T. W. ROUNDS & T. L. REED.

Horse-Scraper.

No. 209,360. Patented Oct. 29, 1878.

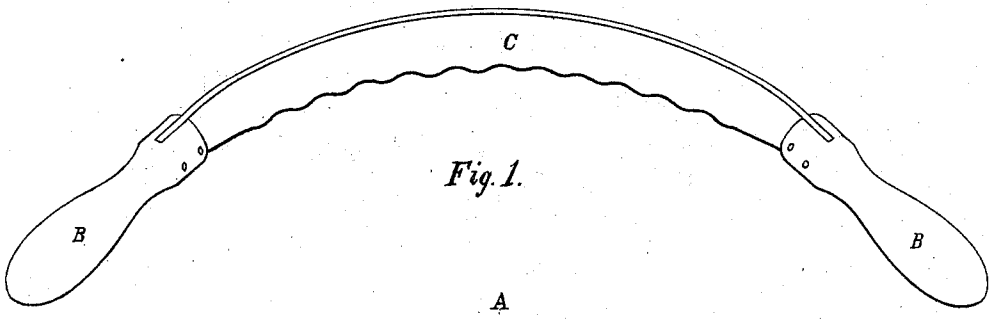


Fig. 1.

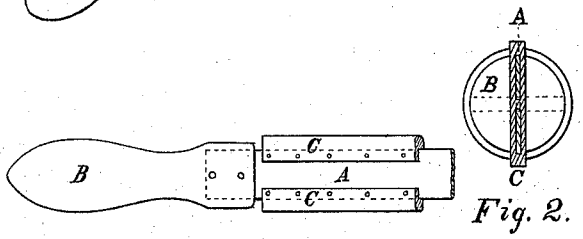


Fig. 2.

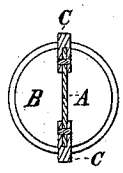


Fig. 4.

Fig. 5.

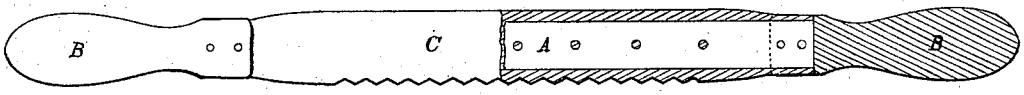


Fig. 3.

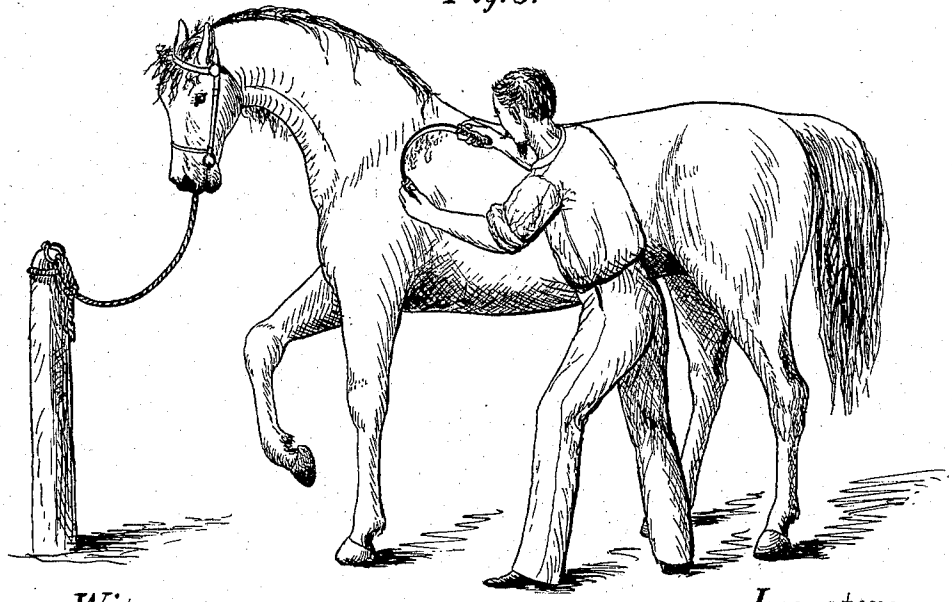


Fig. 6.

Witnesses.

M. Perry

H. B. Perry

Inventors.

Thomas W. Rounds

Thomas L. Reed

by their Atty.

J. G. Perry

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS W. ROUNDS AND THOMAS L. REED, OF PROVIDENCE, R. I.

IMPROVEMENT IN HORSE-SCRAPERS.

Specification forming part of Letters Patent No. **209,360**, dated October 29, 1878; application filed August 24, 1878.

To all whom it may concern:

Be it known that we, THOMAS W. ROUNDS and THOMAS L. REED, both of the city and county of Providence, in the State of Rhode Island, have invented a new and useful Improvement in Horse-Scrapers, of which the following is a specification, reference being had to the accompanying drawings, making part thereof.

This invention is an improvement on the well-known scraper made of hoop-iron, a strip of sheet metal, or wood; and its object is to provide a cheap, efficient, healthful, and durable implement for currying and cleaning horses or other animals; and consists in the combination of a strip of sheet metal or other suitable flexible material as a base, with a covering or edge-binding of vulcanized india-rubber, secured upon the base in any convenient manner, as will hereinafter more fully appear.

Figure 1 is a perspective view of our improved scraper complete; Fig. 2, a transverse sectional view of the same; Fig. 3, an elevation and half-longitudinal section; Fig. 4, an elevation, showing the mode of fastening rubber edges with rivets; Fig. 5, a transverse section of the same; and Fig. 6, a perspective view, showing the manner of using the scraper.

The ordinary scraper having a metallic edge is objectionable, especially those made of brass or composition, being harsh and poisonous, and liable to produce sores, and in the hands of an unskilled groom otherwise to injure the animal; and those made of steel or iron, &c., are exposed to oxidation, and consequent weakening and roughening of the edges, which speedily render them worthless.

By our invention the edges are covered with rubber, which is softer and more natural, and yields sufficiently to prevent injury to the animal, and also shapes itself to irregular surfaces, besides shielding the metallic portion from injury on account of dampness.

A is the base or central body of the scraper, preferably made of a narrow band of sheet metal, and provided with a suitable handle, B, at each end. C is the covering of india-rubber, which may be applied over the whole surface of the body A, or upon the edges merely, as indicated in the drawings, Fig. 2.

Any suitable means of permanently uniting the parts may be adopted. Thus, the rubber may be formed as a flat sleeve, and be drawn on or over the base endwise and cemented; or it may be cut from sheet-rubber, wrapped around the body, or folded over the edges, and cemented or riveted in position. We, however, prefer to cover the base with rubber compound in the raw state, and vulcanize it thereon, by which process we secure a more perfect union of the parts and a better finish, with comparatively slight expense.

The sheet-metal base should be thoroughly cleaned, and may be roughened by corrosive acids, in order that the rubber may adhere more perfectly thereto; and it may even be perforated at intervals, as illustrated in Fig. 3, so that the rubber on the opposite sides may unite through the perforations.

The method of compounding and the process of vulcanizing the rubber are too well known in the art to require description.

The edges of the scraper may be made smooth, serrated, or corrugated, as desired.

In the operation, this improved scraper, covered with rubber, produces a circulation warming and drying to the animal, and the edge strips being riveted or otherwise secured to the base, if necessary, may be taken off and replaced with new ones.

Having thus described this invention, we claim—

The improved horse-scraper consisting of the base or central body A, provided with suitable handles B, in combination with the the elastic covering or binding C, substantially as and for the purposes herein set forth.

THOMAS W. ROUNDS.
THOMAS L. REED.

Witnesses:
ARNOLD GREER,
J. G. PERRY.