(No Model.)

E. E. STEPHENSON.

ANTI-RATTLER FOR THILL COUPLINGS.

No. 464,220. Patented Dec. 1, 1891.

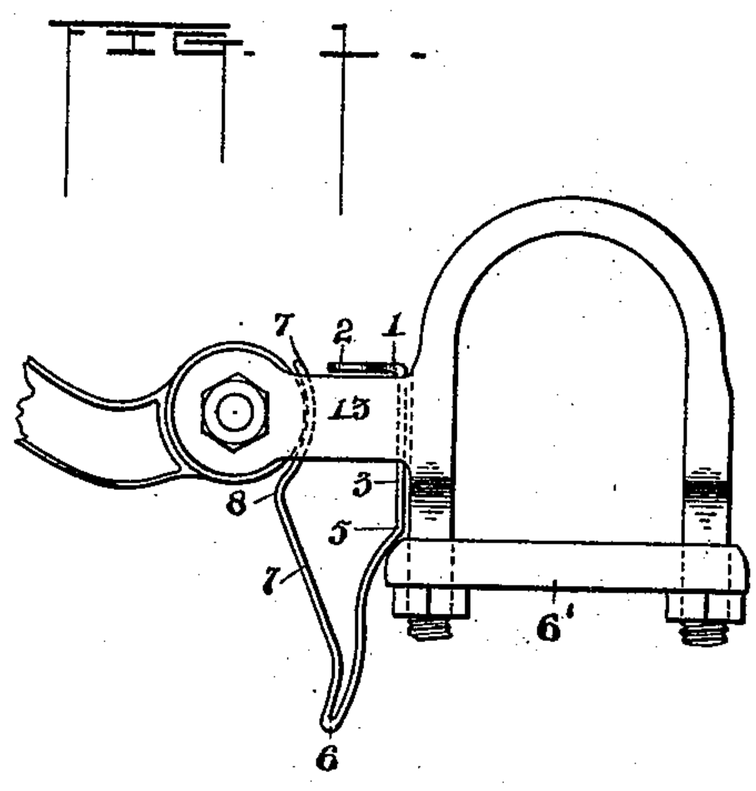


Fig. 2.

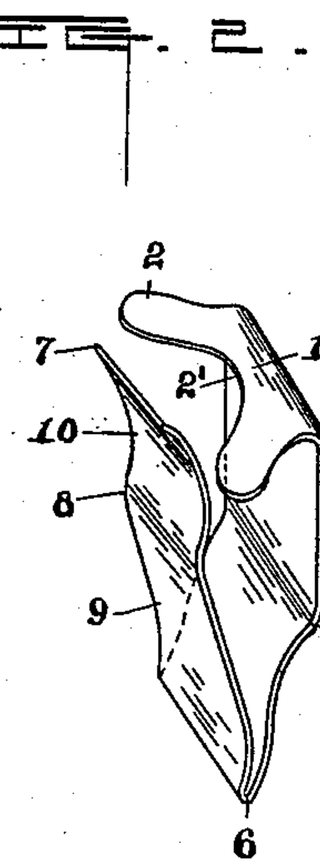
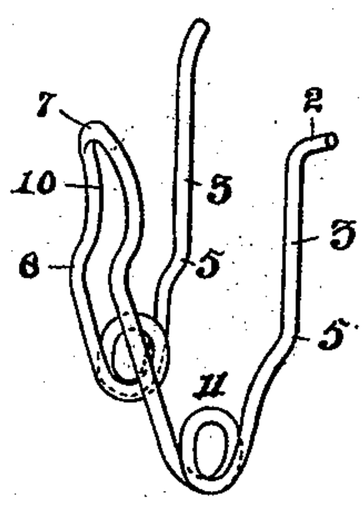


Fig. 3.



WITNESSES

Arch. M. Catlin.

Ota Davis

INVENTOR

Elmer E. Stephenson

by

Benj. R. Catlin

Atty.

UNITED STATES PATENT OFFICE.

ELMER E. STEPHENSON, OF WABASH, INDIANA.

ANTI-RATTLER FOR THILL-COUPLINGS.

SPECIFICATION forming part of Letters Patent No. 464,220, dated December 1, 1891.

Application filed August 28, 1891. Serial No. 403,930. (No model.)

To all whom it may concern:

Be it known that I, ELMER E. STEPHENSON, a resident of Wabash, in the county of Wabash and State of Indiana, have invented certain new and useful Improvements in Anti-Rattling Devices for Thill-Couplings; 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 pertains to make and use the same.

The invention relates to attachments such as shown in the patent granted June 29, 1886, to W. E. Murbarger, No. 344,786, designed to prevent the rattling of thill-couplings, and has for its object to provide a device of simple form capable of being cheaply made, which shall also be easy of application and efficient in operation; and it consists in the construction hereinafter described and particularly pointed out.

In the accompanying drawings, Figure 1 is a side elevation of the improved device applied to a thill-coupling. Fig. 2 is a perspective, and Fig. 3 is a perspective of a modification.

The device is made of metal such as sheet-steel, and approximately V-shaped, substantially as indicated in the drawings.

Numeral 1 denotes a head provided with laterally-extended cheeks 2, adapted to rest upon the jack-clip and to sustain the device therein. Between the lateral extensions or cheeks 2 the head is cut away to form a recess 2′ to receive the thill-iron when the thill is raised toward a vertical position.

3 indicates a straight plane portion of the back part 4 of the device of suitable length and form to fit closely against the clip.

5 denotes a shoulder or bend in the part 4, whereby it is fitted to pass around the yoke 6 of the clip and to rest upon the upper side of said yoke without throwing the part 3 away from the clip.

It is important that the clip snugly fits both the front face of the clip and the upper and front side of the clip-yoke and within the angle made thereby, to obviate rattling at this point and to suitably support in a vertical plane the rear member 3 of the device. The cheeks 2 are extended both forwardly and laterally, whereby they reach over and bear upon the ears 13 of the clip at points in front of the vertical portion and at about their mid-length, whereby they have more friction and a spring-like action and more efficiently resist the tendency of the part 3 to rattle. These cheeks are more durable as well as more efficient than simple lateral projections of part 3 in the same plane, such as instanced in patent to McNutt, No. 443,715, December 30, 1890, which projections would not so well resist the vibrations of the part 3 and are more liable to be broken. In my construction, which provides, as above stated, for cheeks 2 bearing at or near the center of the ears 13, it is important that a space such as 2′ be provided between them to receive the eye of the thill when the latter is raised to a vertical position.

Below shoulder 5 the part 4 is curved in a forward direction until it terminates in the sharp bend 6. Above 6 the front part 7 of the device is provided with a shoulder 8, and the part 9 between the shoulder and the bend 6 is curved in a direction reverse to the curvature of the opposite part 4. The shoulder 8, when the device is in position, is adapted to engage the thill-iron and prevents the device from working up or being thrown out upwardly. The part 10 is curved forward to fit the thill-iron and co-operates with the cheeks 2 to hold the device from dropping down or from being pushed down.

In Fig. 3 the device is represented as made of wire. 2 indicates lateral extensions adapted to rest upon the clip, and 2′ indicates a space between them, in which the thill-iron may move when the thills are raised toward the vertical position. Shoulders are indicated by 5 and 8, and 10 denotes a curved portion adapted to fit the thill-iron, all as in the form first described. 11 denotes a coil to increase the amount of the elasticity of the wire, though it could be omitted without rendering the device inoperative.

As above stated, it is important that the device shall closely fit the front face of the clip by its straight part 3 and also fit the yoke on its upper and front side by the curved or bent shoulder 5. By this construction the usual rattling of the so-called "anti-rattlers" against the clip or clip-yoke itself is prevented, while the latter is made to support the device, not only under ordinary circumstances, but particularly when the thills are being coupled to the clips. Thus the thill-iron, being intro-

duced between the ears 13 of the clip and resting in the curve of the part 10 of the device, can be pressed back and downwardly against it, as required, without danger of crowding it out of place, it being firmly supported by the bearing of the shoulder upon the clip-yoke.

My improvement provides very efficient means for holding the anti-rattler in place both when inserting the thill-irons and when in use. It obviates the necessity of compressing the device by driving it into place after the thills have been attached, whereby the elasticity of anti-rattlers is sometimes injured, and it thoroughly guards against the rattling of the anti-rattler, particularly at the points 5 and 8.

Having now fully described my invention, I claim—

The approximately V-shaped device for obviating the rattling of thill-couplings, made of a single piece of metal having the forwardly-bent lateral extensions 2 adapted to bear upon the ears of the clip at about their mid-length and having a recess 2′ between said lateral extensions and provided with the straight part 3 and the shoulder 5, adapted, respectively, to fit the front of the clip and the upper part and front of its yoke and provided with an abrupt bend, whereby it fits the angle between said clip and yoke, and provided, also, with the shoulder 8 and curved part 10, all substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

ELMER E. STEPHENSON.

Witnesses:
OLIVER H. BOGUE,
CHARLES H. BAKER.