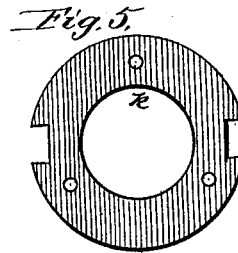
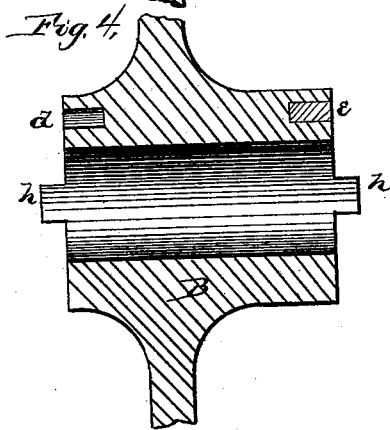
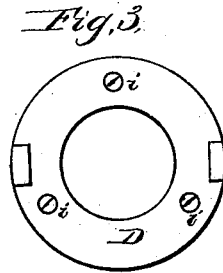
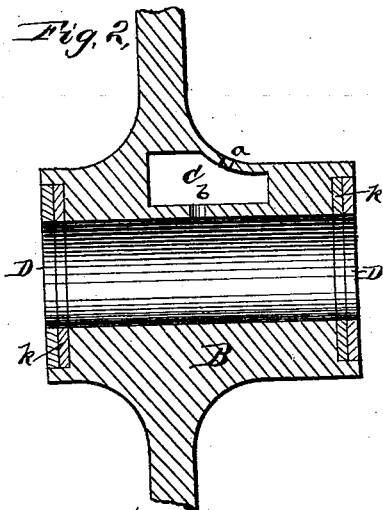
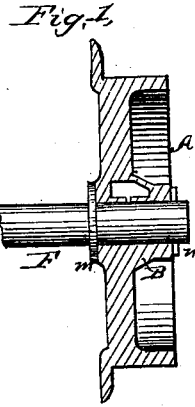


T. H. PHILLIPS.  
Self-Oiling Car-Wheel.

No. 202,581.

Patented April 16, 1878.



Witnesses:  
H. C. McArthur  
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# UNITED STATES PATENT OFFICE.

THOMAS H. PHILLIPS, OF ORWIN, PENNSYLVANIA.

## IMPROVEMENT IN SELF-OILING CAR-WHEELS.

Specification forming part of Letters Patent No. **202,581**, dated April 16, 1878; application filed March 14, 1878.

*To all whom it may concern:*

Be it known that I, THOMAS H. PHILLIPS, of Orwin, in the county of Schuylkill and State of Pennsylvania, have invented certain new and useful Improvements in Self-Oiling Car-Wheels; 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, which form part of this specification.

The nature of my invention consists in the construction of a self-oiling car-wheel; and has for its object to retain the oil, and allow of the wheel being easily removed, when required, and another substituted, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a central vertical section of my improved wheel. Figs. 2, 3, 4, and 5 are enlarged detail views of parts of the same.

A represents a car-wheel, of which B is the hub, said hub being formed with an interior oil-chamber, C, having inlet *a* on the outer side of the wheel, and outlet *b* within the hub, for the passage of the oil to the axle. In each end of the hub B are cast a sufficient number of openings or recesses, *d d*, of any suitable shape, into which are driven wooden plugs *e e*, so as to bring them flush with the face of the hub. On each end of the hub are also cast two or more projecting lugs, *h h*.

A rubber or other suitable packing, *k*, is then placed on the end of the hub, which is kept in place by means of an iron washer, D, having suitable notches for the passage of the lugs or projections *h h*. The washer D is drawn down tight by means of common wood-

screws *i i*, which are screwed into the wooden plugs *e e*, said screws having their heads countersunk in the washer, so as to be flush with its face. The lugs *h h* take all the strain from the screws in the revolution of the wheel.

This device is very simple and cheap, and can be adapted to any pattern of wheel without necessitating any change in the axle. I use the ordinary axle F, with collar *m* and linchpin *n*.

The wheel has free lateral motion on the axle. In case of breakage or accident the wheel may be removed by the simple withdrawal of the linchpin and a new wheel put in, and this is a very important feature—no bolts or springs of any kind to get loose or out of order, and thus interfere with its oil-tight qualities.

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

1. In a car-wheel, the hub B cast with recesses *d* in each end to receive wooden plugs *e*, for the purposes herein set forth.

2. The combination of a car-wheel having wooden plugs *e* driven into holes or recesses in the ends of its hub, the packing *k*, washer D, and wood-screws *i*, substantially as and for the purposes herein set forth.

3. In combination with a car-wheel having a metal washer, D, secured upon each end of the hub by wood-screws, as described, the lugs or projections *h h* cast on the hub and fitting in notches in the washer, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

THOMAS H. PHILLIPS.

Witnesses:

LEWIS W. HEIL,  
H. S. DUTTER.