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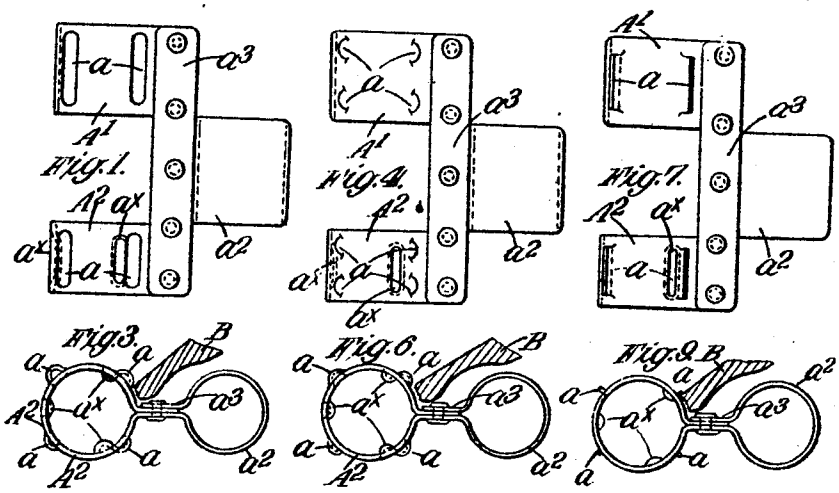
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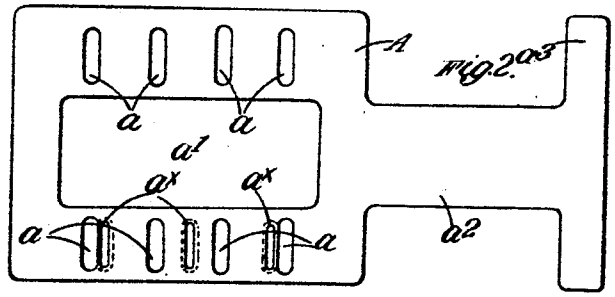
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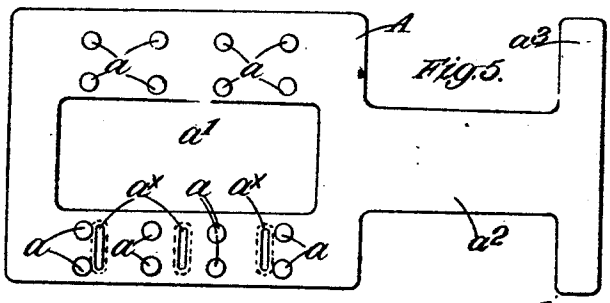
A. T. DAWSON ET AL

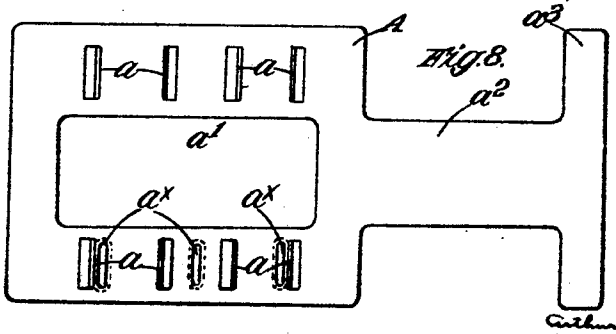
ARTICULATED LINK FOR THE CARTRIDGE BELTS OF MACHINE GUNS

Filed May 5, 1925









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UNITED STATES PATENT OFFICE.

ARTHUR TREVOR DAWSON, GEORGE THOMAS BUCKHAM, AND CARL ALFRED LARSSON, OF WESTMINSTER, LONDON, ENGLAND, ASSIGNORS TO VICKERS LIMITED, OF WESTMINSTER, ENGLAND, A BRITISH COMPANY.

ARTICULATED LINK FOR THE CARTRIDGE BELTS OF MACHINE GUNS.

Application filed May 5, 1925. Serial No. 28,113.

To all whom it may concern:

Be it known that we, ARTHUR TREVOR DAWSON, GEORGE THOMAS BUCKHAM, and CARL ALFRED LARSSON, all subjects of the King of Great Britain, residing at Vickers House, Broadway, Westminster, in the county of London, England, have invented certain new and useful Improvements in or Relating to Articulated Links for the Cartridge Belts of Machine Guns, of which the following is a specification.

This invention relates to articulated links for the cartridge strips or belts of machine guns, that is to say to metal links which are connected together by the cartridges to form a strip or belt, the cartridges serving as the pivots of the links so that the strip or belt thus formed has the necessary degree of flexibility.

According to the invention the cylindrical portions of each link that receive the parts of the cartridge case of larger and smaller diameter, are formed with external shoulders or protuberances under which the feed pawls of the feed box engage during the firing of the gun. The feed pawls are thus held in position and the liability of the pawls slipping on the cylindrical portions of the link is thereby avoided. Each of the said cylindrical link portions may have four shoulders or protuberances (or four rows thereof) arranged at different positions around the circumference of these portions so as to render the strip or belt formed by the links and cartridges capable of being used with either a right hand feed box or a left hand feed box and also capable of being used without regard to which end of the strip or belt is inserted into the feed box for engagement by the feed pawls.

In order that the said invention may be clearly understood and readily carried into effect, the same will now be described more fully with reference to the accompanying drawings, in which:—

Figure 1 is a plan view showing one construction of link in accordance with this invention,

Figure 2 is a view of a metal stamping in the flat condition prior to being bent into shape to form the link,

Figure 3 is an end view of Figure 1 showing how the feed pawl of the gun engages with the link,

Figures 4, 5 and 6 are views similar to Figures 1, 2 and 3 showing another construction of link, and

Figures 7, 8 and 9 are also views similar to Figures 1, 2 and 3 showing still another construction of link.

In all the constructions shown the links are made from flat metal stampings A (Figures 2, 5 and 8) which are formed with protuberances or projections a before the stampings are bent into the shape required for the links. It will be seen from Figures 2, 5 and 8 that the stampings have openings a^1 on each side of which the said protuberances are formed and also that each stamping has a neck portion a^2 of substantially the same width as the width of the openings a^1. This neck portion is interposed between the main portion of the stamping formed with the protuberances a and the opening a^1, and a narrow strip portion a^3. Each stamping when bent to the shape shown in Figures 3, 6 and 9 thus has cylindrical portions A^1, A^2 projecting from one side of a web formed by riveting the aforesaid narrow strip a^3 to the contiguous part of the main portion of the stamping and also has projecting from the other side a single central cylindrical portion (formed by the neck portion a^2) which fits between two cylindrical portions, corresponding to the aforesaid portions A^1, A^2, of an adjacent link to receive a cartridge case which thus pivotally connects the adjacent links together. The cylindrical portions A^1, A^2 of each link are preferably made of the same general diameter, but the portion A^2 which is intended to receive the neck or smaller diameter portion of the cartridge case is provided with internal protuberances a^x formed by pressing out the metal of the stamping. These internal protuberances in the constructions shown are in the form of flutings extending nearly from one side to the other of the said cylindrical portion A^2.

In the construction shown by Figures 1 to 3 the external protuberances a are formed by pressing out parts of the stamping so as to constitute flutings extending nearly from one side to the other of the cylindrical portions A^1, A^2, whilst in the construction shown by Figures 4 to 6 the protuberances are circular and arranged in rows, preferably two in each row as shown. In the construction shown by Figures 7, 8

and 9 projections *a* are formed by cutting through the metal stamping and bending up one of the edges formed by each cut, the said projections extending nearly from one side to the other of the cylindrical portions. In all the constructions shown there are four protuberances or projections (or four rows thereof) arranged more or less equidistantly around the circumference of the cylindrical portions A^1, A^2 so that as aforesaid the strip or belt formed by the links and cartridges is capable of being used either with a right hand feed box or with a left hand feed box and also capable of being used whichever end of the strip or belt is inserted into the feed box for engagement by the feed pawls. Figures 3, 6 and 9 show how the feed pawls B engage under the aforesaid protuberances or projections *a* in order to effect the feeding movement of the strip or belt through the feed box of the gun.

What we claim and desire to secure by Letters Patent of the United States is:—

1. A link for a cartridge strip or belt composed of a number of links connected together by the cartridges which serve as the pivots of the links, comprising cylindrical portions for the reception of the parts of the cartridge case of larger and smaller diameter, and external projections which are formed on said cylindrical portions and under which the feed pawls of the feed mechanism of the gun can engage to avoid slipping of said pawls.

2. A link for a cartridge strip or belt composed of a number of links connected together by the cartridges which serve as the pivots of the links, comprising cylindrical portions for the reception of the parts of the cartridge case of larger and smaller diameter, and external projections which are arranged longitudinally on said cylindrical portions and under which the feed pawls of the feed mechanism of the gun can engage to avoid slipping of said pawls.

3. A link for a cartridge strip or belt composed of a number of links connected together by the cartridges which serve as the pivots of the links, comprising cylindrical portions for the reception of the parts of the cartridge case of larger and smaller diameter, and external projections which are formed on said cylindrical portions by pressing out part of the material of which the link is made, the feed pawls of the feed mechanism of the gun engaging with said projections to avoid slipping of said pawls.

4. A link for a cartridge strip or belt composed of a number of links connected together by the cartridges which serve as the pivots of the links, comprising cylindrical portions for the reception of the parts of the cartridge case of larger and smaller diameter, and external projections which are formed on said cylindrical portions by cutting and bending the material of which the link is made, the feed pawls of the feed mechanism of the gun engaging with said projections to avoid slipping of said pawls.

5. A link for a cartridge strip or belt composed of a number of links connected together by the cartridges which serve as the pivots of the links, comprising cylindrical portions for the reception of the parts of the cartridge case of larger and smaller diameter, said cylindrical portions being of substantially the same external diameter, external projections which are formed on said cylindrical portions and under which the feed pawls of the feed mechanism of the gun can engage to avoid slipping of said pawls, and internal projections in the cylindrical portion that receives the part of the cartridge case of smaller diameter.

6. A link for a cartridge strip or belt composed of a number of links connected together by the cartridges which serve as the pivots of the links, comprising cylindrical portions for the reception of the parts of the cartridge case of larger and smaller diameter, and external projections arranged longitudinally on said cylindrical portions at four different positions around the circumference of said portions.

7. A link for a cartridge strip or belt composed of a number of links connected together by the cartridges which serve as the pivots of the links, comprising cylindrical portions for the reception of the parts of the cartridge case of larger and smaller diameter, and external projections formed longitudinally on said cylindrical portions at four different positions around the circumference of said portions by pressing out parts of the material of which the link is made.

8. A link for a cartridge strip or belt composed of a number of links connected together by the cartridges which serve as the pivots of the links, comprising cylindrical portions for the reception of the parts of the cartridge case of larger and smaller diameter, and external projections formed longitudinally on said cylindrical portions at four different positions around the circumference of said portions by parts cut and bent from the material of which the link is made.

9. A link for a cartridge strip or belt composed of a number of links connected together by the cartridges which serve as the pivots of the links, comprising cylindrical portions for the reception of the parts of the cartridge case of larger and smaller diameter, and external projections arranged longitudinally on said cylindrical portions at four substantially equidistant positions around the circumference of said portions.

10. A metal link for a cartridge strip or belt composed of a number of such links

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connected together by the cartridges which serve as the pivots of the links, formed from a metal stamping comprising a main portion having an opening on each side of which projections are formed, a strip portion and a neck portion situated between said main portion and said strip portion, the link being constructed by bending the main portion and the neck portion into cylindrical shape and riveting the strip portion and the outer part of the main portion to the inner part of said main portion.

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