FLYING SHUTTLE

This is not only a piece of weaving equipment, but also one of the most controversial issues among handweavers. There are many who consider the flying shuttle as a symbol of corruption of the purity of our craft.

Before we start considering the pros and cons involved in using a flying shuttle in handweaving we shall give a short description of this mechanism. A detailed description would be superfluous, because it is rather unlikely that one of our subscribers would try to build this gadget.

A flying shuttle, sometimes called "fly-shuttle", is much more than a shuttle. It is a superstructure built on the beater, usually of the overhead type.

The batten, or beater has a so-called "shuttle race", or a narrow board in front of the reed, much longer than the reed itself. At each end of the shuttle race we have a wooden box (or boxes). The shuttle enters one of these boxes after every shot of weft, and then is propelled in the opposite direction by a combination of sliding metal shafts (pickers), cords, and of a handle which hangs above the centre of the beater. The shuttle is straight, heavier than a hand-shuttle, with points protected with metal caps. Instead of a bobbin or quill, there is a stationary "cop"; the weft unwinds from one end.

The weaver holds the handle always in the same hand, and operates the beater with the other. The shed is changed as usual by pressing treadles.

Originally the purpose of this contraption was twofold: to increase the speed of weaving, and to increase the maximal width of
the fabric. We can dismiss the first factor right away. It is possible that in the old times when a weaver worked 12 hrs a day, always at the same type of fabrics, a fly-shuttle weaver after several years of practice could "outweave" a hand-shuttle operator. Nowadays this factor is absolutely immaterial, and for the following reasons:

1. The beater with the fly-shuttle mechanism is much heavier than a normal beater, and therefore much harder to handle. If it is designed so as to operate more than one shuttle it is still heavier and more unwieldy.

2. The weaver gets tired much faster with a fly-shuttle, not only because beating requires more strength, but also because he works in an unsymmetrical position, with one hand performing a completely different operation than the other.

3. The gadget is bad enough with an overhead beater. With an upright beater it is still worse. Incidentally it produces a tremendous racket not calculated to soothe the weaver's nerves.

4. It is absolutely useless in any weave which requires several shuttles.

5. The flying shuttle mechanism is not cheap, cannot be installed just on any loom, and it cannot be made easily at home.

With all these limitations, there is little to fear from the competition of "unscrupulous" weavers who try to speed up their production by the means of a fly-shuttle. They should be pitied rather than censured, since obviously they are martyrs of a bad cause.

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But the fact remains that if we must weave a fabric 72" wide or more, the only practical answer is a flying shuttle. The alternative of two weavers sitting side by side at the same loom is psychologically unsound, with the exception perhaps of identical twins.

Thus we may safely reject the idea that a flying shuttle could possibly present a danger to our ethical standards, and we can use it with clear conscience for very wide fabrics, provided of course that we ever learn how to operate it.

Still there is one human factor left out. From time to time we hear about a new handweaving venture which is supposed to use
flying-shuttle looms for mass production of so-called handwoven articles. This is bad. And it is bad, regardless of whether they use a fly-shuttle or not. The very idea of mass production does not belong in handweaving, at least not any more since industrial revolution. Mass production may be necessary, but then it has nothing to do with us. It is a problem solved more than a century ago by power weaving.

The so-called handweavers who try to compete with real craftsmen by making their articles cheaper, and at the same time competing with the textile industry by pretending that their articles are hand woven, are dishonest to both, because their production is neither industry or craft. But this has nothing to do with the flying shuttle. One can easily train a flock of "shuttle pushers" to weave by hand faster than any normal handweaver. He will probably use also extremely long warps, automatic bobbin winders, and half-automatic looms. Why not then go a step farther and use power looms?

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So much for the flying shuttle. But there is one part of this equipment, which is worth saving: the shuttle itself. Provided that it is not too heavy, and that the points are not too sharp (power-weaving shuttles are absolutely useless in handweaving), it is much better than a normal hand-shuttle for weaving wide yardage. But this is about all.

Therefore there should be really no controversy about the flying shuttle itself, but rather about the attitude of those weavers who try to cheapen not only their production by the craft itself.

FROM THE EDITOR

THERE WAS A MISPRINT ON THE FIRST PAGE OF THE LAST ISSUE OF THE "MASTER WEAVER". INSTEAD OF "NO. 60", IT SHOULD BE "NO. 59". PLEASE CORRECT THE MISTAKE, AND ACCEPT OUR APOLOGIES.