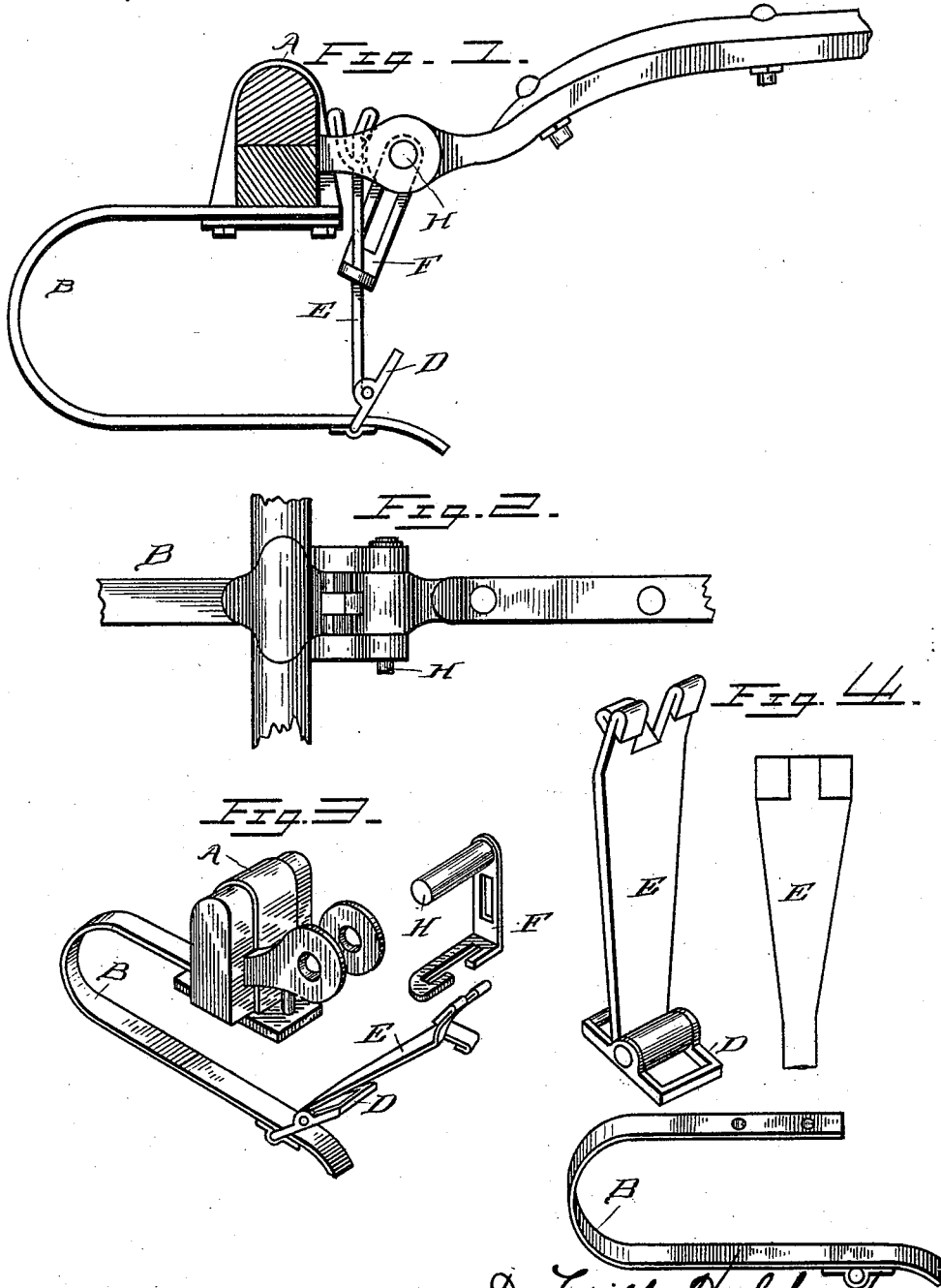


(No Model.)

DE WITT HOLDEN.
ANTI-RATTLER FOR THILL COUPLINGS.

No. 421,713.

Patented Feb. 18, 1890.



WITNESSES
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UNITED STATES PATENT OFFICE.

DE WITT HOLDEN, OF FRANKLIN, TENNESSEE.

ANTI-RATTLER FOR THILL-COUPPLINGS.

SPECIFICATION forming part of Letters Patent No. 421,713, dated February 18, 1890.

Application filed May 7, 1889. Serial No. 309,961. (No model.)

To all whom it may concern:

Be it known that I, DE WITT HOLDEN, a citizen of the United States, residing at Franklin, in the county of Williamson and State of Tennessee, have invented certain new and useful Improvements in Anti-Rattlers 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 appertains to make and use the same.

My invention relates to an attachment for vehicles, consisting of the mechanism hereinafter described, the object of which is to so arrange the parts as to prevent the noise that usually accompanies loose-fitting joints and connections.

Figure 1 is a side view of my invention properly attached to that part of the vehicle where it is intended to be used. Fig. 2 is a top view of the same. Fig. 3 is a view in perspective showing how the combination of the different parts is to be effected, while Fig. 4 is a grouping of some of the minor details.

A indicates the clip for encircling the axle of the vehicle, having the usual projection for forming connection with the tongue or shaft. To the under side of this clip I attach, by means of the nuts on same, a piece of spring-steel projecting rearwardly, and then bent downward and forward in such a manner as to somewhat resemble the letter U.

For the purpose of preventing the rattle caused by the eye of the shaft loosely fitting in the clip A, I arrange the anti-rattler piece E as follows: This spring is to consist of a piece of well-tempered steel, and is to be an inch wide (more or less) at its top, and tapering toward the bottom to a width of one-half an inch (more or less) and is to be pivotally connected to buckle D. The wide or upper end of anti-rattler E is slit downward in two places, dividing the middle one-third of such piece. This middle one-third is to be bent forward for contact with the eye of the shaft or tongue, while the outside thirds are to be inclined rearwardly against the clip A. It will thus be observed that the top anti-rattler E is substantially V-shaped, as shown in Fig. 4. After inserting anti-rattler

piece E between the eye of the shaft or tongue and the clip, I attach the lower end of same pivotally to the buckle D, the lower part of such buckle being connected in like manner to the forward end of spring B, as shown in Fig. 1. To the outside of the eye of the clip I attach, by means of the usual bolt, (indicated H,) the guide F, which is so bent as to extend downward slightly below the lower edge of the eye of the clip, and then bent inward at right angles, so as to form a parallel line with the lower surface of such eye. On this part of the guide last described is a slot of the width of the piece E, one side of such slot being cut out about one-third near its middle for the purpose of receiving the anti-rattler piece E and securely holding the same in a perpendicular position. The perpendicular part of guide F is firmly riveted on the end of draw-bolt H, holding it firmly in position.

In operation the anti-rattler piece E is inserted between the eye of the shaft and the clip. The middle one-third of such piece presses against the eye of the shaft, while the outward thirds are in contact with the clip, and when the connection between such piece E and the spring B is effected by means of the buckle-shaped piece D it will be observed that the V-shaped top of the anti-rattler E is drawn snugly between the eye of the shaft and the clip in such a manner as to prevent any rattling or other noise. The anti-rattler piece E may be released by raising the detached end of spring B, thereby forcing the piece E upward until the narrow part at its lower end is reached, when it may be readily withdrawn from the opening in the slot of the guide F. The bolt H may be withdrawn, thereby releasing the eye of the shaft or tongue.

My invention can readily be applied to any vehicle using a tongue or shafts.

Having described my invention, what I desire to secure by Letters Patent is—

In combination with a thill-coupler for vehicles, the V-shaped spring B, the guide F, bent so as to form a right angle near its middle and rigidly connected at its upper end with the bolt H, and a slot in its lower part for engaging with spring E, the spring E

wider at its upper end, such end being so cut
as to separate it into three equal parts, the
middle third being bent forward, while the
outer thirds incline rearwardly, and connected
5 at its lower end pivotally with the middle
part of buckle D, the lower part of which is
to engage with spring B, while its middle is
connected pivotally with the lower part of

spring E, all substantially as described, and
for the purpose named.

In testimony whereof I affix my signature in
presence of two witnesses.

DE WITT HOLDEN.

Witnesses:

J. L. PARKES,

T. J. REDMOND.