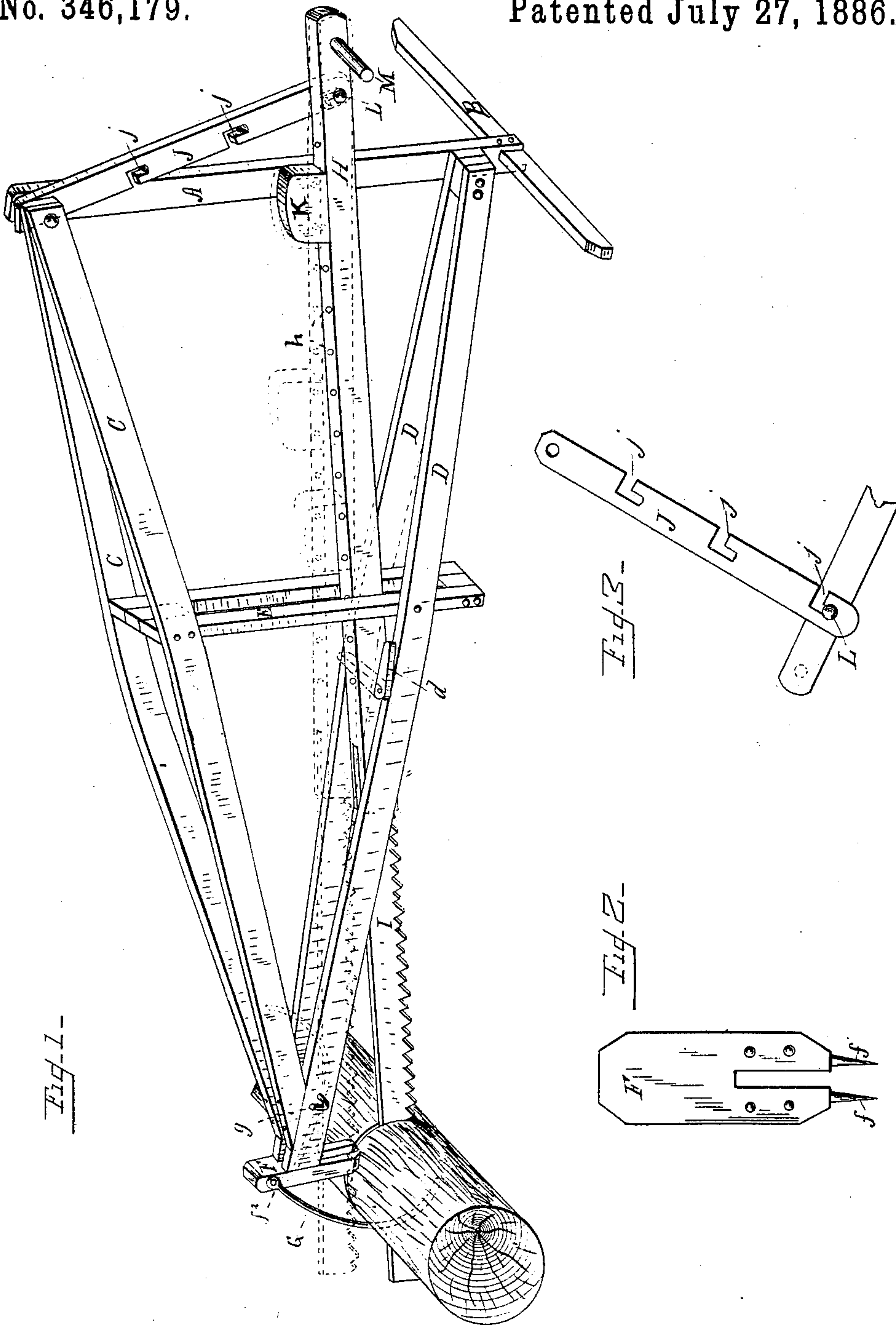


(No Model.)

A. S. TOPPING.
FIRE WOOD DRAG SAW.

No. 346,179.

Patented July 27, 1886.



Witnesses _____

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UNITED STATES PATENT OFFICE.

ALFRED S. TOPPING, OF METAMORA, OHIO, ASSIGNOR OF ONE-HALF TO
AUGUSTUS RIES, OF SAME PLACE.

FIRE-WOOD DRAG-SAW.

SPECIFICATION forming part of Letters Patent No. 346,179, dated July 27, 1886.

Application filed February 1, 1886. Serial No. 190,444. (No model.)

To all whom it may concern:

Be it known that I, ALFRED S. TOPPING, a citizen of the United States, residing at Metamora, in the county of Fulton and State of Ohio, have invented certain new and useful Improvements in Drag-Saws, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in cross-cut or drag-sawing machines; and it consists in certain details of construction, which will be hereinafter fully described.

The object of my said invention is to produce a drag-sawing machine which may be operated by one person, and which will be so constructed that the pressure of the saw on the log may be increased or diminished in proportion as the wood to be cut is hard or soft.

It further consists in devices by which the machine may be attached securely to the log to be cut, and the saw secured when not in use, and, further, in means to change the pitch of the saw.

In the drawings, Figure 1 is a side view of my device. Fig. 2 shows the guide F. Fig. 3 shows the hanger for the saw-bar detached.

A is an upright attached to the base B, and C C D D are respectively upper and lower side bars forming the frame which supports the saw-bar. These are braced and held apart by the vertical brace bar E, which has an opening therein extending from side bars C to D, to guide the saw-bar, and to allow it to be raised and lowered to accord with the diameter of the log to be sawed. At the forward or saw end of the frame is a second short bar or guide, F, slotted to hold and guide the saw, and attached to and forming part of the frame, and having at its lower end spurs or dogs *f*, to enter the log and hold it firmly. Attached to the side of the guide F by a pivot-pin, *f*², is another dog or hook, G, which drops over the log and additionally secures it. When not in use, this hook swings backward on its pivot, and is caught in a catch, *g*, attached to the side of one of the lower side bars D. About midway of this lower side bar D is a pivoted rest, *d*, extending to the opposite side bar on which the end of the saw-bar rests when not in use. The saw-bar H carries at its front end the saw I, attached by bolts, or in any other suit-

able manner, and its rear end is attached to the hanger J by a pin or projection, L, which enters a right-angled slot in the hanger. Motion is imparted to the saw and bar by a handle, M, on the rear end of the saw-bar. The hanger J is swung from a pivot pin or bolt passing through the upper end of the standard A and the upper side bars, C C, and it has a series of right-angled slots, *j j*, to receive the pin L in the saw-bar. A series of openings, *h*, in the upper edge of the saw-bar are adapted to receive points on the weight K, so that it can be moved to any position on the bar to change the pressure on the saw. This is shown in the dotted lines in Fig. 1.

The operation of my device is as follows: The frame is placed so that the guide F rests upon the log with its spurs *f* forced into the same. The dog G is hooked over the log. Then the catch *g* is swung round, which frees the saw and allows it to rest on the surface of the log to be cut. The weight K is then adjusted, and the hanger is swung backward and forward by the handle M. For transportation from place to place the dog G is swung back on the catch *g*, and the saw is supported by the rest *d*.

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

1. In a fire-wood drag-saw, the combination of saw-bar H, provided with handle M, and adjustable weight *k*, having projections on its under side to engage with openings or recesses in the upper side of said bar, with middle guide, E, and log-engaging guide F, all in combination with the main frame, substantially as described.

2. In a fire-wood drag-saw, the hanger J, pivoted at the rear top end of the main frame, and to the rear end of saw-bar H, said hanger being provided with a series of right-angled slots, with which pin L on saw-bar H engages, whereby the saw-bar may be adjusted vertically, all in combination with a suitable supporting-frame therefor, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ALFRED S. TOPPING.

Witnesses:

S. M. CLARKE,
JOHN MALOSH.