

(No Model.)

C. G. CONN.  
WIND INSTRUMENT.

No. 378,771.

Patented Feb. 28, 1888.

FIG. I -

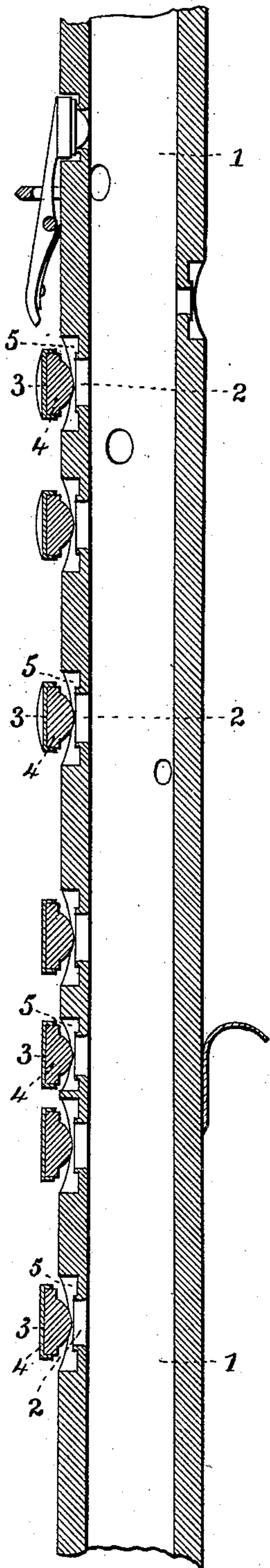
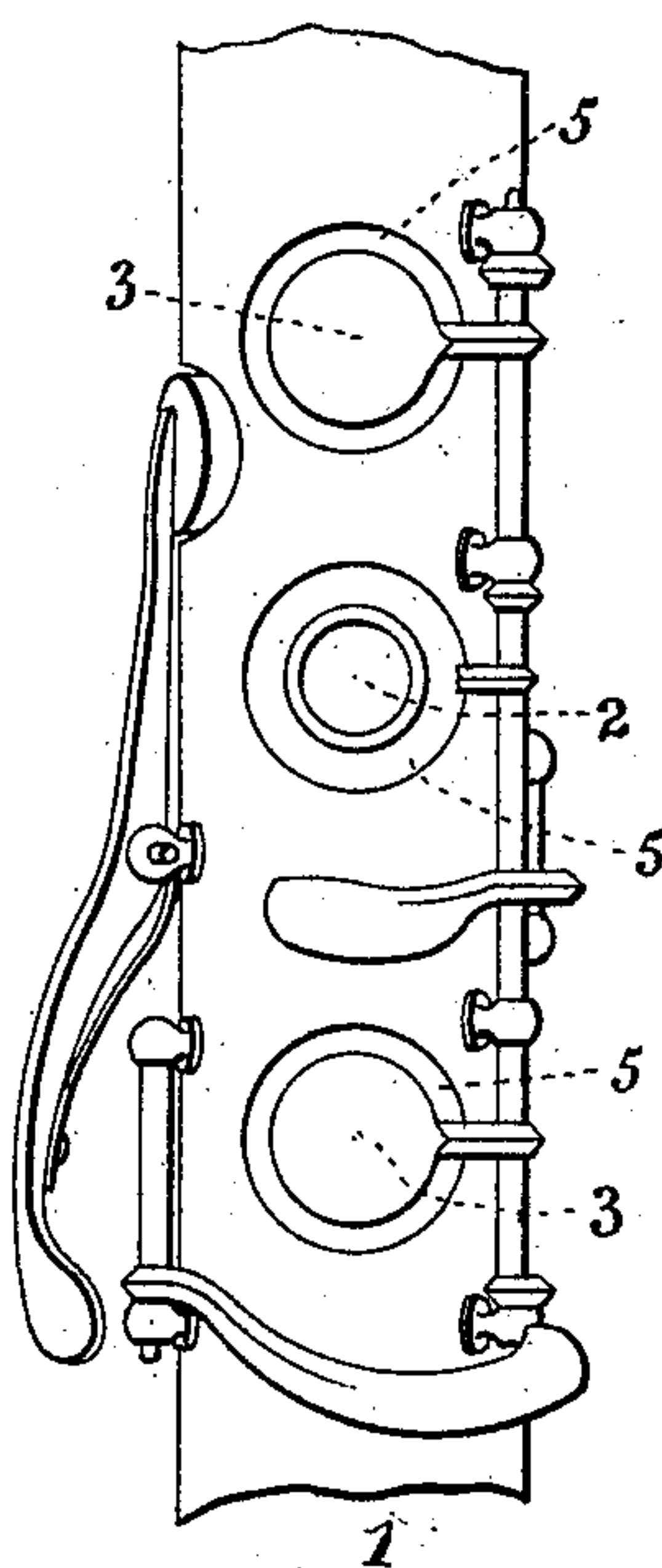


FIG. II -



Attest:  
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# UNITED STATES PATENT OFFICE.

CHARLES G. CONN, OF ELKHART, INDIANA.

## WIND-INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 378,771, dated February 28, 1888.

Application filed August 6, 1887. Serial No. 246,248. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES G. CONN, 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 Wind-Instruments, of which the following is a specification.

My invention relates to such wind-instruments—like flutes, oboes, clarionets, bassoons, &c.—as have a bore broken by holes covered by keys or finger-pieces usually padded.

In the old style of flutes and reed-instruments the holes which are covered with fingers or padded keys are so made that said fingers or keys rest on the outer surface of the instrument, thus creating, when one or more of the fingers or padded keys are covering the holes, one or more breaks in the continuity of the wind-passage equal to the thickness of the material of which the instrument is constructed, preventing to a corresponding extent the instantaneous egress of the wind forced into the instrument to produce the desired tone.

My improvement consists in countersinking the holes nearly to the level of the inside bore of the instrument, and thus, in connection with a slight protrusion of the pad on the fingers or keys, creating a smooth inside passage or bore, thereby utilizing all the wind injected into the instrument and enabling the performer to produce a more voluminous and freer tone with less wind and effort than is required by the use of an instrument constructed in the ordinary manner.

In the accompanying drawings I have exhibited my invention applied to a clarionet; but it will be understood that the principle of construction is equally applicable to all wind-instruments having similar holes and keys.

Figure I is an axial sectional view of a portion of a clarionet, exhibiting my invention. Fig. II is a side view of a portion of the instrument, having a key removed.

1 may represent the tube of a wind-instrument having holes 2, covered or adapted to be covered by finger-pieces or keys 3, padded, as shown at 4. The holes 2 are countersunk, as shown at 5, to enable the keys to pass below the outer surface of the tube, so that the pad of the keys projecting slightly into the holes will be practically on a level with the bore of the instrument, and thus, as above described, prevent any break in the continuity of the wind-passage.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. A wind-instrument having suitable keys and holes countersunk to receive said keys, substantially as set forth.

2. In a wind-instrument, the combination of the tube 1 with holes countersunk, as shown, and padded keys 3, arranged to enter said countersinks, substantially as set forth.

CHARLES G. CONN.

Witnesses:

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W. H. HOWENSTINE.