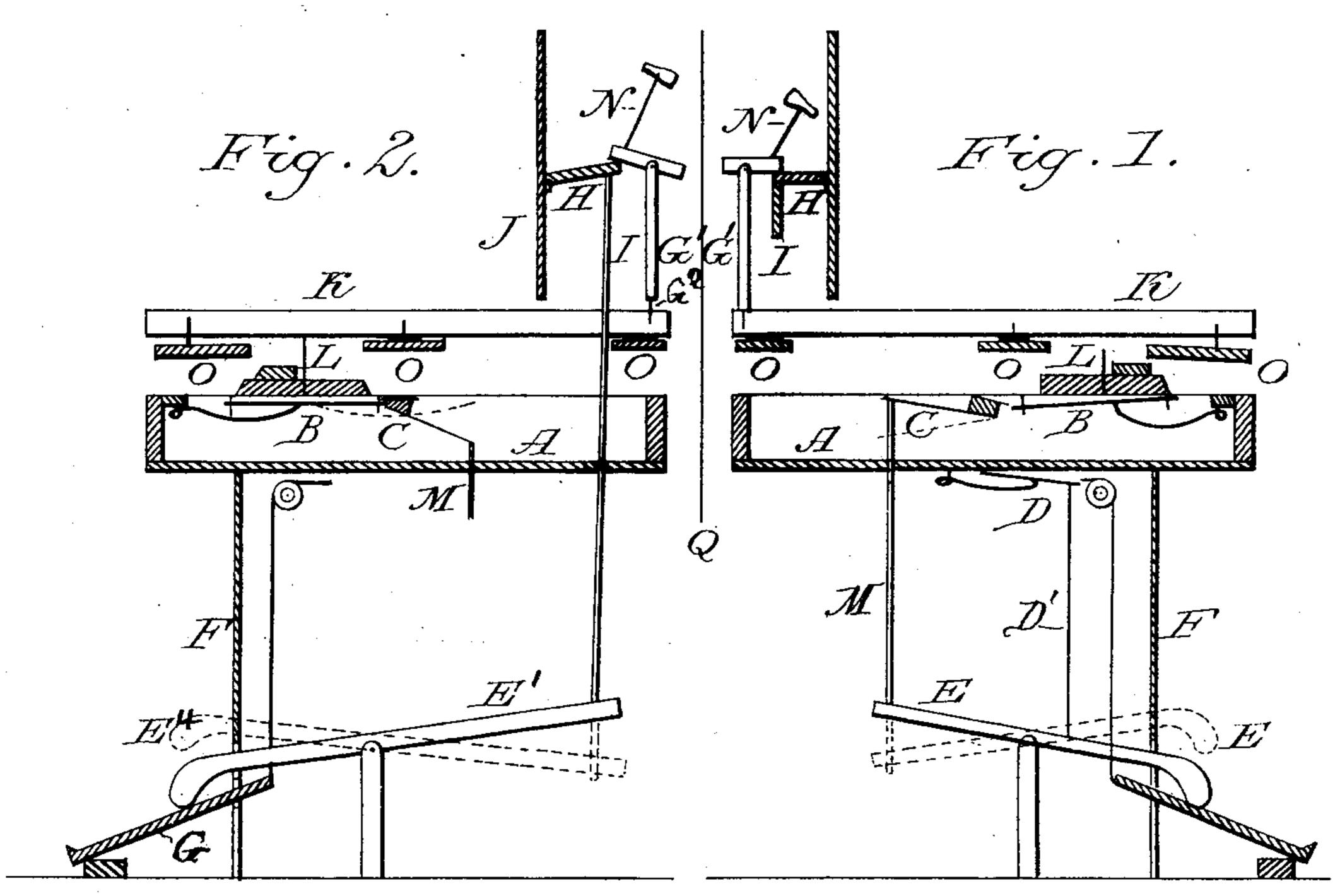
(No Model.)

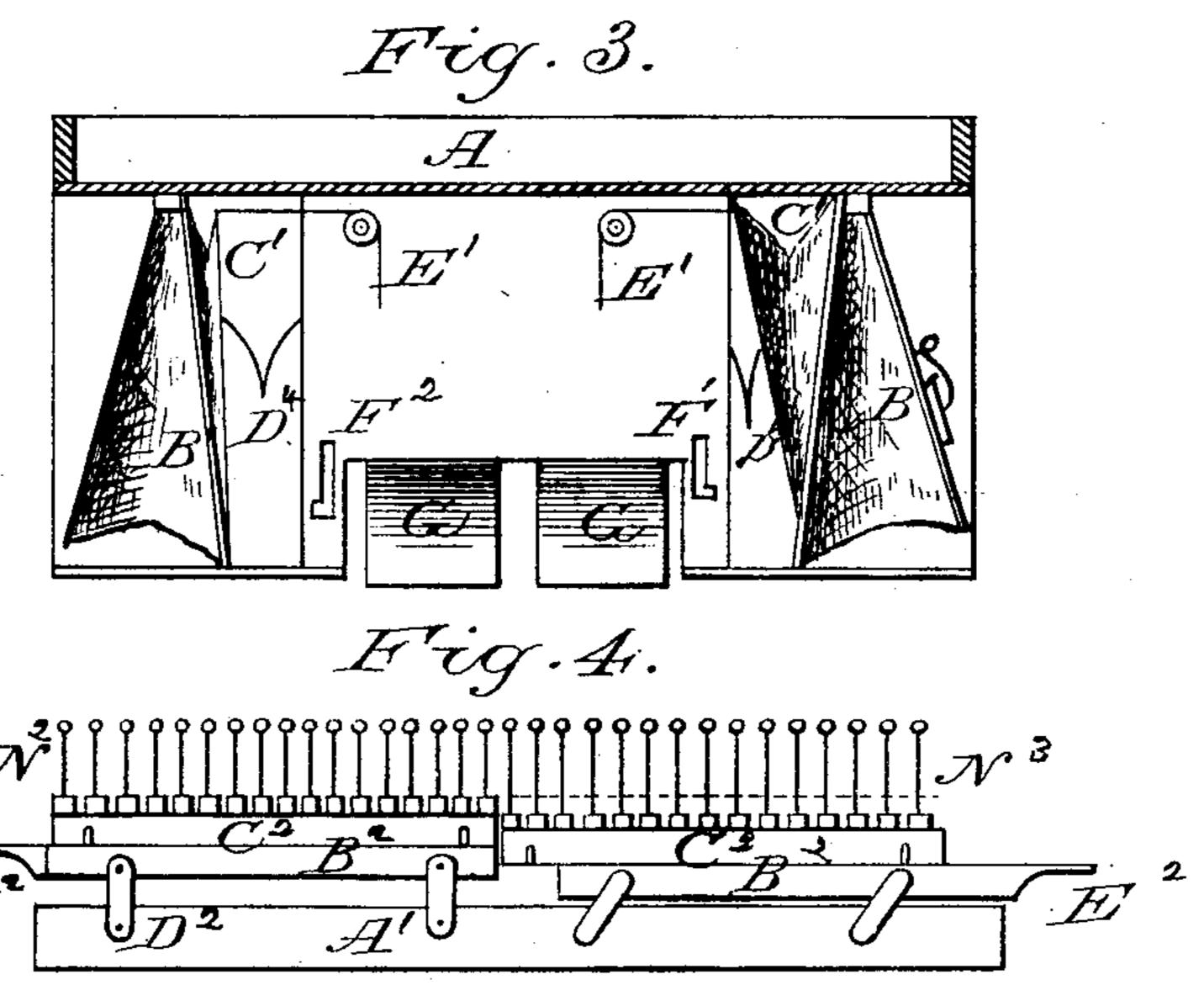
## W. C. WOODWARD.

## COMBINED ORGAN AND UPRIGHT PIANO.

No. 253,464.

Patented Feb. 7, 1882.





Witnesses: Un Translin Hoodward. Geo. W. Ode Truenton: Mm, Carlos Woodward

## United States Patent Office.

WILLIAM CARLOS WOODWARD, OF MARSEILLES, ILLINOIS, ASSIGNOR OF ONE-HALF TO ELIJAH TOLLES, OF UNION, WISCONSIN.

## COMBINED ORGAN AND UPRIGHT PIANO.

SPECIFICATION forming part of Letters Patent No. 253,464, dated February 7, 1882.

Application filed July 21, 1881. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CARLOS WOODWARD, of Marseilles, in the county of La Salle and State of Illinois, have invented 5 certain new and useful Improvements in a Combined Organ and Upright Piano; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a vertical cross-sectional view, showing the piano on for action; Fig. 2, a vertical cross-sectional view, showing the piano off and out of action; Fig. 3, a vertical longitudinal section through the wind-chest, showing the organ-bellows at opposite ends of the case; and Fig. 4, a plan view of the divided piano-action.

organ and upright piano adapted to be played from the same key-board either together, singly, or a portion of the one with a portion of the other; and it consists in the novel construction and arrangement of the parts, as will be hereinafter fully described, and particularly pointed out in the claims.

The organ employed is of the ordinary construction as relates to the reeds and stops; but the valve for the wind-chest and the bellows at each end of the case, as hereinafter further explained, are of my invention. The organ and the upright piano are erected in one case, which does not occupy more room than either of such instruments alone ordinarily does.

Referring by letter to the accompanying drawings, F designates the portion of the case below the key-board, and J the portion of the same above it.

B B designate the organ-bellows, a pair being located at each end of the case F, both pairs being connected to the wind-chest A, so that the wind from either pair will operate the entire length of the wind-chest.

G G designate the organ-pedals by which the organ-bellows are operated. The ordinary organ-stops are employed to cut all or any portion of the reeds off when it is not desired to

use them. A large valve, D, under the bottom 50 of the wind-chest A, is operated through a side pedal, E, and a rod, D', to permit the wind to escape from the wind-chest A at the time that the piano is to be thrown on and used alone, as will be hereinafter more fully explained. 55 The small pedal E is connected by a rod, M, passing up through the bottom of the windchest A, to a lever, C, extending the entire length of the wind-chest connecting with the organ-valves B, whereby the latter may be op- 60 erated to throw the organ into contact with the piano or to throw it out of contact therewith. This is accomplished by raising the pedal E in its slot F' in the front of the case F, which action causes the lever C to drop and 65 carry the organ-valves B and their pitman-pins away from the keys K. The organ is then thrown off, and during the operation of dropping the organ-valves, and just before they are quite open, the rod D', connected to the pedal 70 E, drops the large valve D, and permits the wind in the wind-chest to escape through the opening thus made, instead of passing through the reeds.

B' designates the larger organ-bellows, and 75 C' the smaller bellows, a pair of said bellows being located at each end of the case F, and communicating with the wind-chest A, as shown in Fig. 3.

D<sup>4</sup> designates the bellows-springs, and E' 80 the straps connecting the bellows with the organ-pedals G. By this construction of bellows I get double the power with the same labor it takes to operate the ordinary organ-bellows.

In the piano portion of this instrument A' designates a strip secured to the front of the piano-action; B<sup>2</sup> B<sup>2</sup>, slides secured by buttons D<sup>2</sup> to the strip A'. C<sup>2</sup> C<sup>2</sup> designate strips dividing the piano-action into two equal parts, 90 N<sup>2</sup> N<sup>3</sup>. The slides B<sup>2</sup> B<sup>2</sup> are operated by stops E<sup>2</sup> E<sup>2</sup> to throw either half of the piano-action on or off at the will of the performer.

The organ being operated by the ordinary stops to throw on or off, it will be seen at a 95 glance that the whole of both or portions of both instruments may be used at one time when both instruments are on.

Referring again to the piano alone, E<sup>4</sup> is a small pedal on that side of the organ-pedals G G opposite to the pedal E. This pedal E<sup>4</sup> is connected by a rod, I, extending up through the wind-chest A to a hinged strip, H, extending the entire length of the portion J of the case of the instrument. K designates the keys, and O O O the key-frame. G' designates the piano-action posts, having loose pins G<sup>2</sup> sliding in their lower ends.

In order to throw the piano into action, the pedal E<sup>4</sup> is moved from its notch, and raised in its slot F<sup>2</sup>, which action depresses the inner end of the pedal E<sup>4</sup>, lowers the hinged strip H, and permits the piano-action post G' to rest on

the key K.

In Fig. 1 the piano is shown in action, and the organ off. In Fig. 2 the piano is off and the organ on. The dotted lines in these figures show both instruments.

I am aware that a combined organ and

piano is not broadly new, and I do not therefore claim such an instrument, broadly.

What I do claim, and desire to secure by

Letters Patent, is—

1. In a combined organ and piano, the windchest A, having valves B and D, in combination with the pedal E and rods D' and M, substantially as and for the purposes specified.

2. In a combined organ and piano, the combination, with the piano-action NG' and hinged strip H, of the pedal E<sup>4</sup> and connecting-rod I, substantially as and for the purposes specified.

3. In a combined organ and piano, the combination of the divided piano-action C<sup>2</sup> C<sup>2</sup> N<sup>2</sup> 35 N<sup>3</sup>, connected to the strip A' by buttons D<sup>2</sup>, with the slides B<sup>2</sup> B<sup>2</sup> and stops E<sup>2</sup> E<sup>2</sup>, substantially as and for the purposes specified.

WM. CARLOS WOODWARD.

Witnesses:

CHAS. W. CONKLIN, S. BURWELL.