J. T. SHELTON.

PNEUMATIC KNEE PAD.

APPLICATION FILED MAY 21, 1919.

1,399,584. Patented Dec. 6, 1921.

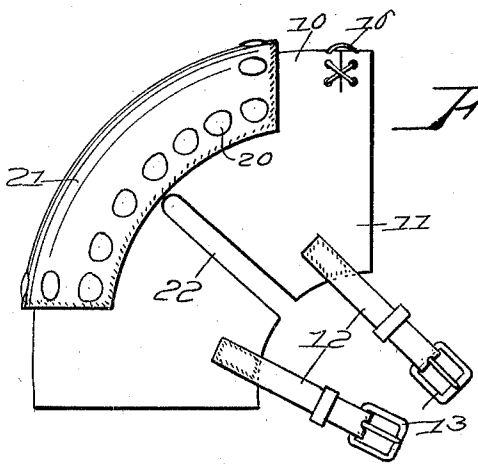


Fig. 1.

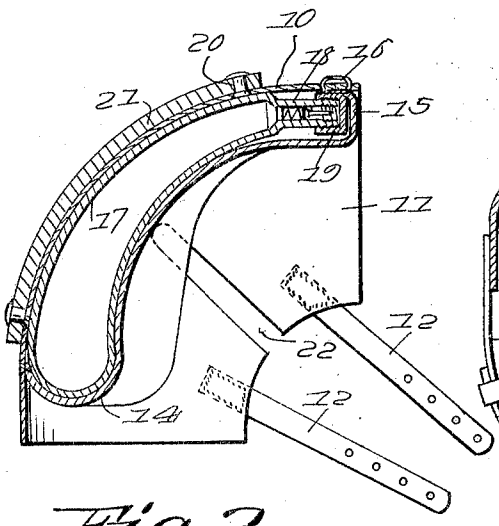


Fig. 2.

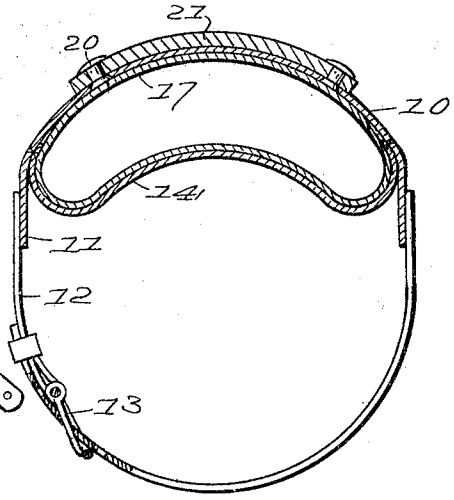


Fig. 3.

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UNITED STATES PATENT OFFICE.

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PNEUMATIC KNEE-PAD.

1,399,584. Specification of Letters Patent. Patented Dec. 6, 1921.

Application filed May 21, 1919. Serial No. 298,653.

To all whom it may concern:

Be it known that I, JAMES T. SHELTON, citizen of the United States of America, residing at Cooper, in the county of Delta and State of Texas, have invented new and useful Improvements in Pneumatic Knee-Pads, of which the following is a specification.

The object of the invention is to provide a knee pad for use by workmen and others who are required to maintain a kneeling posture for protracted periods, the object of the pad being to protect the clothing and also to cushion the knee so as to relieve the inconvenience ordinarily experienced in connection with work of the character indicated.

A further object of the invention is to provide a device of the type indicated which can be readily applied and removed, can be adapted with facility to the purposes of the wearer, and when not in use may be stored in a small space and thus carried with facility, and which when required may be readily inflated to the desired extent without the use of supplemental apparatus.

In carrying out these objects the invention consists in a construction, combination and relation of parts in which a preferred embodiment is disclosed in the drawings, it being understood that changes in form and proportion may be resorted to within the scope of the claim without departing from the principles involved.

In the drawings:

Figure 1 is a side view of the improved pad.

Fig. 2 is a sectional view taken longitudinally of the same.

Fig. 3 is a transverse sectional view.

The device consists essentially of a casing having an exterior element 10 extended at the sides to form ears 11 to which may be attached the fastening elements 12 consisting of straps and the engaging buckles 13, and an inner element 14 secured to the outer element and forming a sack which is open at one end for closure by a suitable flap 15 held in its normal or closed position by lacing 16. It is to be noted that the lacing 16 spans a slit formed in the element 10 adjacent the upper end and across the arch of the latter; so that when the lacing is loosened the slit may be spread and the flap 15 thus easily withdrawn to give access to the interior of the casing. Within this sacklike casing is disposed an inflatable tube or bag 17 of rubber or equivalent material having a valve tube 18 and cap 19 similar to those employed for example in connection with the inner tubes of automobile tires, so that when the casing is opened by the disengagement of the flap 15 the tube or bag may be inflated to the desired extent to afford the required cushioning effect to suit the purposes of the operator.

Secured by means of rivets 20 or the equivalent thereto, to the exterior element of the casing is a tread or shoe 21 of leather, rubber, metal, or any equivalent wear resisting material designed for contact with the floor or other surface from which the knee of the operator is to be protected.

Obviously the adjustability of the fastening means consisting, as illustrated, of the straps and buckles will adapt the device to be readily and snugly fitted to the knee of the wearer, a range of adaptability being also secured by reason of the separate ears 11 between which at each side of the device there is provided the slot 22, and at the same time said ears constitute side protecting wings to prevent contact of the clothing with adjacent objects, while the yieldability of the cushion adapts it to conform to the positions and movements of the operator and thus avoid the inconveniences in this respect to which workmen are subjected, particularly when operating on hard or damp surfaces.

Claim:

A knee pad consisting of a casing having an outer element extended at the sides to form ears for spanning relation to the leg above and below the knee, fastening straps secured to said ears, an inner element secured to the outer element and forming a sack which is open at one end, said inner element being provided with a flap serving as a closure for said casing, the outer element being slit transversely at the upper end across the arch thereof, lacing spanning said slit, and an inflatable bag disposed between the inner and outer elements and provided with an inflation valve disposed adjacent said slit, the said closure flap embracing said valve and being held in the position of closure when the slit is drawn closed by the said lacing.

In testimony whereof he affixes his signature.

JAMES T. SHELTON.