G. H. THOMPSON.

Saw-Sets.

No. 149,810. Patented April 14, 1874.

Fig. 1.

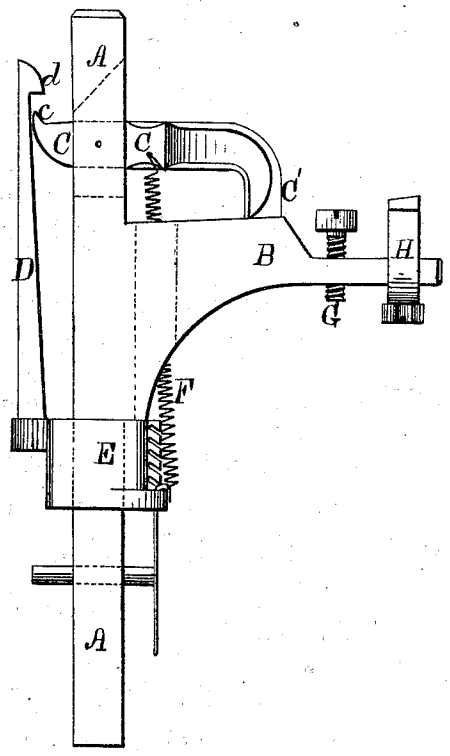
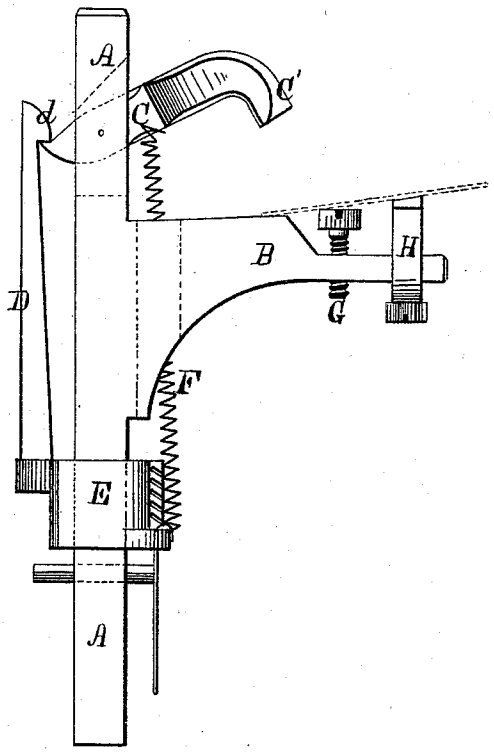


Fig. 2.



WITNESSES:

Jas. E. Hutchinson

John R. Young.

INVENTOR.

George H. Thompson, by

Pindle & Beam, his Attys.

UNITED STATES PATENT OFFICE.

GEORGE H. THOMPSON, OF ATCHISON, KANSAS.

IMPROVEMENT IN SAW-SETS.

Specification forming part of Letters Patent No. **149,810**, dated April 14, 1874; application filed April 4, 1874

To all whom it may concern:

Be it known that I, GEORGE H. THOMPSON, of Atchison, in the county of Atchison and in the State of Kansas, have invented certain new and useful Improvements in Saw-Sets; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side elevation of my improved device with the hammer at rest upon its anvil, and Fig. 2 is a like view of the same with said hammer raised.

Letters of like name and kind refer to like parts in each of the figures.

The design of my invention is the production of a saw-set that may be easily and quickly placed in position for use, and that may be operated by the foot, so as to leave the hands free to control the saw being operated upon; to which end it consists in the peculiar construction and combination of parts by means of which the desired result is produced, substantially as is hereinafter specified.

In the annexed drawing, A represents a rectangular bar, having, preferably, a transverse size of three-quarters of an inch, and a length of about ten inches, from one side of which, above its longitudinal center, extends laterally outward an arm, B, as shown. In and through the upper portion of the bar or standard A is formed a vertical slot, within which is pivoted one end of a bar, C, the opposite end of which bar is enlarged and turned downward so as to form a hammer, C′, said hammer end being provided with the usual triangular face, which impinges upon the upper side of the arm B. The rear end of the hammer-bar C extends through the standard A, and at its lower side is formed upon a rearward and upward curve, while at its upper side and rear end is formed an upward and rearward projecting spur, *c*, that engages with the hooked end *d* of a spring-bar, D, which latter, at its lower end, is secured upon a head, E, that encircles said standard and moves longitudinally upon the same. The upper end *d* of the bar D is beveled upward and rearward, and upon its upward motion, striking against the rounded end of the hammer-bar, is pressed outward until its hook or shoulder has passed above and engages with the spur *c*, after which, by moving said spring-bar downward, said hammer-bar will be tilted until its rear end has assumed such an angle as to cause the former to slip out of engagement therewith. A spiral spring, F, is attached at one end to the hammer-bar C, just in front of the standard A, and, extending downward through a suitable opening in the arm B, has its opposite end connected to or with the front side of the sliding head E, and operates to draw the latter upward to the position shown in Fig. 1, and to return the hammer down upon its anvil. By changing, vertically, the point of attachment of the spring upon the sliding head, its tension may be increased or diminished, as desired. The upper side of the arm B is cut away from the hammer C′ forward, and upon such portion are secured suitable adjustable gages G and H, for sustaining the saw-blade, and for regulating its angle with relation to the face of the anvil.

The device is now complete, and is operated as follows: The lower end of the standard is firmly clasped in a vise at a point just below that reached by the sliding head when drawn downward, after which one foot is placed within a loop that is formed within the lower end of a string or wire which depends from the front side of the sliding head, and the hammer alternately raised and permitted to fall, the teeth of a saw being successively placed beneath said hammer and permitted to receive its blows.

This method of operating the hammer leaves the hands free to manipulate the saw, and enables the work to be done in a better and more expeditious manner than has heretofore been practicable.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

The hereinbefore-described improved saw-set, consisting of the frame A B, the pivoted hammer C C′ *c*, the spring-bar D *d*, the sliding head E, and the spring F, said parts being constructed and combined to operate in the manner and for the purpose substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 14th day of March, 1874.

G. H. THOMPSON.

Witnesses:

B. F. HUDSON,

JOHN A. MITCHELL.