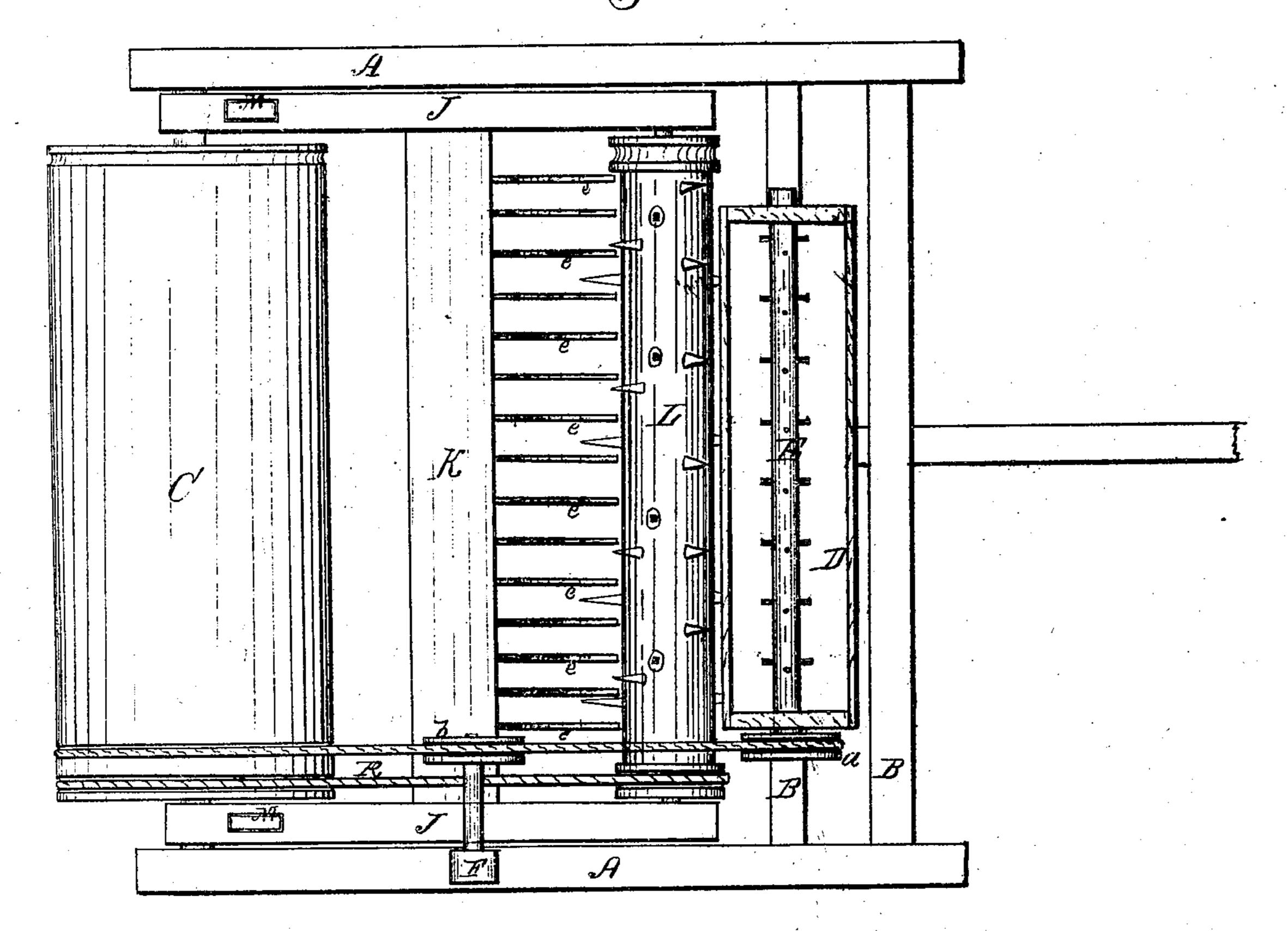
E.A.BARTON'S

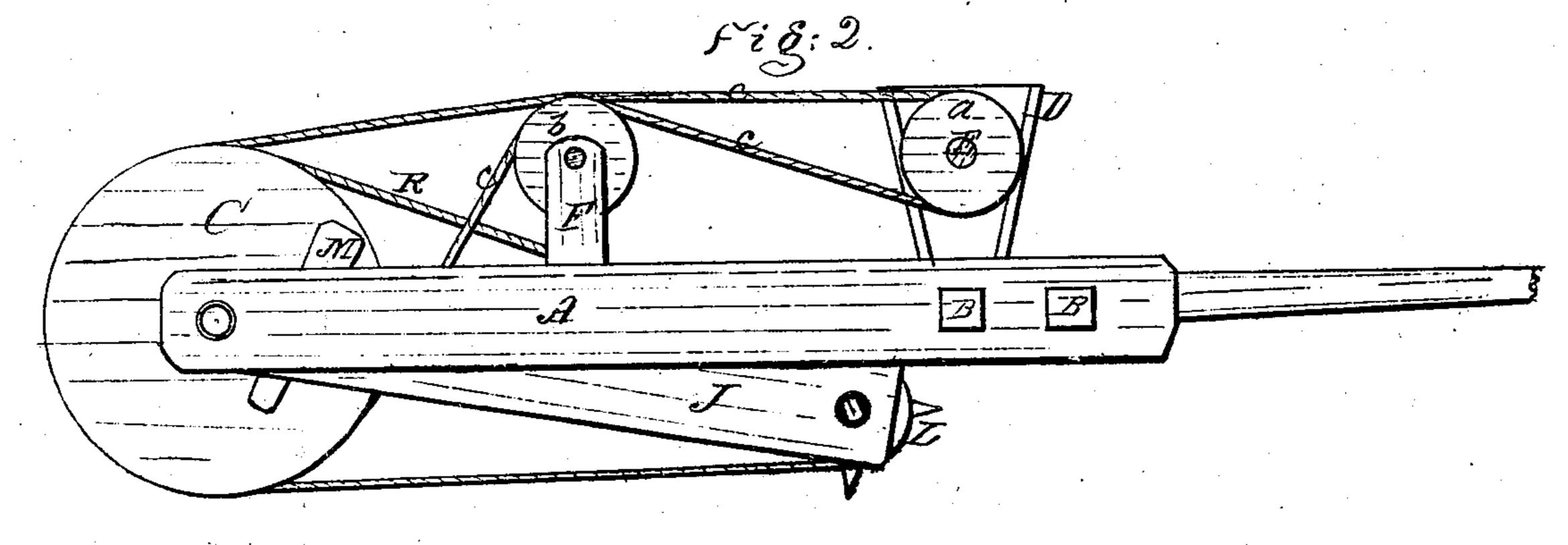
combined Seed sower, Harrow & Roller

98335

Fig. 1

PATENTED DEC 28 1869





J. T. C. M. Julie J. H. Whenan. INVENTOR.

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Mnited States Patent Office.

E. A. BARTON, OF BOONVILLE, INDIANA.

Letters Patent No. 98,335, dated December 28, 1869.

IMPROVEMENT IN COMBINED HARROW AND SEED-SOWER.

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, E. A. BARTON, of Boonville, in the county of Warrick, and State of Indiana, have invented certain new and useful Improvements in Combined Harrow, Seed-Sower, and Roller; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, and in which—

Figure 1 is a top view, showing my improvements, and

Figure 2, a side view of the same.

To enable those skilled to understand and make my improvements, I will proceed to describe the construction and operation of the same, referring by letters, similar letters denoting like parts in the different views.

A represents two side-rails of the roller-frame se-

cured together by two cross-rails B B.

A bearing is provided, in the rear ends of the rails

A, for the axle of the roller C.

The roller C is shorter than the distance between the two rails A, a distance equal to the sum of the thickness of the two side-rails J of the harrow-frame, and has secured to the axle loosely, between the ends of the roller and the rails A, a journal-box.

The harrow-frame consists of two side-rails J, se-

cured together by means of a cross-bar, K.

The forward ends are provided with a bearing for the axle of the rotary harrow L, and the rear ends are slotted out, to fit over the square ends of the journal-boxes.

The ends of the roller and harrow have turned thereon races, for the reception of bands R, which hold the frames together.

The harrow-frame, at the rear end, has vertical slots provided therein, to receive the wedges M, which

tighten the bands R.

A more perfect description of these parts will be seen in my patent granted June 29, 1869, of which this is an improvement.

The end of the roller in my present invention is provided with two band-races, instead of one, and

within the seed-hopper D is arranged a rotating tumbling-rod, E, which is mounted in bearings, in the ends of the hopper, protruding at one end a short distance, and having secured thereto a fixed pulley, a.

On top of the side-rails A is mounted a standard, F, to which is secured a rotating pulley, b, in line with the race of the roller and the pulley a.

A band, c, passing arounds the pulley a, is crossed and passed around the pulley b, and from thence to the race in the end of the roller C, the pulley b, mounted upon its standard, serving to keep the bands above the cross-bar K of the harrow-frame, and making it independent of said frame.

It will be observed that, the machine being started, the motion of the roller is imparted, by the bands R, to the harrow, and by the band c to the tumbling-rod E, which is provided with teeth, and keeps the holes in the bottom of the hopper free from any obstructions, thus allowing the seed to pass through.

On the forward edge of the cross-bar K is arranged a series of cleaning-teeth, c, which effectually prevent the teeth of the rotary harrow becoming clogged.

The machine is provided with the proper seed-dropping device, and with mechanism for lifting the harrow-frame, a driver's seat, and screen, all of which may be seen by reference to the patent hereinbefore alluded to, the object of my present invention-being an improvement upon such machines.

Having described the construction and operation of

my improved machine,

What I claim as new, and desire to secure by Let-

ters Patent, is—

In combination with the seed-sower, harrow, and roller, constructed and operating as described, the tumbler-rod E, and cleaning-teeth e, as and for the purpose set forth.

In testimony whereof, I have hereunto set my hand, this 16th day of August, A. D. 1869.

E. A. BARTON.

Witnesses:

WM. J. L. HEMENWAY, HENRY MACY.