May 12, 1959 L. G. ARPIN 2,885,812

GUN SUPPORTING SLINGS

Filed Oct. 19, 1956

Fig. 1.

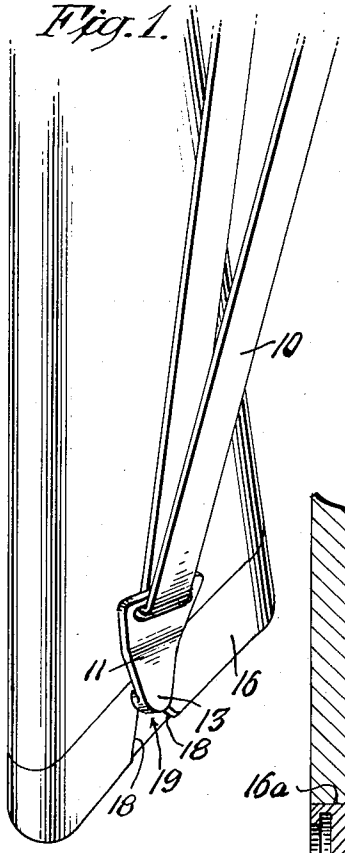


Fig. 2.

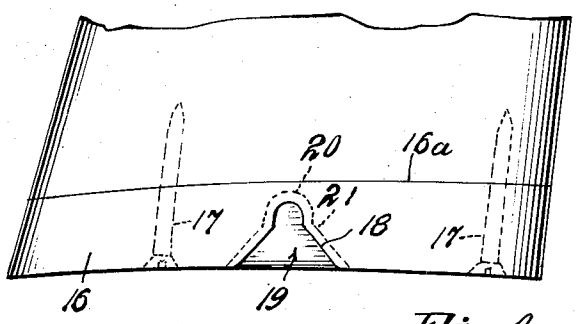


Fig. 3.

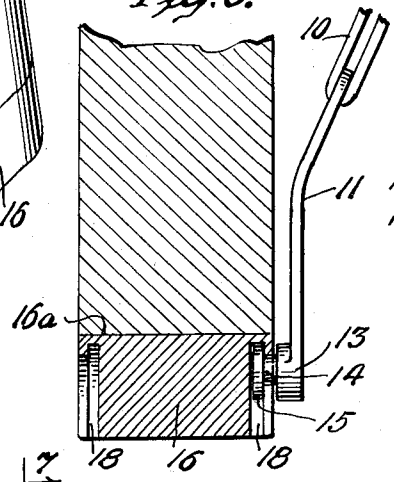


Fig. 4.

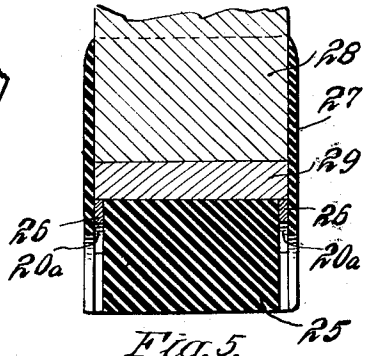


Fig. 5.

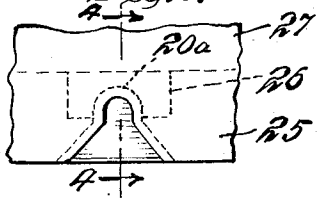


Fig. 6.

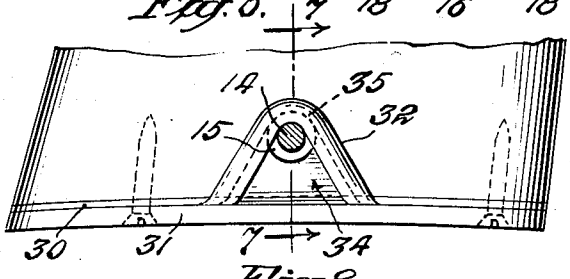


Fig. 7.

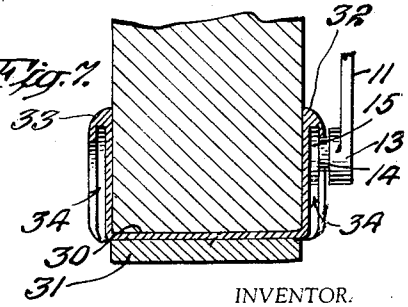
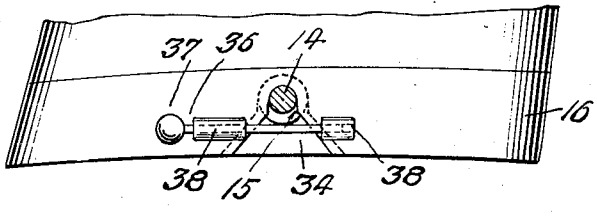


Fig. 8.



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GUN SUPPORTING SLINGS

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3 Claims. (Cl. 42—85)

This invention relates to gun supports or slings for facilitating the carrying of a gun.

The gun carrier of this invention is very simply applied to and disengaged from a gun butt. Although the gun may be used while the sling is connected it will substantially always release from the gun when the gun is raised for firing. In this way it will offer no impediment to controlled firing.

The invention is realized by providing an adaptor gun butt plate which is substituted for the normal gun butt. Of course, it is realized that the particular plate provided in this invention may be original equipment. However, considering the device as an adaptor plate, after removing the conventional gun butt plate, the adaptor plate is secured to the gun butt. The adaptor plate is provided with a recess slot which enables a shoulder strap with a supporting pin to be secured to the adaptor plate through said slot. The supporting pin is rotatable in the slot so that the gun can assume any desired carrying position and is further permitted to release almost instantaneously preparatory to firing.

In a modified form, the adaptor plate is formed of resilient rubber so that it serves as a recoil pad. The recess slot is provided by means of a metal insert embedded in the rubber and which is formed with the required slots for receiving the supporting pin.

In a further modified embodiment, the adaptor plate is of live rubber but is further provided with a sleeve which slips on to the gun butt so that it is unnecessary to screw the device to the gun butt as in the previous embodiments.

Finally, an embodiment is shown which is insertable between the gun butt and the conventional gun butt plate which is retained for use. All the embodiments herein are shown as having opposing recess slots so that either one may be used thus accommodating the device to either left-handed or right-handed users.

The invention will be further understood from the following description and drawings in which:

Figure 1 is a perspective, fragmentary view of the improved sling as connected to a gun butt;

Figure 2 is an elevational, fragmentary view of the modified gun butt adapted for receiving the carrying strap;

Figure 3 is a longitudinal, cross-sectional view of the modified gun butt as illustrated in Figure 1;

Figure 4 is a longitudinal, cross-sectional view similar to Figure 3 with the carrying strap removed but illustrating a modified embodiment, the view being shown as taken substantially along the line 4—4 of Figure 5;

Figure 5 is a fragmentary elevational view of the modified adaptor plate;

Figure 6 is a fragmentary view similar to Figure 2 but illustrating a further modified embodiment;

Figure 7 is a cross-sectional view as taken along the line 7—7 of Figure 6; and

Figure 8 is a fragmentary view similar to Figure 2 but illustrating an additional modified embodiment.

The sling comprises an adjustable carrying strap **10** such as was shown in my co-pending application Serial No. 605,365, filed August 21, 1956, now Patent Number 2,828,058. The strap is suspended as usual, from the opposite shoulder of the user. Arm **11** is supported by the strap **10**. Arm **11** is rigid and may have a coating or jacket of soft plastic or rubber material so as to avoid marring the gun butt finish.

Integral with arm **11** is a perpendicularly disposed stem **13** which is reduced in diameter at **14** to provide circular supporting pin **15**. The stem including the pin **15** is preferably of metal.

The adaptor plate **16** may be formed of conventional plastic materials such as nylon or the like although it may be conveniently formed of aluminum or other metal if desired. It may be in the order of ½" thick and is formed with passages **17** enabling the plate to be secured to a gun butt. It may be observed that ordinarily the factory supplied gun butt plate will be removed and the plate **16** substituted. The same screws will be reapplied through the passages **17** with the inner face **16***a* abutting the outer face of the gun butt base.

The sides of the adaptor plate **16** are each provided with countersunk V-shaped slots **18** having an enlarged entrance passage **19** terminating in an inner apex. This apex constitutes the closed end of slot **18** and comprises a countersunk recess **20** forming a seat for the pin **15**. The countersunk recess is formed by undercutting the sides of the V peripherally to provide a V-shaped groove **21**. The V-shaped slots **18** have their apices or inner recesses **20** extending in the direction of inner faces **16***a* of the adaptor plate, the entrance passage or mouth **19** extending oppositely or toward the outer face of the adaptor plate.

The arm **11** is connected to the installed adaptor plate by slipping the pin **15** into the entrance passage **19** so that it becomes seated in the countersunk recess **20**, such recess being, of course, continuous with the entrance **19**. It will be understood therefore that the pin **15** is capable of rotating movement within the recess **20** while nevertheless securely supporting the gun in a variety of suspended positions. As above stated, both sides of the adaptor plate are formed with slots **18** to accommodate both right and left-handed users.

In Figure 4, is shown an adaptor plate **25** which is formed of live rubber so that it functions as a recoil pad. In this event, it is desirable to supply a metal or hard plastic insert **26** at the sides of the plate in which is formed the countersunk recess **20***a*. It is apparent that a live rubber recess would be undesirable since it might encourage accidental disengagement of the supporting pin.

The live rubber embodiment of Figure 4 further lends itself to facilitate installation requiring neither removal of the factory supplied butt plate nor fastening by screws. Thus it is shown as being provided with an integral soft rubber sleeve **27** which embraces the gun butt **28** including its original butt plate **29** so that screwing the adaptor plate to the gun butt is unnecessary. Thus, the adaptor may comprise the live rubber butt plate together with the integral sleeve which is simply slipped over the gun butt so as to be firmly secured thereon. The metal insert **26** serves the same function as hereinabove described.

It is understood that both opposing inserts **26** may be integral or may comprise two separate pieces one on each side of the adaptor plate.

In the previous embodiments, the slots **18** are formed wholly in side walls of the adaptor plate which is made thick enough to so form them. However, in the embodiment of Figure 6, adaptor plate **30** is shown as a thin,

planar metal plate of the same general configuration as the conventional butt plate which is shown as at **31**. Plate **30** is formed with a pair of oppositely disposed, inwardly depending ears **32** and **33** having slots either of which may be used depending upon whether the user is left-handed or right-handed. Each ear is V-shaped and formed with an entrance opening **34** larger than the seating recess **35**. Seating recess **35** is the apex of a V-shaped groove in which the pin **15** becomes seated.

This last-named embodiment is employed by temporarily removing the conventional gun butt plate **31** and then inserting the adaptor plate **30** between the conventional gun butt plate and the gun butt, using the same screws to re-fasten the elements. It may be noted that the adaptor plate **30** may, if desired, be secured outwardly of the conventional gun butt plate where it will perform substantially the same function.

In any of the above embodiments, it will be understood that a locking pin **35** as shown in Figure 8 may be employed to prevent release of the gun when it is brought into firing position. In such a case, the pin **35** will be slid across the recess **35** into keeper **36** and will prevent disengagement of the pin from the recess when the gun is brought into firing position. In this case, the gun will be used while the sling is connected thereto.

It will also be noted that since the gun acts as a weight upon the sling, the layers of the adjustable strap **10** as shown in Figure 1 will be brought closer together and may conveniently be used to hold shells or the like which are immediately available to the user before he fires the gun.

Assuming that locking pin **35** is not employed, it has been found that the sling is most effective in facilitating carrying of the gun yet practically insuring instantaneous release when the gun is brought up into firing position. Accordingly, the aim of the user is not interfered with. The pin **15** is further most easily returned to its slot when desired.

While I have described what I believe to be the best embodiments of my invention, it will be apparent to those skilled in the art that many changes and modifications may be made therein without departing from the spirit and scope of the invention as defined in the appended claims.

What is claimed is:

1. The combination with a gun butt base of a gun carrier, said gun carrier comprising an adaptor plate, connection means securing said plate to said base, said plate being formed with a V-shaped slot countersunk in an outer side wall of the body of said plate, a pin removably and rotatably received in the apex of said slot, a rigid arm at one end of which said pin is integrally and perpendicularly formed, and a carrying belt connected to the other end of said arm.

2. A gun carrier according to claim 1 and wherein said slot is undercut to provide a peripheral groove along the sides of the V.

3. A gun carrier according to claim 2 and wherein said plate comprises an inner face which is secured to the gun butt base, said V-shaped slot extending perpendicularly to said plate and having its apex in the direction of said inner face and its mouth in the direction of the outer face of said plate, the back of said slot being closed.

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