M. ROBBINS.

Scraper for Vehicle-Wheels.

No. 202,872. Patented April 23, 1878.

Fig. 1.

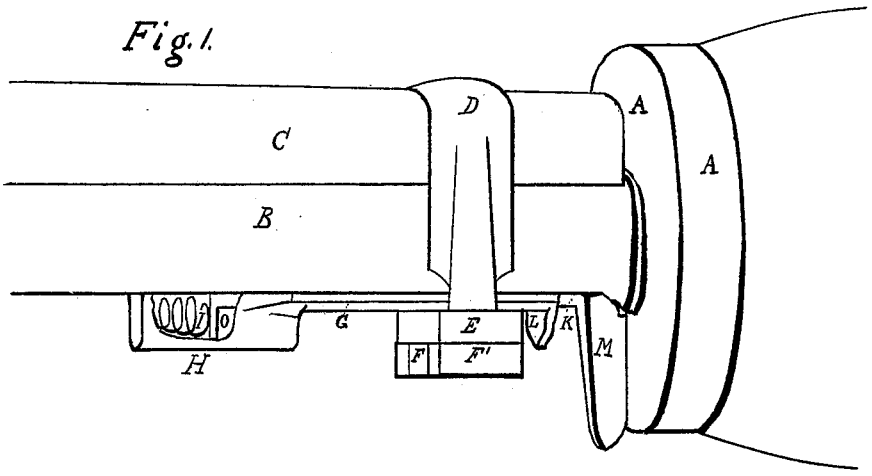
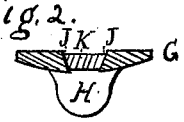


Fig. 2.



Witnesses.
Geo. S. Porter.
C. J. Paul

Inventor.
Martin Robbins,
By Albert M. Moore,
His Attorney.

UNITED STATES PATENT OFFICE.

MARTIN ROBBINS, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN SCRAPERS FOR VEHICLE-WHEELS.

Specification forming part of Letters Patent No. **202,872**, dated April 23, 1878; application filed April 1, 1878.

To all whom it may concern:

Be it known that I, MARTIN ROBBINS, of Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented a new and useful Improvement in Hub-Scrapers, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

My invention consists in a spring-scraper secured to the axle of a carriage and pressing against the inner face of the hub, to remove the grease and dirt from the same.

Figure 1 represents part of an axle and hub—the outer end of the axle and the inner end of the hub—with my invention. Fig. 2 is a vertical cross-section of the plate and bar at the letter G in Fig. 1.

A is the hub of a carriage-wheel; B, the axle; C, the bed-piece, to which the axle is secured by the clasp D, yoke E, and nuts F F′, all in the usual manner. The plate G is also held up against the axle by the clasp and yoke.

A thin plate of metal, G, has, on its under side, at its inner end, a chamber, H, to receive the spiral spring I, and is slotted at J through from the chamber to its outer end, to receive the sliding bar K, the outer end having a tie, L, on its under side, to prevent the sides of the slot J from spreading apart.

The bar K is beveled on its under edges, to fit the slot J, which is beveled on its upper edges. By means of these bevels the bar is supported in the plate. The inner end of the bar K reaches within the chamber, and has a shoulder, O, between which and the inner end of the chamber is a weak spring, I, which crowds the bar toward the hub. At the outer end of the bar is a scraper, M, which reaches nearly or quite to the bottom of the hub. The outer edge of the scraper, next the hub, conforms to the surface of the inner end of the hub, but at its lower end tapers away from the hub, and the scraper is hollowed on its front side and thin at its outer edge, so that any grease or dirt on the inner end of the hub is removed therefrom and drops clear of the hub.

The spring above mentioned is not intended to be strong enough to produce much wear on the hub, and need not be, for it acts constantly, and is merely to allow for the side play of the wheel.

The advantage of this scraper is readily seen to be that it prevents accumulations of dirt and grease on the hub, which, to say the least, are unsightly, and which, by striking against the end of the bed-piece, work into the axle-boxes and grind out the bearing-surfaces of the wheel, and that it also prevents the surplus oil and grease from getting between the yoke and clasp and the axle, and loosening the clasp, particularly the clasp to which the shaft is shackled. Keeping the axle free from dirt causes the oil to last longer.

I claim as my invention—

1. The spring-scraper M I, as and for the purpose herein specified.

2. The scraper M, in combination with the plate G and spring I, as and for the purpose herein specified.

MARTIN ROBBINS.

Witnesses:
ALBERT M. MOORE,
NICHOLAS STARRS.