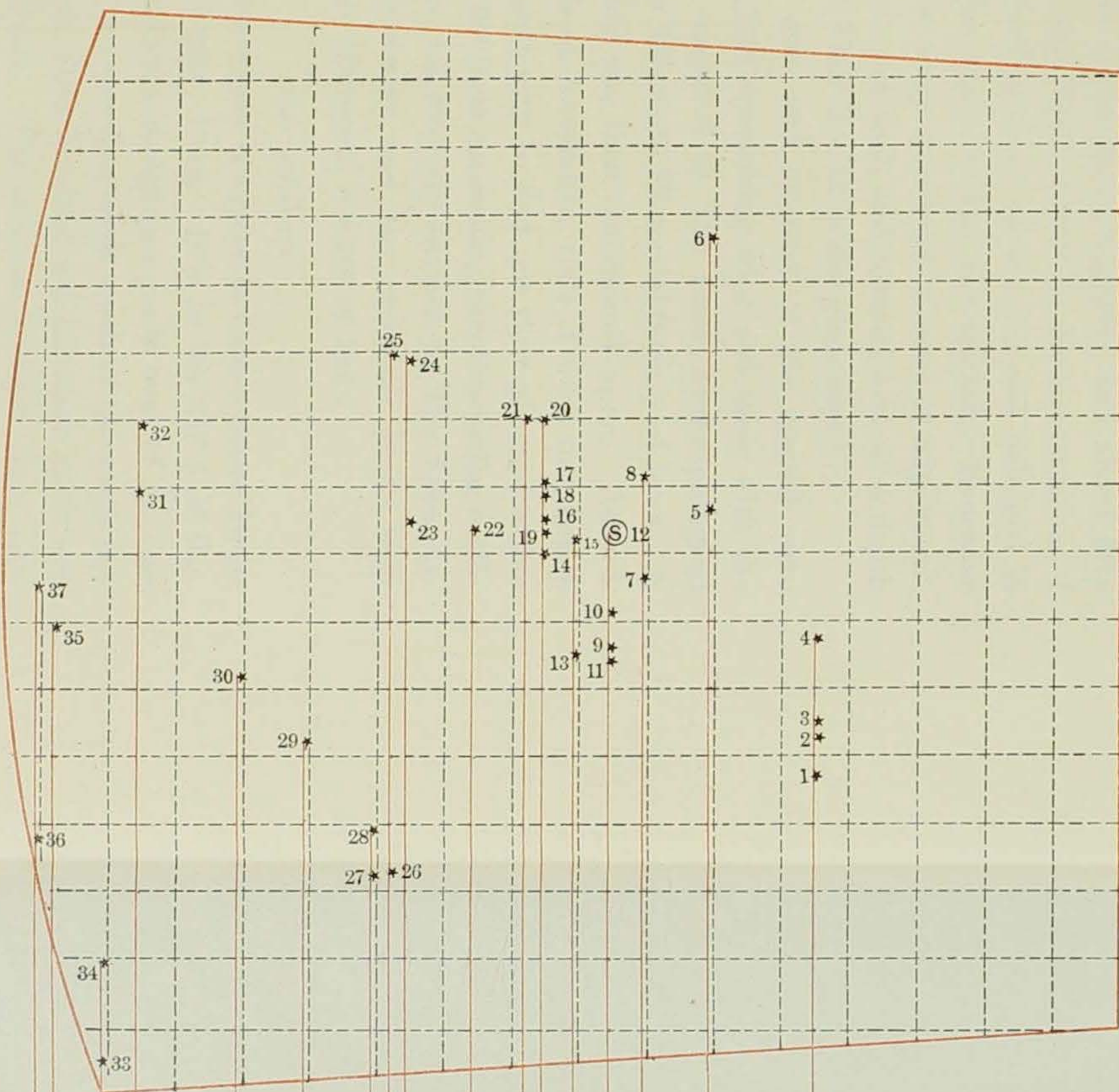
EXCAVATED
NOVEMBER 15-20
1904

AUSPICES OF
**STATE
HISTORICAL
SOCIETY
OF IOWA**

DUREN J. H. WARD
DIRECTOR OF
ANTHROPOLOGICAL
SURVEY

EXCAVATORS

Charles G. Hall
Ira Yakey
Roy W. Pickard
Herman Elston
Porter Elston



EXCAVATION—28 × 32
DIMENSIONS—Diameter,
54 ft.
(See red lines)
SCALE—6 ft. = 1 inch

LOCATION—Dickinson County, Iowa.
S. W. ¼ of Section 30, Centre Grove
Township, 218 yds. W. of E. Sec. line, 75 yds. N. of
S. Sec. line, and 354 yds. E. of West Okoboji Lake. (About
¾ of a mile S. of the monument at Arnold's Park.)
Property owned by James S. Clark.
(Formerly by Simeon S. Striker.)

- | | | | |
|---|--|---|--|
| 1 Bone ornament, piece of Femur, stone-planed, bit of pottery | 10 Stone, <i>in situ</i> , photo | 20 Skull and many bones | 29 Temporal bone |
| 2 Skull | 11 Tomahawk (?) | 21 Skull and 6 bones | 30 Small arm bone |
| 3 Skull | 12 Striker's finds | 22 Jaw of small animal | 31 Arm and leg bones |
| 4 Burnt wood | 13 Femur bone | 23 Skull, many bones, dog's head (?); a, skull; b, skull; c, shoulder blade | 32 Animal's jaw |
| 5 Bones of small animal | 14 Photo of two large stones | 24 Femur, pelvic bones | 33 Bit of ulna (?) |
| 6 Location of squirrel's nest | 15 Skull from Pearson's | 25 Piece of shell | 34 Ulna |
| 7 Beads, copper bangle, piece of iron | 16 Humerus | 26 Burnt wood | 35 Piece of jaw, claw, shell, bone, etc. |
| 8 Bit of human rib [dish] | 17 Skull and skeleton | 27 Skull and ribs | 36 Bones, bill, etc |
| 9 Skull and burnt wood | 18 Bark, finger bones, burnt wood | 28 Small bones | 37 Claw or tooth |
| | 19 Humerus, 3 femurs, tibia, and 12 others | | |

years ago. There were also some flint arrow points, one or two bone handles, something that may once have been iron or steel knives, and a small bit of an iron vessel containing a white, pulpy substance. Then there was a portion of a small skeleton, presumably that of a child. These investigators took three turns at the digging, and about fifty people are said to have been present on the last occasion. I am told that they had a picnic on the hill and indulged in an imitation Indian dance around the mound. Everyone who so desired took away a souvenir of bone or implement. What remained was put back and covered over at a depth of two feet. (See Find No. 12 in the glass case.)

The condition, size, and material of the mound were ascertained in our first prospecting trip; and these with the above facts were reported to The Iowa Anthropological Association and to The State Historical Society of Iowa. A careful investigation was then determined upon. Accordingly, on the 14th of November, 1904, I went to Okoboji with the proper authority to find out through exploration and investigation the facts concerning this interesting earthwork. This course was strongly advised by The Iowa Anthropological Association and the necessary funds were voted by The State Historical Society of Iowa.

THE LOCATION

To be precise, the mound is located in Center Grove Township, Dickinson County, Iowa. It is in the SW $\frac{1}{4}$ of Sec. 30. It is two hundred and eighteen yards west of the east line of section 30, seventy-five yards north of the south line of same section, and three hundred and fifty-four yards east of West Okoboji Lake. The location is about three quar-

ters of a mile south of the monument at Arnold's Park. The property is now owned by Mr. James S. Clark, of Sioux Falls, South Dakota. At the time of the digging done by Miss Striker and up to October, 1904, it was owned by Mr. Simeon S. Striker of Des Moines.

Geologically the mound is on one of the rounded hillocks which are very numerous in that vicinity. The surface is the typical Wisconsin Drift. The lake bank to the west is a clayey drift type above and is strewn with boulders below. At the shore nearest the mound the bank is about thirty-five feet high, and the rise from the top of the abrupt edge back to the mound (about three hundred and fifty yards) is probably forty feet.

THE INVESTIGATION

The mound measured fifty-four feet from outside to outside, and was six feet high. On our first trip we had made an incision on the east side. This was thirty-six inches wide, eighty inches long, and fifty-eight inches deep. The incision photographs as little more than a black hole. A few inches below the surface the earth was very hard and most of it had to be loosened with a pick. There were about eleven inches of soil on top; while the rest had been artificially placed there. Perhaps the soil was also artificial, the vegetation on the top having given it a different appearance. Below the artificial part (about five to six feet from the surface) there began the yellow bleached clay.

THE EXCAVATION

The work of final excavation was commenced on the morning of November 15, 1904. We employed five men

for several days. The excavators were Messrs. Ira Yakey, Charles G. Hall, Roy W. Pickard, Herman Elston, and Porter Elston, residents of the village of Arnold's Park. The work was directed by the writer.

The investigation began at the east side. We first peeled off the dark soil for a distance of six feet from the east starting line. This line was twenty-eight feet from north to south. Nothing was found in the first foot down. We then began to slice the mound from top to bottom, working back to the west a distance of over thirty feet. The most important objects were photographed before they were disturbed or moved. After coming to some bones, for example, we carefully cleaned them with trowel, putty knife, and brush until they were ready to be photographed. When the air had dried and whitened them, we then took the pictures. Every shovelful of earth was examined as it was thrown out.

THE FINDS

Every object found was put in a package and marked, and then the place where it was found was exactly located and recorded. Measurements were made from the southeast corner westward, then northward, and then downward. In the more important cases we were very careful to preserve a record with the camera of how the objects looked *in situ*. There are about forty numbers in the cases now on exhibition in the rooms of The State Historical Society of Iowa, but some include several or many objects. The larger part is human bones. They represent portions of more than thirty individuals. That number will probably be increased when the bones have been more carefully compared. This

does not, however, nearly represent the number of people who had been buried in the mound. Probably a hundred would be a nearer estimate. There are nine skulls sufficiently complete to make profitable measurements. There are several other skulls illustrated only by fragments.

Some of the objects found were in "pockets" below the floor of the mound; and as we followed out each pocket to its limits the bottom of the digging was quite irregular. Wherever we came to the original yellow clay and found nothing, we dug only three or four inches into it; but wherever the clay seemed to be darkened or to have been previously disturbed by something having been placed there, we dug out the pocket.

Some of the uppermost finds show that the people had been in relationship with the White race. For example, there were some beads of a very old type. These beads were white, blue, and pink. They should receive expert attention. There were also bits of iron, having in some cases resemblance to knife and tomahawk form. (See Nos. 11 and 12.) The bones of several small animals, the horns and scales of some fishes, and possibly beaks or claws of birds were also discovered. Burnt wood was frequent, but generally not very deep. Some rare bits, however, were brought up from a depth of six feet.

THE VARIOUS ORDERS OF BURIAL

These bones indicate people of quite varied types. The "Middle Man" (See No. 15) occupied a position about half way down. In physical characteristics he occupied a position midway between the upper and lowest types. The

clearly marked difference between these three types enables us to make out with some clearness, though with difficulty, an intelligible plan of the burials. The first people, or the earliest, were buried below the surface of the hill in the pockets before mentioned. It is probable that this took place beneath the floor of their own dwelling place. From their very striking characteristics it would seem that they were men of distinction. This made the place one of honor and sacredness and created the nucleus for further burials. By these first burials the ground was slightly heaped up. The next interments were made on the sloping side of this small mound, and as the ground was heaped up to cover these, it changed the center. We have evidence of perhaps six different orders of burials. Of course, this changing center made a continually rising burial mound. Some time after the mound was well established they began to bury only around the outside edges. This greatly increased the breadth or diameter. The first men that were found during our excavation were among the last that were buried. They may have been the very latest (which is more probable), or they may have been succeeded by interments in the outer slope around the edge. Those found at the bottom were, of course, the first buried. Of the three groups found at a depth of six feet (Nos. 20, 21, 23) it is thus far impossible to distinguish which is the earliest.

DIFFERENT MODES OF BURIAL

The bones buried at the bottom were not buried with the flesh on them. Evidence points to the fact that these men were killed elsewhere and that their bones were brought

home and placed in a bundle in what was then a small pocket dug beneath the floor of the hill. (See photographs.) Those found in the top of the mound give evidence of having been buried in a sitting posture and with the flesh. In one case, about the second order from the top, the bodies appeared to have been deposited in a reclining posture. (See No. 17 and the photograph *in situ*.)

VARYING STAGES OF PRESERVATION

In nearly all the cases of the burials made in the outer sloping edges of the mound there remain no bones at all. The evidence of such burials is found in the numerous traces made by phosphoric acid resulting from the decaying bones. In the case of the finds nearest the surface, the small bones were largely destroyed and the larger ones were in a very fragile condition. The farther down, the better the state of preservation. In the bottommost specimens the condition is very remarkable. Although probably many hundreds of years old, many of these bones are white, sound, and splendidly preserved. They are so hard that the drill penetrates them with difficulty.

Among the proofs that these remains were not buried with their flesh are the scores of marks made by the teeth of wolves or other animals while gnawing the flesh. Again, the absence of small bones is an indication of this fact. In the case of one skull (No. 23) some of these small bones had been preserved and brought home by using the skull as a basket. While preparing it, ten bones from various portions of the body rattled out. Surely this is sufficient evidence that the bones of this man were not buried with the

flesh, since ribs, fingers, and toes do not grow inside the head. Two of the men had each received two powerful blows on their skulls. There was plain evidence of war implements by which these and other skulls had been terribly fractured. These two men were of different ages, one upwards of sixty and the other perhaps thirty-five years old. These conclusions are determined by the sutures of the skulls, by the teeth, and by other symptoms of bone condition.

OKOBOJI INDIAN SKULL MEASUREMENTS

BY PROFESSOR ARTHUR G. SMITH

The doctrine of the evolution of species, of the development of the many from the few, has been an accepted fact for a sufficient length of time to have passed the nine days of wonder allotted to a new discovery. The actual measurement and observation of the changes now going on is of the deepest interest to all. Every day the conviction is forced upon us that the law of natural selection still reigns supreme, that the weak are no less surely crowded to the wall to-day than they were and have been during all the ages behind and forgotten.

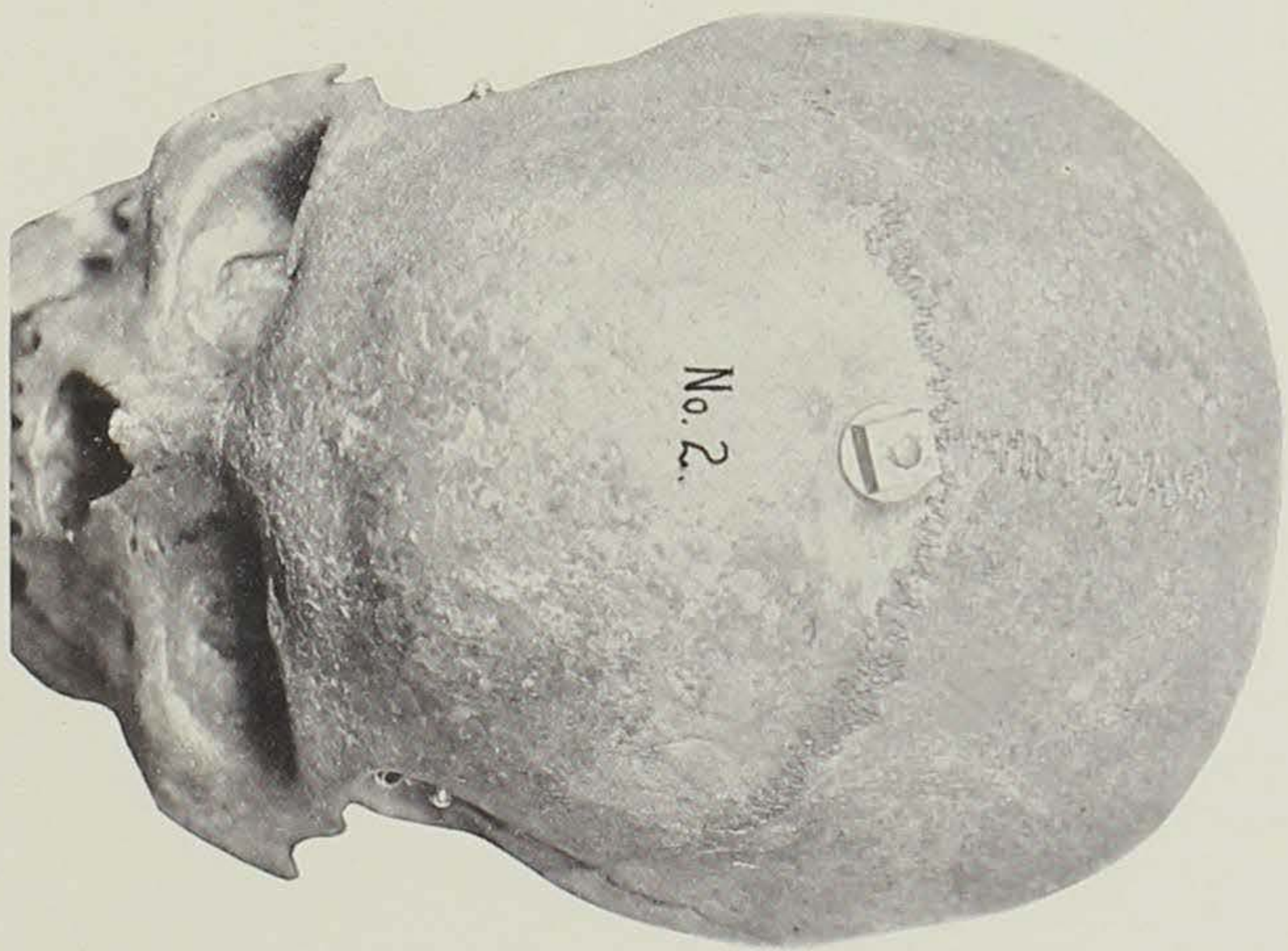
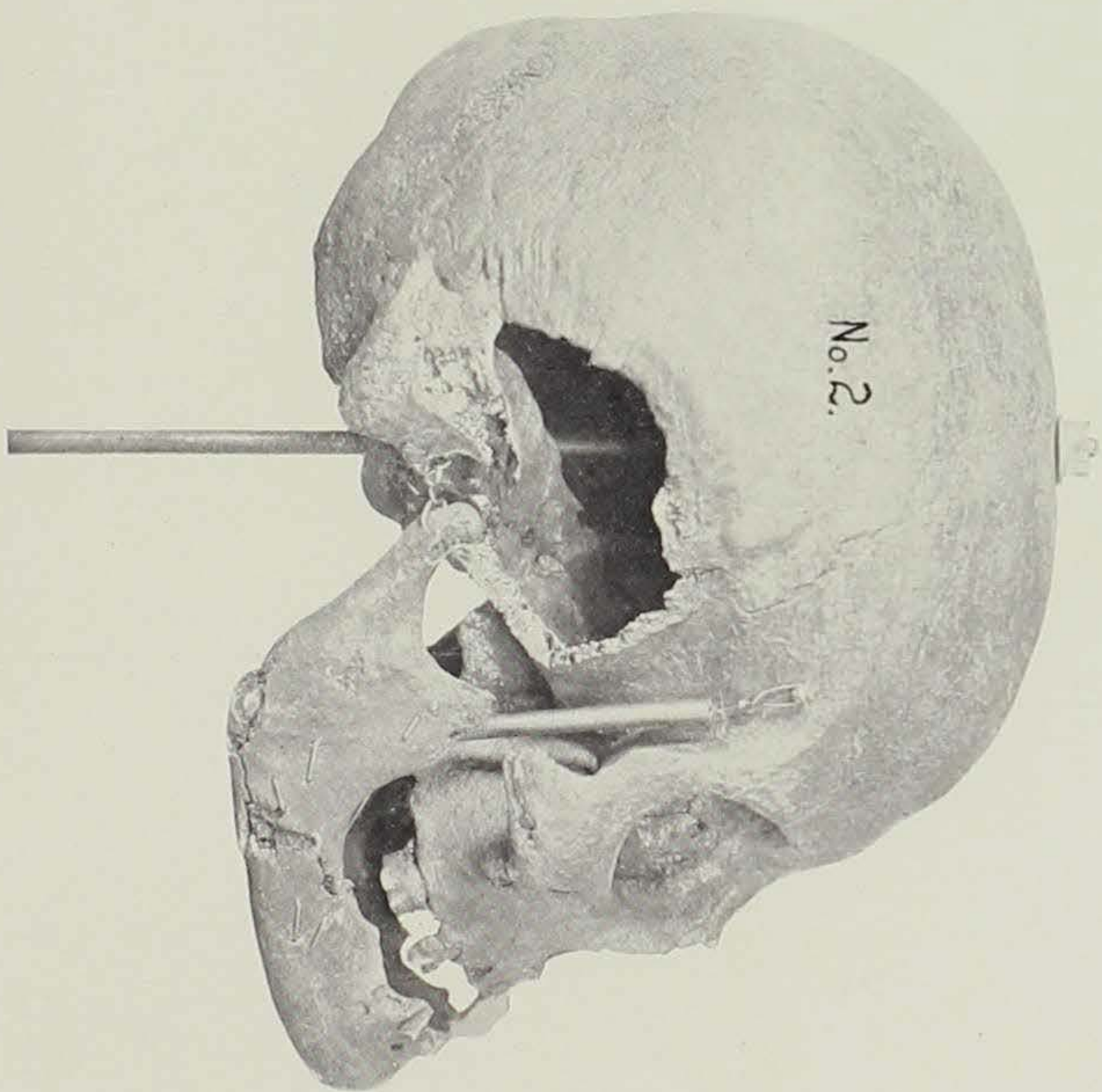
Few men, if any, before the time of Darwin and Wallace would admit change in races or species; individuals were all alike or differed only by chance variation. The foundation of the doctrine of Natural Selection rests upon the differences in individuals. Without this no process of selection can exist. Then when we attempt to make inquiry into this process we must deal not with the individual but the average or mean of the race. These facts, if they be facts, can only be established by the use of some quantitative or

numerical method of expressing the relative frequency of certain individuals. In order to prove the actual variation which is going on around us it is necessary to make vast collections of data in regard to the characteristics of large numbers of individuals. It should always be borne in mind that the single isolated individual proves nothing, while the multitude furnishes the most exact results. The most careful and systematic study of the lives of twenty men would give practically no information in regard to the probable length of life of any man in the next county, but exact knowledge in regard to twenty million men furnishes averages that are certainties.

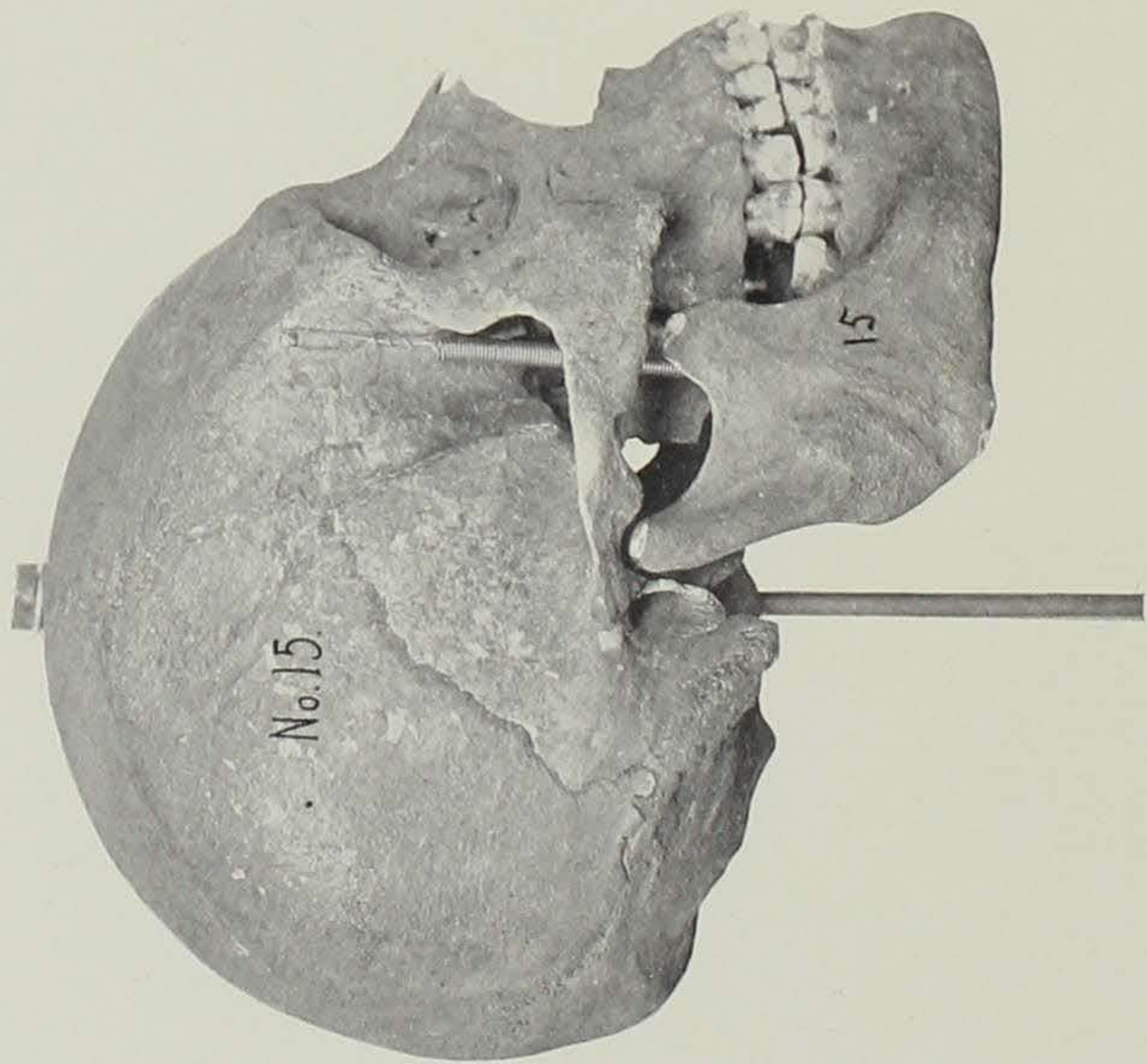
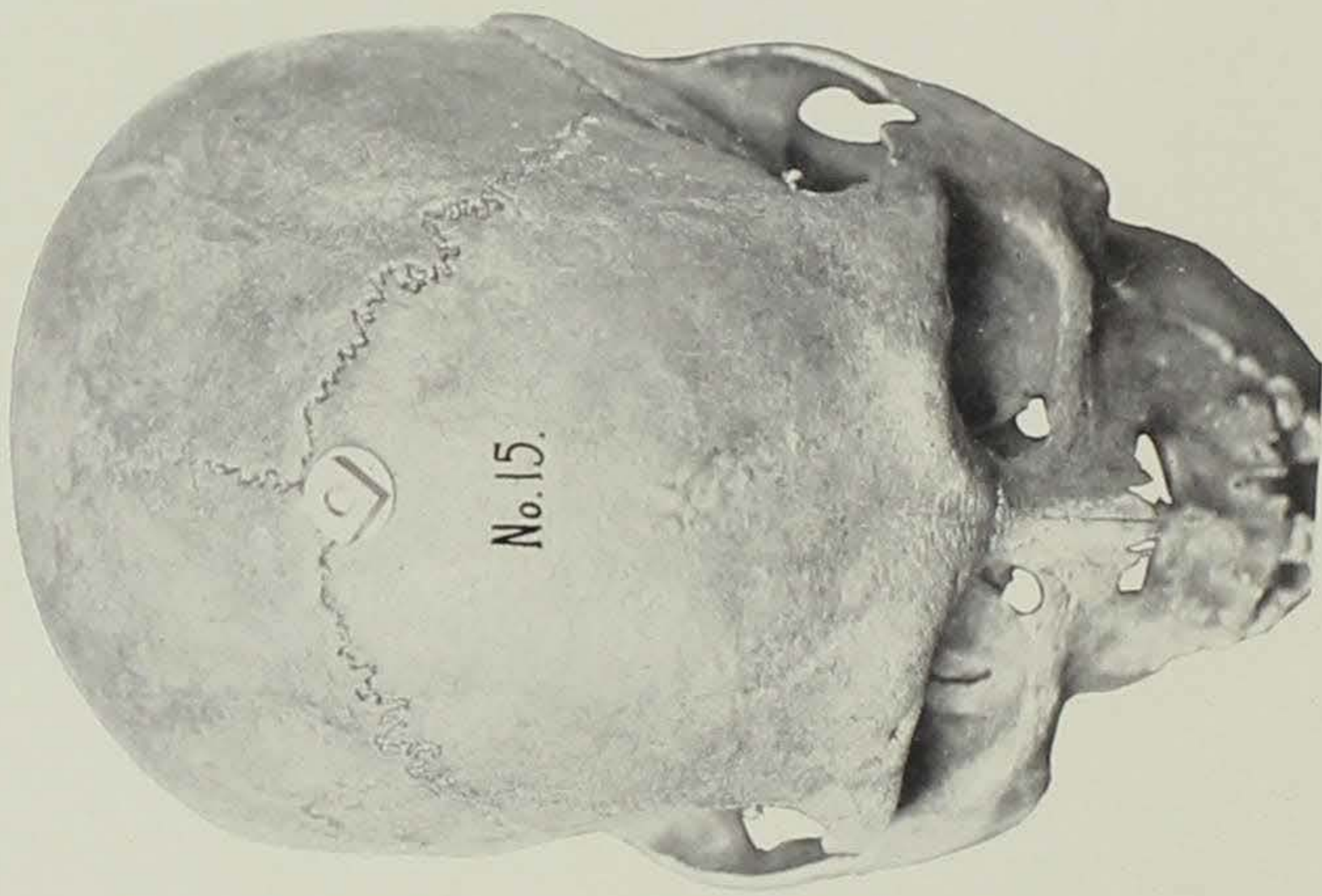
The variations of the individual seemingly enter only by chance, and so we fall back upon the laws of chance. To quote from Karl Pearson: "It is almost impossible to study any type of life without being impressed with the small importance of the individual. In most cases the number of individuals is enormous. Evolution must depend upon substantial changes in considerable numbers and its theory depends upon that class of phenomena which statisticians have grown accustomed to refer to as *mass phenomena*."

"A single individual may have a variation which fits it to survive, but unless this variation appears in many individuals or unless that individual increases and multiplies without loss of the useful variation up to comparatively great numbers, in short until the fit type of life becomes a mass phenomenon, it cannot become a factor in evolution.

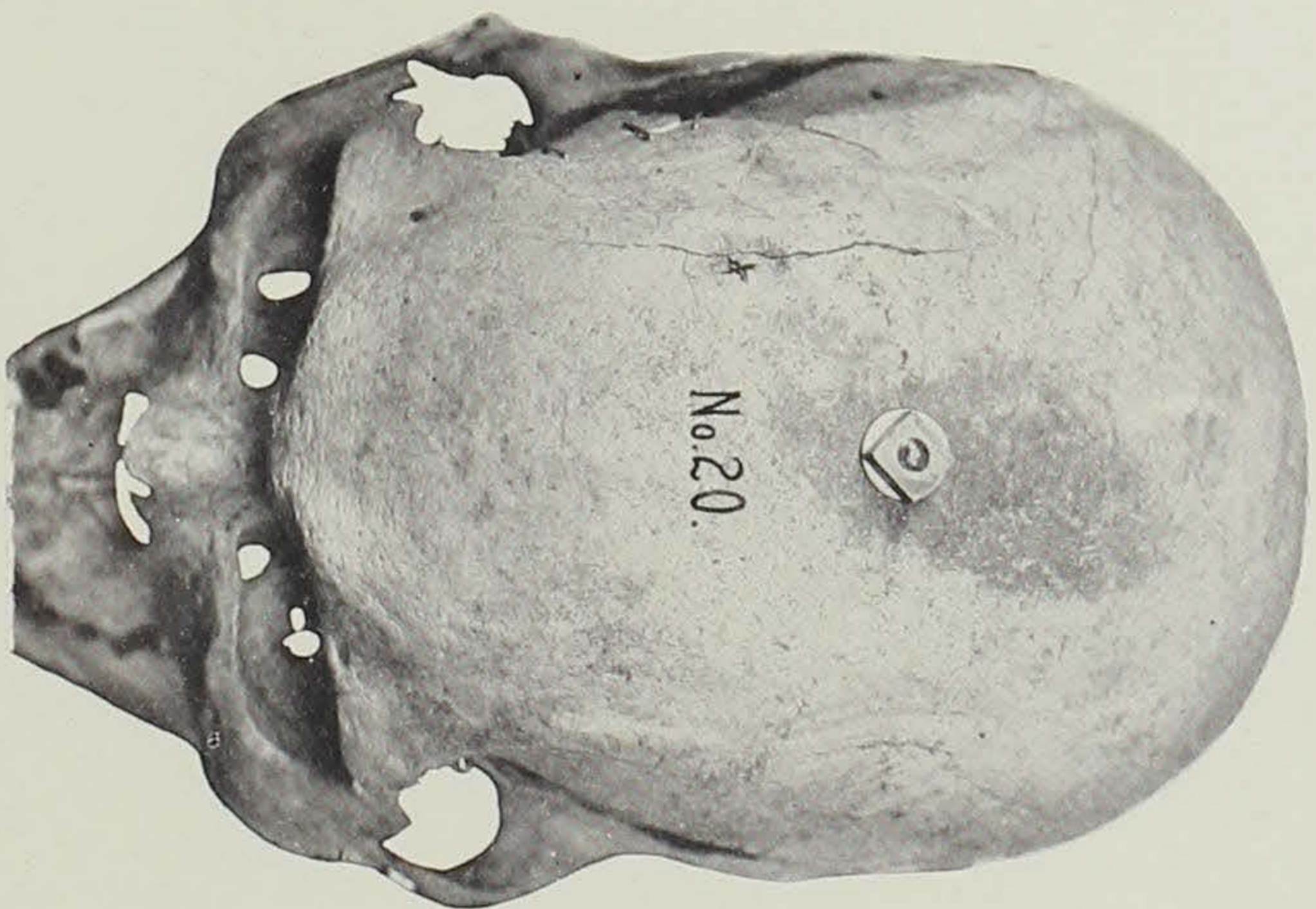
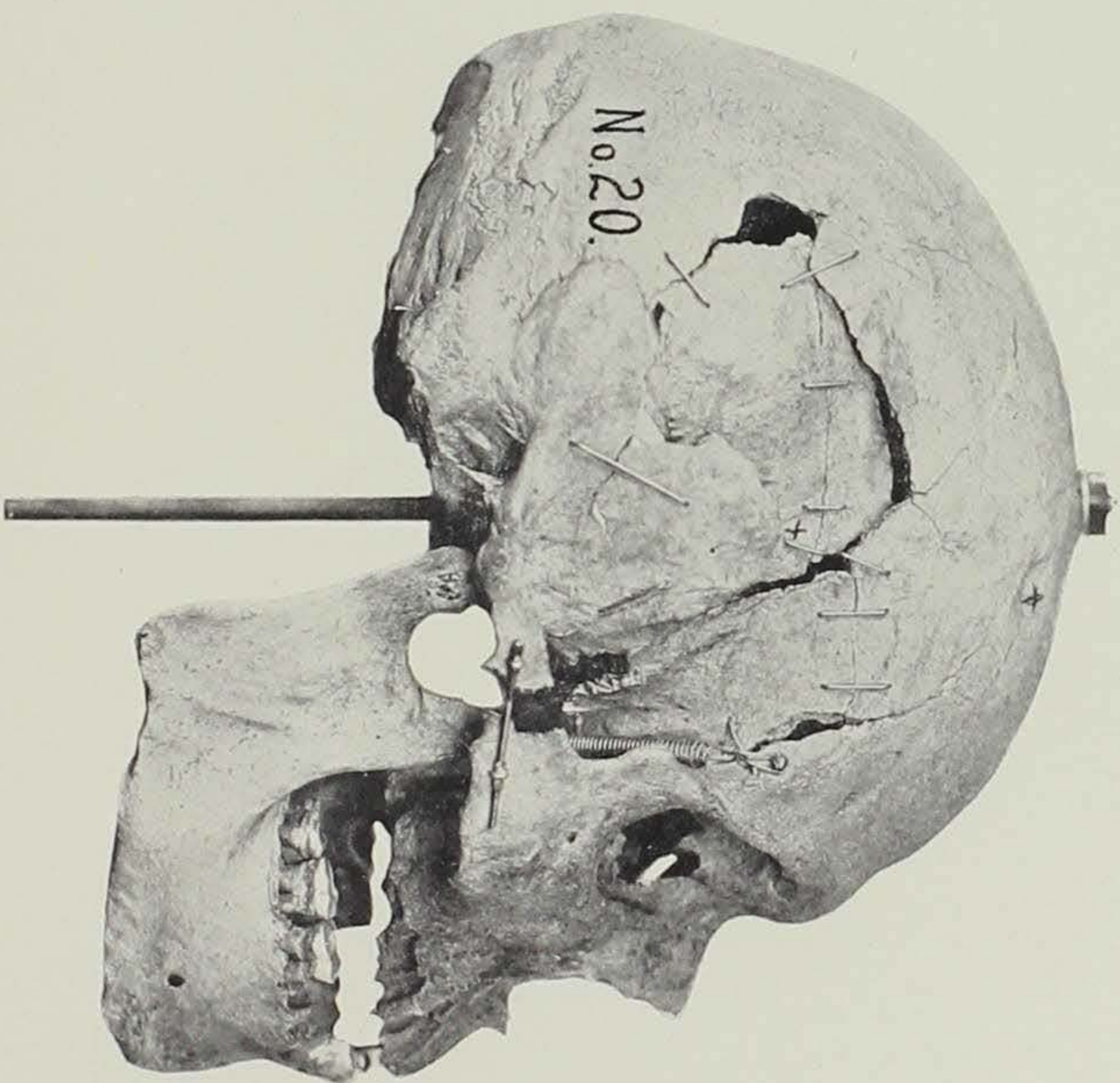
"The moment this point is grasped then, whether we hold variation to be continuous or discontinuous in magnitude, to be slow or sudden in time, we recognize that the problem of



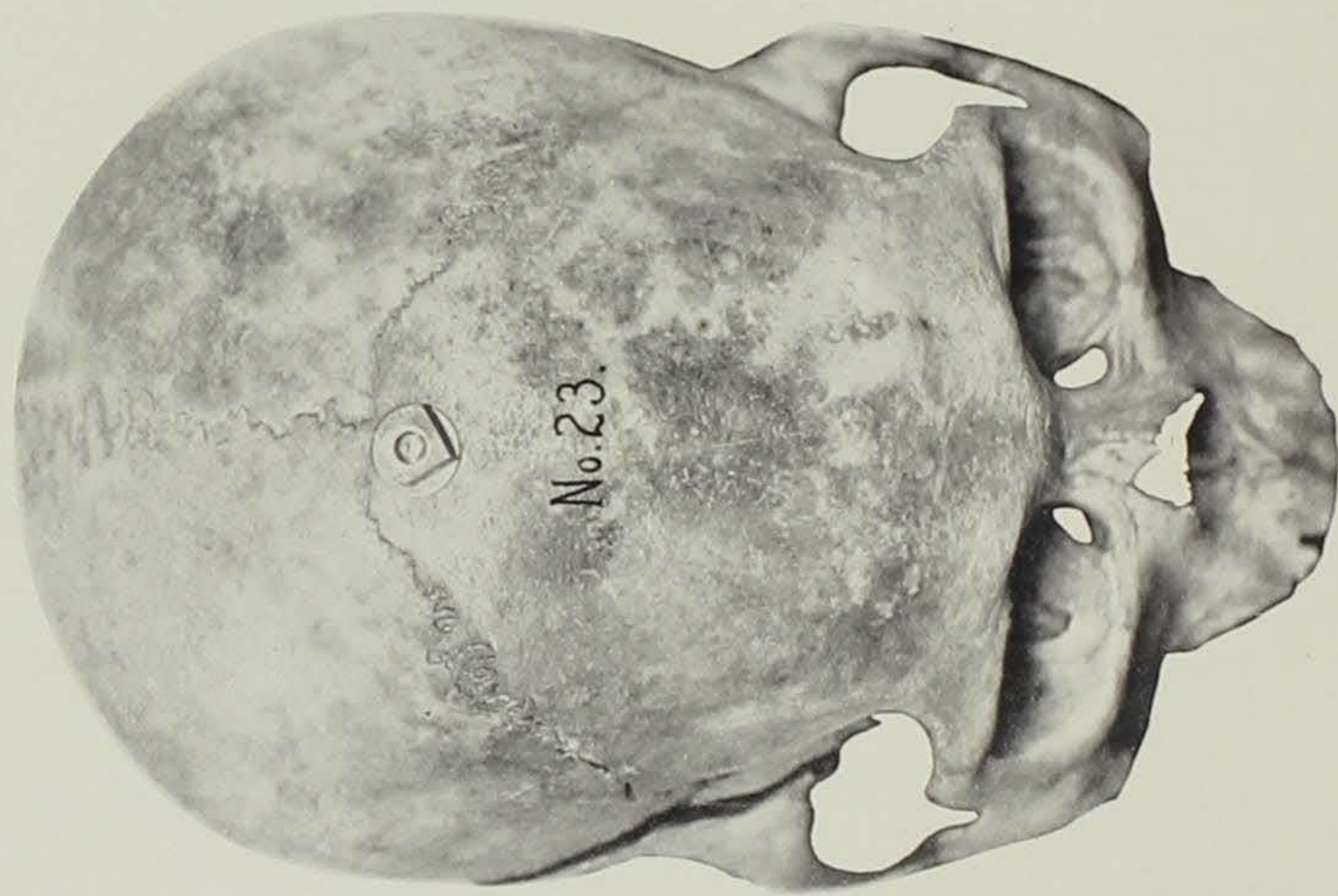
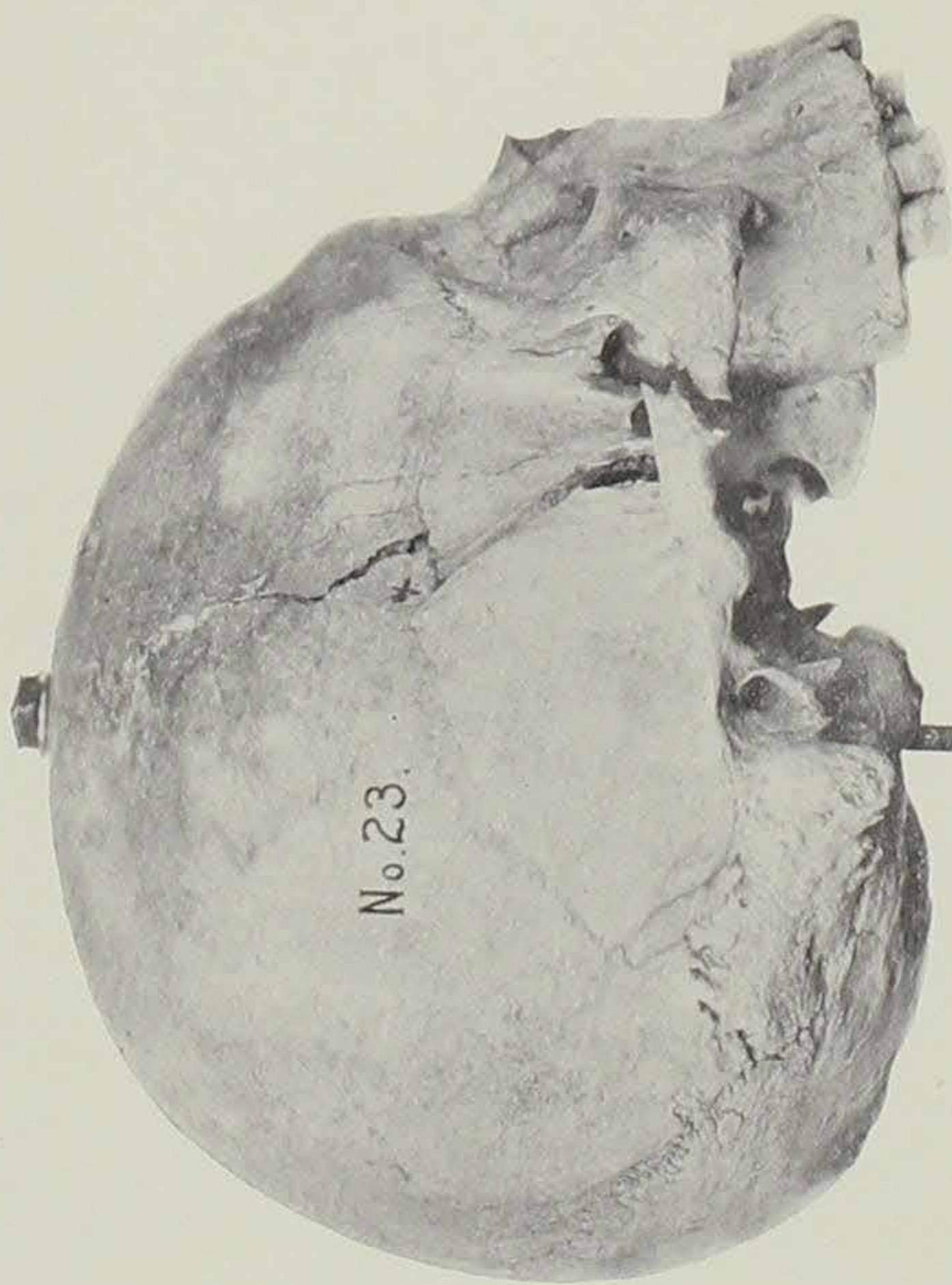
No. 2. AMONG THE LATEST INTERMENTS $1\frac{3}{4}$ FT. FROM SURFACE. BEADS AND IRON INDICATE CONTACT WITH WHITES. BURIED WITH THE FLESH. FRAGILE. VERY DIFFERENT TYPE FROM NOS. 15 AND 20. SEE LOWER JAWS. SEE PROFESSOR SMITH'S MEASUREMENTS.



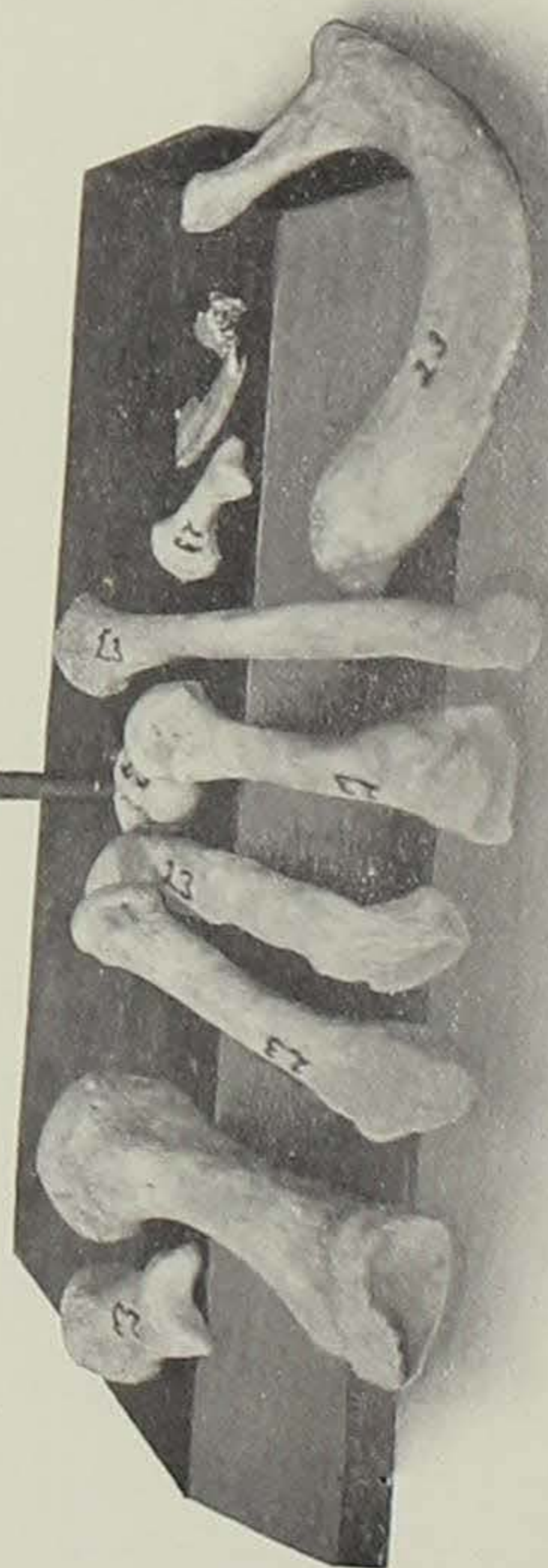
No. 15. "THE MIDDLE MAN." 4½ FT. FROM SURFACE. (PART OF STRIKER-PEARSON FIND.) FAIR PRESERVATION.
SEE PROFESSOR SMITH'S MEASUREMENTS.



No. 20. ONE OF THE THREE EARLIEST INTERMENTS. 6 FT. FROM SURFACE. KILLED BY WAR HAMMER. SEE SMALL CROSS-MARKS. BURIED WITHOUT FLESH. AN AGED MAN. WOUNDED YEARS BEFORE. (FEMUR MENTIONED.) ONLY LARGER BONES FOUND. PERFECTLY PRESERVED. OBSERVE ALSO THE VERY REMARKABLE LOWER JAW. SEE PROFESSOR SMITH'S MEASUREMENTS.



No. 23. ONE OF THE EARLIEST INTERMENTS. 6 FT. FROM SURFACE. KILLED BY WAR HAMMER. BURIED WITHOUT FLESH. THE TEN SMALL BONES WERE FOUND WITHIN THE SKULL. YOUNG MAN. GREAT STATURE AND BRAIN CAPACITY. SEE PROFESSOR SMITH'S MEASUREMENTS.



evolution is a problem in statistics, in the vital statistics of populations."

There has grown up during the past twenty-five years a school of Biologists whom we may call "Biometricians"—a group of Biologists who aim to test so far as may be possible the laws of development in species, and to discover the relations that exist in every phase of life.

To some the measurement of the lengths of the wings of thousands of meadow larks may seem like sheer nonsense—and so it is for the man who makes them and then lacks ability to correlate his results and reach true conclusions. But time will, I believe, show that just such information carefully systemized will be sufficient to uphold or overthrow many a finely spun and well woven hypothesis. It may be the weak confounding the wisdom of the mighty.

The all important point, however, that must be ever borne in mind is that in order that a series of measurements may be of value they must be made according to what may be called the scientific method of statistics. Before conclusions can be drawn, the number of individuals considered must be enormous. Attention is here called to this need of large numbers in order that we may get at the type individual.

In as small a series as the one presented in these skulls of the Okoboji Indians no conclusions in my opinion should be drawn from the mathematical results—that is, so far as giving any further idea of this race than that so many individuals with the particular numerical values found have been observed.

A few words may be said in regard to the measurements

herewith made upon this series of Indian skulls. When we attempt to study past races we are confronted with the fact that about the only thing left to work upon, so far as the physical is concerned, is the few bones that may be found. Again, among the most enduring of these bones is the skull, which from the advanced place that man takes by reason of his intelligence might well seem to be the most important of all the bones for purposes of study. Given then a skull the question at once arises: what measures shall be taken that will best determine the characteristics of the race so far as they may be deduced from simply the skull?

The generally accepted idea is that the most valuable relation, the one that would be taken if only one could be made, is the *cephalic index*, or sometimes called the *cranial*. This index is found by multiplying the maximum breadth of the skull by 100 and dividing by the maximum length. Following this the *vertical index*, or relation of height to length, is taken. Then a large series of values are taken and emphasized as of greater or less importance by different writers. Many regard the nasal index as measuring man's development from an ape-like form. Height to breadth seems to give a good relation for consideration in the study of brain capacity.

In regard to the correlations of the skull it may be said that the correlations differ remarkably from one local race to another. The measure of correlation among the dimensions of the skull is very small compared with that of the principal dimensions, e. g., the long bones of the skeleton, or the bones of the hand. The correlation between length and breadth of head among modern Parisians is so

very small that we may say that the breadth of head among Parisians is entirely independent of the length.

It is shown by Franz Boas in measurements made upon Sioux Indians that "the average breadth of head of individuals whose length of head is very great or very small, differs little from the average breadth. The low value of this correlation is usually explained from the standpoint of mixture of heterogeneous races. It may be said that the law of compensation holds good. Among skulls of the same type, any skulls having a breadth above the average will be compensated for by having a height and length below the average."

Boas considers the cephalic index as a convenient practical expression for the form of the head. Dr. Macdonnell in a careful study of variation in the human skull concludes that there is no correlation between cephalic index and brain capacity. Dr. Alice Lee has shown that it seems hopeless to deduce any equation for determining brain capacity from any one race that shall apply to any other race however closely allied.

A word may be said in regard to the correlation between cranial capacity and intellectual power. So far as this is concerned, Dr. Pearson gives it as his opinion that there is no marked correlation. Jeremy Bentham, who died in 1832, wrote as one of his last acts a memoir on the uses of the dead to the living. He left his writings and his body to University College. His mental ability is known to all. And yet, judged from the standard of brain capacity he would have been of only moderate intellectual power. This of course proves nothing as it is only an individual case.

With these few words the measurements made upon the Okoboji skulls are introduced. The accompanying tables give some few comparative values that may be of interest. All measurements have been made in accordance with the system outlined in *Biometrika*, Vol. I, p. 416. The skull capacities are in cubic centimeters, rape seed being used for filling the skull. All measures of length are given in millimeters. A sheet table of indices of the original inhabitants is added for comparative purposes.

TABLE I

OKOBOJI INDIANS									
Probable Sex.....	<i>m</i>	<i>m</i>	<i>m</i>	<i>f</i>	<i>m</i>	<i>m?</i>	<i>m</i>	<i>?</i>	<i>?</i>
Catalog Number.....	23	15	2	2	20	23a	23b	9	21
Capacity.....	1590	1204	1350	1185	—	—	—	—	—
Greatest Length.....	187	175	174	168	184	194	182	174	—
Greatest Breadth.....	147	136	142	142	134	—	—	—	150
Least Breadth.....	86	95	99	92	95	91	90	—	91
Greatest Height.....	139	130	127	131	130?	—	—	—	—
Nasion to Basion.....	106	105	98	10	—	—	—	—	—
Horizontal Circumference.....	525	499	502	495	515	—	—	—	370
Sagittal Circumference.....	470	339	351	349?	366	—	—	—	—
Cross Circumference.....	320	293	297	309	285	—	—	—	—
Nasion—Alveolar.....	80	77	66	—	79	—	—	—	—
Nasal Height (Nasion to point)....	57	53	51	—	55	—	—	—	—
Nasal Breadth.....	23	25	26	—	25	—	—	—	—
Profile Length (Alveolar to Basion)	112	106	97	—	—	—	—	—	—
Facial Length.....	—	129	—	—	—	—	—	—	—

TABLE II

OKOBOJI INDIANS									
Indices.....	23	15	2	2	20	23a	23b	9	21
Cranial, 100 Breadth: Length.....	78.6	77.7	81.6	84.5	72.8	—	—	—	—
Vertical, 100 Height: Length.....	74.3	74.3	73.0	78.0	70.6(?)	—	—	—	—
Nasal, 100 Nasal Breadth: Nasal Height.....	40.4	47.1	51.0	—	45.5	—	—	—	—
100 Height: Breadth.....	94.5	90.0	89.4	92.3	97.0(?)	—	—	—	—

TABLE III

INDEX	CRANIAL		VERTICAL		NASAL		HEIGHT TO BREADTH	
	<i>m</i>	<i>f</i>	<i>m</i>	<i>f</i>	<i>m</i>	<i>f</i>	<i>m</i>	<i>f</i>
*California Indians Santa Cruz (Islands).....	76.9	78.7	72.2	71.2	46.4	48.3	—	—
*New England Indians.....	74.0	76.1	72.6	76.1	47.6	50.5	98.2	99.1
*Eskimos of Labrador.....	72.0	72.4	71.9	72.2	42.9	44.1	100.1	100.4

*Determined by measurements made by Dr. Frank Russell.

THE FACES JAWS AND TEETH OF THE OKOBOJI
MOUND PEOPLE AS INDICATIONS OF THEIR
STAGE OF DEVELOPMENT

BY PROFESSOR WILLIAM J. BRADY

As Professor Smith has pointed out, we cannot depend on isolated individuals to prove anything beyond the particular specimens. It is only when we examine a great number and find the same recurring phenomena that we are able to draw conclusions. We are interested to know what manner of men these Okoboji mound people were; and so I shall try to present some suggestions based on the evolution of skulls in men and animals. You will see that these suggestions must be very general in character. Before we attempt to use the jaws and teeth of these men as evidence, we must observe jaws and teeth in general, and therefore I have brought a few skulls to show stages in dentition.

All teeth are built up from a certain form known as the primitive cone. This cone is peg-shaped in apex and root. We find this in the lowest orders of animals, and it undergoes modification onward and upward to man. The teeth of all types are specialized by use. The teeth of early

mammals were specialized, though not to an extreme degree. They were forty-four in number—incisors, canine, pre-molar and molar. I have here a typical mammalian jaw. It is that of a hog. Its pre-molars gradually increase in size as they go backward, and the last tooth is the largest. If we find mammals that vary from this dentition we shall see that this is because of the food on which they live. This bear [exhibiting the skull] indicates by his teeth that he ate everything. We know that he had some liking for flesh, yet he ate other things—honey, fruits, roots, etc. The influence of food changes the development of teeth and the shape and strength of the jaw.

Passing now to the strictly carnivorous animals, those which live on living prey, we observe that in this lion [exhibiting the skull] the pre-molar series has been shortened, and there is a great reduction in the size of the molar teeth, while the canines are monstrous. Here is the skull of the orang. The first, second, and third molars persist, but are growing smaller. The pre-molars have been maintained. The cuspids are of very large size.

Coming to the lower races of men, here is a skull from the black race. The first, second, and third molars are larger as they go backward, indicating that these have not made much progress. Here the teeth indicate the inferior stage of evolution. This second skull, which is of a mixed race, does not indicate so low a stage of development. The second molar is the largest tooth and the third molar is beginning to be somewhat reduced in size. The first is considerably smaller. Yet the development is not so great as in the Caucasian.

Observe these models of students' teeth. There is considerable reduction of size in the molar series, both in the uppers and lowers. In the first stages of these changes there is aberation of form. Under greater strain or with less use, the teeth do not follow the general rule. After a while the less used tooth begins to go backward toward the primitive cone. We find a greater degeneracy of the uppers than of the lowers. The lower jaw has the advantage of continued and decided movement to maintain it and to resist the degeneracy which comes from the advance of civilization. The upper jaw does not receive equal stimulation.

In one of these Okoboji skulls (No. 15—"the Middle Man") there is an immense bifurcation of the pre-molars. This would seem to indicate a low type. The third molar, however, is closing its prongs into a cone. In the older skulls (the lowest in the mound—Nos. 20 and 23) the teeth approximate closely the modern Caucasian. We find the crowns reduced, although the jaws are very large. Drawing a parallel in a general way, the teeth are about what residents of Iowa City at the present time would offer, while the jaws are vastly more developed.

In the case of the uppermost, there is evidence of reduction in size, not so much of the teeth as of the bones of the jaw. This is not degeneracy of race, for with the development of man there has been great degeneracy of teeth and bones of the face. We usually speak of degeneracy as a downward and regrettable condition, but degeneracy in some ways is often necessary to promote a higher growth. As we advance intellectually the bones become smaller and lighter. Roundness and thickness of skull do not indicate as high a

degree of development as a smaller, lighter, better marked type. The Neanderthal skull is large, but it indicates very low type. It is round and has no markings. This indicates undevelopment. It is not possible to judge of the intellect from the size of skull. Huxley said that the Engis skull may have sheltered the thoughts of a philosopher or of a savage.

Taking the known facts, we may suggest something of the stage of development of the Okoboji mound people. No. 20 shows intensive white characteristics. The jaw is thin and has the ridges of higher development upon it. The upper jaw bones are thinner, lighter, and more perfectly marked. There may be an immense muscular development independent of other development. In this case we have a high degree of both.

The deepest specimens (Nos. 20, 23, 23a) suggest the highest physical development of any in the mound, and although that physical development is large, yet it is so well marked that to my thinking it shows also a higher mental development. The older specimens are the best, that is, in the shaping of the jaw, in the markings, in the lesson from the teeth, etc. From what I have been able to observe, it is my belief that these bottommost skulls represent a type of people well advanced beyond the present primitive men or the lower early man.

THE LUNCHEON

The forenoon session closed at 12:15 P. M. and a few moments were spent in the closer inspection of the Okoboji Finds. At 12:30 the Association repaired to the Burkley

Imperial Hotel. Here plates were set for forty people. After the repast, brief, impromptu speeches were made by President Loos, Professor Starr, and Professor Calvin. In the parlor, afterwards, everybody remained for a half hour of visiting and acquaintance making.

ANTHROPOLOGY AT HARVARD

BY ARTHUR C. MCLANE

Apropos to some of the interests and undertakings of The State Historical Society of Iowa and The Iowa Anthropological Association, I have been asked to give a brief account of Anthropology at Harvard, which represents the oldest and most successful of the efforts in this direction in America.

THE MUSEUM

The center of anthropological interest and work at Harvard University is the Peabody Museum of American Archaeology and Ethnology. This first educational institution in America devoted exclusively to the study of man, was founded by an Englishman, George Peabody, of London, England, who gave in 1866 the sum of one hundred and fifty thousand dollars to found a museum and professorship in connection with Harvard University. The funds and control were given in charge of a separate board of trustees and so remained until 1877 when the property and control was transferred to the President and Fellows of Harvard.

The Museum is housed in a brick building one hundred feet in length, eighty feet in width, five stories high, and appropriately located on Divinity avenue across the street from the Divinity School.

In this building is lodged the most important collection of American anthropological material in existence. It is quite beyond the capacity of the Museum to exhibit it in its entirety. The collection contains practically complete records of all that has been learned up to date of aboriginal culture, whether prehistoric, proto-historic, or recent, that has found objective expression. Every section of the American continent is represented by valuable collections, many of which could not now be duplicated. In addition there are valuable collections from abroad. The collections are supplemented by a special museum library of 1,900 bound volumes and 2,400 pamphlets, and also by a large collection of anthropological literature in the general library.

SOURCES AND SCOPE OF ITS COLLECTIONS

Aside from the material collected by special expeditions, there are large collections for which the Museum is indebted to other similar institutions and also to individuals. Among the museum collections are those from the Massachusetts Historical Society, the Boston Marine Society, the Boston Society of Natural History, the Smithsonian Institution, and the Peabody Academy of Science in Salem, Massachusetts.

It will be impossible, of course, to suggest, except in general terms, the variety of material there gathered. But there are some special collections that must not go unnoticed. Among these are those of Mortillet and Clement from the Swiss Lake dwellings, from the caves and gravels of France, from the peat bogs of Italy, and the rare finds from Denmark.

The most important collection in the Museum, and prob-

ably the most important collection in America, is that of prehistoric finds from New Jersey. Near Trenton there has been continual excavation in the gravels of the Delaware river, first by Dr. Abbot and later under the direction of Dr. Putnam. Nearly all of the materials are in the Peabody Museum. The Museum is also rich in material dating from more recent times.

For about ten years the Museum has been working in Central America and to a limited extent in Peru, and results of the utmost importance have been secured. The means for doing this have been to a large extent contributed by Mr. Bowditch, a trustee of the institution. The descriptions of the finds would and do include several volumes and can not be enumerated in this connection. Here were found the most developed prehistoric civilizations on the continent, with architectural works of great extent and importance.

Explorations have been carried on among the mounds of the Mississippi Valley, and there is an extensive body of Peabody Museum literature upon the subject. In this connection I must not omit telling of the important work accomplished by Dr. Putnam in saving the Serpent Mound in Ohio. This mound in the form of a serpent, 1,400 feet in length, was part of a farm. It was about to be destroyed when Dr. Putnam, with the aid of several women from Boston, came to the rescue. Thereafter, for several years, it was in the possession of the Museum. It was then transferred to the State of Ohio, and is now a public park.

There is a complete collection of Eskimo culture material from the region reaching from Labrador to Alaska and into

Asia; likewise much material from the southern half of the continent.

PROPAGATORS OF ANTHROPOLOGY AT HARVARD.

The importance of the work of the Museum in American Anthropology will be further and, perhaps, better illustrated by a knowledge of some of the people who have worked there and who have been trained in it. The most important figure is, of course, Professor Putnam, who has been with the Museum since 1874. In that year he became Curator; and for twenty-three years from 1873 he was Secretary of the American Association for the Advancement of Science. In 1890 he was made Chief of the Department of Anthropology of the World's Columbian Exposition. He was the first to suggest the erection of a scientific museum as a memorial of the Exposition. The founding of the great museum now in Jackson Park was largely through his suggestions. It was but fitting that one of his first two students of Anthropology at Harvard, Mr. George A. Dorsey, Ph.D. (Harvard, 1894), and former instructor at Harvard, should be the Curator of the department of Anthropology in that monumental work established by Marshall Field.

I have already mentioned Dr. Abbot's exploration in the Delaware valley, begun in the seventies and continued until the present time. He was the first to call attention to the question of Paleolithic man in America.

Miss Alice C. Fletcher has been a student in the Museum since 1879, and since 1890 has been the holder of the Thom Fellowship. During these twenty-five years she has given much attention to exploration and investigation of the

Indians of the Southwest. Among the many satisfactory results is her complete record of Indian ceremonials, in many cases including phonographic records.

Miss Zelia Nuttall has been honorary assistant in Mexican Archæology since 1886. She has rescued several Mexican codices from destruction, and her work is recognized as of the utmost scientific value.

In the year 1888-89, the first lecture instruction on general Anthropology was given at Harvard by Dr. Duren J. H. Ward. Twenty-five of these lectures were delivered as the introduction to a course in Philosophy, and four public lectures were given in Boylston Hall on subjects analyzing and defining Anthropology, discussing the antiquity of man, man's place in organic nature, and the advantages of this study. They were attended by large audiences, and as a consequence one hundred and twenty-five students petitioned for regular instruction in this field for the coming year. Dr. Ward was called to New York City and the project lapsed.

Mr. S. B. Gordon was a special student and explorer under the direction of the Museum from 1894 to 1901. His explorations in Copan brought him to the front rank of American scientists, and he is now Curator of the Museum of Archæology and Ethnology in the University of Pennsylvania.

Dr. George A. Dorsey has been previously mentioned as the Curator of the department of Anthropology in the Field Columbian Museum.

Mr. W. H. Smith was a student from 1890 to 1894 and is now Professor of Archæology at Columbia University and Curator of the Mexican department in the Museum.

Dr. Frank Russell's work needs no comment before an Iowa audience. The monument of his labors is mounted in the Museum of the Science Building of The State University of Iowa. For some time he was an associate professor at Harvard. At the time of his death he was in the service of the National Bureau of Ethnology.

These men and others have travelled to the ends of the earth to secure for the Museum the necessary material for instruction in the Science of Man. Within the last two years Museum students have travelled through Siberia and have carried on extensive explorations among the people of the desert of Gobi. These various collections are arranged with one point in view, namely, that of instruction. I would emphasize the fact that the Peabody Museum is not merely a collection of curios, but is and has been from the beginning primarily an educational institution, extending its instruction to students of the University and to the interested public.

ANTHROPOLOGY IN THE CURRICULUM

The significant thing about Anthropology at Harvard today is the rightful recognition which it has received in the University curriculum and the great growth of interest in it among the student body in recent years. Professor Putnam was appointed Peabody Professor of American Archaeology and Ethnology in 1886; but not till 1890 were students entered in these branches—there were but two, Mr. Dorsey and Mr. Owen. The latter died in Copan in 1893. Mr. Dorsey took the doctor's degree in 1894, and in that year "Anthropology I." was announced in the courses of

instruction for graduates and, by special permission, for under-graduates. One graduate and three under-graduates were enrolled. Five years later, in 1899, there were twenty-eight students. Five years later again there were three hundred and twenty enrollments in four different courses. And one may reasonably anticipate an increase of twenty-five per cent in the second half of this year.

The department has, I believe, grown more rapidly than any other department in Harvard University. But numbers are not the most significant facts in this connection. The recognition accorded the department by the instructors in other divisions has made it the most important field in the University.

The instructors in Zoology consider Anthropology an integral part of their work and recommend it for all advanced students. The departments of History, Philosophy, Psychology, Education, Sociology, Economics, Medicine, and Divinity, as well as Architecture and the Fine Arts, make the course in Anthropology the basis of much of the work. These courses may be counted as part of the accredited work of the Divinity School. The wisdom of this is recognized by the divinity students who patronize this department in large numbers.

THE INTEREST OF STUDENTS

There is among the student body an Anthropology Club, meeting every three weeks, and under its auspices frequent lectures are held. I may add that these lectures are better patronized on the whole than those inaugurated by any other department.

To show still further interest, I would mention the student expedition of last summer to the Cliff Dwellings and Pueblos of New Mexico. It was a private expedition of some score of students who paid the expenses of an instructor in the department to guide them. This is unique in the history of Harvard University. Following this example, the Geological Department will guide an expedition to Iceland next summer; but it will be most largely patronized by students in the anthropological division. It is difficult to see how in the face of such an array of facts any university can refuse to recognize the necessity of paying considerable attention to this important science.

INSTRUCTORS AND COURSES

The department has at present a professor in charge and two instructors. It has been hampered by a lack of necessary funds and the consequent inability to retain the men whom it has trained for its own service. It began as a department or division of American Archæology and Ethnology. It has since changed its name with its purpose, and is now a department of Anthropology in all that the word implies.

Its courses of instruction are in three groups: (a) Somatology—Comparative anatomy of man and the higher apes; facial and sexual characters. There are in the Museum several hundred skeletons and crania for work in this field. (b) Prehistoric Archæology—Man from geological to historical time. The beginnings of the utilitarian and æsthetic arts, the early periods of culture. (c) Ethnology—A course in primitive folk lore is given by Professor Kittridge of the

department of English and History. Courses in Eusebiogeny, or the origin and development of Religion, are at present given in the Divinity School; and Sociogeny, or the origin of social life, is to be treated in the department of Sociology. Both of these special fields will soon be treated in their proper divisions. The instructors are Dr. Farrabee and Dr. Dixon.

In closing this account of work in Anthropology at Harvard University, I may venture to repeat some important statements:—

1. The department has grown and is growing faster at the present time than any other department in Harvard University, showing the attitude of the student body.

2. It is made the basis of work in more departments than is any other line of research.

3. All students who have completed the course have found positions awaiting them, either in teaching, exploring, or as museum curators.

RECENT ARCHÆOLOGICAL INVESTIGATIONS IN NORTHERN EUROPE

BY PROFESSOR ANDREW A. VEBLEN

The great center of human development in the North of Europe during the pre-historic times was around the Baltic Sea. The area of the richest Archæological finds includes the Russian, Danish, and Swedish coasts. In the iron age, development extended up the coast of Norway. But the oldest important relics are bronze. They consist of implements, particularly knives, and beautifully carved portions of boats, serpents, and fishes. On cliffs in Sweden, Nor-

way, and Denmark, there are found drawings of various objects, more specially of ships, showing the maritime character of those early visitors.¹

The richest region for the relics of boats is in Southern Norway. Many ancient graveyards show what we call boat-formed graves; and there are numerous burial mounds. They are earlier than the Christian era. This kind of burial ceased with the introduction of Christianity. Altogether, there are thousands of them still extant. Generally but one important individual was buried in each mound. At the base of the mound is a burial chamber, often made of stone, in which the body was placed with its weapons and sometimes with bronze jars and wooden buckets.

After cremation came into use, the ashes were frequently buried near the surface in the mounds already made. Weapons of iron were found in some, and in one there was a woman's woolen dress that is about twenty-three hundred years old. The basis of the cloth was wool with cow's hair woven into it to give it thickness. The bronze age extends from about 1700 B. C. to 500 B. C.

The most notable mounds are those in which boats are found in the bottom. These Norse ships were packed away in clay and both the vessel and the contents were very well preserved in some cases. Some of the ships show careful work and fine carving. There were chambers built in the interior of the boat for a tomb in which the body could rest. The finest discovery was a boat eighty feet long, sixteen foot beam, with row-locks, or oar holes, and awnings.

¹ Many maps and charts were shown by stereopticon views making clear the scope and the general character of these finds.

It was well carved and painted. The tiller showed a dragon's head. The remains of the original owner or captain were partly discovered. Comparing the lines of this ship with modern ships, we observe how wonderfully skilled they were in the art of ship building.

Archæological work in the Scandinavian countries is being carried on with great diligence. It is patronized by the government. Among the eminent explorers are Nicholayson, Unseth, Rygh, Gustafson, and more recently, in Sweden, the now eminent and active Drs. Stalpe and Montelius. All the work in Sweden is now under their direction.

RECENT ARCHÆOLOGICAL STUDIES IN ROME

BY W. A. PRATT

Mr. Pratt began by a contrast between the spirit of Archæology to-day and in former times. Columbus fervently uttered the prayer, "O God, help me to find a gold mine." This spirit of commercialism, or of destruction, characterized the work of most earlier investigations.

By the more serious method of science we are getting into an understanding of the inner life of people who lived in Abrahamic days. The oldest Rome is buried under a natural drift of debris thirty to fifty feet deep. Until very recently archæologists supposed they had reached the beginnings of the Roman remains in the Forum at an extreme depth of thirty feet. Some six years ago excavation was undertaken anew, and they have gone down to the level of the Republican pavement and in many places even deeper. Parts of the Forum were covered with forty feet of the accumulation of the ages. This new diligence has been

rewarded by the finding of altar stones, the supposed tomb of Romulus, underground passages, and a portion of a sewer.

Among other interesting things are evidences of the sacking of Rome by the Gauls. The shrine of Cæsar, the temple of Vesta, and the house of the Vestal virgins have been completely uncovered. Near the center of the Forum the fountain of Tutuma was found with waters still flowing as freshly as when Castor and Pollux were said to have watered their horses there. Near by this is a statue of the God of Healing. [During Mr. Pratt's brief talk, Professor Fairbanks passed around a few photographs of these recent excavations.]

Professor Arthur Fairbanks followed with a short discussion of the same subject. Among other things he said that the recent excavations in the Forum are interesting in the light they throw on the early influences at work in Roman history and on the stages of the city's development. From the standpoint of Anthropology, the most interesting discovery is that of graves which long antedate the use of this region as a market place. They are situated near the temple of Antoninus and Faustina, at the depth of ten feet below the Republican level, and perhaps twenty-five feet below the Early Imperial level. In an area of half an acre some twenty-five graves have been found. They show two types of burial: cremation and burial in tree trunk coffins. The articles buried with the dead consist of rude pottery made by hand, parts of bronze weapons, bronze garment clasps, objects of cut bone, amber, etc. The later graves apparently belong to the earliest period of Roman history when

Rome was hardly more than a settlement of outlaws on the Palatine hill. The earlier graves go back to the eighth or even the ninth century, B. C. The objects found in them show Etruscan influence, but no trace of Greek influence. As a result of these excavations in the Forum, the myths of early Roman history are not translated into history; nevertheless the main outline of Roman history from 800 B. C. on can now be determined with some accuracy. The results obtained are hardly less wonderful than those obtained by Schlieman on the site of Homer's Troy.

SYMPOSIUM

Following the addresses called for by the program, a few minutes were spent in the closing hour in general remarks along the line of Anthropological work in Iowa. This was opened by the Secretary, who stated the general object and called attention to the scope of the work covered in the programs of the two yearly meetings now completed. He referred to the growing interest in the subject as shown by numerous letters of inquiry received and by the numerous references to this field in the periodical literature of the time.

Professor Shambaugh followed with a reference to points which he made in his address at the Yearly Meeting in 1904, and to the recommendation then made. He referred to the gratifying results from the two or three instances of archæological work undertaken by the two societies and urged with great earnestness the enlargement and continuance of this work.

Mr. Harrison, of Davenport, expressed his gratification at being present for the first time and spoke encouragingly of the character and purposes of the Association. He referred to work in the past done by the Davenport Academy of Sciences, and said that some of the richest finds had been made in Iowa. He closed by saying that throughout the State there had been much "digging" and but little "exploration."

BUSINESS MEETING

At 5 P. M. the Association went into a business session. The report of the Nominating Committee was called for by President Loos. It was read by Prof. A. G. Smith. The committee placed in nomination as officers for the ensuing year the following names: for President, Charles C. Nutting; for Vice-President, J. H. Paarmann; for Secretary, Duren J. H. Ward; for Treasurer, Frederick E. Bolton; for Executive Board (additional), Frederick J. Becker, William J. Brady, Isaac A. Loos, Benjamin F. Shambaugh, and Frank A. Wilder.

Voted that the report of the Committee be accepted.

Voted that the Secretary cast the ballot of the Association for these members as officers for the year 1905-6.

Voted that the matter of future meetings be left to the decisions of the Executive Board.

Voted to adjourn.

DUREN J. H. WARD
Secretary

THE IOWA ANTHROPOLOGICAL ASSOCIATION
IOWA CITY