

(No Model.)

W. W. CHAMBERS.  
VEHICLE SHAFT PROTECTOR.

No. 422,183.

Patented Feb. 25, 1890.

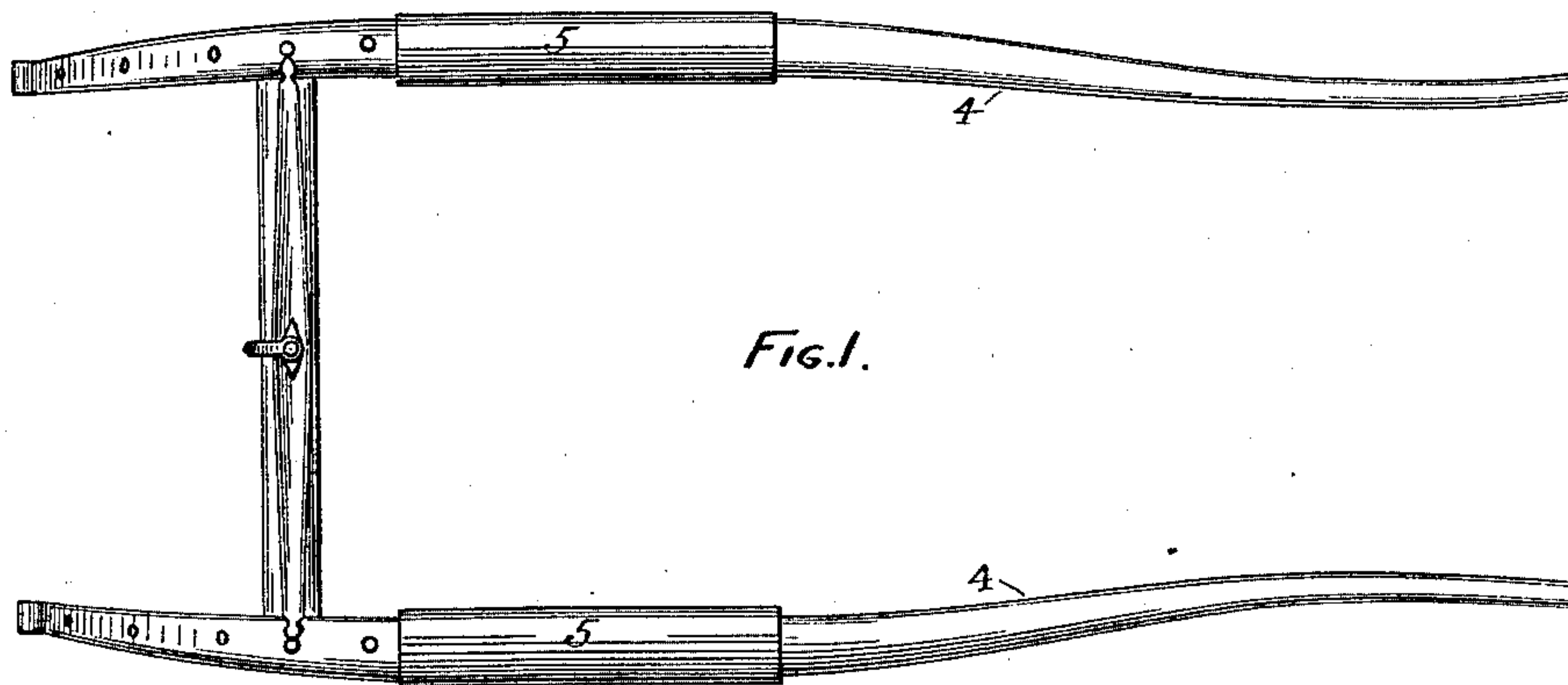


Fig. 1.

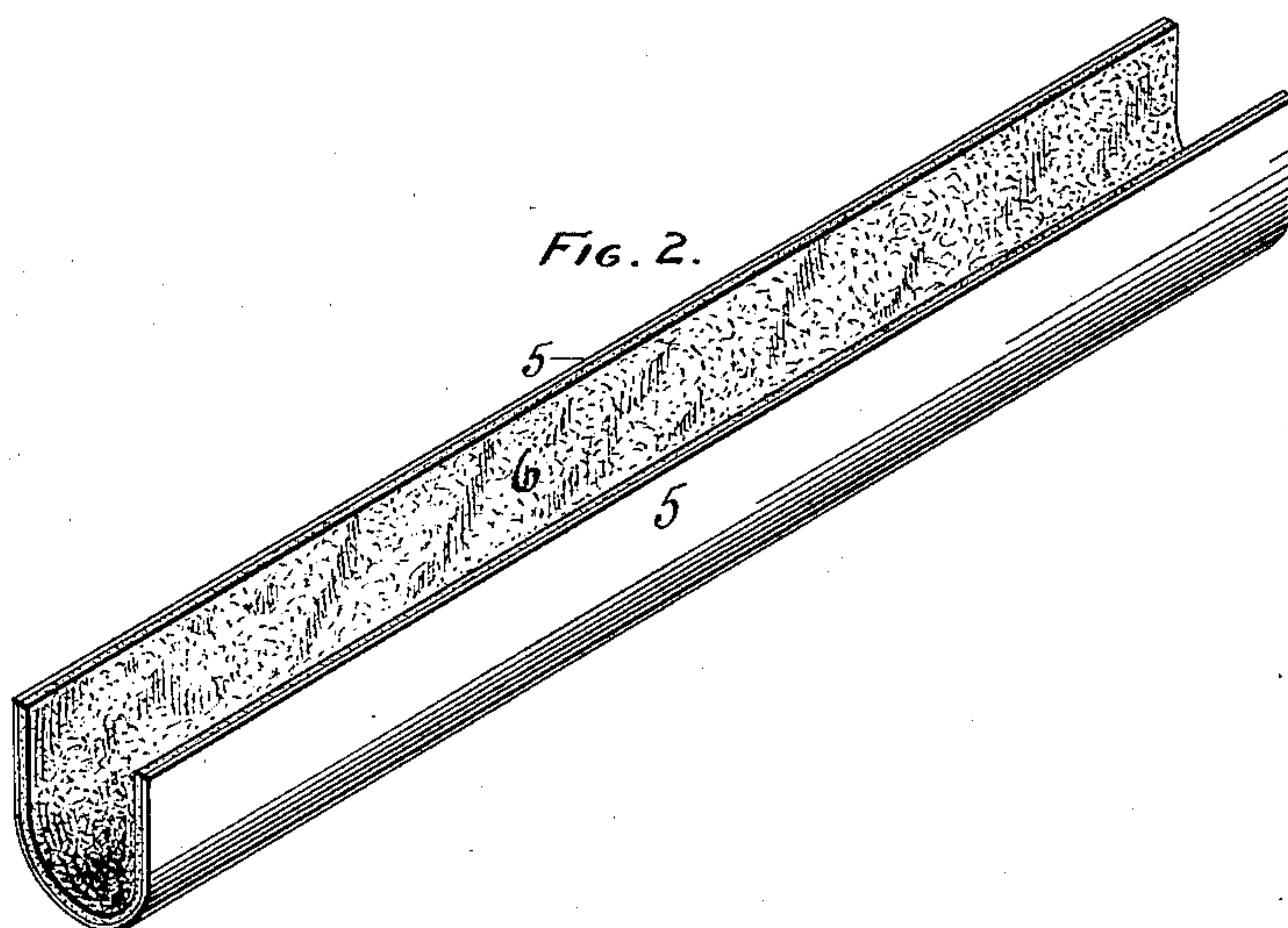
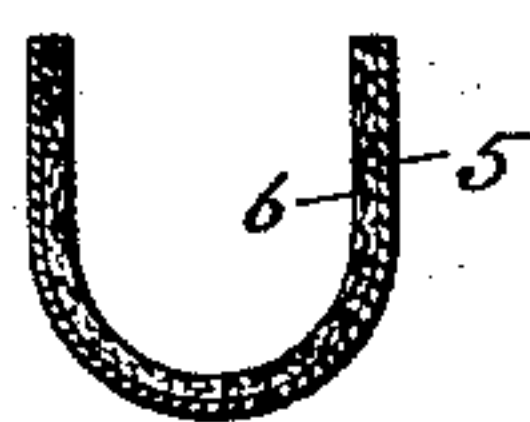


Fig. 2.

Fig. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM W. CHAMBERS, OF WASHINGTON, DISTRICT OF COLUMBIA.

## VEHICLE-SHAFT PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 422,183, dated February 25, 1890.

Application filed December 28, 1889. Serial No. 335,259. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM W. CHAMBERS, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Vehicle-Shaft Protectors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

It is customary in livery-stables and carriage-houses, where economy of storage-space is an important consideration, to arrange the carriages or buggies closely together, the shafts of one vehicle running beneath the body of the vehicle in front. This practice is, however, attended with the disadvantage that through the carelessness or inattention of the stable-men the shafts are frequently allowed to run so far forward as to strike against the rear axle of the front vehicle, and thereby become scratched or abraded upon their upper surfaces and at a conspicuous place thereon, to the annoyance and dissatisfaction of the owner.

The object of my invention is to furnish an efficient safeguard against these occurrences; and to that end I have devised a detachable shield adapted as the vehicle enters the storage-room to be readily and quickly adjusted over those portions of the shafts that are liable to be scratched in the manner described.

In the accompanying drawings, illustrative of my invention, Figure 1 represents in plan a pair of shafts provided with the protecting-shields. Fig. 2 represents, on an enlarged scale, a perspective view of the shield; and Fig. 3 represents a vertical sectional view thereof.

Similar numerals of reference indicate similar parts throughout the several views.

Referring to the drawings, 4 indicates a pair of shafts illustrating the place of attachment to which the protecting-shields are to be applied as the vehicle enters the storage-room. The shields, as shown, are formed of

an outer body portion 5, of trough shape, and of sheet metal or similar material having springy qualities when bent into form. The interior of the device is lined with a layer 6 of felt, india-rubber, or the like, which may conveniently be glued to the metal.

The manner of applying or using the shield is apparent. The upper surface of the shafts is always somewhat rounded off, and as a consequence the side walls of the shield are forced slightly outward as the shield is pressed down over the shaft, and the tendency of the metal to spring back to its original form causes it to grasp the shaft tightly so as not to be accidentally detached. This security of adhesion is still further enhanced by reason of the fact that the shafts have a slight inward curve along the portions covered by the shields. In adjusting the shields in place the soft lining protects the surface of the shafts from injury. As the vehicle enters the carriage-house, the shields are placed over the shafts at the places indicated in Fig. 1, and the covered shafts are then run forward beneath any vehicle within the carriage-house, with the result that the shields protect the shafts from contact with the rear axle of the said front vehicle. It is of course evident that the shields can be readily detached when the vehicle is withdrawn for use.

What I claim is—

1. A protective guard for vehicle-shafts, consisting of a thin metallic plate bent into semicircular form and having a lining of soft material, substantially as described.

2. A protective guard for vehicle-shafts, consisting of a thin elastic plate of sheet metal bent into semicircular form and having an interior lining of felt, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM W. CHAMBERS.

Witnesses:

JOHN C. PENNIE,

HERBERT W. ELMORE.