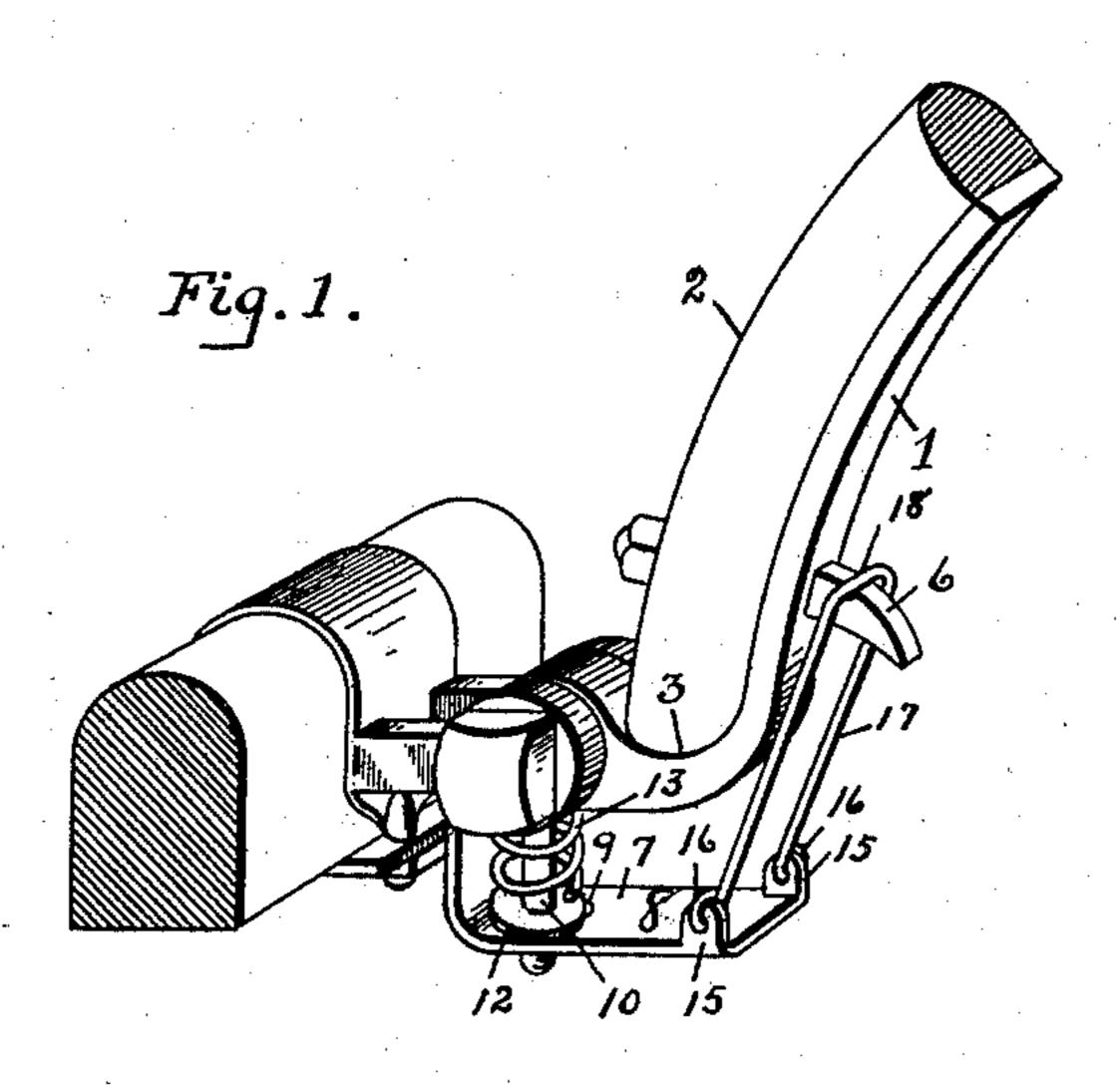
No. 609,375.

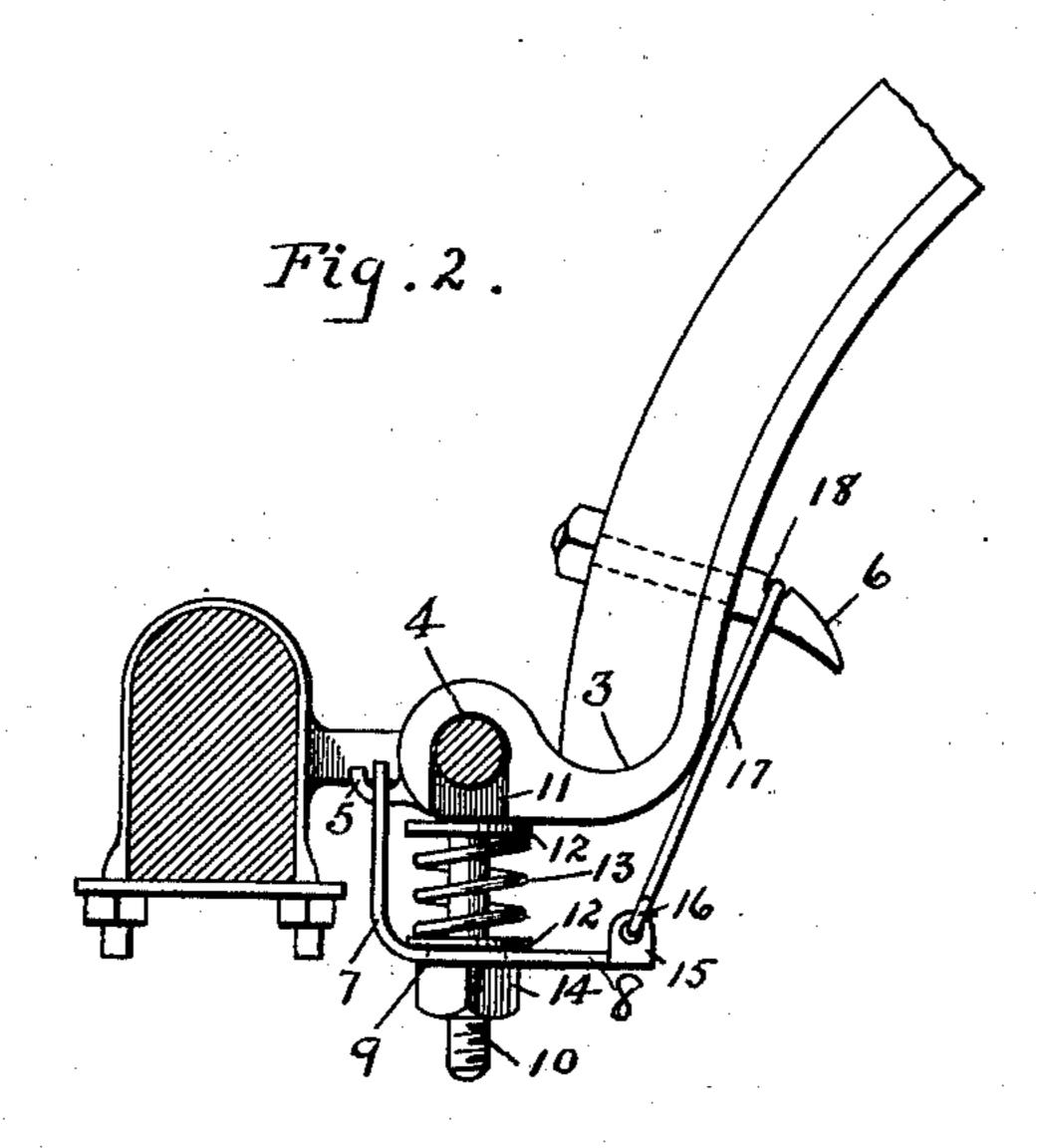
Patented Aug. 16, 1898.

## E. TARBOX, JR. ANTIRATTLER AND SHAFT COUPLING.

(Application filed May 15, 1897.)

(No Model.)





Witnesses Lee J. Van Hom. Wieter J. Evans Edward Farbox fr.

By John Wedderburn Attorney

## UNITED STATES PATENT OFFICE.

EDWARD TARBOX, JR., OF HANCOCK, NEW YORK.

## ANTIRATTLER AND SHAFT-COUPLING.

SPECIFICATION forming part of Letters Patent No. 609,375, dated August 16, 1898.

Application filed May 15, 1897. Serial No. 636,811. (No model.)

To all whom it may concern:

Be it known that I, EDWARD TARBOX, Jr., of Hancock, in the county of Delaware and State of New York, have invented certain new and useful Improvements in Antirattlers and Shaft-Couplers; 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.

The invention relates to a combined thill-coupling and antirattler for vehicles of the various kinds in use, the object being to provide a coupling by means of which the thill can be quickly and easily attached to and detached from a vehicle and which is provided within itself with means for effectually preventing rattling of the coupling when in use.

The construction by which the above-named result is obtained will be understood from the following description and claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view showing a portion of an axle and axle-clip with the improvement applied thereto. Fig. 2 is a side elevation of the same with one arm of the clip removed to show more clearly the parts of the coupling

of the coupling. 1 indicates the thill-iron, and 2 a portion of the thill bolted thereto in the usual manner. The rear end of the iron 1 is upturned, preferably against the rear end of the thill, forming a socket at 3, in which said rear end of 35 the thill rests, and in rear thereof said iron is provided with a slot at 4, opening downward and adapted to engage the axle-clip bolt or pin. The rear end of the iron in rear of said slot 4 is provided with an upturned hook 40 5 for a purpose which will appear, and the iron is provided at or near its forward end or in advance of the slot 4 with a pendent hook 6, which may be formed integrally with one of the bolts connecting the iron with the thill 45 or it may be formed separate therefrom and on the thill-iron itself, as preferred. To the hook 5 is suspended an angle-iron 7 by means of an eye or perforation in its upper end engaging the said hook, the said angle-iron ex-50 tending downward and thence forward in substantially parallel relation to the rear end

said iron is slotted at 9 near its rear end to receive a bolt 10, the head 11 of which enters the open end of the slot 4 and forms a fol- 55 lower, resting in contact with the clip bolt or pin engaging the thill-iron. Adjacent to said head and also adjacent to the arm 8 are arranged washers 12 12, between which a spiral spring 13 is interposed, the tension of which 60 is exerted to hold the follower in contact with the clip bolt or pin. The follower and also the tension of the spring can be adjusted by means of a nut 14 on the outer end of the bolt on the outside of the arm 8. The arm 65 8 is provided at its forward or lower end with parallel forwardly-extending perforated lugs or ears 15, with which eyes 16 on the rear end of the loop-link 17 engage, the looped end of said link passing over and engaging the 70 hook 6, as shown. This link is made, preferably, from a single piece of wire in the loop form indicated; but it may be made in the form of a slotted loop adapted to engage the hook 6, which is curved or inclined rear- 75 wardly on its lower end to adapt it to readily receive and engage the loop, said hook being notched at 18 to engage and securely hold the link 17. By pressing forward or upward upon the arm 8 the loop can be readily dis- 80 engaged from the hook 6, and the angle-arm can be swung rearward for removing the follower from the open slot 4 for adapting the thill-iron to be readily engaged with or removed from the clip bolt or pin, after which 85 the link can be reëngaged with the hook 6 and the parts will be held securely together. By adjustment of the nut upon the followerbolt the tension or pressure of the follower upon the clip bolt or pin can be regulated at 90 will and rattling of the coupling effectually prevented.

By the construction described the thill-iron and the parts connected therewith can be readily attached to thills in common use and 95 serve effectually to attain the purposes indicated.

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

tending downward and thence forward in substantially parallel relation to the rear end of the thill-iron 1, as shown. The arm 8 of 1. In a thill-coupling, the combination with a thill-iron having an open slot for engaging the said angle-iron extending downward and thence forward in a thill-iron having an open slot for engaging the said angle-iron extending downward and thence forward in a thill-iron having an open slot for engaging the axle-clip bolt or pin, of a spring-actuated follower operating in the open end of said

slot, an angle-iron support for said follower and a spring surrounding the shank thereof and upheld by said angle-iron for the pur-

pose and substantially as described.

thill-iron having an open slot for engaging the clip bolt or pin, hooks on said thill-iron, one in front and another in rear of the slot therein, an angle-iron plate connected with the rear hook, an adjustable follower carried by said angle-iron and operating in the thill-iron slot, a link connecting said angle-iron

with the forward thill-hook, a spring surrounding the shank of said follower, and means for adjusting the follower and the tension of said spring, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

EDWARD TARBOX, JR.

Witnesses:
Wesley Gould,
Lewis G. Carpenter.