(No Model.)

2 Sheets—Sheet 1.

J. M. De COSTER.

Drag Saw.

No. 233,403. **Patented Oct. 19, 1880.**

Fig. 1.

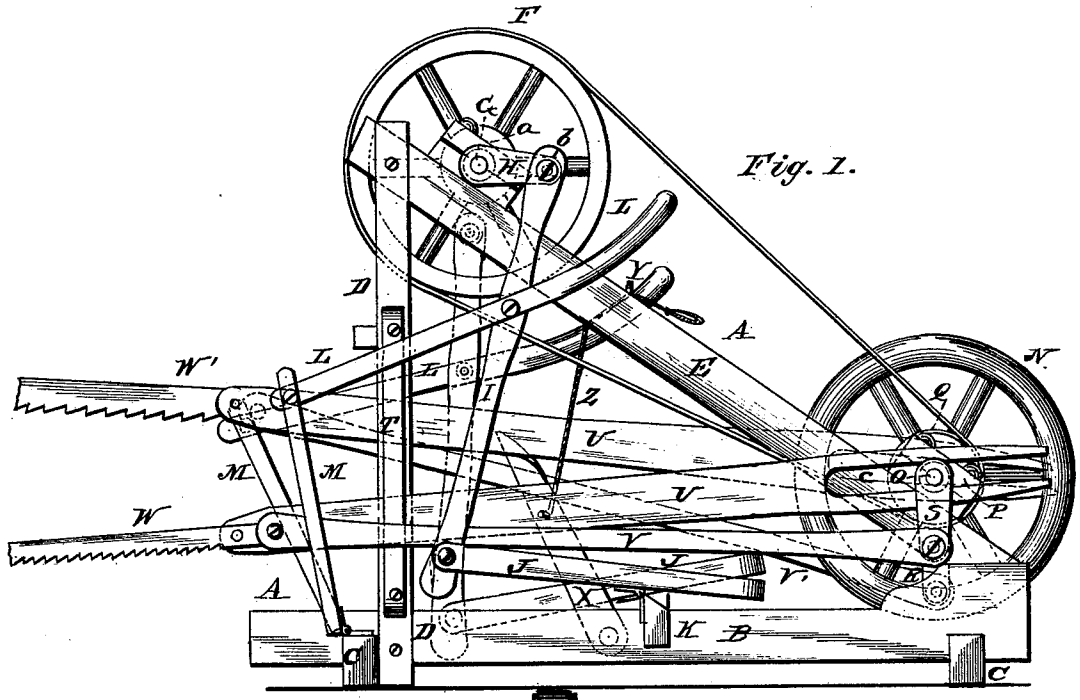
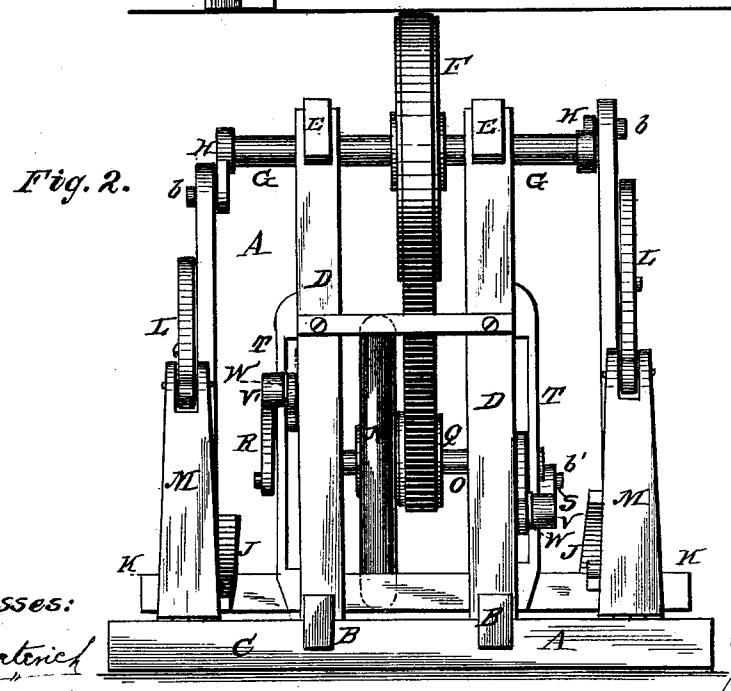


Fig. 2.



Witnesses:

P. L. Dieterich

Fred. G. Dieterich

Inventor:

J. M. De Coster,

by Cushman & Co.

Attorneys

(No Model.)

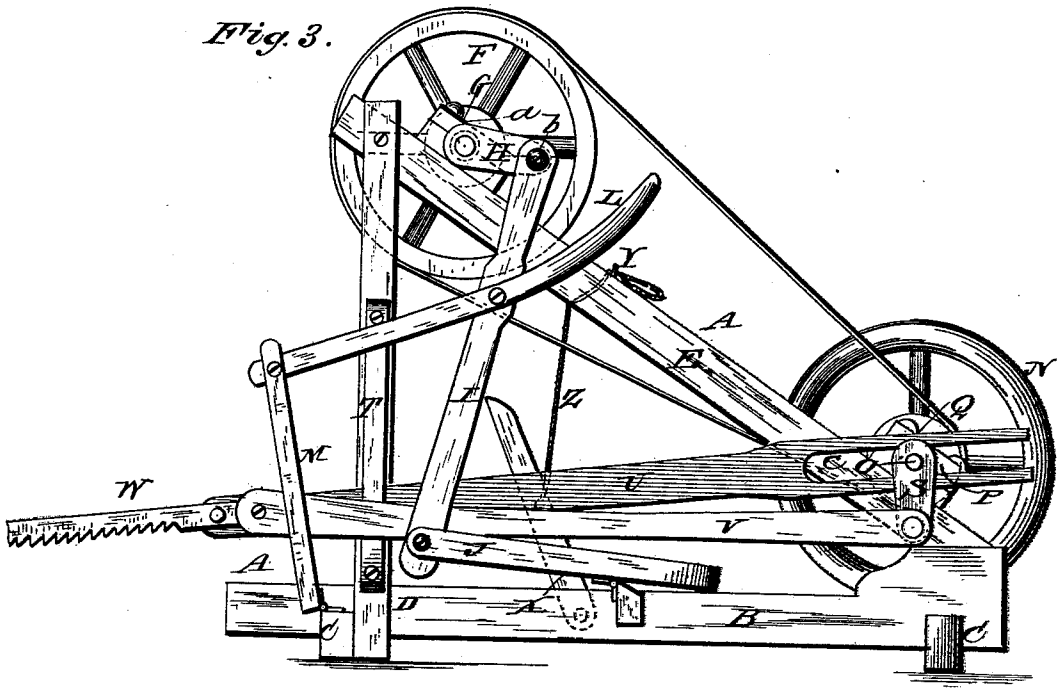
2 Sheets—Sheet 2.

J. M. De COSTER.

Drag Saw.

No. 233,403. Patented Oct. 19, 1880.

Fig. 3.



Witnesses:
Fred G. Dieterich
J. R. Sittell,

Inventor:
Jules M. DeCoster,
by C. A. Snow & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

JULES M. DE COSTER, OF LA GRANGE, MISSOURI.

DRAG-SAW.

SPECIFICATION forming part of Letters Patent No. 233,403, dated October 19, 1880.

Application filed March 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, JULES M. DE COSTER, of La Grange, in the county of Lewis and State of Missouri, have invented certain new and useful Improvements in Drag-Saws; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to sawing-machines; and it consists in the improvements in the construction of the same hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a machine embodying the improvements of my invention, and Fig. 2 is a rear elevation of the machine. Fig. 3 is a side elevation, showing the working parts of one side only.

The machine is intended to be used either as a single or double machine—that is, to make a single cut and be operated by one man, or to employ two saws to make two cuts at one time and to be operated by two men.

Referring by letter to the drawings, A designates the main frame, composed of beams B B, resting on sills C C, having uprights D D and inclined braces E E connected thereto to support the operating mechanism.

F designates a band-wheel secured to a shaft, G, journaled in boxes *a a* upon the inclined braces E E, as shown. This shaft G is provided with cranks H H at its ends, to which are connected, by wrist-pins *b b*, pitmen I I, which lead to and are connected with oscillating treadles J J, hinged to a cross-beam, K. Hand-levers L L are pivoted near their centers to the pitmen I I, and are connected at their forward ends to hinged arms M M, hinged at their lower ends to the front sills of the frame A.

A fly-wheel, N, is secured to a shaft, O, journaled in boxes P P, located on the inclined braces E E of the frame A, near their lower ends. The shaft O is also provided with a small band-wheel, Q, fixed thereto, and a long crank, R, and a shorter crank, S.

The front of the frame A has its uprights D D provided with guards T T, which form spaces in which the guides U U work. These guides U U are slotted at their rear ends, and the slots *c c* formed therein receive and slide upon the ends of the shaft O between the inclined braces E E and the inner faces of the cranks R and S when the machine is in operation. Pitmen V V′ extend from the cranks R and S to the forward ends of the guides U U, and the saws W W′ are secured between the ends of the guides U U and the forward ends of the pitmen V V′.

Upon one side of the frame A is pivoted to the beam B an arm, X, which is provided with a knotted cord, Z, passing through a staple, Y, driven into one of the inclined braces E, so that one portion of the staple nearest its rear end will be sufficiently narrow to hold the knots in the cord when they have been drawn through the larger portion and permitted to rest upon the upper face of the staple at its narrower portion, the object of which is to elevate the guide and saw to the desired angle and hold it there, and at the same time permit the guide to work in the shouldered upper end of the arm X.

To the side of the shaft O is connected, by the long crank R, the guide and pitman which carries the saw W′, which is intended to make a long stroke for the purpose of cutting large logs. The other saw may be disconnected at this time and laid aside by simply removing the wrist-pin *b′*, which connects the pitman V, from the short crank S. When, however, it is desired to cut four-foot stove-wood into three lengths, the large saw may be removed, and a saw similar to the saw S may be connected to the crank R. When two men are to operate the device, they operate the treadles J J alternately.

The hand-levers I I are intended to steady the operator or operators, as the case may be, and to enable him or them to pull the treadle into position to be again operated by the foot.

It is obvious that both of the guides U U may be provided with arms X and knotted cords and staples for adjusting the saws.

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

In a sawing-machine, the combination, with the frame A, of the hinged arm X, knotted cord Z, staple and guide Y U, and pitman V′, carrying the saw W′, arranged in such a manner that the guide will work in the upper end of the arm X, and the knotted cord will hold the saw at the proper angle, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JULES M. DE COSTER.

Witnesses:
H. E. WILHELM,
E. W. AYRES.