

(No Model.)

V. DUMAS, Jr. & A. KNAPP, Jr.
THILL COUPLING.

No. 585,660.

Patented July 6, 1897.

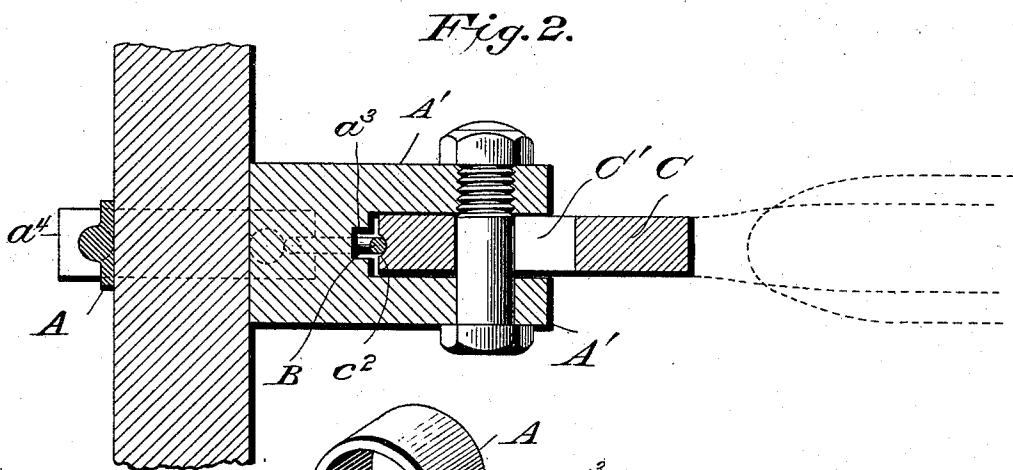
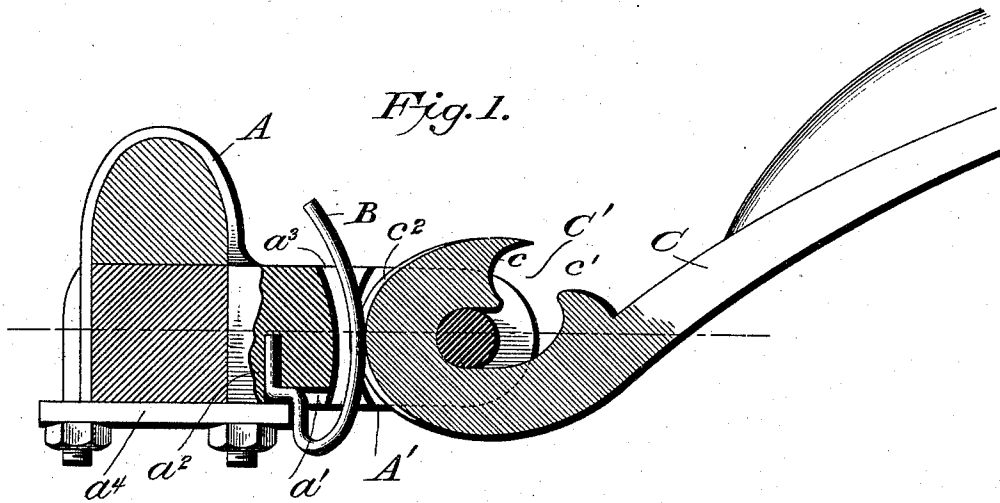
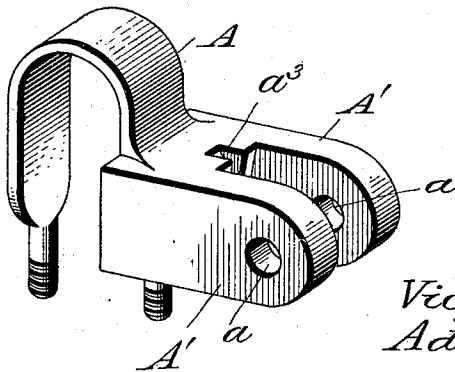


Fig. 3.



WITNESSES

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THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 585,660, dated July 6, 1897.

Application filed April 15, 1897. Serial No. 632,317. (No model.)

To all whom it may concern:

Be it known that we, VICTOR DUMAS, Jr., and ADAM KNAPP, Jr., citizens of the United States of America, residing at Java, in the county of Wyoming and State of New York, have invented certain new and useful Improvements in Thill-Couplings; and we 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide an improved thill-coupling which consists in part of a thill-iron of particular construction, so that it can be readily removed from the axle-clip by raising the thills to a vertical position and then moving them forwardly, so that they will disengage the bolt carried by the axle-clip, the clip also carrying a spring which is adapted to bear against a cam-shaped portion of the thill-iron to hold the parts in close engagement with each other and prevent rattling, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a sectional view of a thill-coupling constructed in accordance with our invention. Fig. 2 is a sectional view on the line 2 2 of Fig. 1, and Fig. 3 is a perspective view of the axle-clip.

A designates the axle-clip, which is adapted to embrace the axle in the usual manner, and this clip is provided with a forwardly-projecting portion which is bifurcated to provide arms A' A', having bolt-apertures a . The under side of the projecting portion of the clip is provided with a recess a' , and at the inner end of said recess is formed an aperture a^2 , in which lies one end of a spring-bar B, said spring-bar being bent, as shown in Fig. 1, to extend for a short distance along the recess a' , from which it projects downwardly and then upwardly between the members or arms A'. The spring-bar is held in place by means of the cross-bar a^4 of the axle-clip, and formed in the projecting portion of the clip between the arms A' is a ver-

tical recess a^3 , into which the spring-bar moves, as hereinafter mentioned.

C designates the thill-iron, the rear end of which is flattened and provided in its upper portion with a serpentine channel C', terminating near the center of the thill-iron, said channel presenting a curved wall c on one side and a projection c' on the other. The rear end of the thill-iron is cam-shaped, as shown in Fig. 1, and is provided with a groove c^2 , in which the spring-bar B bears, so that when the thills are lowered the cam will exert a pressure upon the spring-bar which will tend to hold the parts in engagement and prevent rattling, and when the thills are raised to a vertical position the cam will be turned to release the tension upon the spring, and in this position the thills can be readily moved out of engagement with the bolt of the axle-clip.

It will be noted that the spring-bar only exerts a tension upon the thill-iron when the thills are lowered, and in this position the spring-bar is moved back into the recess a^3 of the axle-clip, being held in proper position by engaging the groove c^2 in the face of the cam.

We are aware that prior to our invention it has been proposed to provide a thill-coupling in which the thill-iron is provided with a flat bar or bolt which projects laterally from the thill-iron and engages with an axle-clip having slots, so that the engagement of the parts will be caused by first raising the thills and then moving them to a horizontal position, and we do not claim such construction as our invention; but

What we claim as new, and desire to secure by Letters Patent, is—

1. The combination with an axle-clip having forwardly-projecting arms A' A', a vertical recess a^3 between said arms and a recess a' on its under side terminating in an aperture a^2 , of a spring-bar B bent at one end to engage the recess a' and aperture a^2 and curved at its other end to lie between the arms A' A', the spring-bar being held in place by the cross-bar of the axle-clip, substantially as shown and for the purpose set forth.

2. The combination with an axle-clip having forwardly-projecting members which sup-

port a transverse bolt, said clip being also
provided with a vertical recess between the
arms and on its under side with a recess a'
terminating at its rear end in an aperture a^2 ,
5 of a spring-bar B bent at one end to engage
the recess a' and aperture a^2 and curved to
lie between the members of the axle-clip, the
spring being held in position by the cross-
bar of the clip; together with a thill-iron hav-
10 ing a flattened rear end forming a cam and
provided in its upper portion with a serpen-
tine channel C' presenting a curved wall c

on one side and opposite thereto a projec-
tion c' , the face of the cam having a groove
 c^2 , substantially as shown and for the pur- 15
pose set forth.

In testimony whereof we affix our signa-
tures in presence of two witnesses.

VICTOR DUMAS, JR.
ADAM KNAPP, JR.

Witnesses:

E. M. HOGAN,
VICTOR DUMAS, Sr.