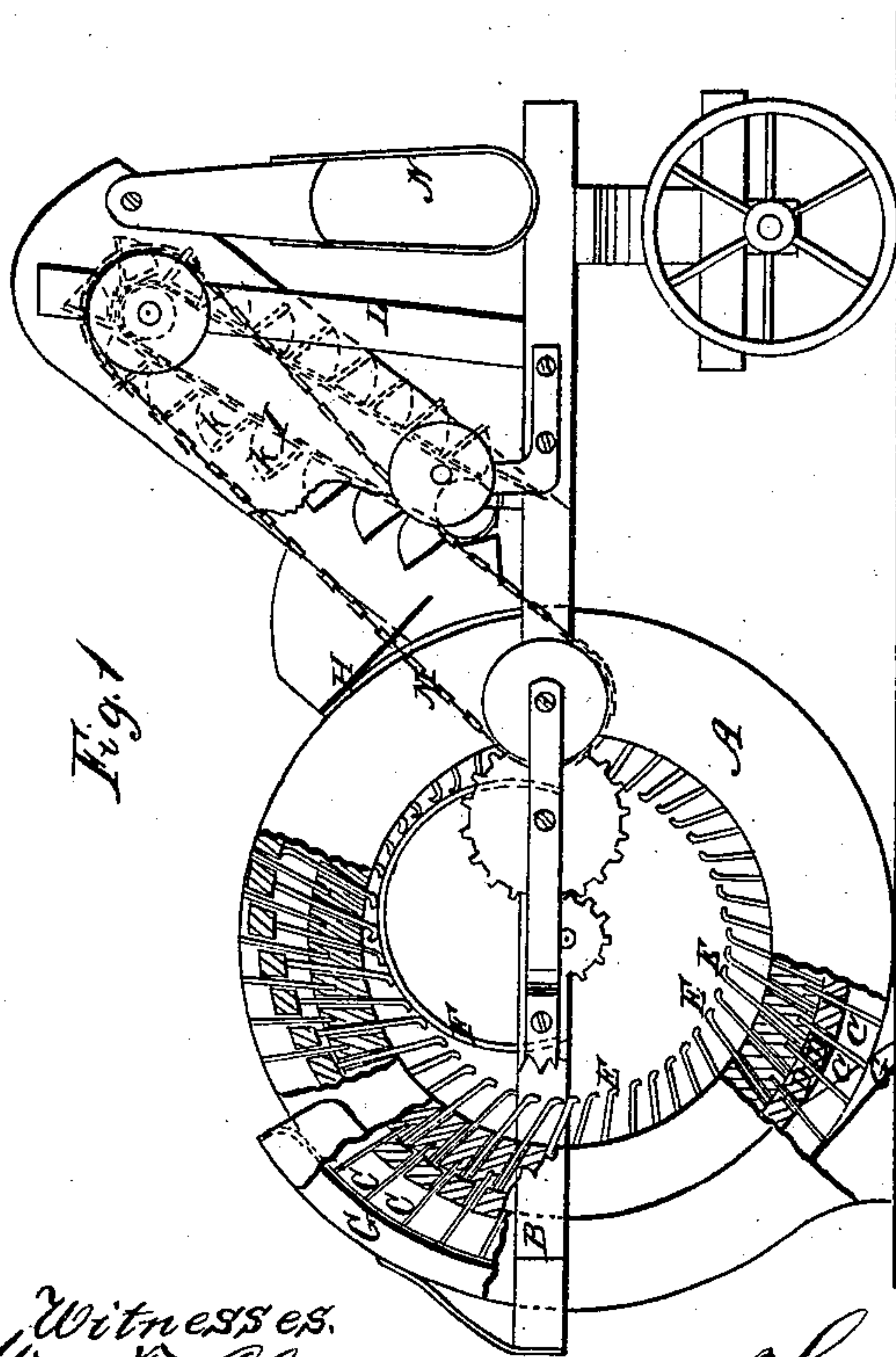
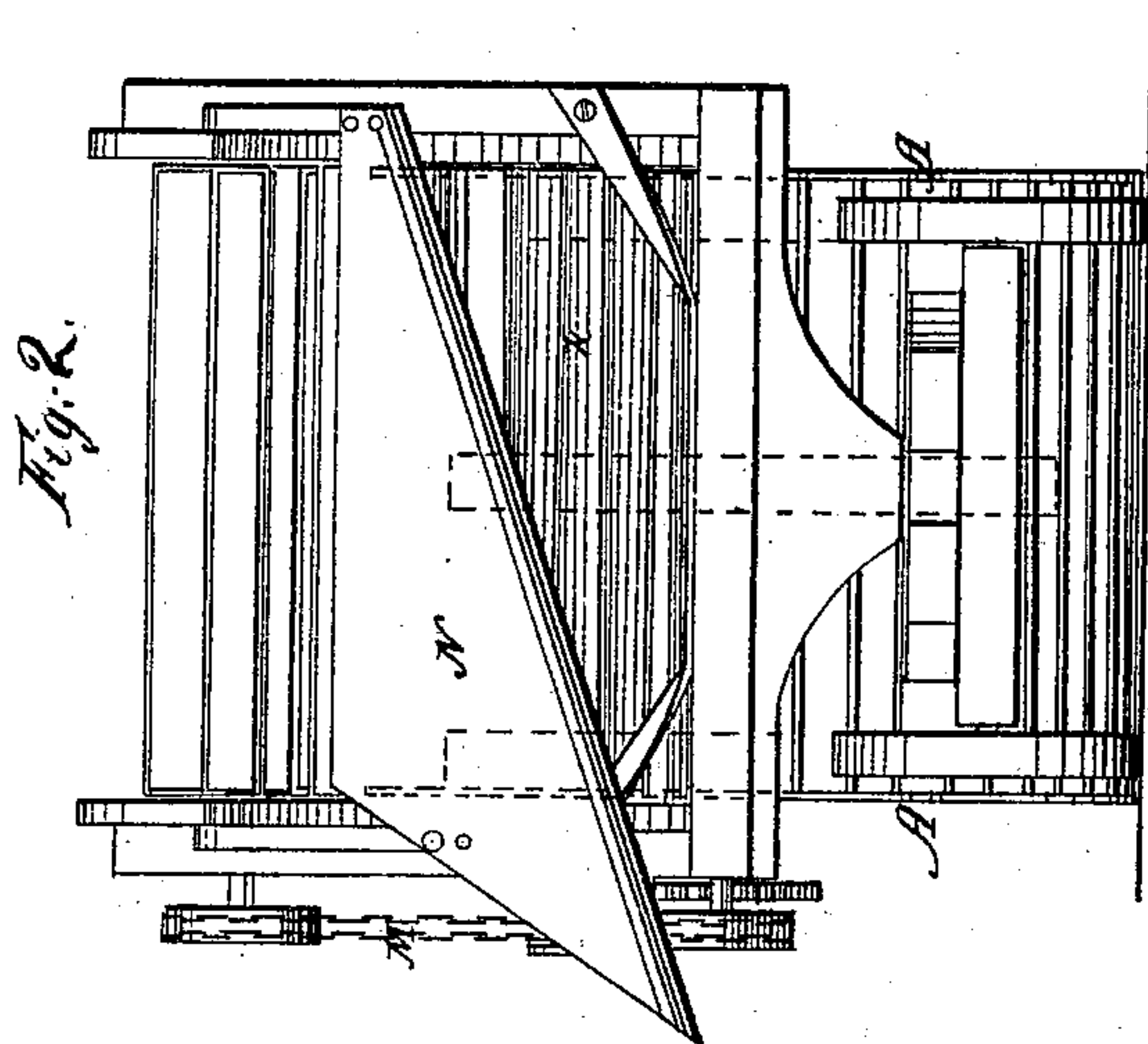


H. Bennett
Ditching Machine.

N^o 96,540.

Patented Nov. 9, 1869.



Witnesses.
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United States Patent Office.

HENRY BENETT, OF LINDEN, CALIFORNIA.

Letters Patent No. 96,540, dated November 9, 1869.

IMPROVED DITCHING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, HENRY BENETT, of Linden, in the county of San Joaquin, and State of California, have invented a new and improved Ditching-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of this invention is to provide a simple and efficient ditching-machine.

It consists of a large drum, having two end rims, united by steel or other bars, suitable for cutters, arranged parallel with the shaft, and pitched slightly out of the radial lines, between which are followers, which recede, and permit the cutters to settle into the earth, to fill the spaces between them, and are then forced out to discharge the earth after it has been carried up by the wheel against a scraper following in the rear, and swung as a guide to prevent the discharge, until the earth has been carried to the proper point to be delivered to an elevating and spouting-apparatus, which the invention also comprises, all as hereinafter more fully specified.

Figure 1 represents an elevation, partly broken, of my improved machine, and

Figure 2 represents a front view of the same.

Similar letters of reference indicate corresponding parts.

A represents a drum, composed of two or more circular rims, mounted on a shaft, supporting a frame, B, the said rims being united by the parallel blades C, of steel or other suitable substance, to serve as cutters, and pitched eccentrically to the centre of the said drum.

Between these plates are followers, D, capable of sliding out and in, and provided with stems, E, for action on the eccentric rims F, to throw the followers out for discharging the earth taken up.

G represents a scraper, suspended from the rear end of the frame, arranged to follow the wheel closely, and to serve as a guide to prevent the earth from discharging too soon.

H represents a chute, which receives the discharged earth, and conveys it to an elevator, consisting of an endless belt, I, and buckets, K, supported on posts, L,

at the front of the machine, and operated by a chain, M, deriving motion from the axis of the drum.

In front of the said elevator, a spout, N, is arranged, which takes the earth from the elevator and discharges it at one side of the machine.

The front of the frame is supported on an axle and wheels, O.

The drum rests on the ground, and is caused to revolve when power is applied at the front of the machine to draw it along the ground.

When so moving, the weight will force the rims, which are sharpened, and the blades C into the ground, driving the followers D upward, and filling the spaces between the blades with earth, which will be so packed as to adhere sufficiently together, with the assistance of the scraper and guide G, to cause the earth to be carried up around the wheel for discharge upon the chute H. The said discharge is effected by the elevation of the followers by the action of the stems thereof riding up the eccentric rims F.

This machine will dig ditches or trenches with vertical walls, discharging the earth therefrom upon the bank to one side, to any required depth, the said machine being drawn along the bottoms of the ditches as many times as may be required to accomplish the work, cutting each time an amount due to the capacity of the weight of the machine to sink the drum into the ground.

The front wheels may be placed sufficiently near together to permit them to run in the ditch.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

1. The spading-drum A, constructed substantially as specified, and provided with the followers D, and combined with the scraper and guide G, and the eccentric rings F, all substantially as described.

2. The combination, with the spading-drum, of the chute H, elevators I K, and spout N, substantially as specified.

3. The arrangement of the spading-drum, elevator-frame, and front axle and wheels, all substantially as specified.

Witnesses:

R. W. BRUSH,
JOHN WILSON.

HENRY BENETT.