No. 771,945. PATENTED OCT. 11, 1904.

D. T. SPRY.

WHEEL FOR TRACTION ENGINES.

APPLICATION FILED APR. 28, 1904.

NO MODEL.

Fig. 1.

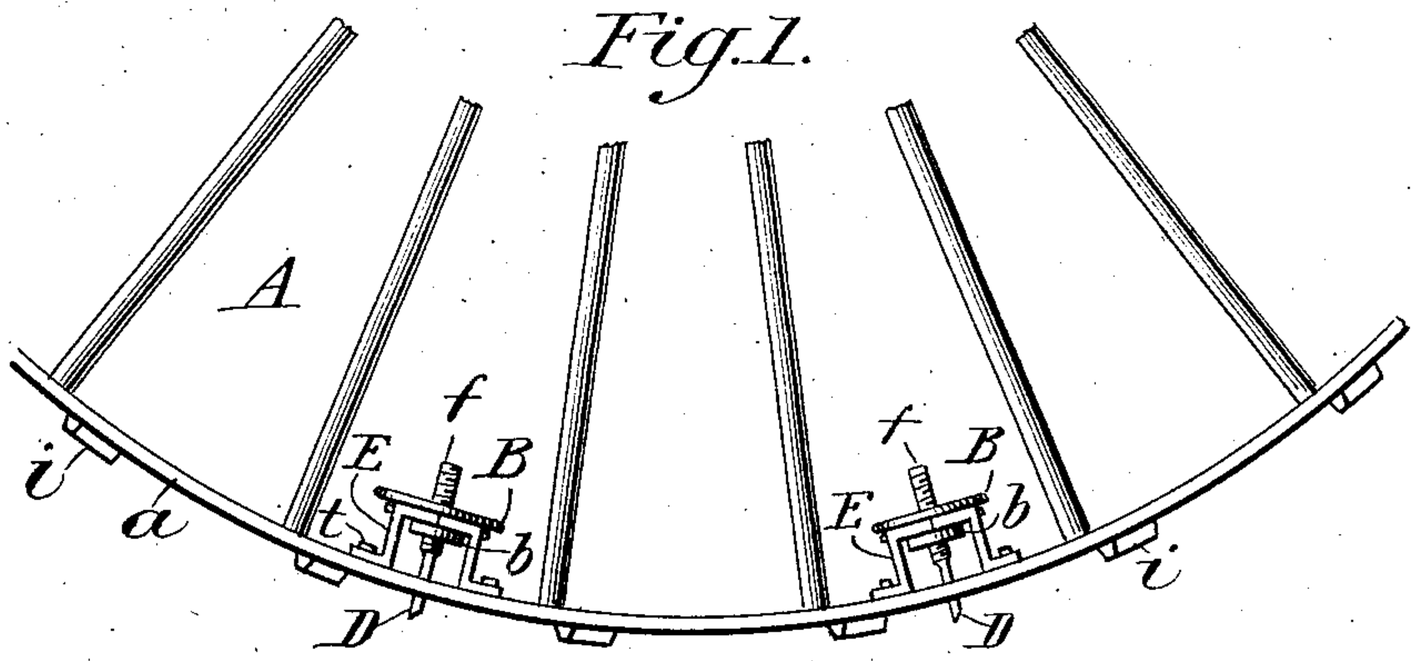


Fig. 6.

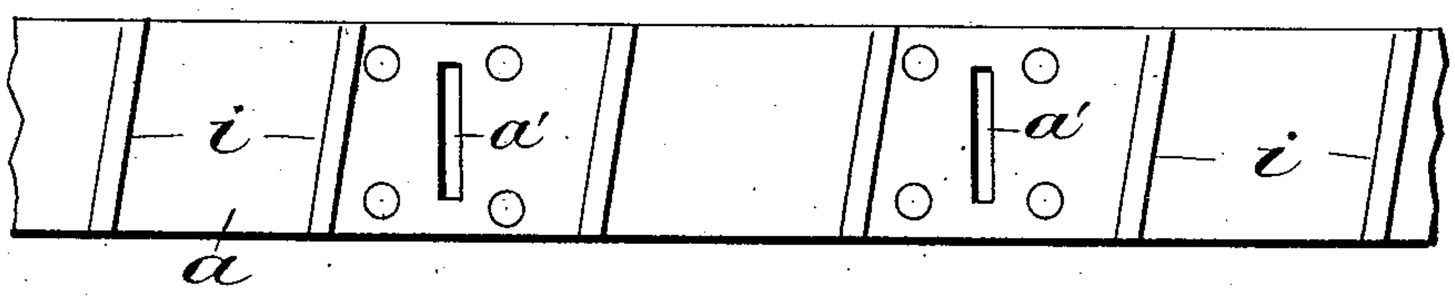


Fig. 2.

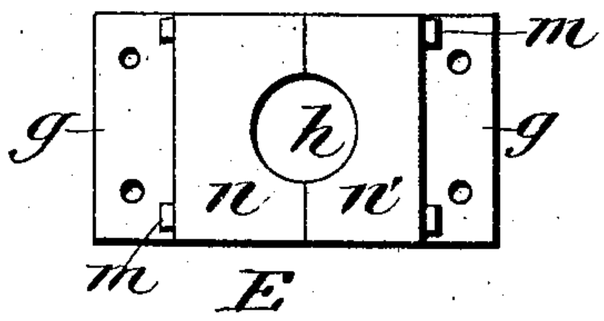


Fig. 4.

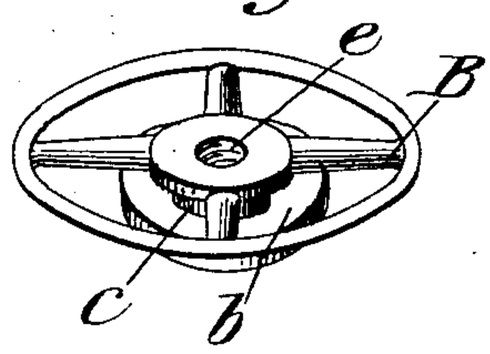


Fig. 3.

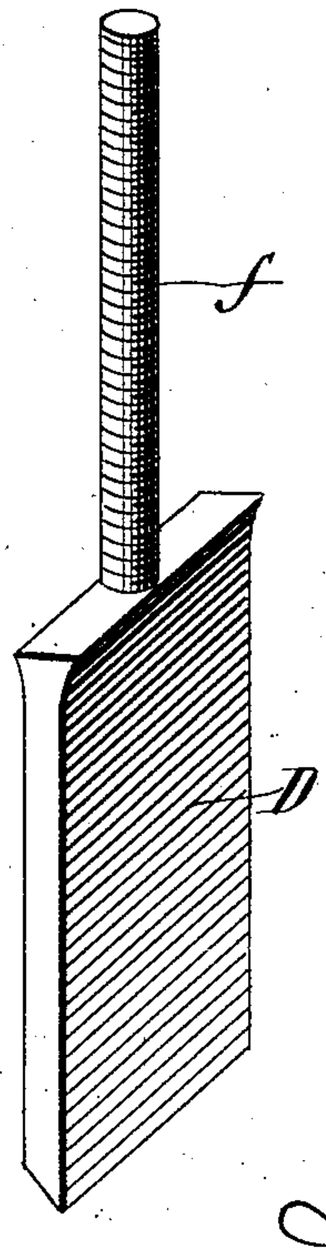
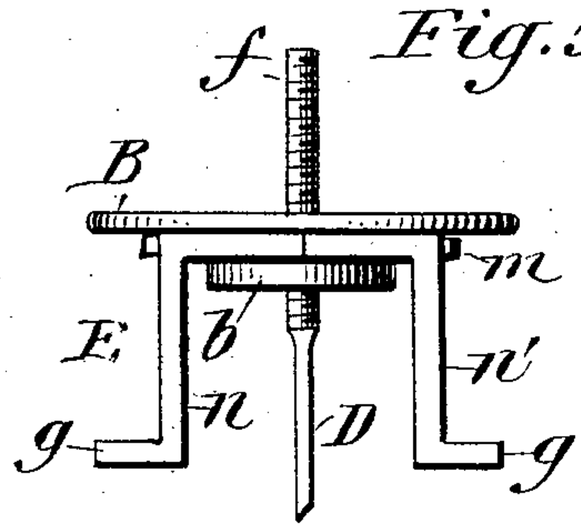


Fig. 5.



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No. 771,945. Patented October 11, 1904.

UNITED STATES PATENT OFFICE.

DANIEL T. SPRY, OF PYMOSA TOWNSHIP, CASS COUNTY, IOWA.

WHEEL FOR TRACTION-ENGINES.

SPECIFICATION forming part of Letters Patent No. 771,945, dated October 11, 1904.

Application filed April 28, 1904. Serial No. 205,344. (No model.)

To all whom it may concern:

Be it known that I, DANIEL T. SPRY, a citizen of the United States of America, residing in the township of Pymosa, in the county of Cass and State of Iowa, have invented certain new and useful Improvements in Carriage-Wheels for Traction-Engines; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in the wheels which support and carry traction-engines; and it consists in the peculiar construction and combination of the parts that will be more fully set forth hereinafter and particularly pointed out in the claim.

The object of my invention is to provide ready means to prevent the carriage-wheels, especially the drive-wheels, of traction-engines from slipping when moving over muddy roads or ground. I attain this object by the device illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a portion of a drive-wheel of a traction-engine having my device applied thereto. Fig. 2 is an enlarged detailed plan view of the frame of my device. Fig. 3 is an enlarged detailed perspective view of the tooth and threaded rod connected thereto. Fig. 4 is an enlarged detailed perspective view of the hand-wheel and its axle. Fig. 5 is an enlarged detailed side elevation of my device; and Fig. 6 is a plan view of a portion of the rim of the drive-wheel, showing slots adapted to receive the teeth D D.

Similar letters refer to similar parts throughout the several views.

A represents a portion of an ordinary drive-wheel of a traction-engine having the rim *a*.

B is a hand-wheel having firmly secured thereto or made integral therewith the axle *c*, which axle is provided with the threaded aperture *e* and has firmly secured thereto and made integral therewith the flange *b*.

D is a tooth which passes through and works in the slot *a'* in the rim of the drive-wheel and which is provided with the threaded rod *f*, which passes through and fits the threaded aperture *e* of the hand-wheel axle.

E is the frame of my device, which is composed of the two parts *n* and *n'*, bolted together by the bolts *m m* and provided with the aperture *h*, into which the axle *c* of the hand-wheel is fitted and held therein by its flange *b*. The frame E is firmly secured to the inner side of the rim of the drive-wheel by bolts which pass through the rim and the lugs *g g* of the frame.

It is apparent that by turning the hand-wheel the tooth D can be moved either outward or inward and the distance which it projects beyond the rim of the drive-wheel adjusted.

There should be a sufficient number of my devices secured to the rim of the drive-wheel to cause one or more of the teeth D D to be always in contact with the muddy ground when passing over muddy roads or ground. I have found by experience that when moving traction-engines over muddy roads the ordinary lugs *i*, secured to the rim of the drive-wheel, are insufficient to prevent the drive-wheel from slipping, but that by using drive-wheels provided with my devices they can readily be prevented from slipping by adjusting the teeth D D so they will extend through the mud and engage with the solid ground. By turning the hand-wheels B B the teeth D D can be readily adjusted, so as to extend through mud of various degrees of thickness or readily drawn inward so as not to interfere when passing over dry and hard roads.

When desired, my devices can also be secured to the rims of and used upon the front carriage-wheels of traction-engines in the same manner as they are secured to and used upon the drive-wheels.

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

The combination of the drive-wheel A, the frame E secured to the rim of the drive-wheel

and having the aperture *h*, the hand-wheel B which is secured to the frame by its flanged axle *c*, and the tooth D which passes loosely through the slotted wheel-rim *a* and which is provided with a threaded rod *f* which passes through and fits the threaded aperture *e* of the axle *c*, substantially as described.

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

DANIEL T. SPRY.

Witnesses:
SAMUEL H. RUDOLPH,
LOUIS H. PINE.