G. J. WIEDMANN.

PRESSURE REDUCER.

APPLICATION FILED MAR. 25, 1911.

1,121,700.

Patented Dec. 22, 1914.

Fig. 1.

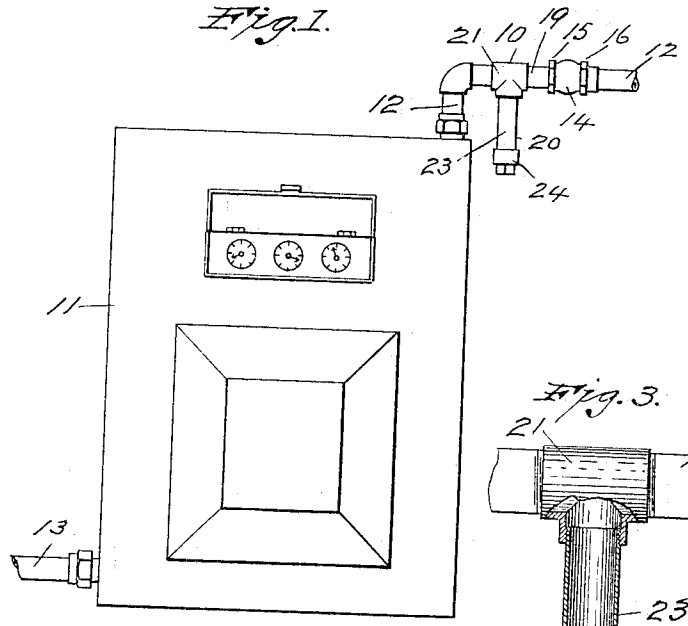


Fig. 3.

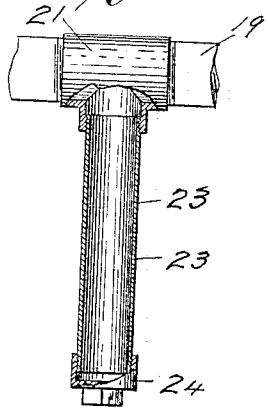


Fig. 2.

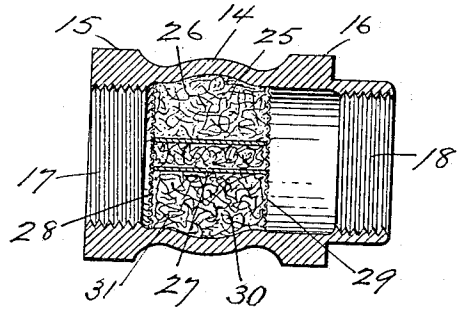
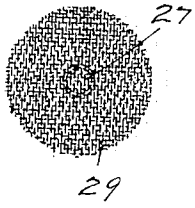


Fig. 4.



Witnesses:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C

UNITED STATES PATENT OFFICE.

GEORGE J. WIEDMANN, OF NEW YORK, N. Y.

PRESSURE-REDUCER.

1,121,700. Specification of Letters Patent. **Patented Dec. 22, 1914.**

Application filed March 25, 1911. Serial No. 616,857.

To all whom it may concern:

Be it known that I, GEORGE J. WIEDMANN, a citizen of the United States, and a resident of New York, borough of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Pressure-Reducers, of which the following is a full, clear, and exact specification.

This invention relates to a class of devices adapted for use more particularly in buildings to reduce the pressure of gas used for lighting and heating purposes.

My invention has for its object to provide a form of reducer or device designed to be employed more especially in conjunction with the meter in a building or other structure where gas is consumed for lighting or heating purposes, and which is adapted to effectually reduce the excess of pressure under which the gas is ordinarily forced through the supply pipes and through the meter without lessening a free and proper flow of the gas, thus permitting a great saving to be made by consumers thereof.

Another object of the invention is to provide a receiver into which may pass the excess of moisture or condensation from the gas prior to its passage through the receiver; and to further provide a pressure reducer of a simplified, inexpensive and durable form which may be readily applied to a meter or to the pipes leading from the source of gas supply.

A practical embodiment of the invention is represented in the accompanying drawing forming a part of this specification in which similar characters of reference indicate corresponding parts in all the views, the said invention being more fully described hereinafter and then pointed out in the appended claim.

In the drawing, Figure 1 is a front elevation of a gas meter with one form of pressure reducer embodying my invention applied thereto. Fig. 2 is a section through the casing of the pressure reducer, Fig. 3 is a section through the receiver of the pressure reducer, and Fig. 4 is a front view of one of the partition plates used in the casing.

The pressure reducer 10 may be applied in any suitable manner to a meter, as 11, which is of the usual or any preferred type adapted to register the consumption of gas for lighting or heating purposes in buildings or other structures, and said pressure reducer is preferably interposed in the outlet pipe, as 12, which is connected to the meter at a part thereof opposite to the inlet pipe, as 13, leading from the source of gas supply, though it is evident that my pressure reducer may be employed with equally the same efficiency if interposed in the supply pipe 13 instead of in the outlet pipe 12, as shown.

The pressure reducer 10 has a tubular casing 14 which may be plain or of an ornamental design, and upon the exterior of said casing may be provided one or more wrench seats 15 and 16. The opposite ends of the casing 14 are interiorly threaded, as at 17 and 18. In the threaded end 17 of the casing 14 is screwed one end of a pipe 19 having its other end connected to the outlet pipe 12 of the meter 11.

Interposed in the pipe 19 is a receiver 20 adapted to collect the excess of moisture from the gas or condensation therefrom when the gas is forced from the meter 11 through the outlet pipe 12. The receiver 20 is composed of the usual form of T-union 21 connected to the pipe 19, and to said T-union is connected one end of a pipe 23 having its opposite end closed by a cap 24. The receiver 20 is disposed in a depending direction with respect to the pipe 19 so that all excess of moisture or condensation from the gas passing through the pipe 19 will be deposited therein.

The central part of the interior of the tubular casing 14 may be enlarged by providing therein an annular recess, as 25, and in said annular recess is a filter 26. The filter 26 has a tube or rod 27 which is disposed between the open ends of the tubular casing 14, and upon the opposite ends of said tube or rod are partitions 28 and 29. Each of the partitions 28 and 29 is made of open mesh material, as shown, or may consist of a perforated plate, and both of said partitions are of a diameter to fit snugly between the wall of the annular casing so as to provide a chamber, as 30, within the tubular casing 14. In the chamber 30 and in the tube 27 between the partitions 28 and 29 is a packing of porous material, as 31, which may be cotton, fiber asbestos, or a similar substance adapted to permit the gas to pass therethrough at the same time serv-

ing to check the excess of pressure by which the gas is usually forced through the meter from the source of supply.

In the foregoing description I have embodied the preferred form of my invention, but I do not wish to be understood as limiting myself thereto, as I am aware that modifications may be made therein without departing from the principle or sacrificing any of the advantages of this invention, therefore I reserve to myself the right to make such changes as fairly fall within the scope thereof.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

In a pressure reducer of the character described, having a casing adapted to be removably interposed in a pipe, in combination with a packing holder adapted to be inserted removably in the casing, said packing holder, comprising a tubular member packed with fibrous material whereby the liquid may percolate through the interior portion of said tubular member, an end plate secured to each end of the tubular member and composed of intersticed or perforated metal, and packing of fibrous material disposed between the said end plates and around the central tubular portion, the same being held in position as though wound upon a spool whereby the pressure reducer may be removed intact from the casing and all portions thereof permeated by the fluid flowing through the pipe.

This specification signed and witnessed this twenty-fourth day of March A. D. 1911.

GEORGE J. WIEDMANN.

Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."