A. B. JONES.
PROTECTIVE SHIELD FOR AUTOMOBILE MECHANICS.
APPLICATION FILED FEB. 28, 1917.

1,254,808.

Patented Jan. 29, 1918.
To all whom it may concern:

Be it known that I, Arthur B. Jones, a citizen of the United States, and a resident of Cambridge, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Protective Shield for Automobile Mechanics, of which the following is a full, clear, and exact description.

The prime object of my invention is to provide protective shields for use by a mechanic or chauffeur working around and beneath an automobile or other vehicle, whereby to protect the clothing of the worker.

In carrying out the object of my invention, use is made of a back shield and knee shields, the back shield having an upper front strap to pass beneath the arms and across the front of the wearer with shoulder straps connecting with the shield and with said strap, the shield also having a waist strap from which knee shields are suspended, the knee shields having leg straps so that when the respective shields are in position, the back shield and knee shields will mutually contribute to prevent vertical displacement of either.

A further object of the invention is to provide mutually acting shields of the character referred to with various adjustments and connections to promote comfort in the wearing of the shields and insure the proper positioning thereof.

The invention also has for an object to form the back shield as to permit of its being folded into compact form when not in use.

The invention will be particularly explained in the specific description following.

Reference is to be had to the accompanying drawings forming a part of this specification in which similar reference characters indicate corresponding parts in all the views.

Figure 1 is a front elevation showing my improved protector adjusted in position for wear; Fig. 2 is a back view thereof; Fig. 3 is a vertical section on the line 3—3, Fig. 2; Fig. 4 is a horizontal section of a knee shield on an enlarged scale.

In carrying out my invention a back shield 10 is provided of a length to extend from the shoulders to a line below the waist, and near the top thereof, the said shield is provided with an upper front strap, 11, to pass beneath the arms of the wearer and across the chest, and with a waist strap 12, said straps being adjustably secured to the shield by any suitable means such as buckles 13. Shoulder straps 14 are connected with the top of the shield 10, preferably by buckles 15, and are connected with the upper front strap 11; the latter connection advantageously being produced by a buckle 16 and strap ends 17 adapted to be looped about the strap 11 to produce a relative sliding movement of the shoulder straps on the said front strap.

The shield 10 when in position obviously will prevent the clothing of the wearer at the back from becoming soiled either by dripping or contact of the back with parts of the automobile or the like. In order that the shield may afford substantial protection, it is padded, and to permit the shield to be folded, I form the upper and lower parts in separate pads by providing stuffing 18 of any suitable material therein, the respective pads being connected by a foldable flexible web 19 produced by sewing the opposite sides of the material from which the shield is formed, it being understood that any suitable fabric, sheet rubber, leather, or the like may be employed in forming the shield.

It will be observed that the shoulder straps and the breast strap are associated with the upper pad section, and the waist strap is associated with the lower pad section whereby the two sections may be effectively held in place while the transverse flexible connection between the pad sections renders the shield flexible, thereby preventing discomfort to the wearer when working beneath a car and in bending to assume convenient working positions.

Suspended from the waist strap 12 are flexible hanger straps or billets 20 made in looped form at their upper ends 21 to slidably engage the waist strap and these hanger straps suspend knee shields 22 which are connected thereto by suitable buckles 23. The knee shields are made in the form of pads, and in the preferred form each shield is produced with vertical series of padded ribs 24 and intervening unpadded webs 25 giving the pad a corrugated form at both surfaces. Each knee shield 22 has upper
and lower leg straps 26 secured by buckles 27 for adjustment.

With the knee shield and back shield thus secured in position, it will be seen that the knee shields will prevent vertical movement of the back shield and vice versa, the knee shields of themselves constituting an effective protection for the knees of the wearer. Also, it is to be noted that the strap 14 serves the two-fold purpose of securing the lower pad section against displacement and as a suspension means for the knee pads.

Having thus described my invention I claim as new, and desire to secure by Letters Patent:

1. A protector of the class described including a back shield formed of upper and lower pad sections, connected by a transverse flexible web, a front strap thereon at the upper pad section of the shield, shoulder straps connected at the back with the said upper pad section and having means to adjustably connect with the said front strap, a waist strap on the lower pad section of the shield, and means associated with the waist strap to prevent vertical displacement of the shield.

2. A protector of the class described including a back shield formed of upper and lower pad sections connected by a transverse flexible web, means to secure the pad sections on the wearer over the clothing, said means including a waist strap on the front of the lower pad section, connecting at its ends therewith, knee shields, retaining means on the said knee shields, and means connecting the knee shields with the waist strap.

3. A protector of the class described, including a back shield, a front strap at the upper portion of said shield, shoulder straps connected with the said shield and with the said front strap, a waist strap connected at the side with said shield, flexible hanger elements depending from the waist strap, knee shields secured to said depending elements at the lower ends thereof, and leg straps on the said knee shields.

4. A protector of the class described, including a back shield formed of upper and lower pads, said pads being connected by a transverse foldable web, a front strap on the upper pad adapted to pass beneath the arms and across the chest of the wearer, shoulder straps connected with the upper pad and with the said front strap, and a waist strap connected with the lower pad to range transversely at the front of the wearer.

ARTHUR BENGMAN JONES.