(No Model.)

F. W. BROWN.

SAW SET.

No. 552,814. Patented Jan. 7, 1896.

Fig. 1,

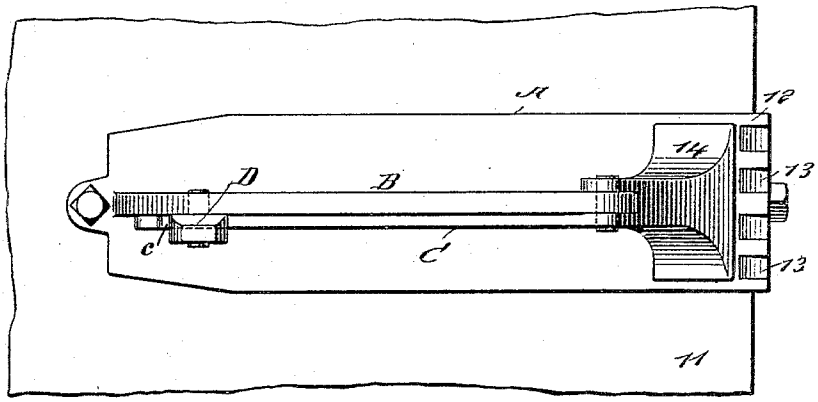


Fig. 2,

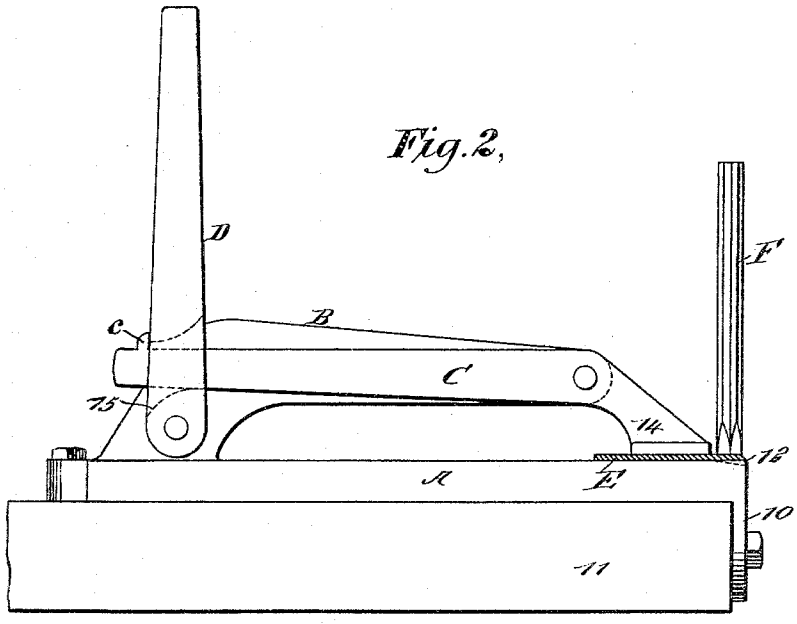
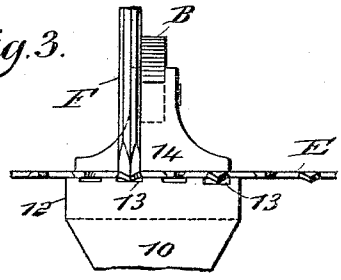


Fig. 3.



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UNITED STATES PATENT OFFICE.

FRED W. BROWN, OF WOLCOTT, NEW YORK.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 552,814, dated January 7, 1896.

Application filed January 25, 1895. Serial No. 536,230. (No model.)

To all whom it may concern:

Be it known that I, FRED W. BROWN, of Wolcott, in the county of Wayne and State of New York, have invented a new and Improved Saw-Set, of which the following is a full, clear, and exact description.

My invention relates to an improvement in saw-sets, and it has for its object to provide a set of exceedingly simple, durable, and economic construction upon which any saw-blade may be expeditiously and conveniently set.

Another object of the invention is to provide a set of but few parts, all of which may be readily replaced when occasion may demand, and to provide the anvil of the set with recesses of different depths, whereby the teeth may be set to a greater or less extent.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in all the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the improved set. Fig. 2 is a side elevation, and Fig. 3 is a front elevation of the set.

In carrying out the invention the saw-set comprises a base A, preferably provided at its front end with a lug 10 whereby it may be fastened to a bench 11, table, or its equivalent, and said base is provided with an arm B, which is arched longitudinally over the upper portion of the base. A clamping-arm C is fulcrumed upon the base-arm, and the said clamping-arm is operated through the medium of a lever D. The rear end of the base is screwed to the bench. At the forward end of the base A and upon the upper surface at said end an anvil surface or face 12 is formed, upon which the saw E to be set is laid for manipulation, and this anvil-surface is provided with a series of recesses 13, graduated as to depth, as is best shown in Fig. 3, the said recesses being of a size practically corresponding to that of the teeth to be set, and these recesses may therefore be of different widths or lengths as well as of different depths; and the object of the recesses is to permit a variation in the setting of teeth, the teeth being given more or less of an inclination.

The clamping-arm C is pivoted at the forward end of the base-arm B, at which portion the clamping-arm is bifurcated or forked, and the main or body portion of the clamp extends rearward along the base-arm B. A foot 14 is made integral with or attached to the forward end of the clamping-arm, and this foot engages with the base just back of its anvil-surface 12. The foot may be of any desired size, and is preferably made of a length substantially the same as the width of the base, as shown in Fig. 1. The free end of the clamping-lever C is provided with an upwardly-projecting stud *c*, which serves to limit the movement of the hereinafter-described hand or operating lever. The clamping-arm is manipulated through the medium of preferably a hand-lever D, heretofore referred to. This lever is fulcrumed upon the rear portion of the base-arm upon that side at which the body of the clamping-arm is located, and the lever D is provided near its pivot-point with a cam-surface 15, as shown in dotted lines in Fig. 2, the said cam-surface being a surface that is inclined from the rear edge of the lever in an upward and forward direction; and if in practice it is found desirable a slot may be formed above this cam-surface in the inner face of the lever, and serve as a guide for the rear end of the body of the clamping-arm, since this portion of the said arm is made to rest upon the cam 15 of the hand-lever. Therefore when this hand-lever is pushed rearward to a substantially vertical position, the foot of the clamping-arm will be forced downward to a clamping engagement with the saw E placed upon the base at its anvil end, and the saw may be readily moved along the base or anvil service by simply drawing the lever in a forward direction, thus permitting the foot to be moved upward, or be loosened from its bearing on the saw.

The setting is accomplished through the medium of a setting-chisel F, which may be of any cross-sectional shape in its body, but its bottom or lower edge is shaped to correspond substantially to that of a tooth; and in the operation of setting, the saw having been placed on the base with the teeth over the

setting-recesses 13, the setting-chisel is placed upon the top of a tooth located over a predetermined recess, and is struck by a hammer until the tooth has been given its desired inclination, since it will be understood that when a tooth of a saw has been set over a certain recess in the anvil-surface of the base each tooth in that particular saw must be set over the same recess, so that the inclination or degree of setting in all the teeth of the saw will be the same.

The machine itself is exceedingly simple, all of its parts may be readily duplicated, and by the use of such a machine a saw may be expeditiously and accurately set even by a youth.

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

1. The combination with a base of an anvil thereon, an arm projecting upwardly and horizontally from the base, a clamping lever fulcrumed on the arm, and an operating lever also fulcrumed on the arm and having an opening receiving the free end of the clamping lever, substantially as described.

2. In a saw-set, the combination with a base plate, of an anvil, an arm rigid on the base plate and arising therefrom and thence extending horizontally toward the anvil, a clamping lever fulcrumed on the end of the arm and having one end extended rearwardly toward the base thereof, and an operating lever fulcrumed at the base of the arm and provided with an opening receiving the free end of the clamping lever, the said opening having an eccentric or cam-shaped surface and the free end of the clamping lever having a laterally projected lug engaging with the rear side of the operating lever, substantially as described.

3. A saw set comprising a movable clamping arm adapted to engage the saw, and a base to which said arm is pivoted, the base having an anvil surface constructed to receive the saw, and the said anvil surface being provided with swaging recesses in front of the end of the clamping arm, substantially as described.

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Witnesses:
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