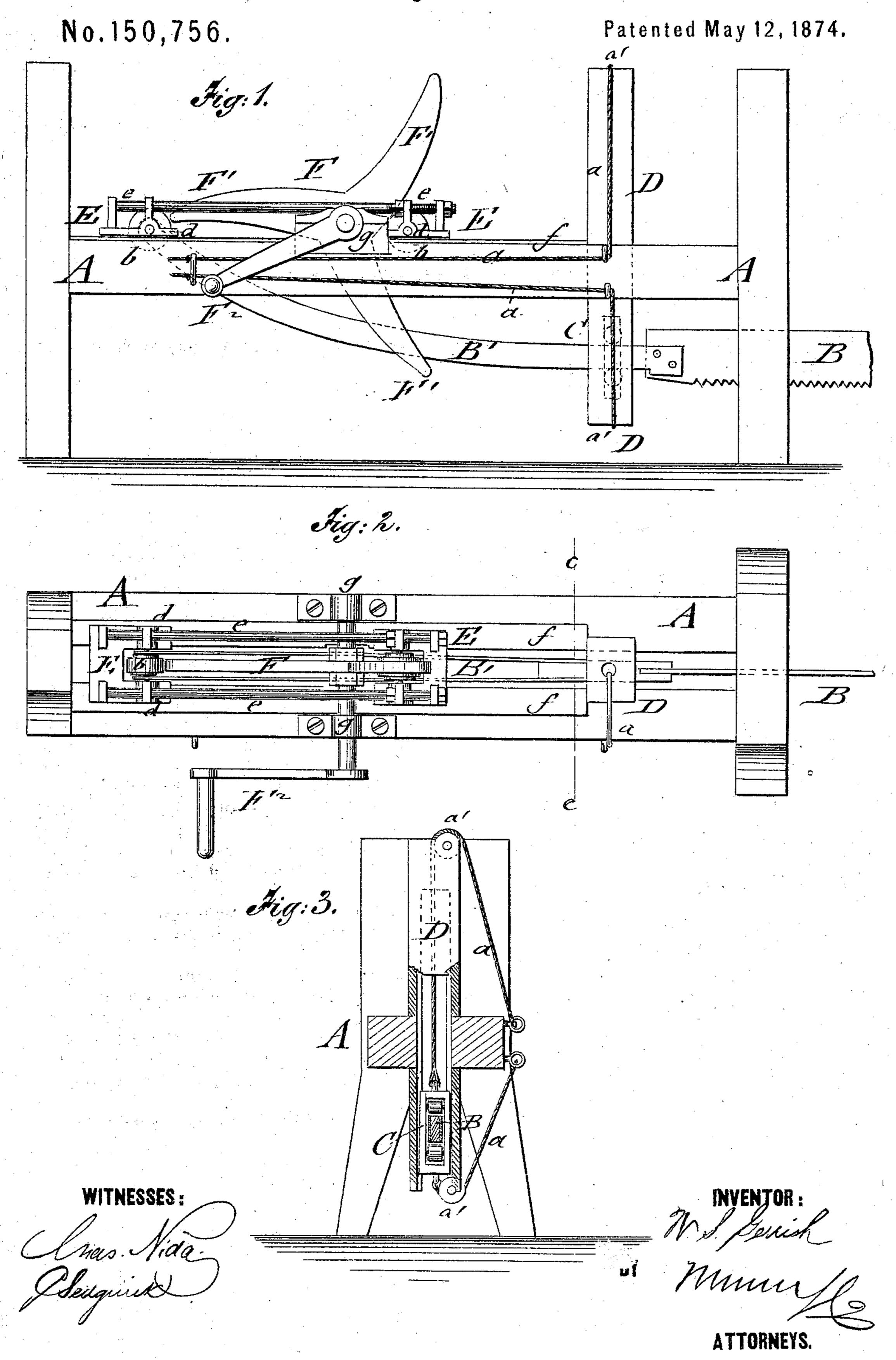
W. S. GERRISH.
Sawing-Machines.



## UNITED STATES PATENT OFFICE.

WINFIELD S. GERRISH, OF HERSEY, MICHIGAN.

## IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. 150,756, dated May 12, 1874; application filed April 11, 1874.

To all whom it may concern:

Be it known that I, WINFIELD S. GERRISH, of Hersey, in the county of Osceola and State of Michigan, have invented a new and Improved Crosscut Sawing-Machine, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a side elevation of my improved crosscut sawing-machine; Fig. 2, a top view; and Fig. 3, a vertical transverse section of the same on the line c c, Fig. 2, showing stirrup and guides.

Similar letters of reference indicate corre-

sponding parts.

The object of my invention is to furnish a crosscut sawing-machine which may be worked by one man with great rapidity, saving time and hands thereby. My invention consists of a crosscut-saw which moves in a suitable stirrup, and connects by two curved plates with the rear of a carriage sliding on the supporting-frame.

A wheel with curved cams or wings is rotated by a hand-crank, and acts on elastic rollers of the sliding carriage, producing thereby the rapid reciprocating motion of the slid-

ing carriage and saw.

In the drawing, A represents the supportingframe, to which the crosscut-saw B is hung by means of stirrup C, sliding by ropes a and pulleys a' in upright guide-pieces D. The saw B is brought by two curved plates or bars, B', which are attached to the end of the saw, in connection with the rear part of a sliding carriage, E. The rear ends of bars B' are pivoted to the shaft of an elastic roller, b, turning in bearings d at the rear part of carriage E.

Bolts C connect rigidly the rear and front parts of the carriage, the front parts having also a roller, b, of rubber or other suitable material. The carriage E slides on guide-rails fof the longitudinal main pieces of frame A, reciprocating motion being imparted to the same by a rotary cam-wheel, F, whose shaft turns in bearings g of the side pieces. The wheel F has three curved cams or wings, F1, as shown in Fig. 1, which pass freely between the connecting - plates B' without interfering with them. The cam-wheel F is rotated by a handcrank, F2, and engages alternately with the convex sides of the wings the front or rear roller of the carriage, causing thereby the rapid reciprocating motion of the same and of the saw.

After adjusting the saw to the object to be cut, one man may with ease, by turning the crank, attend to the crosscutting, and produce thereby (as the machine is easily carried from place to place) a considerable saving in both hands and time.

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

The crosscut sawing machine herein described, consisting of the crosscut saw B, supported in frame A, and connected by double plates B' to sliding carriage E, with elastic front and rear rollers operated by cam-wheel F, all arranged and constructed substantially as specified.

WINFIELD S. GERRISH.

Witnesses:

W. R. WILSON, M. A. LOFLER.