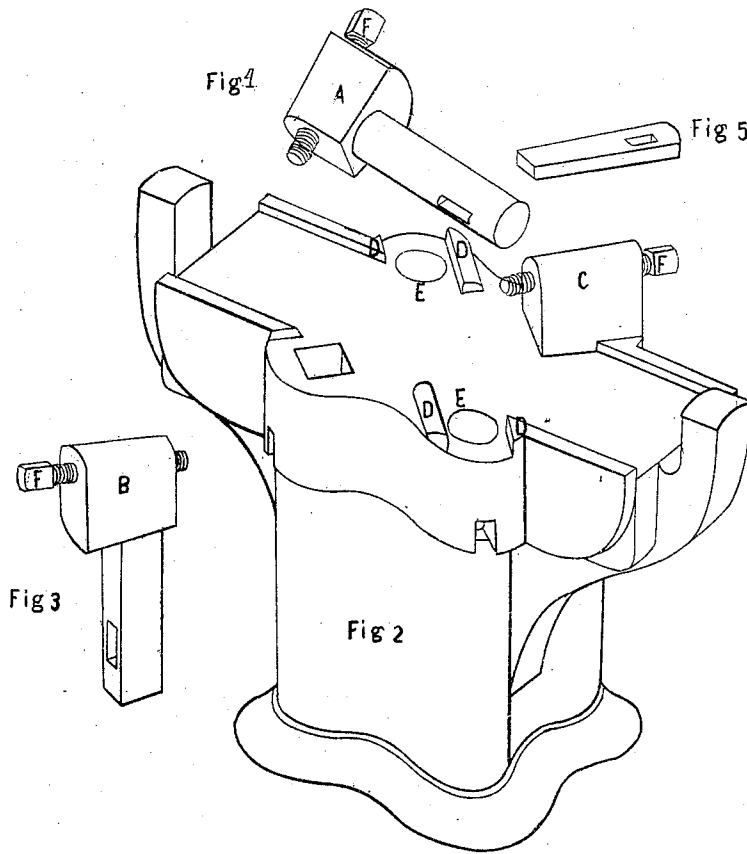
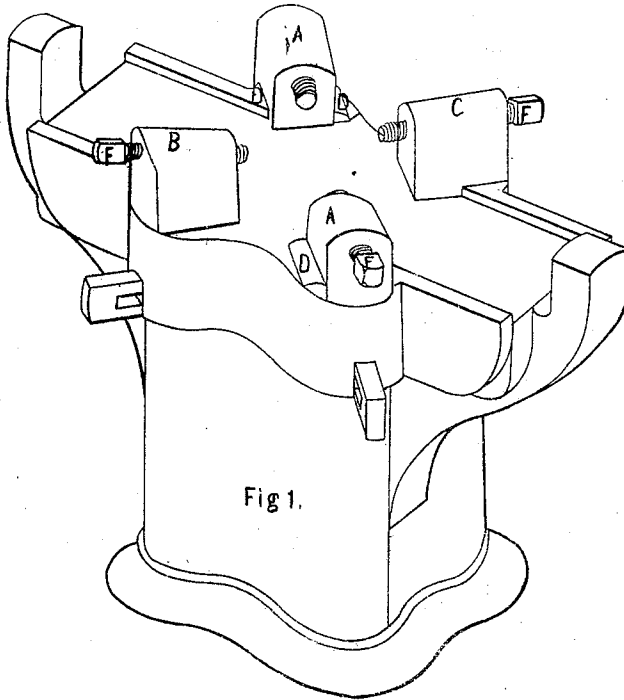


M & C. Peck.
Droß Press.

No 29,910.

Patented Sept 4, 1860.



WITNESSES

Robt W. Mingle
Wm. H. Hildner

INVENTOR.

Wm. Peck
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UNITED STATES PATENT OFFICE.

MILO PECK AND CHARLES PECK, OF NEW HAVEN, CONNECTICUT.

DROP-PRESS.

Specification of Letters Patent No. 29,910, dated September 4, 1860.

To all whom it may concern:

Be it known that we, MILO PECK and CHARLES PECK, both of the city and county of New Haven, in the State of Connecticut, have invented a new and improved mode of making and constructing puppet-heads to drop and other presses and of fitting and adjusting the same to the anvils of such presses; and we do hereby declare that the following is a full, clear, and exact description of such invention, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure I, represents a perspective view of the anvil, with the puppet-heads severally adjusted therein and thereto. Fig. II, represents a corresponding view of the anvil, with all the puppet-heads, excepting the stationary one "C," removed from their respective cores or sockets on the anvil. Fig. III, represents a perspective view of the square-shanked puppet-head in common use. Fig. IV, represents a similar view of the cylindrical-shanked puppet-head, for which Letters Patent are now sought to be obtained. Fig. V, represents the key used in keying up the puppet-heads to their places on the anvil.

Similar letters of reference, where they occur in the several figures, denote like parts of the anvil in all of them.

Our invention consists in making and constructing cylindrical-shanked puppet-heads, in place of the stationary and square-shanked ones now in common use, and in fitting and adjusting the same to anvils in the manner described below. These cylindrical-shanked puppet-heads can not only be made and adjusted to anvils with much greater readiness and facility than the square-shanked ones, but will, when adjusted, secure far greater accuracy of range to the puppet-screws, as well as greater strength, stability, and durability of parts, all of which are material considerations in the fitting up of drop and other presses.

To enable others skilled in the art to make and use our invention, we will proceed to describe the same with reference to the drawings.

A, represents the cylindrical-shanked puppet-heads, with the puppet-screws adjusted therein; and in Fig. I, these are keyed home to their proper place on the anvil between the stationary ledges hereinafter described, the faces of which are planed with reference

to fitting the puppet-heads firmly to their seat on the anvil.

B, represents the square-shanked puppet-heads now in common use, with the puppet-screws adjusted therein.

C, represents the stationary puppet-head, which is cast in connection with the anvil and forms a part of the same.

D, represents the stationary ledges, the office of which is to steady and render firm the position of the cylindrical-shanked puppet-heads, when keyed home to their place on the anvil.

E, E, represent that portion of the face of the anvil planed out between the stationary ledges D, with reference to fitting in the puppet heads in the manner hereinafter described.

F, represents the puppet-screws to the different puppet-heads, the office of which, in the construction of the cylindrical-shanked puppet-heads, is materially important in this, that they furnish the centers for planing up the sides of said heads to their proper width, and with their proper range, to fit in between the faces of the stationary ledges D.

Your petitioners would here state that they do not claim anything new in the manner of fitting up the anvils to drop and other presses, otherwise than by the adjustment of the puppet-heads between the stationary ledges D, and the fitting in of their shanks to the cores or sockets of the anvil in the manner more fully described below. The method of making and fitting these cylindrical-shanked puppet-heads to drop and other presses, and its advantages over the old methods, may be particularized thus: After the face of the anvil is planed to the proper level, and the faces of the stationary ledges D, are dressed to their proper line (which latter process is effected by planing diagonally across the face of the anvil and through opposite sets of ledges), the cores or sockets for the puppet-heads are bored out perpendicular to the face of the anvil; the shanks of the puppet-heads are then turned to fit the cores, the screw-holes to the heads are bored and tapped; the screws fitted into the same, and the sides of the puppet-heads planed parallel to the axis of the screws. These sides are so planed as to fit in accurately between the dressed faces of the stationary ledges D, the office of which ledges, as has been stated in part, is to hold the puppet-heads firmly in their place on the anvil,

and break the torsional strain which is thrown entirely upon the shank of the puppet-head in common use and marked B, in the drawings. This mode of adjustment secures at once the proper range of the puppet-screws, and obviates the difficulty of fitting the puppet-heads to their seat on the anvil, experienced in the case of those with square shanks, since they can be readily turned or dressed at right angles to the axis of their shanks, and thus made to fit perfectly on their seat between the stationary ledges D. In this way a perfect fit is secured to the puppet-head in all its parts, and a greater degree of strength, stability, and accuracy of range and adjustment obtained, than can possibly be done in the old way of making and fitting puppet-heads.

The old way of making and adjusting puppet-heads is shown in part by the accompanying drawings, where the puppet-head marked C, is supposed to be cast in connection with the anvil and forms a part of it, and that marked B, (the one most commonly in use) is fitted to the anvil by means of a square core or socket sunk therein, with a shank to the puppet-head of corresponding dimensions to fit the same. The great disadvantage of the stationary puppet-head consists in the difficulty of drilling and tapping the hole for the puppet-screw with sufficient accuracy of range to secure the proper adjustment and stability of the die when placed in its position on the anvil.

The adjustment of square-shanked puppet-heads to anvils is attended with the following difficulties: In the first place the cores for the shanks are liable to be thrown out of a true perpendicular in casting, and this defect cannot be remedied in the ordinary mode of drifting them out. In fitting the

shank to the core or socket there is much greater difficulty than in case of the cylindrical shank, since the latter can be readily turned to fit its core, while the former has to be planed up with great accuracy and precision in order to secure a perfect fit. There is also considerable difficulty in fitting the head of the puppet properly to its seat on the anvil in the case of the square-shanked puppet-head. The great difficulty, however, consists in drilling and tapping the hole for the puppet-screw with the proper accuracy of range, as in drilling the screw-hole any deviation from the proper range is a defect that cannot be remedied. In the use of the square-shanked puppet-head another disadvantage is encountered in the torsional strain upon the same, which tends to loosen it and destroy its stability as a fixed part of the bed, at the same time that it increases the liability of the casting to break outward from the core, of which there is always a much greater tendency in the case of a square than a round case.

Having thus described the method of making and fitting puppet-heads with cylindrical shanks to drop and other presses, and enumerated its advantages over the old methods, what we claim as new and desire to secure by Letters Patent is—

The making and constructing of puppet-heads to drop and other presses with cylindrical shanks, and fitting the same to anvils between raised ledges or their equivalents substantially as herein described and set forth.

MILO PECK.
CHAS. PECK.

Witnesses:

ROBT. W. WRIGHT,
WM. HILLHOUSE.