J. S. BAKER.

SCROLL-SAWING MACHINE.

No. 192,480. Patented June 26, 1877.

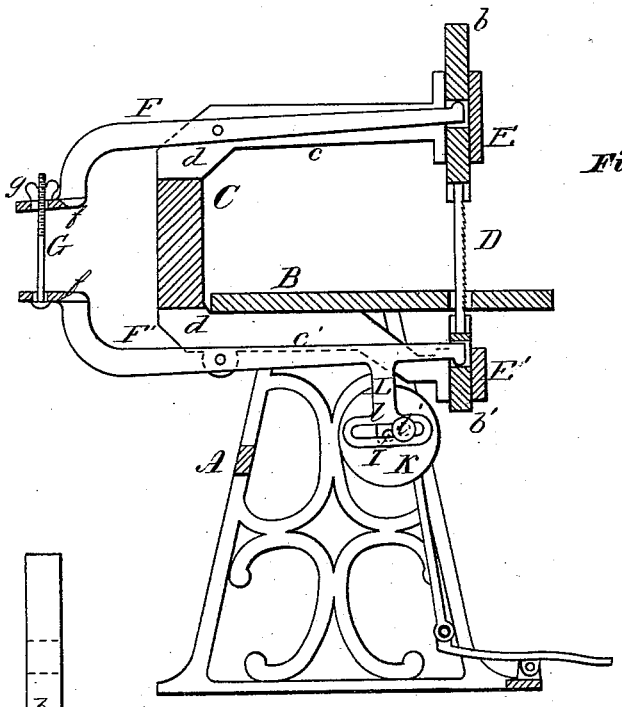

Fig. 1

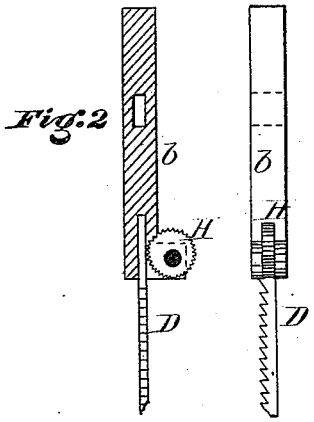

Fig. 2

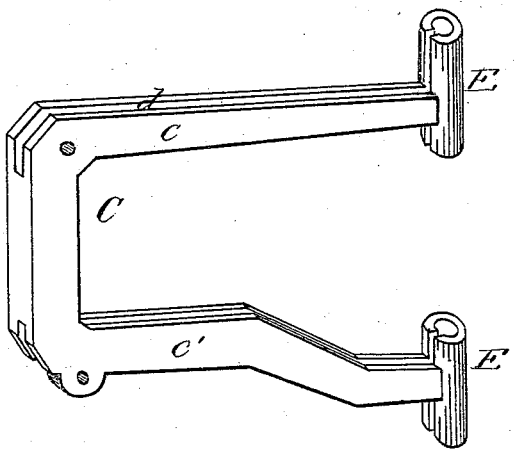

Fig. 3

Witnesses

Saml. J. Van Stavoren

Jos B. Donnelly

Inventor

John S. Baker

By

Connolly Bros.

Attorneys

UNITED STATES PATENT OFFICE.

JOHN S. BAKER, OF NORRISTOWN, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN J. McFADDEN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN SCROLL-SAWING MACHINES.

Specification forming part of Letters Patent No. **192,480**, dated June 26, 1877; application filed April 18, 1877.

To all whom it may concern:

Be it known that I, JOHN S. BAKER, of Norristown, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Scroll-Saws; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a longitudinal vertical section of my invention; Figs. 2 and 3, detail views.

This invention has relation to scroll-saws; and consists, first, in constructing the stationary arms which support the vibrating levers with slots extending their entire length, and providing them with tubular sockets to receive the saw-heads, having vertical slots in their rear sides communicating with the slots in the stationary arms, so that the levers may be connected directly to the heads without the intervention of links; secondly, in the combination, with the longitudinally-slotted horizontal arms and the tubular sockets communicating therewith, of the levers, the saw-heads, and the adjusting-screw connecting said levers at their rear ends, all as hereinafter described and claimed.

Referring to the accompanying drawings, A designates the frame or supports of a scroll-saw table, B. C is a U-shaped frame attached to said frame or table, and having its arms *c c'*, which extend horizontally, slotted vertically, and through their lengths from end to end, as shown at *d*. One of said arms is located below, and the other above, the table. At their forward or free ends the arms *c c'* terminate, each in a vertical socket, E E', respectively, slotted in the rear to correspond with the slots *d* of the arms *c c'*. Through, or within, these sockets are arranged the elongated reciprocating saw-heads *b b'*, holding between them the vertically-reciprocating scroll-saw D. F F' are a pair of levers pivoted to the arms *c c'*, and passing through the slotted portions thereof, and into recesses formed at *f f* in the heads *b b'*. At their rear ends, which curve toward each other, the levers F F' terminate in horizontal projections *f f*, through holes in which pass the connecting and adjusting screw-rod G, holding on one end the thumb-nut *g*. By the adjustment of this rod the levers F F' are brought close together or moved apart at their rear ends, and the tension of the saw thereby regulated.

The ends of the saw fit in recesses in the ends of the sliding heads *b b'*, in which they are held by means of the milled eccentrics H.

I is a horizontal shaft arranged transversely below the table B, and provided with a crank-wheel or pulley, K, receiving rotary motion from any suitable source.

The lower lever F' is formed or provided with a pendant, L, terminating in a horizontal bar, *l*, which is slotted longitudinally to receive the crank-stud *l'* projecting from the wheel K. As the wheel rotates a vibratory or reciprocating movement is given to the levers through the connection just described.

Having described my invention, I claim—

1. The arms *c c'*, slotted their entire length, and formed or provided with tubular sockets E E' at their ends, having vertical slots in their rear sides communicating with the slots in arms *c c'*, for the passage of the vibrating arms or levers F F', substantially as shown and described.

2. The combination of the longitudinally-slotted horizontal arms *c c'*, having the tubular sockets E E' communicating with slots in said arms, levers F F', heads *b b'*, and adjusting-screw G, connecting said levers at their rear ends, substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 11th day of April, 1877.

JOHN S. BAKER.

Witnesses:

SAML. J. VAN STAVOREN,

JOHN RODGERS.