(No Model.)

E. F. WOODRUFF & R. R. BELLEW.

THILL SUPPORT.

No. 535,781. Patented Mar. 12, 1895.

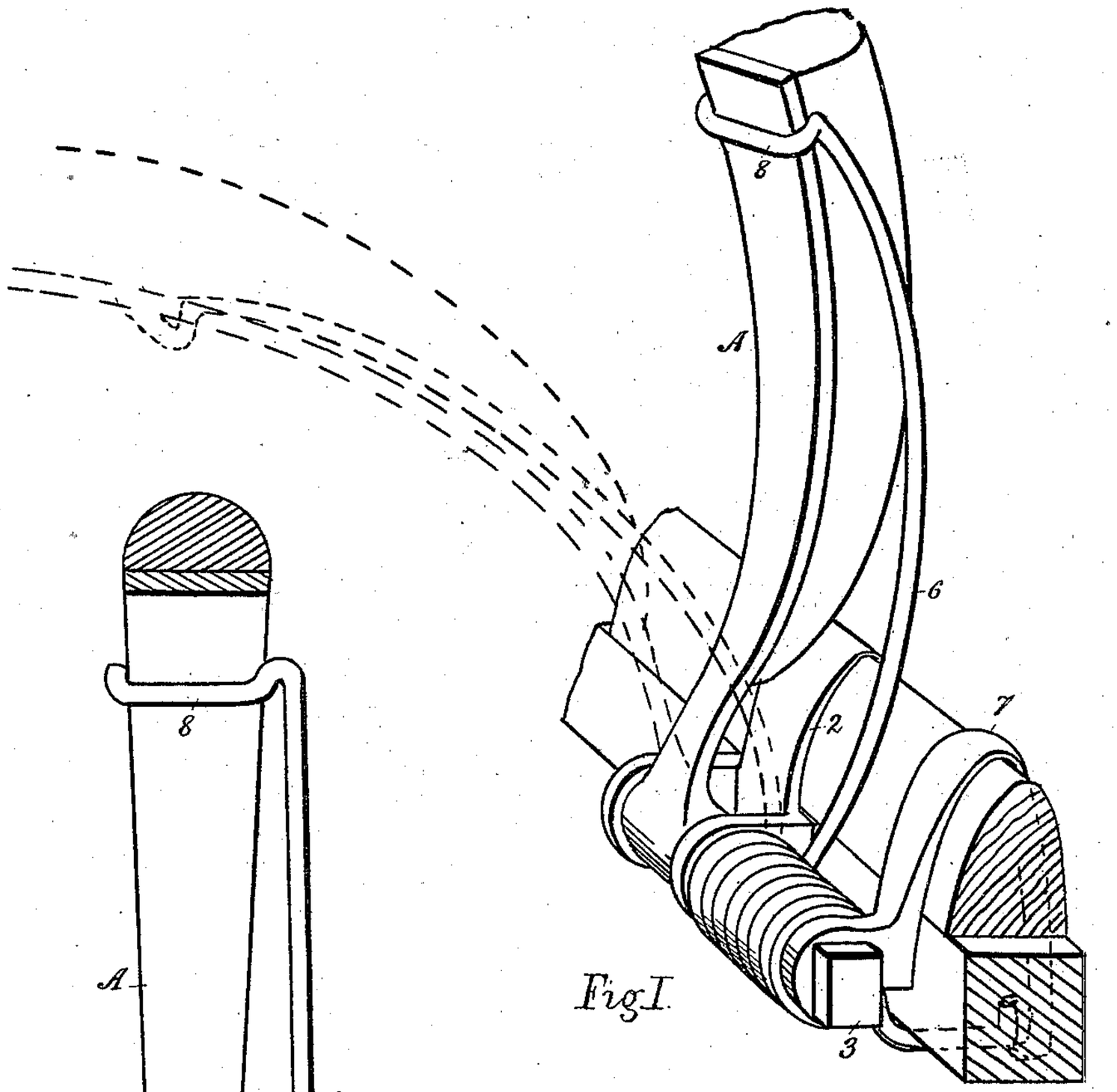

Fig. I.

Fig. II.

WITNESSES:
R. S. Millar
L. M. Adams.

INVENTORS
E. F. Woodruff
R. R. Bellew
BY Dailey
ATTORNEY.

UNITED STATES PATENT OFFICE.

EDGAR F. WOODRUFF AND RANKIN R. BELLEW, OF HARTWELL, OHIO; SAID BELLEW ASSIGNOR TO M. V. B. WEIGHELL, OF SAME PLACE.

THILL-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 535,781, dated March 12, 1895.

Application filed February 23, 1894. Serial No. 501,279. (No model.)

To all whom it may concern:

Be it known that we, EDGAR F. WOODRUFF and RANKIN R. BELLEW, citizens of the United States, residing at Hartwell, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Thill-Supports and Antirattlers, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure I is a perspective view of our improved thill support and anti-rattler and Fig. II a front view of the same.

Our invention relates to improvements in thill supports and anti-rattlers and its purpose is to provide a simple, effective and durable device which may be easily adapted and applied to old as well as new vehicles and whereby the thills may be kept in an erect position when not in use, and also made entirely free from all liability to rattle when the vehicle is in motion.

The peculiar construction and advantages of our invention will be readily understood by referring to the accompanying drawings, in which—

A designates the thill which is made in the usual form and united to the axle of the vehicle by a clip 2 and an elongated thill bolt 3 which is secured in the usual manner by a nut 4. The unthreaded extension of the bolt is provided with a metal sleeve 5 which is encircled by the successive coils of a spring 6 which may be made of steel wire or rod of suitable size. The coils are so spaced and arranged that their extremities bear against the jaw of the clip on one side and the neck of the bolt on the other. The constant tension thus exerted prevents all longitudinal rattling movement of the bolt. The inner end of the spring is bent downwardly and backwardly under the axle and in conjunction with the hanger 7, forming a hook which grasps the top of the axle and forms a clamp to support the head of the bolt. The outer end of the spring is curved upwardly, forwardly and laterally as shown and terminates in a stirrup 8 which supports the thill.

It will be understood that while the spring upholds the thill in various positions, it also serves to keep the eye of the thill iron in close and constant contact with the bolt, thereby taking up all wear and preventing all clattering noise.

What we claim as new is—

In a thill support and anti-rattler, the combination with the ordinary axle clip, of the elongated thill-bolt, the spring compassing the projecting portion of said bolt and having one end or arm reaching upward and backward and engaging the thill and the other end extending downward and clamping the under side of the axle, and the hanger or hook clamping the upper side of said axle and forming a bearing for the projecting end of said bolt, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands, this 12th day of February, 1894, in the presence of witnesses.

EDGAR F. WOODRUFF.
RANKIN R. BELLEW.

Witnesses:
R. S. MILLAR,
E. T. ADAMS.