

E. A. WARREN.
Printers' Quoins.

No. 151,455.

Patented May 26, 1874.

Fig. 1

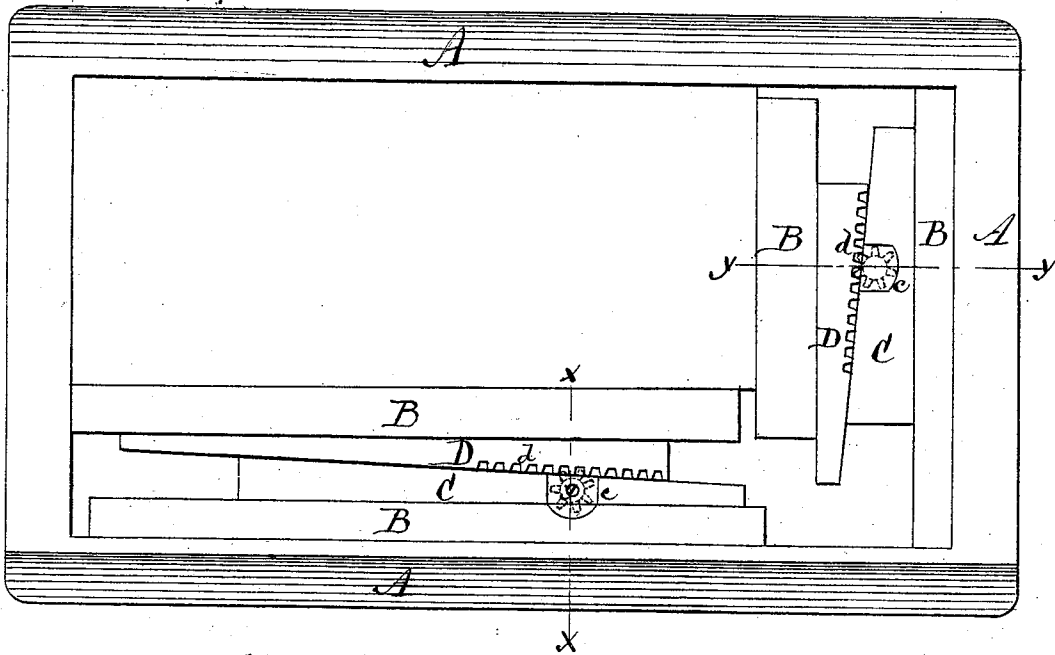


Fig. 2.

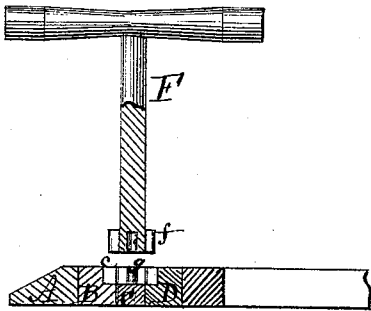
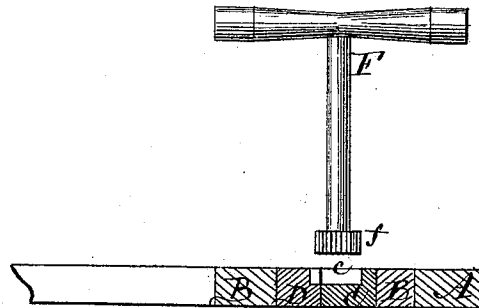


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE

EDMOND A. WARREN, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN PRINTERS' QUOINS.

Specification forming part of Letters Patent No. **151,455**, dated May 26, 1874; application filed May 5, 1874.

To all whom it may concern:

Be it known that I, EDMOND A. WARREN, of Brooklyn, in the county of Kings and State of New York, have invented certain Improvements in Printers' Quoins, of which the following is a specification:

This invention relates to certain improvements on that for which Letters Patent No. 146,967 were granted to me under date of January 27, 1874; and it consists in the combination of a toothed or pinioned wrench or key and a pair of quoins, one of which is formed with a rack for engagement with the pinion on the key, and the other is formed with a bearing on the key.

In the accompanying drawing, Figure 1 is a top view of a chase and furniture with my improvements applied thereto. Fig. 2 is a vertical section taken in the line *xx* of Fig. 1. Fig. 3 is a vertical section taken in the line *yy* of Fig. 1.

The chase A and furniture B are of the ordinary form and construction, and the quoins C D are of the usual wedge shape. The quoin C has a recess, *c*, in its upper face, forming the bearing for the lower end of the wrench or key F, which has a pinion, *f*, formed thereon. The quoin D has a rack, *d*, or series of teeth, on its inclined side, and near its broad end, for engagement with the pinion *f* when said pinion is in the recess *c*, which recess extends sufficiently near the inclined side of the quoin

to allow the teeth of the pinion to mesh into the rack.

The quoins are placed with their inclined sides toward each other, and the recess C toward the rack *d*, with a piece of furniture between the quoin C and the chase, and another piece between the quoin D and the type. The key F is inserted in the recess *c*, with the pinion *f* meshing into the rack. The quoins are tightened or loosened according to the direction in which the key is turned, both quoins sliding in the direction of the revolution of the pinion.

This invention can be applied to chases of any size and any ordinary construction, as the recess for the key is made in one of the quoins instead of in the chase, as in my patent aforesaid.

If desired, the recess may have in its center a pivot, *g*, for engagement with a socket in the lower end of the key, as shown in Fig. 2.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the quoin D, formed with the rack *d*, the key F, formed with the pinion *f*, and the quoin C, formed with a bearing for the key, substantially as shown and described.

EDMOND A. WARREN.

Witnesses:

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