

(No Model.)

C. C. LARRABEE.

CHAFE IRON FOR VEHICLES.

No. 366,227.

Patented July 12, 1887.

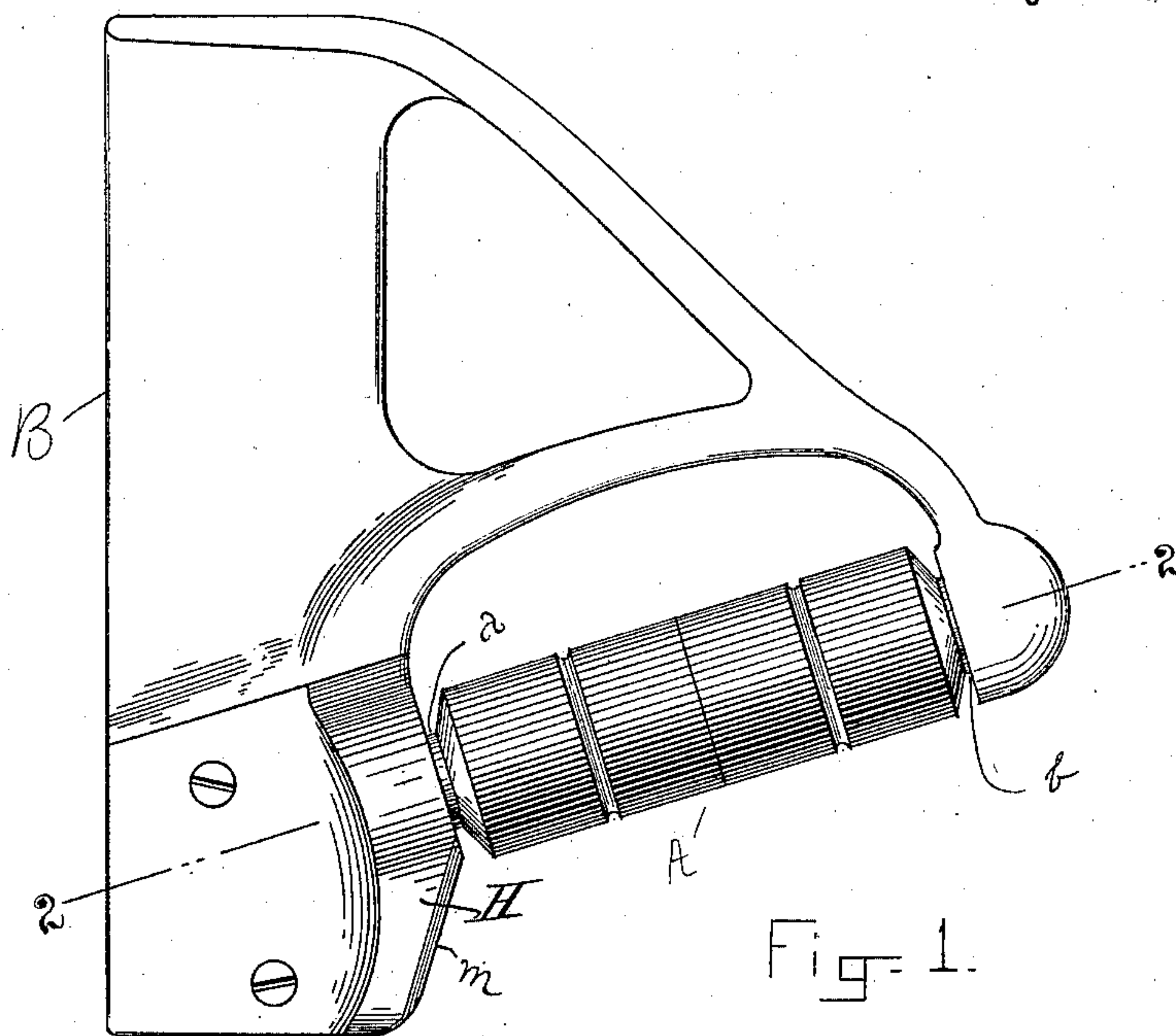


Fig. 1.

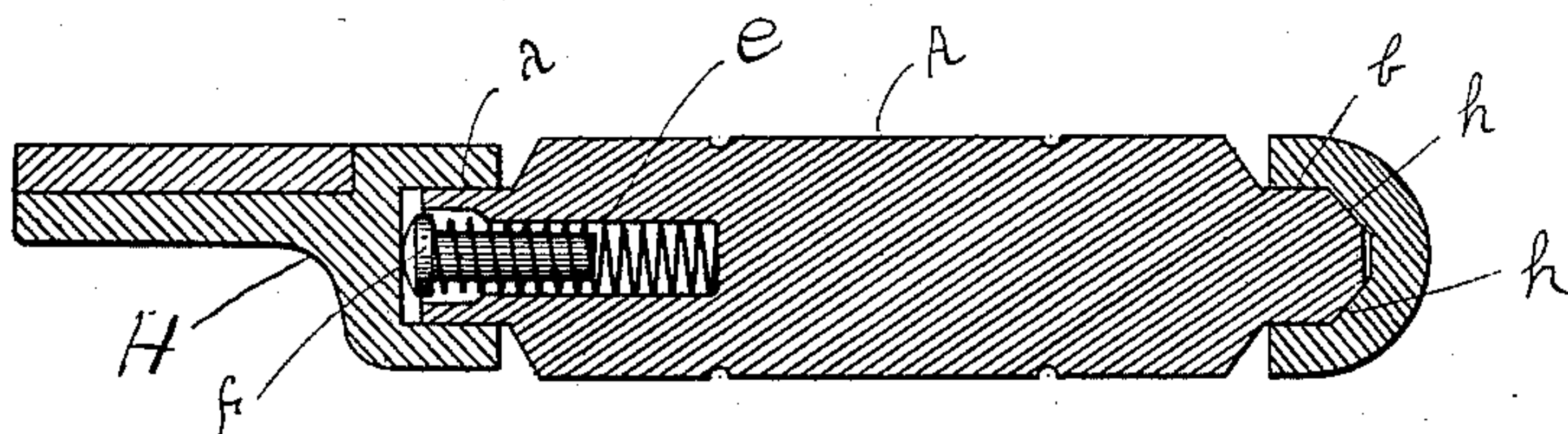


Fig. 2.

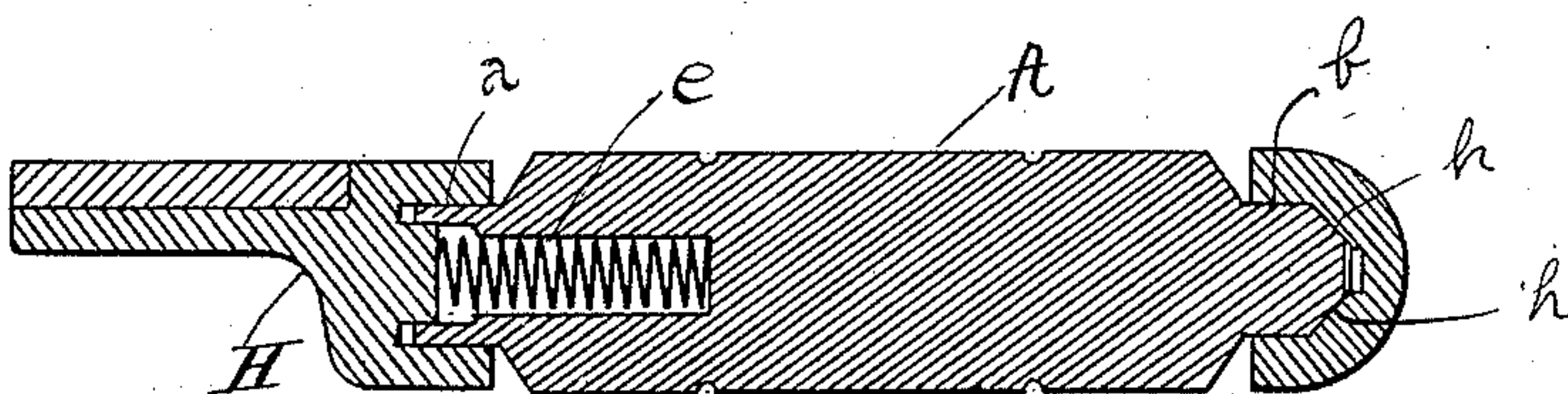


Fig. 3.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES C. LARRABEE, OF BATH, MAINE.

## CHAFE-IRON FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 366,227, dated July 12, 1887.

Application filed April 20, 1887. Serial No. 235,553. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES C. LARRABEE, of Bath, in the county of Sagadahoc and State of Maine, have invented certain Improvements in Chafe-Irons for Vehicles, of which the following, taken in connection with the accompanying drawings, is a specification.

This invention has reference to that class of devices which are used as guards on four-wheeled vehicles to prevent the wheel-tire, in turning the vehicle, from chafing or cutting into the carriage-body, and particularly to that class of said devices wherein a roll mounted in a suitable frame serves as the guard or fender.

The nature of this invention is fully described and specifically claimed hereinafter.

Referring to the drawings, Figure 1 is a perspective view representing the fender or guard and its supporting-frame detached from the vehicle. Fig. 2 is a sectional view on line 2 2. Fig. 3 is the same as Fig. 2, except that it shows a modified form of construction.

The guard-roll A is composed of steel or iron or other suitably hard material, and is provided at its ends with trunnions or pintles *a b*, which are adapted to enter suitable sockets formed in the supporting-frame B, as shown in Fig. 1. The roll obviously is supported in the frame by the pintles *a b*, and permits rolling movement when brought in contact with the wheel, to prevent catching and cramping the wheel. The pintles *a b* are integral with the roll, as this construction gives greater strength and economy in construction. The roll is further provided at the end with a spring, *e*, which spring is inclosed in a bore or chamber formed in the roll, as shown in Fig. 2. This spring bears one end against the roll and its opposite end against the supporting-frame, as in Fig. 3; or, instead thereof, the opposite end may be allowed to bear against the head of a plunger, *f*, as shown in Fig. 2. The construction shown in Fig. 2 is the one I much prefer to use, as the plunger extending into the spring keeps the spring in form and insures its working readily. In either case the effect of the spring is to crowd and press the roll against the inner faces, *h*, of the frame, and thus prevent vibration and rattling of the parts. By inclosing the spring within the roll, as shown, it is removed from all dirt and the damaging

effects of damp weather, and a like advantage is attained relative to the faces *h*. To facilitate the mounting of the roll in its supporting-frame, I make the bearing H detachable from the frame proper and attach it to the frame by screws or other obvious means, as shown in Fig. 1.

The manner of securing the device to the wagon must be obvious to those persons who are skilled in the art to which it pertains. Some slight variations in the supporting-frame may be necessary to adapt the device to different vehicles; but all this will be plain to any person acquainted with the devices now in use for a purpose similar to this.

In operation the tire of the wheel bears upon the face of the roll; but in some styles of vehicles it may tend to slip off the roll during the turning of the carriage, and to prevent this I extend the frame backward and rearward at the point *m*, as fully shown in Fig. 2, so that the tire may bear upon this part of the frame and thereby be held upon the roll. It will of course be understood that two springs may be used to hold and prevent the roll from rattling, one in each end of the roll; but I am convinced by experience that one spring is quite sufficient for practical purposes.

I am aware that it is not new to provide a chafe iron with a spring in the end thereof for crowding the parts together, and I do not broadly claim this.

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

1. A chafe-iron consisting of the supporting-iron adapted for attachment to the side of the wagon or other vehicle, a cylindrical chafe-iron having a solid journal, *b*, and a hollow journal, *a*, and a spring inclosed within the hollow journal, acting through its force to crowd the parts together, substantially as described.

2. A chafe-iron consisting of a supporting-frame, a cylindrical chafe-iron having a solid journal at one end and a hollow journal at the opposite end, combined with the plunger and spring inclosed within the hollow journal, substantially as described.

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Witnesses:

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