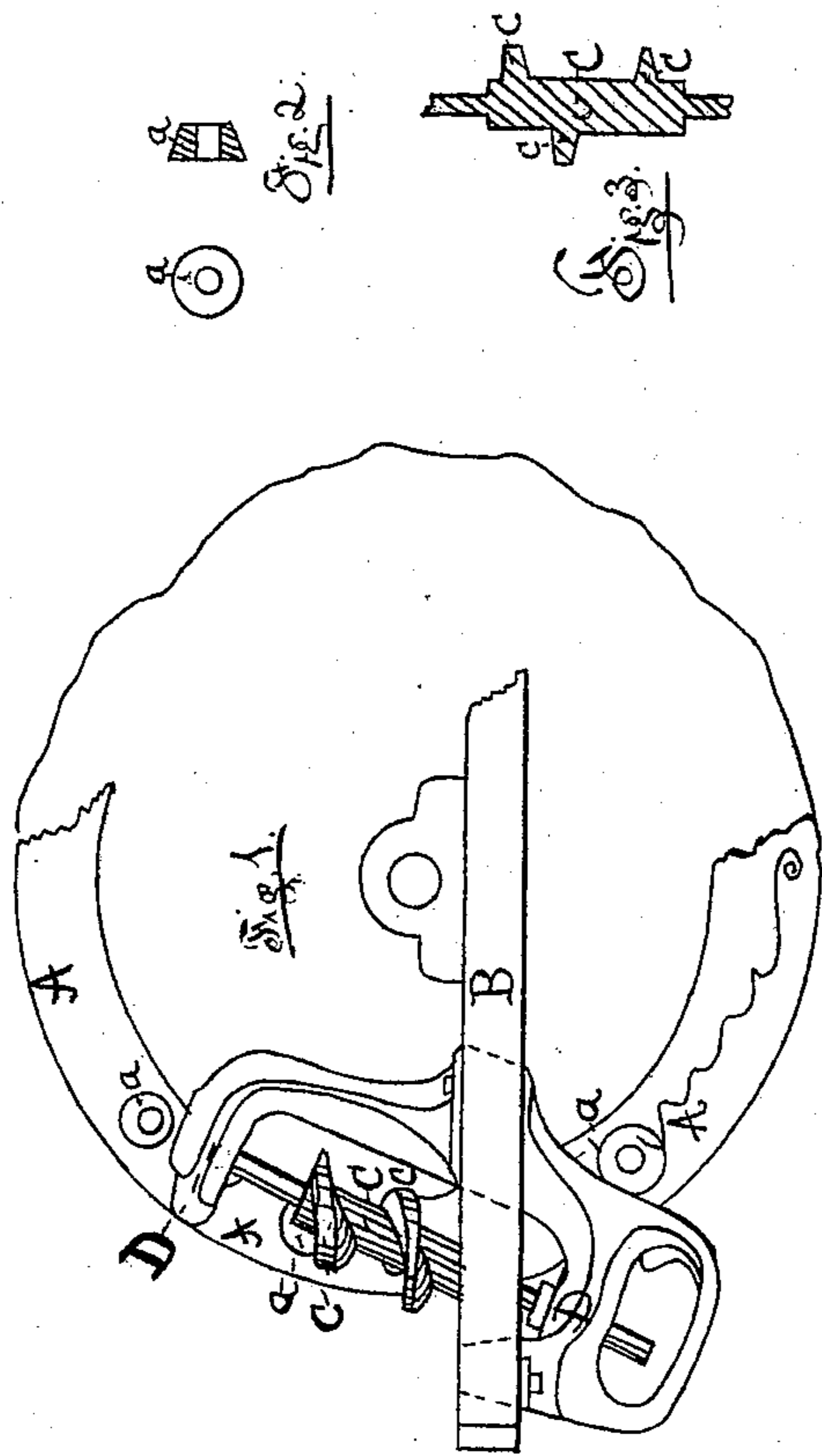


E. P. Russell,
Mower.

N^o. 34,594.

Patented Mar. 4. 1862



Witness
Isaac A. Brownell
A. McNeill

E. P. Russell
per Attornies, Clayton & Sons

UNITED STATES PATENT OFFICE.

E. P. RUSSELL, OF MANLIUS, NEW YORK.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 34,594, dated March 4, 1862.

To all whom it may concern:

Be it known that I, E. P. RUSSELL, of the town of Manlius, county of Onondaga, and State of New York, have invented a new and useful Improvement in the Means for Operating the Cutters of Harvesters; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, in which—

Figure 1 is a section of the driving-wheel, on the face of which are the conical rollers, and also the screw-shaft and beveled screw-flange. Fig. 2 is a view of one of the conical rollers in section. Fig. 3 is a vertical section through the center of the shaft, showing the bevel of the flange from the shaft to the outer edge of the flange or screw.

Like letters designate like parts in each figure.

The nature of my invention consists in the combination of the conical rollers on the face of the driving-wheel with the bevel of the screw-flange from the shaft to the outer edge of the flange, as hereinafter described.

To enable others skilled in the art to make and use my invention, I will describe its construction and operation.

In Fig. 1 A is the driving-wheel; B, the frame to support the same in position; C, the screw-shaft; c, the screw-flange. This flange is beveled or tapered from the top to the bottom, being the largest at the top and tapering

to the bottom, to facilitate in removing the mold from the sand in casting the same. It is also beveled or tapered from the shaft C to its outer edge, being the largest at its base, where it joins the shaft, and tapering to its outer edge, as seen in Fig. 3, and is thus formed to accommodate itself to the tapering or conical rollers.

D are the bearings of the screw-shaft C. The cutters are attached to the screw-shaft C by means of a crank on the lower end of said shaft.

a are the tapering conical rollers, placed on the face of the driving-wheel A, and which run on the bevel or tapering flange c, causing the shaft to revolve, and thus impart motion to the cutters. I find by this combination the power is more available, as it causes the machine to operate much easier than if the flange and rollers worked at right angles to each other.

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

The combination of the tapering or conical rollers a with the bevel outward on the flange C, operating as described, and for the purposes set forth.

E. P. RUSSELL.

Witnesses:

H. T. FOX,
AUGS. TREMAIN.