

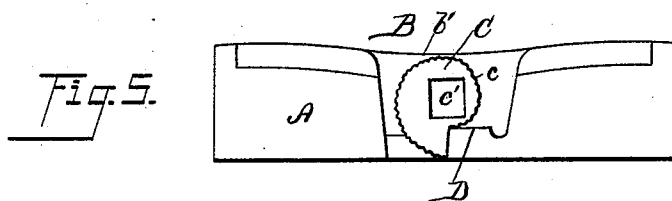
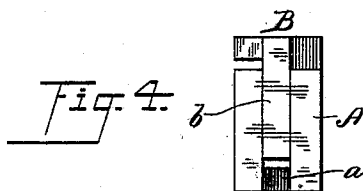
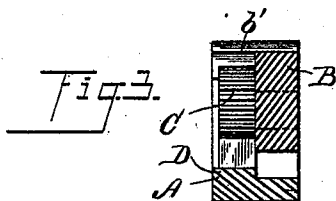
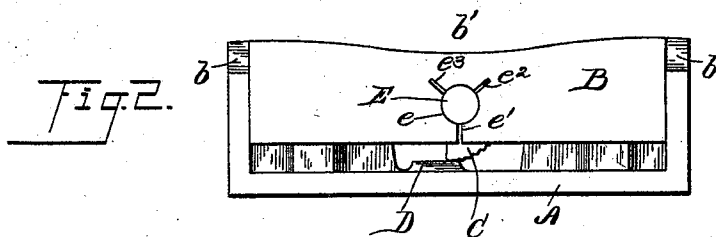
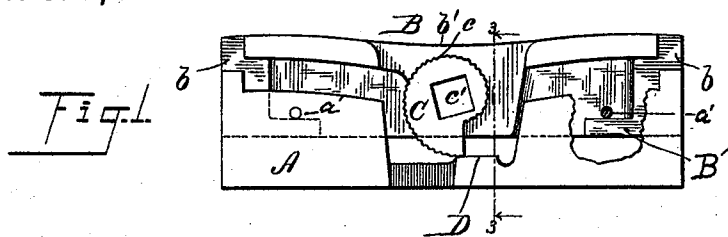
(No Model.)

2 Sheets—Sheet 1.

R. WARG & A. LINDEMANN.
PRINTER'S QUOIN.

No. 527,638.

Patented Oct. 16, 1894.



Witnesses,
E. E. Chapin
witness.

Inventors,
Robert Warg
August Lindemann,
By John E. Wiles,
Attorney.

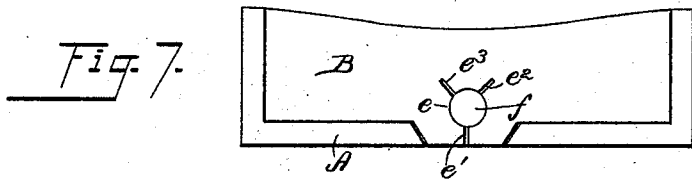
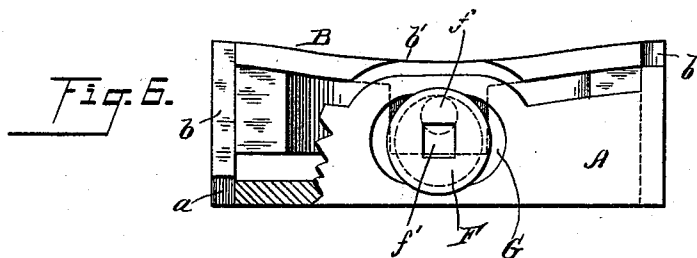
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2 Sheets—Sheet 2.

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PRINTER'S QUOIN.

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Witnesses.

E. E. Chapin
Witness.

Inventors.

Robert Warg
August Lindemann

By John E. Miles,
Attorney.

UNITED STATES PATENT OFFICE.

ROBERT WARG AND AUGUST LINDEMANN, OF MILWAUKEE, WISCONSIN,
ASSIGNORS TO JOHN W. O'NEILL, OF CHICAGO, ILLINOIS.

PRINTER'S QUOIN.

SPECIFICATION forming part of Letters Patent No. 527,638, dated October 16, 1894.

Application filed May 16, 1893. Serial No. 474,469. (No model.)

To all whom it may concern:

Be it known that we, ROBERT WARG and AUGUST LINDEMANN, citizens of the United States, residing at Milwaukee, county of Milwaukee, State of Wisconsin, have invented a certain new and useful Improvement in Printers' Quoins; and we declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Our invention relates to new and useful improvements in "printers' quoins," and consists in the matters hereinafter described and more particularly pointed out in the appended claims.

In the accompanying drawings illustrating our invention: Figure 1— is a plan view of one form of our improved quoin, with parts broken away. Fig. 2— is an inverted view of the same. Fig. 3— is a transverse sectional view of the same taken on line 3—3, of Fig. 1. Fig. 4— is an end view. Fig. 5— is a plan view of our improved quoin, illustrating it in its closed position. Fig. 6— is a broken plan view of another form of our improved quoin. Fig. 7— is an inverted view of the same showing it in its closed position.

Referring by letter to the said drawings, A and B represent respectively, two sections of the quoin, which are conveniently made of generally L shape in cross section, and are arranged to have a sliding engagement with each other. One of the sections, as A, is provided in its opposite ends with slots *a a*, and the ends of the other section B are provided with correspondingly shaped tongues or ribs *b b*, arranged to enter and slide in said slots, so as to keep the two sections of the quoin in alignment with each other.

A suitable cam or eccentric is provided for spreading the two sections of the quoin apart, as will be presently described.

In the first five figures of the drawings, a cam C, is shown as journaled in one section, as B, and arranged to engage with a bearing shoulder D upon the other section, and it follows from this construction, that by a rotary movement of said cam, the two sections may

be crowded away from each other, or permitted to be pressed together, according to the direction of rotation of the said cam. The bearing face of the cam is preferably roughened or corrugated as illustrated at *c*, to prevent accidental slipping of the cam when it is in operation to hold the sections of the quoin in their expanded positions. As a further precaution against slipping, the section B of the quoin, in which the cam is journaled, may be slotted adjacent to the bearing *e* for the axis E of said cam, these slots *e'*, *e''* and *e'''*, being conveniently arranged radially with respect to said bearing as best illustrated in Fig. 2, of the drawings. By this construction, a slight degree of elasticity is afforded to the section B of the quoin, and the bearing face of this section is made of substantially the form illustrated in the drawings, with its central part curved inwardly, as shown at *b*, so that the bearings of said section will be brought well toward the ends of the quoin. It follows from this construction, that when the two sections of the quoin are spread apart by the rotary movement of the cam, and the outer or bearing surface of the said sections are brought into forcible engagement with the form, the pressure of the cam upon the section B will cause said section to spring slightly, so as to cause the slotted bearing for the axis of the cam, to pinch or bind upon the outside of the said axis, and thus securely hold the cam from rotation. Under most circumstances, however, the operation of the cam will be sufficient to securely hold the sections of the quoin in their expanded positions without the necessity of slotting the bearing for the axis of said cam, from the fact that said cam has a dead thrust against the bearing shoulder D, so that there will be little or no liability of accidental loosening of the quoin when in operative engagement with the form. In the upper side of the cam, is provided a suitable angular socket *c'*, for the reception of an angular key or tool for adjusting the cam to a desired position.

As shown more particularly in Fig. 1, we prefer to construct the section B of the quoin, with inwardly extending shoulders B' B' and to provide suitable transverse pins or studs *a'* in the part A which pins are arranged to

project into the line of travel of the shoulders B' B' so as to be engaged thereby when the two sections or parts of the quoin have reached the limit of their outward movement, thus forming stops which serve to prevent the parts of the quoin from being separated.

In the form of construction illustrated in Figs. 6 and 7, of the drawings, an eccentric F is employed instead of the cam before described, and this eccentric is journaled upon a pin *f* revolubly engaged with a suitable bearing in the section B of the quoin, and is arranged to rotate within an elongated opening or slot G in the section A, of the quoin, and is adapted by its rotation to adjust the two sections of the quoin toward or away from each other in an obvious manner. In this form of construction, as in the form first described, the section B of the quoin, is provided with the radial slots *e'*, *e''*, *e'''* adjacent to the bearing *e* for the pin or trunnion *f* of the eccentric F, and the operation of these slots to permit of a slight spring of the section B so as to cause the same to bind upon the pin or trunnion *f* is the same as before described with reference to the other form of construction.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent of the United States, is—

1. A printer's quoin, comprising two sections movably engaged with each other, a suitable cam or eccentric revolubly journaled in one section and adapted for operative engagement with the other section, projecting bearing points upon the first mentioned section, and one or more slots communicating with the bearing of said cam or eccentric substantially as described.

2. A printer's quoin, comprising two sections movably engaged with each other, a suit-

able cam or eccentric revolubly journaled in one section and adapted for operative engagement with the other section to force said sections apart, projecting bearing points upon opposite ends of the first mentioned section, one or more suitable slots in said section communicating with the bearing of said cam or eccentric, one of said sections being provided at opposite ends with suitable slots or grooves, and the other section being provided with suitable tongues or ribs adapted for engagement with said slots or grooves, substantially as described.

3. A printer's quoin, comprising two sections movably engaged with each other, a suitable cam or eccentric journaled in one section and adapted for operative engagement with the other section, the section in which the cam or eccentric is journaled being provided with one or more radial slots communicating with the bearing of said eccentric, and having suitable projecting bearing points upon its outer face adjacent to its opposite ends, substantially as described.

4. A printer's quoin comprising two sections movably engaged with each other, guides for holding said sections in alignment, stops for limiting the outward movement of said sections, one of said sections being provided with a concave bearing face, a cam or eccentric journaled in said section, and one or more radial slots communicating with the bearing of said cam or eccentric, substantially as described.

In testimony whereof we sign this specification in the presence of two witnesses.

ROBERT WARG.

AUGUST LINDEMANN.

Witnesses:

JOHN E. WILES,
M. M. WILES.