

(No Model.)

J. CHARLTON.

SAW SET.

No. 302,891.

Patented Aug. 5, 1884.

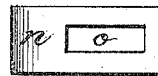
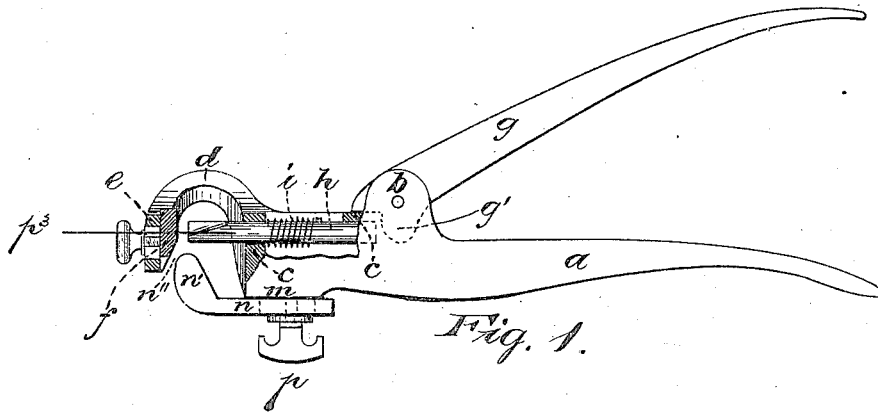


Fig. 2.

Attest.

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UNITED STATES PATENT OFFICE.

JOHN CHARLTON, OF NEWARK, NEW JERSEY, ASSIGNOR TO DRAKE & CO.,
OF SAME PLACE.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 302,891, dated August 5, 1884.

Application filed August 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN CHARLTON, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Saw-Sets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to the class of saw-sets having retractile punches operated by a lever arranged to engage with said punch at its posterior extremity and throw the same forward to set the teeth of the saw individually, said saw-sets being provided with adjustable supporting-plates.

The invention consists in the improved saw-set, constructed and arranged substantially as will be hereinafter set forth, and finally embodied in the claim.

Heretofore saw-sets of the class above mentioned have in some cases had the said adjustable plate, where it engages with the saw-body, pitched at an angle corresponding with the anvil or die, or nearly so, the side view showing a straight line or lines meeting at a slight angle. By this construction, when the anvil has been changed or readjusted, considerable care must be exercised to bring the adjustable supporting-plate into proper relation to said anvil to firmly hold the saw in position. Again, in the instance referred to, the said supporting-plate projects upward to the top line of the punch, so that the said supporting-plate acts to rebend the set teeth. Thus formed, the said plate also interferes with the free lateral movement of the saw-set over the dentate edge of the saw, rendering said saw-set defective as an article of manufacture, the defects of which article it is the object of this invention to overcome.

Referring to the accompanying drawings, in which similar letters of reference indicate like parts in each of the several figures, Figure

1 is a side elevation of a saw-set, partially in section, and Fig. 2 is a bottom plan of an adjustable plate, forming a part thereof.

In carrying out the invention I form a body or frame-work of the device, consisting of the handle *a*, fulcrumal portion *b*, the punch-bearings *c c*, the arched arms *d*, having an opening between and adapted to overlie the toothed edge of the saw, the seat for the adjustable plate, and the slotted seat *e* for an adjustable die, *f*. Upon said fulcrumal portion is secured the lever *g*, having the depending portion *g'* to engage with the posterior extremity of the punch to throw the latter into engagement with the saw-teeth. Within said bearings *c c* is arranged an automatically-retractible punch, *h*, having the spring *i* in proper relation to it to cause automatic retraction. The body of said saw-set is provided with a suitable chamber for the spring, as shown. It is also transversely recessed to receive the saw. The die *f* is adjustably arranged on the seat *e*, and is beveled, as shown, to engage with the saw on the side thereof opposite that engaging with the punch. The seat *m* is provided with an adjustable or, to be more specific, what may be denominated a "rectilinearly-movable" plate, *n*.

The parts thus described are not, broadly, new in this device, but are common to the class of saw-sets of which my improvement is an individual member. The adjustable plate *n*, having the slot *o* to receive the set-screw *p*, differs from those heretofore in use, in that the upwardly-projecting portion *n'* has a curvilinear outline when viewed in side elevation. By this construction, no matter what the position of the opposite die *f* may be, the rounded extremity engages at one point only with the saw, that point being at the root or foundation of the saw-tooth and changeable in its relation to the saw, as will be understood. The extremity of the upwardly-projecting portion is also rounded, and lies at a point at or below the axial line *p'* of the punch, to prevent an interference of the plate with the teeth when the saw-set is moved laterally from tooth to tooth in the process of setting the same.

Having thus described my invention, what I claim as new is—

5 In a saw-set, the combination, with a punch, as *h*, and a die, as *e*, of a plate, *m*, adapted to be adjustably secured to said saw-set, and having the upwardly-projecting portion *n'*, with a rounded upper extremity, *n''*, lying at or below the axial or center line of the punch, and arranged to operate in the manner and for the
10 purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of July, 1883.

JOHN CHARLTON.

Witnesses:

OLIVER DRAKE,
CHARLES H. PELL.