

G. SMITH.

Chafing-Iron for Vehicles.

No. 160,793.

Patented March 16, 1875.

Fig 1.

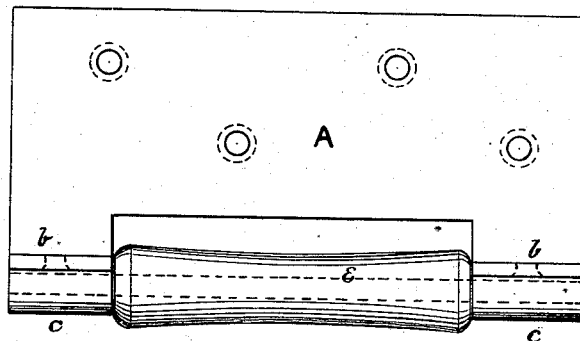
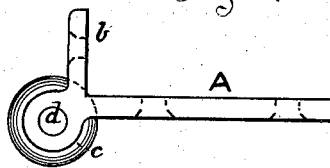


Fig 2.



Witnesses.

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GILBERT SMITH, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN CHAFING-IRONS FOR VEHICLES.

Specification forming part of Letters Patent No. **160,793**, dated March 16, 1875; application filed November 5, 1874.

To all whom it may concern:

Be it known that I, GILBERT SMITH, of San Francisco, in the county of San Francisco and State of California, have invented an Improvement in Chafing-Irons; and I do hereby declare that the following is a full, clear, and exact description of the same, so as to enable those skilled in the art or science to which it most nearly appertains to make and use my said invention without further invention or experiment, reference being had to the accompanying drawings and to the letters marked thereon.

This invention consists essentially in attaching a concave roller to a strong iron plate, so supported by lugs or angle-irons that the plate cannot be torn from the body of the vehicle as by the ordinary construction and attachment.

Referring to the drawings, Figure 1 is a plan; Fig. 2, an end elevation.

A represents a strong plate, which is attached to the bottom of the vehicle by bolts, and to the side rail by upwardly-projecting lugs *b*, through which also pass bolts. An offset is made in the plate, from the ends of which project lugs *c c*, which form stout bearings for the spindle or axis *d*, upon which the chafing-iron moves.

The chafing-iron *e* is of peculiar construc-

tion by reason of its being made concave from near the point of beginning to a point near the opposite end, so that the wheel, when it strikes the iron, will not meet with immediate and rigid resistance, as by the ordinary construction, which is so liable to cramp the wheel and overturn the vehicle. This iron is allowed to turn freely on the spindle or axis *d* as the edge of the tire strikes, and thus the sudden arresting of the rotation of the wheel is prevented and the liability of overturning the vehicle lessened.

I am aware of the Letters Patent No. 79,995, granted July 14, 1868, and consequently do not claim, broadly, a concave roller when employed as a chafing-iron; but

What I do claim as new, and desire to secure by Letters Patent, is—

In combination with a concave roller, *e*, the plate *A*, provided with the upwardly-projecting lugs or angle-irons *b* and bearing-arms, whereby the roller is held firmly in position, substantially as specified.

In witness whereof I have hereunto set my hand and seal.

GILBERT SMITH. [L. s.]

Witnesses:

C. W. M. SMITH,
J. F. S. KELLY.