

(No Model.)

J. W. ROAT.
DITCHING WHEEL.

No. 435,770.

Patented Sept. 2, 1890.

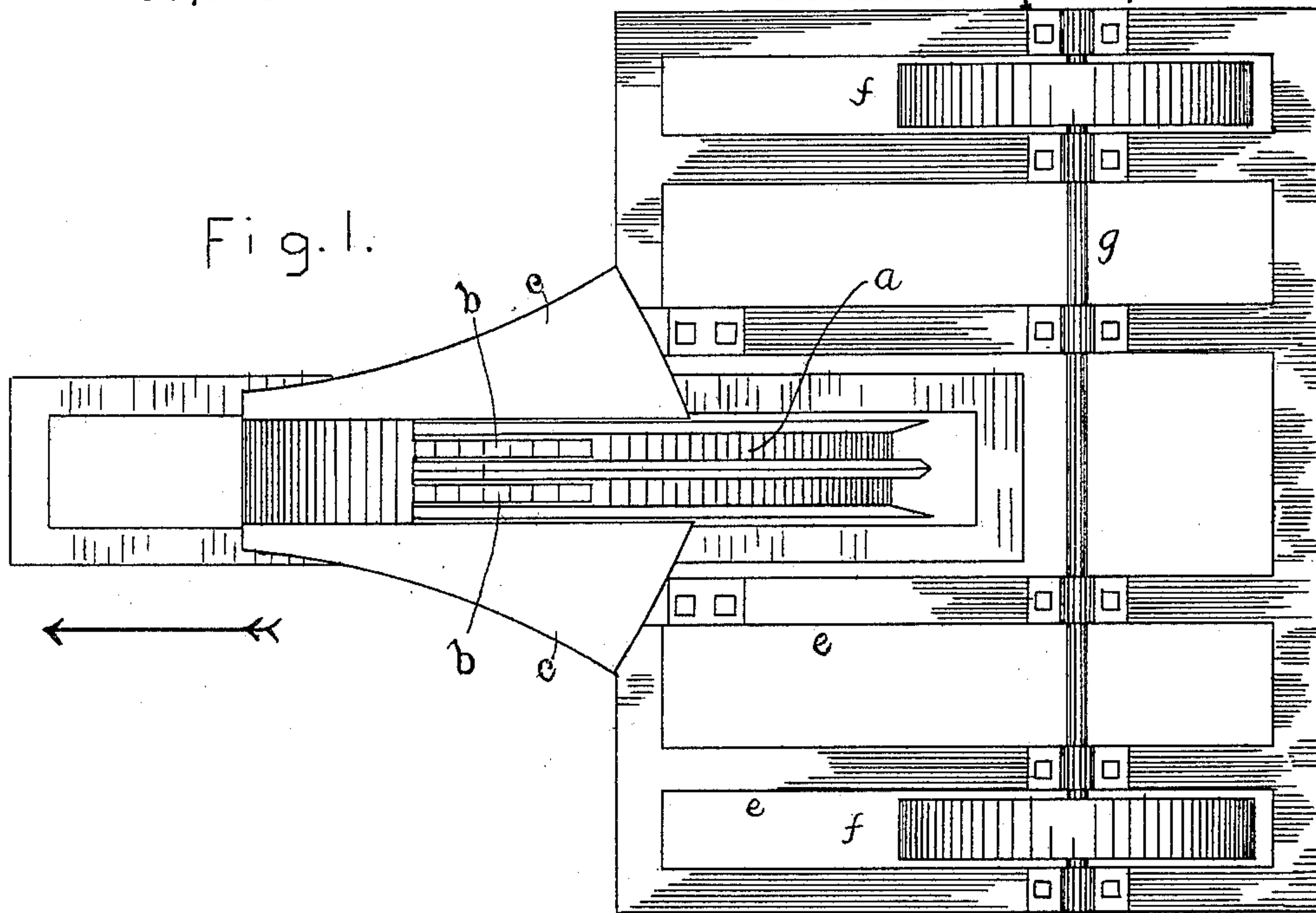


Fig. 2.

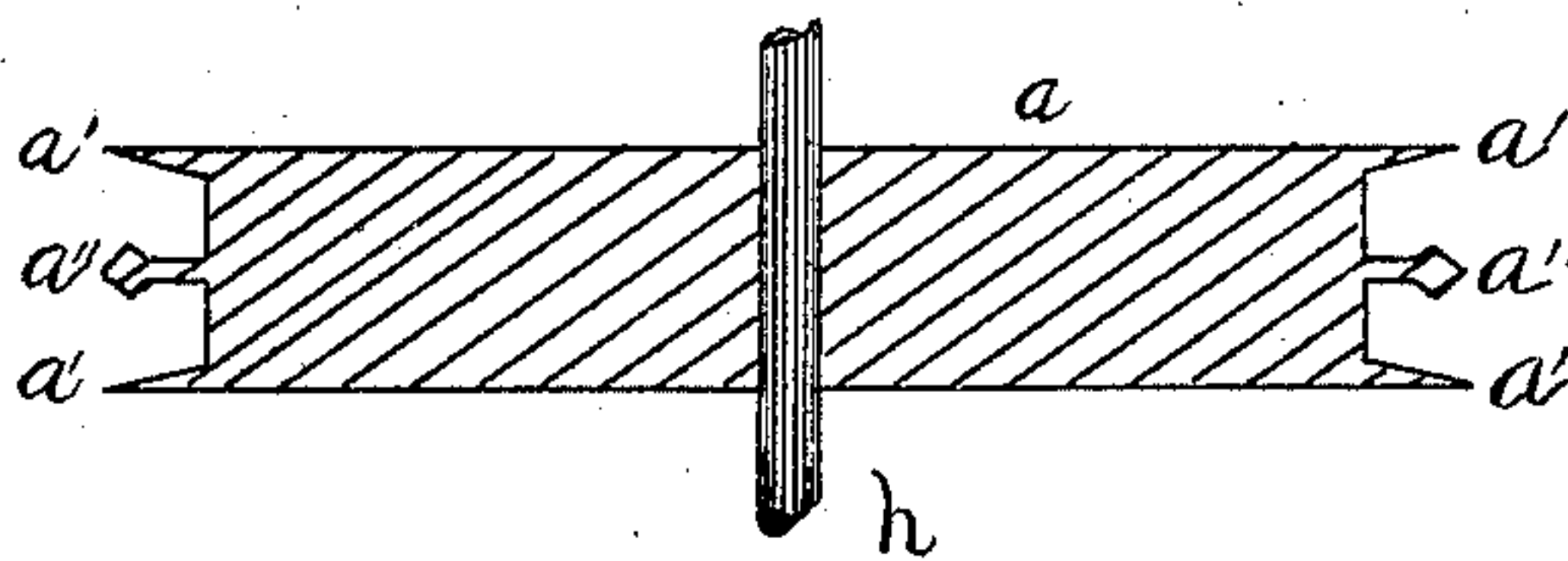
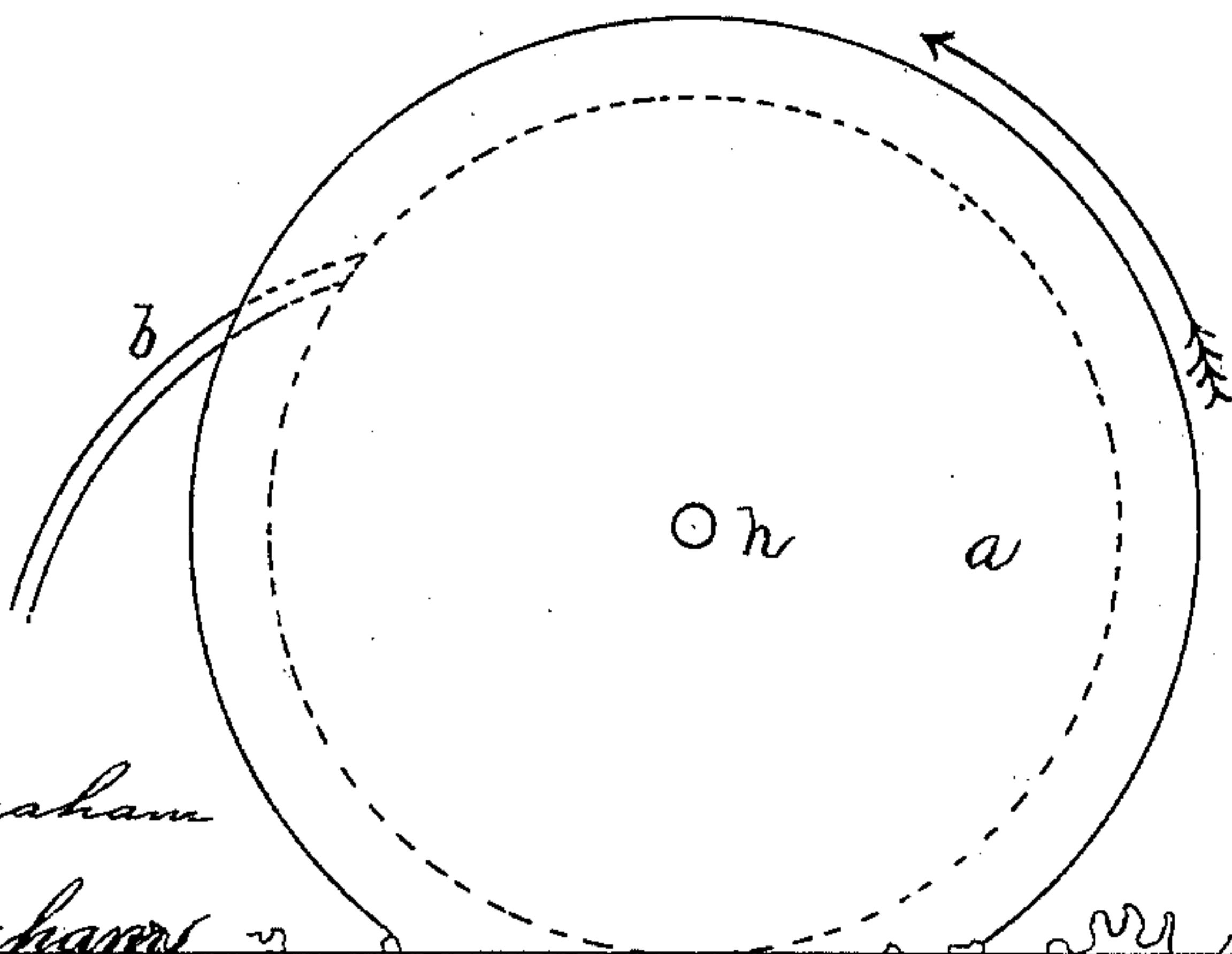


Fig. 3.



ATTEST

Helen Graham

W. H. Graham

INVENTOR.

J. W. ROAT.

By L. P. Graham
his attorney

UNITED STATES PATENT OFFICE.

JOHN W. ROAT, OF MASON CITY, ASSIGNOR TO HENRY W. McFADDEN, OF
HAVANA, ILLINOIS.

DITCHING-WHEEL.

SPECIFICATION forming part of Letters Patent No. 435,770, dated September 2, 1890.

Application filed February 10, 1890. Serial No. 339,942. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. ROAT, of Mason City, in the county of Mason and State of Illinois, have invented a certain new and useful Ditching-Wheel; and I hereby declare the following to be a full, clear, and exact description of the same.

In the drawings accompanying and forming a part of this specification, Figure 1 is a plan of my device in a suitable frame. Fig. 2 is a diametrical section through the wheel; and Fig. 3 is an elevation of the wheel, showing its operative relation to the ground and to the dirt-removing scrapers.

The wheel *a* has the peripheral flanges *a' a'*, the inner surfaces of which are beveled outwardly, and it has the intermediate rib *a''*, which is diamond-formed in cross-section, as seen in Fig. 2. The scrapers *b b* are adapted to the spaces between the flanges and the rib, and they are presented to the upper surface of the wheel in a direction opposed to the rotation thereof. The plates *c c* are inclined in a manner to form chutes or conveyers for the dirt removed by the scrapers and are of any desirable construction. The shaft or axle *h* has bearings in frame *d* and in frame *e*, thereby forming a pivotal connection between such frames. Frame *e* is carried by wheels *f f*, which are mounted on shaft or axle *g*, and it may be provided with a lever or other appliance for raising the ditching-wheel from contact with the ground. The tongue is to

be connected with frame *d*, and the device is to be drawn in the direction indicated by the arrow in Fig. 1. The wheel, by weight, either inherent or imposed, presses the rib and flanges into the ground. The peculiar conformation and arrangement of the rib and flanges causes the dirt to pack in the intervening spaces. The dirt so packed is elevated by the wheel, removed by the scrapers, and conveyed out of the track of the wheel by inclines *c c* or some other readily obvious device. It will be seen that more than one rib may be interposed between the flanges, and that the shown arrangement of rib and flanges may be multiplied on a single wide or a number of connected narrow wheels without affecting the principle of my invention; also, that the inclination of the rib and the flanges may be varied to suit different circumstances.

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

A ditching-wheel having on its periphery beveled circumferential flanges and an intermediate rib or ribs diamond-formed in cross-section, together with scrapers adapted to the intervening spaces, as set forth.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

JOHN W. ROAT.

Attest:

JOHN W. PITMAN,
C. E. COPPEL.