To all whom it may concern:

Be it known that I, GUY OTIS BREWSTER, a citizen of the United States, residing at Cliffside Park, in the county of Bergen, State of New Jersey, have made a certain new and useful Invention in Protectors for Use in Boxing, of which the following is a specification.

The invention relates to protecting devices for use in boxing.

The object of the invention is to provide a body shield or protector to prevent injury to the head, face or upper portion of the body while engaged in boxing or sparring.

A further object of the invention is to provide a protector of the character and for the purpose noted, which is capable of easy application, and wherein the body of the protector is offset from the face of the user by intermediate cushion devices which absorb and take up the shock of blows delivered while boxing or sparring without transmitting the same to the body, head or face of the boxer.

Other objects of the invention will appear more fully hereinafter.

The invention consists substantially in the construction, combination, location and relative arrangement of parts, all as will be more fully hereinafter set forth, as shown in the accompanying drawings, and finally pointed out in the appended claims.

In the drawings,—Figure 1 is a view in developed plan of the inside surface of a protector embodying the principles of my invention. Fig. 2 is a view in vertical section of the same on the line 2, 2, Fig. 1, looking in the direction of the arrows. Fig. 3 is a view similar to Fig. 1, showing a modified construction of shield or protector embraced within the spirit and scope of my invention. Fig. 4 is a broken detail view in section on the line 4, 4, Fig. 3, looking in the direction of the arrows. Fig. 5 is a broken detail view in section showing a modified construction of offsetting pad capable of application to a protecting shield and embodying the principles of my invention. Fig. 6 is a view in perspective showing the application of a protector or shield in accordance with the principles of my invention.

The art of boxing or sparring as a method of physical training, as well as regards the teaching of self defense, loses much of its popularity and effectiveness as an exercise on account of the discomfort and injury resulting from blows delivered upon the head, face or body of the boxer in the course of such exercise. Various expedients have been proposed to overcome this objection, but none, so far as I am aware, has proved effective for the purpose of properly protecting or shielding all the vulnerable parts of the body, while at the same time leaving sufficient and ample freedom of movement and facility for watching an antagonist.

It is among the special purposes of my present invention to provide a protecting device or body shield which is capable of easy and ready application, which permits entire freedom of movement and action on the part of the wearer or user, and wherein all parts of the head, face and body of the user are efficiently protected against the ill effects of blows delivered thereto. In order to secure the best results from sparring or boxing exercises it is desirable that blows be delivered with full force and unless efficient means are provided for receiving the shock of the delivered blows and preventing the same from being transmitted to the body, head or face of the boxer, a decided disinclination to engage in the exercise effectively naturally develops. It is therefore within the contemplation of my present invention to provide an efficient protector which will permit the delivery of blows of full force on the objective points or parts of the body, head or face, without uncomfortable or injurious results.

In carrying out my invention I propose to employ a protector or shield adapted to cover the head, face, shoulders, chest and abdomen, of the user, but the body of which is a protector is offset forwardly from the body by means of cushion or elastic pads interposed between the body of the wearer and the opposed surface of the protector, and I propose to locate the cushion pads at such points as to accomplish the desired results and to take up and absorb the shock of blows delivered against the exterior surface of the protector.

In Figs. 1 and 2 I have shown one form of embodiment of my invention, wherein the body part of the protecting shield is of generally rectangular shape in outline when developed into a plane, and having openings 10, in the opposite edges thereof to accommodate the arms of the wearer, and also having openings 11, for sight holes designed
to be placed over or in front of the eyes of the user. The side edges of the protector may be provided with any suitable or convenient means for drawing and securing said edges toward each other around the body of the user. One form of means for this purpose is shown comprising straps and buckles 13, 14. These may be secured in any suitable or convenient manner to the side edges of the body part of the shield, or to tabs 15, formed thereon. If desired the body part of the protector may be hollow, that is, a space 16, may be provided between the inner ply or facing thereof, indicated at 17, and the outer ply or facing 18, and in order to secure a desirable cushioning action air may be compressed into this space by means of a pump or otherwise through an air nozzle 19, or otherwise, as may be convenient, thereby inflating the same and making it a pneumatic cushion. Any suitable material may be employed for the plies or facings, 17, 18 of the body, such for instance as rubber, rubber cloth, or other textile or material, preferably air tight in the case of a pneumatic protector. In order to secure the offsetting of the protector shield from the body of the user I propose to apply to the inner surface of the body of the protector suitable yielding or cushion pads, as indicated at 20, 21, 22. These resilient or cushion pads may be located at any suitable or desirable point to effectively offset the body of the protector from the user. For instance, I prefer to locate the pad 20, at the point where it bears against the forehead of the wearer, when the protector is applied for use, and I prefer to locate the pad 21, at such a point as to bear against the chest of the wearer and I prefer to locate the pad 22, at a point to bear against the abdomen of the user. In the particular form shown, to which however, my invention in its broadest scope as defined in the claims, is not to be limited or restricted, the pads 20, 21, 22 are of sufficient length to extend substantially half way or more around the part or surface of the body of the user to which they are respectively applied.

In the forms shown in Figs. 1 and 2 the resilient cushion pads are inflatable or pneumatic and may be inflated or blown up by air pumped into them in any suitable or convenient manner. I have shown a convenient arrangement wherein I employ suitable flexible material for the pads and secure the edges thereof to the inside surface of the inner ply or facing 17, through slits or openings therein, that is, by removing strips of the required length and width from the inner ply or facing 17, at the desired points and then inserting and securing against the inside surface along the edges of the cuts, the edges of the flexible portions of the pads.

In this manner when the body of the protector is inflated by pumping air thereinto, the pads become inflated and protrude from the surface of the protector, and they form resilient or pneumatic pads to receive and distribute the force of the impact of a blow delivered, thereby relieving the body of the user of the discomfort or injury which might result by the delivery of such a blow.

Instead of employing a pneumatic body for the protector I may form the same in other ways. In Figs. 3, 4 and 5, I have shown a modified construction embraced within the spirit and scope of my invention wherein the body part of the protector is made up of a series of strips 24, of suitable material, such, for instance, as ratan, the strands being preferably laid parallel with each other and extending vertically or in the direction of the vertical length of the protector, and inclosed between inner and outer plies or layers 25, 26, of suitable textile or other fabric or material, said plies or layers being stitched or otherwise secured together between adjacent strands 24, as indicated at 27. In practice I prefer to employ strands which are provided with flat surfaces on one side, this being preferably the side presented toward the body of the wearer. In this case the cushion pads take up the shock of blows delivered, these being located and arranged as above described.

While I have shown and above referred to the use of pneumatic pads, my invention is not to be limited or restricted in this respect, as it is obvious that other forms of yielding or cushioning pads may serve the desired purpose with equal facility. Thus in Fig. 5, I have shown a pad, 30, composed of a stuffing of hair, excelsior or other suitable resilient material.

If desired a slit or opening, indicated at 22, may be provided adjacent the mouth of the wearer, to insure ample breathing facility of the user. If desired, and as indicated, a strap 31, may be secured to the upper or top edge of the protector and designed to extend over the head of the user to more effectively support the protector when in use and applied.

It is obvious that many variations and changes in the details of construction, arrangement and operation might readily occur to persons skilled in the art and still fall within the spirit and scope of my invention, in its broadest scope, as defined in the claims.

The manner of use of the protector will be obvious. The device is applied by inserting the arms of the user through the arm holes 10, and the edges are then secured by the straps and buckles or other devices around the body, the pads extending transversely of the body of the protector, and resting respectively against the fore-
head, chest and abdomen of the wearer, thereby offsetting the body of the protector from contact with the body of the wearer or user. The resilient pads being interposed between the body of the wearer and the inner surface of the protector. It will be observed that the edges of the protector bend or fold around the side of the head, shoulders, chest and abdomen of the user, thereby efficiently protecting all essential parts of the body of the user against injury. The impact of a blow delivered while boxing or sparring is absorbed and taken up by the pads without being unduly transmitted to the user, while at the same time leaving the user free and unhampered in movement.

Having now set forth the object and nature of my invention and construction embodying the principles thereof, what I claim as new and useful, and of my own invention, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a boxing or sparring protector composed of a body part adapted to cover the face, shoulders, chest and abdomen of the user, and having cushion pads interposed between the inner surface thereof and the body of the user, to receive and distribute the force of impact of a blow delivered thereto, and means for securing the same around the body of the user.

2. As a new article of manufacture, a boxing or sparring protector composed of a body part adapted to cover the face, shoulders, chest and abdomen of the user, and having transversely extending cushion pads on the inner surface thereof to bear against the body of the user and offsetting the protector from the body of the user, and means for securing the protector around the body of the user.

3. As a new article of manufacture, a boxing or sparring protector composed of a body part adapted to cover the face, shoulders, chest and abdomen of the user, and having transversely extending cushion pads on the inner surface thereof respectively adapted to bear against the forehead, chest and abdomen of the user, and operating to offset the protector body from contact with the body of the user, and means to secure the protector around the body of the user.

4. As a new article of manufacture, a boxing or sparring protector composed of a body part to cover the face, shoulders, chest and abdomen of the user, and having arm holes in the edges thereof, and transversely extending cushion pads on its inner surface to bear against and to offset the protector from the body of the user, and means to secure said protector around the body of the user.

5. As a new article of manufacture, a protector for use in boxing or sparring having a body part adapted to cover the face, chest and abdomen of the user, and composed of straps laid parallel to each other in the direction of the vertical length of the body part, and inner and outer covers therefor, said covers being secured together between adjacent straps, and cushion pads on the inner surface of the protector body, and arranged to extend transversely thereof, and securing devices attached to the side edges of said body part.

In testimony whereof I have hereunto set my hand in the presence of the subscribing witnesses, on this third day of April A.D., 1911.

GUY OTIS BREWSTER.

Witnesses:

ALICE M. BINGHAM,
LINN EMERSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."