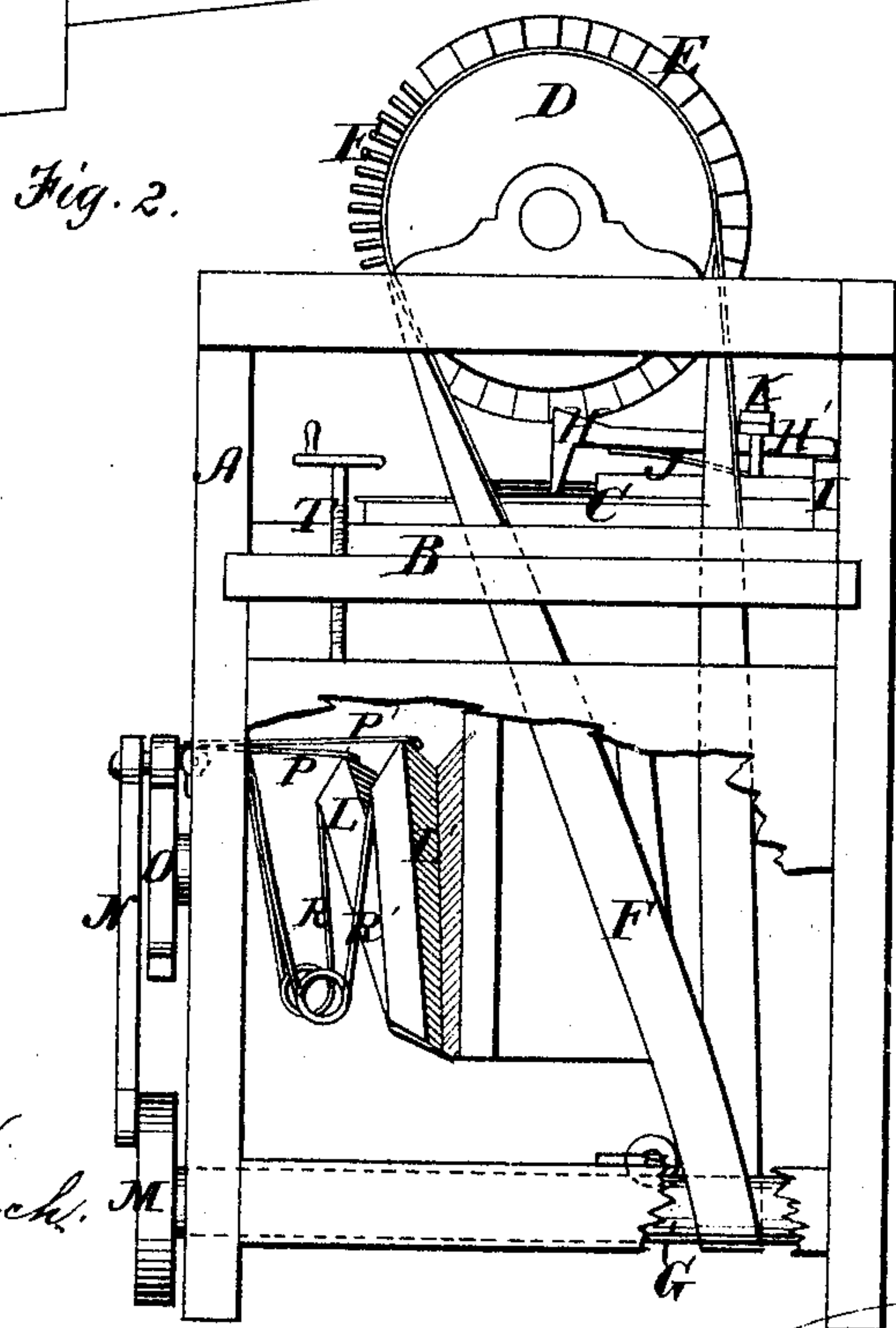
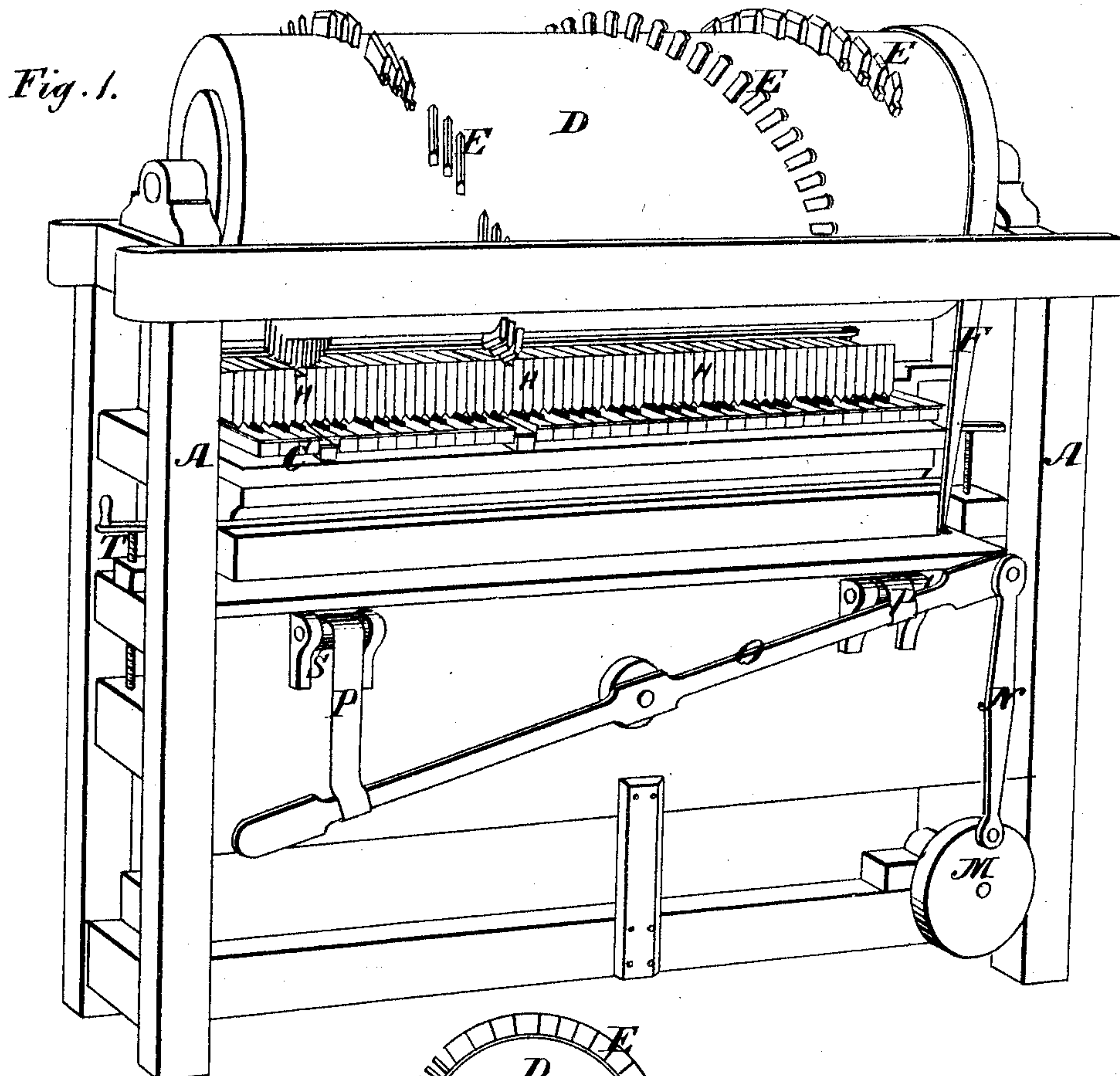


**J. R. PERRY.**  
**Organ-Reed Testing Apparatus.**

No. 150,429.

Patented May 5, 1874.



*Witnesses.*  
*C. F. Brown.*  
*Melville Church.*

*Inventor.*  
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*Hill & Blount.*

# UNITED STATES PATENT OFFICE.

JOSEPH R. PERRY, OF WILKESBARRE, PENNSYLVANIA.

## IMPROVEMENT IN ORGAN-REED-TESTING APPARATUS.

Specification forming part of Letters Patent No. **150,429**, dated May 5, 1874; application filed August 8, 1873.

*To all whom it may concern:*

Be it known that I, JOSEPH R. PERRY, of Wilkesbarre, in the county of Luzerne and State of Pennsylvania, have invented a new and Improved Apparatus for Toning and Testing Reed-Organs; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 a side elevation.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention has for its object to provide for the public an effectual means for toning and testing reed-organs after the reeds have been filed and voiced; and it consists of a frame adapted to receive the key-board and action of a reed-organ, and provided with a double-acting bellows for blowing the said reeds, and a rotary drum armed with suitable projections for operating the keys through an intermediate set of permanent pressure-keys, said bellows and cylinder being driven by any suitable power, and acting on the organ in such manner as to play the same for any desired length of time, and thereby thoroughly test and tone each reed, as I will now proceed to describe.

In the drawings, A represents a frame composed of four uprights suitably connected, and provided with a horizontal shelf, B, adapted to receive the action C of a reed-organ. On the top of the frame A is journaled a longitudinal cylinder, D, provided with projections or pins E, arranged spirally or in any desired manner, on its periphery. The cylinder D is connected by a belt, F, with a transverse shaft, G, located in the lower portion of the frame A near one end. H H, &c., represent a series of pressure-keys, corresponding in number to those of the organ, and located in line under the cylinder D. Said keys are jointed at their rear ends to a series of rigid tongues, H', attached to a strip, I, and are

provided on their lower sides with springs J, which hold them up against a padded longitudinal bar, K. The pressure-keys H are so located that each of them is depressed by the pins E at every revolution of the cylinder D, and when the organ-action is placed in position its keys correspond with and are operated by the pressure-keys H. L L' represent double-acting bellows, such as are in common use in cabinet-organs, located below the shelf B, and operated by the crank or disk M of the shaft G, said crank being connected by a pitman, N, with the oscillating lever O, pivoted to the front side of the frame A, and having its ends connected to the bellows L L' by bands or straps P P'. At every oscillation of the lever the straps P P' alternately distend and release the bellows L L', the latter being compressed by springs R R' when released by the alternate slackening of the straps as the ends of the lever O rise. The straps P P' pass over friction-rollers S, journaled on the front of the frame A.

From the foregoing description, it will be seen that when a reed-set is placed in the shelf B, it is directly over the bellows L L', which draws the wind through the reed-set when power is applied to the shaft G, the same power turning the cylinder D by means of the belt F, and operating the keys of the organ through the permanent set of pressure-keys H, thus blowing the reeds serially as long as may be desired.

By placing an action or reed-set on this machine, and running it for the space of several hours, the reeds are caused to vibrate more than they would in the ordinary use of an organ for twelve months. The constant vibration will thus so permanently fix and set the metal that, when the action is removed from the apparatus, I find on adjusting the pitch that it remains permanently in tune, and that the reeds are thoroughly cleaned, every particle of dust having been removed.

Should a bad reed be overlooked in tuning, when this apparatus is brought to bear on it



it is sure to break; hence cracked or flawed reeds cannot escape the attention of the maker.

The pins or projections on the cylinder are of various kinds, regularly or irregularly placed in rows, so as to produce various kinds of tones as the pins and slides move over the keys.

The shelf B is adjustable by means of screws T, so as to bring the organ-action into proper relation to the pressure-keys H.

Having thus described my invention, I claim as new—

1. The frame A, provided with the toothed cylinder D, and adapted to receive and hold an organ-action or reed-set in such position

under said cylinder that the pins of the latter will operate serially on the keys of the action or reed-set, substantially as and for the purpose specified.

2. The combination of the cylinder D, bolted to the shaft G, and having pins E, spring pressure-keys H, adjustable shelf B, bellows L L', and means for operating the same, substantially as described, for the purpose specified.

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Witnesses:

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