

FERDINAND MEYER.

Improvement in Sawing Machines.

No. 123,720.

Patented Feb. 13, 1872.

Fig 1

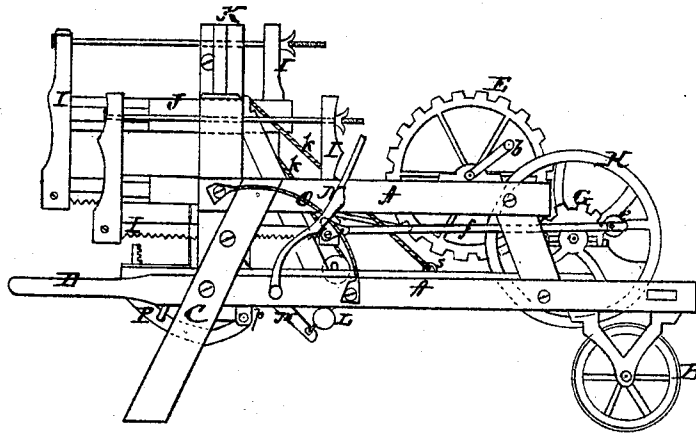


Fig 2

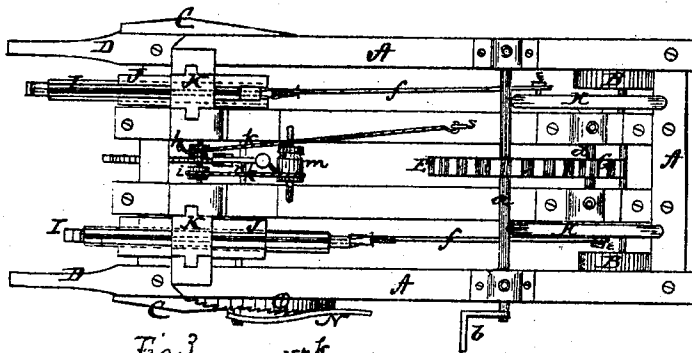
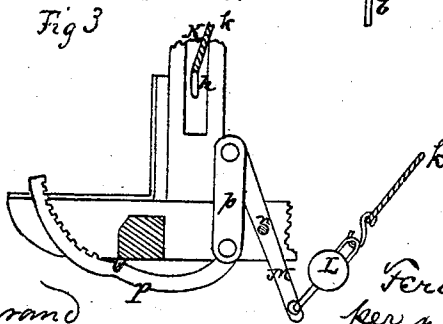


Fig 3



Witnesses:

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UNITED STATES PATENT OFFICE.

FERDINAND MEYER, OF COUNCIL BLUFFS, IOWA.

IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. 123,720, dated February 13, 1872.

To all whom it may concern:

Be it known that I, FERDINAND MEYER, of Council Bluffs, in the county of Pottawattomie and in the State of Iowa, have invented certain new and useful Improvements in Machines for Sawing Stove-Wood; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a machine for sawing cord-wood, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation, and Fig. 2 a plan view of my machine. Fig. 3 is an enlarged section, showing the means whereby the wood is held while being sawed and the saws raised up when desired.

A represents the frame of my machine, resting at one end upon wheels B B and at the other end upon legs C C, the frame at this end forming handles D D. At a suitable point across the frame A is placed a shaft, *a*, with crank *b* at one end for turning the same. Upon this shaft is a large cog-wheel, E, which gears with a smaller cog-wheel or pinion, G, upon a shaft, *d*, said shaft being provided with two fly-wheels, H H. Each of these wheels is provided with a crank or wrist-pin, *e*, upon which is a pitman, *f*, connecting with a wood-saw, I. Each saw I moves horizontally in a slide, J, attached to an up-and-down-sliding head, K, which moves in upright guides attached to or forming part of the main frame A. In a full-sized machine the weight of the saws will feed them down through the wood as it is being sawed. Each head K has a staple, *h*, on the inner side, to which a cord, *k*, is attached, said cord passing over a pulley, *i*, directly above, then down over another pulley, *m*, and attached to a weight, L, which is hooked to the lower end of a lever, M, said lever being placed on

a cross-shaft, *n*, in the frame. The shaft *n* is on its outer end provided with a lever, N, having a suitable projection on its inner side to catch on the segmental ratchet O, as shown. The upper end of the lever M is, by a short bar or link, *p*, connected with the end of a curved bar, P, pivoted, near its center, to the frame A, and its other end being corrugated or toothed so as to hold the stick of wood to be sawed.

By moving the lever N forward, the saws will be raised up, and at the same time the toothed end of the bar P will move away from the wood so as to unfasten the stick. When the stick of wood to be sawed is put on, move the lever N backward, and the bar P will grasp and hold it, and at the same time the saws will of their own weight move down upon the wood. When it is desired to use only one of the saws, one of the cords *k* is unhooked from the weight L, and the saw to which said cord is attached raised up and the cord hooked into a staple, *s*, as shown in Fig. 2, thus holding it up out of the way.

The weight L, added to or at the connection between the cords and the lever M, keeps the cords at all times in their places on the pulleys.

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

1. The combination of the heads K K, cords *k k*, levers M N, connecting-bar *p*, and the toothed curved bar P, all constructed and arranged substantially as and for the purposes herein set forth.

2. The combination, with a suitable frame and gearing, as herein described, of the fly-wheels H H, pitmen *f f*, saws I I, slides J J, heads K K, cords *k k*, pulleys *i m*, weight L, levers M N, ratchet-bar O, and curved toothed bar P, all constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 12th day of December, 1871.

FERDINAND MEYER.

Witnesses:

JACOB WILLIAMS,
ROBT. WILSON.