

(No Model.)

W. STEPHENSON.

GROUND AUGER.

No. 260,798.

Patented July 11, 1882.

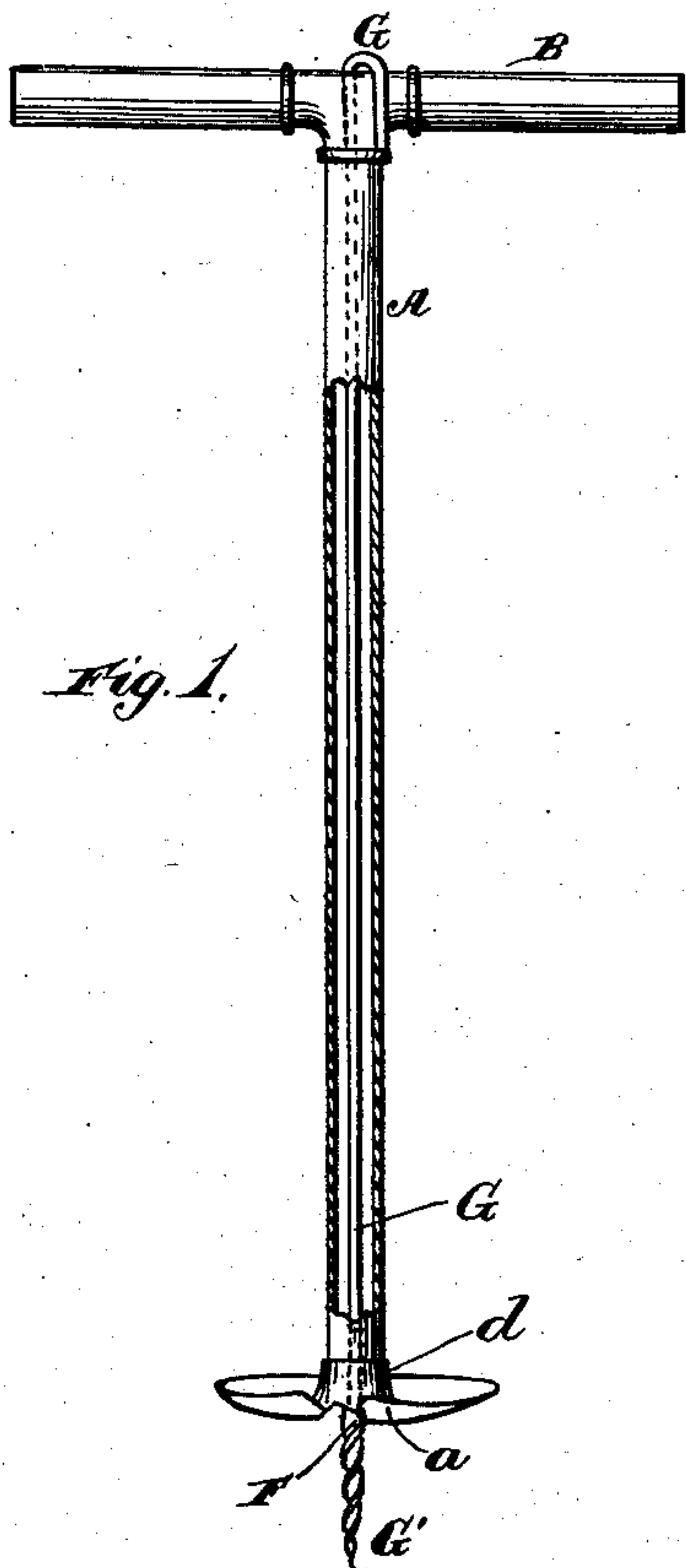


Fig. 1.

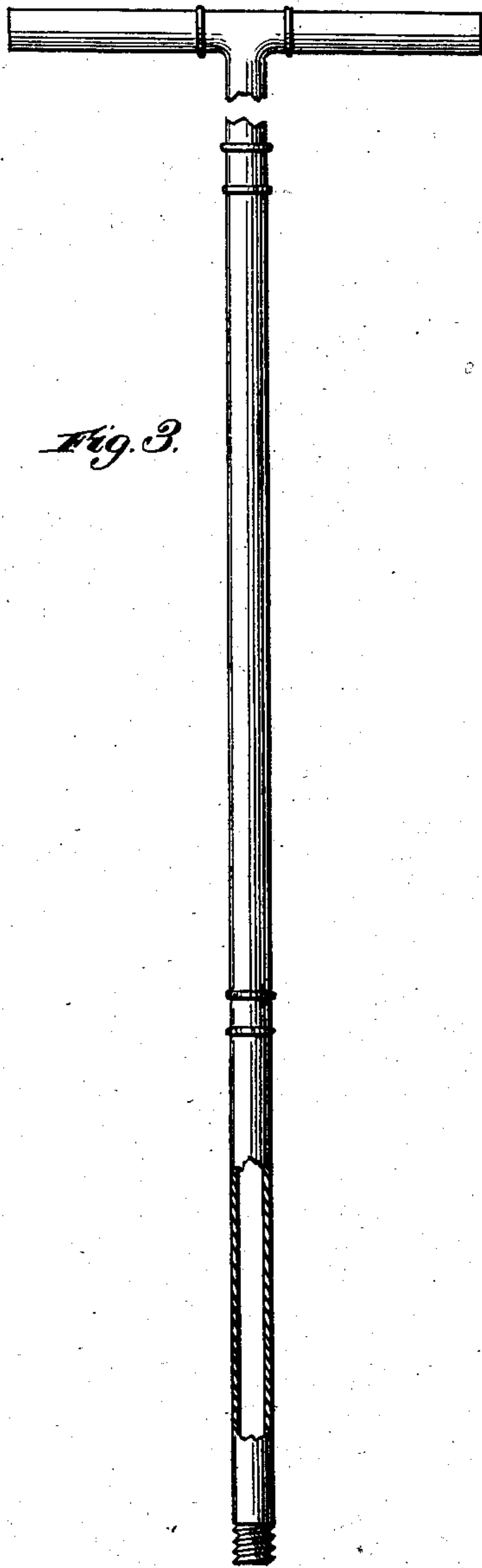


Fig. 3.

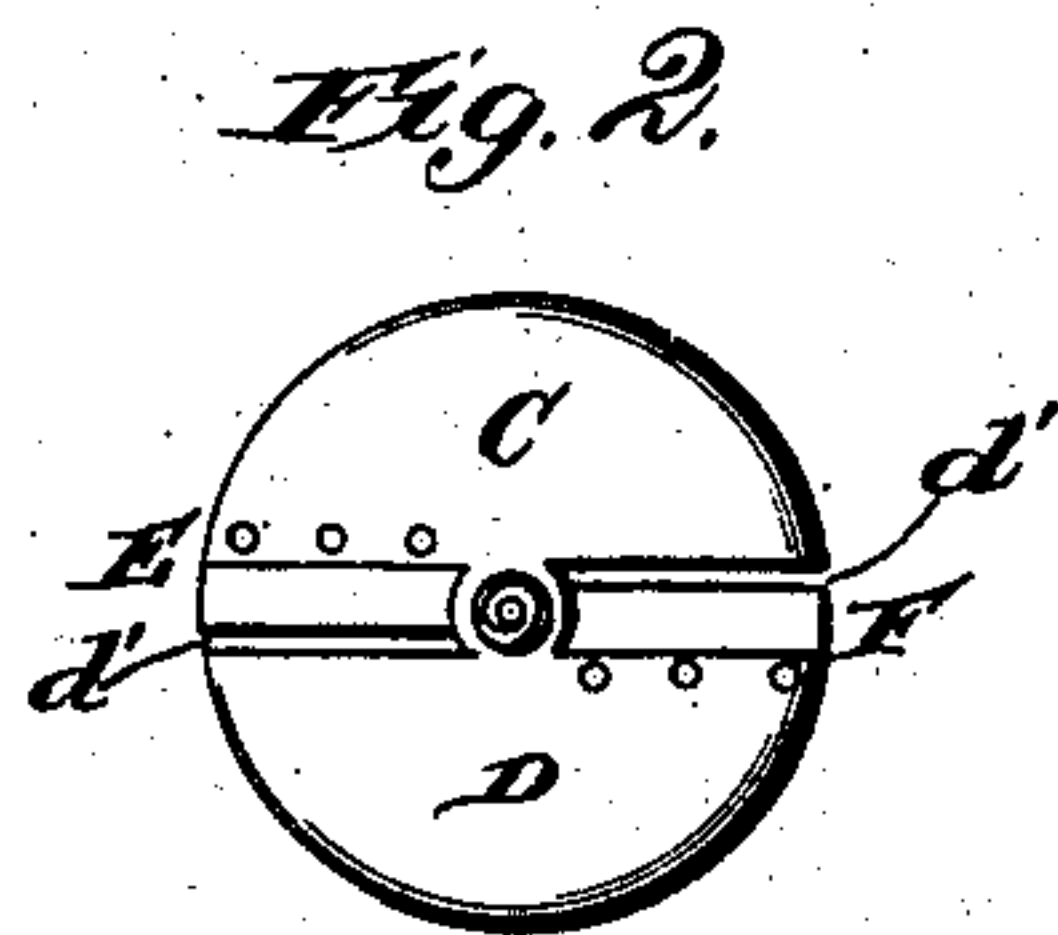


Fig. 2.

Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM STEPHENSON, OF JORDAN, ONTARIO, CANADA.

GROUND-AUGER.

SPECIFICATION forming part of Letters Patent No. 260,798, dated July 11, 1882,

Application filed July 26, 1881. (No model.) Patented in Canada March 12, 1881, No. 12,494.

To all whom it may concern:

Be it known that I, WILLIAM STEPHENSON, of Jordan, in the county of Lincoln, in the Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Ground-Augers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same.

10 The object of my invention is to improve certain details of construction in earth-augers; and to such end it consists in the features of construction and combination hereinafter fully described, and specifically indicated in the claim.

15 By reference to the drawings forming part of this specification it will be seen that Figure 1 represents an elevation of the auger. Fig. 2 is a plan view of the under side of the device employed in connection with the device shown in Fig. 3. Fig. 3 shows sections of gas-piping, which are screwed into the disk for well-boring.

20 A is the tube, of three-quarter-inch gas-pipe, with cross-handle B of same material. C D indicate the two halves of a malleable-iron disk, that is formed with a central hub, *d*, and with the two radial slots *d'*. This hub will in practice be interiorly screw-threaded and screwed onto the lower end of the tube A. This disk is provided with the steel bits E F, which are securely riveted to the same and made sharp on the cutting-edge. They are also turned

up on the outside with a sharp edge, *a*. G is the central rod, passing through the hollow tube A and projecting through the bottom, terminating in a screw-point, *G'*, of any desired pitch for soft or hard ground. The upper part of the said rod projects from the said handle at the top, and is bent over, as shown, to hold it rigid when boring. By this arrangement any desired number of sections of gas-pipe can be employed, the rod having the auger or screw-point *G'* at its lower end being of course adapted in length to the length of pipe, and hence for different lengths of tubes rods of different lengths can be used.

Having thus described my invention, what I claim is—

As an improvement in earth-augers, the combination, with the tubular stock A and cross-handle B, of the radially-slotted disk C D, provided with bits, and having a central hub receiving the lower end of the stock, and the rod G, terminating at its lower end in the auger *G'*, and extending up through both the tubular stock and the cross-handle, and exteriorly connected with the latter, all substantially in the manner and for the purpose described.

Dated at St. Catharines, Ontario, Canada, this 20th day of July, A. D. 1881.

WM. STEPHENSON.

In presence of—

E. C. GOODMAN,
L. H. COLLARD.