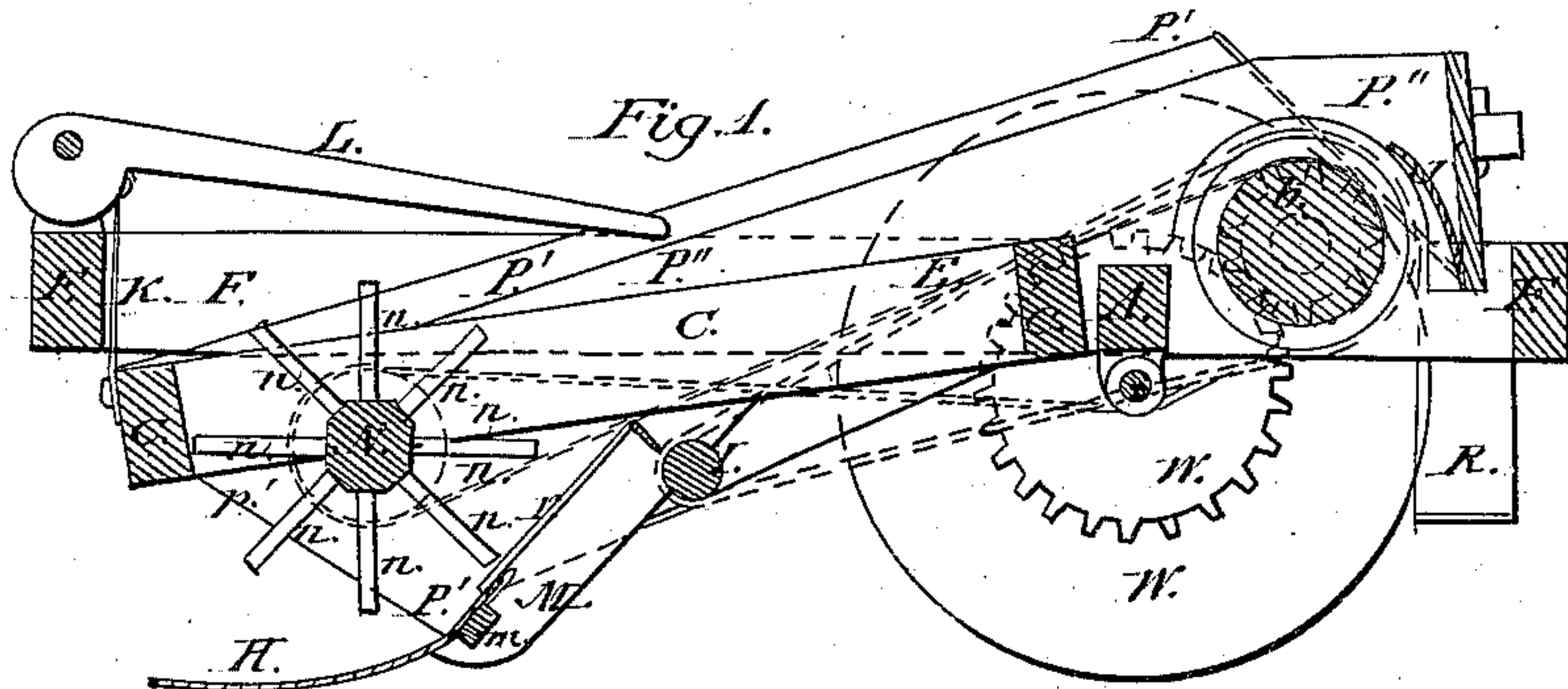


*I. Curtis.*

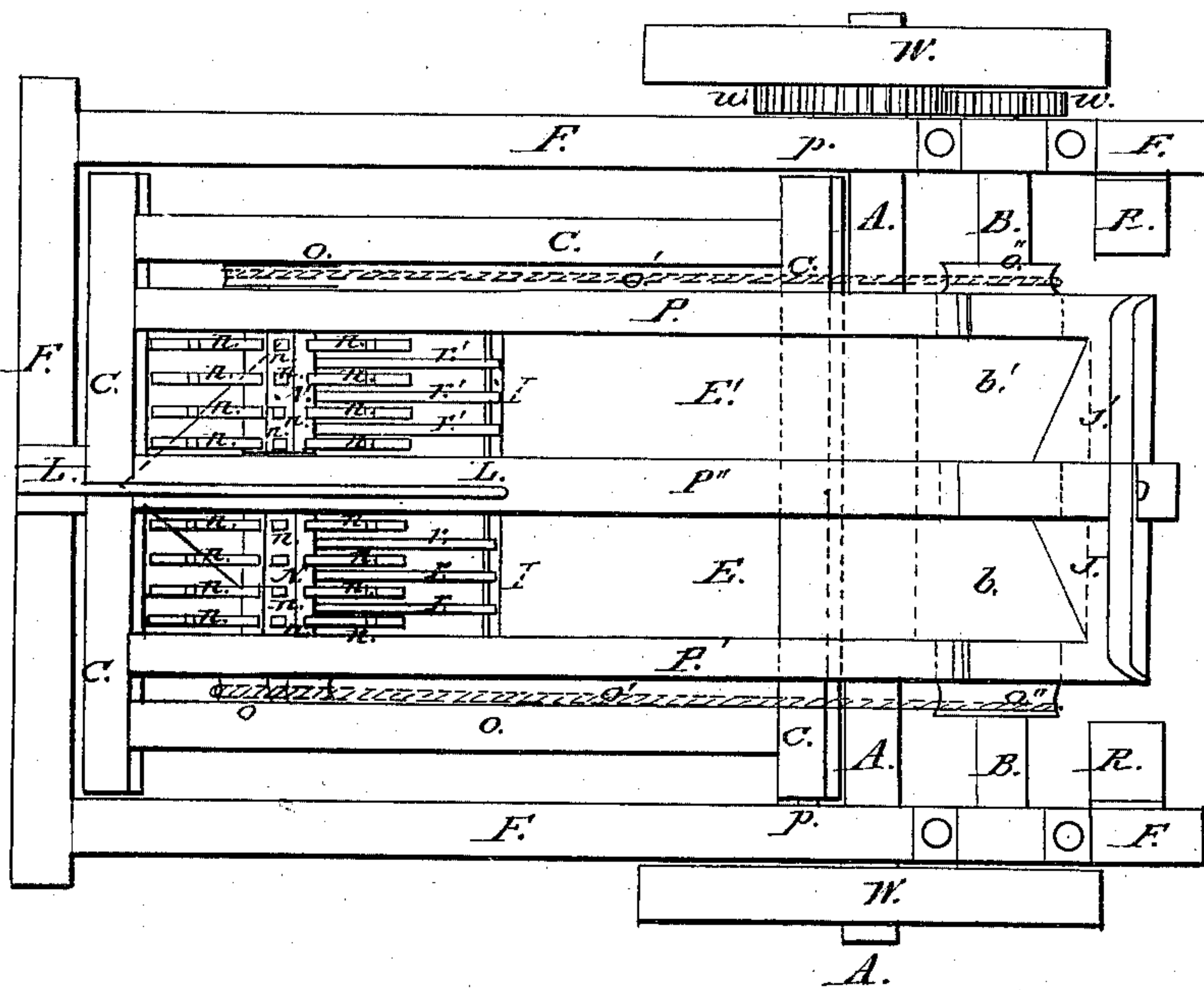
*Potato Digger.*

*N<sup>o</sup> 88,613.*

*Patented Apr. 6, 1869.*



*Fig. 2.*



*Witnesses:*  
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# United States Patent Office.

IRA CURTIS, OF DES MOINES, IOWA.

Letters Patent No. 88,613, dated April 6, 1869.

## IMPROVEMENT IN POTATO-DIGGERS.

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, IRA CURTIS, of Des Moines, in the county of Polk, and State of Iowa, have invented a new and improved Potato-Digger; 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 accompanying drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section.

Figure 2 is a plan.

The object of this invention is to provide for public use a simple, cheap, and effective machine, which will dig the tubers, cleanse them from dirt, and empty them into a bag or basket.

In the drawings—

W W are the wheels;

A, the axle;

F, a frame, resting upon the axle near its rear end, and firmly fastened to the same;

B, a roller, or drum-shaft, supported by the rear end of the frame, and receiving motion from the draught-wheels, by means of gearing *w w*; and

C, a frame within the frame F, and pivoted to it at *p p*, so as to be rocked vertically on such pivots by means of the lever L and cord K.

The frame C is divided longitudinally into two tracks, or open spaces, (shown by the plan, fig. 2,) by means of three dividing-partitions, P P' P".

The side pieces P P' of the two spaces, prevent the potatoes from escaping from the sides of the endless apron hereinafter described.

The middle piece separates the two aprons, and prevents the potatoes from passing from one to the other.

H is the plow, the triangular outlines of which can be seen in fig. 2.

It is supported by a standard, M, fixed (at the proper inclination) to the middle piece of frame C, as shown in fig. 1.

The lower forward corners, of the side pieces P P', come down, and are fastened to the outer corners of the plow, and, if necessary, a cross-bar, *m*, may extend across from one side piece to the other, at this point, in order to support the plow.

The middle partition P" is merely an angular piece lying upon and fastened properly to the upper edge of the central beam of frame C, said frame having three longitudinal beams, two of which are shown in fig. 2, the other being concealed under the angular piece P".

The central piece appears plainly in fig. 1, with the part P" resting upon it.

I I are two rollers, which, in connection with the drums *b b* upon shaft B, carry the endless aprons E E', arranged side by side, one in the space between partitions P P', the other between P P", as shown in fig. 2.

The aprons extend from a point in rear of the plow, backward and upward sufficiently far, and discharge the tubers upon two inclines, J J', (one for each apron,) by which they are directed into a bag or basket.

If a basket is used it may sit on the rest R.

Between the rear edge of the plow and the front edge of the aprons, extends a set of longitudinal bars, or rods, *r r r' r'*, which form a riddle, or sieve, through which the dirt is sifted as the tubers are forced back over it.

The bars may be of any suitable length, inclination, size, and distance apart, and may be constructed so as to have a vibrating motion, if desired.

N N are two beaters and propelling-wheels, put in motion from shaft B by means of suitable belts and pulleys, *o o' o'*, each wheel being provided with arms, *n n*. The function of the wheels is to force the potatoes back over the riddles and upon the inclined aprons, and to agitate them, and remove the dirt from them.

Instead of having the side pieces P P' come down to the plows, so as to keep the tubers from falling off of the riddles, the wheels N N may be provided with end-disks, which will answer the same purpose.

In that case, instead of the arms *n n*, longitudinal bars, extending from one disk to the other, (of the same wheel,) parallel to the shaft, might be employed, forming an apparatus somewhat like a harvester-reel.

The whole apparatus is simple, cheap, inexpensive, and not liable to get out of order.

Having thus described my invention,

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

The whole machine herein described, in its novel arrangement of frames F C, partitions P P' P", wheels W W, *w w*, N N, shaft B, carrying drums *b b*, riddles *r r'*, endless aprons E E', plow H, lever L, axle A, and inclines J J', all constructed and adapted to each other to operate together in the manner and for the purpose substantially as described.

IRA CURTIS.

Witnesses:

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