

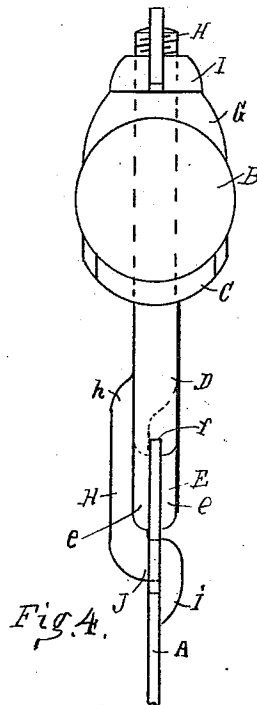
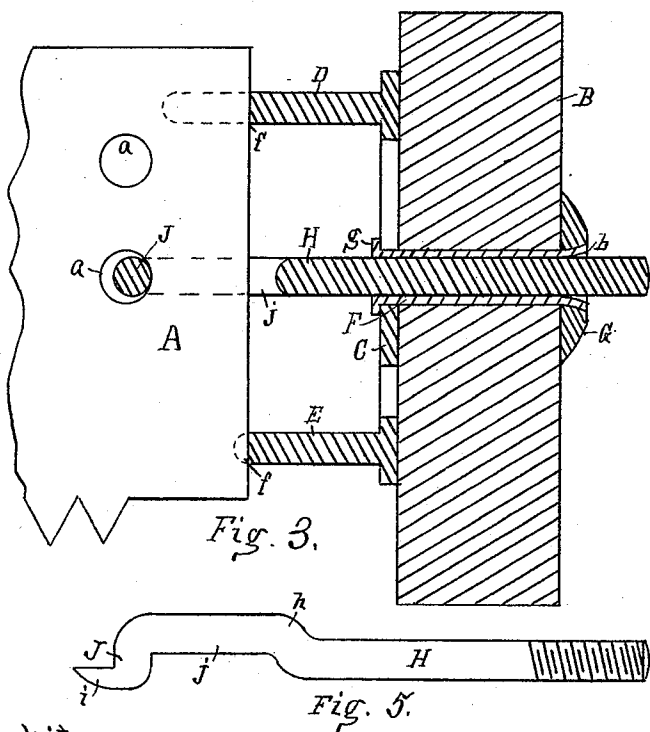
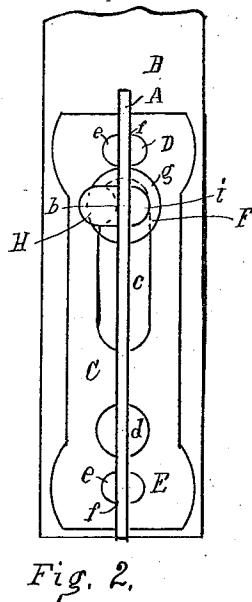
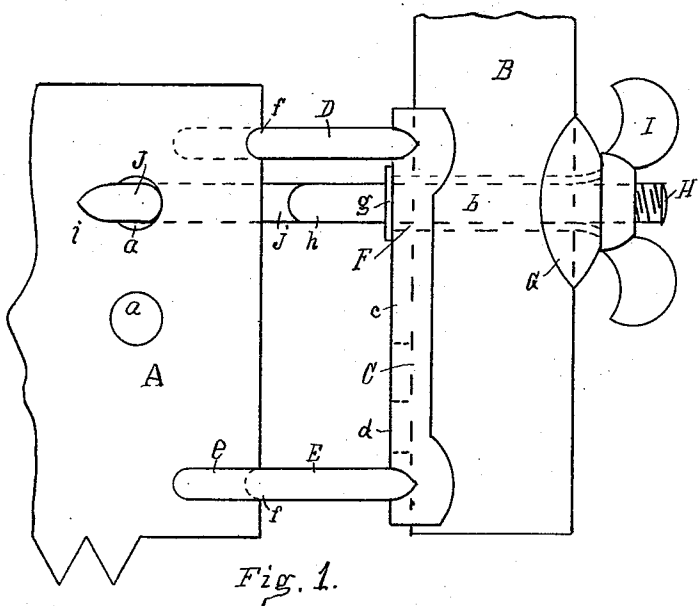
(No Model.)

2 Sheets—Sheet 1.

R. S. CARR.  
SAW HANDLE.

No. 516,473.

Patented Mar. 13, 1894.



Witnesses.  
J. W. Bloueker  
J. Richardson

Robert S. Carr Inventor.

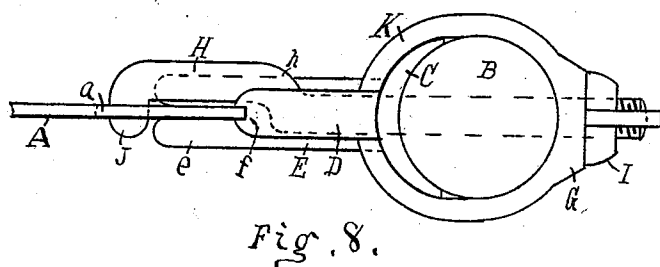
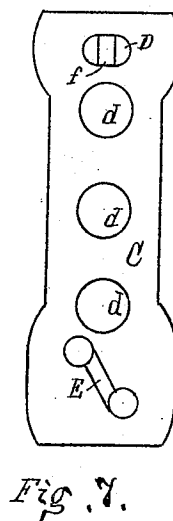
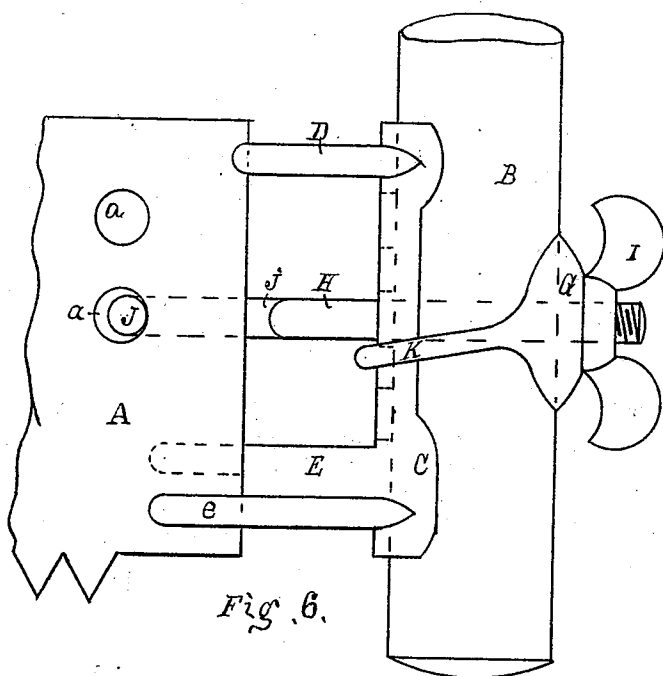
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2 Sheets—Sheet 2.

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# UNITED STATES PATENT OFFICE.

ROBERT S. CARR, OF HAMILTON, OHIO.

## SAW-HANDLE.

SPECIFICATION forming part of Letters Patent No. 516,473, dated March 13, 1894.

Application filed January 11, 1893. Serial No. 458,007. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT S. CARR, of Hamilton, Butler county, Ohio, have invented certain new and useful Improvements in Saw-Handles, of which the following is a specification.

My invention relates to that class of saw handles adapted to be detachably secured to cross-cut saws, and the objects of my improvement are to keep the axis of the handle in the extended plane of the saw: to increase the working length of the saw by locating the handle beyond its end: to secure the handle by either hole in the saw; to provide such form of clamping bolt as will not become disengaged while being tightened: and to provide means to keep the plate and the washer properly on the handle. These objects are attained in the following described manner, as illustrated in the accompanying drawings, in which—

Figure 1 represents a side view of the handle attached to the saw; Fig. 2 a front view of the same; Fig. 3 a sectional view in the plane of the saw; Fig. 4 a plan of Fig. 2; Fig. 5 a plan of the clamping bolt; Fig. 6 a side view of a modified form of construction; Fig. 7 a front view of the plate of Fig. 6; Fig. 8 a plan view of Fig. 6.

In the drawings, A represents the end portion of the saw provided with holes *a*; B the handle with bolt hole *b* through its center near the end; C a metal plate perforated by slot *c* and bolt hole *d*, and adapted to fit against the handle. Parallel abutments D and E project from the plate and terminate in arms *e* and notches *f* on opposite edges respectively. Tube or thimble F extends through the bolt hole in the handle and its end is spread in the taper hole through washer G, the opposite end engages with the plate through slot *c* by means of flange *g* thereon. Clamping bolt H threaded on one end and provided with thumb-nut I extends through the tube and has a portion of its length set over to form shoulder *h* and offset *j*. Pin J is formed thereon at a right angle and across the extended axis of the threaded or main portion and terminates in lip *i* in the continued direction of the bolt.

The handle is attached by inserting lip *i* and pin J through either hole *a*, and placing

the end of the saw in notches *f* with arms *e* against its respective sides. In this position lip *i* keeps pin J in place and the parts may be clamped rigidly together and to the saw by means of the thumb-nut. The plate may be adjusted along the handle on the tube to the extent of the slot to keep the abutments properly on the end of the saw during the use of either hole *a* by pin J. As the greater force is exerted on the handle in an outward direction, the strain is less on the pin when in the top hole, and the lower abutment, which acts as a fulcrum, is farthest removed therefrom by adjusting the plate downward. Shoulder *h* keeps the bolt from dropping too far through the handle when detached, and offset *j* makes room for the end of the saw and permits the main portion of the bolt to extend through the center of the handle in the direct line of the saw. Ring K to encircle the handle may be substituted for tube F (Figs. 6 and 7) to keep the plate and washer in proper position, and permit the plate to be reversed, or to be adjusted on the bolt in the slot or by the use of the separate bolt holes therein. Both arms *e* may be formed on one or on each abutment, and they will cast more easily when separated along opposite sides of a line drawn parallel to the handle, and the abutments correspondingly widened. In this construction lip *i* may be omitted to permit the pin to be removed while the saw remains in the notches and between the arms *e*. By providing the plate C with the slot and hole, or with a series of holes, the plate, and with it the saw, can be adjusted vertically upon the handle by use of but a single hole through the handle, thereby avoiding the weakening of the handle that results from having a number of holes bored through it, and by means of the slot a greater or less adjustment may be secured as desired, and that without removing the bolt from the hole in the handle.

I am aware that prior to my invention, saw handles have been made with abutments on the plate also with means encircling the handle to keep the washer and plate in place thereon. I do not therefore claim such a combination broadly, but

What I do claim as my invention, and desire to secure by Letters Patent, is—  
1. The combination of a saw handle, a plate

thereon and forming an abutment for a saw, a washer seated on the handle, a clamping bolt to engage with a saw and extending transversely through the handle and means  
 5 extending through the handle parallel with the clamping bolt and engaging with the plate and the washer, whereby they are secured to opposite sides of the handle.

2. The combination of a saw handle, a plate  
 10 thereon and forming an abutment for a saw, a washer seated on the handle opposite the plate, a tube extending transversely through the handle and engaging by its respective ends with the plate and washer and a clamping bolt  
 15 adapted to extend through the tube and to engage with a saw.

3. The combination of a saw handle, a plate provided with a slot and forming an abutment for a saw and being movable on the handle, a  
 20 washer, a clamping bolt to engage with a saw and a tube forming a passage for the clamping bolt and extending transversely through the handle one end thereof movably engaging with the plate through the slot therein and  
 25 the other end engaging with the washer.

4. The combination with a saw handle of a plate perforated by a slot, and forming an abutment for a saw and a clamping bolt adapted to extend through the slot in the plate,  
 30 whereon the plate may be adjusted in the direction of the slot.

5. In combination a saw handle, a slotted plate, forming an abutment for a saw a clamping bolt adapted to extend through the slot  
 35 in the plate whereon the plate is adjustable,

a washer, and means engaging with the washer and adapted to encircle the handle and the plate.

6. In combination a saw handle, a plate perforated by a slot and forming an abutment for  
 40 a saw, a clamping bolt adapted to extend through the slot in the plate, a washer thereon, and means to engage the plate with the washer and to permit the adjustment of the plate in the direction of the slot. 45

7. In a saw handle, the combination with a plate perforated by a slot for the insertion of the clamping bolt, of parallel abutments projecting from the plate and adapted to receive  
 50 the end of the saw. 5c

8. In a saw handle, the combination of a plate perforated by a slot and a bolt hole, abutments projecting therefrom and adapted to engage with the end of a saw, a clamping bolt adapted to be inserted through either the  
 55 slot or the bolt hole in the plate, and a washer provided with a ring said ring being adapted to encircle the handle and the plate between the abutments.

9. In a saw handle, the combination of a  
 60 tube extending through the bolt hole therein, a plate adjustably secured to one end of the tube, a washer secured to the other end of the tube, and a clamping bolt adapted to be inserted through the length of said tube.

ROBERT S. CARR.

Witnesses:

J. W. SLONEKER,  
 WILL R. BECKETT.