Noepel & Assmann,

Saw-Set,

No. 77,082. Patented Apr. 21, 1868.

Fig. 1.

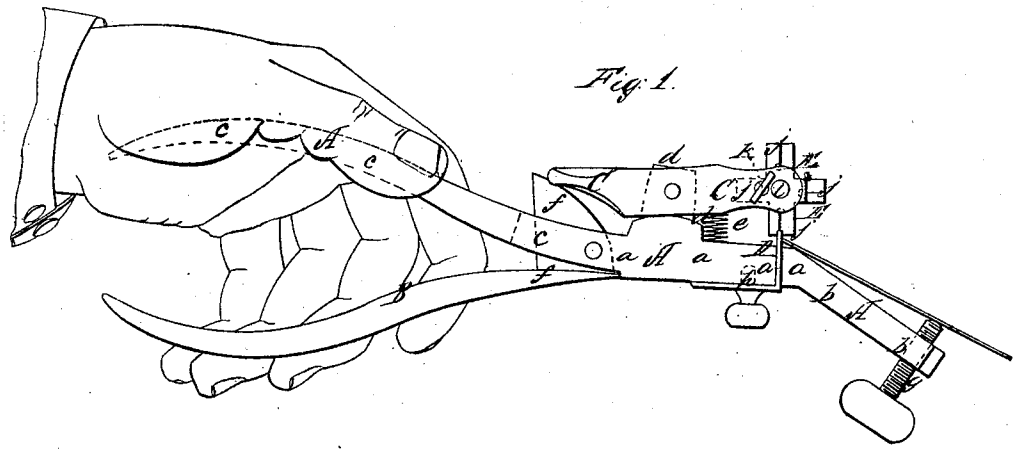
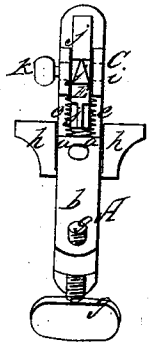


Fig. 2.



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JACOB NOEPEL AND BERNHARD ASSMAN, OF NEWARK, NEW JERSEY.

Letters Patent No. 77,082, *dated April* 21, 1868.

IMPROVEMENT IN SAW-SET.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, JACOB NOEPEL and BERNHARD ASSMAN, of Newark, in the county of Essex, and State of New Jersey, have invented a new and improved Saw-Set; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

Figure 1 represents a side view of my improved saw-set.

Figure 2 is a front view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new hand-saw set, which is composed of two pair of jaws, operated by means of handles, and of a punch and die, which are respectively arranged in the jaws.

This invention consists, first, in the use of a rotary punch, whereby the device is applicable to different sizes and shapes of saw-teeth; and, second, in the construction and arrangement of the jaws and handles, whereby the saw-blade is caused to remain stationary on the lower jaw.

A, in the drawing, represents a metallic bar, having a straight portion, *a*, near the middle, an inclined portion, *b*, at one end, and a handle, *c*, at the other end. At the junction of the handle *c* and the straight part *a*, is pivoted, to the bar A, another handle, B, as shown. From the straight portion *a* of the bar A projects upward a lug or ear, *d*, to which is pivoted a jaw, C, as shown. The front end of the jaw C is held up by a spring, *e*, while its rear end is, by the same means, pressed upon a cam, *f*, that projects from the handle B, as shown. The parts *a* and C form the jaws of the saw-set. The part *b*, together with a screw, *g*, put through it, forms the support of the saw to be set. A die, D, is secured upon the lower jaw *a*, and a punch, E, on the upper jaw C.

From first observation it may appear that the general construction of this saw-set conflicts with and is similar to that of Oliver Newton, which was patented on the 21st day of July, 1863, but such is not the case. In Newton's saw-set, the handle which moves the upper jaw is pivoted to the upper side of the bar A, and if then the instrument is taken in hand and the handles compressed, the lower handle will be raised, whereby the supporting-part and the saw itself will be moved. For this reason the saw-set of Newton's is almost useless, as the continuous motion of the saw makes the tool inconvenient to handle.

In our saw-set, the handle B is pivoted to the under side of the bar A, and operates the jaw C, which is pivoted to the upper side of the said bar. When the tool is operated, the bar A, which forms the upper handle, will remain stationary as the fingers draw the handle B towards the palm of the hand, which rests upon the bar A, as shown, and thus the supports of the saw-blade and the die D will remain stationary, only the jaw C with the punch having to be operated.

A sliding gauge, *h*, should be arranged on the arm *a* to regulate the length of the teeth to be set, the degree of set being regulated by the screw *g*. The punch E is, by means of a pin, *i*, pivoted to the jaw C, and can be turned around the pivot at will. It has two or more arms, *j j*, each arm having a face of different shape or different size.

By turning the punch around its pivot, any one desired anvil-face can be brought into operation, the punch being held in the desired position by a suitable thumb-screw, K, or some other equivalent device. By having the revolving punch with different anvil-faces, the instrument can be made adaptable to almost all kinds of saws.

The axis *i* of the revolving punch F may, instead of being fitted through the jaw C, be fastened into the end of the same, in which case its position would be at right angles with that shown, while the revolving punch would operate with equal effect.

Having thus described our invention, we claim as new, and desire to secure by Letters Patent—

The short lower handle B, pivoted in the slotted long handle A, and provided with a cam, *f*, which works upward through the slotted handle against the lever C, whereby the short handle is operated by the fingers of the hand while the long handle is held comparatively stationary, as set forth.

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