W. GRAVES.

SHIELD.

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973,936.

Patented Oct. 25, 1910.

Fig. 1.

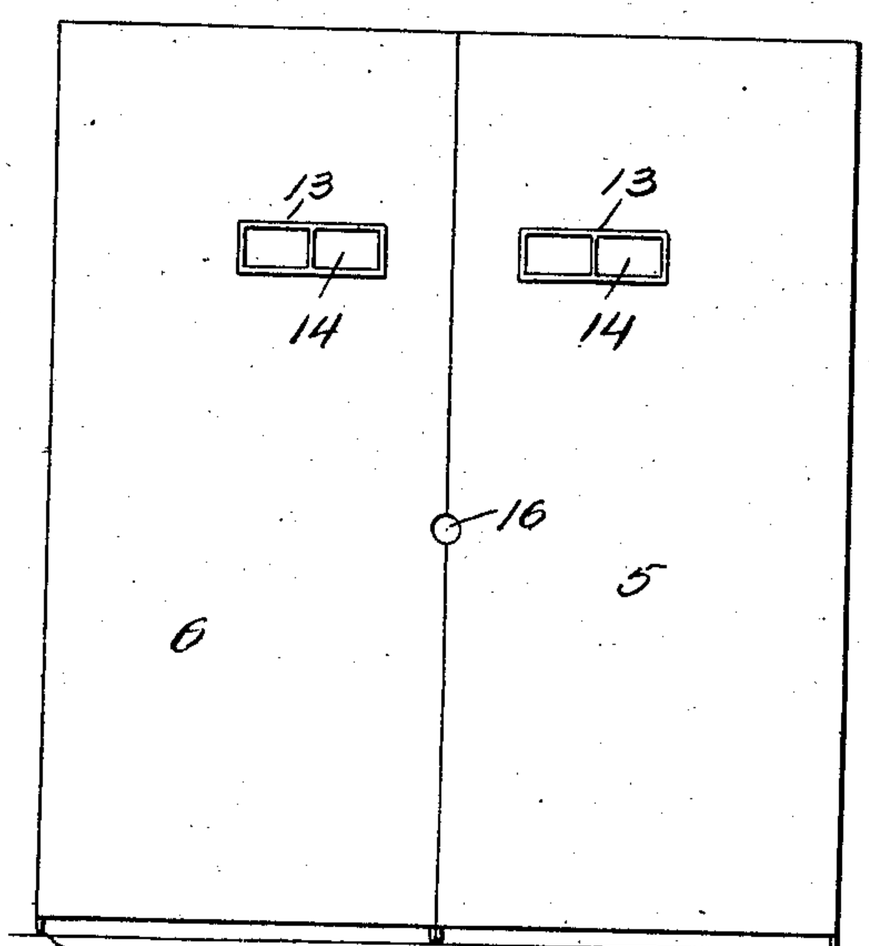


Fig. 2.

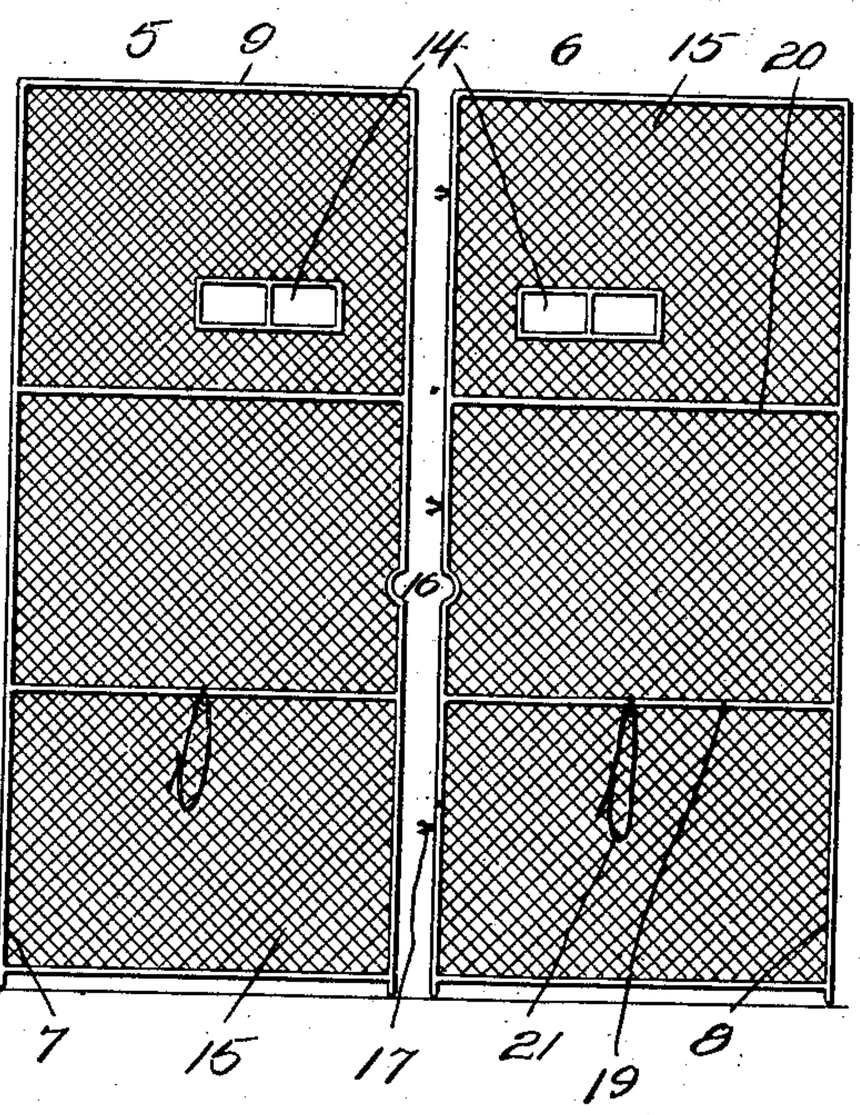


Fig. 3.

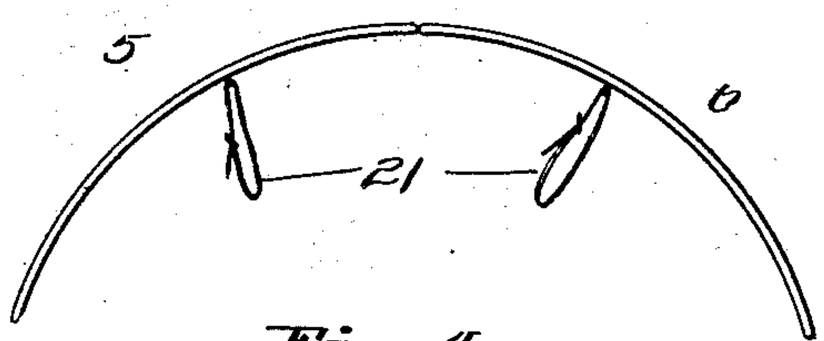
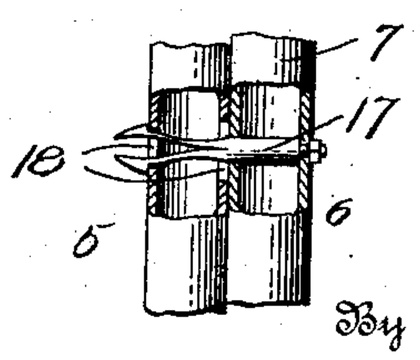


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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SHIELD.

973,936. Specification of Letters Patent. Patented Oct. 25, 1910.

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To all whom it may concern:

Be it known that I, WILLARD GRAVES, a citizen of the United States, residing at Pontiac, in the county of Oakland and State of Michigan, have invented new and useful Improvements in Shields, of which the following is a specification.

This invention relates to improvements in shields and has particular reference to a device of that kind to be employed by firemen.

One object of the invention is the provision of a shield formed of asbestos or other non-heat-conducting material and which may be readily carried by the firemen to a position comparatively close to the fire to be extinguished without exposing the operators to unnecessary danger.

A further object is the provision of a shield provided with an opening through which the nozzle of a hose may be inserted so that the operator behind the screen may direct the stream of water on to the fire to be extinguished.

A further object is the provision of a shield comprising a pair of arcuate-shaped sections detachably connected, whereby they may be folded into a comparatively small space on a vehicle when being transported to the fire.

A still further object is the provision of a shield having a frame provided with spurs to be embedded into the floor or other surface and operating to prevent the shield from sliding.

With these and other objects in view, which will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings and more particularly pointed out in the appended claims; it being understood that various changes in the form, proportion, size, and minor details of the device may be made, within the scope of the appended claims, without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, forming a part of the specification;—Figure 1 is a front elevation of the device. Fig. 2 is a rear elevation of the same. Fig. 3 is a plan view. Fig. 4 is an enlarged detail of the fastening members for the sections showing portions of the section sides partly in section.

Similar numerals of reference are employed to designate corresponding parts throughout.

The sections are designated in general by the numerals 5 and 6. Since the sections are identical in structure a detail description of one will be sufficient. Each section comprises a frame oblong in contour, the opposite sides of which are designated by the numerals 7 and 8. The sides 7 and 8 may be of any desired length and are preferably made of a length greater than six feet. Connecting the upper ends of the sides 7 and 8 is an upper end piece 9. The end piece 9 is arcuate in contour and may be of any desired length. The lower end of the sides 7 and 8 are sharpened so as to provide spurs 10 and connecting the lower end portions of the said sides is a lower end piece 11 conforming to the curvature of the upper end piece 9. Overlying spaces bounded by the sides and ends and arranged in what will subsequently be termed the outer side of the frame is a sheet of asbestos 12. Formed adjacent to the upper end of the sheet and to one side of the center thereof is an oblong opening 13 into which is fitted a sheet of mica 14, whereby a peep opening is provided in order that the operator may see the desired spot on which to direct the stream of water. Placed over the inner surface of the asbestos sheet 12 is a wire netting 15 which is secured, in any suitable manner like the asbestos 12 to the sides and ends of the frame. By the provision of the wire netting 15 the asbestos sheet will be prevented from being accidentally torn by the clothing of the operator. By reference now to the drawings it will be seen that the medial portions of the sides 7 of the frames are curved inwardly so as to provide semi-circular openings, whereby a circular opening will be presented when the said sides 7 bear one upon the other. This opening is designated by the numeral 16 and will be of sufficient diameter to permit the insertion of a nozzle.

By reference now to Fig. 3 it will be seen that extending outwardly and laterally from the side 7 of the frame 5 are a plurality of dowel pins 17 and formed in the adjacent side 7 of the section 6 are a plurality of sockets 18 to receive the dowel pins

17. The dowel pins 17 may be provided with any suitable form of spring latch in order to frictionally hold them within the sockets 18 when the sections are united.

By reference now to Fig. 2 it will be seen that the frames of the sections 5 and 6 are held braced by means of a pair of cross pieces 19 and 20, the opposite ends of which are secured to the sides 7 and 8 and at points between the middles and opposite ends of the sides and between the wire netting and asbestos.

Suitable handles 21 are provided by means of which the sections may be lifted. These handles are preferably formed of loops of flexible material secured to the medial portions of the lower cross pieces 19.

By virtue of the contour of the sections, each being the size approximately of a quadrant, it will be evident when the sections are brought together as shown in the drawings that a substantially semi-circular shield will be presented, whereby the operators behind the shield will be protected both from the heat directly in advance of and on the sides of the shield.

It will be observed that the device is exceedingly simple in structure and inexpensive in manufacture and may be readily set up into operative position and when so positioned by virtue of the spurs 10 will be prevented from accidental movement.

I claim:—

1. A portable shield for firemen comprising a frame consisting of two arcuate sections, means for detachably securing the said sections together, a sheet of non-heat-conducting material secured to the sides and ends of each section, said sheet having a peep opening adjacent to its upper end, said sections being provided at opposite points and at the medial portions of their adjacent sides with semi-circular openings, the sides of which flank an annular opening when the sections are brought together, a cross piece connecting the medial portion of each of said sections, and a handle secured to the cross piece.

2. In a shield for firemen, an oblong frame the sides of which are connected together at their opposite ends by a pair of curved end pieces, a sheet of non-heat-conducting material secured to the sides and ends of the frame, said sheet having a peep opening adjacent to its upper end and further provided at a point below said peep opening with an opening for the reception of a nozzle, a cross piece connecting the medial portions of the sides of the frame, a wire netting secured to the sides and ends of the frame and on that face of the latter opposite to the face covered by the non-heat-conducting material, and a handle secured to the cross piece.

In testimony whereof I affix my signature in presence of two witnesses.

WILLARD GRAVES.

Witnesses:

I. R. BLOOMBURG,

JAMES SCOTT.