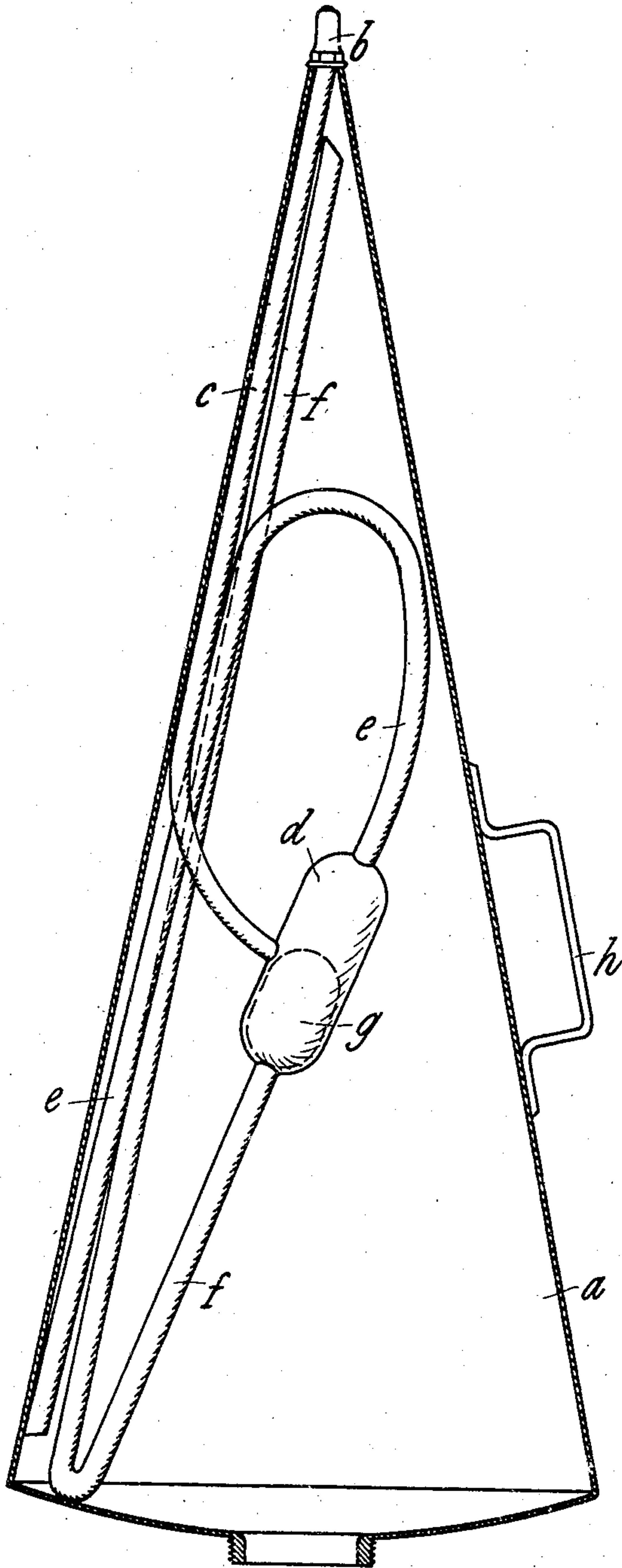


K. SCHMIDT.
GAS SYRINGE WITH BRANCHED OUT DISCHARGE PIPE.
APPLICATION FILED JAN. 26, 1907.

910,729.

Patented Jan. 26, 1909.



Witnesses:
Clemens Wegener.
Fritz Franke

Inventor:
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UNITED STATES PATENT OFFICE.

KARL SCHMIDT, OF NEURUPPIN, GERMANY, ASSIGNOR TO THE FIRM OF W. GRAAFF & COMPANY, GES. MIT BESCHR. HAFTUNG, OF BERLIN AND NEURUPPIN, GERMANY.

GAS-SYRINGE WITH BRANCHED-OUT DISCHARGE-PIPE.

No. 910,729.

Specification of Letters Patent.

Patented Jan. 26, 1909.

Application filed January 26, 1907. Serial No. 354,245.

To all whom it may concern:

Be it known that I, KARL SCHMIDT, a merchant, and a subject of the German Emperor, and a resident of 9 Knesbeckstrasse, in the city of Neuruppin, Province of Mark, Kingdom of Prussia, and German Empire, have invented a certain new and useful Gas-Syringe with Branched-Out Discharge-Pipe, of which the following is a specification.

This invention has reference to an arrangement in gas syringes, the sprinkling nozzle of which is connected to the container for the liquid by rigid connecting means, and by the operation of which the otherwise already known purpose, heretofore aimed to produce by the employment of other means, is accomplished of sprinkling both in an upward as well as in a downward direction and particularly vertically downwards by the operation of the gas syringe, until it is completely emptied, without any possibility of escape of the gases, which serve for the ejection of the extinguishing liquid.

The arrangement forming the subject matter of this invention resides in the fact, that the discharge pipe connected to the nozzle, is conducted to a valve chamber, from which two pipes extend. One of said pipes leads to the pointed end of the gas syringe and the other pipe leads to the bottom. According to the position of the gas syringe, whether the nozzle is directed upwards or downwards, one or the other of said pipes is closed automatically by the valve provided in the chamber, so that liquid can only be forced into the chamber through that pipe, the entrance opening of which occupies the lowest position.

The drawing shows the subject matter of the invention by way of example as an embodiment of the same.

In the interior of the conical container *a* of the fire extinguishing apparatus the discharge pipe *c* which opens out into the chamber *d* and which is connected to the nozzle *b*, is provided. This chamber is situated somewhat below the handle *h* of the apparatus and it is preferably of the shape of a cylinder with semi-spherical closing covers. To the chamber *d* the pipes *e* and *f* are connected. The pipe *e* is bent upon itself and leads to the bottom of the apparatus, while the pipe *f*,

which is likewise bent upon itself, leads to the top of the apparatus. In the chamber *d*, the valve *g* is arranged, which in the form of construction shown by way of example, is of cylindrical shape and is provided with semi-spherical ends. In the position of the valve body *g* represented in the drawing, only liquid from the pipe *e* which leads off from the bottom of the apparatus, can enter into the discharge pipe *c*. This position of the valve body corresponds to the position of the fire extinguisher with the nozzle situated above the horizontal. When the nozzle of the fire extinguisher is directed downwards, the valve body *g* drops down in the cylinder *d* by its own weight and closes the opening of the pipe *e* at its connecting point with the chamber, so that now only liquid through the pipe, *f*, which leads off from the top of the apparatus can enter into the chamber *d* and thence it is forced into the discharge pipe *c*.

It has been found to be of advantage to so arrange the axis of the chamber *d*, that it does not coincide with the longitudinal axis of the casing of the container, but to impart on the contrary an inclined position to the chamber, so that the closing body *g* does not uncover the point of opening-out of the pipe *f* into the chamber *d* at too early a moment. It has also been found to be advantageous, to have the pipes *e* and *f* project a few millimeters into the chamber *d* and to grind the valve body, so that it will fit unto the said projecting pipe ends, so as to be able to produce in an otherwise well known manner a reliable tightening in the terminal positions of the valve body, thereby preventing any escape of gases.

As will be evident from what has been said above, both the sprinkling in a downward direction as well as the sprinkling upwards is insured equally well by means of the arrangement of the valve body in the chamber, connected to the discharge pipe.

What I claim and desire to secure by Letters Patent of the United States is:—

1. The combination, in a fire extinguisher, of a liquid container, with a sprinkling nozzle, a discharge pipe, branch pipes, being in connection with the main discharge pipe and leading to the upper and to the lower parts of the liquid container respectively, and means for closing automatically the branch

2
pipe leading in each particular case into the gas space of the fire extinguisher, all substantially as set forth.

2 In a fire extinguisher, the combination
5 of a liquid container with a sprinkling nozzle rigidly connected therewith, a discharge pipe in connection with said nozzle, a chamber connected with the discharge pipe, U-shaped branch pipes being in connection with the
10 main discharge pipe by means of said cham-

ber, and a valve in this chamber closing automatically by gravity the mouth of one of the said U-shaped branch pipes.

In witness whereof I have hereunto signed my name this 14th day of January 1907 in 15 the presence of two subscribing witnesses.

KARL SCHMIDT.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.