This invention relates to firearms, and more particularly to a molded plastic stock for rifles.

While various attempts have been made to provide light weight molded plastic stock for rifles, such stocks which have been therefore available have been either found to be too heavy, unbalanced, or insufficiently strong to withstand the impact shocks of the recoil of the rifle barrel or incidental blows imparted thereto during normal use. Accordingly, it is an object of the present invention to provide a reinforced plastic rifle stock that is simple in construction, efficient in operation, and which will overcome the aforementioned difficulties.

Another object of the present invention is to provide a molded plastic rifle stock which is constructed from a plurality of separate elements integrally combined with each other to form a stock having properly reinforced points of greatest impact and a minimum amount of material where such forces are not ordinarily concentrated. Still another object of the present invention is to provide a molded plastic rifle stock having novel candle means for supporting the intermediate and rear chamber end of a rifle barrel so as to uniformly impart and transmit recoil forces of the rifle through the associated parts of the stock, such part further cushioning the recoil at the shoulder end of the butt.

Another object of the present invention is to provide a reinforced plastic rifle stock of the type described in which all of the parts are molded to exact dimensions so as to be readily assembled to each other with a minimum amount of time and effort and with exact fit at all juncture points.

Another object of the present invention is to provide a reinforced plastic rifle stock which may be manufactured in large quantities at a relatively low cost so as to be applicable to rifles of various quality for general use.

All of the foregoing and still further objects and advantages of this invention will become apparent from the following description, taken in connection with the accompanying drawing, wherein:

FIGURE 1 is a perspective view of a reinforced plastic rifle stock made in accordance with the present invention assembled and ready to be attached to the rifle barrel;

FIGURE 2 is a side elevational view of the stock shown in FIGURE 1;

FIGURE 2a is a rear perspective view showing certain parts of the stock shown in FIGURE 2;

FIGURE 3 is an enlarged exploded fragmentary perspective view of certain parts of the stock shown in FIGURE 1;

FIGURE 4 is a longitudinal cross sectional view taken along line 4—4 of FIGURE 1;

FIGURE 5 is a longitudinal cross sectional view taken along line 5—5 of FIGURE 4;

FIGURE 6 is an enlarged transverse cross sectional view taken along line 6—6 of FIGURE 4;

FIGURE 7 is an enlarged transverse cross sectional view taken along line 7—7 of FIGURE 4;

FIGURE 8 is an enlarged transverse cross sectional view taken along line 8—8 of FIGURE 4; and

FIGURE 9 is an enlarged exploded fragmentary perspective view of the butt portion of the rifle stock shown in FIGURE 1.

FIGURE 10 is a perspective view of a recoil pad forming a part of the present invention.

Referring now to the drawing, and more particularly to FIGURES 1 and 2 thereof, a reinforced plastic rifle stock 10 made in accordance with the present invention is shown to include a pair of main outer shell halves 12 which may be secured together along a symmetrical longitudinal seam line, in any suitable manner, such as by cement or other bonding material. These outer shell halves 12 are preferably of molded plastic, molded in accordance with any preferred method and of any desired material. An inner fore arm shell 14, molded of similar material, is received within the upwardly opening barrel receiving section of the connected together shell halves 12. This fore arm shell 14 has a forwardly extending U-shaped cradle 15 which is received within a similarly shaped cradle formed by the connected halves 12 for snug engagement with an intermediate portion of the rifle barrel to which the stock is attached. As is more clearly shown in FIGURES 4 and 9 of the drawing, an upper inner butt shell 17 and a lower inner butt shell 20 are secured together along a common seam line disposed within the butt end of the connected halves 12.

The upper inner butt shell 17 is provided with a forwardly and downwardly inclined wall 21, while the forward end of the lower inner butt shell 20 is provided with a horizontal platform 22. This inclined wall 21 and platform 24, together with the sides of the shell halves 12 define a snug fitting seat for receiving the recoil pad 25 which receives the chamber end of the rifle barrel. As is shown in FIGURE 5, the pad 25 increases in thickness from the front to the rear end thereof.

There is an effective interlock between each of the associated elements of the present rifle stock. The forwardly facing shoulders 27 of the inner fore arm shell 14 engage behind the rearwardly facing shoulders 28 at the front end of the connected shell halves 12, whereby to prevent forward shifting movement of the fore arm shell 14 within the connected shell halves. The front end of the recoil pad 25 is engaged behind the rear end of the fore arm shell 14, thus preventing forward movement of the recoil pad 25 relative to the stock. Rearward movement of the connected outer shell halves 12 relative to the upper and lower inner butt shells 17, 20 is prevented by the engagement of the inclined wall 21 with the rear end of the recoil pad 25. The recoil pad also includes shoulder 30 for positioning the barrel therewithin and for preventing forward movement of the recoil pad.

Rear flanges 35, 36 on each of the upper and lower inner shell halves 17, 20 define an enclosed compartment with the inner shell halves that may be filled with a foam material such as polyurethane plastic foam 33. A metallic butt plate 40 is secured to a boss 41 at the terminal end of the upper butt shell 17 by a screw 42, and to a keeper 43 extending through the lower butt shell 20, by means of a bolt 44. A plurality of longitudinally extending bores 34 in this foam filler 33 define compartments for removably receiving cleaning accessories, such as cleaning oil for the rifle. These accessories are accessible to the rearwardly facing opening 37 in the butt plate 40 and new flanges 35, 36 of the butt shells 17, 20, which opening may be normally closed by means of a plate 38 pivotally supported thereon such as by hinges 39.

While this invention has been described with particular reference to the construction shown in the drawing, it is to be understood that such is not to be construed as imparting limitations upon the invention, which is best defined by the claims appended hereto.

Having thus described our invention, we claim as new and desire to secure by Letters Patent:

1. A reinforced molded rifle stock comprising, in combination, a pair of shank absorbing longitudinal outer shell halves defining a forestock and a stock butt, means securing said outer shell halves together in symmetry with
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3. A common vertical central plane, said forestock defining an upwardly opening barrel receiving section, said stock butt being hollow and having a rearwardly facing opening, cradle defined by said forestock for receiving the central portion of the rifle barrel therewithin, a recoil pad carried by said shell halves for abutting engagement with the chamber end of the rifle barrel, said cradle means comprising an inner forearm shell within said barrel receiving section, shoulder means coacting between said forearm shell and said shell halves, limiting forward longitudinal movement of said forearm shell relative to said outer shell halves, and said cradle means further comprising a substantially U-shaped support at the forward end of said inner forearm shell, upper and lower inner butt shells within said butt portion of said stock, and said upper butt shell including a forwardly and downwardly inclined wall at the forward end defining a reaction wall for abutting engagement by said recoil pad.

2. A reinforced molded rifle stock as set forth in claim 1, wherein the forward end of said lower butt shell includes a horizontal platform for supporting engagement with said recoil pad.

3. A reinforced molded rifle stock as set forth in claim 2, wherein said recoil pad comprises a forwardly opening member in supported engagement with said reaction wall and said platform within the mid section of said shell halves and rearwardly of said inner fore arm shell.

4. A reinforced molded rifle stock as set forth in claim 3, further comprising shoulder means acting between said recoil pad and said shell halves preventing forward movement of said recoil pad.

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