S. C. APRIL.

BASE BALL MASK.

APPLICATION FILED MAR. 10, 1916.

1,203,564. Patented Nov. 7, 1916.

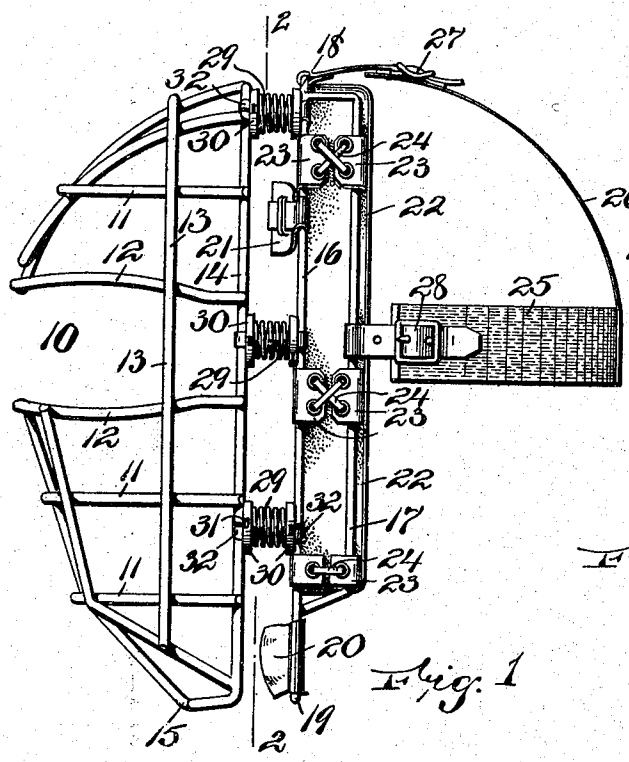

Fig. 1

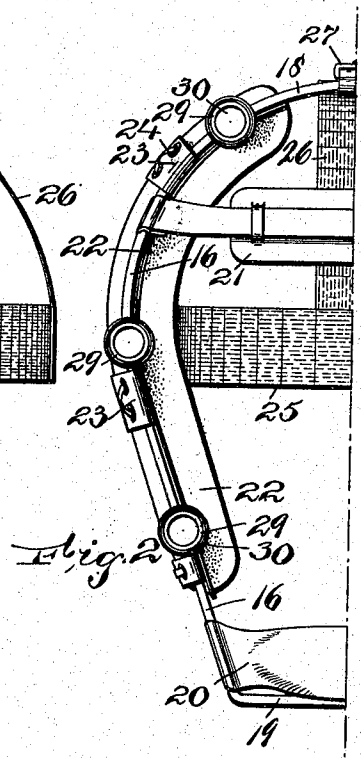

Fig. 2

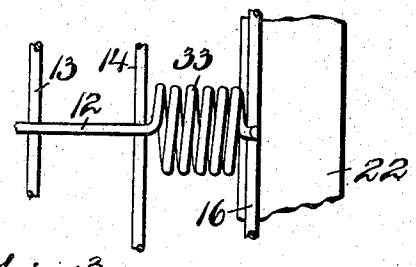

Fig. 3

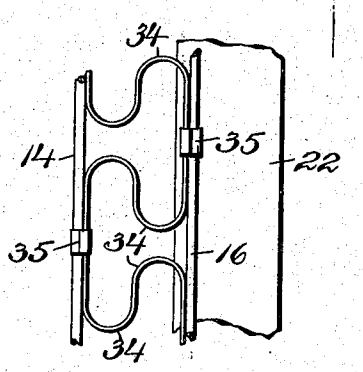

Fig. 4

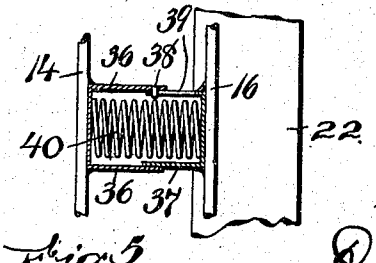

Fig. 5

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BASE-BALL MASK.

1,203,564. Specification of Letters Patent. Patented Nov. 7, 1916.

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To all whom it may concern:

Be it known that I, SAUL C. APRIL, a citizen of the United States, and a resident of Newark, county of Essex, and State of New Jersey, have invented certain new and useful Improvements in Base-Ball Masks, of which the following is a specification.

This invention relates to a baseball mask worn by catchers and umpires to protect the face, and is an improvement on the wire masks in that it minimizes the chance of injury which might result from any breaking of the mask, since the front or guard portion thereof is resiliently supported.

The invention relates to a mask of this kind in which the part which is fastened to the head can be securely put into place with the required degree of firmness and secure fastening without affecting the resiliency of the guard portion, this being accomplished by interposing springs between the guard portion and the portion that goes onto the head, which, for the purpose of identification in this case, is called the head portion.

The invention is further designed to provide a mask in which the whole device is sufficiently stiff to firmly fasten the guard portion of the mask to the head of the wearer so that there is no shaking or trembling of the device to annoy the wearer who requires a steady mask in order to prevent any detraction from his playing.

The invention is illustrated in the accompanying drawing, in which—

Figure 1 is a side view of a mask made according to my invention. Fig. 2 is a section on line 2—2, in Fig. 1, showing the springs in elevation, this view illustrating the head or rear portion of the device. Figs. 3, 4 and 5 are enlarged detail views showing modified forms of springs that can be used in the mask.

The guard portion of the mask is made in different forms and in different styles, the present guard portion being indicated in general by the reference numeral 10 and consists of approximately horizontally disposed strands, such as are shown at 11, the center horizontal strands 12 being usually curved and separated so as to give a better view through the mask. The upright strands 13 and 14 conform in general to the shape of the head and bind the horizontal strands together, the securing of them being sometimes done by looping, but in the form shown the joints are shown as when they appear after welding, so that a smooth small joint is provided. The lower end of the rear strand 14, which forms the rear edge of the guard portion, can be constructed as at 15 so as to guard the chin of the wearer of the mask. The head portion, which is that part that goes onto the head, can also be of different types, the one shown having a wire frame consisting of vertical strands 16 and 17 which can be connected at the top by extending the strand 16 to form the arch 18, and being extended at the bottom to form the connecting strand 19, it being usual also to arrange a chin rest 20 across the bottom part of the head portion, and a forehead strip 21 which fits against the head directly above the eyes. In addition thereto it is customary to arrange cushions or pads 22 which fit around the frame of the head portion, bearing against the strands 16 and 17, and being secured by any means, the form shown for securing the pads consisting of the tabs 23 secured to the pads which tabs embrace the vertical strands 16 and 17 of the head piece and are connected by laces 24 which form a somewhat permanent attaching means, but which can be released if the pads are to be renewed or repaired.

The frame of the head piece has straps that go over the top and back of the head, the usual strands being as shown, consisting of a horizontal head strap 25 connecting the two sides of the head portion and the vertical head strap 26 which is connected with the strap 25 at the back and extends upward and is connected to the arch 18, usually having a buckle 27 by means of which it can be adjusted as to its length, and a buckle 28 is usually attached to both sides of the horizontal head band 25 so as to alter the length of these bands according to the size of the head of the wearer. These bands are usually made of elastic so that the mask can be easily put on and taken off. The two parts of the mask, that is the head portion and the guard portion, are connected by shock-resisting elements interposed between them, such shock-resisting elements being of many kinds, but preferably consisting of springs.

Other forms of shock-resisting elements than those shown can be employed with

good results, but in order to clearly illustrate the invention I have shown springs as employed in this connection.

In Figs. 1 and 2 I place the springs 29 at desired points on the mask, these springs being fastened to the head portion and the body portion, the securing means shown in the drawing consisting of disks or small caps 30 to which the springs 29 are fastened as by passing the ends 31 of the springs through loop portions in the sides of the caps 30, the caps 30 being fastened, as at 32, to the vertical strand 14 of the guard portion and to the vertical strand 16 of the head portion, although the springs can be fastened in other ways and to other parts of the device, if desired. In the old form of masks, the blow delivered to the guard portion or the front of the mask is transmitted directly to the head of the wearer, this bothering the player very much because the blow in many cases is a severe one and often temporarily incapacitates the player, and it is possible to have a serious injury inflicted by such concussion. Furthermore, the lack of any yielding means in the mask has a tendency, on very severe blows, to break the wire strands in the mask and the force of such blows causes the wire strands to disfigure and injure the face of the wearer, such injury and disfigurement having occurred in ball games where a solid mask is used. I am aware also that pneumatic pads have been used on masks, such pads resting against the face of the wearer and being designed to take up the shock. Such pads, however, have not been any more satisfactory than a solid mask because when the device is attached to the head, in order to firmly secure it to the head the fastening means must be tightened so that an initial compression is placed upon the pneumatic pads, which compression takes up the major portion of the resiliency, and any blow coming on the front of the mask, instead of causing an initial compression on the pneumatic pads, transmits the blow through the pads which are already compressed. It thus follows that a mask with pneumatic cushions that is put on tight enough to be secure on the head will compress the cushions to an extent that a blow delivered to the mask is not modified any more than it is when the ordinary stuffed pad is used. In my device the degree of tightness applied to the fastening means has no effect on the resiliency of any shock-absorbing elements that are placed between the head portion and the guard portion, whether such shock-absorbing elements be pneumatic or of spring metal.

In Fig. 3 I illustrate a modified form of spring, such spring 33 being integral with one of the strands, such as 12, of the guard portion and being secured in any suitable manner, such as by welding, to one of the strands, such as 16, of the head portion.

In Fig. 4 I illustrate a strip which is bent into spring loops as at 34, these spring loops being suitably fastened, as at 35, to the marginal edges of the guard and head portions, if desired, such spring strip bent into spring loops extending all around the mask between the head portion and the guard portion so as to equalize the pressure on the springs.

In Fig. 5 I show a still further modification, the telescopic members 36 and 37 being adapted to be telescoped, such telescopic action being limited, particularly in an outward direction, by a pin 38 fitting in a slot 39. These members that are telescopic are preferably cylindrical and contain a spring 40 which bears against the ends of the members so as to have a tendency to force them apart, these telescopic members in turn being fastened to the guard portion and the head portion, the springs being concealed, and in case it is desired to use light springs, the telescopic members have the function of holding the guard portion against sagging on the head portion and it is not apt to vibrate when it is held by light springs. It is my intention, as a rule, to use springs strong enough to hold the guard portion against ordinary vibration when being worn on the head.

The head portion and the guard portion in this construction can be made as solid as desired, the guard portion being adapted to distribute the impact or blow, which it receives, among all the springs by means of which it is held, so that no one part of the mask is apt to be broken by the blow, and the pressure delivered after the springs are compressed is distributed over a wide surface, and when the pads 22 are used the effect on the head is slight and there is very little liability of injury or inconvenience.

Having thus described my invention, I claim:

1. A mask comprising a head portion, means for holding the head portion firmly on the head, a guard portion, and shock-absorbing elements arranged between the head portion and the guard portion, such elements being arranged to normally hold the portions apart.

2. A mask comprising a head portion, means on the head portion for securing it to the head of a person, a wire guard portion conforming in general outline to the outline of the head portion and being adapted to be normally spaced therefrom, and shock-absorbing elements placed between said portions and being secured to said portions to yieldingly hold them spaced apart.

3. A mask comprising a head portion consisting of an open frame, means on the head portion for securing it firmly to the head of

a person, a guard portion, and springs secured to said guard portion and to said head portion, said springs being adapted to be compressed when the portions are moved toward each other and being adapted to normally hold them at a normal distance apart.

4. A mask comprising a head portion, said head portion consisting of a metal frame, pads on the metal frame adapted to fit against the head of a person, means for securing the head portion in position, a guard portion, and springs subject to compression, said springs being placed between the guard portion and the head portion.

5. A mask comprising a substantially rigid head portion having means for attaching it to the head of a person, a substantially rigid guard portion, and comparatively resilient elements arranged between the guard portion and the head portion to materially absorb the force of a blow delivered on the guard portion.

6. A mask comprising a head portion, a guard portion, and shock-absorbing elements arranged between the head portion and the guard portion and adapted to be compressed when said elements are moved toward each other.

In testimony that I claim the foregoing, I hereto set my hand, this 9th day of March, 1916.

SAUL C. APRIL.