

A GUARD FOR THE JOINTER.

A Protective Device of Automatic Type—Operated by the Moving Lumber as it Passes Over the Tables.

A Belgian paper has a description of a jointer guard that appears to possess certain novel features among the many and ingenious devices designed for the better protection of operators of machines having rotating cutter-heads.

However, Figs. 1 and 2 are vertical sections of a machine duly equipped with this protective piece of apparatus, the illustrations exhibiting the guard in two different positions. Fig. 3 shows a plan of the machine with a modified form of the guard.

The invention is characterized by a shield which closes or opens the gap between the tables in such a manner that the workmen cannot come in contact with the knives, at least that is the intention, and by a study of the following particulars it will be seen how the inventor proposes to carry his ideas into effect.

The cutter-head C has a shield K which is a segment of a circle and slides up and down in suitable curved guides located at each inner side of the machine. In the upper

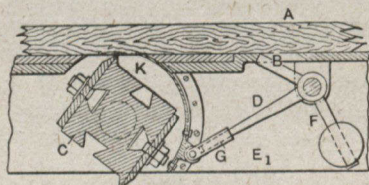


Fig.1

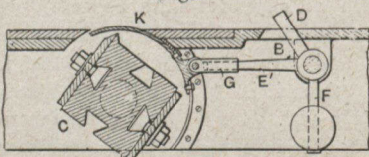


Fig.2

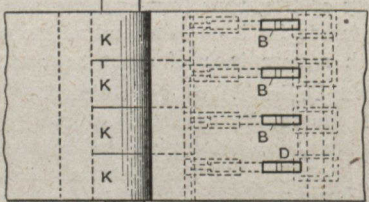


Fig.3

position as illustrated in Fig. 2, the guard or protecting shield is over the knives and the gap in the machine is closed. The guard K is operated through a bell crank, one arm E of the bell crank fitting loosely in a socket at G on the shield. The other member of the bell crank at D projects through an opening in the table at B.

A weighted lever at F actuates the combined arms D and E and is heavy enough to carry the guard K upward and over the cutter-head C and thus bridge the gap between the tables. It will be noted that when the knives are thus guarded by the encircling shield K, the arm D projects through the opening in the table at B.

The latter position of the device is a key to Fig 1 where the machine is illustrated when at work. The board A passes over the opening B and in moving from right to left, presses down the lever D and thus moves the guard out of the way. It would seem that the inventor depends upon the work A to hold back the shield when the opening B is uncovered by the moving board or whatever stock is in hand. But it is not

quite clear how the guard K can be prevented from coming in contact with the work A as soon as the lever D is free, and then the guard and work moving in the same direction are the more surely interfering with the knives and before the end of the work is reached.

Fig. 3 illustrates the division of the guard K into adjoining sections. The several sections have their individual complements of levers and when narrow work is being done on the machine only so much of the guard moves out of the path of the stock as will allow the respective width of the knives to take effect.

RUNNING THE STICKER.

By W. G. Carlisle.

To run a sticker, a man should, in the first place, have a thorough training and a perfect knowledge of the machine. In the second place he must be competent in the making, setting and tempering of knives. In short, he should serve a sufficient time as apprentice with a capable man over him to guide him in his efforts to master the machine and correct his mistakes.

The running of a sticker is, in fact, of such vital importance in the woodworking line that it may well be considered a trade in itself; and to learn a trade, as we all know, requires time.

The writer worked eleven years in a shop in Cleveland, Ohio, and for twenty-seven years in various localities in the North, in the West, and on the Pacific Coast, and in all these places he found a great variety of opinion as to how to set up and make the required changes to a sticker. Some shops and mills still cling to the old ways in this respect, while in others they use the more modern methods.

In some shops, for instance, they use samples or patterns in the setting up of a machine, but as in the course of time these samples become twisted and very hard, it is very difficult to place them properly, especially where the machine stands in a dark place. In other shops the men running the sticking machine very seldom use the patterns; they are evidently a thing of the past in most mills.

Some men saw off a piece of moulding which is to be run, make the knives to match, and then fasten the pattern to a short stick to hold it under the head, and by this means set the knives. Other men will set knives by the use of the common rule, as near as possible, trying perhaps several times and refitting the knives until they arrive at just what is wanted.

Some sticker men, after they get the knives for stock moulding in proper working order, mark the profiles of their knife simply on a piece of board, and file it away; and generally when a man quits the shop he destroys all such patterns and his successor, the new man, will have to do the same work over again. This, however, occurs more often in the West than in the East.

To my knowledge there is no uniform system adopted by sticker men in this work, but as regards the setting of knives I believe that the rule will universally be adopted for that purpose, and all old methods will be eliminated. What would you think of a carpenter keeping a pattern of every rafter or brace he cuts out? Wouldn't you say: "What is the matter with his square; can't he lay out two alike?"

This is exactly the idea I wish to convey to the sticker men. The "up-to-date" sticker man uses the sticker man's rule or gauge; this tool will show you just where to set a