J. COLLINS.

MACHINE FOR CLAMPING AND SQUARING SASHES.

No. 190,554. Patented May 8, 1877.

Fig. 1.

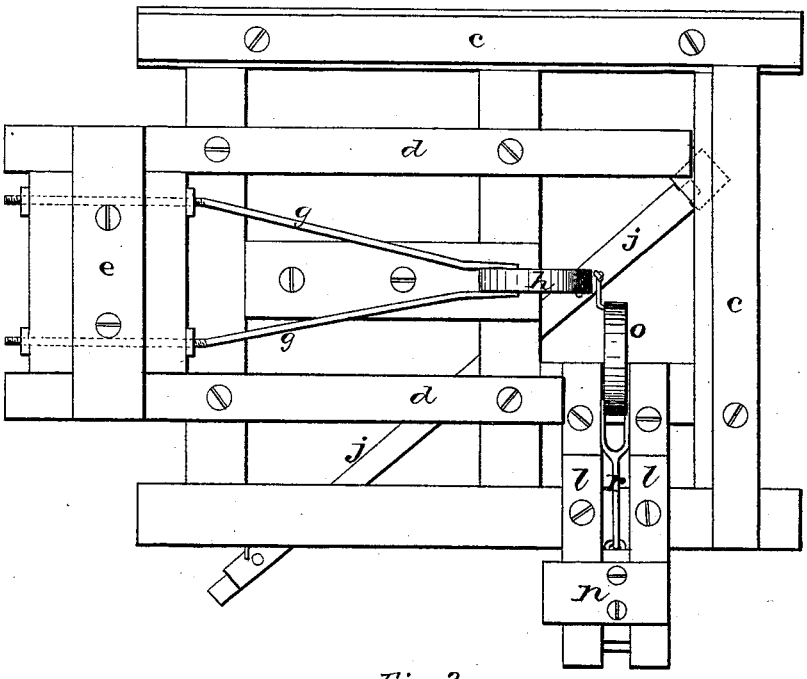
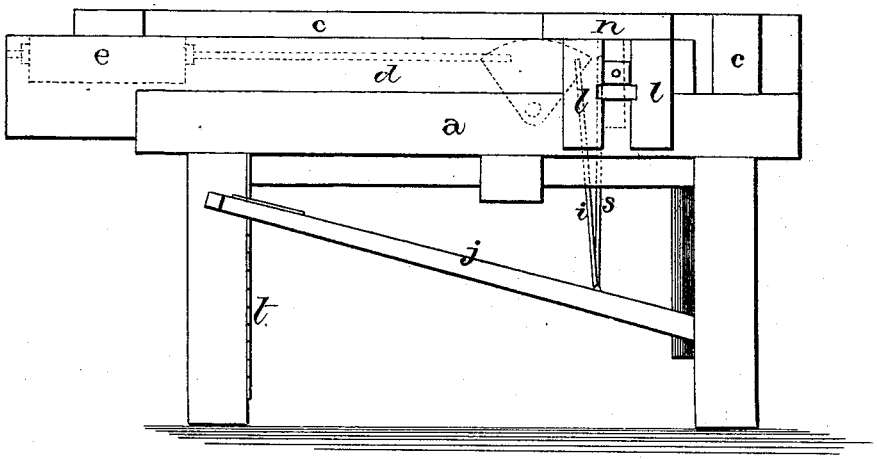


Fig. 2.



WITNESSES.

J. Wm. Garner, Jr.

R. M. Bare,

INVENTOR.

Jos. Collins

per

F. A. Lehmann,

Atty.

UNITED STATES PATENT OFFICE

JOSEPH COLLINS, OF REYNOLDSVILLE, PENNSYLVANIA.

IMPROVEMENT IN MACHINES FOR CLAMPING AND SQUARING SASHES

Specification forming part of Letters Patent No. 190,554, dated May 8, 1877; application filed November 4, 1876.

To all whom it may concern:

Be it known that I, JOSEPH COLLINS, of Reynoldsville, in the county of Jefferson and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Clamping and Squaring Sashes; 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.

My invention relates to an improvement in machines for clamping and squaring sashes; and it consists in the peculiar construction and arrangement of clamping devices with the other operative parts of the machine, as will be hereinafter more fully specified.

The accompanying drawings represent my invention.

a represents a frame, of any desired form or construction, and which has secured upon its top, at right angles to each other, the two bars *c*, which form the surfaces against which the sashes are forced by the two slides. Extending parallel across the top of this frame are the two beams *d*, which form not only the rest upon which the sash is placed, but the guides between which the clamping-slide *e* moves. This slide *e* is connected by the two screw-rods *g* to a quarter-wheel, *h*, which is pivoted in the frame, and which wheel is connected at its opposite corner by the rods *i* with the treadle *j*. Extending at right angles to the two beams *d* are two shorter beams, *l*, between and on which moves a second clamp, *n*, which is attached to a second quarter-wheel, *o*, placed at right angles to the first, by a screw-rod, *r*, which wheel is also connected to the treadle by a rod, *s*. By means of the screw-rods the slides can be adjusted back and forth to suit different sizes of sashes.

By the employment of these quarter or segmental wheels, acted directly upon by the treadle-rods *i* and *s*, the wheel *h* can be brought up much nearer to the beam *c*, and a much smaller sash clamped, than could be done in case sliding clamping-bars were employed, as heretofore. The clamping mechanism is also greatly simplified, and less liable to get out of order.

By bearing down on the treadle both slides advance at right angles to each other, and, pressing the sash against the two bars *c*, clamp it in position, and square it at the same time. The treadle is held in any desired position by the ratchet *t*.

I am aware that two slides moving at right angles to each other, for clamping and squaring sashes, are not new, and do not broadly claim such, the same being shown in the patent to J. H. Hume, June 14, 1870.

Having thus described my invention, I claim—

In a machine in which the sash is both squared and clamped at the same time, the construction and arrangement, with the beams *c d l*, of the clamping devices, consisting of slides *e n*, rods *r g*, and segmental wheels operated directly by the treadle-rods, as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 30th day of October, 1876.

JOSEPH COLLINS.

Witnesses:
M. M. DAVIS,
HENRY KROH.