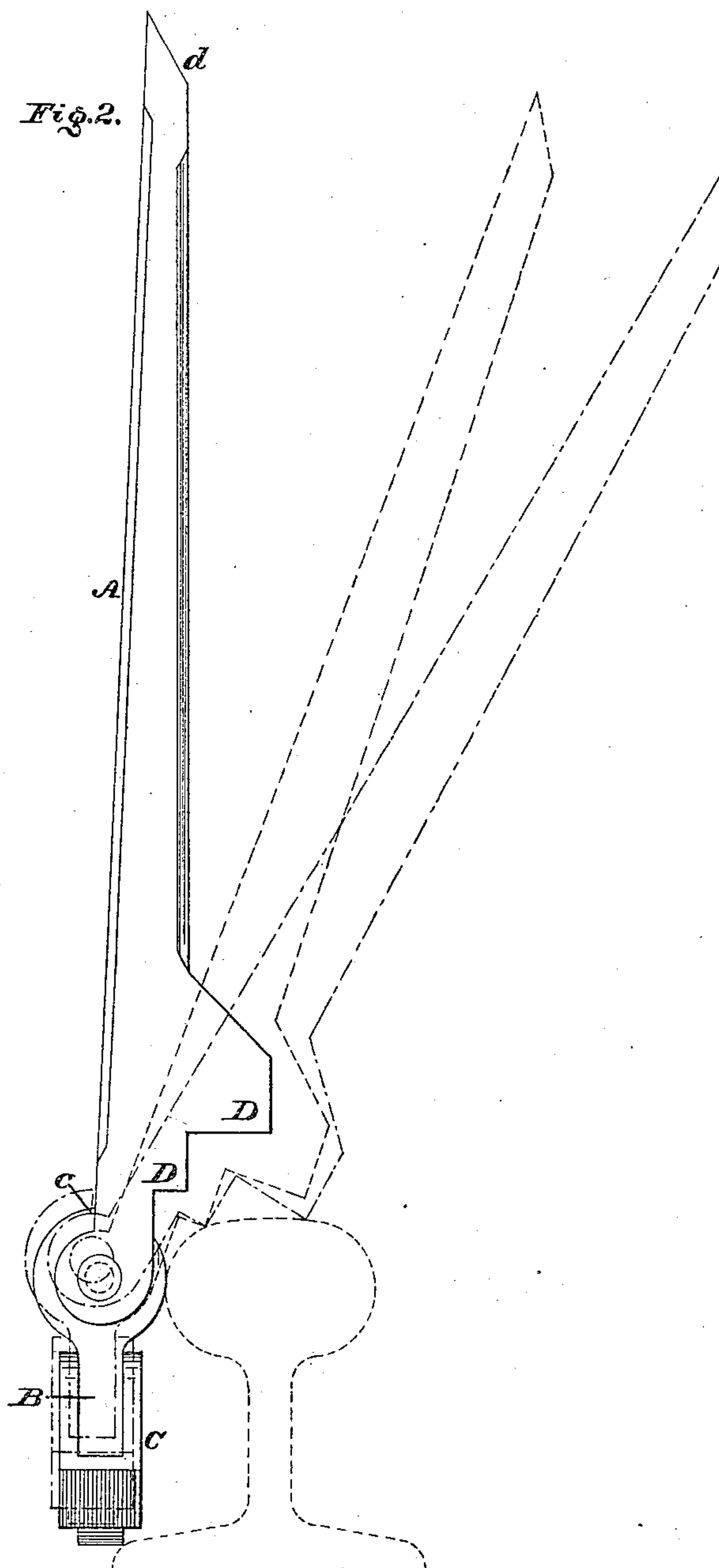
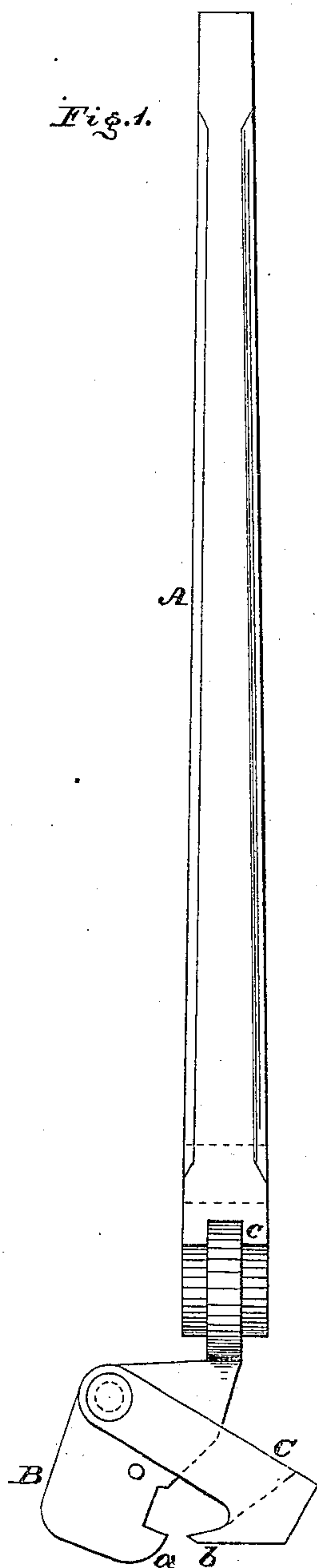


(No Model.)

R. HAWKEY.
Spike Extractor.

No. 241,007.

Patented May 3, 1881.



Witnesses:

A. P. Grant,

H. F. Kirchoff.

Inventor:

Robert Hawkey,

by John A. Gundersheim

ATTORNEY.

UNITED STATES PATENT OFFICE.

ROBERT HAWKEY, OF BURLINGTON, NEW JERSEY.

SPIKE-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 241,007, dated May 3, 1881.

Application filed March 19, 1881. (No model.)

To all whom it may concern:

Be it known that I, ROBERT HAWKEY, a citizen of the United States, residing at Burlington, in the county of Burlington, State of New Jersey, have invented a new and useful Improvement in Spike-Extractors, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a front elevation, and Fig. 2 a side elevation, of the spike-extractor embodying my invention.

Similar letters of reference indicate corresponding parts in the two figures.

My invention consists of a spike-extractor having jaws which tightly grasp the spike and are adapted to spikes of different thicknesses.

It also consists of the lever having different fulcra, so that the greatest leverage may be exerted at first in order to start the spikes, after which the lever takes a new bearing and fully removes the spike.

Referring to the drawings, A represents the lever, to which is pivoted a jaw, B, one side whereof is recessed, leaving the nose *a*.

C represents a jaw, which is pivoted to the jaw B, and recessed at one side, leaving the nose *b*, which is opposed to the nose *a*, the two jaws extending at a right angle to the path of motion of the lever A when in operation.

The portion of one side of the lever A, near the place of connection with the jaw B, is formed with projections or fulcra D, which are of different lengths, or stair-shaped, as shown in Fig. 2.

The upper end of the jaw B has a shoulder, *c*, against which the lever A abuts, and prevents overturning of said lever in the wrong direction, and the upper end of the lever is pointed or sharpened, as at *d*, for digging or

cutting purposes, said shoulder *c* and point *d* not being essentials.

The operation is as follows: The jaws B C are separated, so that by a sliding movement the head of the spike to be extracted may enter the recesses of said jaws, and the noses *a b* extend under the head, ready to grasp the shank of the spike, the implement being so disposed in an upright position that the fulcra are over the bearing places or object, which in the present case is shown as a railroad-rail. The lever A is then lowered, and when the shortest fulcrum D reaches the tread of the rail the jaws are raised and tightened against the spike, and the greatest leverage may then be exerted, the powerful effect of which is to start the spike. When this is accomplished the longer fulcrum D reaches and bears upon the rail, and thus the lever takes, as it were, a fresh hold, and one of lifting ability, capable of raising the started spike entirely clear of its bed or place of location, the spike being then easily separated from the jaws, and the device in condition for further service.

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

1. The lever A, in combination with the jaws B C, the jaw B being pivoted to the lever A and the jaw C pivoted to the jaw B, substantially as and for the purpose set forth.

2. The lever A, having differential fulcra D, in combination with jaw B, hinged to said lever, and jaw C, hinged to jaw B, substantially as set forth.

ROBERT HAWKEY.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. GRANT.