

No. 725,240.

PATENTED APR. 14, 1903.

G. GEROULD, JR. & M. GEROULD.  
SHAFT HOLDER.

APPLICATION FILED AUG. 25, 1902.

NO MODEL.

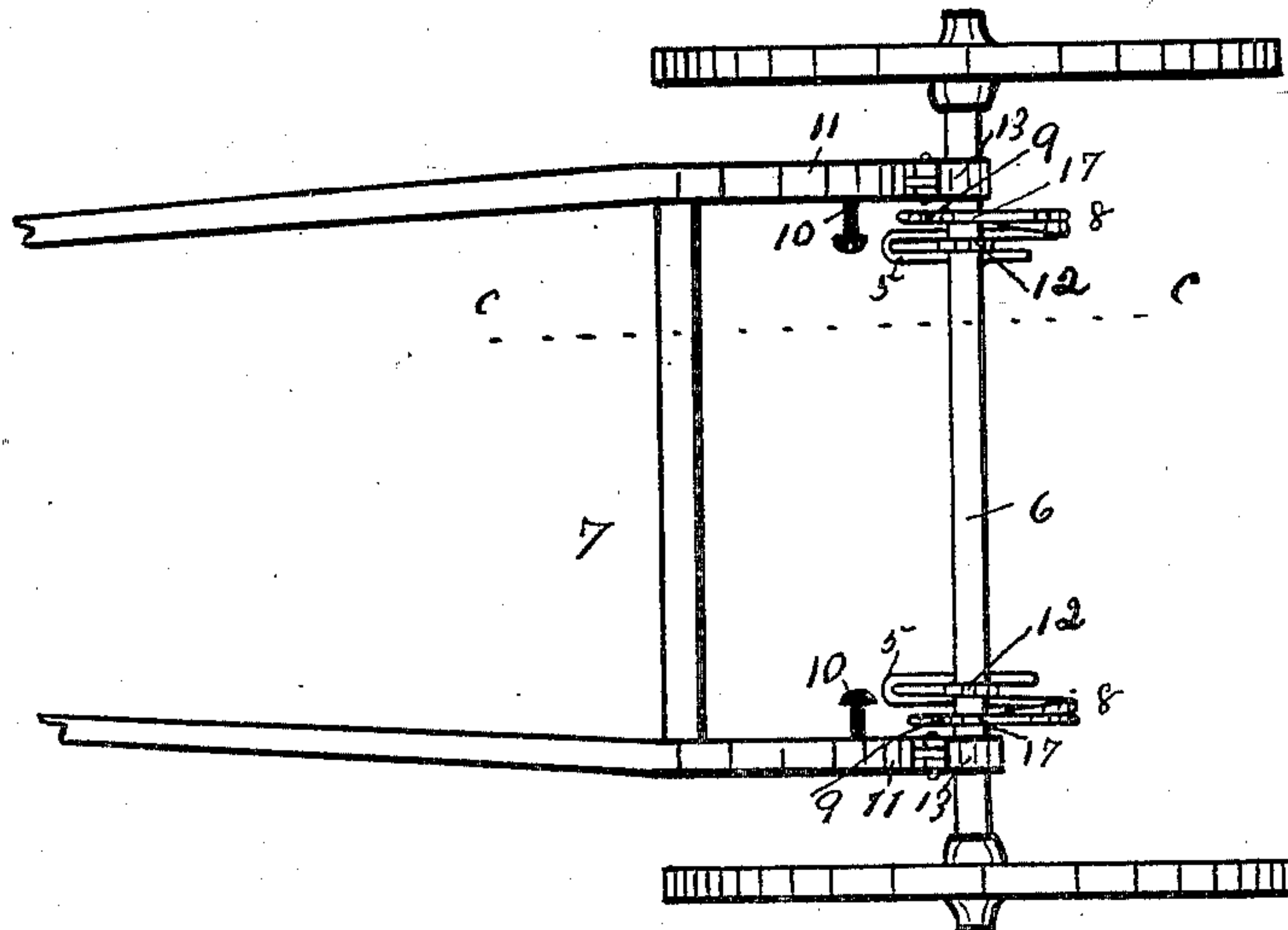


Fig. 1.

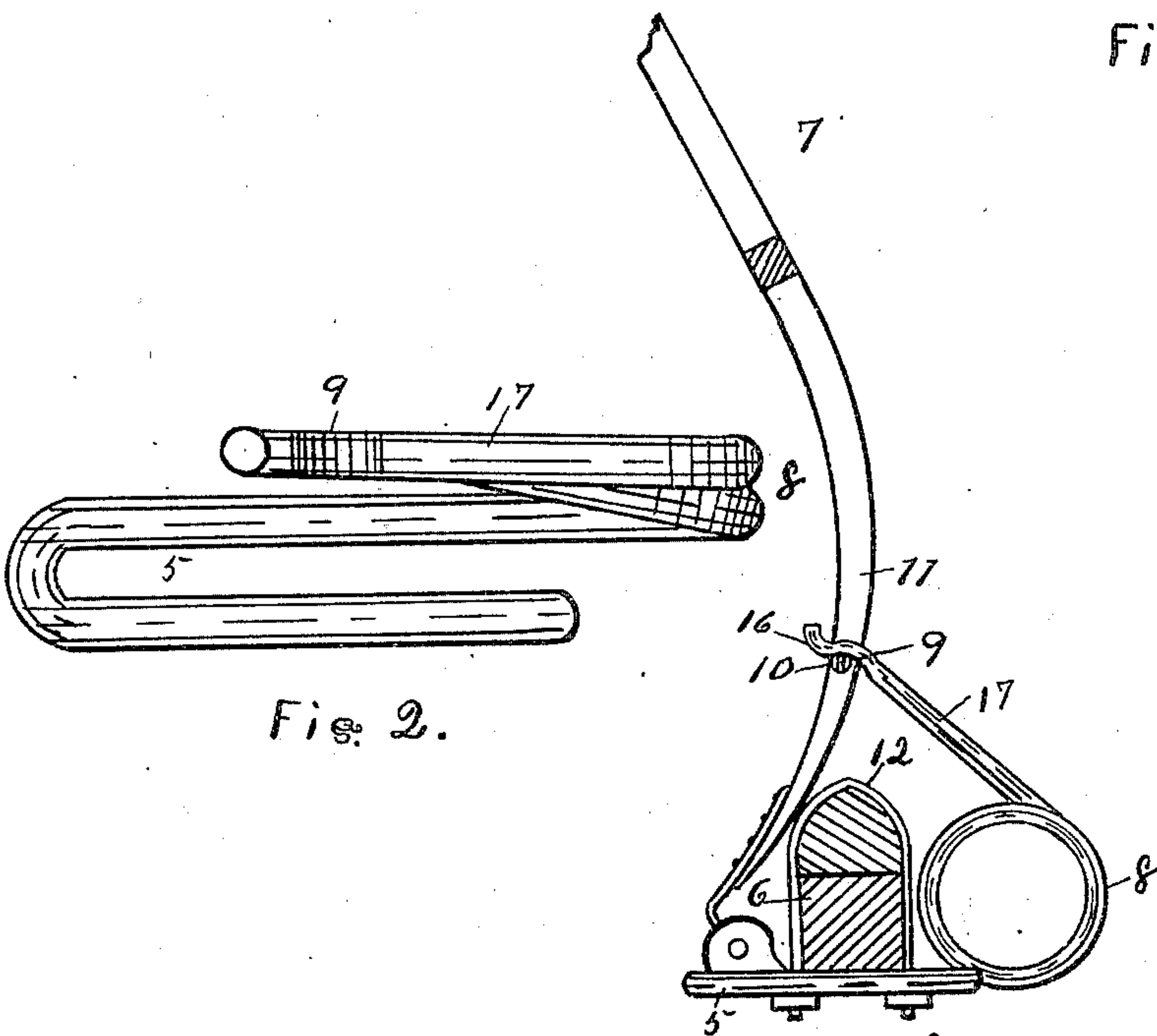


Fig. 2.

Fig. 3.

WITNESSES:

Lhea C. West.  
Rhea West

INVENTORS:

George Gerould, Jr.  
Manfred Gerould.  
Per: Lucius C. West,  
att'y.

# UNITED STATES PATENT OFFICE.

GEORGE GEROULD, JR., AND MANFRED GEROULD, OF BRADY, MICHIGAN.

## SHAFT-HOLDER.

SPECIFICATION forming part of Letters Patent No. 725,240, dated April 14, 1903.

Application filed August 25, 1902. Serial No. 120,917. (No model.)

*To all whom it may concern:*

Be it known that we, GEORGE GEROULD, Jr., and MANFRED GEROULD, citizens of the United States, residing at Brady, in the county of Kalamazoo, State of Michigan, (post-office address, Vicksburg, Michigan,) have jointly invented a new and useful Shaft-Holder, of which the following is a specification.

This invention relates to that class of thill-holders in which the thills are provided with inwardly-extended pins or projections near their rear end and with which pins elastic arms are detachably connected for holding said thills in an elevated position.

The object of this invention is to construct a pair of holders each made from one single bar of elastic metal having the peculiarities for adjustment and for the connections with the pins of the thills set forth below, thus designing to simplify, cheapen, make more convenient and effectual, besides improving the appearance.

Another object is to attach the holders a little removed inwardly from the point of attaching the thill-irons and to use independent clips and clip-nuts for attaching the holders to make possible and convenient the adjustment, as explained below.

In the drawings forming a part of this specification, Figure 1 is a plan view of the forward wheel-axle of a vehicle, showing where the holders are attached; Fig. 2, an enlarged plan of the elastic part of the holder; and Fig. 3 is an enlarged section of the axle and thills in Fig. 1 on line *c c* looking from a point below, thus showing the holder in side elevation.

Referring to the parts of the drawings pointed out by numerals, one end of the single rod of elastic metal is bent back upon itself, forming the elongated adjusting-loop 5, in the form of a hair-pin, which fits against the under side of the axle 6, transversely thereto, and inside of the rear ends of the thills 7, Fig. 1. From the loop 5 the rod is bent into a short spiral 8, Figs. 2 and 3, and from thence extends forward and upward to a point above the axle 6 and terminates in a short obliquely-located upwardly-extended letter *S* end, forming a curve 16 for the contact therewith of the projections 10 when the thills are first raised, and thus cause said contact to automatically raise the arm 17 without any hand

manipulation of the arm by the operator, and forming an under kink 9 to catch over the projections 10 on the inside of the rear curved portions 11 of the thills, Fig. 1. This portion bearing the letter *S* besides extending forward and upward, as stated, also extends a little laterally outward toward the thill on its particular side of the vehicle in order to come in position to readily interlock with the thill-pin. By this means we are enabled to set the holders inward from the thill-clips, as stated. Two holders are used, one on each side of the thills, as in Fig. 1.

The loop 5 is attached to the axle 6 by a clip 12, especially designed for the purpose and independent of the thill-clips 13.

The position the holders occupy is shown in Fig. 1, they being laterally removed a little inwardly from the thill-iron clips, and the hair-pin adjusting portion is attached by being bound at its sides by the clip-nuts resting directly against said sides and binding them firmly to the axle on the under side.

In Fig. 3 the loop 5 is set about centrally on the axle 6 between its two ends; but if used on a vehicle with the curve 11 of the thills varying or where the dimensions of the thills or the point of the attachment of the projections 10 varied then the loop 5 would be adjusted forwardly or rearwardly in accordance therewith. In this adjustment it will be noticed that owing to the position of the holders no thill-clips or thill-irons nor anything else are in the way to conflict with the long hair-pin portion and prevent forward or back movement when adjusting. The spirals 8 come in the rear of the axle 6 and are thus inconspicuous, but if seen are tasty and neat in appearance.

In Fig. 3 the thills 7 are shown held in their elevated position. When raised to this position, the projections 10 come in contact with the under curved point 16, causing the arm 17 to yield, owing to the elasticity of the spiral 8, and the projection 10 enters the kink 9. When thus adjusted to the elevated position shown, the resistance of the spring of the spirals 8 holds the thills surely and safely in place. When desiring to lower the thills, by giving them a sudden but gentle pull the projections 10 are released from engagement with the kinks 9.



The design is to paint the holders the same as the vehicles on which they are used; but the holders may be of course nickel-plated, if desired.

5 While the holders are described as being used on wheeled vehicles or those having axles, of course they may be used to hold the thills of sleighs and cutters thus elevated, the single elastic rod portions being attached  
10 to some portion of the sleigh.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

15 The combination with the vehicle-axle, of the thill-supports, consisting of the narrow elongated adjusting-loop made by bending one end of an elastic rod upon itself into a narrow hair-pin form very much longer than the width of the axle and having ends pro-  
20 jecting well beyond the front and rear sides of the axle and free from any connections,

said hair-pin loop being attached to the axle direct at a point a little removed inwardly from the thill-iron clip by the independent clip, and its nuts directly binding the sides of 25 said adjusting-loop against the under side of the axle, the elastic rod from said loop extending through the spiral and thence outwardly toward the thill, forwardly, and upwardly well above the axle, and there terminating in the short, obliquely-located, and 30 upwardly-extended letter S end, substantially as set forth.

In testimony of the foregoing we have hereunto set our hands in the presence of two wit- 35 nesses.

GEORGE GEROULD, JR.  
MANFRED GEROULD.

Witnesses:

LHEA C. WEST,  
GEORGE GEROULD.