(No Model.)

W. DUNN.
Saw Set.

No. 241,633. Patented May 17, 1881.

Fig. 1.

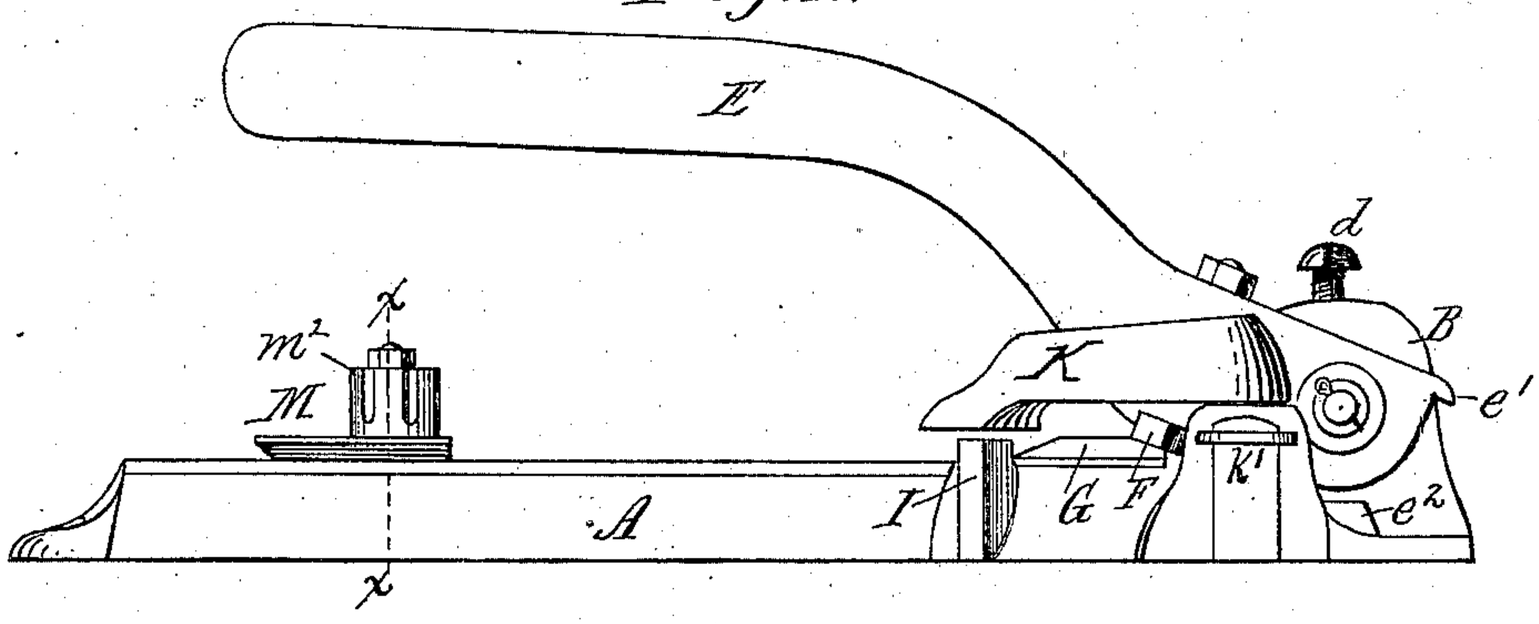


Fig. 2.

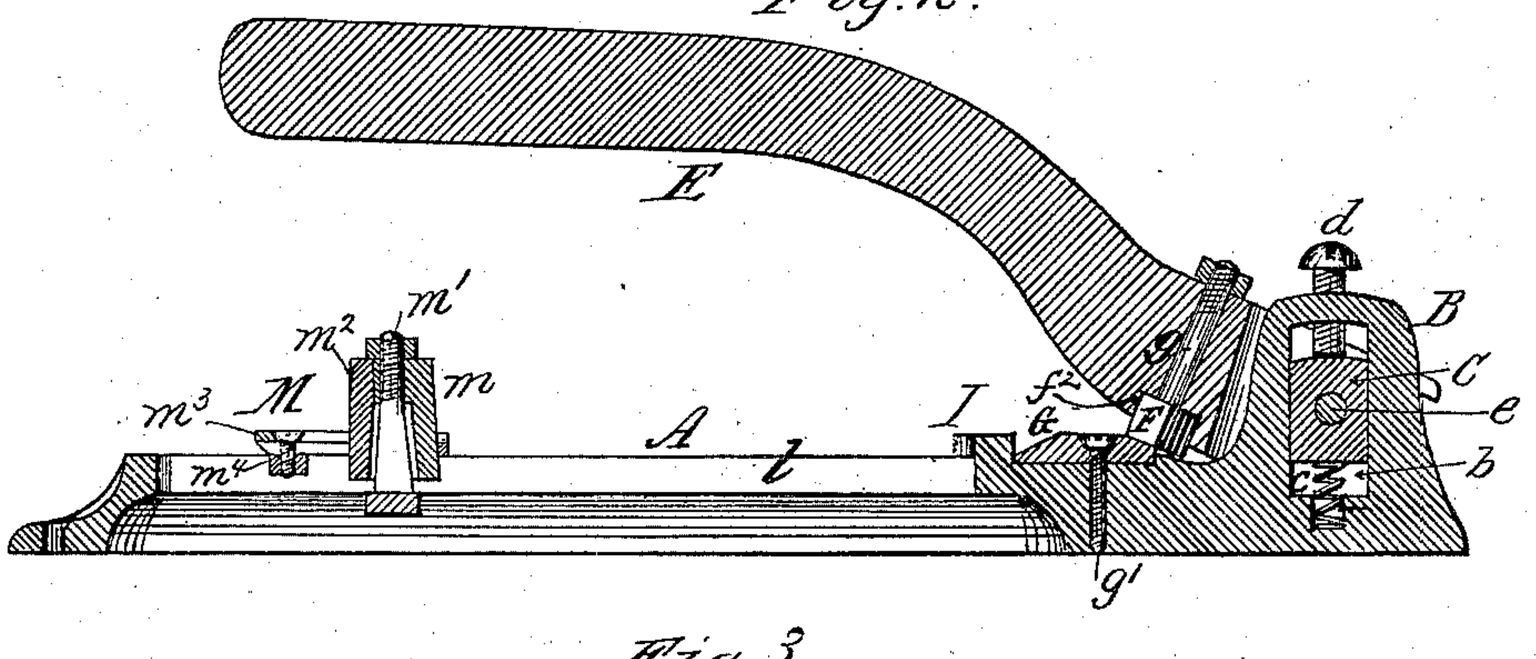


Fig. 3.

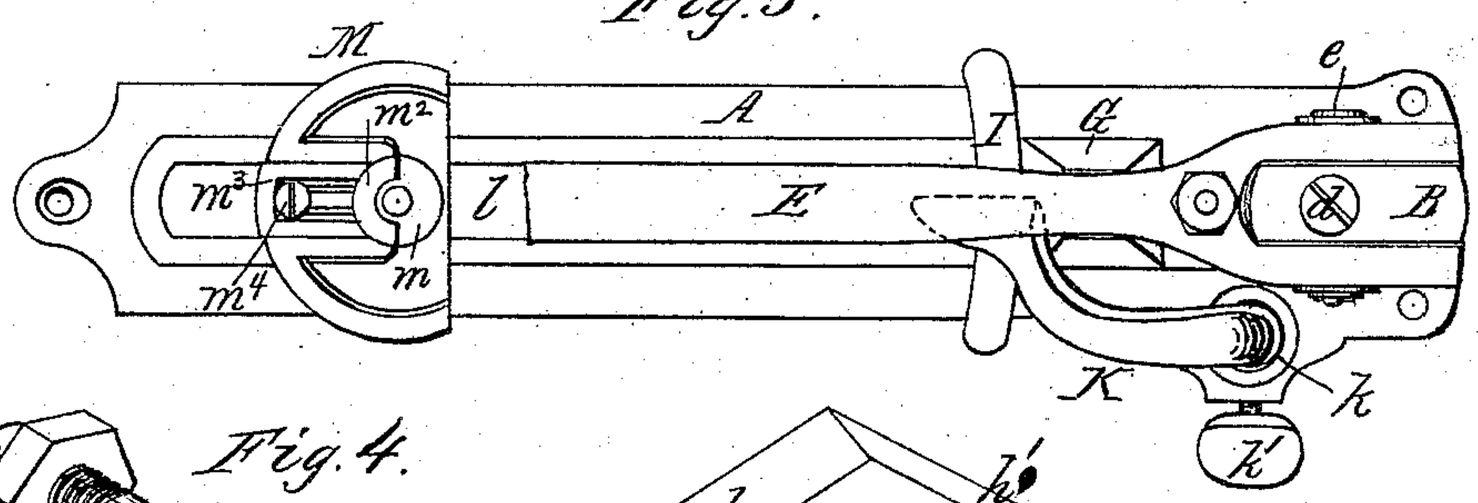


Fig. 4.

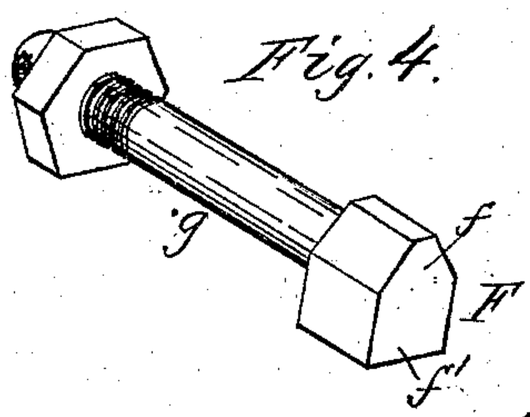


Fig. 6.

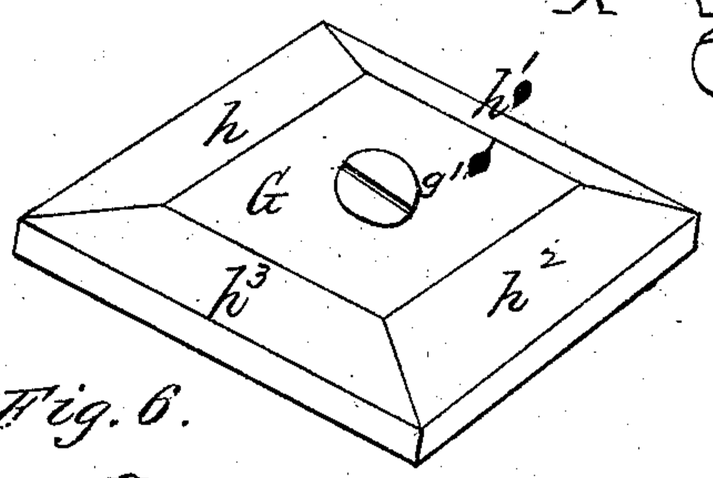
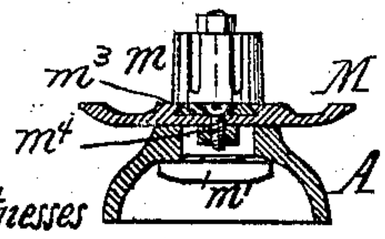


Fig. 5.



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UNITED STATES PATENT OFFICE.

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SAW-SET.

SPECIFICATION forming part of Letters Patent No. 241,633, dated May 17, 1881.

Application filed February 3, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM DUNN, of the city of Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Saw-Sets, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates more particularly to a machine for setting the teeth of circular saws; and it consists of the construction, combination, and arrangement of the parts which compose the machine, as will be hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a side elevation of my improved machine. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a top-plan view of the machine. Fig. 4 is a perspective view of the hammer. Fig. 5 is a perspective view of the anvil. Fig. 6 is a cross-section in line *x x*, Fig. 1.

Like letters of reference refer to like parts in the several figures.

A represents the bed of the machine, provided at one end with an upwardly-projecting lug, B, having a vertical slot, *b*, in which is arranged the fulcrum-bearing C. The latter rests on a spring, *c*, which presses the bearing C upward, and the bearing is held down by a set-screw, *d*, so that by tightening or releasing the set-screw the bearing can be raised or lowered in the slot *b*.

E represents the lever to which the hammer F is attached. This lever is pivoted to the bearing C by a horizontal bolt, *e*, and is provided with a nose, *e'*, which limits the upward movement of the lever by striking against a shoulder, e^2, on the bed. The hammer F is provided with two faces, *f f'*, arranged on opposite sides and made of different widths. The hammer is secured in a socket, f^2, on the under side of the lever E, by a bolt, *g*, so that the hammer can be reversed in the socket and either face be brought over the anvil G. The hammer F can be removed from the lever E and be replaced by a hammer having faces of greater or less width, in accordance with the size of the saw-teeth which are required to be set. The anvil G is secured to the bed A by a set-screw, *g'*, and the bed is provided with a recess or socket, in which the anvil is held. The anvil is made square, and provided on its upper side with four faces, *h h'* h^2 h^3, of different bevels, either of which may be brought under the hammer by releasing the screw *g'* and turning the anvil.

I represents a rib arranged on the bed A, in the rear of the anvil G, and forming a supporting-surface for the saw.

K represents an arm, which bears upon the saw and prevents the latter from rising when the hammer depresses a tooth. The arm K is provided with a vertical pivot, which turns in a socket, *k*, formed on the bed A, and is held in place by a set-screw, *k'*.

l is a longitudinal slot formed in the bed A, and M is the saw-carrier, made adjustable in the slot *l* toward and from the anvil. The carrier M consists of a plate resting on the bed A, and provided with an upwardly-projecting hub, *m*, adapted to pass through the eye of the saw. The carrier M is secured to the bed by a vertical bolt, *m'*, passing through the hub of the carrier, and provided with a screw-nut on its upper side. Upon releasing the nut the carrier M can be moved toward and from the anvil and adjusted to correspond with the diameter of the saw operated upon. The hub *m* is composed of a body formed in one piece with the saw-carrier M and an adjustable piece, m^2, provided with a slotted horizontal base, m^3, which is adjustably secured to the carrier M by a screw-bolt, m^4. By adjusting the adjustable piece m^2 toward or from the body of the hub the size of the hub is decreased or increased to adapt it to the varying sizes of the eyes of the saws.

The circular saw to be set is placed upon the carrier M, and the latter is adjusted on the bed so as to bring the teeth of the saw over the forward beveled face, *h*, of the anvil. The teeth of the saw are set by bringing the hammer down on the teeth with greater or less force, as may be required, the saw being turned by hand during this operation on the stud or hub *m* of the carrier M. By raising and lowering the pivot-bearing C of the lever E the inclination of the lower face of the hammer F is adjusted to correspond with the particular bevel of the anvil which is required to be used in setting the

saw and to correspond with the thickness of the saw operated upon.

I claim as my invention—

1. The combination, with the bed A, provided with an adjustable anvil having two or more faces of different bevel, of the hammer F, attached to a lever, E, having its pivot made vertically adjustable, whereby the face of the hammer is adjusted to correspond with the bevel of the anvil, substantially as set forth.

2. The combination, with the bed A, provided with lug B, having a vertical slot, *b*, of the bearing C, resting on the spring *c* and held down by a set-screw, *d*, and the lever E, pivoted to the bearing C, substantially as set forth.

3. The combination, with the bed A, of the anvil G and supporting-surface I, arranged in the rear of the anvil, and the arm K, adjustably supported on the bed A by a vertical pivot, and arranged to bear upon the saw above the surface I, substantially as set forth.

4. The combination, with the bed A, provided with slot *l*, of the adjustable saw-carrier M, anvil G, and lever E, provided with hammer F, substantially as set forth.

5. The combination, with the bed A, of the lever E, provided with hammer F, anvil G, arm K, supporting-surface I, and adjustable saw-carrier M, substantially as set forth.

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Witnesses:
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