

E. L. GAYLORD.
POWER PUNCHING-PRESS.

No. 179,781

Patented July 11, 1876.

Fig. 1.

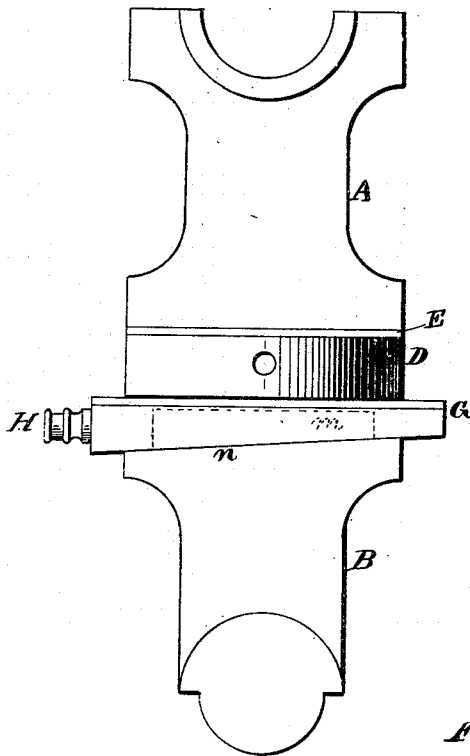


Fig. 2.

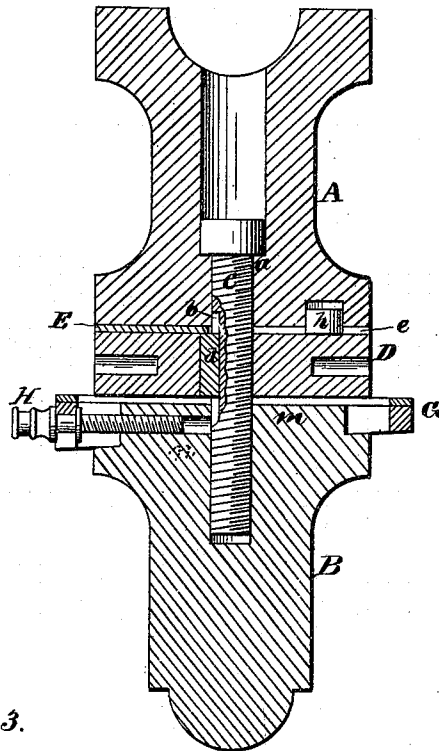


Fig. 3.

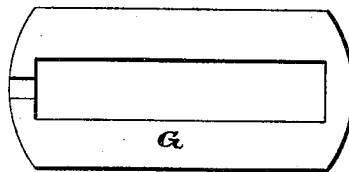
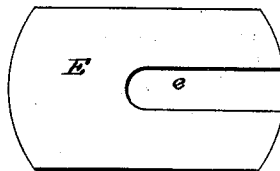


Fig. 4.



WITNESSES

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EDWARD L. GAYLORD, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO JOHN S. FOLLANSBEE, OF SAME PLACE.

IMPROVEMENT IN POWER PUNCHING-PRESSES.

Specification forming part of Letters Patent No. **179,781**, dated July 11, 1876; application filed February 10, 1876.

To all whom it may concern:

Be it known that I, EDWARD L. GAYLORD, of Bridgeport, in the county of Fairfield, and in the State of Connecticut, have invented certain new and useful Improvements in Power Punching-Presses; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making a part of this specification.

In the ordinary pitmen for power-presses, when it is desired to adjust the pitman to different dies, &c., it has to be made longer or shorter, which is usually accomplished by the insertion of washers of varying thickness, and at last pieces of paper are inserted to get an accurate adjustment. This requires considerable time, and is also a very difficult and tedious proceeding.

The object of my invention is to obviate this difficulty, and to render the pitman capable of being adjusted accurately and quickly. To this end the nature of my invention consists in the introduction between the sections of a two-part pitman, that are held together by a screw, and in the manner hereinafter described, of a wedge with a device for forcing it in or withdrawing it, thereby making the pitman longer or shorter, as may be required. My invention further consists in combining a vertical pin with such pitman and the ordinary washer, to prevent the washer from turning around, all as hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation of a power-press pitman embodying my invention. Fig. 2 is a longitudinal section of the same. Fig. 3 is a plan view of the wedge, and Fig. 4 is a plan view of the washer used in the pitman.

A represents the upper, and B the lower, part of a pitman for power-presses. Longitudinally through the upper part A is bored a hole for the passage of the screw C, which screws into the top of the lower part B, the

head of the screw resting on a shoulder, *a*, in the hole bored through the upper part A. The screw C has a longitudinal groove, *b*, in which is inserted a feather, *d*, formed or fastened in the hub of a wheel, D, placed around the screw between the two parts A and B. By turning this wheel D the screw C is rotated in either direction, so as to extend or contract the pitman. E represents the ordinary washer, used between the upper part A and the wheel D when the pitman is extended. This washer is formed with a slot, *e*, extending from one end inward to the center, so that the washer can easily be slipped in around the screw. To prevent the washer from turning a loose pin, *h*, is inserted in a hole in the bottom of the top part A, which pin falls of its own gravity through the slot *e* in the washer onto the wheel, so that the washer is, in a measure, held in position and kept from turning when the wheel is turned. The top of the lower part B of the pitman is formed with an elongated tenon, *m*, and an inclined shoulder, *n*, on each side thereof, and on this tenon is placed a wedge, G, having a central slot, as shown in Fig. 3, for the passage of the tenon *m*. This wedge takes up the space between the inclined shoulders *n n* and the bottom side of the wheel D. In the large end of the wedge G is a slot, in which is laid a flanged screw, H, which screws into the tenon *m* for adjusting the wedge.

In operation, one or more washers, E, are first used, as required, and then to make the final nice adjustment the wedge is moved out or in, as required, by means of its screw H, and the parts held firmly by turning the wheel D to tighten the screw C.

My invention is equally adapted to a right-and-left screw as to the screw C shown.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the parts A B, the vertical headed connecting-screw C, and the slotted wedge G, provided with adjusting-screw H, all substantially as and for the purposes herein set forth.

2. The combination of the pitman A B, made in two parts, as described, the screw C, feath-

ered wheel D, the wedge G, with regulating-screw H, and the inclined shoulders *n n* and tenon *m*, formed on the part B of the pitman, all substantially as and for the purposes herein set forth.

3. The combination of the loose pin *h*, inserted in the part A of the pitman, the slotted washer E, and wheel D, as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of February, 1876.

E. L. GAYLORD.

Witnesses:

WM. E. DISBROW,
C. H. NEWTON.