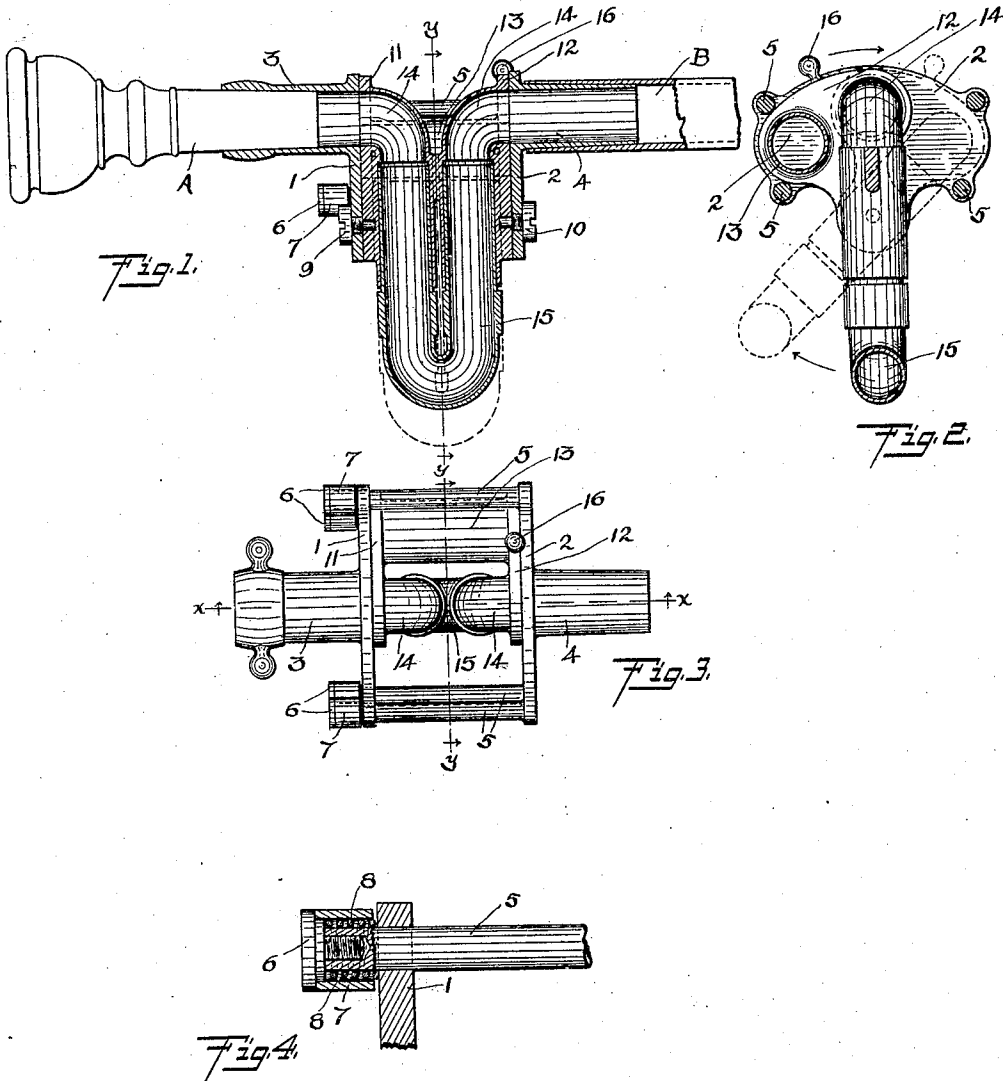


No. 847,340.

PATENTED MAR. 19, 1907.

M. B. KENDIS.
KEY CHANGING ATTACHMENT FOR CORNETS.
APPLICATION FILED DEC. 15, 1906.



Michael B. Kendis, Inventor.

Witnesses:

A. J. Lowry
D. S. Walker

By David O. Barnell

Attorney.

UNITED STATES PATENT OFFICE.

MICHAEL B. KENDIS, OF OMAHA, NEBRASKA.

KEY-CHANGING ATTACHMENT FOR CORNETS.

No. 847,340.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed December 15, 1906. Serial No. 348,070.

To all whom it may concern:

Be it known that I, MICHAEL B. KENDIS, a citizen of the United States, and a resident of Omaha, in the county of Douglas and State of Nebraska have invented certain new and useful Improvements in Key Changing Attachments for Cornets, of which the following is a specification.

My invention relates to musical instruments, more particularly to cornets or instruments of similar type; and it is the object thereof to provide a device, attachable to any cornet, by which the key thereof may be quickly changed by the musician without interruption of playing or even without removing the fingers from the valve-stops of the instrument.

A further object of my invention is to provide in a device of the class described means for automatically taking up wear of the engaging surfaces and maintaining at all times a perfect joint between the same.

A device embodying my invention is shown in the accompanying drawings, in which—

Figure 1 is a longitudinal section of the device, the section being on the line $x x$ of Fig. 3. Fig. 2 is a transverse section on the line $y y$ of Figs. 1 and 3. Fig. 3 is a plan view of the device; and Fig. 4 is a detail section of one of the spring take-up devices for maintaining uniform contact between and compensating wear of the engaging faces of the parallel plates to which the air-tubes are connected.

In the construction shown I provide the parallel plane-surfaced plates 1 and 2, on which are carried the tubes 3 and 4, the tube 3 being adapted for connection with an ordinary mouthpiece A and the tube 4 being adapted for connection with the main tube B of the instrument on which the device is used. On the plate 2 are the studs 5, which extend therefrom toward and pass through the plate 1. In the ends of said studs are placed screws 6, having enlarged shouldered heads, as shown in Fig. 4. Short tubular sections 7 are placed over the shoulders of the screw-heads, and said tubular sections 7 inclose small coil-springs 8, which bear against the plate 1, pressing the same toward the plate 2.

Pivotally held between the plates 1 and 2 by the pivot-screws 9 and 10 is a body comprising the parallel plane-surfaced plates 11 and 12, connected by the straight tube 13 and the bent tube, consisting of the elbowed por-

tions 14 and the U-shaped tuning-slide 15, of which the legs are slidable within the elbowed portions 14, as shown in Fig. 1. On the plate 12 is a small upwardly-extending knob 16 in a position easily reached by the thumb of the right hand of the player without removing the fingers of the hand from the valve-stops of the instrument. By means of said knob 16 the pivoted body may be tilted either to bring the short tube 13 into alinement with the tubes 3 and 4, as shown by the dotted lines in Fig. 2, or to bring the longer U-shaped tube into alinement with the tubes 3 and 4, as shown by the full lines in Figs. 1 to 3. The length of the air-column of the instrument is thus changed by the difference of length of the long and short tubes, this amount being variable by means of the tuning-slide 15. Thus the key of the instrument may be changed at will almost instantly by the player without interruption of playing.

The coil-springs 8 maintain a constant contact between the plates 1 and 11 and 2 and 12, respectively, so that air-tight joints are made between said plates and any wear thereof at once compensated.

It will be obvious that the device being of small size and neat design may be placed on an instrument without being unsightly and being of simple construction is comparatively inexpensive to make.

Now, having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a key-changing attachment for wind instruments, parallel plane-surfaced plates, tubes carried by each of said plates, one of said tubes being adapted for connection with a mouthpiece and the other being adapted for connection with the main tube of a wind instrument, a body movably held between said parallel plates, said body having parallel plane surfaces fitting against the said plates, there being passages of different lengths through said movable body between the parallel surfaces thereof, and means for bringing the outlets of either of said passages into alinement with the tubes carried by the parallel plates.

2. In a key-changing attachment for cornets, substantially parallel plates, means for yieldably pressing said plates toward each other, one of said plates having means for connecting the same with a mouthpiece and the other plate having means for connecting

the same with the main tube of a cornet, and
a body movably held between said plates,
said body having passages of different lengths
through the same, and said passages being
5 so arranged that by movement of the body
either of the passages may be made to form a
part of the connecting air-duct between the
parallel plates.

3. A key-changing attachment for cornets
10 comprising parallel plates having tubular
connections, the one adapted for connection
with the mouthpiece of the instrument and
the other adapted for connection with the
main tube thereof, and a body pivotally held

between said plates, there being a direct 15
passage through said body and an indirect
passage of variable length, said passages be-
ing so arranged that by tilting of the body on
its pivots either of the passages may be made
to form a part of the connection between 20
the parallel plates.

In testimony whereof I have hereunto sub-
scribed my name in the presence of two wit-
nesses.

MICHAEL B. KENDIS.

Witnesses:

D. O. BARNELL,
A. J. LOWRY.