

DISTRIBUTION AND USE OF SLINGS IN PRE-COLUMBIAN AMERICA, WITH DESCRIPTIVE CATALOGUE OF ANCIENT PERUVIAN SLINGS IN THE UNITED STATES NATIONAL MUSEUM.

By PHILIP AINSWORTH MEANS,

Collaborator in Archeology, United States National Museum.

I. THE CHARACTER OF PERUVIAN SLINGS; THEIR OCCURRENCE AND EMPLOYMENT IN PERU AND IN OTHER PARTS OF AMERICA.

Introduction.—Planned originally to be hardly more than a descriptive catalogue of a collection of slings in the United States National Museum, this paper has been gradually extended so that a more just appreciation of the importance of the sling in early Peru might be gained.

The remarkable collection upon which the study is based was made wholly by Dr. Aleš Hrdlička in the year 1913. Through his kindness and that of Dr. W. H. Holmes, head curator of anthropology in the United States National Museum, I have been enabled to study the collection and write this paper. Miss Sarah G. Flint, of the Museum of Fine Arts, Boston, has been so good as to help me with some of the technicalities of the weaving in some of these specimens, and Dr. Walter Hough, of the United States National Museum, has done likewise. I wish to express my thanks to all of them.

The distribution of the sling in ancient America.—Concerning the sling in North America, north of the Rio Grande, Doctor Hough says there is no absolute proof that the sling was known in that part of the continent before the coming of the white men, although it became more or less common after that event. It has, however, been assumed that the clay pellets found in some of the California sites were sling missiles.¹

Slings were among the numerous weapons for offense used by the natives in Mexico, although they do not seem to have been of the first importance there, probably because the spear-thrower (*atlatl*) was more efficacious.² It is interesting, for purposes of comparison,

¹ Hough, in Bulletin 30 of the Bureau of American Ethnology, vol. 2, p. 602.

² Clavigero, 1883, vol. 1, p. 247. Maudslay, Introduction to Bernal Diaz, p. lvil (Hakluyt Society, 1908). Nuttall, 1891.

to see what the older writers on Mexico have to say about the sling. Bernal Diaz del Castillo describes a battle between the Spaniards and the Mexicans in these words:

Thus as we approached with our army they shot from above so many stones, javelins, and arrows that they covered the ground. * * * They had slings and plenty of stones, and they shot arrows and stones so fast that they wounded five of our soldiers and two horsemen. * * *¹

Bancroft says that the material from which the Aztec slings were made was pita thread or other fiber, and that the stones, which were carried in a pouch suspended from the waist, were hurled with much force and accuracy.² In Yucatan also the sling was in use. They were made of henequen, and stones were the missiles.³

As we possess only the most meager information as to the weapons used in the region between Yucatan and southern Panama, it is impossible to be certain to what extent the sling was used there. They were employed in the district of Tabasco and in other parts of northern Guatemala, but they do not seem to have been the most important of the long-range weapons of the region.⁴ Indeed, many of the tribes in Central America seem to have used either the bow and arrow or the blowgun with poisoned darts to a much greater extent than they did the sling. Among the Coiba or Cueva of eastern Panama, however, the sling again assumes an important place in the list of weapons.⁵ The bow and arrow were lacking in that region which centers about the Gulf of Urabá (or Darien).

Beginning with the territory around Antioquia on the Cauca River, in northwestern Colombia, we begin to get more evidence of the use of slings. Of the arms used in that district Cieza de León says:

* * * The inhabitants of these valleys are brave amongst themselves and much feared by their neighbors. The men go naked and barefooted, and merely wear a narrow band fastened to a girdle round the waist. Their arms are darts, long lances of black palm, slings, and two-handled clubs, called *Macanas*. * * *⁶

In short, slings were very important in this part of South America, their only rival among long-range arms being the bow.⁷ This, however, seems to mark the southern limit of the sling as used in Central America rather than the northern limit of the sling as used in South America, for that weapon seems to have been unknown in Ecuador previous to the Inca conquest, which began about 1490, and which had the result of pushing the Peruvian culture northwards rather than that of changing the fundamental character of the pre-Inca culture of Quito (Quito) and its dependencies.⁸ Inca dominance

¹ Diaz del Castillo, Maudslay's translation, Hakluyt Society, 1908-1916, vol. 4, pp. 305-306.

² Bancroft, 1883, vol. 2, p. 409.

³ Idem, vol. 2, p. 743. Ancona, 1889, vol. 1, p. 161.

⁴ Idem, vol. 1, pp. 655 and 696.

⁵ Idem, vol. 1, p. 761. Joyce, 1916, pp. 97-98.

⁶ Cieza de León, Markham's translation, Hakluyt Society, 1864, p. 49.

⁷ Simon, 1882-1892, vol. 1, p. 113. Uribe Angel, 1885, p. 513.

⁸ Gonzáles Suárez, 1890, vol. 1, p. 91. Cevallos, 1870-1873, vol. 1, p. 27.

lasted not more than 40 years or so in Ecuador, and it is possible that the sling never gained a real foothold in the country.

The sling appears not to have been used at all in early days in the Amazonian and Montaña regions of South America, for the blow-gun, the bow and arrows, and the javelin combined to fill the needs of the people as to long-distance weapons.¹ The use of poisoned darts was very general in these regions, just as it was in parts of Central America.

In northwestern Argentina the sling was of common occurrence from Inca times onward, and it may have been in use before the Inca clan extended its rule over that part of the continent.² Boman gives a picture of a sling of the ribbed type having six ribs, bound in two groups of three ribs each. This specimen is almost precisely like some of those in the collection we shall shortly examine. The Araucanians of Chile, in immediately pre-Spanish times at least, used slings and were very dextrous with them.³ I am inclined to think that the sling was, in Argentina and in Chile, an intrusive element introduced from Peru.

Having thus briefly reviewed the position held by the sling in America as a whole, the question of its use and distribution in Peru now presents itself for consideration. In the first place, the distribution of the weapon will be traced, beginning in the north.

Zárate tells us that the arms which the people of the Isle la Puna employ in their combats "are arrows and slings. * * *"⁴

This, as far as known, is the northernmost limit of the sling on the Peruvian coast. Somewhat to the south began the domains of the Chimu, stretching down the coast as far as Pativilca, Parmunca (modern Paramonga), or Huaman (modern la Barranca).⁵ No doubt this large territory was subdivided into political units continuous with the many valleys involved, but at the time of the Inca conquest the Chimu Capac, whose seat, now known as the Grand Chimu, was near the modern Trujillo, held a sway which was not merely nominal over the northern half of the Peruvian coast. Between the indeterminate southern limits of the Chimu's dominion and Chancay there was a region, now rich in archeological remains, the old political status of which is uncertain.⁶ Still more southward, the valleys from Chancay to Pachacamac were under a chief bearing the title or name of Cuismanco. Pachacamac, as well known, was a famous place of temples and pilgrimage for people from the sur-

¹ Whiffen, 1915, pp. 115-117.

² Boman, 1908, pp. 451-453 and fig. 97.

³ Molina, 1809, vol. 2, p. 72.

⁴ Zárate, 1830, vol. 1, p. 23. (Translation mine.)

⁵ Markham, 1912, p. 181. Squier, 1877, p. 165. García Rosell, 1903, pp. 199-203.

⁶ Idem, p. 181.

rounding regions.¹ To the south, in the valleys of Huarca, Chilca, Mala, and Runahuanac, the chief power was in the hands of a personage called Chuquimancu. The region around Chinchá Alta and Chinchá Baja was ruled by a chief, named Chinchá. Garcilasso tells us that before the Inca conquest the subjects of the chief called Chinchá had been very powerful; that they had come from far away and that they were warlike.² Finally, the districts about and between Pisco, Ica, and Nasca seem to have been closely allied, after the manner of the groups of valleys further north.³ All these coast regions were the seat of high culture for some time, in places perhaps for several centuries, before the Inca clan in the Cuzco Valley began its extraordinary climb to imperial power. The Inca domi-



FIG. 1.—BATTLE SCENE SHOWING USE OF SLING.

nance over this region became definitely fixed in the reign of Pachacutec (between 1425 and 1475 A. D.), although preparatory conquests, mainly in the southern parts of the the coast country, were probably made as early as the reign of Inca Rocca (about 1350 A. D.).⁴

Such, in brief, were the political subdivisions of the coast people of Peru. Although broken up into a number of chiefdoms, and doubtless numerous tribes, these people belonged to one general type or stock.⁵ They were brachycephalic, like the people of Central America, with more or less intrusion, according to region, of the

¹ Garcilasso, Markham's translation, Hakluyt Society, 1869 and 1871, vol. 2, pp. 185-193. Markham, 1912, p. 181. Means, 1917b, p. 329. Joyce, 1912, p. 95.

² Idem, pp. 149-153.

³ Idem, p. 147. Joyce, 1912, p. 95. Markham, 1912, pp. 176-178. Means, 1917, p. 239.

⁴ Means, 1917, pp. 246-249.

⁵ Hrdlička, 1914, p. 48.

highland population.¹ The archeological evidence concerning the occurrence of the sling among these peoples, though still far from being as complete as one could desire, is full enough to permit us to form some estimate as to its distribution and character in the various parts of the littoral.

In the Chimu region, where many realistically painted vessels have been found, vase paintings showing combats in which slings are being used occur.² Figures 1 and 2 show two of the most interesting battle scenes painted on pre-Inca vessels from the neighborhood of Trujillo. The slings are not depicted in detail, but they are unmistakable.

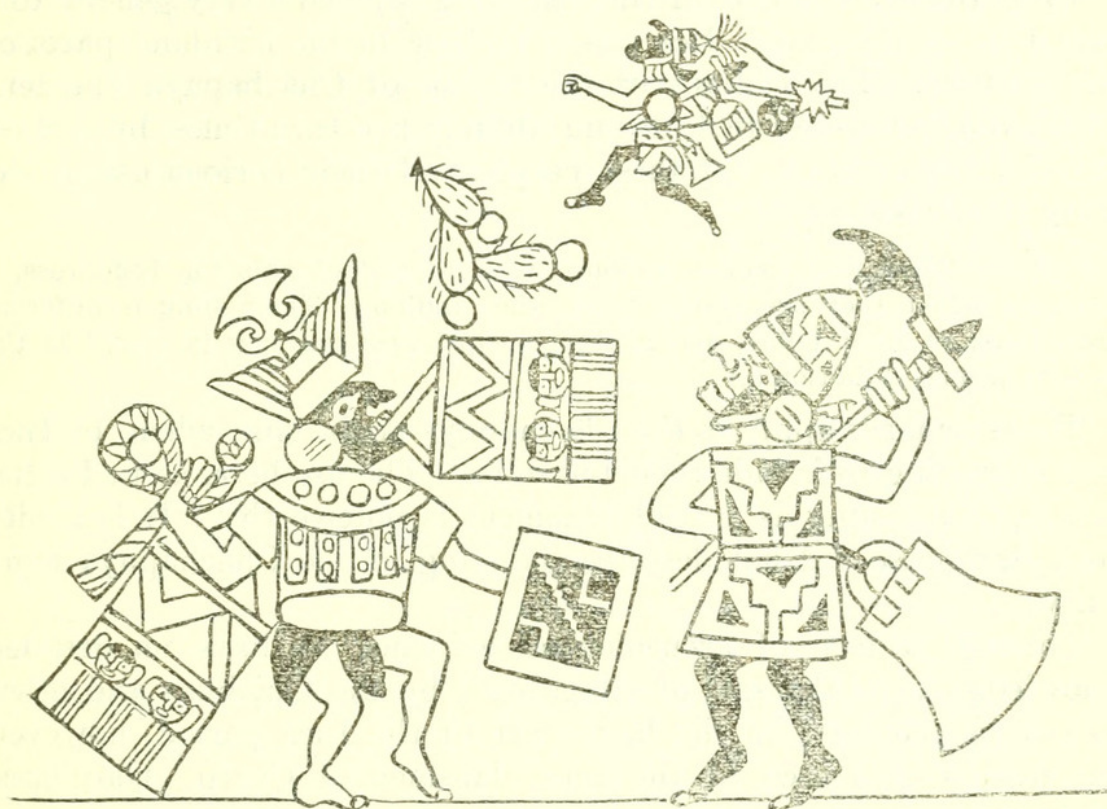


FIG. 2.—BATTLE SCENE SHOWING USE OF SLING.

Beginning at Ancon, we have actual specimens of slings, and it is interesting to note that both types of sling to be hereafter described—the solid-cradled and the ribbed—are found at that site.³ The same is true to a still greater extent at Pachacamac. Some confusion is caused in this connection at Pachacamac and elsewhere by a custom that seems to have existed of twisting a sling about the head, making it perform the functions of a fillet. As a result of this practice some of the specimens are so ornate as to be practically useless for any purposes save those of adornment.⁴ One ribbed

¹ Hrdlička, 1911, pp. 9–11.

² See Baessler, 1902–03, pls. 36 and 37. (My figs. 1 and 2 are reproduced from them.) Hamy, 1897, pl. 41, figs. 117 and 118.

³ Reiss and Stuebel, 1880–87, pls. 75 and 76.

⁴ Uhle, 1903, pl. 19, fig. 5, is an example of this development.

sling from Pachacamac has 13 ribs at the middle of the cradle and seven ribs at either end, somewhat like No. 301127, from Coyungo, in the collection to be described presently. (See my plate 26, figure 3.) In the Pachacamac specimen, however, all the ribs are bound together. In both, part of each cord is flat, and there are tassels.¹ Solid-cradled slings are not wanting at Pachacamac, some of them suggesting those found at Lomas (Nos. 301048-301056).²

In the region of Nasca the use and probably also the development of the sling has, as will be shown later on, reached its acme. Also, it was found by Dr. A. Hrdlička, its use persisted well into post-Columbian times.

From the above it is clear that the sling enjoyed a very general distribution on the coast. Nor was it lacking in the highland parts of the country. The Indians of the region of Chachapuya (modern Chachapoyas) were ruled, in immediately pre-Inca times, by a chief called Chuqui-Sota.³ Of these people and their curious use of the sling Garcilasso says:

* * * These Chachapuya Indians wear, as a distinguishing headdress, a sling, by which they are known from other Indians. Their sling is different from those of other tribes, and is the principal arm they use in war, like the ancient people of Majorca.⁴

These remarks apply to the Chachapuya at the time when the Inca was beginning to invade their territory. The use here, as in Pachacamac, of the sling as a head ornament is noteworthy. It is a pity that Garcilasso did not describe the sling of the Chachapuya more fully.

Through a lack of archeological evidence we have no detailed knowledge as to the sort of slings used by the Quichuas and other mountain peoples. In the later part of the Inca period, however, the weapon was used by the Inca clansmen of Cuzco. Garcilasso says:

* * * The arms were * * * supplied by the provinces where the materials for making them were most abundant. In some they made bows and arrows; in others they made lances and darts; in others clubs and axes; in others slings and lashings; in others shields, for these shields were their only defensive weapons. * * *

Further on he says, speaking of the puberty ceremonies of the youth of the Inca clan:

* * * The novices were expected to know how to make all offensive weapons used in war, with their own hands, or at least those which did not require the blacksmith's art, such as bows and arrows, a dart thrown by

¹ See Uhle, 1903, pl. 19, fig. 1.

² Uhle, 1903, pl. 19, figs. 2, 3, and 9.

³ Sarmiento, Markham's translation, Hakluyt Society, 1907, p. 129.

⁴ Garcilasso, vol. 2, p. 322.

⁵ Idem, pp. 18-19.

means of a leather strap, a lance with a sharpened point, and a sling made of reed. * * * ¹

A hint as to the nature of the slings used in the mountains at the time of the Inca dominion is given by Cobo:

* * * Of their offensive arms some are for fighting at a distance and others for hand-to-hand fighting. For fighting at a distance they used slings made of wool or of *Cabuya*, with which they were great sharpshooters. Almost all the people of this kingdom used them, particularly the mountaineers, who were very skillful slingers. * * * ²

It seems not to be unlikely that the slings of which Cobo speaks were more or less like those on the coast. *Cabuya* is a kind of aloe.³

In the region about Lake Titicaca, also, the sling was used, and still is.⁴

Some notion as to the tactical significance of the sling is gained from a passage from Xeres, who, speaking of the capture of Atahualpa at Cajamarca by the Spaniards, says:

* * * In this town of Caxamalca, * * * the arms they found, with which they made war, and their manner of fighting were as follows: In the van of their army came the sling-men, who hurled pebbles from slings. These sling-men carry shields, which they make from narrow boards, very small. They also wear jackets of quilted cotton. Next came men armed with sticks having large knobs at one end, and axes. The sticks are a braca and a half in length, and the thickness of a lance. The knob at the end is of metal, with five or six sharp points, each point being as thick as a man's thumb. They use them with both hands. The axes were the same size or larger. The metal blade was a palmo in width, like a halberd. Some of the axes and clubs, used by the chiefs, were of gold and silver. Behind these came men armed with hurling lances, like darts. In the rear were pikemen with lances 30 palmos in length. * * * ⁵

Conclusion.—We have now seen that the sling was widely distributed over Mexico and Central America and in the northernmost parts of South America. It can not, however, be said to have been the most important offensive weapon in the greater part of this region; it is, of course, possible that it was more important before the more efficacious spear-thrower and bow attained the development they possessed at the time of the Spanish conquest. In the more southerly parts of Central America the sling has a formidable rival in the blowgun, a weapon probably derived from the people of the Amazon region. Nevertheless, the sling was of general occurrence; it may well have been the chief long-range weapon in the earlier periods. The sling is especially important in certain coastal regions of Peru in pre-Inca times, and it is also one of the chief weapons of the people in the mountains. By the Incas the sling was given a still wider distribution.

¹ Garcilasso, vol. 2, p. 171.

² Cobo, 1892, vol. 4, p. 194. The translation is mine.

³ Cieza, 1864, p. 146.

⁴ Bandelier, 1910, p. 88. Beuchat, 1912, pp. 581 and 669.

⁵ Xeres, Markham's translation, Hakluyt Society, 1872, p. 60.

As to the derivation of the sling in South America there is, I think, but very little doubt that it was one of the cultural elements brought from Central America by the first settlers on the Peruvian coast, and that it spread from there inland, and over large parts of the continent.

A GENERAL DESCRIPTION OF THE PERUVIAN SLING.

An examination of the Hrdlička collection together with other available specimens, reveals the presence of two distinct types of sling. The differentiation rests upon the structure of the part of the weapon upon which the missile was placed, which is called the cradle. The cradle is, of course, the most important part of the sling. In the Peruvian specimens it is usually oblong or oval in shape, and from each end depend one or two cords. In the collection under discussion the two types of cradle provide the basis for classification. One type is that which I shall call "the solid-cradled type"; that is, the cradle is one continuous compact strip of fabric. The other sort of cradle is "the ribbed type"; in it the ribs, running parallel with the length of the cradle and encased in a binding of fine threads, not only make apparent the method of its construction, but they also form an important part of the decoration of the sling. Among the four sites represented in the Hrdlička collection the two sorts of sling are thus represented:

Nasca: Four solid-cradled slings (Nos. 301001-301004, inclusive); 32 ribbed slings (Nos. 301005-301035, inclusive).

Coyungo: No solid-cradled slings; 23 ribbed slings (Nos. 301124-301143, inclusive, and Nos. 301153-301155, inclusive).

Lomas: Twenty-four solid-cradled slings (Nos. 301046-301069, inclusive); 49 ribbed slings (Nos. 301070-301118, inclusive).

Acarí: No solid-cradled slings; 9 ribbed slings (Nos. 301144-301152, inclusive).

It is seen that the two types are not universally present or equally common.

To the basis presented by the cradle and attached cords additional features are sometimes added in the form of tassels. The cord may be round or flat in cross section. The decoration of the cradle in a class of the flat slings are divided into three distinct parts.

Tassels are frequent in all the sites save Acarí (where the slings were generally poorer in quality than elsewhere), but the habit of combining the flat or partly flat cord with the tripartite subdivision of the decoration of the cradle is distinctive of Coyungo (see Nos. 301124-301135, inclusive), only one other example of it, No. 301022, from Nasca, occurring elsewhere.

Aside from the major varieties of the sling, the solid-cradled type and the ribbed type, there are in the collection several groups of slings

from different sites which merit a special description. The first specimens of note from the point of view of structure are Nos. 301001 and 301002, solid-cradled slings from Nasca. There are in each of these slings two warp threads encased in a close-set continuous spiral woof, upon which, in turn, the surface threads bearing the surface decoration are woven. Doctor Hough, who examined the specimens, says that this technique is most unusual. Figure 3 on page 325 makes it clear how these slings were made.

Another group of slings which is noteworthy is that distinguished by having six ribs at the center, arranged in two groups of three, but having only two ribs at the ends, the number diminishing in such a way that the grooves between the ribs themselves form a symmetrical pattern. The cradle thus formed is oval in outline, and it has a border for decorative purposes around the edge. The slings contained in this group are Nos. 301005–301013, inclusive, from Nasca, and Nos. 301137–301143, inclusive, from Cuyungo.

A third group, Nos. 301048–301056, inclusive, from Lomas, has for its peculiarity the reversing of the colors from one side of the fabric to the other. The shades used are brown and white; that part of the design which is brown on one side is white on the other, and vice versa. The outline of the pattern is the same on both sides, only the colors alternat-

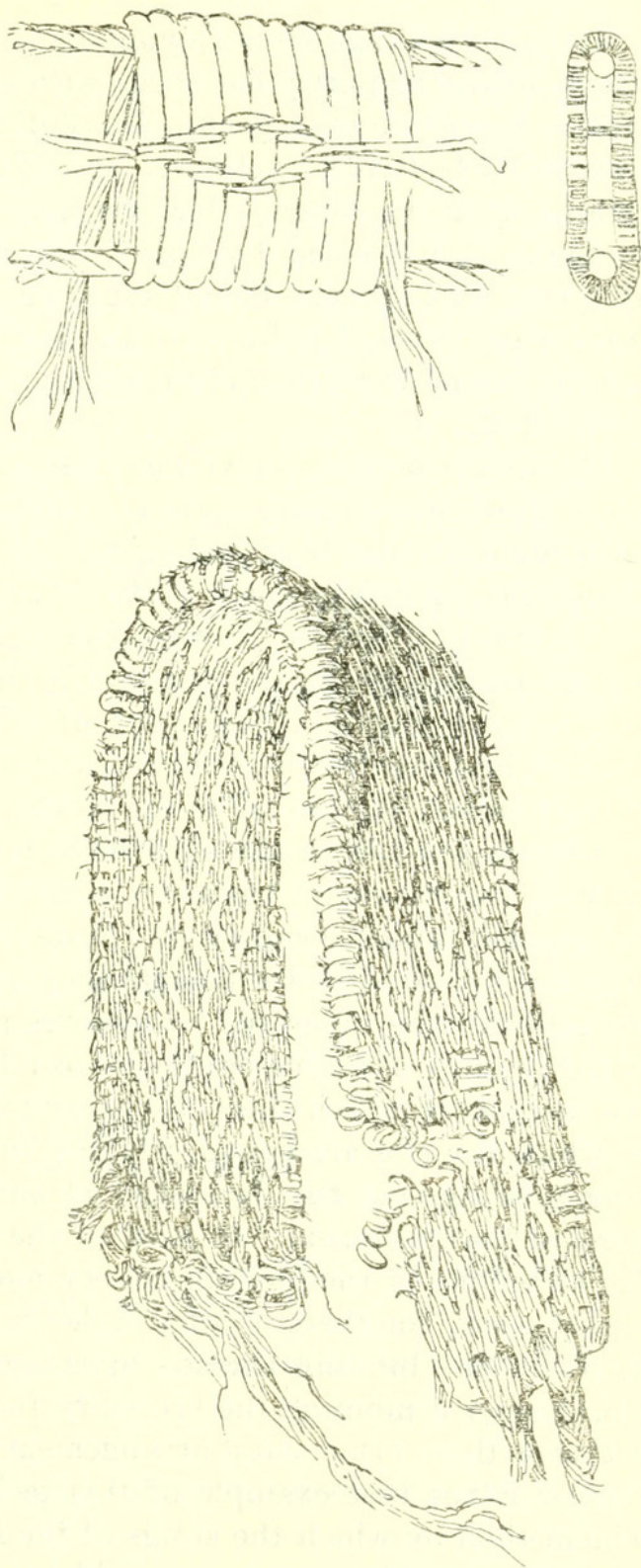


FIG. 3.—SOLID-CRADLED SLING WITH METHOD OF MAKING.

ing. Mr. M. D. C. Crawford has described some cloth like this under the name of "double cloth."¹ Two sets of yarn were used, but they were firmly locked together as a result of the interchange of color areas.

The ribbed slings from Coyungo and Nasca, which show a combination of flat or partly flat cords with a tripartite subdivision of the cradle, form a fourth group, No. 301022, coming from Nasca, and Nos. 301124-301135, inclusive, and Nos. 301153-301155, inclusive, coming from Coyungo. The flat part of the cords is elaborately braided. The two end divisions of the cradle have all their ribs (usually four in number) bound together with colored threads, which form a geometrical pattern on the surface; the middle division has the ribs bound in pairs, and the decoration there is less elaborate than at the ends.

The four groups just reviewed comprise the more noticeable departures from the ordinary sorts of solid-cradled and of ribbed slings. Individual peculiarities and minor points relative to the grouping of the ribs can best be noted in the detailed notes on the collection.

The great difference between the solid-cradled type of sling and the ribbed type lies in the fact that in the former the decoration rests in the fundamental threads out of which the fabric is woven or braided, and that the tissue is solid and compact throughout the length of the cradle. In the case of the ribbed slings, on the other hand, the ornamentation lies in the superficial binding, which has nothing to do with the structural basis of the fabric save in so far as it encases the threads which compose it. Moreover, the cradles of the ribbed type are not solid and compact; they are broken up lengthwise into pronounced ribs separated by grooves and interstices. The threads of the binding of such a cradle are usually of two or more colors, and the manner in which these are arranged combined with the pattern in which the ribs are bound, whether in pairs, in threes, or fours, or singly, brings out the decorative element which is so prominent in most of the specimens. In most of the specimens of the ribbed type the technique of the binding is very much like that of some sorts of basket-work, for there is often a decorative purpose in the intervals at which the binding threads have been made to step from rib to rib, thereby combining the necessary function of binding the ribs together with an ornamental arrangement of spaces. No. 301071, from Lomas, is the best example of this technique. (See pl. 25, fig. 2.) The method by which the slings of the solid-cradled type were made bears, in general, a greater resemblance to the ordinary textile technique. In some cases there is a true warp and a true woof; again, the woof is sometimes replaced by a continuous warp, which zigzags from side to side throughout the length of the fabric. Finally, braiding, of a rather elaborate nature, is common.

¹ Crawford, 1916, p. 135.

As regards color and design these slings are admirable. Black, white, brown, yellow, and red are the commonest shades; but blue, green, buff, and pink also appear, though with less frequency. Sometimes the sling proper is without ornamentation, or its tassels are its only decoration. More often, however, the cradle and that part of the cords which is next to the cradle have a well-executed design in colors. Although geomtric designs are in the majority, the zoomorphic element makes its appearance, as in Nos. 301002, 301007, 301010, from Nasca. Doctor Hrdlička is of the opinion that the decorations of many of the strings represent a snake. All the specimens, save Nos. 301046 and 301047 from Lomas, are entirely of wool. The two exceptions specified have cotton foundations with wool embroidery. (See pl. 22, fig. 3.) The prevalence of wool is interesting as indicating a well-developed trade between the coast and the mountain regions, for the wool-bearing animals indigenous to Peru all live at high altitudes.¹ Although they are not represented in the collection under discussion, other materials were used for slings in ancient Peru. Slings made of human hair, of llama hide, and of vegetable fiber have been reported from Ancon.²

In point of size the slings vary widely. Their dimensions may be summarized thus:

Total length of slings:

Maximum=28 feet (No. 301124).

Minimum=3 feet, 3 inches (No. 301010).

Average=8 feet, 10 inches.

Cradle:

Length—

Maximum=18½ inches (No. 301002).

Minimum=3 inches (No. 301026).

Average=7¾ inches.

Width—

Maximum=3½ inches (No. 301070).

Minimum=½ inch (Nos. 301022 and 301116).

Average=1¼ inches.

II. DESCRIPTIVE CATALOGUE OF A COLLECTION OF SLINGS FROM SOUTHERN PERU.

Specimen No. 301001.—Cradle of a sling of the solid-cradled type. Locality: Nasca.

Colors.—Red and yellow.

Design.—Three longitudinal rows of diamonds formed by yellow lines on a red ground.

Material.—Wool.

Remarks.—The structure consists of two parallel warps encased in a continuous spiral woof very closely wound about the two warp-threads. Over

¹ Scott, 1913, p. 390. Flower and Lydekker, 1891, p. 300.

² See Reiss and Stuebel, pl. 76, fig. 9. Specimens showing the use of these materials occur in several museum collections, notably in that of the Peabody Museum of Harvard University. A sling decorated with feathers also appears there.

this foundation is woven the outer covering, which bears the surface design mentioned above. The surface threads are so compactly woven that the underlying structure is obscured by them. (See fig. 3.) Condition, fragmentary.

Specimen No. 301002.—Cradle of a sling of the solid-cradled type. Locality: Nasca.

Colors.—Red, yellow, and dark green.

Design.—Partly zoomorphic, showing conventionalized animals (dogs or llamas). Otherwise geometric. (See pl. 23, fig. 1.)

Material.—Wool.

Remarks.—The underlying structure is the same as that in No. 301001. As the design is more elaborate here, however, the wool threads have been made to emphasize some of the horizontal lines of the design. Condition, fragmentary.

Specimen No. 301003.—Cradle of a solid-cradled sling. Locality: Nasca.

Color.—Black.

Material.—Wool.

Remarks.—There is no wool. Specimen is elaborately braided. Condition, fragmentary.

Specimen No. 301004.—Sling of the solid-cradled type. Locality: Nasca region.

Colors.—Dark brown and white.

Design.—Simple and geometric.

Material.—Wool.

Remarks.—Condition, good.

Specimen No. 301005.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, black, and yellow.

Design.—Simple and geometric. (See pl. 23, fig. 2.)

Material.—Wool.

Remarks.—Cradle has six ribs at center. The number diminishes toward the ends in such a way that the grooves between them form a symmetrical design. Parts of the cords at both ends of the cradle have a decorative binding. Condition, fragmentary.

Specimen No. 301006.—Part of a sling of the ribbed type. Locality: Nasca region.

Remarks.—A replica of No. 301005. Condition, bad..

Specimen No. 301007.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Black, red, green, and yellow.

Design.—Geometric, with highly conventionalized birds in yellow and green on a red ground. The cradle is black with a border of birds.

Material.—Wool.

Remarks.—The arrangement of the ribs is the same as that in No. 301005. Condition, fair.

Specimen No. 301008.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, yellow, and black.

Design.—Geometric.

Material.—Wool.

Remarks.—The six ribs in the cradle are arranged as in No. 301005. Condition, fragmentary.

Specimen No. 301009.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red and white.

Design.—Geometric.

Material.—Wool.

Remarks.—The six ribs are arranged as in No. 301005. A tear in the binding of one cord shows its structure. The undyed cord proper is bound at frequent intervals with three or four twists of fine undyed thread. Upon this rests the woven outer binding on which the design appears. The outer binding consists of a continuous spiral woof held together by the embroidered design on its outer side. Condition, fragmentary.

Specimen No. 301010.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, yellow, buff, and green.

Design.—Geometric, with conventionalized birds and fishes in green and yellow on a red ground. (See pl. 23, fig. 3.)

Material.—Wool.

Remarks.—The six ribs are arranged in the same way as in No. 301005. Condition, fair.

Specimen No. 301011.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, green, and white.

Design.—Geometric.

Material.—Wool.

Remarks.—Condition, bad.

Specimen No. 301012.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, buff, yellow, olive green, and black.

Design.—Geometric. (See pl. 23, fig. 4.)

Material.—Wool.

Remarks.—The cradle has six ribs at the center, the number diminishing toward the ends, as in No. 301005. The part of the cords which is next the cradle is flat in cross-section, not round. Condition, fragmentary.

Specimen No. 301013.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, yellow, and black.

Design.—Geometric.

Material.—Wool.

Remarks.—The cradle has six ribs, arranged in the same manner as in No. 301005. Condition, fair.

Specimen No. 301014.—Sling of the ribbed type. Locality: Nasca region.

Color.—Red.

Design.—Plain. (See pl. 24, fig. 1.)

Material.—Wool.

Remarks.—One of finest slings in the collection. The cradle has 15 ribs in the central portion and 8 ribs, of twice the size of the others, at both ends. Part of each cord is elaborately braided in such a way as to have a flat cross section. There were originally four fine tassels, two of which now remain. Condition, good.

Specimen No. 301015.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Black and white.

Design.—On cradle, checkerboard design; elsewhere simple and geometric.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, fragmentary.

Specimen No. 301016.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Brown and white.

Design.—Irregular patches of the two colors.

Material.—Wool.

Remarks.—Cradle has four ribs bound in pairs. Condition, fair.

Specimen No. 301017.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Cradle, white; cords, black and white.

Material.—Wool.

Remarks.—Cradle has six ribs, bound in two groups of three. Condition, fragmentary.

Specimen No. 301018.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Black and white.

Design.—Cradle white with black border. (See pl. 24, fig. 2.)

Material.—Wool.

Remarks.—Cradle has six ribs, bound in two groups of three. Condition, fragmentary.

Specimen No. 301019.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Black and white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, fair.

Specimen No. 301020.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Brown and white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. The cords are knotted together at the ends. Condition, good.

Specimen No. 301021.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Dark brown and light brown.

Design.—Simple and geometric.

Material.—Wool.

Remarks.—Cradle has six ribs, bound in two groups of three. The ribs are arranged as in No. 301005. Condition, poor.

Specimen No. 301022.—Sling of the ribbed type. Locality.—Nasca region.

Colors.—Dark brown, light brown, and black.

Design.—Geometric. (See pl. 24, fig. 3.)

Material.—Wool.

Remarks.—This sling is so delicate as to suggest that it was either ceremonial or for use by a young boy. The cradle has four ribs bound together for 3 inches at each end, but bound in pairs for 2½ inches at the center. Part of the cords is braided, as in No. 301014, and flat in cross-section. Condition, fair.

Specimen No. 301023.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, white, and black.

Design.—Irregular patches of red and white on cradle; cords have concentric diamonds of the three colors; one tassel white, the other black.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. The two tassels are good. Cord attached to white tassel has three knots in it. Condition, good.

Specimen No. 301024.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Dark brown and white.

Design.—On cradle, irregular patches of the two colors. On upper parts of the cords, zig-zag rings of same colors. Condition, fragmentary. Cradle has four ribs, bound in pairs.

Material.—Wool.

Specimen No. 301025.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, yellow, brown, and white.

Design.—Simple and geometric. (See pl. 24, fig. 4.)

Material.—Wool.

Remarks.—Cradle has four ribs, bound together, like those in No. 301022. Condition, fair.

Specimen No. 301026.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, white, and black.

Design.—Geometric.

Material.—Wool.

Remarks.—Cradle has four ribs, bound together. The fineness of the specimen suggests that it was either ceremonial or for use by a young boy.

Specimen No. 301027.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, buff, green, brown, and black.

Design.—On cradle, irregular patches of all the colors. On cord, concentric diamonds.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, fragmentary.

Specimen No. 301028.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Brown, black, and white.

Design.—On cradle, elaborate diamond-pattern.

Material.—Wool.

Remarks.—Cradle has 14 ribs, originally bound in 7 couples. They are now in a very bad condition.

Specimen No. 301029.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Black and white.

Design.—Simple and geometric.

Material.—Wool.

Remarks.—Cradle has four ribs bound in pairs. The one tassel which remains is black. Condition, fragmentary.

Specimen No. 301030.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, yellow, white, and black.

Design.—On cradle, elaborate diamond-pattern. On cords, snake-like pattern or rings running around cord.

Material.—Wool.

Remarks.—Cradle has 10 ribs, bound separately but locked together at intervals. The technique of the cord is interesting. It is three-quarters of an inch thick and consists of a twisted woolen cloth, undyed, overlaid with a woven cover of black and white wool. Condition, very poor.

Specimen No. 301031.—Part of a sling. Locality: Nasca region.

Remarks.—Probably the missing cord of No. 301030.

Specimen No. 301032.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, white, and black.

Design.—Black diamonds set end to end and red diamonds set end to end on a white ground. This design on cords. Cradle more simple.

Material.—Wool.

Remarks.—Cradle has seven ribs. Condition, bad.

Specimen No. 301033.—Sling of the ribbed type. Locality: Nasca region.

Colors.—Red, purple, yellow, green, black, and white.

Design.—Diamond pattern.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, very poor.

Specimen No. 301034.—Cradle of a sling of the ribbed type. Locality: Nasca region.

Colors.—Red, yellow, and dark brown.

Design.—Simple and geometric.

Material.—Wool.

Remarks.—Six ribs, bound in two groups of three. Condition, bad.

Specimen No. 301035.—Cradle of a sling of the ribbed type. Locality: Nasca region.

Colors.—Red, white, and black.

Design.—Geometric.

Material.—Wool.

Remarks.—Six ribs, bound in two groups of three. Condition, bad.

Specimen No. 301036.—A tassel from a sling. Locality: Nasca region.

Colors.—Red, green, and white.

Design.—Conventional.

Material.—Wool.

Remarks.—Part of another sling is tied to the tassel. Condition, fragmentary.

Specimen No. 301037.—A tassel from a sling. Locality: Nasca region.

Colors.—Tassel, green. Cord, red with some purplish-brown threads.

Material.—Wool.

Remarks.—Condition, fragmentary.

Specimen No. 301038.—A tassel. Locality: Nasca region.

Colors.—Cord, white. Tassel, red, dark brown, pink, light brown, and green.

Material.—Wool.

Remarks.—The red threads which form the tassel are gathered into ten strands, which are tightly bound for nine inches of their length with fine threads, which form narrow rings of the other colors. From the point where the binding stops the threads of the tassel fall loosely. (See pl. 22, fig. 1.)

Specimen No. 301039.—A tassel. Locality: Nasca region.

Colors.—Tassel, red; cord, red, yellow, and green.

Design.—Simple and geometric design on the top part of the tassel.

Material.—Wool.

Specimen No. 301040.—A tassel. Locality: Nasca region.

Color.—Black.

Material.—Wool.

Remarks.—Condition, poor.

Specimen No. 301041.—A tassel. Locality: Nasca region.

Colors.—Tassel, green; cord, green, with buff rings at intervals.

Material.—Wool.

Remarks.—Condition, fragmentary.

Specimen No. 301042.—Part of a sling of the ribbed type. Locality: Nasca region.

Colors.—Black, white, and brown.

Material.—Wool.

Remarks.—Cradle has ten ribs, bound in couples. Cords imitate snakes. Condition, poor.

Specimen No. 301043.—A tassel. *Locality:* Nasca region.

Colors.—Red, green, blue, and yellow.

Design.—Four conventionalized faces superimposed on each side of the top of the tassel.

Material.—Wool.

Remarks.—The cord is elaborately braided and it has a flat cross-section. Condition, good, but incomplete. (See pl. 22, fig. 2.)

Specimen No. 301044.—Sling of the ribbed type. *Locality.*—Nasca region.

Colors.—Brown and black.

Material.—Wool.

Remarks.—The fact that the sling has been hastily but firmly knotted together suggests that it got torn in some combat.

Specimen No. 301045.—A tassel. *Locality.*—Nasca region.

Color.—Brown.

Material.—Wool.

Remarks.—Condition bad.

Specimen No. 301046.—Part of a sling of the solid-cradled type. *Locality.*—Lomas.

Colors.—Red, green, and white.

Design.—Geometric, serpentine. (See pl. 22, fig. 3.)

Material.—Cotton and wool.

Remarks.—The only cotton sling in the collection. The white cotton foundation has been treated with some sort of a chalky preparation to make it white. Upon this ground an attractive design has been embroidered in woolen threads. The delicate nature of the specimen makes it seem likely that it was ceremonial rather than utilitarian. Condition, fragmentary.

Specimen No. 301047.

Remarks.—The remainder of the cradle of No. 301046.

Specimen No. 301048.—Sling of the solid-cradled type. *Locality.*—Lomas.

Colors.—Dark brown and light brown.

Design.—Geometric and rather elaborate; zoomorphic element is seen in the conventionalized llamas. The design is broken up into a number of small panels or sections.

Material.—Wool.

Remarks.—The technique is such that those figures which are dark brown on one side of the fabric are light brown on the other side. No two of the panels on either side are alike. (See pl. 22, fig. 4.) Condition, fair.

Specimen No. 301049.—Sling of the solid-cradled type. *Locality.*—Lomas.

Remarks.—Much like No. 302048, but simpler.

Specimen No. 301050.—Sling of the solid-cradled type. *Locality.*—Lomas.

Remarks.—Much like No. 301048, but simpler.

Specimen No. 301051.—Part of a sling. *Locality.*—Lomas.

Remarks.—Much like No. 301048.

Specimen No. 301052.—Part of a sling. *Locality.*—Lomas.

Remarks.—Part of the same sling as No. 301051.

Specimen No. 301053.—Part of a sling of the solid-cradled type. *Locality.*—Lomas.

Colors.—Dark brown and light brown.

Design.—Of same sort as that on No. 301048.

Material.—Wool.

Specimen No. 301054.—Part of a sling of the solid-cradled type. *Locality.*—Lomas.

Colors.—Dark brown and light brown.

Design.—Elaborate geometric of same sort as that on No. 301048. (See pl. 25, fig. 1.)

Material.—Wool.

Remarks.—There is a perfectly definite warp upon which the fabric is built up.

Specimen No. 301055.—Part of a sling of the solid-cradled type. *Locality.*—Lomas.

Colors.—Black, white, and light brown.

Design.—Geometric and of same sort as that in No. 301048.

Material.—Wool.

Specimen No. 301056.—Sling of the solid-cradled type. *Locality.*—Lomas.

Colors.—Red, dark brown, and light brown.

Design.—Narrow border of red; central design of longitudinal zigzag in other colors. Technique the same as in No. 301048.

Material.—Wool.

Specimen No. 301057.—Part of a sling of the solid-cradled type. *Locality:* Lomas.

Colors.—Red, green, yellow, black, and white.

Design.—Simple and geometric.

Material.—Wool.

Remarks.—Condition, fragmentary.

Specimen No. 301058.—Part of a sling of the solid-cradled type. *Locality:* Lomas.

Colors.—Red and yellow.

Design.—Simple and geometric.

Material.—Wool.

Remarks.—Condition, poor.

Specimen No. 301059.—Part of a sling of the solid-cradled type.
Locality: Lomas.

Colors.—Red and yellow.

Design.—Simple and geometric.

Material.—Wool.

Remarks.—There is a fine red-and-yellow tassel. Condition, fragmentary.

Specimen No. 301060.—Part of a sling of the solid-cradled type.
Locality: Lomas.

Colors.—Red, yellow, brown, green, and white.

Design.—Geometric and very delicate.

Material.—Wool.

Remarks.—This sling is so small and delicate as to suggest that it was either for some ceremonial purpose or for use by a young boy. Condition, fragmentary.

Specimen No. 301061.—Sling of the solid-cradled type. Locality: Lomas.

Colors.—Yellow (or light brown) and dark brown.

Design.—Simple and geometric.

Material.—Wool.

Remarks.—The texture is rather coarse and rough. Like No. 301044, this sling has been torn and then mended later.

Specimen No. 301062.—Sling of the solid-cradled type. Locality: Lomas.

Colors.—Dark brown and white.

Design.—Mixture of the two colors.

Material.—Wool.

Remarks.—The texture of this sling is coarser than that of most of the specimens. Condition, fair.

Specimen No. 301063.—Part of a sling. Locality: Lomas.

Colors.—Red, green, buff, blue.

Design.—The four colors braided irregularly together.

Material.—Wool.

Remarks.—Condition, fragmentary.

Specimen No. 301064.—Part of a sling of the solid-cradled type.
Locality: Lomas.

Colors.—Red and yellow.

Design.—Mixture.

Material.—Wool.

Remarks.—There is a tassel, in fragmentary condition.

Specimen No. 301065.—Part of a sling of the solid-cradled type.
Locality: Lomas.

Colors.—Light brown and dark brown.

Design.—Simple and geometric.

Material.—Wool.

Remarks.—Condition, fragmentary.

Specimen No. 301066.—Part of a sling of the solid-cradled type.
 Locality: Lomas.

Colors.—Red, yellow, and green.

Design.—Elaborate and geometric.

Material.—Wool.

Remarks.—The fabric is built up by crosswise weaving on a series of warps. It is true weaving, differing from most of the specimens in this respect. Condition, fragmentary.

Specimen No. 301067.—Part of a sling of the solid-cradled type.
 Locality: Lomas.

Remarks.—Part of the same sling as No. 301066. (See pl. 22, fig. 5.)

Specimen No. 301068.—Part of a sling of the solid-cradled type.
 Locality: Lomas.

Remarks.—Part of the same sling as Nos. 301066 and 301067.

Specimen No. 301069.—Part of a sling of the solid-cradled type
 Locality: Lomas.

Colors.—Red and yellow.

Design.—Simple and geometric.

Material.—Wool.

Specimen No. 301070.—Cradle of a sling of the ribbed type. Locality: Lomas.

Colors.—Red and yellow.

Design.—Eight rows of step-sided diamonds in yellow on a red ground.

Material.—Wool.

Remarks.—Cradle has 15 ribs, bound firmly together. Foundation of the ribs is white wool cord. Probably this cradle belonged to a sling of the same sort as No. 301014. Condition, fragmentary.

Specimen No. 301071.—Sling of the ribbed type. Locality: Lomas.

Colors.—Red, blue, green, and buff.

Design.—On cradle, symmetrical arrangement of patches of all the colors; on flat part of cord, a symmetrical mixture of red and buff. (See pl. 25, fig. 2.)

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Wherever two patches of the same color come opposite one another on both pairs of ribs, the two pairs are bound together. As a result of the symmetrical arrangement of the patches of color, the gaps between the two pairs of ribs are also symmetrical. For a short space at both ends of the cradle there are three ribs, not four, and they are all bound together. A large part of each cord is flat in cross-section, the rest being round. There is one fine tassel left. Condition, fair.

Specimen No. 301072.—Sling of the ribbed type. Locality: Lomas.

Colors.—Black and white.

Material.—Wool.

Remarks.—One of the two tassels is black, the other is white. Cradle has four ribs, bound in pairs. The ribs are unusually thick.

Specimen No. 301073.—Sling of the ribbed type. Locality: Lomas.

Colors.—Red, black, and white.

Design.—On cradle, checkerboard pattern in black and white. The two tassels are red. (See pl. 25, fig. 3.)

Material.—Wool.

Remarks.—The cords are thicker than most. Cradle has four ribs, bound in pairs. Condition, good.

Specimen No. 301074.—Sling of the ribbed type. Locality: Lomas.

Colors.—Black and white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. One of the two tassels is white; the other is black. The black tassel is very clumsily attached to its cord; the white one is much neater. Condition, good.

Specimen No. 301075.—Sling of the ribbed type. Locality: Lomas.

Colors.—Red, green, blue, and buff.

Design.—Symmetrical arrangement of the four colors on the cradle, as in No. 301071. The flat part of the cord is buff and red.

Material.—Wool.

Remarks.—Cradle has four ribs, bound firmly together. The two fine long tassels are red and yellow. Condition, fair.

Specimen No. 301076.—Part of a sling of the ribbed type. Locality: Lomas.

Remarks.—Much like No. 301075. Condition, poor.

Specimen No. 301077.—Cradle of a sling of the ribbed type. Locality: Lomas.

Colors.—Red, white, and black.

Design.—Stripes.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, fragmentary.

Specimen No. 301078.—Part of a sling of the ribbed type. Locality: Lomas.

Remarks.—Very much like No. 301073, but having a smaller cradle.

Specimen No. 301079.—Sling of the ribbed type. Locality: Lomas.

Colors.—Black and white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, fragmentary.

Specimen No. 301080.—Part of a sling of the ribbed type. Locality: Lomas.

Colors.—White and brown.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs, one pair being broken. Condition, bad.

Specimen No. 301081.—Part of a sling of the ribbed type. Locality: Lomas.

Remarks.—Much like No. 301080.

Specimen No. 301082.—Part of a sling of the ribbed type. Locality: Lomas.

Colors.—Black and white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs.

Specimen No. 301083.—Cradle of a sling of the ribbed type. Locality: Lomas.

Colors.—Black and white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs, one pair being broken. Condition, bad.

Specimen No. 301084.—Part of a sling of the ribbed type. Locality: Lomas.

Colors.—Black and white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, fragmentary.

Specimen No. 301085.—Sling of the ribbed type. Locality: Lomas.

Colors.—Black and white.

Design.—On cradle, checkerboard pattern.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, good.

Specimen No. 301086.—Part of a sling of the ribbed type. Locality: Lomas.

Colors.—Black and white.

Material.—Wool.

Remarks.—Cradle is entirely black; cords are white. Cradle has four ribs, bound in pairs. Condition, fair.

Specimen No. 301087.—Part of a sling of the ribbed type. Locality: Lomas.

Remarks.—Much like No. 301086.

Specimen No. 301088.—Part of a sling of the ribbed type. Locality: Lomas.

Colors.—Brown and white.

Remarks.—The remaining cord has a knot in it, otherwise specimen is much like No. 301086.

Specimen No. 301089.—Part of a sling of the ribbed type. Locality: Lomas.

Remarks.—Much like No. 301086.

Specimen No. 301090.—Part of a sling of the ribbed type. Locality: Lomas.

Remarks.—All white, otherwise much like No. 301086.

Specimen No. 301091.—Part of a sling of the ribbed type. Locality: Lomas.

Remarks.—Cradle brown, cords white, otherwise much like No. 301086.

Specimen No. 301092.—Sling of the ribbed type. Locality: Lomas.
Colors.—Cradle white with black border, otherwise much like No. 301086.

Specimen No. 301093.—Sling of the ribbed type. Locality: Lomas.
Remarks.—Tassel has some red in it, otherwise much like No. 301086.

Specimen No. 301094.—Part of a cradle of the ribbed type. Locality: Lomas.

Remarks.—Small in size, otherwise much like 301086.

Specimen No. 301095.—Part of a sling of the ribbed type. Locality: Lomas.

Remarks.—Much like No. 301086.

Specimen No. 301096.—Part of a sling of the ribbed type. Locality: Lomas.

Remarks.—Much like No. 301086.

Specimen No. 301097.—Part of a sling of the ribbed type. Locality: Lomas.

Colors.—Brown, black, and white.

Design.—On cradle, a symmetrical arrangement of patches of the three colors.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, fragmentary.

Specimen No. 301098.—Part of a sling of the ribbed type. Locality: Lomas.

Colors.—Black and white, arranged in patches.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs throughout their length, but the pairs, in turn are bound together in two places. Condition, fragmentary.

Specimen No. 301099.—Part of a sling of the ribbed type. Locality: Lomas.

Colors.—Black and white.

Material.—Wool.

Remarks.—Cradle has three ribs, bound together. Condition, fragmentary.

Specimen No. 301100.—Cradle of a sling of the ribbed type. Locality: Lomas.

Colors.—Brown and white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, poor.

Specimen No. 301101.—Part of a sling of the ribbed type. Locality: Lomas.

Colors.—Black, white and light brown.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs.

Specimen No. 301102.—Part of a sling of the ribbed type. Locality: Lomas.

Colors.—Black, white and brown.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs, one pair being broken. Condition, bad.

Specimen No. 301103.—Sling of the ribbed type. Locality: Lomas.

Colors.—Brown, white and black.

Design.—Stripes. (See pl. 25, fig. 4.)

Material.—Wool.

Remarks.—There are two cradles, each with four ribs, bound in pairs. The two cradles lie over and parallel with one another. Probably the missile went between them, like a nut in a nut-cracker. The two cradles are held together by two strands at one end and by three at the other, the strands being carried across the ends of both cradles. Condition, fragmentary but fairly good.

Specimen No. 301104.—Part of a sling of the ribbed type. Locality: Lomas.

Colors.—Brown, black, and white.

Design.—Cradle, white with black border, like No. 301092. Tassel, white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, fair.

Specimen No. 301105.—Cradle of a sling of the ribbed type. Locality: Lomas.

Colors.—Black, white, and red.

Remarks.—Much like No. 301104.

Specimen No. 301106.—Cradle of a sling of the ribbed type. Locality: Lomas.

Colors.—Red, white, and black.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, poor.

Specimen No. 301107.—Sling of the ribbed type. Locality: Lomas.

Colors.—Brown, black, and white.

Material.—Wool.

Remarks.—Cord at one end of sling is white; at other end is a black loop tied to the cradle. Cradle has four ribs, bound in pairs.

Specimen No. 301108.—Sling of the ribbed type. Locality.—Lomas.

Colors.—Black and white.

Material.—Wool.

Remarks.—Cords are thicker than usual. Cradle has four ribs, bound in pairs.

Specimen No. 301109.—Sling of the ribbed type. Locality.—Lomas.

Colors.—Black and white.

Material.—Wool.

Remarks.—Both cords and tassel are thicker than usual. Cradle has four ribs, bound in pairs.

Specimen No. 301110.—Part of a sling of the ribbed type. Locality.—Lomas.

Colors.—Cradle, black; cords, white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound firmly together. Condition, fragmentary.

Specimen No. 301111.—Part of a sling of the ribbed type. Locality.—Lomas.

Colors.—Cradle, black; cords, white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, bad.

Specimen No. 301112.—Part of a sling of the ribbed type. Locality.—Lomas.

Colors.—Black, white, red and brown.

Design.—Cradle is black, white, and red; cords are brown, black, and white. Tassel is black.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs.

Specimen No. 301113.—Sling of the ribbed type. Locality.—Lomas.

Colors.—Brown, black, and white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs.

Specimen No. 301114.—Sling of the ribbed type. Locality.—Lomas.

Colors.—Red, brown, buff, and white.

Design.—Patches of color symmetrically arranged. (See pl. 26, fig. 1.)

Material.—Wool.

Remarks.—Cradle has eight small ribs, arranged in two major groups of four ribs each. Both the major groups comprise two minor groups, each of which has two ribs. The major groups are distinct throughout their length, but the two sets of minor groups in each major group are locked together at frequent intervals.

Specimen No. 301115.—Part of a sling of the ribbed type. Locality.—Lomas.

Colors.—Brown and white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, bad.

Specimen No. 301116.—Sling of the ribbed type. Locality.—Lomas.

Colors.—Brown and white.

Material.—Wool.

Remarks.—One of the cords has a loop at the end 2 inches long. Cradle has four ribs, bound in pairs. The small size of the sling suggests that it was for use by a boy. Condition, fair.

Specimen No. 301117.—Sling of the ribbed type. Locality.—Lomas.

Colors.—Brown, red, and white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, bad.

Specimen No. 301118.—Cradle of a sling of the ribbed type. Locality.—Lomas.

Colors.—Brown.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs.

Specimen No. 301119.—Two ropes with tassels. Locality.—Lomas.

Colors.—Ropes and tassels brown; small cord joining them white.

Material.—Wool.

Remarks.—Possibly part of a sling. Condition, fragmentary.

Specimen No. 301120.—Rope and tassel. Locality: Lomas.

Colors.—Dark brown, red and yellow.

Material.—Wool.

Remarks.—The brown rope has, near the tassel, a woven cover of red and yellow. Condition, fragmentary.

Specimen No. 301121.—Tassel. Locality: Lomas.

Remarks.—Tassel white, otherwise like No. 301120.

Specimen No. 301122.—Tassel. Locality: Lomas.

Remarks.—Dark brown tassel hanging from white cord.

Specimen No. 301123.—Tassel. Locality: Lomas.

Colors.—Red, green, buff, and purple.

Material.—Wool.

Remarks.—Cords in the tassel have been knotted near the bottom to prevent their unraveling.

Specimen No. 301124.—Sling of ribbed type. Locality: Coyungo.

Colors.—Dark brown, light brown, and white.

Design.—Geometric. (See pl. 26, fig. 2.)

Material.—Wool.

Remarks.—The portion of the cords which is nearest the cradle is braided in such a way as to have a flat cross-section. This part is brown and white. Round part of cords is white. Cradle has three divisions in point of design. In the first and third division there are five ribs, bound together, and decorated with five step-sided diamonds, dark brown, bordered with white, on a black ground. Middle division also has five ribs, three black ones being bound together and two white ones together. This tripartite subdivision of the cradle is important. This is the longest sling in the collection (twenty-eight feet). Condition, good. There are the remains of a tassel at both ends. Undoubtedly this sling was ceremonial.

Specimen No. 301125.—Sling of the ribbed type. Locality: Coyungo.

Colors.—Dark brown, light brown, and white.

Design.—Geometric.

Material.—Wool.

Remarks.—Save for the fact that the central division of the cradle of this sling has four and not five ribs, it is essentially similar to No. 301124.

Specimen No. 301126.—Sling of the ribbed type. Locality: Coyungo.

Remarks.—A duplicate of No. 301125.

Specimen No. 301127.—Sling of the ribbed type. Locality: Coyungo.

Colors.—Red, buff, black, and white.

Design.—Diamond pattern. (See pl. 26, fig. 3.)

Material.—Wool.

Remarks.—The cradle has the tripartite subdivision noted in No. 301124. Here the middle division has eight ribs, bound in groups of four. The end divisions have three ribs at their outer ends and eight toward the center of the cradle. The ribs in the end divisions are bound firmly together. A large part of either cord is flat and braided. Probably this sling was for ceremonial purposes. There is a small tassel at each end.

Specimen No. 301128.—Sling of the ribbed type. Locality: Coyungo.

Remarks.—A duplicate of No. 301127.

Specimen No. 301129.—Sling of the ribbed type. Locality: Coyungo.

Remarks.—Similar to Nos. 301124 and 301127.

Specimen No. 301130.—Sling of the ribbed type. Locality: Coyungo.

Remarks.—A duplicate of No. 301129.

Specimen No. 301131.—Sling of the ribbed type. Locality: Coyungo.

Colors.—Black and white.

Material.—Wool.

Remarks.—Central division of cradle (which shows tripartite subdivision) has four ribs, bound in pairs. The colors are arranged checkerboard fashion. A large portion of each cord is flat and braided. Very similar to No. 301124.

Specimen No. 301132.—Sling of the ribbed type. Locality: Coyungo.

Remarks.—Save for the fact that the colors are dark brown, light brown, and white, this sling is much like No. 301131.

Specimen No. 301133.—Sling of the ribbed type. Locality: Coyungo.

Remarks.—Save for the fact the colors are red, yellow, black, and white, this sling is much like No. 301131.

Specimen No. 301134.—Sling of the ribbed type. Locality.—Coyungo.

Remarks.—Save for the fact that the colors are dark brown and white, this sling is much like No. 301124.

Specimen No. 301135.—Sling of the ribbed type. Locality.—Coyungo.

Remarks.—Colors are black and white; otherwise much like No. 301124.

Specimen No. 301136.—Part of a sling of the ribbed type. Locality.—Coyungo.

Colors.—Red, yellow, and black.

Design.—Five rows of step-sided diamonds, the two outer and middle rows being black bordered with yellow, and the other two rows being red bordered with yellow. Cord has a snakelike pattern of rings in black, brown, and white. (See pl. 27, fig. 1.)

Remarks.—Cradle has twenty-four slender ribs, bound together. Condition, poor.

Specimen No. 301137.—Cradle of a sling of the ribbed type. Locality.—Coyungo.

Colors.—Red, yellow, and black.

Design.—Cradle red with yellow and black border.

Material.—Wool.

Remarks.—Cradle has six ribs at the center, the number diminishing toward the ends, as in No. 301005. Condition, fragmentary.

Specimen No. 301138.—Part of a sling of the ribbed type. Locality.—Coyungo.

Remarks.—A duplicate of No. 301137.

Specimen No. 301139.—Part of a sling of the ribbed type. Locality.—Coyungo.

Colors.—Dark brown and white. (See pl. 27, fig. 2.)

Remarks.—Tassel is yellow; otherwise like No. 301137.

Specimen No. 301140.—Part of a sling of the ribbed type. Locality.—Coyungo.

Remarks.—Probably part of No. 301139.

Specimen No. 301141.—Part of a sling of the ribbed type. Locality.—Coyungo.

Colors.—Red, yellow, and black.

Remarks.—Similar to No. 301137.

Specimen No. 301142.—Part of a sling of the ribbed type. Locality.—Coyungo.

Colors.—Cradle yellow with black border; otherwise like No. 301141

Specimen No. 301143.—Part of a sling of the ribbed type. Locality.—Coyungo.

Colors.—Dark brown and white. (See pl. 27, fig. 2.)

Material.—Wool.

Remarks.—Cradle has six ribs, bound in groups of three.

Specimen No. 301144.—Sling of the ribbed type. Locality: Acari valley.

Colors.—Black and white. (Faded and stained.)

Material.—Wool.

Remarks.—Cradle has four rather thick ribs, bound in pairs. The cords are very thick and clumsy. Condition, very bad.

Specimen No. 301145.—Sling of the ribbed type. Locality: Acari valley.

Colors.—Dark brown and light brown.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs. Condition, very bad.

Specimen No. 301146.—Part of a sling of the ribbed type. Locality: Acari valley.

Colors.—Black and white.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs.

Specimen No. 301147.—Sling of the ribbed type. Locality: Acari valley.

Colors.—Dark brown and light brown.

Remarks.—Cradle has four ribs, bound in pairs, one pair being broken. Condition, bad.

Specimen No. 301148.—Part of a sling of the ribbed type. Locality: Acari valley.

Colors.—Brown and yellowish.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs.

Specimen No. 301149.—Part of a sling of the ribbed type. Locality: Acari valley.

Colors.—Dark brown, light brown, and black.

Material.—Wool.

Remarks.—Cradle has four ribs, bound in pairs.

Specimen No. 301150.—Part of a sling of the ribbed type. Locality: Acari valley.

Remarks.—A duplicate of No. 301149.

Specimen No. 301151.—Part of a sling of the ribbed type. Locality: Acari valley.

Colors.—Red, dark brown, and light brown.

Material.—Wool.

Design.—Intricate and geometric. (See pl. 27, fig. 3.)

Remarks.—Cradle has 12 ribs, bound in six pairs.

Specimen No. 301152.—Sling of the ribbed type. Locality: Acari valley.

Colors.—Dark brown, red, and white.

Material.—Wool.

Remarks.—Cradle has eight ribs, bound in two sets of four. This sling was probably used by a young boy.

Specimen No. 301153.—Sling of the ribbed type. Locality: Co-yungo.

Colors.—Dark brown and light brown.

Design.—Step-sided brown diamonds on black, on cradle. Tripartite subdivision of cradle, middle division only is decorated.

Material.—Wool.

Remarks.—Cradle has five ribs, bound together throughout. Cord partly flat.

Specimen No. 301154.—Sling of the ribbed type. Locality: Co-yungo.

Colors.—Dark brown and white.

Material.—Wool.

Remarks.—Cradle has tripartite subdivision. Four ribs, bound in pairs.

Specimen No. 301155.—Sling of the ribbed type. Locality: Co-yungo.

Remarks.—A duplicate of No. 301154.

BIBLIOGRAPHY OF WORKS REFERRED TO.

BAESSLER, ARTHUR.

1902-3. *Ancient Peruvian Art*. New York, 3 vols.

BANCROFT, HUBERT HOWE.

1883. *Native Races of the Pacific States*. San Francisco, 5 vols.

BANDELIER, ADOLPH F.

1910. *The Islands of Titicaca and Koati*. New York.

BEUCHAT, HENRI.

1912. *Manuel d'archéologie américaine*. Paris.

BOMAN, ÉRIC.

CEVALLOS, PEDRO FERMÍN.

Paris, 2 vols.

1870-73. *Resúmen de la historia del Ecuador*. Lima, 6 vols.

CIEZA DE LEÓN, PEDRO DE.

1864. *Travels*. (Translated by Sir Clements R. Markham for the Hak-

1908. *Antiquités de la région andine de la République Argentine*.
luyt Society.) London.

CLAVIGERO, FRANCISCO J.

1883. *Historia antigua de Mexico*. . . . (Translated from the Italian
by J. Joaquin de Mora.) Mexico, 2 vols.

COBO, BERNABÉ.

1890-93. *Historia del Nuevo Mundo*. (Edited by Marcos Jiminez de la
Espada.) Seville, 4 vols.

CRAWFORD, M. D. C.

1916. *Peruvian Textiles*. (Anthropological Papers, American Museum of Natural History, vol. 12, pt. 4.) New York.

DIAZ DEL CASTILLO, BERNAL.

- 1908-16. *The True History of the Conquest of New Spain*. (Translated by Alfred Percival Maudslay for the Hakluyt Society.) London, 5 vols.

FLOWER, WILLIAM HENRY, and LYDEKKER, RICHARD.

1891. *Mammals Living and Extinct*. London.

GARCIA ROSELL, RICARDO.

1903. *Departamento de Piura*. . . . (Boletín de la Sociedad Geográfica de Lima, vol. 13, pp. 193-224.) Lima.

GARCILASSO DE LA VEGA.

- 1869 and 1871. *Royal Commentaries of the Yncas*. (Translated by Sir Clements R. Markham for the Hakluyt Society.) London, 2 vols.

GONZALEZ SUAREZ, FEDERICO.

- 1890-1903. *Historia general del Ecuador*. Quito, 7 vols.

HAMY, E. T.

1897. *Galérie américaine du Trocadéro*. Paris, 2 vols.

HOUGH, WALTER.

- Slings*. (In Bulletin 30 of the Bureau of American Ethnology, vol. 2, p. 602.)

HEDLIČKA, ALEŠ.

1911. *Some Results of Recent Anthropological Exploration in Peru*. (Smithsonian Miscellaneous Collections, vol. 56, No. 16.) Washington.

1914. *Anthropological Work in Peru in 1913*. (Smithsonian Miscellaneous Collections, vol. 61, No. 18.) Washington.

JOYCE, T. A.

1912. *South American Archaeology*. London.

1916. *Central American*. . . . *Archaeology*. London.

MARKHAM, SIR CLEMENTS R.

1912. *The Incas of Peru*. New York. (Second edition.)

MEANS, PHILIP AINSWORTH.

1917. *An Outline of the Culture Sequence in the Andean Area*. (Proceedings of the Nineteenth International Congress of Americanists, pp. 236-252.) Washington.

- 1917b. *A Survey of Ancient Peruvian Art*. (Transactions of Connecticut Academy of Arts and Sciences, vol. 21, pp. 315-442.) New Haven

MOLINA, J. IGNATIUS (Juan Ignacio Molina).

1809. *The Geographical, Natural and Civil History of Chili*. London, 2 vols.

REISS, WILHELM, and STUEBEL, ALPHONS.

- 1880-87. *The Necropolis of Ancon*. (Translated by A. H. Keane.) New York, 4 vols.

SARMIENTO DE GAMBOA, PEDRO.

1907. *History of the Incas*. (Translated by Sir Clements R. Markham for the Hakluyt Society.) London.

SCOTT, WILLIAM B.

1913. *Land Mammals in the Western Hemisphere*. New York.

SIMON, PEDRO.

- 1882-92. *Noticias historiales de las conquistas de Tierra Firme*. . . . Bogotá, 5 vols.

SQUIER, E. G.

1877. *Incidents of Travel . . . in the Land of the Incas.* New York.

UHLE, MAX.

1903. *Pachacamac.* Philadelphia.

URIBE ANGEL, MANUEL.

1885. *Estado de Antioquia.* Paris.

WHIFFEN, THOMAS.

1915. *The North-west Amazons.* London.

XERES, FRANCISCO DE.

1872. *Report.* . . . (Translated by Sir Clements R. Markham for the Hakluyt Society.) London.

ZÁRATE, AGUSTÍN DE.

1830. *Histoire de la découverte et de la conquête du Pérou.* Paris, 2 vols.



Means, Philip Ainsworth. 1919. "Distribution and use of slings in pre-Columbian America, with descriptive catalogue of ancient Peruvian slings in the United States National Museum." *Proceedings of the United States National Museum* 55(2275), 317–349.

<https://doi.org/10.5479/si.00963801.55-2275.317>.

View This Item Online: <https://www.biodiversitylibrary.org/item/32554>

DOI: <https://doi.org/10.5479/si.00963801.55-2275.317>

Permalink: <https://www.biodiversitylibrary.org/partpdf/37597>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Smithsonian

Copyright & Reuse

Copyright Status: NOT_IN_COPYRIGHT

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.