

(No Model.)

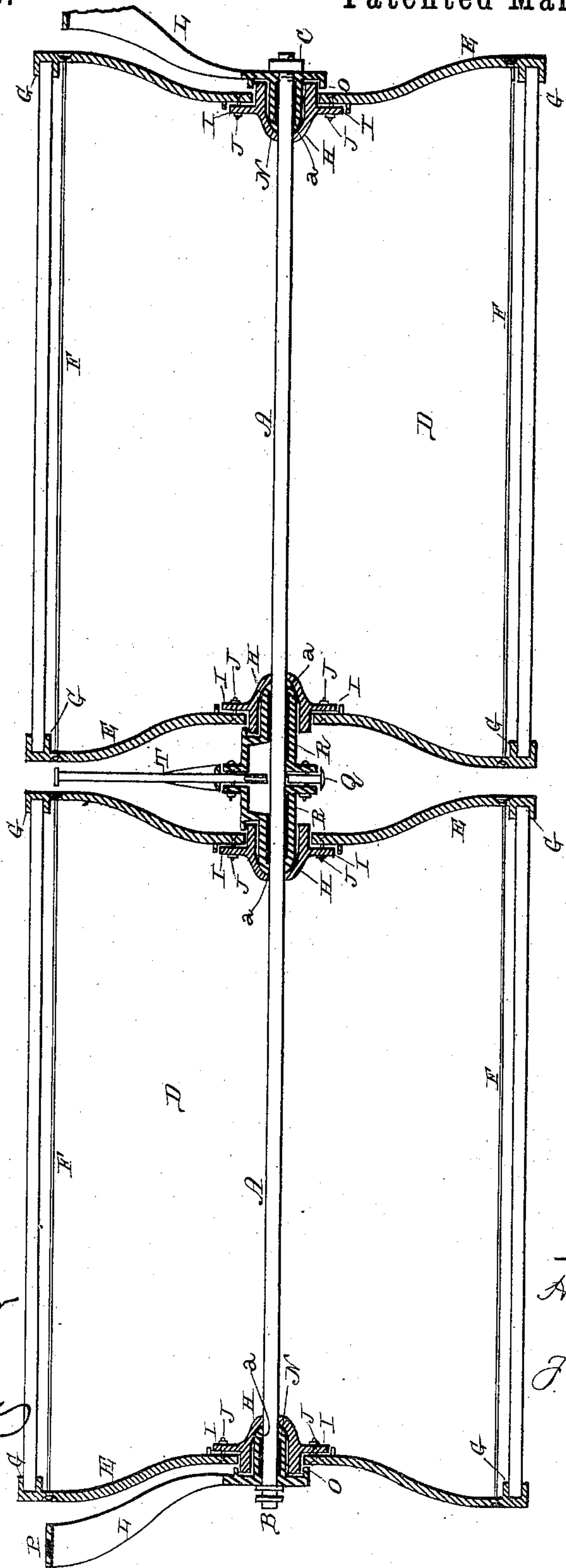
2 Sheets—Sheet 1.

H. A. CURRIER.

LAND ROLLER.

No. 313,813.

Patented Mar. 10, 1885.



WITNESSES.

L. T. Gardner

Joe Garner

Invention.

A. A. Currier,
per

J. A. Schumann,
att'y.

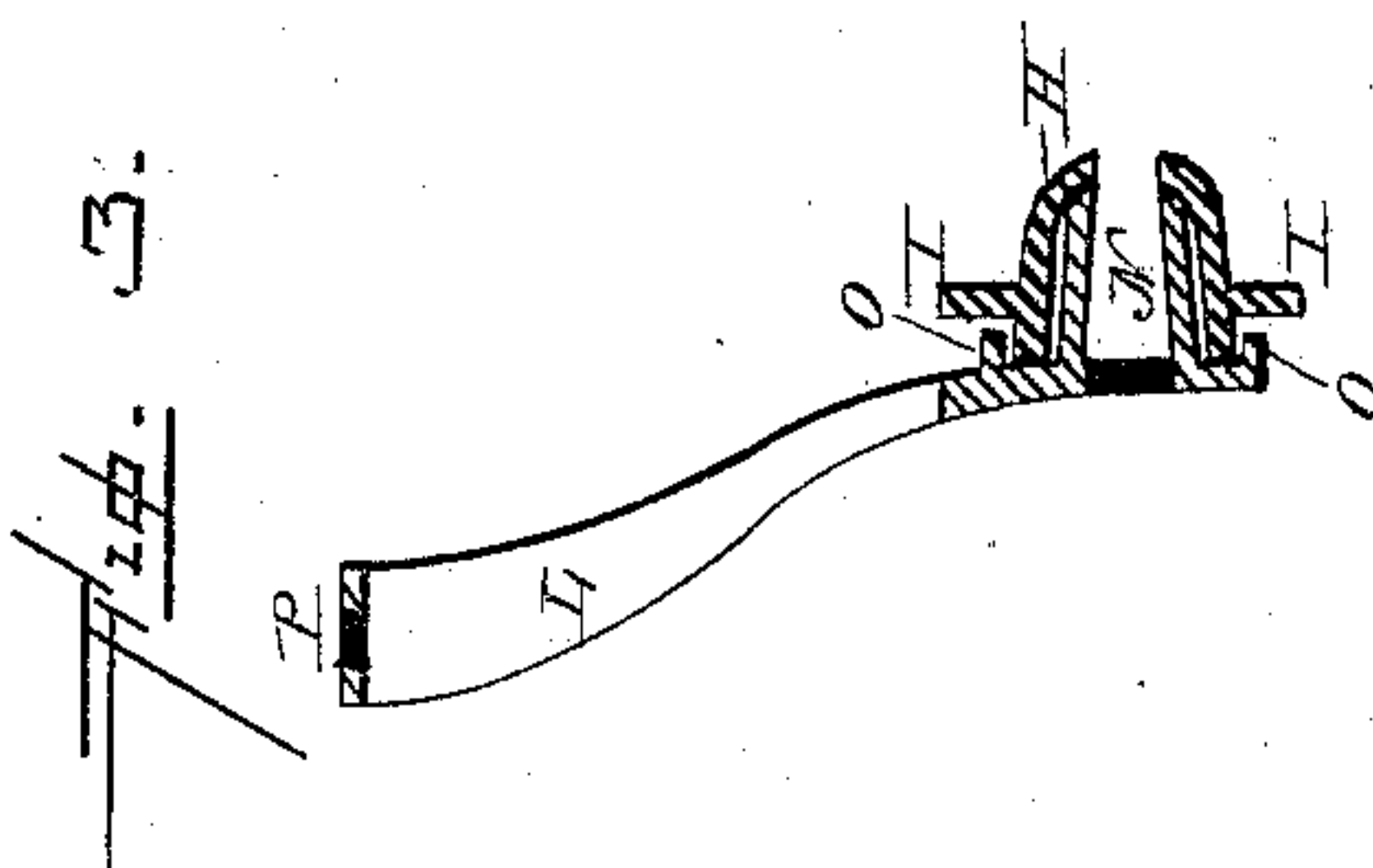
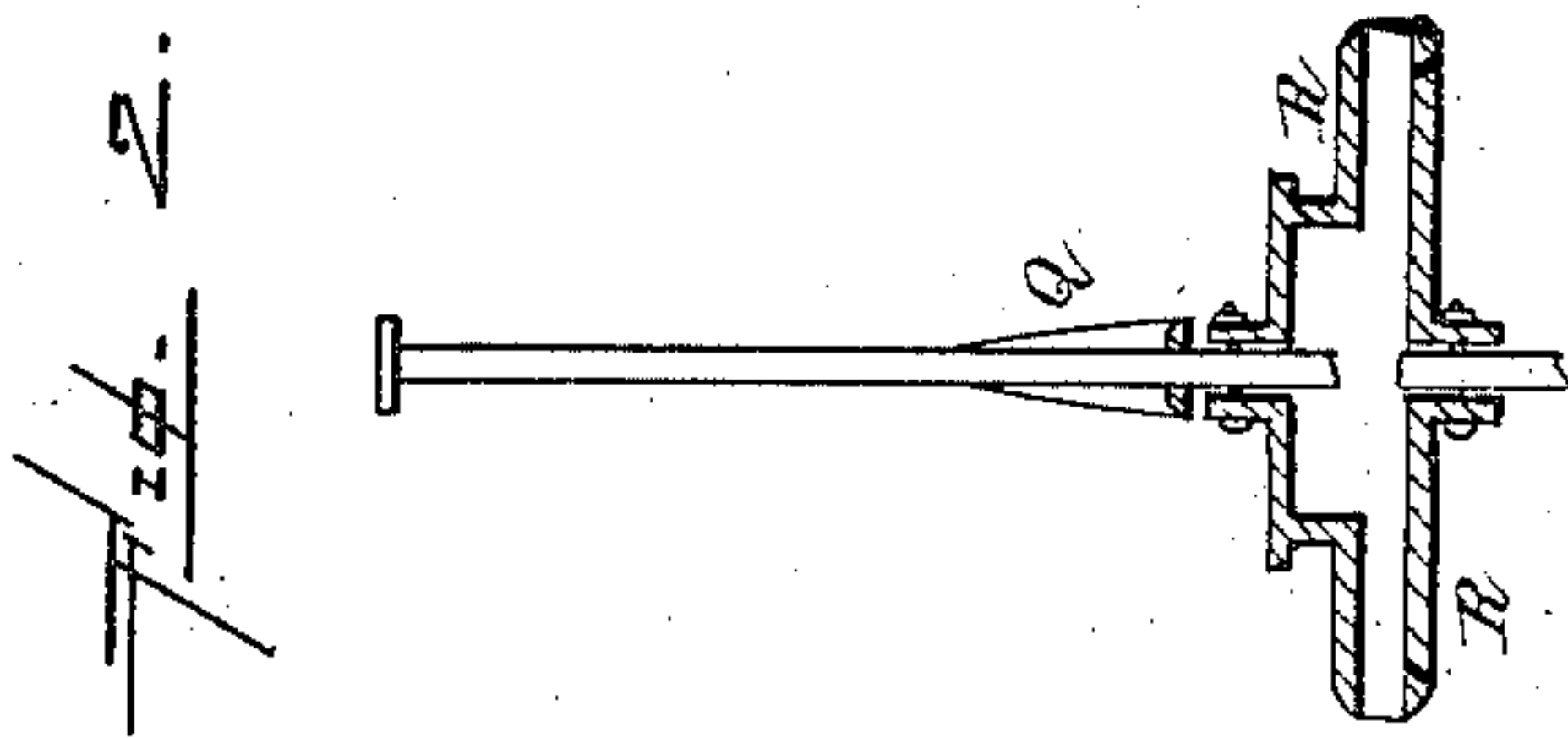
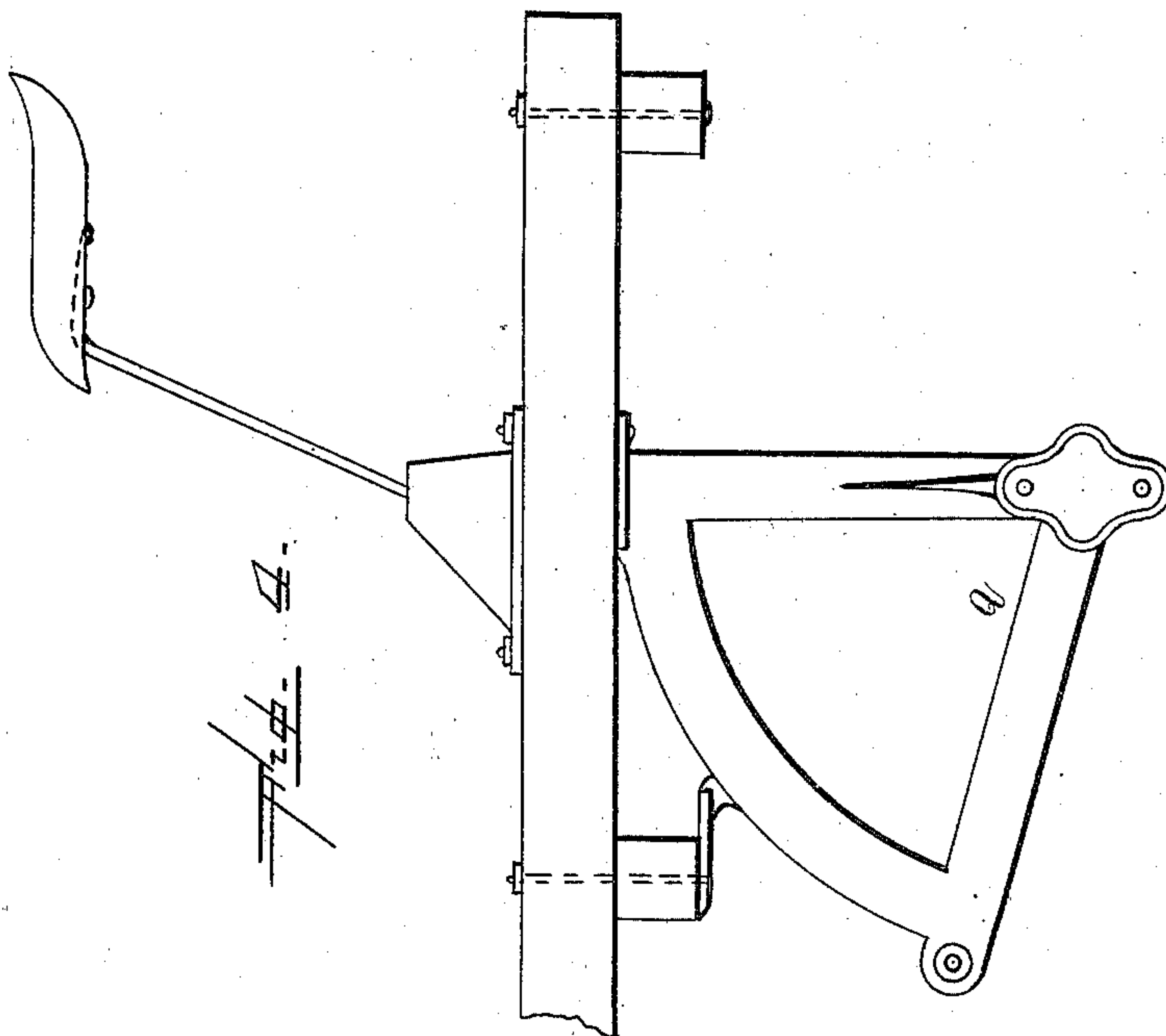
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Witnesses.

L. P. Gardner
J. W. Garner

Inventor.

H. A. Currier,
per
J. A. Lehmann, atty.

UNITED STATES PATENT OFFICE.

HENRY A. CURRIER, OF ALMONT, MICHIGAN.

LAND-ROLLER.

SPECIFICATION forming part of Letters Patent No. 313,813, dated March 10, 1885.

Application filed June 23, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. CURRIER, of Almont, in the county of Lapeer and State of Michigan, have invented certain new and useful Improvements in Rollers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in rollers; and it consists in the combination of a rod which passes through all of the sections, the end pieces having suitable gudgeons formed thereon, the hubs, and the castings which are secured to the hubs, as will be more fully described hereinafter.

The object of my invention is to produce a land-roller in which the hubs are made in separate and distinct parts, so that they can be replaced when worn out, and in which the various parts can be easily lubricated.

Figure 1 is a vertical longitudinal section of a roller embodying my invention. Figs. 2, 3, and 4 are detail views.

A represents a rod by means of which the various sections are united together, and which has a head, B, formed upon one end, and a screw-thread upon the other to receive the clamping-nut C. There may be either one, two, or more sections, D, to the roller, as may be preferred. At each end of each section of the roller is formed a circular metallic frame or casting, E. At the outer inner edges of these castings E are formed the flanges G, in between which the ends of the boards or rods which form the roller proper are clamped, the boards and castings being bound together by tie-rods F. Through the center of each of these castings E is formed an opening large enough for a portion of the hub H to pass through. These castings are bolted to the hubs H by means of the flanges I, formed on the hubs, and the bolts J. These hubs H are made tapering upon their inner sides, and have their inner ends contracted so as to fit snugly around the rod A. Where the two sections D are fastened together, as here shown, the ends of the frame or support L are provided with the bearings or gudgeons N at their

lower ends, which gudgeons project into the hubs, as shown. Upon the inner sides of the parts L are formed the flanges O, which catch over the outer edge of the gudgeon N, for the purpose of forming a tight joint or dust-band to keep the dust and dirt from working into the bearings. In each one of these gudgeons or bearings N is made a suitable oil-chamber, *a*, in which oil can be poured, and which will gradually work out of the bearing into the hubs, so as to lubricate the moving parts. The rods A and the parts L have no movement, while the hubs H revolve around the parts N. Through the upper ends of the parts L are made suitable slots, P, so that when the parts are secured together the frame can be adjusted so as not to cause any binding between the moving parts. Where two sections, D, are secured together, as here shown, a central frame or casting, Q, is used, which projects upward between the ends of the two sections, and which has the tongue or pole secured upon its top, as shown in Fig. 4. Upon the top of this tongue or pole will be secured the driver's seat. Through the lower part of the casting Q is made an opening for the rod A to pass through, and to opposite sides of this lower perforated part are clamped the two central gudgeons or bearings, R, which are shaped and constructed as shown in Fig. 2. The outer ends of these gudgeons project into the hubs H, and upon the gudgeons are formed suitable flanges, which catch over the outer ends of the hubs for the purpose of forming dust-bands, as above described. These gudgeons R are made hollow, as shown, so as to receive oil, and this oil is fed into these gudgeons by means of the pipe T, which projects down from the frame in the rear of the seat into the central iron between the gudgeons, and flowing thence into the gudgeons. The oil is poured through this pipe T until the chambers in the gudgeons are filled, and from these chambers the oil will gradually find its way into hubs, so as to lubricate the different parts. The hubs are all made detachable, as here shown, so that when they become worn out, broken, or injured they can be readily removed and replaced by others. By means of the construction here shown the bearings can be kept constantly oiled.

I am aware that it is not new to journal a number of rollers or sections of rollers upon a single rod or shaft, and this I disclaim.

Having thus described my invention, I
5 claim—

1. In a land-roller, the combination of two or more sections, D, a rod which passes through all of the sections, the end frames, L, provided with the gudgeons or bearings, the hubs, and
10 the frames E, substantially as described.

2. In a land-roller, the combination of the rod A, the two sections D, each one of which is provided with the end frames, L, and gudgeons N, the castings E, and hubs H, with the
15 central casting, Q, and suitable gudgeons secured thereto, substantially as described.

3. In a land-roller composed of two or more sections, D, the combination of the frame Q, the two hollow gudgeons R, which are secured thereto, the hubs H, the frames E, and the
20 rod A, the gudgeons being adapted to be filled with oil through the pipe T, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY A. CURRIER.

Witnesses:

C. R. FERGUSON,
F. P. MCHARDY.