

(No Model.)

A. WEIL.
APPARATUS FOR BORING WELLS.

No. 525,374.

Patented Sept. 4, 1894.

Fig. 2.

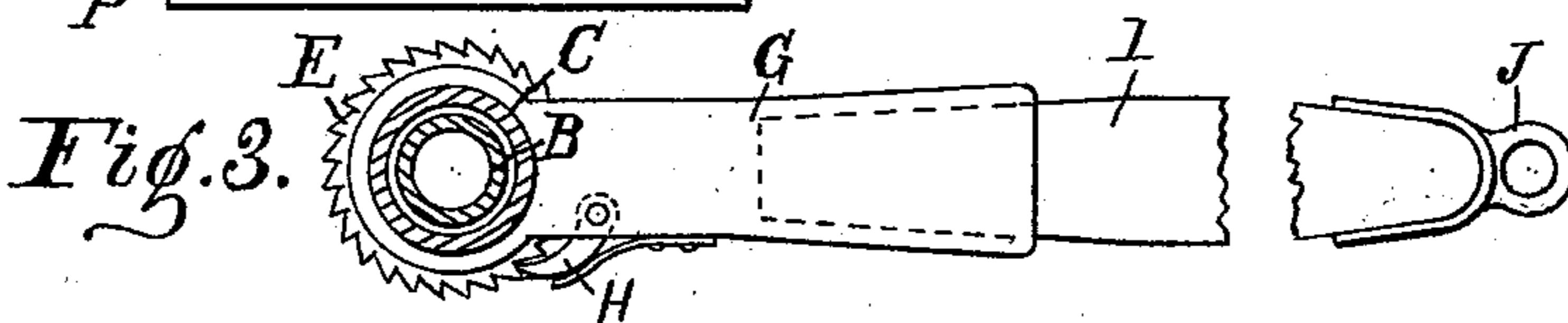
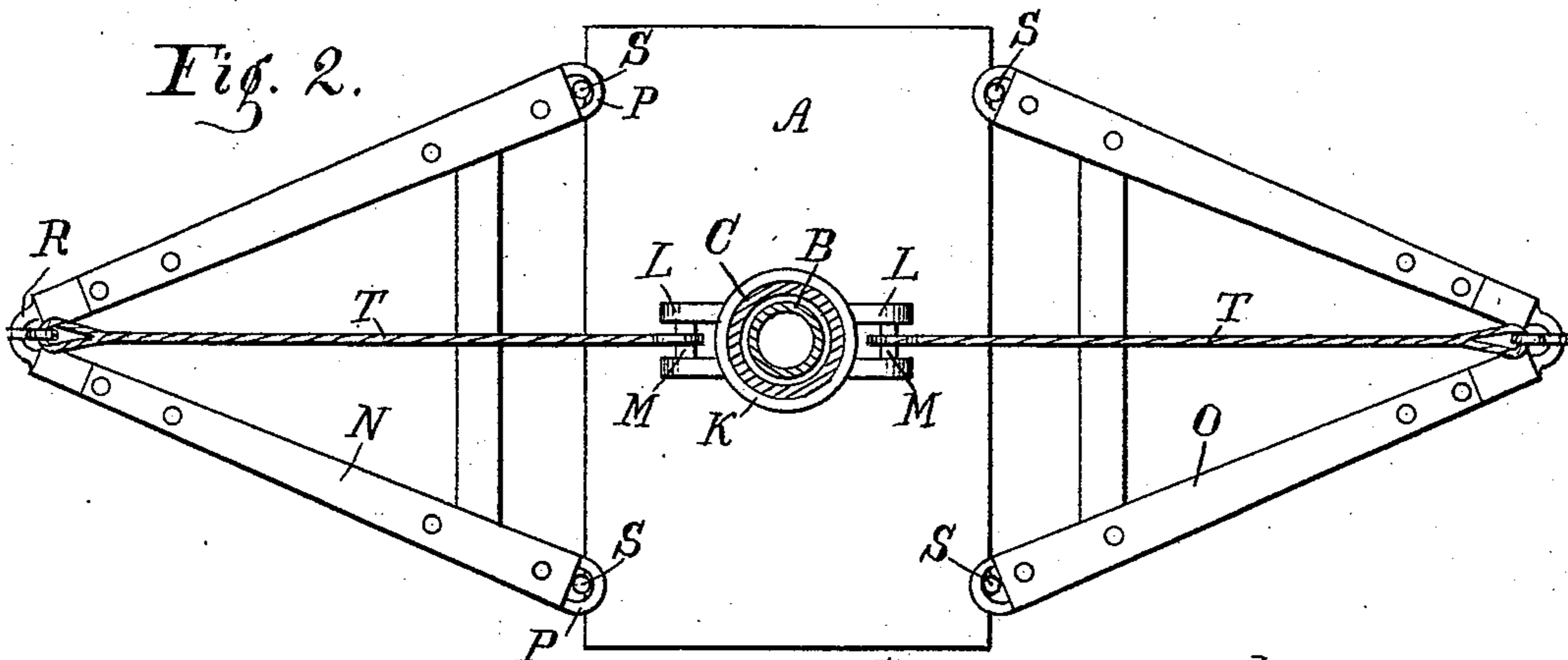
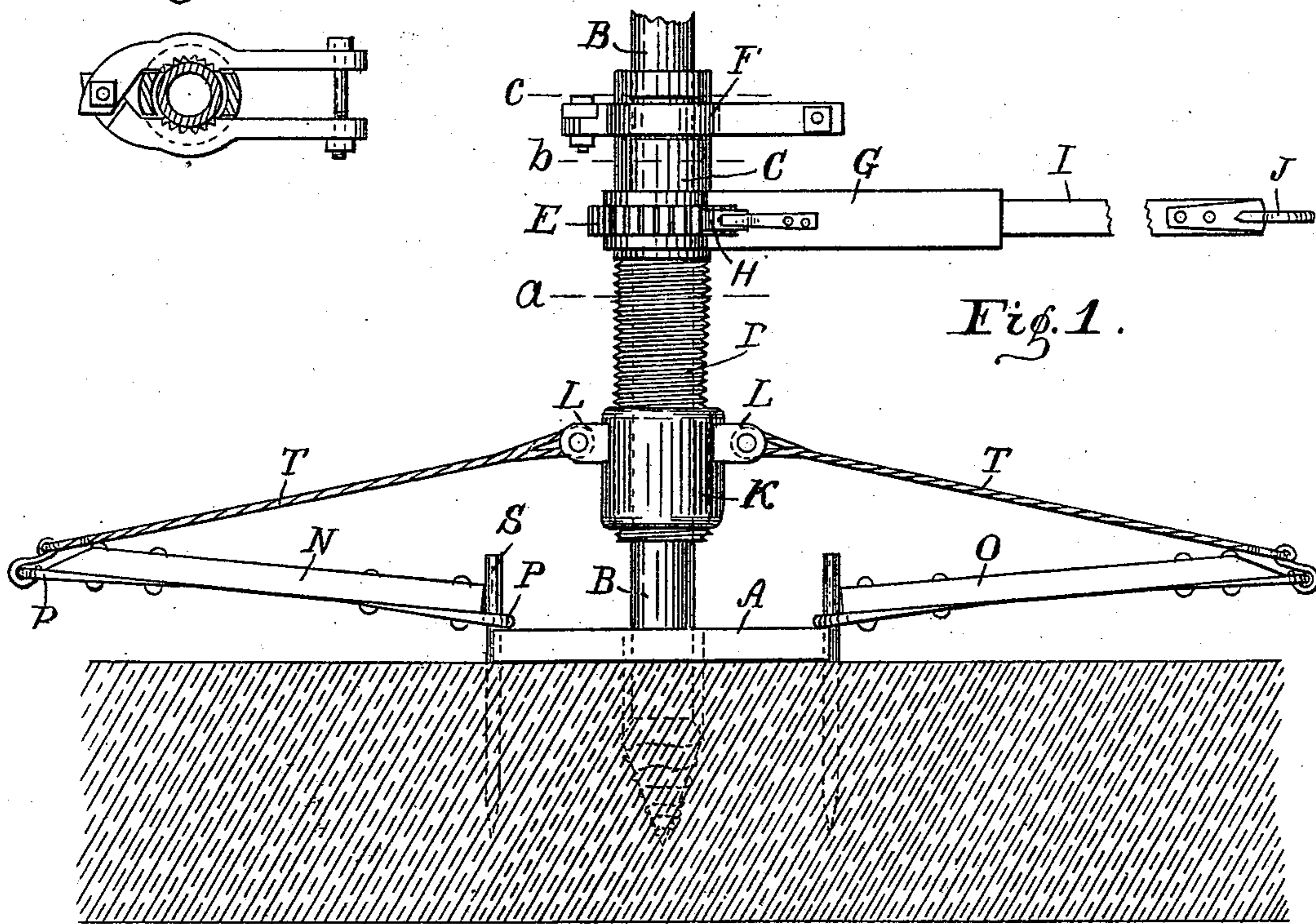
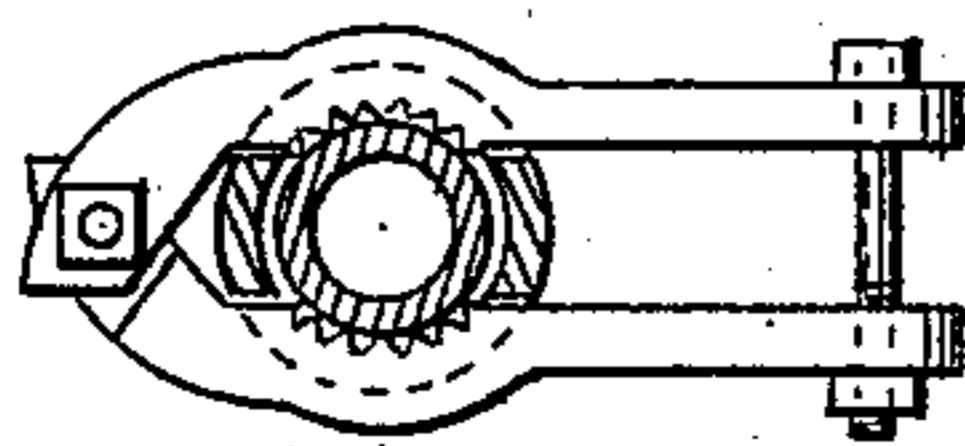


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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APPARATUS FOR BORING WELLS.

SPECIFICATION forming part of Letters Patent No. 525,374, dated September 4, 1894.

Application filed May 24, 1894. Serial No. 512,346. (No model.)

To all whom it may concern:

Be it known that I, ADOLF WEIL, a citizen of the United States, residing at Greenfield, in the county of Hancock and State of Indiana, have invented a new and useful Improvement in Apparatus for Boring Wells, of which the following is a specification.

My invention relates to an improved apparatus for boring tubular wells.

The object of my improvement is, to dispense with the derrick ordinarily used for such purposes, and to provide a simple apparatus by means of which the well-tube, provided with a suitable boring tool, or point, may be forced into the earth.

The accompanying drawings illustrate my invention.

Figure 1 represents a side elevation. Fig. 2 represents a plan at —a— Fig. 1. Fig. 3 represents a section at —b— Fig. 1. Fig. 4 represents a section at —c— Fig. 1.

In the drawings, A, indicates a base-plate, made preferably of a piece of stout plank, having a central hole large enough to admit the passage of the well-tube.

B, indicates the well-tube, or any suitable tool for boring.

Mounted loosely upon the well-tube, or boring-tool, is a sleeve, C, having a portion of its lower end, D, screw-threaded, and having also, formed upon or secured to its upper part, a ratchet-wheel, E. The upper portion of sleeve C is cut away on opposite sides so as to permit a pair of clamping jaws, F, to project through the sides of the sleeve and engage the tube B.

Mounted upon sleeve C, so as to turn freely thereon, and embracing the ratchet-wheel, is a lever, G, having a pawl, H, which engages the ratchet-wheel. Lever G is provided with an extension, I, having at its outer end, an eye, J, so that a horse, if required, may be attached to the outer end of the extension.

Mounted upon the threaded portion of sleeve C, is a screw-threaded nut, K, having on opposite sides lugs, L, L, each carrying a bolt or pin, M.

Arranged on opposite sides of the base-plate are a pair of triangular frames, N, and O, each of which is provided, at its base, with a pair of eyes, P, P, and at its apex with a

loop, R. Frames N and O, are secured in position by means of metallic pegs, S, S, driven vertically through the eyes P, P, close beside the edges of the base-plate and deep into the ground; the arrangement being such that the tube B, and the apexes of frames N and O, are in line. Frames N and O are each connected at its apex with the lugs of nut K, by means of chains, or ropes, T, T.

The operation of my device is as follows: The lower end of tube B being provided with a suitable point, or boring tool, is passed through the sleeve C, and through the base-plate A, nut K being arranged at the lower end of the threaded portion of the sleeve, and the tube being secured to the sleeve so as to rotate therewith by means of the clamp F. The sleeve and the tube are now rotated by means of the lever G so as to turn the sleeve into the nut. The tendency of the nut to move upward being checked by the clamping of the inner ends of frames N and O against the pegs S, as the sleeve and the tube rotate the tube is forced downward by the action of the screw threads. When the threaded portion of the sleeve has passed entirely into the nut, clamp F is released from the tube, and the sleeve, being turned in the opposite direction, is raised and a new hold of the clamp upon the tube is taken. The operation proceeds until the tube has been forced down the required distance.

I claim as my invention—

The above described apparatus for boring wells, consisting of a boring tool, the sleeve mounted upon said tool, said sleeve being screw-threaded a portion of its length, the nut mounted on said screw-threaded portion, the pair of triangular frames arranged on opposite sides of the boring tool, the pegs arranged to secure the opposed inner ends of the frames to the ground, the cords attaching the outer ends of said frames to the nut, means for securing the sleeve to the boring tool so as to rotate therewith, and means for turning the sleeve relatively to the nut, all arranged to co-operate substantially as set forth.

ADOLF WEIL.

Witnesses:

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