

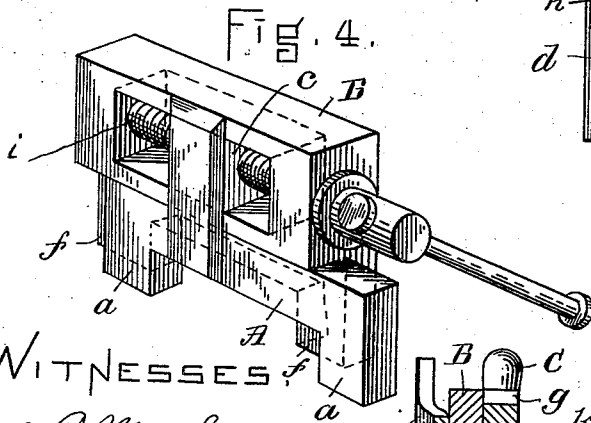
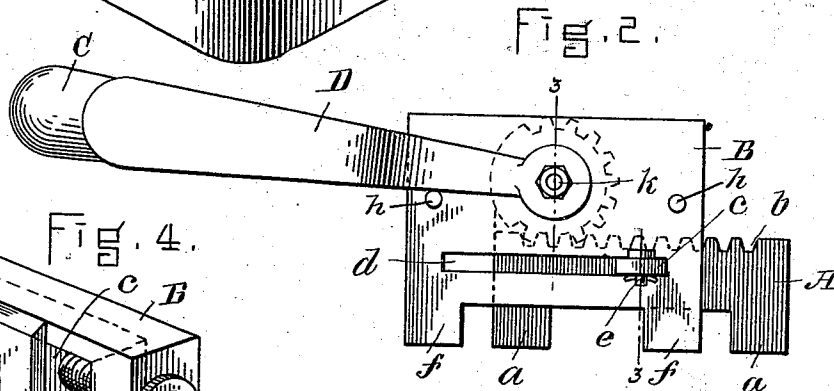
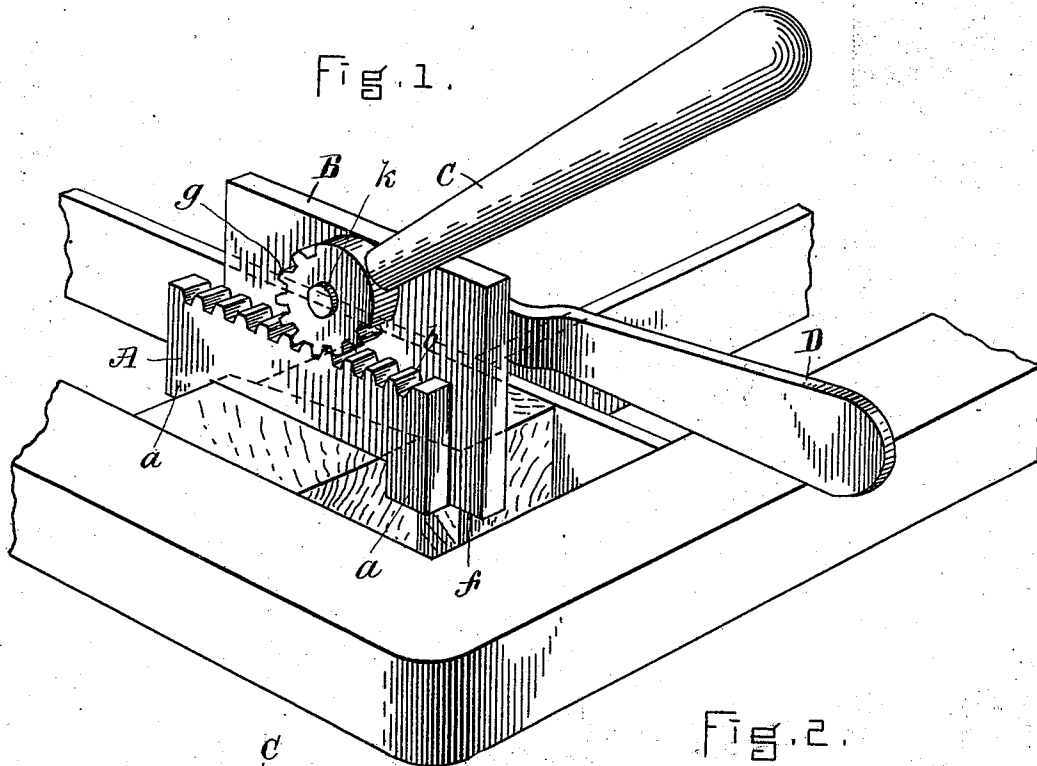
(No Model.)

W. HAY.

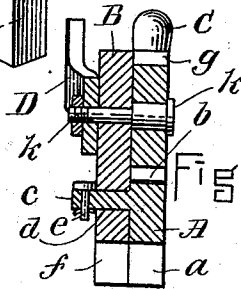
IMPLEMENT FOR LOCKING OR UNLOCKING WEDGES.

No. 552,084.

Patented Dec. 24, 1895.



WITNESSES, ^A 
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IMPLEMENT FOR LOCKING OR UNLOCKING WEDGES.

SPECIFICATION forming part of Letters Patent No. 552,084, dated December 24, 1895.

Application filed February 27, 1895. Serial No. 539,918. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HAY, a subject of the Queen of Great Britain, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Implements for the Locking or Unlocking of Wedges, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of my invention as applied to the use of printers, showing one corner of a chase with quoins in a locked position. Fig. 2 is an elevation of the side of the implement opposite to that shown in Fig. 1. Fig. 3 is a vertical section on the line 3-3 of Fig. 2. Fig. 4 is a perspective view of a modification of my invention.

My invention has for its object to provide an implement which will readily move a wedge-shaped piece or quoin into or out of a fixed position, particularly adapted to the use of printers and floor-layers in their respective trades; and it consists in the combination of two slides having downwardly-projecting lugs adapted to fit over the edges of a wedge-shaped piece, and provided with a means of securing one slide to the other in such a manner as to permit of said slides moving in opposite directions to each other in a horizontal plane; and my invention also consists in certain combinations of parts and details of construction, as hereinafter set forth and specifically claimed.

In the said drawings, A represents a slide provided on its under edge with two downwardly-projecting ears or lugs *a a*, and on its upper edge with teeth forming a rack *b*. At the center of the slide A is a horizontally-projecting lug *c*, which fits into and projects through a slot *d* formed in a second slide B, and securely held in place by means of a pin *e*. (Shown in Figs. 2 and 3.)

The slide B is provided with two downwardly-projecting lugs *f f* similar to those on the slide A, which serve as grippers when placed over the wedges or quoins, as shown in Fig. 1, so that when the operator uses the implement it will readily adapt itself, obviating the necessity of fixing it in any way, as

might be the case in the event of pins being used to engage in holes or indentations in the quoin. Another advantage is that the quoin need not necessarily be of any particular shape or pattern or size, as any quoin or wedge-shaped piece may be used, provided it does not exceed the space between these two lugs which are formed on each sliding portion.

To the slide B, at a point midway between the lugs *f f*, is fulcrumed at *k* two handles or levers C D, the lever C having a toothed segment *g* near its fulcrum, which engages with the rack *b*. The lever D, which is pivotally connected to the opposite side of the slide B at *k*, serves as a handle with which the operator can steady the implement while locking or unlocking the quoins or wedges and is normally supported by two pins *h h* projecting from one side of the part B.

Having described the several parts of my invention which form its construction, it will be obvious to any one having a knowledge of the workings of mechanics that should the operator (the implement being in position) move the lever C either backward or forward he will accomplish the result for which the implement was designed—viz., the locking or unlocking of wedge-shaped pieces or quoins.

My invention will prove of great value to those engaged in the locking-up of forms in the printer's trade, inasmuch as it will bring a purchase on the two quoins which may be secured between the inner face of the chase and "lock-ups" next to the type, thereby insuring the locking or removal of the quoin without disarranging or skewing the type as set up, an advantage hitherto not attained, another being that wooden quoins may be used instead of metallic ones, the former having proved to be preferable for use. The disadvantage of using wooden quoins at present is owing to their becoming nicked on the edges and readily split and broken, rendering them unfit for use, which is occasioned by the battering to which they are subjected by using a shooting-stick and mallet to place them in a fixed position or release them, which makes them an expensive commodity in the printer's trade, while metal quoins are constantly becoming loosened and out of place, because they do not bind. By the use

of my invention it will readily be seen that these disadvantages are obviated.

For the use of floor-layers where wedges are constantly being used it will readily be seen that the several parts would necessarily have to be made on a much larger scale, the levers in such cases being of sufficient length to admit of the implement being conveniently operated.

In Fig. 4 my invention is shown in a modified form from that previously described, and consists in having the projecting lug *c* provided with a threaded aperture through which a screw *i* is introduced, said screw being securely fixed in one end of the sliding portion B, while it projects through the opposite end and has a lever attached thereto which will facilitate the turning of the screw to adjust or move the slides A B in the direction required; but a wrench or crank might be employed for this purpose without departing from the spirit of my invention. By this device I am enabled to work in places where it would be impossible to get the range of movement required by the handles shown and described in the first part of this specification—as, for instance, where the forms are on a cylinder printing-press, some of which have but little space between the surface of the cylinder and the face of the type.

What I claim, and desire to secure by Letters Patent, is—

1. In an implement for the locking or unlocking of wedges, the combination of two slides one of which is provided with a lug projecting horizontally into a slot formed in the other, each being recessed on its under side so as to form four depending lugs, one on each end of each slide and for the purpose of spanning a pair of quoins, and having a means whereby the two slides may be moved in op-

posite directions to each other, for the purpose specified substantially as set forth.

2. In an implement for the locking or unlocking of wedges, the combination of two slides, each provided with two downwardly projecting lugs, one of said slides having a lug which projects horizontally therefrom into a slot formed in the second slide, and having a series of teeth adapted to engage with a toothed segment on the end of a hand lever, said hand lever being free to move on a pivot and secured to the second slide for the purpose of moving said slides in the same horizontal plane and in opposite directions of one to the other, and a second hand lever fulcrumed on the same pivot on the opposite side of the slide to which the toothed segment is attached, and serving as a hand hold to steady the implement when in use, for the purpose specified substantially as set forth.

3. In an implement for the locking or unlocking of wedges, the combination of the slides A. B., one of said slides having a toothed rack *b*., and the other provided with two hand levers C. D., one of which has a toothed segment *g*. to engage with the rack *b*. for the purpose of moving said slides A. B. away from each other in the same horizontal plane, said slides being secured to each other by means of a lug *c*. projecting into a slot *d*. and held in place by a pin *e*., each of said slides being provided with two downwardly projecting lugs *a. a.* and *f. f.*, for the purpose specified substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM HAY.

Witnesses:

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R. H. MARSH.