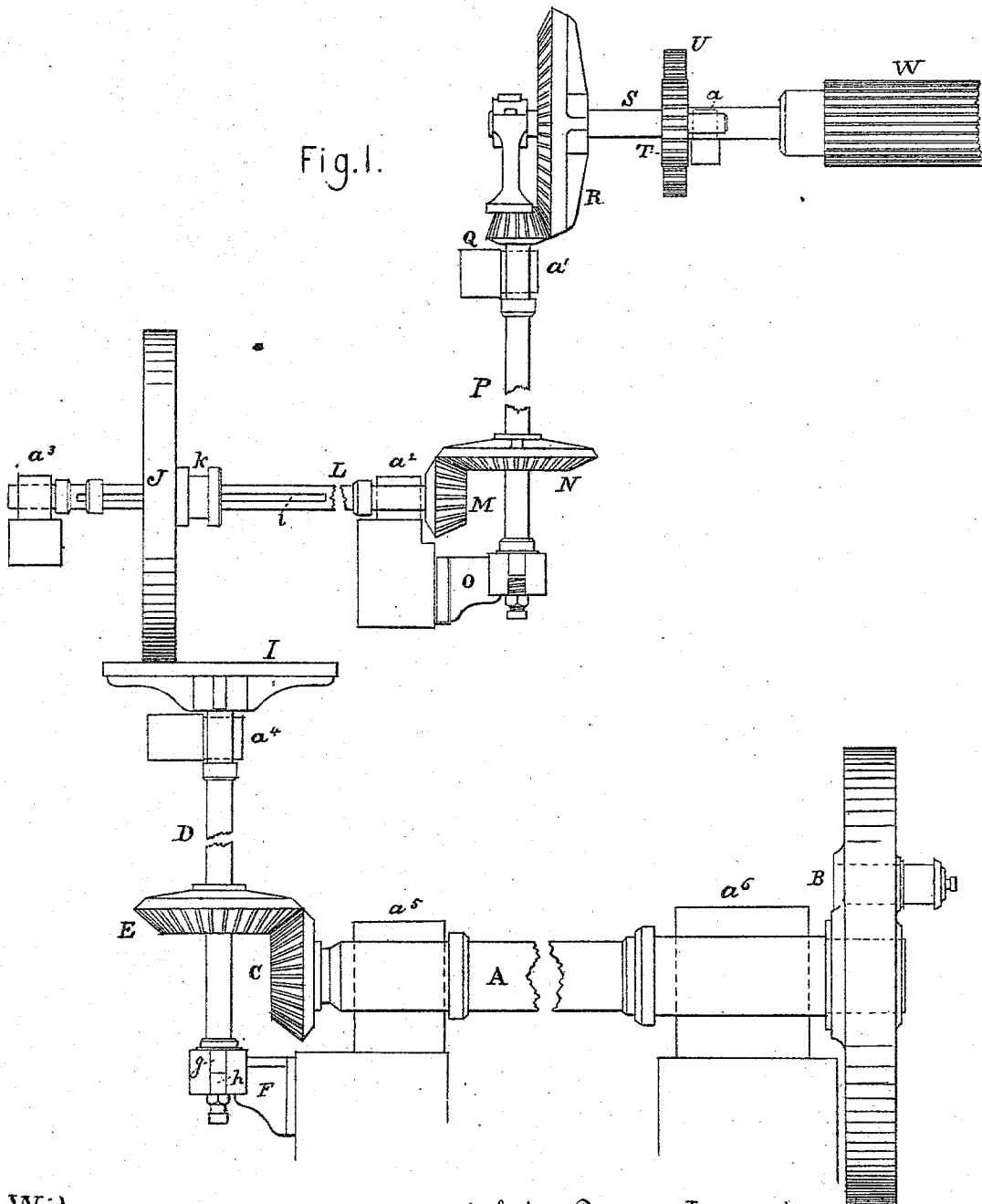


D. C. PRESCOTT.
Saw-Mills.

No. 136,541.

Patented March 4, 1873.



Witnesses:

Geo. N. Howard.
W. A. Daniels

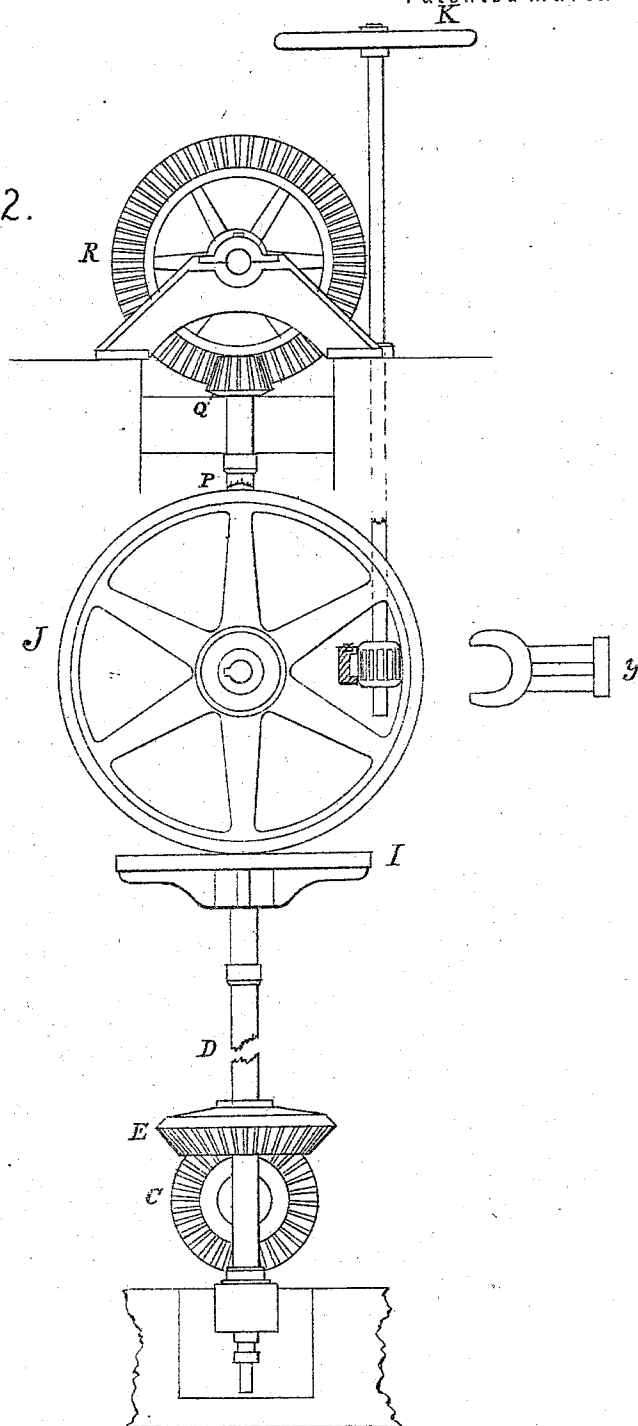
D. Clint Prescott, Inventor,
 Chas S Whitman. Attorney.

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Fig. 2.



Witnesses:

Geo. N. Howard

H. A. Daniels

D. C. Prescott, Inventor,

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Attorney,

UNITED STATES PATENT OFFICE.

D. CLINT. PRESCOTT, OF MARINETTE, WISCONSIN.

IMPROVEMENT IN SAW-MILLS.

Specification forming part of Letters Patent No. 136,541, dated March 4, 1873.

To all whom it may concern:

Be it known that I, D. CLINT. PRESCOTT, of Marinette, county of Oconto and State of Wisconsin, have invented certain Improvements in Saw-Mills. The following description, taken in connection with the accompanying plate of drawing hereinafter referred to, forms a full and exact specification, wherein are set forth the nature and principles of the invention, by which the same may be distinguished from others of a similar class, together with such parts thereof as are claimed as new and are desired to be secured by Letters Patent of the United States.

My invention relates to that class of feed mechanisms which are made use of in saw-mills; and the nature thereof consists in certain improvements in the details of the construction of the same, hereinafter described and shown.

In the accompanying plates of drawing which illustrate my invention and form a part of the specification thereof, Figure 1 is a side elevation of feed mechanism. Fig. 2 is an end view of same, portions of shafting in both views being removed, but the shafts are supposed to be of proper lengths. Shaft-bearings are indicated at $a^1 a^2 a^3$, &c.

The construction and operation of my invention are as follows: In the drawing, A designates a crank-shaft; B, a crank with pin to which the pitman is attached, and which gives motion to the gate or sash containing the gang of saws. C is a bevel-gear keyed to end of crank-shaft A. It gives motion and power to the upright shaft D by means of the bevel-gear E. The said shaft D has a steel pivot, *g*, in its lower end, and is supported by a steel screw, *h*, in bracket F. I is a circular friction-plate, smooth on its upper surface, and keyed fast to shaft D. The friction-plate I gives motion and power to friction-wheel J on horizontal shaft L, to which motion is also imparted from friction-wheel J by means of a feather, *l*, fixed in shaft L. The eye in friction-wheel J is made sufficiently large to permit the movement of wheel on shaft L and feather *l*, when desired. M is

a bevel-pinion keyed to horizontal shaft L, which gives motion to bevel-gear N and upright shaft P, supported by bracket O, both of which, like shaft D, are supported by steel pivots and screws. Q is a beveled pinion keyed fast to shaft P. It also connects with beveled gear R, by means of which motion is imparted to the short horizontal shaft S. T is a spur-pinion keyed to shaft S, and works in spur-gear U, which is keyed to the heavy shaft which passes through the fluted feed-roller W, imparting motion to the same. *y* is a fork fitted to groove *k* in friction-wheel J. *z* is a small pinion and section of rack. K is a hand-wheel to upright shaft. The said fork *y*, pinion with rack *z*, hand-wheel and shaft K being connected with suitable timber are to move the friction-wheel J, from one point of contact on friction-plate I to others, thereby permitting the feed to be increased or decreased at will; and by moving the friction-wheel J across the center of friction-plate I the motion of the feed-roller W is reversed, and the workman is enabled to back his log out of the gang of saws in case of breakage or other cause.

The operation of the machine is as follows: A slab being taken from each side of the log it is placed on feed-roller W. Motion is given to the gang of saws by means of the pitman operated by the crank B with its shaft A, same being driven by engine or water-wheel. To give motion to feed-roller W and move the log through the gang, the friction-wheel J is lowered until it comes in contact with friction-plate I, which is already in motion by means of gears C and E and shaft D. Thus motion is immediately imparted to wheel J, shaft L, gears M and N, shaft P, pinion and gear Q and R, spur-gears T and U, and the log passes through the gang of saws.

To stop the feed without stopping the gang, which is often necessary, the friction-wheel J is raised from the plate I. To increase or decrease the speed of feed-roller W, as may be desired, the distance between the point of contact of friction-wheel J and center of friction-plate I is increased or diminished by

means of fork *y*, pinion and rack *z*, shaft and hand-wheel *K*, connecting with timber in groove *k* in friction-wheel *J*.

Having thus described the construction and operation of my invention, I will state what I claim and desire to secure by Letters Patent in the following clause—that is to say,

I claim—

The bevel-gears *C* and *E*, upright shaft *D*, friction-plate *I*, friction-wheel *J* provided with groove *k*, keyed shaft *L*, bevel-gears *M* and

N, shaft *P*, bevel-gears *Q* and *R*, and shaft *S*, all combined and operating together, as and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand this 22d day of July, 1872.

D. CLINT. PRESCOTT.

Witnesses:

AMOS HOLGATE,
M. B. DODGE.