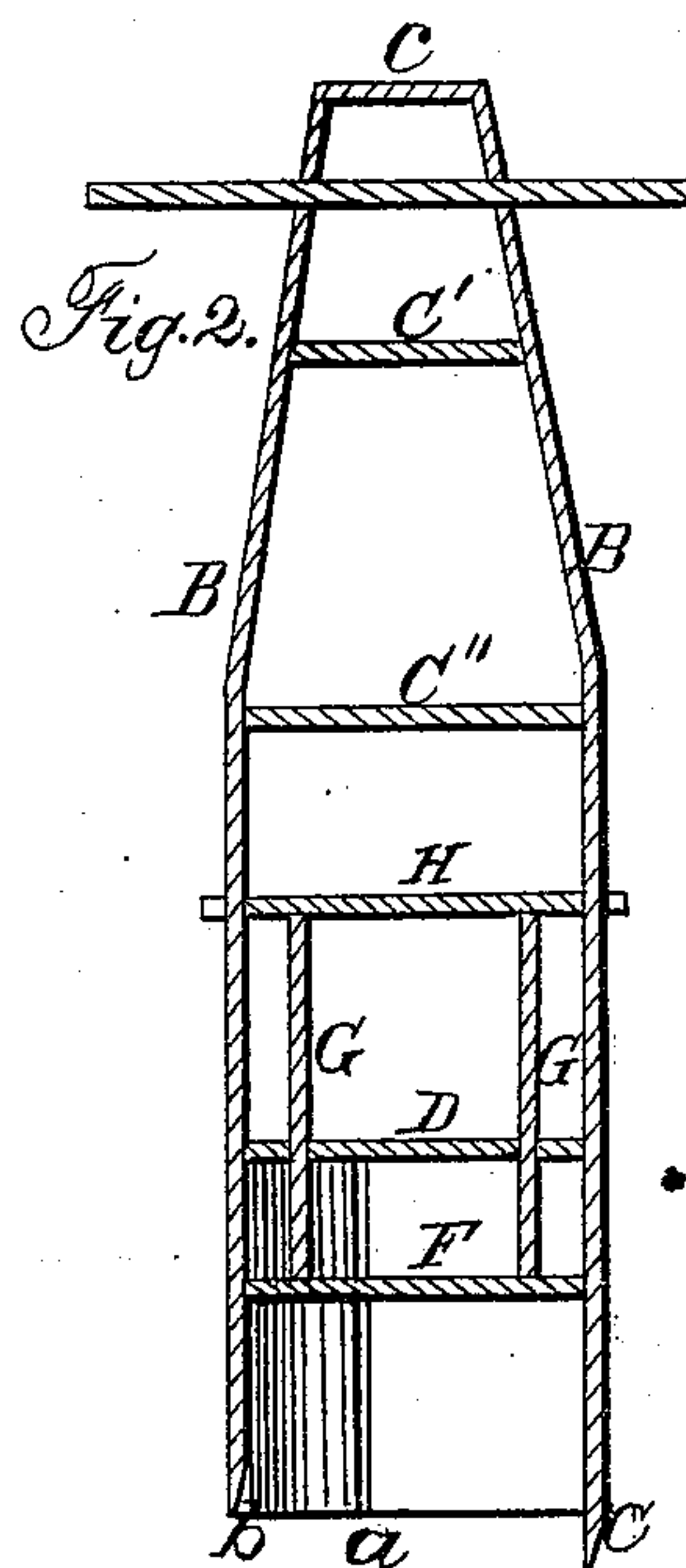
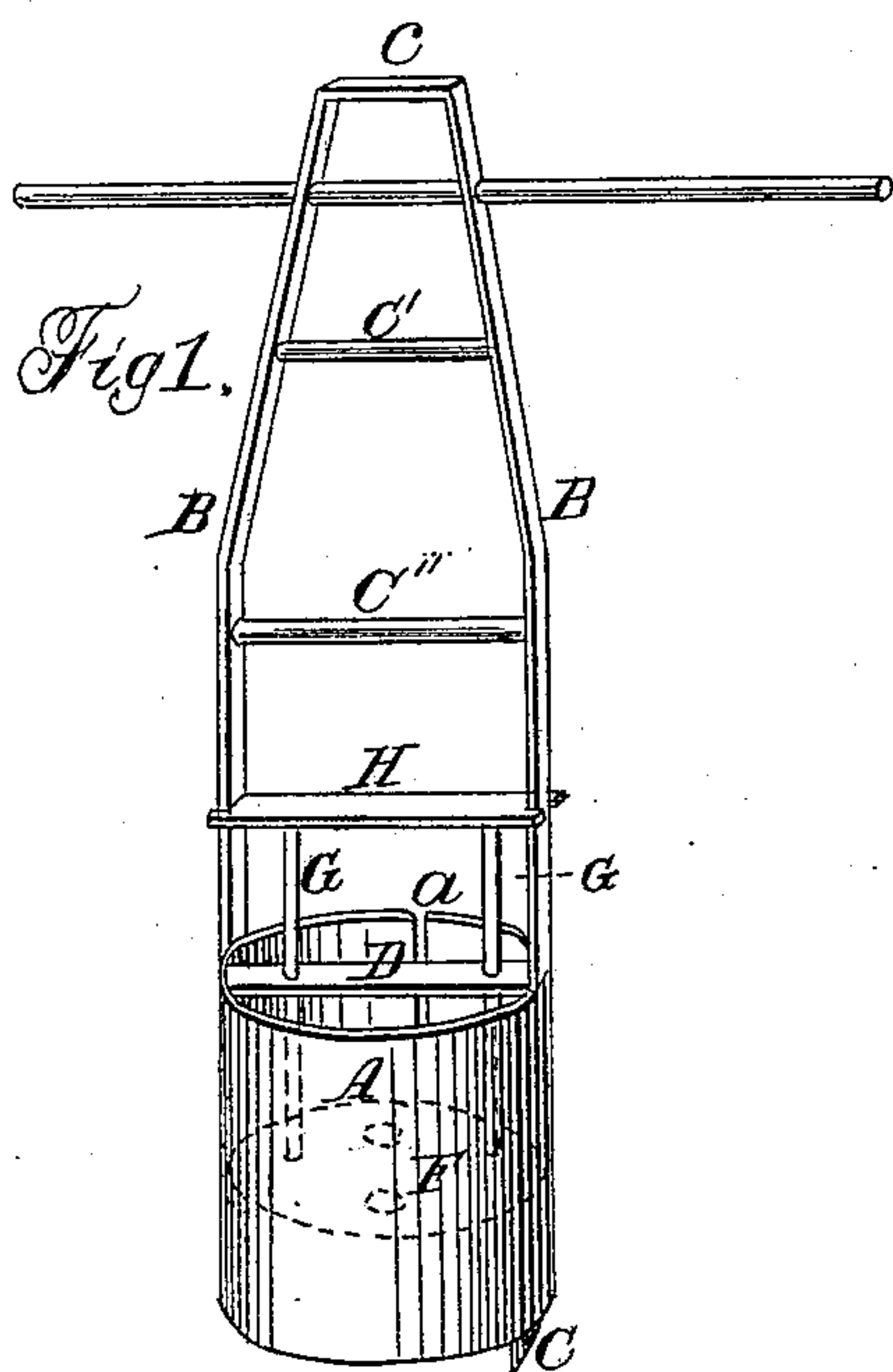


W. I. HALE.
Post-Hole Borer.

No. 76,752.

Patented April 14, 1868.



Witnesses

Chas F Clausen
R Mason

Inventor.

W. I. Hale

By D. P. Holloway & Co
Attys

United States Patent Office.

W. I. HALE, OF ASHLEY, ILLINOIS, ASSIGNOR TO HIMSELF AND W. M. LOGAN, OF SAME PLACE.

Letters Patent No. 76,752, dated April 14, 1868.

IMPROVED POST-HOLE BORING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, W. I. HALE, of Ashley, in the county of Washington, and State of Illinois, have invented a new and useful Improvement in Machines for Boring Holes for Fence-Posts, Telegraph-Poles, &c.; and I do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view.

Figure 2 is a vertical section.

Like letters refer to like parts.

A represents the body of the auger. This is made cylindrical in form, of thin metal, steel being preferred. The diameter is equal to the size of the hole to be bored, and the height equal to the breadth. The two edges of this cylinder meet, as at *a*, but they are not united, so that a pressure upon the inside will expand them. The lower edge is made sharp, that is, it is bevelled from the inner side, so that the earth which enters it shall be retained by and lifted up with it. This bevel edge is shown at *b*, in fig. 2. For the purpose of cutting through obstructions, as small roots or indurated clay, I form, upon two sides of this cutting-edge, sharp spurs or blades, one of which is shown at *c*.

B represents the handle, which is composed of two branches, which are firmly attached to opposite sides of the body A at the top, and joined by a cross-bar, C. This handle is supported by other cross-bars, *c' c''*, which give it additional strength, and at the top the two branches are united in like manner, as shown at D. For the purpose of giving additional facility in using the auger, I introduce, near the top, a rod, E, by which the auger can be rotated.

F represents a follower or plunger, which consists of a plate or disk, which fills the diameter of the body A, and is kept in place by the guides G G and cross-head H, which latter works up and down upon the handle B. The disk F is perforated at the centre, to admit the passage of the air in the upward and downward movement of the plunger.

In using this auger, the edge *b* is placed upon the ground, at the place where the hole is to be bored, and by placing the foot upon the cross-bar C, and slightly rotating the auger, it is pressed into the ground to the depth of a foot or more; then, by gradually raising the instrument, the enclosed earth is lifted, and thus leaving a hole to the depth to which the auger has penetrated. The office of the follower or plunger is to push the raised earth out of the body of the auger, by placing the foot upon the cross-head H. The auger is then again introduced, and forced down still deeper into the hole, and then raised as before, and discharged of its contents; and this is repeated till the hole has reached the desired depth.

What I claim as my invention, and desire to secure by Letters Patent, is—

The body A, spurs *c*, plunger F, guides G, and cross-head H, when constructed, arranged, and combined as and for the purpose specified.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses

W. I. HALE.

Witnesses:

A. H. BROWN,

HENRY RUDOFF.