Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).
The present invention relates to handgun support systems.

BACKGROUND

Conventional handgun designs inherently cause threat to the users of such handguns, particularly upon firing. For example, when a semi automatic handgun is fired, the handgun slide is blown back by the explosion of the ammunition. Any finger, face, or eye near a semi automatic handgun slide during firing is in danger of being seriously injured. As another example, when a revolver handgun is fired the explosive gases escape from the front of the revolver’s cylinder and the revolver’s barrel. Any finger near the front of the revolver’s cylinder during firing is in danger of being seriously injured.

Moreover, while in many cases the purpose of a handgun is defensive (i.e. to prevent life from being taken), conventional handgun designs do not inherently help prevent inadvertent damage to third parties upon firing. For example, shot placement accuracy is critical when dealing with life threatening situations. Poor shot placement can cause failure to protect life, and poor shot placement can cause innocent life to be taken. Thus, every round fired from a handgun has the potential of causing death or serious injury.

While existing handgun add-ons have been introduced to alleviate at least some of the above issues inherent with handguns, these handgun add-ons have exhibited various limitations. For example, existing handgun add-ons are physically attached to the handgun, therefore changing the basic operation of the handgun. Published US patent 3 609 902 a discloses a handgun support provided with a saddle member within which a gun grip is cradled. A steady rest is rigidly supported forward of the saddle to engage the gun immediately forward of the trigger guard. The operator’s hand then grasps the gun grip and saddle to provide an interlocking of the gun and support.

There is thus a need for addressing these and/or other issues associated with the prior art.

DETAILED DESCRIPTION

A handgun support device is provided. The handgun support device includes a handgun rest for supporting at least a portion of a grip of a handgun therein, where the handgun rest includes a wall portion, a front support for at least a portion of a front side of the grip of the handgun, the front support protruding from a front side of the wall portion, and a back support for at least a portion of a back side of the grip of the handgun, the back support protruding from a back side of the wall portion and including a hole or gap to allow a thumb of a user to be placed through an opening thereof to support the handgun against the wall portion of the handgun rest with the user’s fingers and opposing thumb. The handgun support device further includes a rigid structure extending from the handgun rest for being held against an external support.

Figure 1 illustrates various views of a handgun support device, in accordance with one embodiment. Figure 2 illustrates an Adjustable Rest Extension (MILSPEC) for the handgun support device of Figure 1, in accordance with another embodiment. Figure 3 illustrates handgun revolver models of the handgun support device of Figure 1, in accordance with yet other embodiments. Figure 4 illustrates the use of various materials for the handgun support device of Figure 1, in accordance with still yet other embodiments. Figure 5 illustrates camera and tablet options for the handgun support device of Figure 1, in accordance with still yet another embodiment.
the handgun rest 102. The handgun may be a semi automatic handgun, revolver, or any other type of handgun.

[0012] Since the handgun support device 100 includes the handgun rest 102 for supporting at least a portion of a grip of a handgun therein, the handgun support device 100 may be formed for a particular make and/or model of handgun. For example, different handgun support devices may be formed for different handgun makes and/or models. This may allow the portion of the grip of the handgun held by the handgun rest 102 to rest flush against the handgun rest 102 of the handgun support device 100. To this end, the handgun rest 102 may be a groove or other indentation in which the portion of the grip of the handgun is held (e.g., placed, situated, etc.).

[0013] The handgun rest 102 may be formed such that the portion of the grip of the handgun may be placed therein without necessarily being attached thereto, or locked therein, by any further mechanism. In particular, the handgun rest 102 rest includes a wall portion 104. The wall portion 104 may optionally be solid and/or flat. The wall portion 104 may be utilized such that a side of the portion of the grip of the handgun rests against the wall portion 104 when the portion of the grip of the handgun is held by the handgun rest 102. To this end, the wall portion 104 may be of sufficient size and strength to support a user’s hand supporting the portion of the grip of the handgun against the wall portion 104.

[0014] The handgun rest 102 rest also includes a front support 106 for at least a portion of a front side of the grip of the handgun, where the front support 106 protrudes from a front side of the wall portion 104. The front support 106 may be of sufficient size and strength to prevent the front portion of the grip of the handgun from moving, sliding, etc. forward when held against the wall portion 104.

[0015] The handgun rest 102 rest further includes a back support 108 for at least a portion of a back side of the grip of the handgun, where the back support 108 protrudes from a back side of the wall portion 104. The back support 108 includes a hole or gap 109 to allow the thumb of the user to be placed through an opening thereof to support the handgun against the wall portion 104 of the handgun rest 102 with the user’s fingers and opposing thumb. The back support 108 may be of sufficient size and strength to prevent the back of the portion of the grip of the handgun from moving, sliding, etc. backwards when held against the wall portion 104. In one embodiment, the back support 108 may be located on the wall portion 104 in a position such that when the handgun (i.e., a semi automatic handgun in this embodiment) is held by the handgun rest 102, the back support 108 is located just under the slide of the handgun. In another embodiment, the back support 108 may be located on the wall portion 104 in a position such that when the handgun (i.e., a revolver in this embodiment) is held by the handgun rest 102, the back support 108 is located just under the hammer of the handgun. This back support 108 may improve recoil management.

[0016] To this end, the handgun rest 102 having the wall portion 104, front support 106, and back support 108 forms a platform against which a side, front, and back of the portion of the grip of the handgun rests flush (e.g., with little to no room to slide front to back, etc.). This provides a type of bench rest for the portion of the grip of the handgun, when held by a user.

[0017] Moreover, as shown, the handgun support device 100 further includes a rigid structure 110 extending from the handgun rest 102 for being held against an external support. For example, the external support may be a portion of a body of the user of the handgun (e.g., a shoulder, torso, leg, etc.). The rigid structure 110 may be of sufficient length to reach the body of the user when the handgun is held at least partially at arm’s length by the user. In various embodiments, the rigid structure 110 may be an attachment to the handgun rest 102, such as a metal frame, composite thin frame, folding frame or hard case attached to the handgun rest 102.

[0018] To use the handgun support device 100, in one embodiment, a user needs simply to support the rigid structure 110 against the user’s upper torso with the user’s opposing hand, place the handgun within the handgun rest 102, and fire the handgun. The rigid structure 110 provides a cheek rest to take aim from a repeatable position and improve shot placement accuracy.

[0019] More illustrative information will now be set forth regarding various optional architectures and uses in which the foregoing method may be implemented, per the desires of the user.

[0020] Figure 2 illustrates an Adjustable Rest Extension (MILSPEC) for the handgun support device of Figure 1, in accordance with another embodiment. As an option, Adjustable Rest Extension may be implemented in the context of the handgun support device 100 of Figure 1. As shown, the handgun support device 100 may be utilized such that a face of the user is not to extend beyond the rigid structure at a point where the the handgun rest 102 attaches to the rigid structure 110.

[0021] Figure 3 illustrates handgun revolver models of the handgun support device of Figure 1, in accordance with yet other embodiments.

[0022] Figure 4 illustrates the use of various materials for the handgun support device of Figure 1, in accordance with still yet other embodiments.

[0023] Figure 5 illustrates camera and tablet options for the handgun support device of Figure 1, in accordance with other embodiments. As an option, a camera may be implemented in the context of the handgun support device 100 of Figure 1, namely being included in either the handgun rest 102 or the rigid structure 110, or a combination thereof. The camera may be incorporated into the handgun support device 100 of Figure 1 to provide secure remote viewing and recording of the handgun operation.

[0024] As an option, a tablet computer may be implemented in the context of the handgun support device 100 of Figure 1, namely being included in either the handgun rest 102 or as at least a portion of the rigid structure 110.
or a combination thereof. The tablet computer may be incorporated into the handgun support device 100 of Figure 1 to provide the rigid structure 110 for the handgun support device 100 and location information about where and when the handgun was used.

Claims

1. A handgun support device (100), comprising:

   a handgun rest (102) for supporting at least a portion of a grip of a handgun therein, the handgun rest including:

   a wall portion (104),
   a front support (106) for at least a portion of a front side of the grip of the handgun, the front support protruding from a front side of the wall portion (104), and
   a back support (108) for at least a portion of a back side of the grip of the handgun, the back support (108) protruding from a back side of the wall portion (104) including a hole or gap (109) to allow a thumb of a user to be placed through an opening thereof to support the handgun against the wall portion (104) of the handgun rest (102) with the user's fingers and opposing thumb; and
   a rigid structure (110) extending from the handgun rest (102) for being held against an external support.

2. The handgun support device (100) of claim 1, wherein the front support (106) continuously extends along the front side of the wall portion (104) for supporting the entirety of the at least a portion of the front side of the grip of the handgun.

3. The handgun support device (100) of claim 1, further comprising a bottom support for a bottom portion of the grip of the handgun, the bottom support protruding from a bottom side of the wall portion (104).

4. The handgun support device (100) of claim 3, the bottom support extending along an entirety of the bottom side of the wall portion (104).

5. The handgun support device of claim 3, the bottom support extending along a portion of the bottom side of the wall portion (104) for creating and for allowing access to the bottom portion of the grip of the handgun.

6. The handgun support device (100) of claim 1, wherein the handgun rest (102) is shaped specific to a particular model of the handgun.

7. The handgun support device (100) of claim 1, wherein the external support is a body of the user of the handgun.

Patentansprüche

1. Handfeuerwaffen-Halteeinrichtung (100), mit:

   einer Handfeuerwaffenauflage (102) zum darin Halten zumindest eines Bereiches eines Griffes einer Handfeuerwaffe, wobei die Handfeuerwaffenauflage aufweist:

   einen Wandbereich (104),
   eine vordere Halterung (106) für zumindest einen Bereich einer Vorderseite des Griffes der Handfeuerwaffe, wobei die vordere Halterung aus einer Vorderseite des Wandbereichs (104) hervorsteht, und
   eine hintere Halterung (108) für zumindest einen Bereich einer Rückseite des Griffes der Handfeuerwaffe, wobei die hintere Halterung (108) aus einer Rückseite des Wandbereichs (104) hervorsteht und ein Loch oder einen Spalt (109) aufweist, sodass ein Anwender einen Daumen durch eine Öffnung platzieren kann, um die Handfeuerwaffe anliegend an dem Wandbereich (104) der Handfeuerwaffenauflage (102) mit den Fingern des Anwenders und dem gegenübergelagerten Daumen zu halten; und
   eine starre Struktur (110), die sich von der Handfeuerwaffenauflage (102) erstreckt, um an einer externen Halterung angelegt zu werden.

2. Handfeuerwaffen-Halteeinrichtung (100) nach Anspruch 1, wobei die vordere Halterung (106) sich zusammenhängend entlang der Vorderseite des Wandbereichs (104) zum Halten des gesamten mindestens einen Bereichs der Vorderseite des Griffes der Handfeuerwaffe erstreckt.

3. Handfeuerwaffen-Halteeinrichtung (100) nach Anspruch 1, die ferner eine Bodenhalterung für einen Bodenbereich des Griffes der Handfeuerwaffe aufweist, wobei die Bodenhalterung aus einer Bodenseite des Wandbereichs (104) hervorsteht.

4. Handfeuerwaffen-Halteeinrichtung (100) nach Anspruch 3, wobei die Bodenhalterung sich entlang der gesamten Bodenseite des Wandbereichs (104) er- streckt.

5. Handfeuerwaffen-Halteeinrichtung nach Anspruch 3, wobei sich die Bodenhalterung entlang eines Be- reichs der Bodenseite des Wandbereichs (104) so
erstreckt, dass Zugänglichkeit zu dem Bodenbereich des Griffes der Handfeuerwaffe geschaffen und Zugang ermöglicht wird.

6. Handfeuerwaffen-Halteeinrichtung (100) nach Anspruch 1, wobei die Handfeuerwaffenauflage (102) für ein spezielles Modell der Handfeuerwaffe in spezifischer Weise geformt ist.

7. Handfeuerwaffen-Halteeinrichtung (100) nach Anspruch 1, wobei die externe Halterung ein Körper des Benutzers der Handfeuerwaffe ist.

Revendications

1. Dispositif support d’arme de poing (100), comprenant :

   un appui d’arme de poing (102) pour supporter au moins une section d’une poignée d’une arme de poing à l’intérieur, l’arme de poing comprenant :

   une section de paroi (104),
   un support frontal (106) pour au moins une section d’une face frontale de la poignée de l’arme de poing (104), et
   un support arrière (108) pour au moins une section d’une face arrière de la poignée de l’arme de poing, le support arrière (108) dépassant d’une face arrière de la section de paroi (104) et comprenant un trou ou un intervalle (109) pour permettre à un utilisateur de placer son pouce dans un orifice de celle-ci afin de supporter l’armes de poing contre la section de paroi (104) de l’arme de poing (102) par les doigts et le pouce opposé de l’utilisateur ; et
   une structure rigide (110) s’étendant depuis l’appui de l’arme de poing (102) de manière à être maintenue contre un support externe.

2. Dispositif support d’arme de poing (100) selon la revendication 1, dans lequel le support frontal (106) s’étend en continu le long de la face frontale de la section de paroi (104) pour supporter la totalité de l’au moins une section de la face frontale de la poignée de l’arme de poing.

3. Dispositif support d’arme de poing (100) selon la revendication 1, prenant en outre un support inférieur pour une section inférieure de la poignée de l’arme de poing, le support inférieur dépassant d’une face inférieure de la section de paroi (104).

4. Dispositif support d’arme de poing (100) selon la revendication 3, le support inférieur s’étendant le long de la totalité de la face inférieure de la section de paroi (104).

5. Dispositif support d’arme de poing selon la revendication 3, le support inférieur s’étendant le long d’une section de la face inférieure de la section de paroi (104) pour créer et pour permettre l’accès à la section inférieure de la poignée de l’arme de poing.

6. Dispositif support d’arme de poing (100) selon la revendication 1, dans lequel l’appui d’arme de poing (102) est conformé spécifiquement pour un modèle particulier d’arme de poing.

7. Dispositif support d’arme de poing (100) selon la revendication 1, dans lequel le support externe est le corps d’un utilisateur de l’arme de poing.
Figure 1
Figure 2
Handgun Support Device 100 for a Revolver Handgun

FACE CHECK: No Faces beyond this point.

Rigid Structure 110

Revolver Handgun

Front Support 106

Back Support 108

Hole or Gap 109

Left Handed embodiments are possible for all Handgun Support Devices 100

Figure 3
Vacuum Formed Composite Handgun Support Device **100**.

Metal Frame Handgun Support Device

- **Wall Portion 104**
- **Hole or Gap 109**
- **Back Support 108**
- **Front Support 106**

Carbon Fiber Handgun Support Device **100** (Can be embedded in bags and clothing)

- **Wall Portion 104**
- **Hole or Gap 109**
- **Back Support 108**
- **Front Support 106**

The Handgun Support Device **100** can be embedded in bags, cases... really any rigid body.

**Figure 4**
Figure 5

APS VIEWER Camera Option.

Tablet Computer Rigid Structure 110 Option.
REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

• US 3609902 A [0004]