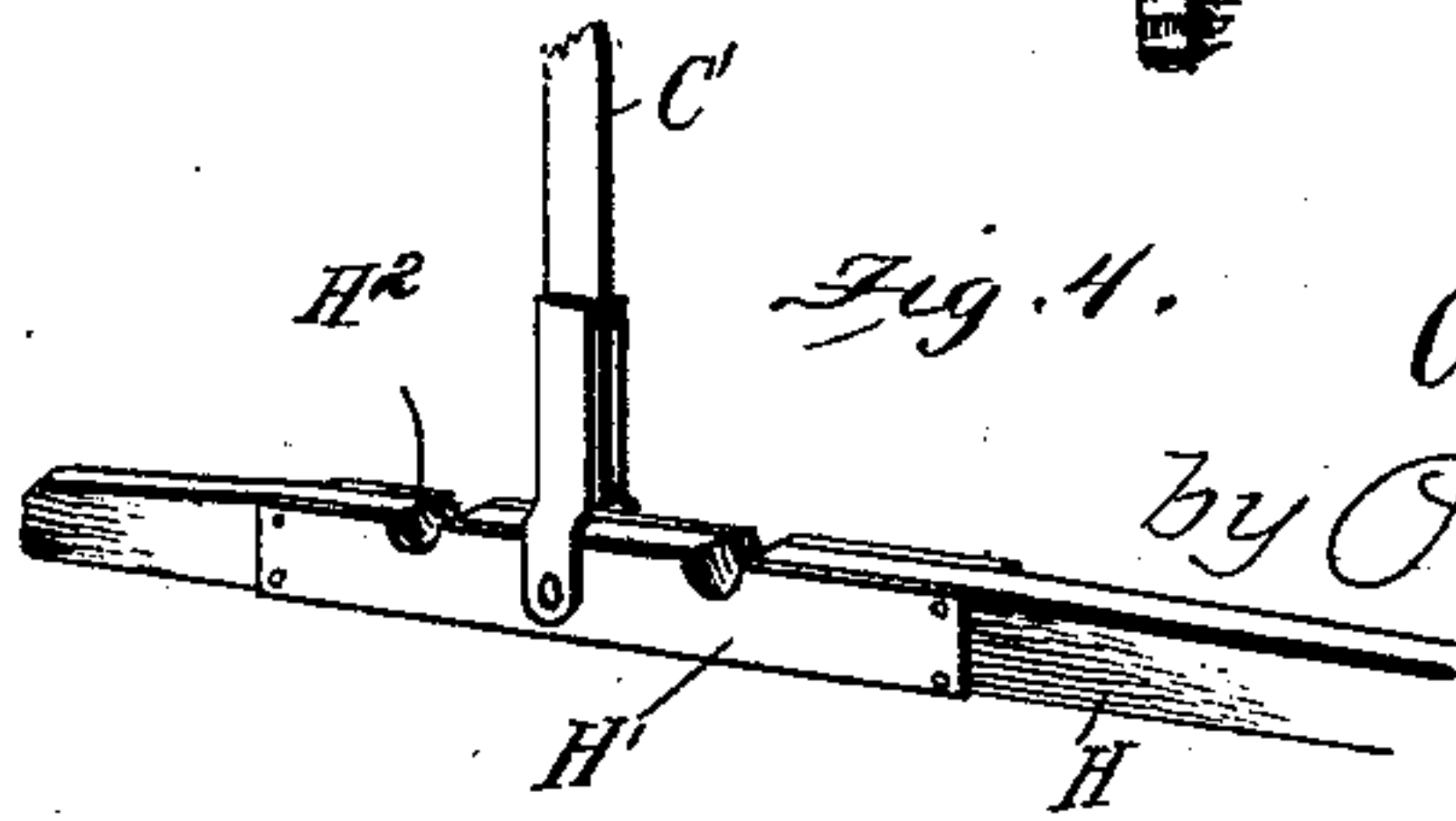
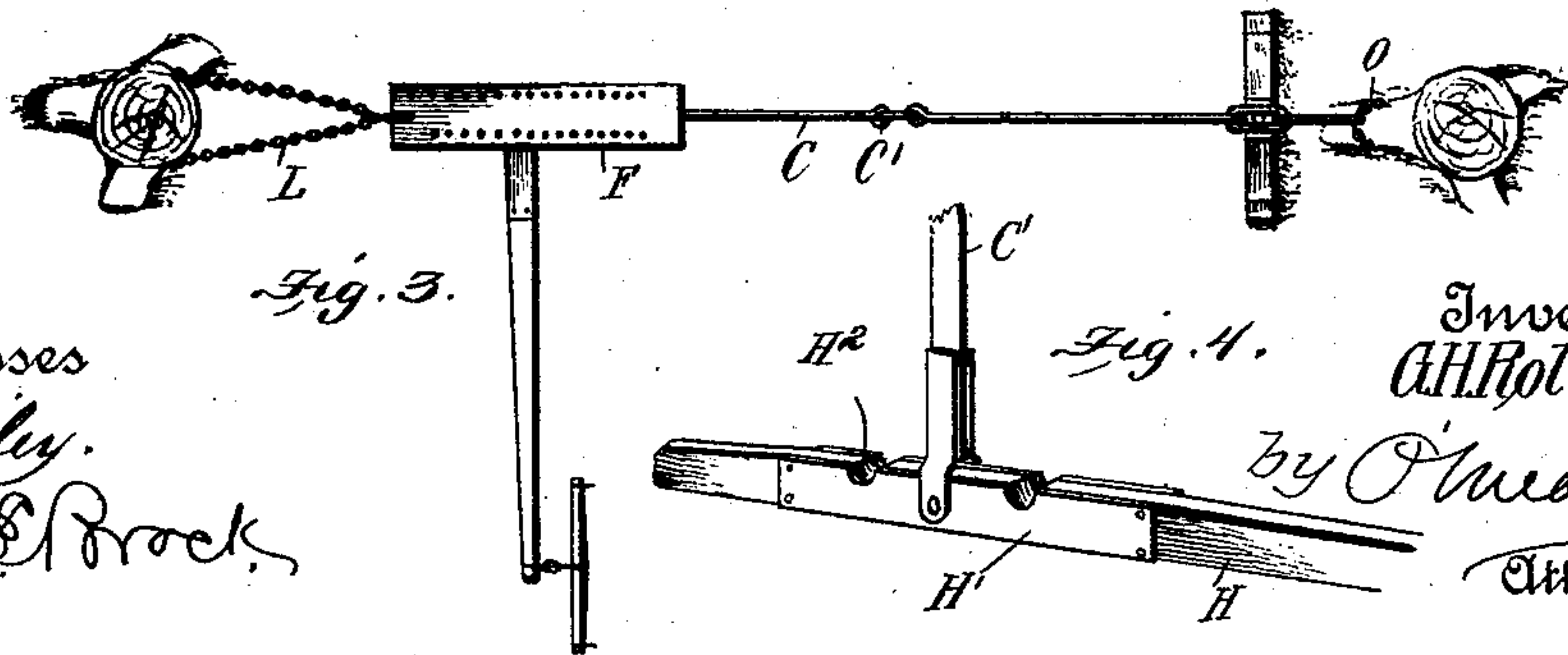
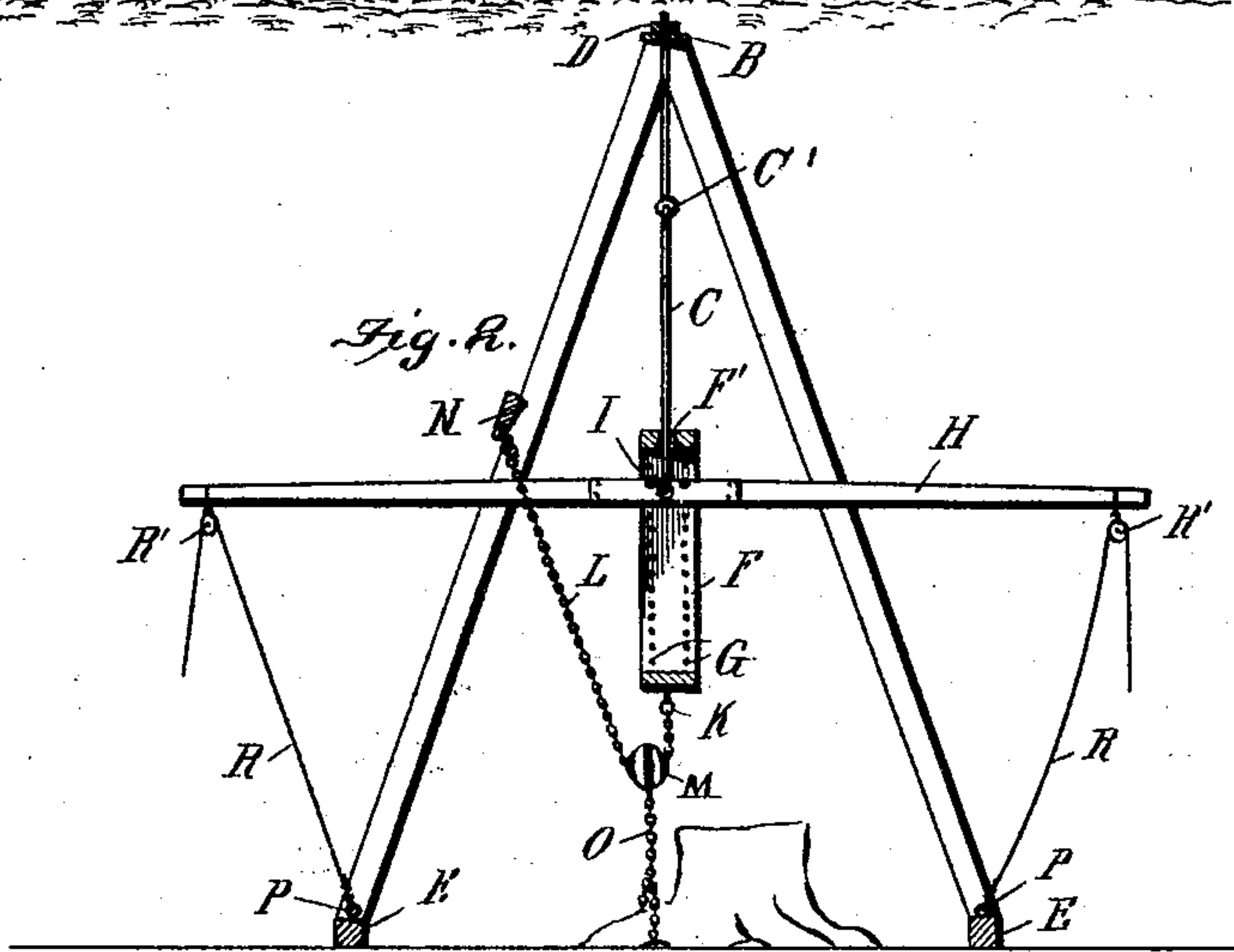
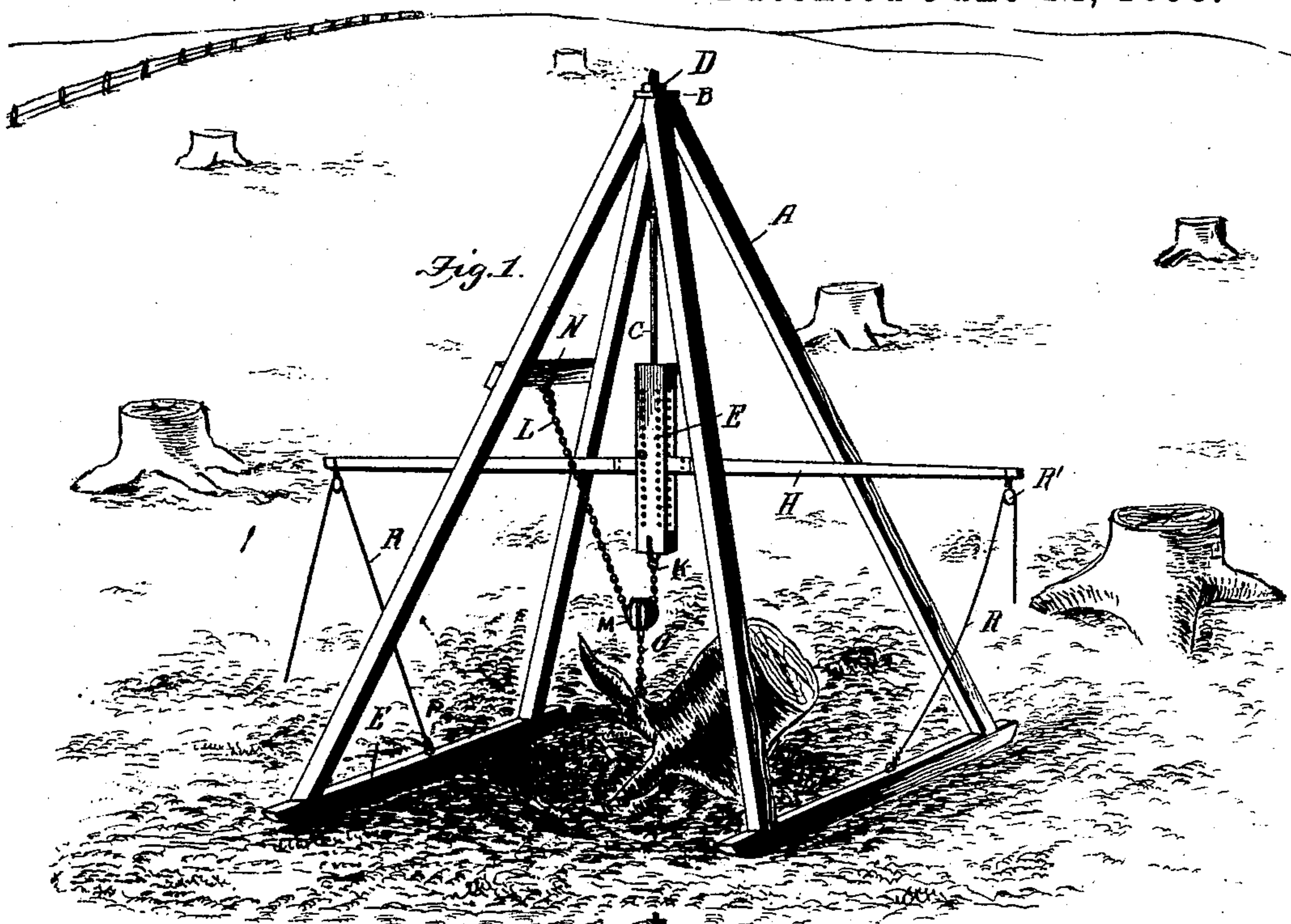


(No Model.)

G. H. ROLLINS.
STUMP EXTRACTOR.

No. 605,586.

Patented June 14, 1898.



Witnesses
T. W. Riley.
Chas. E. Brock.

Inventor
G. H. Rollins.

by O. Mearns
Attorneys

UNITED STATES PATENT OFFICE.

GEORGE H. ROLLINS, OF PITTSVILLE, WISCONSIN.

STUMP-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 605,586, dated June 14, 1898.

Application filed November 18, 1896. Serial No. 612,593. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. ROLLINS, residing at Pittsville, in the county of Wood and State of Wisconsin, have invented a new and useful Stump-Extractor, of which the following is a specification.

This invention is an improved construction of stump puller or extractor, the object being to provide an exceedingly strong and durable device which can be operated either by hand or horse power.

Another object is to provide a stump-extractor the principle of which can be applied either in a vertical or horizontal direction.

With these various objects in view my invention consists, essentially, of a supporting-frame provided with shoes or runners, whereby the device can be quickly and easily transported from place to place, and a depending supporting-rod having a lever centrally pivoted to its lower end, said lever passing through a box which slides upon the supporting-rod and has a series of pins passing therethrough and directly above the operating-lever, said box or block being adapted to be moved upward step by step upon the supporting-rod by means of the lever, and said box or block being connected to the stump to be pulled or extracted.

My invention consists also in certain details of construction and novelties of combination, all of which will be fully described hereinafter and pointed out in the claim.

In the drawings forming a part of this specification, Figure 1 is a view showing the invention in use. Fig. 2 is a vertical sectional view. Fig. 3 is a diagrammatic view showing the manner of using the stump-extractor in a horizontal position. Fig. 4 is a detail view showing the connection between the supporting-rod and operating-lever.

In carrying out my invention I employ a main frame which consists of four inclined standards A, which meet at a common point, and upon their upper ends is placed a cap B, through which passes the supporting-rod C, said rod being secured by means of a nut D.

Shoes or runners E are placed upon the bottom of the standards, as most clearly shown, by means of which the frame can be dragged about as desired and placed over the stump to be pulled.

The supporting-rod C is preferably jointed, as shown at C', in order to permit a certain amount of lateral play without throwing any undue strain upon the main frame. Working up and down upon the supporting-rod is a box or block F, which I term the "power-box," said box being preferably constructed of two stout plates of metal united at their upper end, the upper end being perforated, as shown at F', to permit the introduction of the supporting-rod C. The sides of the box have a series of perforations G made therein, said perforations being arranged in parallel rows, as most clearly shown in the drawings.

The operating-lever H passes between the side plates of the box, said lever being centrally pivoted to the lower end of the supporting-rod, said rod being bifurcated at its lower end, and the operating-lever is provided with bearing-plates H' at the center, which plates are notched, as shown at H², said notches being adapted to receive the lifting-pins I, which pins are passed through perforations G in the sides of the box above the operating-lever, and by pulling down upon one end of the lever the opposite end is raised, which raised end engages the lifting-pin I and raises the power-box along the supporting-rod. Another pin is then inserted above the lower end of the lever, and the elevated end of the lever is then depressed, which causes the lower end to rise, lifting the lift-box still more along the supporting-rod. The lower end of the power-box is therefore connected to the stump, and in practice I prefer to arrange an eye K at the lower end of the said box, and to which is connected a chain L, said chain passing through a pulley-block M and connected at its upper end to a cross-piece N, attached to the side standards of the frame, said pulley-block M having a chain O extending therefrom, which is placed around the stump to be pulled. Thus it will be seen that the power is doubled by the use of the pulley-block M, the cross-piece N, and chain L.

Eyebolts P are attached to the shoes or runners E, and connected to the said eyebolts are the ropes R, which pass upward through the pulleys R', carried upon the ends of the operating-lever, whereby horse or man power can be employed, as desired.

Now in operation the machine is drawn in

place directly over the stump to be pulled. The power-box is then lowered and the chains and lever adjusted. The lever is then worked up and down, and by changing the position of
5 the pins I the power-box will be moved upward along the supporting-rod C, and as it is so moved the stump will of course be drawn upward.

The construction and arrangement of the
10 various parts are such that the device can be handled in a quick and easy manner and with an expenditure of a minimum amount of power.

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

In a stump-extractor, the combination of the standards having runners at their lower ends, their upper ends being brought together
20 at a common center, of the cap-plate arranged upon the top of said standards, a short rod screw-threaded at its upper end and passing through said plate, a nut for holding said rod

and adjusting it in said cap-plate, a supporting-rod loosely connected to the opposite end 25 of said short rod, an operating-lever pivotally attached at its center to the lower end of the supporting-rod, the bearing-plates at the middle of said lever having notches arranged at each side of the supporting-rod, the power- 30 box through which the supporting-rod extends, said box being freely movable vertically upon said rod and having a series of perforations arranged in longitudinal parallel rows, the removable lift-pins fitting in said 35 perforations, the pulley-block M, the cross-piece N, chain L connected to the lower end of the power-box, passing around the block and having its opposite end attached to cross- 40 piece N, and the chain O connecting the block with the stump, substantially as shown and described.

GEORGE H. ROLLINS.

Witnesses:

A. B. COTEX,
L. E. COLVIN.