

G. T. EAMES.
ARBOR PRESS.
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1,106,500.

Patented Aug. 11, 1914.

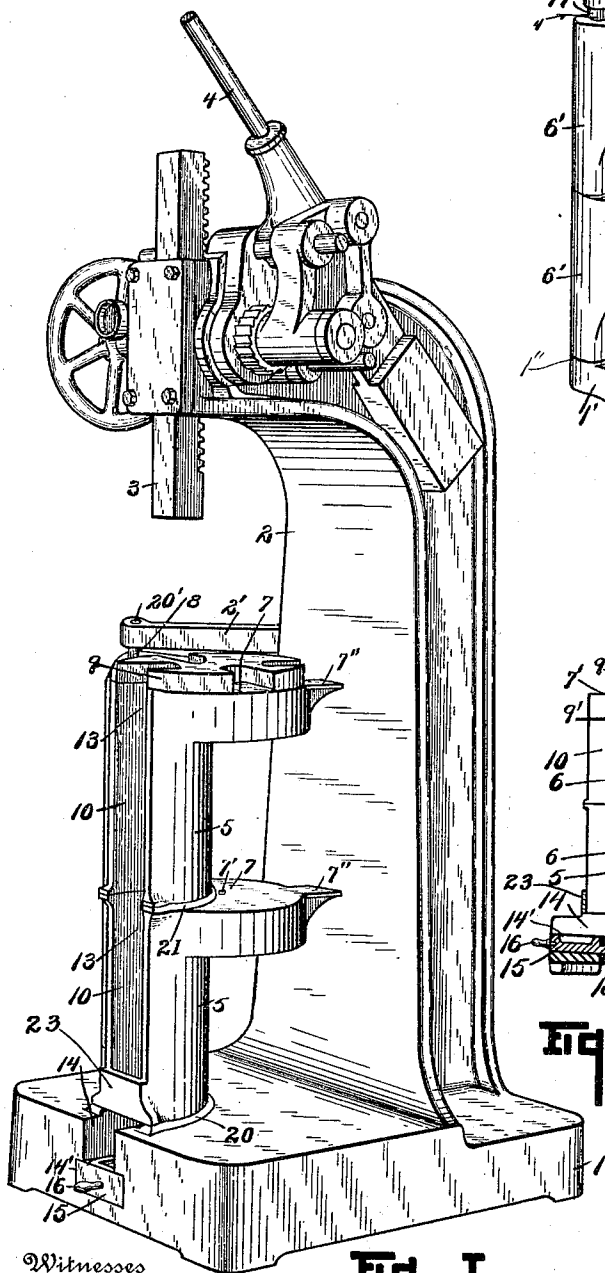


Fig. I.

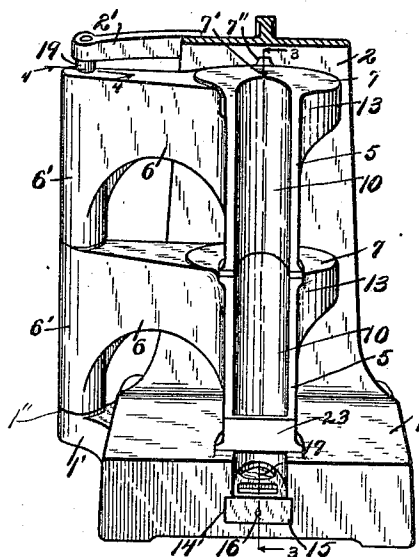


Fig. II.

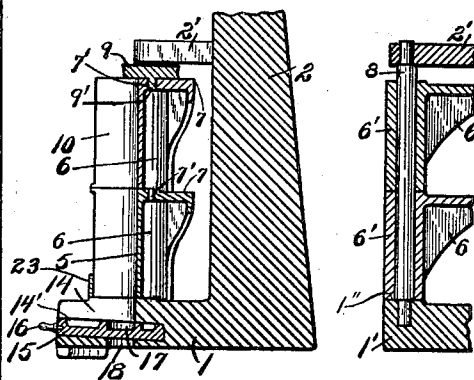


Fig. III

Fig. IV.

Witnesses
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UNITED STATES PATENT OFFICE.

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ARBOR-PRESS.

1,106,500.

Specification of Letters Patent.

Patented Aug. 11, 1914.

Application filed November 4, 1912. Serial No. 729,439.

To all whom it may concern:

Be it known that I, GARDNER T. EAMES, a citizen of the United States, residing at the city of Kalamazoo, Michigan, have invented certain new and useful Improvements in Arbor-Presses, of which the following is a specification.

This invention relates to improvements in arbor presses.

10 The main object of this invention is to provide in an arbor press, an improved adjustable table structure.

Further objects, and objects relating to structural details, will definitely appear 15 from the detailed description to follow.

I accomplish the objects of my invention by the devices and means described in the following specification.

20 The invention is clearly defined and pointed out in the claims.

A structure which is a preferred embodiment of my invention is clearly illustrated in the accompanying drawing forming a part of this specification, in which:

25 Figure I is a perspective view of a structure embodying the features of my invention. Fig. II is a detail front elevation, the upper end of the standard and the parts carried thereby being omitted. Fig. III is a 30 detail vertical section on a line corresponding to line 3—3 of Fig. II. Fig. IV is a detail vertical section on a line corresponding to line 4—4 of Fig. II.

Referring to the drawing, the base 1 is 35 provided at the rear with a standard 2 which projects forwardly at its upper end to overhang the work table.

40 The ram 3 is operated through the lever 4. The operating mechanism is preferably that shown and described in my Patent, #1,038,543, of September 17, 1912, and as the details thereof form no part of this invention, they are not further described herein.

45 I provide a plurality of table members, the structure illustrated having two which comprise columns or pedestals 5, and rearwardly projecting beds 7 at their upper ends. These table members are substantial 50 duplicates. The table members are provided with laterally projecting arms 6 having vertical bearings 6' at their outer ends. The bearings are mounted upon the rod 8, the lower end of which is supported by the 55 arm 1' on the base, its upper end being sup-

ported by the arm 2' on the standard 2. The arm 1' is provided with a bearing surface 1'' for the lower end of the bearing of the lower arm 6, while the lower end of the bearing of the upper arm 6 bears on the upper end of the bearing below. When the table members are swung to operative position, the lower end of the column of the lower member rests on the base, while the lower end of the upper member rests 65 upon the lower member. The beds are provided with rearwardly projecting stop arms 7'' which engage the standard 2 when the members are swung to operative position. These stop arms not only position the table 70 members, but assist in supporting them in operative position. The work holder 9 is provided with a downwardly projecting pivot 9' adapted to engage the holes 7' provided therefor in the table beds so that the 75 work holder may be shifted from one bed to the other; that is, when both table members are employed, it is placed on the bed of the upper member and when only one is employed, it is placed on its bed. The columns 80 5 of the table members are provided with outwardly facing channels 10 extending from top to bottom thereof, the channels registering when the table members are in operative position. The base is provided 85 with a recess 14 registering with the column channels. The base is also provided with a reinforcing rib 20 about the edge of its recess for the column of the lower table member to rest upon, while the top of the 90 lower table member is provided with a corresponding rib 21 about its channel. A cross piece 23 extends across the channel 10 at the lower end of the lower member. There is an opening 18 through the base from this 95 recess. This opening may be closed by the slide 15 arranged in ways 14' in the recess 14, as shown in Fig. III. The slide 15 is provided with a suitable handle 16. The slide has a pocket or holder 17 for a suitable material such as Babbitt metal. By providing a plurality of these table members, the table may be adjusted to suit the particular kind of work. By providing the hole 18 through the base, long shafts may 105 be extended through the floor should occasion require. When the slide 17 is in position, this hole is closed and the slide also forms a holder for suitable buffer material, such as lead or Babbitt metal. 110

By arranging the parts as I have illustrated and described, the table may be quickly adjusted to the work and is very rigid.

5 I have illustrated only two of the table members. These may be increased as desired. I have illustrated and described my improvements in detail in the form in which I have embodied the same. I have not attempted to illustrate or describe various
10 modifications which I contemplate, as such modifications will be readily understood by those skilled in the art to which this invention relates, from the disclosure made. I
15 desire, however, to be understood as claiming my improvements specifically in the form illustrated as well as broadly within the scope of the appended claims.

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

1. In an arbor press, the combination with the base and standard, of work table members comprising columns and beds at the
25 upper ends thereof, the columns having outwardly facing channels extending from top to bottom thereof, said base having an outwardly facing recess registering with said channels, there being an opening through
30 said base from said recess; a slide in said base recess for closing said opening; laterally projecting pivoted supporting arms for said table members, the column of the lower member resting on the base and the column
35 of the upper member resting on the member below when swung to operative position; rearwardly projecting stop arms on said beds adapted to engage said standard when the members are in operative position; and
40 a removable work holder having a pivot pin on its under side, said beds being provided with holes adapted to receive said pin whereby the holder may be shifted from one bed to another.

45 2. In an arbor press, the combination with the base and standard, of work table members comprising columns and beds at the upper ends thereof, the columns having outwardly facing channels extending from top
50 to bottom thereof, said base having an outwardly facing recess registering with said channels, there being an opening through said base from said recess; a slide in said base recess for closing said opening; laterally projecting pivoted supporting arms for
55 said table members, the column of the lower member resting on the base and the column of the upper member resting on the member below when swung to operative position; and rearwardly projecting stop arms on said
60 beds adapted to engage said standard when the members are in operative position.

3. In an arbor press, the combination with the base and standard, of work table mem-

bers comprising columns and beds at the
65 upper ends thereof, the columns having outwardly facing channels extending from top to bottom thereof, said base having an outwardly facing recess registering with said
70 channels, there being an opening through said base from said recess; a slide in said base recess for closing said opening; laterally projecting pivoted supporting arms for
75 said table members, the column of the lower member resting on the base and the column of the upper member resting on the member below when swung to operative position; and a removable work holder having a pivot
80 pin on its under side, said beds being provided with holes adapted to receive said pin whereby the holder may be shifted from one bed to another.

4. In an arbor press, the combination with the base and standard, of work table members comprising columns and beds at the
85 upper ends thereof, the columns having outwardly facing channels extending from top to bottom thereof, said base having an outwardly facing recess registering with said channels, there being an opening through
90 said base from said recess; a slide in said base recess for closing said opening; and laterally projecting pivoted supporting arms for said table members, the column of the lower member resting on the base and the
95 column of the upper member resting on the member below when swung to operative position.

5. In an arbor press, the combination with the base and standard, of work table mem-
100 bers comprising columns and beds at the upper ends thereof, the columns having channels extending from top to bottom thereof; laterally projecting pivoted supporting arms for said table members, the column of the
105 lower member resting on the base and the column of the upper member resting on the member below when swung to operative position; rearwardly projecting stop arms on said beds adapted to engage said standard
110 when the members are in operative position; and a removable work holder having a pivot pin on its under side, said beds being provided with holes adapted to receive said pin, whereby the holder may be shifted
115 from one bed to another.

6. In an arbor press, the combination with the base and standard, of work table members comprising columns and beds at the
120 upper ends thereof, the columns having channels extending from top to bottom thereof; laterally projecting pivoted supporting arms for said table members, the column of the lower member resting on the base and the column of the upper member
125 resting on the member below when swung to operative position; and rearwardly projecting stop arms on said beds adapted to

engage said standard when the members are in operative position.

7. In an arbor press, the combination with the base and standard, of work table members comprising columns and beds at the upper ends thereof, the columns having channels extending from top to bottom thereof; laterally projecting pivoted supporting arms for said table members, the column of the lower member resting on the base and the column of the upper member resting on the member below when swung to operative position; and a removable work holder having a pivot pin on its under side, said beds being provided with holes adapted to receive said pin, whereby the holder may be shifted from one bed to another.

8. In an arbor press, the combination with the base and standard, of work table members comprising columns having rearwardly projecting beds at the upper ends thereof, the columns having open channels extending from top to bottom thereof, laterally projecting pivoted supporting arms for said table members, the column of the lower member resting on the base and the column of the upper member resting on the member below when swung to operative position, a ram supported by said standard to act on work on said tables, and means for actuating said ram.

9. In an arbor press, the combination with the base and standard, of work table members comprising columns and beds projecting inwardly therefrom, the columns having channels extending from top to bottom thereof; laterally projecting arms on said table members having vertical bearings at their outer ends; a vertical bearing rod; a supporting arm on said base for the lower end of said rod, said arm being provided

with a bearing surface for the bearing of the lower table member, the lower end of the bearing of the upper table member resting upon the upper end of the bearing of the member below, the column of the lower member resting on the base and the column of the upper member resting on the member below when swung to operative position; a supporting arm on said standard for the upper end of said rod; and rearwardly projecting stop arms on said beds adapted to engage said standard when the members are in operative position.

10. In an arbor press, the combination with the base and standard, of work table members comprising columns and beds projecting inwardly therefrom, the columns having channels extending from top to bottom thereof; laterally projecting arms on said table members having vertical bearings at their outer ends; a vertical bearing rod; a supporting arm on said base for the lower end of said rod, said arm being provided with a bearing surface for the bearing of the lower table member, the lower end of the bearing of the upper table member resting upon the upper end of the bearing of member below, the column of the lower member resting on the base and the column of the upper member resting on the member below when swung to operative position; and a supporting arm on said standard for the upper end of said rod.

In witness whereof, I have hereunto set my hand and seal in the presence of two witnesses.

GARDNER T. EAMES. [L. s.]

Witnesses:

LUELLA GREENFIELD,
MARGARET GLASGOW.