

W. W. Marsh,

Oil Press.

N<sup>o</sup> 17,161.

Patented Apr. 28, 1857.

Fig. 1.

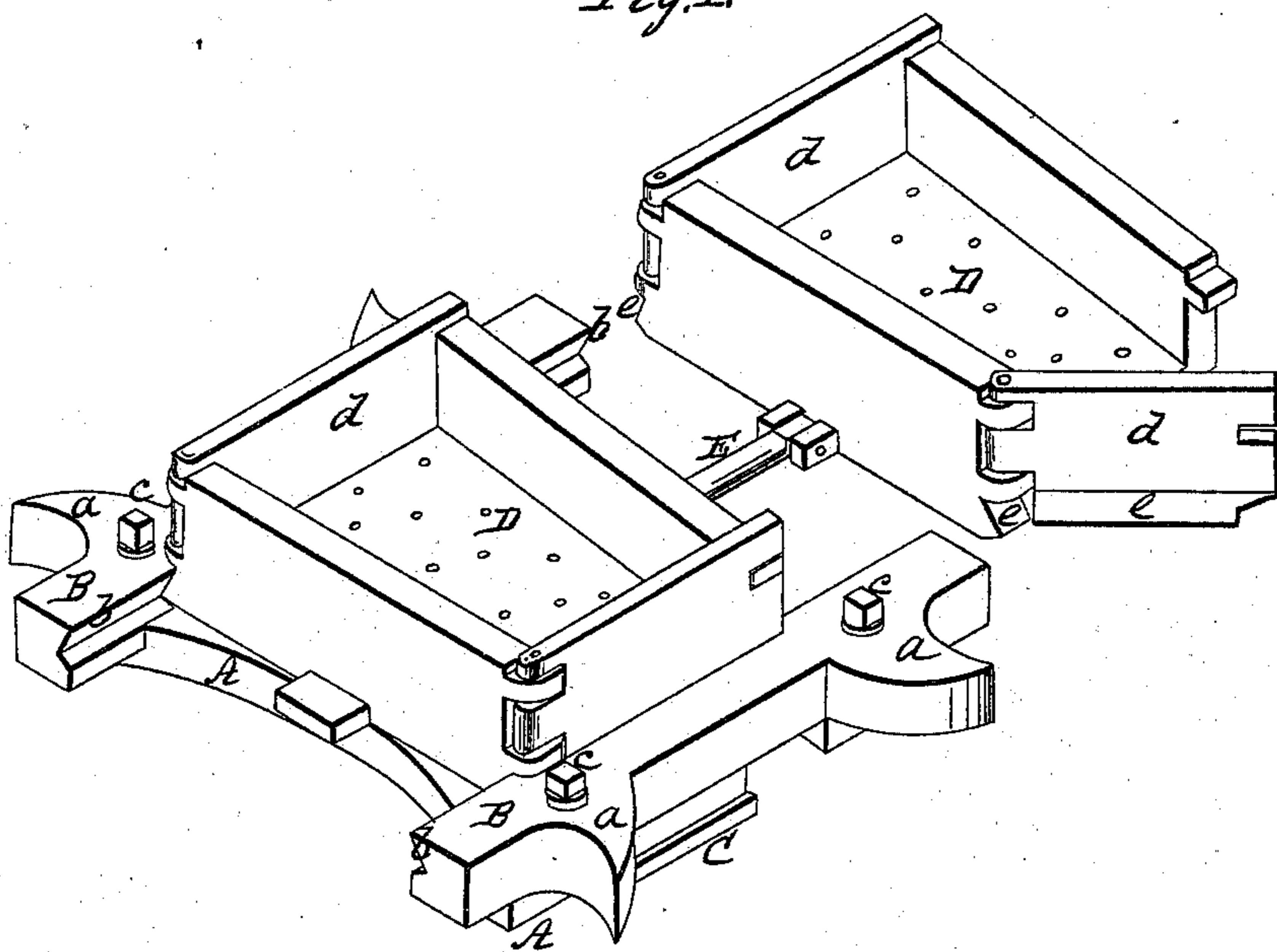
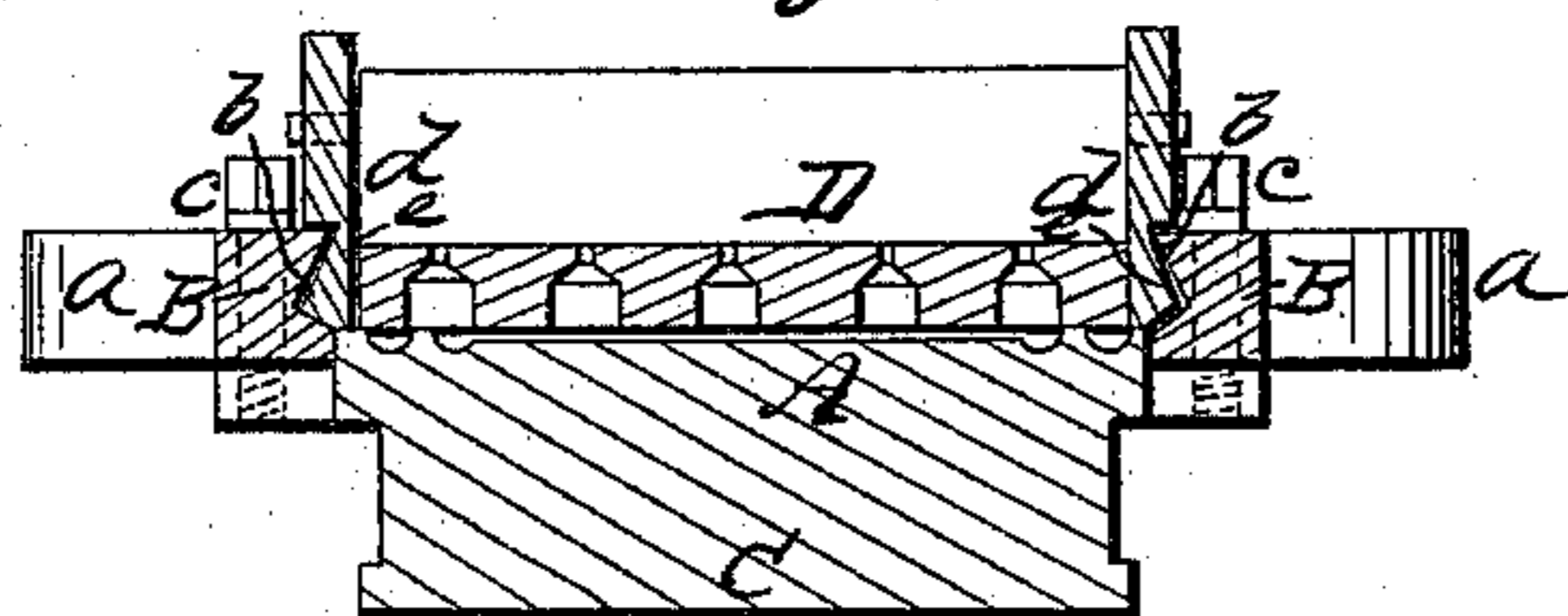


Fig. 2.



# UNITED STATES PATENT OFFICE.

WM. W. MARSH, OF JACKSONVILLE, ILLINOIS.

## SECURING AND GUIDING THE BOXES OF OIL-PRESSES.

Specification of Letters Patent No. 17,161, dated April 28, 1857.

*To all whom it may concern:*

Be it known that I, WILLIAM W. MARSH, of Jacksonville, in the county of Morgan and State of Illinois, have invented a new and useful Improvement in Oil-Presses; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a perspective view of one of the trusses of an oil press and two meal boxes which are used therein alternately. Fig. 2, is a transverse vertical section of the truss and one of the meal boxes.

Similar letters of reference indicate corresponding parts in both figures.

This invention relates to vertical presses and consists in furnishing the upper sides of the trusses with guides of such form that while they serve the two purposes of guiding the boxes into and out of the press, and securing their hinged sides, they also serve to connect the trusses with the boxes immediately above them in such a manner that the weight of the trusses will aid in drawing the boxes off the pistons which operate in them, and thereby opening the press when the ram is allowed to return after having expressed the oil from the meal.

To enable others to make and use my invention, I will proceed to describe its construction and operation.

I have thought it sufficient to show in the drawing only one of the trusses and one pair of meal boxes with their connecting guides as all the other parts of the press may be substantially like those of the oil press described in my Letters Patent dated Jan. 13, 1857, or of other oil presses heretofore used.

A, is the truss which is of the usual construction having the piston C, attached to its under side.

B, B, are the guides consisting of two bars bolted to the top of the truss, close to the sides thereof, by bolts *c, c*, the said guides having lugs *a, a*, which fit to the upright pillars of the press and serve to guide the trusses in the vertical movement by which the pressing operation is effected, and having longitudinal tongues *b, b*, of semi-dovetail form parallel with each other fitting to grooves *e, e*, of corresponding form in the

sides *d, d*, of the meal boxes D, D. The sides *d, d*, are hinged vertically to the ends of the boxes to open horizontally.

E, is the link connecting the two meal boxes so that one may be drawn into the press as the other is drawn out.

It will be readily understood that the guide bars B, B, standing above the trusses at the sides of the meal boxes and fitting snugly thereto, serve to guide the boxes in and out of the trusses and also to confine the hinged sides *d, d*, against the outward pressure that is produced upon them by the expressing operation, and at the same time, by their tongued form, entering the grooves in the boxes, they connect the trusses with the boxes above them in such a manner that when the ram, which is at the bottom of the press, is withdrawn in a downward direction, each truss is left suspended from the box above it and consequently adds its great weight to that of the box to assist in drawing the box off the piston, which renders it imperative upon the box to descend. By thus providing for the drawing of the boxes off the pistons, one of the greatest difficulties encountered in operating oil presses is removed.

The longitudinal tongues and grooves of the guides and boxes may be of any form that will effect the connection of the boxes and trusses; and it is immaterial whether the tongues be upon the guides and the grooves in the boxes, or vice-versa.

I do not here intend to claim generally the use of longitudinal guides or flanges at the sides of the trusses to guide the boxes to and from the trusses and keep the hinged sides of the boxes closed, but

What I do claim as my invention, and desire to secure by Letters-Patent, is—

The employment, upon the upper sides of the trusses, of longitudinal guides B, B, of such form, substantially as described, that while they serve to conduct the boxes to and from the press and to confine the hinged sides against the outward pressure, they also serve to connect the trusses with the boxes, for the purpose herein specified.

W. W. MARSH.

Witnesses:

HENRY F. BRENSON,  
W. TUSCH.