

(No Model.)

J. CARTER & W. RICHMOND.
EARTH AUGER.

No. 598,856.

Patented Feb. 8, 1898.

Fig. 1.

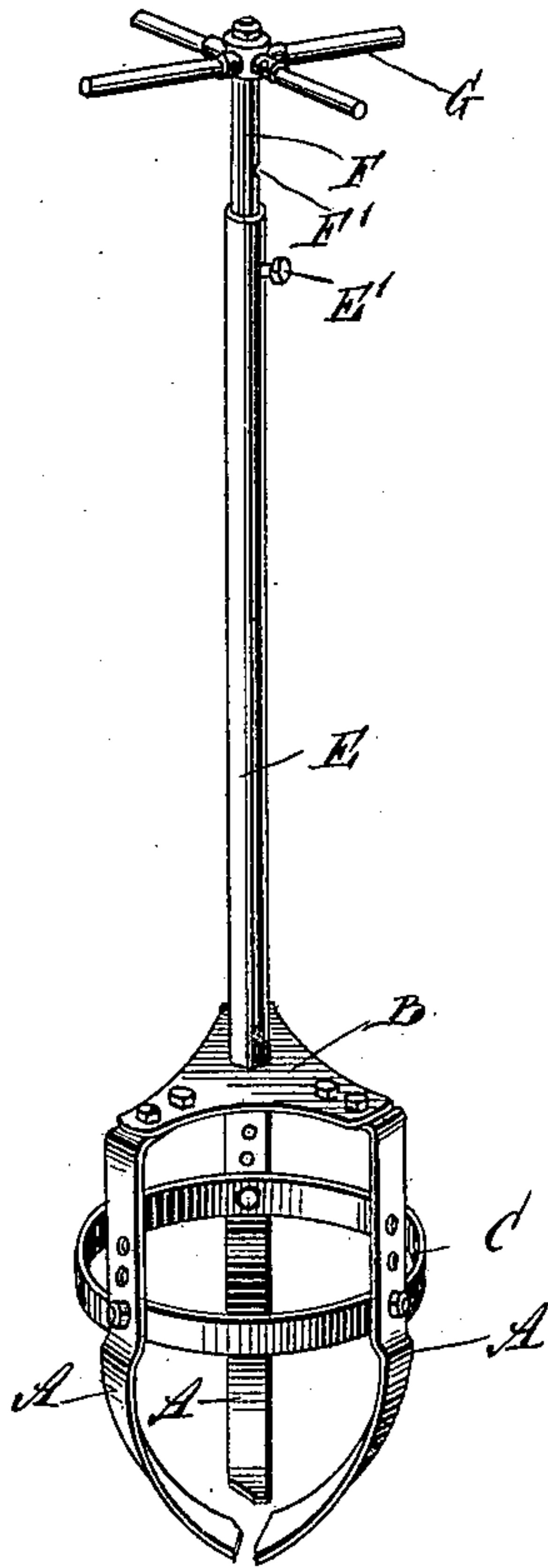
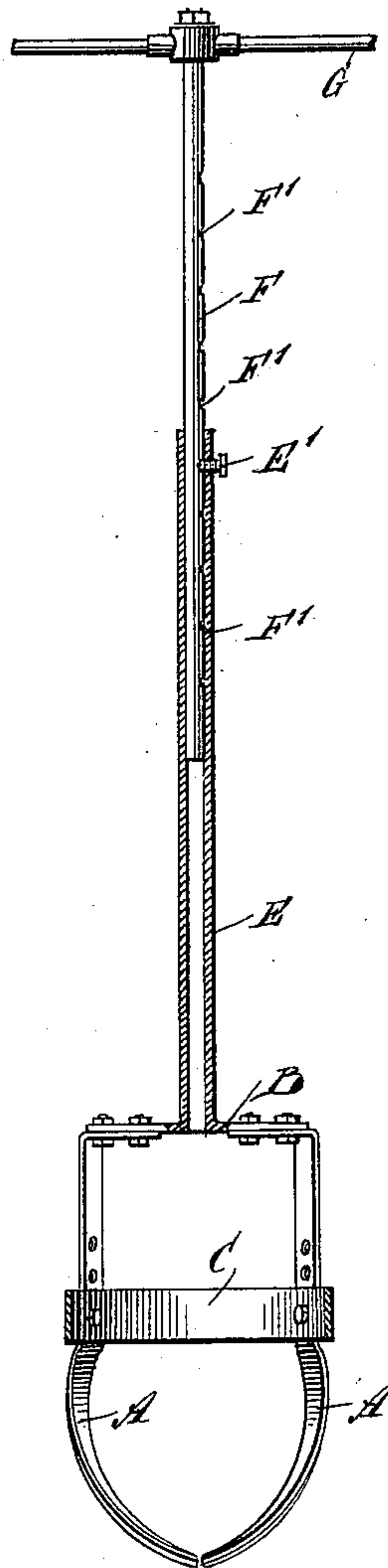


Fig. 2.



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EARTH-AUGER.

SPECIFICATION forming part of Letters Patent No. 598,856, dated February 8, 1898.

Application filed May 10, 1897. Serial No. 635,938. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH CARTER and WILLIAM RICHMOND, of Blyth, Province of Ontario, and Dominion of Canada, have invented a new and Improved Earth-Auger, of which the following is a full, clear, and exact description.

This invention is an earth-auger of that class in which a shank or handle is provided with a series of blades, the latter being engaged with the earth and rotated against the same by the turning of the handle or shank.

This specification is the disclosure of one form of our invention, while the claims define the actual scope of the conception.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective view of the invention, and Fig. 2 is a vertical section thereof.

The three blades A are respectively bolted at their upper ends to a spider-shaped head B. The blades A extend downward from the head and have their lower portions curved slightly outward and thence inward to describe approximately an inverted-dome-shaped figure. The blades A are provided with a regulating-band C, located just above the curved lower portions thereof. The band C is adjustably secured to the blades by means of bolts passing through openings in the blades. The band may be raised or lowered on the blades, so as to regulate the stiffness of the lower or curved portions of the blades A. These lower or curved portions of the blades are arranged to engage the earth and to cut the same, so as to throw the loose earth into the space inclosed by the blades and ring and permit the loose earth to be drawn. The lower portions of the blades A are given a slight twist, as shown in the drawings, so that their edges will be properly presented to the earth as the auger is turned.

Fixed centrally on the head B and arising perpendicularly therefrom is a tube E, provided with a set-screw E' at its upper portion. Sliding in the tube E is a rod F, having a series of notches F' formed therein. The

notches F' serve to be engaged by the set-screw E', so that the parts E and F may be held at any desired position relative to each other. The parts E and F compose the handle, which is therefore adjustable with reference to its length. A person using the auger may adjust the handle according to the depth of the hole and avoid the inconvenience of stooping during the operation of boring. The upper end of the rod F is provided with suitable handle-grasps G, which may be four in number, as shown, or which may be increased or diminished in number, as desired.

The auger is used in the usual manner—which is to say, by grasping the handle and turning the auger against the earth. The blades A will loosen portions of the earth and throw the same into the space inclosed by the blades. This loose earth may now be withdrawn and the operation continued. The band C may, if desired, be increased in width, so as to adapt the instrument for use in connection with sandy soil, the widened band serving to assist in holding the loose earth within the auger. The means for adjustably connecting the parts E and F need not be thus specifically shown in the drawings. If desired, the set-screw and notches may be dispensed with and substituted by any other device.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The herein-described earth-auger provided with a longitudinally-adjustable handle having a spider-shaped head attached thereto, blades attached to said head, each blade being formed with a plurality of bolt-holes vertically arranged, a ring or band attached to said blades, and bolts passing through an opening in each blade and through said band, whereby the latter is made vertically adjustable on the blades to regulate the stiffness of the lower ends thereof, substantially as and for the purpose set forth.

2. The herein-described earth-auger provided with a spider-shaped head, blades A attached at their upper ends to said head and depending therefrom, said blades having

their lower portions curved outwardly and
thence inwardly and being provided above
said curved portions with a plurality of ver-
tically-arranged bolt-holes, and a band C hav-
5 ing bolts passed therethrough and through
one of the openings in each blade, whereby
said band is rendered vertically adjustable
on said blades to regulate the stiffness of the

latter, substantially as and for the purpose
set forth.

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Witnesses:

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