

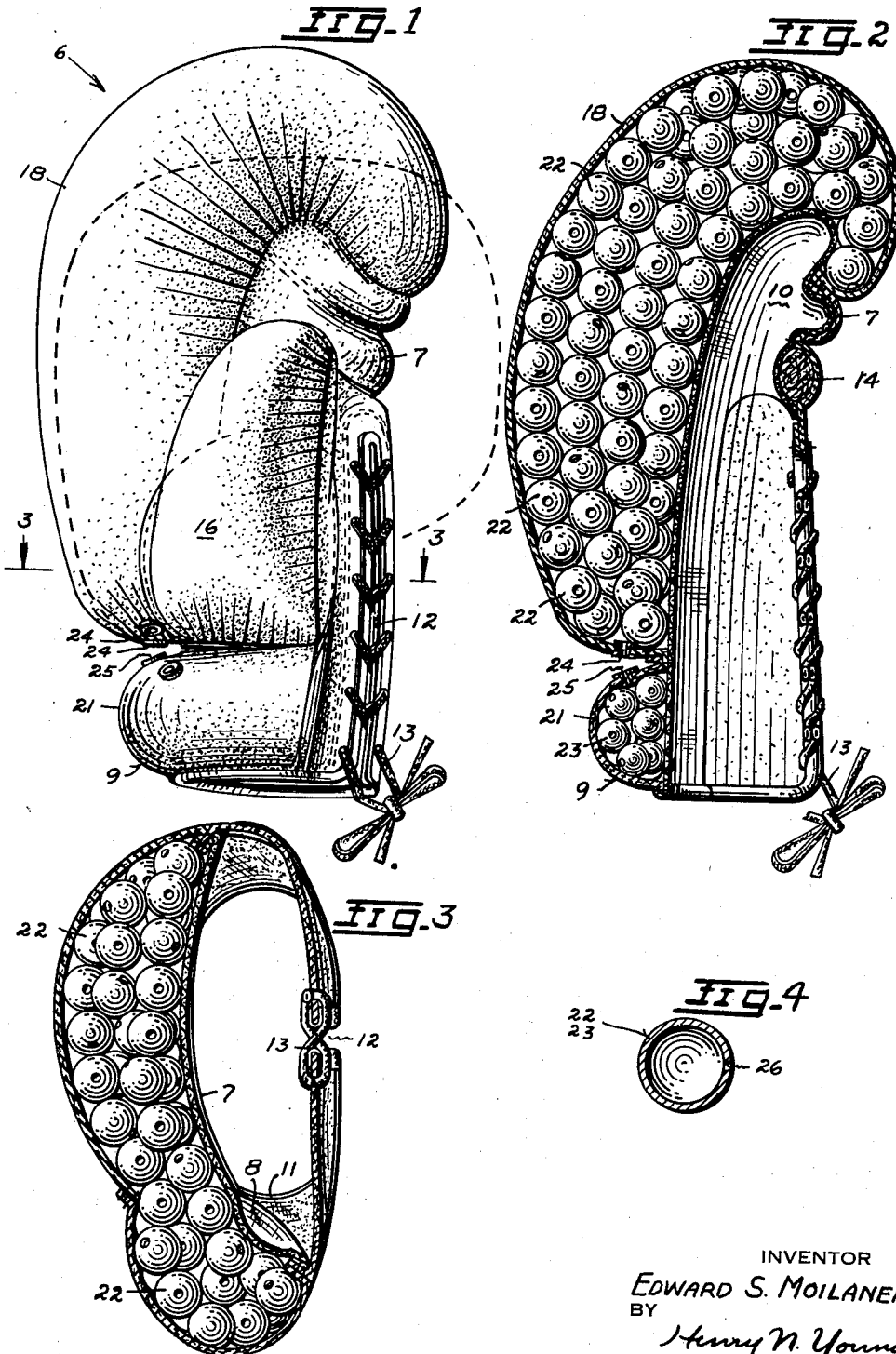
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BOXING GLOVE

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BOXING GLOVE

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1

The invention relates to the structure of a boxing glove, and particularly to a boxing glove having a pneumatic stuffing.

An object of the invention is to provide a boxing glove of the pneumatically stuffed type which permits the shaping of the same into a fist without appreciable resistance.

Another object is to provide a boxing glove in which the shock of a blow against any striking point of its exterior is uniformly dispersed through and substantially absorbed by the stuffing.

A further, and more specific object, is to provide for the use of a plurality of mutually free globate stuffing members which are resiliently yielding under deforming impacts.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth or be apparent in the following description of a typical embodiment of the invention, and in the accompanying drawings, in which,

Figure 1 is an external side view of a left-hand boxing glove embodying the features of present invention, the glove being in unclenched condition.

Figure 2 is a longitudinal section of the glove taken centrally through its finger-mitt portion.

Figure 3 is a section of the glove at the line 3-3 in Figure 1.

Figure 4 is an enlarged central section through a hollow ball comprising a stuffing element of the glove.

As particularly illustrated, the features of present invention are incorporated in the structure of a boxing glove 6 comprising an inner portion providing a hand-receiving mitt having finger stall and thumb stall portions 7 and 8 respectively, extending from a wrist portion 9; the finger stall portion 7 provides a cavity 10 receiving all four fingers while the thumb stall portion 8 provides a thumb-receiving cavity 11. The walls of the glove cavities are formed of a suitable flexible material such as leather or a fabric, and the mitt 7-8-9 has its palm portion provided with a longitudinal slit extending from the wrist end of the glove for its opening thereat to facilitate the insertion of a boxer's hand in the glove, the edges of the slit 12 being arranged for drawing together in a usual manner by means of lacing 13 to secure the glove on the inserted hand. The palm of the present mitt mounts an elongated grip member 14 extending across it adjacent the closed outer end of the cavity 9 in such a position that it may be enclosed and grasped

2

within the loop of the fingers when a hand in the mitt is formed into a fist.

Pockets or casings 15 and 16 and 17 are provided opposite and outwardly of the finger-stall and thumb-stall and wrist-receiving portions of the mitt for receiving stuffing as a protection for the back of a hand and the wrist, with the glove at outer walls of said pockets respectively comprising pieces 18 and 19 and 21 of flexible and generally air-tight sheet material such as leather or fabric. The various edges of said pocket-forming pieces are secured directly to the mitt assembly except where the finger and thumb pockets join, the edges of the pieces 18 and 19 being fixed together at said pocket juncture in a line which extends between spaced points of the mitt and is arched away from the mitt portion between the points, the pockets 15 and 16 thus being connected as one for stuffing-receiving purposes.

The connected pockets 15 and 16 are filled to capacity with a plurality of globate and resiliently deformable members 22 of the same size, while the pocket 17 may be filled with similar globate members 23 of a smaller size than the members 22, it being noted that the generally C-shaped wrist-encircling pocket 17 is relatively thin as compared with the pockets 15 and 16. While the members 22 and 23 might comprise solid balls of sponge rubber or the like, I prefer that they comprise hollow balls containing air in their cavities for providing a lighter stuffing assembly in the pockets. The members 22 are preferably of such a size that, when applied as stuffing in the pockets 15 and 16, they are at least three deep opposite the finger-stall portion of the clenched glove where impacts are greatest during a boxing use of the glove; the arrangement is generally such that no ball contacts the outside wall of a pocket at more than one point, and some balls contact only other balls in the pocket at the striking zone of the glove.

It will be noted that the use of globate stuffing members 22 in the stuffing-receiving pocket 15-16 of the present glove structure permits a clenching and opening of a hand and the enclosing glove without undue resistance by the stuffing, this by reason of the permitted free movement of the ball members to re-arrange themselves for the changed shape of the stuffed pocket. Also, when the stuffed glove is clenched, a blow struck by or against the present stuffing at any glove point will be taken up by a deforming compression of the outer stuffing members and be distributed laterally and inwardly through the

mass of members for absorbing the crushing force within the impacted body of stuffing.

The present pocket 15 extends over the tip of the finger stall part of the mitt in the manner illustrated, and this pocket may be provided with vent openings 24 at its inner end opposite the pocket 17 at the wrist line of the glove whereby a change in the space of the pocket, as when a blow is struck or the pocket is resuming its normal form following the striking of a blow, will be permitted by maintaining a condition of atmospheric pressure within the pocket. The stuffing pocket 16 for the thumb stall portion of the glove, being, in the present instance, connected with the pocket 15, shares the venting feature with it. Vent holes 25 are provided for the stuffing pocket 17 at the wrist of the glove for maintaining a condition of atmospheric pressure therein, the stuffing of this pocket being more apt to receive than to give blows; the members 23 in this pocket are generally smaller than the members 22 in order to interpose a sufficient shock-absorbing number of them between the inside and outside walls of the pocket.

It will now be noted that the present hollow ball members 22 and 23 are provided with restricted openings 26 through which air may pass as a ball is compressed or as an impact-deformed ball resumes its normal globate form by reason of the resiliency of the material of which it is made. The holes 26 of the balls 22 and 23 are preferably of such sizes with respect to the ball cavities that they appreciably retard the escape of air as the balls are deformed by the relatively sharp impacts of boxing against them, yet permit a return flow of air into their interiors at the rate required for a resumption of their normal shapes by reason of their resiliency; in this manner, a deforming impact is passed on from ball to ball.

The use of the described globate stuffing members permits a high degree of predetermination of the effectiveness of a stuffing made up of balls in the various pockets, and thus provides a boxing glove structure which may offer a maximum degree of protection to the hand of a boxer using it. The present glove structure was originally designed for use in exercising and for training for boxing matches, but is also adaptable for use in boxing contests by providing a stuffing of ball members which cooperatively provide an approved hardness for the striking zone of the glove.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and use of the present boxing glove will be readily understood by those skilled in the art to which the invention appertains. While I have described the features and use of an arrangement which I now consider a preferred embodiment of my invention, I desire to have it understood that the showing is primarily illustrative, and that such changes and developments may be made, when desired, as fall within the scope of the following claims.

I claim:

1. In a boxing glove, a flexible outer casing, and a plurality of resiliently elastic and relatively unattached members enclosed in the casing in mutually free and contacting relation and cooperatively providing a compressedly yielding padding for the glove.

2. In a boxing glove, a flexible outer casing, and a plurality of resiliently elastic globate members

enclosed in the casing and cooperatively providing a compressedly yielding padding for the glove.

3. In a boxing glove, a flexible outer casing of air-tight material provided with vent openings at its back, and a plurality of resiliently elastic globate bodies enclosed in the casing in mutually free and contacting relation to cooperatively provide a compressedly yielding padding for the glove.

4. In a boxing glove, a flexible casing member cooperative with the glove to define a space for padding opposite an outer face of the glove, and a plurality of resiliently elastic ball members retainedly disposed in the space in relatively free and mutually contacting relation and comprising the padding for the glove.

5. In a boxing glove, a flexible outer casing for a glove part, and a plurality of resiliently elastic hollow ball members enclosed in the casing in mutual contact for cooperatively providing a compressedly yielding padding for the glove.

6. In a boxing glove, a flexible outer casing, and a plurality of hollow ball members of resiliently yielding material enclosed in the casing in contact with each other and/or the casing sides for cooperatively providing a compressedly yielding padding for the glove, said ball members being provided with vent holes through their sides to facilitate their independent and temporary deformation by deforming impacts against them.

7. In a boxing glove, a flexible outer casing, and a plurality of resiliently elastic hollow ball members of globate form enclosed in the casing in contacting and mutually free relation to cooperatively provide a compressedly yielding padding for the glove, said ball members having their sides provided with holes of a size to retard the escape flow of air from their interiors when the balls are deformed by impact and to freely permit a return flow of air into their interiors to facilitate their resumption of their normal globate forms.

8. In a boxing glove having a finger-stall portion and a thumb-stall portion and a wrist-encircling portion, flexible outer casings for said portions, and a plurality of resiliently elastic and relatively free globate members enclosed in one or more of said casings and providing a compressedly yielding padding for the glove thereat.

9. In a boxing glove having a finger mitt portion, a flexible outer casing for said mitt portion, and a plurality of resiliently elastic globate bodies enclosed in the casing in mutually free and contacting relation to provide a compressedly yielding padding which permits a clenching and unclenching of a hand in the glove without offering appreciable resistance thereto.

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