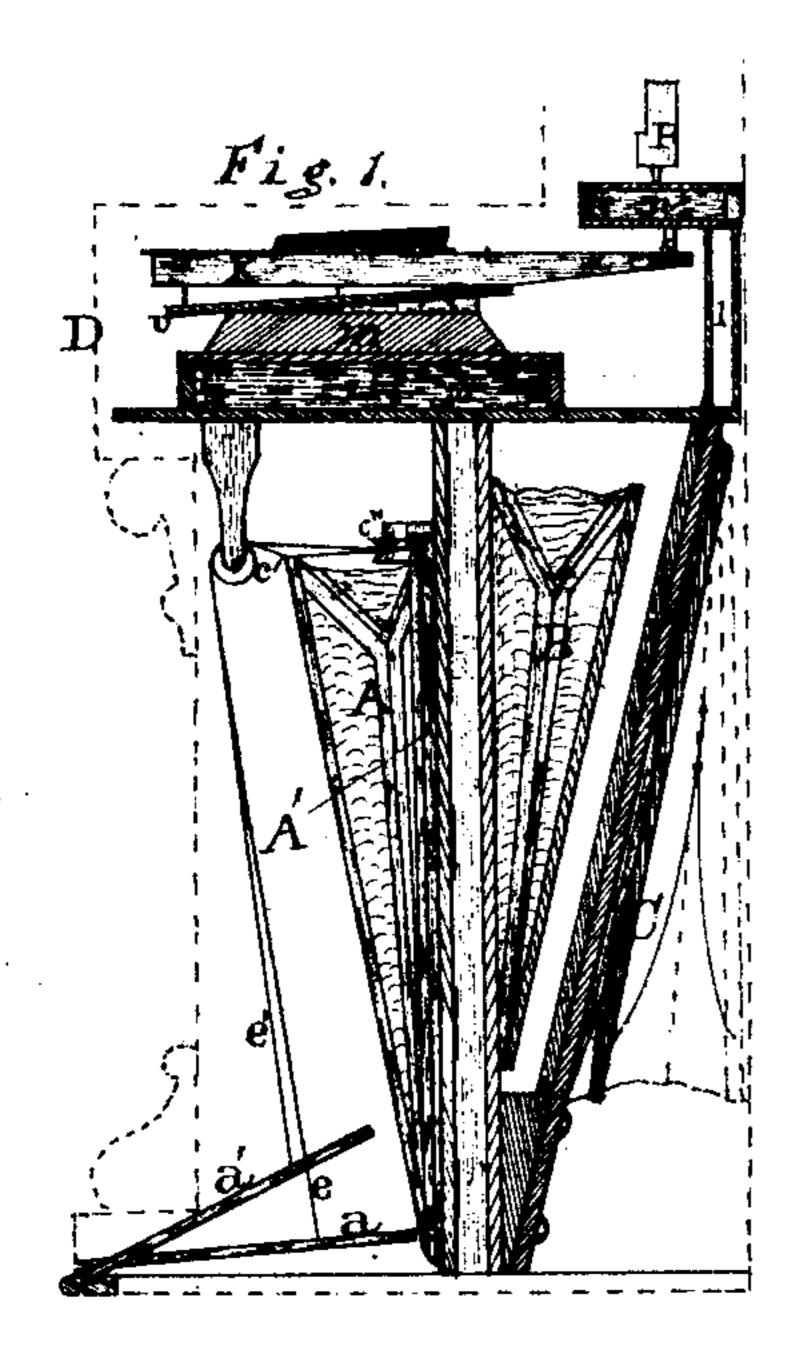
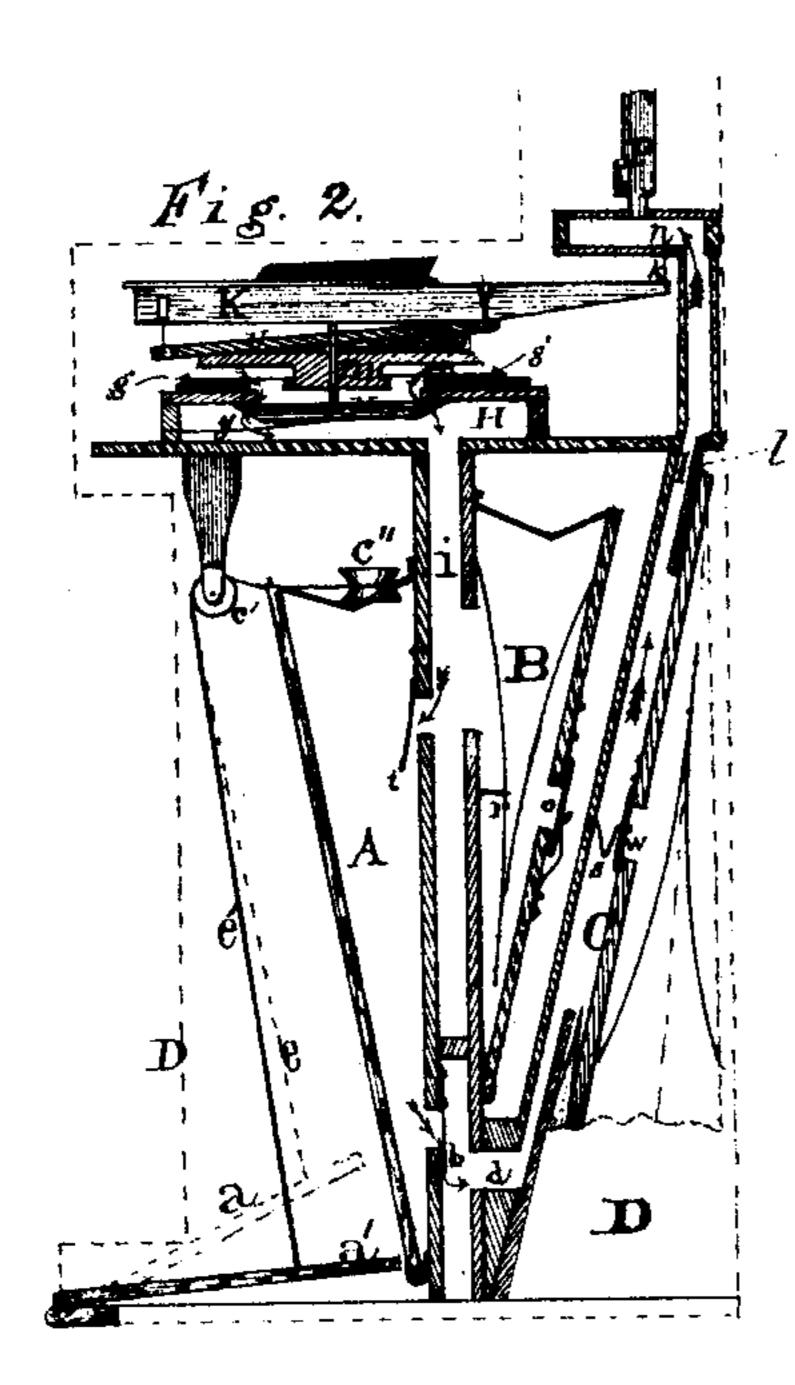
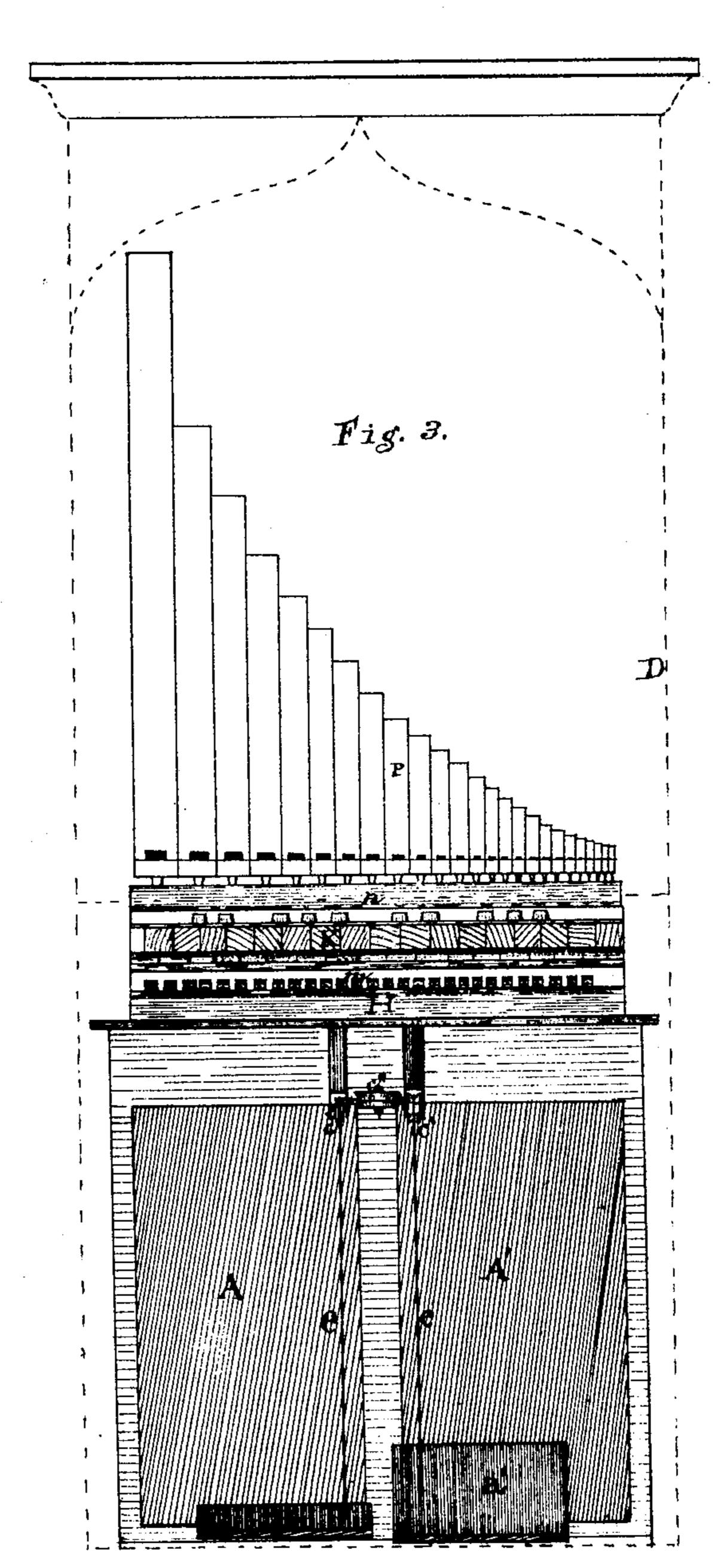
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## United States Patent Office.

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 com-

monly 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', reedboard 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 suffi-

ciently 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 tand 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-le-

ver 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.

JAMES CORDLEY.

Attest:

N. B. FASSETT,

J. R. McEldowney.