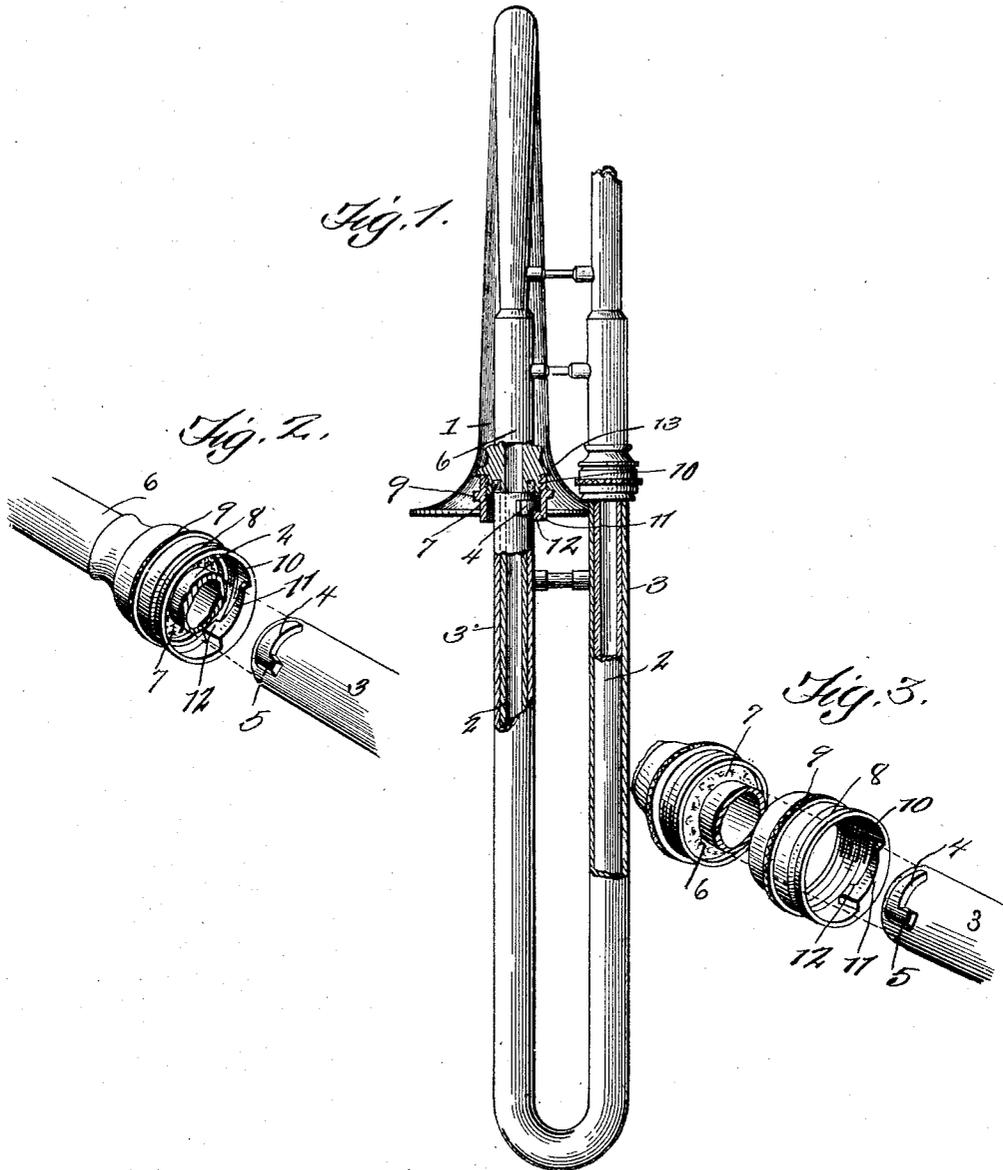


H. C. MARTIN.
 LOCKING DEVICE FOR TROMBONES.
 APPLICATION FILED JUNE 29, 1908. RENEWED OCT. 20, 1910.

977,026.

Patented Nov. 29, 1910.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY C. MARTIN, OF ELKHART, INDIANA.

LOCKING DEVICE FOR TROMBONES.

977,026.

Specification of Letters Patent. Patented Nov. 29, 1910.

Application filed June 29, 1908, Serial No. 440,847. Renewed October 20, 1910. Serial No. 588,186.

To all whom it may concern:

Be it known that I, HENRY C. MARTIN, a citizen of the United States, residing at Elkhart, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in Locking Devices for Trombones, of which the following is a specification.

This invention relates to certain new and useful improvements in locking devices for locking the inner and outer sliding members of a trombone and it has for its objects among others to provide a simple yet efficient lock for locking the outer slide or sliding member to the inner one when not in use, so as to guard against mishap, or bending or denting the outer slide in falling off, which very often occurs when not in use. When a slide falls or is dropped any distance it becomes sprung or gets damaged, dented or bent and this interferes with its proper working until repaired. By my improved construction such mishap can not take place. I dispense with all hooks or extraneous parts which are exposed. It is well known that in tuning a slide trombone the instrument is held in the left hand and as the tuning slide is in the upper bend of the bell portion of the instrument, the player must reach upward in the operation of tuning, often times catching his sleeve or cuff on the hook above referred to, either breaking off the hook or bending the same; this hook being only soldered on the ring will easily break off, or if it does not break it tears the clothing of the player. My lock is composed of parts which are hidden and absolutely invisible with no projections on which to catch the clothing or tear it or to be broken off by contact therewith.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings which, with the numerals of reference marked thereon, form a part of this specification and in which—

Figure 1 is an elevation, partly in section, and with portions broken away, of a trombone having my improved slide lock attached thereto. Fig. 2 is a perspective detail on an enlarged scale with a portion broken away showing the inner and outer slides separated. Fig. 3 is a similar view

showing the inner and outer slides and the parts of the lock separated but in their relative positions.

Like numerals of reference indicate corresponding parts throughout the several views. 60

Referring to the drawings 1 designates the bell, 2 the inner slide portions and 3 the outer slide portions. On one end of the outer slide 3 is a lug 4 having a shoulder or right angled portion 5, as seen clearly in Figs. 2 and 3. The adjacent end of the adjoining tubular portion 6 is provided with a cavity in which is seated a cushioning member 7 of cork or other analogous material against which the end of the outer slide 3 abuts when the parts are in closed position. 65

8 is a sleeve or ring having an annular roughened or milled portion 9. The interior wall of this sleeve is threaded, as seen at 10, the threads extending only part way of the length of the ring, as seen best in Fig. 3, and upon the adjacent inner wall of said ring is a lug 11 having a right angled portion or shoulder 12, as seen clearly in Fig. 3. This ring is screwed onto the adjacent end of the member 6, as seen at 13 in Fig. 1. The ring is then screwed up tight so that the inner end of the tube 3 bears against the cork ring or cushion on the inner slide and the lug is then soldered on to it in such a position that leaves it unlocked, and when the outer slide is pulled up tight against the cushion, by unscrewing the ring this lug engages over the lug 4 and thus the outer and inner slides are locked together against movement, as seen in Fig. 1. By turning the ring tight again the outer slide is unlocked and released but at the same time the ring tightens itself against the cork ring or cushion and thereby practically locks itself, acting the same as a jam nut so there is no rattle of the parts. It is to be noted that the parts of the lock are concealed, and hidden from view as well as being protected so as to prevent injury by being caught in the clothing of the player or of tearing the clothing. 85

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages. 100

What is claimed as new is:—

1. The inner and outer sliding tubes of a wind instrument, and a lock therefor com- 110

prising a rotatable member having a lug upon its inner wall, a cooperating lug interengaging therewith, the same, when not in use, being concealed from view at the end of one of said tubes and a yielding cushion against which the end of the outer slide abuts when the parts are in closed position.

2. The combination with the inner and outer sliding tubes of a wind instrument, of a lock therefor, comprising a rotatable member having a lug upon its inner wall, a cooperating lug on the outer wall of the outer tube, a cushion seated in a cavity embraced by said rotatable member, said cushion and the interengaging parts being concealed within said rotatable member when the instrument is not in use.

3. The combination with the inner and outer sliding tubes of a wind instrument, of a rotatable tubular member having an interior lug with shoulder and a cooperating lug on the outer slide tube receivable within the rotary member, and a cushion seated within a cavity in the end of the portion to which said rotatable member is secured and between which and the lug of the rotatable

member the lug on the outer slide tube is received.

4. The combination with a trombone, of a concealed lock for the inner and outer sliding tubes thereof comprising a rotatable tubular member having a lug within the same, the outer tube having a cooperating lug, and a cushion independent of but concealed within the rotatable member and against which the end of the outer tube engages.

5. The combination with the inner and outer tubes of a trombone the latter provided with an exterior lug having a right angled portion, a tubular member having a cavity in its adjacent end, a cushion seated in said cavity and against which the end of said tube abuts, a ring having interior threads and an interior lug having a right angled portion said ring being screwed on to the end of said tubular member.

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

HENRY C. MARTIN.

Witnesses:

OSCAR W. MYERS,
FREDRICK MARTIN.