Nov. 27, 1956 H. A. REISING 2,771,697

REMOVABLE HANDGRIP FOR GUNS

Filed Aug. 10, 1953

Fig. 1

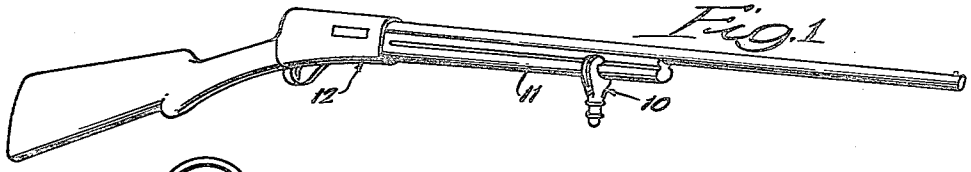


Fig. 2

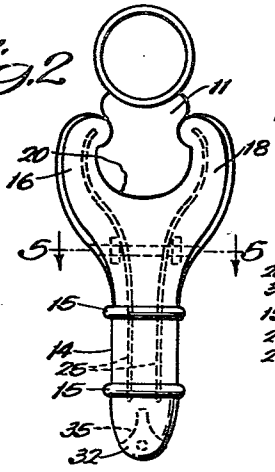


Fig. 3

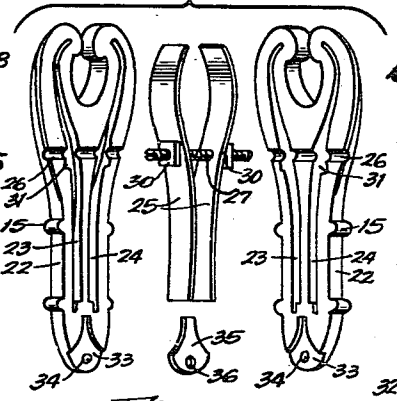


Fig. 4

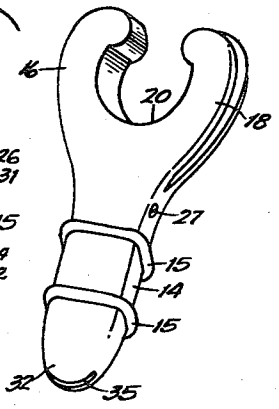


Fig. 5

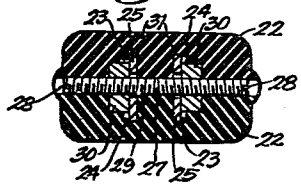


Fig. 6

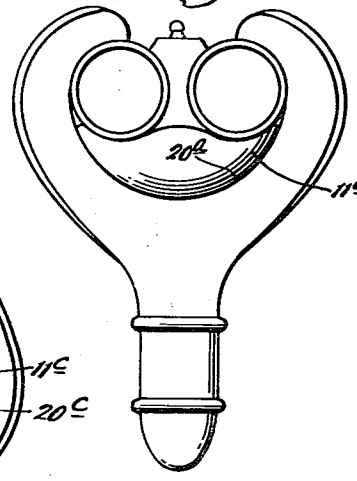


Fig. 7

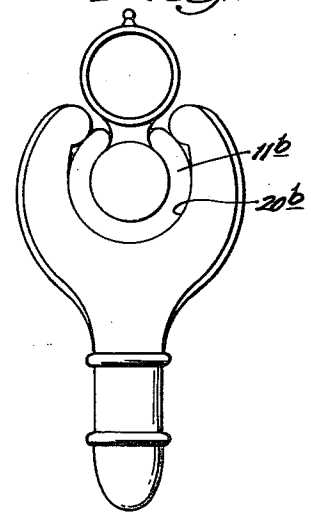
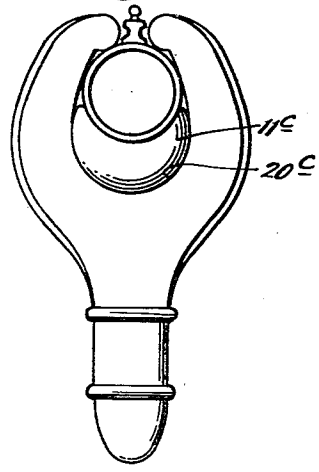


Fig. 8



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REMOVABLE HANDGRIP FOR GUNS

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2 Claims. (Cl. 42—71)

This invention relates to removable handgrips for guns, and more particularly to a handgrip construction adapted for use with a wide variety of guns.

It is an object of the present invention to provide a removable handgrip which may be readily adjusted and firmly secured to a desired position along the forearm or the like of a gun or rifle.

It is another object of the present invention to provide a handgrip construction which may be employed for the manufacture of a wide variety of handgrip forms for use with many different types of guns.

It is a further object to provide a handgrip construction which is simple in design and readily adaptable to large-scale manufacture at low cost.

It is another object to provide a removable and slidably adjustable handgrip for guns which may be positioned at any desired location below the forearm or other suitable portion of the gun structure and firmly secured thereto in locking engagement.

It is a still further object to provide a removable and adjustable handgrip for guns which may be secured below the forearm or other suitable portion of the gun structure to permit the barrel of the gun to be forwardly supported by an operator employing a "thumb-up" fist-like grasp along a vertical axis.

These and other objects and advantages of the invention will be more apparent from the following description when read in connection with the accompanying drawing, in which

Figure 1 is a perspective view of a gun having the handgrip of the present invention attached thereto.

Figure 2 is an enlarged front elevation of the gun shown in Figure 1, illustrating the manner in which my novel handgrip is attached to the gun.

Figure 3 is an exploded view of the handgrip of Figures 1 and 2, showing the separate parts thereof prior to assembly.

Figure 4 is a perspective view of the assembled handgrip of Figures 1 to 3.

Figure 5 is a cross-sectional view along line 5—5 of Figure 2.

Figure 6 is a front elevation of a modified shape of handgrip shown attached to a gun of another type.

Figure 7 is a front elevation of a handgrip constructed in accordance with the present invention shown attached to still another type of gun.

Figure 8 is a view similar to Figures 6 and 7 showing a handgrip employed with yet another type of gun.

In Figure 1 of the drawing I have illustrated a handgrip **10**, constructed in accordance with my present invention, attached to the forearm **11** of an automatic shotgun **12**. As best shown in Figure 2, the handgrip **10** is of Y-shaped form comprising an elongated handle portion **14**, having raised ridges **15** to facilitate manual gripping, and a pair of oppositely disposed arm portions **16** and **18**. The arms **16** and **18** form a yoke and include between them a surface or configuration **20** which is substantially similar in form to the shape of the lower external surface of the forearm **11** of the gun **12**. The inner shape of the arms **16** and **18** conforms closely to the forearm **11**, resulting in a uniformly contacting engagement therewith.

The handgrip comprises an assembly of four major subunits, as best shown in Figure 3. Two substantially identical body elements **22** provide the opposite halves for the unitary assembly. The elements **22** may be molded of a resilient material such as rubber or the like. The elements **22** are provided with a pair of internal channels or grooves **23** and **24**, each extending upwardly from the handle portion to one of the arms and lying substantially along the central portions thereof. The grooves **23** and **24** conform to the curved shapes of the opposed arms of the body halves **22**.

A pair of substantially identical metallic spring elements **25**, having a shape which conforms to either of the grooves **23** and **24**, when properly faced, are provided for insertion within the grooves between the body halves. Another channel **26** is provided transversely of the elements **22** so as to form a cylindrical bore when the body halves are in face-to-face relation. A screw threaded bolt **27** passes through apertures **29** in the spring elements **25**. The bolt **27** is oppositely threaded along each half portion to receive a pair of opposed nuts **30**, and is provided with slots **28** at each end. The intersections of grooves **23** and **24** with groove **26** are recessed to provide enlarged portions **31** to receive the nuts **30**.

The handgrip is assembled by first inserting bolt **27** through apertures **29** of an opposed pair of springs **25**, and screwing a pair of nuts **30** into contacting engagement with the outer faces of the springs **25**. This unit is then placed within a first body half **22**, the springs **25** lying in grooves **23** and **24**, the bolt **27** along channel **26**, and the nuts **30** within recesses **31**. A second body half **22** is next brought into face-to-face engagement with the first body half so as to receive the elements **25**, **27** and **30** in like manner. The transverse seam then may be suitably sealed by solvent adhesive or molding as desired to form a complete unitary assembly.

At the end of the handle portion **14**, I provide a cavity **32** formed by recesses **33** in body halves **22**. Each recess is provided with a small lug **34**. The purpose of the cavity **32** is to receive a metal screw-driver **35** therein. The screw-driver **35** is provided with an aperture **36** to receive the lugs **34**. The resilient nature of the material forming the body elements **22** permits the screw-driver to be easily inserted in the cavity **32**, the lugs **34** engaging the aperture **36** to hold the screw-driver in position. The end of the handle **14** may be manually distended and the mouth of the cavity readily widened to permit removal of the screw-driver when desired.

In Figures 6 to 8 I have illustrated the handgrip of my present invention mounted on guns of various types. In Figure 6 I have shown a handgrip having an internal surface or configuration **20***a* which is of suitable form to embrace the lower external surface of the forearm **11***a* of a side-by-side double barrel shotgun. It will be apparent that the shape of the handgrip shown in Figure 6 is of substantially the same construction as that shown in Figures 2 to 5, differing only in the form of the space between the upwardly extending arms of the handgrip. As a practical matter, the half elements which form the assembly of both forms of handgrip, that of Figures 2 to 5 and that of Figure 6, may be initially molded in an identical manner. The interior surfaces **20** and **20***a* may then be stamped out, or otherwise cut away, with an appropriate die selected to produce the particular surface desired.

In Figure 7 I have shown a surface **20***b* suitable for engagement with the slide **11***b* of a pump gun.

In Figure 8 I have shown still another form of internal

surface 20*c* for engagement with the forearm 11*c* of a single-shot shotgun.

Practical operation

In the practical use of my present invention, a handgrip having the particular form suitable for attachment to the characteristic shape of a selected gun is chosen. The screw-driver **35** is removed from the cavity **32** and employed as a tool for adjusting the arms of the handgrip preparatory to mounting on the gun. The screw-driver engages the slot **28** of the bolt **27**, and rotation thereof within the bore formed by grooves **26** in a suitable direction will effect a separation of the nuts **30** away from the center of the bolt **27**. The nuts **30**, because of their position in contacting engagement with the near opposed surface of the spring member **25**, will effect a separation of the spring members relative to each other at their upper position. The spring members will in turn separate the arms of the handgrip so as to provide a sufficient space therebetween to permit entry of the forearm or other suitable portion of the gun and adjustable sliding engagement therewith. The screw-driver may then be used to effect a turning of the bolt in an opposite direction so as to draw the arms of the handgrip together into tightly fitting engagement with the gun. The screw-driver may then be returned to the cavity, **32**, and the handgrip is now mounted on the gun for practical use.

It will be apparent that the handgrip may be positioned at any suitable place along the gun structure in accordance with the particular desires of the user. Once tightened into locking engagement with the gun, the handgrip will provide a firmly secure but resilient holding means. Such a grip means allows the operator of the gun to use a "thumb-up" fist-like grasp along a vertical axis in forwardly supporting the barrel of the gun, thereby permitting the gun to be held in a manner which is substantially more stable and less awkward than the conventional "palm-up" direct grasp along the horizontal axis of the gun forearm.

I claim:

1. A handgrip adapted to be removably secured to the forearm or the like of a gun, said handgrip comprising a resilient Y-shaped body including a handle portion and curved arm portions, said body being formed by a pair of longitudinally extending half portions in face-to-face relation, each of said halves having a pair of longitudinal channels spaced one from the other and each extending from the handle portion to one of each of the arm portions of said halves, said channels forming a pair of grooves extending from said handle portion to each of said arm portions when said halves are in face-to-face relation, a pair of opposed spring members each positioned in one of said grooves, and adjusting means connecting said spring members and operative to vary the displacement therebetween whereby the distance between said curved arm portions may be regulated.

2. A handgrip adapted to be removably secured to the forearm or the like of a gun, said handgrip comprising a resilient Y-shaped body including a handle portion and arm portions extending therefrom to form a yoke, a pair of opposed spring members normally biased away from each other and enclosed within said body, adjusting means connecting said spring members, said adjusting means comprising a bolt oppositely threaded along each half thereof and extending through an aperture in each of said spring members, a pair of nuts threaded onto the end of said bolt and fixed with respect to rotation relative to said body, said nuts each lying respectively between an end of the bolt and an adjusting spring member whereby rotation of the bolt in the one direction causes said nuts to converge toward each other and engage said spring members, a rotation of the bolt in the other direction causes said nuts to move away from each other, whereby said arm portions may be caused to converge.

References Cited in the file of this patent

UNITED STATES PATENTS

789,403	Aitken	May 9, 1905
809,080	Wight	Jan. 2, 1906
936,528	Freeman	Oct. 12, 1909
2,104,129	Kress	Jan. 4, 1938

FOREIGN PATENTS

7,805	Great Britain	1893