

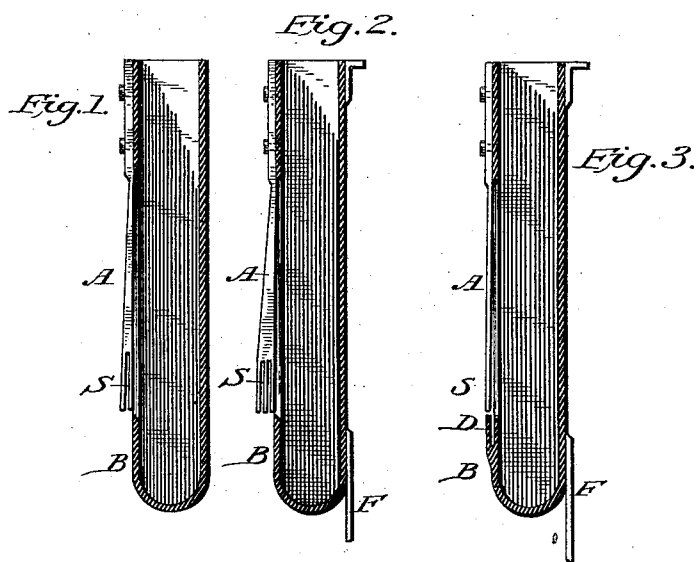
(No Model.)

H. JANES.

VIBRATOR FOR REED MUSICAL INSTRUMENTS.

No. 518,957.

Patented May 1, 1894.



Witnesses:

Francis P. Jones.  
E. H. M. B. L. H.

Inventor:

Henry Jones.

# UNITED STATES PATENT OFFICE.

HENRY JANES, OF WATERBURY, VERMONT.

## VIBRATOR FOR REED MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 518,957, dated May 1, 1894.

Application filed April 29, 1891. Serial No. 391,000. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY JANES, of Waterbury, in the county of Washington and State of Vermont, have invented a new and  
5 Improved Reed for Musical Instruments, of which the following is a specification.

The object of the invention is to produce tones more nearly resembling those of open flue pipes than has heretofore been done by  
10 single sets of reeds.

Reference is made to the accompanying drawings which form a part of this specification.

Figures 1, 2 and 3 are sectional side views  
15 of an ordinary reed and reed tubes showing the manner of slotting the vibrator and the reed block.

A, is the vibrator; B, reed block or reed tube; S, Figs. 1 and 2, slots in vibrator; D, Fig. 3,  
20 slot in reed block or tube at end of eschalot; F, lug which holds reed tube in position.

The gist of my invention consists in the generation of one or more harmonious overtones, in addition to the fundamental tone  
25 of the reed, by the partial release of the wind pressure, once or more, in the middle of each oscillation of the vibrator. For this purpose I notch, or slot, transversely, more or less deeply, once or more, the free end of the vibrator as shown at S, Figs. 1 and 2, the reed  
30 block at the corresponding end of the eschalot being brought to an edge so as to be considerably thinner than the width of the slot. This allows of a partial release of the wind  
35 pressure at the middle of each vibration and

so produces in addition to the fundamental tone of the vibrator, one or more higher octaves according to the number of slots. By this means a heavy reed is made to speak  
more quickly, the volume of tone is considerably augmented and approximates that of an open flue pipe; the open diapason quality being best produced by vibrators of rather large  
scale, deeply slotted, with the limbs kept flat at the ends. This quality is best brought out  
45 in the lower part of the register, with heavy vibrators having a large arc of vibration. In the high pitched reeds of the upper part of the register the vibrators being of course too  
thin for slotting, this partial release of the  
50 wind pressure is produced by making the slot or notch in the reed block, at the end of the eschalot corresponding to the free extremity  
of the vibrator, the vibrator being made thinner at its free end than the width of the notch,  
55 as shown at D, Fig. 3. If desired, the slot or notch may be made by soldering to the reed block or vibrator a properly shaped piece of metal.

I claim as new and wish to patent—

The vibrator slotted transversely at its free end, as shown and described, for the purpose  
60 of producing, in addition to the fundamental tone of the reed, overtones one or more octaves higher.

HENRY JANES.

Witnesses:

GEORGE W. KENNEDY,  
F. B. JANES.