(No Model.)

T. SHEPARD.

SAW SET.

No. 458,275. Patented Aug. 25, 1891.

Fig. 1.

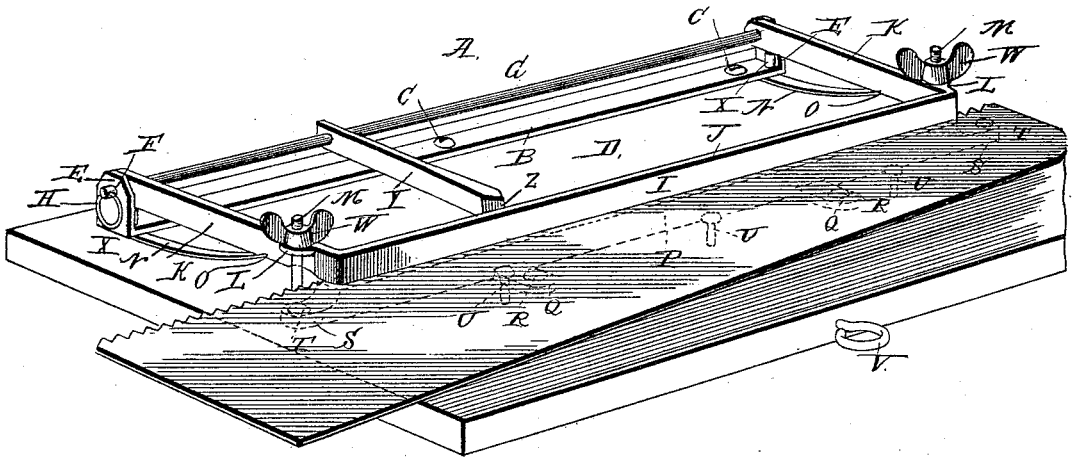
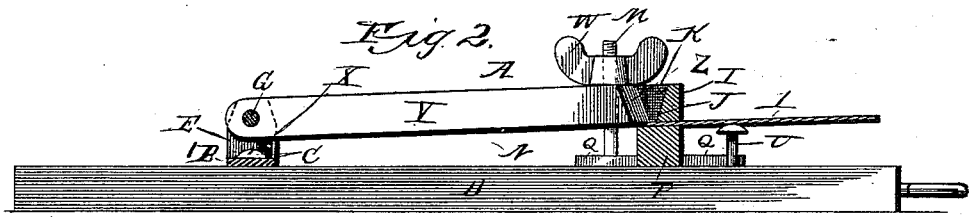


Fig. 2.



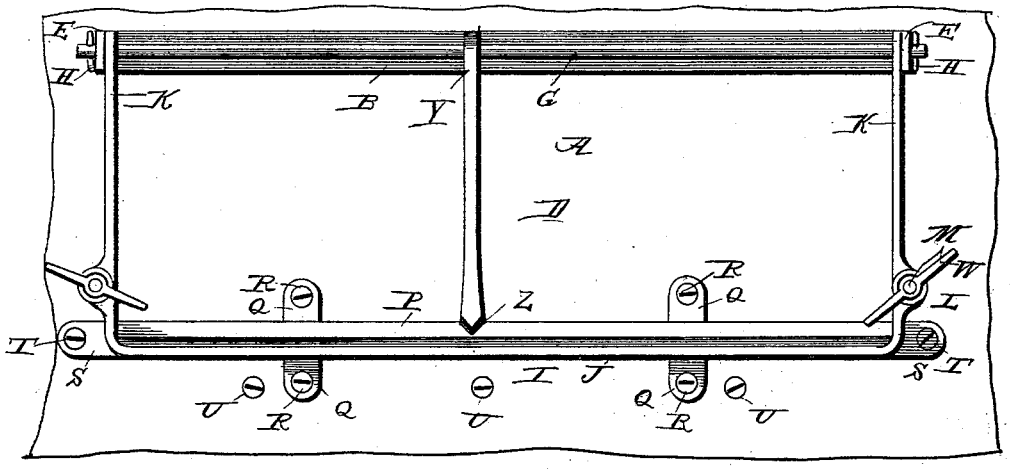


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS SHEPARD, OF KANSAS CITY, MISSOURI.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 458,275, dated August 25, 1891.

Application filed December 12, 1890. Serial No. 374,481. (No model.)

To all whom it may concern:

Be it known that I, THOMAS SHEPARD, of Kansas City, Jackson county, Missouri, have invented certain new and useful Improvements in Saw-Sets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to appliances for imparting the required lateral slant to the teeth of saws, in order that the kerf shall be thicker than the thickness of the saw-blade; and the object of my invention is to produce a simple and inexpensive form of saw-set which can be readily manipulated and by means of which the teeth can be set uniformly at exactly the required slant.

To the above purposes my invention consists in certain peculiar and novel features of construction and arrangement, as hereinafter described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a perspective view of a saw-set embodying my invention, a saw being shown in position for the setting operation. Fig. 2 is a transverse vertical section of the same. Fig. 3 is a plan view of the same.

In the said drawings, D designates a board or other piece of suitable material, which constitutes the base or backing of the saw-set. Upon one side of said base or backing, and near one edge of the same, is placed an elongated metal bar B, each end of which is formed with an upturned standard E, and the body portion of which is secured to the base D by a suitable number of screws C or similar devices. Immediately above the body portion of this bar B is located a rod or bar G, the ends of which are inserted into the upper parts of the standards E, so that the rod lies parallel with the bar B, the said rod being retained in position by rings H, one of which passes through each end of the rod outside of each of the standards E. Upon the base D is also placed a rest-bar P, which extends parallel with and at some distance from the bar B just described. This bar P is also of elongated form and has at intervals of its length laterally-extending lugs Q, through which screws R or equivalent devices are inserted to secure the rest P upon the base, while the ends S of the rest are secured to the base by screws T or equivalent devices.

J designates the upper jaw of the saw-set, the outer portion I of said jaw being of elongated form and extending parallel with the rod G and the end portions K of said jaw extending at right angles to said portion I. The extremities of the end portions K embrace the rod G near its ends and within the standards E, and the length of said end portions is such that the portion I of the jaw extends immediately above and parallel with the rest-bar P. The inner side of the outer portion I of the jaw J is beveled or inclined upwardly and outwardly, as shown in Fig. 2, and admits the outer end Z of the setting-arm Y. This arm at its opposite end loosely embraces the rod G, so as to be moved freely thereon between the arms K of the upper jaw. Beneath each end of the bar B is confined, as at X, one end of a plate-spring N, the opposite end of which is recessed, as at O, to receive the outer part of the corresponding end portion K of the upper jaw J. The tendency of these springs N is thus to lift the outer portion of the upper jaw off of the rest-bar P. In the outer part of each end portion K of the upper jaw is formed a lug L, through which extends a rod M rising from the base D, and upon the upper end of each of these rods is screwed a nut W, each of which impinges upon one of the lugs L before referred to. It will be seen that the rest-bar P rises considerably above the base D, and in order to support the saw properly during the operation of setting the teeth a number of pins U are inserted into the base outside of the rest-bar, and thus the outer part of the saw is supported, as shown in Figs. 1 and 2. An eye V or an equivalent device is secured to one edge of the base D, so that the entire device can be hung up when not in use. While the teeth of the saw are being set, the saw is held between the rest-bar P and the outer portion I of the upper jaw J, the nuts W being screwed down for this purpose. The workman grasps the setting-bar with one hand and with a hammer strikes the outer end of said bar so as to properly set the teeth, the bar being moved along gradually until all of the alternate teeth

have been set. The nuts W are now loosened, allowing the springs N to lift the upper jaw and the saw is withdrawn and turned over. After the saw has been again inserted between the rest-bar and the upper jaw the nuts W are tightened and the intermediate teeth are set as before.

From the above description it will be seen that I have produced a simple, compact, and inexpensive saw-set, which can be readily manipulated, and which will set the teeth uniformly at exactly the required slant.

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

An improved saw-set comprising a suitable base or backing, an elongated bar secured thereon and having at each end an upturned standard, a rod having its ends inserted into said standards and having retaining-rings inserted through its outer ends, a rest-bar also secured to the base parallel with and at a distance from the first-named bar, a U-shaped upper jaw embracing the rod at the extremities of its arms and having an outwardly-beveled outer portion, a spring located beneath each end of the bar and making contact at its outer recessed extremity with the under side of the corresponding arm of the upper jaw, a lug formed in the outer part of each jaw-arm, a rod passing upward through each of said lugs, a nut threaded upon the upper end of each rod and impinging upon said lugs, and a number of pins inserted into the base outside of the rest-bar, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS SHEPARD.

Witnesses:
GEO. Y. THORPE,
H. E. PRICE.