

*I. J. Bogert,
Stump Elevator.*

N^o 77,798

Patented May 12, 1868.

Fig. 2

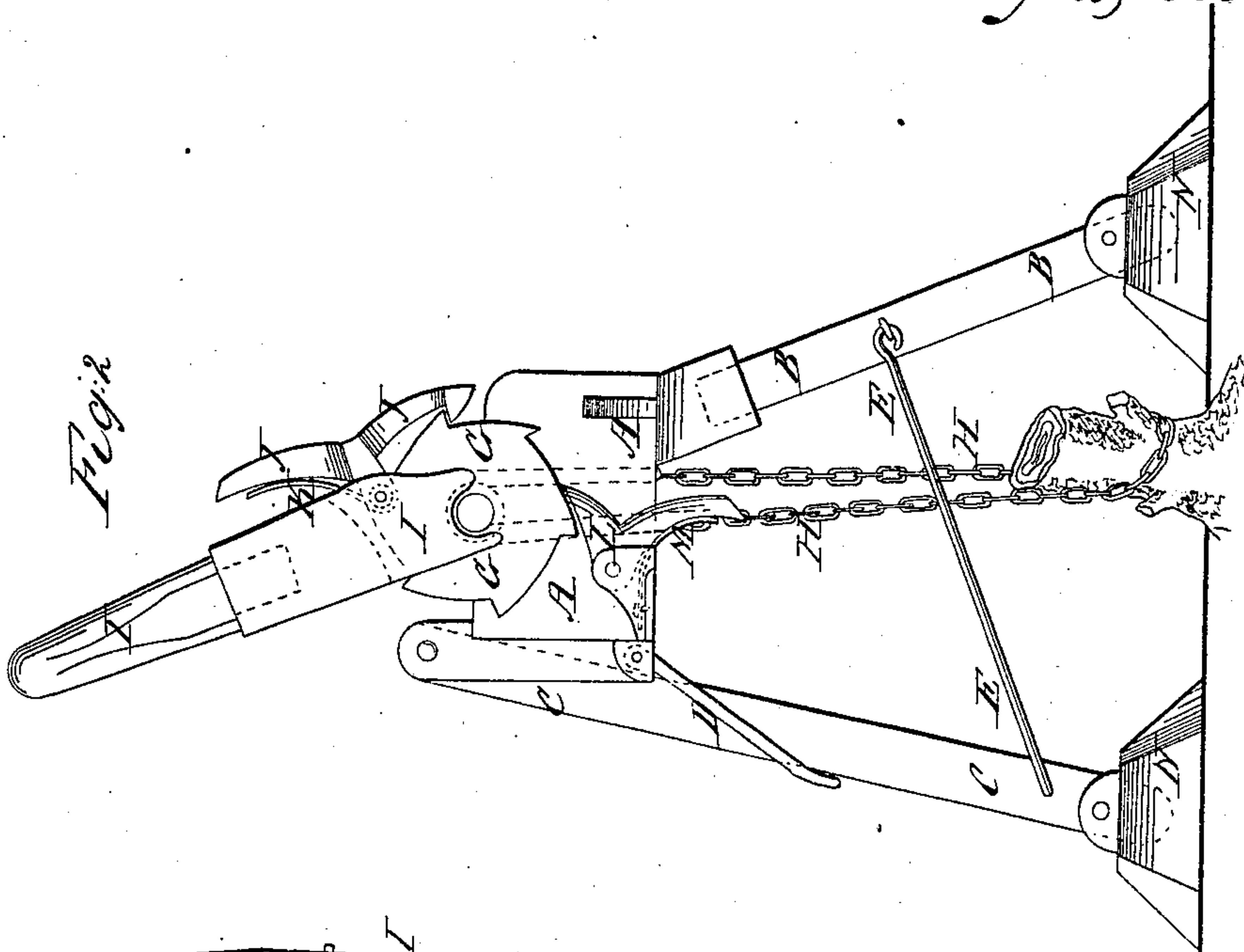


Fig. 3.

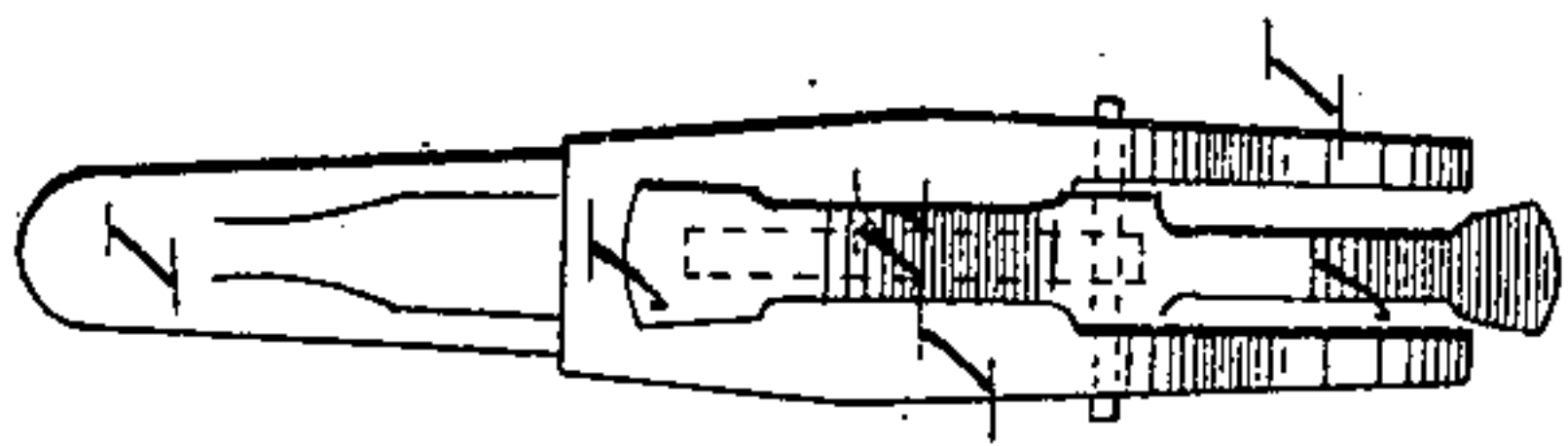
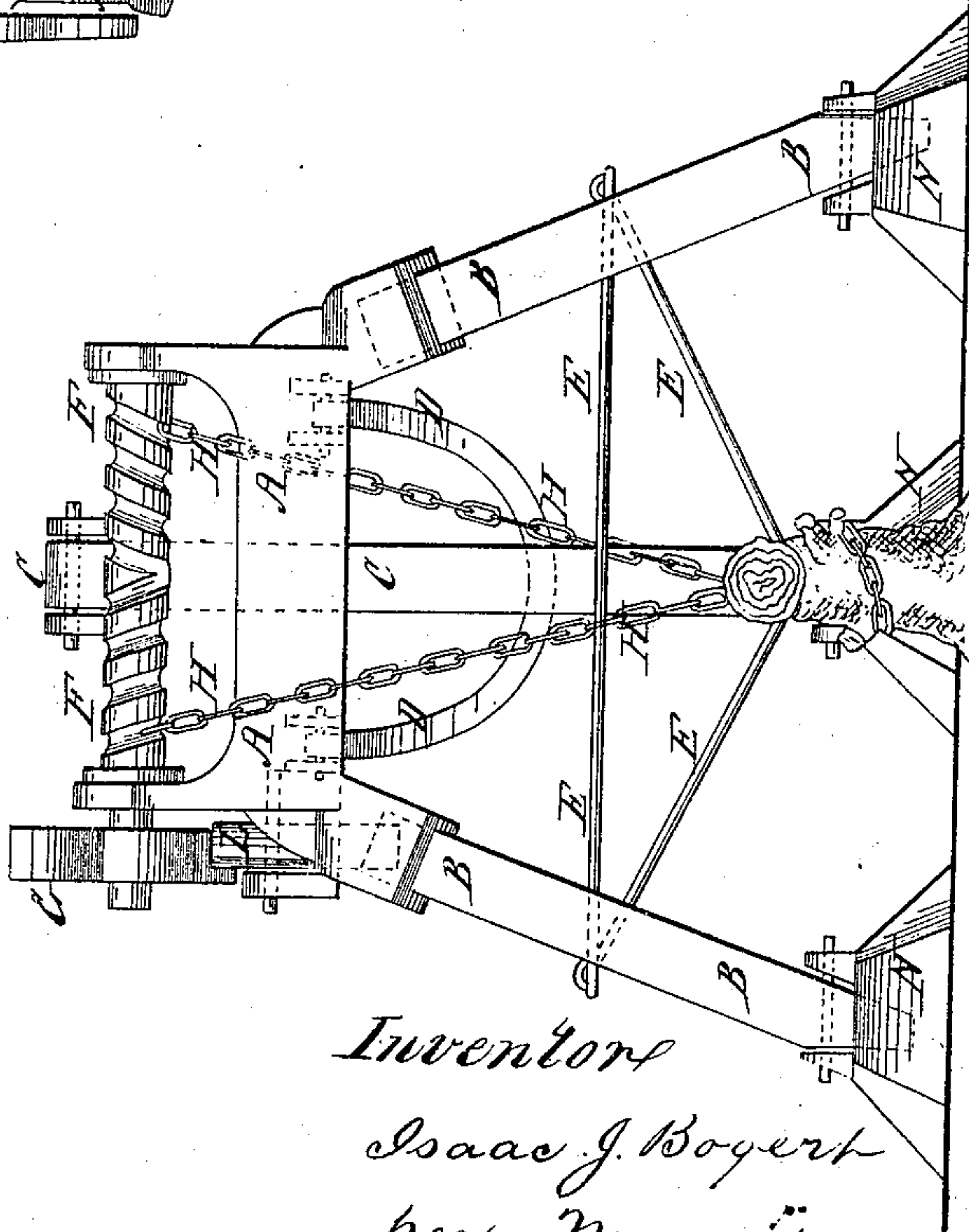


Fig. 1.



*Witnesses
W. C. Ashkettle
J. A. Service*

*Inventor
Isaac J. Bogert
per Munroe
Attorneys*

United States Patent Office.

ISAAC J. BOGERT, OF FAYETTE, ASSIGNOR TO HIMSELF AND S. C. CROSBY,
OF MANCHESTER, IOWA.

Letters Patent No. 77,798, dated May 12, 1868.

IMPROVED STUMP-EXTRACTOR.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, ISAAC J. BOGERT, of Fayette, in the county of Fayette, and State of Iowa, have invented a new and improved Stump-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view of my improved machine, the cant-hook lever being removed.

Figure 2 is a side view of the same, and showing the cant-hook lever in place.

Figure 3 is a detail view of the cant-hook lever.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved machine for pulling stumps, raising and moving heavy weights, &c., which shall be simple in construction, easily operated, and powerful in operation.

And it consists in the combination of the head-block or frame, inclined legs, cylinder, and toothed wheel with each other, and in the combination of the cant-hook lever with the toothed wheel, the whole being constructed and arranged as hereinafter more fully described.

A is the head-block or frame, which is made very solid and strong.

To the under side of the forward part of which is attached the upper ends of the legs B, which incline forward and sidewise, as shown in figs. 1 and 2.

To the rear part of the frame or block A, or to short posts securely and firmly attached thereto, is pivoted the upper end of one or more inclined legs, C, as shown in figs. 1 and 2.

The leg C is strengthened and secured in place by the curved brace-bar D, the ends of which are pivoted to the block or frame A, and the middle part of which is adjustably bolted to the said rear leg C, so that the inclination of said leg may be changed according as it is desired to set the machine so as to act vertically, or to have it draw or move the object rearward.

The legs, when properly adjusted, are secured in their proper relative positions by the brace and connecting-rods E, as shown in the drawings.

F is a cylinder, the journals of which work in bearings in the upper part of the frame A, a little in front of the centre of said frame.

To the projecting end of one or both the journals of said cylinder F is securely and rigidly attached a wheel G, having ratchet-teeth formed in its face, as shown in figs. 1 and 2.

To the cylinder F, near its ends, are securely attached hooks for the attachment of the ends of the chain H.

The cylinder F may be grooved spirally from the ends towards the centre until the said grooves meet in the centre, as shown in fig. 1, said grooves serving as guides to the chain as it is being wound around the said cylinder.

I is the lever, the end of which is slotted to pass over the wheel G, and its end is also notched to ride upon the journal of the cylinder F.

J is a pawl or cant-hook, pivoted to the lever I in such a position that the hook formed upon its lower end may take hold of the teeth of the wheel G and revolve it.

K is a spring connected to the lever I in such a way that its free end may rest against the upper end of the pawl J, and hold its hook forward against the teeth of the said wheel G.

L is the holding-pawl, which is pivoted to the block or frame A, in such a position that it may take hold of the teeth of the wheel G, and hold it while the pawl J is moving forward to take another hold.

M is a spring attached to the frame or block A in such a position that its free end may rest against the lower part of the pawl L, and hold it up against the teeth of the said wheel G.

N are feet, having a broad surface to bear upon the ground, and which are pivoted to the lower ends of the legs B, to prevent them from being forced into the ground by the downward strain upon the machine.

By this construction and arrangement of the parts the machine may be adjusted to raise the stump or other weight vertically, or so as to draw it rearward, at the same time raising it more or less above the surface of the ground, as may be desired.

I claim as new, and desire to secure by Letters Patent—

1. The combination of the head-block or frame A, inclined legs B and C, cylinder F, and toothed wheel G, with each other, substantially as herein shown and described, and for the purpose set forth.
2. In combination with the above, I claim the feet N pivoted to the lower ends of the supports B, substantially as described, for the purpose specified.
3. The combination of the lever I and hooked pawl J with the toothed wheel G, substantially as herein shown and described, and for the purpose set forth.

ISAAC J. BOGERT.

Witnesses:

SILAS LAMB,
ERASTUS HAMMON.