(No Model.)

R. KINSMAN.

QUOIN.

No. 543,488. Patented July 30, 1895.

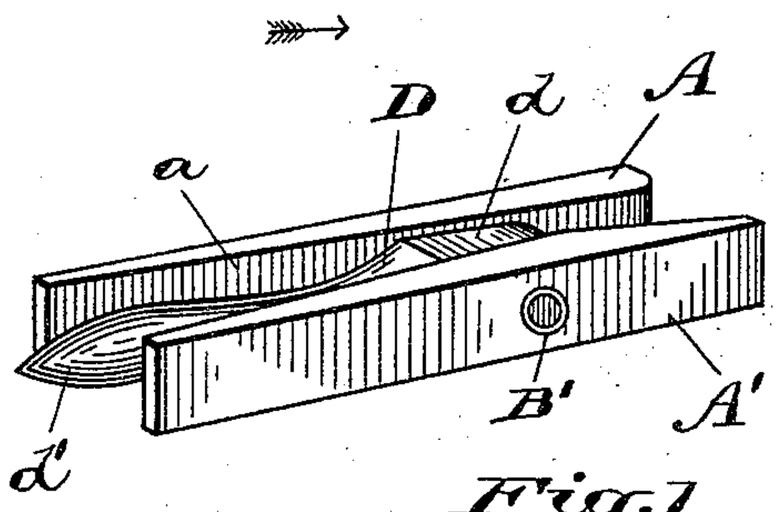

Fig. 1

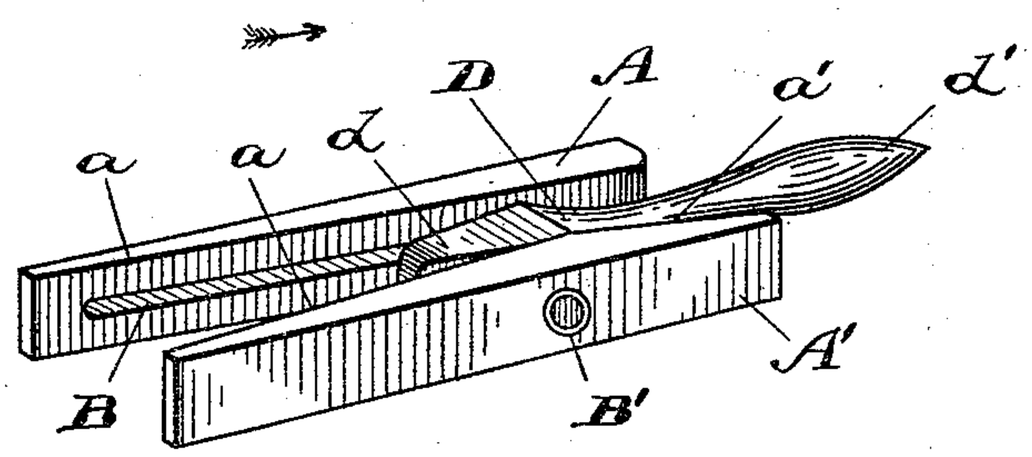

Fig. 2

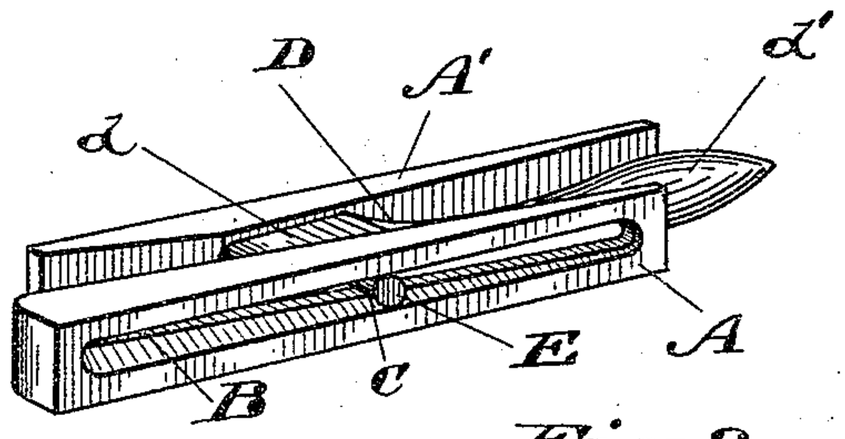

Fig. 3

Witnesses

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UNITED STATES PATENT OFFICE.

RICHARD KINSMAN, OF GALT, CANADA.

QUOIN.

SPECIFICATION forming part of Letters Patent No. 543,488, dated July 30, 1895.

Application filed April 20, 1895. Serial No. 546,581. (No model.)

To all whom it may concern:

Be it known that I, RICHARD KINSMAN, of Galt, in the county of Waterloo and Province of Ontario, Canada, have invented certain new and useful Improvements in Quoins; and I hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to certain new and useful improvements in quoins; and the object of the invention is to so construct the quoin that the wedges and expansion-lever will normally at all times be adjustably connected together, and to so arrange the lever and wedges that in the use of the quoin one or both of the wedges may be moved into any required position to produce any required expansion within the range of the quoin; and the invention consists essentially of the device hereinafter more fully set forth, and more particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view showing the quoin unlocked. Fig. 2 is a similar view showing it locked. Fig. 3 is a perspective view of the quoin unlocked, showing one of the wedges in an adjusted position.

Like letters of reference refer to like parts throughout the specification and drawings.

The quoin consists of two wedges A A′, respectively, each of which is fitted with a bearing B B′, respectively, for the spindle C of the expansion-lever D. The inner face *a* of the wedge A is at an angle to the outer face and forms a straight line from end to end. In the middle of the side of the wedge A is the bearing B for its respective end of the spindle C. The bearing B consists of an elongated slot extending nearly from end to end of the wedge and equal in width to the diameter of the spindle C. This slot permits of the longitudinal movement of the wedge A to increase or reduce the width of the expansion of the quoin. The inner face of the wedge B′ consists of two inclined planes *a a′*, which meet at a point to the right of the spindle C. The inclined plane *a* is employed for the purpose of assisting the expansion of the wedges, while the inclined plane *a′* is employed for the purpose of permitting the longitudinal adjustment of the wedge A. Formed integrally with the middle of the spindle C is the expansion-lever D. That portion *d* of the lever D contiguous to the spindle C is substantially wedge-shaped, with the greatest width of the wedge adjacent to the handle *d′* of the said lever. Each end E of the spindle C on the outer side of its adjacent wedge A A′ is enlarged or riveted to prevent the separation of the wedges from the spindle and lever. The enlarged or riveted ends E of the spindle C prevent the separation of the wedges A A′ and permit at the same time the semi-revoluble movement of the lever and its spindle. By turning the lever into the position indicated in Fig. 1 the quoin is contracted and by turning the lever into the position indicated in Fig. 2 the quoin is expanded to lock the type within the type-chase. By shifting the wedge A in the direction indicated by arrows the capacity for expansion of the quoin is reduced and by shifting the wedge in the opposite direction the capacity for expansion of the quoin is increased. By constructing the quoin in this manner it is possible to hold together the several parts of the quoin and dispense with the use of the key or wrench and lock or unlock the quoin by throwing the lever either to the right or left, as the case may be.

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

1. A quoin consisting of two oppositely opposed wedges a lever pivotally connected to and adapted to expand the wedges, and means for longitudinally adjusting one of the wedges to increase or diminish the expansion capacity of the quoin, substantially as described.

2. A quoin consisting of two oppositely opposed wedges the inner face of one of the wedges composed of two inclined planes, a wedge-shaped expansion lever pivotally connected to the said wedges, a longitudinal slot through the side of one of the wedges, adapted to form the bearing for its respective end of the spindle of the expansion-lever, and to permit of the longitudinal adjustment of the wedge, substantially as described.

Galt, April 13, A. D. 1895.

R. KINSMAN.

In presence of—

ROBERT CRANSTON,

R. BARRIÉ.