

C. G. Burke,

Organ Swell,

Nº 26,344.

Patented Dec. 6, 1859

Fig: 1.

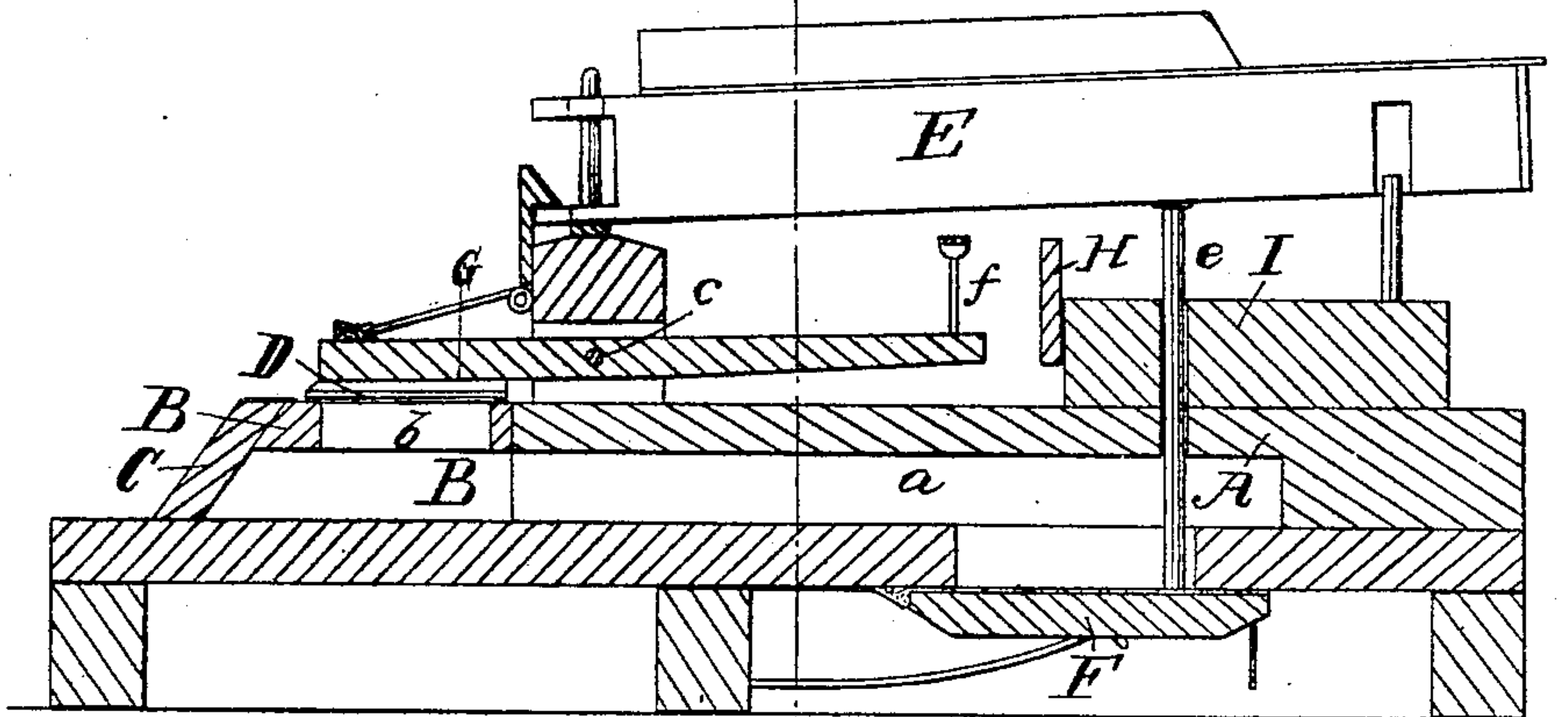
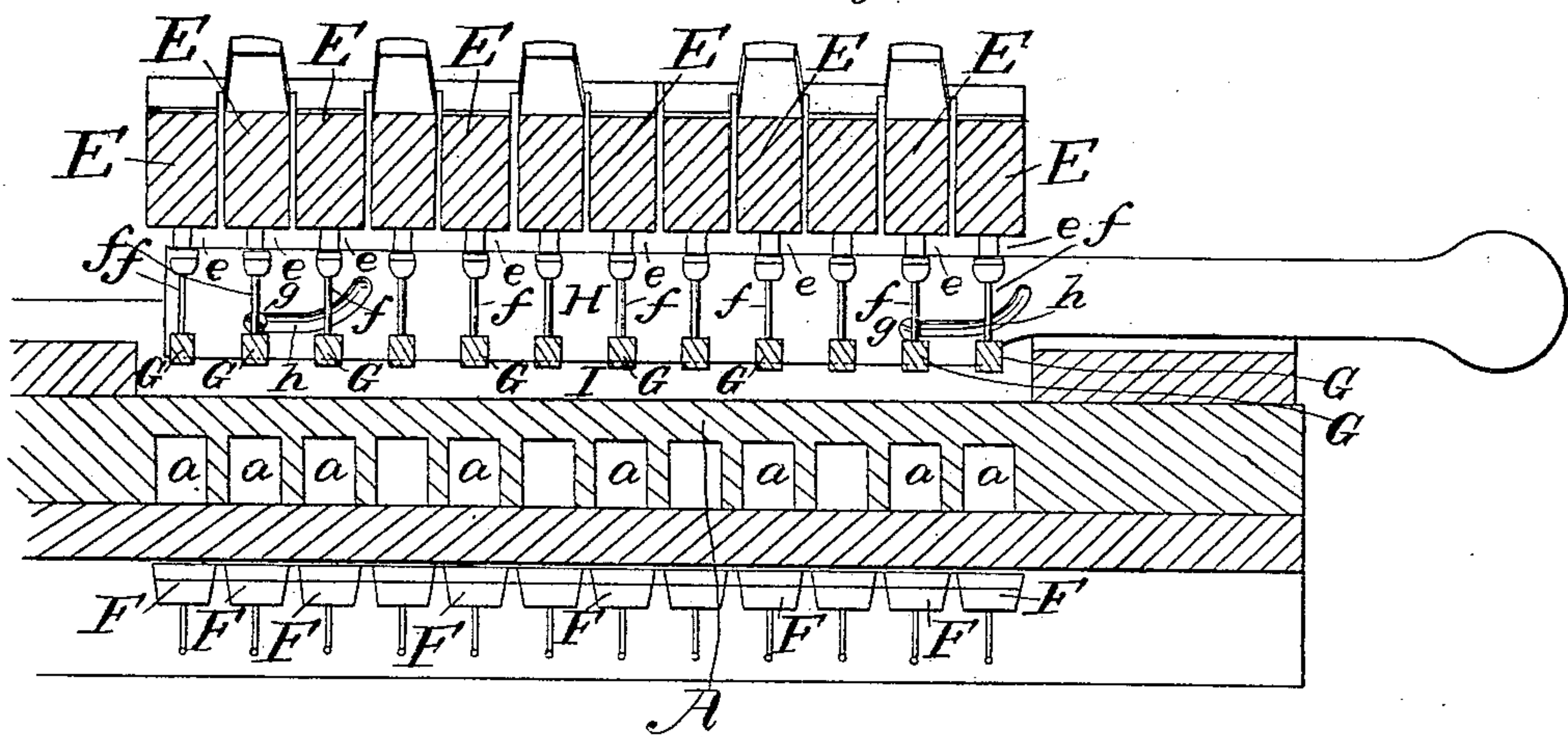


Fig: 2.



UNITED STATES PATENT OFFICE.

CHARLES G. BURKE, OF UTICA, NEW YORK.

MELODEON.

Specification of Letters Patent No. 26,344, dated December 6, 1859.

To all whom it may concern:

Be it known that I, CHARLES G. BURKE, of Utica, in the county of Oneida and State of New York, have invented a new and useful
5 Improvement in Melodeons and other Reed Musical Instruments; 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, forming part of this specification, in which—

10 Figure 1, is a transverse vertical section of the playing part of a melodeon. Fig. 2, is a longitudinal vertical section of a portion of the same in the plane indicated by the line
15 α, α , in Fig. 1.

Similar letters of reference indicate corresponding parts in both figures.

The object of my invention is to make the melodeon and other reed instruments of the
20 same class capable of greater expression than those heretofore constructed, and to this end my invention consists in providing the instrument with what I call swell valves, one for each key, so applied in connection
25 with levers or their equivalents that they can be opened at the pleasure of the player by the action of the keys in playing, for giving any desired degree of swell or expression to any note irrespectively of the preceding
30 or succeeding notes or of the other notes of a chord.

To enable others skilled in the art to make and use my invention I will proceed to describe its construction and operation.

35 A, is the reed board constructed in the usual manner.

B, is what I call a swell box fitted to the back of the reed board or formed by continuing the reed board farther back than usual.

40 a, a , are the reed tubes continued from the reed board right through the swell box; and C, is the swell board hinged to the back of the swell box in the same manner as it is commonly hinged to the back of the reed
45 board.

F, F, are the reed valves acted upon by the keys E, E, through the agency of push down pins e, e , in a manner common to the melodeons heretofore constructed.

50 D, (Fig. 1), is one of the swell valves of which there is to be one for each key throughout the whole or any portion of the scale,

each fitted to an opening b , provided in the top of the swell box over one of the tubes
 a, a . These valves are attached each to one
55 of a series of levers G, G, arranged below the keys on a fixed fulcrum c . Each of said levers has applied to its rear portion a spring d , for the purpose of depressing it to close the valve. The front portion of each lever
60 has attached to it an upright pin f , so arranged that it may be acted upon by its respective key when the latter is depressed far enough in playing, for the purpose of opening the swell valve.

The keys in playing may be depressed sufficiently to open the reed valves F, F, D, D, without touching the pins f, f , or it may be depressed further to make it act upon the said
65 pins to depress the front portions of the levers G, G, and open the swell valves to a greater or less extent to give more or less expression to the notes as may be desired, each swell valve being thus rendered capable of
70 being operated independently of all the others to admit of playing crescendo or diminuendo. The swell valves do not however interfere with the usual operation of the swell board C, which may be used in the
75 usual manner.

H, is a stop consisting of a slide running the whole length of the instrument or of
80 such portion of it as may be fitted with swell valves, and attached to a fixed board I, on the top of the reed board by means of two
85 screws g, g , screwing into the said board I, and passing through curved slots h, h , in the slide. By drawing this slide lengthwise it may be so far elevated by the movement of the slots on the screws that its upper edge
90 will be higher than the highest position of the tops of the pins f, f , and that it will prevent the depression of the keys far enough to operate the swell valves, but yet permit their descent far enough to open the reed
95 valves F, F, as far as is necessary. The stop H, may be operated by hand or by a pedal.

What I claim as my invention and desire to secure by Letters Patent, is—

1. Fitting a melodeon or other reed instrument of the same class with a series of
100 swell valves D, so applied as to be capable of being operated by the keys in playing

substantially as herein described for the purpose of giving expression to any note independently of the preceding or succeeding ones or of the other notes of a chord.

- 5 2. And I also claim the employment of a stop H, applied and operating substantially as described in combination with the keys

and the swell valves for the purpose herein set forth.

CHARLES G. BURKE.

Witnesses:

C. M. HUGHES,
MICHAEL HUGHES.