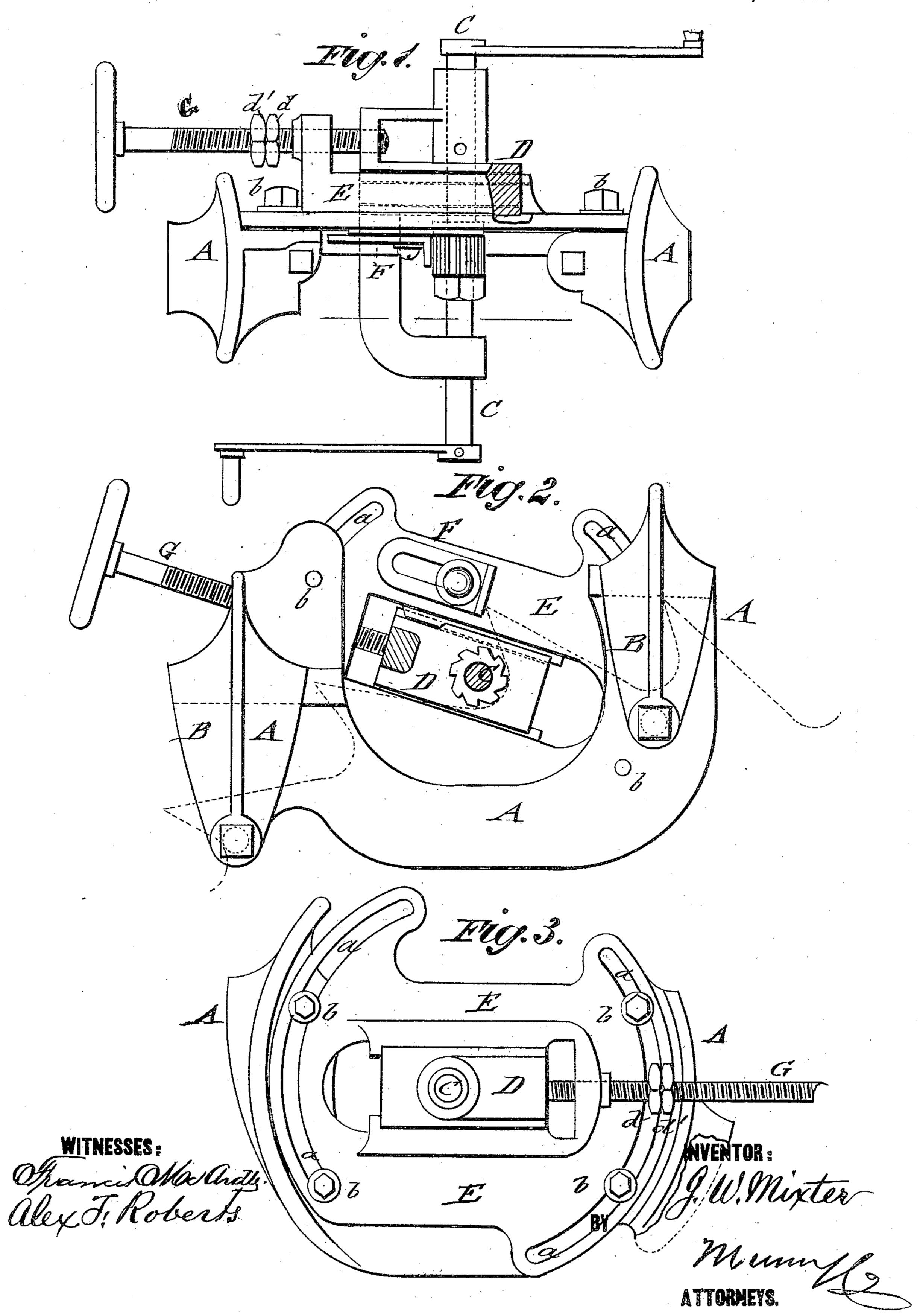
## J. W. MIXTER.

SAW-GUMMER.

No. 172,469.

Patented Jan. 18, 1876.



## UNITED STATES PATENT OFFICE.

JASON W. MIXTER, OF TEMPLETON, MASSACHUSETTS.

## IMPROVEMENT IN SAW-GUMMERS.

Specification forming part of Letters Patent No. 172,469, dated January 18, 1876; application filed October 29, 1875.

To all whom it may concern:

Be it known that I, Jason W. Mixter, of Templeton, in the county of Worcester and State of Massachusetts, have invented a new and Improved Saw-Gummer, of which the following is a specification:

In the accompanying drawing illustrating my invention, Figure 1 represents a top view, and Figs. 2 and 3 are side views, of my improved saw-gummer.

Similar letters of reference indicate corre-

sponding parts.

My invention relates to improvements in the saw-gummer for which Letters Patent have been granted to me under date of June 23, 1874, No. 152,302, so that the carriage, which is formed with a quadrantal slot at each end, is allowed to swing freely upon screws which pass through said slots and enter the main frame, admitting thereby the changing of the line of cut from the horizontal to the perpendicular without moving the cutter from its place, and without necessitating the readjustment of the machine.

In the drawing, A is the main or supporting frame of my saw-gumming machine, which is applied by means of strong clamping-jaws B and set-screws to the saw, being adjusted thereon by suitable gage-screws. The cuttershaft C is revolved by cranks at one or both sides in a carriage, D, that slides in the centrally-recessed way E, which is formed with a quadrantal slot, a, at each end, and is made adjustable to swing in either direction upon the set-screws, which pass through said slots

and enter its main frame.

Heretofore, it has been necessary in changing the line of cut to carry the cutter away from the tooth, and adjust the whole machine again on the saw. This occasions not only loss of time, but prevents, also, by the limited adjustability of the carriage-way, the gumming of small circular and of straight saws. By guiding the carriage-way E in such a manner along the main frame A that both ends are free to swing around, the line of cut may

be changed instantly without moving the cutter or readjusting the machine. This may be accomplished either by providing the carriageway with symmetrical quadrantal slots a and set-screws b, as shown in Fig. 3, or by making the carriage of circular shape, and moving it along flanged guides, with set-screws for adjusting the way to any required direction of cut. As the extreme positions of the way form an angle of ninety degrees the lines of cut may be produced at any angle up to a right angle. The ready changing of the position of the way E admits the cutting at different angles without readjustment of the machine. The carriage-way E is further provided with a sliding gage-piece, F, that is set against the point of the tooth to be gummed, giving thereby, in connection with the gagescrews, the same position to the gummer at each tooth. The feed screw G has a set-nut, d, and jam-nut d', by which the distance to be cut or gummed may be defined exactly for each tooth. The cutter is run up as far as the screw allows, and is then moved to the next tooth, the gage F being placed against the point of the same. The gumming is thereby accomplished evenly and exactly throughout the saw, and the operation of gumming the saw expedited and facilitated.

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

ent—

1. The combination, in a saw-gummer, of the swinging or adjustable carriage way E, cutter C, and adjustable carriage D with the main frame A', all constructed and relatively arranged substantially as herein set forth.

2. The combination of the sliding gage-piece F, feed-screw G, and nuts d d' with the carriage-way E and frame A of a saw-gummer,

as and for the purpose set forth.

JASON W. MIXTER.

Witnesses:

FRANK HUTCHINSON, L. C. PARMENTER.