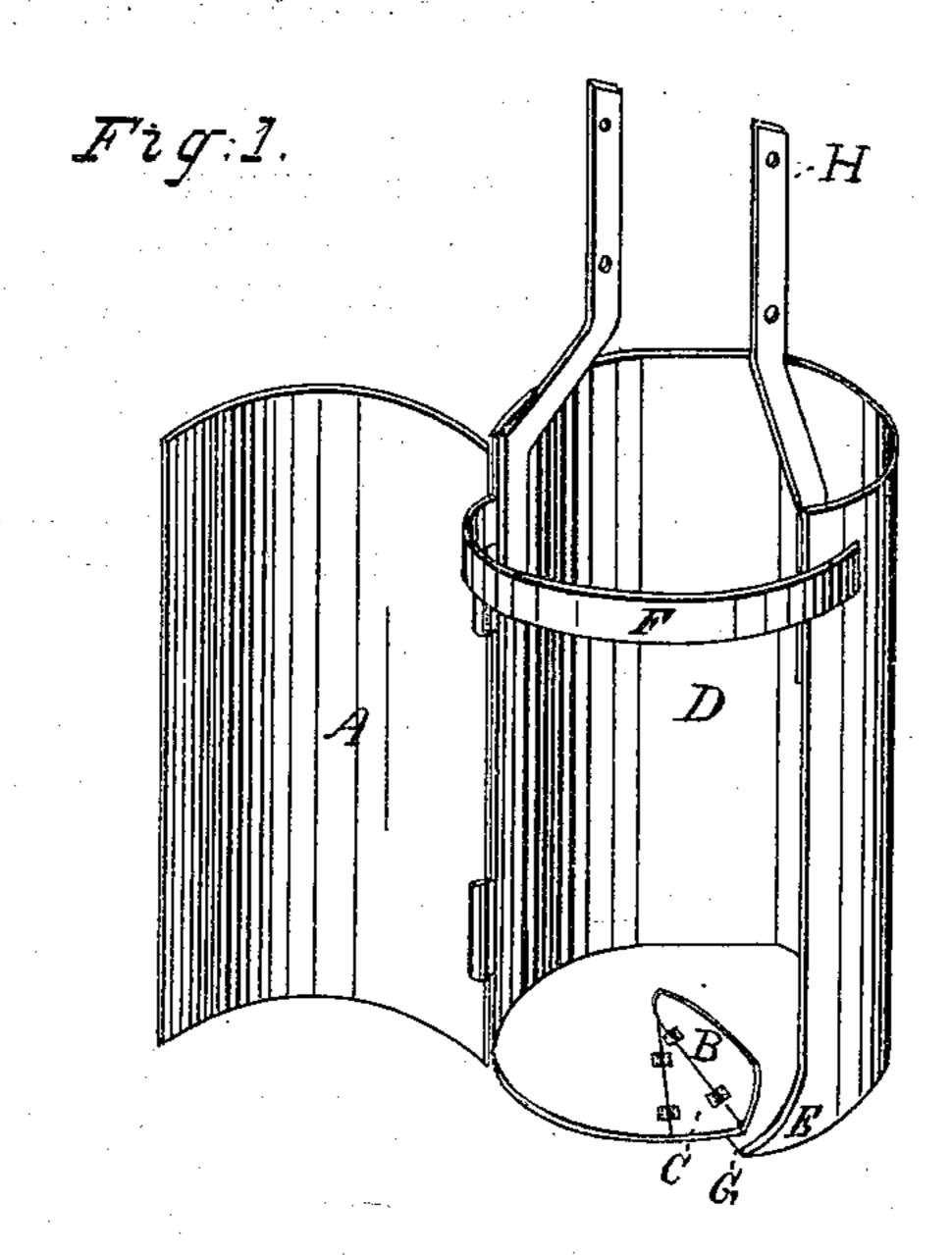
## W. W. JILZ.

## Improvement in Earth-Boring Augers.

No. 129,283.

Patented July 16, 1872.



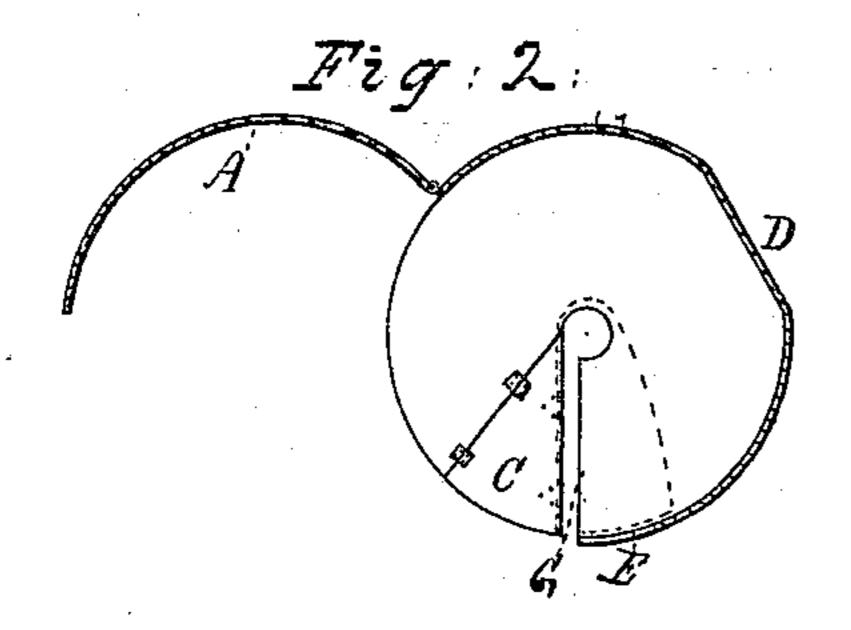
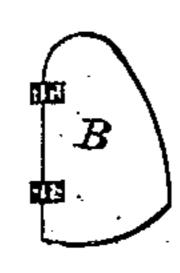


Fig. 3



Wilmesses Lyndon M. Courtek Inventor William Wheeten Like

## UNITED STATES PATENT OFFICE.

WILLIAM WHEETEN JILZ, OF ST. JOSEPH, MISSOURI.

## IMPROVEMENT IN EARTH-BORING AUGERS.

Specification forming part of Letters Patent No. 129,283, dated July 16, 1872.

Specification describing certain Improvements in Augers for Boring Wells or Post-Holes, invented by William Wheeten Jilz, of St. Joseph, in the county of Buchanan and the State of Missouri.

My invention has relation to earth-boring augers; and consists in constructing such augers with the flattened cylinders, cutters, doors, bands, and valves, hereinafter particularly described and claimed.

Figure 1 of the drawing represents a perspective view of my auger. Fig. 2 is a cross-section; and Fig. 3 is a detail thereof.

The letter K of the drawing represents the cylinder of which my auger is constructed. A is a hinged door. D is the rear side of the cylinder, flattened, as shown in Fig. 2. F is a holding-band, designed to hold the upper end of the cylinder in place when the door A is removed, and also to aid in holding the contents of the cylinder while the same is being withdrawn from the earth. H represents the arms by which the auger is operated. B represents a valve in the bottom of the auger, and hinged to the door C. C represents a door, hinged to the bottom-plate in the manner shown. This door C, operating in conjunction with the valve

B, enables the operator to bore among and remove bowlders of greater size than those which are ordinarily passed into an auger-cylinder through the usual openings therein, for when a bowlder of considerable size is encountered the valve C and door B fold backward and admit it into the cylinder by enlarging the entering space. E represents the lower end of the side wall, curved and sharpened and pointed to form a vertical cutting-edge; and G is the horizontal cutting-edge or bit of the auger. The flattened side D serves to admit air to the bottom of the auger, and the doors A and B are used only to hold the earth more securely within the auger when boring in sandy or muddy earth.

What I claim as my invention, and desire

to secure by Letters Patent, is-

The earth-auger herein described, constructed with cylinder K, flattened side D, cutters E and G, doors A and C, holding-band F, and valve B, substantially as specified.

WILLIAM WHEETEN JILZ.

Witnesses:

LYNDON W. COMSTOCK, ERNEST KARTHAUS.