

Aug. 11, 1931.

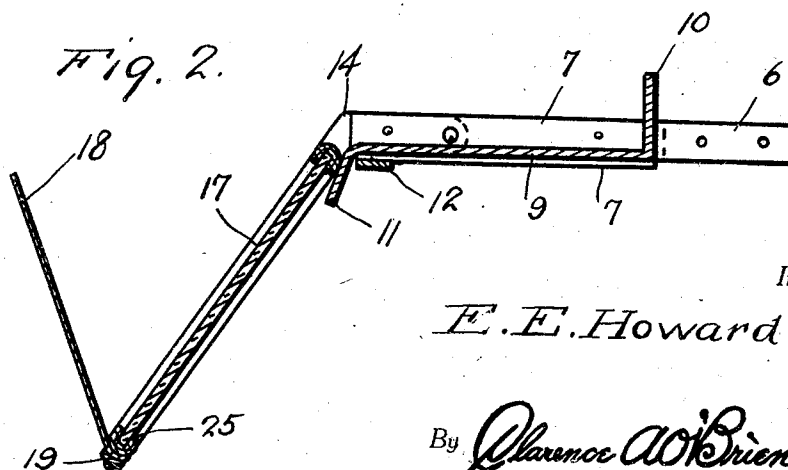
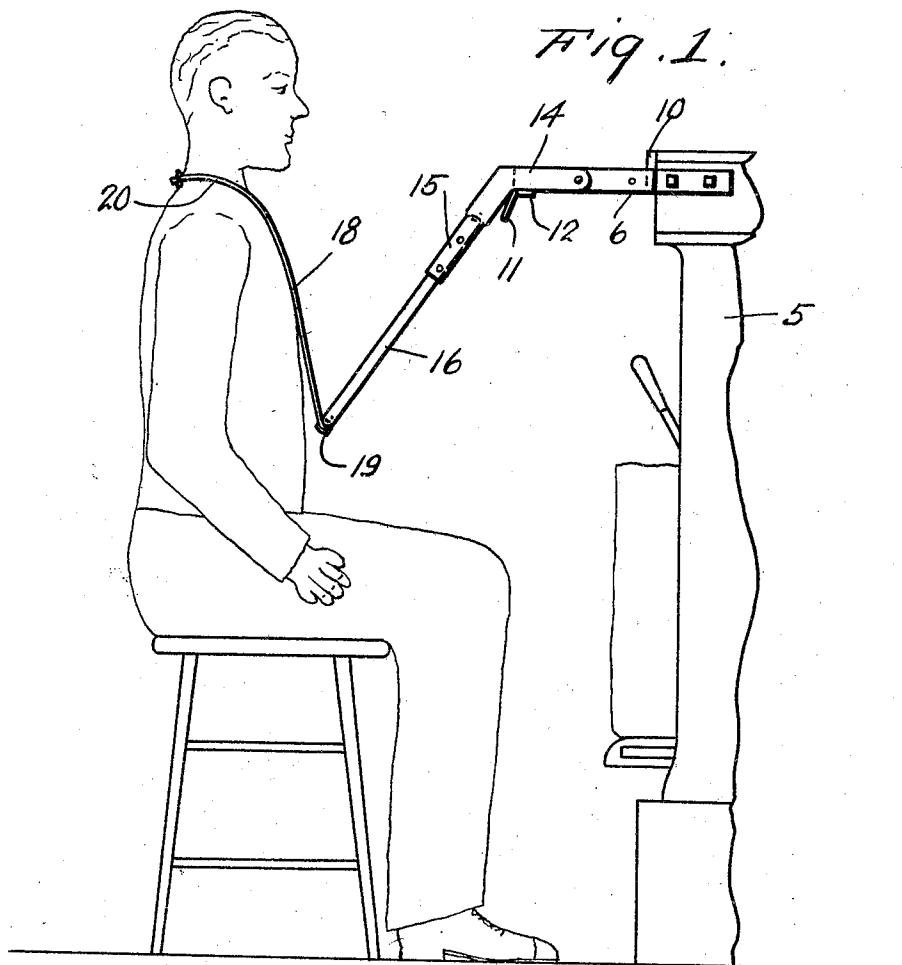
E. E. HOWARD

1,818,481

DUST SHIELD FOR CEMENT PACKERS

Filed July 22, 1929

3 Sheets-Sheet 1



Inventor

E. E. Howard

By *Clarence A O'Brien*
Attorney

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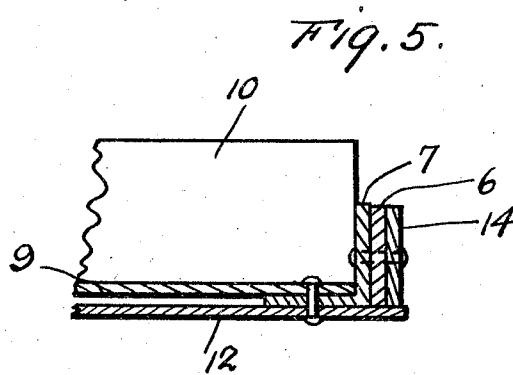
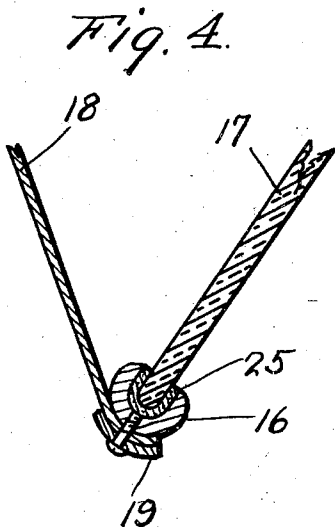
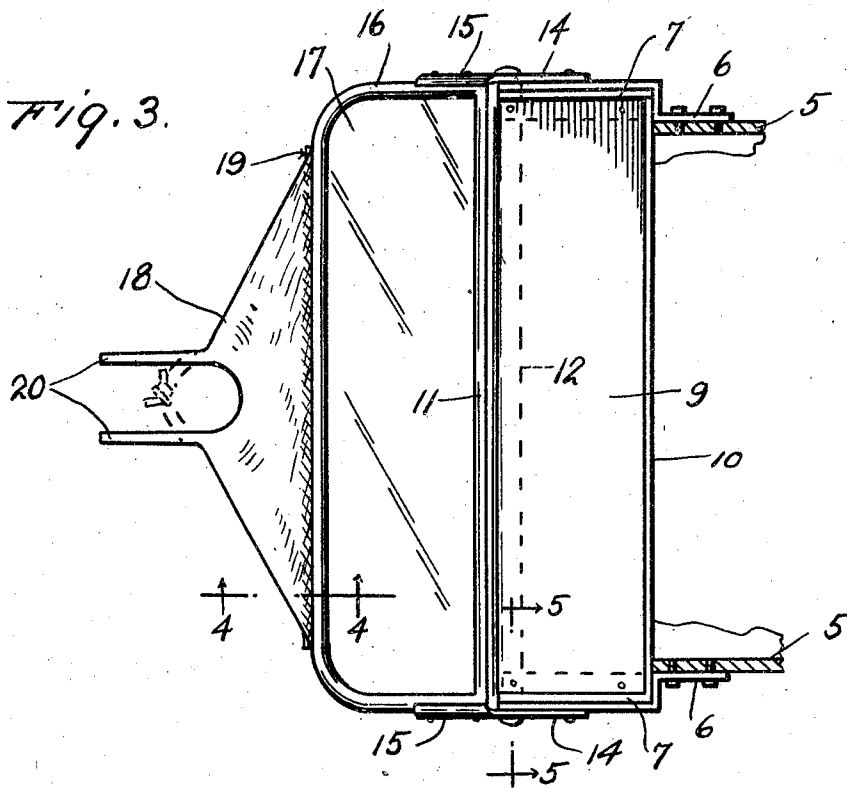
E. E. HOWARD

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DUST SHIELD FOR CEMENT PACKERS

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Inventor

E. E. Howard

By *Clarence A. O'Brien*
Attorney

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E. E. HOWARD

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DUST SHIELD FOR CEMENT PACKERS

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3 Sheets-Sheet 3

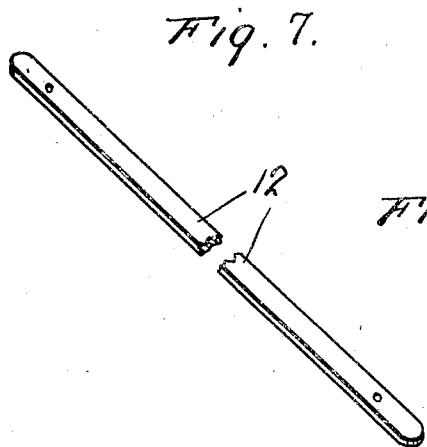
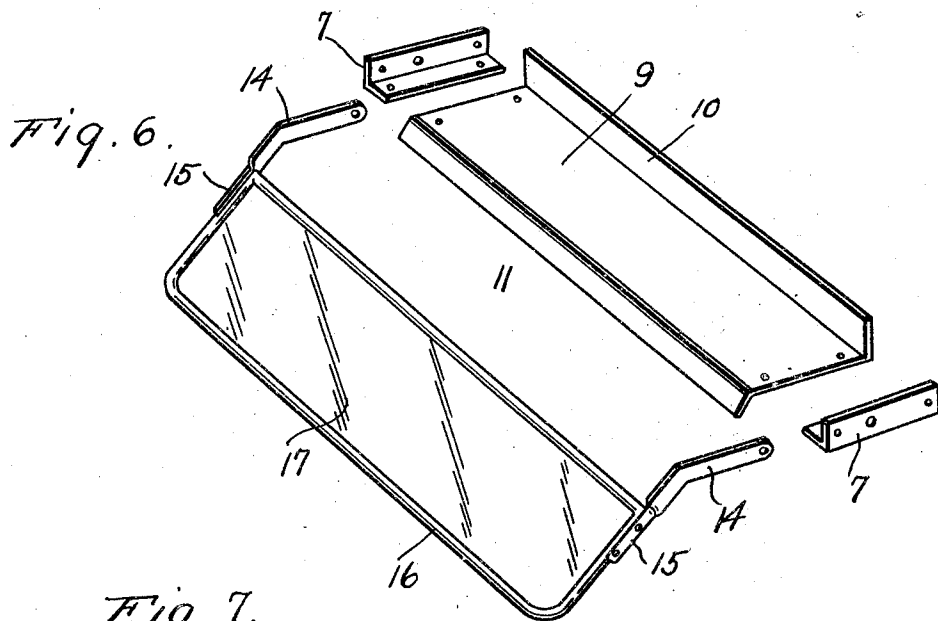


Fig. 8.

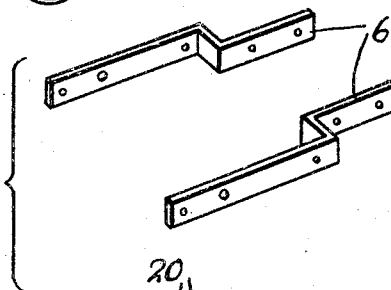


Fig. 10.

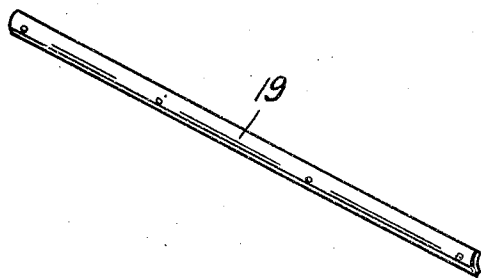
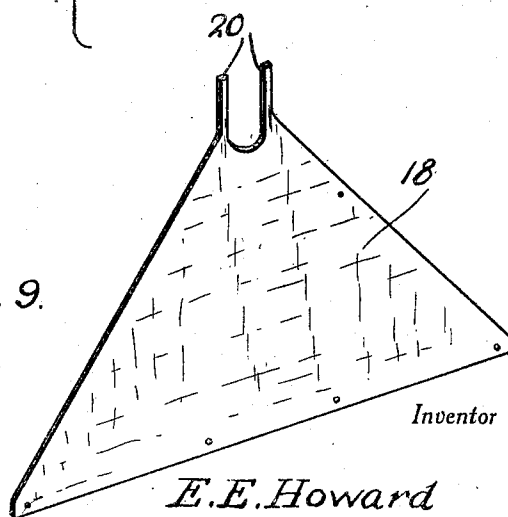


Fig. 9.



Inventor

E. E. Howard

By *Clarence A. O'Brien*
Attorney

UNITED STATES PATENT OFFICE

EZRA E. HOWARD, OF CONCRETE, WASHINGTON

DUST SHIELD FOR CEMENT PACKERS

Application filed July 22, 1929. Serial No. 380,057.

The present invention relates to a dust shield for cement packers and has for its prime object to provide a shield which may be fastened on a machine for sacking cement, lime, plastering, etc., for the purpose of protecting the operator when sacks become broken open or have holes therein.

A still further very important object of the invention resides in the provision of a shield of this nature which is simple in its construction, convenient for the operator to carry on his work, thoroughly efficient and reliable while in use, and otherwise well adapted to the purpose for which it is designed.

With the above and numerous other objects in view as will appear as the description proceeds, the invention resides in certain novel features of construction, and in the combination and arrangement of parts as will be hereinafter more fully described and claimed.

In the drawings:

Figure 1 is a side elevation of the device showing the same in use,

Figure 2 is a vertical central section thereof,

Figure 3 is a top plan view thereof,

Figure 4 is a sectional view taken substantially on the line 4—4 of Figure 3,

Figure 5 is a detail section taken substantially on the line 5—5 of Figure 3,

Figure 6 is a perspective view of the parts of the shield disassembled,

Figure 7 is a perspective view of the brace rods,

Figure 8 is a perspective view of the stationary supporting brackets,

Figure 9 is a perspective view of the apron, and

Figure 10 is a perspective view of the strip for fastening the apron for the transparent panel frame.

Referring to the drawings in detail it will be seen that the numeral 5 denotes generally a well known form of tube standard cement packers to which my apparatus is adapted to be fastened for protecting the operator as is clearly illustrated in Figure 1.

This apparatus comprises a pair of stationary brackets 6 which are fastened to the

sides of the packer and supports angle bars 7 which in turn support a shield plate having an upwardly directed right angularly extending flange 10 at its edge adjacent the packer and at its edge remote from the packer with a depending obliquely disposed flange 11.

A brace rod 12 extends under the plate 9 adjacent the flange 11 and is fastened to the angle bars 7. Angular brackets 14 are pivotally connected to the angle bars 7 and have extensions inclining downwardly and outwardly toward the operator and terminating in portions 15 curved transversely to fit the sides of the frame 16 in which is disposed transparent shield panel 17.

A substantially triangularly shaped apron 18 is fastened to the bottom rail of the frame 16 by means of a strip 19 which is transversely curved and the apex of the apron 18 remote from the frame 16 terminates in a pair of spaced parallel extensions 20 which may be tied about the neck of the operator as is clearly illustrated in Figure 1.

Frame 16 is of channel formation and has packing 25 therein to receive the periphery of the glass panel 17.

From the above detailed description it will be seen that the operator with this shield structure may conveniently operate the packer for sacking the cement, lime, plaster etc. and will be thoroughly protected from the dust and because of the transparent panel 17 will have sufficient visibility to efficiently carry out the work. The frame 16 is engageable for rest on the flange 11, as seen in Figure 2.

It is thought that the construction, utility and advantages of this invention will now be quite apparent to those skilled in this art without a more detailed description thereof.

The present embodiment of the invention has been disclosed in considerable detail merely for the purposes of exemplification since in actual practice it attains the features of advantage enumerated as desirable in the statement of the invention and the above description.

It will be apparent that changes in the details of construction, and in the combina-

tion and arrangement of parts may be resorted to without departing from the spirit or scope of the invention as hereinafter claimed or sacrificing any of its advantages.

Having thus described my invention, what I claim as new is:

1. An apparatus of the class described comprising a pair of angle bars, a shield plate across the angle bars, a pair of angular brackets pivotally connected to the angle bars and having downwardly and outwardly inclined portions, a frame mounted between said portions, a transparent panel in said frame, said shield plate having an obliquely depending flange at its edge adjacent the frame engageable with said frame in a manner to limit the downward swinging movement thereof and at its opposite edge with an upstanding right angularly disposed flange and a flexible apron secured to the frame having means for suspending the same and said frame from the neck of an operator.

2. An apparatus of the class described comprising a pair of angle bars, a shield plate across the angle bars, a pair of angular brackets pivotally connected to the angle bars and having downwardly and outwardly inclined portions, a frame mounted between said portions, a transparent panel in said frame, said shield plate having an obliquely depending flange at its edge adjacent the frame engageable with said frame in a manner to limit the downward swinging movement thereof and at its opposite edge with an upstanding right angularly disposed flange, means fastened to the angle bars and offset inwardly to be fastened to the side of a packer, and a flexible apron secured to the frame having means for suspending the same and said frame from the neck of an operator.

3. An apparatus of the class described comprising a pair of angle bars, a shield plate across the angle bars, a pair of angular brackets pivotally connected to the angle bars and having downwardly and outwardly inclined portions, a frame mounted between said portions, a transparent panel in said frame, said shield plate having an obliquely depending flange at its edge adjacent the frame engageable with said frame in a manner to limit the downward swinging movement thereof and at its opposite edge with an upstanding right angularly disposed flange, means fastened to the angle bars and offset inwardly to be fastened to the side of a packer, a brace rod extending between the angle bars adjacent the first named flange, a flexible apron fixed to the frame and having means incorporated therewith so that the same may be fastened about the neck of an operator, said apron constituting means for suspending the frame from the neck of an operator.

In testimony whereof I affix my signature.

EZRA E. HOWARD.