

TEXTILE PERIODS IN ANCIENT PERU

BY

LILA M. O'NEALE AND A. L. KROEBER

UNIVERSITY OF CALIFORNIA PUBLICATIONS IN AMERICAN ARCHAEOLOGY
AND ETHNOLOGY

Volume 29, No. 2, pp. 23-66, plates 1-45, 15 figures in text

UNIVERSITY OF CALIFORNIA PRESS
BERKELEY, CALIFORNIA
1959

ABBREVIATIONS USED

A	Anthropos.
l'A	L'Anthropologie.
AA	American Anthropologist.
AAA-M	American Anthropological Association, Memoirs.
ArA	Archiv für Anthropologie.
AES-P	American Ethnological Society, Publications.
AGW-M	Anthropologische Gesellschaft in Wien, Mitteilungen.
AJPA	American Journal of Physical Anthropology.
AMNH	American Museum of Natural History—
-AP	Anthropological Papers.
-B	Bulletin.
-M	Memoirs.
-MA	Memoirs, Anthropological Series.
-MJ	Memoirs, Jesup Expedition.
BAE	Bureau of American Ethnology—
-B	Bulletins.
-R	(Annual) Reports.
CNAE	Contributions to North American Ethnology.
CU-CA	Columbia University, Contributions to Anthropology.
FL	Folk-Lore.
FMNH	Field Museum of Natural History—
-M	Memoirs.
-PAS	Publications, Anthropological Series.
IAE	Internationales Archiv für Ethnographie.
ICA	International Congress of Americanists (Comptes Rendus, Proceedings).
IJAL	International Journal of American Linguistics.
JAFL	Journal of American Folk-Lore.
JRAI	Journal of the Royal Anthropological Institute.
MAIHF	Museum of the American Indian, Heye Foundation—
-C	Contributions.
-IN	Indian Notes,
-INM	Indian Notes and Monographs.
PM	Peabody Museum (of Harvard University)—
-M	Memoirs.
-P	Papers.
-R	Reports.
PMM-B	Public Museum (of the City) of Milwaukee, Bulletin.
SAP-J	Société des Américanistes de Paris, Journal.
SI	Smithsonian Institution—
-AR	Annual Reports.
-CK	Contributions to Knowledge.
-MC	Miscellaneous Collections.
UC-PAAE	University of California, Publications in American Archaeology and Ethnology.
UPM-AP	University of Pennsylvania (University) Museum, Anthropological Publications.
USNM	United States National Museum—
-R	Reports.
-P	Proceedings.
UW-PA	University of Washington, Publications in Anthropology.
ZE	Zeitschrift für Ethnologie.

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Issued March 6, 1930

UNIVERSITY OF CALIFORNIA PRESS
BERKELEY, CALIFORNIA

CAMBRIDGE UNIVERSITY PRESS
LONDON, ENGLAND

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METHOD AND MATERIAL

In 1927 the authors undertook an investigation of prehistoric textiles from the coast region of Peru. One of them contributed knowledge of textile technology, the other field experience in Peruvian archaeology. Crawford's monographs, *Peruvian Textiles and Peruvian Fabrics*,¹ were taken as a basis, and proved thoroughly satisfactory. In general, his terminology has been retained, with a number of amplifications that were found necessary.² Crawford's work however treats ancient Peru as a unit, without reference to differences of district or period, and the present study was planned to consider these aspects.

A beginning was made with the Max Uhle collections from Ica and Nazca in the University of California Museum of Anthropology. Dr. Berthold Laufer kindly made available the collections secured by Kroeber for Field Museum of Natural History from Nazca and the earlier ones from Cerro del Oro in Cañete and Aramburú near Lima. For comparison there were examined also two collections from Ancon and Chancay presented to the University by Charlotte Uhle and previously classified by Agnes Nelson of the Department of Household Art; one from Chincha assembled by Max Uhle, the analysis of which had been begun by Ruby Harstine; and smaller lots secured by Uhle at Nievería near Lima and at Puerto de Supe. From these collections over 650 pieces were studied. The original intention was to describe in detail and according to a unified system the entire Peruvian textile collections of the University, with related material available in other institutions; but as something over a thousand additional specimens remain in the University Museum alone, it appears wisest to summarize the results obtained to date, rather than defer conclusions indefinitely in the hope that the fuller material may in time be worked over.

¹ *Am. Mus. Nat. Hist., Anthr. Pap.*, 12:53-104, 1915; 12:105-191, 1916.

² Certain definitions appear in the appended Glossary; the full list is reserved for a monograph on Peruvian textiles.

The 650-odd analytic descriptions of individual fabrics have been summarized, as regards the textile processes involved, in a tabulation indicating the various spinning, weaving, finishing, and superstructural techniques occurring in each piece. Even this summary proving too long for the present preliminary report, it has been further condensed into a table showing the frequency of occurrence of the more important processes and devices in each culture—that is, in the examined textiles dating from a certain period in a certain valley. This table, which is basic to all the briefer tables in the body of the text, will be found at the end of the paper.

The lots examined classify as follows:

- Nazca valley: various sites, Field, by Kroeber from excavations in 1926, 186 pieces, assignable to periods by the pottery associated in the graves, as follows: Early Nazca, 113; Epigonal including Nazca Y, 9; Late Ica and Inca, 64.
- Nazca valley: various sites, Field, by Kroeber from surface in 1925 and 1926, or from excavations in graves without pottery, 24 pieces, tentatively assignable to periods as follows: *Epigonal (and Y), 21; *Late Ica and Inca, 3.
- Nazca valley: various sites, California, M. Uhle by purchase or surface gathering, 60 pieces. These have been tentatively classified as to period by their stylistic similarities to the excavated specimens in the first group, as follows: *Early Nazca, 4; *Epigonal (and Y), 27; *Late Ica and Inca, 29.
- Ica valley: California, M. Uhle by excavation, definitely assignable to periods by the associated pottery,³ 116 pieces, as follows: Early Nazca, site F, 6, *site H, 2, *site A, 5, total 13; Epigonal, site E, 8; Middle Ica, site M, 31, site CL, 1, site Z, graves 1, 4, 5, 6, 21, total 53; Late Ica and Inca, sites D, T, X, Y, 42.
- Pisco valley: Field, Kroeber, by purchase, *7 fragments from one of the sites subsequently excavated by Tello at Paracas, period approximately Early Nazca.
- Chincha valley: California, M. Uhle by excavations at sites A, D, E, F,⁴ Late or Inca, 75; site D, "Early" Chincha, *Epigonal (not included in basic table), 2.
- Cañete valley: Cerro del Oro, Field, Kroeber by excavations in 1925, Early (or Middle?) Cañete, probably later than Early Nazca, 14; Late (not included in basic table), 3.

³ This series, 21:95-133, 1924. Sites A and H are classed by Kroeber and Strong as (Proto-)Nazca. The 7 textiles from these two sites are somewhat aberrant, and seemingly of Epigonal (Middle) character rather than Early (Proto-)Nazca. The pottery from them, while also aberrant, however has definitely Early Nazca rather than Epigonal leanings. In all tabulations below, these 7 textiles have been counted as Early.

⁴ This series, 21:1-94, 1924. The authors, while not wholly committal, lean toward construing Early Chincha as of Early (Proto-)Nazca period. The two textiles are definitely Middle (Epigonal) in character. Since the pottery fragments—mostly incised—are not decisive, it has seemed best to classify the culture, on the basis of these textiles, as Middle in all the tabulations below.

Lima valley: California, M. Uhle, from Nievería,⁵ Early Lima, 6; from Aramburú, Field, Kroeber by excavations in 1925, Early Lima, 14.

Ancon: California, C. Uhle, probably mainly *Late or Inca, 27.

Chanca valley: California, C. Uhle, mostly from site A, and therefore mainly *Late,⁶ 18.

Supe valley: California, M. Uhle by excavation at Puerto de Supe,⁷ period of "primitive" fishing culture, 16.

Moche (Trujillo or Santa Catalina) valley: California, M. Uhle by excavation, Middle period, Tiahuanacoid, from Moche, site A, 10; Late Chimú, from Chanchan, 7, from Moche, *site H, 75, total 82.⁸

Total, 660, of which 447 of known and *213 of attributed period;⁹ 167 Early, 150 Middle, 343 Late.

The range involved thus is the coast of Peru from about 300 miles north of Lima to about 250 miles south; the time, the whole of Peruvian prehistory yet known, from Early Nazca and the "primitive" fishing period of the central coast to Inca. No highland material was available.

The chronological concordance of periods in the several valleys is not so certain as the sequence of those in the same valley, but their probable approximate correspondence is indicated in the following table, which is based primarily on pottery, secondarily on building construction, head deformation, and other culture traits: Tello would probably put Paracas, Uhle, Primitive Supe and Early Lima, somewhat earlier than here given; Kroeber is somewhat in doubt about the temporal placing of Early Cañete. The textile material whose time position is least certain is indicated in the table by broken lines.

The results to date indicate the following inferences: 1, certain habit persistences characterize regions; 2, changes according to period manifest themselves in style rather than technology, or in the preference given to certain techniques rather than in new invention; 3, the fundamental technologies and control of the art were already established at the beginning of the discovered record. The last point is perhaps of most general interest and may be considered first.

⁵ This series, 21:305-329, 1927. ⁶ This series, 21:266, 1926.

⁷ This series, 21:235-264, 1925 (especially pp. 254, 261).

⁸ This series, 21:191-234, 1925. Moche, site H, which is the summit of the Cerro Blanco at the back of the Huaca de la Luna, appears to have yielded almost no pottery, the specimens in the University consisting only of a few sherds. Some of these are not determinable and some may be Early, but others are certainly Late Chimú. As the general character of the textiles resembles that of textiles known to be Late, the Moche H lot has therefore been counted as Late. Although it is possible that offerings were already being deposited at this site in Early or Middle times, it is less likely that these would be preserved.

⁹ The asterisk is used throughout to designate pieces, lots, or numbers whose age is not determined by pottery associated in the same graves.

TRAITS COMMON TO ALL PERIODS

First of all, both cotton and wool yarns are used in all periods. The collection from Cahuachi in Nazca, for instance, which was excavated by Kroeber, and is placed by him in A, that is, the first of the Early Nazca periods, comprises 25 pieces wholly of cotton, 31 of wool, 28 of both fibers. For Early Nazca in general, exclusive of this Cahuachi lot, the proportion of wool is somewhat lower, the ratio being 14:7:8. For Early Lima from Aramburú and Nievería it is 8:8:4, for Early Cañete 8:5:1; these are also excavated, unselected collections. Even the "Primitive" lot from Puerto de Supe runs 13:2:1 in spite of being the deposit of a poor fishing population. In fact, next to it, the highest proportion of all-cotton yarn fabrics is shown by the Late Chinchá and Late Chimu lots. The totals and proportions according to period and valley are as per table 2 (p. 28).¹⁰

It will be seen that the percentage of pieces containing only wool yarns is actually highest in the Early, and that for all-cotton fabrics in the Late period. The Middle period has the highest frequency of combination of wool yarn and cotton yarn in the same fabric, due partly to the predilection for tapestries. Other factors that have probably caused variation between lots are economic status as in Primitive Supe, preselection of the collection as in Late Ancon, and definite specialization of art in the case of Late Chinchá and Chimu. All in all, however, it is clear that both cotton and wool were employed side by side and in nearly equal frequency in all periods.

The free use of wool from the earliest period represented in the remains means that the textile art was then already an elaborate one, and that trade between coast and interior was regular. The first point is almost self-evident: figured tapestries, elaborate embroideries, knitting, brocades other than their basic web, may theoretically be possible in cotton, but actually they occur, the world over, almost exclusively in wool or silk. As to the second point, the llama and alpaca do not occur on the coast today, except as flocks of the former are transiently driven down with loads, and probably were not kept in numbers

¹⁰ Caution is necessary in such a classification. Many webs are incomplete. In the case of a border fragment with cotton warps, wool weft, the content is as fully indicated as if the piece were whole; whereas a preserved fragment of the all-cotton material to which such a border was a finish would tell only half the story.

TABLE I
CHRONOLOGICAL CONCORDANCE OF PERIODS

VALLEYS		PERIODS
Inca horizon		Nazca
		Ica
		Pisco
		Chincha
		Cañete
		Lima
		Ancon
		Chancay
		Supe
		Moche
Beginning of Late period		
End of Tiahuanaco-Epigonial horizon		
Beginning of Tiahuanaco-Epigonial horizon		
Earliest known Pre-Tiahuanaco cultures		
	Early Nazca	Y, Epig.
	Early N.	Nazcoid
	Paracas	
		Epig.
		Mid. Ica
		Late Ica
		Late Chincha
		Late Cañete
		"Early" Ch.
		Early Cañete
		"Early" Lima
		Late Ancon
		Late Chancay
		"Primitive"
		Tiahuanacoid
		Late Chimu

TABLE 2
FABRICS CLASSIFIED ACCORDING TO YARN MATERIALS

	Totals	Cotton yarns only	Wool yarns only	Both C. and W. yarns	Per cent Cotton only	Per cent Wool only	Per cent C.+W.
Late Chimu, Chanchan.....	7	2	0	5	29	0	71
*Late Chimu, Moche.....	75	53	11	11	71	15	15
*Late Chancay.....	18	8	2	8	44	11	44
*Late Ancon.....	27	5	4	18	18	15	66
Late Chincha.....	75	49	2	24	65	3	32
Late Ica, Ica.....	42	18	6	18	43	14	43
Late Ica, Nazca.....	64	16	29	19	20	41	39
*Late Ica, Nazca.....	32	3	10	19			
Tiahuanacoid, Moche.....	10	3	0	7	30	0	70
"Early" Lima, Nieverfa.....	6	0	4	2	0	67	33
"Early" Lima, Aramburú....	14	8	4	2	57	29	14
Middle Ica.....	53	11	5	37	21	9	70
Epigonal, Ica.....	8	1	1	6	12	12	75
Y and Epigonal, Nazca.....	9	5	3	1	23	42	35
*Y and Epigonal, Nazca.....	48	8	21	19			
Primitive Supe.....	16	13	2	1	81	12	6
*"Early" Cañete.....	14	8	5	1	57	36	7
*Early Paracas.....	7	2	1	4	29	14	57
Early Nazca, Ica.....	6	1	5	0	17	83	0
*Early Nazca, Ica.....	7	4	3	0	57	43	0
Early Nazca, Nazca.....	113	39	38	36	34	34	32
*Early Nazca, Nazca.....	4	1	2	1			
Total Late.....	340 ¹¹	154	64	122	45	19	36
Total Middle.....	148 ¹¹	36	38	74	24	26	50
Total Early.....	167	68	56	43	41	33	26
	655	258	158	239			

* = Attributed periods.

¹¹ Three Late Cañete and two "Early" (*Epigonal) Chincha pieces have been omitted from this and the following comparative tabulations. Their addition would bring the Late and Middle totals up to 343 and 150, as in the previous listing.

anciently.¹² The abundance of wool in the early coast cultures means, therefore, that this staple was consistently brought down from the Andes in quantity, or that the fabrics containing it were made in the mountains. That the former was the usual procedure is indicated by Uhle specimen *8846, carded and dyed but unspun wool rovings, from Soisongo, probably of Epigonal period. Moreover, the Paracas specimens (pl. 9a, b, c) are embroidered in designs typical of Early Nazca pottery designs, in fact proceeding in curves which are evidently taken over from ceramic painting, not evolved in cloth.¹³ Early Nazca was a coastal valley culture, and has not been reported from the highland. Import of wool from the highland was therefore current in the early era of localized cultures.

Another trait marking the essential unity of the textile art in all discovered periods is the loom. There appears to be no direct evidence that a large-size frame loom was used in Peru before Spanish times. The looms found and described are all of the type attached to the weaver's belt, or small set-ups for special purposes. The indirect evidence of the fabrics indicates the same. These almost always fall below 30 inches or 75 cm. in width. Of the 650 pieces examined, only 15 were woven wider than this in a single set-up; these measure 32½ to 47½ inches.¹⁴ Garments of greater breadth are often sewn together from pieces woven not over 30 inches wide. Some specimens, measuring 51 to 64 inches, are unsewn; but examination shows that these consist of loom-joined strips, one woven first, the second or several others

¹² None of the four tame or wild species of Andean camel, in fact, thrives in the coast region, though the reason is not clear. The "climate" or air pressure is said to make them die soon in most cases. Diet seems a more likely cause.

¹³ No embroideries with designs approximating those of Early Nazca pottery as closely as these fragments from Paracas were found by Kroeber in his excavations at Cahuachi or elsewhere in Nazca. The splendid embroideries described by Seler (*Gesamm. Abh.*, 4:285, 288, 293, 298) and Crawford (130, 132-134, 1916) which are very similar to Early Nazca pottery designs, are attributed to Nazca and Ica, respectively. But these are pieces acquired through purchase, not excavations, and therefore really of unknown provenience; and Tello, in tracing the known fine "Nazca" textiles, came to the conclusion that their provenience could all be traced back to Paracas. His own excavations there yielded fabrics of the identical style (*Internat. Congr. Americanists*, 1926, 22:681-683, 1928). However, some of Kroeber's Cahuachi Nazca specimens approximate the Paracas one in elaborateness and curvilinear freedom of design motives: such are 171140 (fig. 2), 171180d, 171266b.

¹⁴ The 4 specimens above 40 inches in width, Field Museum nos. 171182a, 171216 (fig. 6), 171218a (pl. 1), 171222 (fig. 5), are all from Cahuachi, Early Nazca A, at the very beginning of the time scale dealt with. The 11 others, between 30 and 40 inches wide, are Cahuachi 171219a, 171265, 171305b, 171306; Early Nazca from Majoro, Nazca, 170465a; Early Cañete 169848; Epigonal Nazca 170624, 170625; Late Nazca 171359a; Late Ica 4228; Late Chimú from Moche *2261.

subsequently woven edge to edge against the previously completed web¹⁵—a procedure that would certainly not have been followed by any one acquainted with a large-frame loom. This simplicity of the basic machinery for weaving would be expectable in an early period. Since it seems to have persisted through Inca times, fundamental progress evidently did not occur. To put it differently, the earliest known textile art of Peru was essentially as developed as any later one: the formative stages have not yet been discovered.

The same holds for techniques. Nearly all the fundamental weaves of Peruvian fabrics appear in Early Nazca: kelim, interlocking, and eccentric tapestry, pattern weave (of three types), weft scaffolding, twine-plaiting or lace, probably brocade;¹⁶ even wrapped weave and double cloth can be included, though they each occur only once and

¹⁵ Loom joining, so far as discovered, is of two main varieties. The first involves an extra length of yarn independent of the weaving elements. Each time a new pick of weft crosses the new set-up of warps it interlocks with this yarn which has already been put through a weft loop on the old web with a needle. The two widths are thus drawn closely together and give the appearance of a single breadth. Unlike a seaming stitch, the additional yarn alternately engages individual turns of weft on the adjoining outside warps. Thus, in a fine crêpe shawl (Cahuachi Nazca 171224) with a count of 40 weft, there are 20 points of joining per inch; in a fragment of white cotton (Moeche *2273f) with 46 weft, there are 23 points per inch. Obviously the count within each width is identical inch for inch. Cahuachi 171262 (pl. 5) is similarly joined of two webs.

The second type of loom join is dependent upon weft manipulation. In some fine tapestries the wefting for an irregular distance away from the edge must have been done with a needle supplementary to the regular weaving implement. A shuttle could not possibly be inserted between tapestry weft averaging 52 to the inch, as in Epigonal Nazca *9052 (pl. 13). In this specimen each pick is made to pass between two turns of weft on the outside warp of a previously completed web. The remaining pieces of this type are coarser, and commonly 2 to 3 picks of the new weft alternate with a similar group left unseparated on the edge warp of the first woven piece. The coarsest example found is "Early" (Epigonal) Chincha *3891. Others are Late *8385, *8541 from Nazca, Middle Ica 4588 (pls. 22*b*, 29, 32*a*). In all these the joined strips are from 16 to 25½ inches wide. An interesting illustration of the free use of such a device is the Late blanket *8385 from Nazca, which consists of 12 plain and 12 patterned strips, any or all of which might have been separate set-ups adjacent to completed portions. As a matter of fact, two of the twenty-four were made on a single set-up. The other strips contain evidences of having been done individually.

¹⁶ The difficulty in distinguishing between brocades and embroidery has been recognized by Crawford (p. 125 ff., 1916). With an open-mesh material such as forms the webs of Early Nazca 171218*a* (pl. 1), 171219*a*, 171220, and especially with one portion of each of these seemingly embroidered, it is probable that all was stitchery. To find a decorative yarn crossing a basic weft, or a knot at the end of a thread, would constitute proof. This is rare. Primitive workers are no more inclined to confess to lack of skill than are modern ones. Failing such evidence, we have arbitrarily classed as brocades those fabrics in which geometric designs are built up by alternating a pick of decorative yarn with a pick of basic weft.

with special technical features which set them off.¹⁷ To be sure, the extent and purpose of the use of many of these techniques is quite different. Typical Early Nazca elaborate figures are embroidered, those of later periods tapestried; but tapestry crops up in Early Nazca: sometimes monochrome, sometimes in pattern, now in a ribbon or band, next in a garment, then in a sling. The process was perfectly well known, even though not nearly so common as later. Similarly with the other basic weaves, and with braiding, embroidery, knit-work, yarn-crêping, and most processes. Some of these had their principal vogue early, some late; but generally they occur both early and late.

The same may be said for dyes. Each culture, local or temporal, favored certain colors or combinations, but the total range and excellence of dyes was about the same early and late. Early Nazca, Epigonal, Middle, and Late Ica all use admirable colors, though experience comes to recognize these as typically differentiated according to period.

STYLISTIC VARIATIONS OF PERIODS

While the capacities of the ancient Peruvian textile art remained nearly constant, period expressed itself in style; and style varied according to the favor accorded this or that technical process, as well as in its decorative patterns and color combinations.

For instance, Early Nazca achieves ornament scarcely at all by tapestry, but essentially by single-yarn techniques, especially embroidery and knitting. It adds a willingness to attempt curvilinear figures, of demons and attired men in embroidery, of birds and men in knitted fringes. Fine pieces can thus usually be distinguished at first glance from later ones, among which elaborate tapestry designs predominate, and embroidery and knitting are reserved for subsidiary or special purposes. The following list is illustrative for tapestry, embroidery, and knitting, although the qualitative difference between the periods is greater than the numerical one, owing to the addition of esthetic emphasis.

¹⁷ Double cloth, normally a two-color fabric, has been found limited almost exclusively to brown and white or red and white. The one Early example (Nazca 170476d) is a typical warp-stripe set-up of the period, four colors repeated across the width. Color change is thus effected not only by the interplay of surface and reverse colors characteristic of the weave, but in addition by the color variation within each as modified by the stripe set-up. The single Early wrapped weave is a sling, Nazca 171314. Customarily, slings employing wrapped weave use this for the decorative portion only, between the center and the heavy braided ends. This specimen has a kelim tapestry center, which is unique in itself, and wrapped weave for the remaining 56 inches on each side.

Early embroidery differs radically from Middle and Late. Early normally covers large surfaces (Paracas 170095, 170096, 170102, pl. 9; Nazca 171140, fig. 2). Middle and Late have edges or lines of needlework required by the structure of the article, made into additional

TABLE 3
PERIOD VARIATION IN TECHNIQUE TYPE

	Pieces	Tap- estry ¹⁸	Em- broidery	Knit- ting	Per cent tap- estry	Per cent em- broidery	Per cent knitting
Late Chimu, Chanchan.....	7	5	0	0	71	0	0
*Late Chimu, Moche.....	75	17	16	0	23	21	0
*Late Chancay.....	18	10	0	0	56	0	0
*Late Ancon.....	27	19	0	1	70	0	4
Late Chinchá.....	75	17	9	1	23	12	1
Late Ica, Ica.....	42	10	4	1	23	10	2
Late Ica, Nazca.....	64	7	14	0	11	22	0
*Late-Ica, Nazca.....	32	14	12	1	44	34	3
Tiahuanacoid, Moche.....	10	1	3	0	1	3	0
"Early Lima," Nievería.....	6	3	0	1	5	0	17
"Early Lima," Aramburú....	14	3	0	0	21	0	0
Middle Ica.....	53	31	3	20	58	6	38
Epigonal Ica.....	8	3	1	1	37	12	12
Y and Epigonal, Nazca.....	9	4	0	0	44	0	0
*Y and Epigonal, Nazca.....	48	20	6	9	42	13	19
Primitive Supe.....	16	1	1	0	6	6	0
Early Cañete.....	14	1	1	1	7	7	7
Early Paracas.....	7	0	4	4	0	57	57
Early Nazca, Ica.....	6	0	0	1	0	0	12
*Early Nazca, Ica.....	7	1	0	1	20	0	20
Early Nazca, Nazca.....	113	9	24	24	8	21	21
*Early Nazca, Nazca.....	4	0	1	1	0	25	25
Total Late.....	340	99	55	4	29	16	1
Total Middle.....	148	65	13	31	44	9	21
Total Early.....	167	12	31	32	7	19	19

decorative features. Only Late Chimu consistently shows large-area stitchery (*2281a, *2283a), like Early fabrics. A variety of Middle and Late embroidery here called "needleknitting" is merely an embroidery stitch used to finish edges (pl. 33). If this needleknitting is deducted from the cases of embroidery in the table, the Late, Middle, and Early totals become 34: 8: 27 instead of 55: 13: 31, and the corresponding percentage frequencies 10: 5: 16.

¹⁸ Figure-8 weave, technically a tapestry, has not been counted as tapestry for purposes of this table when it is the sole form of tapestry used in a piece, as happens especially in slings.

A few other examples will illustrate the change in trends:

	Pieces	Gauze ¹⁹	Brocade	Pattern weave	Double cloth
Total Late.....	340	10	40	28	9
Total Middle.....	148	2	12	21	10
Total Early.....	167	3	3	12	1

In brocade, pattern weave, and double cloth frequencies, Middle period goes with Late; in gauze, Middle evidently belongs with Early.

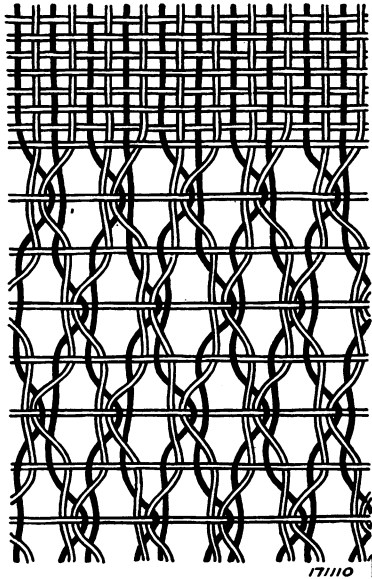


Fig. 1. Early Nazca. Detail to show manipulation of warps in change from plain to gauze weave. Warps customarily return to original position on sixth pick of weft.

Again, for Ica and Nazca valleys only, the frequencies of shape of braid are:

	Total pieces	Braided pieces ²⁰	Square and round	Flat
Late.....	138	50	60	10
Middle.....	65	20	10	11
Early.....	130	11	4	12

¹⁹ Gauze refers to structure, that is, crossed or zigzagging warps (fig. 1), not to the effect of sheerness.

²⁰ Some slings change from round to square braid, so that there are more occurrences of braid than braided objects. A favored square braid is 8-strand; round, 4-strand. Our common 3-strand occurs only 9 times in the 33 cases of flat braid.

Exclusively characteristic of the Early Nazca culture in Nazca and Ica valleys, so far as data in hand go, is three-dimensional knitting (pl. 3). Tie-dyeing has not yet been found in this culture and of double cloth there is only the one aberrant example mentioned.

Epigonal, in the same area, is characterized especially by twine-plaiting lace (pl. 17f) which carries over from Early Nazca (pl. 7a) but has not been found subsequently. Embroidery has become rarer in Epigonal; ambitious and very fine tapestries are being made (pls. 12, 13, 14, 15b, c).

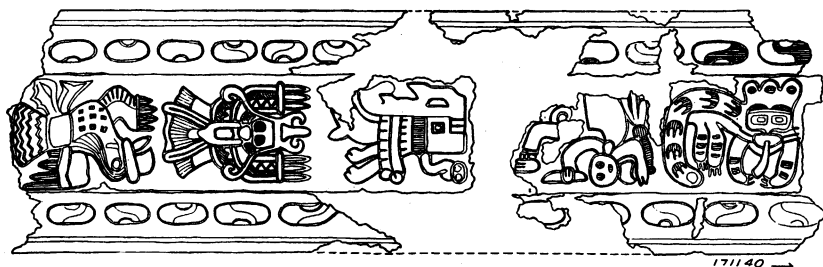


Fig. 2. Early Nazca. Embroidered motives after the manner of pottery designs.

Middle Ica specializes in tapestry (pl. 23a), especially over grouped warps and with interlocking and underfloat weft. Knitting is still, or again, very frequent; so is double cloth (pl. 24b); and wrapped weave, practically absent before, comes in.



Fig. 3. Early Nazca. Band with solidly embroidered ground and motives. Dotted lines indicate reconstructions.

Late Ica carries on the tapestry of the preceding with greater variety of devices and less extreme specialization on underfloat weft. Figure-8 wefting is common, but as this occurs in slings rather than in fabrics, it perhaps constitutes tapestry only in a technical sense. Wrapped weave, which begins to be fairly frequent in Middle Ica, becomes common in Late and occurs with multiple as well as single weft. Counterpairing of weft in wrapped weaves (pl. 30a), and facing of one weft with a second in pendant bags and slings, are exclusive traits of Late Ica, so far as the present data go. Other characteristic features are applied fringes and tassels and padding yarns introduced to give size to sling centers. Knitting has become extremely rare, but round and square braids are abundant.

Outside of Nazca-Ica, the material presents fewer time sequences, so that peculiarities of style are interpretable as due either to regional or temporal influences; yet on the whole the traits accord with those of the corresponding Nazca-Ica periods. For instance, Tiahuanacoid Chimu and Early (Middle) Lima can be equated roughly with Epigonal Nazca-Ica in time; and like it they show a preponderance of tapestries, the decay of embroidery, a persistence of knitting, and flat braid.

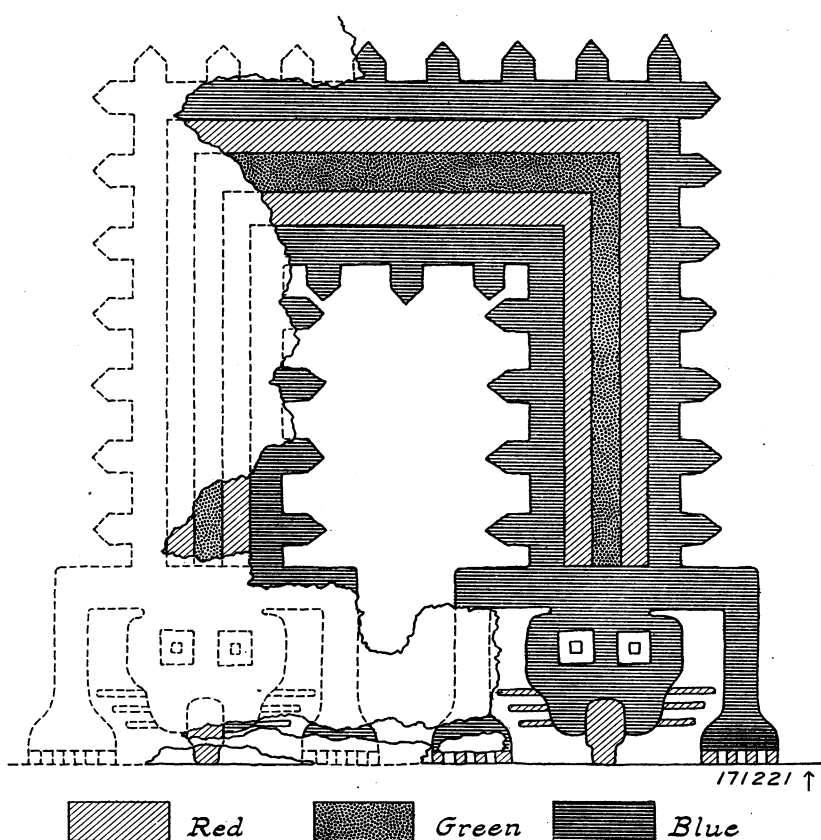


Fig. 4. Early Nazca. Double-headed monster at corners of thin cotton shawl. Plain weave; weft interlocking for color change.

Late Chimu, Chancay, Ancon, and Chincha agree on the whole with Late Nazca-Ica. Underfloat tapestry, for instance, is scarce, as in Late Ica, though extremely abundant in Middle Ica. Common in Late material generally are warp-locking tapestry, gauze, and brocade, especially single-faced. Slack-spun yarn has been found only in Late specimens, and crêped yarn, although as old as Early Nazca, is most frequent in Late material.

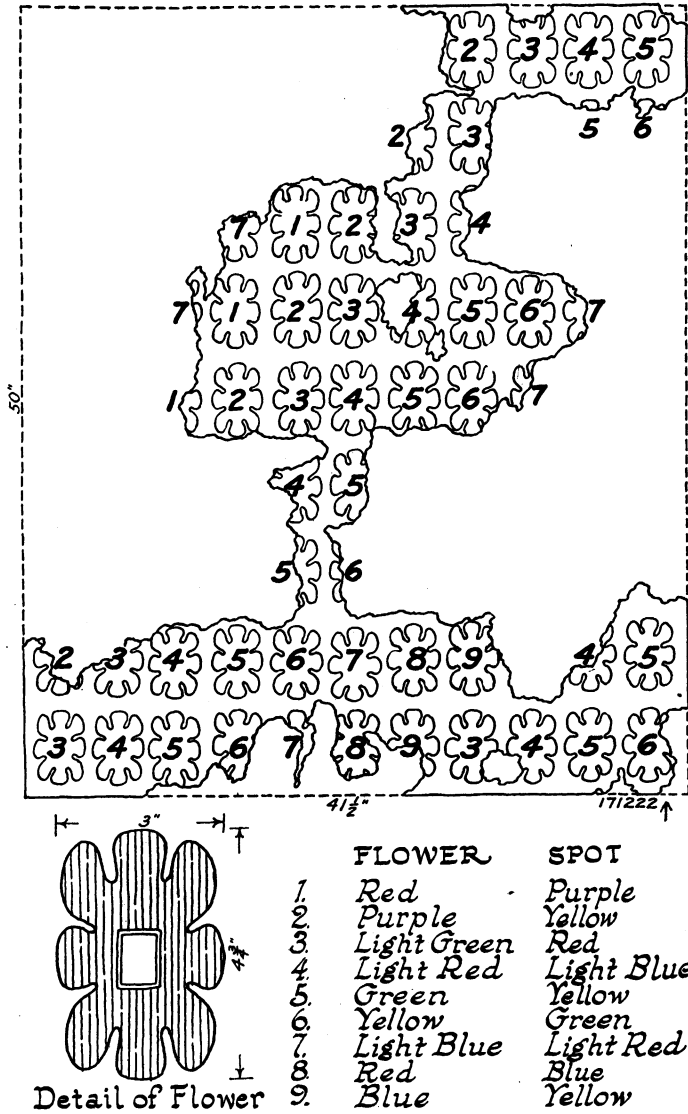


Fig. 5. Early Nazca. Sketch of fragment to show maintained sequence of color combinations. Full size indicated by portions of intact selvages; single set-up of warps.

Design in Early Styles

The embroidered and knitted textiles of Early Nazca (pls. 1-8) are developed in an unusual range of clear bright colors. Allowance for variations, possible through exposure, still leaves occurrences of two or three values of some colors in the same piece, sufficient to prove that variety was an acceptable as well as an accomplished fact. Where the potter of the period confined himself to 5, 6, 7, or 8 colors, the textile worker divided corresponding motives into minute areas occasioning from 7 to 13 colors (fig. 5). Of these, the greater number fall under the descriptive terms: reds, greens, blues, browns, from light to dark. Comparatively little purple is found, the white is a deep cream, the black more often bluish or brownish than true in color.

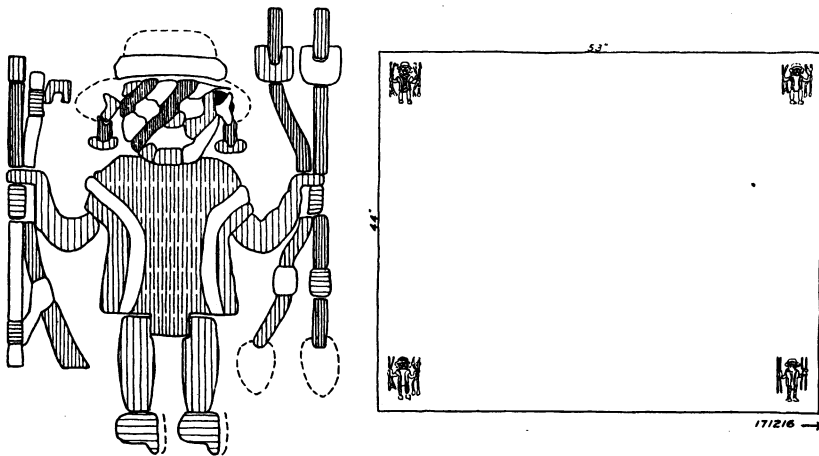


Fig. 6. Early Nazca. Embroidered wool motive from corner of cotton shawl. Use of running stitch makes fabric reversible. Dotted lines indicate reconstruction.

Fine Paracas embroideries have the monsters, trophy-heads, cat-demons of Nazca pottery substantially unchanged. They appear in solidly worked grounds of black, yellow, red, blue, the whole giving the effect of an appliqué on fine cloth foundation. Cahuachi Nazca examples are inferior to Paracas in quality of workmanship (figs. 2, 3, 5, 6). They use the same type of subject, however, and show the same consideration for details into which the unit can be broken up (fig. 2). A characteristic of the band decorations from both sites is the inversion of alternate repeated motives along the length of design (pl. 9).

While curvilinear figures are the rule, there are a few cases in which attempt is made to represent geometric forms. A Cahuachi Nazca poncho (pl. 2c) has an area of solidly embroidered squares front and back of the shoulder line in addition to a band of flower forms at the armhole. Nazca *9120 is a square kerchief with allover design of crosses and rectangles worked solidly in rows of outline stitch.

Three-dimensional knitted fringes are the customary decorative finish for sheer crêpe shawls from Cahuachi sites. Presumably the fragmentary fringes from other Nazca and Ica sites (pl. 3a) served the same purpose. Definite stylizing seems to have been achieved with regard to subject, size, arrangement, and color. The motives are without exception birds or flowers or a combination of the two; sizes vary from half-inch to inch-high birds on a narrow "perch"; arrangement implies a choice between a row of open flowers or plants each with a bird's bill inserted in it, or a row of birds facing in one direction.

Opposite symmetrical representation, familiar in Eastern textile designs, while rare, is not unknown to knitting (171112), weaving (171226), and embroidery (171225) of the Early period.

Evidence of the influence of one textile technique on others is clear in the adaptations of Early Nazca bird-flower elements. Three examples from the woven-band finishes for shawls may be cited. Superficial similarity of these shawls, which came from the same grave at Cahuachi, ends with red as dominant color and a patterned center stripe.

One (171224) has a knitted center corresponding to a "perch" incorporated as an integral part of the band. The knitting was done over weft which crossed a one-quarter-inch space between two independent set-ups of warps. Tail feathers are represented on the center by bars of color; heads and bodies rise from its surface.

The second woven band (171225) embroiders the bird-flower motive in tapestry technique over exposed weft crossing between warp set-ups. Following the conventional trend toward variety in coloring, there are thirteen distinguishable hues or values of hues in the last specimen and fourteen in the present example.

A third band (pl. 2a, b) lies strictly within the class of woven fabrics, but has the same decorative center stripe, dominant color, and motive, this time done in single-face pattern weave with warp floats. In contrast to the knitted and embroidered prototypes, four colors (two reds, black, and green) suffice to carry out the design where the others have more than a dozen.

A special type of three-dimensional knitting, closely akin in effect to painting and wood carving, is represented by small human faces, showing on surface and reverse sides (171115, 171180b, 171321). A

more complicated design of the same order (fig. 7) is a knitted veneer on a separately woven trim for a neck opening, with human figures about an inch in length and from four to six colors in each. As in embroidery, geometric designs seem to have been rarely used as knit-

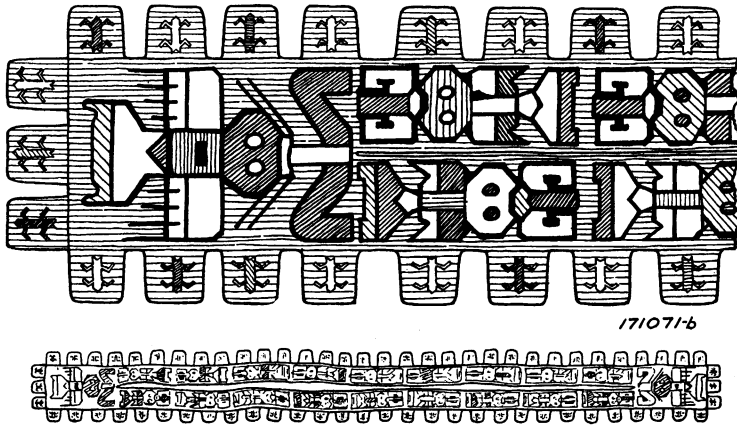


Fig. 7. Early Nazca. Knitted veneer completely covering surface side of plain-weave facing for poncho neck opening.

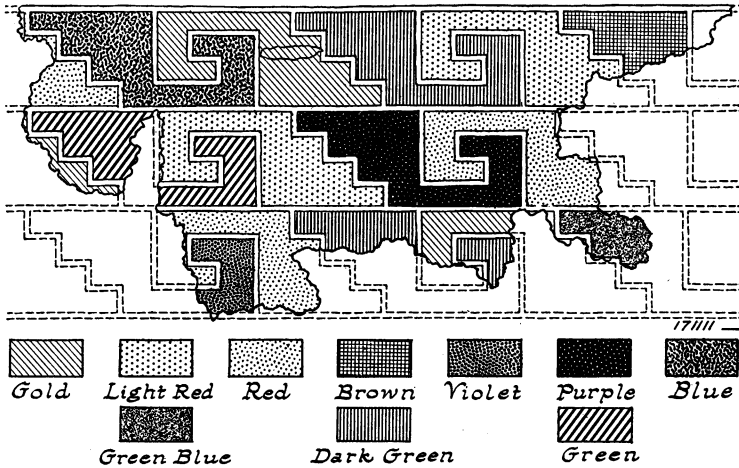


Fig. 8. Early Nazca. Interlocking plain weave fabric showing characteristic step-fret motive. All borders white. Dotted lines indicate reconstruction.

ting motives, but there is an example of a fret or reversed L adapted to the width of a band (171117). The piece is fragmentary but of the type found on edges as decorative finish.

An early type of fabric unique in coloring and construction resembles in its appearance a multicolored patchwork. The motives are purely geometric: reciprocal stepped frets within horizontal zones

(pl. 6a; fig. 8), or stepped crosses edged by bands and borders of smaller crosses (170322). As may be seen, the opportunities for color change are limited only by the number of small webs forming the whole. As many colors occur as in the later tapestries; in one example, twelve.

While the available range of dyes might have led to lavish color use in all Early textiles, certain ones conform to rigorous color limitation. For instance, those webs to be embroidered are of white cotton; those on which knitted edges are to be applied are prevailingly white (pl. 3c is black); the few plain-dyed cotton cloths, mostly reds, are undeco-

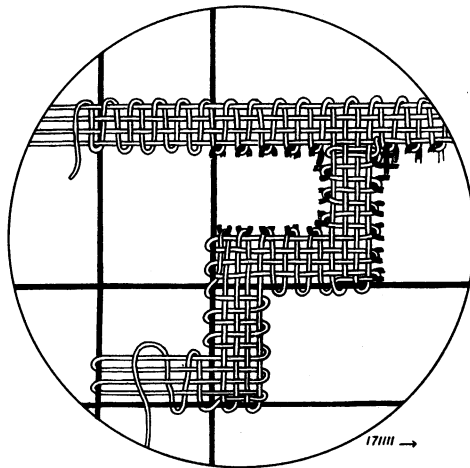


Fig. 9: detail of fig. 8. Early Nazca. Plain weave showing skeleton yarns and interlocking warps and weft. Note continuous yarn forming border which is warp and weft by turns.

rated; striped cottons are brown and white or brown and blue combinations, some adding light pink as a variant to the white yarns.

Wool is of a different class; it suggests richer treatment. A very fine fragment of a wool shawl (170665) has warp stripes of red-purple, tan interchanging with orange, green-blue, rose, each two separated by a bright red, the whole series of 5 colors repeated as a unit in regular sequence of widths.

Two warp-striped wool shawls (*171262, pl. 5, 171265) in red, rose, and black are edged with a complicated narrow fringe down the two sides, extending around the corners to end or to be met by a less elaborate finish which fills out the space at top and bottom. A small wool kerchief (pl. 8b) is striped and edged in the same manner. It is

possible that knitted fringes may have extended only partly across the top and lower edges, but no piece has been found to make this more than speculation.

The Early Cañete (pl. 11) culture has the multicolored geometric patchworks of Early Nazca, but neither its knitted birds and flowers nor its elaborate embroideries. Only part of the collection obtained by Kroeber from this culture at Cerro del Oro was available for the present study, the remainder, including most of the decorated specimens, having been rendered temporarily inaccessible for analytic study by being on exhibition.

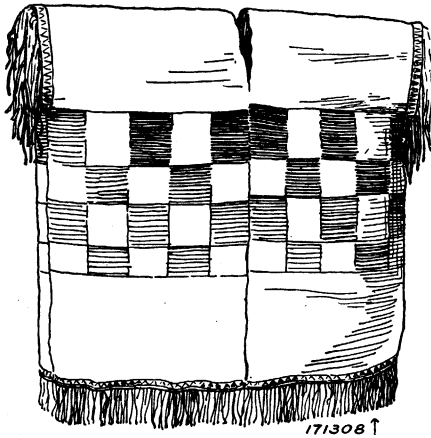


Fig. 10. Early Nazca. Shirt blocked off in solid brown and white rectangles by means of skeleton yarns and interlocking plain weave. Kelim tapestry edge bands.

The Primitive or Early Supe shellmound or fishing culture is represented by too few decorated specimens to make discussion of its design worth while. If the pieces preserved are representative, the textiles were as meager ornamentally as the unpainted pottery of this culture.

No textile positively identifiable as Early Chimú seems to be recorded anywhere. The Uhle collection from the Huaca de la Luna at Moche, which comprises more than 600 pottery vessels, besides metal and stone objects, does not include even one fragment of cloth. Preservation conditions are less favorable in northern Peru than elsewhere on the coast; rains, though rare, do occur. It is highly desirable that future excavations preserve even scant textile remnants if these appear in indubitable Early Chimú tombs.

Design in Middle Styles

In the Middle periods a distinction must be made between earlier culture phases such as Epigonal Nazca and Ica (pls. 12-21) whose pottery shows a marked highland or specific Tiahuanaco influence, and later ones, such as Middle Ica (pls. 23, 24), in which these influences are diminishing and the pottery designs are trending toward those of Late Ica or other immediately pre-Inca styles. "Early" Chinchá (pl. 22), "Early" Lima (pls. 25-27), and Tiahuanacoid Chimú (figs. 12, 13) textiles affiliate more with Epigonal Ica than with Middle Ica.

Motives common to Nazca-Ica Epigonal fabrics are simple geometric forms with stepped or plain outlines, an elaborated S-shape, reciprocal hooks, double latch-hooks, the puma entire, or its claw, eyespot, mouth detail used independently, and human figures with staves of exaggerated size. The outstanding colors are definite red and yellow, sometimes with smaller areas of vivid blue.

Pure Tiahuanaco style is manifest in the border of human heads in a fine Ica tapestry (pl. 12). A Nazca band (pl. 15*a*) has four men carrying staves, arranged lengthwise. This Epigonal motive reappears in Late Ica, Chinchá, and Chimú pieces.

A combination of recognized Epigonal elements suggestive of a human figure occurs in Nazca fabrics (pls. 16, 19). The breaking down of realistic representation, as well as the coloring which includes much blue, mark the latter specimen as later than the multicolored Early Nazca and Early Cañete patchwork fabrics which are identical in technique.

One very striking piece attributed to the period is a shirt (pl. 13). The puma of various sizes is the main motive; in addition there are frets and simple geometric motives. Tans and browns are dominant, orange and red appear in noticeable amounts, while small areas of bright rich blue confirm the age.

Middle Ica textiles as well as pottery trend away from the Epigonal semi-realistic toward the angular and repetitive in patterning. This is a period of close-textured brown and white cotton fabrics edged with deep tapestry borders woven on the same warps. The main portion, whether striped (pl. 24*a*) or built up of a series of stepped squares (4369) to form an allover pattern, is a drab sequel to a technique which developed in Early Nazca with a dozen colors.

Other Middle Ica bordered fabrics are double cloths in brown and white cotton exclusively (pl. 24*b*). The simplest of designs is attempted, an all-over of rectangles stepped on the diagonal, each half centered with a square spot.

The first impression given by the tapestry border patterns is one of confused, meaningless detail further complicated by colors close in value. Motives, reduced to elements, may be interpreted as frets, birds, or fish forms (pl. 23*a*). Counterpairing, inversion of alternate motives on a vertical axis or on both axes for disposition within an indistinct rectangle, are typical arrangements (fig. 11).

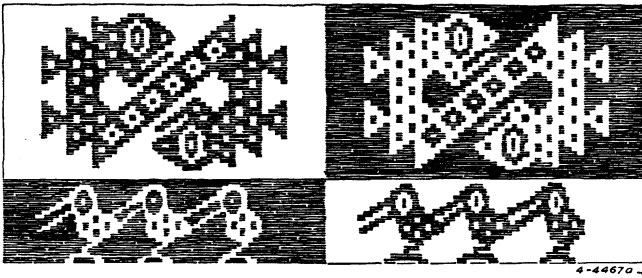


Fig. 11. Epigonal, Ica. Double-face brocade. Characteristic reversal of motive on both vertical and horizontal axes.

Repetition of any one unit is less apparent, however, than the rhythmic occurrence of colors. Rose red, much of it faded to golden brownish, is the almost invariable Middle Ica ground color. Choice is further conventionalized by a limitation of the number of colors to be combined; the average falling between four and seven, with blue a conspicuous addition to weaving yarns.

The Early Lima tapestry and pattern-weave fragments from Nievería and Aramburú are mostly brown-white combinations (pl. 25*a, c*). Designs are of Middle Ica border type, geometric, repetitive. Tapestry of characteristic Epigonal type occurs (pls. 25*a, 27d*).

The textile series from the northern Tiahuanacoid site Moche A is small but exhibits well developed technical skill. Plain weaves with warp-float pattern stripes make up four of the ten pieces. Tapestry of kelim and eccentric types, double cloth, double-faced brocade, constitute most of the others. Yarns are cotton, almost invariably singleply, heavily crêped. Exclusively characteristic of Middle period Chimu culture, so far as may be judged from our data, is the combining of embroidery with a structurally patterned textile. Small

raised dots in figure-8 stitch are needle-worked subsequent to the weaving on the two brocades and one double cloth in the group, and constitute the only cases of embroidery from this site (fig. 12). Both stitch and use are unique. The designs are of general Epigonal type, like the profile human being of figure 13.

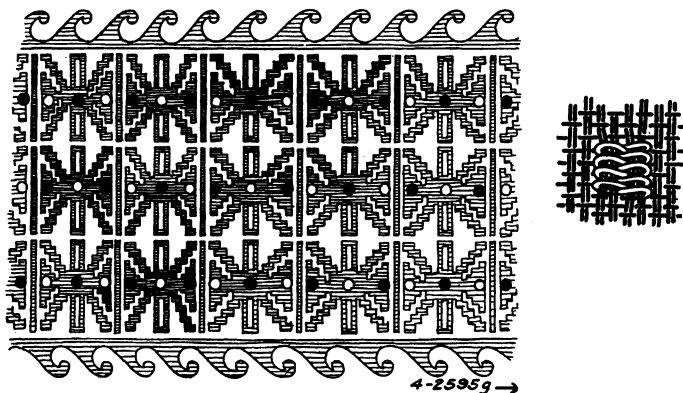


Fig. 12. Tiahuanacoid, Moche. Double-face brocade border design; relief dots in figure-8 embroidery stitch.

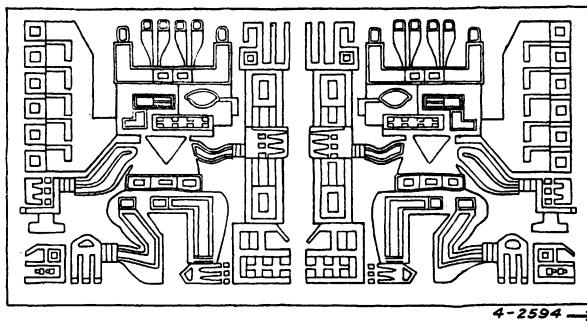


Fig. 13. Tiahuanacoid, Moche. Kelim tapestry motive in pure Tiahuanaco style.

In general, Middle period designs are fairly complex, but appear to be disintegrations from former more realistic trends. Colors are less numerous and less inclined to rich dark tones. Cloths to be bordered are still white or brown, a few dyed in plain colors.

Design in Late Styles

Peruvian textiles of the Late and Inca periods (pls. 28-48) are distinguished more readily by style than by workmanship. Tapestry weaving, though common, had reached its highest degree of quality

in Epigonal times. The three finest pieces examined (pls. 12, 14 from Ica and Nazca) counting 46, 38, 58 2-ply cotton warps and 180, 216, 200 2-ply wool weft per inch, are Epigonal.

Certain design features are shared by all Late textile styles. Conventionalizing of human and animal forms is extended to the point of geometric representation as seen in Nazca checkered llamas, Ica human figures, and Chinchá birds (pls. 29, 40). Motives are fitted, often reciprocally, into horizontal or vertical bands or slanting rows, so that there is definite movement to the design. If the arrangement of itself appears at first glance to be an all-over pattern, sequence of colors may be insistent. An illustration of this is to be found in a shirt from Nazca (171360). Reduced to black and white, the surface would seem crowded with the variety of vertically and horizontally banded design elements. In the actual garment the coloring, complex as it is in detail, forces the attention diagonally across the patterned area. Squares, lozenge shapes, stepped fret forms are no longer sufficient in and of themselves but are become frames for one or many smaller motives. That this was an accepted convention is indicated by the following from many possible examples:

Brocaded designs corresponding to those embroidered in the corners of Early Nazca shawls (fig. 6) are enclosed in the Late period by stepped bands (pls. 38, 46). Peculiar to Chinchá is the placing of a stepped square in the center of a shawl in addition to corner decorations. This is an emphatic contrast to the Early shawls with their elaboration of diagonal corners. Late Ica kelim tapestries have rows of stepped frets filled with bird forms (4275a). Small diamond shapes, each enclosing a bird, make diagonal lines in a Late tapestry from Nazca (170948a). A brocade from Ancon is divided into rectangles each filled with a cat form (16-984).

Available materials from Chinchá come under the above characterization with but few exceptions. There are one or two outstanding pieces of brocade type in which motives lack geometric frames. In the largest, a brown shawl (3972a), color sequence gives a forceful unity to an all-over pattern of widely spaced design motives.

In no textile group of equal size has there been found such consistent reliance upon a single design element as at Chinchá. Bird forms appear in tapestry, brocade, and double cloth; they are embroidered and painted. They are used singly, interlocked, or in combination with other animal forms. They vary in size from a half-inch to six inches, and may be wholly geometric, fanciful, or realistic. These last are of the type found on pottery, though diagonally arranged according to the convention in textile patterning.

What is said of Chincha applies more or less to Moche-Chanchan, Chancay, Ancon, Ica, and Nazca textiles. Here again are horizontal rows of birds, llamas, and crosses, rectangles containing six-pointed stars or animal forms. An illustration may be taken from brocade (pl. 31). Each rectangle frames a single form. The ground is one color, body a second, eyespot and body detail a third, feathers and toes a fourth. Five combinations from a range of ten colors form a sequence to be repeated on the sixth diagonal row of rectangles. This repetition of a sequence of three, four, and more colors or combinations, while occurring in all periods (fig. 5), is most typical of the Late textiles, and may be found from double-face pattern weaves to the simplified knitted edge-bindings.

In summary, Late pieces give an impression of motives confined within borders or geometric forms. The patterning is often aggressively diagonal in line emphasized by an insistent sequence of colors. All colors are used, with tans to brown playing large parts as ground colors. Brocades are still white or brown cottons ornamented with wool weft.

STYLISTIC VARIATIONS OF REGION

Regional peculiarities are of two kinds: those occurring in the same period, and those holding for an area through successive periods. The former are more easily brought out by contrast with the common element of the age; the latter are more interesting.²¹

Regional Peculiarities within the Late Period

The tabulation that follows lists the principal textile processes specially characteristic of four districts—in order from north to south: Chimu, Chancay-Ancon, Chincha, Ica-Nazca—together with resemblances common to the first and third of these.

The agreements between Chimu and Chincha in the Late period are striking in view of their geographic separation. Ancon and Chancay lie between them; and Ica-Nazca, on the basis both of distance and pottery resemblances, would expectably prove more similar to Chincha than this to Chimu.

²¹ Peculiarities of the same two kinds occur in pottery: within one period, the difference between Early Nazca and Early Chimu, or Late Ica and Late Chimu; irrespective of period, certain traits persisting through Nazca-Ica (round bottoms; many colors: 8 Early, 3 Late) and through Chimu (flat bottoms; stirrup mouth and whistling jars; few colors: 3 Early, Late mostly solid black).

TABLE 4
REGIONAL PREPONDERANCES OF LATE TECHNIQUES

	<i>Chimu, 82</i>		<i>Chancay-Ancon, 45</i>		<i>Chincha, 75</i>		<i>Nazca-Ica, 138</i>	
	No.	%	No.	%	No.	%	No.	%
<i>Typical of Late Chancay-Ancon</i> ²²								
Tapestry, all types.....	22	27	29	64	17	23	61	44
Monochrome weft stripes.....	3	4	14	31	9	12	5	4
Kelim.....	7	8	18	40	12	16	11	8
Eccentric.....	3	4	13	29	9	12	8	6
Gauze weave.....	.....	.....	7	15	.....	.....	3	2
Pattern weave, double face.....	1	1	6	13	4	5	7	5
<i>Typical of Late Chimu</i>								
Fringes—all types.....	36	44	4	9	12	16	12	9
<i>Typical of Late Chincha</i>								
Brocade, both types.....	8	10	3	7	20	27	9	7
Shedding for secondary design in single-face brocade.....	2	2	.....	.....	10	13	1	1
Warp face, plain weave.....	10	12	2	4	20	27	27	12
Weft grouping for size.....	8	10	4	9	12	16	16	12
Loose battening.....	9	11	.....	.....	21	28	6	4
Kelime slot for neck openings.....	3	4	.....	.....	6	8	1	1
<i>Typical of Late Chimu and Chincha</i>								
Plain weaves, all types.....	63	77	19	42	65	87	63	46
Basket weave ²³	4	5	.....	.....	9	12	.....	.....
Crêped yarns.....	62	76	14	31	50	67	22	16
Warp doubling, plain weave.....	42	51	2	4	44	59	4	3
<i>Typical of Late Nazca-Ica</i>								
Interlocking tapestry.....	.....	.....	1	2	.....	.....	20	14
Figure-8 tapestry.....	.....	.....	.....	.....	.....	.....	31	22
Wrapped weave.....	.....	.....	.....	.....	.....	.....	25	11
Braided pieces.....	1	1	1	2	1	1	47	34
Drawing in for color change in warps.....	1	1	5	11	.....	.....	22	16
Warp-lock, tapestry.....	.....	.....	.....	.....	.....	.....	12	9
Weft-lock, tapestry.....	.....	.....	1	2	2	2	16	12
Padding yarns, slings.....	.....	.....	.....	.....	.....	.....	18	13
"Facing" yarns, slings.....	.....	.....	.....	.....	.....	.....	9	7
Counterpairing, wrapped weave.....	.....	.....	.....	.....	.....	.....	4	3
Half-hitching.....	1	1	.....	.....	.....	.....	7	5
Plaiting element manipulation for color.....	.....	.....	.....	.....	.....	.....	7	5
"Needleknitting".....	.....	.....	.....	.....	3	4	18	13

²² The Chancay and especially the Ancon series appears to be a selected group with preponderance of display pieces and therefore showy technical processes.

²³ With reference to the frequency of basket weave at Chincha, it is probably significant that all the 3 pieces examined from Late Cañete also showed this technique. Cañete is the valley next north of Chincha, and their Late potteries are very similar.

The exceptionally abundant use of cotton in the Chimu and Chincha areas in Late times has already been mentioned. This predilection is clearly not due to a meagerness of quality of fabrics or lack of interest in them, and probably not to a deficiency of wool supply. It appears to be the result of a specialization and refinement of techniques and devices especially adapted to cotton, as the following facts show:

Fully one-half of the textiles from the Chimu sites are woven of single-ply, crêpe-twist, white cotton yarns used in pairs for warps, doubled if size is required for weft. An adaptation to cotton from an essentially wool technique is illustrated by alternating plain weave and monochrome tapestry bands within the same piece (pl. 46a). This form of patterning, peculiar to Chimu, has its uniqueness further emphasized by the fact that the change to tapestry within the plain-weave fabric involves, instead of a shift to wool, simply the use of two cotton yarns on the bobbin in place of the usual single strand. Crêped yarn lacks softness, pliability; it will not beat up smoothly. Loss of smoothness is in part compensated for, however, by the resultant puffy texture which the tapestry stripes have in contrast with the plain-weave open-mesh ones.

Other than in stripes, Chincha and Chimu textiles show free use of cotton as a tapestry yarn either alone or with wool. Complete motives are developed in browns and blues unlike most examples from Nazca-Ica sites (pl. 45a, b). Late Ica tapestries, when they include cotton, generally have it in small details such as eyespots or feathers. It may be suspected that a true white was the aim in this use of cotton, since so-called "white" wool is more nearly cream or pale yellow.

Chincha rivals Chimu in its use of fringes. A typical finish on Chimu crêpe veils and shawls is formed of a tape-like heading, 2 to 8 warps wide, the fringe proper being the extra length of weft which turns about a skeleton warp set an inch distant. Upon completion of the plain weaving, the skeleton warp is withdrawn, leaving tightly twisted weft loops. The simplest 2-warp variety is a customary finish on all four edges (pl. 46a).

Chincha fringes are more elaborate, constituting an important decoration on sheer fabrics. They may include cross-stripes of color in tapestry technique alternating with monochrome portions, the plainness of which is broken by tiny patterned insets in a repeated sequence of colors (pl. 38).

The type of brocade here termed "single-face" because of its definite surface and reverse sides is common to both Late Chimu and Chincha (pl. 39, 46b, c). This technique uses finer yarns than double-face and practically all the wool appears on the surface side. Also, single-face brocade uses less wool than the double variety by reason of the light weight or scattered design motives in which it customarily appears.

Single-face brocades, to the practical exclusion of the double-face type, and cotton motives within traditionally wool-weft tapestries, might be cited as indications of inability for one reason or another to procure the requisite amount of wool for fine weaving. Or, the emphasis placed on cotton might be indicative of a style dependent upon different quality standards. The Late Ica tapestries are marvels of intricate design and sustained color-harmony. By these criteria they stand preeminent among other Late tapestries. But to compare them with the highest form of craftsmanship from Late Chimu and Chincha puts the latter at the temporary disadvantage suffered by an apparently

simple work of art placed beside an obviously complex one. The finest wool tapestry is sturdy and unyielding compared to a cotton crêpe shawl decorated at widely spaced intervals with embroidery or brocade. The difference is at once apparent in pieces from Chincha (pl. 38) and Nazca (pl. 14). Each conforms to its own standard and has been developed in materials which present no intrinsic handicaps. Wool will take the richer colors, cotton yield greater sheerness of texture.

Purely from the standpoint of technical skill, it is open to argument whether greater difficulties are overcome in the production of a figured tapestry than in the manipulation of crêpe yarns and fine wools to produce a patterned transparent fabric.

The historic reason for these Chimu-Chincha similarities is perhaps the fact that both areas were flourishing at the Inca conquest and continued important after it. The region from Lima to Supe, in which lie Ancon and Chancay, was evidently less prosperous at this period. Nazca had become unimportant; Ica scarcely that, but yet was clearly secondary to Chincha. What seems to have happened is that the greater coast centers specialized on the material (cotton) which they produced, and developed processes that brought out its potentialities. Even submission to the highland Incas appears not to have seriously checked this development. The poorer districts, however, especially Nazca, continued in the earlier tradition which derived from Tiahuanaco-Epigonal times, when the highest specialization on fine tapestries was in vogue. It is also significant that of all the fabrics here studied those which most resemble the Inca shirt which Bandelier secured at Titicaca²⁴ are several from Nazca (pls. 33, 34), mostly from the Inca period settlement at Poroma. While the impoverished, uninfluential Nazcans either maintained, as best they could, the ways of their forefathers, or followed the styles of their conquerors, the Chinchas and Chimus were turning successfully to new processes and effects based upon the material which their local culture provided. The explanation is hypothetical but seems reasonable and fits the known facts of documentary history.

Processes Characteristic of the South in All Periods

A local peculiarity of the southern area, extending through all periods, is the use of scaffolding yarns and end-to-end warp locking. In Early Nazca these processes are employed to make the peculiar multicolor open-mesh cloth whose square, geometric pattern conforms to the whole fabric (pl. 6a, figs. 8, 9, 10). In the red portions, both warp and weft are red; and so for each color. In other words, a set of

²⁴ Crawford, 121, fig. 8, 1916.

TABLE 5
SOUTHERN PECULIARITIES IRRESPECTIVE OF PERIOD

	North: Moche	Central: Chancay, Ancon, Lima	Intermediate: Cañete, Chincha	South: Paracas, Ica, Nazca
Scaffold weft ²⁵ (10)				
Late.....	2
Middle.....	4
Early.....	2	2
Warp locking, end-to-end ²⁵ (7)				
Late.....	1	1
Middle.....	2
Early.....	3
Interlocking tapestry (67)				
Late.....	1	....	20
Middle.....	4	....	41
Early.....	1(?)
Figure-8, in sling centers (42)				
Late.....	31
Middle.....	1	....	7
Early.....	3
Wrapped weave, single and multiple weft (32)				
Late.....	25
Middle.....	6
Early.....	1
Knitting, edge-bindings (55)				
Late.....	1	1	2
Middle.....	1	....	30
Early.....	1 ²⁶	19
Knitting, 3-dimensional (12)				
Late.....
Middle.....
Early.....	12
"Needleknitting" ²⁷ - embroidery ²⁷ (30)				
Late.....	3	18
Middle.....	5
Early.....	1	3
Weave-plaiting, with weft elements (7)				
Late.....	3
Middle.....	3
Early.....	1

²⁵ Scaffold weft implies end-to-end warp locking and interlocking weft within plain weave (fig. 9); warp locking used alone is a device to add warp length for a border or to effect a color change within the fabric (fig. 10). In the latter case weft of the same color as the new warp is used (171362b, 3898). The Chincha example, a shawl, is blocked off in large gray and tan squares by this method.

²⁶ Includes Early Cañete not listed in summary table.

²⁷ Needleknitting, an embroidery stitch, is identical to a knitted edge-binding one loop wide. It could be done by the ordinary knitting process; the stitchery variant represents a short cut to a lighter effect. Occurring both Early and Late in the same sites with the common form, it must be looked upon as knitting, structurally.

warps runs lengthwise only as far as a given color, and is then replaced by an interlocked set of warps of the new color. Transverse yarns, which we have called scaffold weft, must originally have existed at the horizontal lines of color contact, and have been withdrawn on completion of the pattern. Awkward as this process is in principle, it evidences an ambitious ideal and allows a distinctive effect. It occurs also in Early Cañete (170262b, 170322), whose culture is Nazca-influenced, and continues at Nazca into Epigonal (pl. 19). Cloth of this particular type has not been found from later periods, but end-locked warps and scaffold wefts have been encountered in Middle and Late Ica from Ica and Nazca (4369, 4884, 5473c, d, 171362b), and in a single example from Chinchá (3938). This looks like a local persistence of technical processes after the specific style of fabric with which they had formerly been associated in the area had gone out of use.

This case appears to be only one of several examples of persistent southern traits, as illustrated by the following tabulation. It will be noted that Cañete-Chinchá and Chancay-Ancon-Lima occasionally lean toward Nazca-Ica, but that Moche, which is farthest north, does not, wherever a Nazca-Ica peculiarity is in question.

CONCLUSIONS

In summary, then, it may be said that at least on the central and southern coast of Peru the textile art was already established in a highly skilled and elaborate form at the period of our first relatively datable archaeological material—Early Nazca A, going back to the beginning of the Christian era according to Uhle's estimate. From that time on, few new processes were devised, but the interest accorded one or another process of textile manufacture or ornamentation varied according to period almost as much as the decorative design forms. These designs, whenever elaborate, changed to correspond approximately with the designs painted on pottery: typically semirealistic or at least representative in the pre-Tiahuanaco era, stiffly representative or already meaningless in Tiahuanaco-Epigonal times, frankly geometric or conventionally stylized and repetitive in the Late period. At the same time each region tended to retain local distinctiveness in the techniques favored, and these flavors of provincialism the Inca conquest had not yet obliterated in cloth any more than in pottery shapes and decorative patterns.

GLOSSARY

Brocade (see footnote 16), single-face, and double-face (see p. 48).

Double cloth: a reversible fabric requiring two sets of warps arranged one above the other, each with its own weft. Commonly, the sets are of different colors. To make the pattern, certain reverse-side warps are raised to replace surface side warps which are lowered. Colors are exchanged and ties are formed between otherwise separate portions of the fabric. Since each set of warps, no matter what its position, is crossed only by its own weft of same color, strongly contrasted design areas are produced. (See footnote 17.)

Figure-8 weave: tapestry, in structure, over two single or two groups of warps. See footnote 18.

Fringe, extra length weft. See p. 48.

Loom-joining. See footnote 15.

Gauze. See footnote 19.

Needleknitting. See p. 32.

Pattern weave: a single or double-face fabric with design developed by warp or weft floats, i.e., yarns free for a distance upon the surface. Warp designs are dependent upon arrangement of colors in the set-up and their subsequent shedding. Weft float designs are independent of set-up, made by carrying the bobbin yarn over and under groups or series of warps. Crawford (147 ff., 1916) has adopted the term "bobbin weave" for this type.

Plain weave: the interlacing of a single weft yarn over and under single warps.

1a type: the interlacing of a single weft yarn over and under warps in pairs.

1b type: the interlacing of two weft yarns over and under the same single warps.

Basket: the interlacing of two weft yarns over and under warps in pairs.

1+, interlocking: warps of two colors, upon meeting at upper and lower edges of a pattern figure, loop about each other; colored weft yarns similarly loop about each other at side edges. Interlocking plain weave presupposes skeleton yarns. See p. 49.

Tapestry: plain weave in which weft are battened together so closely as to completely cover warps. A Peruvian tapestry is with few exceptions wool weft over cotton warps relatively heavy or grouped for size.

Eccentric: interlacing of weft and warps at angles other than right angles. Generally used to develop irregularly-shaped spots and curvilinear design motives.

Kelim: tapestry distinguished by slots at the sides of pattern figures. Weft of one color turn on an edge warp; those of the adjoining color turn on the adjacent warp. Length of slot is governed by size of color area.

Interlocking: manipulation of weft yarns to avoid slots at edges of color areas. (1) Weft of one color loop about weft of an adjoining color; (2) weft of adjoining colors turn about a common warp; (3) weft of adjoining colors loop about each other at the same time enclosing a common warp.

Underfloat: colored weft of one pattern figure pass under warp yarns to reappear in one or several pattern figures on the same plane. Used for small details in combination with interlocking types.

Twine-plaiting: "lace" constructed of pairs of yarns which twine about each other for distances dependent upon the design. Where two pairs meet to cross, each separates and plaits as in modern bobbin lace.

Weft scaffolding. See p. 50.

Wrapped weave: formed by carrying the weft element forward and around a single warp at a time. Similar to outline stitchery which is done on already woven material, in contrast to wrapping on bare warps.

EXPLANATION OF PLATES AND FIGURES AND MUSEUM NUMBERS
OF SPECIMENS ILLUSTRATED

Specimens designated by numbers containing four or less figures are in the University of California Museum of Anthropology; those of six figures, in Field Museum of Natural History. The former properly possess the prefix 4-,²⁸ which has been omitted so as not to conflict with grave numbers.

The several sites at a locality are distinguished by capital letters; sub-sites or portions of a cemetery by small letters following; graves by numbers. Thus, "Cahuachi, Nazca, Aj10-171218a" means part or fragment *a* of Field Museum specimen 171218 which was found in grave 10 of portion *j* of cemetery (site) A at Cahuachi, valley of Nazca. "Ocucaje, Ica, E15-4556" means University of California specimen 4-4556 from grave 15 of site E (at Ocucaje) in the valley of Ica.

All California specimens were excavated or secured by Max Uhle²⁸ between 1899 and 1905; their sites are described in the papers issued in volumes 21 and 24 of this series. All Field Museum specimens were excavated or found by Kroeber in 1925 and 1926; their sites have not yet been described in print.

An asterisk denotes that the precise provenience of the specimen, and therefore its associations and period, were not obtained; or that it is a surface find. All such pieces, however, are certain as to valley, and sometimes as to precise locality; and their period is often inferable with little doubt.

Arrows by the letters on plates and text figures denote the direction of the warp.

Plates

EARLY CULTURES

Plate 1. Cahuachi, Nazca. Aj10-171218a; wool embroidery and brocade on cotton shawl; *a*, detail, × .36; *b*, *c* (corner), × .57.

Plate 2. Cahuachi, Nazca. *a*, *b*, Aj10-171226. Surface and reverse sides of wool border on cotton kerchief; single-face pattern weave, warp floats; × .5. *c*, Aj13-171266b; wool embroidery over top of poncho armseye. × .5.

Plate 3. *a*, Trancas, Nazca; *9058; knitted wool fringe; × .5. *b*, Cahuachi, Nazca; Ag-171113, 171114, Ha-171180a; knitted fringes; × .83. *c*, Cahuachi, Nazca; Ag-171112; knitted fringe border to black cotton veil, 36 × 14 inches; × .73.

Plate 4. Cahuachi, Nazca. *a*, Ag-171110; gauze weave motives within cotton fabric; × .83. *b*, Aj11-171236; double-face pattern weave motive in center of cotton kerchief, 15½ × 16¾ inches; × .81.

Plate 5. Cahuachi, Nazca. Aj13-171262; 3-color striped wool shawl 60 × 52 inches; needleknitting within fringe; × 1.

Plate 6. *a*, Cahuachi, Nazca; Ag-170211e; plain weave, interlocking warps and weft; borders cotton, motives wool; × .44. *b*, Ocucaje, Ica; A-4567a; wool fabric built up row by row of half-hitching; × .95.

Plate 7. *a*, Cacatilla, Nazca; *8537; twine-plaited wool lace veiling; × .37. *b*, Trancas, Nazca; *9056; painted cotton cloth; × .2.

²⁸ Except that the Chancaay and Ancon pieces were collected by Charlotte Uhle and their catalogue numbers bear the prefix 16-.

Plate 8. Cantayo, Nazca. *a*, C-ax-171071d; child's cotton shirt 10 × 15 inches; knotted bindings at neck and armscyes. *b*, C-ax-171033; 3-color striped wool kerchief, 16 × 14½ inches; × .5. *c*, C-ax-171045; wool yarn outlining on cotton material; × .5.

Plate 9. Paracas. *a*, *170102; *b*, *170096; *c*, *170095b. Wool embroidery on cotton; knitted edge-bindings; × .7.

Plate 10. Paracas; *170095. *a*, *b*, surface and reverse sides of single design motive; × .47. *c*, wool embroidery in outline stitch on cotton; knitted edge-binding; × .46.

Plate 11. Cerro del Oro, Cañete. *a*, A16-169710c; complete cotton web, 15 × 6½ inches. *b*, A9-169660; twine-plaited wool fabric, 6 × 3 inches. *c*, A16-169702; 4-color warp-stripe wool bag; needleknitting on lower edge, 6¼ × 5½ inches.

MIDDLE CULTURES

Plate 12. Ocucaje, Ica. Epigonal. E15-4556; tapestry, interlocking and eccentric types; × .17.

Plate 13. Trancas, Nazca. Epigonal. *9052; wool poncho, tapestry weave; × .17.

Plate 14. Trancas, Nazca. Epigonal. *a*, *9061a. *b*, *c*, *9061; wool tapestry; × .41.

Plate 15. Nazca. Epigonal. *a*, "Nazca"; *9114; wool headband, underfloat tapestry; 18½ × 2½ inches. *b*, Cahuachi; *8786; fragment of bag, wool tapestry; knitted bindings; 3½ × 3¾ inches. *c*, Cahuachi; *8785; bag, wool tapestry; knitted binding around openings; 2½ × 9½ inches.

Plate 16. Trancas, Nazca. Epigonal. *9053; kelim tapestry; 25 × 14½ inches.

Plate 17. Nazca, Epigonal. *a*, Cacatilla; *8539b. *b*, Cahuachi; *8784. *c*, "Nazca"; *9134; tapestry ribbons, various lengths. *d*, "Nazca"; *9131; double-face pattern weave; warp floats. *e*, Tunga; *8440; single-face pattern weave, warp floats. *f*, Tunga; *8443; twine-plaited wool belt, 104 inches long. All × .43.

Plate 18. Nazca. Epigonal. *a*, "Nazca"; *9118; Monochrome tapestry border; double-face pattern weave stripe; × .3. *b*, Trancas; *9055; wool bag, warp-face plain weave; embroidered motives; knitted edge-bindings; × .57.

Plate 19. Cacatilla, Nazca. Epigonal. *8538a; plain weave, interlocking warps and weft; 20 × 24 inches.

Plate 20. Cahuachi, Nazca. Epigonal. *8783; *a*, surface, *b*, reverse side of pile weave fabric; 9 × 2¾ inches.

Plate 21. Cahuachi, Nazca. Epigonal. *171134; double-face fabric, variant form of twine-plaiting; × .65.

Plate 22. Chincha. "Early" (Epigonal) Chincha. *a*, D-3891a; kelim tapestry; × 1. *b*, D-3891; loom-joined widths for mat; × .9.

Plate 23. Chulpaca and Galagarza, Ica. Middle Ica. *a*, Z4-4867; detail of wool bag, underfloat tapestry weave; × .74. *b*, M-4359c; double-face brocade; warp shedding for secondary design; × .38.

Plate 24. Galagarza, Ica. Middle Ica. *a*, Z4-4869c; 3-color striped cotton fabric; interlocking weft; × 1. *b*, Z1-4834; cotton double cloth; × .42.

Plate 25. Aramburú, Lima. "Early" Lima. *a*, 105-169411c; double-face pattern weave border, all cotton. *b*, 107-169388; twining variant; wool yarns. *c*, 105-169415b; herringbone twill, cotton; wool tapestry border. All × .66.

Plate 26. Nievería, Lima. "Early" Lima. 9350; wool cap, 6½ inches total height; single-element fabric built up row by row of counterpaired half-hitches.

Plate 27. Nievería, Lima. "Early" Lima. *a*, 9350e; plain weave, warp-face wool fabric, tie-dyed; × .24. *b*, 9350d; tab-edged wool band, kelim tapestry; × .66. *c*, 9350a; knitted wool veneer on both sides of plain-weave cotton fabric; × .5. *d*, 9350c; kelim tapestry, wool; fringe of extra length weft loops; × .66.

LATE AND INCA CULTURES

Plate 28. Poroma, Nazca. Late Ica. *a*, *8380; single-face wool brocade on cotton crêpe; 39 × 28 inches. *b*, *8379; wool tapestry; monochrome, kelim, eccentric, figure-8 techniques; white portions, cotton yarn; 17¾ × 37½ inches.

Plate 29. Poroma, Nazca. Late Ica. *8385; wool blanket; lengthwise stripes in monochrome, interlocking, and eccentric tapestry technique; complete piece, 64 × 72 inches; × .25.

Plate 30. Nazca. Late Ica (Inca). *a*, "Nazca"; *9111; 23¼ inches long; *b*, Poroma; *8381; 27 inches long. Bags, plain and tapestry weaves; tops, half-hitching variant, pendants double-face wrapped weave: *a*, counterpaired; *b*, plain; tassels, edge bindings, wrapped weave.

Plate 31. Nazca. Late Ica. *a*, "Nazca"; *9115; wool double-face brocade on cotton; edge, tapestry, double-face pattern weave stripe; × .24. *b*, Poroma; 171362d; surface and reverse sides of single-element fabric built up row on row of needleknitting; wool yarn; × .73.

Plate 32. Nazca. Late Ica. *a*, Cacatilla; *8541; fragment composed of three widths, loom-joined; two all cotton, one wool; × .2. *b*, Poroma; *8386; wool blanket; loom-joined; interlocking tapestry; complete piece 108 × 55 inches; × .06.

Plate 33. Poroma, Nazca. Late Ica (Inca). 171377; wool shirt, 15 × 12¼ inches; interlocking tapestry; saddler's stitch seam, needleknitting at edges.

Plate 34. Poroma, Nazca. Late Ica (Inca). *a*, *b*, *8387ab; front and back of wool shirt; interlocking tapestry; × .18.

Plate 35. Ica. Late Ica. *a*, Tate-Chulpaca; Tf-5115; wool mat, 14½ inches square; interlocking and underfloat tapestry; *b*, Tate-Chulpaca; Td, 8-5064; kelim variant, spaced warps; *c*, Ocucaje; D1-4991; cotton gauze weave kerchief, 22½ inches square; double-face wool brocade stripes. All × .5.

Plate 36. Ica. Late Ica. *a*, Galagarza; X-4219; center portion of sling or girdle; multiple parallel wrapping. *b*, Ocucaje, D-4520; wool bag; kelim and eccentric techniques. *c*, Galagarza; X-4213; wool bag with handle; warp-face plain weave; needleknitting on edges; 7 × 8¼ inches.

Plate 37. Galagarza, Ica. Late Ica; Y-4230; wool tapestry trim for neck opening; scaffold weft for shaping; kelim and eccentric techniques; × .81.

Plate 38. Chíncha. Late Chíncha. E9-3954; corner of cotton crêpe shawl, 86 × 60½ inches; embroidered design; tapestry border; fringed tape with spaced warps; extra length weft loops; white portions of tape in cotton yarn; × .55.

Plate 39. Chíncha. Late Chíncha. E8-3949a; plain-weave cotton shawl, 1a type, with single-face brocade motives in wool yarn; kelim tapestry border; × .56.

Plate 40. Chíncha. Late Chíncha. D-3882; garment; double-face wool brocade on cotton; border single-face pattern weave; × .56.

Plate 41. Chíncha. Late Chíncha. *a*, E13-3971; wool tapestry band, kelim and eccentric techniques; × .8. *b*, E13-3970; cotton crêpe shawl; wool tapestry band; fringed tape with spaced warps and extra length weft loops; × .4.

Plate 42. Chíncha. Late Chíncha. *a*, E12-3965f; cotton bag 6 inches square in double-face pattern weave; \times .52. *b*, E12-3965e; wool brocade borders on ends of cotton kerchief, plain weave, 1a type; \times .8. *c*, B9-3711; warp-stripe wool bag with square braid draw string; knitted edge binding; \times .43.

Plate 43. Chíncha. Late Chíncha. *a*, E13-3970a; wool tassel; chainstitch embroidery; \times .23. *b*, D-4070; wool tapestry headband in kelim technique; embroidered tassel head; \times .23. *c*, E13-3971a; wool tapestry border in kelim and eccentric techniques applied to lower edge of cotton shirt, plain weave, warp face; \times .43.

Plate 44. Chíncha. Late Chíncha. F4-4098; double cloth blanket, 58 \times 63 inches in 21-inch widths; \times .83.

Plate 45. Chánchan. Late Chimú. *a*, 70e; fragment of cotton tapestry belt; kelim technique. *b*, 70g; end and tassels of cotton belt 44 inches long; kelim tapestry technique. *c*, 70f; single-face wool brocade on cotton; tapestry stripes. All \times .41.

Plate 46. Moche. Late Chimú. *a*, *H-2272c; all-cotton veil 25 inches wide, tapestry stripes; \times .7. *b*, *H-2263; corners of cotton shawl, 37 inches square; wool embroidery; \times .65. *c*, *H-2277b; wool embroidery, outline stitch; single-face brocade on cotton; \times .65.

Plate 47. Moche. Late Chimú. *a*, *H-2276; *b*, *H-2472; *c*, *H-2275; wool tapestry ribbons, kelim technique, from 29½ to 34½ inches long; white motives, cotton yarn; \times .6. *d*, *H-2274; cotton headband 23 inches long finished at ends with 7-inch tassels; double-face pattern weave; \times .47.

Plate 48. Moche. Late Chimú. Wool ornaments embroidered in chainstitch and couching. *a*, *H-2281a; 10½ \times 2⅞ inches. *b*, *H-2283a; 3½ inches diameter. *c*, *H-2288b; 7 inches long.

Figures in Text

Fig. 1. Early Nazca. Cahuachi, Nazca. Ag-171110; detail from cotton gauze weave fabric; \times 2.5.

Fig. 2. Early Nazca. Cahuachi, Nazca. G-171140; solid embroidery on wool ground; \times .5.

Fig. 3. Early Nazca. Cantayo, Nazca. C-ax-171049; wool embroidery in outline stitch on cotton ground; 16 \times 1½ inches.

Fig. 4. Early Nazca. Cahuachi, Nazca. Aj10-171221; wool design motive inset into cotton shawl; \times .5.

Fig. 5. Early Nazca. Cahuachi, Nazca. Aj10-171222; wool embroidery on cotton crêpe shawl; single set-up; 50 \times 41½ inches.

Fig. 6. Early Nazca. Cahuachi, Nazca. Aj10-171216; wool embroidery on cotton. Figure 4½ inches high.

Fig. 7. Early Nazca. Cantayo, Nazca. C-ax-171071b; knitted wool veneer on cotton base; 14½ \times 1⅝ inches.

Figs. 8, 9. Early Nazca. Cahuachi, Nazca. Ag-171111; interlocking plain weave; 8, \times .25; 9, \times 1.5.

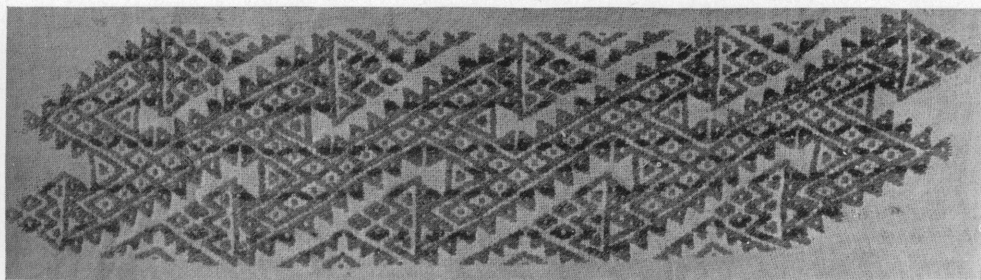
Fig. 10. Early Nazca. Cahuachi, Nazca. A15-171308; shirt with interlocking plain weave portion; kelim tapestry borders; seamed; 78 \times 45 inches.

Fig. 11. Epigonal. Ocucaje, Ica. E1-4467a; double-face wool brocade on cotton; \times .6.

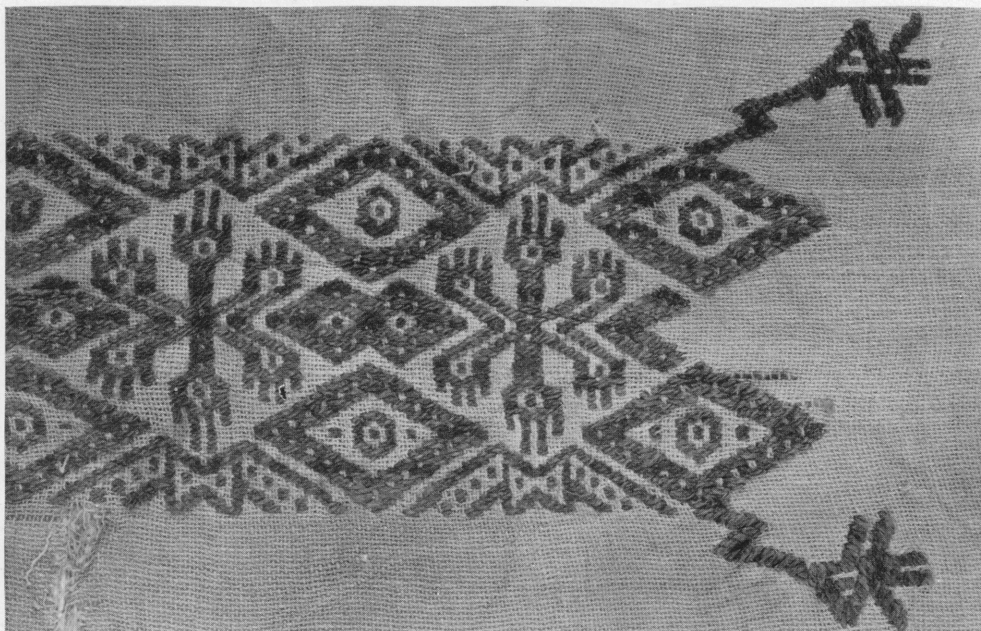
Fig. 12. Tiahuanacoïd, Moche. A-2595g; double-face wool brocade border on cotton; \times .75.

Fig. 13. Tiahuanacoïd. Moche. A-2594; kelim tapestry; 3⅞ \times 6 inches.

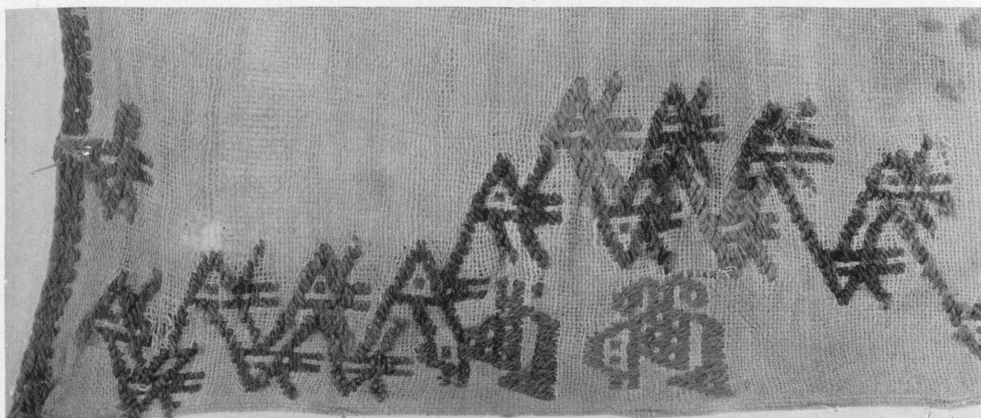
PLATES 1 TO 48



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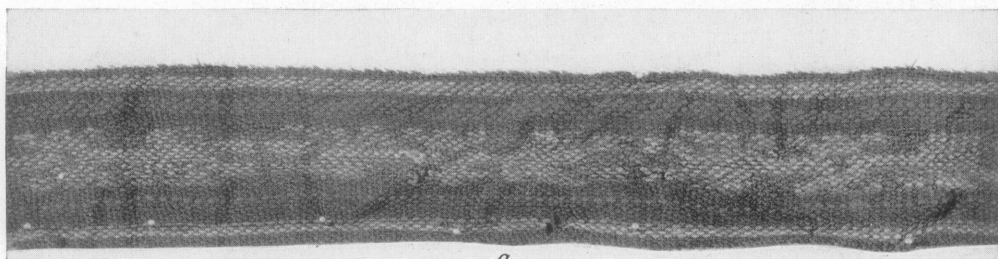


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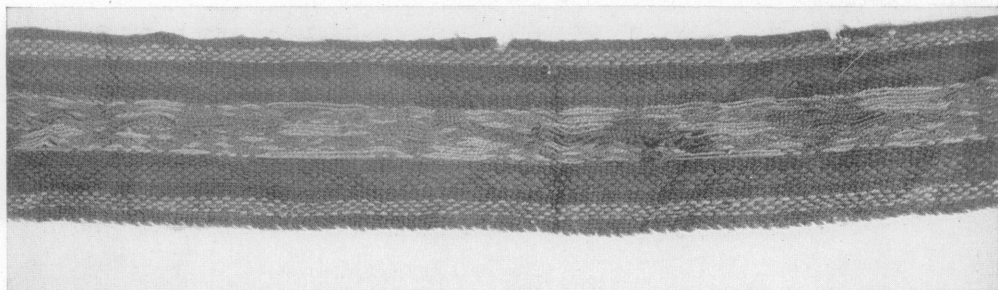


c ↑

EARLY NAZCA. NAZCA. FIELD MUSEUM.



a →

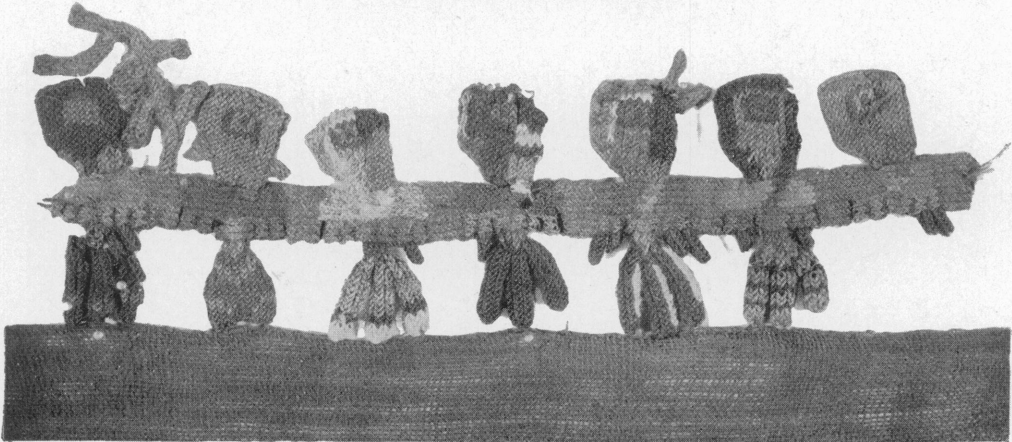
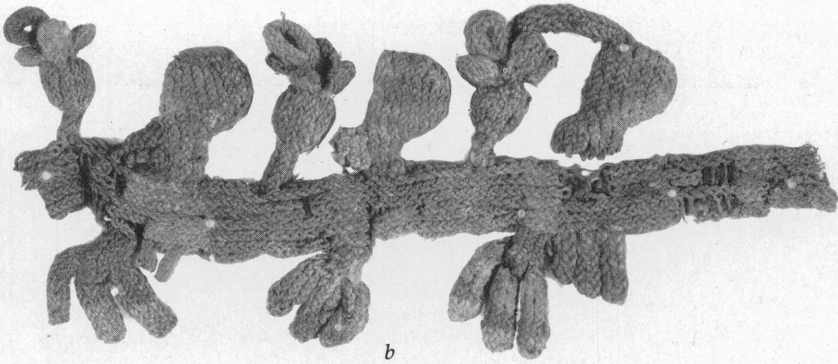
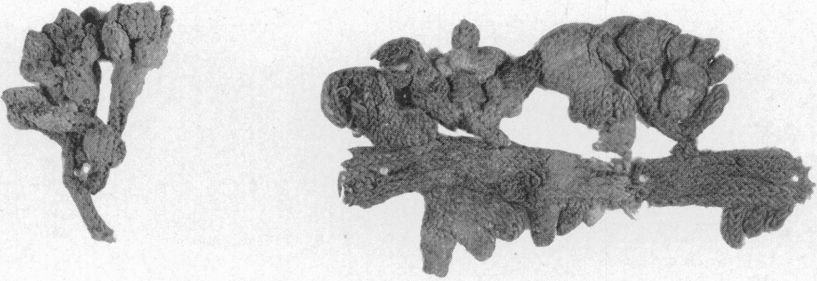
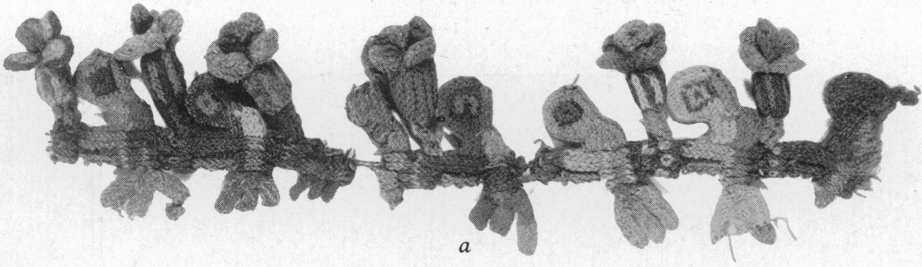


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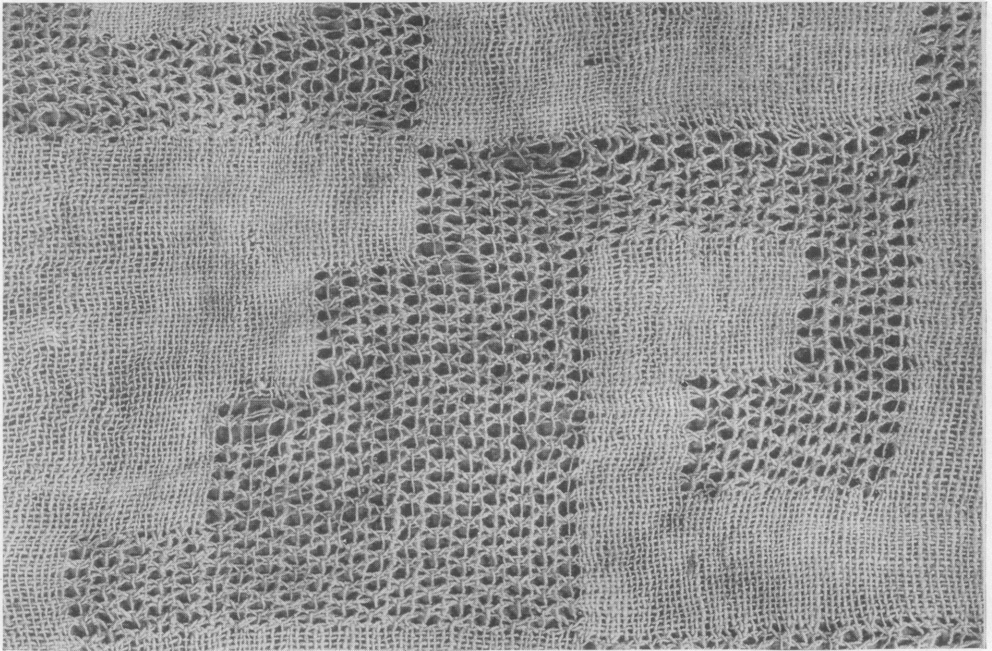


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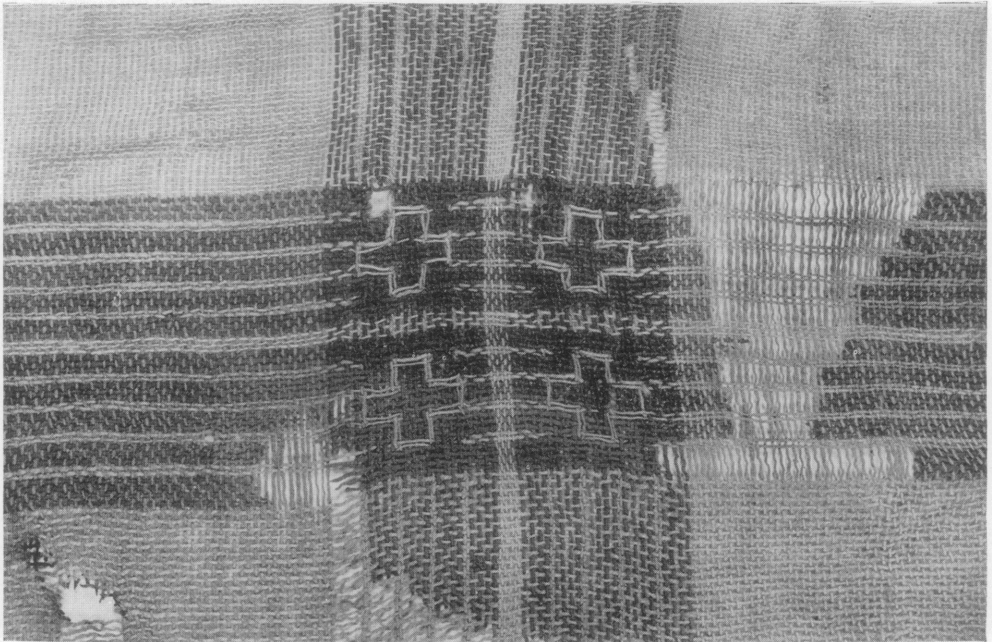
EARLY NAZCA. NAZCA. FIELD MUSEUM.



EARLY NAZCA. NAZCA. FIELD MUSEUM.

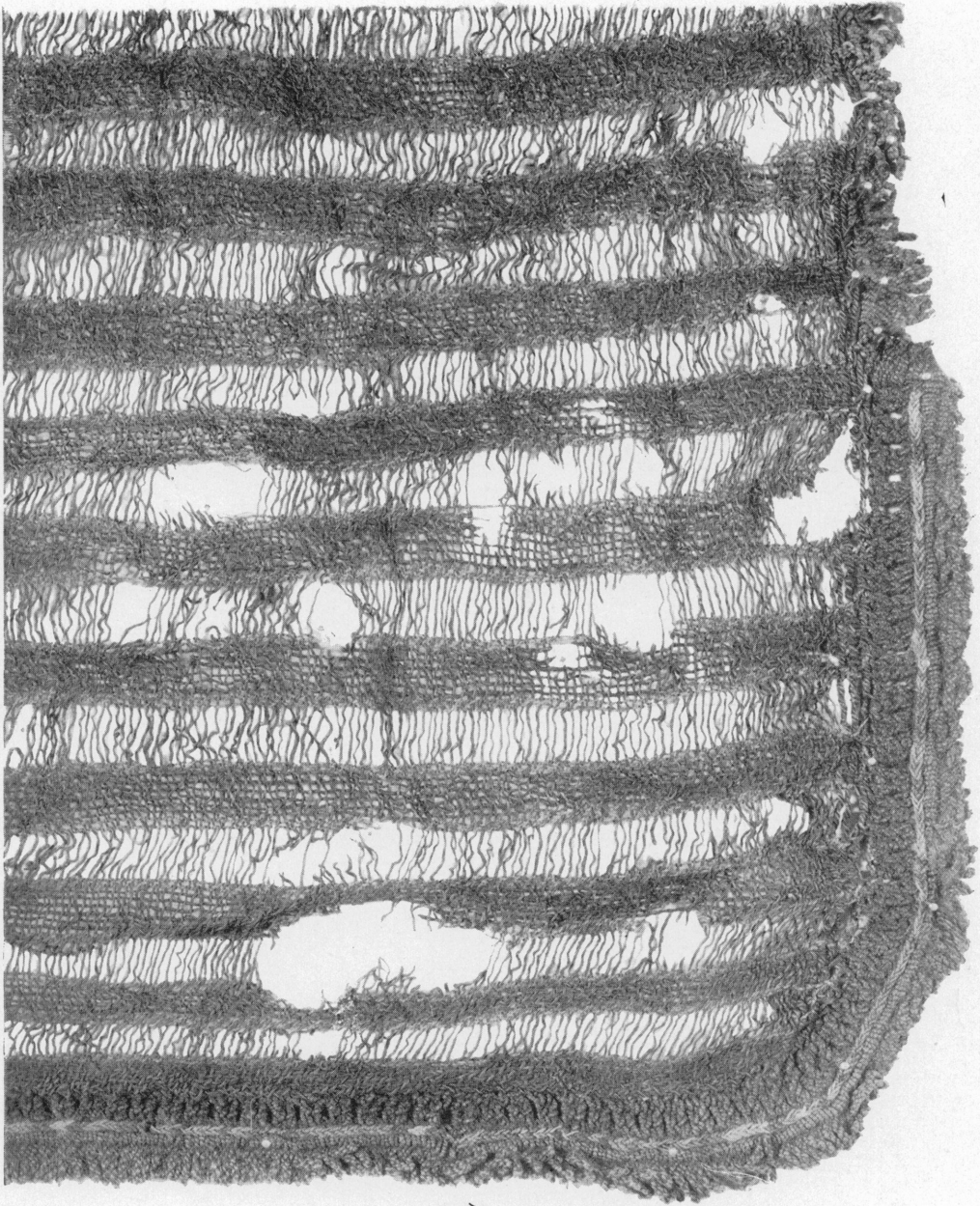


a →



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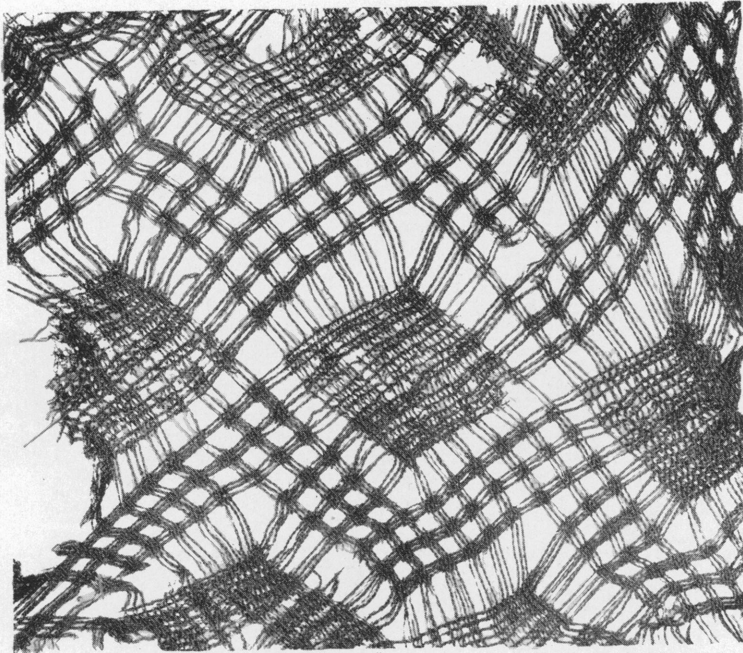
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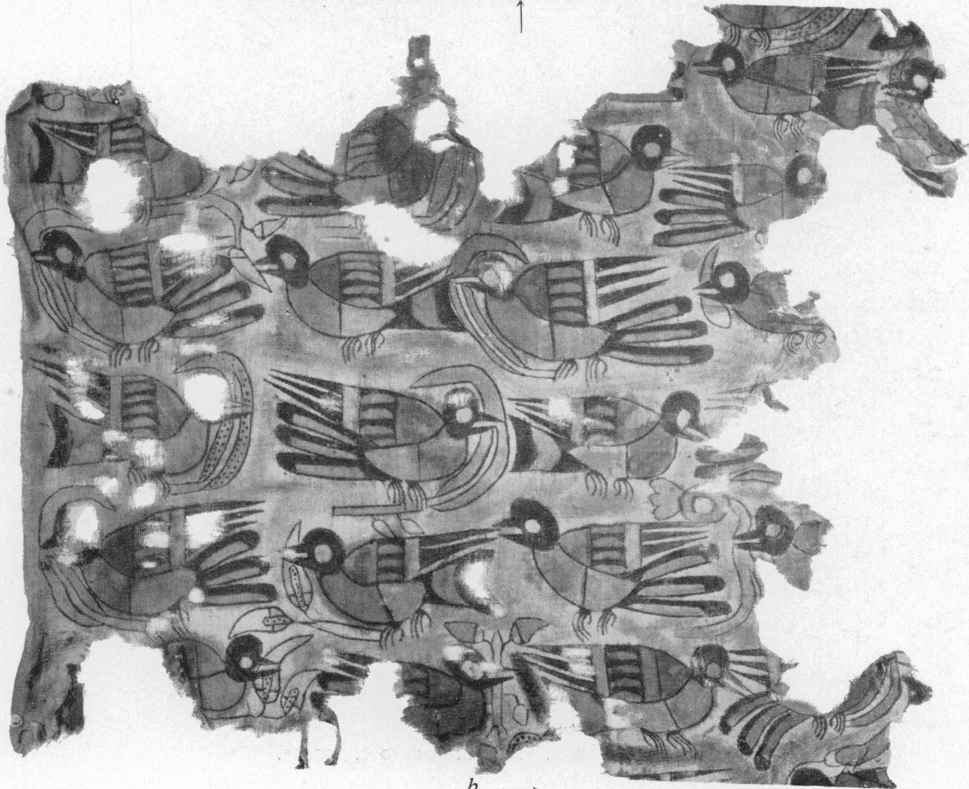
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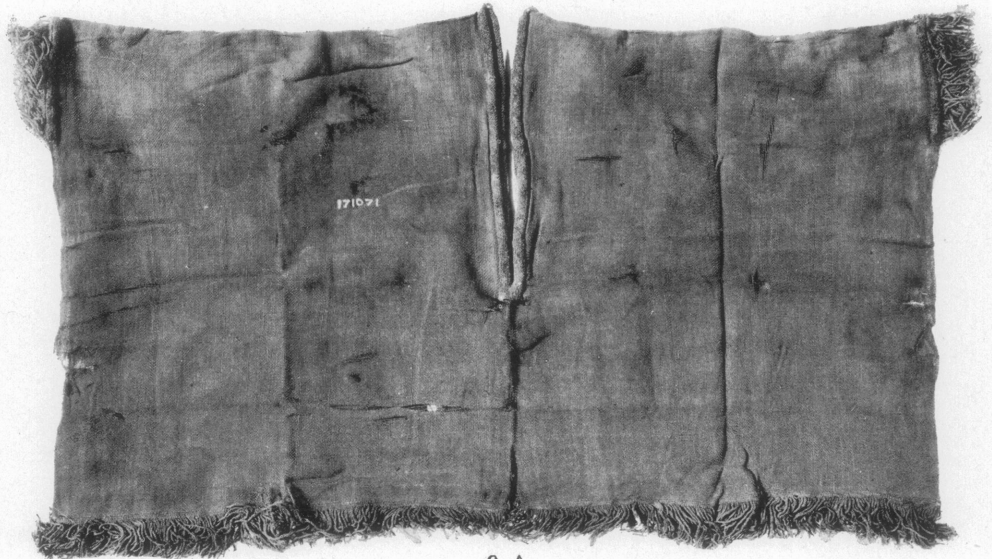
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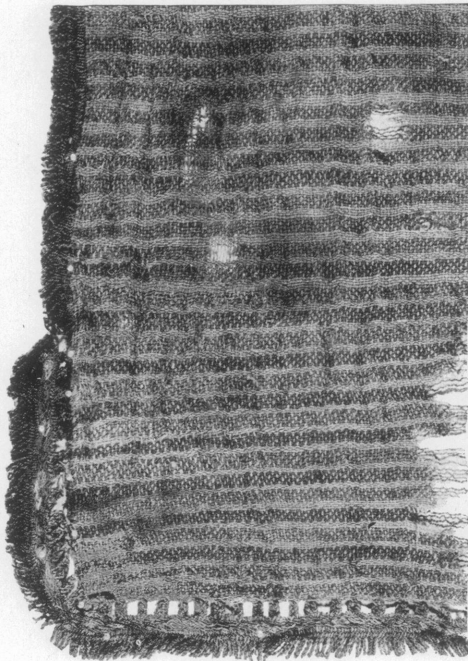
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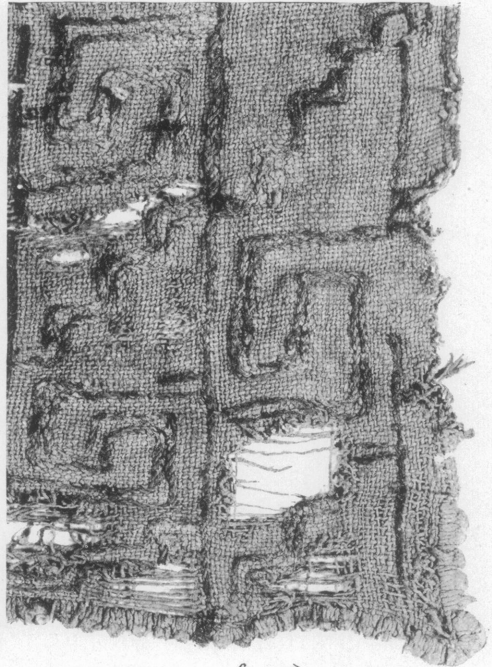
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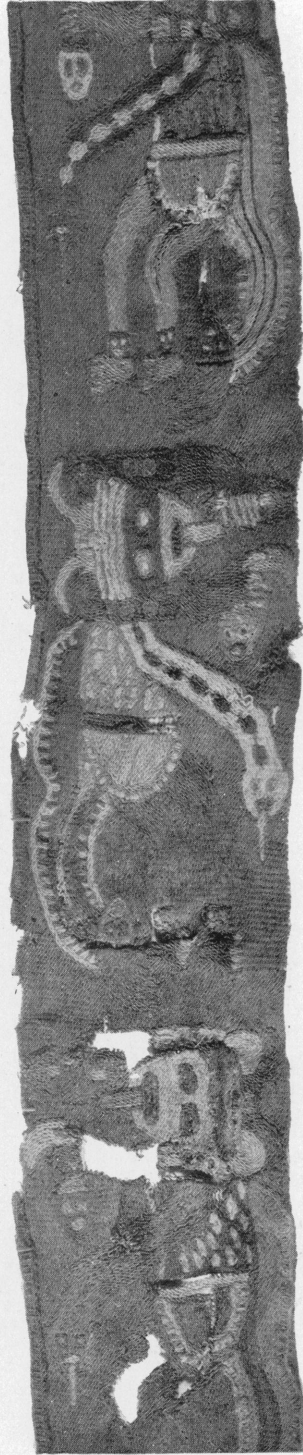
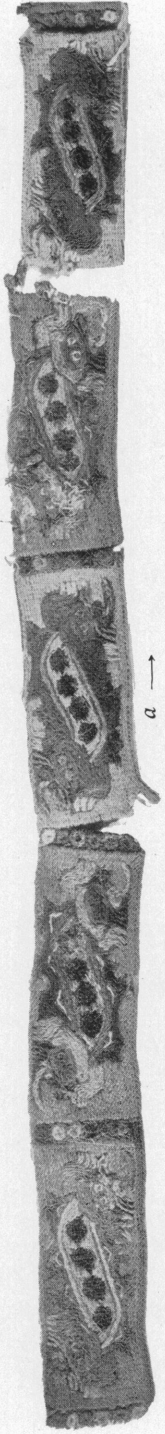


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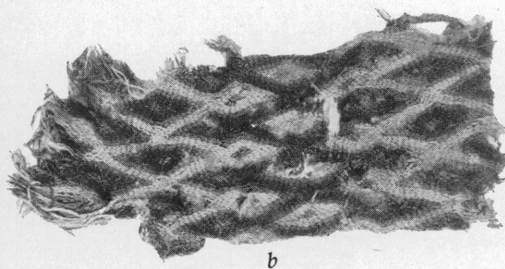
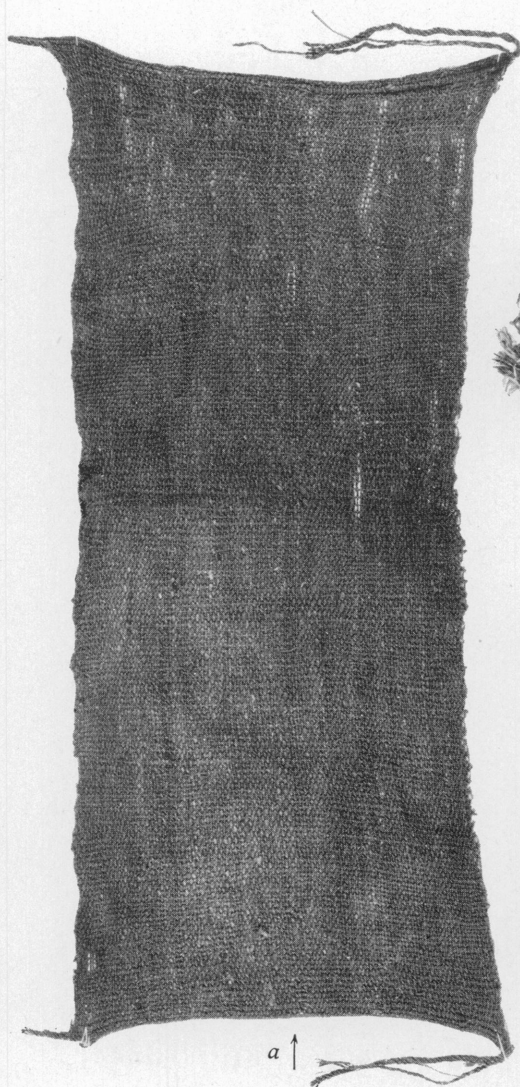
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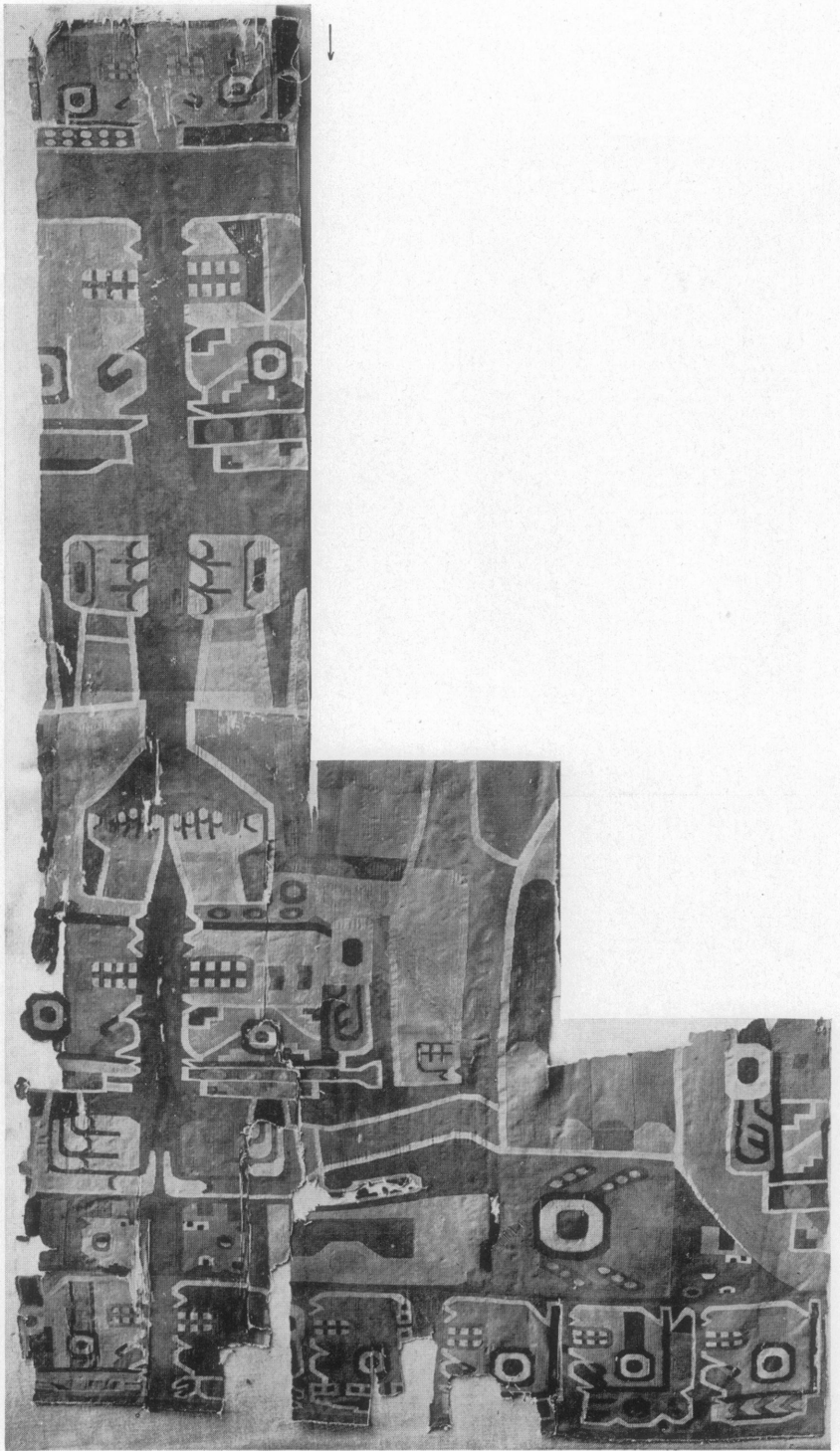
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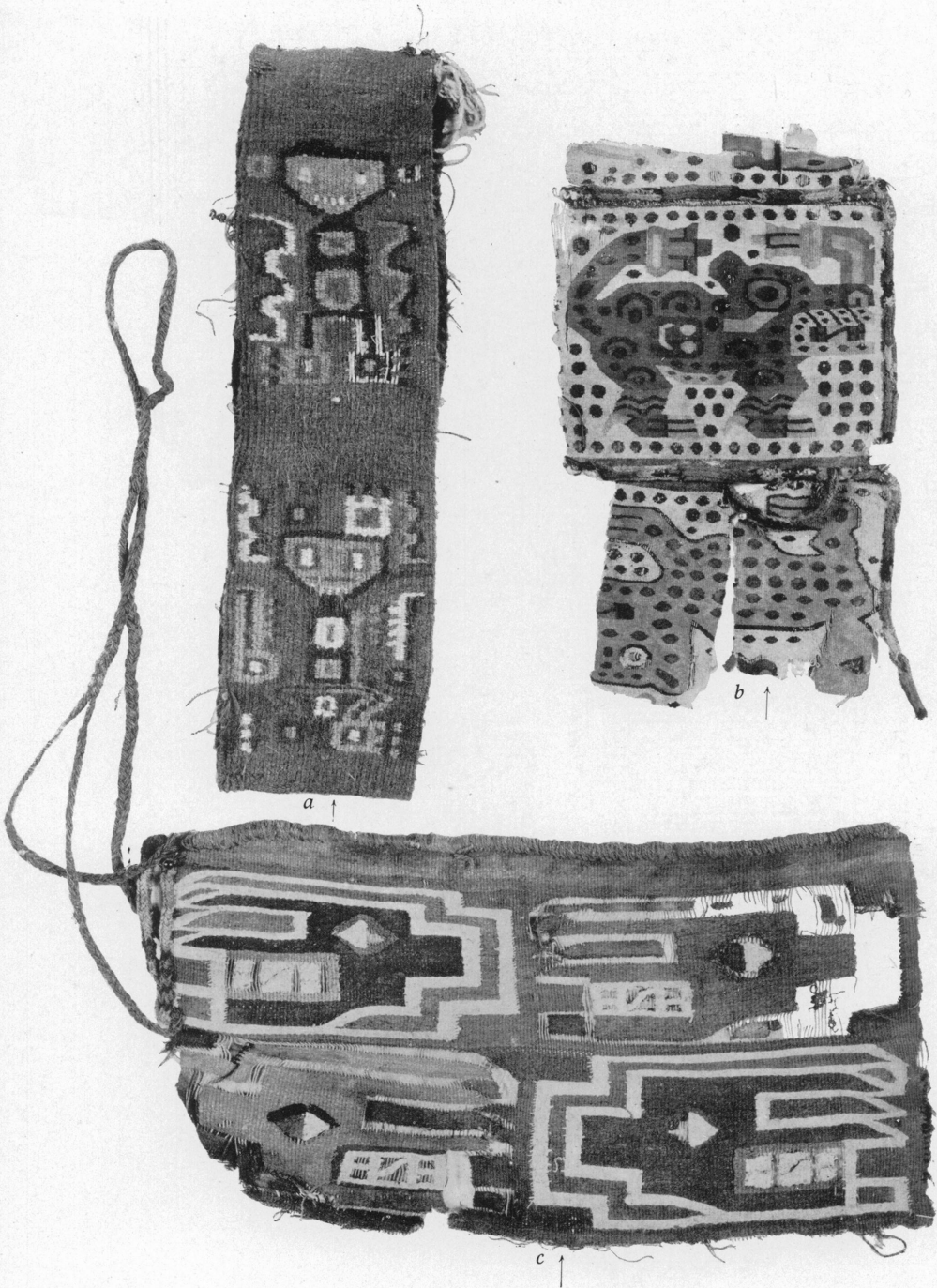
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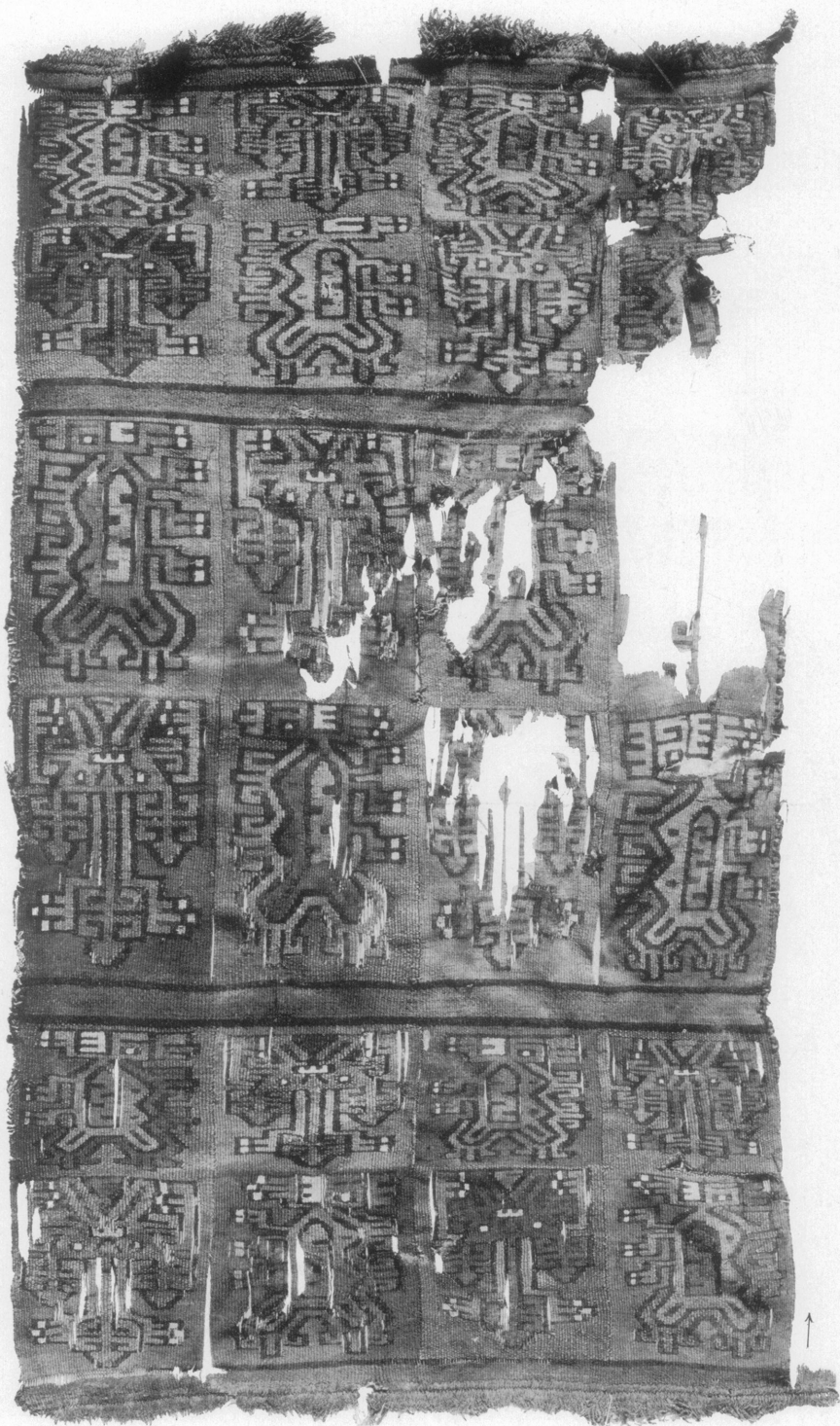
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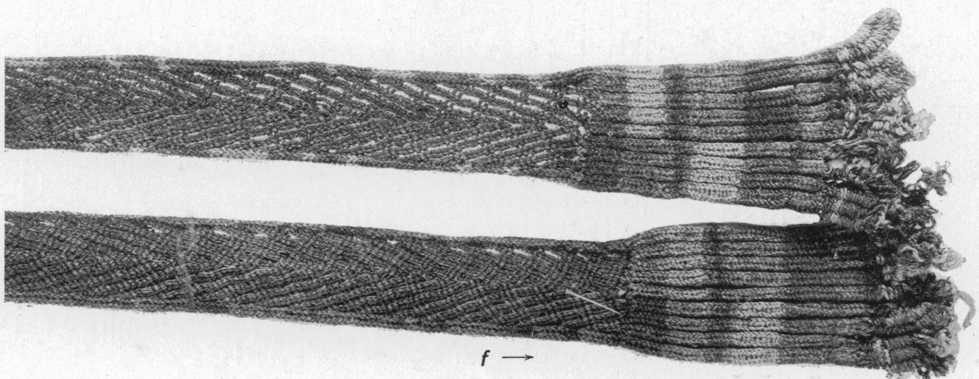
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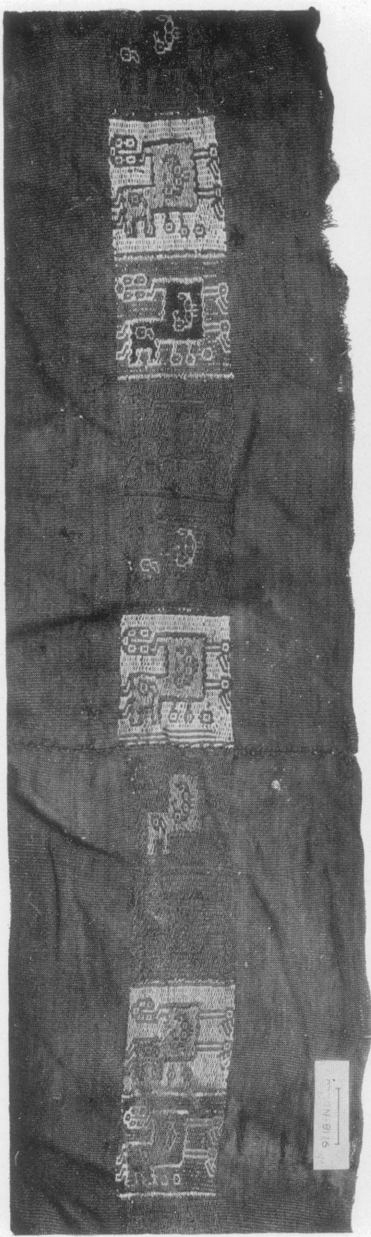


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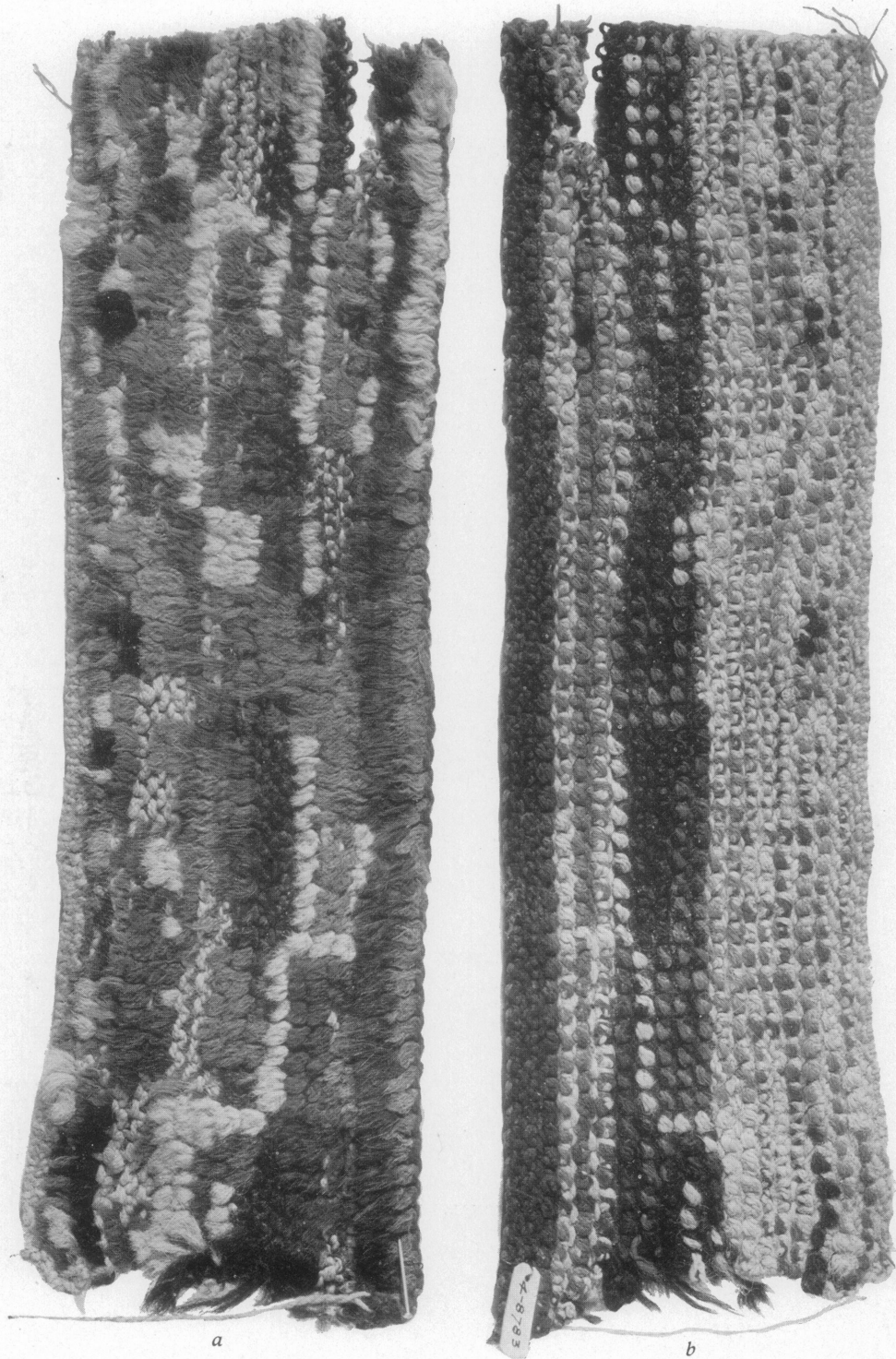


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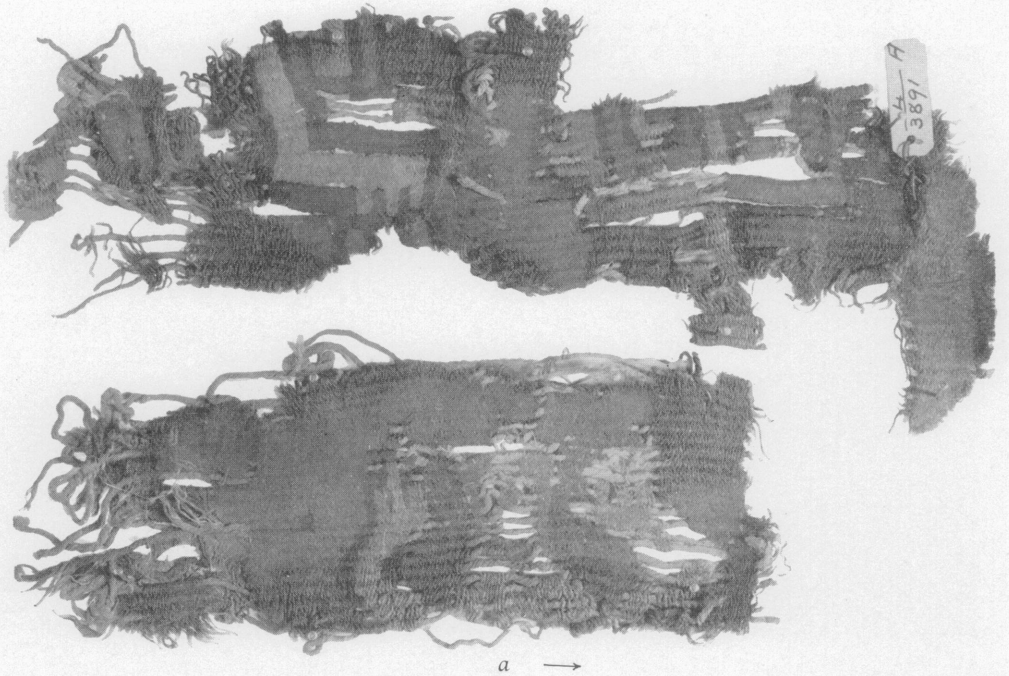
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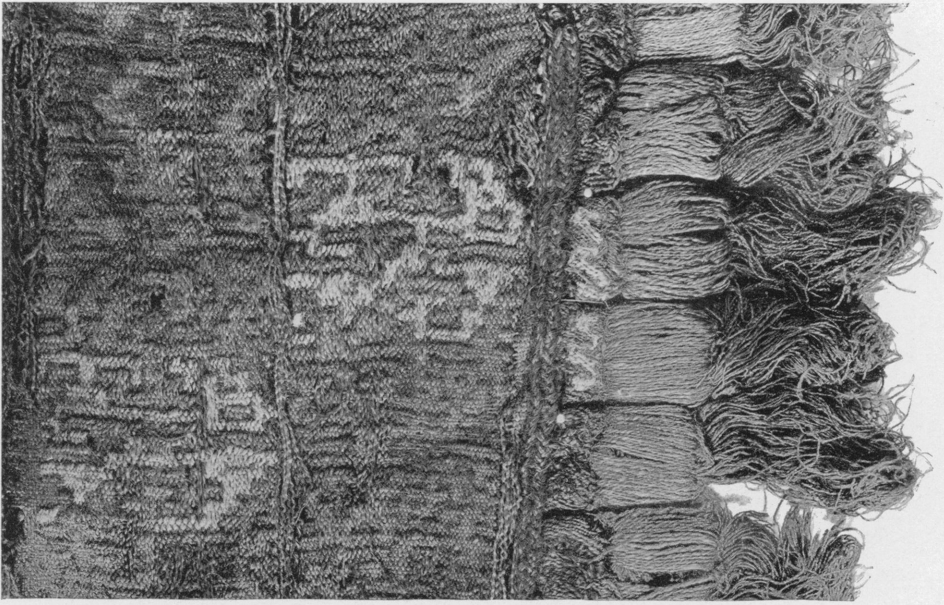
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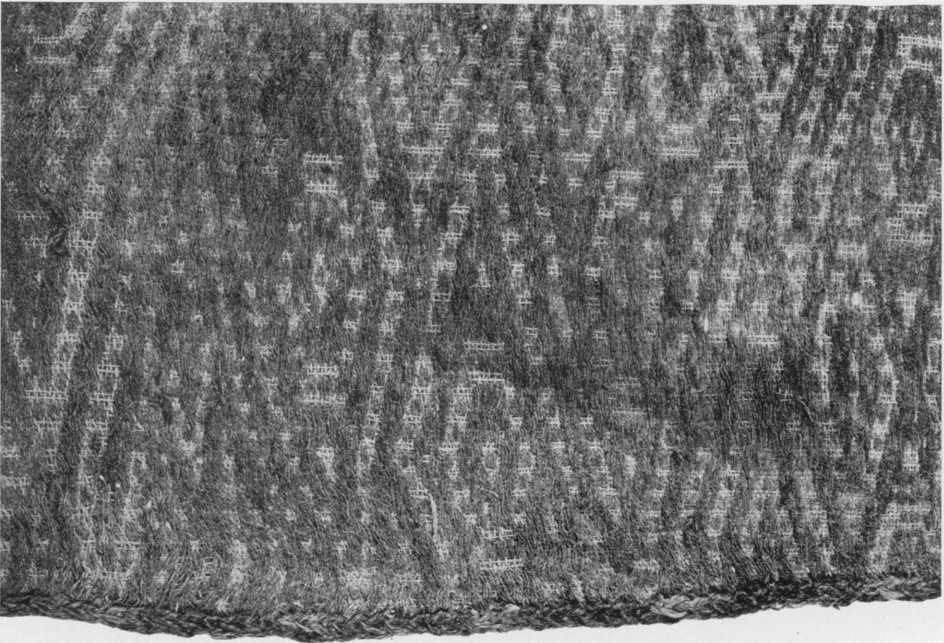
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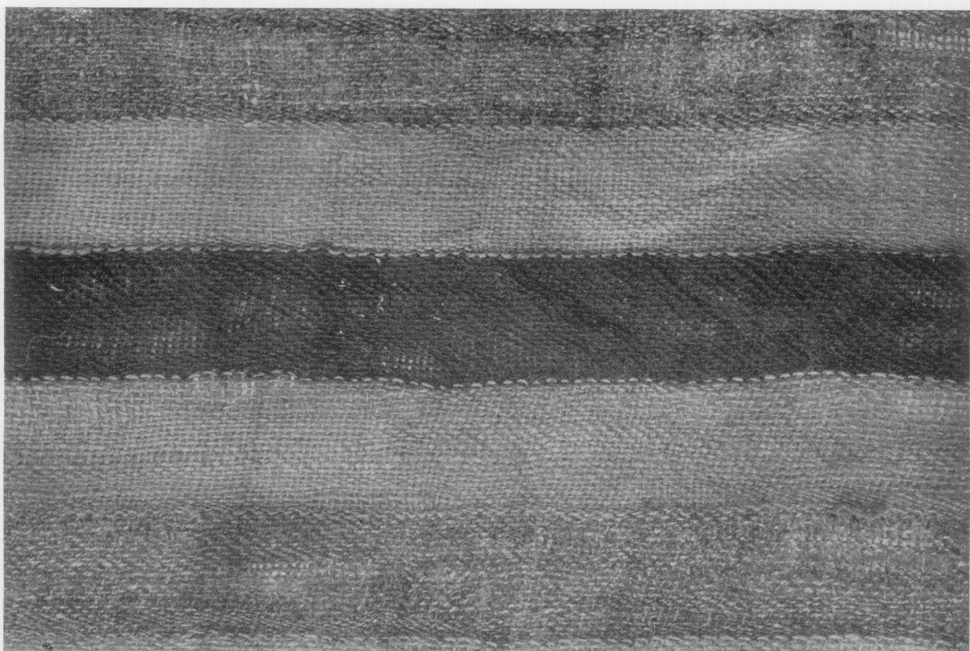


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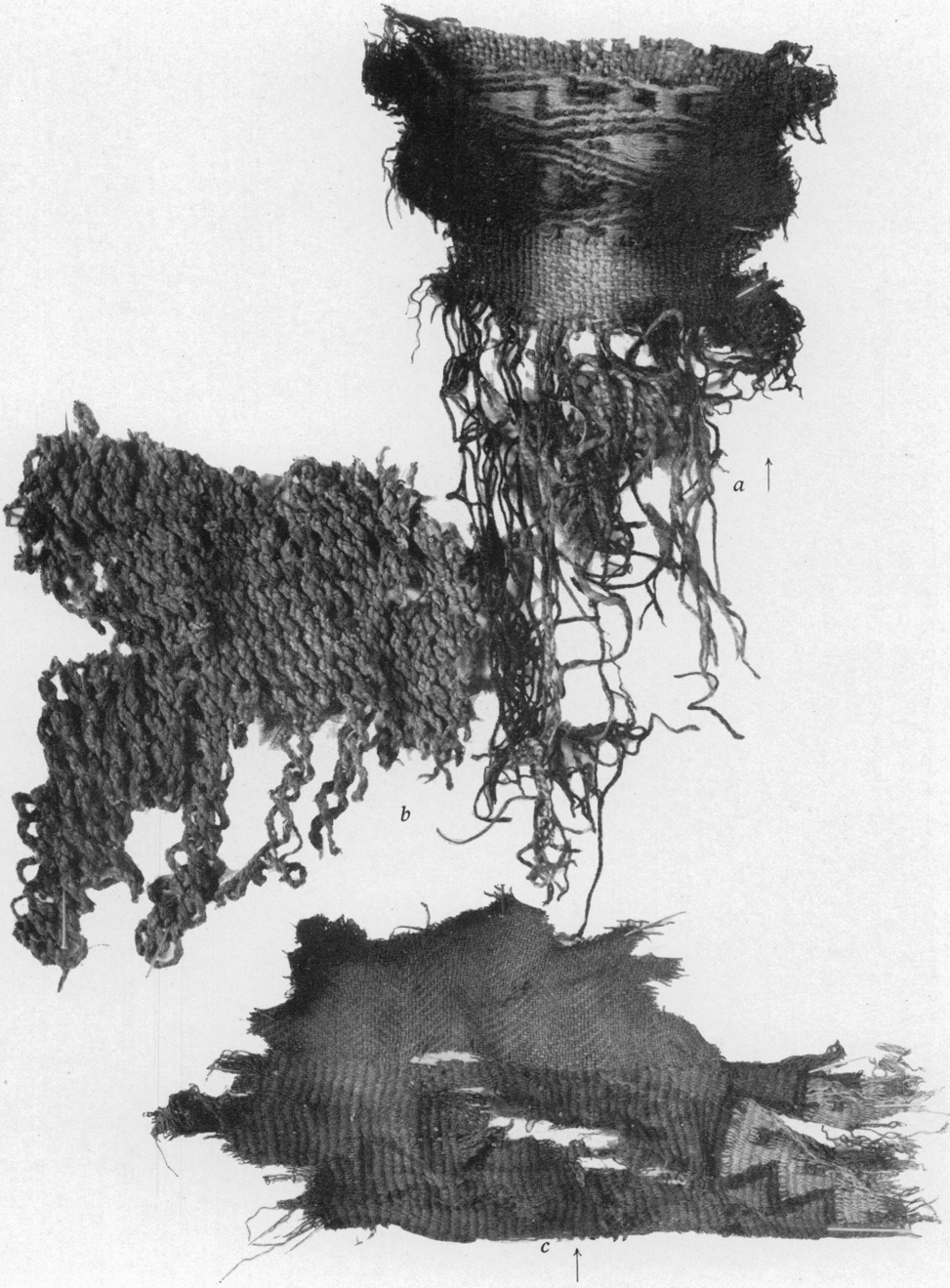


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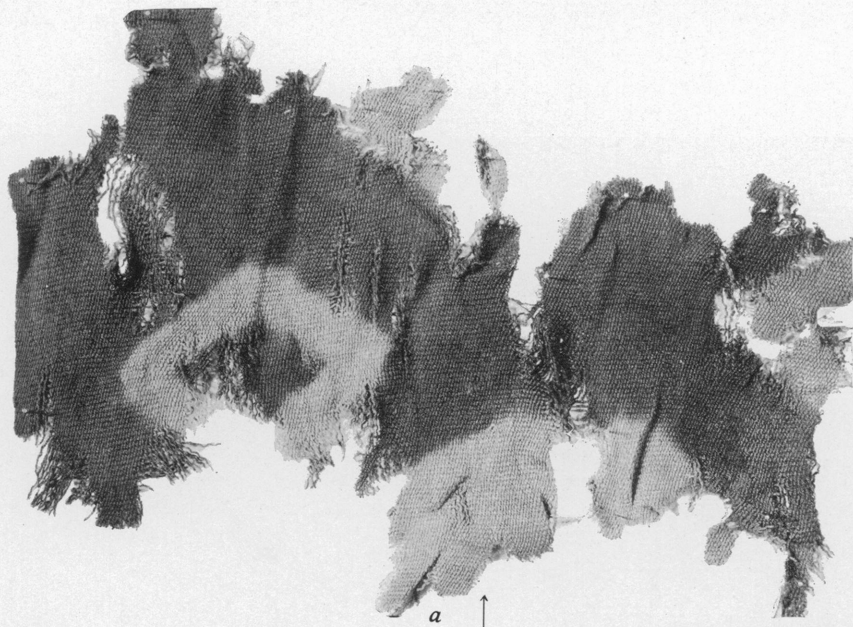
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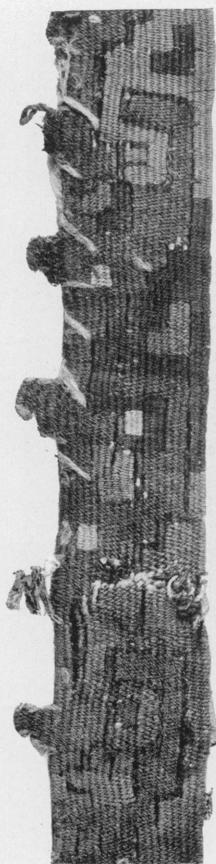
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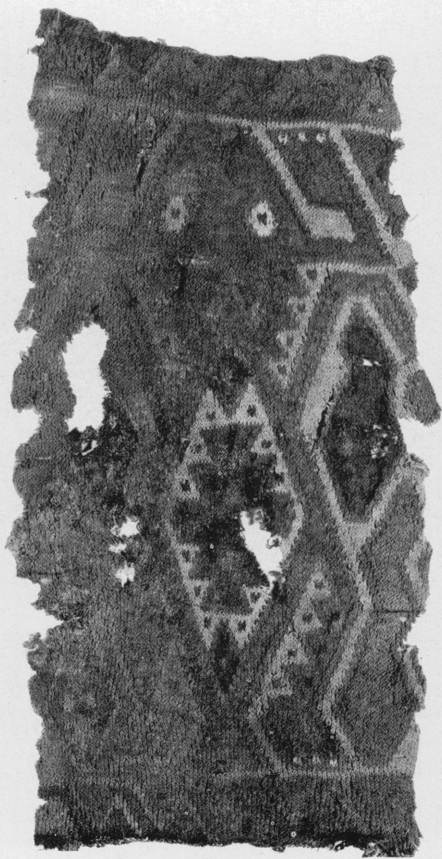
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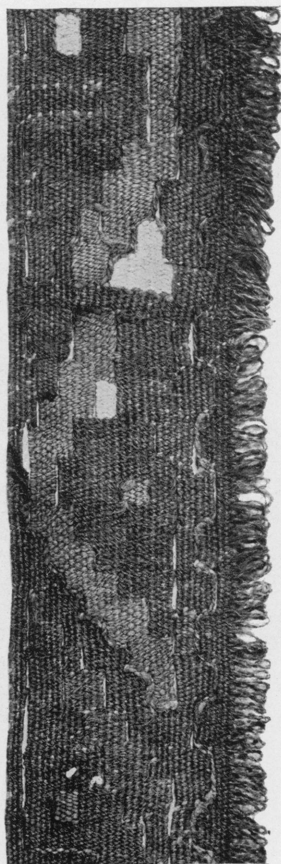
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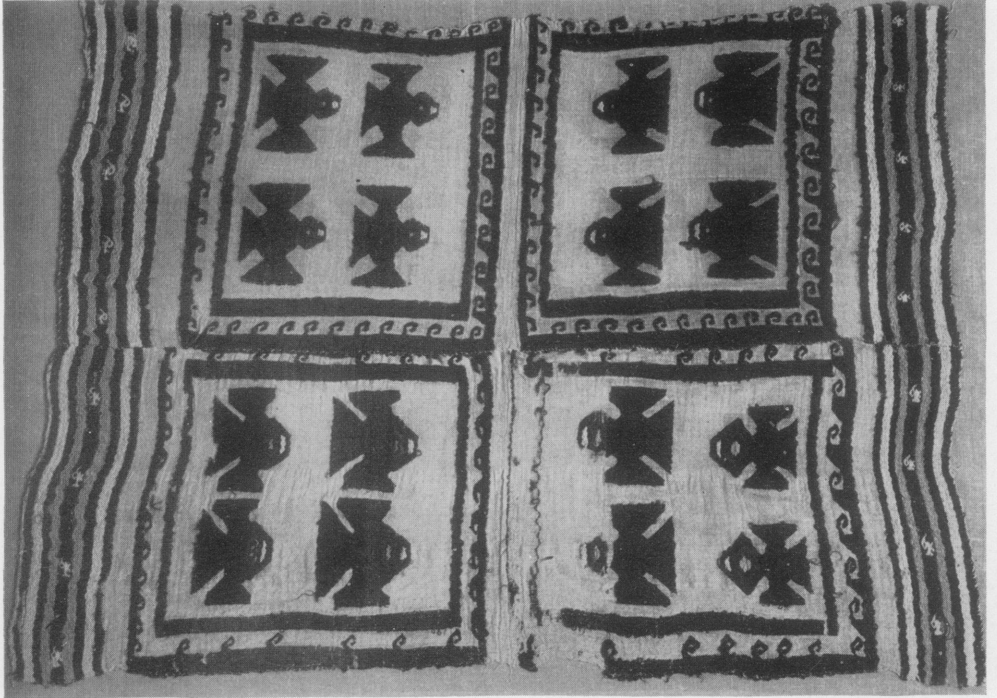


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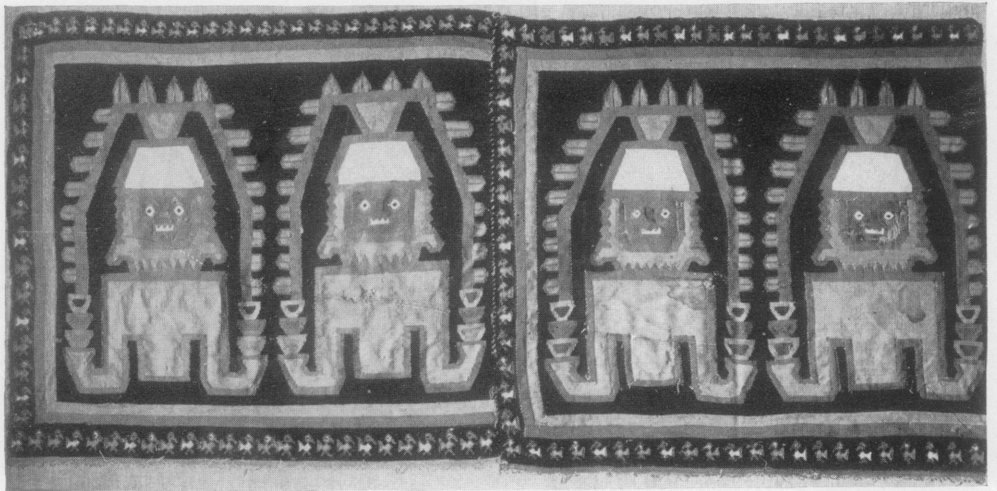


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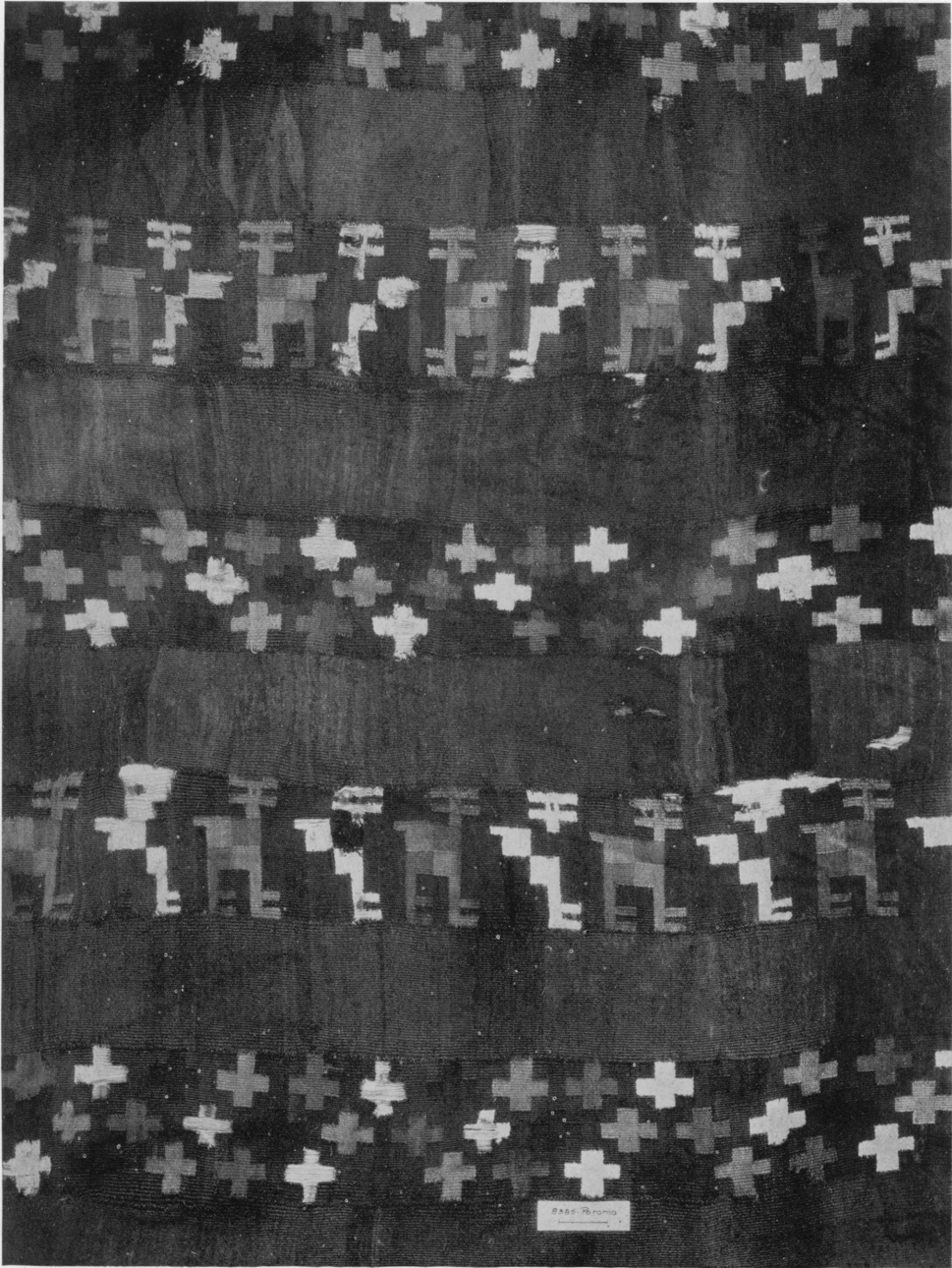


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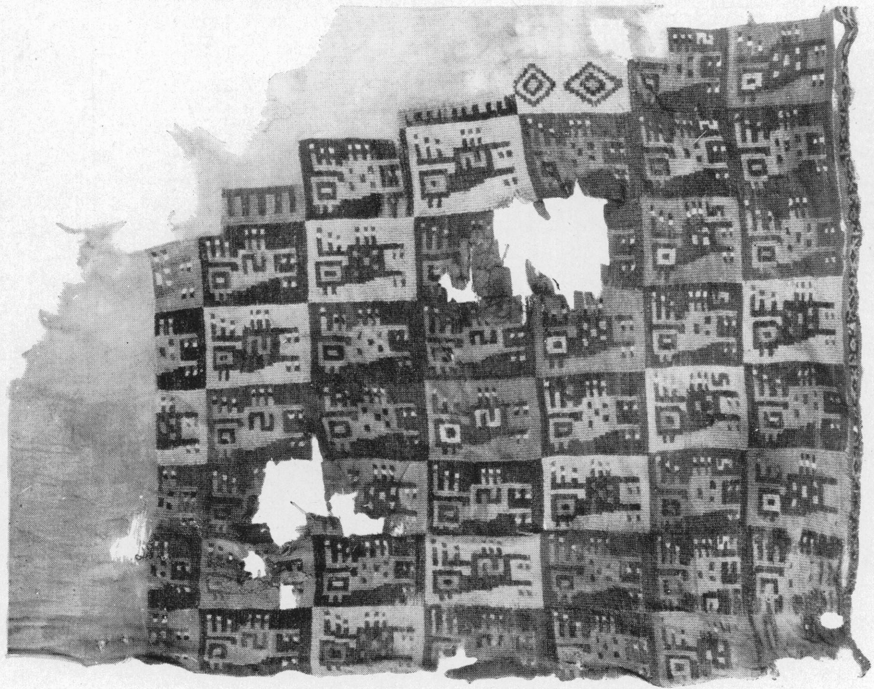
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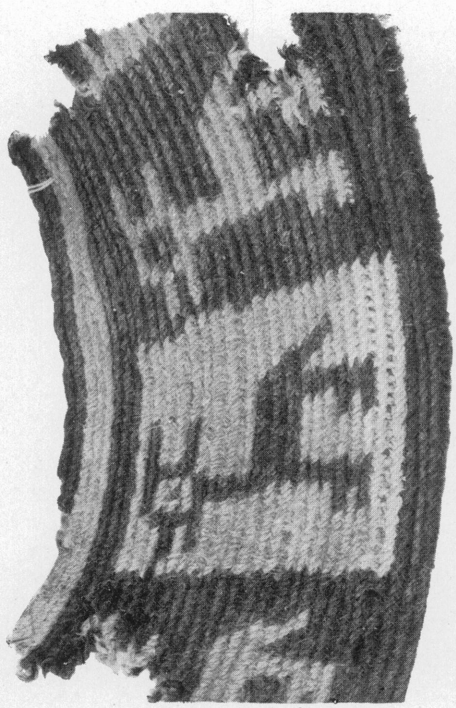
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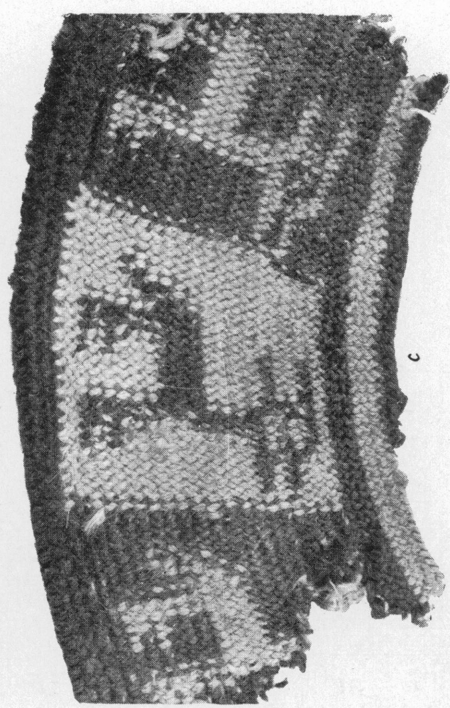
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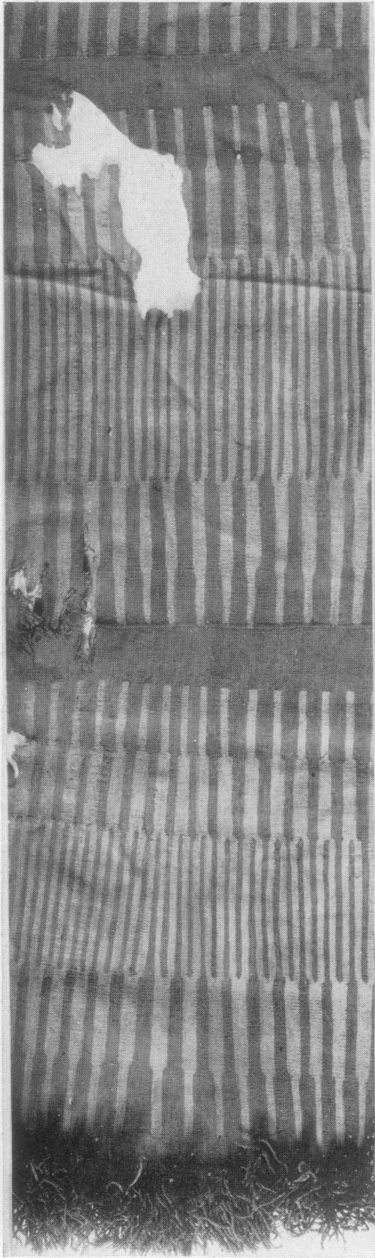


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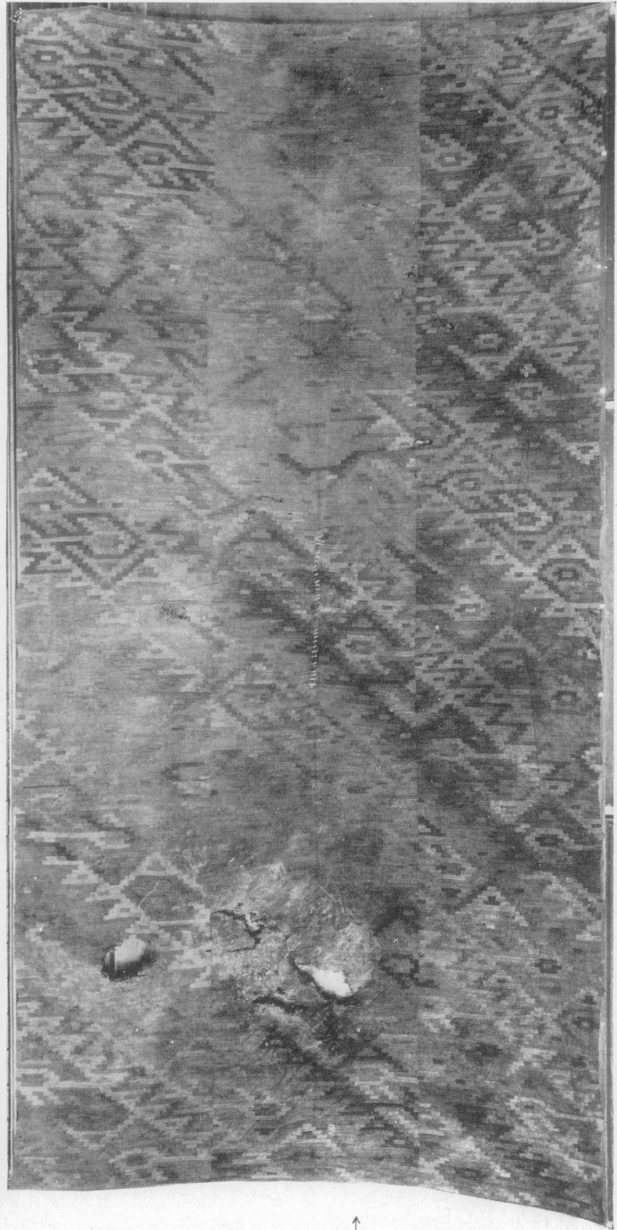


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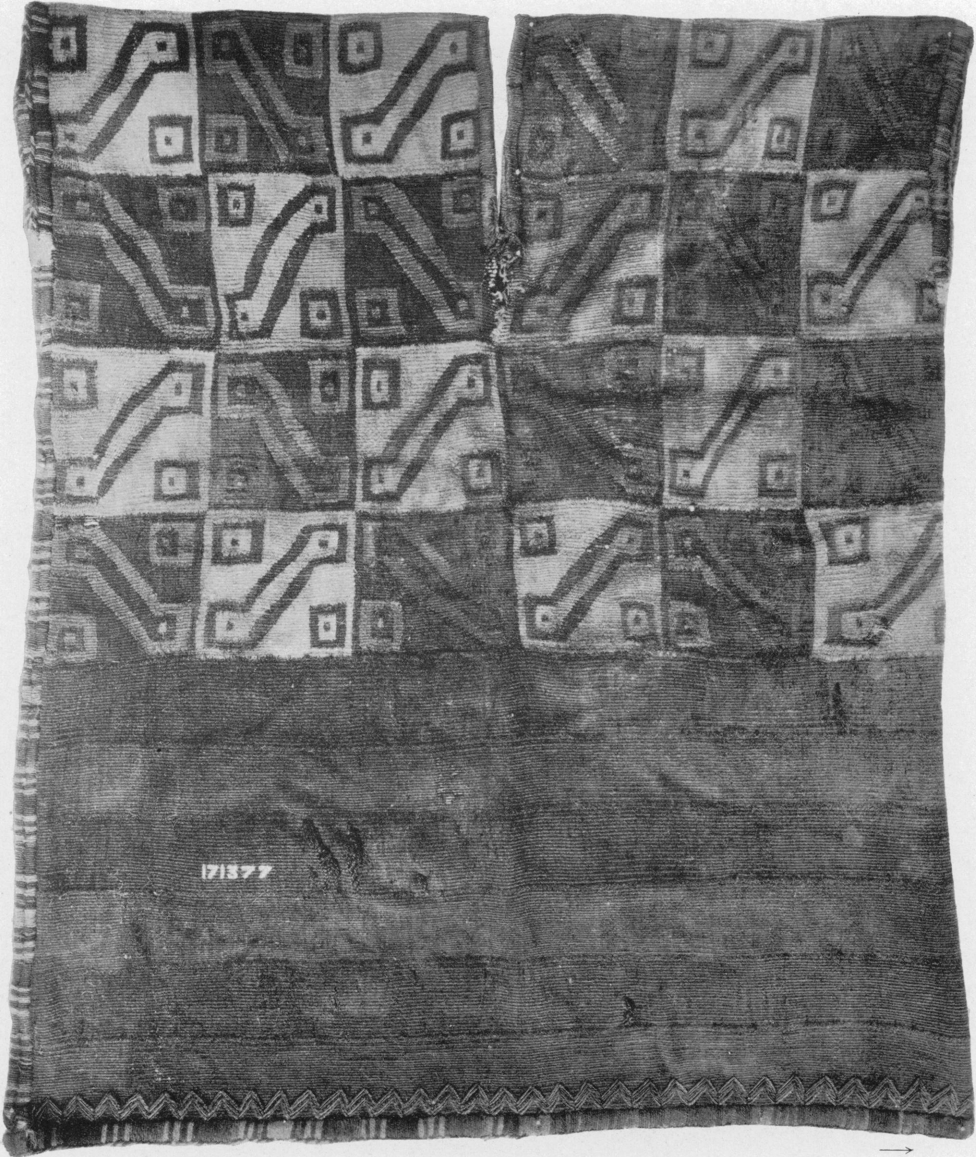


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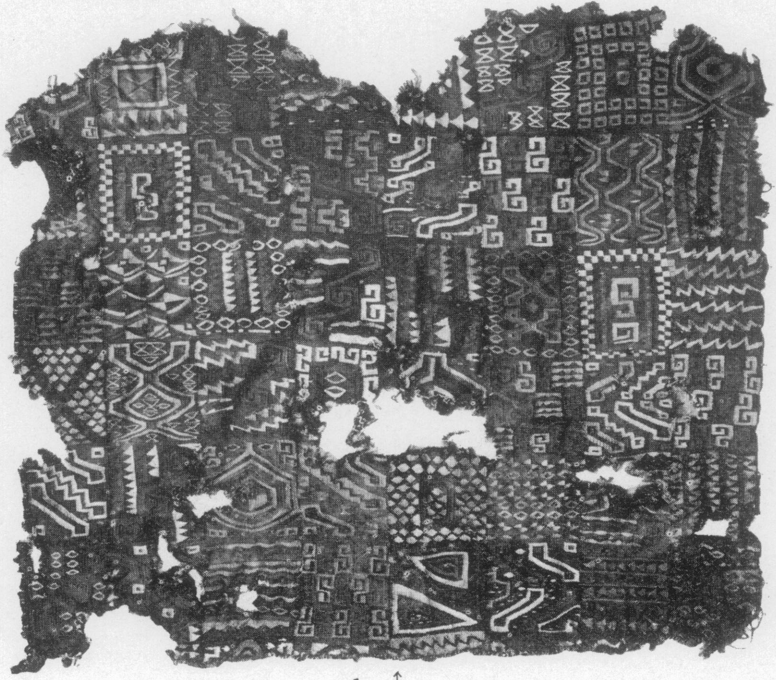


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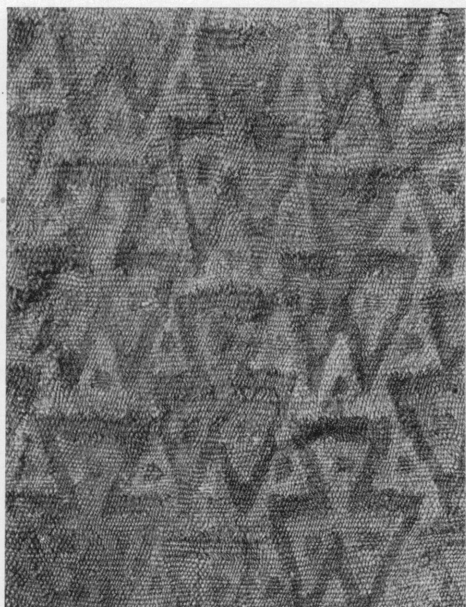
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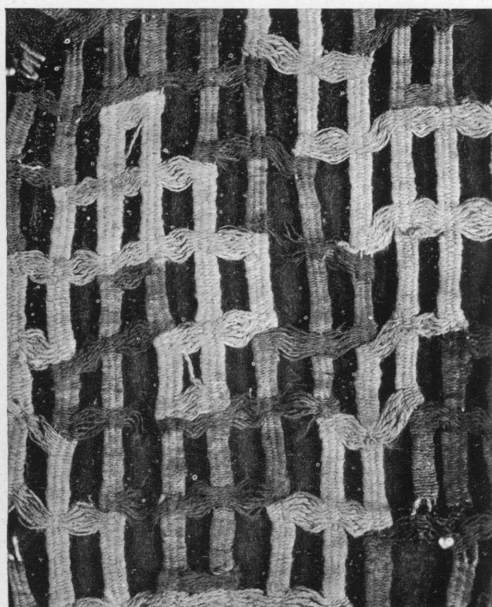
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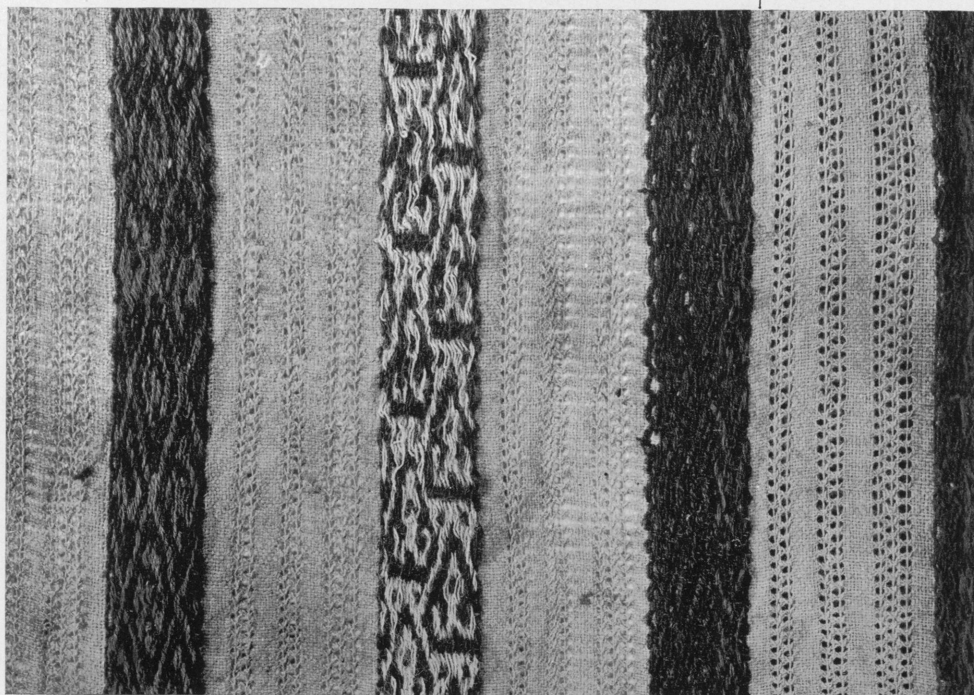
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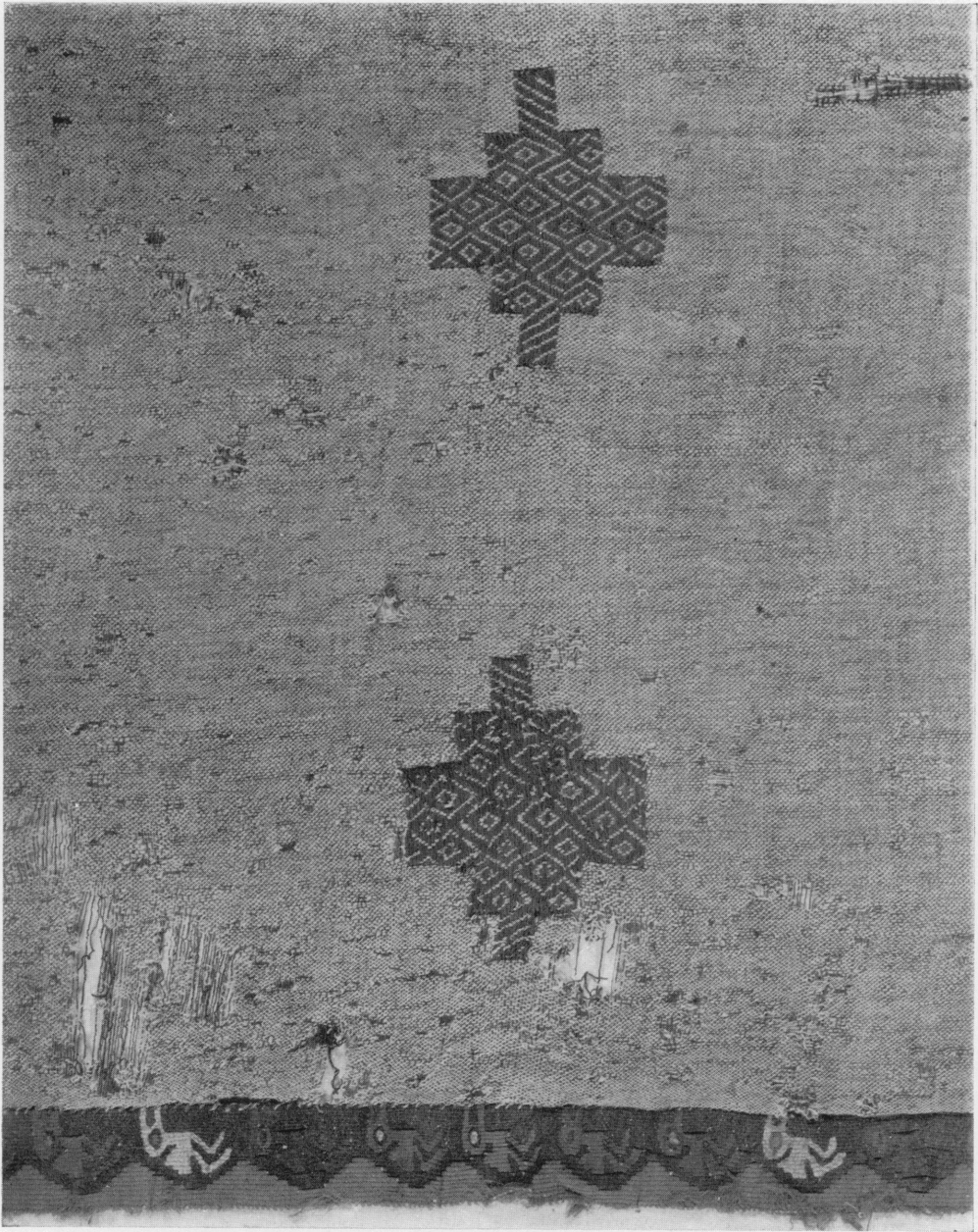
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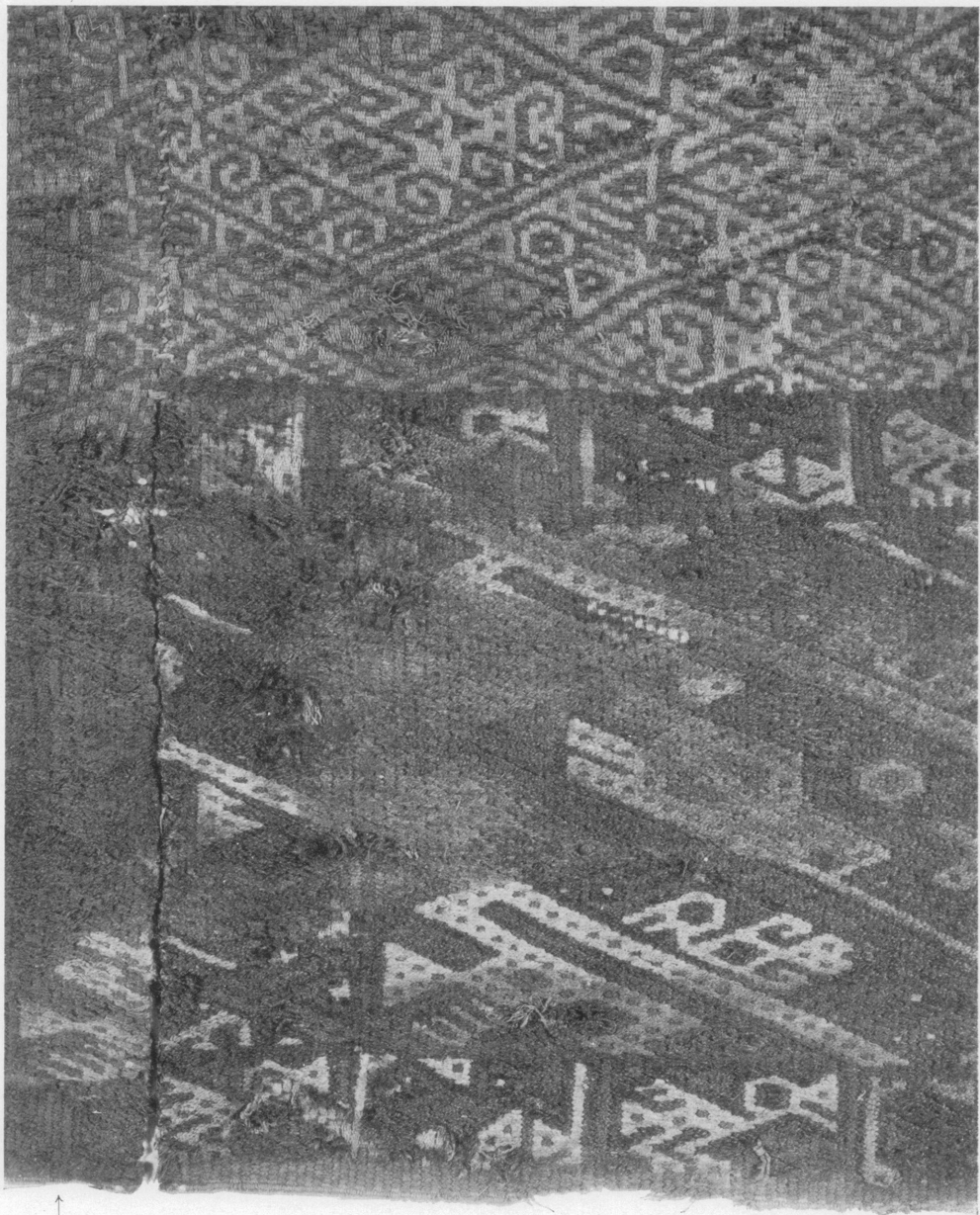
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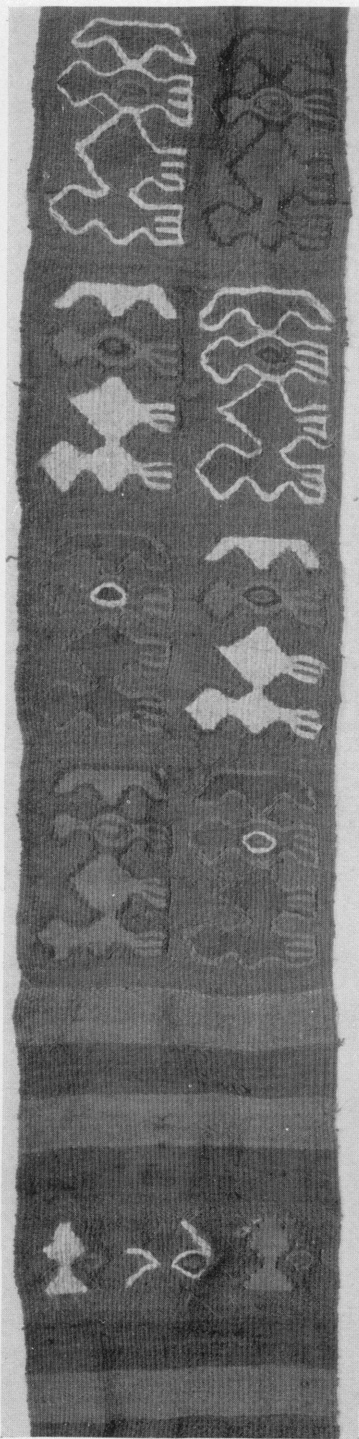
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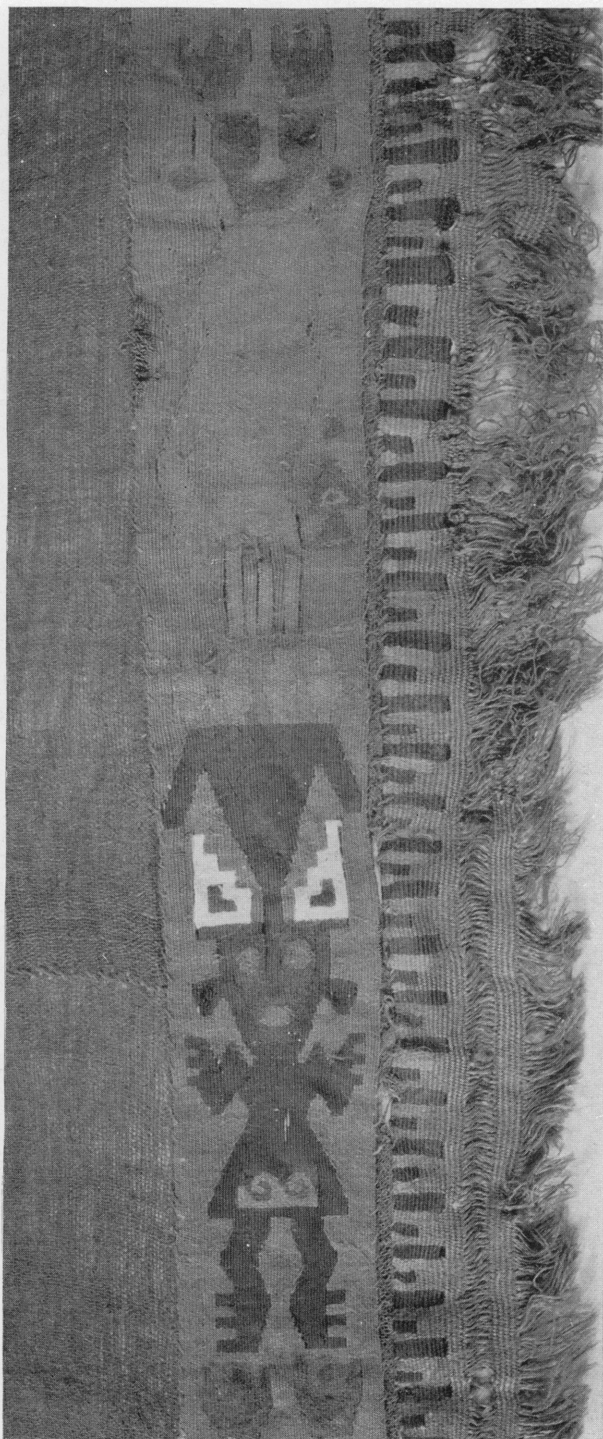
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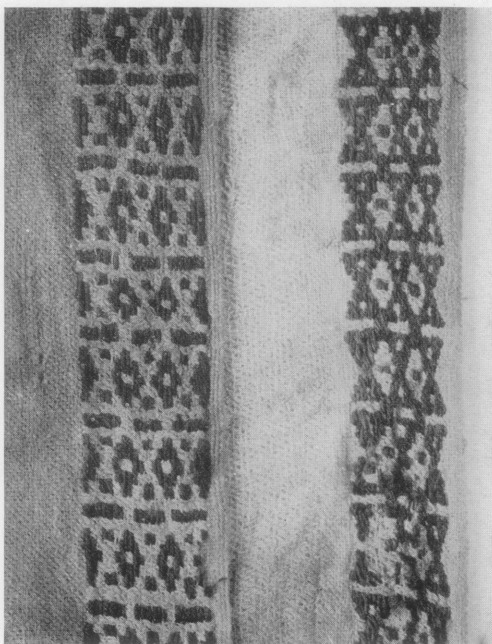


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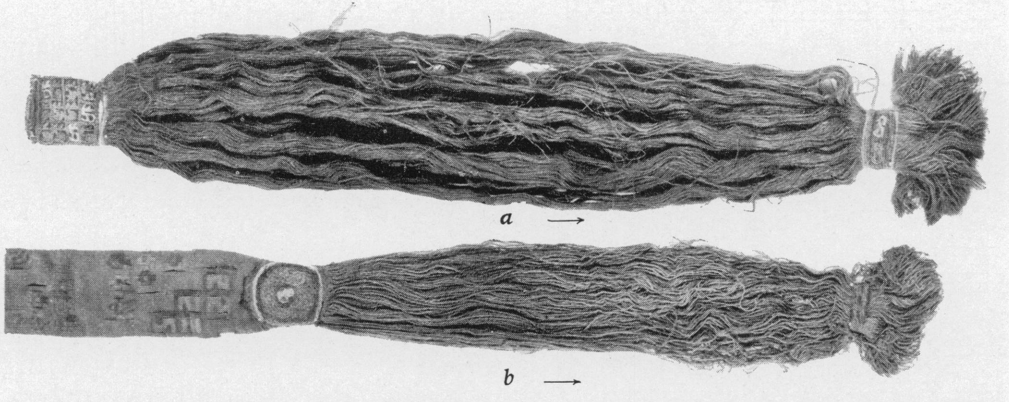


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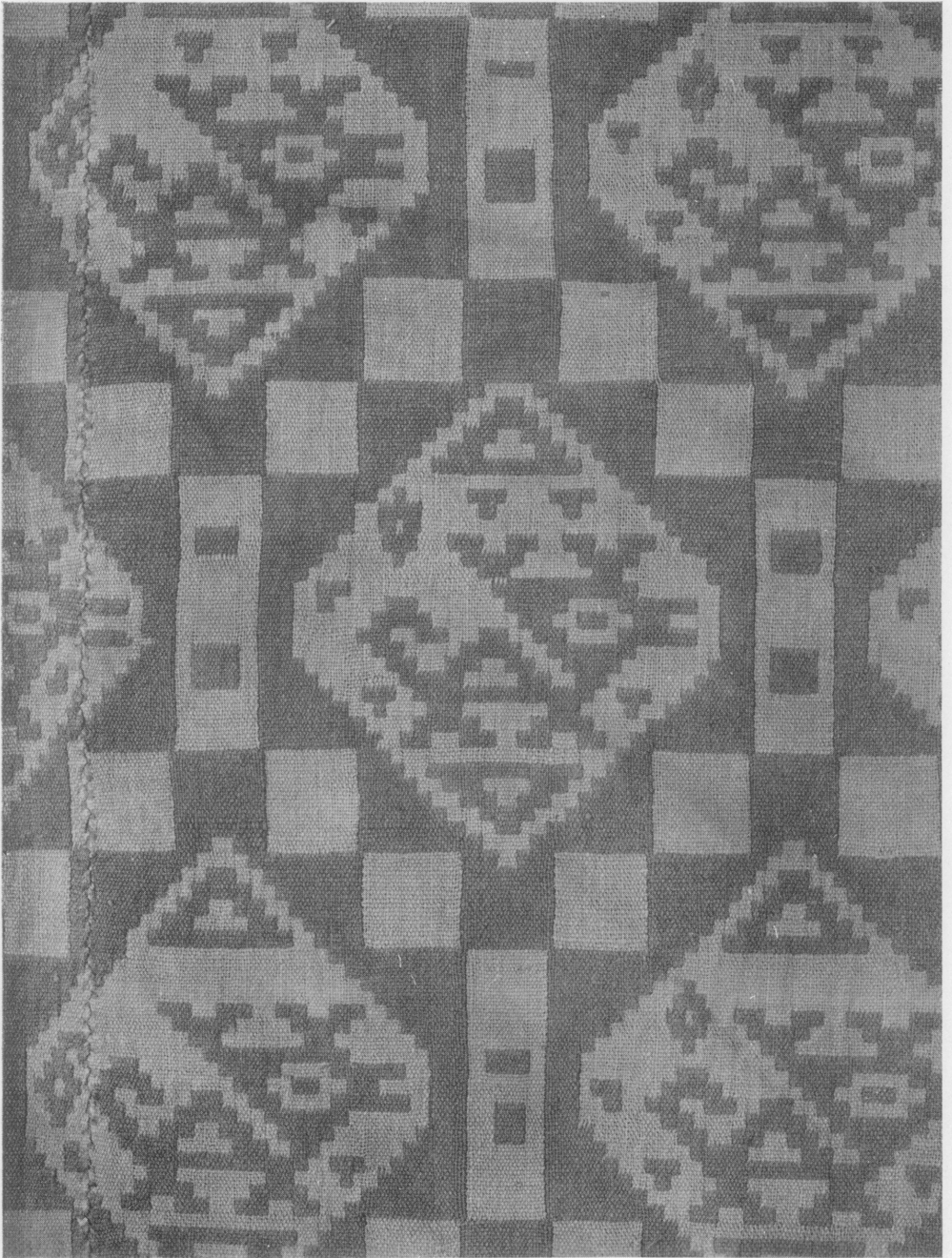


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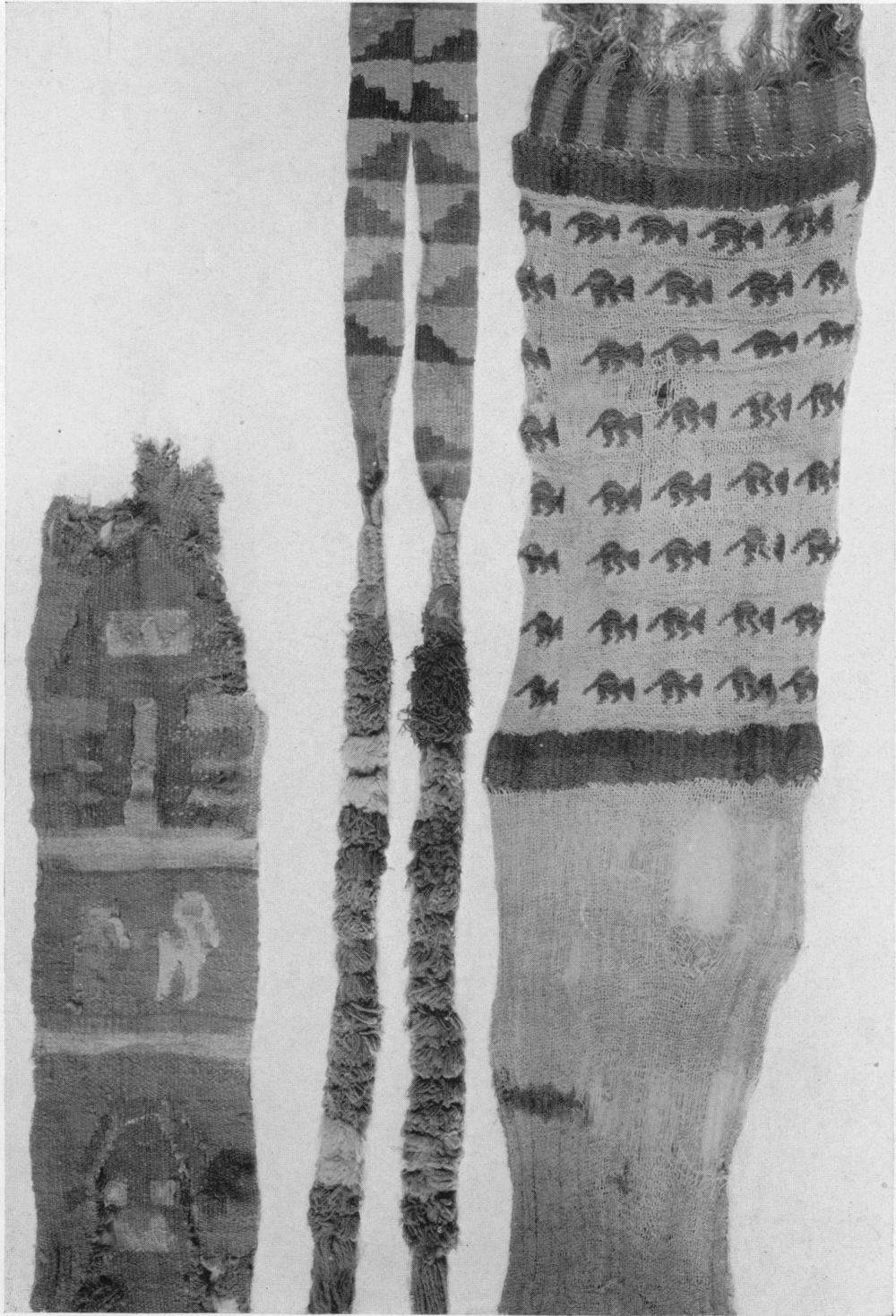
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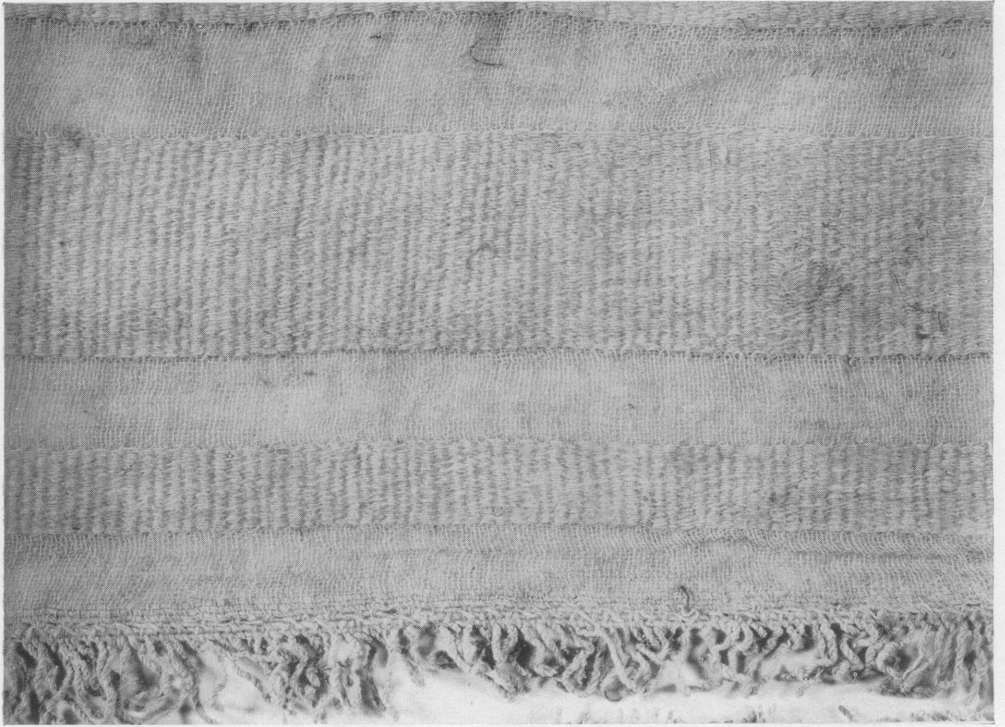


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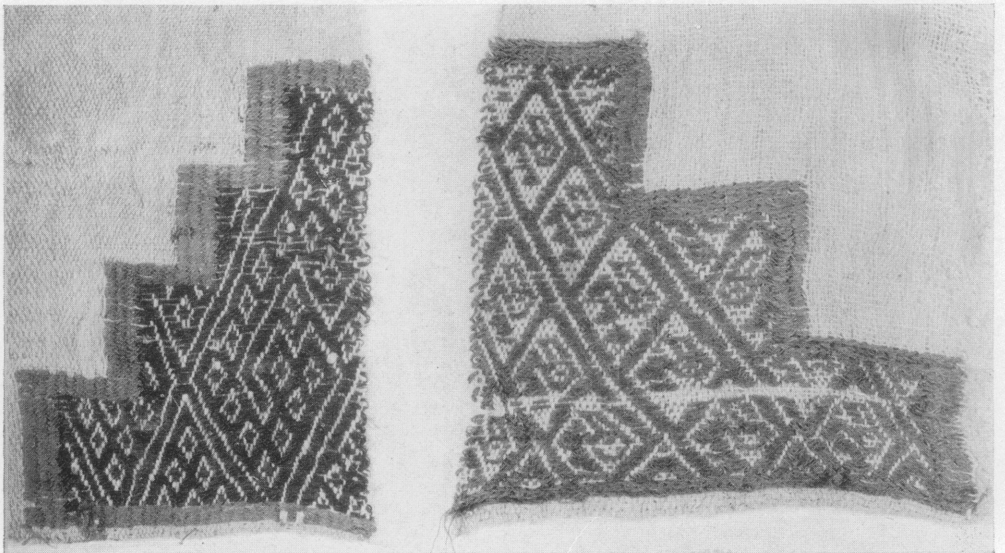
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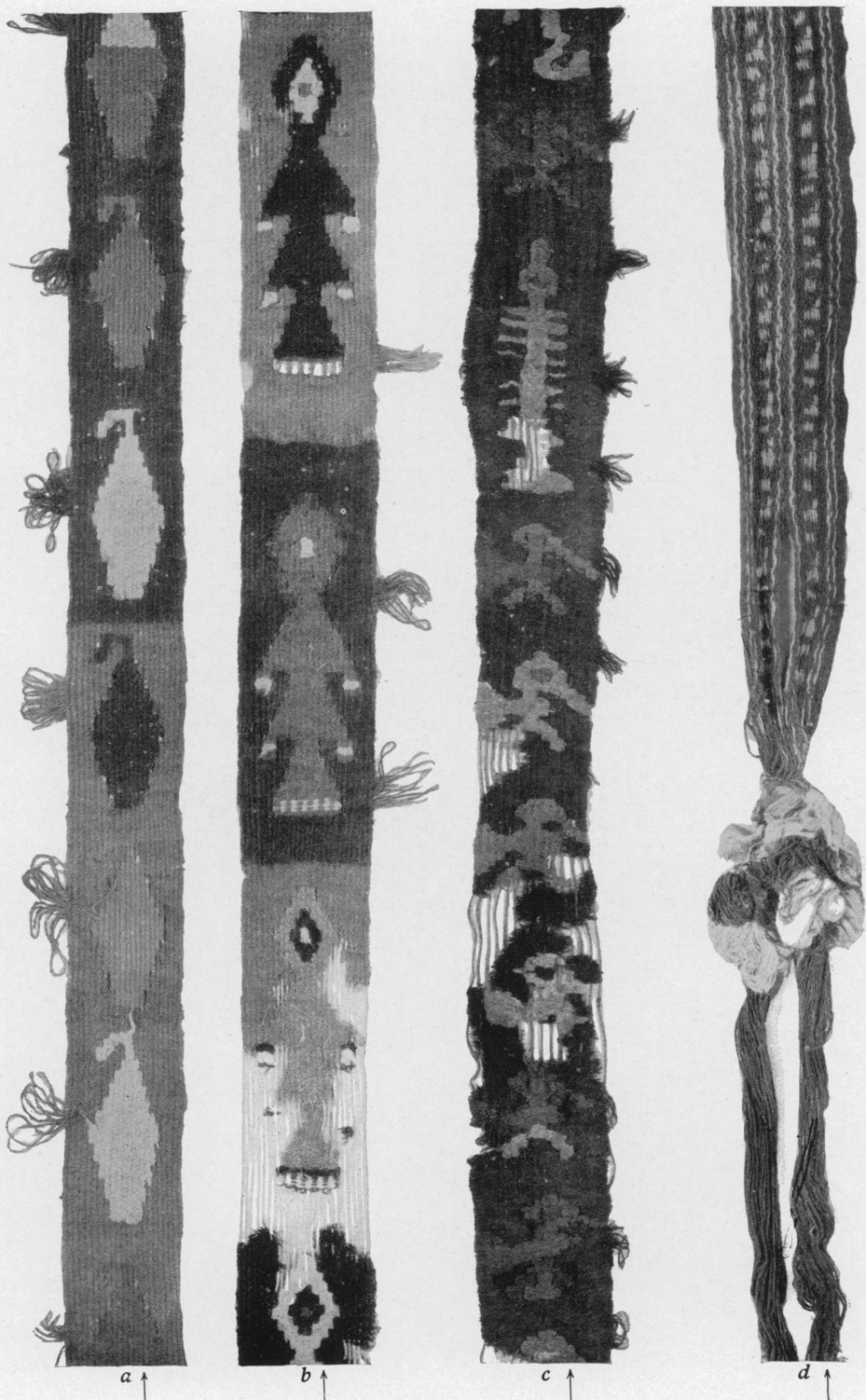
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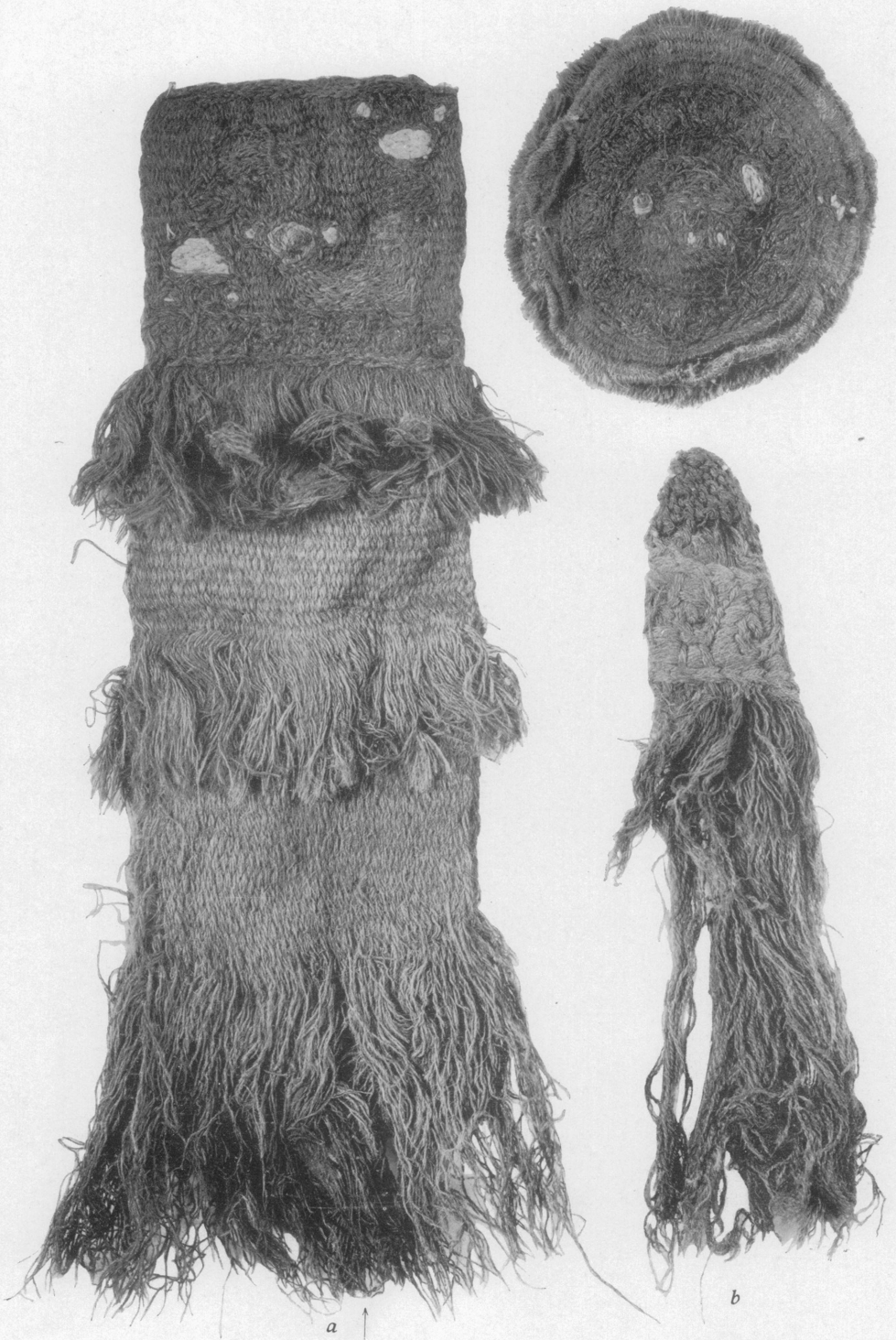
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LATE CHIMU. MOCHE.



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LATE CHIMU. MOCHE.

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