A SEA-SNAKE

The "Sea-snake" is played by the natives of Murray Island, Torres Straits, they call it *Pagi* = a Sea-snake. It is described by Rivers and Haddon (p. 152, Fig. 9). Partington (pl. 341, 3) gives a drawing of a finished pattern from Torres Straits, preserved in the British Museum (A. C. Haddon Collection) and labelled "cat's-cradle in the form of a water snake (*garé*)."

First : Opening A. (The *left* palmar string *must* be taken up first.)

Second : Keeping all the loops securely on the fingers, turn the hands with the palms down and the fingers pointing toward one another. Move the right hand
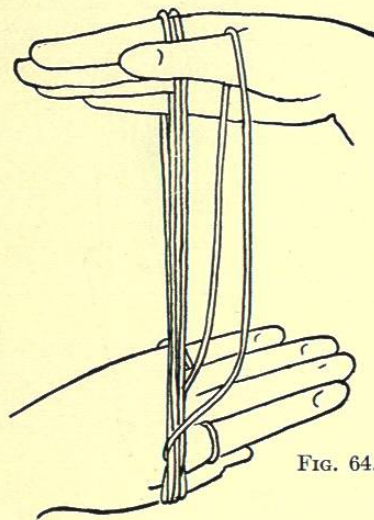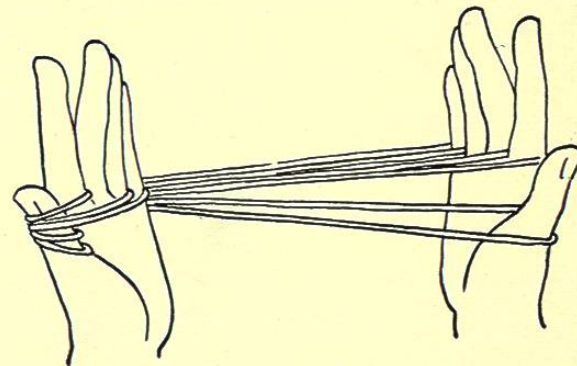

Fig. 64.

Fig. 65.

toward you, then to the left, and carry it up and away from you over and past the left hand (Fig. 64); turn the hands with the fingers pointing upward and draw the strings tight (Fig. 65). This movement brings all the strings from the palm of the left hand around the base of the left thumb over the back of the left hand and then to the right hand from the far side of the left hand.

Third : Put the entire left hand, from above, into the loop on the right index (Fig. 66), and move it away from you over the right little finger loop, and release the loop from the right index as it slips down on the left wrist (Fig. 67). Now carry the right hand around the left hand, by moving it away from you, to the left, and toward you over the left hand (Fig. 68), thus unwinding the strings. Separate the hands and draw the strings tight (Fig. 69).
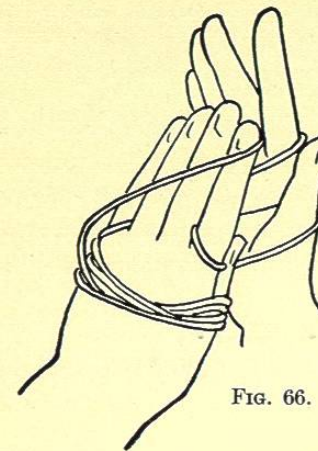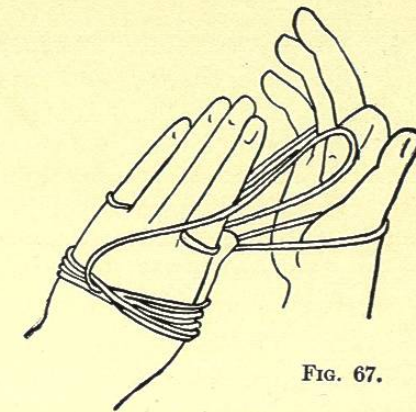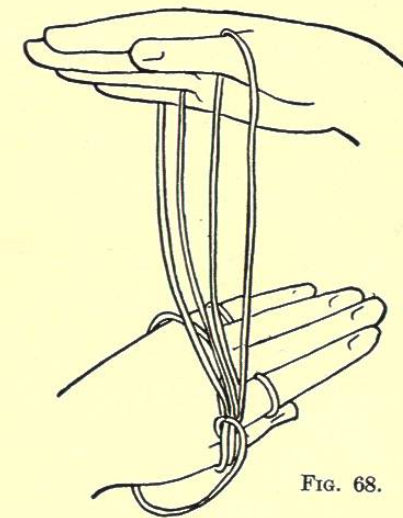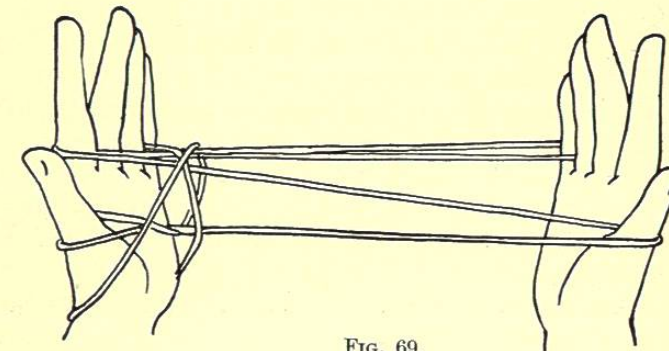
Fig. 66.

Fig. 67.

Fig. 68.

Fig. 69.

Fourth : Release the loop from the left index and draw the strings tight (Fig. 70). The string on the right hand is now in the First Position.

Fifth : With the back of the left index take up, from below, the string on the right palm, as in Opening A, and separate the hands (Fig 71).

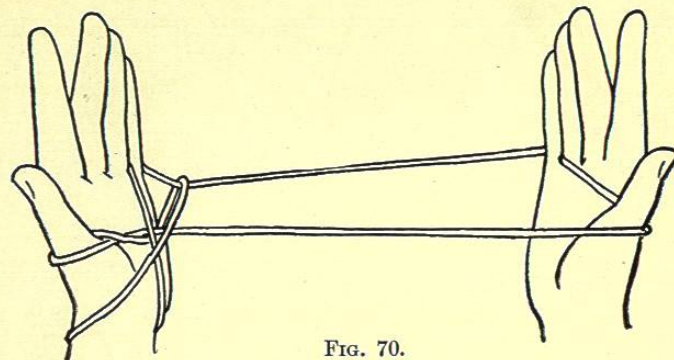*Sixth :* With the right thumb and index pick up the string on the back of the

FIG. 70.

left wrist (Fig. 72), lift it over the tips of all the left fingers, and let it drop on the palmar side; separate the hands (Fig. 73).

Seventh : Release the loop from the left thumb.

Eighth : Put the left thumb, from below, into the left index loop and with-
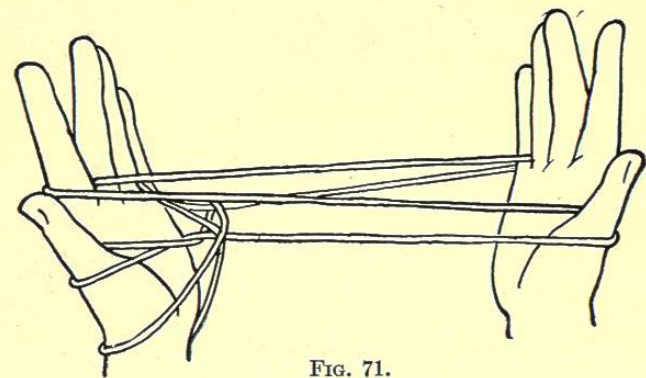

FIG. 71.

draw the left index (Fig. 74), in order to transfer the loop to the left thumb (Fig. 75, Left hand).

Ninth : Turning the palms away from you, bend each index over the near little finger string (Fig. 75, Right hand), and pick up on the tip of the finger the far little
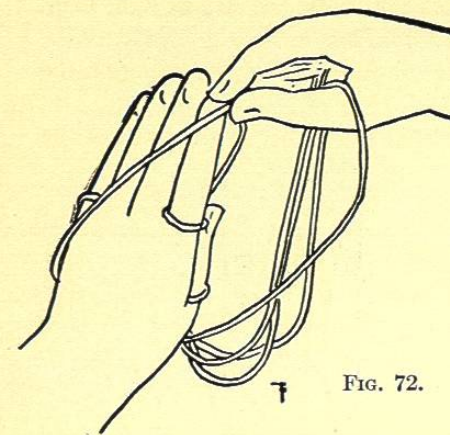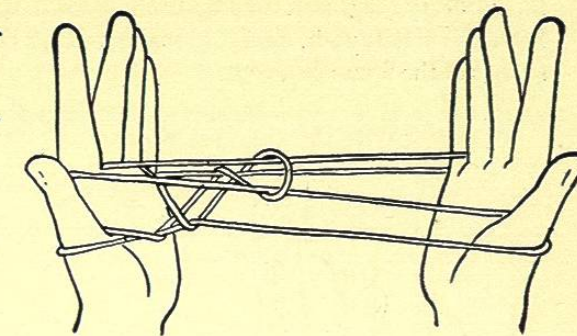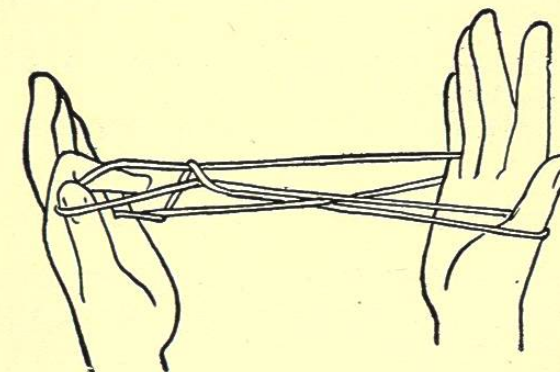
FIG. 72.
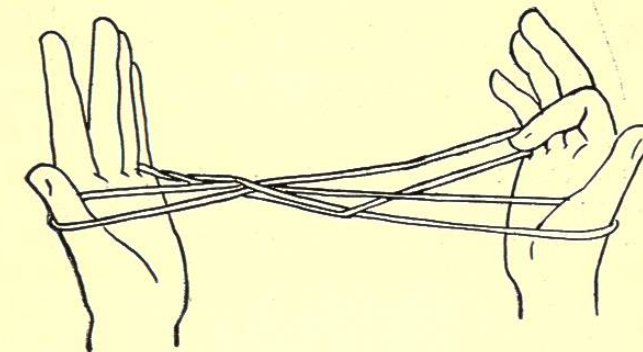

FIG. 73.

FIG. 74.

FIG. 75.

finger string (Fig. 76); holding these index strings high, release very gently the loop from the left thumb, and the snake will be seen winding about the two parallel strings of the figure (Fig. 77).
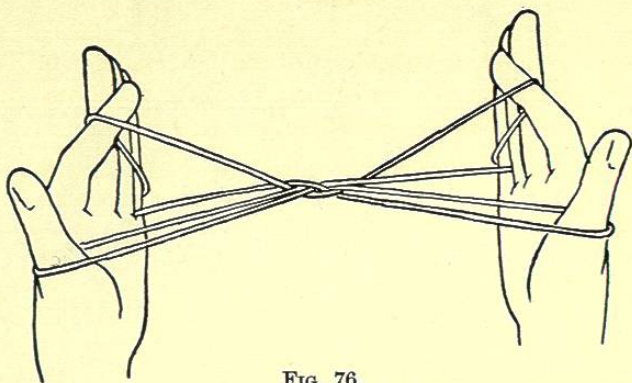

FIG. 76.

To make the snake swim to the right, draw the strings slowly to the left, allowing them to slip through the fingers of the right hand.

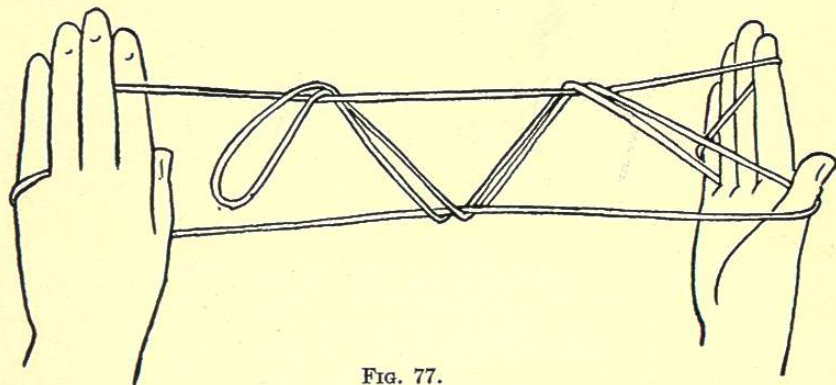This figure is interesting because the *Second* and *Third* movements are unlike anything we find in other figures, and also because the majority of the movements are done on the left hand only, instead of being done simultaneously on both hands. Of course the final figure must be unsymmetrical.

FIG. 77.

A KING FISH (Also a Catch)

This is another of the games obtained by Dr. Haddon in Torres Straits. In Murray Island it is known as *Geigi* = King Fish, and in Mabuiag as *Dangal* = the Dugong, or Sea-cow (Rivers and Haddon, p. 151, Fig. 7).

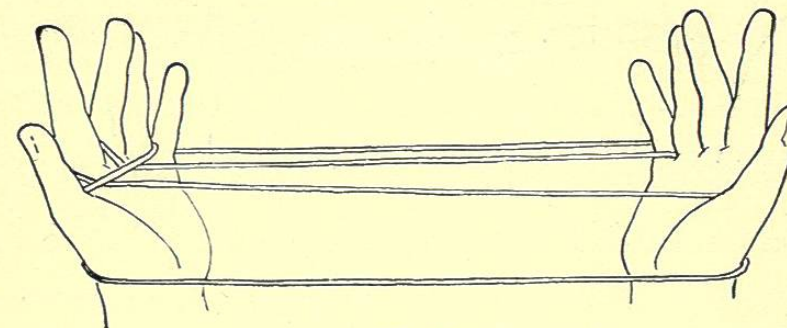*First :* Opening A. (The *left* palmar string *must* be taken up first.)

FIG. 78.

Second : Release the loop from the right index. Separate the hands and draw the strings tight (Fig. 78).

Third : Bend the left index down between the two index strings and hold firmly in the bend of the finger, the string which passes across the left palm and over the
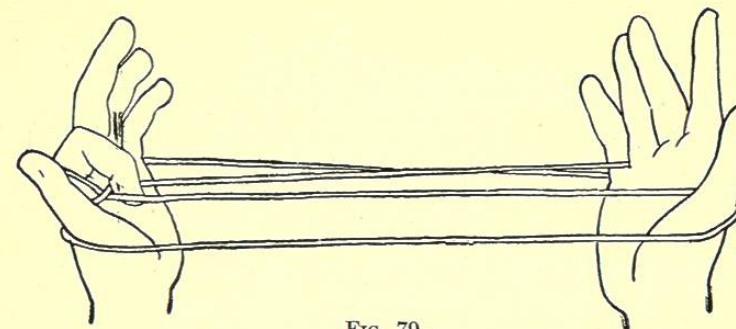

FIG. 79.

index strings (Fig. 79). Turn the left hand with the palm down and the fingers pointing to the right, and let all the strings slip off the left hand except the loop

held in the bend of the left index by which the strings can now be pulled tight (Fig. 80).

Fourth : Arrange the loop held by the left index on the left hand in the First Position across the palm and behind the thumb and little finger.

Fifth : Bring the palms together, point the left index downward, and put it,
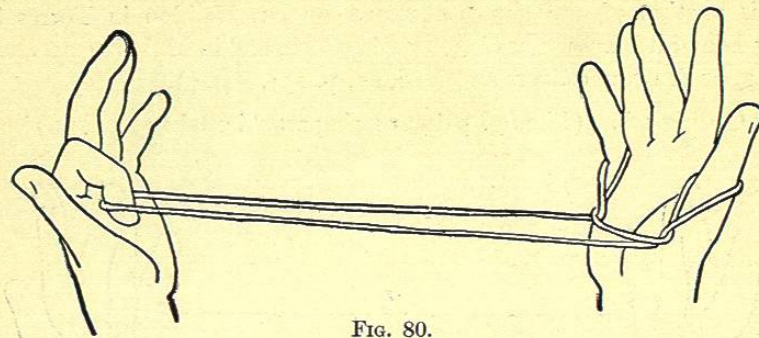

FIG. 80.

from above, behind the string crossing the right palm; with the left index still pointing downward pull the string away from the palm (Fig. 81), and, while turning the left index first toward you and then upward (Fig. 82), separate the hands. This movement puts a twisted loop on the left index.

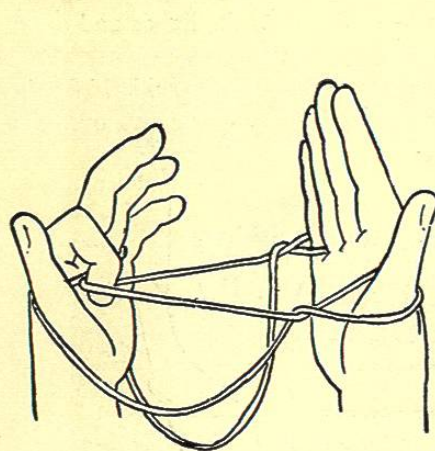*Sixth :* Bend the right index down into the right thumb loop (Fig. 83), and
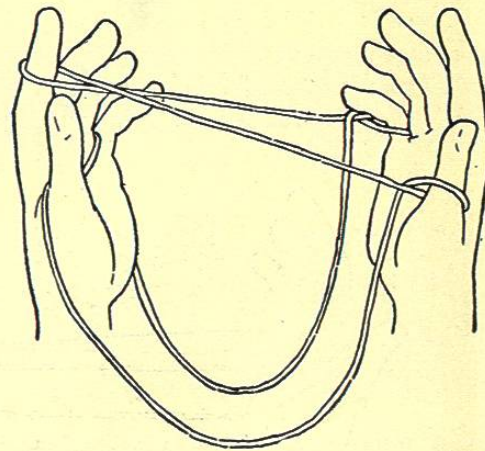
FIG. 81.   FIG. 82.

then, turning the palm away from you, put the right index, carrying the **right far** thumb string, down into the little finger loop (Fig. 84) and pick up with its tip the right near little finger string (Fig. 85). As you return the index to its original
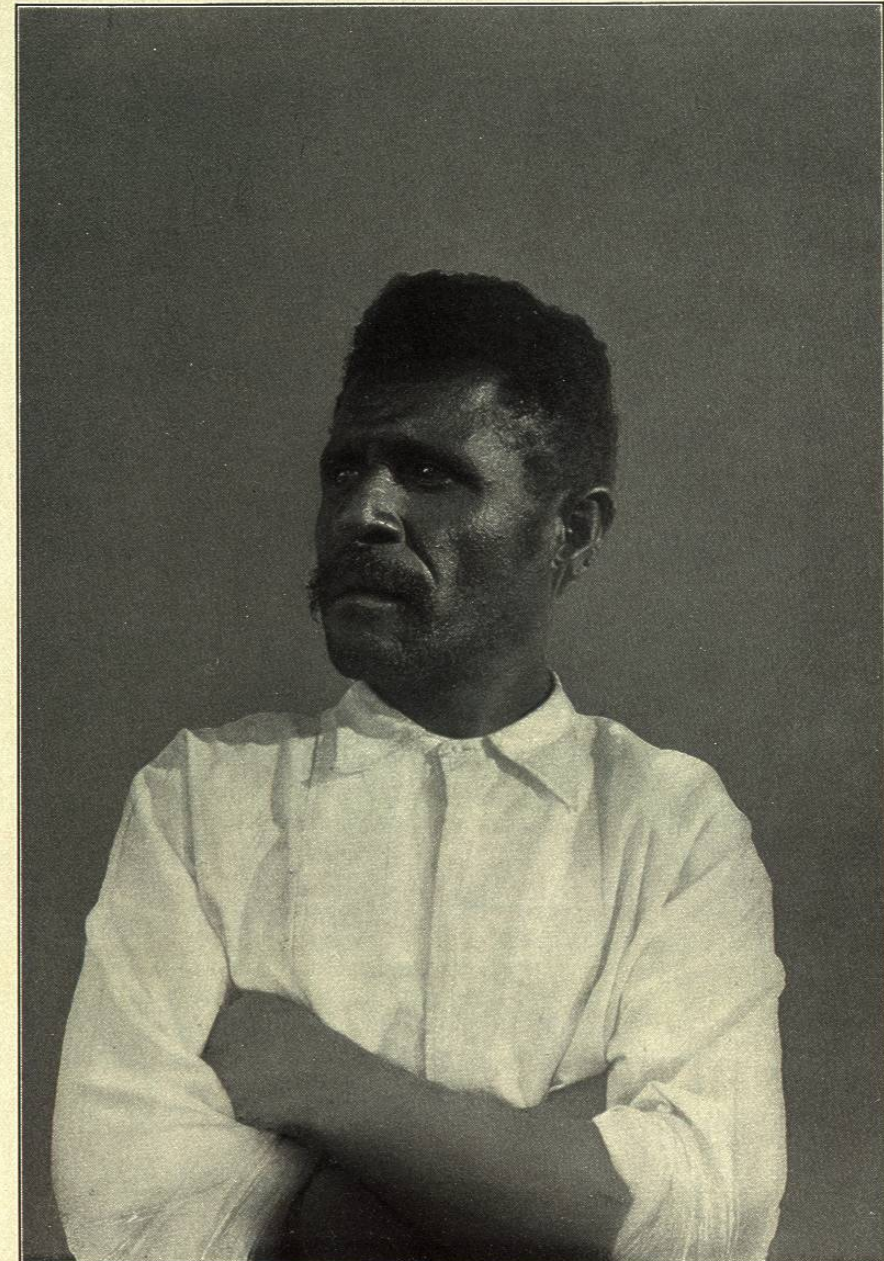
WARIA, A MAMOOSE, OR CHIEF, OF MABUIAG, TORRES STRAITS.
An intelligent and literary Papuan. See Haddon's *Head Hunters: Black, White and Brown.*
(Courtesy of Dr. A. C. Haddon.)

position, of course, the string which was the right far thumb string slips off the index finger. This movement, which appears so complicated, is nothing more than the index finger pulling the near little finger string through the thumb loop.
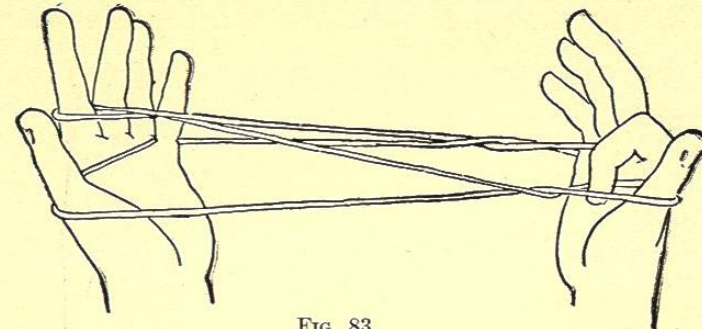
FIG. 83.

You now have on the left hand a string across the palm and a twisted loop on the index; and on the right hand a near thumb string and a far little finger string;
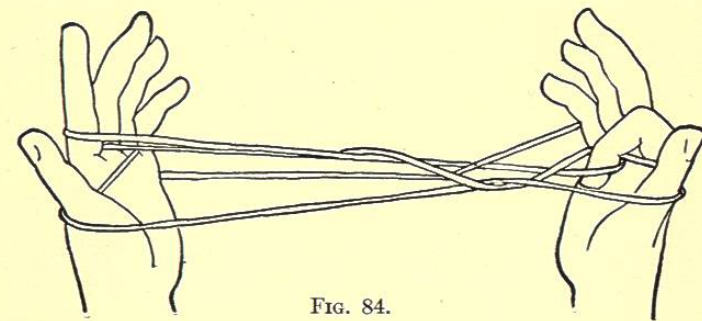
FIG. 84.

the near little finger string is looped around the tip of the index after passing under the far thumb string and pulling it over to the centre of the palm.
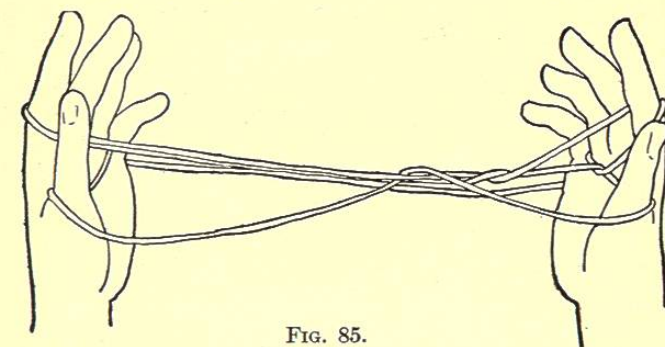
FIG. 85.

Seventh : Bend the left little finger down into the left index loop (Fig. 86, Left hand) close to the index, and pull down and hold securely the left far index string.

Eighth : Bend down the right little finger over the right far thumb string (Fig. 86, Right hand) where it forms the lower string of a triangle, whereof the other
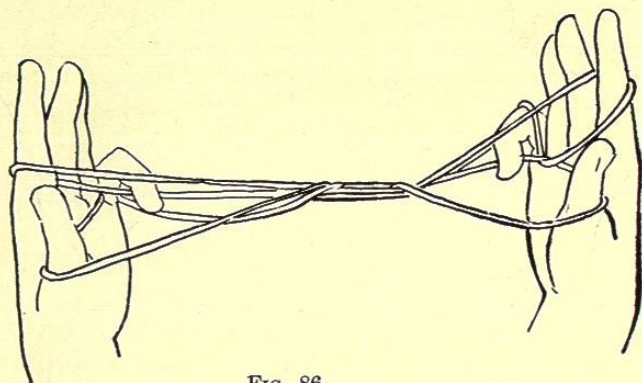

FIG. 86.

two sides are formed by the original near little finger string held up by the tip of the right index. Pull down this far thumb string in the bend of the right little finger.

Ninth : Let the loops slip off the thumbs and extend the figure between the index and little finger of each hand (Fig. 87). The strings on the index fingers must be kept well up toward the tips; if the figure does not come properly it can be
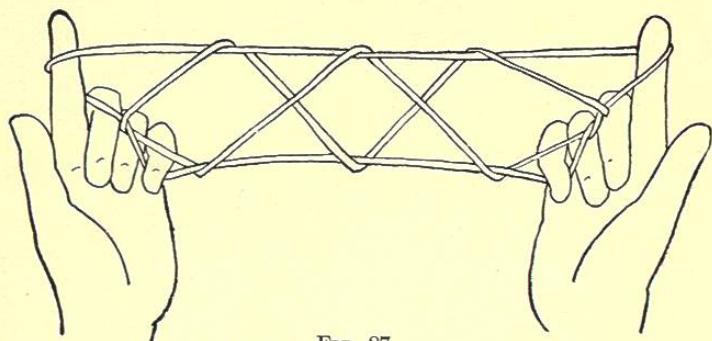

FIG. 87.

worked into shape, by pushing toward the centre of the figure with the thumb the straight string running, on each hand, from the index to the little finger.

Tenth : If a second person put his hand through the middle diamond of the figure his wrist will be caught in a double loop when the strings are dropped from the left hand and pulled tight with the right; his wrist will not be caught if the strings be dropped from the right hand and pulled with the left hand toward the left.

This is an interesting example of a figure which starts unsymmetrically, and then, after a series of very different movements by each hand comes out almost perfectly symmetrical at the end. You will notice that there is a twist at the right end
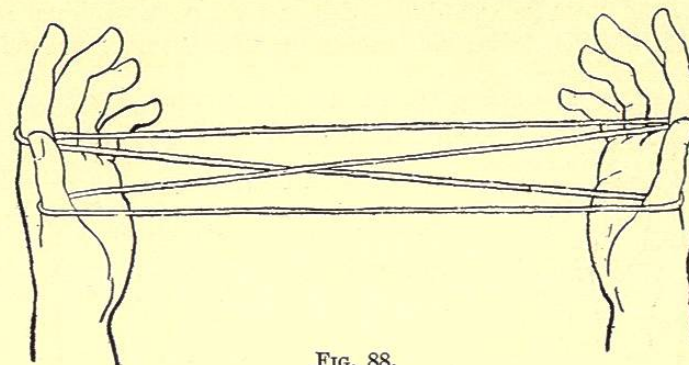

FIG. 88.

of the right lozenge and a simple loop at the left end of the left lozenge. If the right palmar string be taken up first in the formation of Opening A, and then the movements of the hands reversed, the wrist will be caught in a double loop when the right-hand strings are dropped. By forming the figure first one way and then the other you can add to the perplexity of the observer.

BAGOBO DIAMONDS

I was taught this figure by a young man of the Bagobo Tribe in the Philippine Reservation at the St. Louis Exposition in August, 1904. He had no name for it. I found that it was also known to the Philippine Linao Moros.

First : Opening A. (The *left* palmar string *must* be taken up first.)

Second : Release the loops from the little fingers. There is now a loop on each thumb and a loop on each index (Fig. 88).

Third : Transfer the

FIG. 89.

thumb loops to the index fingers by taking up from below with the back of each index the far thumb string (Fig. 89, Right hand). You now have on each index, two loops, an upper and a lower (Fig. 89, Left hand).
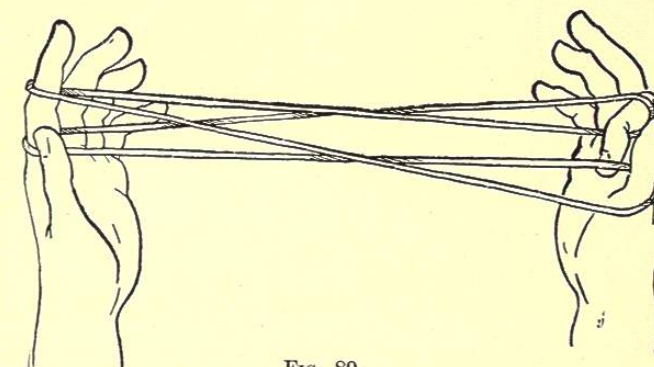
Fourth : Pass each thumb away from you over the lower near index string, and with the back of the thumb pick up, from below, the lower far index string, and return the thumb to the original position (Fig. 90).

Fifth : Pass each thumb away from you over the upper near index string, and
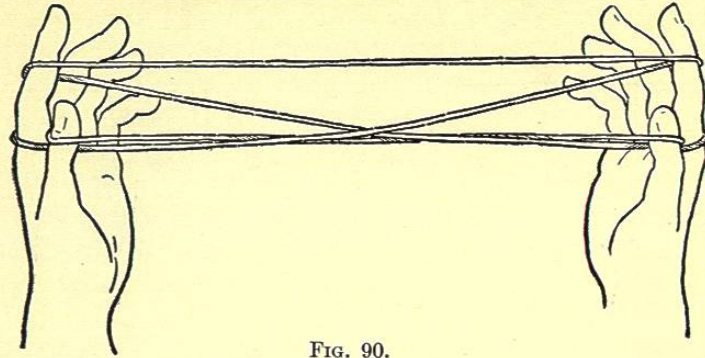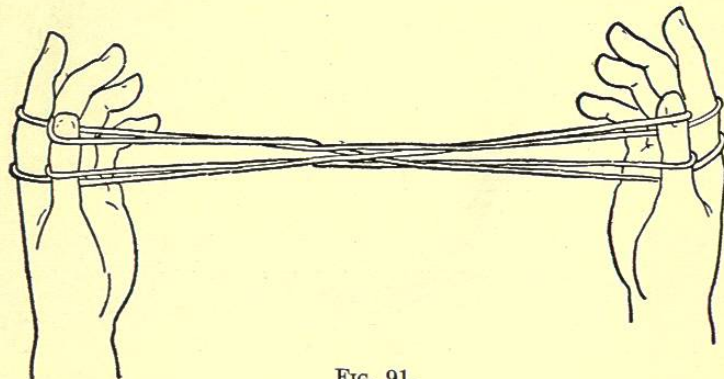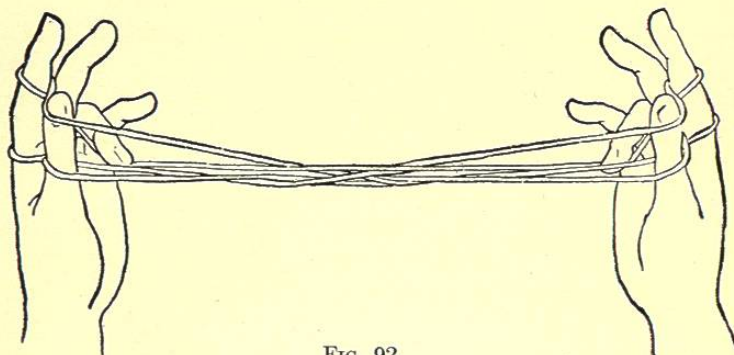

FIG. 90.

FIG. 91.

FIG. 92.

with the back of the thumb pick up, from below, the upper far index string, and return the thumb to the original position.

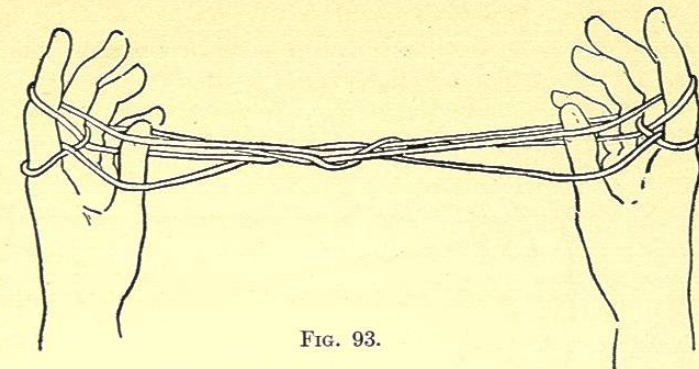By these movements the far strings of the two index loops are crossed over their corresponding near strings,
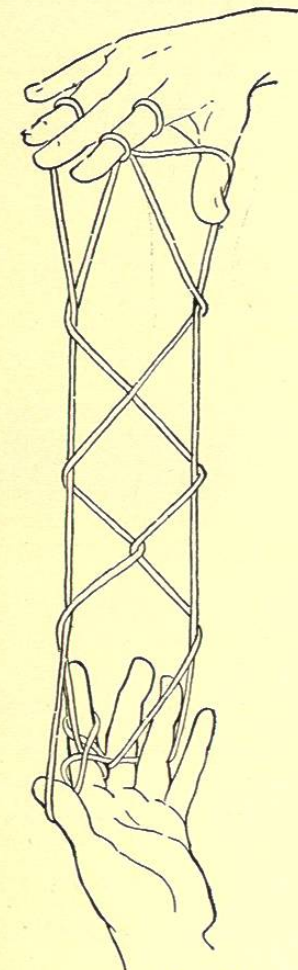

FIG. 93.

and pass around the backs of the thumbs to become lower and upper near thumb strings (Fig. 91).

Sixth : Pass each ring finger over the upper near index string and pick up, from below, on the back of the ring finger the lower near index string (Fig. 92), and return the ring fingers to their positions (Fig. 93).

Seventh : Pick up with the teeth, close to the back of the thumb, the right lower near thumb string, and lift it over the tip of the thumb, and drop it on the palmar side, being careful not to disturb the upper near thumb string. Repeat this movement on the left hand by picking up with the teeth the left lower near thumb string, lift it over the tip of the thumb, and drop it on the palmar side.

Eighth : Keeping the strings drawn tight, swing the left hand down, and turn it palm up with the fingers pointing away from you; turn the right-hand palm down with the fingers pointing toward you and the completed figure appears (Fig. 94).

In this figure the *Fourth* and *Fifth* movements are unlike anything observed in the preceding figures. The interesting point, however, lies in the fact that while both hands do the same movements throughout the figure, the finished pattern will not appear unless one hand is revolved through half a circle. Moreover, when the pattern does appear, it is not perfectly symmetrical.

FIG. 94.

BAGOBO TWO DIAMONDS

This figure was shown me by the same young Bagobo who taught me the pre-ceding Diamonds.   He had no name for it.

First : Opening A.

Second : Release the loops on the thumbs.

Third : Turning the palms away from you, bend each index away from you over the far index string, and pick up from below on the back of the finger the near
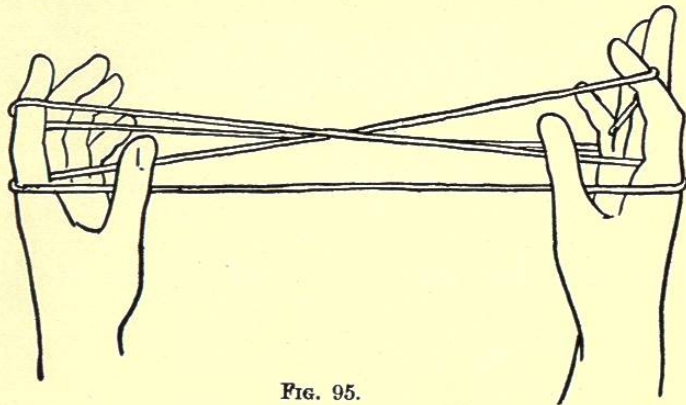

FIG. 95.

little finger string; straighten the index and turn the palms facing each other (Fig. 95, Right hand); then release the loop from each little finger (Fig. 95, Left hand) and draw the strings tight.   You now have two loops on each index, an upper loop with a straight far string and a lower loop with a near straight string.   The right
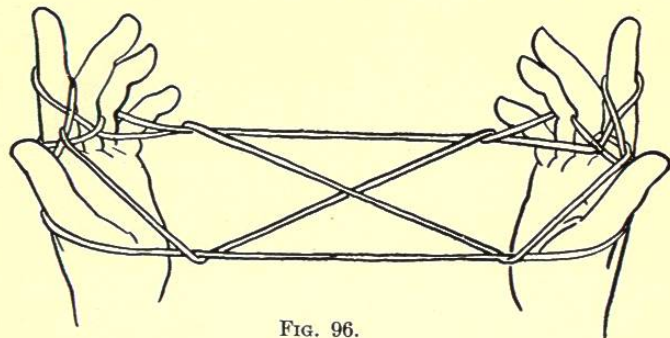

FIG. 96.

lower far index string crosses on the near side of the left lower far index string; in the Bagobo Diamonds, the left lower near index string crosses on the near side of the right lower near index string.

Fourth, Fifth, Sixth and *Seventh :* The same as the corresponding movements of the Bagobo Diamonds.

The finished pattern appears on the completion of the *Seventh* movement (Fig. 96).

This figure closely resembles the preceding figure, but in the *Second* and *Third* movements it is the little finger loops which are transferred to the index fingers. The final figure is symmetrical, and does not require any rotation of the hand to produce it.