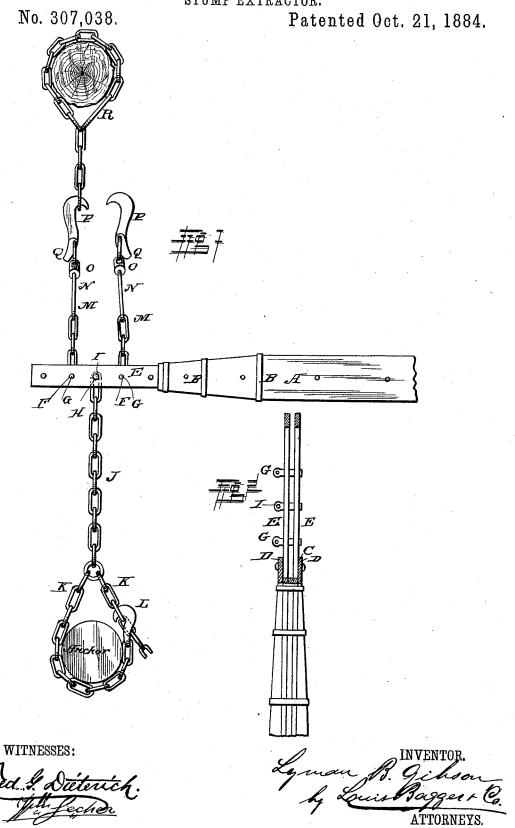
L. B. GIBSON. STUMP EXTRACTOR.



## UNITED STATES PATENT

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## STUMP-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 307,038, dated October 21, 1884.

Application filed September 5, 1884. (No model.)

To all whom it may concern:
Be it known that I, LYMAN B. GIBSON, a citizen of the United States, and a resident of South Addison, in the county of Steuben and 5 State of New York, have invented certain new and useful Improvements in Stump-Extractors; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in  $_{10}$  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, and in which-

Figure 1 is a top or plan view of my im-15 proved stump-extractor; and Fig. 2 is a vertical section of the lever on line x x, Fig. 1.

Similar letters of reference indicate corre-

sponding parts in both the figures.

My invention has relation to that class of 20 stump-extractors in which the fulcrum for the operating-lever is anchored to a rigid object, and hooks hinged to the lever engage links of the chain attached to the stump to be pulled; and it consists in the detailed construction 25 and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A. indicates the operating-lever, which is preferably composed of a number of bars or planks 30 secured by bands B one above the other and by bolts passed through the several layers, and the end of the lever is provided with a socket, C, having projecting lips D upon its upper and lower sides, between which lips 35 two flat metallic bars, E E, project, which extend in between the layers of the lever-handle, secured there by the bolts and bands, and are provided with a number of registering perforations, F, adapted to receive bolts G. 40 The central one, H, of the perforations is provided with a bolt, I, upon which the inner link of the anchoring-chain J is hinged, which chain is provided with two branching chains, K, at its end, one of which is provided with 45 a hook, L, which may engage the links of the other branch chain, thus enabling the branch chains to encircle a rigid object forming the

M M are two chains, which are hinged at 50 their inner ends upon the two bolts G which are placed at equal distances from the cen- I purpose shown and set forth,

tral bolt, and two hooked rods, N N, are hooked into the links of these chains, and are provided at their outer ends with swivels O, to which two hooks, P.P., are hinged, the said 55 hooks having rearwardly or inwardly projecting rods Q at their inner ends, which bear against the swivels and prevent the hooks from being tilted too far backward.

R is the chain attached to the stump, and 60 the hooks P engage the links of this chain.

When the extractor is to be put into operation, the anchoring-chain is secured to a rigid object by hooking the branch chains around it, and the extractor-chain is attached to the 65 stump. One of the hooks P is now hooked into one of the links of the extractor-chain, the lever being moved so as to bring the said hook as close as possible to the stump, whereupon the lever is drawn over to the other side, 70 the central bolt acting as fulcrum, thus giving the stump a pull out of the ground. The other hook P is now hooked into the extractorchain nearer to the stump and the lever drawn back again, which will again draw the stump 75 farther out of the ground, the first hook moved closer to the stump, and so forth until the stump has been drawn or tilted out of the ground.

It will be seen that the hooked rods having So the hooks swiveled to them may be hooked closer to the bolts of the lever in the chains hinged upon the same, so as to enable the lever to be operated when the stump and the anchoring object are close together, as also 85 the anchoring-chain may be hinged upon the central bolt in any of its links, and it will be seen that when the leverage is to be increased or decreased the bolts for the hook-bearing chains may be moved closer to or farther from 90 the central bolt.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States-

1. The lever consisting of the handle com- 95 posed of layers of flat bars secured one above the other by bolts and bands, having a socket at its outer end, and having two flat metallic bars projecting from within the layers of the handle through the socket, and having a num- 100 ber of registering perforations, as and for the

2. The combination, in a stump-extractor, of the lever having two flat bars projecting from its end, having a number of registering perforations, the bolts fitting in the said perforations, 5 the anchoring-chain having the branch chains provided with a hook at the end of one chain, the chains hinged to the outer bolts, the hooked rods provided with swivels at their outer ends, the hooks having the rearwardly-projecting ro arms and hinged to the swivels, and the ex-

tractor-chain, all constructed to operate as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

LYMAN B. GIBSON.

Witnesses:

A. A. Scott, E. B. Ross.