

NOTES ON DYEING AND WEAVING AS PRACTISED AT SITIAWAN
IN PERAK.

BY L. WRAY.

[WITH PLATE XI.]

THE method of weaving which is carried on to a limited extent at Sitiawan by a few Malay women, was introduced from Kelantan, and differs from that in other parts of Perak in several important particulars. As it does not appear to have been previously described, a few notes on it may be of interest.

The material used is silk. This comes from China, and is purchased by the weavers at Singapore for about \$3 per pound. It is then in a raw state, harsh, and of a yellowish colour, and before use it has to be cleaned by washing with water and wood ashes. The ashes of the husk of the fruit of the durian (*Durio zibethinus*), of the husk of the silk-cotton (*Eriodendron anfractuosum*), or of the fruit-stalks of the coconut palm (*Cocos nucifera*) are employed for this purpose. After treatment with this lye, it is rinsed in clear water and dried, when it becomes white, soft, and silky, and is ready for dyeing.

The patterns are produced by a process of tie and dye, but unlike the Indian method, it is the thread before weaving which is tied and dyed, and not the woven cloth. It is, as a rule, the thread of the warp which is dyed to produce the pattern, the woof being of one colour.

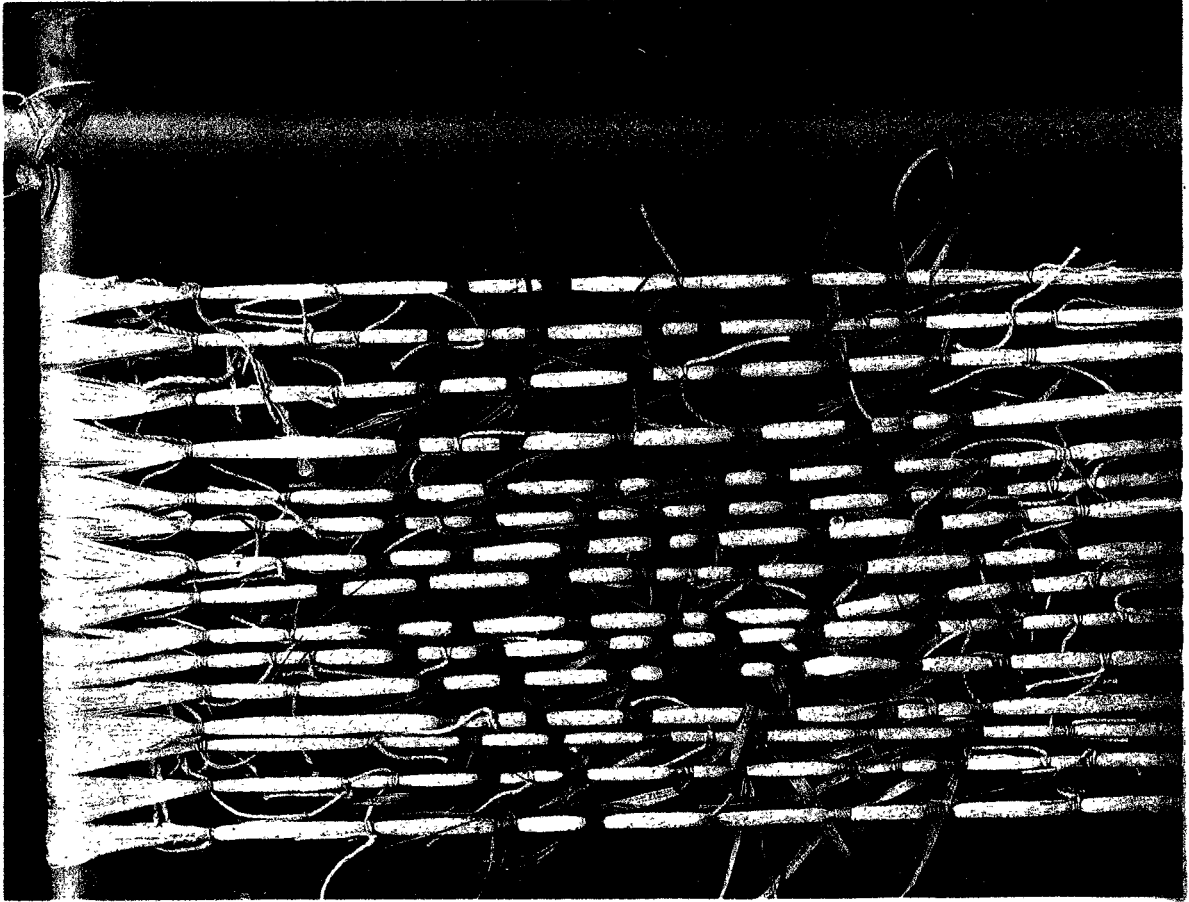
If the pattern is to be, say, white on a coloured ground of, say, red, the parts of the warp which are to be white are covered up previous to dyeing so that they are protected in those places from the action of the pigment and remain white. When the pattern is a parti-coloured one, the same means are employed, but all except the ground colour is covered up in the first instance. The whole is then put into the dye for the ground colour. Then, all that is to be, say, yellow is uncovered and the yellow dye is applied to those parts, then the blue parts are uncovered and dyed, and so on. Lastly, the covering is removed from the white parts, and the thread is ready for the loom. To do all this well, demands a great amount of work, of a most difficult nature when intricate patterns are to be produced, but the results are often very beautiful, and considering the amount of time and skill involved in the manufacture, the cloths are by no means dear at the price locally asked for them.

The method of carrying out the work is as follows:—A frame is constructed of four pieces of bamboo of rather greater length than the length of the cloth it is intended to make. The bamboos are tied together with rattan or string, so that

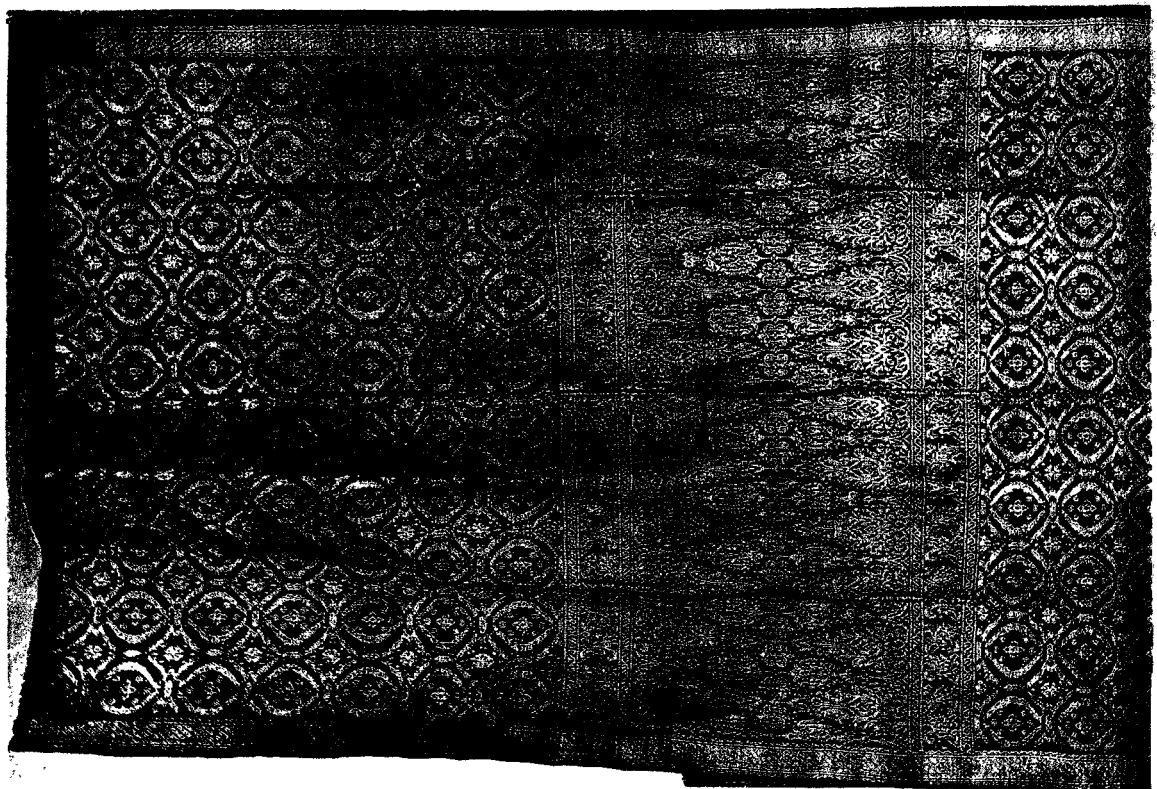
the frame can be taken to pieces easily. The silk is then wound on to this frame till there is judged to be sufficient for the warp of the intended cloth. It is then separated into distinct bundles of perhaps one hundred threads each, and these bundles are tied at either end of the frame. The number of bundles of thread is determined by the width of the cloth to be woven, and as about fifty threads go to the inch and five threads from each bundle are taken, it requires ten bundles per inch of width. Where a strip of the same pattern is repeated in the design, larger bundles of thread are required for that portion than when it only occurs once. The bundles of thread having been arranged on the frame, the covering up with waxed thread for the narrow bands of colour and with strips of banana stem for the broad bands is begun. The patterns are not drawn, but are made up by the unaided eye on the frame. The thread or banana stem is bound tightly round the bundles of silk and is tied with what is known as an upholsterer's knot. In Pl. XI, Fig. 1, is shown a portion of a frame with the bundles of silk-thread on it and the waxed threads and banana stem strips in place ready for dyeing. The tying is a very long and tedious process, as may be imagined. As before mentioned everything except the portions of the silk threads which are to form the ground is covered in the first instance. Two strings are then threaded through the loops of the bundles along the side of the bamboos, so that the position of the bundles may remain the same during the process of dyeing. The bamboo frame is then untied and the silk removed from it. Almost invariably the ground is red and this is produced by lac. Stick-lac is pounded up and soaked in water for two days and then boiled. The silk is dipped into this solution and the colour is fixed by subsequent immersion in a solution of alum in water, and the acid juice of the fruit of the Glugor (*Garcinia atrovirdis*). The same mordant is used with all the other dye substances employed in this work. When the ground is finished the bundles of silk are rearranged as before on the bamboo frame. Then all the parts which are to be yellow are uncovered. These are then dyed by the local application of the yellow dye. For this purpose chips of a wood called Kadrang (probably *Cryptocarya impressa*) are treated in the same way as the lac. Turmeric (*Curcuma longa*) is sometimes substituted for Kadrang to produce yellow. The other colours of the pattern are dyed successively in the same way, until the whole are finished, then the covering is removed from the white portions. The green and blue dyes are purchased locally from the Chinese shops.

The whole of the bundles having been dyed, the silk for the warp is put into the loom, five threads from each bundle being taken and carefully arranged in the comb of the loom so that the whole pattern looks correct. The wool thread is of the colour of the ground, but here and there a stripe of some other coloured thread may be introduced.

The following details will give some idea of the arrangement of the patterns in one cloth which I carefully examined. This cloth was what is called a Sarong, that is a sort of skirt worn by Malays of both sexes. The ground colour was red, and there were also in it white, black, blue, green, and yellow in the warp, with



Warp-threads on frame, showing method of tying preparatory to dyeing



A silk sarong in the collection of the Perak Museum

gold thread at intervals in the woof, which was otherwise red like the ground. The patterns were mostly more or less diamond shaped, and to produce them one hundred and twenty differently dyed bundles of threads had been employed. There were four different stripes of patterns. The bulk of the cloth was made up of a narrow pattern of ten differently dyed threads separated by a streak of yellow, then there was a broad strip of fifty, a narrower one of thirty-six, and another of twenty-four differently coloured threads. The narrowest pattern was about 1 inch in width and the broadest about 5 inches. The woof was red and at intervals of about $1\frac{1}{2}$ inches a single gold thread was inserted. This cloth, which was about 4 feet wide by 7 feet long, I was informed by the maker, had taken two months to dye and weave, and the price asked for it was \$20, which is about thirty-six shillings in English money.

The effect of these cloths is very charming and harmonious, and a great deal of their beauty is undoubtedly due to the woof being of the ground-colour, so that each portion of the pattern is mixed with this colour and all crudity of colouring is thereby prevented. I sent several of these cloths to the Indian and Colonial Exhibition in 1886, and their harmonious colouring and artistic excellence was much admired by the late Sir Frederick Leighton.

In the example just described only single threads of gold were interwoven with it, but many cloths are profusely decorated with gold. This is done during the weaving, in the following way:—If a part of the cloth is to have roses at regular intervals arranged in *quincunx* order, and there are to be ten of the rows across the cloth, five little bobbins, made up of two small slips of bamboo tied together in the form of a cross, wound with gold thread, would be required, one for each two rows. The flowers are put in as the weaving proceeds, and the five threads are carried in zigzag lines from flower to flower at the back of the cloth. In this work the back of the cloth is always upwards in the loom. Sometimes the cloth to be enriched with gold is of an uniform colour, but more often it is covered with patterns produced by the parti-coloured dyeing of the warp already described, in which case the gold forms a part of the general design.

[NOTE.—Several accounts of the processes of dyeing and weaving in Sarawak will be found in “The Natives of Sarawak and British North Borneo,” by H. Ling Roth (vol. ii, p. 29). The dyeing of the Sea Dyak textiles is described by Dr. A. C. Haddon, in the Bradford Report of the British Association (1900, p. 901). These processes are similar to that described by Mr. Wray.—Ed. J.A.I.]