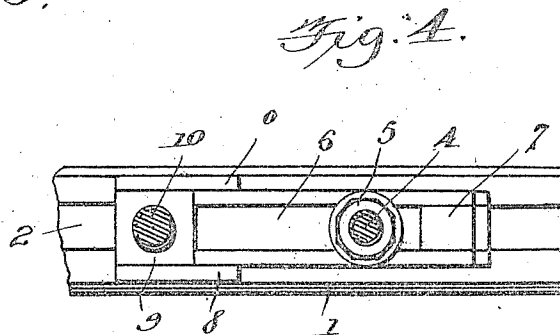
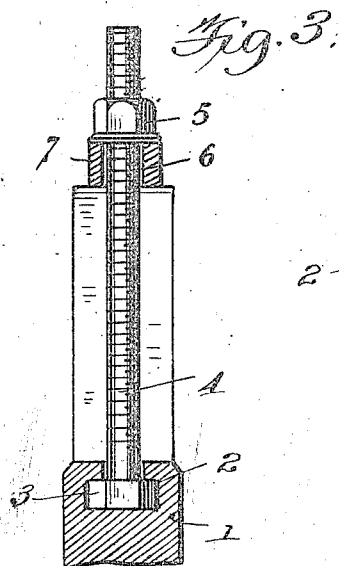
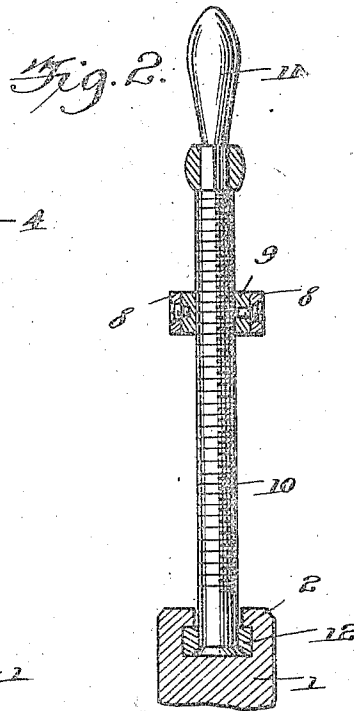
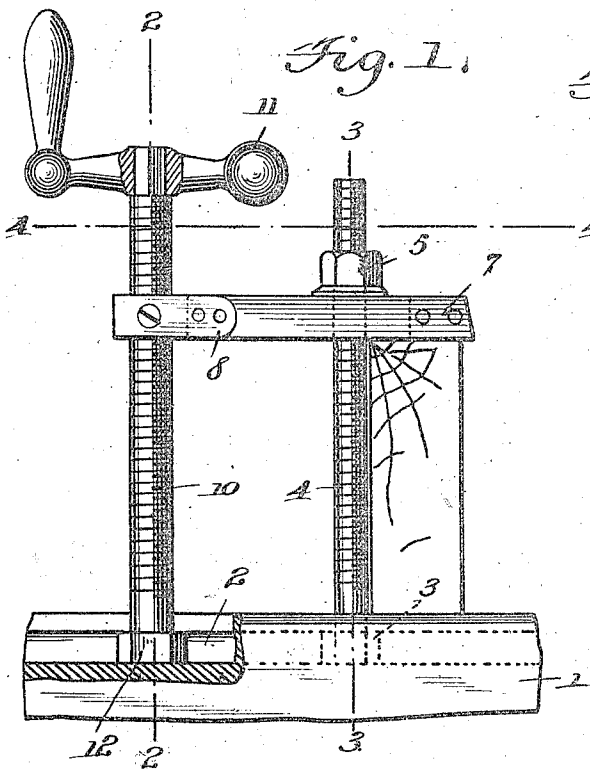


A. ERMAN.
CLAMP.
APPLICATION FILED JAN. 10, 1914.

1,093,554.

Patented Apr. 14, 1914.



Witnesses

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AUGUST ERMAN, OF OMAHA, NEBRASKA.

CLAMP.

1,093,554.

Specification of Letters Patent.

Patented Apr. 14, 1914.

Application filed January 10, 1914. Serial No. 811,454.

To all whom it may concern:

Be it known that I, AUGUST ERMAN, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented new and useful Improvements in Clamps, of which the following is a specification.

This invention relates to clamps and more particularly to that type of devices for securing or holding articles upon machine beds.

The object of the invention is to provide a simple and efficient device of this character which may be readily attached to the bed plate of the drill press planer or other similar machines so that the material being operated upon may be conveniently held in position.

Further objects of the invention will appear as the following description is read in connection with the accompanying drawing, which forms a part of this application, and in which:—

Figure 1 is a side elevation of the device attached to the fragment of a bed plate of a machine showing a piece of work interposed between the bed plate and the jaw of the clamp. Fig. 2 is a vertical sectional view taken on the line 2—2 of Fig. 1. Fig. 3 is a vertical sectional view taken on the line 3—3 of Fig. 1. Fig. 4 is a horizontal section on the line 4—4 of Fig. 1.

Referring more particularly to the drawing, 1 represents the bed plate of the machine which is provided with the usual dove-tail groove 2. Arranged to be slidably mounted in the groove is the head 3 of an adjusting bolt 4 which is threaded to receive a retaining nut 5. This bolt passes through a longitudinal slot 6 formed in the jaw 7 which is arranged, as will be hereinafter described, to co-act with the bed plate, the bed plate acting as one jaw, to clamp the material in position to be worked on. One end of the jaw has secured thereto

a pair of arms 8 between which is pivotally mounted a nut 9 through which the clamping screw 10 passes. This clamping screw is squared upon its upper end to receive an operating handle 11 and is swiveled at its lower end into a nut or head 12 which is also arranged to slide in the groove 2 of the bed plate. The screw 10 rotates freely in the nut 12 and the nut 9 is freely pivoted between the arms 8 so as to permit any angular position of the jaw 7. It will be noticed that both of the nuts 3 and 12 are polygonal so as to be engaged by the walls of the groove to prevent turning with the bolts.

What is claimed is:—

1. In a clamp, a jaw member having a longitudinal slot, a nut swiveled in one end of the jaw member, an adjusting screw passing therethrough, a bolt having a nut threaded thereon, said last-named bolt being adjustable in the slot toward and away from the screw and means for connecting the screw and bolt to the bed plate of the machine.

2. In combination, a bed plate having a dove-tail groove therein, a screw having an integral polygonal head slidably mounted in the groove, an adjusting nut threaded onto the bolt, a jaw provided with a longitudinal slot to receive said bolt, a nut swiveled in the jaw at one end thereof, a screw having a polygonal nut swiveled upon one end thereof and arranged to slide within the groove, said screw being threaded in the nut and having relative adjustment toward and away from the bolt and means for operating the screw.

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

AUGUST ERMAN.

Witnesses:

GEORGE A. KELLEY,
NICHOLAS KRAUSE