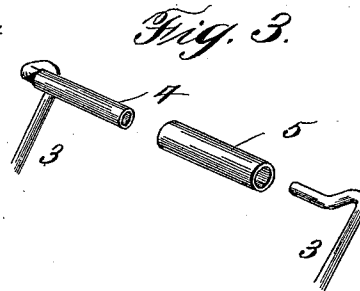
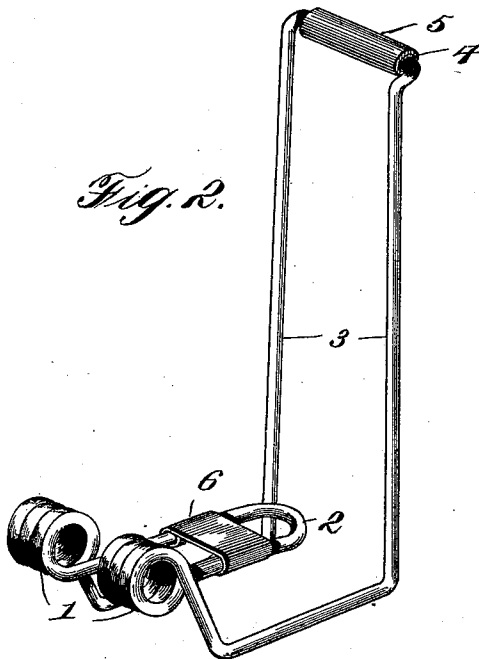
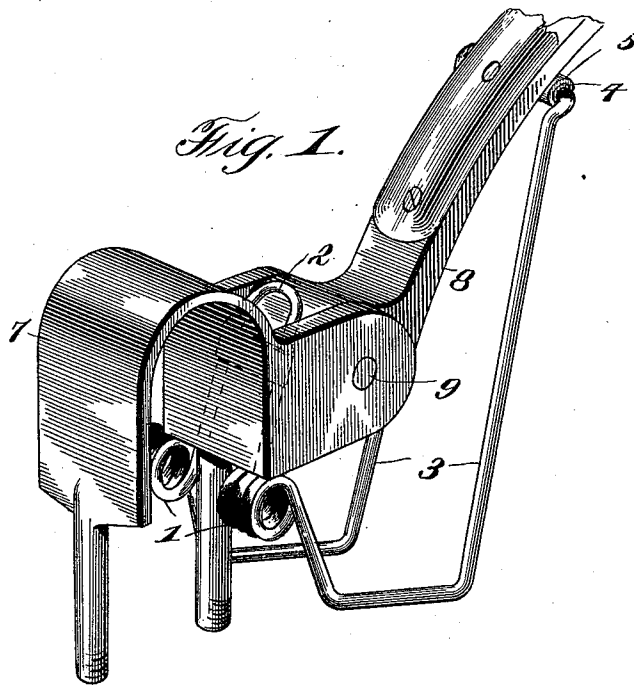


(No Model.)

G. L. & R. BOWMAN.
THILL SUPPORT.

No. 578,201.

Patented Mar. 2, 1897.



Witnesses
Chas. K. Davies.
Chas. L. Covnles.

Inventors
George L. Bowman &
Rex Bowman
By *W. J. Hudson*
Attorney

UNITED STATES PATENT OFFICE.

GEORGE L. BOWMAN AND ROSS BOWMAN, OF STOYESTOWN, PENN-
SYLVANIA.

THILL-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 578,201, dated March 2, 1897.

Application filed June 1, 1896. Serial No. 593,726. (No model.)

To all whom it may concern:

Be it known that we, GEORGE L. BOWMAN and ROSS BOWMAN, citizens of the United States, residing at Stoyestown, in the county of Somerset and State of Pennsylvania, have invented certain new and useful Improvements in Thill-Supports; and we do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in that class of thill-coupling attachments which consist of a spring or yielding support for the thill-iron; and it has for its object to prevent the spreading of the parts of the supporting device, as will be more fully hereinafter described, and specifically pointed out in the claims.

The above-mentioned object is attained by the means illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view showing a thill-coupling with our improved device attached thereto. Fig. 2 represents a perspective view of the device detached from the coupling; and Fig. 3 represents a view with the members separated, showing the construction of the forward end of the device.

Our improved device is constructed of a single piece of spring-wire, which is bent so as to form two spiral springs 1, with an intermediate tongue 2 and supporting-arms 3. These arms extend downwardly from the spiral springs and then forwardly and upwardly, as shown in the respective figures of the drawings. The extremities of the arms are bent inwardly toward each other, and one is provided with a short tube 4, of a length equal to the width of space between the arms. The bent extremity of the other end extends into this tube and is held therein by the spring action of the arms. Upon the said tube is located an antifriction-roller 5, upon which the thill-iron rides when the device is in place, as shown in Fig. 1 of the drawings. The members of the tongue are connected by a re-

inforcing-strip 6, which prevents the device from spreading at the tongue.

The numeral 7 indicates a thill-clip, and 8 the thill-iron, secured thereto by a coupling-bolt 9 in the ordinary manner.

In attaching the device to the coupling the tongue is placed between the jaws of the clip, so that its forward side will rest upon the boss of the thill-iron, the tongue being curved to conform to the contour of said boss. The arms are then forced upward and forward and are separated at their extremities, which are passed under the thill-iron, and the antifriction-roller is placed upon the tube and the arms allowed to spring together. The spring action of the arms holds them firmly together, and the roller forms a bearing for the thill-iron, which will cause it to wear evenly and which will prevent the tendency of the arms to spread, as would be the case if the roller was mounted directly upon the inwardly-bent ends of the arms.

It will be seen that the thill-iron will rest and ride upon the spring which yieldingly supports it, so as to effectually prevent rattling.

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

1. In an attachment for thill-couplings, the combination with the thill-supporting arms having inwardly-bent extremities, of the tube secured to one of said arms into which the bent end of the opposite arm is adapted to spring, and the antifriction-roller oversetting said tube to furnish a uniform bearing for the thill and prevent the spreading of the arms by the weight of the thill and shaft, substantially as described.

2. In a thill-support of the character described, the combination of the tongue thereof of a reinforcing-plate embracing the members of the tongue, so as to prevent the same from spreading, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

GEORGE L. BOWMAN.
ROSS BOWMAN.

Witnesses:

J. H. GARDNER,
J. H. BOWMAN.