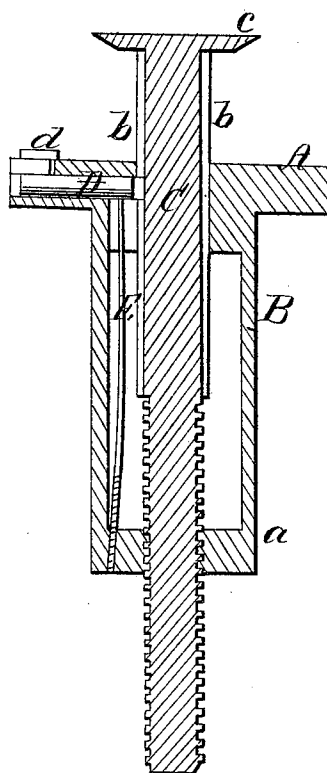
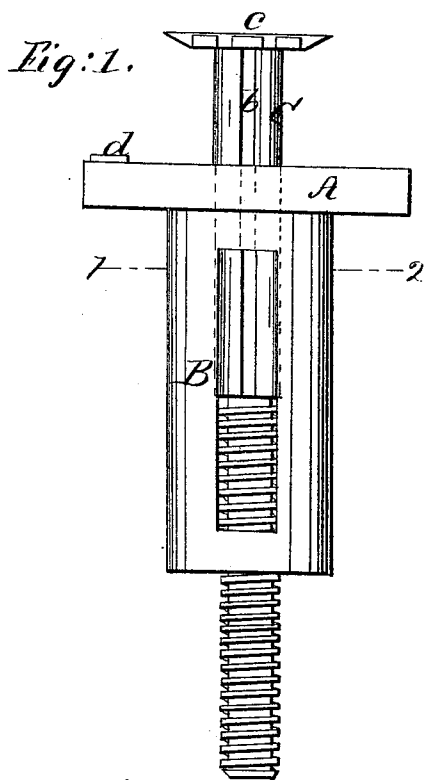
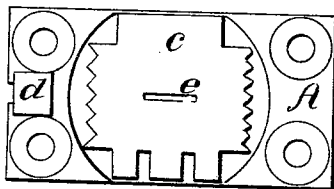


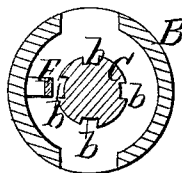
*W. B. Kean,*  
*Bench Dog,*  
*N<sup>o</sup> 7,565,* *Patented Aug. 13, 1850.*



*Fig: 3.*



*Fig: 4.*



# UNITED STATES PATENT OFFICE.

W. B. KEAN, OF WORCESTER, MASSACHUSETTS.

## BENCH-HOOK.

Specification of Letters Patent No. 7,565, dated August 13, 1850.

*To all whom it may concern:*

Be it known that I, W. B. KEAN, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Bench-Hooks for Carpenters and other Workers in Woods; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a side elevation. Fig. 2, is a longitudinal vertical section through the center. Fig. 3, is a plan as seen from above. Fig. 4, is a horizontal section taken through the line 1—2 in Fig. 1.

Similar letters of reference indicate like parts in each of the several figures.

The nature of my invention consists in a spindle provided with a head having four or any other suitable number of edges passing through a hollow metal socket secured to the bench in a position slightly deviating from a line perpendicular to the surface of the bench; the lower part of the spindle is screwed and fits into a female screw in the lower part of the socket, the upper part of which fits in a cylindrical guide in the upper part of the socket; the four edges of the head are formed to suit various descriptions of work, and under each edge in the part of the spindle above the screw is a groove into which a spring catch attached inside the socket fits. The head may be adjusted by the screw on the spindle at any height and either edge may be set to the work being secured in any position by the spring catch; the front edge will (owing to the inclined position of the socket) always be the highest, and the back edge always lower so as to be clear of the work.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and the manner of adjusting it.

A, is a plate of metal having on its under side a hollow cylindrical socket B, set at a position to the plate slightly deviating from the perpendicular, its lower ends being inclined toward the front of the plate, or that part at the right hand in the drawings (Figs. 1 and 2); the socket has a slot on each side and is provided with a female screw *a*, at its lower end; the plate A, is secured by a screw, or screws to the bench, it being let into the bench so that its surface is level with it.

C, is a spindle, having a steel head *c* which has four edges, three of which are toothed to suit various kinds of hard and soft wood, and one of which is smooth and square, to suit pattern makers, or others who do not wish to mar their work; the lower part of the spindle is secured on about half its length, fitting the female screw *a*, in the lower part of the socket; the upper part of the spindle fits easily in a cylindrical aperture or guide in the plate A, and under each side of the heads has a groove *b'*, a notch *e*, is also made in the head for the insertion of a screw driver.

D, is a small bolt or catch sliding in an opening through the plate A, its inner end fits in either of the grooves (*b*) and its back end is provided with a thumb knob *d* which stands above the plate.

E, is a flat steel spring its lower end is secured in the lower part of the socket and its upper end is attached to the bolt or catch D, always having a tendency to hold the end in the groove (*b*) and keep the spindle from turning in the socket.

This bench hook may be set with great accuracy at any required height.

By drawing back the catch D, by hand and releasing the end from the groove (*b*) the spindle may be raised or lowered by unscrewing or screwing in the spindle either edge may be turned to the work and may be secured by releasing the catch; the edge toward the work will always be higher than the opposite, or back edge.

The head may be provided with any suitable number of edges, say two (2) three (3) or four (4).

What I claim as new in my invention and desire to secure by Letters Patent is—

Forming the head *c* with any suitable number of edges of any required form to suit various kinds of work and having the spindle of which the head forms part, grooved and fitted in a socket, set at an inclination to the bench, so that any edge of the head can be set to the work and secured by a spring catch, and whatever edge is turned to the work will be higher than the back or opposite edge, as herein set forth.

W. B. KEAN.

Witnesses:

WM. N. EVANS,

WM. L. MERCHANT.