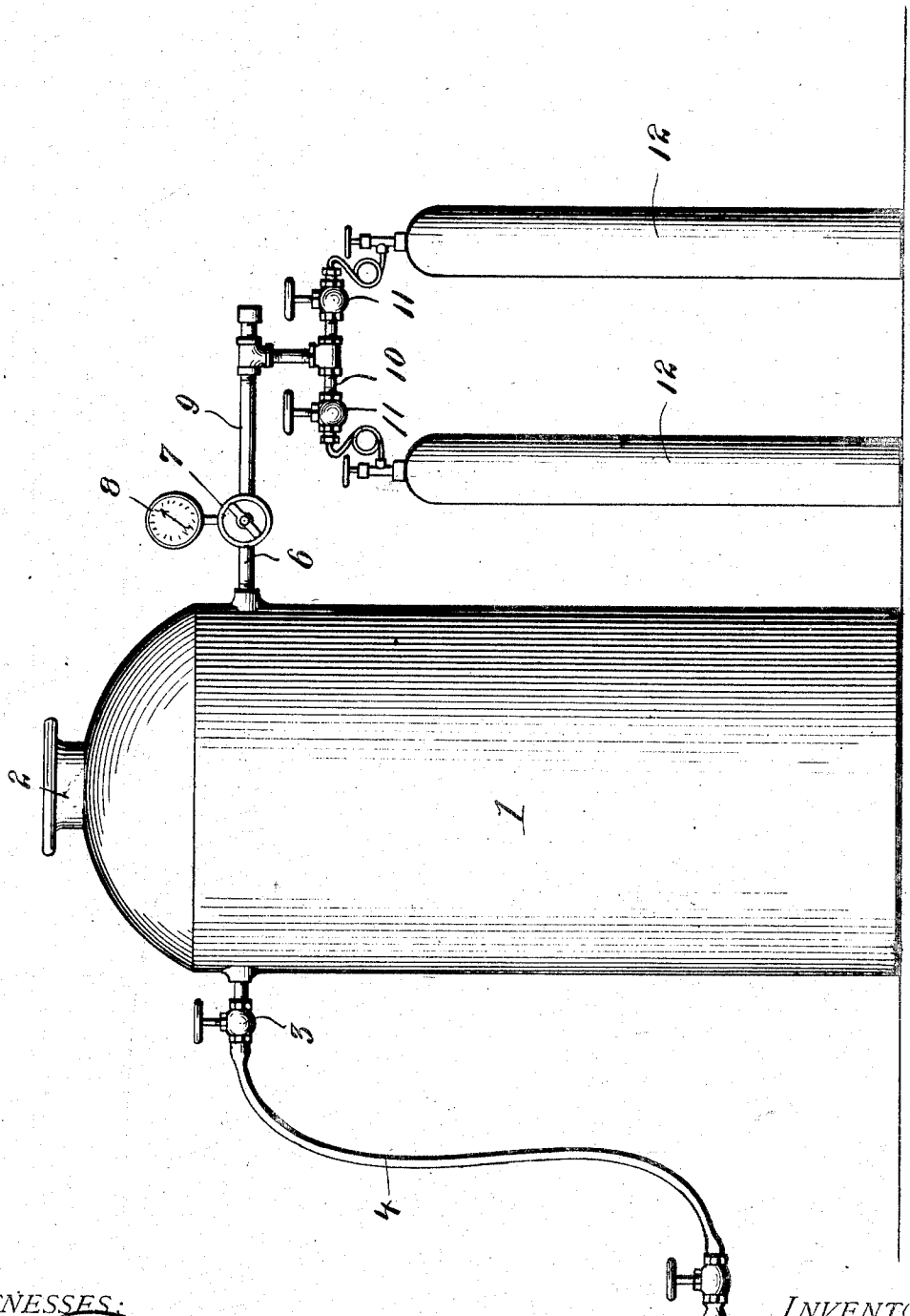
No. 866,109. PATENTED SEPT. 17, 1907.

C. BRENT.

DRY GAS FIRE EXTINGUISHER.

APPLICATION FILED DEC. 13, 1906.




WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES BRENT, OF BRANDON, MANITOBA, CANADA, ASSIGNOR TO EVER-READY FIRE EXTINGUISHER CO., OF BUFFALO, NEW YORK, A CORPORATION OF NEW JERSEY.

## DRY-GAS FIRE-EXTINGUISHER.

No. 866,109. Specification of Letters Patent. Patented Sept. 17, 1907.

Application filed December 13, 1906. Serial No. 347,700.

*To all whom it may concern:*

Be it known that I, CHARLES BRENT, residing at Brandon, in the Province of Manitoba, Dominion of Canada, have invented certain new and useful Improvements in Dry-Gas Fire-Extinguishers, of which the following is a specification.

It has been found in practice generally that the ordinary fire extinguisher does not meet all of the demands or is not capable of being used in many places on account of the peculiar location of the fire, or the peculiarity of the fire itself. An instance of this kind is best illustrated by an electrical switch board where it is disastrous to use liquid of any kind. It has been found however, that carbonic acid gas is very effective in extinguishing a fire of this sort, but heretofore the practical use of the gas has been rendered unavailable on account of the fact that the rapid expansion of the gas freezes the connections and prevents the flow of the gas just at the time when it is most needed.

It is the object of this invention therefore, to provide an apparatus wherein carbonic acid gas may be supplied in a continuous stream to a suitable hose or other delivery device in a manner such that the extinguisher may be used continuously so long as the supply of gas holds out.

More specifically the invention contemplates the use of a tank provided with a suitable delivery hose and nozzle and also with a suitable connection leading to a carbonic acid gas supply and arranging in such connection a reducing valve adapted to maintain a certain pressure in the tank while it is standing idle, and also during the time it is in use.

The invention may be further briefly summarized as consisting in a construction and combination of parts hereinafter set forth in the following description, drawings and claims.

Referring to the drawings, Figure 1 is a view showing my device in its preferred form.

Any preferred form and construction of parts may be employed in carrying out my invention, but I have shown one form in the drawings which meets the requirements very effectively and in such embodiment 1 represents an expansion tank, provided with a plug 2 at the top, and a valve 3 to which is connected a hose 4, provided with a nozzle 5 on the end thereof. This tank 1 is connected by a pipe 6, with a reducing valve 7, having a gage 8, and in turn connected by a pipe 9, with a coupling 10, having a pair of valves 11, arranged to control the flow of carbonic acid gas from suitable containers 12.

It will be seen from the foregoing description and from the construction of the parts that the valve 3 may be closed, and gas from the containers may be admitted to the tank at any pressure which is set by the valve 7, and indicated upon the gage 8. The apparatus is then ready for use.

Upon the breaking out of a fire the valve 3 is opened and the gas from the tank 1 is permitted to be discharged through the nozzle 5, as the gas in the tank 1 is discharged additional gas is supplied from the gas containers and at the pressure indicated upon the gage.

The tank 1 is necessary in the use of carbonic acid gas as a fire extinguishing medium for the reason that if the gas is not expanded it will freeze in the pipe and connections.

Having now described my invention, I claim:

1. In a dry gas fire extinguisher, in combination, a container for liquefied carbonic acid gas, an expansion tank adapted to receive expanded gas from said container, and delivery means in direct communication with said expansion tank whereby the expanded gas may be delivered directly upon the burning material.

2. In a dry gas fire extinguisher, in combination, a gas tainer for liquefied carbonic acid gas, an expansion tank communicating with said gas container, means for reducing the pressure of the gas as it enters said expansion tank, and a suitable delivery means in direct communication with said expansion tank for supplying the expanded gas for use upon a fire.

3. In a dry gas fire extinguisher, in combination, a gas container for liquefied carbonic acid gas, an expansion tank, connections between said gas container and said expansion tank, a reducing valve in said connections for reducing the pressure of the gas entering said expansion tank, and suitable delivery means connected directly to said expansion tank and adapted to supply the expanded gas for use upon a fire.

In testimony whereof I affix my signature in the presence of two witnesses.

CHARLES BRENT.

Witnesses:
G. H. DRAPER,
JOHN M. PROVOOST.

Correction in Letters Patent No. 866,109.

It is hereby certified that in Letters Patent No. 866,109, granted September 17, 1907, upon the application of Charles Brent, of Brandon, Manitoba, Canada, for an improvement in "Dry-Gas Fire-Extinguishers," an error appears in the printed specification requiring correction, as follows: In line 74 the word "tainer" should read *container;* and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 22d day of October, A. D., 1907.

[SEAL.]

C. C. BILLINGS,

*Acting Commissioner of Patents.*