

No. 720,237.

PATENTED FEB. 10, 1903.

C. GOLDSTUECKER.
GAS RESERVOIR FOR RAILWAY CARS.
APPLICATION FILED AUG. 12, 1902.

NO MODEL.

Fig. 2.

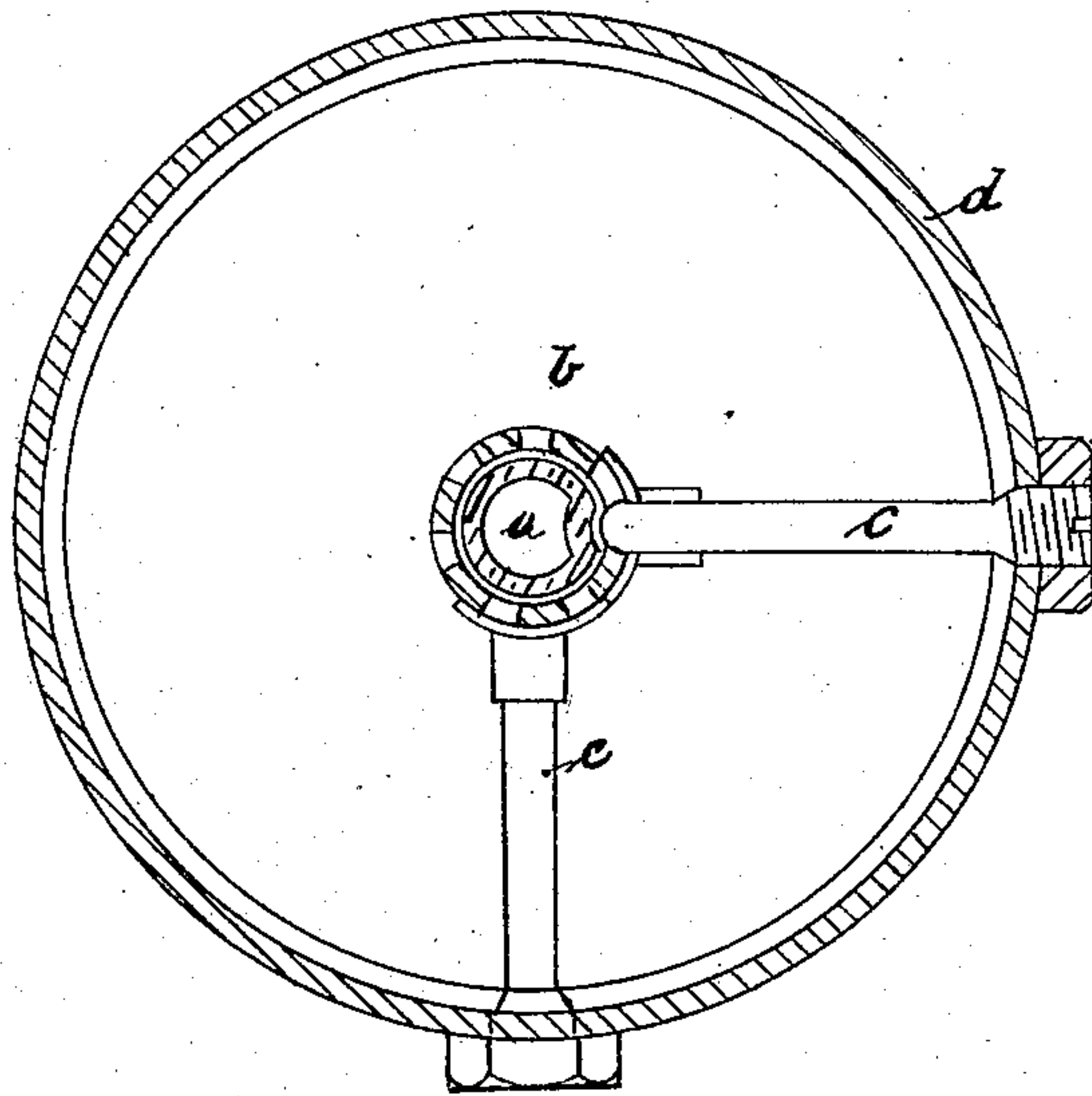
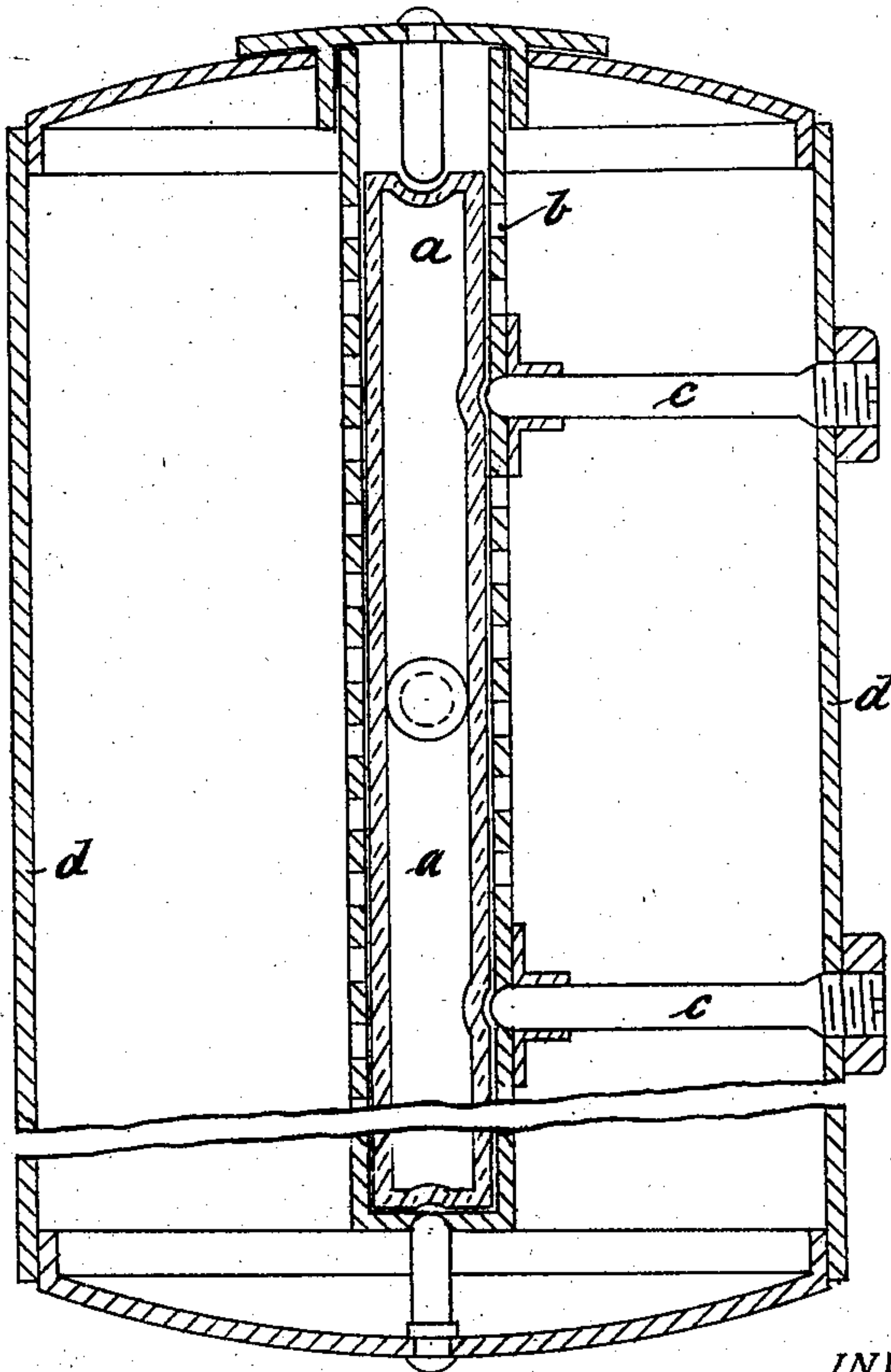


Fig. 1.



WITNESSES

H. R. Hoffman.
Geo. Steinmeyer

INVENTOR

Carl Goldstuecker
by G. Steiner

Attorney

UNITED STATES PATENT OFFICE.

CARL GOLDSTUECKER, OF CONSTANTINOPLE, TURKEY.

GAS-RESERVOIR FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 720,237, dated February 10, 1903.

Application filed August 12, 1902. Serial No. 119,409. (No model.)

To all whom it may concern:

Be it known that I, CARL GOLDSTUECKER, chief engineer of the oriental railways, a subject of the King of Prussia, Emperor of Germany, residing at Constantinople, in the Empire of Turkey, have invented certain new and useful Improvements in Gas-Reservoirs for Railway-Cars, of which the following is a specification.

10 The object of the present invention is a device by which the gas contained in the reservoirs of railway-cars is made non-combustible. For this purpose in each reservoir of the train another reservoir is arranged, consisting of
15 an easily-breakable material—as, for instance, glass—and which is filled with a volatile material—as, for instance, carbonic acid or nitrogen—being adapted to destroy the combustibility of the illuminating-gas contained
20 in the gas-reservoir. This material in its special reservoir is kept under a higher pressure than that contained in the ordinary or outer gas-reservoir, so that in case the former is destroyed a very energetic and rapid mixture of this body with the surrounding gas is
25 obtained. The destruction of the inner reservoir occurs before the gas-reservoir gets loose, so that an escape of still inflammable gas is impossible. The inner reservoir, which
30 may consist of glass, as already mentioned, is preferably of a cylindrical form and may be placed in another perforated metal cylinder, so that it remains stationary in the center of the gas-reservoir. This perforated cylinder is rigidly connected with one of the end
35 caps, preferably the one provided with a man-hole-opening. The destruction of the glass cylinder in the gas-reservoir (in order to set the volatile material free) may be effected by
40 bolts or stays arranged at different points of the wall of the gas-reservoir. The inner ends of these bolts are so placed that they are in the immediate neighborhood of the glass body. In case of a small deformation of the
45 gas-reservoir the inner reservoir is immediately destroyed by one or several of the bolts, the mixing of the two gases is effected, and the illuminating-gas is no longer combustible. This destruction must necessarily occur,
50 as the gas-reservoir during accidents is always destroyed by shock or by pressure from

outside. Should the gas-reservoir spring a leak, the gas mixture escapes and cannot burn.

The special arrangement of the inner reservoir within the outer gas-cylinder is immaterial if only care be taken that in case of accident the inner cylinder be destroyed without fail. 55

The accompanying drawings, forming part of this specification, show as an example an apparatus embodying my invention. 60

Figure 1 is a longitudinal section through the same, and Fig. 2 is a cross-section on line A B.

a is the inner receptacle or glass tube, inclosing under high pressure a body—as, for instance, liquefied carbonic acid. *b* is the perforated metal tube, surrounding the pipe *a*, being held in the center by the bolts *c* and being connected to one of the caps or heads of the ordinary gas-reservoir *d*. The glass pipe *a* may be provided with slight depressions in front of the end of each bolt *c*, as shown in the drawings, which contributes to give the tube *a* a steady position in the gas-reservoir *d*. 65 70 75

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

A gas-reservoir for railroad-cars comprising in its center a perforated metal tube extending longitudinally from one end plate of the reservoir to the other, and being steadied by bolts screwed through the outer wall of the reservoir and extending through the wall of said perforated tube, said tube surrounding an inner breakable receptacle for a substance adapted to destroy the inflammability of the contents of the gas-reservoir in being commingled therewith, the inner breakable receptacle having an outer diameter less than the inner diameter of the surrounding perforated metal tube and having its outer surface in contact with the steadying-bolts substantially as described and for the purpose set forth. 80 85 90 95

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CARL GOLDSTUECKER.

Witnesses:

T. O. MORTON,
CHAS. H. W. TUCKER.