

(No Model.)

A. WATSON.
ADJUSTABLE WORK REST FOR BENCHES.

No. 403,627.

Patented May 21, 1889.

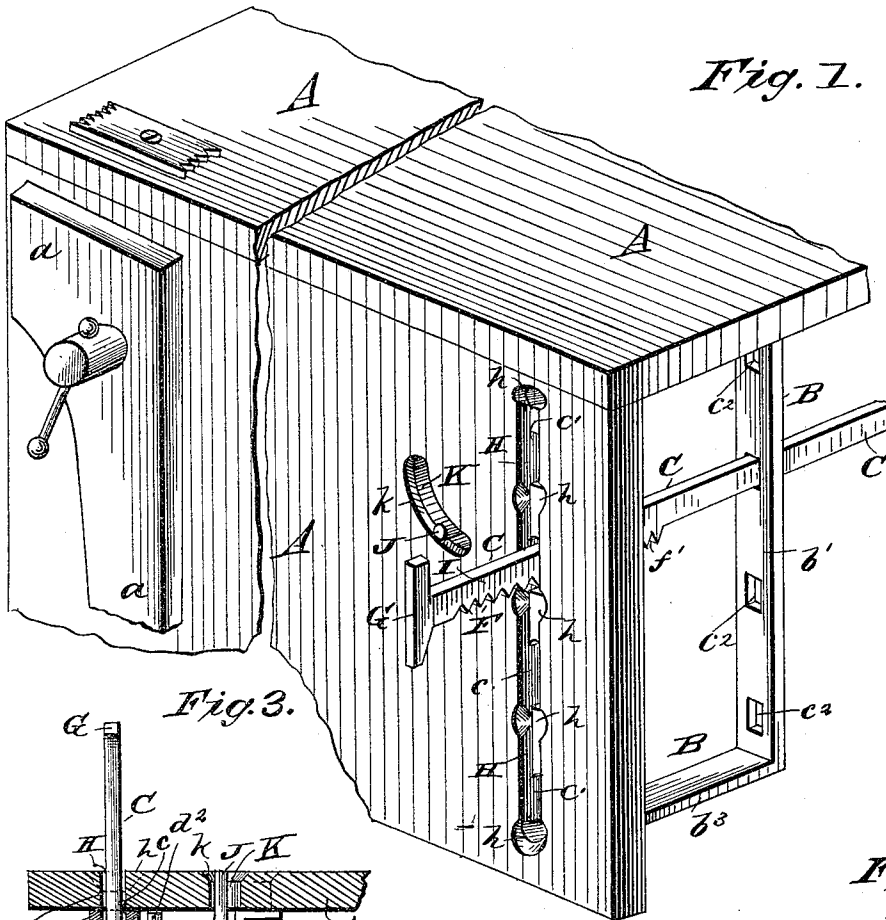


Fig. 1.

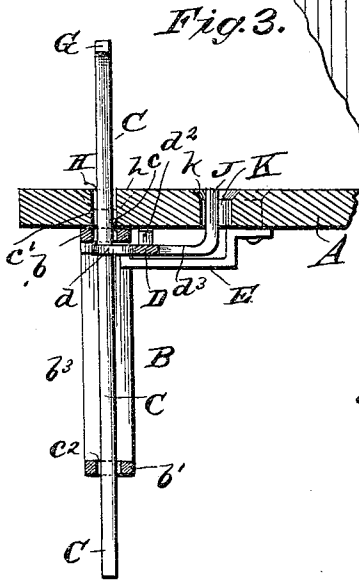


Fig. 3.

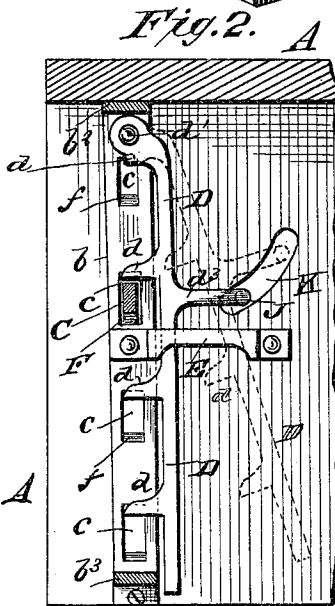


Fig. 2.

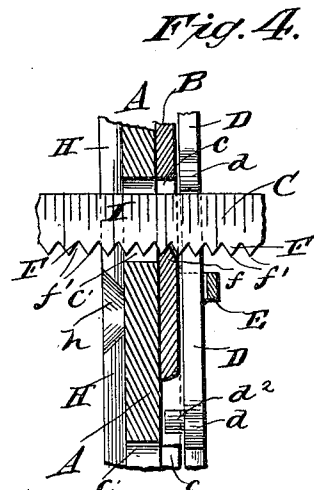


Fig. 4.

WITNESSES.

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ALEXANDER WATSON, OF BROOKLINE, MASSACHUSETTS.

ADJUSTABLE WORK-REST FOR BENCHES.

SPECIFICATION forming part of Letters Patent No. 403,627, dated May 21, 1889.

Application filed December 20, 1888. Serial No. 294,153. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER WATSON, of Brookline, in the county of Norfolk and State of Massachusetts, have invented a new and Improved Adjustable Work-Rest for Benches, of which the following is a full, clear, and exact description.

My invention relates to a work rest or support for benches, particularly those used by wood-working mechanics; and the invention has for its object to provide a simple, inexpensive device of this character, which may be readily applied to the bench, and will effectively support the back end of work at the face of the bench and will not protrude thereat to tear or injure the workman's clothing, and may be readily adjusted and locked at any required position to support work of different dimensions.

The invention consists in certain novel features of construction and combinations of parts of the work-rest, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of opposite end parts of a wood-worker's bench with my improvement applied to its back-end portion. Fig. 2 is a detail vertical sectional view of part of the bench and the work-rest as seen from the inside of the bench. Fig. 3 is a detail sectional plan view, and Fig. 4 is a detail vertical sectional view.

My improved work-rest is intended for use at the back end of a work-bench, A, and in conjunction with any ordinary vise or clamp-jaw, *a*, arranged at the forward end of the bench. In its preferred form the work-rest is made with a rectangular frame, B, fixed to the work-bench A, an adjustable work-supporting bar, C, held in the frame B and bench A, a latch-bar, D, for locking the work-bar C at any required height or outward extension in the bench, and a keeper or guide, E, for the latch, all relatively arranged for co-operation, as hereinafter more particularly explained.

The frame B may be made of either metal or wood, or both, and is secured to the top

and front of the work-bench at its inside. The front vertical bar, *b*, of the frame is provided with a series of slots, *c*, which are opposite or directly in line with a series of slots, *c*², made in the rear bar, *b*¹, of the frame, and the slots *c* coincide with a series of slots or holes, *c*¹, made in the front of the bench. The work-rest bar C is loosely fitted to the aligned slots *c c*^{1 c}². The lower walls or ends of the slots *c* are chamfered upward to form a tooth, *f*, with which any notch, *f*¹, of a rack, F, formed on or fixed to the lower edge of the rest-bar C, may be engaged. The slots *c c*¹ are sufficiently large to allow the bar C to be lifted to disengage its rack F from the bench or frame detent *f*, the bar C being fitted loosely enough in the inner frame-holes, *c*², to allow this action. At its outer end the work-rest bar C has a head, G, which projects upward sufficiently to form a guard, which prevents outward slip of lumber supported on the body of the bar at the front side of the bench and in position to be clamped by the bench jaw or vise *a*.

The front face of the bench is provided with a vertical slot, H, of sufficient width and depth to receive the head G of the bar C and hold it flush with the face of the bench, into whichever of the series of vertically-ranging holes or slots *c c*^{1 c}² the bar may be adjusted, and a series of semicircular notches, *h*, cut into the bench-face admit the finger and thumb of the workman, to allow easy grasp of the head of the rest-bar C for withdrawing it for use at any time. It will be noticed that the bench-slot H allows the work-rest-bar head G to lie entirely within the face of the bench, which wholly obviates tearing the clothing of the workman by the bar when the latter is not in use; and when it is in use, its head G being comparatively thin and projecting but slightly beyond the face of the lumber, there will be little danger of the workman's clothes catching on it—far less danger than is entailed by the use of the ordinary pegs or pins which are driven into holes in the front of a bench to support the work. A scale, I, of inches and fractions thereof marked on either or both front and rear faces of the bar C behind its head G indicates to the workman the extent of projection of the head beyond the face of

the bench, and allows him to set the bar to suit the thickness of the stuff without the aid of an ordinary rule.

The latch D is pivoted at d' at its upper end, and preferably to the outer bar, b , of the frame B, and is provided with a series of lugs, d , corresponding in number to the slots or holes $c c'$ in the frame and bench and so located that in whichever slot the work-rest bar C may be placed one of the lugs d , as the latch swings down to vertical position by its own gravity, will overlap the bar C when its rack F is engaged with the bench or frame detent f , and thus lock the bar against end-wise movement either way and hold it at any required position to suit the thickness of lumber for which it had been adjusted. The keeper E prevents backward or inward bodily movement of the latch, and a lug, d^2 , on the latch works along the inner face of the bench-front and causes the latch-lugs to always work or swing clear of the front bar, b , of the frame B. To allow operation of the latch from the front face of the bench, I provide the latch with an arm, d^3 , from which a pin or stud, J, projects outward through or into a curved slot, K, in the front of the bench. The side edges of this slot at the outer face of the bench are chamfered or beveled off, as shown at k , to allow easy grasp of the stud by the workman, while the end of the stud does not extend beyond the outer face of the bench, and consequently cannot catch and tear or wear the workman's clothes.

I am not restricted to the use of the frame B with the bench, as an inside standard, the equivalent of the frame-bar b' , may be held to the bench in any approved way to support the inner end of the work-rest bar C, and this standard may be dispensed with were the bench thick enough to sustain the bar C, it being obvious that with these modified constructions any ordinary mechanic could easily fit the bar C and its latch D to the bench, which will be provided with the slots H K or their equivalents, allowing recessor of the rest-bar head within the bench and operation of the latch from outside the front of the bench. The upper and lower bars, $b^2 b^3$, of the frame B may be tenoned into its outer and inner vertical bars, $b b'$, and the lower bar, b^3 , is preferably tenoned through the bar b into the work-bench front, or the bar b may have a lug entering the bench to give more substantial support to the frame and its connections.

It is obvious that two of the above-described work-rests may be fitted to the same bench, one in front of the other, or one at the back end of the bench and another set intermediate this one and the work, clamp-screw, or vise, and two of the work-rest bars C may be used, one above the other, at each of the work-rests, as will readily be understood.

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

1. The combination, in a work-rest for benches, of a bar fitted to the bench for lateral adjustment and provided with a rack, a detent on the bench to which the rack is adapted, and a latch hung to the bench and provided with a lug adapted to lock the bar, substantially as herein set forth.

2. The combination, in a work-rest for benches, of a bar fitted to the bench for lateral and vertical adjustment and provided with a rack, a detent on the bench to which the rack is adapted, and a latch hung to the bench and provided with a series of lugs adapted to lock the bar, however it may be adjusted, substantially as herein set forth.

3. The combination, in a work-rest for benches, of a bar fitted to the bench for lateral adjustment and provided with a rack, a detent on the bench to which the rack is adapted, and a latch hung to the bench and having a lug adapted to lock the bar, said latch provided with a pin projecting into a slot of the bench to allow its operation from the outer face of the bench, substantially as herein set forth.

4. The combination, in a work-rest for benches, of a bar fitted to the bench for lateral and vertical adjustment and provided with a rack, a detent on the bench to which the rack is adapted, and a latch hung to the bench and provided with a series of lugs adapted to lock the bar, however it may be adjusted, said latch provided with a pin projecting through a slot of the bench to allow its operation from the outer face of the bench, substantially as herein set forth.

5. The combination, with a work-bench provided with a face slot or recess, H, and a curved slot, K, of a work-rest bar, C, fitted for lateral and vertical adjustment in the bench, a latch, D, hung to the bench and provided with a lug or lugs, d , adapted to overlap and lock the bar C, and having a pin, J, entering the slot K, and a keeper, E, for the latch, substantially as herein set forth.

6. The combination, with a work-bench having slots $c' H K$, of a frame, B, held thereto and provided with slots $c c^2$ and a detent, f , a bar, C, having a head, G, and rack F, and fitted to the bench and frame, a latch, D, hung to the frame B and having lugs $d d^2$, an arm, d^3 , and a pin, J, and a keeper, E, for the latch, all arranged for operation substantially as herein set forth.

ALEXANDER WATSON.

Witnesses:

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