May 4, 1954 J. A. STEWART 2,677,207

COMBINED GUNSTOCK BOOT AND CHEEK PAD

Filed March 29, 1950

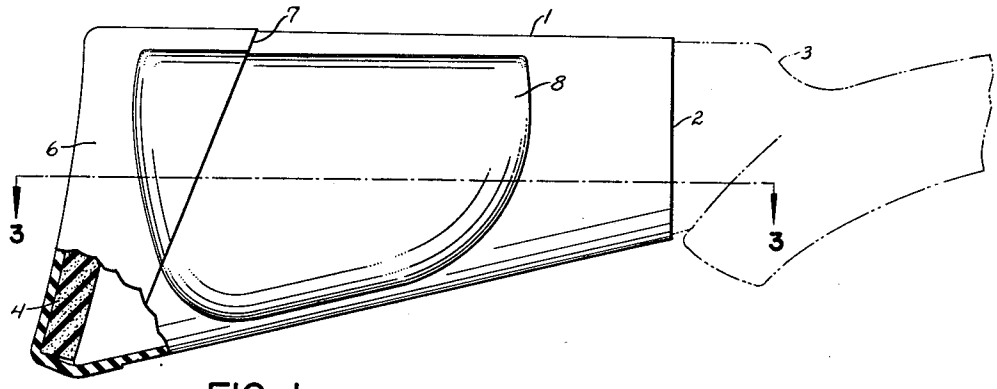


FIG. 1

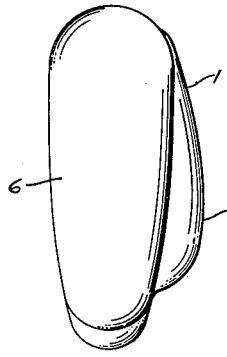


FIG. 2

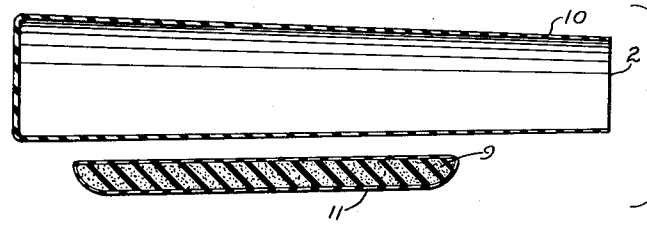


FIG. 4

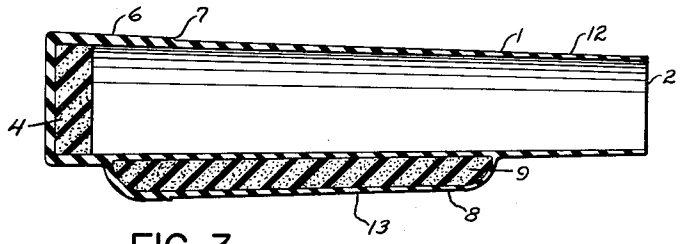


FIG. 3

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COMBINED GUNSTOCK BOOT AND CHEEK PAD

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3 Claims. (Cl. 42—74)

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This invention relates to a cheek rest for gun stocks and, in particular, to a cheek rest which is an integral part of a boot for gun stocks. As a preferred modification, the present cheek rest is incorporated in a rubber gun boot of the type shown in my prior Patent No. 2,468,349, and which is formed by a dipping process.

Cheek rests are of material assistance in the accurate aiming of a gun, since they provide a lateral extension by which the gun stock may be hugged to hold it steady. Any stock may be, and usually is, gripped by the cheek in aiming, but when no cheek rest is provided, the cheek contact is only near the top of the stock and there is a natural tendency to turn the gun about its longitudinal axis in order to bring the cheek squarely on the stock. The cheek rest comprises a prominence on the stock which extends considerably from the base surface of the stock, near the lower part of the stock, and only very slightly, if at all, near the top of the stock, so that a large area of the cheek may be engaged without having to turn the gun about its axis.

Heretofore, cheek pads have been provided in various ways. For instance, it may be formed as an integral part of the wooden stock. In another form, a leather boot, comprising a cushioning element, has been laced onto the stock. In the first case, anyone desiring a cheek rest feature on an existing gun would have to replace his gun stock. This is so expensive as to be prohibitive and the cheek rest has no cushioning features. The boot or sleeve types are generally insecure, have uncomfortable surface features, and do not afford a constancy of location of the parts which is essential to improving marksmanship through familiarity with a particular gun.

In my aforesaid prior patent, I have shown a rubber boot formed in a dipping process, which is slipped over the stock of a gun and engages the stock in a close embrace with the boot under slight tension so that it remains securely in place. By the present invention, I provide a cheek pad which is formed on such a boot so as to to be, in effect, an integral part thereof, with a cushioning element securely and permanently lodged in proper location on the boot.

It is, therefore, an object of the invention to provide an improved cheek pad for a gun stock. A further object is to provide a cheek pad which is an integral part of a gun-protecting, rubber boot, and a method of making the same. In particular, it is an object to provide a cushioning cheek pad snugly and permanently secured

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between successively formed layers of rubber in a gun stock boot. More particularly, it is an object to provide a combined boot and cheek rest for a gun stock wherein a resilient pad is completely contained in sealed relation in a cavity in a wall of a gun stock boot.

Other objects will be apparent to those skilled in the art from the specification to follow, as illustrated in the drawings, in which:

Fig. 1 is a side elevation, partly broken away, of a boot having a cheek pad, and showing a gun stock in broken lines,

Fig. 2 is a rear end view of Fig. 1,

Fig. 3 is a section taken on the line 3—3 of Fig. 1, and

Fig. 4 is an exploded view showing the cheek pad prior to its attachment to a partly formed boot.

Referring to the drawings by characters of reference, there is shown a rubber boot 1, having a wall thickness which tapers toward the open end 2 of the boot. The boot conforms generally to the form of a gun stock 3 over which it is received, and at its rearward end is shaped to receive a sponge rubber recoil pad 4 of generally rectangular cross-section. The rear portion 6 of the boot is of slightly greater wall thickness than the balance of the boot, and terminates along a diagonal line 7. This feature gives added rigidity to the part containing the cushion 4 and further serves for ornamentation and to render the article distinctive in appearance. For this purpose the portion 6 may be colored differently from the remainder of the boot.

A pocket 8, entirely integral with the boot 1 on one side thereof, completely confines a sponge rubber pad 9, with which its inner walls are in close contact throughout.

It will be noted (Fig. 2), that the pocket 8 tapers outwardly from the boot proper 1, in a downward direction, so that its maximum depth is on the lower half and its upper portion presents a surface which slants with respect to a vertical, longitudinal plane through the center of the boot. This configuration of the pocket permits extensive contact with the face of the user, while the latter's head is tilted in the manner necessary to bring the eye into the line of the gun sights, and the firm contact of the face obviates any turning of the gun stock about the axis of the gun.

The relationships among the various parts of the boot are best described by reciting the steps by which the boot is made.

In the first operation, a form in the shape of

a gun stock, preferably of glazed porcelain, is dipped into a suitable supply of rubber in liquid form, which may contain filler ingredients and vulcanization agents, to produce an initial layer of rubber 10 (Fig. 4). This layer is preferably of the order of 0.020 inch in thickness and the layer may be tapered in thickness, as aforesaid, by suspending the coated form with its butt end downwardly while the rubber is still capable of flowing.

The sponge rubber pad 9 is separately coated in a dipping step so that the pad is entirely or substantially covered with a coating 11. This coat is also preferably about 0.020 inch in thickness.

With layer 10 still on the dipping form, the coated pad 9 is attached to boot layer 10, as by any suitable rubber cement. The degree of adhesion required is only such as will hold the pad in place until the succeeding coat of rubber has been applied.

With the pad attached, the boot is again dipped in the coating substance and a second layer of a thickness about the same as initial layer 10 is applied over the latter to produce a boot wall 12 about 0.040 inch in thickness. In this step, an outer coating 13 is simultaneously applied over that portion of coating 11 that is not cemented to the boot, thereby hermetically sealing the pad 9 in place and securing it permanently in position.

The thicker, rear portion 6, if employed, is attained by a further dipping action, to add stock 0.020 inch in thickness, with a resultant total thickness of 0.060 inch in the butt portion.

It will be seen that there has thus been provided a unitary gun stock boot that not only provides all the useful features of the boot of my aforesaid prior patent, but which, in addition, includes a cheek pad which is permanently built into the wall of the boot and is therefore securely lodged in desired position and protected against damage and deterioration.

The separate coating of the inner pad 9 is an extra insurance for the hermetic sealing thereof and also provides for a wall thickness which, in the final form of the boot, has the desired strength at all points of the pad to a degree equivalent to that of the boot proper.

Whereas the process has been described as rubber dipping, it is possible to achieve the coating steps by other means, such as by spraying or by electro-deposition.

While a certain preferred form of the invention has been shown and described, various changes therefrom are possible without involving departure from the spirit or scope of the appended claims.

What is claimed is:

1. A combined gun stock boot and cheek pad comprising an outer integral envelope of rubber-like material, one side of said envelope being divided into spaced walls, and a cushioning pad hermetically sealed in the space between said walls.

2. A combined gun stock boot and cheek pad comprising an integral envelope of rubber-like material, one side of said envelope being divided into spaced inner and outer walls, and a cushioning pad in the space between said walls, said outer wall constituting means for hermetically sealing said pad to said envelope.

3. A combined gun stock boot and cheek pad comprising an integral envelope of rubber-like material constituting a gun stock boot and having a pocket on at least one side of said envelope, a cushioned cheek pad carried in said pocket, and an outer wall for said pocket, said outer wall being formed of the same material as said envelope and being integrally united with said envelope in a manner to hermetically seal said pad in said pocket.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
2,188,691	Rigandi	Jan. 30, 1940
2,283,238	Thompson	May 19, 1942
2,313,792	Winder	Mar. 16, 1943
2,330,330	Beal et al.	Sept. 28, 1943
2,451,473	Cooper	Oct. 19, 1948
2,468,349	Stewart	Apr. 26, 1949