(No Model.)

A. S. N. OLSON.

PRINTER'S QUOIN.

No. 541,115. Patented June 18, 1895.

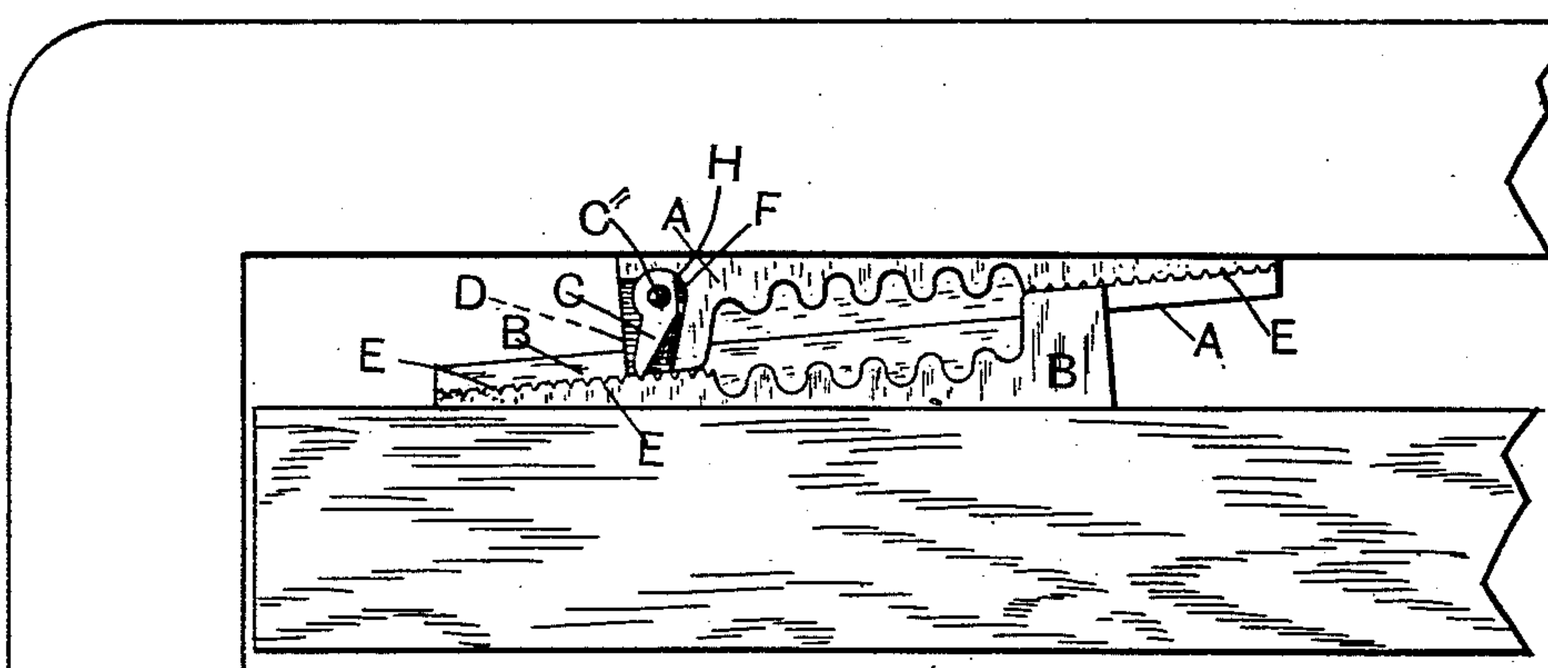


Fig. 1.

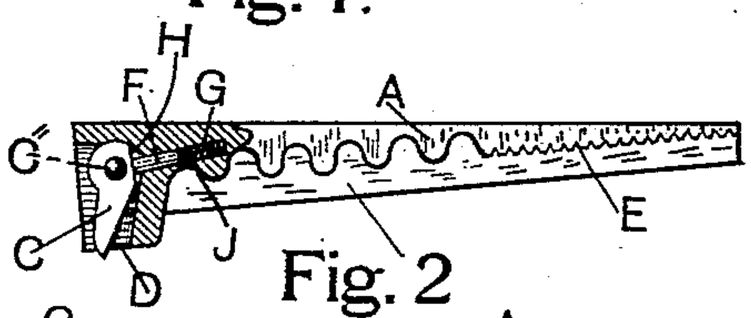


Fig. 2

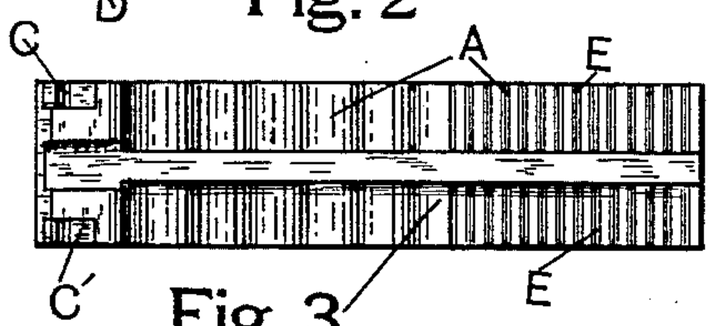


Fig. 3

Fig. 4.

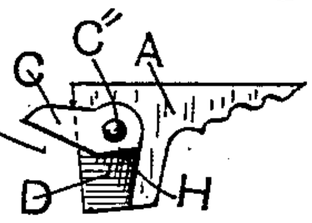
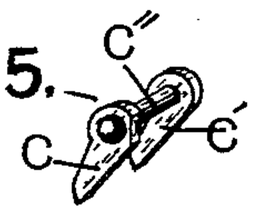


Fig. 5.



WITNESSES:

H. H. Hale

William R. Carr.

INVENTOR:

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By his atty. Oscar Snell

UNITED STATES PATENT OFFICE.

ALBERT S. N. OLSON, OF CHICAGO, ILLINOIS.

PRINTER'S QUOIN.

SPECIFICATION forming part of Letters Patent No. 541,115, dated June 18, 1895.

Application filed November 30, 1894. Serial No. 530,454. (No model.)

To all whom it may concern:

Be it known that I, ALBERT S. N. OLSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Printer's Quoin, of which the following is a specification.

My invention relates to quoins used by printers for securing type within a form when made ready for the press and my object is to provide a means for preventing the ordinary two piece wedge quoin from slipping backwardly, after having been once set in proper position, the construction thereof being described hereinafter, and is illustrated in the accompanying drawings, in which—

Figure 1 is a plan of a portion of one corner of an ordinary printer's form, showing a piece of furniture and a quoin in which is embodied my improvement in the position which it is used. Fig. 2 is a plan of one of the pieces of a quoin with a portion of one end shown as broken away better to illustrate one manner of applying my improvement. Fig. 3 is a side elevation of one of the wedge pieces of this quoin with my improvement attached thereto. Fig. 4 is a small portion of one end of one piece of the quoin with one part in a different position from what is shown in the other figures. Fig. 5 is a perspective view of two detents which are firmly attached to their pivotal shaft to act in unison.

This improvement may be applied to both wedge halves of the quoin, but in the drawings is shown as applied to but one.

The kind of quoin shown in the drawings consists, as is well known, of two wedges which when placed together have their opposite faces parallel and in contact, respectively, with the form and with the furniture, the distance between these opposite faces being increased or decreased by sliding one of the wedges or both, longitudinally by means of a key which is provided with cogs which are fitted to mesh into the cogs plainly shown projecting toward one another from the opposite pieces A and B.

On account of the presence of ink or water, or from the two parts of the quoins of this character wearing very smooth on the contacting surfaces, there is a tendency of the parts to slip backwardly and loosen the furniture, and various provisions have been made to prevent this, among which may be mentioned a series of serrations on the surfaces in contact between the two halves A and B, the serrations of one registering with the depressions between the serrations of the other, but this expedient is objectionable in that, when the quoin is under even a moderate pressure in locking up the form the serrations must be made to jump over one another which not only requires an undue amount of power applied at the key but causes the serrations to quickly wear away to a comparatively smooth surface when the quoin is useless for the purpose intended, and to obviate these objections I have provided detents or dogs C and C′ which have one end firmly attached to the pivotal shaft C″ which is mounted transversely in the quoin near the large end thereof, the detents being disposed in a housed out portion D of the end of the half quoin so as not to increase the width of the same. The free end of each detent projects sufficiently to engage with notches E in the opposite half, as shown in Fig. 1, both detents being held in yielding contact with the sides of the notchss by means of a pin F, which projects from a longitudinally disposed hole G and contacts a flat face H at one side of the boss portion of one of the detents, C, the pin F being held in such contact, yieldingly, by means of a small helical spring J, Fig. 2.

The flat face H serves as a cam to force the pin F inwardly against the resiliency of spring J, when the detents are swung outwardly, Fig. 4, and are held in this position whenever necessary before fully locking up a form.

It is obvious to those skilled in the art to which this invention pertains that, when locking up a form the two wedges comprising this quoin are so disposed that, when two complete quoins are used on one side of a page of matter, the wedge half next the furniture of one quoin must be locked up in an opposite direction to the wedge half next the furniture of the other quoin of the same side in order to prevent slipping the wedges of the quoin first locked, and also for other obvious reasons both sides of the complete quoin must be capable of being engaged with the key and also both sides must have a detent C or C′ or a lever on

one side and a detent at the other, both attached to the pivotal shaft C″ so that, the detent at the lower side next the imposing stone may be thrown into or out of engagement with notches E as desired when the quoins are being manipulated in the operation of locking up or unlocking the forms.

I claim as my invention—

The combination in a pair of quoins having contiguous faces made inclined and provided with two parallel rack bars, located below the plane of the contiguous faces, and adapted to be moved in opposite directions by a pinion inserted between the rack bars, and with a laterally central longitudinal rib or feather, and a corresponding groove arranged at the head of each quoin, of a shaft mounted laterally through the head of one quoin and a detent fixed at each end of the shaft which operate in housed outside portions at opposite sides of the head, and are adapted to engage notches in the opposite quoin at each side of the longitudinal rib, and a spring operating to yieldingly hold the detents either into or out of contact with the opposite quoin as described.

In testimony that I claim the foregoing I have hereunto set my hand, this 10th day of November, 1894, in the presence of witnesses.

ALBERT S. N. OLSON.

Witnesses:

A. LONG,

H. C. DURFEE.