

No. 882,122.

PATENTED MAR. 17, 1908.

C. O. & A. D. PORTER.
CUTTER GUARD FOR BUZZ PLANERS.
APPLICATION FILED JULY 8, 1907.

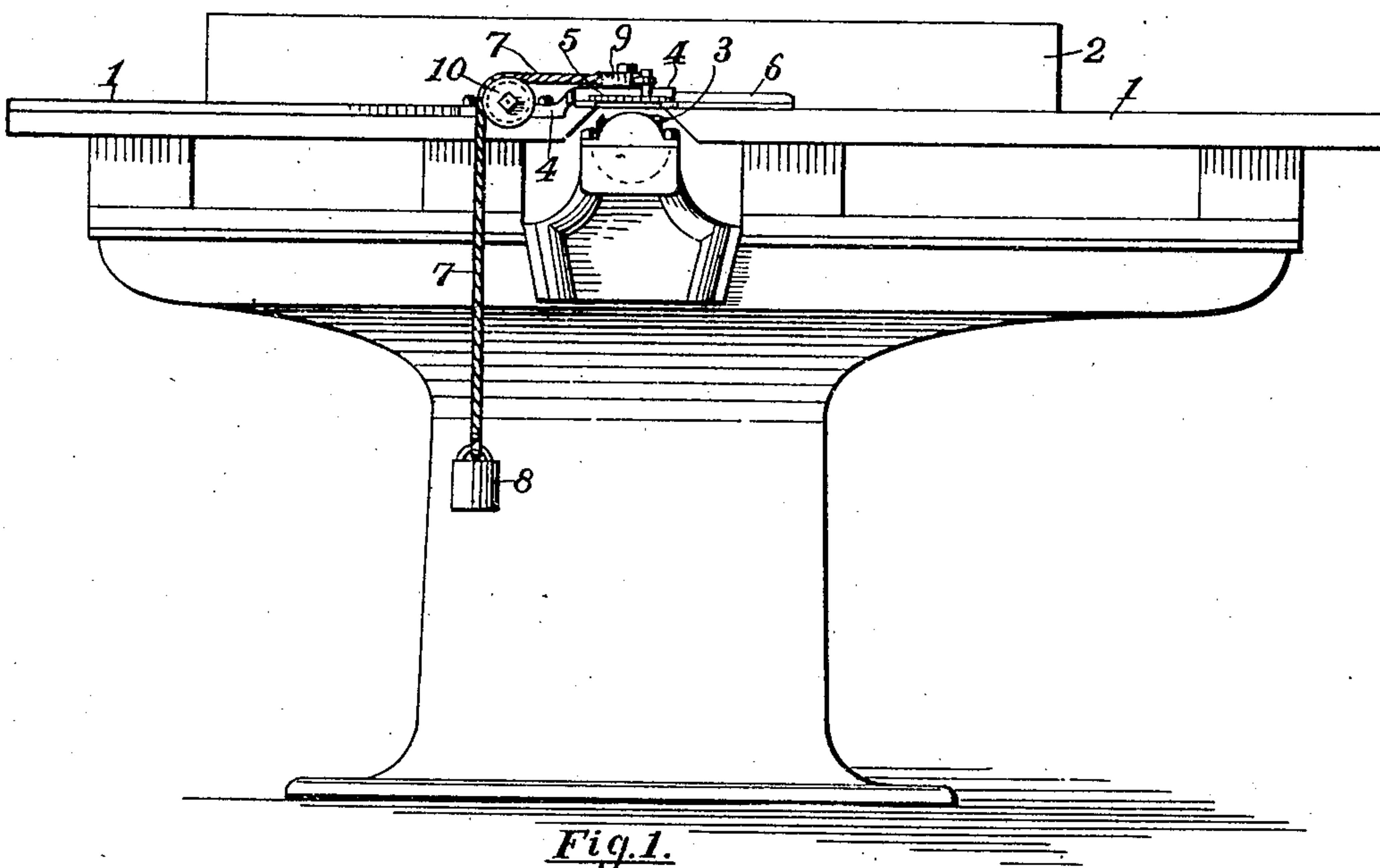


Fig. 1.

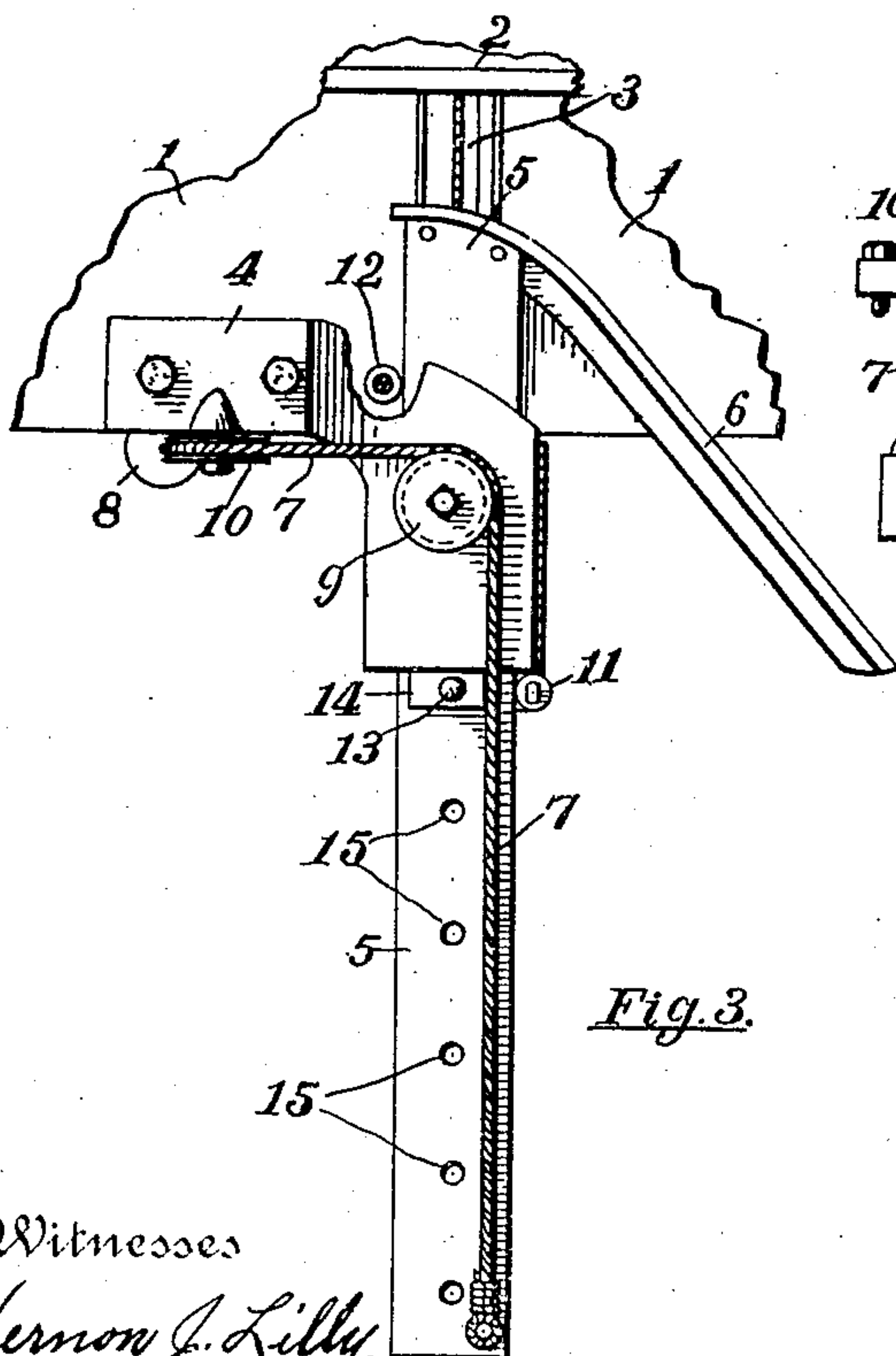


Fig. 3.

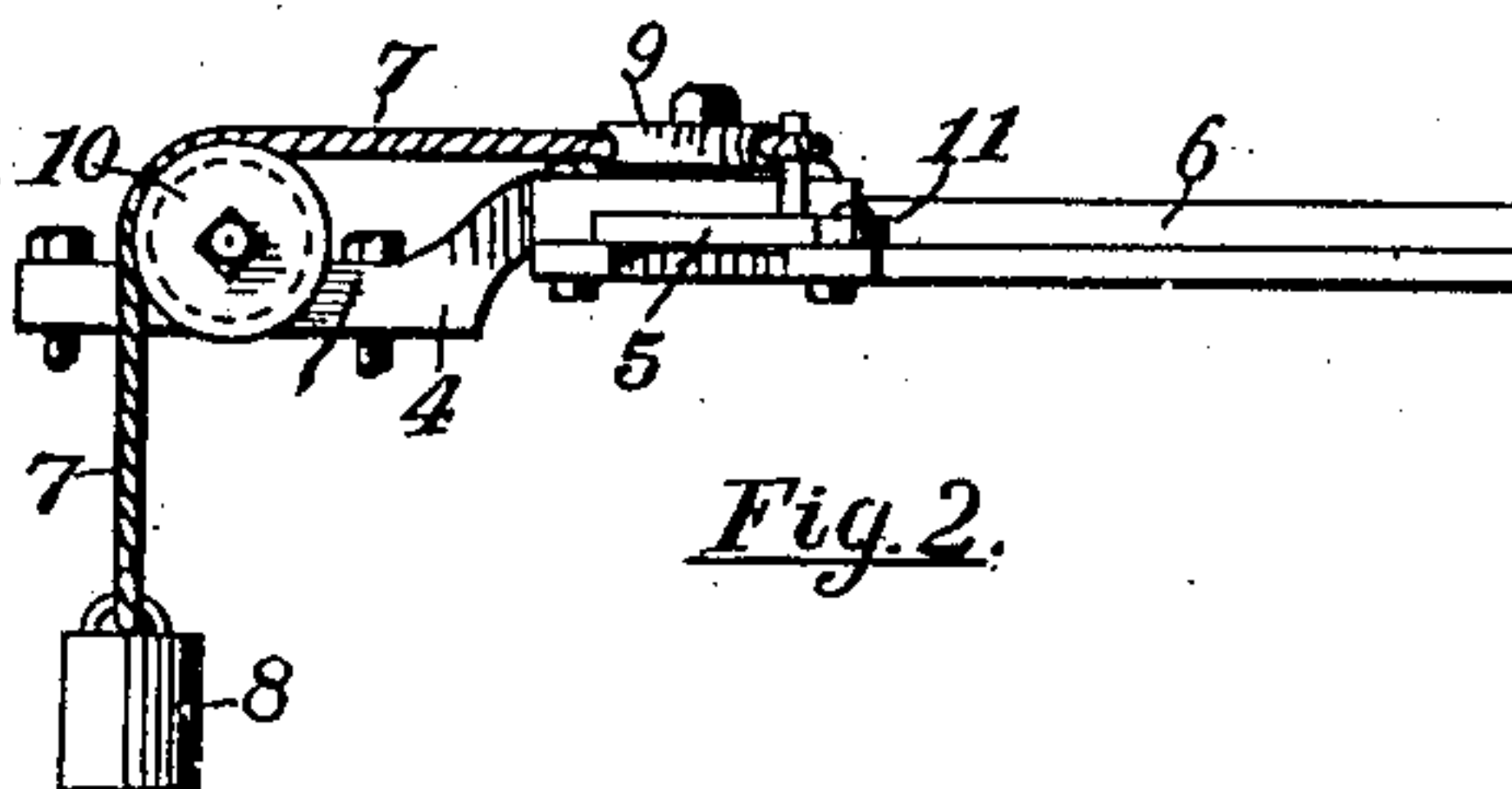


Fig. 2.

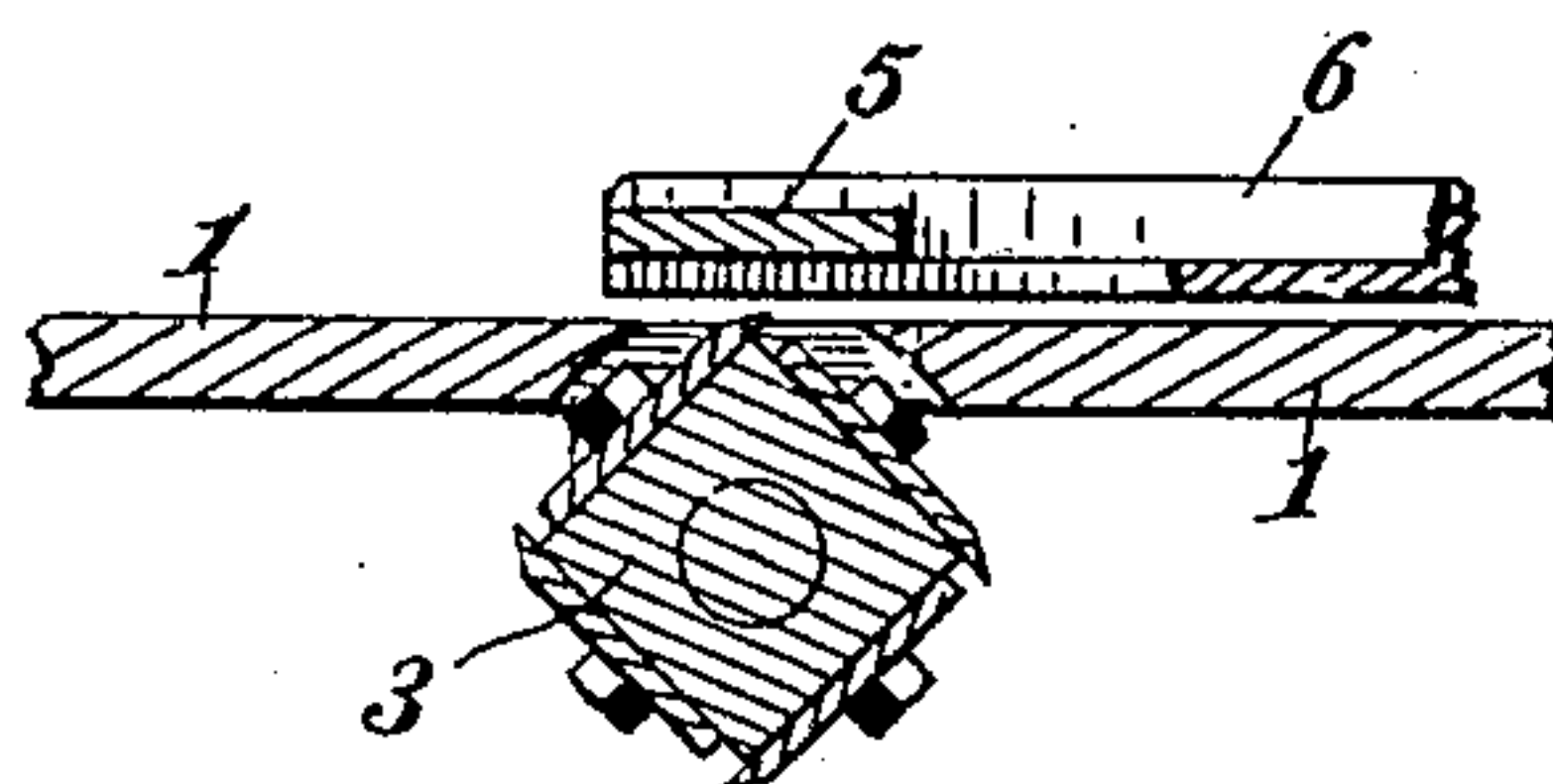


Fig. 4.

Witnesses
Vernon J. Lilly,
Georgiana Chace

Inventors
C. Oscar Porter and
Alvin D. Porter
By *Luther V. Moulton*
Attorney

UNITED STATES PATENT OFFICE.

C OSCAR PORTER AND ALVIN D. PORTER, OF GRAND RAPIDS, MICHIGAN.

CUTTER-GUARD FOR BUZZ-PLANERS.

No. 882,122.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed July 8, 1907. Serial No. 382,626.

To all whom it may concern:

Be it known that we, C OSCAR PORTER and ALVIN D. PORTER, both citizens of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Cutter-Guards for Buzz-Planers; and we 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.

Our invention relates to improvements in cutter guards for buzz planers; and its object is to provide the same with various new and useful features, hereinafter more fully described and particularly pointed out in the claims, reference being had to the accompanying drawings, in which:

Figure 1. is a front elevation of a device embodying our invention; Fig. 2. is a view of our device detached from the machine; Fig. 3. a plan view of our device; and, Fig. 4. a sectional detail of a portion of the same.

Like numbers refer to like parts in all of the figures.

1 represents the bed of the machine upon which the work slides and in which there is a slot or opening through which the knives or cutters project sufficiently to engage the work; 2 is the work guide and 3 the cylinder or cutter of the machine. To the front edge of the table 1 is secured a bracket 4, slidably mounted in which is a flat bar 5, which bar extends parallel with the axis of the cutter and above the same to protect the workman from contact therewith. This bar is provided with an inclined arm 6, which is engaged by the work and the bar thus moved longitudinally to permit the work to pass between the end of the same and the guide 2. The bar is also yieldingly pressed toward the guide by a cord 7 attached to the outer end of the bar and extending over pulleys 9 and 10 and having a weight 8 attached thereto.

To prevent the bar from binding in the bracket, friction rollers 11 and 12 are provided which engage the respective edges of the bar and take the thrust of the work against the arm 6, thus insuring the free movement of the bar as the work slides along the inclined surface of said arm. In operating upon wide or thick work whereby the end of the bar is spaced apart a consider-

able distance from the guide 2, it is desirable to prevent the bar from running in toward the guide the full distance. For this purpose an adjustable stop 14 is mounted on the bar by means of a pin 13 adjustable in a series of holes 15 in the bar. This stop engages the end of the bracket and thus prevents the bar from moving inward beyond a pre-determined distance.

In operation, the end of the work engages the inclined surface of the arm 6 and sliding along the same between the arm and the guide 2 forces the bar back sufficiently to permit the work to pass between the end of the bar and the guide. As the work passes from between the bar and guide, and beyond the cutter, the weight automatically runs the bar inwardly over the cutter, and thus protects the workman from contact therewith, so that at all times the cutter is completely covered either by the work or by this bar, and thus accidental contact therewith on the part of the workman is absolutely prevented.

What we claim is:

1. A cutter guard for buzz planers comprising a bracket adapted to be attached to the bed of a buzz planer and provided with guiding means, a bar slidable longitudinally of said guiding means, the bar having spaced apertures and provided with a laterally directed inclined arm at its inner end, friction rollers carried by the bracket and between which said bar operates, guide pulleys carried by said bracket, a cable working over said guide pulleys and connected to the bar at the one end and provided with a weight at the other end, and a stop pin insertible interchangeably in the apertures in said bar.

2. In a device of the class described, a bracket formed with spaced guide ways and adapted to be connected to the bed of a planer, a bar having a plurality of spaced apertures and slidable in said guide ways above the cutter elements of the planer, an arm connected to the bar at its inner end and extending at an angle therefrom and toward the feed end of the planer, and a stop pin adapted to be inserted interchangeably in said apertures.

3. The combination with a planer including cutter elements and a work guide, of a bracket adapted to be attached to the bed of

the planer and provided with guiding means parallel to the longitudinal plane of the cutter elements and above the same, a bar slidable in said guiding means, an arm attached
5 to said bar at its inner end and extending at an angle therefrom and toward the feed end of the planer, and a stop having means for adjustable connection to said bar.

In testimony whereof we affix our signatures in the presence of two witnesses.

C OSCAR PORTER.
ALVIN D. PORTER.

Witnesses:

PALMER A. JONES,
LUTHER V. MOULTON.