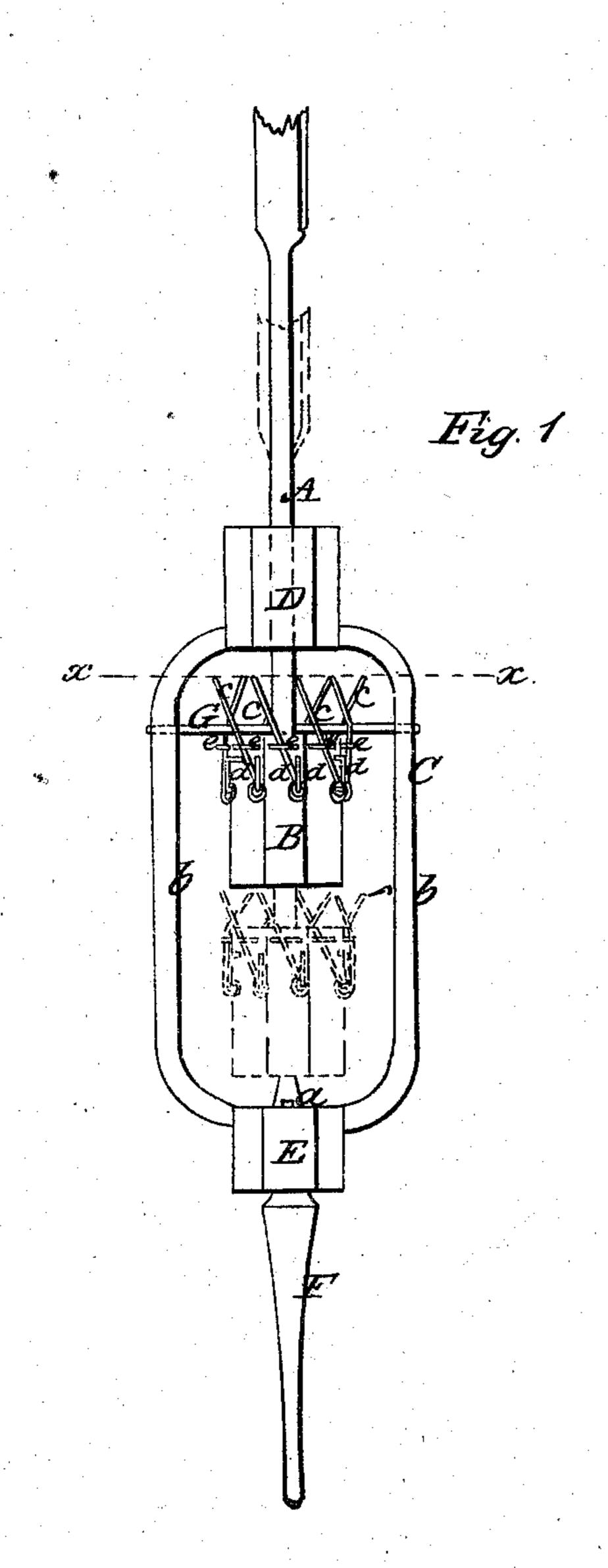
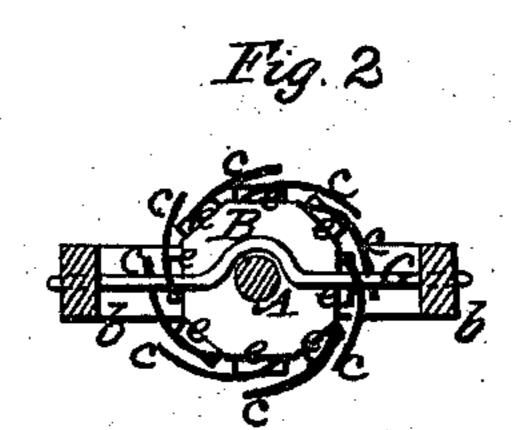
## C. N. WHITE. BORING IMPLEMENT.

No. 12,706.

Patented Apr. 10, 1855.





## UNITED STATES PATENT OFFICE.

C. N. WHITE, OF CONCORD, NORTH CAROLINA.

## IMPLEMENT FOR BORING THE EARTH.

Specification of Letters Patent No. 12,706, dated April 10, 1855.

To all whom it may concern:

Be it known that I, C. N. White, of Concord, in the county of Cabarras and State of North Carolina, have invented a new and Improved Drill or Boring Implement for Boring in the Earth; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side view of my improved implement. Fig. 2 is a horizontal section of do (x) (x) Fig. 1, showing the plane of

section.

Similar letters of reference indicate cor-

responding parts in the two figures.

This invention relates to a new and improved drill or boring implement for boring in the earth for mining and other like pur20 poses, and consists in the combination of a revolving frame and weight with inclined movable rods attached to it as will be hereafter fully shown and described, whereby the drill is rotated a certain distance and made to strike or act upon a fresh place at each stroke.

To enable others skilled in the art to fully understand and construct my invention, I

will proceed to describe it.

30 A Fig. 1, represents a rod or staff having

a weight B, secured to its lower end.

C is a frame which may be constructed of wrought iron. This frame has at its upper part a collar D, through which the 35 rod or staff A passes, the rod or staff working or fitting loosely in the collar D. At the lower end of the frame C there is a hub E in which a drill F is secured, the shank of the drill passing through the hub and 40 being secured by a key (a) in the upper part of said hub. The frame C it will be seen is formed of two curved or bowed pieces (b) (b) the ends of which are connected to opposite sides of the collar D, and 45 hub E, the weight B, being between the pieces (b) (b). To the upper part of the weight B, there are attached small rods (c)

the lower ends of the rods being bent in the

form of eyes and fittings on staples (d) on the weight and each rod passes through a 50 guide (e) on the weight the guides causing the rods to be in inclined positions to the left of a vertical line as clearly shown in Fig. 1, by preventing them from passing a vertical line in the opposite direction. The 55 guides also sustain the rods at the proper angle.

 $\overline{G}$  is a horizontal rod, the ends of which are secured to the curved or bowed pieces (b) (b) of the frame as shown in Figs. 1 60

and 2.

An up and down motion is given the rod or staff A in any proper manner and the weight B, as the rod or staff falls, strikes upon the shank of the drill and 65 forces it into the earth, see red lines Fig. 1. When the rod or staff is raised the upper ends of two of the rods (c) act against the horizontal rod G and turn or rotate the frame C and consequently the drill F and as 70 the rods (c) are allowed to move backward a certain distance in consequence of being connected to the staples (d) by the eyes at their lower ends they free themselves from the rod G as the weight again descends. 75 Thus it will be seen that the drill is rotated a certain distance at each stroke of the rod or staff A. Any form of drill may be used, and any length to correspond to the required depth of hole or excavation to be 80 made, it being understood that the frame C and weight D are always above the surface of the ground.

Having thus described my invention, what I claim as new and desire to secure by Let- 85

ters Patent, is,

of the drill passing through the hub and being secured by a key (a) in the upper part of said hub. The frame C it will be seen is formed of two curved or bowed pieces (b) (b) the ends of which are connected to opposite sides of the collar D, and

C. N. WHITE.

Witnesses:

R. C. COOKE, A. J. YORK.