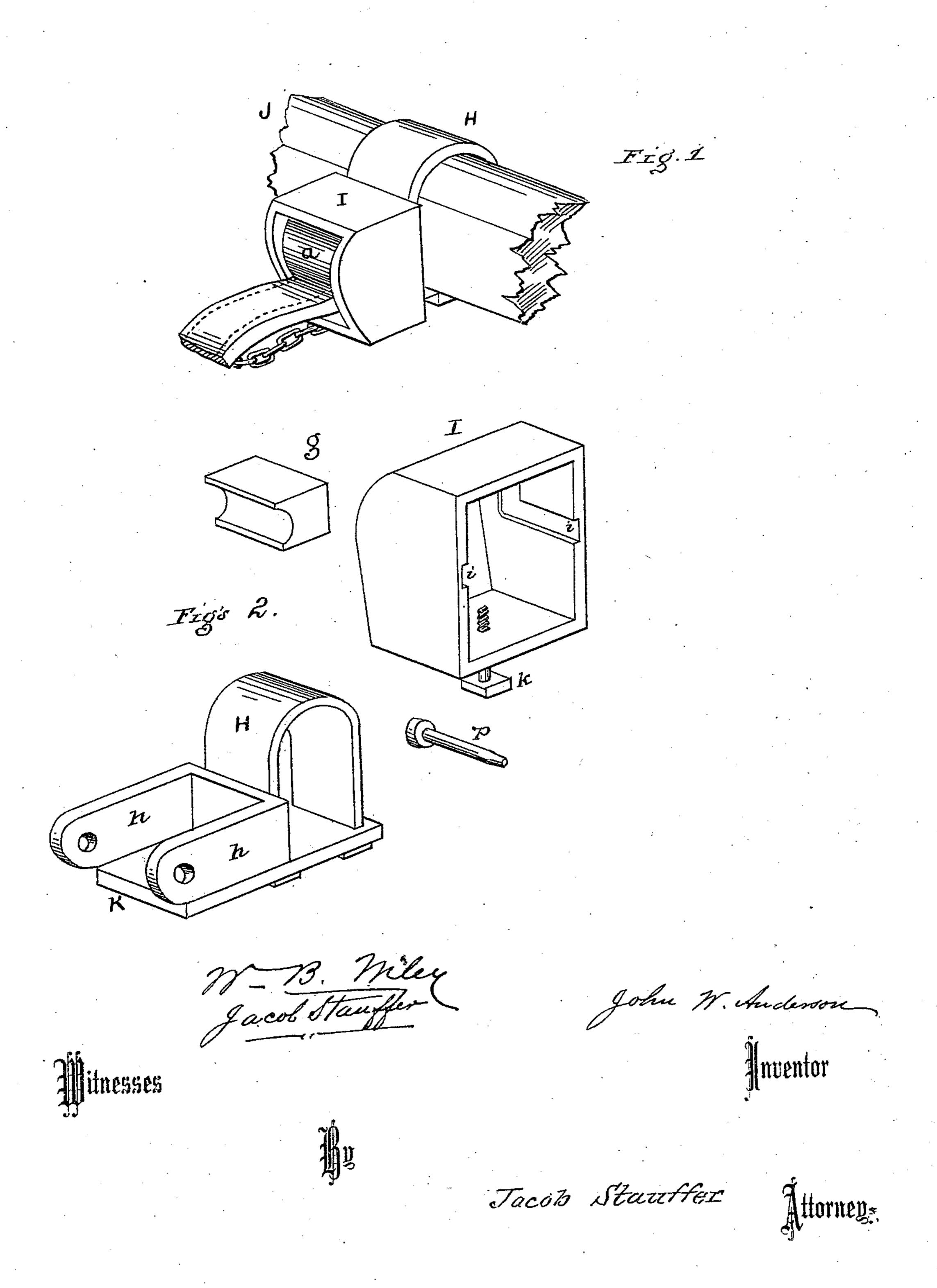
J. W. ANDERSON.

No. 183,244.

Patented Oct. 17, 1876.



UNITED STATES PATENT OFFICE.

JOHN W. ANDERSON, OF GREEN P. O., PENNSYLVANIA.

IMPROVEMENT IN THILL-COUPLINGS.

Specification forming part of Letters Patent No. 183,244, dated October 17, 1876; application filed July 12, 1876.

To all whom it may concern:

Be it known that I, John W. Anderson, of Green P. O., in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Shafts and their Couplings to Vehicles, of which the following is a specification:

This invention relates to an ordinary thill-coupling forming a rubber-box, and provided with a cap that locks the bolt, and a gum adjusting-screw attached beneath.

The accompanying drawing, with the letters of reference marked thereon, and a brief description, will enable those skilled in the art to make and use the same.

Figure 1 shows the several parts combined and attached; Fig. 2, the same shown detached.

The clip H is connected with its screw ends | in the ordinary way to the vehicle or crosspiece J. The bottom plate K projects, forming the closed bottom of a box open in front and above. The vertical sides h are perforated to receive the headed coupling-bolt p, which is slightly tapered at the end, so as to enter the bearings freely through the eye a on the end of the shaft-iron, in the ordinary way between said bearings. The open box formed between the bearings and bottom is provided with gum-elastic stuffing. Over the foregoing arrangement a loose, open frame or cap, I, is slipped. This cap has a thumb or set screw, k, through its bottom, to act against the bottom K of the thill-box and clip. The upper and inner vertical sides of the cap I

have a recess boxed out, (shown at i,) said groove turned up at the forward end, so that when it is slipped forward over the bolt-head and end of bolt, should it be projecting into said slot or recess, the vertical terminus of said slot or groove allows the cap to come down over and with its shouldered edges embracing the head of the bolt, thus locking or confining the coupling-bolt without the use of a screw-nut, and covering and protecting the gum or rubber block g. By means of the binding-screw k the proper adjustment is easily made, should it be necessary, to supply a slip of gum from time to time. All rattling or loosing the bolt is hereby prevented. This cap I may be attached to the eye end a of the shaft by a small chain, to prevent its misplacement when detached from the thillcoupling or clip when the shafts are removed.

I am aware that various thill-couplings with gum are used; but I am not aware of any constructed and operating substantially as herein set forth; therefore,

What I claim in a thill-coupling is—

The clip H, having projections h k to hold the rubber g, in combination with the thill-iron a, bolt p, and the cap I, having an angular recess, i, and binding-screw k, all substantially as shown and described, and for the purpose set forth.

JOHN W. ANDERSON.

Witnesses:
W. B. WILEY,
JACOB STAUFFER.