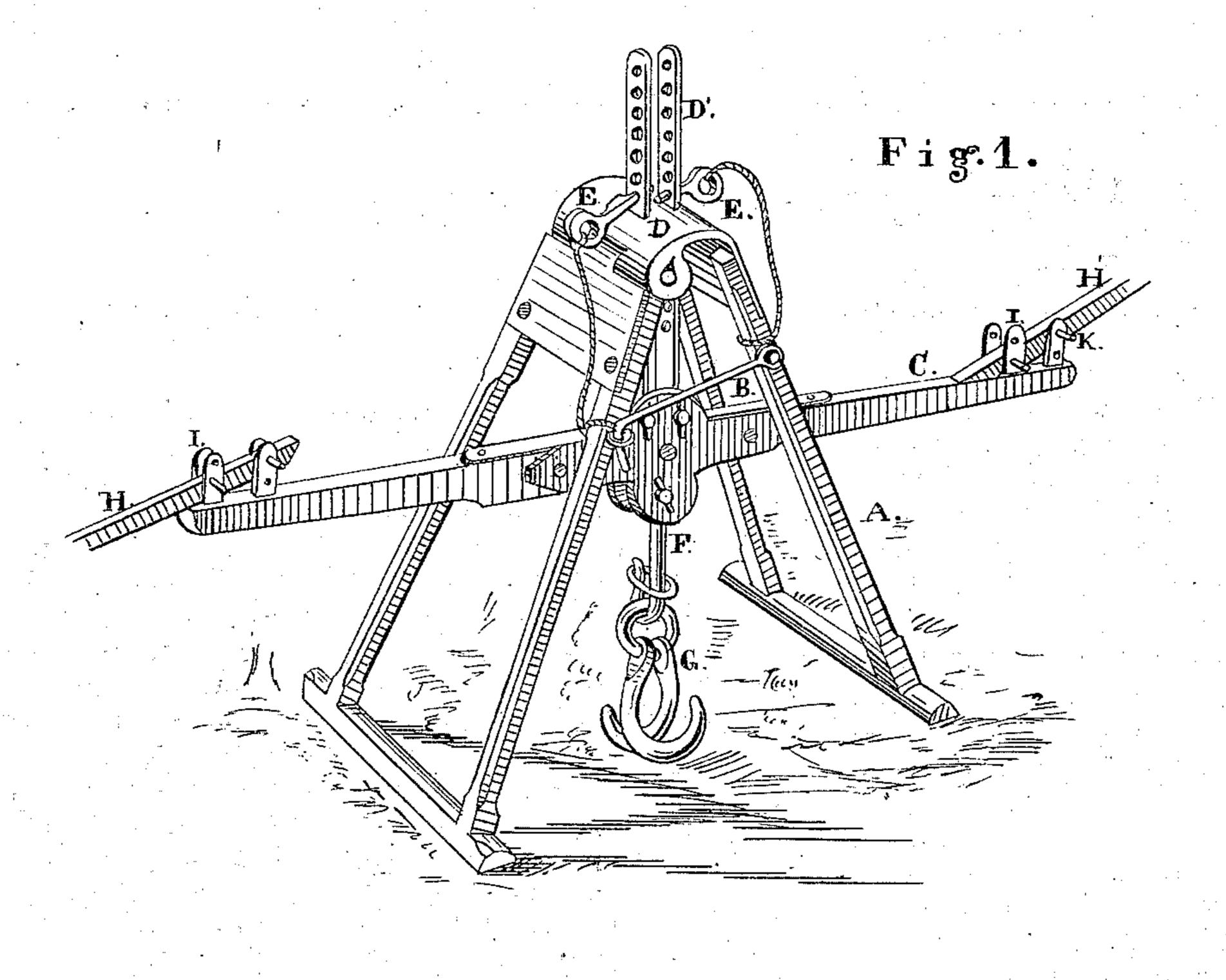
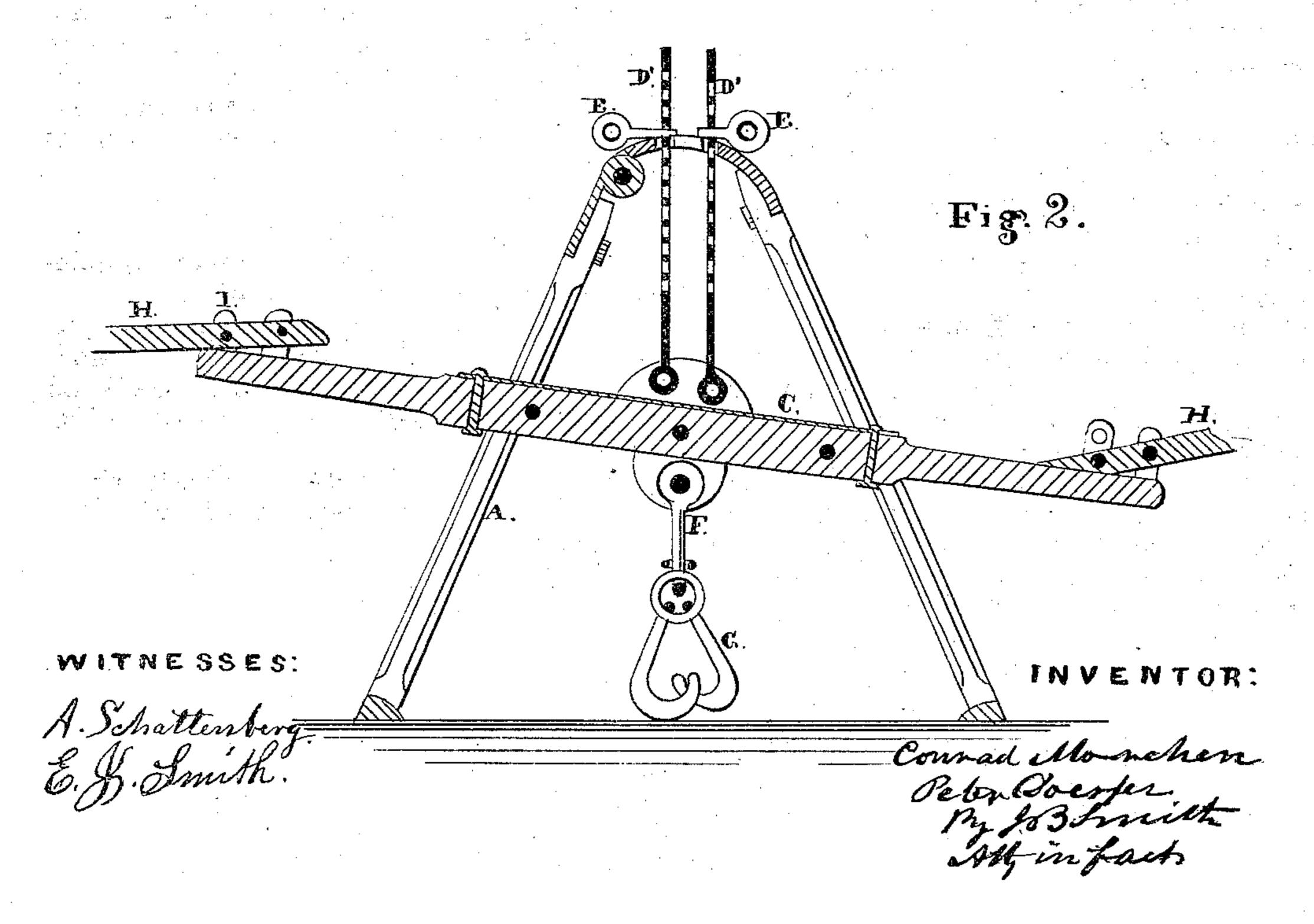
C. MORCHEN & P. DOERFER.

Stump-Extractors.

No. 135,658.

Patented Feb. 11, 1873.





UNITED STATES PATENT OFFICE.

CONRAD MÖRCHEN AND PETER DOERFER, OF EATON, WISCONSIN.

IMPROVEMENT IN STUMP-EXTRACTORS.

Specification forming part of Letters Patent No. 135,658, dated February 11, 1873.

To all whom it may concern:

Be it known that we, Conrad Mörchen and Peter Doerfer, of the town of Eaton, county of Manitowoc, in the State of Wisconsin, have invented certain Improvements in Stump-Extractors, of which the following is a specification:

Nature and Object of the Invention.

Our invention relates to a stump-extractor constructed in such a manner that the leverage is so short that almost any stump can be extracted with it by the aid of two men, and the lever has another lever at each end of it attached by pins in such a way that they can be regulated so as to raise or lower the ends of the operating-lever, and thus increase the power of the machine, and also make it handier to work with.

Description of the Drawing Forming Part of this Specification.

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

A is the frame; B, a hook, which keeps the frame from spreading; C, the operating-lever; D, an iron cap, which holds the top of the frame together. One side of this iron cap is secured permanently to one side of the frame, and the other side is secured by a pin or pins in an eye or eyes, so that the frame can swing nearer together or further apart, and thus accommodate itself to the nature of the ground. D', bars or standards with holes in them for the insertion of iron pins to form a fulcrum. These bars or standards are fastened at their lower ends to lever C by pins, and pass up through holes in cap D. E E, pins, which are

thrust into the holes in D'; F, à hook or fastening attached to the bottom of lever C, and into the lower end of which hang hooks G, which are used to hook under a stump. H, levers attached to the ends of lever C; I, brackets on the ends of lever C; K, pins, which are passed through the brackets and hold levers H.

The operation of this machine is as follows: Set the frame over a stump; lower the lever C down so as to permit the securing hooks G under the stump; hook B is hooked into the eye so as to prevent the frame from spreading; then take hold of the ends of lever C and tilt one end down, and, as the standard near the other end rises, put in one of the pins E; then tilt the other end down, and as the other standard rises shift the pin E down into the hole below, and so on alternately till the stump is raised out of the ground. If more power is wanted, or if the end of the lever C is too high or too low for working handy, then put in levers H, and arrange it so as to work as described.

Claim.

We claim as our invention the following combination, the other parts being old:

The frame A with the curved iron-plate attachment D, in combination with the standards D', levers C H, link F, and hooks G, all constructed, arranged, and operated as described.

CONRAD MÖRCHEN. PETER DOERFER.

Witnesses:

ELISA FRANZ,
PETER REUTHER.