

J. M. Cooper.

Earth Auger.

N^o 2,807.

Patented Oct. 7, 1842.

Fig. 2

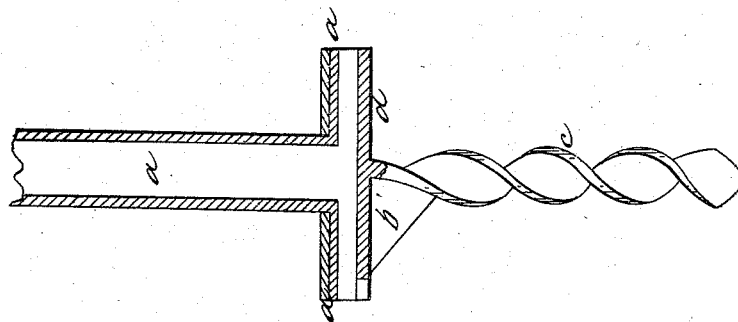
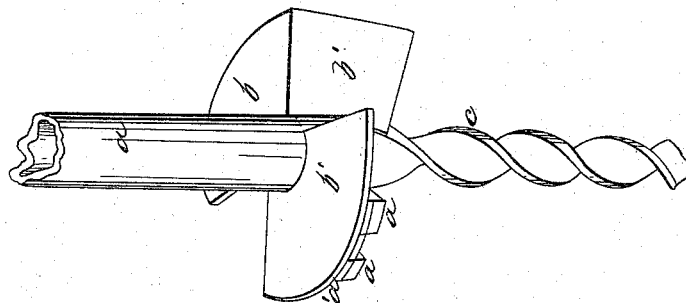


Fig. 1



UNITED STATES PATENT OFFICE.

JNO. M. COOPER, OF NEWBERN, ALABAMA.

AUGER FOR BORING EARTH.

Specification of Letters Patent No. 2,807, dated October 7, 1842.

To all whom it may concern:

Be it known that I, JOHN M. COOPER, of Newbern, county of Greene, and State of Alabama, have invented a new and Improved Auger for Boring Earth in Sinking Wells, &c., and that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—

Figure 1, is a perspective view; Fig. 2, a section longitudinally through the center.

On the lower end of a tube (*a*), of any required length, are two projections (*a' a'*), on each side, at right angles to the tube, to which I affix two plates (*b*) horizontally, occupying a little more than a quarter of a circle on each side; one end of each of these plates is bent down and assumes a spiral form as shown at (*b'*), the lower edges being sharpened so as to cut; a center worm (*c*) formed similar to a common auger has a cross piece (*d*) at its upper end, with a groove in the upper side running its whole length, the extremities being notched out the width of the groove at the bottom; this cross piece is firmly riveted to the projection (*a' a'*) with the worm directly under the center of the tube; the groove being connected there-

with; it will thus be obvious, that whatever the amount of the load is above the plates (*b*), there will be a constant communication preserved between the superincumbent air and the under side of the plates (*b*) thus relieving the auger of the pressure of the air in drawing it out, if the tube is filled with water, the chalk, clay &c. which is being bored will always be kept wet at the point where the cutters are acting. The tube (*a*) is connected with the boring rods in any of the usual methods; by this arrangement a greater load may be raised, than in any other way by the same power, and the auger be made to cut much more easily.

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

The combination and arrangement of the hollow tube (*a*) and grooved cross piece (*d*) with the boring apparatus so as to keep up a communication between the superincumbent air, or water, in the shaft, and the underside of the plate (*b*), all as herein described.

JOHN M. COOPER.

Witnesses:

TH. R. BORDEN,
ALFRED SEXTON,