No. 692,023. Patented Jan. 28, 1902.

W. H. LYNCHARD.

PRINTER'S QUOIN.

(Application filed Mar. 14, 1901.)

(No Model.)

Fig 1

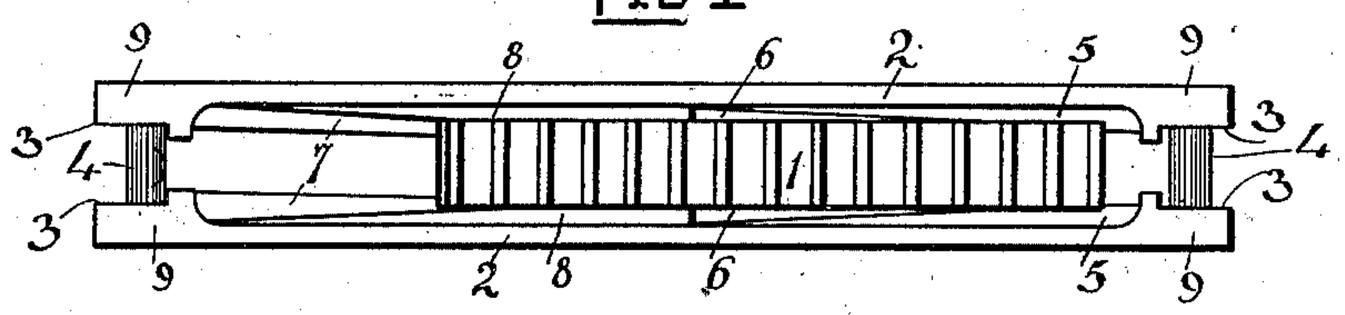


Fig 2

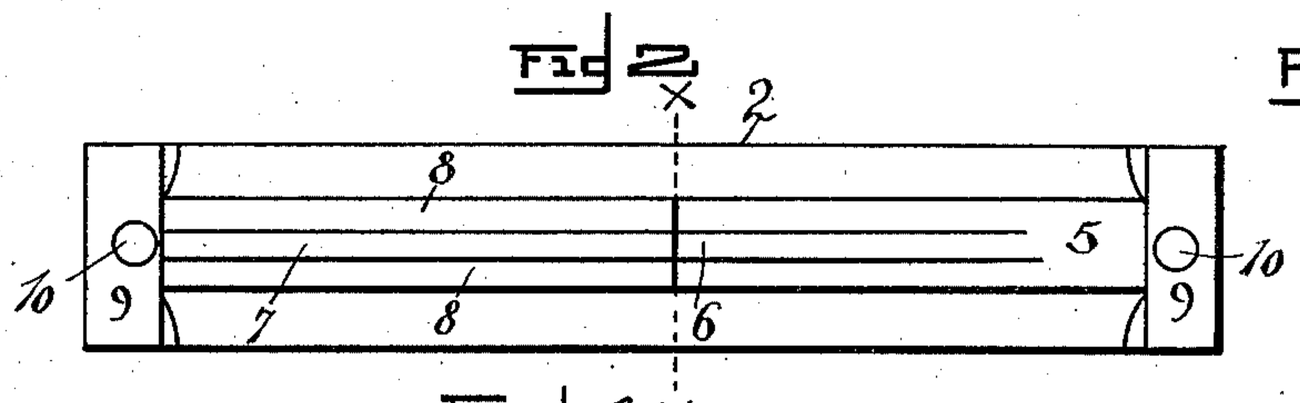


Fig 3

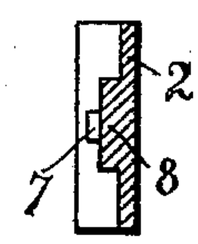


Fig 4

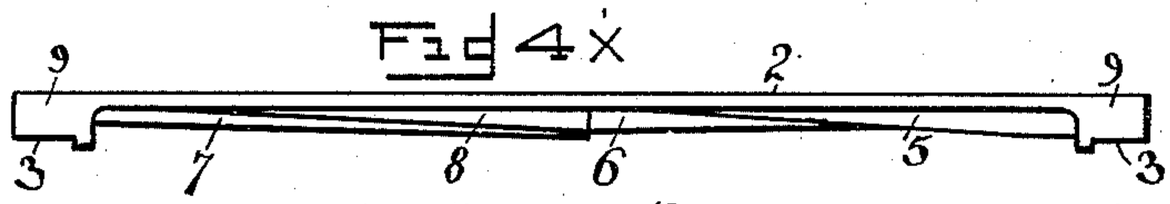


Fig 5

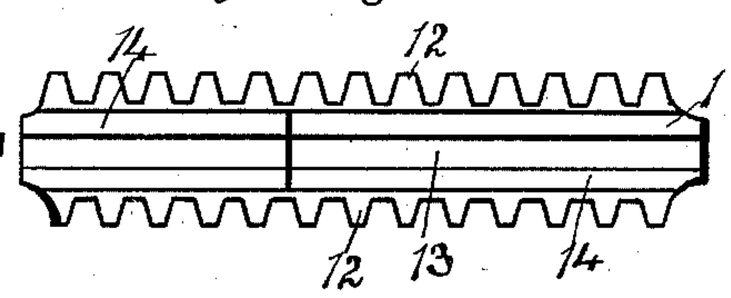


Fig 6

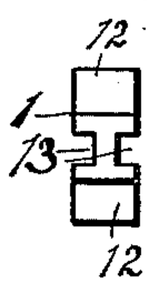


Fig 7

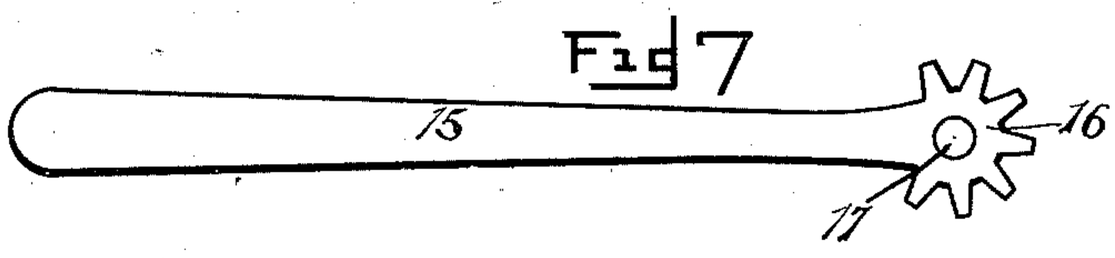


Fig 8

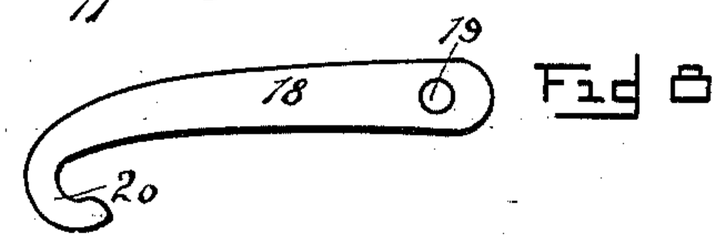
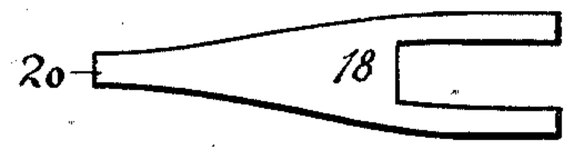


Fig 9



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UNITED STATES PATENT OFFICE.

WILLIAM H. LYNCHARD, OF COUNCIL BLUFFS, IOWA.

PRINTER'S QUOIN.

SPECIFICATION forming part of Letters Patent No. 692,023, dated January 28, 1902.

Application filed March 14, 1901. Serial No. 51,113. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. LYNCHARD, residing at No. 133 Benton street, Council Bluffs, in the county of Pottawattamie and State of Iowa, have invented certain useful Improvements in Printers' Quoins; and I do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention has relation to a new and novel improvement in printers' quoins.

The object of my invention is to provide a printer's quoin so constructed that the members thereof, which are adjustably secured to one another, may be moved laterally without longitudinally displacing the same, and my device further embodies certain other combinations of mechanical instrumentalities, as will be described more fully hereinafter.

In the accompanying drawings I have shown in Figure 1 a top view of the printer's quoin embodying my invention. Fig. 2 shows an elevation of one of the counterpart members. Fig. 3 shows a view on line *x x*, Fig. 2. Fig. 4 shows a top view of one of the quoin members. Fig. 5 shows a side elevation of the rack-wedge as used in my invention. Fig. 6 shows an end view of the rack-wedge. Fig. 7 shows a view of the pinion-headed lever as used in my invention, while Figs. 8 and 9 show, respectively, a side and top view of the hook as used in connection with the locking-tool used in my invention.

The aim of my invention is more particularly to provide a printer's quoin so constructed that the same may be placed within a very narrow space and, further, having its sides in the form of parallel bars, so that the sidesticks or furniture employed with the ordinarily-constructed quoins may be eliminated. This construction enables the operator to lock a form within narrow space and insures a mechanical square even lock-up to the imposed form.

In furthering the aim of my invention I provide two counterpart quoin members 2 2, which are provided with the enlarged ends 9 9. These quoin members 2 2 are in the form of narrow metal bars, as will be understood in referring to Figs. 1 and 4. Adjacent the enlarged heads 9 9 I provide a seating 3 in removing or cutting away a portion of the metal, so that the end 20 of a suitable hook 18 may work between the counterpart seatings of the quoin members when they are in their closed or united condition. In Fig. 1 I have shown one of my printers' coins as extended, showing the same in its fullest lateral position. These counterpart quoin members are provided with two or more wedge-faces 5 and 8. (Shown more clearly in Fig. 4.) Centrally extending from each wedge-face is a rib, the wedge 5 being provided with an extending rib 6 and the wedge 8 with an extending rib 7. To one of these counterpart quoin members 2 are fixed the pins 4 4, to which pins are loosely secured the remaining quoin member, so that one quoin member loosely works upon the pins fixed to the remaining quoin member. The heads of these pins are flanged slightly to prevent the quoin member working off. Working between these counterpart quoin members 2 2 is the rack-edged wedge 1, which is provided with a central groove 13, adapted to receive the ribs 7 and 6, while the wedges 14 14 are made complementary to the wedges 5 and 8. This wedge for the sake of convenience is in duplex form, so that two distinct but united wedges are used, the quoin members 2 also being duplexed, in that they have two or more separate wedge-faces 5 and 8.

When the quoin members are distended to their fullest capacity, the wedge-faces 5, 8, and 14 are engaged to provide the mechanical power, while the ribs 6 and 7 are employed to prevent the wedge 1 from working off the quoin members. It should be remembered, however, that these ribs 6 and 7, as well as the groove 13, could be eliminated without departing from the spirit of my invention. From this it will be seen that I provide two counterpart quoin members 2 2, which are adjustably united by means of the pins 4, and between which quoin members loosely works the rack-edged wedge 1.

Used in connection with my quoin is a pinion-headed lever 15, the head 16 being cut in the form of a pinion adapted to mesh with

the rack edges 12 of the sliding wedge-bar, adjustably held between the quoin. Passing through the opening 17, within the pinion-head 16, and an opening 19, within the bifurcated end of the hook 18, is a suitable pin, so that this hook 18 is pivotally secured to the pinion-head 16. The hooked end 20 is adapted to work over and engage the pins 4.

In using my quoin in securing a form the operator would place the quoin in its closed condition, in which instance the rack-edged wedge 1 would be at one end between the united or closed quoin members. To distend the quoin members, the operator would pass the hook 18 about one of the pins 4 and then insert the pinion-head 16 of the lever 15 within the rack of the wedge 1. The lever 15 would then be tilted on its fulcrum, which would be formed by means of the pinion-head 16, and this revolving of the stationary-held pinion-head would impart a movement to the rack-edged wedge 1 to spread the counterpart quoin members. Should the lever 15 be carried down its full length, the pinion-head is removed from the rack 1, a new hold is taken, and the wedge again led forward until the proper tension has been obtained. In their closed condition the hook would be inserted within the seatings 3 to engage the pins 4. It should be remembered, however, that the seatings 3 could be eliminated, as the hook could be made to directly engage the ends 9 of the counterpart quoin members.

These quoins are made in lengths to correspond to the lengths of the ordinary labor-saving furniture.

Having thus described my said invention, what I claim as new, and desire to secure by United States Letters Patent, is—

1. The combination with two loosely-connected counterpart quoin members, each member being provided with a plurality of wedge-faces, each wedge-face being provided with an extending rib, of a wedge complementary to said wedge-faces and provided with racks upon opposite edges, and a groove to receive said ribs, as and for the purpose set forth.

2. The combination with two counterpart quoin members, of terminal pins uniting said quoin members, said quoin members being cut away to provide a seating adjacent said pins, each quoin member being provided with a plurality of wedge-faces, a rack-edged wedge complementary to and sliding between said quoin members, a pinion-headed operating-lever, and a hook secured to the pinion-head of said lever, and adapted to engage said terminal pins, while said head engages said rack-edged wedge, all arranged substantially as and for the purpose set forth.

Signed in the presence of two witnesses.

WILLIAM H. LYNCHARD.

Witnesses:

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R. J. DAVENPORT.