J. A. CLUXTON.

Drag-Saw.

No. 226,718. Patented April 20, 1880.

Fig. 1.

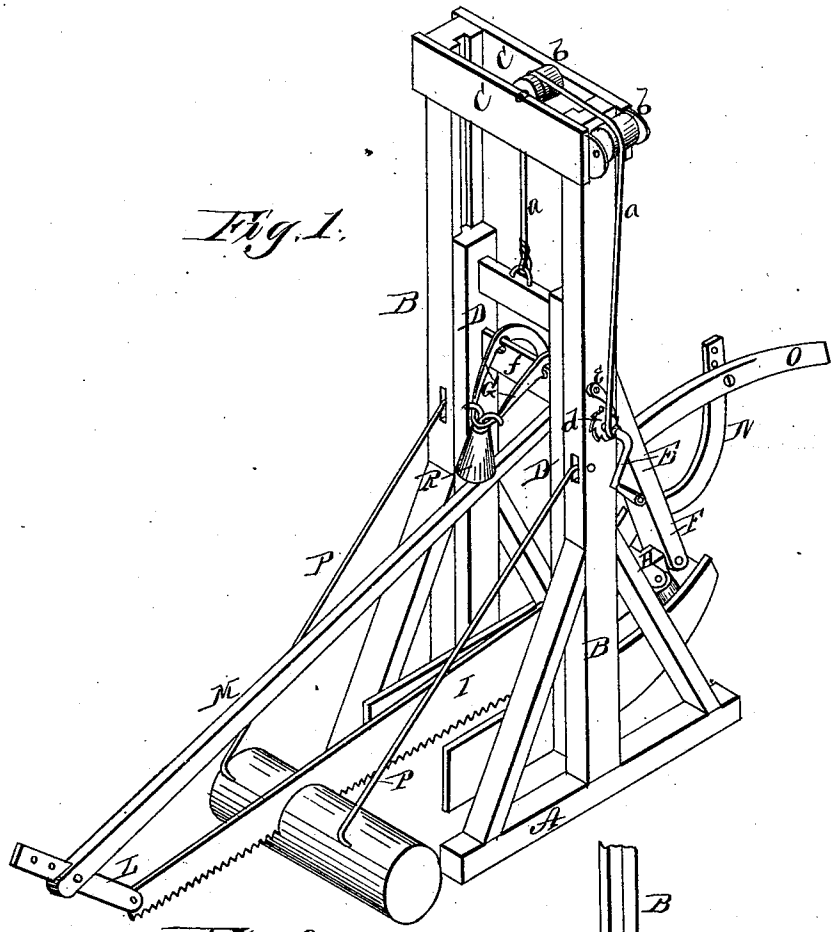
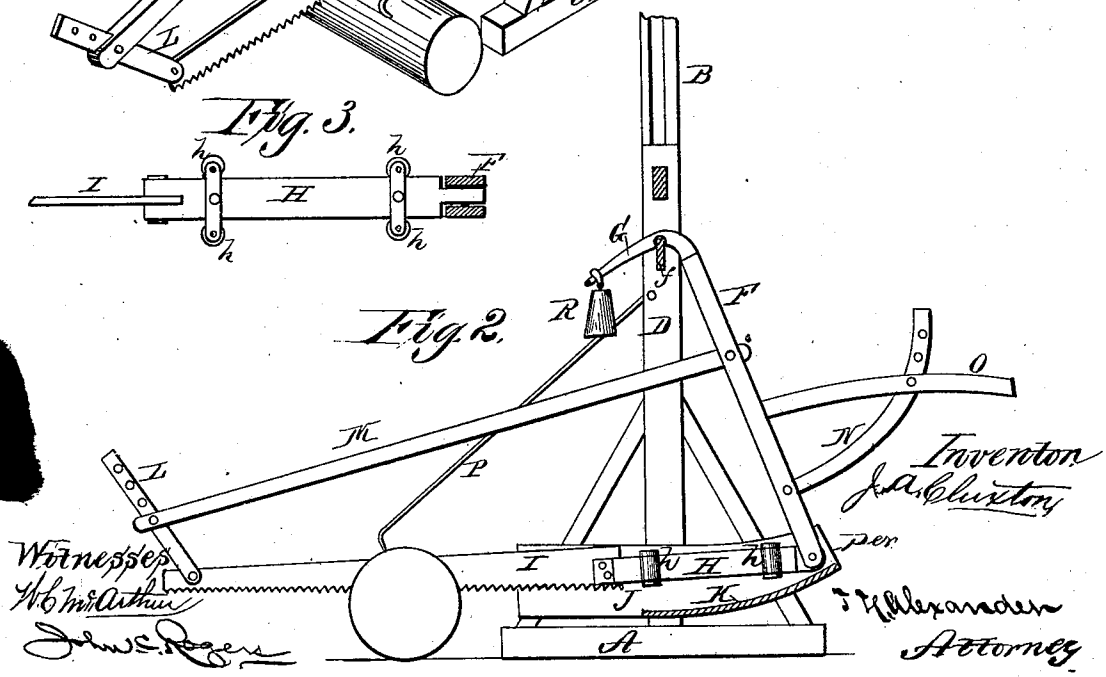


Fig. 3.

Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN A. CLUXTON, OF BENTONVILLE, OHIO.

DRAG-SAW.

SPECIFICATION forming part of Letters Patent No. 226,718, dated April 20, 1880.

Application filed February 25, 1880.

To all whom it may concern:

Be it known that I, JOHN A. CLUXTON, of Bentonville, in the county of Adams and State of Ohio, 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 thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a sawing-machine for cross-cutting logs, &c., for stove-wood or other purposes, 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 drawings, in which—

Figure 1 is a perspective view of my sawing-machine. Fig. 2 is a central vertical section of the same, and Fig. 3 is a detail view of the saw-head.

The frame of my machine is composed of two parallel sills, A A, upon which are standards or uprights B B, suitably braced and connected at their upper ends by cross-pieces C C.

The inner edges of the standards B B are grooved vertically, and in said grooves is placed a sash, D, which carries the saw, and this sash is suspended by means of a cord, *a*, passing upward and over pulleys *b b* in the top of the frame, and then downward to a crank, E, at the side of the frame, so that the sash may be raised and lowered at pleasure.

The sash is held at any point by means of a ratchet-wheel, *d*, on the crank-shaft and a pawl, *e*.

F represents a pendulum, provided at its upper end with a bail, G, bent forward and hung upon a plate or bar, *f*, near the top of the sash, so as to allow the pendulum to swing freely.

In the lower end of the pendulum F is pivoted a short arm, H, to which the saw I is rigidly attached.

The arm H is on each side provided with rollers *h h*, and at the heel or rear end may be provided with a single roller.

The side rollers, *h h*, bear against guide-boards J J, attached to the frame, and the roller at the rear, when used, bears against a bottom board, K, arranged on a proper curve at the rear ends and between the guide-boards J J, whereby the saw is guided true and without any unnecessary friction.

At the front end of the saw is pivoted an arm, L, which is perforated and passes through a slot or mortise in a long arm, M, and there pivoted, the rear end of said long arm being pivoted in the pendulum F.

N is a curved arm, rigidly attached to the pendulum near its lower end, and to which the handle O is adjusted and secured, the front end of the handle being pivoted in the pendulum.

P P are dogs connected to the standards B B, for holding the machine to the log.

By the construction of the machine the operator can get close to his work, which is always desirable.

The guide-rollers steady the saw, and a weight, R, on the bail G at the top gives a back motion.

The connection L at the point of the saw is to be raised or lowered to suit the size of the log, and the handle can be adjusted up or down to suit the height of the operator.

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

1. In a sawing-machine, the sliding sash D, suspended and held at any desired point in the frame by means of the cord *a*, crank E, ratchet-wheel *d*, and pawl *e*, in combination with pendulum F, hung on bar *f*, weight G, curved guide-boards J K, saw-head H, and saw I, all constructed and arranged to operate substantially as herein set forth.

2. In a sawing-machine, the combination of pendulum F, hung loosely upon bar *f* and provided with weight R, with the sliding and suspended sash D, adjustable arm M, connection L, saw I, and saw-head H, all constructed and arranged to operate as and for the purposes set forth.

3. The within-described sawing-machine, consisting, essentially, of frame A B, suspended and sliding sash D, swinging pendulum F, weight R, bar *f*, handle O, arm M, said arm connecting the pendulum with the front end of the saw by means of bar L, saw I, saw-head H, and curved guide-boards J K, all as and for the purposes herein set forth.

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

JOHN A. CLUXTON.

Witnesses:
LUTHER THOMPSON,
GEO. C. EVANS.