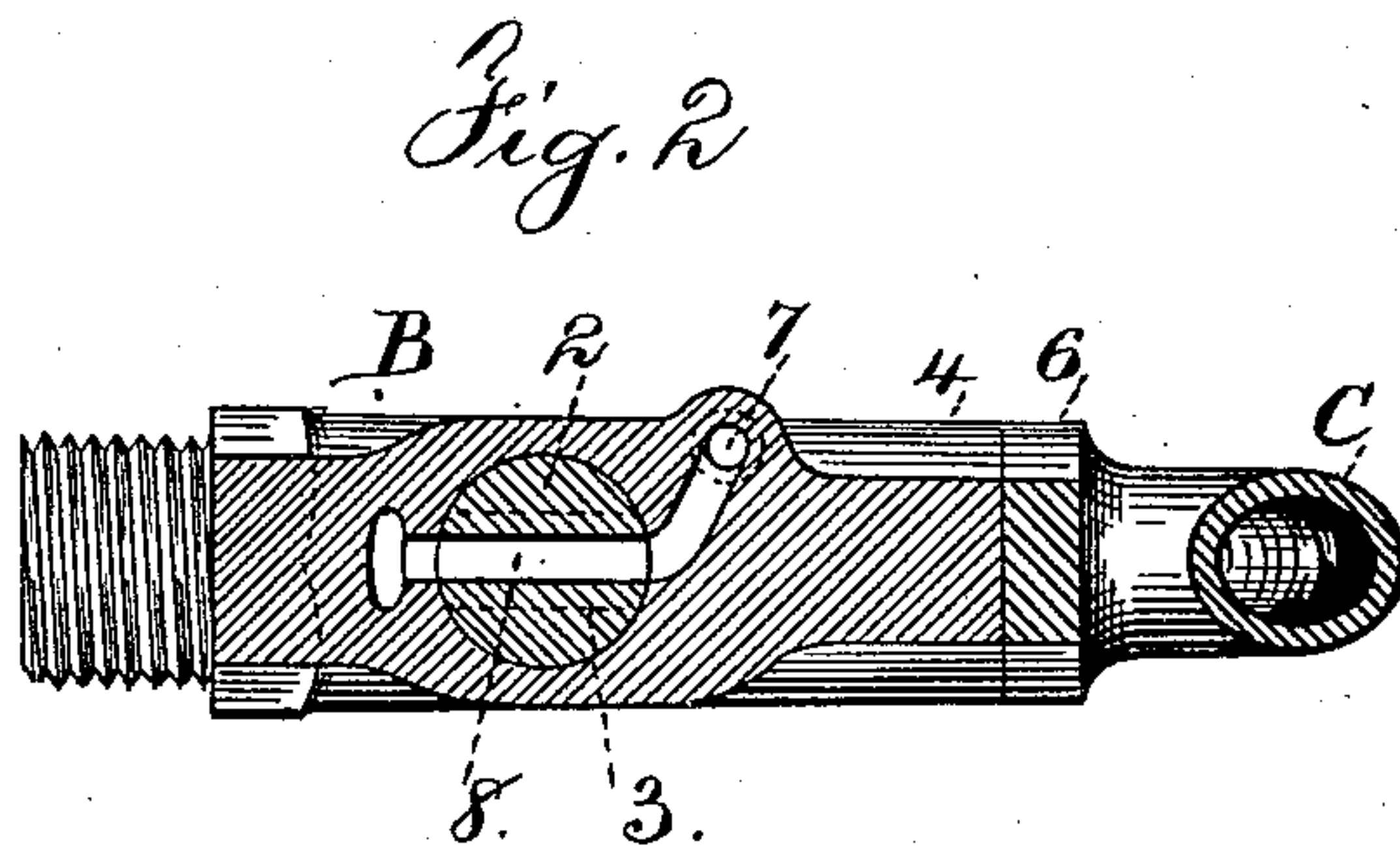
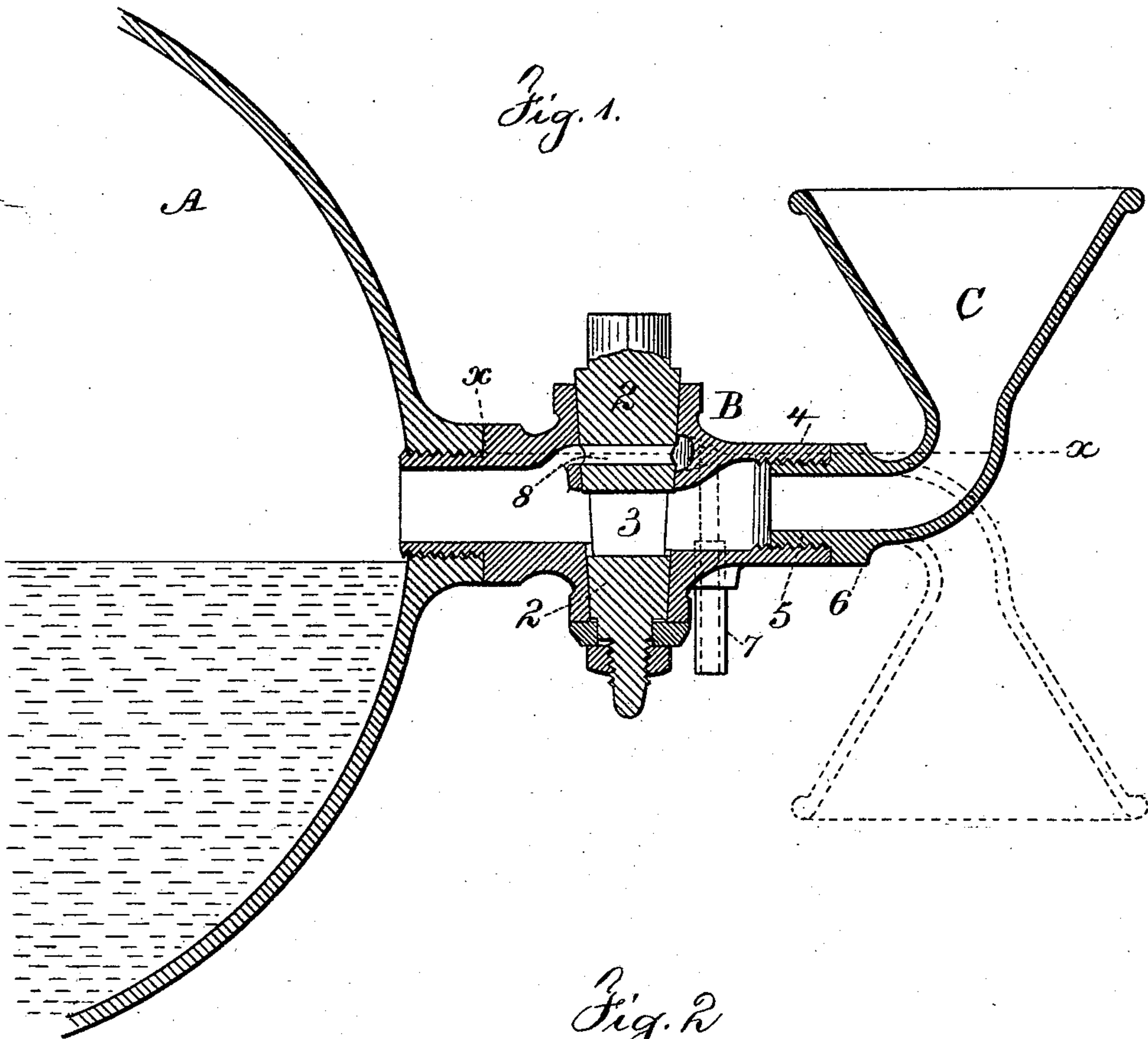


(No Model.)

W. C. BAKER.
CAR HEATING APPARATUS.

No. 472,689.

Patented Apr. 12, 1892.



Witnesses

Chas. H. Smith
J. Stail

Inventor

William C. Baker.
For Lemuel W. Serrell
attys

UNITED STATES PATENT OFFICE.

WILLIAM C. BAKER, OF NEW YORK, N. Y.

CAR-HEATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 472,689, dated April 12, 1892.

Application filed June 15, 1891. Serial No. 396,288. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. BAKER, a citizen of the United States, residing in the city and State of New York, have invented an
5 Improvement in Car-Heating Apparatus, of which the following is a specification.

In car-heating apparatus it has heretofore been usual to provide an expansion-vessel above the body of the car and into which the
10 pipes from the heating apparatus ascend, so that the water circulates through the expansion-vessel in heating the car, and there is more or less leakage in the apparatus, involving a loss of water that has to be made
15 up from time to time by filling water into such expansion-vessel to keep the same at the proper height, and a supply-cock has been used with a funnel, usually made of sheet metal and connected by a screw-coupling;
20 but when the supply-funnel is left in its position for use the same is liable to become charged with cinders and dust.

In my present improvements the supply-funnel and the screw connecting the same to
25 the cock are preferably of cast metal and constructed in such a manner that when the funnel is turned up into position for use the screw is tightened, and the cock is made so that the air is allowed to blow off from the
30 expansion-vessel as the water is introduced, and the air-vent constructed in such a manner that it can easily be kept free from incrustation of salt from the brine made use of in the circulating system.

35 In the drawings, Figure 1 is a vertical section of the improvement, and Fig. 2 is a sectional plan at the line *x x*.

The expansion-vessel A is of ordinary character, and the cock B is screw-threaded at one
40 end and screwed into the expansion-vessel at or near the water-line of the same, and the plug 2 of the cock is provided with a square at one end for the reception of a wrench, and it also has a water-way 3, so as to be opened
45 or closed, and at the outer end of the cock is a screw-socket 4, receiving the screw-threaded end 5 of the funnel C, such funnel being, preferably, of metal cast along with the screw-threaded end 5 of the collar 6, and the parts
50 are constructed in such a manner that when the collar is screwed up firmly against the end of the socket 4 the funnel C will be ver-

tical and in position for the reception of the water for the expansion-vessel, and when the water has been filled in through this funnel 55 the attendant simply gives the funnel a half-rotation, partially unscrewing the same, and the funnel hangs downwardly and is not liable to become detached and cannot become obstructed by cinders or dust. The funnel is 60 indicated in Fig. 1 by dotted lines in the position when it is out of use. In the body of the cock there is a vertical passage-way for the reception of the upper end of a tube 7, and there is through the plug 2 of the cock a 65 passage-way 8, opening at the rear end into the inner passage-way of the cock leading into the expansion-vessel, and these two passages 3 and 8 are opened simultaneously for water to be supplied to the expansion-vessel 70 and closed simultaneously when the plug 2 has received a quarter-rotation. By this construction the passage-way 8, opening at an elevated point into the expansion-vessel, allows air to pass off freely as the water is ad- 75 mitted, and should any water or brine run out it can be caught in a cup. The tube 7 is easy of access for the insertion of a wire or small rod to remove any salt or obstruction in the 80 same.

I claim as my invention—

1. The combination, with the expansion-vessel and the cock having a horizontal screw-threaded socket, of the funnel having a bend and a horizontal screw-threaded connection 85 to the cock, whereby the funnel is allowed to hang down when partially unscrewed and held firmly by the friction when turned up for use, substantially as specified.

2. The combination, with the expansion- 90 vessel and the cock having a horizontal screw-threaded socket and the air-vent and plug with two passage-ways, of the funnel having a bend and a horizontal screw-threaded connection to the cock, whereby the funnel is al- 95 lowed to hang down when partially unscrewed and held firmly by the friction when turned up for use, substantially as specified.

Signed by me this 11th day of June, 1891.

W. C. BAKER.

Witnesses:

GEO. T. PINCKNEY,
WILLIAM G. MOTT.