Feb. 24, 1942. J. G. COLLINS 2,274,129

JOINTER FENCE

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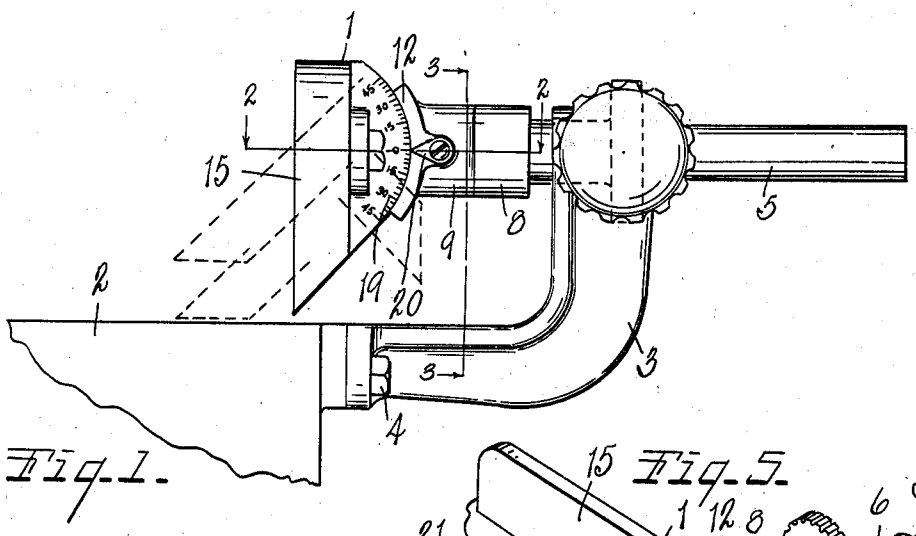


Fig. 1.

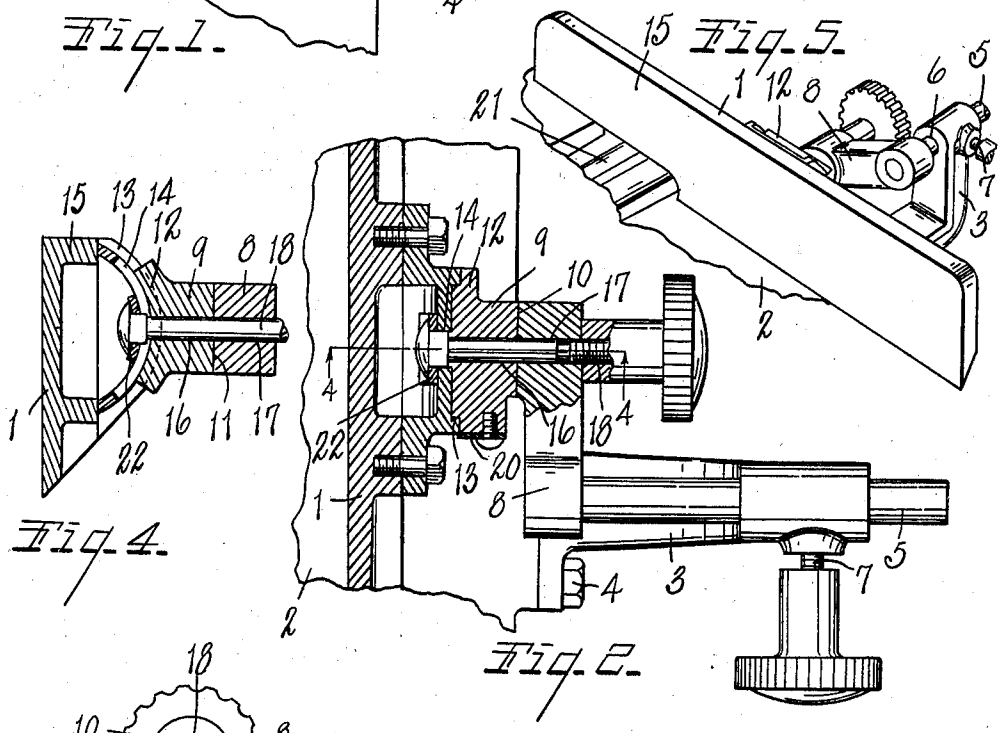


Fig. 4.

Fig. 2.

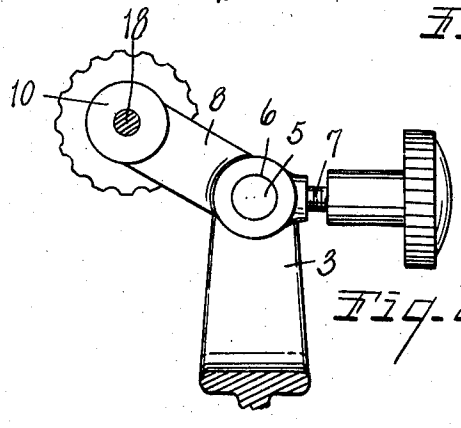


Fig. 3.

Fig. 5.

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JOINTER FENCE

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4 Claims. (Cl. 143—170)

This invention relates to fences for jointers or the like and it has for its objects:

First, to provide a new and improved fence of the type referred to.

Second, to provide such a fence which can be made easily and inexpensively.

Third, to provide such a fence which is easily adjusted both as to the angle of inclination and as to its position relative to the work table of the jointer.

Fourth, to provide such a fence which offers adequate support at the cutting location of the jointer and which will not be sprung or deflected during use.

Other objects and advantages pertaining to details of construction and operation will appear from the description to follow. The invention is defined in the claims. A preferred embodiment of my invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a front elevation of my improved fence in position on a jointer table.

Fig. 2 is a top view of the fence partially sectioned on the line 2—2 of Fig. 1.

Fig. 3 is a detail sectional view taken on the line 3—3 of Fig. 1.

Fig. 4 is a detail sectional view taken on the line 4—4 of Fig. 2.

Fig. 5 is a perspective view of my fence showing its relationship to the cutting tool of the jointer.

I mount my improved fence 1 on the usual two part jointer table 2 by means of a bracket 3 fastened with bolts 4 to the edge of the table. The bracket 3 extends above the plane of the table and supports a rod 5 which extends transversely of the table 2, that is on a plane parallel to the top of the table and at an angle preferably 90° to the direction in which the work piece is moved over the table when the machine is used, and is mounted for slidable and rotary adjustment in a bore 6 in the bracket 3. A set screw 7 serves to hold the rod in adjusted position.

At the end of the rod, I provide a crank arm 8 on which a fence holding member 9 is supported. At the free end of the crank, I provide a flat face 10 against which the flat face 11 of the fence supporting member 9 lies. On the other side of the fence supporting member 9, I provide arcuate ways 12 to receive arcuate members 13 which are formed with a slot 14 therebetween and project from the fence 15. In register with the slot 14, I provide a bore 16 in the member 9 and a bore 17 in the crank 8 through which a bolt 18 extends to clamp the fence and its supporting member 9 and the crank arm 8 together.

A suitable scale 19 with a pointer 20 is provided to assist in obtaining the proper adjustment.

The angle between the face of the fence 15 and the top of the table 2 is adjusted by loosening the bolt 18, so that the fence may be swung to the desired angular position as indicated in dotted lines in Fig. 1. The elevation of the fence from the table top is determined by rotary adjustment of the shaft 5 in the bracket 3. The crank arm 8 may be swung up or down and the fence and its supporting member 9 may be held in adjusted position by tightening the bolt 18. The position of the fence on the table may be adjusted by axial movement of the rod 5 and the rod may be held in adjusted position by tightening the set screw 7. The bolt 18 extends through an arcuate shoe 22.

It will be apparent that all of the parts in my improved fence are extremely simple and can be made at a very low cost. The adjustment of the fence is very simple and when the fence has been adjusted, it can be easily clamped in adjusted position. The fence is held at a point adjacent the cutter, which is here shown at 21, so that it will not give and because the fence is supported centrally, it does not have the spring or permit the leverage to be exerted against it to create a displacement of the fence by the work.

The terms and expressions which have been herein employed are used as terms of description and not of limitation. There is no intention in the use of such terms and expressions of excluding any equivalents of the features shown and described. It is recognized that various modifications are possible within the scope of the invention claimed.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A fence for jointers or the like, having a work table comprising a rod extending in a plane parallel to the top of the work table, means supporting said rod for rotary and axial movement and for holding it in adjusted position, a crank on said rod, a fence supporting member having a face engaging the free end of said crank and having an arcuate way disposed to support a fence transversely of said rod and pivotally on an axis extending transversely of said rod, a fence having an arcuate slide engageable with said arcuate ways and extending transversely of said rod, said crank and fence supporting member having reg-

istering bores extending parallel with said rod and a clamping bolt extending through said bores and serving as a pivot for said fence supporting member and engaging said fence and adapted to clamp said fence, said fence supporting member and said crank together to hold them in adjusted position.

2. A fence for jointers or the like having a work table comprising a rod extending in a plane parallel to the top of the work table and at right angles to the path of movement of a work piece when the machine is used, means supporting said rod for rotary and axial movement and for holding said rod in adjusted position, a crank on said rod, a fence supporting member pivotally mounted on the free end of said crank on a pivot, parallel with said rod, a fence extending transversely of said rod parallel to the path of movement of a work piece when the machine is used and pivotally mounted on said member on an axis extending transversely of said rod, and means for holding said fence and said member in adjusted position.

3. A fence for jointers or the like having a work table comprising a slide extending in a plane parallel to the top of the work table and at right angles to the path of movement of a work piece when the machine is used, means supporting said slide for movement longitudinally of itself toward or away from said path of movement of said work piece, an arm on said slide and swingable in a plane perpendicular to the line of movement of said slide, a fence supporting member pivoted on the free end of said arm on an axis parallel to the line of movement of said slide, and a fence on said member extending parallel to the plane of movement of said arm and pivoted on an axis transversely disposed to the line of movement of said slide, and means for holding the aforesaid elements in adjusted position.

4. A fence for jointers or the like having a work table comprising a slide extending in a plane parallel to the top of the work table and at an angle to the path of movement of a work piece when the machine is used, means supporting said slide for movement longitudinally of itself toward or away from said path of movement of said work piece, an arm on said slide mounted for swinging movement, a fence supporting member pivotally mounted on said arm at a point spaced from the pivotal axis of said arm and on a pivotal axis perpendicular to said path of movement of said work piece, a fence on said member extending parallel to and pivoted on said fence supporting member on an axis parallel to said path of movement of said work piece, and means for holding the aforesaid elements in adjusted position.

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