

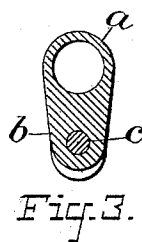
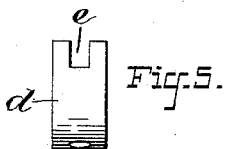
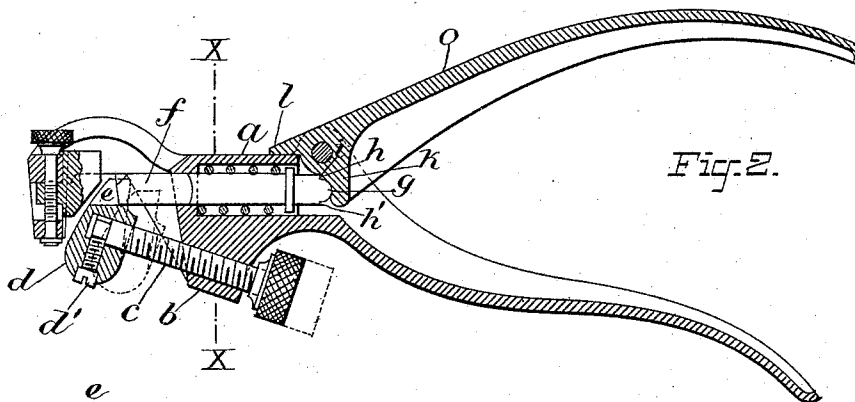
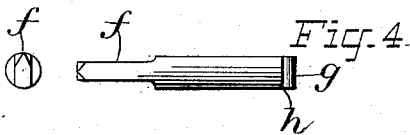
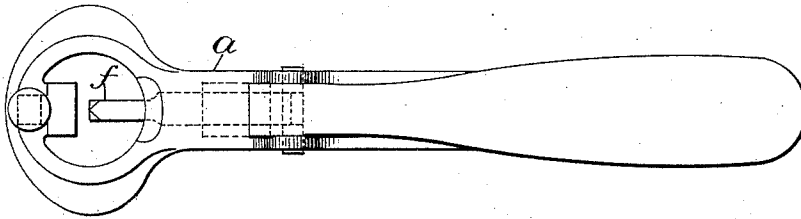
(No Model.)

C. MORRILL.  
SAW SET.

No. 468,816.

Patented Feb. 16, 1892.

Fig. 1.



ATTEST:

M. A. Pettit  
Chas. W. Hardell

INVENTOR:

Chas. Morrill

By J. A. Hurdle  
Attorney

# UNITED STATES PATENT OFFICE.

CHARLES MORRILL, OF NEW YORK, N. Y.

## SAW-SET.

SPECIFICATION forming part of Letters Patent No. 468,816, dated February 16, 1892.

Application filed July 31, 1891. Serial No. 401,325. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES MORRILL, a citizen of the United States, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Saw-Sets, of which the following is a specification.

My invention relates to improvements in saw-sets provided with a suitable housing for the protection of the actuating-spring surrounding the horizontally-moving hammer.

The invention also relates to an adjustable guard, all of which will be fully described and shown hereinafter.

Heretofore the actuating-spring and hammer of saw-sets have been exposed, thus enabling the dust and refuse to settle between the convolutions of the spring and in time clog the same to such an extent as to cause it to become inoperative. They were also provided with a guard having a broad vertical slot adapted to accommodate a correspondingly-shaped hammer, the latter of which, when operating upon a narrow saw, would cause it to buckle, thereby giving the blade of the saw a curved shape after having its teeth set. I propose to obviate these objections by my present invention, which will be fully pointed out in the claims.

My invention consists in providing a suitable inclosure for the reception of the actuating-spring surrounding and connected with the horizontally-moving hammer.

It also consists of an adjustable guard so arranged as to enable the operator to set the teeth of narrow saws as well as broader ones.

It further consists of the arrangement of the heel of the operating-handle and the end of the horizontally-moving hammer.

In the accompanying drawings, Figure 1 represents a plan view of the device having the adjustable guard removed. Fig. 2 represents a longitudinal vertical section of the device, in which is shown the principal features of my invention. Fig. 3 is a transverse section of the housing, taken on the line X X of Fig. 2. Fig. 4 is a detail view of the hammer detached. Fig. 5 is a face view of the adjustable guard detached.

Similar letters refer to similar parts throughout the drawings, in which—

*a* represents the housing, forming a part of

the main body of the device, and *b* is the depending lug, having an internal screw-threaded perforation whose longitudinal center is arranged on a suitable angle to the horizontal center of the main body of the device. The screw-threaded perforation aforesaid is adapted to receive a regulating-screw *c*, the forward end of which is swiveled to the adjustable guard *d* by means of the set-screw *d'*, which latter also regulates the friction of the screw *c*. The guard is provided with the vertical narrow slot *e*, through the latter of which the narrow end of the hammer *f* passes when in operation. The rear end of the hammer aforesaid is provided with a semicircular bead *g*, arranged transversely to the longitudinal center thereof. The base of the bead *g* terminates in shoulders *h h'*, the former of which engages normally with the corresponding shoulder *i*, forming a part of the heel *k* of the operating-handle *o*, the latter of which is provided with the nose *l*, which rests normally upon the upper surface of the housing, thereby regulating the movement of the hammer rearwardly.

It will be observed that the convex portion of the bead *g* aforesaid engages with a corresponding concavity made in the heel *k* of the operating-handle *o*.

It will be obvious that the teeth of narrow saws can be operated upon when shifting the guard *d* forward, as shown in Fig. 2; but when broader saws are to be operated upon the guard may be shifted rearwardly, as shown by the dotted lines in Fig. 2. It will also be obvious that the housing surrounding the actuating-spring will prevent the refuse which usually accumulates in work-shops from clogging the spring, which is often the case in saw-sets having their actuating-springs exposed. It will also be obvious that the narrowness of the end of the hammer and that of the slot of the guard will enable the operator to set the teeth of narrow saws without distorting their straight alignment.

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

1. In a saw-set, the combination of the housing forming a part of the main body of the saw-set, the actuating-spring completely covered thereby, and a horizontally-moving ham-

mer connected with said spring, substantially as shown and described.

2. In a saw-set, the combination consisting of the adjustable guard having the narrow  
5 vertical slot therein, said guard being swiveled upon the forward end of the adjustable screw, and the set-screw adapted to hold the guard and adjusting-screw together and to regulate the friction of said adjusting-screw  
10 within the guard aforesaid, substantially as shown and described.

3. In a saw-set, the combination consisting of a horizontally-moving hammer having its

forward end flattened and a semicircular bead arranged transversely on its rearward end, 15 said bead terminating in shoulders adapted to engage with corresponding means connected with the operating-handle, substantially as shown and described.

Signed at New York, in the county of New 20 York and State of New York, this 20th day of July, A. D. 1891.

CHAS. MORRILL.

Witnesses:

JOHN C. DICKINSON,  
CHAS. W. HURDLE.