

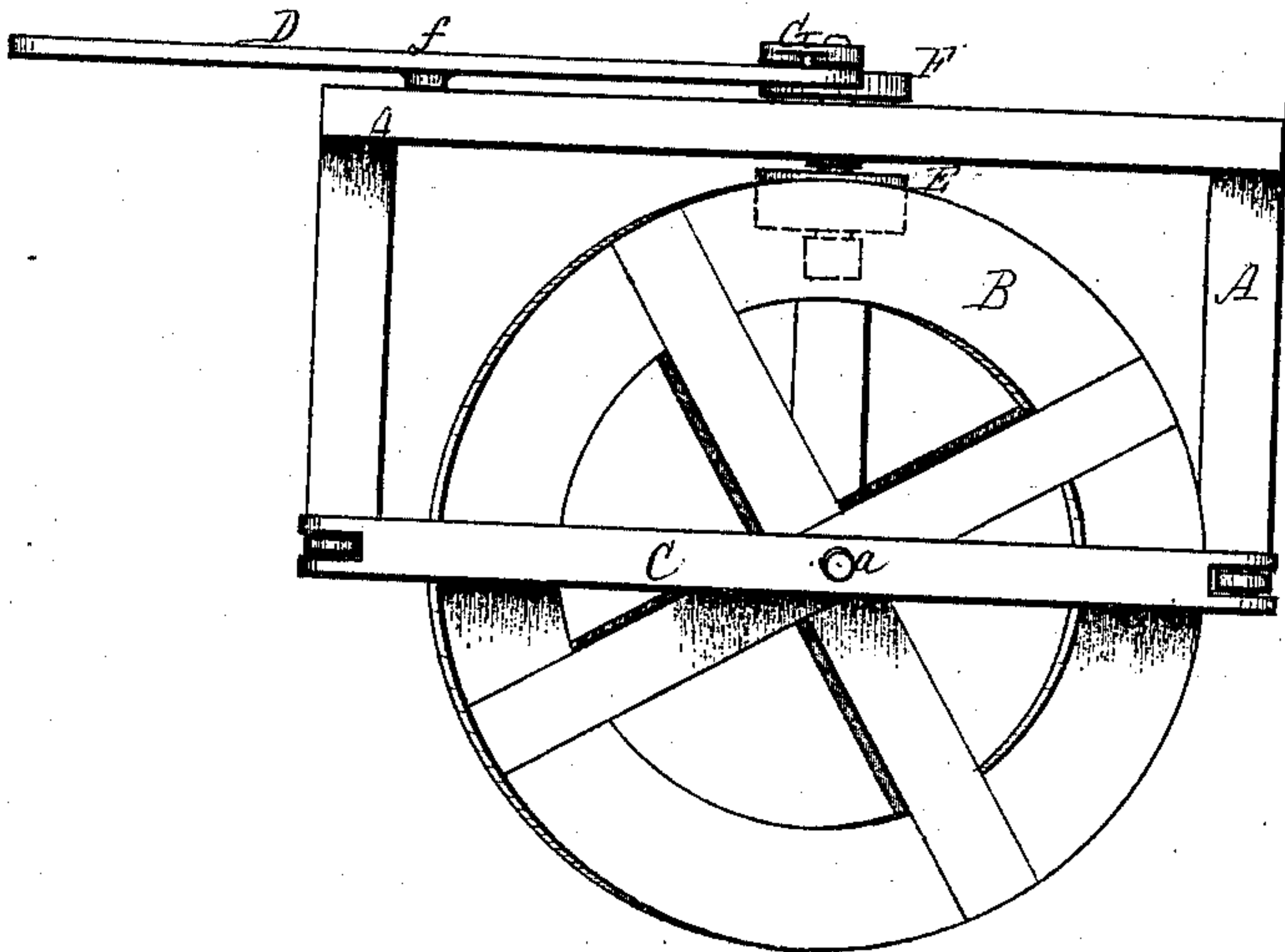
*J. B. Hall,*

*Ing Power.*

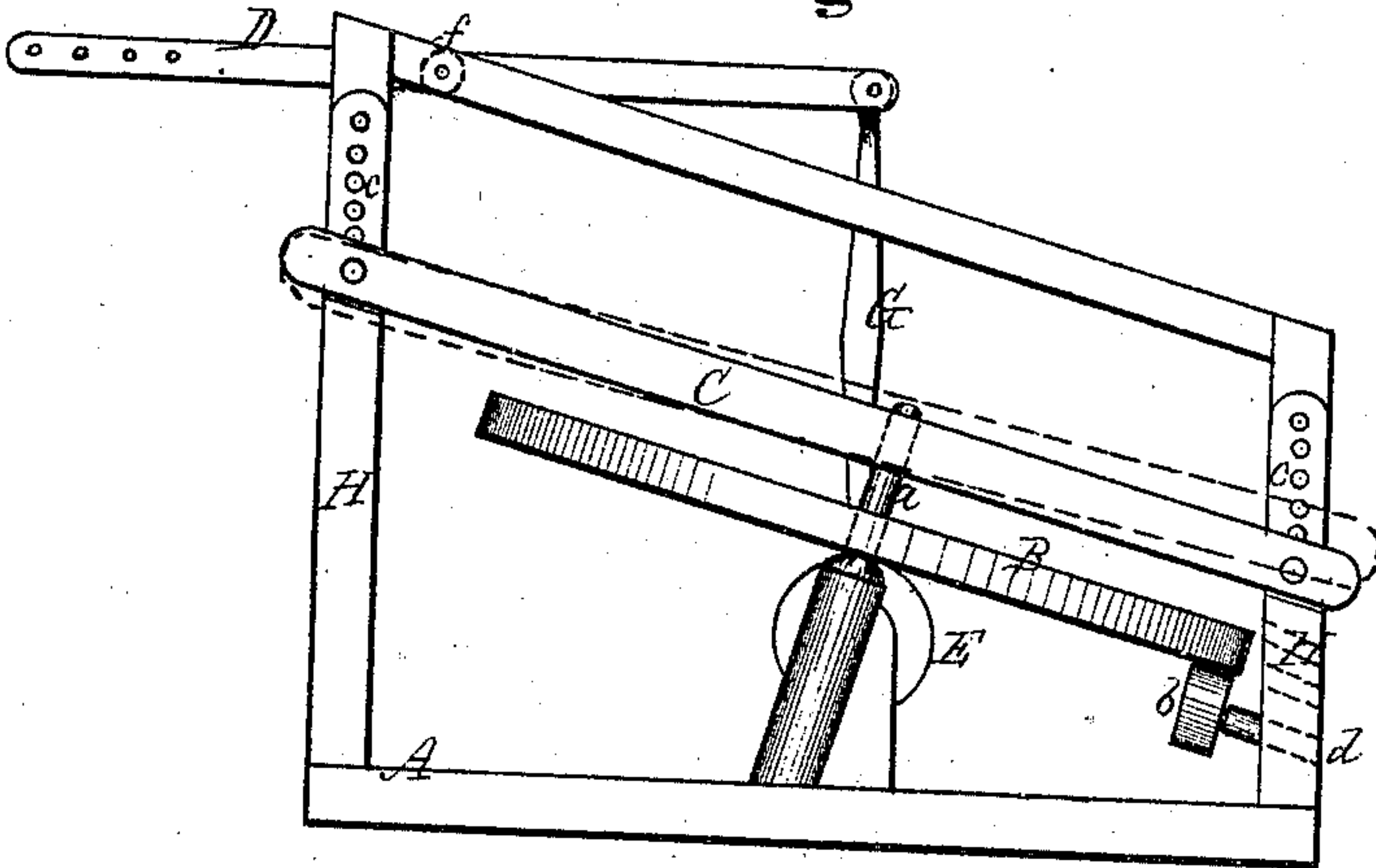
*No. 97,193.*

*Patented Nov. 23, 1869*

*Fig. 1.*



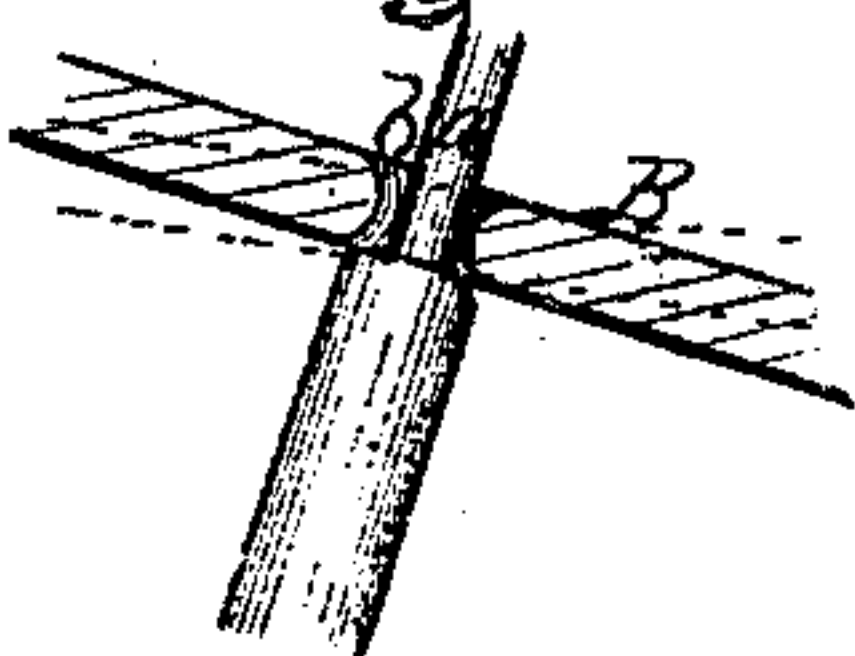
*Fig. 2.*



*Witnesses.*

*Geo. H. Mott*  
*R. F. Ayres*

*Fig. 3.*



*Inventor.*

*John B. Hall,*  
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# United States Patent Office.

JOHN B. HALL, OF CHESHIRE, NEW YORK.

Letters Patent No. 97,193, dated November 23, 1869.

## IMPROVEMENT IN ANIMAL-POWER

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, JOHN B. HALL, of Cheshire, in the county of Ontario, and State of New York, have invented a certain new and useful Improvement in Dog-Powers; and I do hereby declare that the following is a full and exact description of the same, referring to the accompanying drawings, in which—

Figure 1 is a plan of my improved machine.

Figure 2, an elevation of the same.

Figure 3, a section, showing the bearing of the tread-wheel on its standard.

Like letters of reference indicate corresponding parts in all of the figures.

My improvement belongs to that class in which a revolving tread-wheel bears upon a friction-gear, to give motion to the working-beam.

The invention consists, essentially, in a loose bearing of the eye of the tread-wheel upon its standard, whereby any adjustment of the angle of the same may be attained, without the use of a swinging beam or lever; also, in the same connection, in the employment of an adjustable and removable bar, which not only allows the free adjustment of the tread-wheel, but also allows it to be removed from place by simply taking off.

In the drawings—

A is the frame, of any suitable form.

B is the tread-wheel, having a loose eye, *b*, which fits on an inclined bearing, *a*, of a standard, secured to the bottom of the frame.

The looseness of the eye is such as to allow the angle of the tread-wheel to be changed, as desired, to adapt the action to animals of different weight, as indicated by dotted lines in fig. 3.

In the rear of the tread-wheel is a bearing-roller, *b'*, on which it runs.

This roller is adjusted up and down, to fit the different inclinations of the tread-wheel, by its stem or journal passing through any of a series of holes, *d*, in the frame.

On one side of the frame, at right angles to *b'*, the usual friction-gear wheel *E* rests under the tread-wheel, and receives motion therefrom.

On the shaft of this wheel is situated a crank, *F*,

which gives motion to walking-beam *D*, through the medium of pitman *G*.

When the crank is at the upper end of the stroke, the walking-beam stands horizontally, the effect being such that the dasher of the churn can be changed from one hole to another in the end of the walking-beam, without making any vertical adjustment.

The upper end of bearing *a* rests in a socket of a bar, *C*.

This bar has a vertical adjustment by means of mortises, which slide on tenons of standards *H H* of the frame.

These tenons have each a series of holes, *c c*, and a bolt passing through the bar, secures the same in place. This bar can be changed to any angle, or can be entirely removed from place, in which case the tread-wheel can be also removed, by simply lifting it off from its bearing *a*.

In this invention I disclaim, broadly, the use of a tread-wheel, and also disclaim simply adjusting the tread-wheel to different angles.

This last effect is shown in a patent already issued, in which the tread-wheel is mounted on a lever, pivoted at one end, while the other moves up and down, to produce the adjustment.

My invention consists simply in making a loose eye to the tread-wheel, by which the adjustment is produced, without other attachments thereto; and in employing, in connection with the same, the adjustable bar *C*, which is capable, not only of changing to the different angles, to correspond with the angles of the tread-wheel, but is also entirely removable, to allow the tread-wheel, to lift off from its bearing.

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

The arrangement of the loose eye *b*, bearing *a*, and removable and adjustable bar *C*, when employed in connection with the tread-wheel *B* and friction-wheel *E*, in the manner and for the purpose specified.

In witness whereof, I have hereunto signed my name, in the presence of two subscribing witnesses.

Witnesses:

R. F. OSGOOD,  
GEO. W. MIATT.

JOHN B. HALL.