

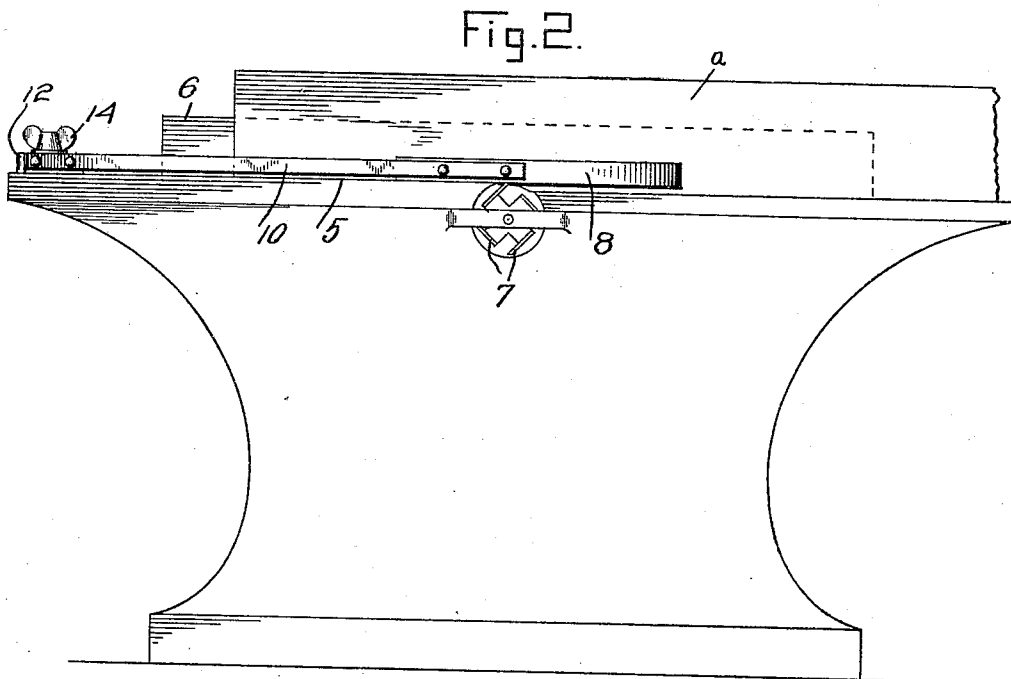
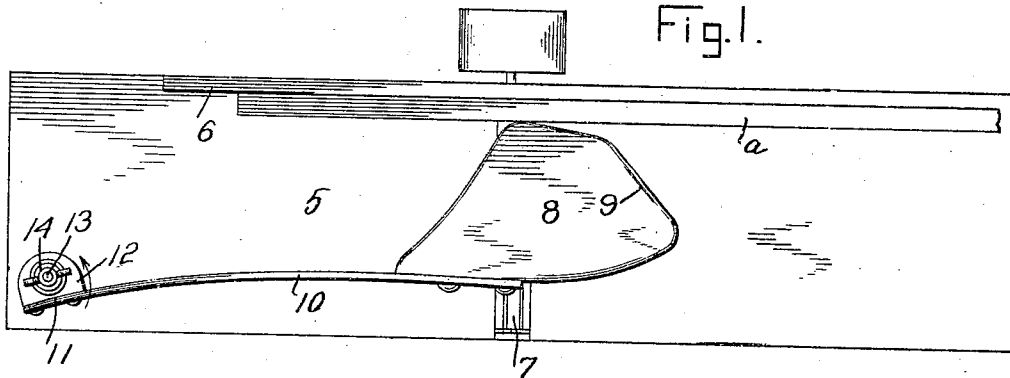
P. FOSTER.
OUTTER GUARD.

APPLICATION FILED MAR. 4, 1907.

935,481.

Patented Sept. 28, 1909.

2 SHEETS—SHEET 1.



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Witnesses
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2 SHEETS—SHEET 2.

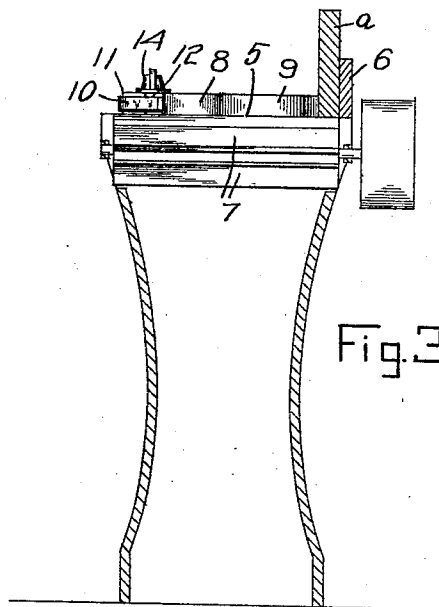


Fig. 3.

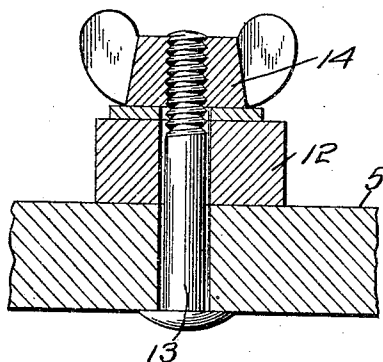


Fig. 4.

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UNITED STATES PATENT OFFICE.

PETER FOSTER, OF FAIRFIELD, MAINE.

CUTTER-GUARD.

935,481.

Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed March 4, 1907. Serial No. 360,416.

To all whom it may concern:

Be it known that I, PETER FOSTER, a citizen of the United States, residing at Fairfield, in the county of Somerset, State of Maine, have invented certain new and useful Improvements in Cutter-Guards; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to cutter guards for jointers and has for its object to effectually prevent the workman's hand coming in contact with the knives of the machine when the end of a board or strip is shoved past the knives. It is a common occurrence in the use of machines of this class for the workman's hand to slip from the board or strip as the end of the same passes the knives and in this manner strike the knives resulting in serious injury.

In carrying out my invention I employ a guard plate which is held normally by means of a spring over the knives so as to completely cover the same and prevent contacting of the workman's hand with the knives. The tension of the spring is adjustable by a novel means which will be hereinafter described and the board to be planed is inserted between the back of the jointer and the opposing edge of the guard plate it being understood that when the board is shoved past the knives, the plate will be sprung into position to completely cover the knives and that during the operation of the machine, the only portion of the knives not covered by the guard plate, is the portion working upon the board.

In the accompanying drawings, Figure 1 is a top plan view of a jointer showing my invention applied thereto, Fig. 2 is a front elevation thereof, Fig. 3 is a detail vertical transverse sectional view therethrough, taken in a line with the knives, and, Fig. 4 is a similar view taken through the block for securing the spring to the bed.

Referring more specifically to the drawings the bed of the machine is indicated by the numeral 5 and the back for the bed by the numeral 6. The rotary knives are indicated by the numeral 7.

The guard plate or shield for these knives is indicated by the numeral 8 and has a por-

tion of its inner edge disposed in a diagonal plane as at 9. To the outer edge of this guard plate and to the portion thereof opposite to the diagonally disposed edge portion 9 there is secured one end of a spring bar 10 and the opposite end of the spring bar is secured to the straight edge 11 of a block 12 which is held upon the bed 5 of the jointer by means of a bolt 13 which is engaged through the bed and block and upon which is engaged a set nut 14 which bears upon the upper face of the block and is adapted to hold it rigidly in any position to which it may be adjusted as will be presently explained. This block 12 is secured to the spring bar 10, upon the same the guard plate is secured.

Now from the foregoing it will be understood that the tendency of the spring 10 is to hold the shield or guard plate 8 in the direction of the guide rail 6 of the bed of the jointer and over the knives 7, the rear edge of the guard plate being normally in spring contact with the forward face of the guide rail 6. It will further be understood that by loosening the set nut when the plate is in this position, and turning the block 12 in the direction indicated by the arrow in Fig. 1, the tendency will be exerted upon the spring 10 to form a rearwardly directed bend therein which will of course increase the tension of the same. The shield presents an angled engaging edge 9 to the work introduced.

In operation, the board to be planed, which board is indicated by the reference character α is placed between the rail 6 and the opposing edge of the plate 8 and held in this position by the force exerted by the spring upon the said plate. The board is then slid along the top of the bed and as soon as the end of the board is reached the plate will be sprung over into engagement with the rail 6 and will cover the knives 7.

The underface of the guard plate 8 is concaved so that the knives will not contact with the plate and be injured or dulled.

It will be observed by reference to Fig. 1 that the winged nut performs a double function, for it not only serves to hold the spring 10 flexed to press the guard against the guide rail 6 with the desired degree of pressure, but also operates to permit of the guard being swung laterally from over the knives to per-

mit cleaning of the latter, the removal of chips or the like, or the detachment of the knives from the cutter-head when desired.

What is claimed is—

- 5 The combination with a bed plate of a jointer, of a guard, a block disposed on the bed plate and provided with a flat surface, a bolt projecting upward from the bed plate and extending through the block, a leaf
10 spring held spaced from the upper face of the bed plate and having one end secured to the outer edge and above the plane of the lower face of the guard and its opposite end secured to the flat surface and above the

lower face of the block, and a winged nut 15 carried by the bolt and engaging the block and operating to hold the spring tensioned to insure proper contact between the guard and the stock being operated upon and also to permit the guard to swing free laterally 20 from over the cutter knives.

In testimony whereof, I affix my signature, in presence of two witnesses.

PETER ^{his}X FOSTER.
mark

Witnesses:

LEONIDE J. MORIN,
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