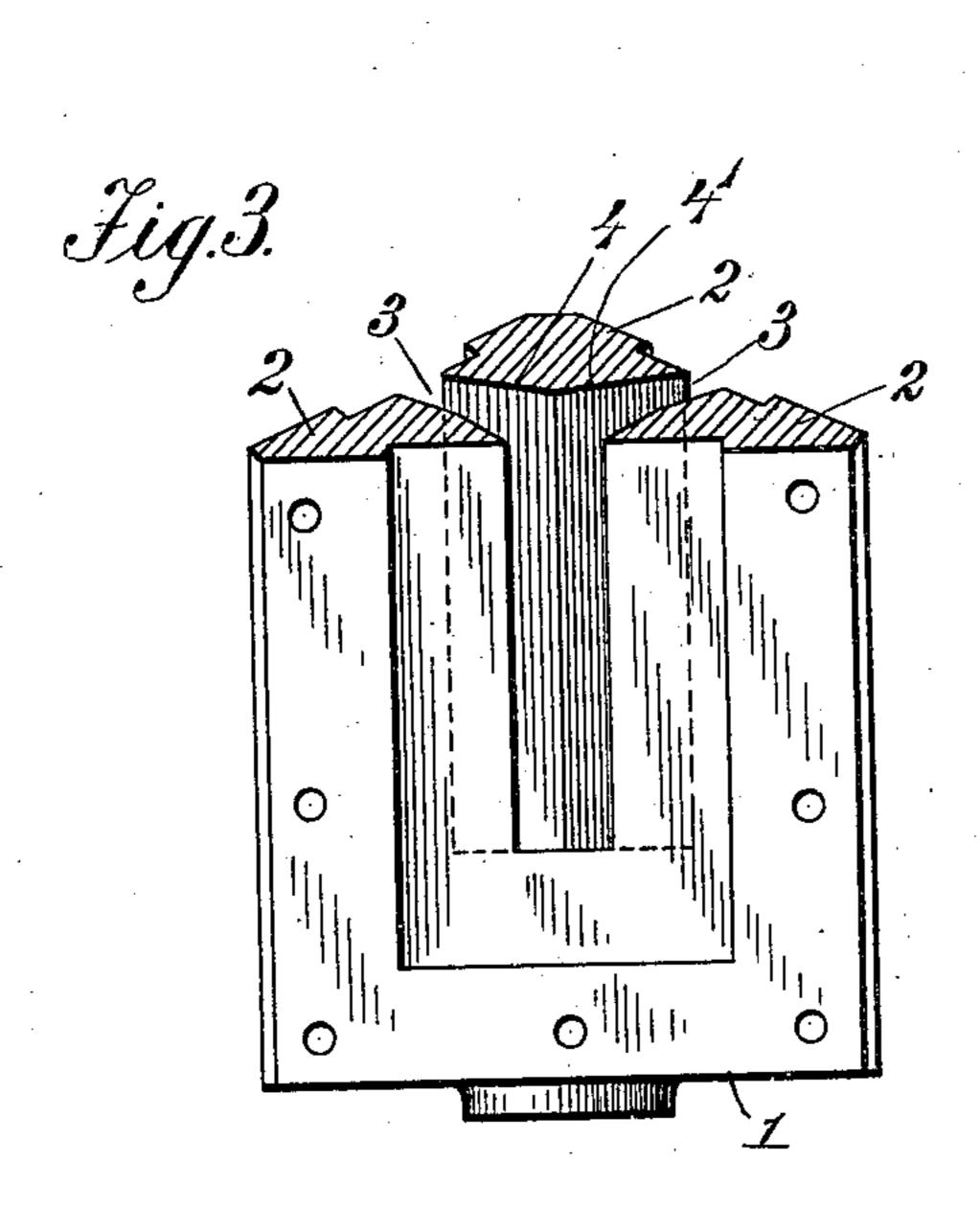
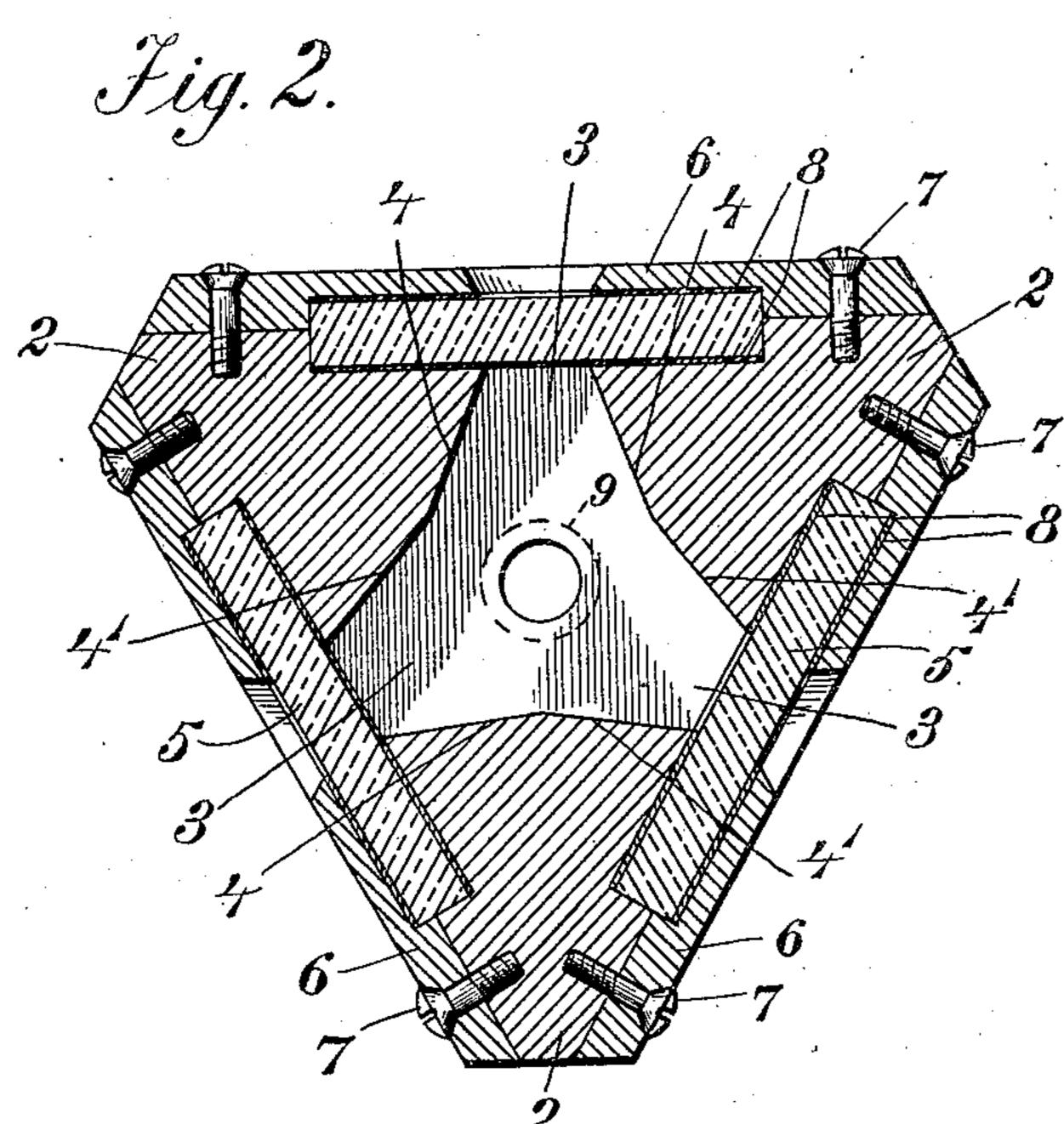
C. M. O'DANIELS. WATER GAGE.

APPLICATION FILED MAR. 1, 1909.

934,623.

Patented Sept. 21, 1909.





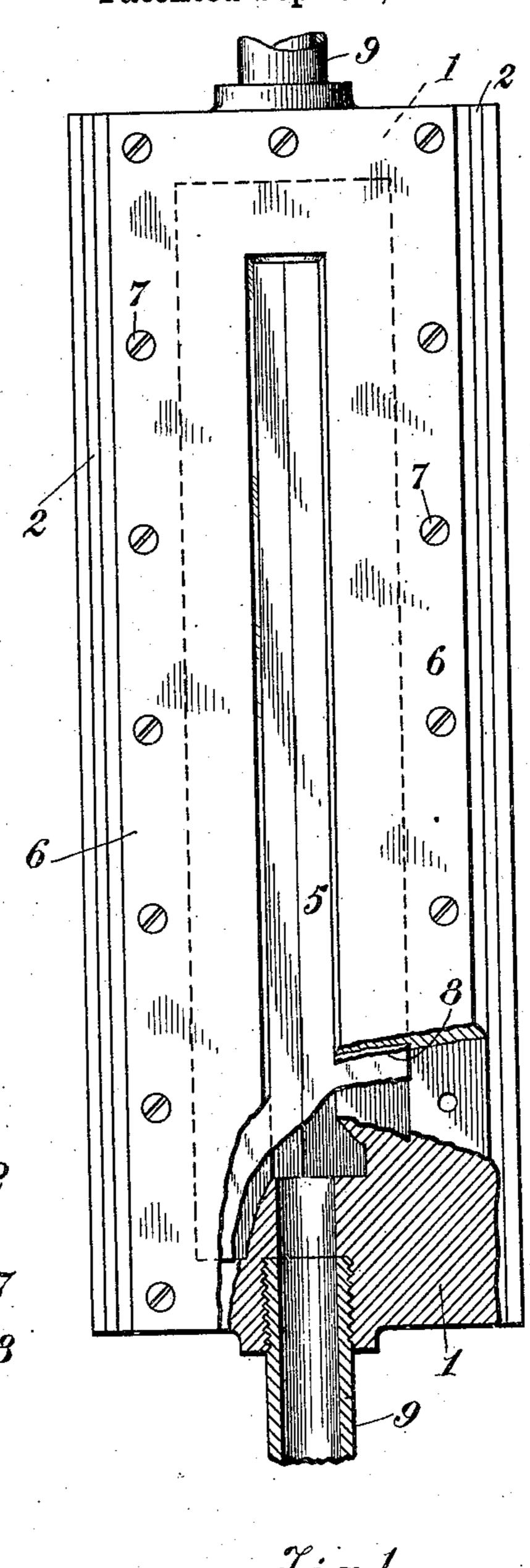


Fig.1.

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UNITED STATES PATENT OFFICE.

CALVIN M. O'DANIELS, OF SEATTLE, WASHINGTON.

WATER-GAGE.

934,623.

Specification of Letters Patent. Patented Sept. 21, 1909.

Application filed March 1, 1909. Serial No. 480,784.

To all whom it may concern:

Be it known that I, Calvin M. O'Daniels, a citizen of the United States of America, and a resident of the city of Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Water-Gages, of which the

following is a specification.

My invention relates to devices of the above type, having more particular reference to those designed to be attached to locomotives, steamship boilers and the like, and the primary object thereof is to first provide a water gage constructed for the admission of light in such a manner that possible errors in the reading of the gage will be avoided, and second, to provide a structure which is comparatively simple and not liable to be easily broken or otherwise impaired.

With the above objects in view, my invention resides in the structural features and arrangements of parts, hereinafter described and succinctly defined in my annexed claims.

Referring to the accompanying drawing, in which like numerals of reference indicate like parts throughout: Figure 1 is an elevation of my invention, parts being broken away. Fig. 2 is a transverse sectional view thereof, and Fig. 3 is a fragmentary view of the frame of my gage.

My improved gage comprises a frame consisting of upper and lower heads 1, shown as being substantially triangular in form, and bars 2 connecting the same, and preferably formed integral therewith, each at a respective corner portion thereof. Bars 2 are suitably spaced and have their inner or opposing faces inclined in opposite directions, as at 4, 4', whereby the gage is provided with a 40 chamber having legs 3, shown as three,

whose side walls diverge inwardly.

In their outer faces, bars 2 are formed with seats, as shown, in which glass panels, as 5, extending over the outer end portions of the legs 3, are secured by suitable face plates 6 having sight openings, as shown, which face plates are removably secured to the frame of the gage, as by screws 7. It will also be observed that face plates 6 are also formed with seats for reception of the glass panels 5.

Packing, as 8, of suitable type, is inserted in the seats of the main frame and of the face plates 6 to form tight joints, as will be

55 readily understood.

By constructing the side walls of legs 3 of the water chamber, as described, inwardly diverging light reflecting surfaces are provided adjacent each glass panel 5, those of one leg joining or merging in the adjacent 60 ones of the others, see Fig. 2, whereby each leg 3 lies between the others and has its side walls inclined each toward a respective one thereof permitting, where, for example, one of the sight openings lies directly in front 65 of the source of light, by reason of the light rays entering the same and being reflected from the opposite of the walls of legs 3, such distribution or diffusion of the light rays as to enable accurate and ready reading 70 through either of the other two sight openings.

Reference numeral 9 indicates the connections between the gage and the boiler, the same as now considered consisting of pipes 75 which are threaded in conduits, suitably

provided in heads 1, as shown.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States of Amer- 80 ica, is:

1. A gage comprising a frame consisting of upper and lower substantially triangular heads and corner bars connecting the same, said corner bars of the frame being spaced 85 to provide legs forming the water chamber of the gage and each having its inner face inclined in relatively opposite directions, and glass panels secured to said frame and extending over the spaces between the corner 90 bars thereof.

2. A gage comprising a frame consisting of upper and lower heads and integral bars connecting the same, said bars being spaced apart and formed with inclined faces, glass panels extending over the spaces between said bars of the frame, and face plates securing said glass panels in position and being formed with sight openings, the inclined faces of said bars of said frame 100 diverging from said sight openings, for the purpose specified.

Signed at Seattle, Washington this 16 day of February 1909.

CALVIN M. O'DANIELS.

Witnesses:

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STEPHEN A. BROOKS.