Jan. 27, 1959 J. LINKE 2,870,681

CONTAINER FOR A CARTRIDGE BELT

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Fig. 1

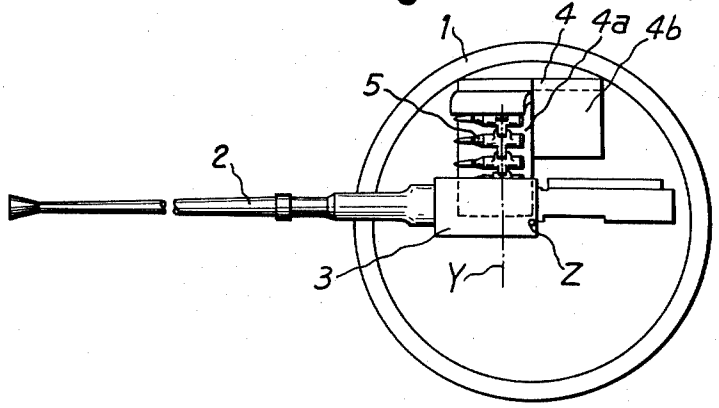
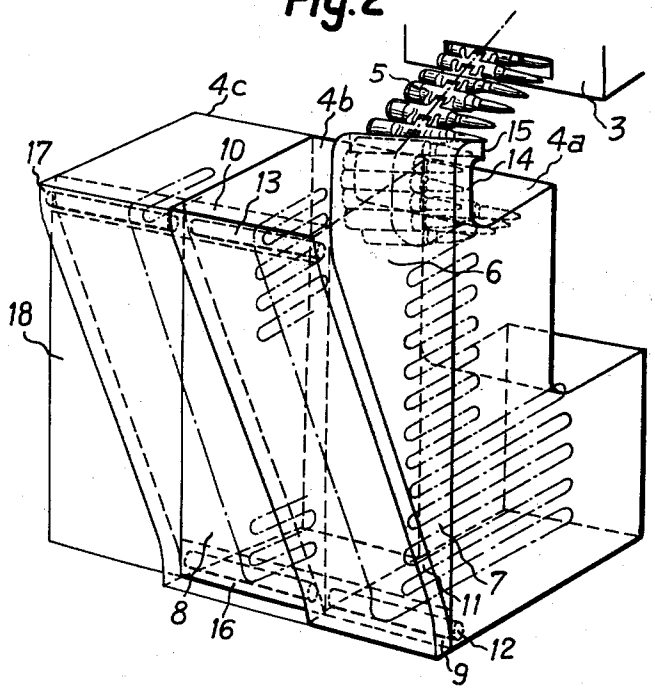


Fig. 2



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CONTAINER FOR A CARTRIDGE BELT

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2 Claims. (Cl. 89—34)

The invention relates to a container for a cartridge belt for automatic weapons stored in zig-zag layers, said container having compartments separated from one another by partition walls, wherein the cartridges lie parallel to a vertical plane including the axis of the weapon.

Such containers, hereinafter referred to as belt boxes, are known in themselves. In the embodiments which have become known, in which the cartridges lie in the box in the manner described, the accommodation of the store of ammunition either requires much space in a direction perpendicular to the axis of the weapon or, with a given space, sets narrow limits to the quantity of ammunition which can be stored.

In order to overcome these disadvantages it has already been proposed to store the cartridges at right angles to the axis of the weapon, and to divert the cartridge belt 90° in a belt supply conduit before introducing the same into the weapon. This sharp deflection of the belt gives, however, often rise to break-downs in the supply.

It is the principal object of the present invention to provide a container for a cartridge belt which affords ample storage space without requiring much space in the direction perpendicular to the axis of the firearm, and at the same time obviating any substantial deflection of the cartridges from their position parallel to the axis of the firearm.

With this and other objects in view, which will become apparent from the following description and accompanying drawing, I provide a container for a cartridge belt of an automatic firearm, comprising in combination: end walls, side walls, a bottom and a top, partition walls dividing the container into separate compartments, passages for the belt being arranged in the side walls of adjacent compartments on the same side thereof alternately near the top and bottom thereof, and an oblique conduit lining up the said passage near the bottom of one compartment with the said passage near the top of the adjacent compartment, the said cartridge belt being folded zig-zag fashion in each compartment with the cartridges substantially parallel to a vertical plane containing the axis of the said firearm, and being passed from one compartment to the next adjacent compartment through the said passages and conduit connecting the same.

The belt can accordingly be conducted to the weapon substantially without change of direction of the cartridges. The belt box according to the invention may be used for example for the storing of the cartridge belt on its way to an automatic firearm which is mounted on an annular turntable gun mounting built into a vehicle in which the ammunition has to be accommodated primarily within one half of the cylindrical space bounded by the annular turntable, alongside the weapon.

In the drawing an embodiment of the invention is illustrated by way of example.

Fig. 1 shows the belt box together with the gun, in plan view.

Fig. 2 is a perspective view of the belt box.

Fig. 1 is the rotary ring of the upper gun mounting, on which the weapon **2** is mounted in a manner not shown in detail, is denoted by **1**. The upper gun mounting is rotatable together with the weapon about the vertical azimuth laying axis Z. Y is the elevation laying axis of the gun. From the belt box **4** fixedly connected to the upper gun mounting the cartridge belt **5** is passed into the belt feeder device **3** of the weapon **2**. The free space on the left hand side between the weapon and the annular turntable is occupied by the gunner.

According to Fig. 2 the belt box according to the invention is a rectangular container which is subdivided by the partition wall **6** into the two compartments **4***a* and **4***b*, the compartment **4***a* being made for example wider at the bottom than at the top, for enlarging the useful space thereof. In the walls **7** and **8** lying on the same side of the belt box slot-shaped passages **9** and **10** for the cartridge belt are provided parallel to the bottom of the box, namely in the wall **7** near the bottom and in the wall **8** near the top. From the lower passage **9** of the compartment **4***a* a conduit **11** is passed obliquely to the upper passage **10** of the compartment **4***b*. This conduit is straight at its middle portion and curved towards the passages **9** and **10**, and runs out tangentially towards the front- and rear-edges of the box. The orifice **15** of the belt outlet conduit **14** leading from the belt box compartment **4***a* upwardly rises towards the front. In the interior of the compartments, behind the passages **9** and **10**, deflector rollers **12** and **13** for the cartridge belt are arranged, which are journalled on axes parallel to these passages.

In the Fig. 2 the connecting line of the centers of the cartridges combined in a belt is indicated in chain-dotted lines, and the storing of the belt is illustrated diagrammatically. When loading the belt box, the belt **5** is put into loose zig-zag layers beginning at the bottom of the rear compartment **4***b* and extending over the full width of the compartment in such a manner that the cartridges point their projectiles forward and the axes of the projectiles lie parallel to the side walls of the belt box. From the uppermost layer the belt runs over the deflector roller **13**, through the conduit **11**, through the passage **9** and over the deflector roller **12** into the compartment **4***a* where it is put into loose zig-zag layers just as in the compartment **4***b*, and after its uppermost layer, it is passed through the outlet passage **14** to the belt feeder device **3** of the weapon.

When firing, the compartments of the belt box are emptied in the inverse order of loading the same. When the compartment **4***a* is empty, the part of the belt stored in the compartment **4***b* is discharged through the conduit **11**, the belt after the deflector roller **12** being pulled directly upward into the outlet conduit **14**.

Instead of as described hereinabove with reference to the embodiment illustrated, the belt box may alternatively be composed of more than two compartments arranged one behind the others. For example a third compartment **4***c* is indicated in thin lines in Fig. 2. In this case an entrance passage **16** has to be provided in the side wall of the compartment **4***b* and an outlet passage **17** in the side wall **18** of the compartment **4***c*, lying on the same side. The belt is piled up in zig-zag layers in the compartment **4***c* as in the compartments **4***a* and **4***b*, and is passed through a conduit from the outlet passage **17** of the compartment **4***c* to the entrance passage **16** of the compartment **4***b*. The two passages could obviously be provided alternatively in the other side walls of the belt box. It is only essential that the outlet pas-

sage of one compartment lies on the same side as the entrance passage of the adjacent preceding compartment.

Since the outlet orifice of the conduit **14**, which lies on the side of the belt box facing away from the weapon, rises forwardly, the belt is twisted but little at a medium elevation of the weapon, between this outlet orifice and the belt feeder device **3** of the weapon.

While I have described herein and illustrated in the accompanying drawing what may be considered a typical and particularly useful embodiment of my said invention, I wish it to be understood that I do not limit myself to the details and dimensions described and illustrated; for obvious modifications will occur to a person skilled in the art.

What I claim as my invention and desire to secure by Letters Patent, is:

1. A container for a cartridge belt of an automatic firearm, comprising in combination: end walls, side walls, a bottom and a top, partition walls dividing the container into separate compartments, passages for the belt being arranged in the side walls of adjacent compartments on the same side thereof alternately near the top and the bottom thereof, and oblique conduits lining up the said passages near the bottom of one compartment with the said passages near the top of the adjacent compartment, the said cartridge belt being folded zig-zag fashion in each compartment with the cartridges substantially parallel to a vertical plane containing the axis of the said firearm, and being passed from one compartment to the next adjacent compartment through the said passages and conduits connecting the same.

2. A container as claimed in claim 1, comprising deflector rollers for the cartridge belt journalled in the said compartments adjacent the said passages.

No references cited.