A gun, such as a rifle, and especially a sports gun, is composed of a stock, a barrel, and a trigger and firing mechanism. To enable a precise and extremely stable connection of the stock and barrel with a reduced number of individual parts, the stock includes a buttstock and a forestock connected detachably to this buttstock, with the forestock being a one-piece profiled body with an integrated barrel jacket.
GUN OR RIFLE

BACKGROUND OF THE INVENTION

1. Field of the Invention

The invention relates to a gun, such as a rifle, and especially a sports gun.

2. Prior Art

In modern guns for sports competitions, the gun stock usually consists of a complex molded stock body processed several times from one piece made of wood or light metal, on which, if desired, various stock attachments, such as a handle, a cheek support, a stock cap, additional weight, and the like can be mounted. The gun barrel is typically supported by a separate barrel holder mounted on the stock, e.g., in the form of a connecting bridge, or by a barrel jacket that can be mounted separately on the stock. The front-sight support is also generally embodied as a separate component and must be mounted on the barrel. However, the manufacture and also especially the assembly of the barrel holder, the barrel jacket, and the front-sight support require a high degree of accuracy and great precision, which is associated with a correspondingly high expense in terms of time and costs.

SUMMARY OF THE INVENTION

The task of the invention is to create a gun of the type mentioned in the introduction, which enables a precise and extremely stable connection of the stock and barrel with a reduced number of individual parts.

This task is achieved by a gun with the features as described herein. Advantageous refinements and advantageous embodiments of the invention are the object of the disclosure.

In the gun according to the invention, the stock consists of a buttstock and a forestock, which is connected detachably to this buttstock and which consists of a one-piece profiled body with integrated barrel half. Thus, the barrel can be guided and supported in the forestock without separate connecting bridges or holding elements. In this way, the number of parts in the gun can be reduced and the assembly expense can be reduced. In addition, an extremely precise and position-stable connection between the stock and the barrel is enabled. Through the reduced number of individual parts and the lower assembly expense, the manufacturing costs can also be further decreased.

In an especially preferred configuration of the invention, the profiled body, from which the forestock is created, also includes an integrated front-sight support for mounting a front-sight tunnel or a corresponding targeting device. This configuration can prevent errors in the coaxial alignment, which can appear, e.g., when a front-sight support is screwed or clamped on.

In another advantageous configuration, a guide rail is also integrated in the one-piece profiled body. In this way, additional attachments, such as a hand support, a hand stop, or the like, can be mounted easily and reliably without additional elements on the forestock.

Another advantage of the gun according to the invention is that no separate system housing connected to the stock and/or the barrel is required. The trigger parts, loading parts, the reduction valve, and the barrel can be mounted directly in or on the buttstock, which can be manufactured preferably from one piece. Thus, e.g., the shot pressure chamber or the firing pin guide can be formed directly as a hole in the buttstock. Also, the trigger mechanism with the adjustment elements can be mounted directly in the buttstock without a separate trigger housing.

In an advantageous way, the buttstock also consists of one piece and includes an integrated guide for mounting a diopter, a targeting scope, or a similar targeting device. Other stock attachments, such as a cheek support, a stock cap, a handle, additional weights, and the like can also be mounted on the buttstock.

The forestock consisting of the profiled body is connected to the buttstock in a positive fit. For accurate positioning, the connection between the forestock and the buttstock can be guaranteed, e.g., by a screw connection. Any assembly cut-outs in the buttstock are covered by the special shape of the forestock in the assembled state.

BRIEF DESCRIPTION OF THE DRAWINGS

Additional details and advantages of the invention result from the following description of a preferred embodiment with reference to the drawing.

FIG. 1 shows a sports gun in an exploded view;

FIGS. 2A, 2B and 2C show a forestock of the sports gun shown in FIG. 1 in a side view, top view, and perspective view, respectively,

FIG. 3 shows the forestock shown in FIG. 2 in an enlarged front view.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS OF THE INVENTION

The compressed-air gun shown schematically in an exploded view in FIG. 1 contains a buttstock 1, a forestock 2 connected detachably to this buttstock, and a barrel 3, which is guided and supported in the forestock 2. The buttstock 1 consists of a molded body with a rear end part 4 bent downwards and a front holder part 5, which is integrated with a trigger and firing mechanism with a trigger lever 6 and a shot valve 7. The loading and system parts and the like, which are not shown in detail, are also housed in the front holder part 5 of the buttstock 1. The trigger parts, loading parts, the shot valve, and the rear end of the barrel are mounted directly in or on the buttstock 1. Thus, e.g., the shooting pressure chamber or firing pin guide is formed directly as a hole in the buttstock 1. Likewise, the trigger mechanism is integrated directly in the buttstock 1. Therefore, a separate trigger housing is not necessary. Also, the adjustment devices for the trigger are mounted directly in the buttstock 1. On the top side of the front holder part 5, the buttstock 1 also has an integrated guide 8 formed as a dovetail guide for mounting a diopter 9, a targeting scope, or a similar targeting device.

A handle 10 can be mounted by means of a cylindrical screw 11 on the bottom side of the buttstock 1 behind the trigger lever 6. A check plate 12 can be inserted via a carrier 13 into a recess 14 on the top side of the rear end part 4 on the buttstock 1 and fixed by a lateral screw 15.
A stock cap plate 17 can also be inserted into a recess 16 on the rear side of the buttstock 1. This includes a rear-side holder groove 18 for a stock cap rail 19 for mounting a stock cap 20. A hand support 21 can further be mounted on the bottom side of the foreskost 2. The buttstock 1 is manufactured as a molded part from one piece and can be produced, e.g., as an aluminum cast part or the like.

[0019] The foreskost 2 shown separately in FIGS. 2A, 2B, 2C and 3 consists of a profiled body 22 with an integrated barrel jacket 23, in which the barrel 3 is guided and supported by support rings 24 and 25. The barrel jacket 23 extends over the front end of the barrel 3, so that this is held forwards within the barrel jacket 23. The profiled body 22 also contains on the top side of the barrel jacket 23 an integrated front-sight support 26, on which a front-sight funnel 27 or a corresponding targeting device can be mounted. The front-sight support 26 is likewise formed as a dovetail guide in the shown embodiment. The profiled body 22 contains a holder opening 28, which can be accessed from the front and in which a cylindrical pressure container 29 shown in FIG. 1 can be inserted. A T-shaped guide groove 30 for mounting the hand support 21 of a hand stop or the like is further integrated on the bottom side of the profiled body 22. On its rear end, the foreskost 2 has a recess 31 for the front holder part 8 of the buttstock 1. On the rear end of the foreskost 2, lateral holes 32 for mounting screws for connecting the buttstock 1 and the foreskost 2 can be provided.

[0020] As can be seen especially from FIG. 3, the barrel jacket 23 integrated in the profiled body 22 contains a through opening 33 with circular cross section, in which the barrel 3 shown in FIG. 1 is housed and supported by the support rings 24 and 25. The front-sight support 26 formed as a dovetail guide and extending on the top side of the barrel jacket 23 is also integrated in the profiled body 22. Underneath the opening 33, the holder opening 28 for the pressure container 29 is located within the profiled body 22. The holder opening 28 has an essentially circular cross section. Underneath the holder opening 28, the T-shaped guide groove 30 is also integrated in the profiled body 22. The profiled body 22 preferably consists of a light metal, advantageously an aluminum alloy.

[0021] The invention is not limited to the previously described embodiment shown in the drawing. Thus, instead of the compressed-air gun or compressed-gas gun, it can also be an explosive-charge gun.

What is claimed is:
1. A gun, especially sports gun, comprising a stock, a barrel, and a trigger and firing mechanism, wherein the stock includes a buttstock and a foreskost connected detachably to the buttstock, the foreskost being a one-piece profiled body with an integrated barrel jacket.
2. A gun according to claim 1, wherein the one-piece profiled body includes an integrated front-sight support.
3. A gun according to claim 1, wherein the one-piece profiled body includes an integrated guide groove.
4. A gun according to claim 1, wherein the barrel jacket extends past a front end of the barrel and completely surrounds the barrel.
5. A gun according to claim 1, wherein the barrel jacket has a through opening with circular cross section, in which the barrel is supported by support rings.
6. A gun according to claim 1, wherein the profiled body has an integrated holder opening for a pressure container.
7. A gun according to claim 1, wherein the rear end of the foreskost includes a recess for a front holder part of the buttstock.
8. A gun according to claim 1, wherein the buttstock is comprised of one piece having an integrated guide for mounting a targeting device.
9. A gun according to claim 1, wherein the trigger and firing mechanism is integrated into the buttstock.
10. A gun according to claim 1, wherein a handle is mounted on the buttstock.
11. A gun according to claim 1, wherein a stock cap plate with a stock cap is mounted on the buttstock.
12. A gun according to claim 1, wherein a cheek plate is mounted on the buttstock.