(Model.)

# S. CLEMENS.

## Drag Saw.

**No. 242,886.** **Patented June 14, 1881.**

*Fig. 1.*

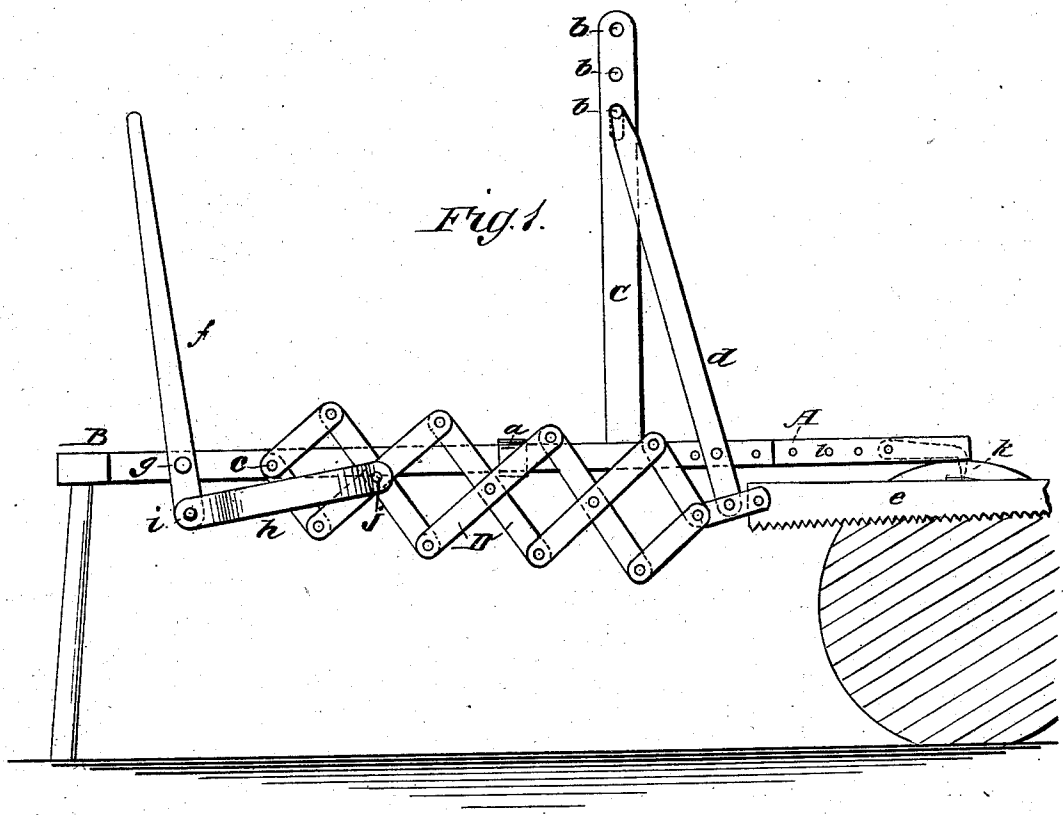
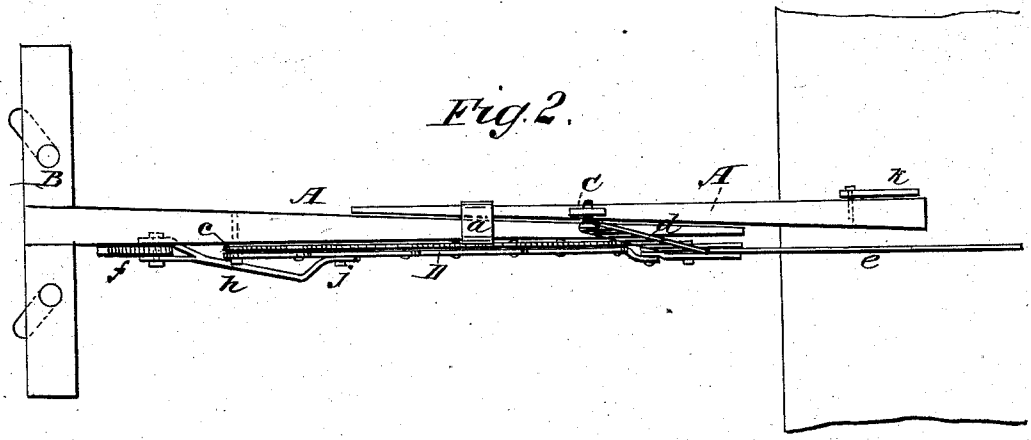



*Fig. 2.*

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# UNITED STATES PATENT OFFICE.

SAMUEL CLEMENS, OF ROCKPORT, ASSIGNOR TO HIMSELF AND H. L. ANDERSON, OF SUMMER HILL, ILLINOIS.

## DRAG-SAW.

SPECIFICATION forming part of Letters Patent No. 242,886, dated June 14, 1881.

Application filed November 30, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, SAMUEL CLEMENS, of Rockport, in the county of Pike and State of Illinois, have invented a new and Improved Drag-Saw, of which the following is a description.

The object of this invention is to produce a drag-saw which will be simple in construction and effective in operation, and which may be easily operated by one person.

The invention consists in having the saw-blade pivoted at one end of a "lazy-tongs" connected with the frame-work of the apparatus, and in having a hand-lever pivoted to the said frame-work and connected with the lazy-tongs by means of a pitman to operate the said lazy-tongs, as hereinafter described.

Figure 1 represents, in side elevation, a drag-saw made in accordance with my invention in position upon a log, and Fig. 2 is a plan view of the same.

Similar letters of reference indicate corresponding parts.

The frame-work of my improved apparatus consists of a supporting-beam, A, made preferably in two pieces, and held together by means of a metallic sleeve, *a*, a table, B, to which the supporting-beam is attached, and an upright, C, having a series of slots, *b*, near the upper end, for the purpose hereinafter described. The supporting-beam A is made in two pieces to allow of longitudinal adjustment, and is provided with a series of adjusting-holes, through which pins are inserted to hold the frame against slippage when adjusted.

Pivoted at *c* upon the side of the supporting-beam A is a lazy-tongs, D, composed of metallic strips pivoted together at their ends and centers, as common, (see Fig. 1,) the said lazy-tongs being preferably of greater diameter at its center than at its ends. The lazy-tongs is supported near its free or saw end by means of a pitman, *d*, pivoted to the upright C or hooked into one of the slots *b* of the said upright, and the said lazy-tongs is provided at this end with a saw-blade, *e*, of usual construction. The pitman *d* serves to guide the saw in its operation and control the extent of longitudinal movement, more or less throw being given to the saw by lengthening or shortening the pitman *d*, which may be done by adjusting the said pitman in the different slots *b* in the upright.

The lazy-tongs D and saw *e* are operated by a hand-lever, *f*, pivoted at *g* to the supporting-beam A, and connected at its short end with the said lazy-tongs by means of a pitman, *h*, the said pitman being pivoted to the lever *f* at *i* and to the lazy-tongs D at *j*, as shown in Fig. 1.

At the end of the supporting-beam A which rests upon the log is pivoted a grapple-hook, *k*, to be driven into the log to hold the apparatus in position upon the log during operation. (See Fig. 2.)

In the operation of sawing with my improved drag-saw the end of the supporting-beam A is placed upon the top of the log and the pivoted hook *k* is driven into the log, this holding the apparatus securely against lateral movement. The operator, standing upon the platform B, moves the hand-lever *f* back and forth, which imparts a rapid reciprocating motion to the saw through the medium of the lazy-tongs, and thereby cuts the log in a quick and effective manner.

The construction of the parts as herein described forms a cheap, strong, and effective apparatus for sawing logs, &c., and one which may be easily operated by one person.

In consequence of the shape and arrangement of the lazy-tongs, as described, a slight backward and forward movement of the hand-lever *f* will impart to the lazy-tongs and connected saw a movement of greatly-increased rapidity and length, the ratio of which will be regulated as desired by the adjustment of the pitman *d* and supporting-beam A, as described.

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

The combination, with the frame A B C, of the lazy-tongs D, pivoted at one end to the beam A and its free or saw end supported by the swinging arm *d*, the saw *e*, pivoted to the lazy-tongs, and the lever-handle *f*, connected by a pitman, *h*, to the lazy-tongs, as and for the purpose set forth.

SAMUEL CLEMENS.

Witnesses:

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