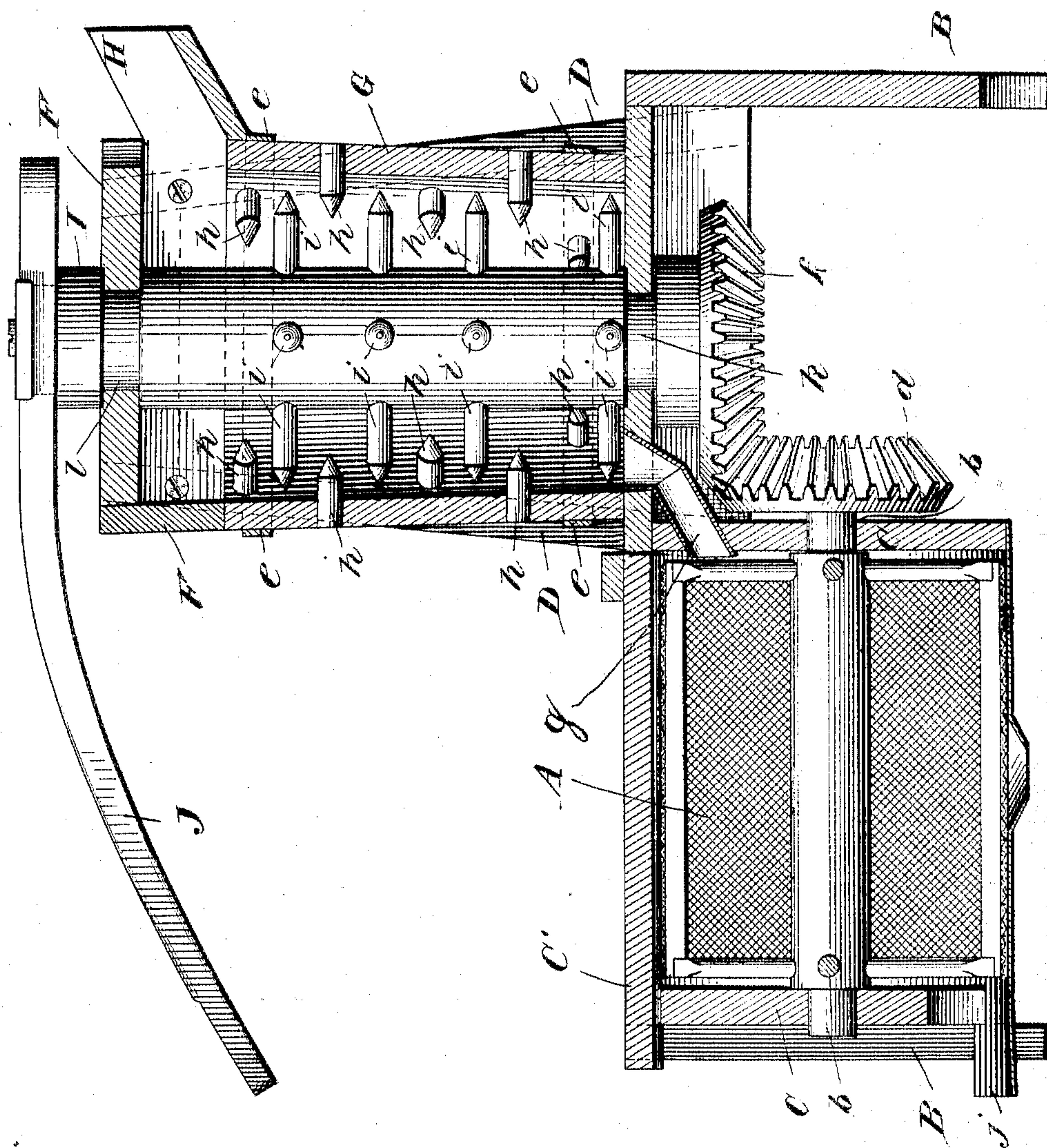


No. 777,228.

PATENTED DEC. 13, 1904.

D. UPTON.
BARNYARD MANURE PULVERIZER.
APPLICATION FILED DEC. 18, 1899.

NO MODEL.



Witnesses

E. W. Hart.
Ralph T. Worfield.

Inventor

Deccatur Upton.
by *Charles D. Poist & Co.*
his Attorneys.

UNITED STATES PATENT OFFICE.

DECATUR UPTON, OF NEAR UPTON, KENTUCKY.

BARNYARD MANURE-PULVERIZER.

SPECIFICATION forming part of Letters Patent No. 777,228, dated December 13, 1904.

Application filed December 18, 1899. Serial No. 740,817. (No model.)

To all whom it may concern:

Be it known that I, DECATUR UPTON, a citizen of the United States, residing near Upton, Larrue county, Kentucky, have invented a new and useful Barnyard Manure-Pulverizer, of which the following is a specification.

My invention relates to an improvement in manure-pulverizers, the object being to provide a machine of the character named which can be used by farmers for pulverizing manure, so that it can be drilled into the soil with the grain; and it consists in certain novel features of construction and combinations of parts, which will be more fully described hereinafter, and particularly pointed out in the claim.

The accompanying drawing is a vertical sectional view of my improved machine.

G represents a vertical cylinder mounted on the frame B C and held together, preferably, by hoops *e e*. This cylinder is provided with a plurality of inwardly-projecting horizontally-disposed teeth *h h*. At its upper end it is provided with a hopper H, into which the material to be treated is fed, and at its lower end it has a discharge-spout *g*. A vertical shaft I is journaled at *k* and *l* in the frame C and the top F, and it is provided with a plurality of outwardly-extending projections *i i* in the cylinder to break up and pulverize the material passing through the machine. The vertical shaft I has a lever J on its upper end, by means of which it is revolved by hand, horse, steam, or other power, as the case may be. On the lower end of shaft I a bevel-pinion *f* is secured.

A is a cylindrical rotary bolt or screen which turns through bevel-pinion *d* on bearings *b b* and into which the material is discharged from spout *g* and through the meshes of which the finely-pulverized manure discharges. A discharge *j* conducts off the stalks, sticks, or other refuse which are caught by the bolt or screen.

Braces D D hold the upper portion of the machine securely in place on the top C.

The bolt or screen is protected by a removable cover C', which fits into the frame C, and

by removing which access is had to the screen for the purpose of making any repairs necessary.

By the use of my improved machine the manure can be easily prepared in the barnyard or other convenient place for drilling into the soil with the grain to be sown. In this way an inexpensive machine is provided for the work.

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

In a manure-pulverizer, the combination with a suitable frame of a vertical cylindrical shaft and a horizontal screen-carrying shaft each journaled in the frame adjacent to each other, beveled gears on the adjacent ends of the shafts, the gears intermeshed to communicate motion from one shaft directly to the other, projecting pins mounted on the cylindrical shaft, a sweep or lever secured to the upper end of the vertical shaft, a vertically-disposed tapering casing or cylinder mounted upon the frame and inclosing the cylindrical shaft, the diameter of the upper end of the casing being greater than the diameter of the lower end thereof to form a constriction at the lower end of the casing, inwardly-projecting pins or teeth mounted in the casing and adapted to cooperate with the teeth on the vertical shaft, a feed-hopper leading to the upper end of the vertical casing, a spout discharging from the lower end of the casing, a cylindrical screen carried by the horizontal shaft into which the spout discharges, the frame provided with a discharge-opening beneath the screen for the pulverized material passing therethrough and also with an outlet located at one end of the screen and distant from the discharge-opening, for the evacuation of the unpulverized material.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DECATUR UPTON.

Witnesses:

DIXON WATKINS,
SAMUEL T. WYATT.