

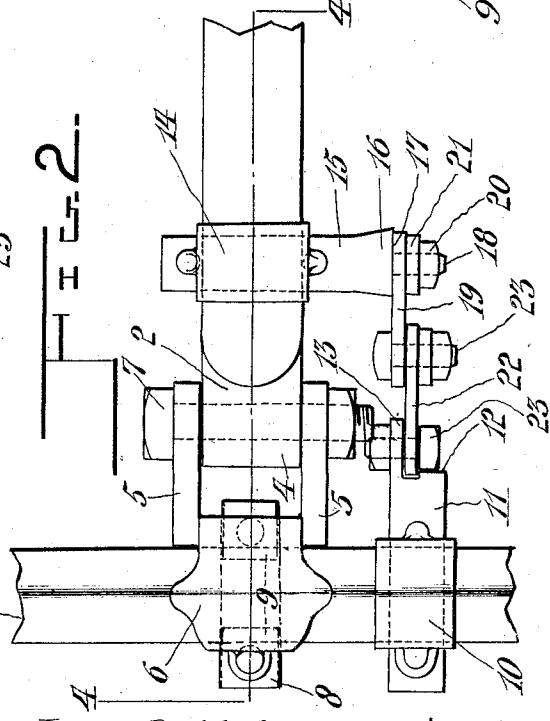
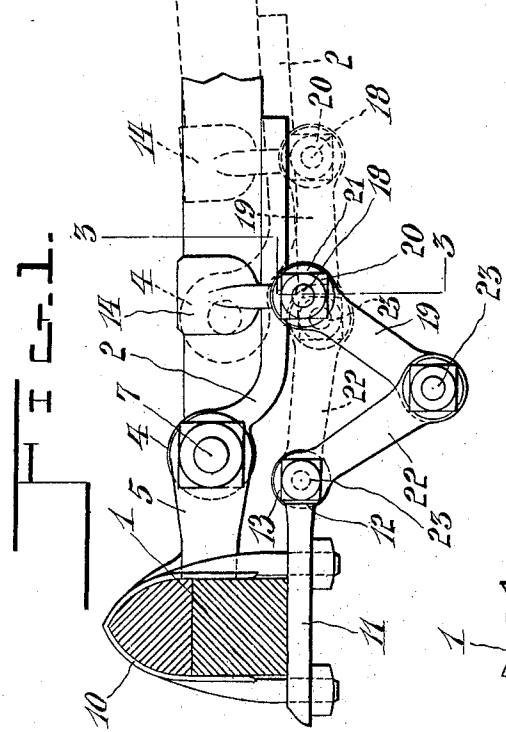
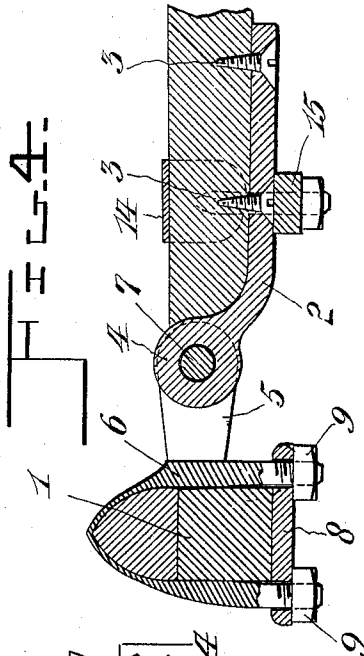
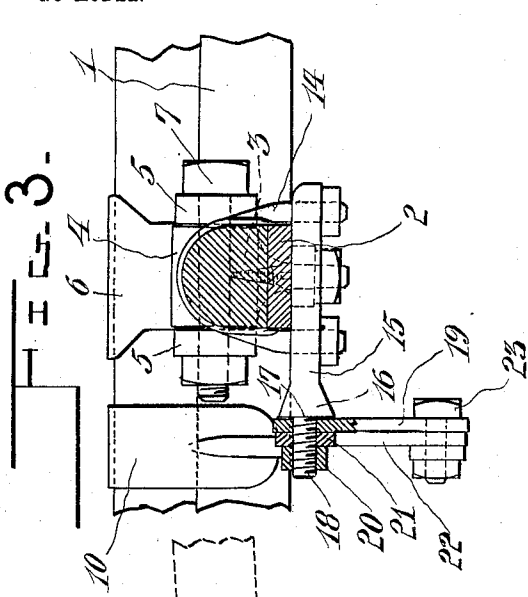
No. 765,501.

PATENTED JULY 19, 1904.

L. A. MELANSON.  
THILL COUPLING.

APPLICATION FILED OCT. 7, 1903. RENEWED MAY 31, 1904.

NO MODEL.



Witnesses:

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# UNITED STATES PATENT OFFICE.

LOUIS AUGUSTE MELANSON, OF CHURCH POINT, CANADA.

## THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 765,501, dated July 19, 1904.

Application filed October 7, 1903. Renewed May 31, 1904. Serial No. 210,410. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS AUGUSTE MELANSON, a subject of the King of Great Britain, residing at Church Point, county of Digby, in the Province of Nova Scotia, Canada, have invented certain new and useful Improvements in Auxiliary Thill-Couplings; and I do hereby declare that the following is 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 thill-couplings.

Considerable inconvenience in connection with driving is often occasioned by the breaking of the coupling, due to rough usage or imperfections in the construction of the parts.

The object of this invention is to provide an auxiliary coupling to be used in connection with any other thill-coupling, the said auxiliary coupling being of special construction whereby it does not encumber the points at which it is attached and is especially useful when from any reason the main coupling has given way in the manner suggested.

The invention consists in the construction and combination of parts to be more fully described hereinafter and definitely set forth in the claims.

In the drawings, which fully illustrate my invention, Figure 1 is a side elevation of the coupling, the axle of the vehicle being represented in dotted outline in the position they would assume in the event of the main coupling giving way. Fig. 2 is a plan of the coupling, representing short portions of the axle and the shaft. Fig. 3 is a vertical cross-section supposed to be taken substantially upon the line 3 3 of Fig. 1. Fig. 4 is a longitudinal central section supposed to be taken on the line 4 4 of Fig. 2.

Throughout the drawings and specification the same numerals of reference denote like parts.

Referring more particularly to the parts, 1 represents the forward axle of the vehicle, to which the coupling has been attached. The main coupling comprises a thill-iron 2, which is attached by means of screws 3 or similar

fastening devices to the shaft, the said thill-iron being formed at its rear into a head 4, which is received between the forwardly-projecting ears 5, which are formed integrally with the clip 6, as shown. A bolt 7, passing through the head 4, secures the same between the ears 5, and a cap 8 enables the clip 6 to be securely attached, by means of nuts 9, in the usual manner.

In applying my auxiliary coupling to such a thill-coupling as that described I provide a secondary axle-clip 10, which attaches to the axle 1 adjacent to the clip 6 aforesaid. The cap-plate 11 of this clip 10 projects forwardly, as shown, and is mutilated, as indicated, so as to form a flat substantially vertical face 12 and a forwardly-projecting ear 13 therebeyond.

A secondary shaft-clip 14 is provided, very similar in construction to the secondary axle-clip 10, which has been fully described, and this latter clip is attached at a suitable point upon the shaft just forward of the thill-head 4 aforesaid. The cap 15 of this shaft-clip is extended on that side adjacent to the clip 10, its extremity being enlarged to form a head 16, a substantially flat shoulder 17, and a reduced stud 18, as shown.

Upon the stud 18 there is attached a link 19, the same being secured in position by means of a suitable nut 20, a washer 21 being employed in this connection, as shown. This link 19 connects with a second link 22 of similar construction by means of a bolt 23, and the rear extremity of the link 22 is attached to the aforesaid ear 13 by means of a similar bolt 23. It should be stated that the head of the bolt 23 lies adjacent to the aforesaid flat face 12 in such a manner that the face prevents the rotation of the bolt when its nut is being applied.

It should be stated that the secondary shaft-clip 14 would be located so near to the axle that when the couplings were both intact the links 19 and 22 would dispose themselves substantially the position shown most clearly in Fig. 1 in the full lines—that is, the joint at the bolt 23 would be displaced downwardly. It should be stated also that the shoulder 17 aforesaid near the extremity of the cap 15

should be substantially in alinement with the ear 13, so as to facilitate the proper attachment of the links 19 and 22. Now if the main coupling should give way for any reason the auxiliary coupling will prevent the detachment of the shaft from the axle, and in the event of such an accident as that suggested the parts would then dispose themselves in substantially the relation indicated by the dotted lines in Fig. 1, where it will appear that the links 19 and 22 operate to form a sufficient coupling to enable the vehicle to be drawn. It should be understood, of course, that this auxiliary coupling which I have described is not intended in any sense to replace or permanently do the duty of the ordinary thill-couplings; but it should appear that the construction described is extremely simple and easily applied. It is also removable and adjustable, as will readily appear with its other advantages. It should be stated that in practice the auxiliary coupling would be of the lightest possible construction consistent with safety in driving the vehicle after an accident to the main coupling had occurred, it being understood that the driver after an accident would drive with more than usual care.

While I have shown in the accompanying drawings the preferred form of my invention, it will be understood that I do not limit myself to the precise form shown, for many of the details may be changed in form or position without affecting the operativeness or utility of my invention, and I therefore reserve the

right to make all such modifications as are included within the scope of the following claims or of mechanical equivalents to the structures set forth.

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

1. An auxiliary thill-coupling comprising a clip, a cap therefor adapted to clamp said clip to the axle of the vehicle, a second clip, a cap therefor adapted to clamp the same to the shaft, and links pivotally connecting said caps.

2. An auxiliary thill-coupling comprising a clip, a cap cooperating therewith and adapted to clamp the same to the axle of the vehicle, said cap having a forwardly-projecting ear, a second clip, a cap cooperating therewith and adapted to attach said second clip to the shaft of the vehicle, said second cap extending laterally to a point in substantial alinement with said ear, and links connecting said extension with said ear.

3. An auxiliary thill-coupling comprising an axle-clip having a cap with a forwardly-projecting ear, a shaft-clip having a cap having a reduced extremity forming a stud, and links attaching respectively to each other to said ear and to said stud.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

LOUIS AUGUSTE MELANSON.

Witnesses:

J. BOYD McNEILL,  
A. H. BROOKS.