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GUIDEWAY OR PASSAGE FOR MACHINE GUN AMMUNITION BELTS

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Fig. 1.

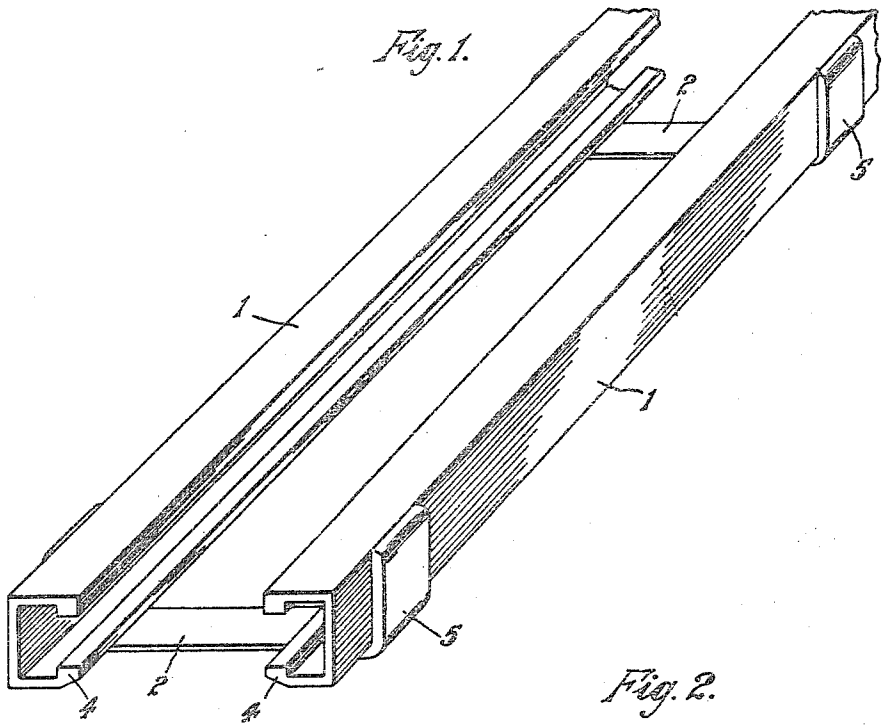
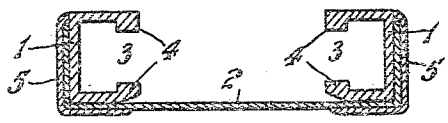


Fig. 2.



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GUIDEWAY OR PASSAGE FOR MACHINE-GUN AMMUNITION BELTS

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6 Claims. (Cl. 89—33)

This invention comprises certain improvements in or relating to guides or shoots for machine-gun ammunition belts particularly for use with machine guns on aircraft.

A convenient known type of ammunition guide comprises two channel shaped strips which are spaced apart with their open sides facing each other. Owing to the relative positions of the ammunition storage box and the gun it is often necessary for the shoots or guides to be bent or twisted both in a longitudinal and transverse plane; it must be ensured that these bends or the like do not interfere with the free sliding action of the ammunition as it passes through the guideway.

The present invention has for its object to provide an ammunition shoot or guide which is simple and cheap to construct and which fulfills the above requirements.

According to the present invention, the ammunition guide or shoot comprises two channel section guide members which are fixed together, with their open sides facing each other, by means of metal or other rigid cross members arranged at spaced intervals throughout the length of the guide or shoot.

The channel section guide members can, therefore, be moulded, bent or otherwise formed to shape and at the same time or afterwards connected together to form a structure which is of light weight and yet substantially rigid.

The channel section guide members may be shaped to provide narrow supporting ledges or surfaces for the ammunition, thus reducing friction to a minimum. These ledges or surfaces may be treated with graphite or like lubricating material.

In order that the invention may be more clearly understood and readily carried into effect, reference may be had to the accompanying drawing in which

Fig. 1 is a perspective view of a portion of an ammunition shoot or guide constructed according to this invention, and

Fig. 2 is a cross section through the cross pieces hereinafter referred to.

According to a convenient embodiment of the invention, a guideway or shoot for ammunition belts for machine guns on aircraft comprises a pair of guide members 1, formed of hard rubber, which are spaced apart in parallel relationship by brass or other metal cross strips 2 secured to said guide members at suitable intervals throughout the length of the guide.

The guide members 1 are preferably formed by extrusion of a thermoplastic substance through suitable dies, and these guide members are subsequently bent to the desired curvature under heat and pressure. This shaping may be carried out by a moulding operation or by simply heating the shaped strips or members and then bending same to the desired shape before or after union with the rigid cross members.

Each guide member is of channel shape in cross section, and a pair of guides are fixed together so that their open sides 3 face each other. The free longitudinal edges of each guide member have a narrow inturned flange or ledge 4 provided thereon, and these ledges form the actual supporting surfaces for the ammunition passing through the guide passage. The narrow ledges provide adequate support for the ammunition whilst friction is reduced to a minimum. The narrow ledges are also preferably suitably treated with graphite or other similar lubricating material, and this further enhances the free sliding action of the ammunition as it passes through the guide.

The cross sectional shapes of the two guide members may be the same or different; in the latter case the shapes preferably are such as to enclose conveniently the respective sides of the belt of ammunition being carried. The lower limb or flange of each channel, to which the metal cross strips 2 are attached, may be thicker than the other flange, and may have a flat face beneath the inturned ledge to fit against the flat centre portion of the connecting strips.

Each connecting strip 2 is formed from flat sheet brass or other suitable material capable of being bonded to rubber or other material of which the guide members are constructed; in one method the ends of each strip may be bent to lie against two or more adjacent sides of each channel member 1. The strips are then bonded to the guides, and a patch or thin covering of rubber 5 or the like may be externally applied to conceal and/or strengthen the joint.

The spacing members may be fixed to the channel guide members in any other convenient manner; for instance the ends of the strips 2 may be let into grooves or recesses in the guide channels 1 and united thereto by the application of heat and pressure. The spacing strips may be perforated, roughened or otherwise treated to facilitate the adhesion of the guide members thereto. Alternatively, the guide channels may have screwed pins, rivets or the like embedded therein or fixed thereto and adapted to engage

holes in the spacing strips and to be secured by nuts, riveting-over or other means.

What we claim is:

1. A guide for machine gun ammunition comprising a pair of extruded thermoplastic channels with their open sides facing each other and metal connecting pieces bonded to said channels at spaced intervals throughout the length of said guide.

2. The guide of claim 1 in which said channels are formed of hard rubber.

3. A guide for machine gun ammunition comprising a pair of channel section guide members spaced apart with their flanges in spaced horizontal planes and open toward each other and having narrow ledges on the inner surfaces of said flanges to support the ammunition and cross pieces arranged at spaced intervals throughout the length of the guide and secured to the lower flanges below the openings between said flanges.

4. A guide for machine gun ammunition comprising a pair of channel section guide members in spaced relation with their open sides facing each other and cross members at spaced intervals throughout the length of the guide spanning the space between said channel members and extending beneath a side face of each guide member and upwardly on the connecting web of said channel.

5. A guide for machine gun ammunition comprising a pair of extruded thermoplastic channels with their open sides facing each other, metal connecting pieces bonded to said channels at spaced intervals throughout the length of said guide and a thin covering of said plastic material covering the joints between the channels and the metal connecting pieces and bonded to said metal connecting pieces and to said channels.

6. A guide for machine gun ammunition comprising a pair of extruded thermoplastic channels with their open sides facing each other, said channels having transverse grooves at spaced intervals lengthwise of said guide and metal connecting pieces joining said channels and fitting in said grooves and bonded therein to said channels.

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