(No Model.)

C. B. BOSTWICK.

TRACTION WHEEL.

No. 246,064. Patented Aug. 23, 1881.

Fig. 1.

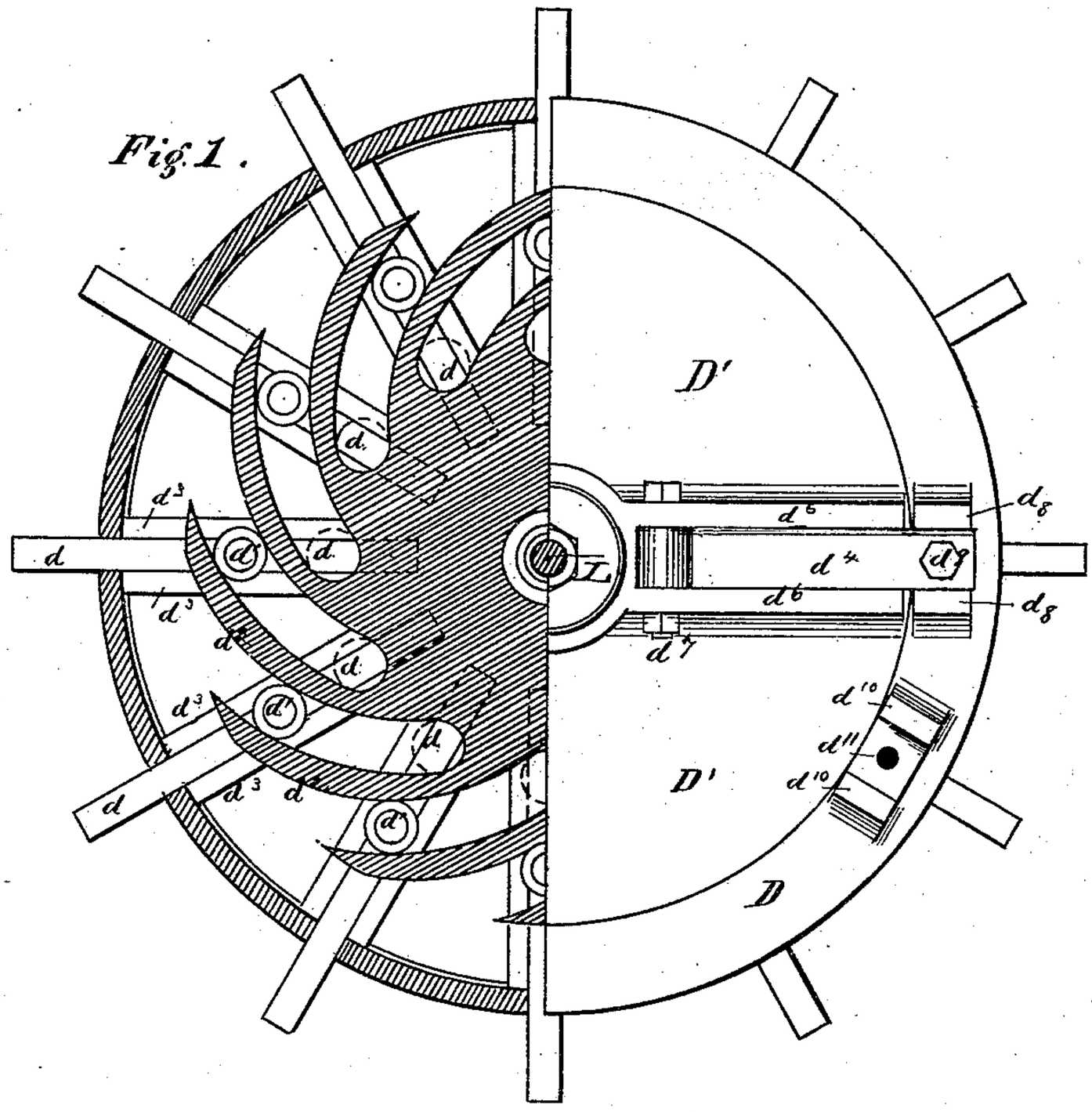
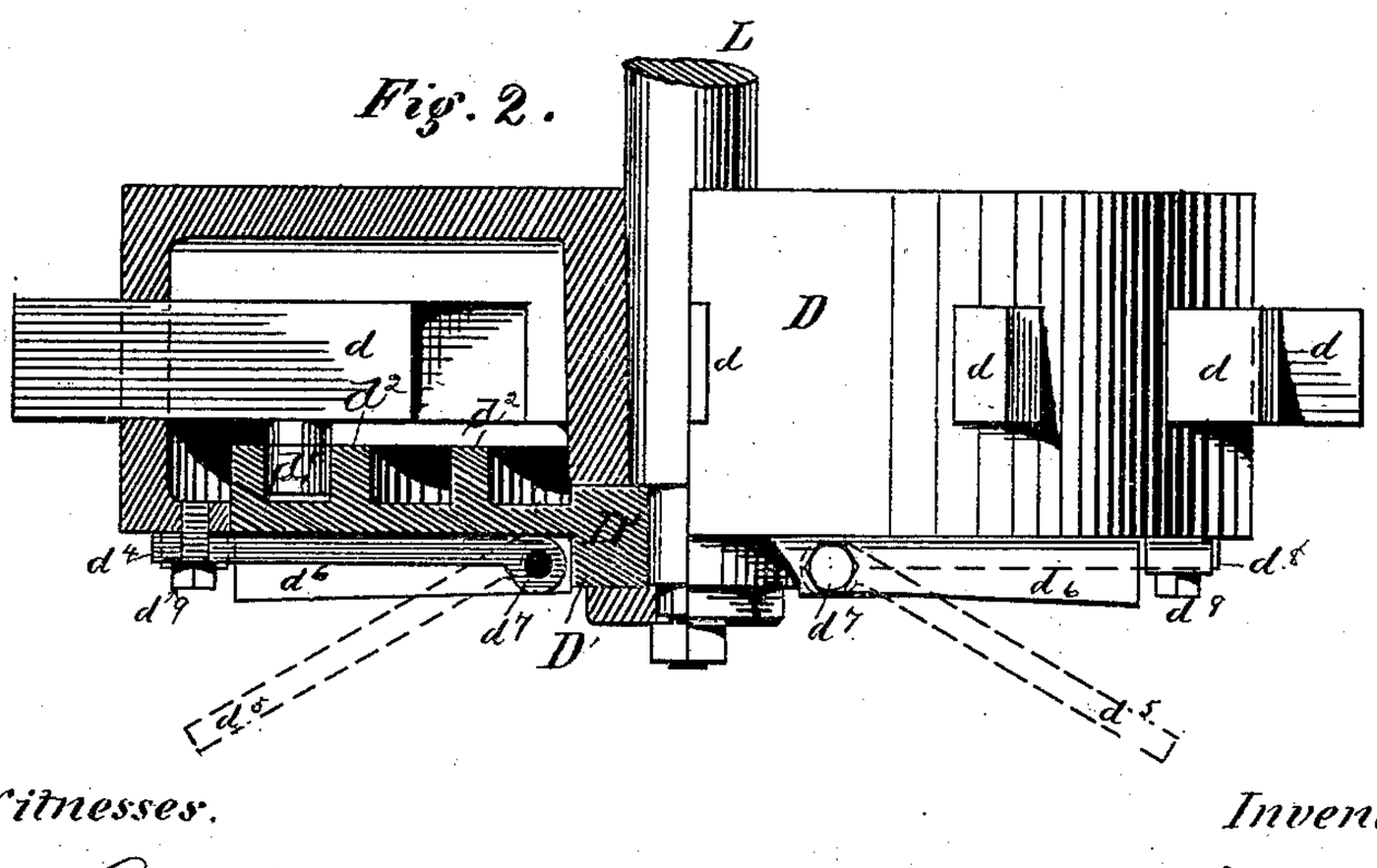


Fig. 2.



Witnesses.

Saml Diescher

Joseph Stillburg

Inventor.

Chauncey B. Bostwick

By C. M. Alexander

Attorney

UNITED STATES PATENT OFFICE.

CHAUNCEY B. BOSTWICK, OF PITTSBURG, PENNSYLVANIA.

TRACTION-WHEEL.

SPECIFICATION forming part of Letters Patent No. 246,064, dated August 23, 1881.

Application filed May 2, 1881. (No model.)

To all whom it may concern:

Be it known that I, CHAUNCEY B. BOSTWICK, of Pittsburg, in the county of Allegheny, and in the State of Pennsylvania, have invented certain new and useful Improvements in Driving-Wheels for Traction-Engines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in the driving-wheels of traction-engines, steam-plows, and other similar machines; and it has for its objects to provide such wheels with certain devices whereby they may be adapted to travel over various descriptions of soil, as more fully hereinafter specified. These objects I attain by the apparatus and mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a view, partly in elevation and partly in section, of my improved wheel, and Fig. 2 a top view thereof, with a portion broken away, showing the interior of said wheel.

In the drawings, the letter D indicates one of my improved driving-wheels, which is in the form of a hollow shell, provided at its periphery with suitable slots, through which are adapted to work the plates *d d*.

The interior of each wheel is provided with a series of ways, d^3, in which the plates *d* are adapted to slide in order that they may be projected to a greater or less extent.

Each of the plates *d* is provided with friction-rollers *d'*, projecting to one side and fitting into the spiral grooves produced by means of the ribs d^2 d^2 formed on the face-plate D'. This latter fits into the driver, and is secured to it by means of a washer and nut fastened to the shaft.

At suitable intervals pairs of parallel ribs d^6 are formed on the outer surface of the face-plate, extending radially from the hub toward the periphery. Between each pair of such ribs is housed a bar of iron, one end of which has an eye to receive a bolt, d^7, passing through corresponding apertures in the ribs close to the hub, the said bar d^4 being adapted to swing upon the bolt d^7 after the manner of a hinge, as indicated in dotted lines d^5.

On the face of the driver, near the rim, are a pair of lugs, d^8, forming a continuation of the ribs d^6. The bar d^4, which extends beyond the ribs d^6, being fitted into the space between the lugs, is fastened there by a screw-bolt, d^9, as shown. When one or more of such bars are thus fastened the face-plate is locked, and must revolve with the driver, while the plates are held in their respective position.

Whenever it is desired to retract the plates *d d* from the circumference of the drivers D, the screws d^9 are loosened, the bars d^6 swung out from the lugs d^8, and the face-plate is turned until the bar d^4 arrives opposite the lugs d^{10}, when it may be again locked, and the plates *d d*, with their ends, will form an even surface with the periphery of the driver.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with the shell D, provided with slots at its periphery, and with radial ways d^3 on its interior, the plates *d d*, adapted to move in said ways, and provided with friction-rollers *d'*, and the face-plate D', provided with spiral grooves on its interior, in which the friction-rollers set, the whole constructed and arranged to operate substantially as specified.

2. In combination with the shell D, plates *d*, and friction-rollers *d'*, the face-plate D', provided with spiral grooves, and the parallel ribs d^6 on the outer surface of said face-plate, the pivoted bar housed beween said ribs, and the lugs d^8 and d^{10} on the shell, all adapted to operate substantially in the manner specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 28th day of April, 1881.

CHAUNCEY B. BOSTWICK.

Witnesses:

H. AUBREY TOULMIN,

J. J. MCCARTHY.