P. M. NEVIUS.

FLUSH VALVE SEAT FOR FLUSHING TANKS.

APPLICATION FILED APR. 13, 1908.

917,110. Patented Apr. 6, 1909.

Fig. 1

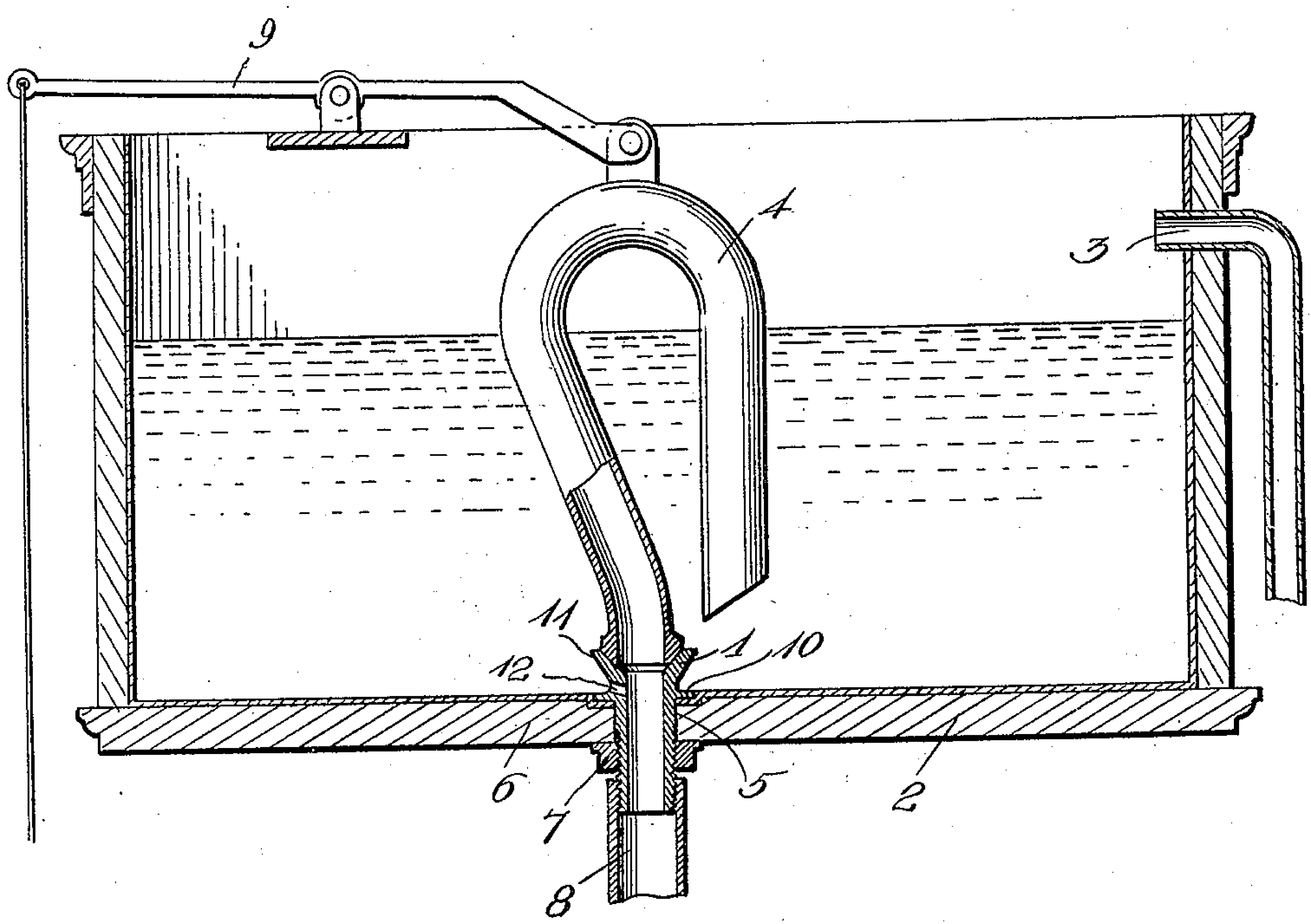
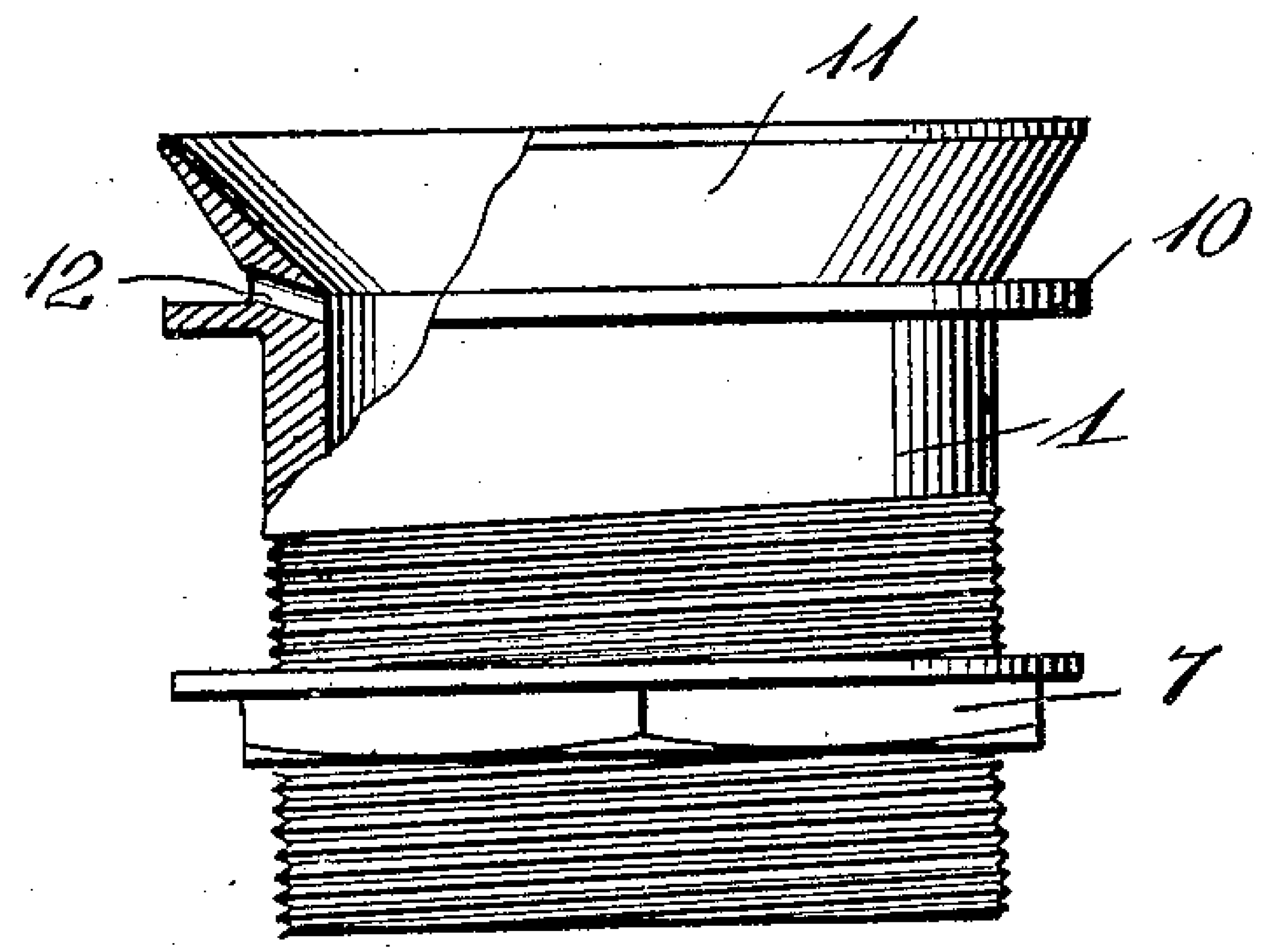


Fig. 2



Witnesses

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FLUSH-VALVE SEAT FOR FLUSHING-TANKS.

No. 917,110. Specification of Letters Patent. Patented April 6, 1909.

Application filed April 13, 1908. Serial No. 426,845.

To all whom it may concern:

Be it known that I, PETER M. NEVIUS, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Flush-Valve Seats for Flushing-Tanks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to flush valve seats and more particularly to a valve seat to be used in connection with the flushing tank shown in connection with the water supply and drainage apparatus described in my Patent, No. 851,100 issued April 23, 1907, whereby it is desirable that a valve be provided that will permit all of the water to be drained from the tank after each flush.

In the above mentioned drainage apparatus the flushing tank is emptied each time the apparatus is used and with the ordinary valve seat about one-half inch of water is always left in the tank after each operation.

It is to obviate this difficulty that I have provided the herein described invention which consists of a valve seat having an upstanding flange and a flange adapted to fit in close engagement with the bottom of the tank, said upstanding flange having drilled therein a hole, the lower side of said hole being substantially flush with the bottom of said tank While herein I have described this valve as particularly adapted to the apparatus described in the above mentioned patent, it is understood that I do not limit myself to this particular use but may use the same in connection with any tank wherein a valve seat is used.

For the above mentioned objects and uses and for other objects which will appear as the description proceeds, my invention consists of certain novel arrangements and combinations of parts of which the herein described valve seat is one of many possible embodiments.

While herein I have described minute details, I do not limit myself to these as the details of construction and arrangement may be greatly varied without departing from the spirit and scope of the invention.

In the annexed drawings forming a part of this specification, Figure 1 is a longitudinal sectional view showing my valve applied to the flushing tank described in the above mentioned patent, and, Fig. 2 is a side elevation of the valve seat.

Referring more particularly to the drawings which are for illustrative purposes only and therefore not drawn to any particular scale, my valve seat 1 is shown in connection with a tank 2 provided with an inlet opening 3 near the upper edge thereof, and a siphon valve 4 adapted to seat in the valve seat 1. The valve seat 1 is securely fastened to the opening 5 in the bottom 6 of the tank 1 and is held firmly in engagement therewith by means of a nut 7, and is provided with a discharge pipe 8 as is usual in devices of this kind.

The siphon valve 4 is provided with a pivoted lever 9 by which the same may be operated. The valve seat 1 is provided with a laterally extending flange 10 adapted to bear against the bottom 6 and an upwardly outwardly extending flange 11 adapted to receive upon its upper face the coöperating face of the siphon valve 4. Intermediate the flanges 10 and 11, I provide a small perforation 12 as low as possible against the flange 10 whereby the lower part of said perforation is as normally flush with the bottom 6 as it is possible to make it without having an opening midway of the bottom of the perforation. The valve 10 may be slightly sunk in the bottom 6 if desired. It will be seen that when the tank is emptied that without this perforation, there would be about one-half inch of water left in the bottom of the tank. This would be undesirable in a device of this kind which is designed to be used out of doors where tanks which remain full of water would become frozen up. With a valve provided with the perforation 12, the water which would otherwise remain in the bottom of the tank up to the top of the flange 11 is drained out and passed down the pipe 8. Another advantage of this device is that it permits flushing both before and after the device is used. This is particularly advantageous in either very cold or very warm weather. It is understood that this valve seat may be used in connection with any tank from which all of the water is to be drained. It is thought that the operation and advantages of my invention will be understood without further explanation.

Having thus described my invention, what I claim as new and desire to secure by U. S. Letters-Patent is:—

In combination with a water tank having

an opening in the bottom portion, a valve seat formed with a flared head, a laterally extending flange secured in the tank opening with the upper face of the flange held flush with the face of the tank bottom, such valve seat being formed with a downwardly inclined opening to drain the tank of water, the upper end of said opening being disposed above the flange, and the lower end of said opening being disposed on a plane below the bottom of the tank and continuously connecting said tank with the discharge pipe, means for securing the valve seat to the tank, a goose-neck valve having an enlarged head conforming to the shape of the valve seat, said valve being seatable on the valve-seat so that it will not obstruct the flow of water through the drainage opening, and means pivotally secured to the valve for holding the same in position over the valve-seat.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

PETER M. NEVIUS

Witnesses:
E. P. DEARBORN,
A. E. KOEPFLE.