J. H. PLUMMER.
Scroll-Sawing Machine.

No. 168,920. Patented Oct. 19, 1875.

## UNITED STATES PATENT OFFICE.

JEROME H. PLUMMER, OF BROOKLYN, NEW YORK.

## IMPROVEMENT IN SCROLL-SAWING MACHINES.

Specification forming part of Letters Patent No. 168,920, dated October 19, 1875; application filed August 14, 1875.

To all whom it may concern:

Be it known that I, Jerome H. Plummer, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Scroll-Sawing Machines, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of the machine; Fig. 2, a front elevation; and Fig. 3, a detail top view of the leg connecting frame.

Similar letters of reference indicate corre-

sponding parts.

The invention will first be described in connection with drawing, and then pointed out in the claims.

In the drawing, A represents the table of my improved scroll-saw, which is made of suitable size and strength, and provided with a horizontal rear extension, A', to the rear end of which the reciprocating saw-frame B is pivoted. The saw-frame B is made of parallel arms with a lateral connecting-piece, one arm extending above, the other below, the table, both being provided with curved front ends of steel and with clamp-screws to hold the saw, that runs in a recess of table A. The rear ends of the arms of the saw-frame are provided with a connecting screw-rod for setting the saw taut in the frame. A curved arm, C, extends from the rear end of extension-arm A' to a point at suitable height above the center part of the same, and terminates in a small shelf, C', for the oiler's wrench, saw, &c., which is very convenient for the ready working of the apparatus. The top arm C has a slotted recess, a, at its front end, through which the upper arm of the saw-frame passes to be guided steadily thereby. A band-spring is interposed between the curved top arm C and the upper arm of the saw-frame to assist the upward motion of the frame and prevent the contact of the saw-frame with the upper end of the guiderecess. A curved arm, D, of shorter length than the top arm C is securely applied to the under side of the table, and provided below the point of connection with a similarly-slotted recess, a', for guiding the lower arm of sawframe B. The bottom arm D is extended downward and forked in U-shape to support

the revolving shaft b of the motion-transmitting gear of the saw. Shaft b is rotated by pulley and belt connection with a large balance-wheel, E, that is again set in motion by a treadle, F, and connecting crank-rod F'. A small fly-wheel, d, of shaft b assists the motion of the latter, while a crank-disk, e, at the front end, and crank-rod e' form the connection with the front end of the lower arm of the sawframe, and impart thereby reciprocating motion to the same. The balance-wheel E revolves on a stationary shaft, f, of a horizontal frame, G, that extends around the wheel, and forms, by forked or recessed socket-arms G1, the connection with the table-supporting legs G. The legs G<sup>2</sup> are screwed rigidly, by flanged top ends, to the under side of the table A, and constructed, at the height of frame G, with inwardly-projecting lugs g, that are grooved at the sides and fitted into the socket-arms of the wheel-frame, so as to interlock firmly therewith and produce a rigid support of the table and operating mechanism. The treadle is hinged to a connecting-rod of the front legs and extended to such distance that the connecting crank-rod F' may be pivoted to the rear side of the same and swing freely in the wider part of the wheel-frame G.

A compact support and connection for the table, saw-frame, and operating parts are thus furnished, which admit the convenient shipping of the saw in detached parts, and its convenient putting together for use.

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

1. A reciprocating saw-frame, B, combined with and pivoted to a table extension, A', whose slotted arms C D form a guide thereto above and below the table, as and for the purpose set forth.

2. A rear table-extension, A', provided with a curved arm, C, supporting a shelf, C', as and

for the purpose specified.

JEROME H. PLUMMER.

Witnesses:
PAUL GOEPEL,
T. B. MOSHER.