

(No Model.)

W. R. WHITMORE.

PRINTER'S QUOIN.

No. 261,886.

Patented Aug. 1, 1882.

Fig. 1.

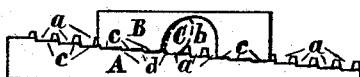


Fig. 2.

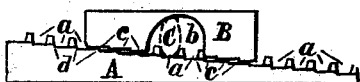


Fig. 3.

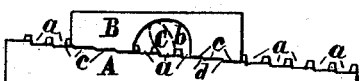


Fig. 4.

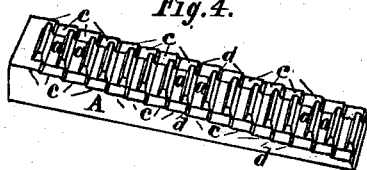


Fig. 5.

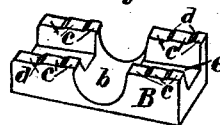


Fig. 6.



Fig. 7.



Attest;

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UNITED STATES PATENT OFFICE.

WILLIAM R. WHITMORE, OF NEWBURYPORT, MASSACHUSETTS, ASSIGNOR
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PRINTER'S QUOIN.

SPECIFICATION forming part of Letters Patent No. 261,886, dated August 1, 1882.

Application filed February 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. WHITMORE, a citizen of the United States, residing at Newburyport, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Printers' Quoins, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to an improvement in printers' quoins, the object of the invention being to so construct and operate such quoins that they will be durable under the ordinary rough usage, that great force may be applied in locking up, in a simple and effective manner, by means of a wrench or lever, and that the quoins will be held most securely when the form is locked up.

My invention consists in quoins formed in pairs, of the contiguous sides of which one has notches or recesses to receive the edge part or projection of a wrench or lever, the other of said sides having a transverse opening in which the wrench or lever may be inserted, so that the quoins may be spread apart and then moved along by the side of the other by means of the wrench or lever, in the manner herein-after more particularly described.

The invention also consists in planes or faces formed upon the contiguous sides of the pair of quoins, which are parallel to the outer sides of the quoins, and prevent the quoins from sliding accidentally one upon the other when the form is locked up.

In the drawings, Figures 1, 2, and 3 are plan views of a pair of quoins embodying my invention and illustrating the position the quoins take in operation with reference to each other. Fig. 4 is a perspective view of one of the quoins, and Fig. 5 of the other quoin, showing particularly the sides which are contiguous in operation; and Figs. 6 and 7 are different views of the wrench or lever.

In a side of one, A, of a pair of quoins are notches or recesses *a*, as many as may be required, through the length of the quoin. In a side of the other quoin, B, is a transverse opening, *b*. The sides having said notches or recesses and transverse opening are the contiguous sides of the pair.

A wrench or bent lever, C, is employed for operating the quoins. The ends of this lever are oblong in cross-section, and are bent or formed at an angle with the shank. One end so shaped and bent would answer very well; but I prefer to have both ends thus constructed for greater convenience, their corresponding diameters of cross-section being at right angles to one another, as shown.

In operation the end of the wrench or lever C is inserted in the opening *b* of the quoin B in such a manner that one edge of the wrench or lever shall enter the proper notch or recess *a* in the quoin A, as shown in Fig. 1. Then by swinging the wrench or lever C while the opposite edge of the same bears against the quoin B the latter is pressed away from the quoin A and then carried along by the side of the same, as illustrated in Figs. 2 and 3. The dotted lines show the position of this part or end of the wrench or lever. Thus the quoin B has taken, as it were, one step upon the quoin A. Upon swinging the wrench or lever back to its first position and inserting the edge in the next notch or recess *a* another movement of the quoin B may be made by which it advances another step, and so on, step by step, till the pair of quoins are expanded transversely and sufficiently to get the required pressure for locking up the form.

Particular attention should be given to the construction of those parts of each of the quoins which are outside of the space occupied by the notches or recesses *a* and form the balance of the contiguous sides. Each of said parts is so formed as to present a series of planes, each plane being parallel to the outer or opposite side of a quoin. These planes *c* and their risers *d* form what may be called "steps." Owing to this peculiar construction the quoins, in locking up, are spread apart at each movement only to that extent as to allow each plane of the quoin B to be slid or moved upon the next higher plane of quoin A, while the quoins will be prevented from accidentally sliding one upon the other when the form is locked up, since the steps or planes *c* and risers *d* form depressions and corresponding projections on the contiguous sides, said sides being in their

general direction, as a whole, inclined to the outer or opposite sides of the quoins.

The part of quoin A having the notches or recesses *a* being raised above the remainder of this side, and fitting a longitudinal groove, *e*, in quoin B, the quoins will be effectually prevented from sliding transversely one upon the other.

The notches or recesses *a* in quoin A may be of various forms without materially changing the nature or working of the device, the wrench or lever C having its edges at and near one or both ends or projections thereon formed to correspond with said notches or recesses. So, also, these notches or recesses may be at or near the edges of this side of the quoin A, while the planes or steps occupy the middle portions of the contiguous sides of the quoins, being a change in form of quoins that will naturally suggest itself, and one that will involve the essential features of my invention.

I claim as my invention—

1. A pair of quoins having on each of their contiguous sides a series of steps presenting planes parallel to the outer or opposite sides of the quoins, said contiguous sides being inclined in their direction, as a whole, to said outer or opposite sides, substantially as described.

2. The combination of quoin A, having notches or recesses *a*, with quoin B, having opening *b*, said quoins forming a pair for joint operation, and having on their contiguous sides bearing planes parallel to the outer or opposite sides of the quoins, substantially as and for the purpose specified.

WILLIAM R. WHITMORE.

Witnesses:

JOHN L. KNIGHT,
REUBEN F. DADE.