

ON WEST INDIAN STONE IMPLEMENTS, AND OTHER INDIAN RELICS

BY

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During the journey which I undertook in 1885/86 to the West Indies and Venezuela, under the auspices of Prince Roland Bonaparte, the late Dr. Emil Riebeck and Teyler's Genootschap¹, I collected a certain number of ancient Indian stone implements. In the following pages I shall try to give a brief description of a part of these specimens, all of which belong at present to the Ethnographical Museums of Leiden and Berlin. For comparison and to be more complete, I have added the description and figures of a small, though more or less representative, number of stone implements, mostly from Dutch Guiana or Surinam, in public and private collections in the Netherlands. Furthermore I shall add a few notes on other Indian relics of different kinds which occur in Surinam.

The Archaeological and Ethnographical Museums in Leiden have furnished the greater part of these implements. The former institution mostly owes these objects to Mr. C. G. Hering in Paramaribo; the latter establishment is indebted to Mr. C. G. Young in New Amsterdam, Berbice, for a number of stone implements from British Guiana which were most generously presented by him. A few other specimens belong to Mr. G. A. van Sypesteijn, ex-governor of Surinam, now in the Hague, and to Prof. K. Martin, in Leiden, which were kindly placed at my disposal by the owners. Finally the late Dr. C. Rau, in Washington, kindly furnished me with the illustrations of two specimens from Surinam which the Smithsonian Institution possesses through Mr. Hering.

¹ Cf. Tijdschr. van het Nederl. Aardrijksk. Genootschap, 2e Serie dl. III, Versl. en Meded., enz.

Before adding any explanatory notes to the specimens of stone implements figured here, I will now give a few general remarks as to the occurrence of these objects in Surinam.

Among the Indian tribes in Dutch Guiana, of which we possess certain knowledge, viz. the Caribs, Arowaks, and Warraus, stone implements are no longer in use. At present stone implements occur in Surinam in two different ways: 1^o. scattered like usual stones on the surface of the ground, and 2^o. preserved in the houses of modern Indians, Negroes and Creoles. As far as I know, positive evidence of the existence of shell mounds in Surinam, like those in British Guiana, is missing; so we do not know of any stone implement from such a source.

The first way mentioned in which stone implements are found is the most common. The number of those found among the Indians seems by no means to be considerable, and I think one might find as many of these objects in the hands of Negroes and Creoles throughout the Colony as among the Indians above mentioned. I suppose the Indians of Surinam have the same reasons for preserving these stones as those mentioned by Mr. in Thurn ¹ viz. in the first place for smoothing and polishing the clay in the making of pottery, and in the second place because some superstitious property seems to be ascribed to them. I never found any ornamented example; only one of my specimens (tK 17), obtained from Carib Indians on Wayombo river, had merely a slight coat of pigment, probably intentionally laid on.

The world-wide spread superstition that ancient stone implements have fallen from the sky and are considered as "thunderbolts" and "thunderstones" is equally found in Surinam, especially among Negroes. These objects are sometimes used by them as charms against strokes of lightning.

All the specimen of stone implements from Surinam, which came in my hands, like those from other parts of the West Indies and Venezuela, are polished and highly finished thus presenting the so-called neolithic characteristics. ²

As the stone implements here described have not been rigorously

¹ Among the Indians of Guiana. London 1883. p. 423.

² It seems that the generally admitted opinion that West-Indian stone implements are always highly finished must allow of a few exception, as flaked, chipped and unpolished specimens have been found in the Antilles. See the Guesde Collection of Antiquities, by Otis T. Mason. Smithsonian Report for 1884. p. 740.

examined as to the petrographical character, it is impossible to give at present a certain diagnosis of them, but we may safely say that a certain number among them consists of diabas. However I think the petrographic diagnosis of these stones is here of very little importance as Surinam and the adjacent regions of South America, especially British Guiana, and the West Indian islands present so much the same geological features that even a professional petrographic description would in this case not throw any light on the question whether these implements have been brought to Surinam from the northwest — continent or islands — or have been made in that country itself. Thus only the comparison of the formation of the implements can, in this case, throw any light on the subject of Indian migrations.

Several specimen have lost their natural color, i. e. the color of the stone of which they are made, by the influence of time and weather, probably in most cases due to long continuance in the soil in which they were found. So one specimen (SH. 7) is even covered with a thick patina. Others, though it may be their natural color, offer such indefinite colors and varieties of tints that it was next to impossible to give any reliable description of it. Even by means of Radde's chromatic tables I failed, in many cases, to define the exact color.

For convenience's sake I have reproduced the marks and numbers by which the specimens were registered or marked in the museum, or by their respective owners, at the time I studied them. Thus the specimens marked *S.*, *SH*, *S. J. v. L.*, *SS.*, and *S. Gn.* belong to the National Museum of Antiquities in Leiden, which initials indicate the provenance and the name of the collector; e. g. *S II* = *Surinam*, *Hering*, etc.

The specimens marked *r. K.*, *L.*, and *Y* form a part of the National Museum of Ethnography in Leiden; *rK* = *ten Kate*; *L* = *Loth*; *Y* = *Young*. Those marked *M* are private property of Prof. Martin; those *v. Syppest.* of ex-governor van Sypesteyn. Finally *W.* indicates the specimens in the Smithsonian collections at Washington.

As no typical difference can be established between the implements here under review, as to the region in Surinam they come from, it may suffice to say that they were all collected in different parts of Surinam, with the exception, of course, of those obtained in British Guiana by Mr. Young, and which come either from the coast, or from Demerara- and Berbice rivers.

It may be as well to mention here that as regards the illustrations and annexed explanatory notes, I have made a representative selection among the specimens in both the Leiden museum, and that especially the Museum of Antiquities contains, besides the specimens figured here, a large collection of stone, and shell implements and other Indian relics from the West Indies, mostly from Aruba and Curaçao, of which latter objects particularly a description has never as yet been published.

I disposed in all over 38 specimens, of which annexed illustrations may give an idea. As all these specimens have been figured in half size it seems superfluous to give any measurements or a minute description. I shall only add a few remarks as far as the typical forms, their probable use and occurrence is concerned.

In two different papers, known to me, in which is treated of West Indian stone implements, two of the specimens (marked S. J. v. L. and S. Gn.) figured here, have already been described and figured, viz. by E. Friedel¹, and seven or eight, of which one (marked S. J. v. L.) equally by Friedel, by Dr. C. Leemans, Director of the Leiden Museum of Antiquities². I am sorry to say that a few of the illustrations, both in the *Zeitschrift* and in the *Compte rendu* represent the specimens, which I closely compared in the Leiden Museum of Antiquities, in a rather inaccurate way.

I perfectly agree with Dr. Leemans when he says (*loc. cit.*) that *Fig. 9*, pl. II in Friedel's paper is probably not procured in Dutch Guiana, and designated by mistake as being a hammer. I must add that I consider it very doubtful whether the specimen (No. 11) figured by Friedel was found in British Guiana. Probably Friedel's assertion is based upon a misunderstanding.

Prof. K. Martin figured two of the stone implements, illustrated here by me, in his work *West-Indische Skizzen* (Leiden 1887), *Tab. VI, Figs. 13 en 14*.

Though brief this enumeration of authors who have previously described or figured stone implements from Surinam may be, I think it is probably complete.

Furthermore Mr. Everard F. im Thurn³ has described and figured

¹ See *Zeitschrift für Ethnologie* V, 1873, p. 40, 41, Pl. II.

² *Compte rendu de la 2e session du Congrès international des Américanistes. Luxembourg 1878. Tome II, p. 291—299.*

³ See *Timchri*: being the Journal of the Royal Agricultural and Commercial

a number of stone implements from British Guiana and the West Indian islands, thus furnishing interesting material for comparison. I shall occasionally refer to his publications in the course of these notes.

The stone implements figured here all belong to the "practical" forms. Of the "ornamental" forms there was not a single one among the specimens which I had at my disposal.

These "practical" forms represent from ten to twelve types of which a few closely resemble and as it were run into each other; they are with difficulty to be classified with perfect decision. Although mostly representing common types, two of the types in my collection seem to be rather rare; at least hitherto I never came across any other similar specimens, neither in collections nor in literature.

Among the common forms I firstly point to *Figs.* W. 2, S. H. 7, t. K. 15, Y. 14, S. H. 8, representing slight variations of the bilaterally notched type with square butt, which has been compared to the longitudinal section of a "button mushroom". This type, as well as the following notched forms, might be called the West Indian typical stone blades *par excellence*.

All the specimens of this square-butted type figured here, present a more or less distinct, probably intentional asymmetry of the butt and notches¹, possibly for the sake of more convenient hafting and strengthening of the striking power of the weapon.

As shown in the illustrations, there are a few other types, partly running into each other, with bilateral notches, namely two or three types with more or less square, heavy butts (See *Figs.* S. H. 19, t. K. 17, t. K. 18, S. H. 4 and t. K. 9, t. K. 3) and two types with convex butts (*Figs.* S. S. 1, S. Gn., S. H. 16).

It is hard to say whether t. K. 18 represents a finished specimen, or, considered as unfinished, is to be considered as one of the side-notched types of which S. H. 19 furnishes an example.

Figs. t. K. 4, t. K. 5 and M. 2 of the convex butted types represent by their peculiar semicircular edge and smallness a special form of the notched stone implements.

Figs. S. J. v. L. and t. K. 11 may furnish examples of the most simple notched forms. The latter example stands very closely to simple celts like illustrated in *Figs.* t. K. 10, M. 2, W. 1.

Society of British Guiana, Vol. I, Part. II; Vol. II, P. II; Vol. III, P. I; and Among the Indians of Guiana, p. 421—427, pl. X.

¹ Cf. Timelri, Vol. III, Part. I, p. 112, pl. 8, fig. 6.

The petaloid or almond shaped type, the typical West Indian "celt", among our specimens is represented by *Fig. Y 9*.

Of the more or less wedge shaped, so called Scandinavian type *Figs. S H. 1, Y 13, Y 17, Y 4, Y 10* may furnish examples. As suggested by Mr. im Thurn¹, specimens of this type were most probably intended to be socketed into the heavy wooden war clubs (*tiki*), commonly called *apootoo* or *apatoo* in Surinam. A specimen of a kindred form (*Y 6*), as tried by me, perfectly fitted into the empty socket in an old Indian ornamented war club from Guiana (in the Leiden Museum of Ethnography) destined to keep a stone celt. So I think there is but very little doubt that also implements of this form (among which *S H 22*) were intended to be fastened into this kind of handle. As far as the just mentioned assertion of Mr. im Thurn's is concerned, I wish to remark that in the club preserved in Leiden, the pit or socket destined to keep the stone blade, is on the *sharp* or *narrow* side of the club, and not on the broad and flat side, or face, like *Fig. 43 (loc. cit.)* seems to indicate.

The war clubs of the Bakairi- and Suyá-Indians in the interior of Brazil, as figured by Dr. von den Steinen² may serve to illustrate another way of fastening different unnotched stone blades (like *t K 10, M 2, W 1; Y 9*) into wooden handles. Very much the same manner of hafting seems to have been in use among the ancient inhabitants of the Bahama islands³.

As forms of the winged type — one of the comparatively rare forms above mentioned — though far from being similar to each other in other respects, we may consider N^o. 2 v. Sypest., S. J. v. L. 1, S. H. 15, t. K. 7, N^o. 4 v. Sypest., S. H. 6.

I consider it very questionable whether these implements, and among these especially N^o. 2, v. Sypest., were ever destined to be fastened into a handle. By its general shape, rounded form (which is insufficiently shown in the figure) and dimension, it might as well have served as an implement — weapon or other — to

¹ Among the Indian of Guiana, p. 424, 425, fig. 43 and fig. 2, pl. 10.

² Durch Central Brasilien. Leipzig 1886. Ethnologischer Tafel N^o. II, Figs. 3 & 8.

It is perhaps well to remember here that the Bakairi are the southernmost Carib tribe of Indians which suggested to their discoverer, Dr. von den Steinen, a new and very debatable theory on the home and migrations of the Caribs, entirely opposed to the views hitherto accepted.

³ See the Latimer Collection of Antiquities, by Otis T. Mason. Smithsonian Report for 1876. p. 373 and fig. 12.

be grasped in the hand, and some what reminds *Fig. 6*, pl. X in Mr. im Thurn's *Indians of Guiana*.

N^o. 4, *v. Sypest.* is remarkable for its relative flat face (unfortunately not very evident in the illustrations) and broad wings. S H 6 is noteworthy for its comparatively small butt with somewhat beveled wings, and its broad blade diverging toward the edge.

N^o's t. K. 1 and L. 2, presenting another form of the winged type, are the only specimens of this form I ever came across as yet.

I think it is very doubtful whether these forms, the former as well as the latter, were ever hafted; possibly they were used as wedges, in working wood, or rather as chopping knives.

The former example was found by me near the place of an ancient Indian encampment in the Coronic district; the latter was obtained by Mr. W. L. Loth, government-surveyor, on one of his expeditions into the interior of Surinam, if I am not mistaken.

As little as the other stone implements above described, slabs of stone for the cooking of cassava-bread are no longer in use among the Indians of Surinam known to me. A circular iron griddle of European make is now generally used.

Likewise the old cassava-graters of which the teeth consisted of numerous small, pointed stones, formerly in use among these Indians, have been replaced by tin graters bought in town. It seems that only the Indians in the remote, almost unknown as yet parts of Surinam — like the Rucuyennes — still use these stone graters.

As regards the sites of ancient Indian villages in Surinam I can be short. On the place where Paramaribo now stands, *f. e.* at the site of the Military Hospital, traces of ancient Indian settlements on the sand- and shell reef have been found. In the Coronic district which has been inhabited by Indians in historic times, probably by Warraus¹, a number of these sites are to be found, as well on usual sandgrounds as on the shell reefs along the seacoast, which reefs suggested to an explorer the idea that shell mounds or kitchen-middens occurred there. Although in certain places where the soil was accidentally (?) some what elevated this suggestion seems true, I do not think we have any reason to believe that these are true shell mounds like those in British Guiana; at least in the tract of country in

¹ Cf. among others the old map of Surinam in Stedman's *Voyage à Surinam*. Coll. de Planches, pl. V. French edition.

the Coronie district, lying between Plns. Belladrun and Inverness, which I explored, no such thing was found by me. Still I cannot deny that a careful search throughout the coast region of Surinam might reveal some interesting ethnological and archaeological findings. Amongst the objects which I collected in Coronie are two deformed Indian skulls, a number of broken human bones, a quantity of broken fragments of pottery, all of which are now in the collections of Prince Roland Bonaparte, and a few stone blades.

Petroglyphs or rock engravings in Surinam were only seen by me on the Maroni river, on the wellknown so called Timehri-rock, opposite Portal island, and examined or described by Kappler, Hering and Crevaux. It seems these engravings, of which many are almost obliterated, must be ranged among the "deep" kind of Mr. in Thurn's classification ¹. Besides this "Timehri" rock and the pictured rocks on the Corentyn, I have never heard of any rock- engravings in Surinam. But who knows how much might yet be recorded in the unknown interior of the Colony!

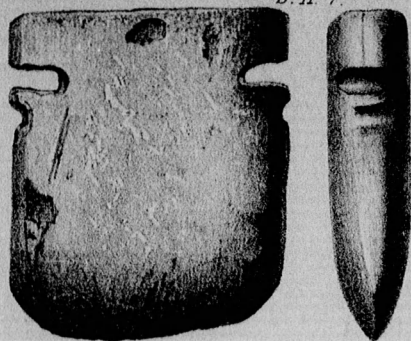
Cuplike excavations, like mortarpits, made by men, and which must not be, though sometimes are, confused with somewhat similar excavations of a geologico-dynamic origin ² were seen by me on the flat surface of rocks on Switi Cassaba island, near the Armina rapids in the Maroni river, together with a certain number of deep, narrow and oblong excavations; of the latter I also found some on the above mentioned Timehri rock.

Closed Sept. 1887.

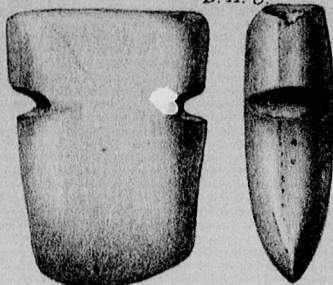
¹ Indians of Guiana, p. 394.

² See Martin, Westindische Skizzen, p. 37.

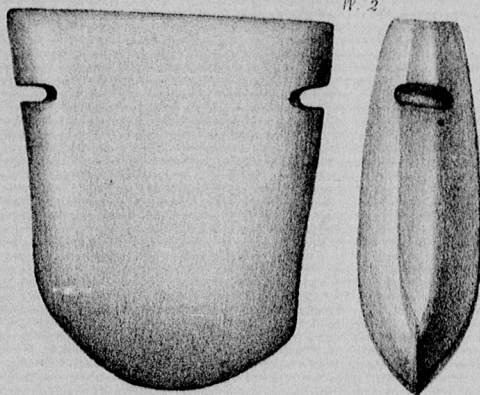
S.H. 7.



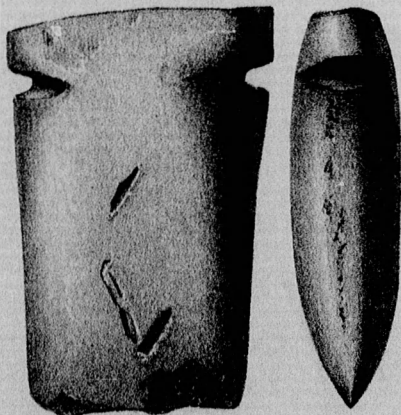
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W. 2.

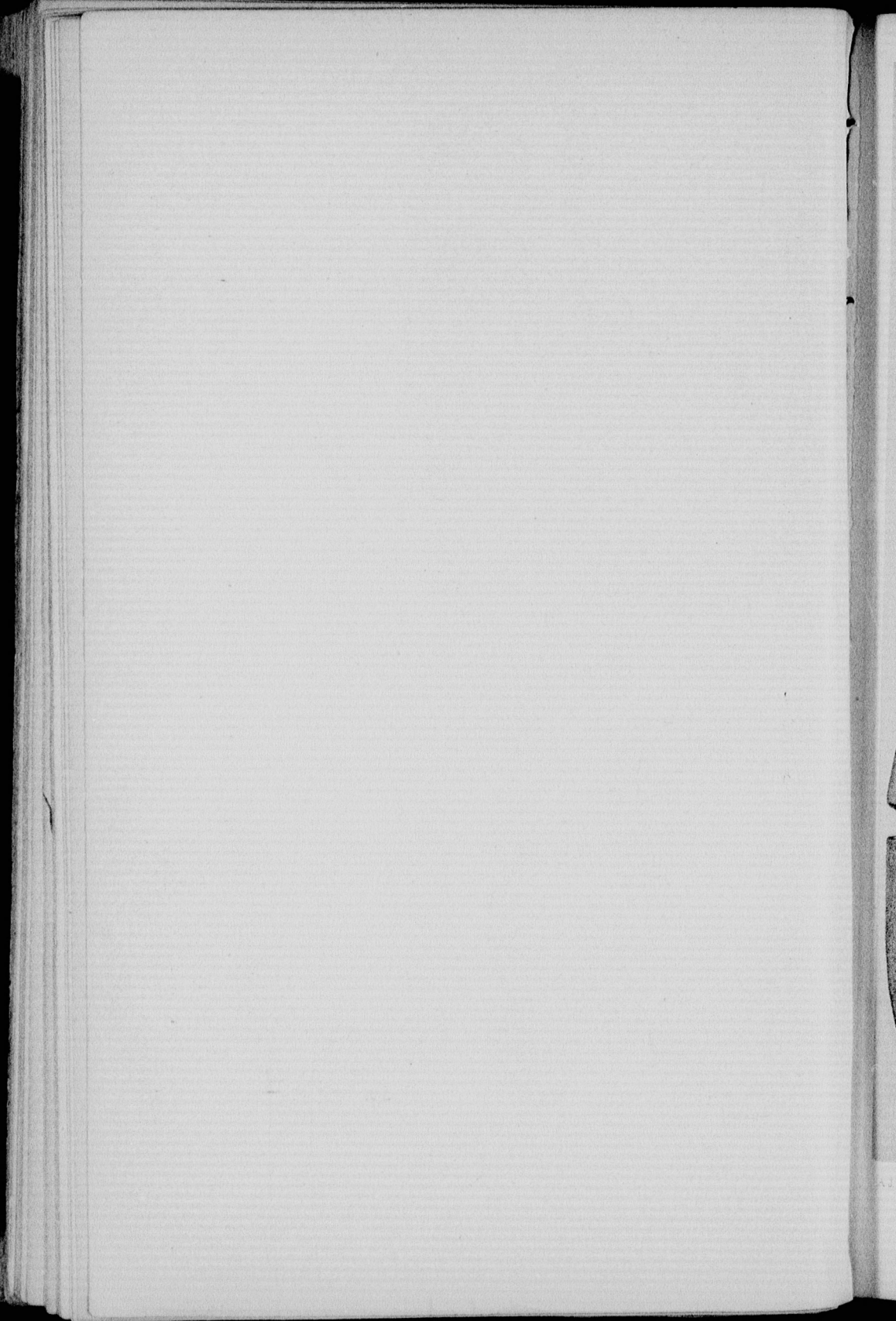


t. K. 75.

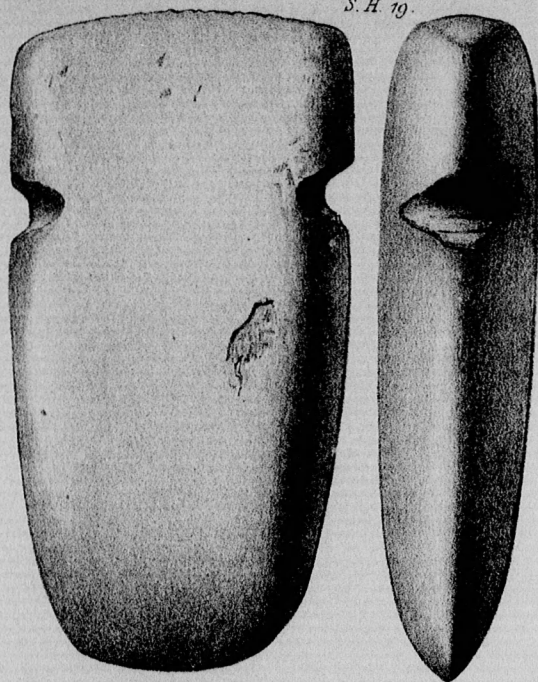


Y. 74.

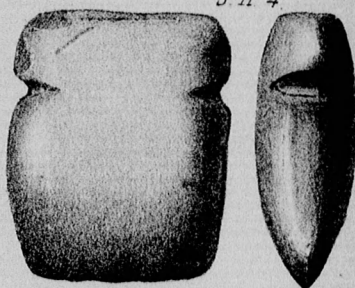




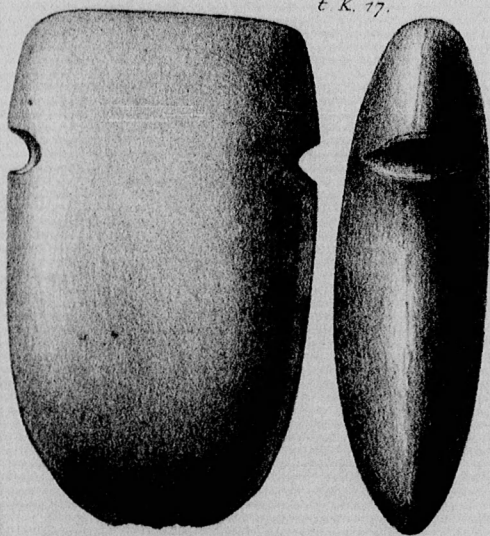
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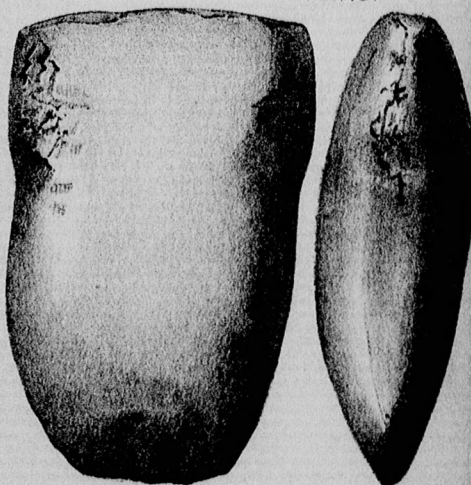
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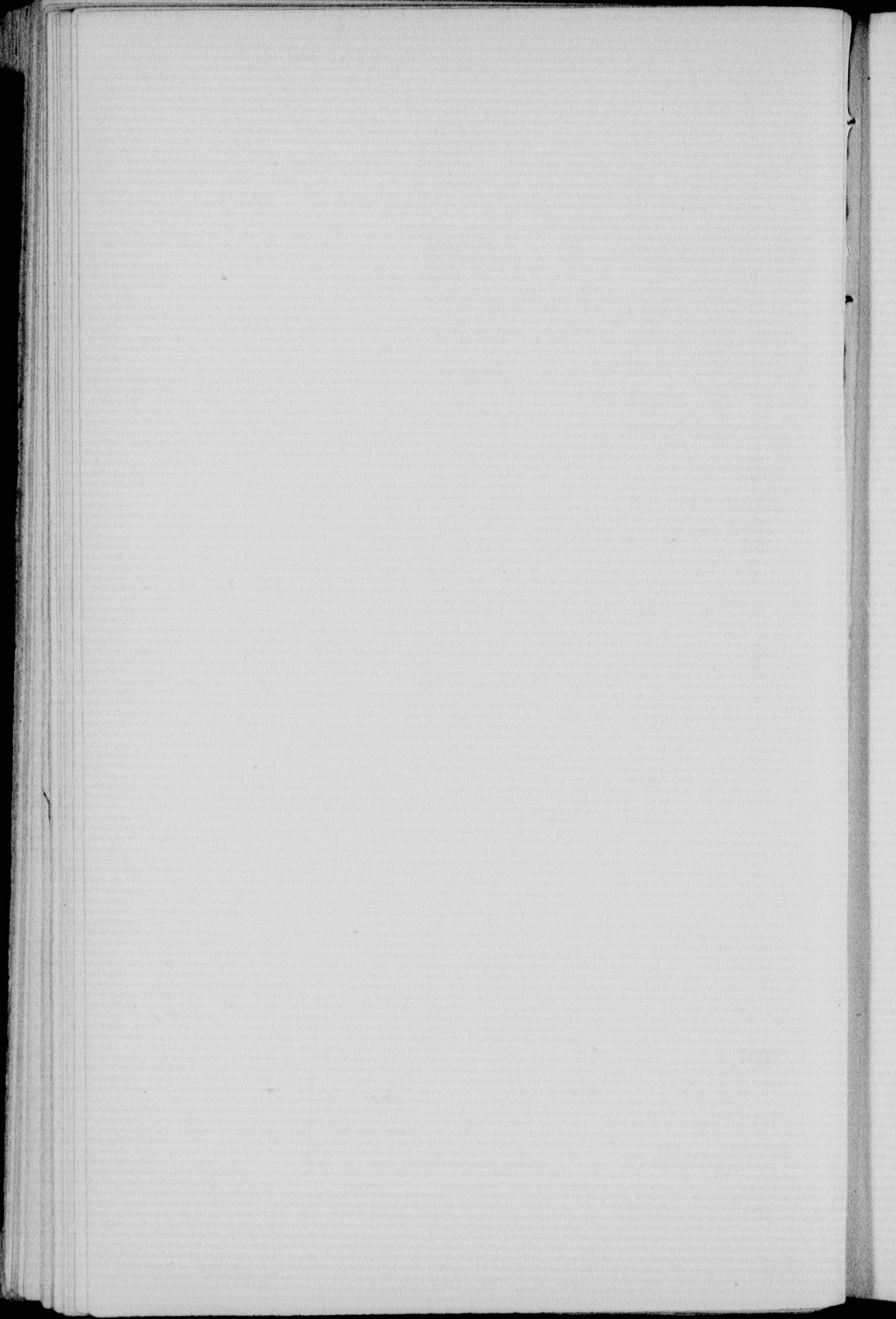


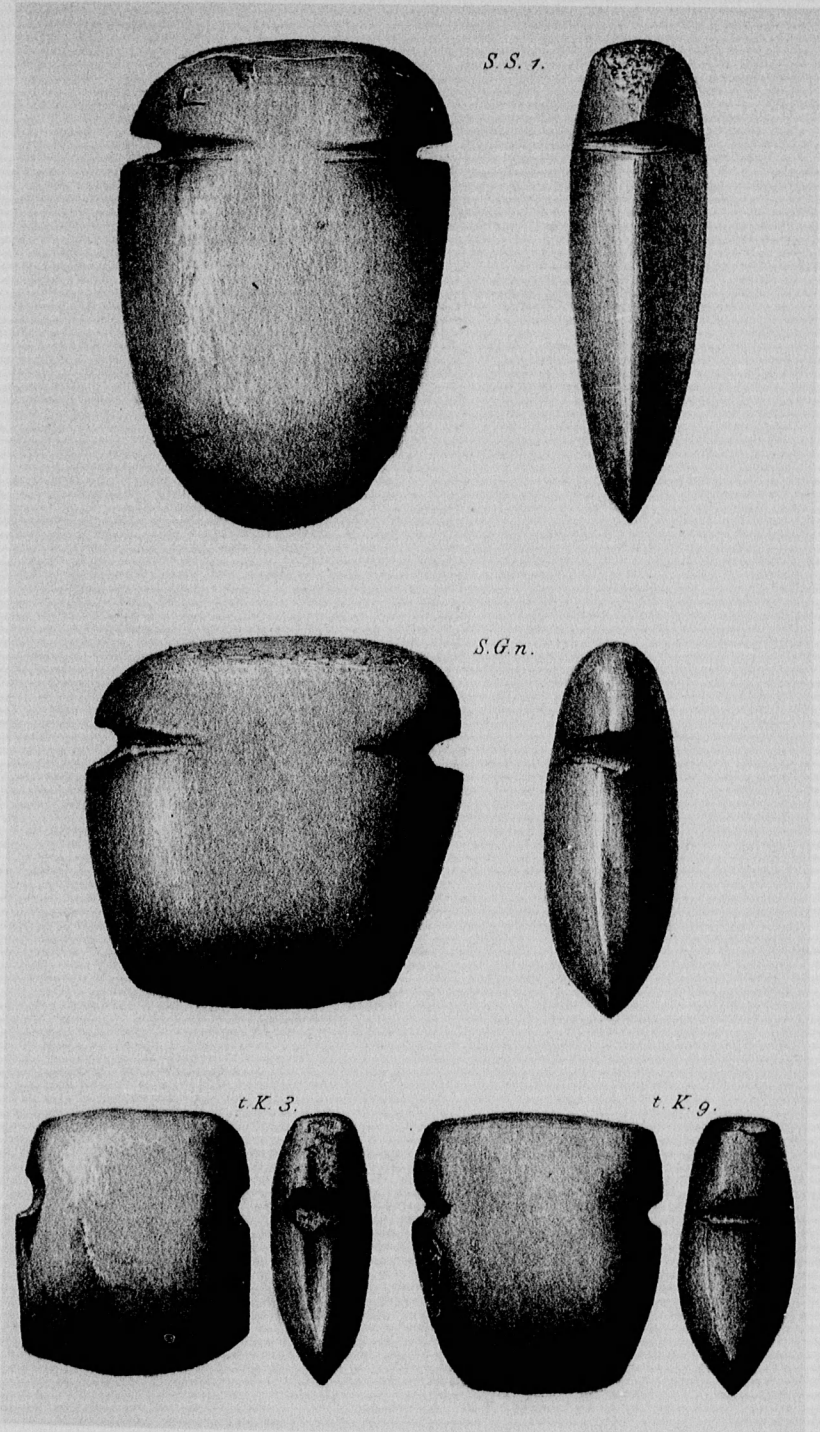
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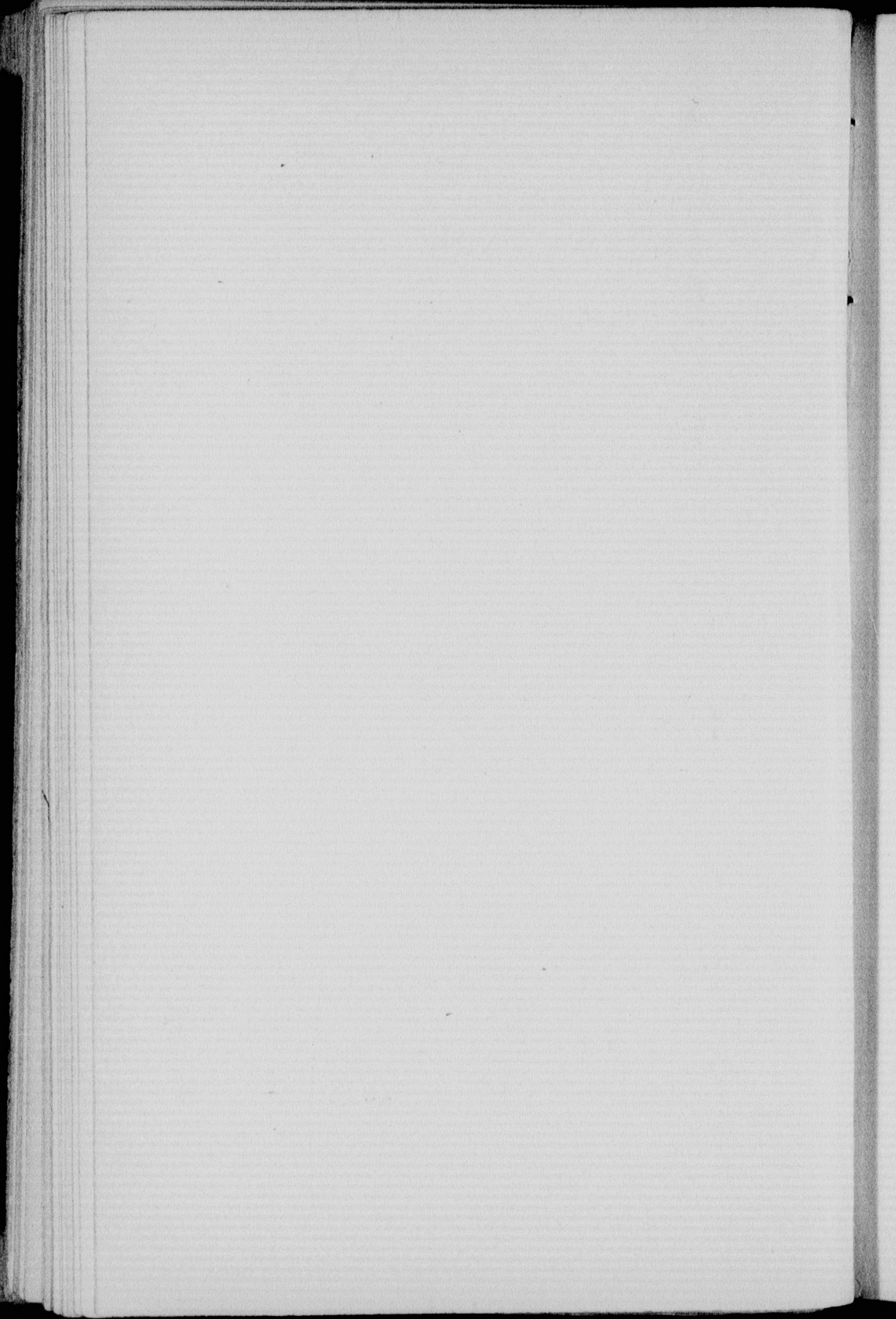


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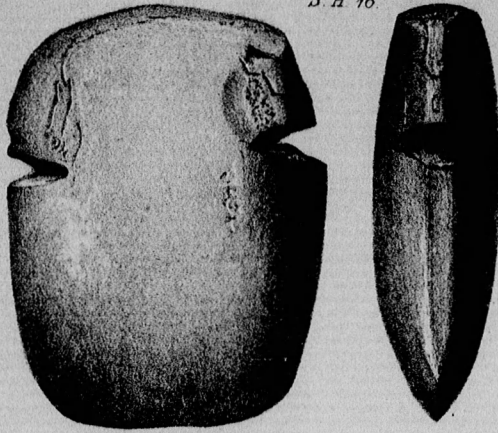




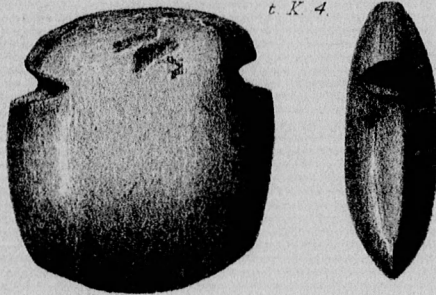




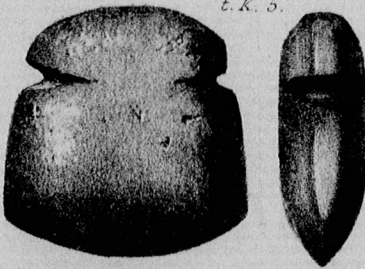
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t. K. 4.

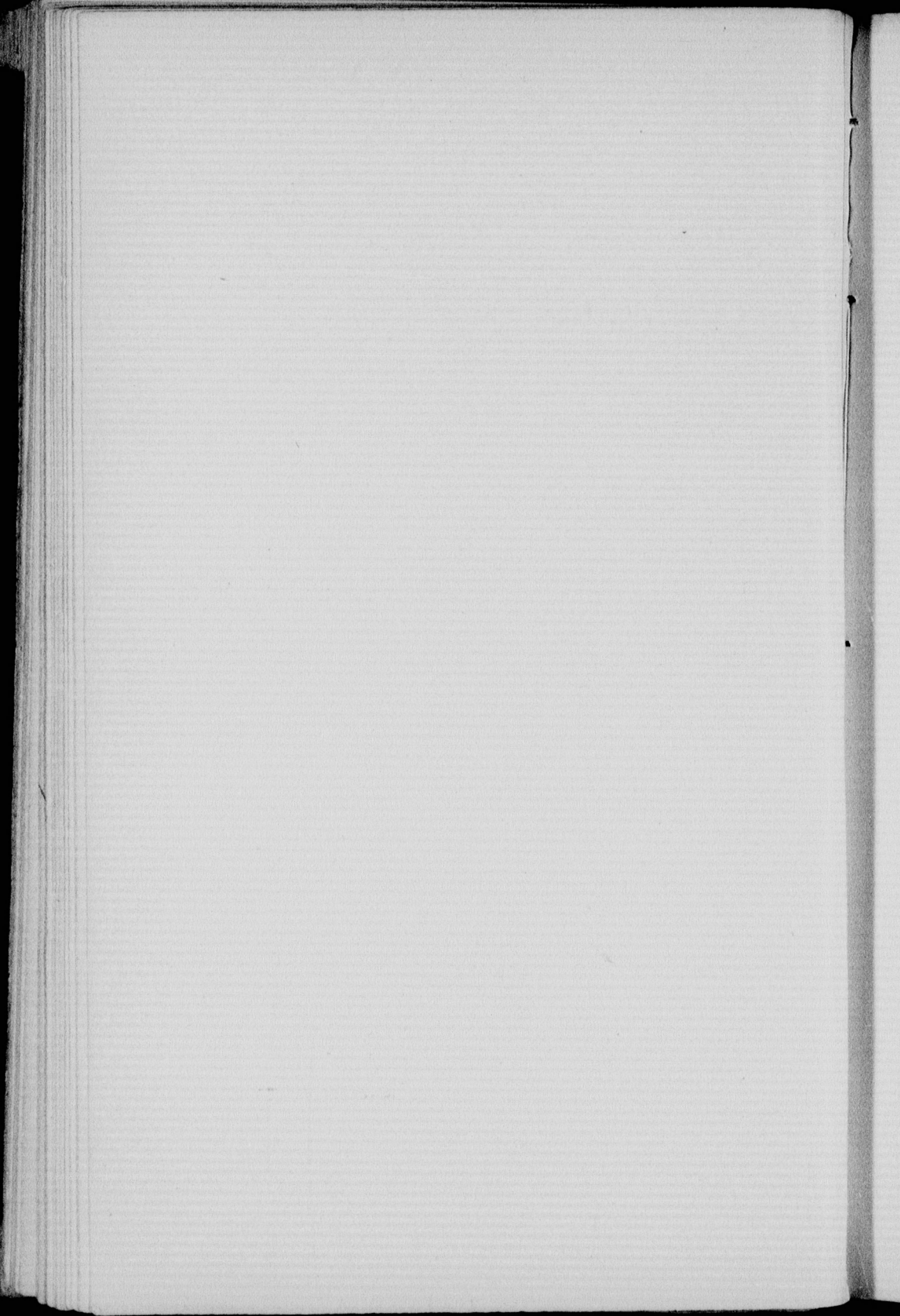


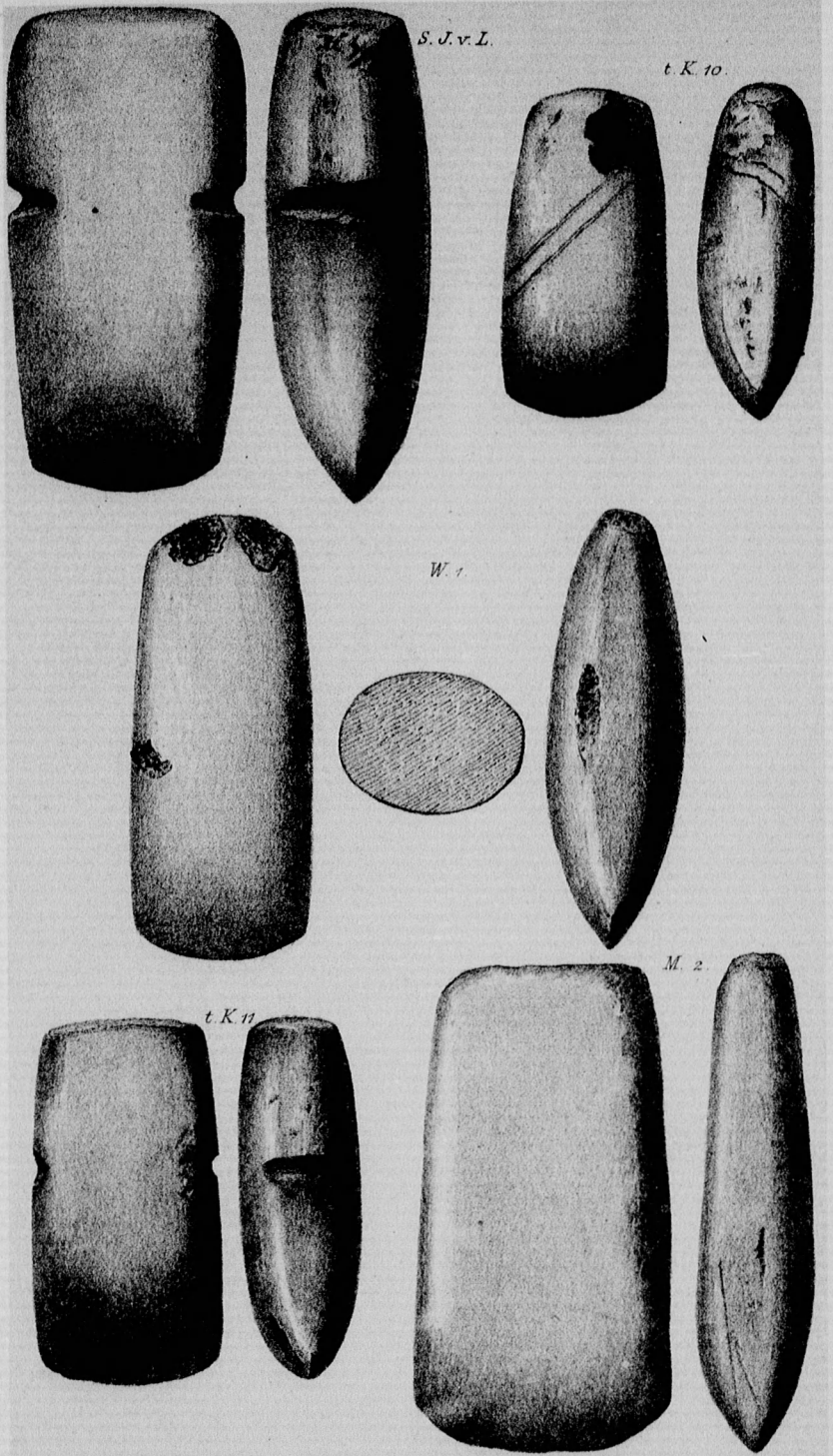
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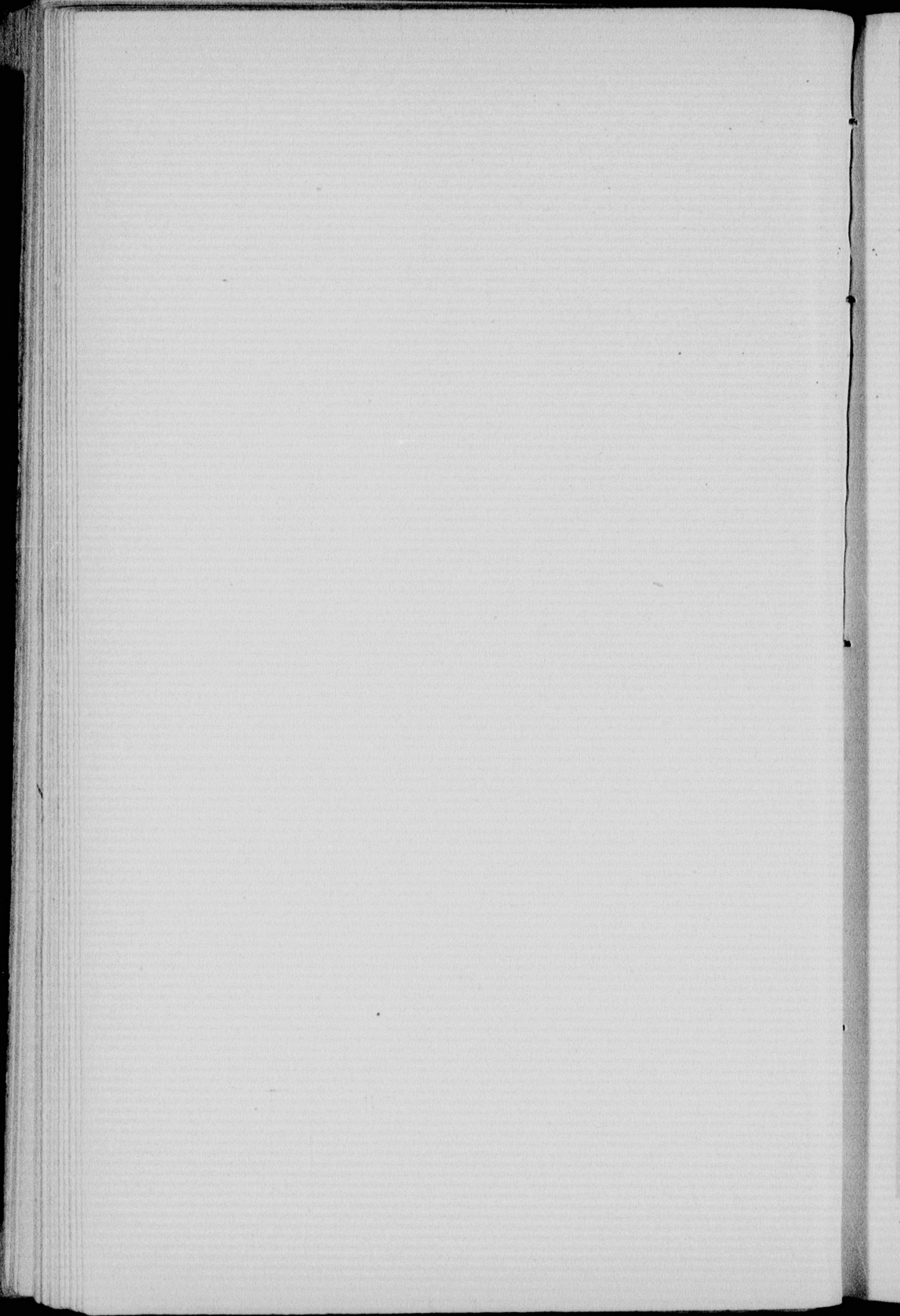


M. 1.



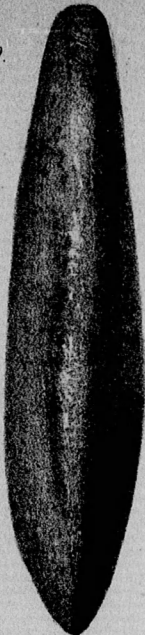








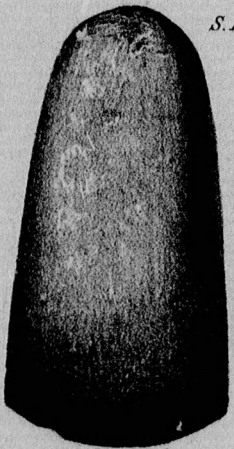
Y. 9.



Y. 13.



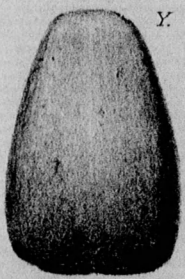
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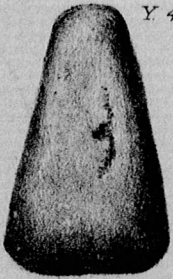
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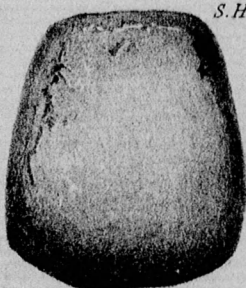
Y. 17.



Y. 6.

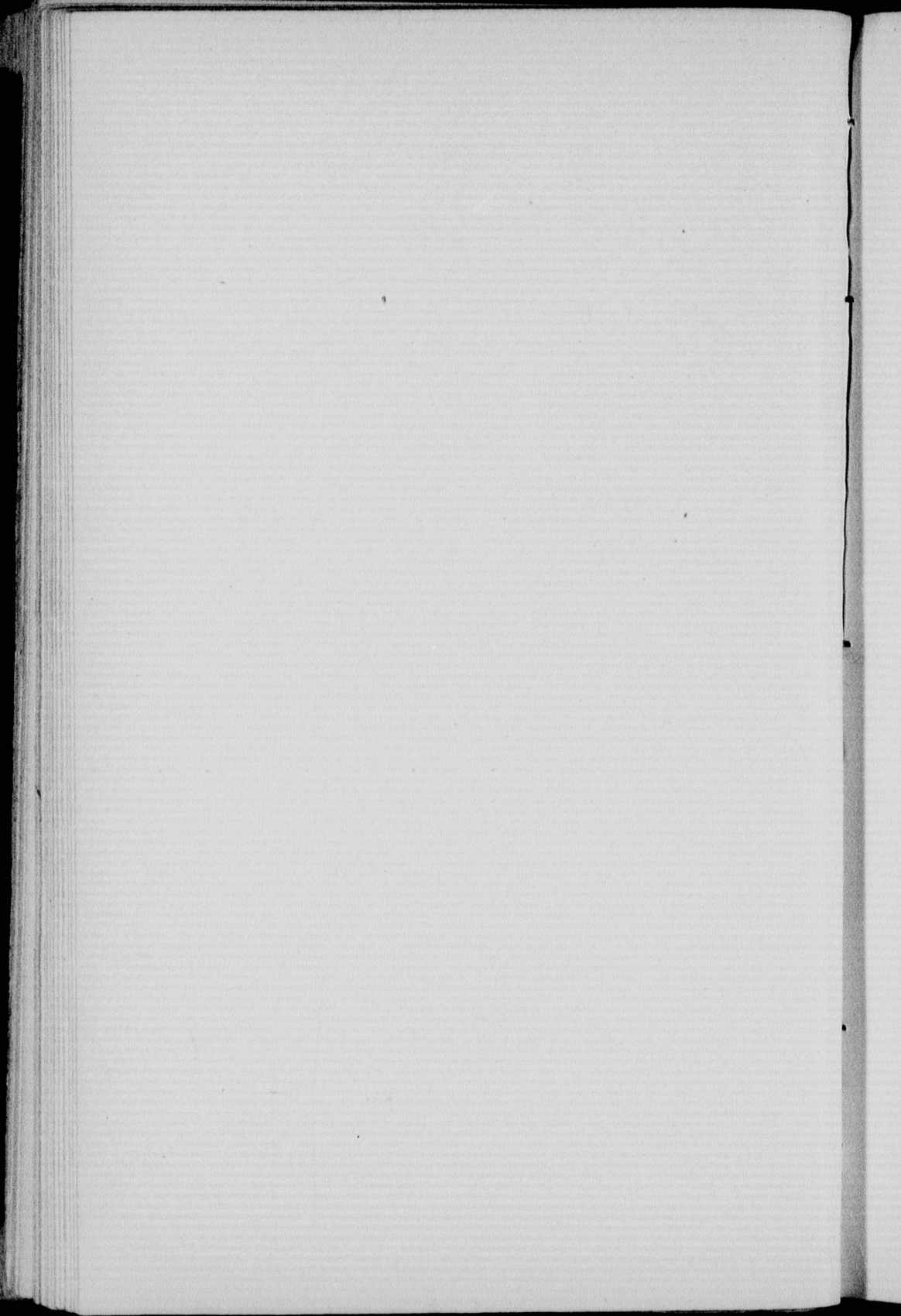


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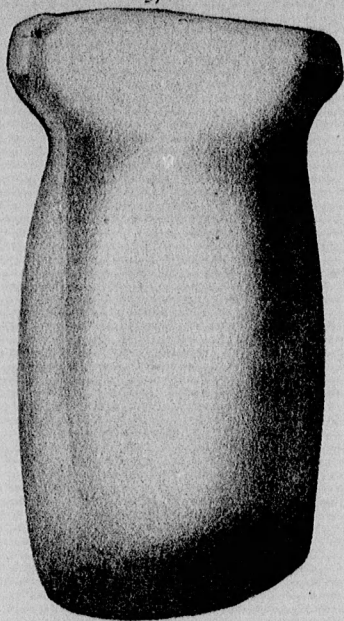


S.H. 22.

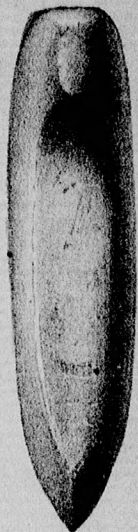
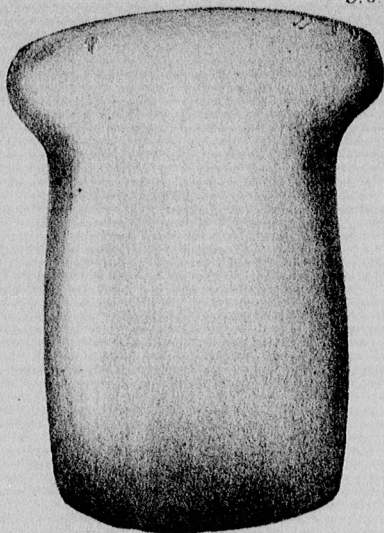




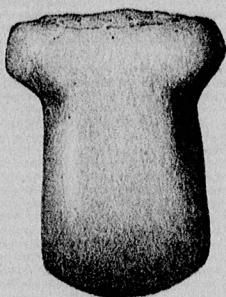
v. Sijpest. 2.



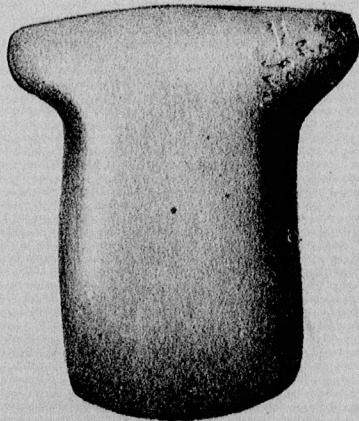
S. J. v. L. 1.



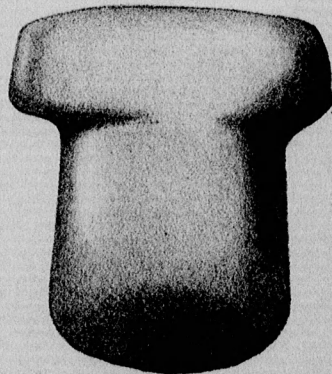
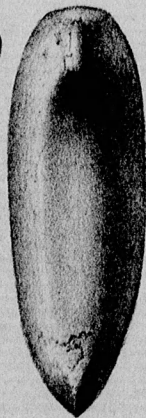
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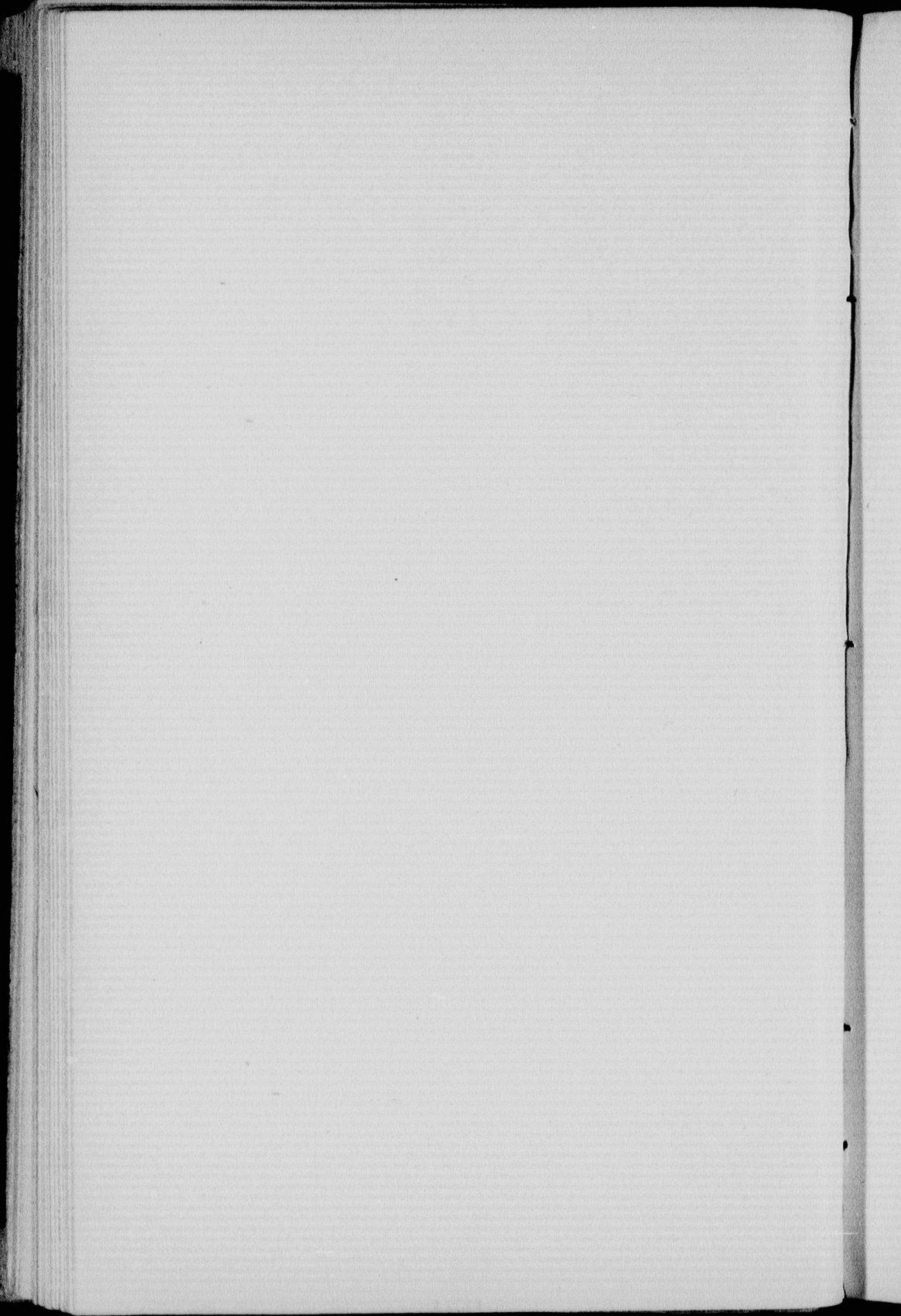


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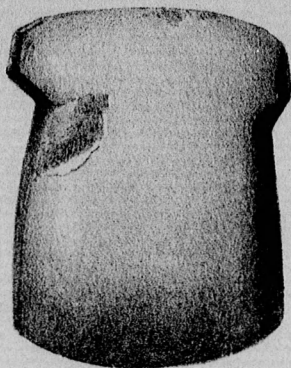


v. Sijpest. 4.

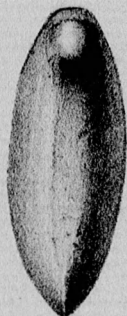
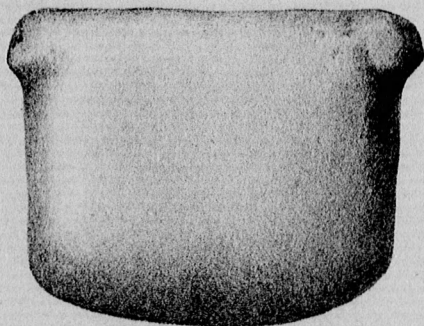




S. H. 6.



t. K. 1.



L. 2.

