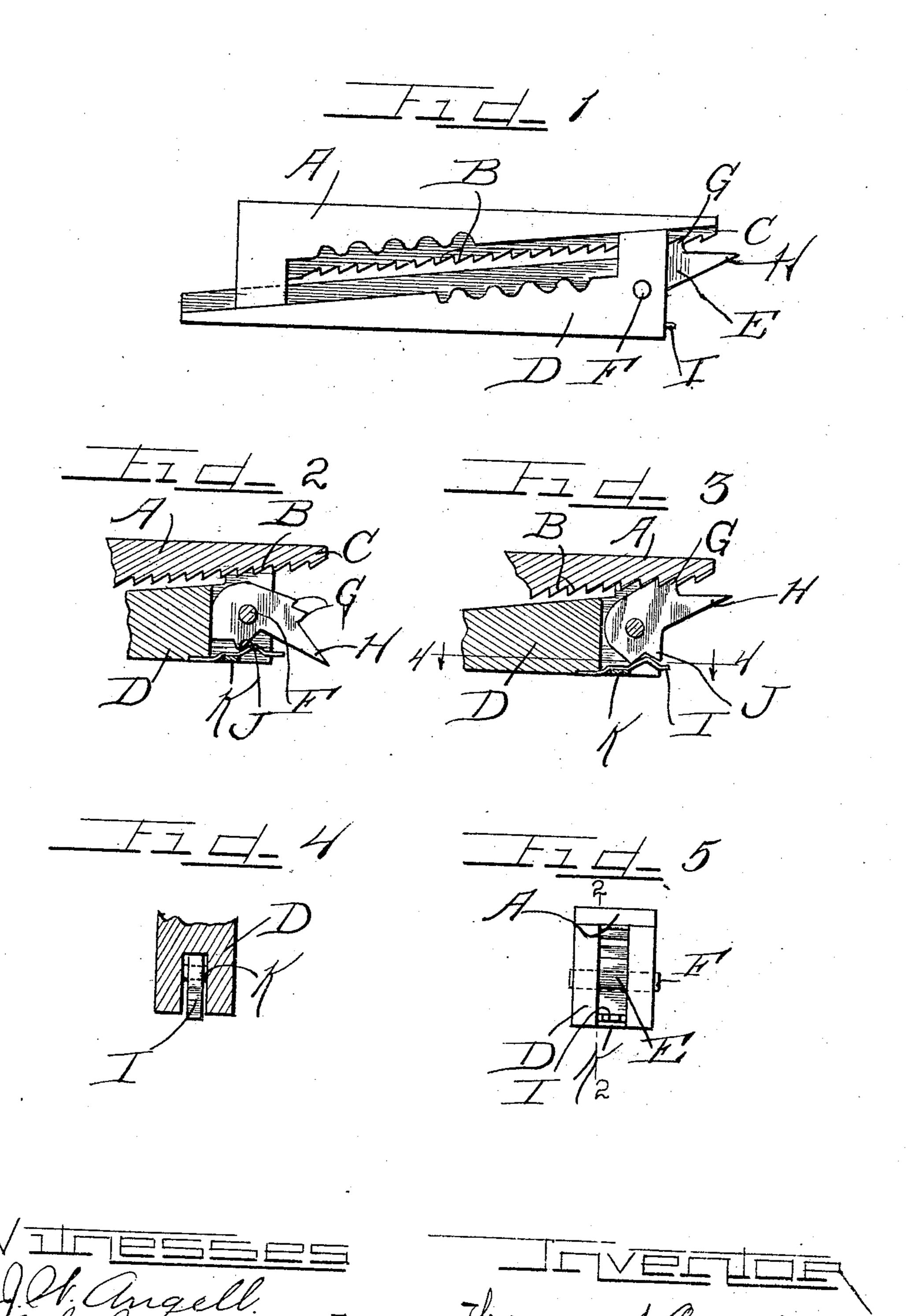
T. J. AMUNDSON.

PRINTER'S QUOIN.
APPLICATION FILED MAY 15, 1909.

940,113.

Patented Nov. 16, 1909.



UNITED STATES PATENT OFFICE.

THOMAS JAY AMUNDSON, OF CHICAGO, ILLINOIS.

PRINTER'S QUOIN.

940,113.

Specification of Letters Patent.

Patented Nov. 16, 1909.

Application filed May 15, 1909. Serial No. 496,138.

To all whom it may concern:

Be it known that I, Thomas J. Amundson, a citizen of the United States, residing at Chicago, in the county of Cook and the 5 State of Illinois, have invented a new and useful Improvement in Printers' Quoins, of which the following is a specification.

The object of the invention is to provide, at low cost, convenient, effective, and dura-10 ble quoins which may be used as plain ordinary quoins or as automatically locking

quoins. In the accompanying drawings, Figure 1 is a plan view of a pair of quoins, embody-15 ing the invention, as they appear in use. Fig. 2 is a section on the line 2—2, Fig. 5. Fig. 3 is a like section showing a slight modification. Fig. 4 is a section on the line 4-4, Fig. 3, looking in the direction of the ar-20 rows. Fig. 5 shows the quoin as seen from

the right in Fig. 1.

In these views, A and D represent quoins | of common general form, but in this case the central rib of the quoin A has its edge ser-25 rated to form a ratchet B, while the quoin D is slotted inwardly from its thicker end in the plane of the ratchet, and provided with a pawl E pivoted in the slot to turn upon an axis F. The pawl is provided with teeth G 30 to engage the ratchet and with an arm H which projects to some distance beyond the end of its quoin and even when the pawl is engaged with the ratchet lies at some distance from the latter so that it may be readily 35 grasped by the fingers. The pawl has upon the side opposite its teeth a projection J one or the other side of which is constantly pressed by a spring I, which thus tends to rotate the pawl toward or from engaging 40 position, according as the pawl is moved in one or the other direction from a certain neutral position. One end of this spring engages the body of the quoin by entering loosely into a recess at the bottom or inner 45 side of the slot while its opposite free end portion extends beneath the pawl in the path of its projection, where it is provided with a rounded or V-shaped bend or projection, as shown. The intermediate portion of the 50 spring is bent over a bar K which extends across the slot and serves as a sort of fulcrum for the spring. The parts are so proportioned that when the spring is in place its inner end is held in its recess its medial por-55 tion supported by the bar K and its projecting free portion is pressed by the pawl, so

that the spring resists rotation of the pawl in certain ways and is itself held in place by the pawl which keeps it engaged with the bar K and thus prevents its sliding longitu- 30 dinally outward; and if the pawl be turned in either direction beyond the point where its projection rests upon the highest point of the bend in the spring, the force of the spring causes the movement to continue forc- 65 ing the pawl into engagement with the ratchet or against the bottom of the slot, which thus becomes a stop preventing the arm H from passing the plane of the working face of the quoin which carries it.

In Fig. 3, the pawl is shown as having two projections adapted to receive between them the projection on the spring, but there is no very material difference in the operation.

The operation of the devices is obvious, it 75 being evident that the pawl may be locked out of action or thrown into action whenever desired, and that to release the locking it is only necessary to move the arm H slightly farther away from the quoin A by swinging 30 it on its pivot from its locking position, and further plain that the locking devices when locked out of action do not interfere with the use of the quoins in the ordinary way, and that the quoins may be used either side up or 85 with a given end turned either to the right or left.

What I claim is:

1. Printers' quoins comprising in combination, a quoin having the usual side rack 90 and a central rib serrated to form a ratchet, a companion quoin slotted inward from its thicker end in the plane of the ratchet, a pawl pivoted in the slot to engage and disengage the ratchet and provided with an 95. arm projecting beyond the end of its quoin at some distance from the ratchet when the pawl is engaged therewith, a stop preventing the arm from swinging beyond the plane of the working face of the quoin which carries 100 it, and a spring arranged to urge the pawl toward ratchet engaging position or oppositely toward the limit fixed by the stop, according as the stop is moved in one or the other direction from a certain point.

2. Printers' quoins comprising in combination, a quoin having a lateral rack and a central, longitudinal rib serrated to form a ratchet, a companion quoin slotted inward from its thicker end in the plane of the 110 ratchet and provided with a bar crossing the slot near the quoin's working face, a detach-

able spring engaging the quoin at the bottom of the slot, bent over said bar and projecting, in the slot, beyond the same, a ratchet-engaging pawl pivoted in the slot above the free end of the spring and adapted to swing into engaging position and oppositely against the bottom of the slot and to flex said spring in leaving either limit of its path, substantially as set forth.

In witness whereof I have hereunto sub- 19 scribed my name on the 11th day of May, 1909 in the presence of two subscribing witnesses.

THOMAS JAY AMUNDSON.

Witnesses:
John Grant,
R. Roper.