

## THE HISTORY OF WEAVING.

**N**OW, when or where the art of weaving originated we shall probably never know. The presumption is that it was discovered at various periods and by different people. The earliest notices of it in ancient literature do not refer to it as a new invention, but as a common and familiar process. The fine linen of the Egyptians is spoken of in the book of Genesis, and their mummy cloths, manufactured of the same material, are to be seen in our museums. Still older specimens of linen fabrics have been recovered within the last twenty-five years, from the remains of the Swiss lake village of the Stone Age, and a few particulars respecting them may be interesting to our readers. Mr. Barlow does, indeed, refer to these discoveries in two short and obscurely worded paragraphs; but we think they ought not to be dismissed in so summary a manner. About a quarter of a century ago the remains of pile dwellings were discovered in the course of excavations carried on in land gained from the lake of Zurich. Attention having been called to the subject, it was soon found (1) that similar settlements had existed in connection with all the Swiss lakes; (2) that these settlements were of great antiquity, and that some of them dated back to very remote periods. These pile dwellings were wooden huts built over the water upon platforms supported on piles driven into the bed of the lake, probably as a security against attack from wild beasts and neighboring tribes. That this habit of building over the water continued for many centuries there can be no doubt, and that the earlier inhabitants of the country who adopted the practice were unacquainted with iron and bronze is also evident. Amongst these earlier settlements, that of Robenhusen, (Zurich) is one of the most interesting, from the circumstances that the site of the settlement is now a peat moor, and that carefully conducted explorations have shown that it was twice totally destroyed by fire. To this latter circumstance we owe the preservation of a large quantity of relics which throw a flood of light upon the habits of the lake dwellers, and amongst them are many specimens of their spinning and weaving. Some of these are before us as we write; they have been carbonized by the fire, and thus, instead of rotting away, have been preserved. No hemp has hitherto been discovered either at Robenhusen or elsewhere, but flax must have been cultivated freely. It has been found as seed, and in various stages of preparation, and the fabrics into which it was worked are figured in Dr. Keller's book. Some of them are simply plaited work, the strands of which are formed not of cord, but by bundles of untwisted fibre. Others, however, are distinctly woven, as, for instance, a coarse cloth showing an average of between 25 and 34 threads to the inch in both warp and weft. No very closely woven cloth has yet been found, nor has anything come to light, "which in uniformity and regularity of work can even in remote degree be compared with the products of the present day." Still the Robenhusen weavers were not without some notions of variety, as one specimen found differs from that last described, in "having every alternate three threads apparently thicker than the other intermediate three, by which the cloth becomes ribbed." Another specimen is a piece of fringe, which may have been used for trimming garments, and another is a kind of ribbon. At Irghausen the cloth mentioned above was found with embroidery worked upon it, and also a manufacture which Dr. Keller describes as a kind of cloth which is "almost a coarse pattern of what drapers call check muslin." "It has," he says "been made simply by an alteration in both directions of rows of five or six fine threads with rows of probably the same number of smaller ones almost amounting to small string."

A loom of very simple construction would be sufficient for the manufacture of all the fabrics hitherto discovered in the lake dwellings; but that looms were used is evident, both from the nature of the fabrics themselves and the frequent discovery of weights which could hardly have been employed for any other purpose than to keep the threads of the warp stretched. At Moringen (a settlement of the Bronze Age) a bone shuttle was found. Dr. Keller figures a loom of very rough construction made by Mr. Pauer, a ribbon manufacturer of Zurich, for the purpose of showing that a very simple contrivance is sufficient for the production of fabrics similar to those of the Stone Age. The main feature of this loom, are two uprights, made of slender forked tree stems, and a cross-bar resting on them. The looms of the Egyptians were also very simple affairs, judging from the representations that have been preserved; but they certainly did much finer work than the lake dwellers of Switzerland. Linen mummy-cloth has been found, "woven with threads of about 100 hanks to the pound, with 140 threads to the inch," and it may be remarked in passing, that the well-known French cambric is a survival of the Egyptian art, tracable backwards from Cambray in France to Zavia, in Spain, where it was introduced by the Moors. Elaborate and complicated machinery is certainly not essential to the production of fine work. The looms of India, which are more interesting, as they have most probably supplied the pattern upon which our own hand looms are made, are more remarkable for simplicity and apparent rudeness of construction than for anything else; and yet the work done by the Indian weaver is all but inimitable. We do not know how long the Indian museum at South Kensington will remain intact, as the Government has, we grieve to say, determined upon breaking up the collection; but there is at present a very beautiful and costly show of Indian fabrics there, and on the walls a display of drawings showing the native weaver at his work. The whole series is well deserving a careful study, especially as bringing out some important points of contrast between ancient processes as represented by Oriental and modern manufacture. Mr. Barlow, for instance, quotes some particulars relative to Cashmere shawls, showing that a first-rate woven shawl, weighing seven pounds, will fetch in Cashmere £300, this price being made up as under:—

Cost of material.....	£ 30.
Wages and labor.....	150.
Miscellaneous expenses.....	50.
	230.
Duty.....	70.
	£300

A glance at these figures is sufficient to make one feel the old-world character of the manufacture which a Cashmere shawl represents, and how incompatible with our nineteenth century work it is and must remain. It is almost impossible to imagine skilled English workmen spending years of toil over a single article of dress, and if they did, their productions would be too costly to find buyers. The machinery of our manufacturing districts is essentially labor-saving, the main object being to produce the largest amount of work with the least possible expenditure of skilled workmanship. The Oriental workman, on the other hand, is content to labor for a bare subsistence at occupations in which manipulative skill is almost everything.

That this latter condition of things is quite compatible with civilization of a certain grade is manifest from the example of ancient and modern times, but it is equally obvious that it is not in harmony with the Benthamite maxim of "the greatest good for the greatest number," since it is a condition in which the welfare of the masses is sacrificed for the aggrandisement of the few.