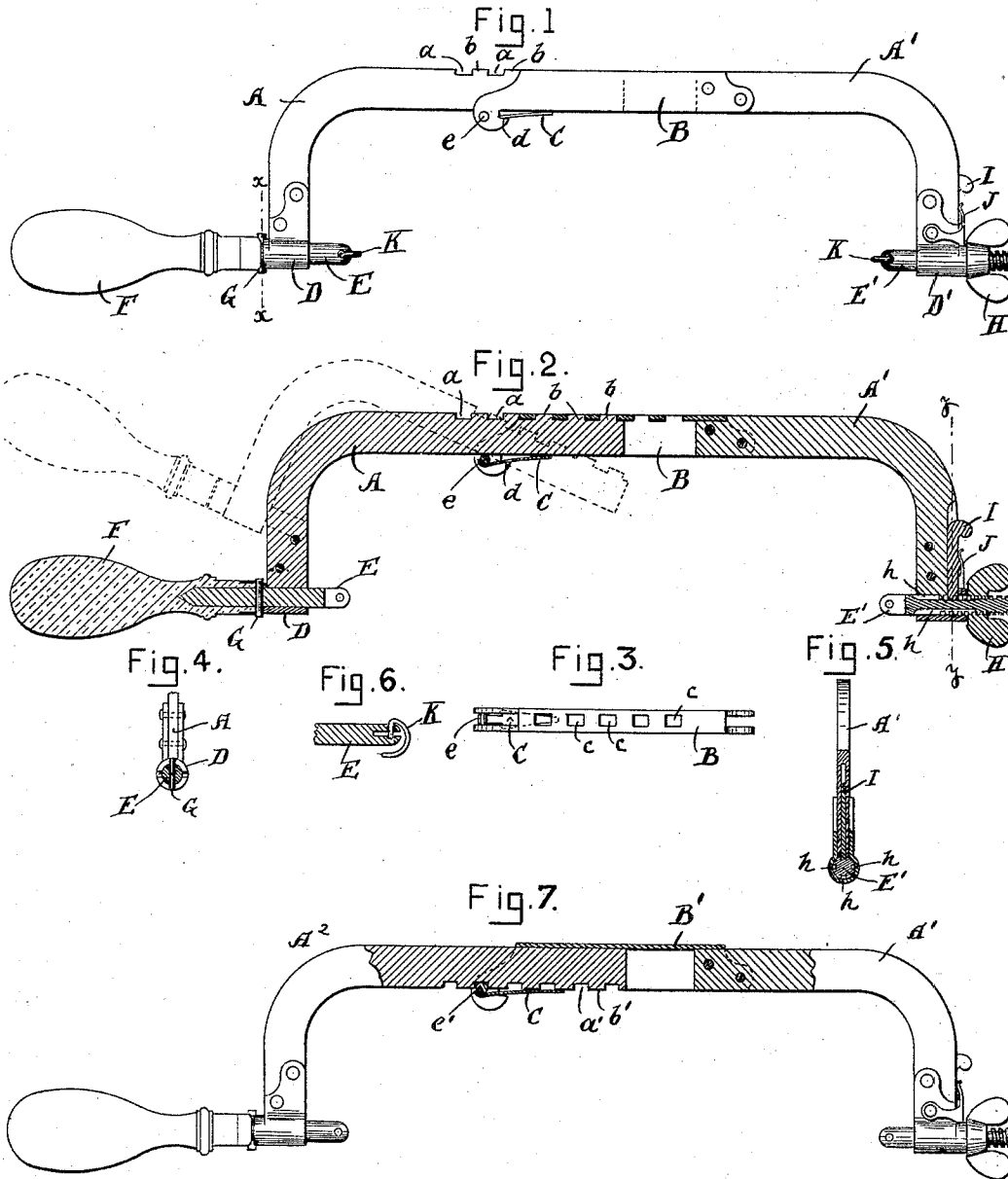


(No Model.)

J. A. WHELPLEY
HACK SAW FRAME.

No. 487,358

Patented Dec. 6, 1892.



Witnesses.

Winifred G. Kerwin.
John J. Moore.

Inventor.

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UNITED STATES PATENT OFFICE.

JAMES A. WHELPLEY, OF KEENE, NEW HAMPSHIRE, ASSIGNOR TO THE
KEEN MANUFACTURING COMPANY, OF SAME PLACE.

HACK-SAW FRAME.

SPECIFICATION forming part of Letters Patent No. 487,358, dated December 6, 1892.

Application filed February 11, 1891. Serial No. 381,066. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. WHELPLEY, a citizen of the United States, residing at Keene, in the county of Cheshire and State of New Hampshire, have invented certain new and useful Improvements in Hack-Saw Frames, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to produce a hack-saw frame that can be lengthened or shortened, according to the saw to be employed.

The invention consists in a frame made in two parts adjustable in relation to each other and in the means for holding them in position and in certain details of construction, as hereinafter fully described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a side view of a hack-saw frame embodying my invention. Fig. 2 is a longitudinal vertical section through the same. Fig. 3 is a plan or top view of the connecting-piece. Fig. 4 is a vertical section taken on line *x x* of Fig. 1. Fig. 5 is a vertical section taken on line *y y* of Fig. 2. Fig. 6 is a sectional view showing the pin for holding the end of the saw. Fig. 7 shows a side view, partly in section, of a modification.

A A' represent the two main portions of the frame, each bent to the form shown. The portion *A* is provided on its upper edge at its inner end with a series of notches *a* and teeth *b*.

To the inner end of the portion *A'* is secured a connecting-piece *B*, of saddle-shaped form, the upper side of which is formed with a number of square holes or perforations *c* to correspond with the teeth *b* on the portion *A*. The lower outer ends of this piece extend somewhat beyond the top portion and each side is formed with a small shoulder *d*. These two ends are connected together by a rivet *e*.

C is a flat spring of the form shown, (see Fig. 3,) that at its tail end is of a width to fit between the ends of the connecting-piece *B* and under the rivet *e*, and it is formed with two shoulders to correspond with the shoulders on the ends of said connecting-piece, so that when in place it is held securely.

To connect the two parts *A A'* together, the end of the portion *A* is inserted on an angle (as shown in dotted lines in Fig. 2)

through the opening formed between the end of the connecting-piece *B* and the rivet *e* and when in the desired position is brought on a straight line with same, its lower end resting upon the rivet *e*, and the teeth *b* enter the corresponding openings *c* in the connecting-piece *B*. The two portions of the frame are thus securely locked together, the spring *C* retaining the piece *A* in place, so that the teeth *b* cannot become disengaged from the connecting-piece *B*.

To the outer end of the portion *A* is secured a piece *D*, through which passes a split bar or rod *E*, that carries one end of the saw. To this bar or rod is attached a handle *F*, and through the rod is passed a pin *G*, that fits into recesses formed in the rear end of the piece *D*, so as to hold the rod in its proper place, according to the position it is desired the saw-blade to occupy. To the outer end of the portion *A'* is also secured a piece *D'*, through which passes the other split bar *E'*, that carries the other end of the saw. This rod or bar is screw-threaded and is fitted with a thumb-nut *H*, and it is also formed with four recesses or grooves *h*, corresponding to the recesses in the piece *D*, into one of which fits a sliding bolt *I* to hold the rod or bar *E* in its proper position. This bolt *I* is fitted into a recess in the rear of the portion *A'* and held in place by a spring *J*.

To secure the saw to the rods or bars *E E'*, I employ bent pins *K* of the form shown in Fig. 6—that is, with a straight end—which is inserted through the hole in the end of the rod and then bent over, so that its outer end will project back sufficiently to prevent its being removed, but allowing sufficient movement for the end of the pin passing out of the saw-blade, so that it can be moved to insert or remove the saw, but cannot be removed from the rods, thereby preventing it from being lost.

In Fig. 7 I have shown a modification. In this case the bar *A²* is formed with notches *a'* and teeth *b'* on its under side, which fit over the pin or rivet *e*, and the connecting-piece *B'* is plain on its upper side, the openings *c* not being required.

What I claim as my invention is—

1. A hack-saw frame consisting of two parts *A A'*, the portion *A* being provided at its up-

per inner end with teeth *b* and the part *A'* having a connecting-piece *B* secured thereto, said connecting-piece having holes *c* to receive the teeth *b*, a rivet *e*, and spring *C*, substantially as set forth.

2. In a hack-saw frame, the screw-threaded rod or bar *E'* for holding one end of the saw, said bar being formed with slots or grooves into which a bolt *I* passes, the spring *J* for retaining the bolt in place, and nut *H*, in combination with a split bar or rod *E'*, secured to the handle *F* for holding the other end of the saw, substantially as and for the purposes set forth.

3. In a hack-saw frame, the rod or bar *E* and screw-threaded rod or bar *E'*, the bar *E*

having a pin or projection *G* fitted into one of a series of recesses in the end of the frame and the bar *E'* being formed with a similar number of grooves, and a bolt *I* for entering one of said grooves, whereby the saw-blade is locked in the described position, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 13th day of January, A. D. 1891.

JAMES A. WHELPLEY.

Witnesses:

CHAS. STEERE,
EDWIN PLANTA.