



# United States Patent Office.

CARL FOGELBERG, OF BOSTON, MASSACHUSETTS.

Letters Patent No. 101,452, dated April 5, 1870.

## IMPROVEMENT IN MELODY-ATTACHMENT.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, CARL FOGELBERG, a citizen of Sweden, but now residing at Boston, of the county of Suffolk and State of Massachusetts, have made a new and useful invention having reference to Melody-Attachments for Key-board Musical Instruments; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Figure 1 is a longitudinal section, and

Figure 2, a transverse section of a "melody-attachment," with my invention applied to it.

In the said drawing what is termed the "melody-attachment" consists not only of a long, narrow, and shallow passage, A, and a series of valves, C C C, applied to its top and arranged as represented, but a series of organ pipes, D D D, provided with ducts leading to such valves.

Each of such valves has an operating stem, *a* furnished with a button, *b*, and an elevating-spring, *c*.

The passage A receives air from the bellows of the instrument through an opening, *d*, and has a closing-valve, B, disposed in advance of the series of pipe-valves C C C.

The valve B is also furnished with a stem, *e*, provided with a lifter or spring, *f*.

To the said passage A, with its pipes, ducts, and valves, as described, constituting what is termed a "melody-attachment" for a key-board musical-instrument, I apply another air-duct or passage, E, provided not only with an opening, *g*, to communicate with the opening *d*, but having a series of holes, *h h h*, leading out of its top and underneath the valves *c*, each hole *h* being arranged directly under one of the said valves. I also apply to the passage E, in advance of the holes *h*, a valve or damper, *i*, hinged to the bottom of the passage, and furnished with a stem, *k*, which should connect with a pedal.

The several stems of the pipe-valves are to have keys applied to them, so as to be operated thereby.

The valves B and *i* are to effect the closing of each of these passages A and E, as occasion may require. Furthermore, each of the pipes has a hole, *l*, made

through its bottom and in rear of its nose-piece *m*, and there is applied to the lower ends of the several pipes, so as to cover such holes *l* of them, a flap or valve, *m'*, it being hinged to the pipes.

On moving such valve downward on its hinge *n*, the whole series of holes may be opened.

This valve is a "swell," applied directly to the pipes made with air-holes, arranged over such "swell" in manner as represented.

By moving the "swell" down, more or less, the tone of the pipes, or those in action at any time, may be pleasantly modified.

From the above it will be seen that when any one of the valves *c* is depressed upon the bottom of the passage A, such valve, provided there be no auxiliary air-passage below it, will cut off communication with all the pipes in rear of it; consequently, while such valve may remain depressed for the purpose of sounding its pipes, none of the other pipes in rear can be sounded, but by having the auxiliary air-passage E, with its valve and ducts as described, air may be allowed to flow into that part of the passage A which may be in rear of any valve that may be depressed in it.

Thus, while I retain the advantages of the narrow duct A, I am, by my additions, able to avoid the difficulty above mentioned of actuating any pipe whose valve may be in rear of any one which may be depressed.

I claim, therefore—

The combination of the auxiliary wind-passage E, its valves and air-ducts, as described, with the melody-attachment, composed of the passage A, its valves, air-ducts, and series of pipes, as set forth, the whole being to operate substantially as explained.

Also, the combination of the swell-valve *m'* and the series of openings *l*, with the pipes D, arranged to operate as set forth

CARL FOGELBERG.

Witnesses:

R. H. EDDY,  
J. R. SNOW.