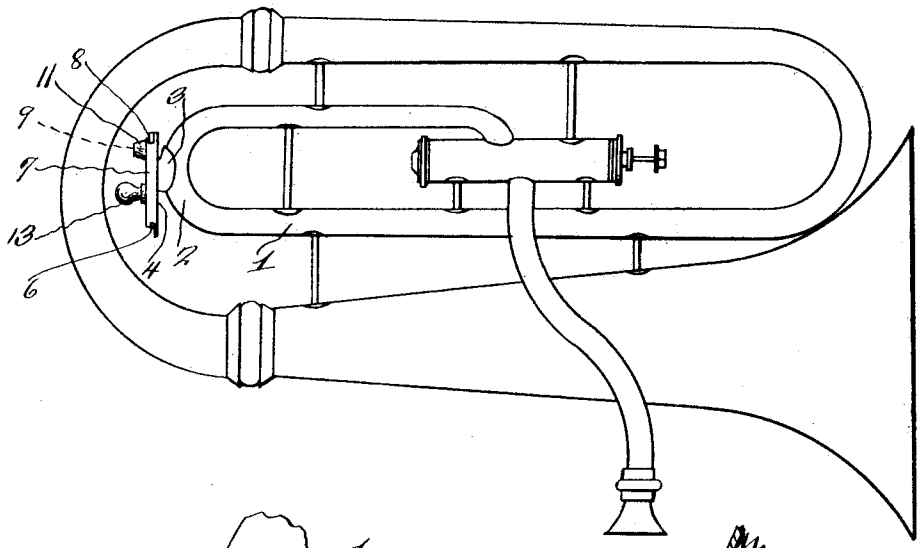
F. A. SNYDER.

SPIT VALVE FOR CORNETS.

APPLICATION FILED FEB. 16, 1914.

1,107,458. **Patented Aug. 18, 1914.**

Fig. 1.



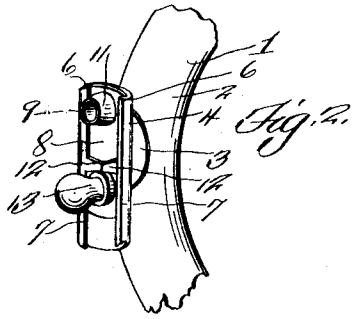


Fig. 2.

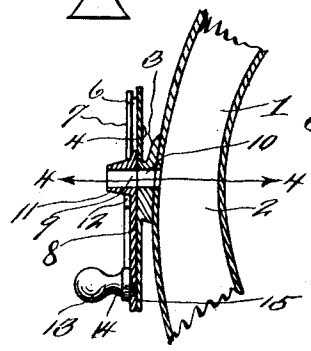


Fig. 3.

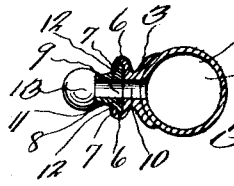


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

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SPIT-VALVE FOR CORNETS.

1,107,458. Specification of Letters Patent. Patented Aug. 18, 1914.

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To all whom it may concern:

Be it known that I, FRANK A. SNYDER, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Spit-Valve for Cornets; and I do hereby 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 the art of musical instruments, and particularly to brass and other wind instruments; and the object of the invention is to provide an improved spit valve or water key for use in connection with a cornet or the like.

Another object of the invention is to provide a water key of such a construction as to eliminate the use of forks and springs, which are commonly used in connection with water keys.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings and claimed.

In the drawings:—Figure 1 is a plan view of a cornet showing the improved water or spit valve as applied thereto. Fig. 2 is an enlarged detail view of a portion of the cornet showing the water key. Fig. 3 is a sectional view longitudinally through the water key. Fig. 4 is a transverse sectional view.

Referring more especially to the drawings, 1 designates a wind musical instrument, which may be a cornet, trombone or the like, and soldered or otherwise fastened to the curved portion 2 of the instrument is an arched plate 3, with which an elongated plate 4 forms an integral part. The side portions of the plate 4 are provided with longitudinal guides or grooves 6 formed in the flanges 7. Movable longitudinally in the guides is a valve plate 8 provided with an opening 9 to register with the opening 10 in the plate 4. This opening 9 has an adjacent thimble 11, and when the valve plate 8 is adjusted so that the opening 9 registers with the opening 10 of the plate 4, the water or spittle in the instrument will exit freely. Projecting from the flanges 7 substantially centrally between the ends of the plate 4 and arranged diametrically opposite are lugs 12, which constitute abutments to be engaged by the thimble of the valve plate, to limit the same in position, when the openings 9 and 10 register. A thumb or finger piece 13 is provided having a screw threaded lug 14 threaded into a small opening 15 of the valve plate. When the valve plate is adjusted so that the openings 9 and 10 are out of registration, the finger or thumb piece contacts with the lugs 12, thereby limiting the valve plate in such position. The plate 4 is constructed of brass or other suitable metal corresponding to the metal of the wind instrument, while the valve plate 8 is designed to be constructed of steel and machined so as to be perfectly even and smooth, so as to closely fit the guides or grooves and against the surface of the plate 4. As the valve plate is moved in one direction to register the openings 9 and 10, the thimble abuts against the lugs, and when moved in the opposite direction, throwing the openings 9 and 10 out of registration, the finger or thumb piece contacts with said lugs.

The invention having been set forth, what is claimed as new and useful is:—

1. In combination with a wind musical instrument having a water exit opening, a plate having guides secured to the instrument and provided with an opening registering with the opening of the instrument, a slide valve plate mounted in said guide and provided with a thimbled opening adapted to be thrown in and out of registration with the first opening, said valve plate having a thumb piece at its end opposite the thimbled opening, and means projecting from the guides between the thimble of the opening and the thumb piece, to limit the valve plate in its movement in either direction.

2. In combination with a musical wind instrument having a water exit opening and provided with diametrically opposite elongated guides, a pair of lugs extending from the guides toward one another and arranged diametrically opposite each other, a slide valve plate mounted in the guides provided with an opening at one end and an adjoining thimble, and with a thumb piece at the other end, the thimble adapted to contact with the

lugs to limit said valve plate when moved in one direction to cause said openings to register, whereas the thumb piece contacts with said lugs to limit the valve plate when moved in the opposite direction with the openings out of registration.

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

FRANK A. SNYDER.

Witnesses:
PETER O. HUNGER,
ALOYSIUS P. SNYDER.