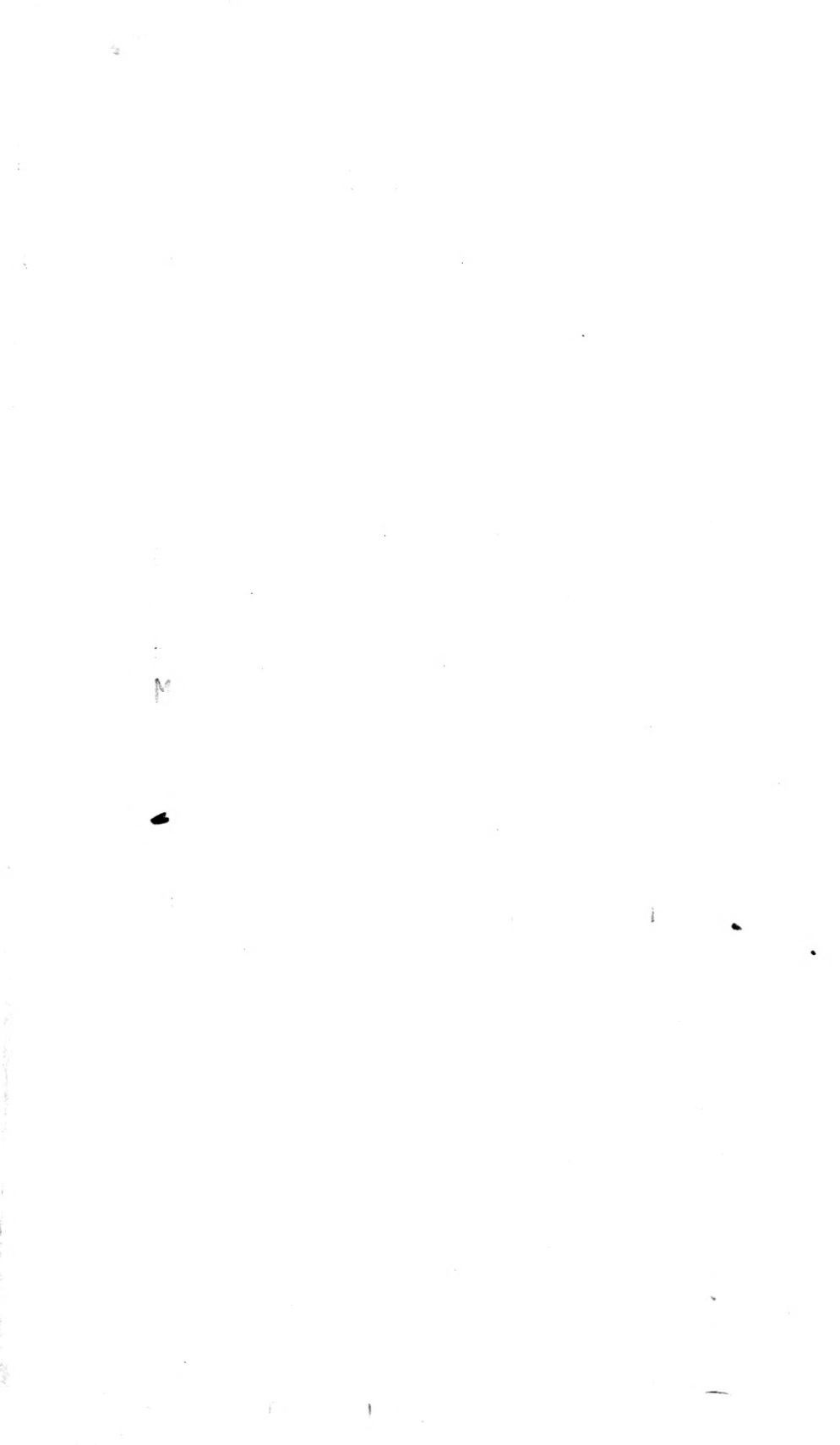


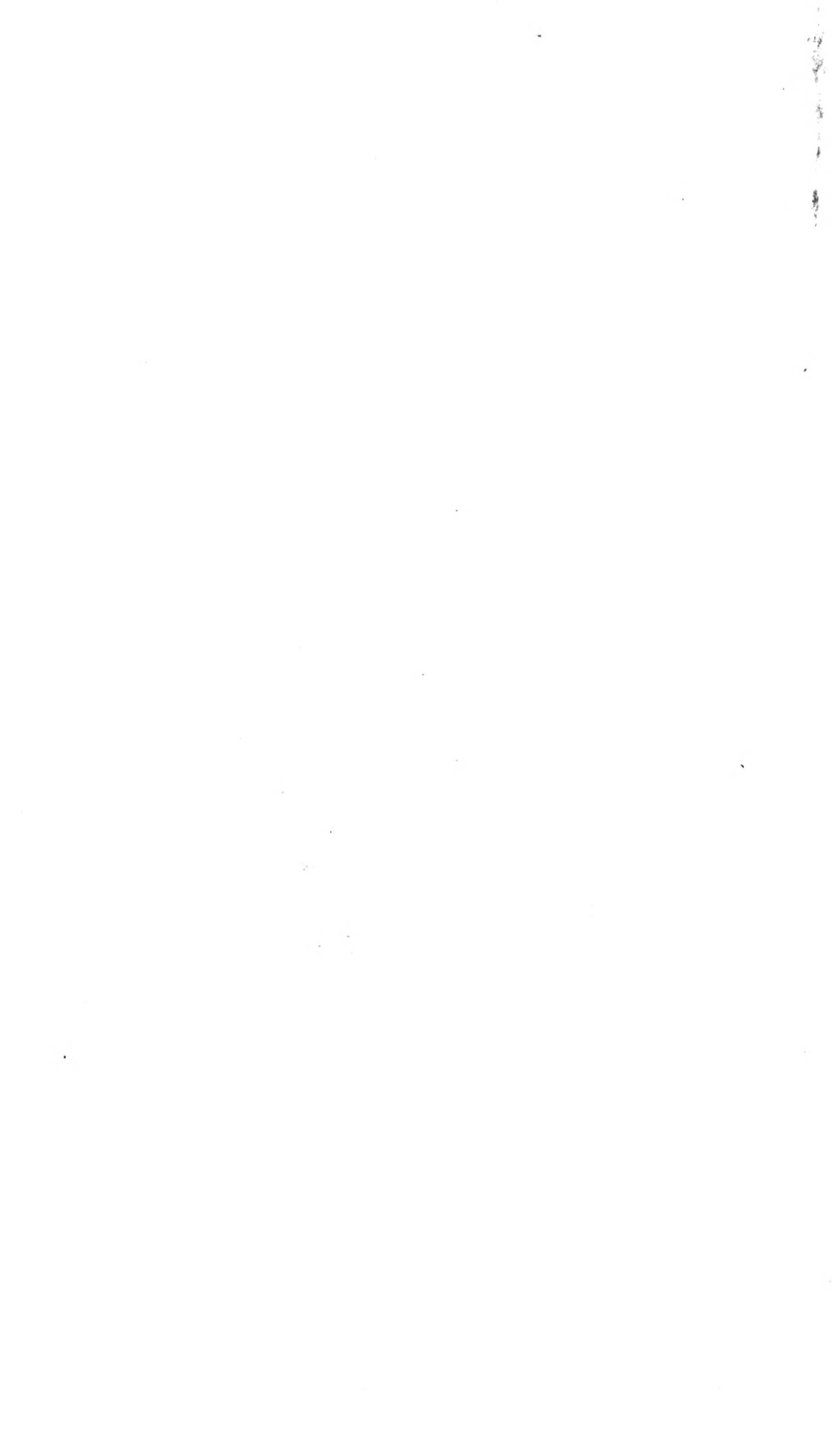
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FIELDIANA • ANTHROPOLOGY

Published by

CHICAGO NATURAL HISTORY MUSEUM

Volume 36

DECEMBER 31, 1946

Number 2

TOGGLE HARPOON HEADS FROM
THE ALEUTIAN ISLANDS

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INTRODUCTION

The Eskimo harpoon with toggling head is a complicated weapon used in the hunting of sea mammals. The harpoon consists of a wooden shaft, a socketed collar of bone or ivory, a foreshaft of bone or ivory, and a detachable head of bone or ivory. This detachable head is so constituted that, after penetrating an animal, it toggles (turns sidewise) in the wound when pressure is applied to the harpoon line. This toggling action fastens the harpoon head securely within the wound and prevents the animal from freeing itself from the harpoon head and line. This type of harpoon was known to all coast-dwelling Eskimos, including the Aleut, who live in the Aleutian Islands.

In the large collection of Aleut artifacts presented to Chicago Natural History Museum by Dr. Alvin R. Cahn, there are eight toggle harpoon heads of bone. Such harpoon heads are rare in the Aleutian Islands, where the barbed head of bone used on a harpoon without a movable foreshaft is much more common. Consequently, eight toggle harpoon heads, six of which came from a stratified site, are of greater importance than their number would at first indicate.

Like other Eskimo harpoon heads, those of the Aleut are complex structures. Each is equipped with a socket at the base into which was fitted the outer end of the foreshaft; a spur; a line-hole through which the harpoon head was fastened to a line; and, at the outer end of the harpoon head, either a slot or a bed into which was fastened a stone blade.

DESCRIPTION OF HARPOON HEADS

The harpoon head (Cat. No. 179308) illustrated in figure 5 is 13.8 cm. long. It has a long, pointed spur and a shallow, closed socket 0.5 cm. deep. The inner side of the spur is concave for a length

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of 1.5 cm. This concavity and the shallow, closed socket fitted against the foreshaft. The line-hole is oval and slightly countersunk from both sides, with a shallow groove on each side that leads downward toward the socket. At the outer end of the harpoon head there

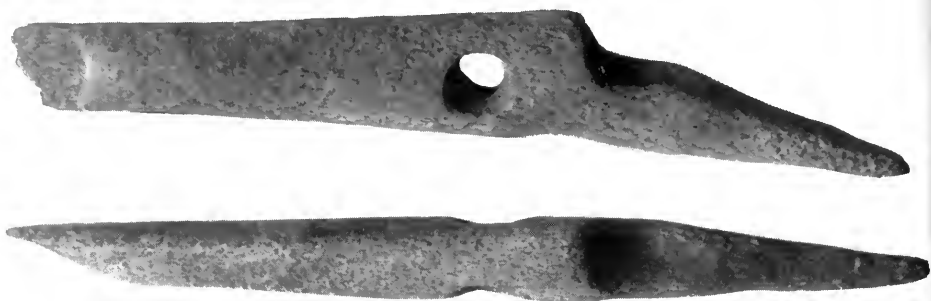


FIG. 5. Bone harpoon head from Amaknak Island. Cat. No. 179308.

is a spoon-shaped bed into which was once lashed a blade of chipped stone. When this harpoon is viewed with blade-bed uppermost, the spur is at the left. This harpoon head came from the lower levels of D Midden, a large midden on southwestern Amaknak Island.

A similar harpoon head (Cat. No. 179309) is illustrated in figure 6. It is 12.1 cm. long. It also has a long, pointed spur and a shallow, closed socket 0.7 cm. deep. The inner side of the spur is slightly



FIG. 6. Bone harpoon head from Amaknak Island. Cat. No. 179309.

concave near the socket for a distance of 1.6 cm. The line-hole is round. At the outer end of the harpoon head there is a spoon-shaped bed into which was once fastened a blade of chipped stone. When this harpoon head is viewed with the blade-bed uppermost,

the spur is at the right. This harpoon head was found in the lower levels of D Midden.

The harpoon head (Cat. No. 179311) illustrated in figure 7 is 10.2 cm. long. It has a relatively short, pointed spur and a shallow,



FIG. 7. Bone harpoon head from Amaknak Island. Cat. No. 179311.

closed socket 0.7 cm. deep. The line-hole is elliptical. On one side of this harpoon head there is a groove leading from the line-hole toward the socket. At the outer end of the harpoon head there is a spoon-shaped bed for the hafting of a blade or point of chipped stone. When this harpoon is viewed with the blade-bed uppermost, the spur is at the right. This harpoon head came from the lower levels of D Midden.



FIG. 8. Bone harpoon head from Amaknak Island. Cat. No. 179312.

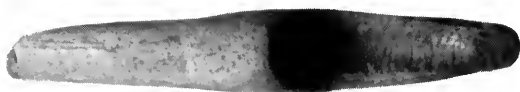
An unfinished and broken harpoon (Cat. No. 179312) is illustrated in figure 8. It is 9.7 cm. long, with a rather short, pointed spur, a shallow, closed socket, and an elliptical line-hole that appears to be gouged or reamed rather than drilled. The characteristics of this head suggest that the intended style was like that of the previously described harpoon head illustrated in figure 7. The unfin-

ished and broken harpoon head was found in the lower levels of D Midden.

The harpoon head (Cat. No. 179314) illustrated in figure 9 is 7.5 cm. long. It has a shallow, closed socket 0.5 cm. deep and a relatively long, pointed spur. The inside part of the spur adjacent



FIG. 9. Bone harpoon head from Amaknak Island. Cat. No. 179314.



to the socket is concave for a distance of 1.4 cm. The line-hole is round and slightly countersunk from each side. At the outer end of the harpoon head there is a spoon-shaped bed into which at some previous time was fastened a blade or a point of chipped stone.

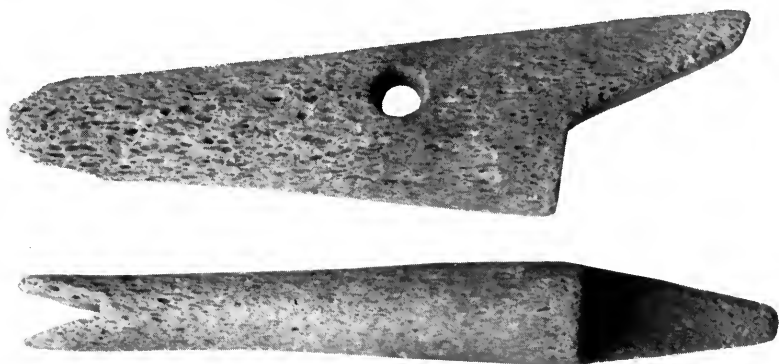


FIG. 10. Bone harpoon head from Amaknak Island. Cat. No. 179310.

On each side of the blade-bed there are narrow grooves, probably three to a side, but since the outer end of the blade-bed is broken, the number of grooves cannot be ascertained with certainty. When this harpoon head is viewed with the blade-bed uppermost, the spur is at the right. This harpoon head came from B Midden, in the southwestern part of the island.

[Note to Librarians]

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In December 1943, the name of Field Museum of Natural History was changed to Chicago Natural History Museum. Since that time it has not been practical to make the called-for change in the name of the Museum's technical publications. Beginning in 1945, these publications of the Museum will appear under the general title of Fieldiana, with division as formerly into five series—Anthropology, Botany, Geology, Zoology, and Technique. These series will be continuous with the volumes already published and will carry their successive numerical designations as if no change of name had been made. The name "Fieldiana" will appear only in connection with these series and all other publications of the Museum will carry other titles.

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The new name will not be used for the concluding parts of volumes now partly published nor for additions to sets devoted to a single subject, as, for example, the Flora of Peru. These volumes and sets will be completed as soon as possible but will continue to bear the serial designation with which they started and the former name of the institution.

September 19, 1945

The harpoon head (Cat. No. 179310) illustrated in figure 10 is 11.3 cm. long, with a closed socket 1.3 cm. deep and a relatively short, pointed spur. The line-hole is round and slightly counter-sunk from each side. At the outer end of the harpoon head there is a slot for the attachment of a stone blade. This harpoon head was found in the upper levels of D Midden.

The broken harpoon head (Cat. No. 179091) illustrated in figure 11 is 6.5 cm. long. It has a relatively long, pointed spur and an



FIG. 11. Bone harpoon head from Amaknak Island. Cat. No. 179091.

incipient, closed socket. The line-hole is triangular. On each side of the harpoon head there are grooves leading from the line-hole toward the socket. There is a trace of a blade-slot at the outer end of the harpoon head where it is broken. This harpoon head is decorated with a design that includes such motifs as the compass-drawn dot and circle or dot and concentric circles with spurs. The design is suggestive of Punuk and post-Punuk Eskimo art in northern



FIG. 12. Bone harpoon head from Amaknak Island. Cat. No. 179313.

Alaska. This harpoon head was found in the upper levels of D Midden.

The small harpoon head (Cat. No. 179313) illustrated in figure 12 is 5.9 cm. long. It has a closed socket 0.5 cm. deep and a short, pointed spur. The inside of the spur is concave and this concavity acts as an extension of the socket. At the outer end of the harpoon head there is a slot for the attachment of a stone blade or point. The outer ends of the slot are broken. This harpoon head was found at A Midden.

STRATIGRAPHY

Six harpoon heads were found at the D Midden on southwestern Amaknak Island. The D site was a large midden about twenty-four feet thick. The upper levels of this site were in a roadbed cut through the uppermost sixteen feet of the midden. The lower levels were contained in trenches excavated into the lowermost eight feet of the midden from the level of the road cut. Materials from the upper and lower proveniences were kept separate at the time of excavation, thus making possible stratigraphic analyses of a gross nature. The materials from the lowermost eight feet of the midden are indicative of an early period of Aleut culture, whereas those from the uppermost sixteen feet are indicative of a late period.

Of the four harpoon heads from the lower levels of the D site, one was unfinished and broken. The other three are of one style, of which the most obvious characteristic is the presence of the spoon-shaped bed for the attachment of a chipped-stone blade. This style is characteristic of the early period of Aleut culture.

The presence of the early style harpoon head in the B Midden on southwestern Amaknak Island is complemented by its association with artifacts decorated in a style indicative of the early period. This art style has been described elsewhere (Quimby, 1945).

The two harpoon heads from the upper levels of the D site also conform to a definite style, the most obvious characteristic of which is the presence of a slot for the attachment of a stone blade or point. This style is representative of the late period of Aleut culture. One harpoon head of the late style was found in the A Midden.

COMPARISONS

Jochelson (1925, pp. 54, 90; fig. 8; plate 27, figs. 17-29) describes and illustrates some toggle harpoon heads of bone. Although his descriptions and illustrations are not wholly adequate for comparative purposes, the evidence he presents suggests that most of these toggle harpoon heads were of the late type characterized by a blade-slot. Some of the specimens he illustrates may not be harpoon heads at all. What appear to be actual harpoon heads in Jochelson's collection came from the islands of Umnak, Attu, Atka, and Amaknak.

Neither Hrdlicka (1945) nor Dall (1877, 1878) describes or illustrates toggle harpoon heads from the Aleutian Islands.

Weyer (1930, p. 266, fig. 17) describes and illustrates some toggle harpoon heads excavated from a midden at Port Möller in the



FIG. 13. Types of Aleut harpoon heads from Amaknak Island. Top row: late period. Bottom row: early period.

Alaska Peninsula. Although these harpoon heads are different from those described in this paper, they conform to the late type in that they are equipped with blade-slots.

Hrdlicka (1944, figs. 120, 121, 122) illustrates some toggle harpoon heads from his Pre-Koniag levels on Kodiak Island. These harpoon heads have much in common with the late Aleut type from Amaknak Island. The Pre-Koniag harpoon head shown by Hrdlicka (1944, fig. 125) resembles rather closely the late Kachemak Bay style (de Laguna, 1934, plate 38).

De Laguna (1934, pp. 80, 186-189, plate 38) describes toggle harpoon heads from sites in Kachemak Bay in Cook Inlet. The Kachemak Bay styles are different from those of Amaknak Island. The late Kachemak Bay style, however, is characterized by the closed socket and elegant silhouette somewhat similar to that of the early period Aleut type on Amaknak Island.

Although the Aleut harpoon heads, especially those of the early period, are different from the types of harpoon heads characteristic of the culture stages in northern Alaska, one ancient harpoon head from Punuk Island shares a few characteristics with the early Aleut type. This ancient harpoon head, described by Collins (1941, fig. 7), was excavated from the base of a midden sixteen feet high. The harpoon head has a shallow, closed socket (but triangular, rather than round or oval) and a bed for the end blade. In other respects, however, the form of this harpoon head does not resemble the early period type from Amaknak Island. The harpoon head described by Collins was decorated with a simple geometric pattern engraved upon both sides. The design is somewhat suggestive both of early Aleut design and Dorset (Quimby, 1945).

SUMMARY AND CONCLUSIONS

Stylistic and stratigraphic analyses of the small collection of bone harpoon heads from Amaknak Island indicate that there are two major styles, each of which is characteristic of a cultural period: Early period Aleut harpoon heads are equipped with beds for the end blades or points, whereas late period Aleut harpoon heads are provided with slots for the end blades or points (fig. 13).

The specific styles of Aleut harpoon heads are unique, but on a more abstract level of comparison they could be included in a southern Alaskan type along with some harpoon heads from Kodiak Island and Kachemak Bay. With the possible exception of a style

represented by one ancient harpoon head from Punuk Island, the Aleut harpoon heads of the early period do not seem to be related (except remotely) to northern Alaskan styles.

The toggle type of harpoon head does not seem to have been important in the Aleutian Islands, where various styles of long barbed harpoon heads of bone were much more numerous.

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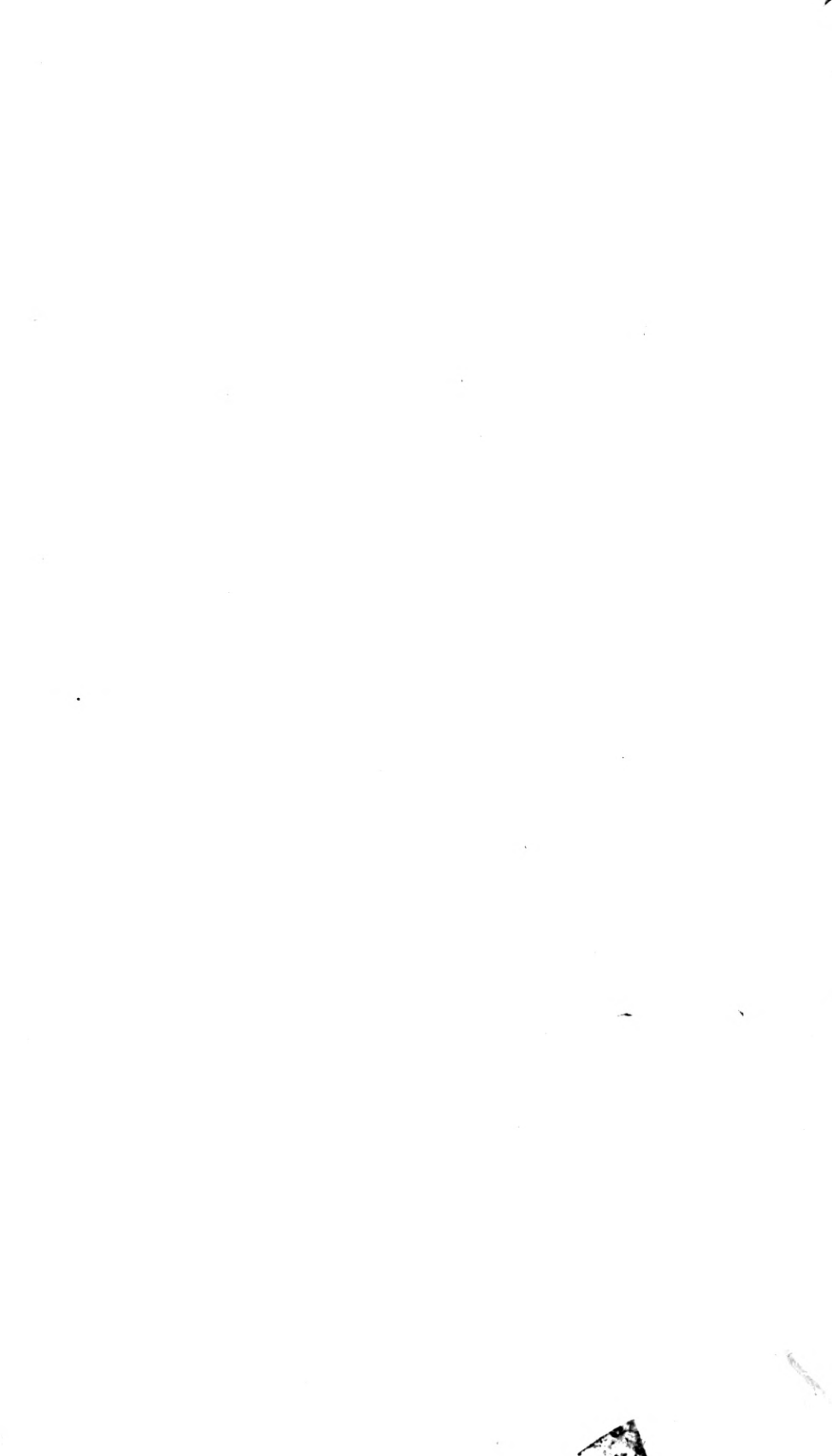
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