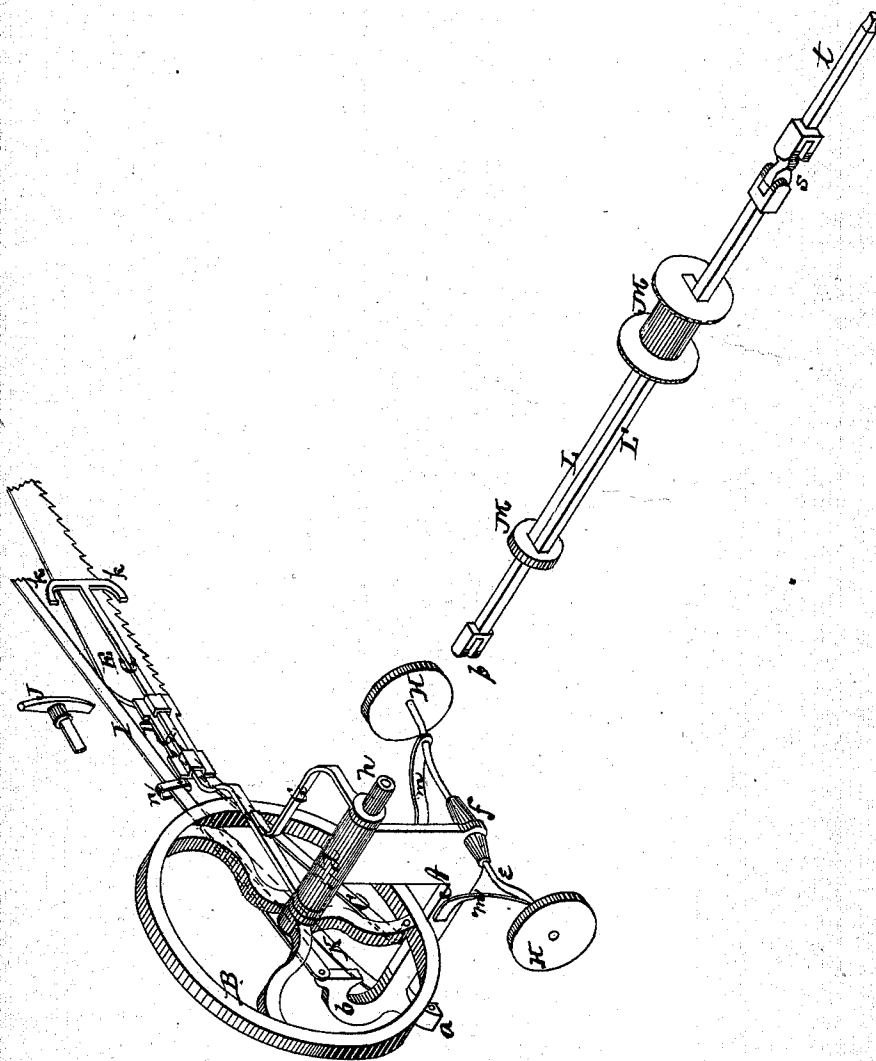


W. DETRICK & J. D. CULVER.  
Sawing-Machines.

No. 139,554.

Patented June 3, 1873.



Witness:

F. L. Durand  
C. L. Everett.

Inventor

William <sup>Inventor.</sup> Wetrick

J. D. Cilver

Урен

Hander Thasore

*Attorneys.*

# UNITED STATES PATENT OFFICE

WILLIAM DETRICK AND JACOB D. CULVER, OF GREENCASTLE, INDIANA;  
SAID CULVER ASSIGNOR TO SAID DETRICK.

## IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. 139,554, dated June 3, 1873; application filed November 21, 1872.

*To all whom it may concern:*

Be it known that we, WILLIAM DETRICK and JACOB D. CULVER, of Greencastle, in the county of Putnam and in the State of Indiana, have invented certain new and useful Improvements in Sawing-Machine; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of our invention consists in the construction and arrangement of a sawing-machine, with an extension tumbling-shaft to connect the same with the horse-power for operating it, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same we will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a perspective view of our machine with tumbling-shaft.

A represents an L-shaped cast-iron stand, at the outer end of the horizontal part of which is a foot, *a*, and also an upward-projecting extension, *b*. At the upper end of the vertical part of the stand A is a hub, *d*, for the shaft of the fly-wheel to pass through, and at or near the angle of the stand is another hub or enlargement, *f*, for the axle of the wheels. The entire stand, with all these parts just described, is cast in one piece, and the axle *e* may be cast into the hub or enlargement *f*, so as to make it solid in the same. Through the hub *d* passes a shaft, *h*, upon the inner end of which is placed the fly-wheel B. This wheel has upon its side a wrist-pin, upon which the pitman C is placed. The other end of this pitman is placed on a pin on the slide D, to which the saw E is firmly attached. The slide D moves upon a guide-bar, G, which is bent, as shown, and its rear end forked so as to be placed on the fly-wheel shaft *h*, one prong at each end of the hub *d*. At the outer end of the guide-bar G are handles *k k*, by the aid of which the guide-bar and saw are raised and turned over to the opposite side when desired. The axle *e*, which passes through the hub or enlargement *f* at the angle of the stand, is braced on each side by a bar, *m*, and

has a wheel, H, upon each end, as shown. I represents the dog, pivoted at its inner end to the extension or handle *b* of the stand, and provided at its outer end with a reversible head, J, so that it can be turned and hold the log on either side of the machine. To the outer side of the foot *a* is pivoted a brace, K, upon the other end of which is formed or attached a loop, *n*, to slide on the dog I, and said dog is, by this brace and loop, held in proper position to perform the object for which it is intended. It will readily be seen that the saw and dog can both be swung around so as to operate on either side of the machine, which is often very convenient, obviating the necessity of moving the machine as often as would otherwise be the case. To connect this machine with the horse-power, from which it receives its motion, we use an extension tumbling-shaft, consisting of two flat bars, L and L', placed side by side, one end of each bar being attached in a collar or spool, M, and the other bar passing through the same, there being made in the center of each collar or spool an oblong hole for the passage of the two bars. At the loose end of the bar L is formed a clutch, *p*, or other suitable device for attaching the same to the end of the fly-wheel shaft *h*, and at the loose end of the bar L' is a universal joint, *s*, forming the connection with a short shaft, *t*, which forms a part of the horse-power, or is attached to the same.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the frame A with the parts *a b d f*, cast in one piece, the fly-wheel B, reversible guide-bar G, slide D, saw E, and pitman F, all substantially as set forth.

2. The combination of the pivoted dog-bar I with reversible head J, and the pivoted-brace K with loop *n*, arranged substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hand this 15th day of October, 1872.

WILLIAM DETRICK.  
J. D. CULVER.

Witnesses:

JOHN OSBORN,  
ROBT. A. THROOP.