

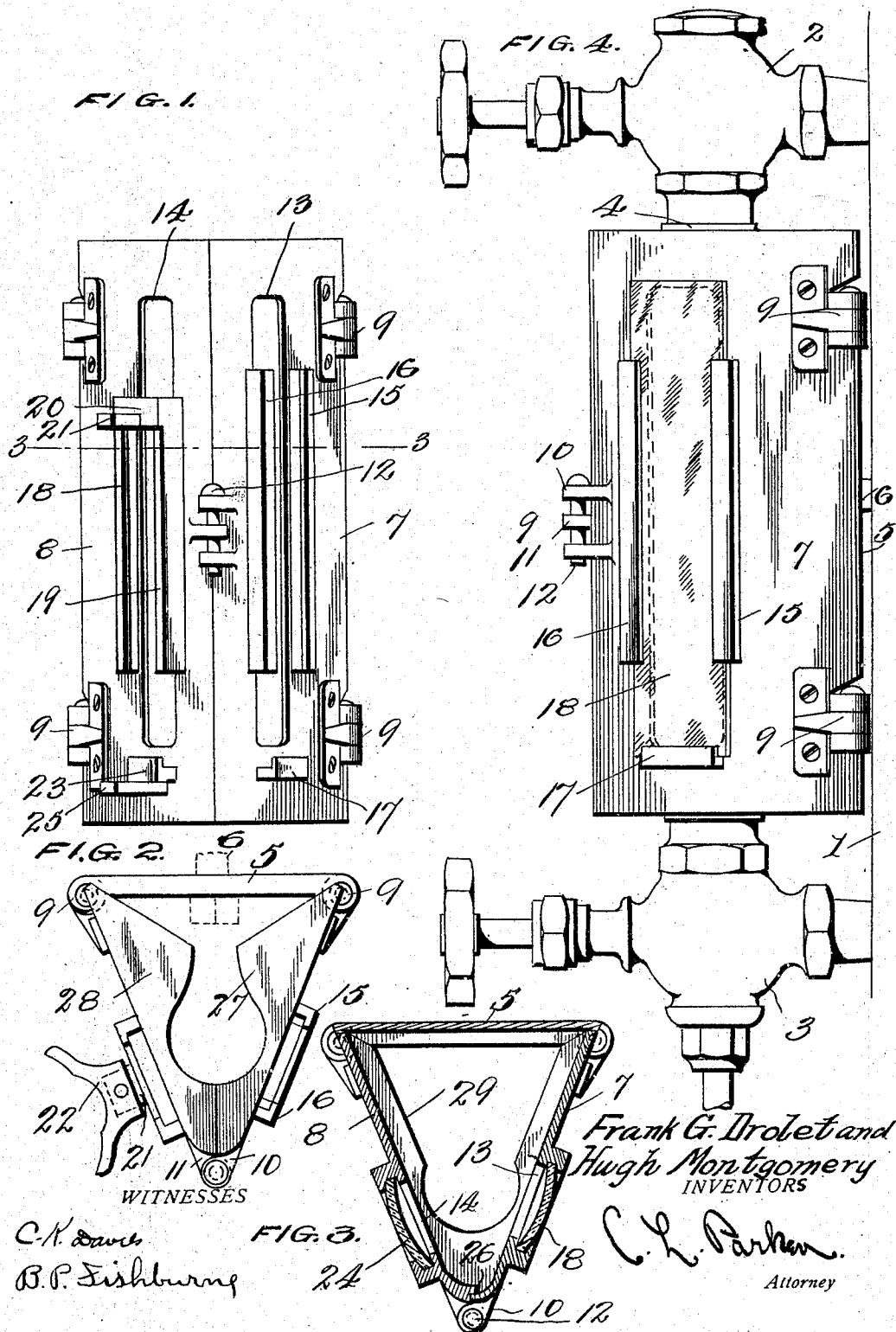
H. MONTGOMERY & F. G. DROLET.

WATER GLASS SHIELD.

APPLICATION FILED MAY 19, 1909.

949,800.

Patented Feb. 22, 1910.



UNITED STATES PATENT OFFICE.

HUGH MONTGOMERY AND FRANK G. DROLET, OF MILO JUNCTION, MAINE.

WATER-GLASS SHIELD.

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Specification of Letters Patent.

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Application filed May 19, 1909. Serial No. 497,021.

To all whom it may concern:

Be it known that we, HUGH MONTGOMERY and FRANK G. DROLET, citizens of the United States, residing at Milo Junction, in the county of Piscataquis and State of Maine, have invented certain new and useful Improvements in Water-Glass Shields, of which the following is a specification.

Our invention relates to water-gage-glass protectors for locomotive and stationary boilers, and consists generally of a protector having a supporting back plate secured to the boiler head and carrying hinged side plates.

An object of our invention is to provide a protector which may be readily and securely fastened to the boiler.

A further object of our invention is to provide a protector which may be readily opened for the cleaning or renewal of the water-gage-glass without removing the said protector.

The final object of our invention is to provide a protector which will entirely inclose the water-gage-glass, and in which the water-gage-glass may be seen from any position.

In the accompanying drawings, illustrating the preferred embodiment of our invention, Figure 1 is a front view of our device, parts thereof being removed. Fig. 2 is a plan view of the same. Fig. 3 is a horizontal cross sectional view of our device taken on the line 3—3 of Fig. 1. Fig. 4 is a side view of our device complete and showing the same as applied to a boiler.

In the drawings, 1 designates the boiler head provided with the usual steam arm 2 and water arm 3 connected to each other by the water-gage-glass 4.

5 designates the supporting back plate of our protector which is secured to the boiler head 1 by means of a bolt 6 or the like. The similar side plates 7 and 8 are swingingly connected to the plate 5 as shown at 9. The side plate 7 is provided adjacent its forward edge thereof with the two apertured arms 10 and the side plate 8 is provided with the apertured arm 11, which is arranged to lie between the arms 10 and to receive therethrough the bolt 12 passing through the arms 10.

The side plates 7 and 8 are provided with

the longitudinal openings 13 and 14 respectively and the side plate 7 is further provided with the side brackets 15 and 16 and the supporting bracket 17. The glass 18 is supported between the brackets 15 and 16 and above the bracket 17 as shown in Fig. 4. The side plate 8 is provided with the side brackets 18 and 19 connected at the upper portions by the transverse portion 20, from which projects the member 21 carrying the detachable lamp support 22. The supporting bracket 23 is arranged below the side brackets 18 and 19 and is adapted to support the glass 24. 25 is a member similar to the member 22 and is secured upon the side plate 8 adjacent the bracket 23. The side plate 8 has its forward side edge provided with a recess 26 to receive the forward side edge of the side plate 7 as shown in Fig. 3, thus forming an interlocking connection.

The side plates 7 and 8 are provided with the top members 27 and 28 respectively, which are cut away so as to fit around a portion of the steam arm 2. The supporting plate 5 has secured to the lower portion thereof the triangular bottom 29, cut away so as to receive a portion of the water arm 3. The bottom 29 is engaged by the sides 7 and 8 when they are in a closed position.

When applying our device to a boiler, the water-gage-glass is removed, the sides of the protector are swung back, which allows for the placing of the bottom of the protector over the water arm. The supporting back is then bolted or otherwise secured to the boiler head, the water-gage-glass replaced, and the sides swung forwardly and secured together.

Having fully described our invention, we claim:

1. In a water-gage-glass protector, the combination with a boiler head, a water-gage-glass, water-gage connections arranged upon said boiler head for supporting said water-gage-glass, of a back plate detachably secured to said boiler head, sides swingingly mounted upon said back plate and arranged to engage each other and form a triangular casing inclosing said water-gage-glass, a sight opening in each of said sides, and transparent material covering the same, substantially as described.

2. A water-gage-glass protector adapted to be detachably applied to a boiler, and comprising end and side walls adapted to inclose a water-gage-glass, one or more of said
5 side walls being movable to an open and closed position, sight openings in said side walls, and transparent material covering the same, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

HUGH MONTGOMERY.
FRANK G. DROLET.

Witnesses:

HOLLIS J. HALL,
FRED M. CURTIS.