

W. E. MERRIMAN.

Improvement in Stalk-Pullers.

No. 133,110.

Patented Nov. 19, 1872.

Fig. 1.

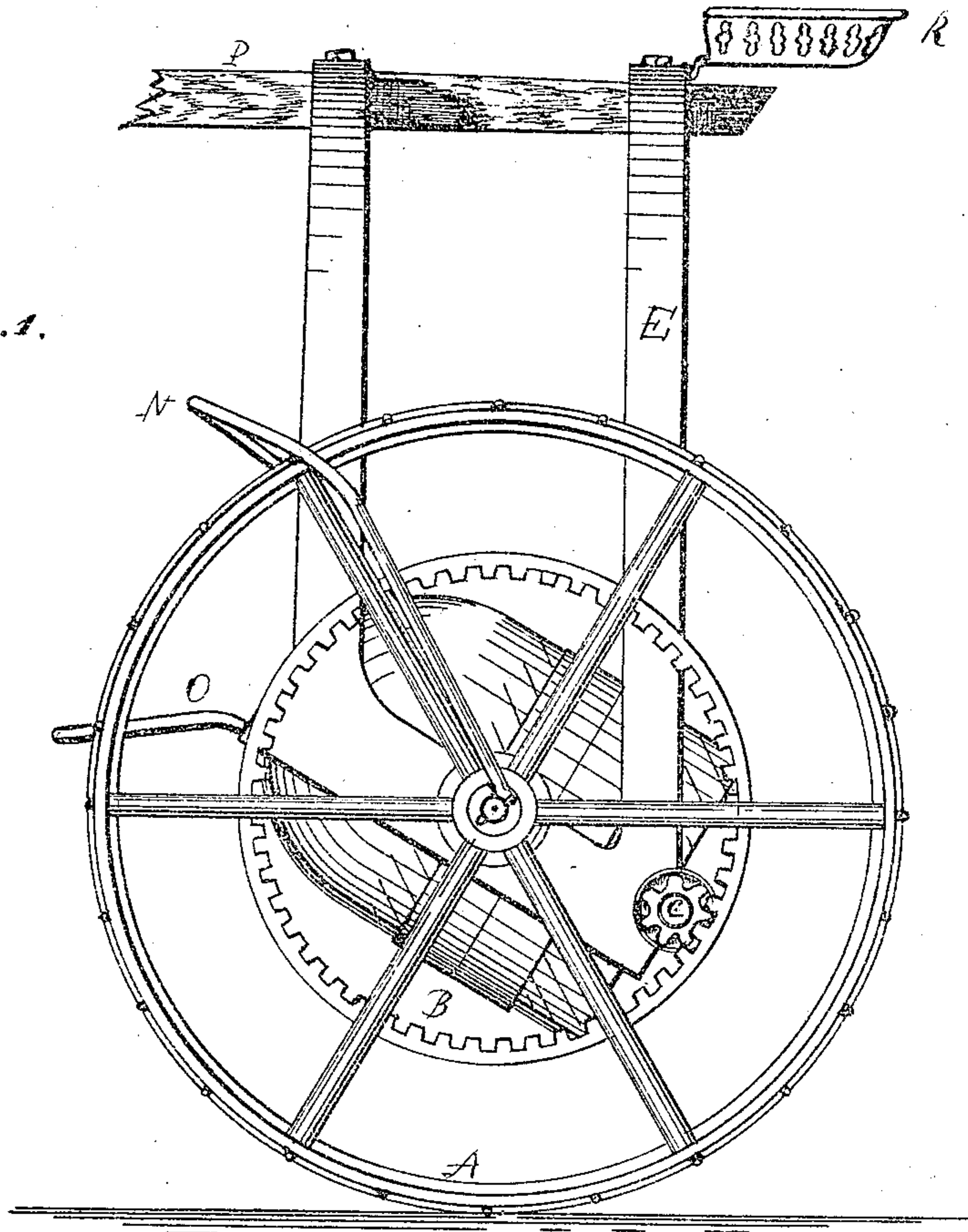


Fig. 2.

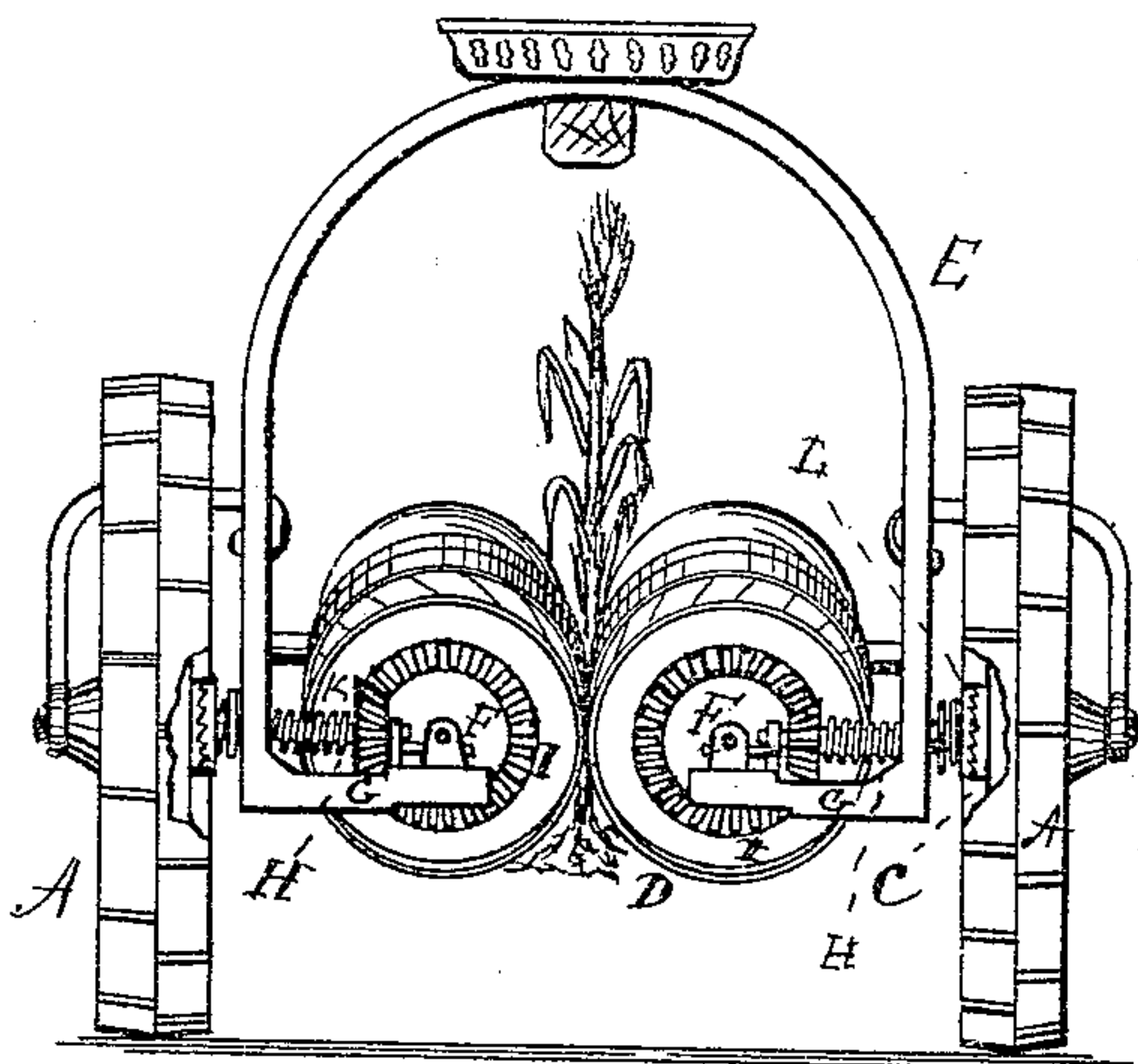
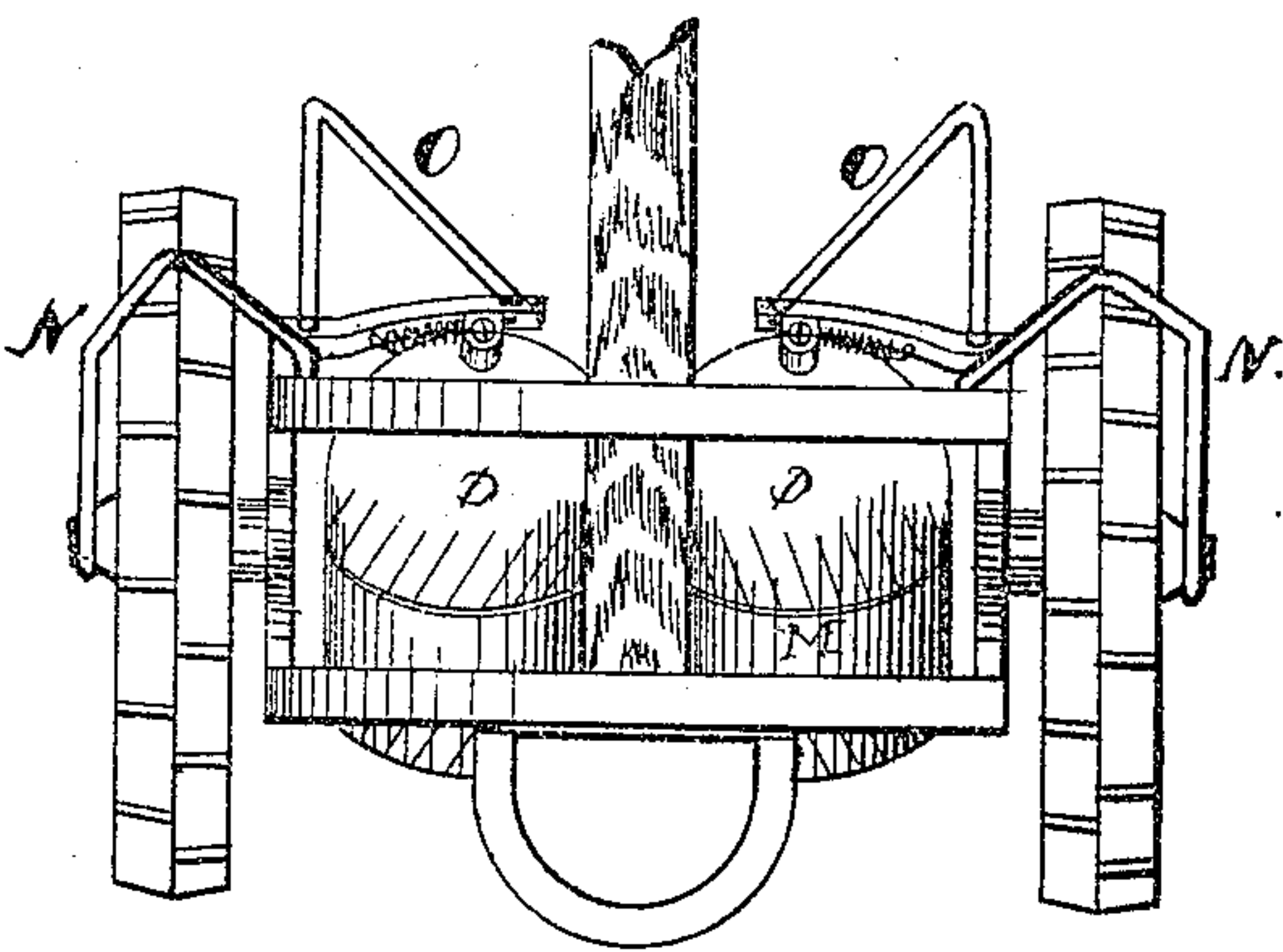


Fig. 3.



Inventor

Wells E. Merriman

Witnesses;
J. W. Wagner.

By Daniel Breed Atty.

UNITED STATES PATENT OFFICE.

WELLS E. MERRIMAN, OF AKRON, OHIO.

IMPROVEMENT IN STALK-PULLERS.

Specification forming part of Letters Patent No. 133,110, dated November 19, 1872.

To all whom it may concern:

Be it known that I, WELLS E. MERRIMAN, of Akron, in the county of Summit and State of Ohio, have invented certain Improvements in Stalk-Pullers, of which the following is a specification:

In the accompanying drawing, Figure 1 is a side view of my machine; Fig. 2 is a rear view of the same; and Fig. 3 is a top view.

My invention consists of a pair of inclined rollers arranged upon traveling-wheels, and provided with gear-wheels, operated by the traveling-wheels, for the purpose of seizing cotton-stalks or other stalks and pulling them up by the roots; and also in other devices and combinations connected therewith.

In the construction of my machine both of the traveling-wheels A are also driving-wheels, and provided with internal gear-wheels B, which engage with the pinions C for operating the rollers, yet to be described. The pulling-rollers D are supported on the arched axle E, and have adjustable bearings F, which slide in the arms G of the axle. The two rollers are gently pressed together by means of the coiled springs H. The rear ends of the roller are provided with gear-wheels I, which engage with the pinions K upon the same shaft with the pinions C, thus communicating motion from the driving-wheel. These pinions C are provided with a clutch or coupling, L, which is fixed to the axle of the pinion C, while the pinion itself is loosely attached to said axle. By means of this clutch or coupling the traveling-wheels always move the roller D when said wheels roll forward; but when the wheels turn backward the pinion C turns on its axle without moving the rollers. The surface of

the rollers D may be corrugated or made rough, as seen in Fig. 1, or covered with rubber bands M, in order to seize the stalks and pull them up by the roots. These rollers D are set obliquely in order to seize and pull stalks and yet allow the pulled roots to pass under the rollers without clogging the machine. A brace, N, serves the threefold purpose of bracing the axle, holding and guarding the wheel, and for an attachment for the whiffletree. A pair of guides, O, direct the stalks between the rollers. The pole or tongue P is made adjustable by means of a block, which may be placed under either arch of the axle in order to give the pole and rollers the proper pitch or inclination. The seat R is at the rear of the pole and above the arch of the axle.

It may be mentioned that the axle may have three or more arches, if desired.

Having described my invention, I claim—

1. The adjustable rollers D D, when set obliquely or with their forward ends much higher than their rear ends, substantially as and for the purposes set forth.

2. The gear-wheels I, in combination with the rollers D, pinions G, clutch L, pinions C, and gear-wheels B, for operating said rollers, substantially as set forth.

3. The arched axle or frame, bearing both the ground-wheels and the oblique rollers D D, substantially as set forth.

4. The guide-rods O, in combination with the oblique rollers D, substantially as set forth.

WELLS E. MERRIMAN.

Witnesses:

DANIEL BREED,
WM. G. HENDERSON.