(No Model.)

N. K. WATSON.

DRAG SAW.

No. 275,443. Patented Apr. 10, 1883.

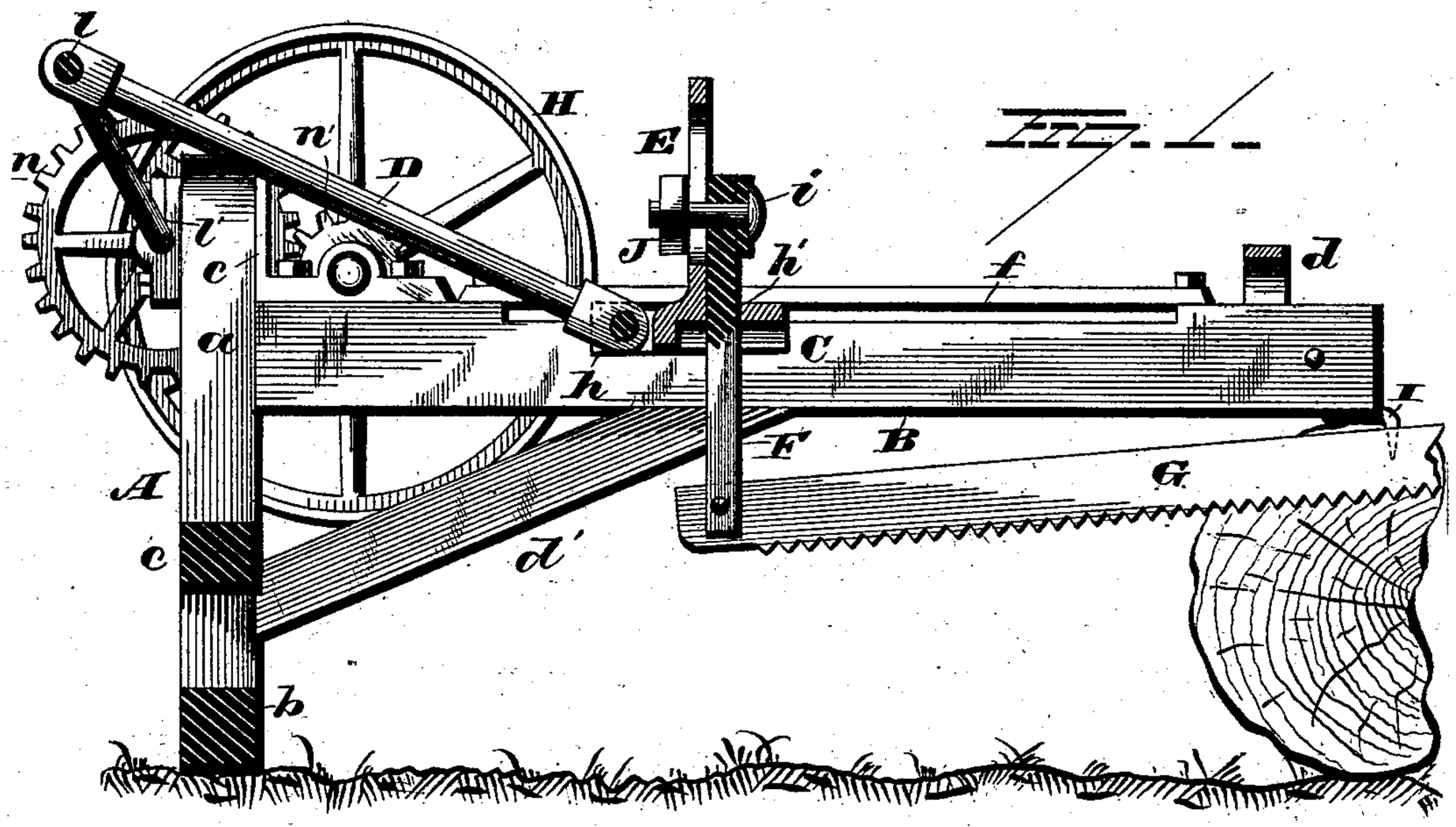
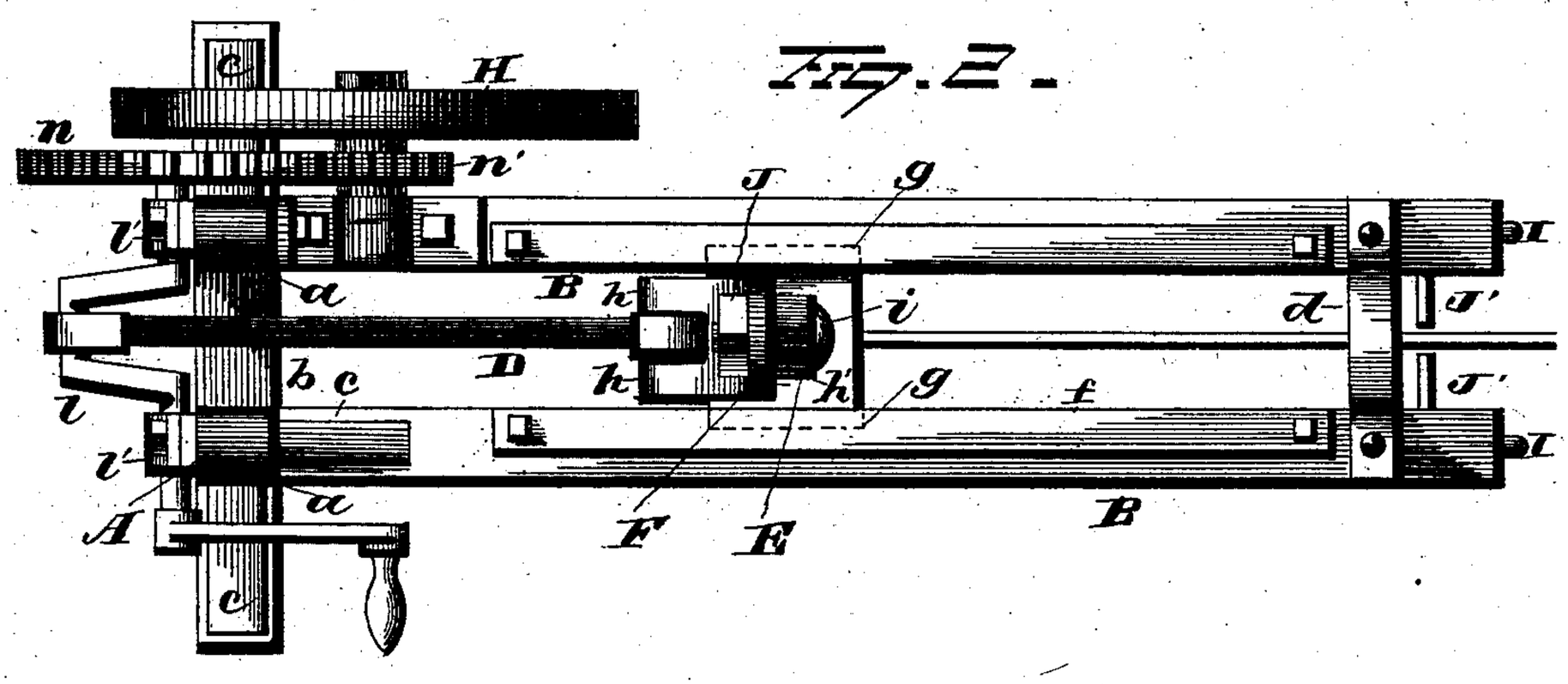


Fig. 2.



WITNESSES

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NATHAN K. WATSON, OF WRIGHTSVILLE, GEORGIA.

DRAG-SAW.

SPECIFICATION forming part of Letters Patent No. 275,443, dated April 10, 1883.

Application filed October 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, NATHAN K. WATSON, of Wrightsville, in the county of Johnson and State of Georgia, have invented certain new and useful Improvements in Drag-Saws; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in drag-saws, the object of the same being to provide a saw-frame one end of which rests on the ground while the other ends rest on and dogs the wood being sawed.

A further object of my invention is to provide means for guiding the saw and adjusting it vertically, so as to accommodate it to different thicknesses of logs; and with these ends in view my invention consists in certain details in construction and combinations of parts, as will be more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a longitudinal sectional view of my improved machine, and Fig. 2 is a plan view thereof.

A represents the end standard, composed of the two upright beams *a* and the base-beam *b*, the said beams being strengthened and held in position by the braces *c*. The two horizontal beams B are secured to the beams *a* near the upper ends thereof, and are separated and held in position near their outer or free ends by the metallic bridge *d*, which latter is curved slightly, as shown in the drawings, so as to enable the saw to move freely without engaging therewith. These beams B are further strengthened in their positions by the diagonal braces *d'*, which latter are secured at their opposite ends to the under side of the beams B and the front faces of the upright beams *a*. The two beams B are separated sufficiently for all necessary purposes, and each is provided on its inner face with an oblong groove or guide, *f*, in which the sliding block C rests and moves. This sliding block C is provided on opposite sides with the flanges *g*, adapted to rest and move in the oblong grooves *f*, and on its near end with the two rearwardly-extending arms *h*, between which the front end of the pitman D is pivotally secured. This block C is also provided on its upper or superior surface with the upright slotted standard E, by means of which the saw is adjusted vertically, so as to accommodate it to logs of different diameters. The sliding block C is provided immediately in front of the upright standard E with an opening or perforation, *h'*, for the passage of the adjustable rod F, which latter is provided at its lower end with means for the attachment of the saw thereto, and its upper enlarged end or head with the screw-bolt *i*, the shank of which latter passes through the oblong slot in the standard E, and is secured therein in any desired vertical adjustment by the thumb-nut J. Thus it will be seen that as the rod F is moved up or down it carries with it the rear end of the saw G, and thereby enables the latter to work in a position as nearly horizontal as is possible. When sawing a large log the sliding rod F would be moved upward to the proper position and secured, and when sawing a small one the movement thereof would be the reverse.

I are hooks secured in the ends of the beams B, and are adapted to engage with the log being sawed and dog the same, and at the same time hold the saw-frame in position.

J' are two lugs, secured to the side beams and projecting inwardly, so as to afford a rest for the saw G when the latter is not in use. The rear end of the pitman D is connected to the crank-shaft *l*, by means of which latter motion is imparted thereto. This crank is journaled in the boxes *l'*, and is operated by the handle *m*, secured to one end thereof, and is provided on its opposite end with the large gear-wheel, *n*, which latter operates the large fly-wheel H through the intervention of the small gear-wheel, *n'*. The large fly-wheel H equalizes the applied power and prevents the saw from jerking, as is seen with the saw now commonly used. When power is applied to the operating-handle the saw G is reciprocated by means of the pitman, which latter converts the rotary motion of the crank-shaft into a reciprocating motion, and consequently moves the saw backward and forward.

My improvement is simple in construction, is of few parts, is easy of operation, and can be manufactured at a small initial cost.

It is evident that slight changes in the construction of the different parts might be resorted to without departing from the spirit of my invention, and hence I would have it understood that I do not limit myself to the exact construction of parts shown, but consider myself at liberty to make such changes as come within the spirit and scope of my invention.

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

1. In a drag-saw, the combination, with a frame consisting of horizontal beams provided at one end with hooks adapted to engage with the log and at the other end with supporting-standards, of a slide adapted to reciprocate in guides formed in said beams, and a saw connected with said slide by means of a rod, substantially as set forth.

2. In a drag-saw, the combination, with the horizontal beams provided at one end with hooks adapted to engage with the log and at the other end with supporting-standards, of a slide adapted to reciprocate in guides formed in said beams, a saw connected with the slide, and a crank-shaft and suitable gearing mounted on the frame for reciprocating the saw, substantially as set forth.

3. In a drag-saw, the combination, with the beams B B and slide constructed with an upwardly-projecting arm provided with an elongated slot, of the saw G, rod F, bolt and nut for securing the rear end of the saw in any desired vertical adjustment, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 9th day of September, 1882.

NATHAN K. WATSON.

Witnesses:
J. M. MASON,
M. H. MASON.