(No Model.)

S. B. & E. ALLEN.

DRAG SAWING MACHINE.

No. 245,693. Patented Aug. 16, 1881.

Fig 1.

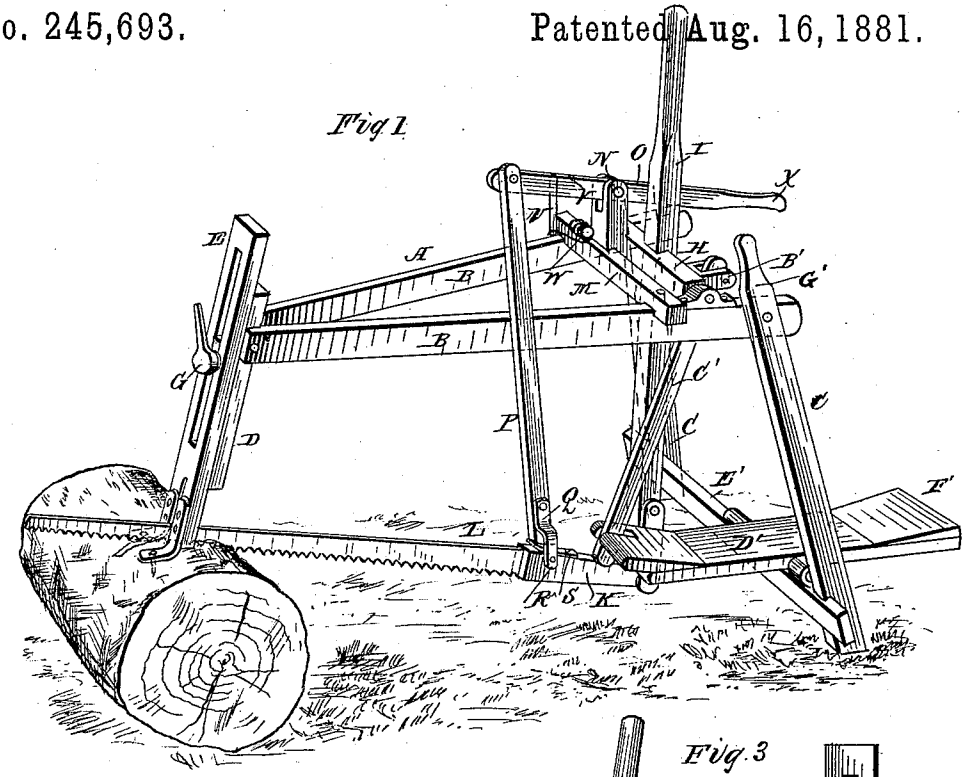

Fig 2.

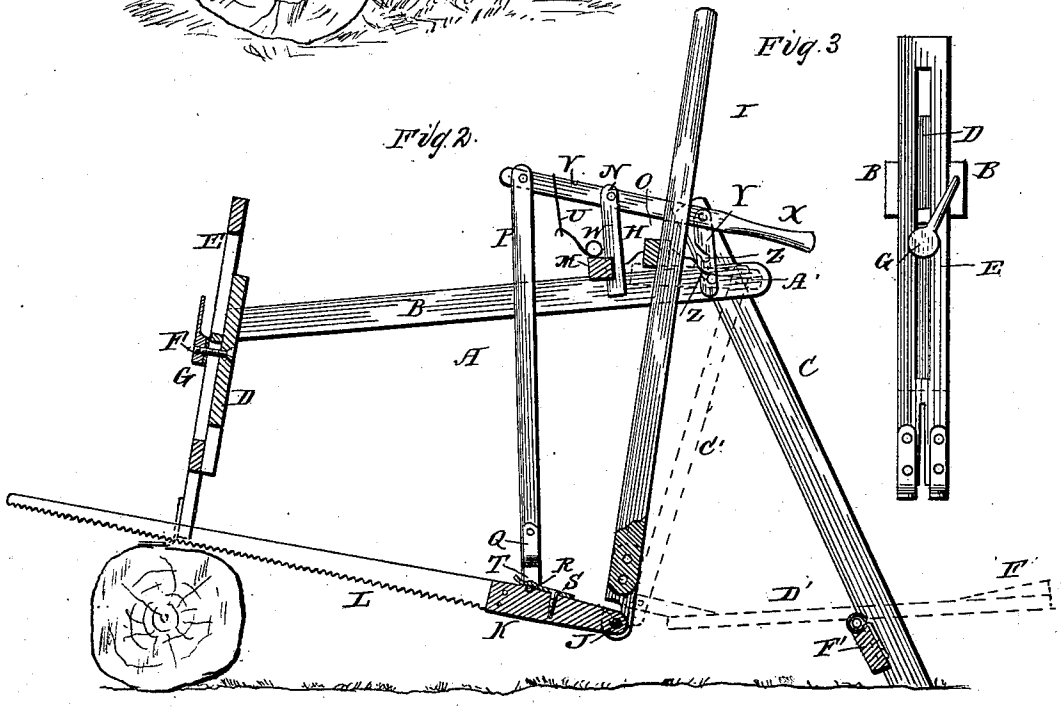

Fig 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

SILAS B. ALLEN AND ETHAN ALLEN, OF ROCHESTER, INDIANA.

DRAG-SAWING MACHINE.

SPECIFICATION forming part of Letters Patent No. 245,693, dated August 16, 1881.

Application filed June 15, 1881. (No model.)

To all whom it may concern:

Be it known that we, SILAS B. ALLEN and ETHAN ALLEN, of Rochester, in the county of Fulton and State of Indiana, have invented certain new and useful Improvements in Drag-Saws; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view. Fig. 2 is a longitudinal sectional view, and Fig. 3 is a front view.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to drag-saws; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A represents the frame of the machine, which consists of two converging beams, B B, having legs C C at their rear ends, and provided at their front ends with an upright, D, to which a vertically-slotted leg, E, is adjustably secured by a bolt and nut, F G.

H is a cross-piece or oscillating shaft, pivoted in suitable bearings near the rear end of the frame-pieces B B. To the said shaft is secured a lever, I, provided at its lower end with a pair of brackets or stirrups to receive a bolt, J, secured transversely in the rear end of the handle K of the saw L, which is in this manner connected to the said lever I.

M is a cross-piece secured to the frame-beams B in front of shaft H, and provided with an upright, N, to which is pivoted a lever, O. To the front end of the latter is pivoted a connecting-rod, P, having at its lower end a fork, Q, provided with a transverse bolt, R, which may be slipped under a flat spring, S, secured upon the upper side of the saw-handle, and provided with a bulge, T, to receive the said bolt.

U is a link, capable of being adjusted in any one of a series of notches, V, in the front end of lever O, and connected with a spring, W, secured upon the cross-piece M. The rear end of lever O is provided with a handle, X, and with a pivoted downward-projecting arm, Y, having notches Z, by which it may be adjusted upon a stud, A′, upon the inside of one of the frame pieces or beams B.

The oscillating shaft H is provided with a rearward-projecting crank-arm, B′, connected by a pitman, C′, with the front end of a foot-board or treadle, D′, mounted upon a cross-piece, E′, connecting the lower ends of the legs C C of the machine. The said treadle is, for the convenience of the operator, to be provided with slanting end pieces, F′.

One of the legs C is provided with a handle, G′, to be grasped by the operator when at work.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation of the machine will be readily understood.

The front leg, E, may be readily adjusted so as to adapt the machine to a log of any size. The operator places his feet upon the front and rear end of the treadle and his hands upon the handle G′ and lever I, thus operating the saw by means of the said lever and the treadle combined.

By means of the lever O the rear end of the saw may be raised or lifted, and retained in an elevated position by the notched arm Y, and the spring W causes a downward pressure or tension, adjustable by the link U, and which greatly facilitates the sawing.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

1. As an improvement in drag-saws, the combination of lever O, connecting-rod P, having fork Q and transverse bolt R at its lower end, of the saw-handle K, having spring S, adjustably connecting the rod P and handle K, and enabling them to be easily detached or connected, all arranged and operating substantially as and for the purpose herein shown and specified.

2. The combination of the lever O, adjust-

able link U, spring W, connecting-rod P, and the saw, as herein described, for the purpose set forth.

3. The combination, with the frame A, having stud A′, of the lever O, having pivoted notched arm Y and adjustable link U, the spring W, the connecting-rod P, and the saw, as herein described, for the purpose set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

SILAS B. ALLEN.
ETHAN ALLEN.

Witnesses:
ROBERT C. WALLACE,
ISAIAH WALKER.