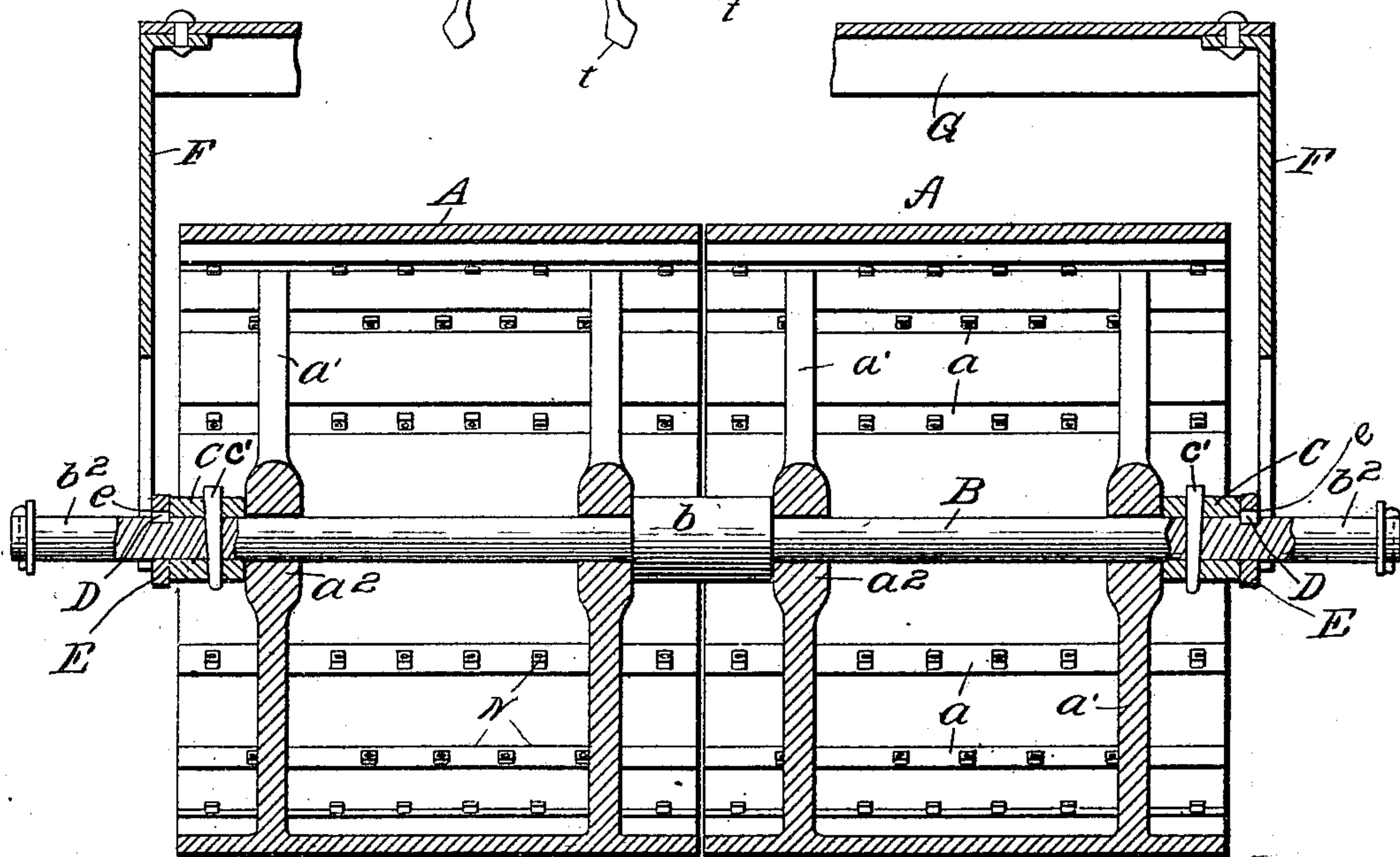
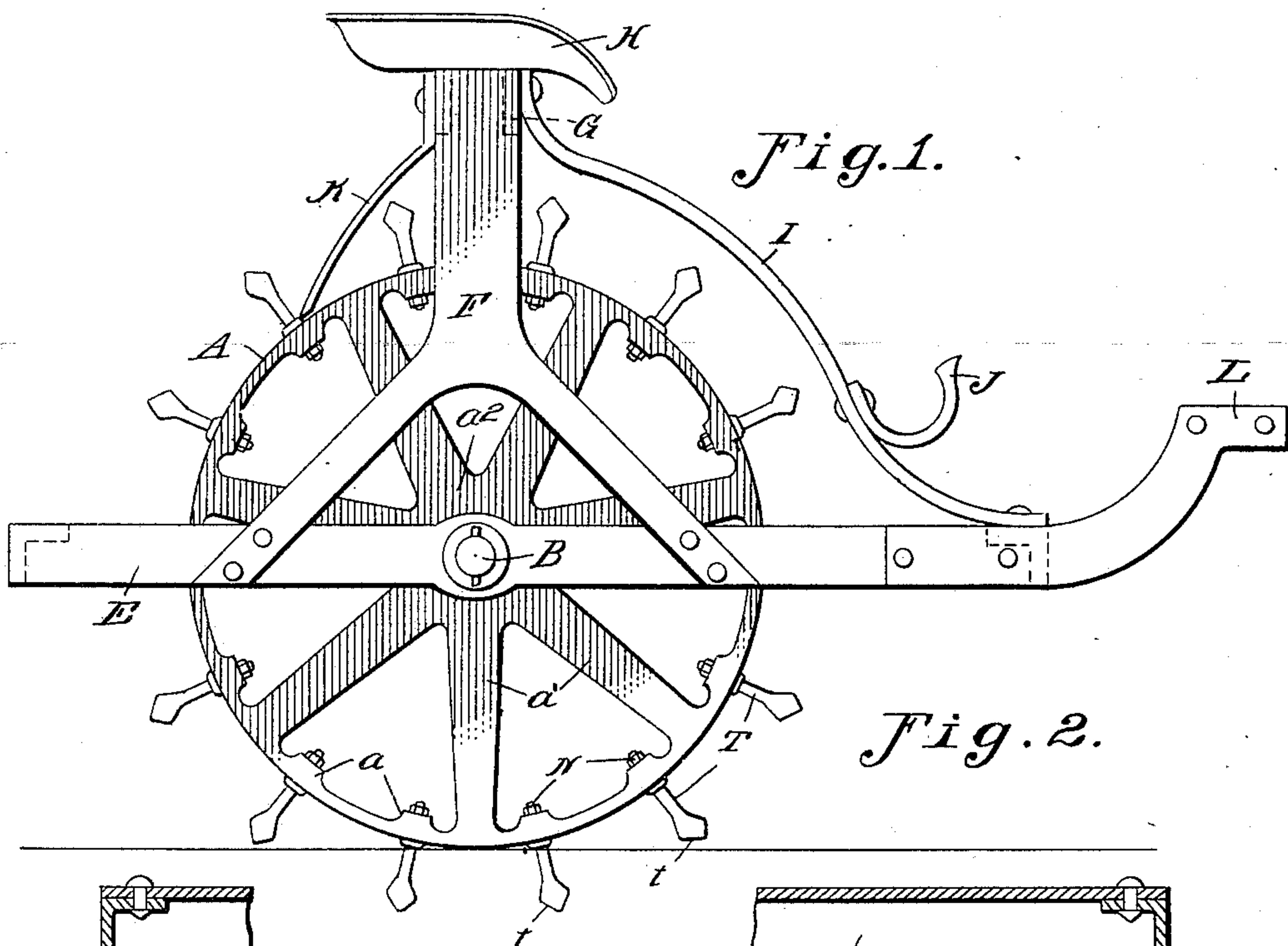


No. 840,788.

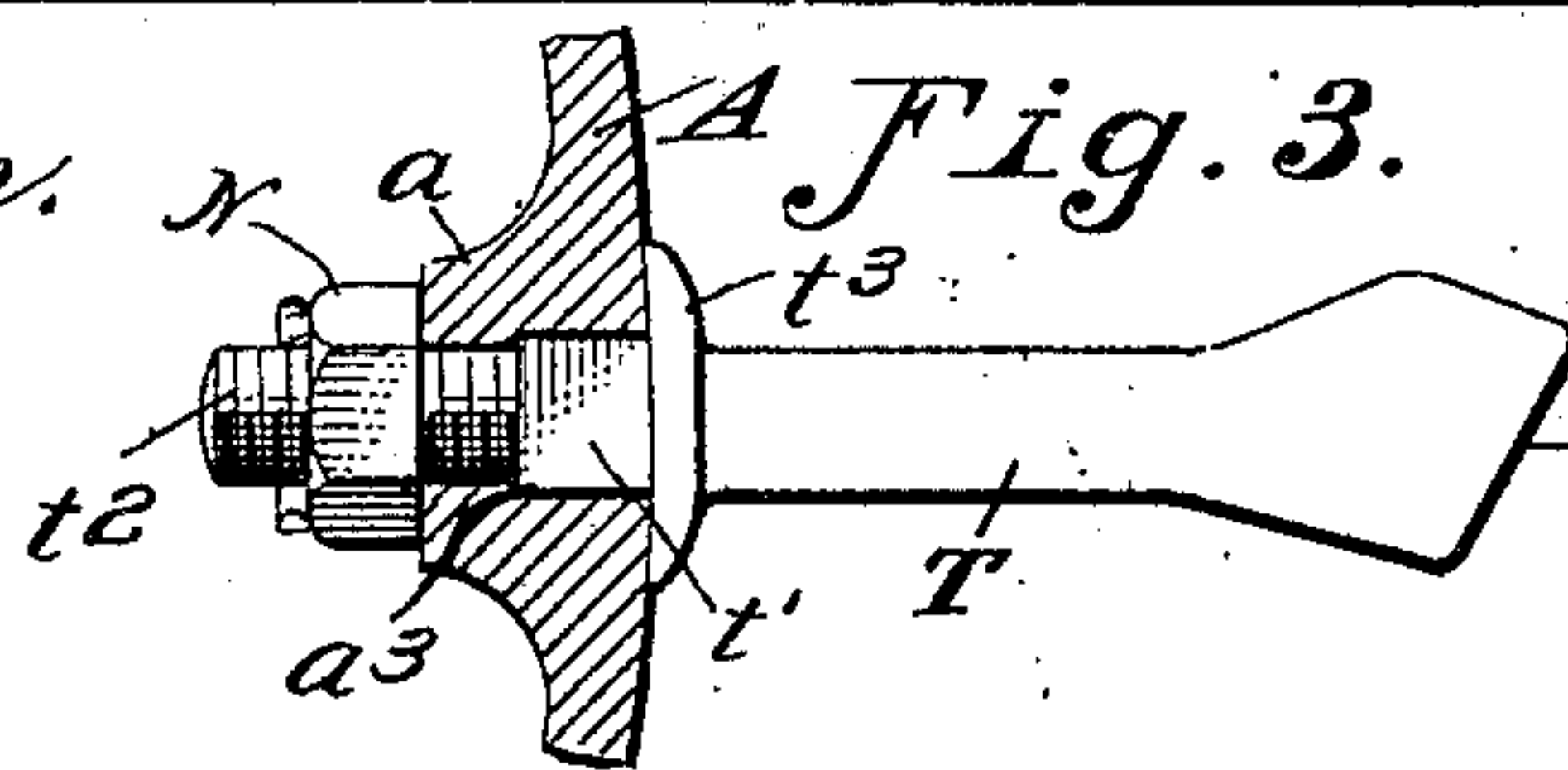
PATENTED JAN. 8, 1907.

L. G. MEADE.
CUTTING HARROW.
APPLICATION FILED OCT. 18, 1906.



WITNESSES:

F. C. Gibson.
J. R. Smith



INVENTOR,

L. G. Meade,
By Davis & Davis,
Attorneys.

UNITED STATES PATENT OFFICE.

LEMUEL G. MEADE, OF PAINT ROCK, ALABAMA.

CUTTING-HARROW.

No. 840,788.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed October 18, 1906. Serial No. 339,552.

To all whom it may concern:

Be it known that I, LEMUEL G. MEADE, a citizen of the United States of America, and a resident of Paint Rock, county of Jackson, State of Alabama, have invented certain new and useful Improvements in Cutting-Harrows, of which the following is a full and clear specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my apparatus; Fig. 2, a vertical transverse section, and Fig. 3 a detail section showing one of the knives or teeth.

The object of this invention is to provide a strong, durable, inexpensive, and efficient machine for rolling and pulverizing soil; and to the accomplishment of this object and such others as may hereinafter appear the invention consists of the parts and combination of parts hereinafter fully described, and particularly pointed out in the appended claim, reference being had to the accompanying drawings, forming a part of this specification, in which the same reference characters designate like parts throughout the several views.

Referring to the drawings by reference characters, A A represent two hollow cylindrical rollers supported upon an axle B by means of suitable spokes a' and hubs a^2 , the inner hub of each roller abutting against a collar or enlargement b , affixed rigidly to the shaft midway its ends. On the interior of each roller is formed a series of longitudinal parallel ribs a , through each of which a series of holes a^3 is formed for the reception of the shanks of removable pulverizing-teeth T. Each tooth consists of a shank having a threaded part t^2 and a squared part t' , the inner end or threaded part being adapted to receive a nut N, which bears against the squared face of the rib a , and the squared part being adapted to engage the walls of the recess a^3 , and thereby prevent the tooth turning. The shank of the tooth is provided with a flange t^3 , which abuts against the face of the roller. The working end of the tooth is flattened and provided with a cutting edge, which stands obliquely to the surface of the roller. It will thus be observed that the teeth are rigidly but removably fastened to

the roller and may therefore be removed whenever it is desired to simply roll the earth without the clod cutting and pulverizing teeth.

The frame of the machine consists of the side bars E, to which are connected suitable cross-bars and tongue-supporting arms L. A pair of bifurcated standards F are rigidly mounted on the side bars and are connected by top cross-bar G, upon which is mounted the driver's seat H. A suitable brace I, carrying a foot-rest J, may be employed, and a suitable scraper K may also be employed. The hubs of the cylinders are shown as being mounted directly on the axle; but it is understood, of course, that in the larger sizes of machines I may employ suitable ball-bearings in the hubs for the purpose of reducing friction.

The ends b^2 of the axle pass through and project beyond the side bars of the frame sufficiently far to form spindles for temporary transporting-wheels. Each roller is held in place against the central boss B by means of a collar C, which is fastened rigidly to the shaft by means of a key c' , which passes through the collar and the axle. To lock the frame and the axle and collar together to prevent the axle turning, I employ a key D, which fits in a key-seat in the axle and in notch e in the frame.

It will be observed that owing to the position and shape of the cutting-blades of the teeth the clods will be cut up as the machine proceeds, and the rollers will then pulverize them, and such clods as are not pulverized will be pressed into the earth, where they will soon disintegrate.

It will be observed also that by using a pair of rollers and mounting them to rotate independently the machine is adapted to be turned in its own length.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a soil pulverizer and roller, a frame, an axle rigidly keyed in the frame and having its ends projecting beyond the side bars of the frame to form spindles for temporary wheels, a central rigid boss on the axle, a pair of toothed land-rollers journaled on the

axle one at each side of said boss, the inner ends of the hubs of the rollers abutting against said boss, and a pair of collars C keyed to the axle, one between each side bar 5 of the frame and the adjacent hub of the adjacent roller.

In testimony whereof I hereunto affix my

signature, in the presence of two witnesses, this 9th day of October, 1906.

LEMUEL G. MEADE.

Witnesses:

THOMAS G. WILBOURN,
JHON. ED. MAPLES.