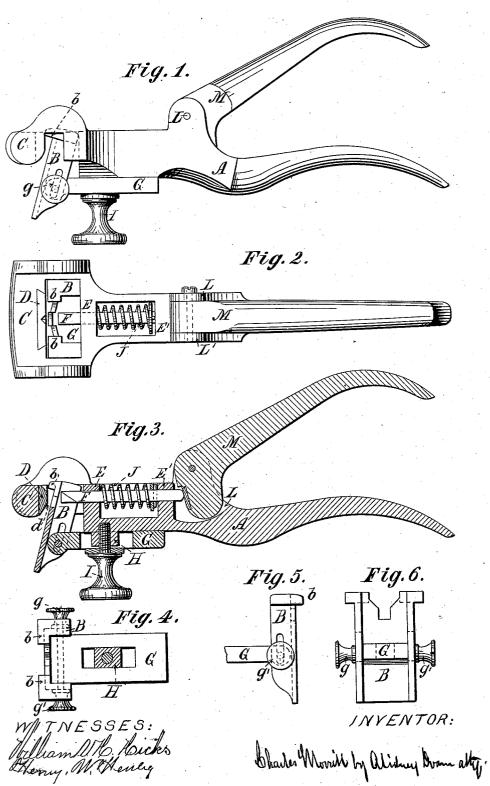
## C. MORRILL. Saw-Set.

No. 224,789.

Patented Feb. 24, 1880.



# UNITED STATES PATENT OFFICE.

### CHARLES MORRILL, OF NEW YORK, N. Y.

#### SAW-SET.

SPECIFICATION forming part of Letters Patent No. 224,789, dated February 24, 1880.

Application filed February 24, 1879.

To all whom it may concern:

Be it known that I, CHARLES MORRILL, of the city, county, and State of New York, have invented, made, and applied to use Improve-5 ments in Saw-Sets, and that the following is a full, clear, and correct description of the same, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked to thereon, in which—

Figure 1 is a side elevation of my saw-set; Fig. 2, a top view of the same; Fig. 3, a longitudinal section of the same; Fig. 4, a bottom view of the adjusting-plate; Fig. 5, a side 15 view of the same; Fig. 6, a back view of the

In the drawings like parts of the invention are designated by the same letters of reference.

The nature of the present invention consists 20 in improvements, as more fully hereinafter set forth, in the construction of a saw-set, the object of the invention being the production of a saw-set that will set a saw of any width and do the work thoroughly without liability 25 of springing the saw.

To enable those skilled in the arts to make and use my invention, I will describe the same.

A shows the handle of the saw-set, the upper portion of which is continued in its manu30 facture, and forms a support for the adjusting-plate B and the curved beam C, within which is received the die D. The handle A is also provided with the ways E E', in which the punch F, for setting the teeth of the saw, 35 moves.

The die D is beveled upon its face, as at d, as shown in Fig. 3, the angle of the bevel being in a direct line with the lower side of the punch F, so that when the saw is placed in the saw-set the root of the tooth comes at the angle, thereby preventing the bending of the

The adjusting-plate B is made true upon its face or upper surface, and is swiveled about centrally upon the slotted frame-work G, and, by loosening the screws g, can be raised and lowered to suit the length of the saw-teeth. The projecting portions b upon the plate B form guides for guiding the saw-set over the

The slotted portion of the frame-work is placed over the boss H, and into the same is

passed a screw, I, by which the frame G is held in position, and, by unloosening the screw, can be moved forward and back upon the handle A.

The punch F is passed through the journals E E' of the handle A, and over the punch F is passed a spiral spring, J, having its bearing between the under side of the journal E 60 and a washer held upon the punch by a pin.

Within the lugs L L' upon the handle A is swiveled the cam lever M, the cam portion of which is intended to have its bearing upon the rear end of the punch F, and, by depressing the lever, cause the punch to be thrown forward against the tooth of the saw to be set.

As the punch is thrown forward the spiral spring J is compressed, and by releasing the hold upon the lever M the punch and lever 70 are restored to their former position.

Such being the construction, the operation is as follows: The adjusting-plate B is adjusted or regulated to suit the fineness or coarseness of the saw by moving the plate G 75 forward or backward, and is then adjusted to suit the capacity of the saw by means of the screws g. The saw-set is then passed over the saw to be set, and as each tooth to be set is brought directly in front of the punch F 80 the lever M is depressed, which throws the punch F forward, forcing the tooth to be set against the die D.

It will be observed that the root of the tooth is brought at the angle of the die and 85 that the face of the die and of the punch are at right angles to each other always. Thus the tooth of the saw is brought up by the punch against the die and set without straining the saw or breaking the teeth.

The set will set any saw from a quarter of an inch upward, and can be used for setting band-saws, compass-saws, and jig-saws.

Having now set forth my invention, what I claim as new is—

The adjusting-plate B, in combination with the slotted frame-work G and die D, constructed and operating substantially as and for the purpose set forth.

### CHARLES MORRILL.

In presence of—
A. SIDNEY DOANE,
J. KEATING.