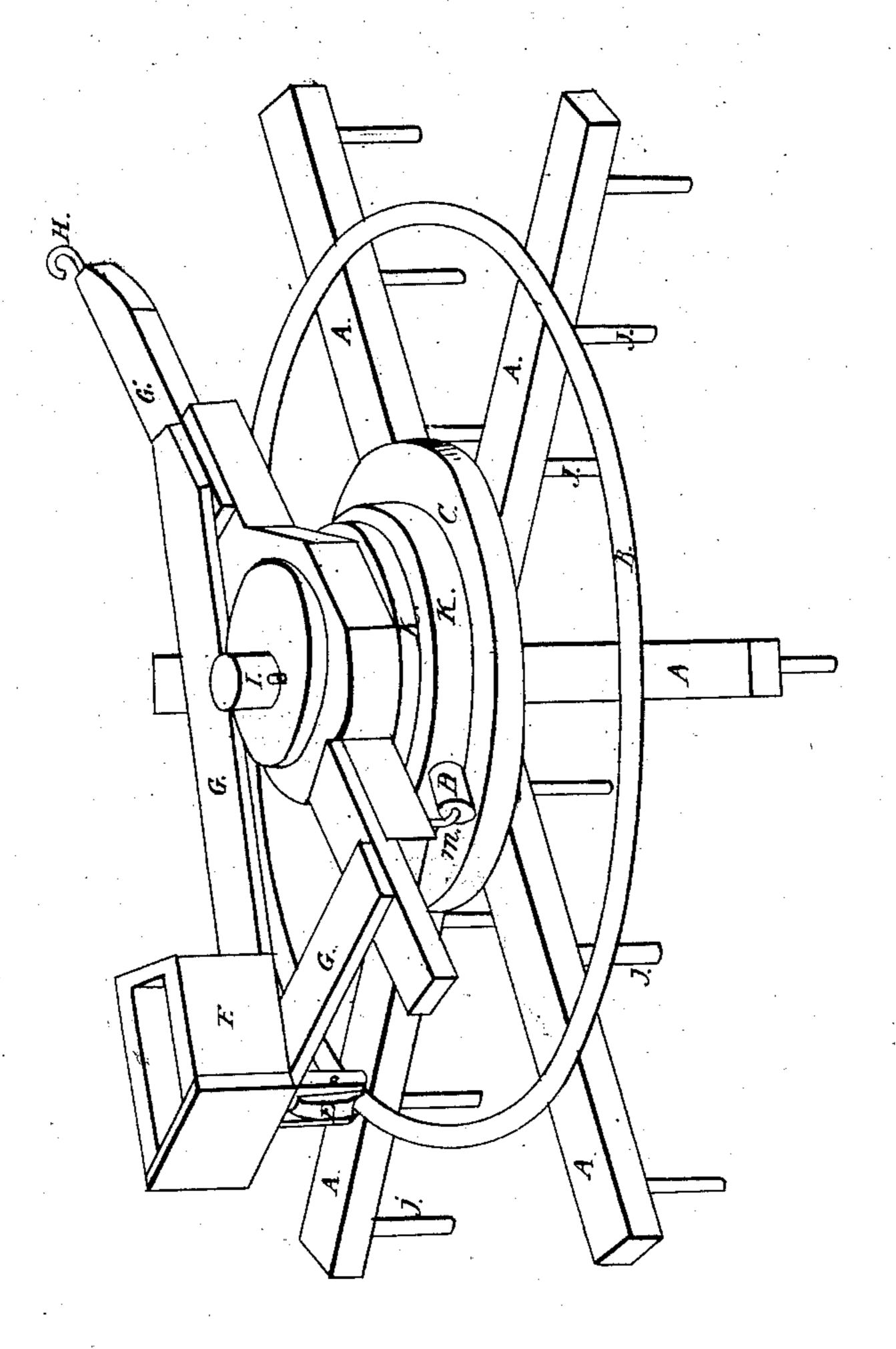
H.C. Stoll.

Rotary Harrow.

JY\$62,379.

Patented Feb. 26, 1867.



Wilnesses:

Geo Schapin Albayward Henry Collos By his allorney Geo Lohapin

## Anited States Patent Pffice.

HENRY C. STOLL.

## HENRY C. STOLL, OF MOKENA, ILLINOIS.

Letters Patent No. 62,379; dated February 26, 1867.

## IMPROVEMENT IN REVOLVING HARROWS.

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

## TO ALL WHOM'IT MAY CONCERN:

Be it known that I, Henry C. Stoll, of Mokena, in the county of Will, and State of Illinois, have invented a new and useful Improvement in Revolving Harrows; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, and letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a perspective representation of my improvement in harrows.

The nature of my invention consists, first, in the use of an upper triangular frame, one side of which is used as a draught-bar, and supports an inner friction-roller travelling on a track, elevated a suitable distance above the harrow frame, and placed in such a position as to equalize the weight of the frame, while the other two sides of the triangle support the common weighted box, resting upon a friction-roller travelling upon an outer track. By this arrangement the draught is applied directly to the central post, and the inner frictionroller prevents the rear end of the draught-bar from inclining backward, and causing the bearing made through the bar to bind upon the central post, which would be the case if the aforesaid provision was not made. This inner friction-roller is also important in preventing the triangular frame from being elevated too high at the - front of the draw-bar when passing over uneven ground, or a sudden start of the horses, and is further important in preventing the draw-bar from wearing down the shoulder of the central pivot, as a large portion of the weight of the triangular frame rests continuously upon the roller when the harrow is in use. Thus it is evident that the expense of replacing a roller, when worn out, will be much less than supplying a new pivot; and to accomplish this purpose, I place the friction-roller as near to the pivot as the nature of a substantial construction will admit. Second, in constructing a harrow frame having a series of arms of equal length radiating from a common centre, by which means the inner and outer tracks have a uniform support, which is not the case when the frame is constructed with rectangular cross-pieces; and further, the teeth can be arranged in such a manner in the frame that the soil can be more thoroughly pulverized, from the fact that harrow-teeth cannot be put through the joints of the cross-timbers without weakening them.

A represents the frame, which is halved together at the centre and secured in a substantial manner. C shows the inner track, secured to the frame A by bolts in such a manner as to give additional support to the frame, and also provide a foundation for the parts K, used to elevate the draught-bar G' and give a suitable surface for it to rest upon. G G G' shows the triangular frame resting upon the friction-rollers D E and the upper part of K, a hole being made through G' in order that the post I may pass through and allow the frame G G G' to revolve upon it when the rollers D E are travelling upon the tracks C B. m shows the shank of the bent shaft, supporting the roller D, passing upward into the draught-bar G', which may be made to incline to the front or back, according to the length of the shank. B is the outer track, made of round iron and bolted fast to the frame A. By means of this construction the frame A will readily revolve, and the triangular frame G G G' will work easily thereon, even when pulverizing the soil of uneven ground. The harness attachments can be secured to the hook II in the usual manner, and the harrow will operate without further care.

Having thus fully described my device, I do not claim the triangular frame G G G', the outer track B, and the roller which runs upon it; but what I do claim, and desire to secure by Letters Patent, is—

The frame A, in combination with the tracks C B, friction-rollers E and D, and the triangular frame G G G', when constructed substantially as and for the purpose set forth and described.

Witnesses:

GEO. L. CHAPIN, A. HAYWARD.