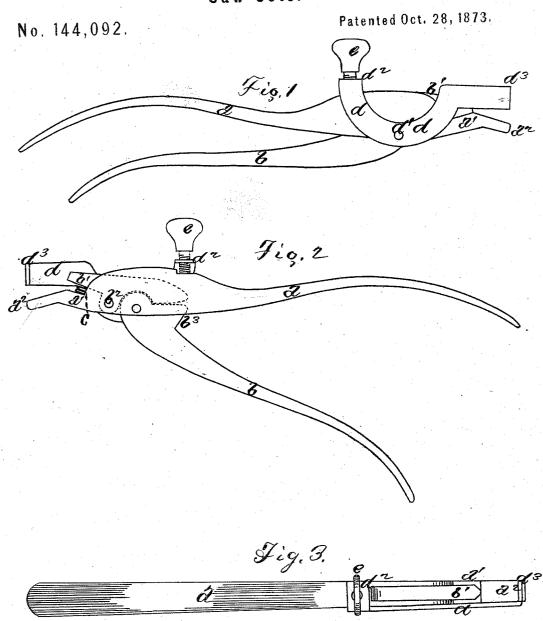
H. C. HART. Saw-Sets.



Witnesses.

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Inventor: Buberto, Harl Byll. E. O'munels Act;

UNITED STATES PATENT OFFICE.

HUBERT C. HART, OF UNIONVILLE, CONNECTICUT.

IMPROVEMENT IN SAW-SETS.

Specification forming part of Letters Patent No. 144,092, dated October 28, 1873; application filed August 22, 1873.

To all whom it may concern:

Be it known that I, HUBERT C. HART, of Unionville, Hartford county, Connecticut, have invented certain new and useful Improvements pertaining to Saw-Sets, of which the following is a specification, reference being had to the accompanying drawings, in which-

Figure 1 is a side view of a saw-set embodying my said improvements. Fig. 2 is a view of the opposite side of such saw-set. Fig. 3 is a top view of such saw-set in the same position as in Fig. 1.

The invention consists in the combination of parts set forth in the claim at the end of this specification, whereby I produce a simple, cheap, and efficient saw-set.

The letter a indicates one of the handles of the saw-set, bearing at its forward end the lower or anvil jaw a^1 and the bevel-finger a^2 . The letter b indicates the other handle of the saw-set, its forward end pivoted within a vertical slot in the handle \tilde{a} . The letter b^1 indicates the upper or grasping jaw, pivoted on the pin b^2 within the same vertical slot with the handle b, having at the rear a lever end, operating in connection with the shoulder b^3 on the handle b.

It is not new to use a compound lever in this connection; but my peculiar arrangement of the end levers is new, and in this connection a great improvement.

The old arrangement of the compound levers in saw-sets is to have the weight end of the operating handle or lever bear on the power end of the grasping lever or jaw on that side of the fulcrum of the operating lever or handle which is opposite from the power end of the operating lever, thus necessitating an undue and unwieldy length of the whole instrument, while by placing the weight of the operating-lever between the fulcrum and the power, I am enabled to considerably shorten up the length of the whole instrument, and

thus make it more handy; but in order to do this without increasing the vertical thickness of the instrument at the place where the levers co-operate, I have to make the secondary lever, in this case the grasping-jaw, of peculiar construction. I have to hollow out its under side, so as to make place for the joint or pivot of the primary lever, in this case the handle b.

The letter c indicates a spring, preferably spiral, for throwing the two jaws apart. The tooth of the saw is grasped between the two jaws $a^1 b^1$. The letter d indicates a balanced oscillating lever-guard, pivoted to the part a on the pin d^1 , having a lateral arm, d^2 , at the rear, through which runs the set-screw e, its lower end bearing on the top of the handle a, and having a lateral arm, d^3 , at the front, under which the blade of the saw is placed.

By means of the set-screw e, the position of the guard d is adjusted at pleasure.

The blade of the saw is placed under the guard d^3 , resting on the bevel-finger a^2 ; the two handles are then pressed by the hand of the operator toward each other, and the two jaws thereby made to grasp the tooth of the saw. This operation tends to lift the body of the blade; but it comes in contact with the arm d^3 , and, its upward progress being thus arrested, the tooth is bent to the proper set. The lower down the arm d^3 is set the more the tooth will be bent, and in this way the set given to the saw-tooth is regulated.

I claim as my invention—
The combination of the handle a, having the jaw a^1 and finger a^2 , the handle b, lever b^1 , and the oscillating lever-guard $d d^2 d^3$, with its screw e, the whole constructed, arranged, and designed for operation and use, substantially as described.

HUBERT C. HART.

Witnesses:

WM. EDGAR SIMONDS, John Pollitt.