

B. J. Camp.
Scroll-Saw.

N^o 74497

Patented Feb. 18, 1868.

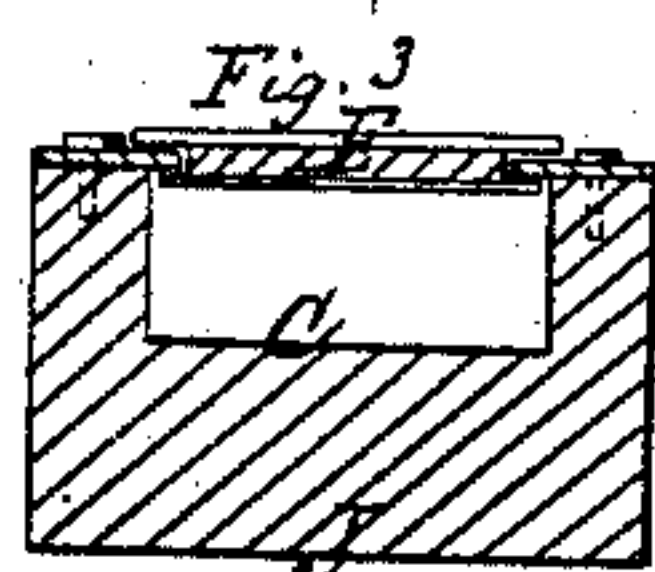
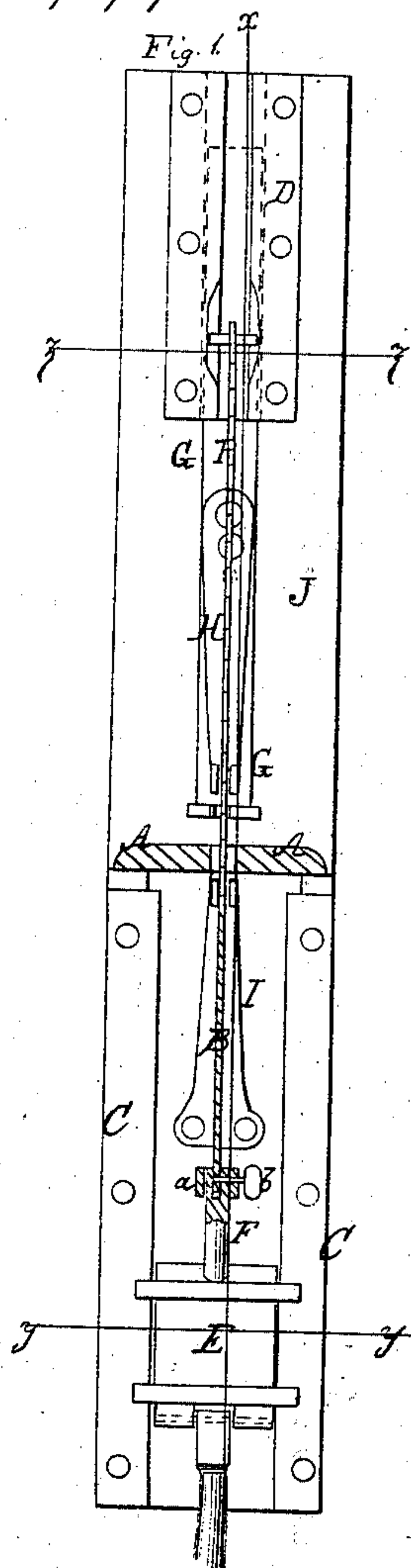
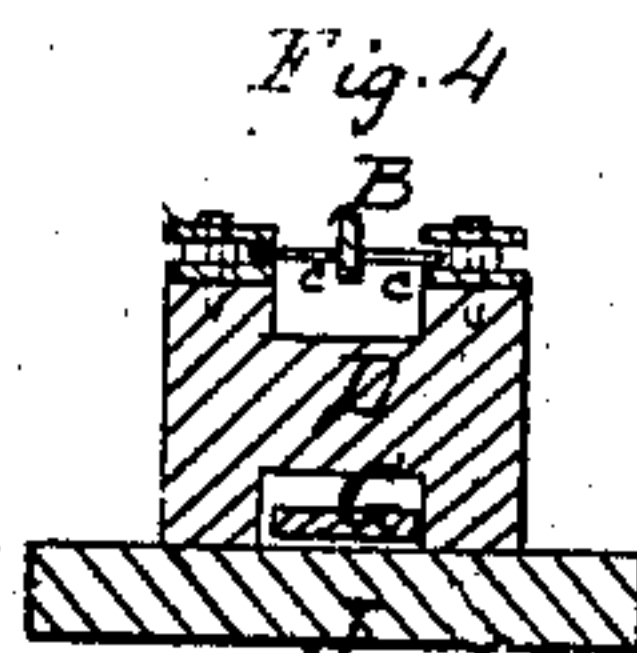
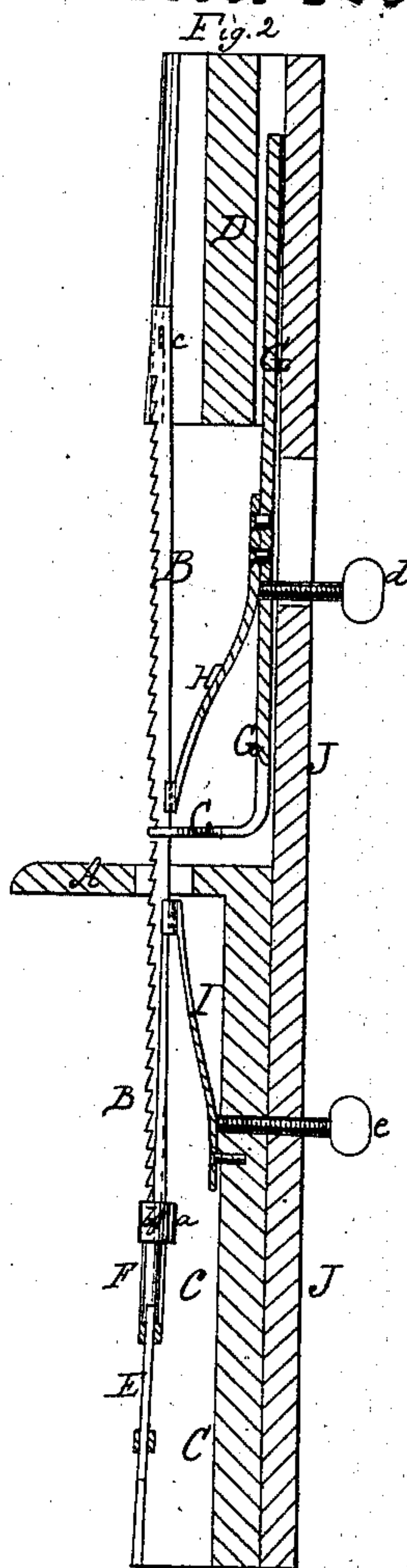
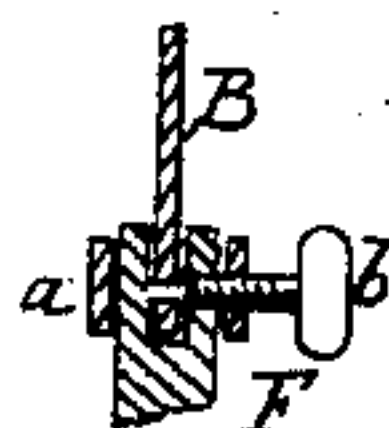


Fig. 5



Witnesses
Theo. Truske
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United States Patent Office.

B. J. CAMP, OF MARION, OHIO.

Letters Patent No. 74,497, dated February 18, 1868.

IMPROVEMENT IN SCROLL-SAWS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, B. J. CAMP, of Marion, in the county of Marion, and State of Ohio, have invented a new and improved Scroll-Saw; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a front view, partly in section, of my improved saw.

Figure 2 is a vertical sectional elevation of the same, taken on the line *x x*, fig. 1.

Figure 3 is a detail horizontal section of the same, taken on the line *y y*, fig. 1.

Figure 4 is a detail horizontal section of the same, taken on the line *z z*, fig. 1.

Figure 5 is a detail vertical section, showing the manner of fastening the lower end of the saw.

Similar letters of reference indicate like parts.

This invention relates to a new manner of fastening, straining, and guiding reciprocating scroll-saws, so that the same will work with great ease, and can be operated with the greatest speed, without jarring or getting out of order.

The invention consists, first, in the manner of securing the lower end of the saw, by means of a tenoned screw, to a vertical slotted shank, projecting from a reciprocating cross-head, of usual construction; second, in the form and arrangement of the upper and lower guides, both of which are inclined, or their lower ends are thrown forward, whereby a raking motion is given to the saw, to make it cut faster, without necessitating an increase of power. The invention consists, third, in the application of adjustable springs, for straining the saw to any desired degree, said springs having grooved ends, to guide the saw, and to prevent it from bending. The invention also consists in securing either one or both of the aforesaid springs to an up-and-down sliding shoe and guide-block.

A represents the table or platform; B is the saw-blade; C is the lower stationary guide; D is the upper stationary guide. The latter are secured to some substantial frame. Their faces are inclined, as shown in fig. 2, *i. e.*, their lower ends are thrown further forward than their upper ends, their angles of inclination being exactly equal to each other. In the lower guide slides a cross-head, E, which is moved by a pitman, from a crank-shaft or otherwise. From the upper edge of the cross-head projects a slotted vertical pin, F. The lower end of the saw is held in this slotted pin, and a sleeve, *a*, is arranged around the same, in which a set-screw, *b*, is held, as shown in fig. 5. The end of this set-screw is provided with a tenon, which passes through a hole in the saw, and into the opposite side of the pin F, as is clearly shown in fig. 5, so that the saw is clamped between the shoulder on the set-screw, on one side, and one arm of the pin F, on the other side. To the upper end of the saw is secured a pin, *c*, which works in grooves in the upper guide, D. G is an L-shaped bar, the vertical arm of which is fitted through a hole in the upper guide, in such a manner that it can be raised and lowered at will. The end of its horizontal arm is forked, and fits around the saw-blade, above the table A, to guide the same. H is a spring, which is secured to the up-and-down adjustable bar G, and which presses against the inner edge of the saw, the degree of pressure being regulated by a set-screw, *d*, which is fitted through the bar G, and presses against the spring, as is clearly shown in fig. 2. I is a spring, which is secured to the upright frame J, to which the guides are secured, said spring being arranged below the table A, as shown. It presses against and strains the saw-blade in a similar manner as the spring H, and is adjustable in the same manner, by means of a set-screw, C. The ends of these springs H and I are provided with forked steel ends, which fit around the saw-blade, and serve to guide the same.

What I claim as new, and desire to secure by Letters Patent, is—

The up-and-down adjustable guide-bar G, carrying the bent spring H, constructed and arranged to operate as herein set forth.

B. J. CAMP.

Witnesses:

ISAAC YOUNG,

JOSEPH VAIL.