

(Model.)

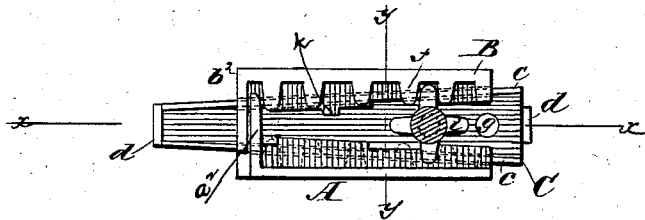
O. C. SPRINGER.

PRINTER'S QUOIN.

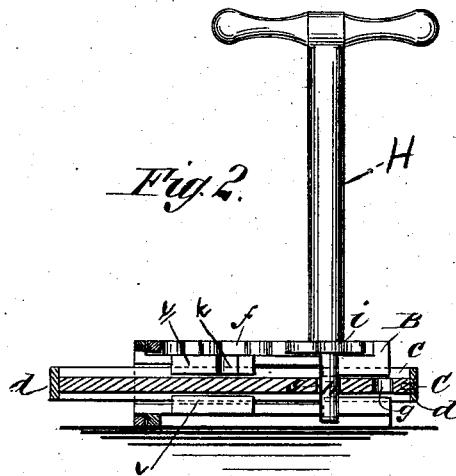
No. 260,621.

Patented July 4, 1882.

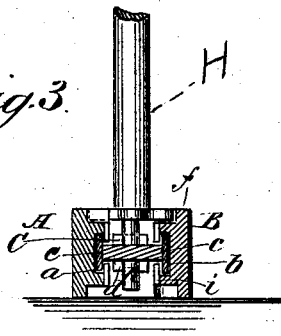
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

OTTO C. SPRINGER, OF CLEVELAND, OHIO.

## PRINTER'S QUOIN.

SPECIFICATION forming part of Letters Patent No. 260,621, dated July 4, 1882.

Application filed March 11, 1882. (Model.)

*To all whom it may concern:*

Be it known that I, OTTO CORROLL SPRINGER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Printers' Quoins, of which the following is a full, clear, and exact description.

My invention consists in a novel construction and combination of three wedges, one of which bears against the inner side of the chase, another against the outer side of the furniture, and the third works between the other two, so as to press laterally against them and tighten them without moving them longitudinally.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a top view of a quoin embodying my improvements. Fig. 2 is a longitudinal section taken in the line *xx* of Fig. 1. Fig. 3 is a transverse section taken in the line *yy* of Fig. 1.

A and B represent the outer wedges with their wide ends toward the left-hand side of Figs. 1 and 2.

C is the central wedge with its wide end toward the right-hand side of said figures.

The wedges A and B are of about the same height as an ordinary quoin, and the wedge C about one-third of said height.

On the inner sides of the outer wedges are grooves *a* and *b*, which may be of dovetail or other form, which will render them wider at the bottom than at the top of said groove.

The central wedge, C, has on its two opposite sides ribs *c*, which engage with said grooves *a* and *b* when the three wedges are in place together to form the quoin. After the wedge C has been thus connected to the outer wedges its displacement is prevented by stops or lugs *d*, which strike against the projections *e k* on the inside of the wedges A B, and are attached to its ends by welding, riveting, or in any other suitable manner.

At the wide ends of the outer wedges, A and B, are transverse arms *a*<sup>2</sup> *b*<sup>2</sup>, which extend inwardly and engage with each other, so as to prevent either one of the wedges from mov-

ing longitudinally and independently of the other.

The central wedge, C, is considerably longer than the outer ones, so as to allow it the proper amount of travel between them. It may be driven home by means of a shooting-stick if desired; but I prefer to use for that purpose the devices shown herein, which are as follows:

On the inner side of the wedge B is a rack, *f*, and in the central wedge, C, is a suitable number of round holes *g*.

A key, H, is provided near its lower end or spindle, *h*, with a pinion, *i*, for engagement with the rack *f*.

The operation of tightening the quoin is as follows: Being arranged at its narrowest dimensions by pulling out the central wedge as far as necessary, the quoin is placed at the desired point between the chase and furniture. The spindle *h* of the key is then inserted in one of the holes *g* of the central wedge, and the pinion *i* is engaged with the rack *f*. Then by turning the key in the proper direction the wedge C is driven between the outer ones, so as to force them laterally away from each other until the quoin is perfectly tight in its place. By turning the key in the opposite direction the wedge C is drawn outward, so as to loosen the quoin and allow it to be removed.

The advantages of my invention are: It is always ready for use, and its amount of adjustability is so great that it may be made to fill spaces of various sizes between the chase and furniture, thus obviating the necessity for having a large number of quoins of different sizes. As the outer wedges move only laterally and not longitudinally, and the central wedge does not touch either the furniture or the chase, the furniture is not marred by friction of the quoin, as is the case where a quoin is driven home with a shooting-stick. The quoin is simple and cheap in construction, may be made of brass, malleable iron, or any other suitable metal, and is durable, strong, and not liable to get out of order.

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

1. A printer's quoin in which two laterally movable and grooved wedges, A B, having the

projections  $e$   $k$  and connections  $a^2$   $b^2$ , are combined with a third ribbed wedge, C, of less height but longer than the others, and having stops or lugs  $d$ , as shown and described.

- 5 2. The combination, with the wedge A, of the wedge B, having on its inner side the rack  $f$ , and the central wedge, C, having the round holes  $g$ , as shown and described, where-

by the wedge C may be driven home between the other two wedges by a key having a spindle,  $h$ , and pinion  $i$ , as shown and described. 10

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Witnesses:

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