BRIEF SUMMARY OF THE INVENTION

The present invention relates generally to a buttstock assembly for firearms and the like. More particularly, it is directed to a new and improved buttstock assembly containing a stowage compartment therein.

It is a primary object of the present invention to provide a new and improved buttstock assembly incorporating a stowage compartment capable of carrying all the cleaning and servicing equipment necessary to maintain the firearm, said compartment being readily accessible without removal of the butt plate from the assembly.

Another object of the present invention is to provide a new and improved buttstock assembly for rifles and the like having a latchable door free of protruding portions extending outwardly of the resilient butt surface.

Another object of the present invention is to provide a compartmentalized buttstock assembly of the type described which includes a latchable door having metal-to-metal latch contact assuring firm and secure closure of the door coupled with both strength and durability of construction and ease and reliability of operation. Included in this object is the provision for a metallic latch keeper permanently bonded within the butt plate of the assembly.

Still another object of the present invention is to provide a buttstock assembly having a protrusion-free resilient butt surface for minimizing the impact load to the operator during firing and an access door capable of preventing the passage of mud and other foreign matter into the interior of the buttstock.

Other objects will be in part obvious and in part pointed out more in detail hereinafter.

These and other objects are accomplished in accordance with the present invention by providing a buttstock assembly with a stowage compartment in the buttstock and a removable butt plate having a latchable door providing access to the compartment. The butt plate is a composite member having a resilient butt surface and a metal latch keeper fixedly embedded within its interior for cooperating with a slidable, cartridge-operated latch detent on the door.

A better understanding of the objects, features, properties and relationships of the invention will be obtained from the following detailed description and accompanying drawing which set forth an illustrative embodiment and are indicative of the way in which the principle of the invention is employed.

BRIEF DESCRIPTION OF THE DRAWING

In the drawing:

FIG. 1 is a fragmented sectional view of the buttstock assembly of the present invention showing the latchable door in its open position;

FIG. 2 is an end view of the butt surface of the assembly of FIG. 1 with the door in its closed position;

FIG. 3 is a view of the interior configuration of the buttstock plate taken along the line 3—3 of FIG. 1;

FIG. 4 is a perspective view of the butt end of the buttstock prior to assembly of the buttstock plate thereon; and

FIG. 5 is a sectional view of the butt plate's door hinge assembly taken along the line 5—5 of FIG. 1.

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

Referring now to the drawing in greater detail wherein like reference numerals indicate like parts throughout the several figures, an assembly incorporating the features of the present invention is shown as being comprised of an elongated buttstock 10 of conventional design having a composite butt plate 12 securely fastened on the enlarged butt end thereof. As best shown in FIGS. 1 and 4 the buttstock 10 is of oval cross-sectional configuration and is provided with a small transversely extending slot 14 adjacent its butt end for receiving a swivel 16. The interior of buttstock 10 is filled with a hard core 24 of molded polyurethane or the like which terminates short of the butt end and forms a recess 26 outlined by the terminal lip 28 of the buttstock. A bore 18 extends into the buttstock from recess 26 and intersects slot 14 thereby enabling a butt-plate-retaining fastener 20 within the bore 18 to be threadably connected to the swivel 16.

In the particular embodiment illustrated, the core 24 is molded so as to provide a generally cylindrical through aperture 32 extending longitudially along the top of the buttstock and a centrally located stowage compartment 34 of generally triangular shape with its enlarged entrance opening at the recess 26. The cylindrical aperture 32 is particularly well suited for receiving a portion of a buffer assembly, such as the receiver extension 36. As shown, the receiver extension 36 is of approximately the same length as the buttstock and is slidably received within the cylindrical aperture 32. An annular flange 38 at one end of the extension 36 abutably engages the lip 40 of the aperture 32 at the forward end of the buttstock. The central stowage compartment 34 tapers inwardly from its opening at the recess 26 and terminates within the buttstock adjacent its forward end. This compartment is particularly well suited for stowage of all the cleaning and servicing equipment necessary to maintain the rifle. For example, it has been found that a case extracting tool together with rods, brushes, pads and similar equipment can be conveniently stowed within the compartment, preferably within a rubberized fabric pouch of corresponding triangular configuration.

The butt plate, generally designated by the numeral 12, encloses the recessed butt end of the buttstock and is held in secure engagement therewith by both the fastener 20 secured to swivel 14 and a bolt 44 threadingly connected to the end of receiver extension 36 opposite
the end carrying flange 38. Advantageously, the butt plate 12 of the present invention is a composite structure comprised of a hard, rigid frame member 46 and a resilient rubber-like cap 48 securely and permanently bonded thereto. The rigid frame member 46 is received within the recess 26 of the buttstock and is provided with a peripheral flange 50 for abuttingly engaging the recess-outlining lip 28 of the buttstock thus providing secure seating of the butt plate 12 against the buttstock for assuring positive interlocking engagement upon tightening of the retaining fasteners 20 and 44. The rubber-like cap 48 forms the rear or butt surface of the composite plate 12 and extends forwardly to the peripheral flange 50 of the frame member. As will be appreciated, the main function of the rubber cap is to provide a soft butt surface on the end of the assembly to minimize the impact load to the operator during discharge of the firearm.

The composite butt plate 12 is provided with a central aperture 54 disposed in alignment with the opening of the stowage compartment 34. Like compartment 34 the aperture 54 is generally rectangular in transverse cross section. As shown in FIGS. 1 and 2 the portion of aperture 54 is slightly enlarged over that defined by rigid frame member 46 so as to provide a lip or stopper 56 against which the compartment door 58 may abut as it is latched in its closed position.

According to the present invention the composite butt plate 12 is provided with a steel latch keeper 60 permanently bonded within the interior of the butt plate between the frame member 46 and cap 48. The keeper 60 is of sturdy and rigid construction and includes an integral funnel-shaped support portion 62 which is centrally apertured and disposed within the tapered or countersunk aperture 64 of the frame member 46 for firm engagement by the head of retaining bolt 44. In this way the keeper is firmly and securely held against the frame structure 46 and resists inadvertent outward movement during unlatching and opening of the door 58. As best seen in FIG. 1, the keeper 60 extends downwardly from the support portion 62 into the space provided by a notch 68 at the top of central aperture 54.

An enlarged notch 70 is provided at the bottom of aperture 54 directly opposite notch 68 for receiving the hinge and hinge bracket 72 of the door 58. The bracket 72 is a U-shaped member having a detent contacting portion 74 mounted within a recess 76 on the interior surface of frame member 46. As shown, the flange 74 is provided with an aperture 78 through which the fastener 20 passes when securing the butt plate. Thus, the bracket 72 also is positively secured within the recess 76 between the butt plate and the buttstock as illustrated in FIGS. 1 and 2 respectively.

The door 58 providing closure of the compartment 34 includes a substantially flat closure portion 80 which when moved into the closed position abuts the doorstop 56 and is held substantially flush with the exterior butt surface of the butt plate. The interior of the door is provided with a longitudinally extending hollow shaft portion 82 and a terminal hinge 84 affixed to the end of shaft portion 82 and projecting below the flat closure portion 80 of the door into enlarged notch 70. As illustrated in FIG. 5 the U-shaped hinge bracket 72 pivotally mounts the hinge 84 by means of a pair of opposed side arms 96 which abut the inwardly projecting flanges 98 of the butt plate's frame member and supportably carry a hinge pin 100 extending through the hinge 84. Thus the door 58 can easily move between the open and closed positions illustrated in FIGS. 1 and 2 respectively.

A latch detent 86 is slidably retained within shaft portion 82 by a roll pin 88 and is biased outwardly away from hinge 84 by a compression spring 90 mounted within the shaft. The latch detent 86 is further provided with a notch 92 which facilitates movement of the detent by an operator against the bias of compression spring 90. As will be appreciated a cartridge or other suitable means may be used for this purpose.

Thus, as can be seen from the foregoing detailed description, the assembly provides a resilient protrusion-free butt surface for minimizing the impact load to the operator. At the same time the butt plate is provided with an access door to a storage compartment capable of carrying all of the cleaning and servicing equipment necessary to maintain the rifle. The door is secured by the cooperative interengagement of a spring-loaded metal latch detent and a metal latch keeper permanently embedded and bondably secured within the butt plate of the assembly.

As will be apparent to persons skilled in the art, various modifications, adaptations and variations of the foregoing specific disclosure can be made without departing from the teachings of the present invention.

We claim:

1. In a buttstock assembly including a buttstock having a stowage cavity with an opening at one end thereof and a removable butt plate mounted on an end of the buttstock for covering the opening, said butt plate being provided with an aperture in alignment with the opening and a door for closing said aperture, the improvement wherein the butt plate is a composite member forming a resilient rear surface of the assembly and having a rigid latch keeper fixedly bonded within the interior of the butt plate adjacent the aperture, the door being an elongated member housing a slidable latch detent cooperating with the keeper in holding the door closed, the door being free from protrusions extending outwardly of the resilient rear surface of the assembly.

2. The buttstock assembly of claim 1 wherein the door has a hinge on one end including a hinge mounting bracket secured within the assembly between the buttstock and the butt plate.

3. The buttstock assembly of claim 1 wherein the composite butt plate includes a rigid frame portion mountable on the end of the buttstock and a resilient cover portion bonded to the frame portion, said cover portion forming the resilient rear surface of the assembly, said keeper being permanently bonded within the butt plate between the cover and frame portions.

4. The assembly of claim 1 wherein both the keeper and the detent including members and the door is provided with a spring biasing the detent outwardly for contact with the keeper, the detent including means facilitating movement thereof against the bias of the spring during latching and unlatching of the door.

5. The assembly of claim 1 wherein the door includes a substantially flat external surface substantially flush with the resilient rear surface when the door is latched in its closed position, an elongated longitudinally extending interior compartment for slidably retaining the latch detent therein and a spring biasing the detent outwardly of the compartment for latching engagement with the keeper.

6. The assembly of claim 1 including a retaining member mounted within the buttstock and having means cooperating with the buttstock for preventing its movement toward the butt plate and a fastener cooperating with said retaining member for urging the butt plate into secure engagement with the buttstock.
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