

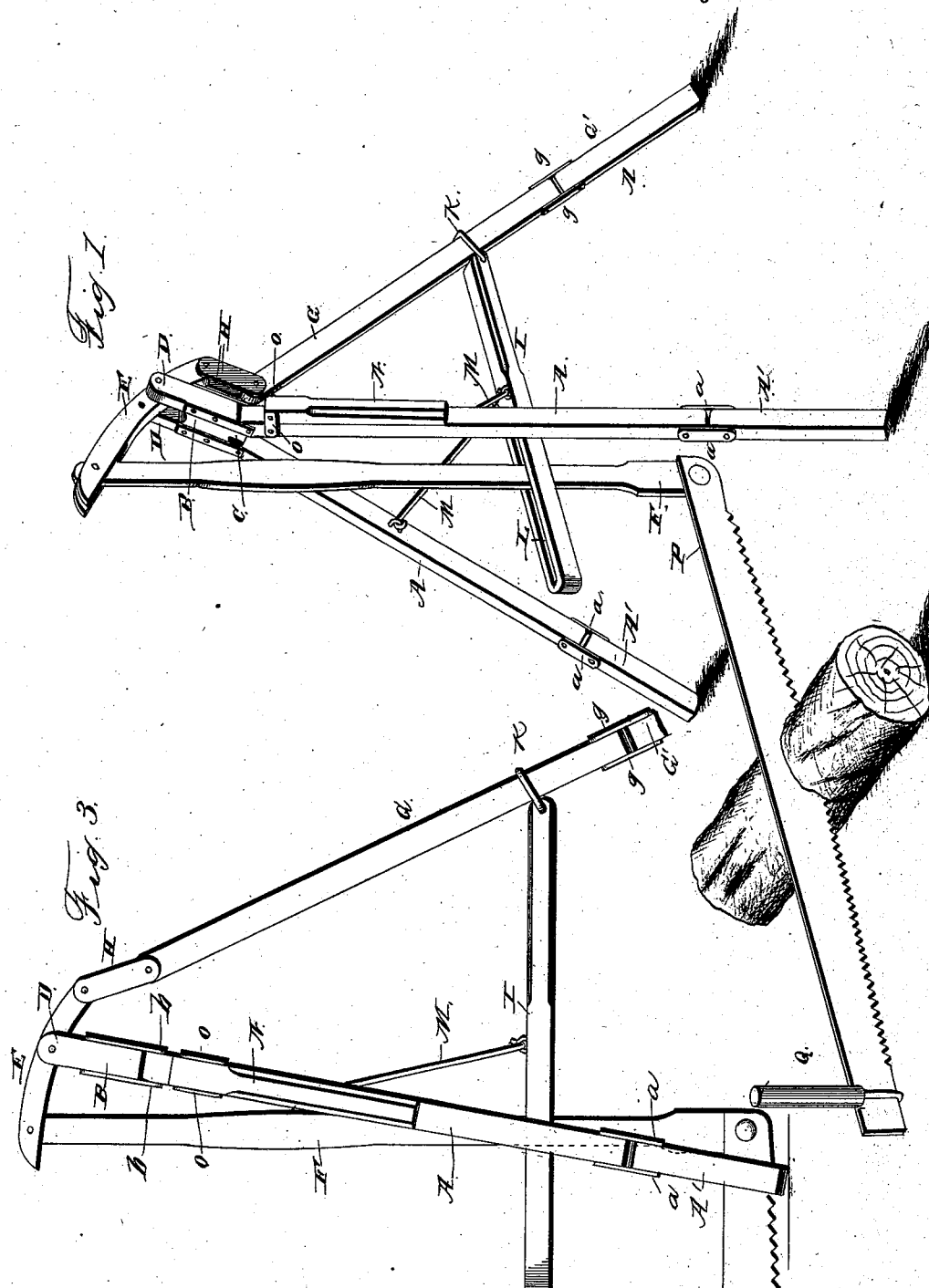
(No Model.)

2 Sheets—Sheet 1.

F. W. OLDS.
WOOD SAWING MACHINE.

No. 382,723.

Patented May 15, 1888.



Witnesses.

Geo. Harper

C. E. Doyle.

Inventor,
J. H. Olds

By his Attorneys.

Chowder

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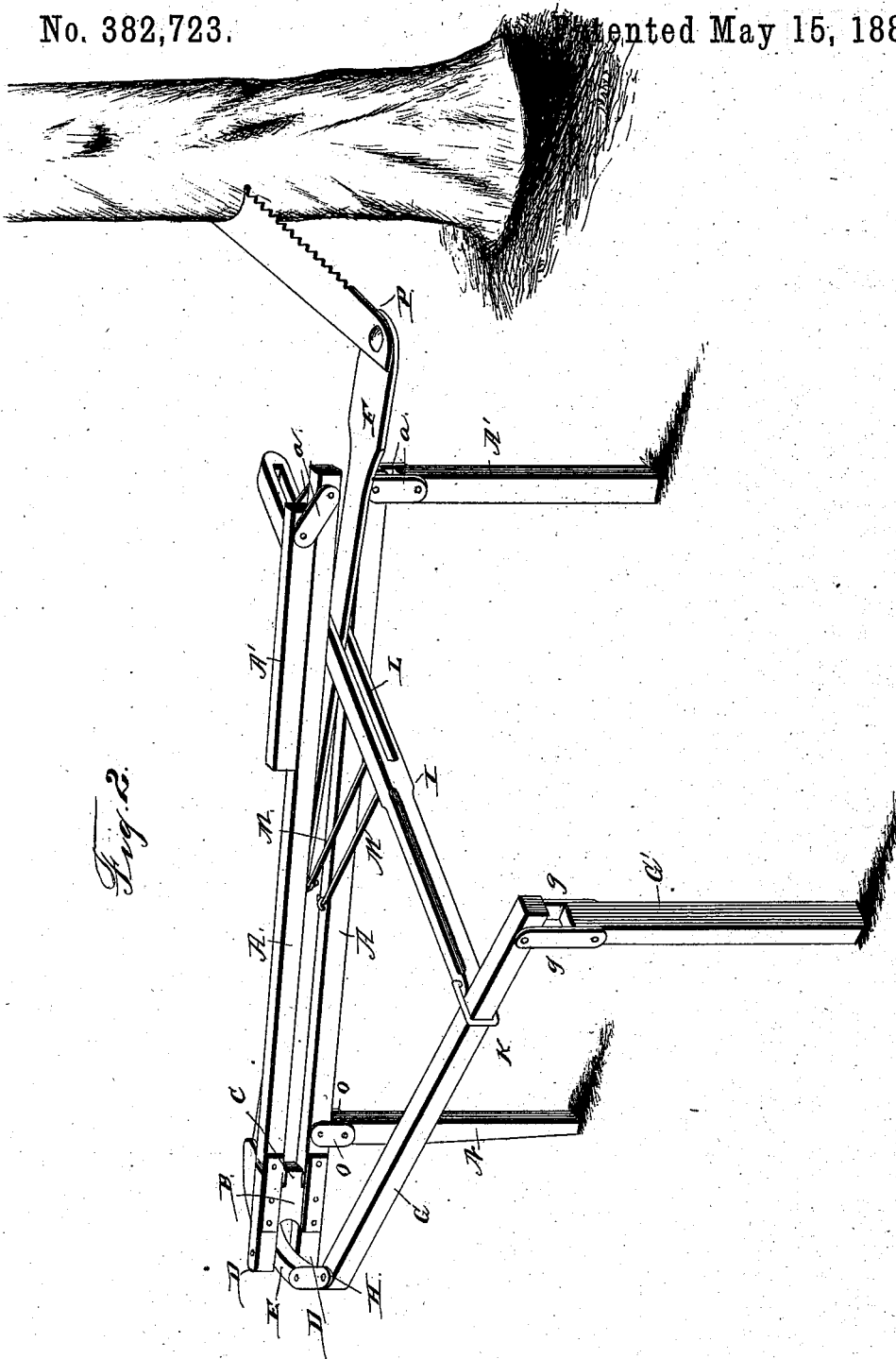


Fig. 2.

Witnesses.
Geo. Thayer.
W. E. Hayler.

Inventor.
F. W. Olds.
By his Attorneys,
C. H. Snowden.

UNITED STATES PATENT OFFICE.

FRANK W. OLDS, OF MUNITH, MICHIGAN.

WOOD-SAWING MACHINE.

SPECIFICATION forming part of Letters Patent No. 382,723, dated May 15, 1888.

Application filed January 25, 1888. Serial No. 261,834. (No model.)

To all whom it may concern:

Be it known that I, FRANK W. OLDS, a citizen of the United States, residing at Munith, in the county of Jackson and State of Michigan, have invented new and useful Improvements in Wood-Sawing Machines, of which the following is a specification.

My invention relates to improvements in wood-sawing machines; and it has for its object to provide a device with which either a log or a standing tree may be sawed, or, in other words, to provide a device with which either a vertical or a horizontal cut may be made.

It is my object, further, to so construct the device that it may be folded up compactly for transportation.

A further object is to provide improved means for vertically adjusting the saw.

With these objects in view the invention consists in a certain novel construction and combination of devices, which are fully set forth hereinafter in connection with the accompanying drawings, wherein—

Figure 1 is a perspective view of the machine in its vertical position. Fig. 2 is a similar view in its horizontal position. Fig. 3 is a side view in the position shown in Fig. 1.

Referring by letter to the drawings, A A designate the side legs of the machine, which are mounted at their upper ends between depending ears *b b* at opposite sides of the lower end of the block B. The block is provided, also, with a depending tongue, C, between the upper ends of the legs, which is designed to serve as a stop to limit the outward swing of the lower ends of the legs. For this purpose the legs are extended slightly above their pivots, so that when their lower ends are drawn apart the upper ends strike upon opposite sides of the said tongue. Between the vertical ears D D on the upper end of the block is mounted the lever E, and from the front end of the lever is suspended the swinging arm F, the function of which is described hereinafter.

G designates the rear leg of the machine, which is connected at its upper end to the rear end of the lever E by means of the side links, H H. These links allow the leg free vertical and forward and backward movement, but prevent lateral movement.

A' A' and G' represent adjustable extensions which are attached to the lower ends of the legs A A and G, respectively. The extensions are connected to the legs by means of the side links *a a* and *g*, which are attached to the said members by means of bolts. When the bolts are tightened, they bind the extensions in the desired positions with relation to the legs.

I designates a guide-bar, provided at its rear end with a loop, K, which embraces and slides on the leg G, and L designates a guide-slot, which is formed longitudinally in the bar near its front end. An intermediate point of the guide-bar is connected to the side legs by means of the rods M M.

N represents a short leg, which is attached by links O to one of the side legs near its upper end, and its utility is hereinafter fully described.

P represents the saw, which is of any ordinary or preferred kind, and is provided at one end with a handle, Q. The opposite end of the saw is connected, by means of a bolt, pin, or its equivalent, to the lower end of the swinging arm. The swinging arm, as will be seen, passes through the guide-slot, and therefore when the arm is swung forward and backward its motion is guided by the slot.

Fig. 1 shows the device in the operative position when it is desired to saw logs or make vertical cuts. The side legs are spread apart and inclined slightly rearward, and the rear leg is inclined slightly forward, thus bracing the machine in all directions and preventing it from swaying when the saw is in operation. The handle of the saw is grasped, and the saw is swung forward and backward in the same way as when operated entirely by hand. It will be seen that the same swinging motion is attained on account of the swinging arm, and the saw is steadied by the said arm operating in the guide-groove. When the cut is started, the front end of the lever is in an elevated position, and as the cutting progresses the said front end of the lever is drawn down, thus enabling the saw to cut deeper. Thus the saw is vertically adjustable by very simple means.

Fig. 2 shows the device in its horizontal position, as when about to make a horizontal cut—for instance, in cutting down trees. In this case it is arranged on one side. The ex-

tensions of one of the side legs and the rear leg are turned down to serve as short legs, and the short leg N is also swung out into its operative position. The upper side leg is now
 5 folded and arranged so as not to interfere with the operation of the machine. The machine is operated in this position in the same way as when in the vertical position.

Having thus described my invention, I
 10 claim—

1. In a sawing-machine, the combination of the side and rear legs, having extensions connected to their lower ends and adapted to assume positions at right angles to the legs when
 15 the machine is in the horizontal position, substantially as specified, the short leg mounted on one of the legs and the sawing device mounted on the said legs, all constructed and arranged substantially as and for the purpose
 20 specified.

2. In a sawing-machine, the combination of the side and rear legs, A A and G, connected together at their upper ends, the extensions A' A' and G' at the lower ends of the said legs,
 25 respectively, and the side links, *a a* and *g*, connecting the upper ends of the extensions to the lower ends of the legs, the swinging arm F, and the saw attached to the lower end thereof, substantially as specified.

3. In a sawing-machine, the combination of the side legs, A A, and the rear leg, G, connected together at their upper ends, the guide-bar having a longitudinal slot therein, the loop
 30 on the rear end of the guide-bar embracing and sliding on the rear leg, the connecting-rods between an intermediate point of the guide-bar and the side legs, and the swinging
 35 arm pivoted at its upper end and operating in the said guide-slot, and having the saw attached at one end thereto, substantially as
 40 specified.

4. In a sawing-machine, the combination of the block B, the side legs mounted on the block, the lever E, mounted on the block, the
 45 rear leg connected to one end of the lever, and the swinging arm connected to the other end of the lever and having the saw attached thereto, substantially as specified.

5. In a sawing machine, the combination, with a suitable stand, of the lever pivoted
 50 thereto, the leg connected to one end of the lever, and the swinging arm connected to the other end and having the saw attached thereto, substantially as specified.

6. In a sawing-machine, the combination of
 55 the block B, having the depending ears *b b* and the vertical ears D D, the legs A A, mounted at their upper ends between the ears *b b*, the lever E, mounted between the ears D D, the rear leg, G, connected at its upper end to the
 60 rear end of the lever by means of the pivoted links H H, the guide-bar connected to the legs, and the swinging arm operating in a slot in the said guide bar and having the saw attached to its lower end, substantially as speci-
 65 fied.

7. In a sawing-machine, the combination of the block B, the side legs mounted at their upper ends thereon, the depending tongue or
 70 stop C between the legs to limit the outward swing of the latter, the lever mounted on the block, the rear leg connected to one end of the lever, and the swinging arm connected to the other end thereof and having the saw attached
 75 thereto, as set forth.

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

FRANK W. OLDS.

Witnesses:

CHAS. E. SNOW,
 EVERETT H. DENNIS.