

No. 636,168.

Patented Oct. 31, 1899.

M. ODGERS.
SAW SET.

(Application filed July 27, 1899.)

(No Model.)

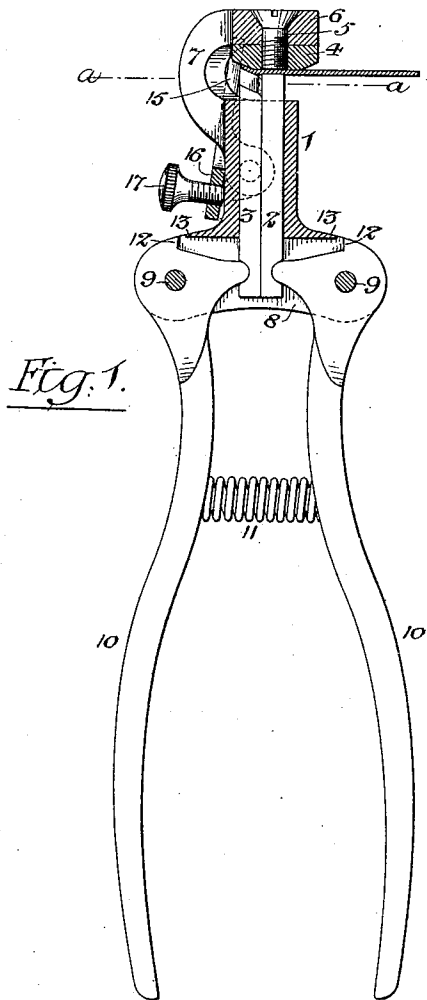


Fig. 1.

Fig. 2.

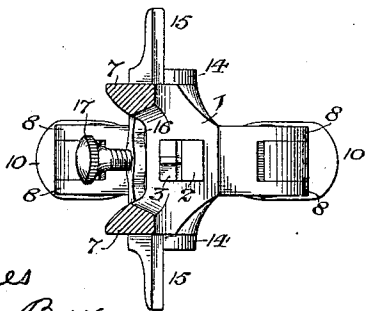
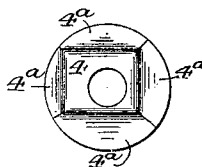


Fig. 3.



Witnesses
Wm. a. Barr.
Hamerton S. Turner

Inventor
Matthew Odgers
by his Attorneys
Howson & Howson

UNITED STATES PATENT OFFICE.

MATTHEW ODGERS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE
HENRY DISSTON & SONS, INCORPORATED, OF SAME PLACE.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 636,168, dated October 31, 1899.

Application filed July 27, 1899. Serial No. 725,296. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW ODGERS, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain
5 Improvements in Saw-Sets, of which the following is a specification.

The object of my invention is to provide a simple form of saw-set in which the saw is firmly clamped at a point adjacent to the
10 toothed edge before the action of the setting-die upon the tooth, whereby the teeth of saws of different sizes can be accurately set. This object I attain in the manner hereinafter set forth, reference being had to the accompanying
15 drawings, in which—

Figure 1 represents a longitudinal section of a saw-set constructed in accordance with my invention. Fig. 2 is a transverse section on the line *a a*, Fig. 1; and Fig. 3 is an enlarged face view of the anvil forming part of
20 the saw-set.

The body 1 of the saw-set is hollow and forms a guide for the two sliding dies 2 and 3, the former of which is a clamping-die and
25 the latter a setting-die, operating in conjunction with an anvil 4, which is secured by a set-screw 5 to a jaw 6, which is located some distance beyond the end of the body 1 of the saw-set and is connected thereto by a curved
30 arm 7, so that between the body 1 and the jaw 6 is formed a throat for the reception of the toothed edge of the saw-blade. The anvil 4 has a series of setting-faces 4^a, four of which are shown in the present instance, each
35 of these setting-faces having an extent of bevel differing from the others, as shown in Fig. 3, so that by turning the anvil in respect to the jaw 6 any desired setting-face 4^a of the series may be brought into position to coact
40 with the setting-die 3.

The inner end of the body 1 has depending flanges 8, between which are pivoted, by means of transverse pins 9, a pair of levers 10, the short arms of these levers engaging with
45 notches or recesses in the outer faces of the sliding dies 2 and 3, which are disposed back to back in the central opening of the body 1, as shown in Fig. 1. The long arms of the levers 10 form handles whereby the saw-set
50 is manipulated, and these long arms of the levers are normally separated from each other

by the action of an interposed coiled spring 11, so as to withdraw the dies 2 and 3 to their full extent. Contact of lugs 12 on the levers 10 with stops 13 on the body of the saw-set
55 serves to limit the separation of the levers and the retraction of the dies.

To pins projecting from the sides of the body 1 of the saw-set are hung projecting ears 14 on gage-bars 15, located one on each side
60 of said body, said gage-bars being connected by a cross-bar 16, which has a threaded opening for the reception of a set-screw 17, the latter bearing upon the rear face of the body 1, so that by the adjustment of this set-screw
65 the gage-bars 15 can be caused to project more or less forwardly into the throat of the saw-set, and can thus govern the set of the tooth by limiting the extent to which the latter is permitted to project over the beveled face of
70 the anvil 4.

By the use of the clamping-die 2, working closely adjacent to the setting-die 3, the saw is clamped at a point close to the tooth before the action of the setting-die upon the latter.
75 Hence the operation of the tool is extremely accurate, and the same can be used for setting the teeth of saws of different widths down to the very narrowest, the tool being also simple in construction and convenient of
80 manipulation.

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

1. The combination in a saw-set, of the body 85 having a jaw located beyond the end of the same, and an arm connecting said jaw to the body, and a setting-anvil on said jaw having a broad flat bearing-surface for the saw-blade and a beveled surface for determining the set
90 of the tooth, and a pair of dies disposed back to back and guided in said body of the saw-set, one of said dies being a clamping-die for the saw-blade and having a flat end opposed to the flat face of the setting-anvil and the
95 other a setting-die having a beveled end operating in conjunction with the beveled face of the setting-anvil, substantially as specified.
2. The combination in a saw-set, of the hollow body having clamping and setting dies
100 guided therein, the end jaw having a setting-anvil thereon, an arm connecting the end jaw

to the said body, pivoted gage-bars flanking the body and connected by a cross-bar, and an adjusting-screw engaging with said cross-bar and bearing upon said body, substantially as specified.

5
3. The combination in a saw-set, of the hollow body, clamping and setting dies guided therein, the end jaw having a setting-anvil, levers hung to the body of the saw-set and
10 having long arms forming operating-handles, and short arms, one engaging with the clamping-die and the other with the setting-die, a spring for separating the long arms of the

levers, and lugs on the levers projecting longitudinally beyond said short arms and cooperating with stops on the body of the saw-set for limiting the extent of such separation, substantially as specified. 15

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 20

MATTHEW ODGERS.

Witnesses:

THOS. SHALLCROSS, Jr.,
E. R. ROBERTS.