M. C. MORGAN.

Organ-Reeds.

No. 139,912. Patented June 17, 1873.

Fig. 2.

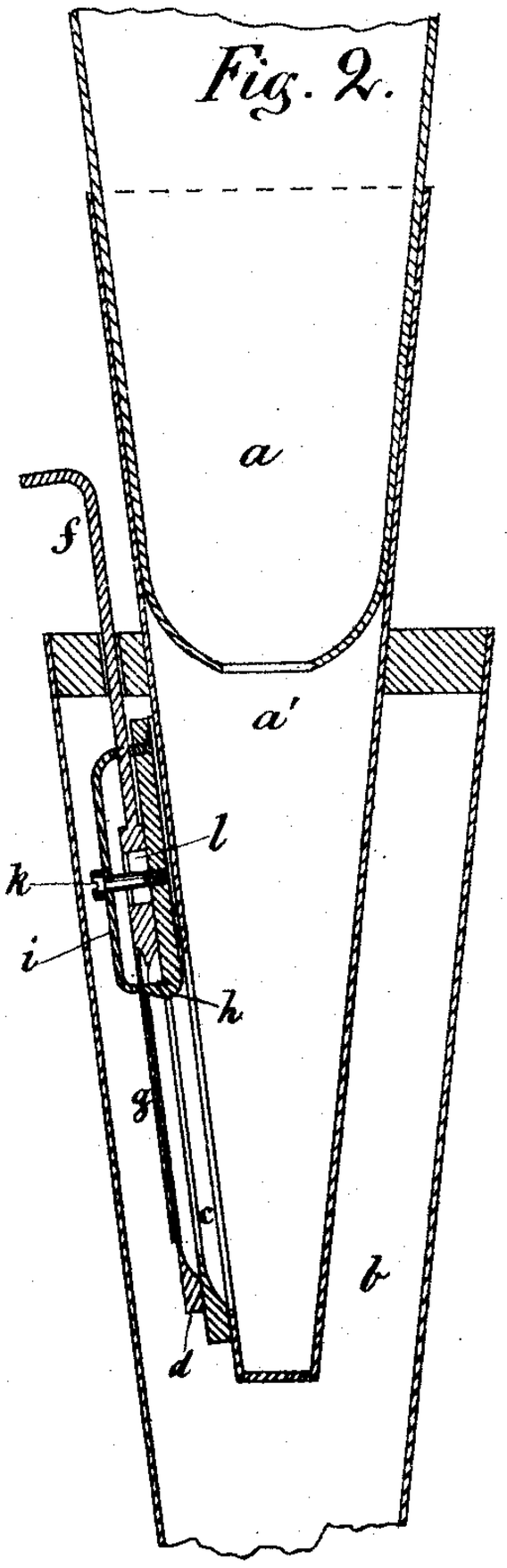


Fig. 1.

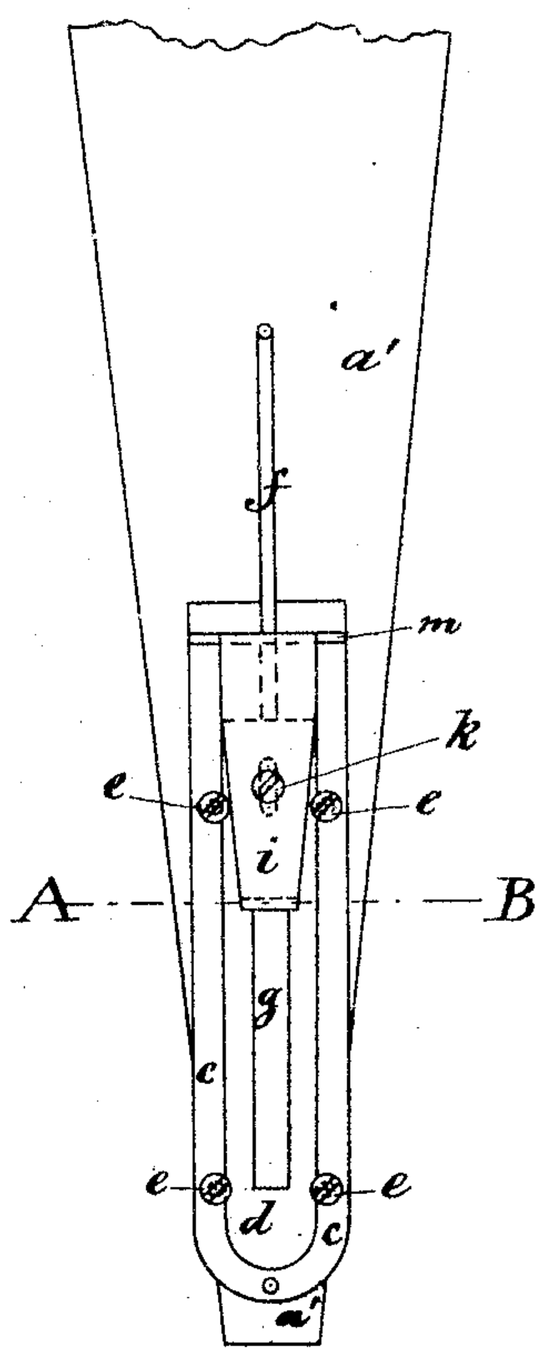
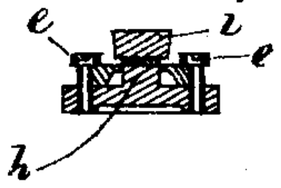


Fig. 3.



Witnesses:

John R. Heard.
C. A. Preston

Inventor:

Miles C. Morgan.
by Munn & Andrén. his attys.

UNITED STATES PATENT OFFICE.

MILES C. MORGAN, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN ORGAN-REEDS.

Specification forming part of Letters Patent No. **139,912**, dated June 17, 1873; application filed April 23, 1873.

To all whom it may concern:

Be it known that I, MILES C. MORGAN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Reeds for Organs; and I do hereby declare that 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 pertains to make and use it, reference being had to the accompanying drawings which form part of this specification.

My invention relates to improvements in free-reeds for organs and reed instruments, consisting in the employment of an additional plate over which the reed-block is made to slide. A clamp is secured to the additional plate, between which and a projection on the lower plate the reed is clamped firmly. By moving the reed-block between the said clamp and projection the reed is shortened or lengthened, whereby the reed is easily tuned without filing the reed, or by a movable clamp, as formerly done, as will now be more fully shown and described.

On the drawing, Figure 1 represents a front elevation of my improvement. Fig. 2 represents a central longitudinal section of Fig. 1, and Fig. 3 represents a cross-section on the line A B, shown in Fig. 1.

Similar letters refer to similar parts wherever they occur in the drawings.

a represents an ordinary organ-pipe, and *a'* is the "boot" into which the organ-pipe *a* is inserted. *b* represents the foot in the usual manner. *c* is the additional plate that may be attached to the organ-pipe *a*, or to the boot *a'*, by means of screws or solder, thus dispensing with the wooden echelott that was formerly used. The reed-block *d* is made to slide over the plate *c*, and is guided between the screws *e e e e*, or their equivalents, as shown in Fig. 1. The reed-block *d* is operated by means of a suitable rod, *f*, attached to the said reed-block, as shown in Fig. 2. *g* is the reed that is clamped and held firmly in its upper end between a projecting lip, *h*, made in one piece, with the plate *c*, as shown, and the lower end of a clamp, *i*, that is pressed against the reed by means of the screw *k* going through a slot-hole, *l*, in the reed-block *d*, and screwed in the additional plate *c*, as fully shown in Fig. 2. The upper end of the clamp *i* rests in a groove, *m*, made in the plate *c*, as shown.

From the above it will be seen that the free-reed *g* is clamped firmly between the lower end of the clamp *i* and the projecting lip *h*, made in one piece with the metallic plate *c*, and consequently no vibration of the reed *g* takes place above the place where it is clamped. The reed can therefore be tuned easily simply by sliding the reed and reed-block *d* up or down, according to the desired pitch required. I shorten the vibrating part of the reed *g* by moving the reed-block *d* upwards, whereby the pitch is raised, and I lengthen the vibrating part of the reed by moving the reed-block *d* downwards, whereby the pitch is lowered, according to the height or depth of tone required. The reed can thus be tuned at any time simply by moving the handle or rod *f* up or down, without removing the reed and block from the organ-pipe or reed-board.

All the parts of my invention are made of metal, and therefore not liable to get out of order.

This my invention is intended for what is called free-reeds—that is, reeds that are allowed to vibrate freely through the opening in the reed-block.

It is apparent to every one accustomed to tuning organ-reeds in the ordinary manner, by filing the reed that this my invention is very simple and efficient, and that a great deal of labor is saved in tuning the reeds of organs and reed-instruments, having my improvement, instead of the ordinary reeds now used.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent and claim—

In combination with the plate *c*, having a projecting lip, *h*, attached thereto, the stationary clamp *i*, screw *k*, or its equivalent, and the movable reed-block *d*, for the purpose as herein shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 14th day of April, 1873.

MILES C. MORGAN.

Witnesses:

ALBAN ANDRÉN,

GEORGE S. HUTCHINGS.