No. 767,545. PATENTED AUG. 16, 1904.

J. A. DAVIDSEN.

JOINTER GUARD.

APPLICATION FILED MAY 19, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

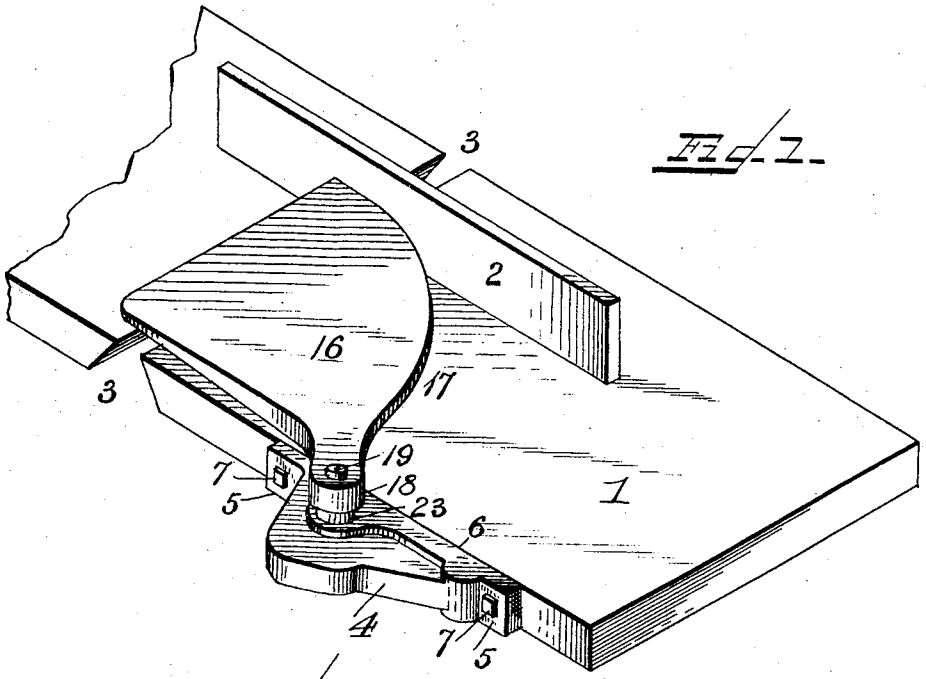
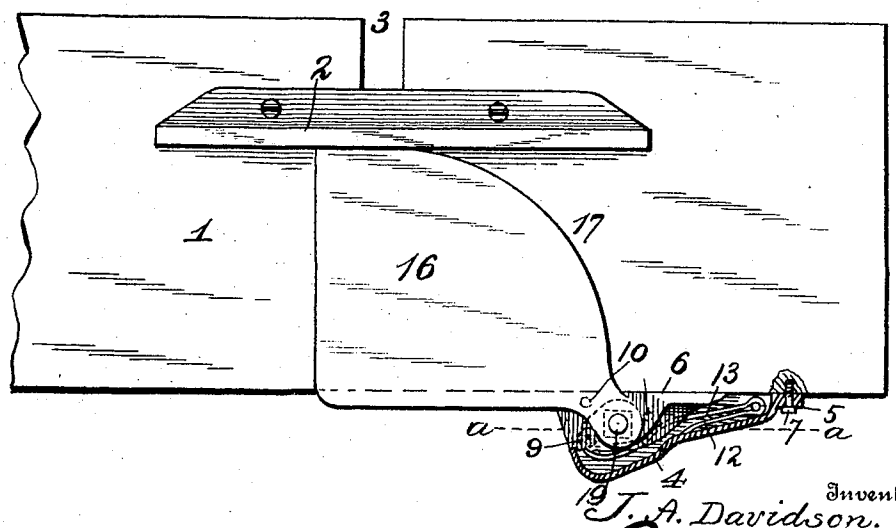


Fig. 1.

Fig. 2.



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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3.

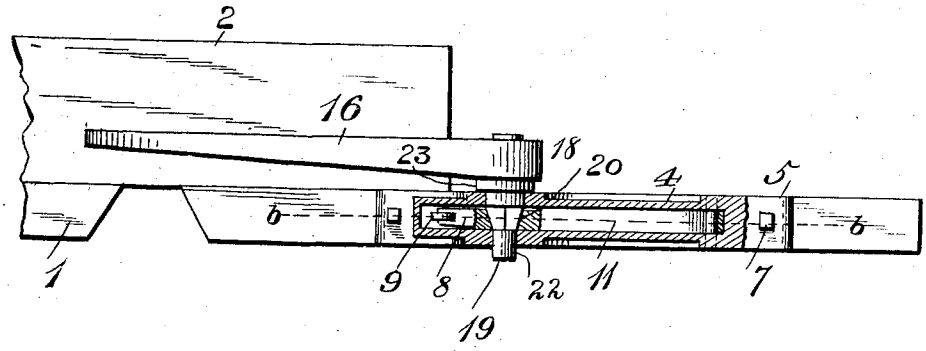
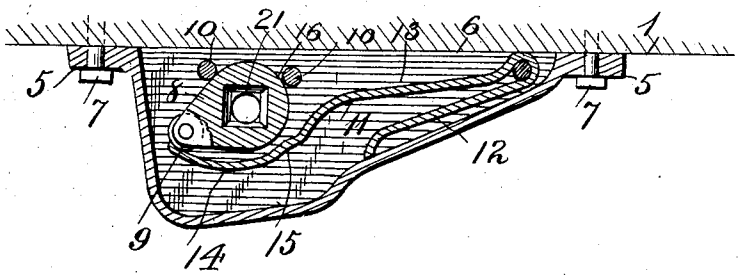


Fig. 4.



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No. 767,545. Patented August 16, 1904.

UNITED STATES PATENT OFFICE.

JACOB A. DAVIDSEN, OF EAU CLAIRE, WISCONSIN.

JOINTER-GUARD.

SPECIFICATION forming part of Letters Patent No. 767,545, dated August 16, 1904.

Application filed May 19, 1904. Serial No. 208,769. (No model.)

To all whom it may concern:

Be it known that I, JACOB A. DAVIDSEN, a citizen of the United States, residing at Eau Claire, in the county of Eau Claire and State of Wisconsin, have invented new and useful Improvements in Jointer-Guards, of which the following is a specification.

My invention is an improved jointer-guard; and it consists in the construction, combination, and arrangement of devices hereinafter described and claimed.

The object of my invention is to provide an improved device of this character which may be readily attached to the frame or table of the jointer or surfacing-machine and which is effective to prevent the operator from being injured by the cutters.

A further object of my invention is to provide means whereby the jointer-guard may be readily swung out of the way to uncover the cutters when desired and to provide means for holding the same in such position.

In the accompanying drawings, Figure 1 is a perspective view of a portion of the jointer provided with a guard embodying my improvements. Fig. 2 is partly a top plan view of my improved jointer-guard and partly a horizontal sectional view through the bracket-box, disclosing the spring therein. Fig. 3 is a sectional view of the same, taken on the plane indicated by the line *a a* of Fig. 2. Fig. 4 is a horizontal sectional view taken on the plane indicated by the line *b b* of Fig. 3.

The table 1 of the jointer here shown is of the usual construction, provided on its upper side with the guide 2. The transverse slot in the table in which the cutters operate is indicated at 3, the cutters being omitted, as the same are well understood and form no part of my present improvements.

In the embodiment of my invention I provide a bracket-box 4, which is preferably of the form here shown, but which may be of any suitable form, and the same is provided at its ends with lugs 5. The inner side 6 of the bracket-box is here shown as straight and adapted to bear against the outer side of the table 1. The bracket-box is detachably secured to the table by screws or other suitable devices 7, inserted in openings in the lugs 5 and which are driven into the table. Between the upper and lower sides of the bracket-box, near one end thereof, (which I will call the "inner" end,) is an angularly-movable arm 8, provided at its outer end with a tappet-roller 9. The box is provided with a pair of stops 10 near its inner open side, against which the arm 8 normally bears when the guard is in position over the cutter-slot. A spring 11, which is here shown as provided with diverging arms 12 13, (the latter being longer than the former,) is placed in the bracket-box. Its short arm 12 bears against the outer side of the bracket-box, and its longer arm, which is curved, as at 14, bears against the tappet-roller and serves to normally retain the arm 8 in the position required to keep the guard over the cutter-slot. The said arm 13 of the said spring is also provided with an offset 15, adapted when the arm 8 is turned to the position required to swing the guard out from over the cutter-slot, so as to uncover the latter and the cutter, to engage the tappet-roller 9, and thereby retain the said arm in such position.

The guard-plate 16 is preferably of the form here shown, with its front edge or side curved, as at 17, the said guard-plate being sufficiently wide to bear against the guide 2 of the jointer-table. At the front outer corner of the guard-plate is an arm or lug 18, from which depends a pivot-stud 19, which has a downwardly-tapered angular portion 20 to fit in a correspondingly-shaped opening 21 in the arm 8, has a reduced cylindrical lower end portion 22 to engage a bearing-opening in the lower side of the bracket-box, and a shouldered cylindrical portion 23 of larger diameter at the upper end of the said tapered portion 20 to engage a bearing-opening in the upper side of the bracket-box. It will be understood that by means of the said stub 19 the guard-plate is detachably connected to the arm 8 and pivotally connected to the bracket-box and that the guard-plate and the arm 8 move in unison. The tension of the spring is such as to keep the inner side of the guard-plate in contact with the guide or with the work as the latter is moved over the table and over the cutters, and, moreover, the guard is by the spring caused to bear with

sufficient tension against the work to materially assist in keeping the latter in contact with the guide while being dressed by the cutters. To remove the guard, it is only necessary to lift the same so that its pivot-stud becomes detached from the bracket-box and the arm 8.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A guard of the class described, comprising a bracket-box adapted to be secured on one side of a table or frame, a pivotally-movable arm housed in said bracket-box, a spring also housed in the bracket-box to move the said arm in one direction and a guard-plate having a pivotal stud detachably connected to the said arm and the said bracket-box, the latter having bearings for the said pivot-stud, substantially as described.

2. A guard of the class described, comprising a bracket-box, an angularly-movable arm therein, having a tappet element, a spring having an arm engaging said tappet element and provided with an offset or recess to receive said tappet element when the arm is turned against the tension of the spring, and a guard having a pivot-stud connected to the arm for pivotal movement with the latter and having its bearings in the bracket-box, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JACOB A. DAVIDSEN.

Witnesses:
A. C. LARSON,
GUSTA SORLIE.