J. Cordley.

Parlor Organ.

No. 110,900. Patented Jan. 10. 1871.

Fig. 1.

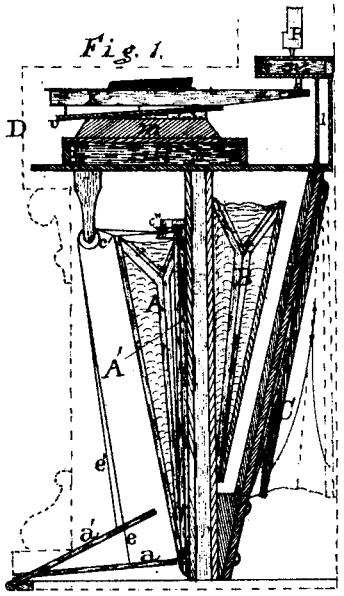


Fig. 2.

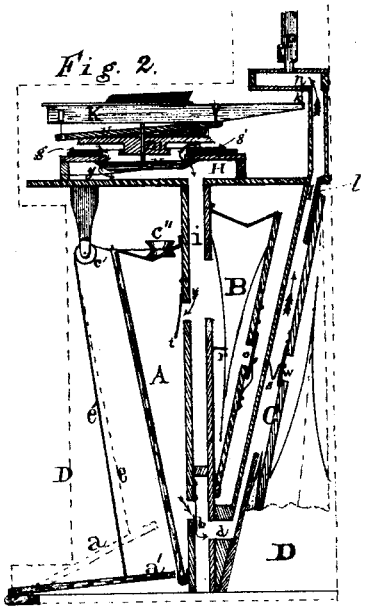
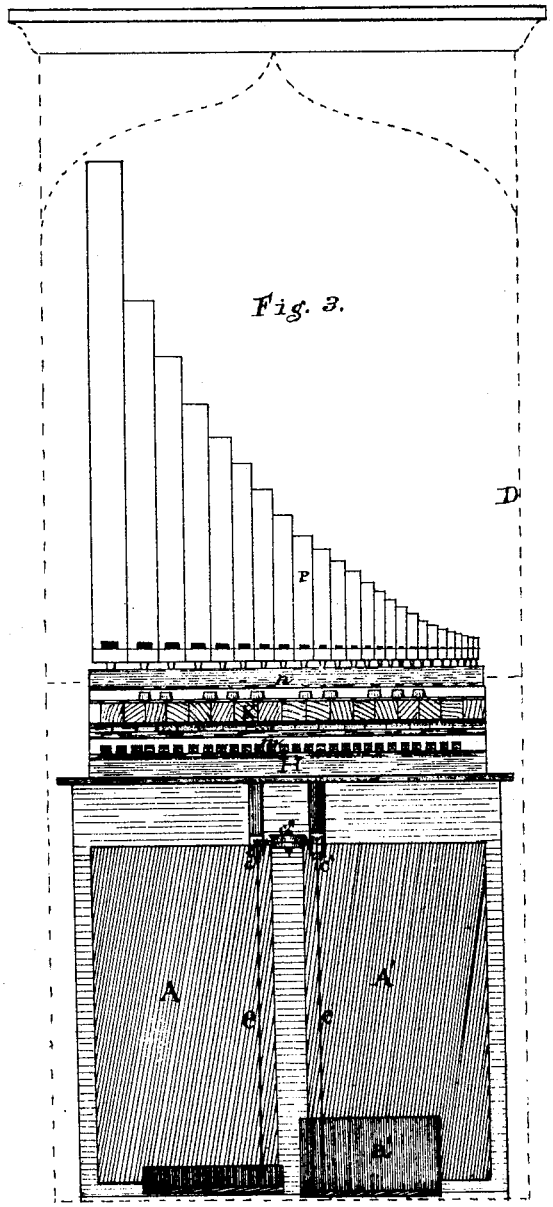


Fig. 3.



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JAMES CORDLEY, OF ADRIAN, MICHIGAN.

IMPROVEMENT IN PARLOR-ORGANS.

Specification forming part of Letters Patent No. **110,900**, dated January 10, 1871.

To all whom it may concern:

Be it known that I, JAMES CORDLEY, of the city of Adrian, in the county of Lenawee and State of Michigan, have invented certain Improvements in Parlor-Organs, of which the following is a specification.

My invention relates primarily to a simple and practical parlor-organ of the combined reed and pipe type.

The first part of my invention consists in a peculiar construction and relative arrangement of the several bellows of such an organ and their connections.

The second part of my invention consists in a peculiar combination of devices for operating a pair of vertical pumping-bellows without the aid of springs or weights by the alternate depression of two pedals.

In the accompanying drawings, Figure 1 is an end elevation of a combined reed and pipe parlor-organ embodying my invention. Fig. 2 is a vertical section of the same, cutting the cord *e'* in Fig. 1. Fig. 3 is a front elevation, showing the keys K and pipes P.

D is the inclosing case of the instrument.

A and A′ represent the two front blow-bellows.

B is the exhaust-regulation bellows.

C is the additional wind-regulation bellows for blowing the pipes.

H is the reed wind-chest, and *i* a wind-conductor from the reed wind-chest H to the bellows B.

l is a similar conductor from the bellows C to the pipe wind-chest *n*.

k is the valve-pin to operate the valve in the wind-chest *n*, which valve is not represented in the drawings.

v is the reed-valve, held over the opening in the ceiling of the wind-chest H by the spring *y*.

The pedals *a* and *a'* are made to operate the front blow-bellows, A and A′, by means of the cord *e*, attached to the depressed pedal *a* and passing up over the pulley *c*, and off horizontally, is made fast to the upper corner of the bellows A, then around the horizontal pulley *c''*, then fastened to bellows A′, then outward to and over the pulley *c'*, and thence downward and secured to the now elevated pedal *a'*, so that as one of the pedals is borne down the other is drawn up by the cord *e'*, and vice versa, thus dispensing with the spring commonly used for the purpose of throwing the pedals up. Nothing is claimed to be new about these pedals themselves; nor about the keys K or key-frame U, reeds *g* or *g'*, reed-board *m*, bellows A, A′, and B, and therefore I deem any further description of their construction unnecessary.

The valve *w* of the supplementary wind-regulation bellows C is a flat valve hung at the upper edge over the opening and connected to the back of the said bellows C by means of the string *s*, the object of the string being to draw the valve open when the said bellows C is sufficiently inflated.

The valve *o* of the main wind-regulation bellows B is similar in form and hung the same, having a small spring to hold it shut, and a pin, *r*, to push it open when the wind is exhausted.

Operation: As the pedal *a'* is pressed down the bellows A′ is drawn open by the cord *e'* and inflated with air drawn from the bellows B through the valve *t* until the valve *v* is thrown open by the keys, when the air rushes in through the reeds, causing them to speak, and filling the exhausting-bellows B. As the other pedal, *a*, is pressed down and the bellows A drawn open, the former bellows, A′, is drawn shut by the cord *e*, closing the valve *t* and forcing the wind down through the valve *b* and channel *d* into the bellows C, causing it to be inflated until the string *s* draws the valve *w* open, the wind in the meantime passing up through the channel *l* into the pipe wind-chest *n*, causing the pipes and reeds to speak, each bellows contributing alternately to this object.

In place of the pedals, the ordinary hand-lever may be used, if desirable.

I have also contemplated locating the additional bellows C horizontally in the space D below where it now is, and placing the pipes all in the case below the keys.

I am aware that a pair of horizontal exhausting-bellows in a French organ have been so connected that the depression of one pedal to open its bellows closes the other bellows and raises the pedal thereof. I do not therefore claim broadly so connecting the pedals of a two-bellows organ that the depression of one pedal elevates the other, but limit myself to my specific devices for applying said function to a two-pedal vertical bellows-organ.

I claim as my invention—

1. In the described organ, the pumping-bellows A A′, reed bellows or regulators B, and pipe bellows or regulators C, wind-stocks *i d l*, reed wind-chest H, and pipe wind-chest *n* with valves *t b o w*, constructed and arranged as shown and set forth, for the purpose specified.

2. The combination, with the vertical pumping-bellows A A′, of the pedals *a a′*, connected cords *e e′*, vertical pulleys *c c′*, and horizontal pulley *c″* for operating the said bellows without the aid of springs.

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