

# R. W. Carpenter

## Piano Attachment

N<sup>o</sup> 37,217.

Patented Dec. 23, 1862.

Fig: 1.

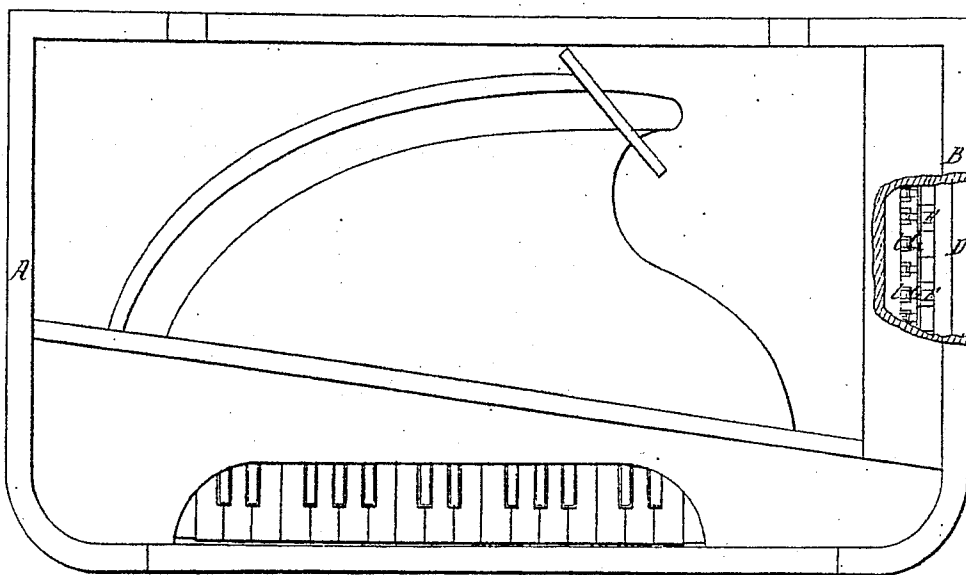


Fig: 2.

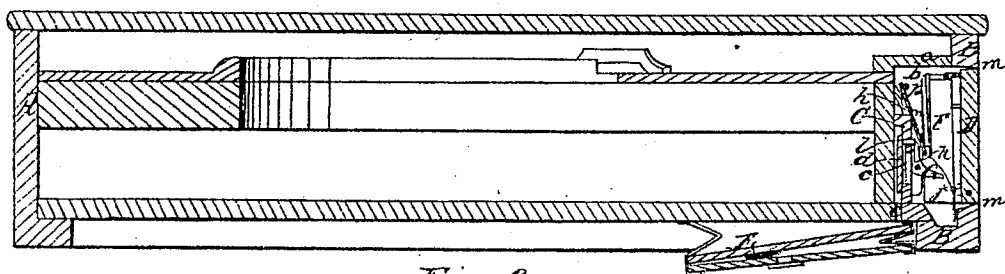
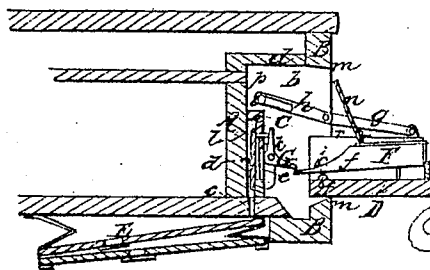


Fig: 3.



Witnesses:  
W. S. Partridge  
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# UNITED STATES PATENT OFFICE.

R. W. CARPENTER, OF BROOKLYN, NEW YORK.

## COMBINATION OF REED INSTRUMENT WITH THE PIANO-FORTE.

Specification forming part of Letters Patent No. 37,217, dated December 23, 1862.

*To all whom it may concern:*

Be it known that I, RILEY W. CARPENTER, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Mode of Combining a Reed Instrument with a Piano-Forte; 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—

Figure 1 is a plan view of an instrument illustrating my invention, such parts as are not necessary to such illustration being omitted. Fig. 2 is a longitudinal vertical section of the same, with the key-board of the reed instrument closed up. Fig. 3 is a vertical section corresponding with Fig. 2 of the right-hand end of the instrument, with the key-board of the reed instrument drawn out.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to combine a reed musical instrument, such as is known as a "melodeon" or "harmonium," with a piano-forte, in the same case, with a separate and distinct set of keys for each, so that each can be played separately, or the one as an accompaniment to the other, by a different player, without making the said case much larger or very perceptibly altering its appearance in any way; and to this end it consists in the arrangement of the reed-board within one end of the case in an upright position, and the arrangement of the key-board to swing back into the case with the keys nearly close to the reed-board when it is not desired to play upon the reeds; also, in a novel arrangement of the action, in combination with such arrangement of the reeds and the key-board.

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

A B is the case, exactly resembling the case of a square piano-forte in all respects, but that it is built out at the right-hand end to the extent of about four inches, increasing its length to that extent. The part B so built out forms a space, *b*, to contain the upright reed-board C, and to receive the key-board D when the latter is shut up, as shown in Fig. 2, in which condition no part of the reed instrument, except a portion of the bellows E and its appendages, can be seen, either while the piano-

forte is closed or while it is open, as the space *b* within the built-out part B is covered at the top by a board, *a*, and the bottom or exterior of the key-board is either flush with the end of the case or paneled, so as to escape observation. The bellows E, being arranged under the case, will hardly be observed. The several parts of the piano-forte may be arranged precisely as in other square piano-fortes. The reed-board C is arranged close against the end of the portion A of the case which contains the piano-forte, and communicates with the bellows at the bottom by a passage, *c*, and the valves *d* and reeds *e* can be fitted to the reed-board substantially in the usual manner, both being upright like the reed-board. The key-board D is fitted into an opening, *m m*, in the portion B of the case, and pivoted thereto, as shown at *f*, to permit it to be shut up, as shown in Fig. 2, or let down, as shown in Fig. 3, and its upper part is connected at each end by two metal link-bars, *g h*, with a fixed pin, *i*, within the space *b* to support it in the position shown in Fig. 3 for playing, the said link-bars being so jointed, and the inner ones being so slotted to slide upon the pins *i*, that they will be folded up by the act of closing up the key-board. The keys F F are attached to the board D in the usual manner. They are extended back some distance in rear of their fulcrum-pins *j* for the purpose of operating upon the reed-valves by means of elbow-levers or jacks G. These jacks work upon a fulcrum-pin, *k*, which attaches them all to the reed-board, and they act upon the valves through the agency of push-pins *l*, working through holes in the reed-board. When the key-board is in the playing position shown in Fig. 3, the rear ends of the keys are close under the lower ends of their respective jacks, and the depression of the playing ends of the keys throws up their rear ends against the jacks, and so causes the upper ends of the latter to be forced back against the push-pins, and the valves to be opened. When the key-board is moved up to the position shown in Fig. 2, the keys move away from the jacks, which always remain attached to the reed-board. When the key-board is in the playing position the upper part of the opening *m m* is closed, or nearly so, by a board, *n*, which serves as a name-board, and which is hinged to the key-board. As the key-board is closed up this board *n* comes in

contact with the top of the reed-board, and folds up toward the key-board, passing under a stationary pin, *p*, secured at one end of the space *b*, and as the key-board is let down the said board *n* is held back until it assumes its proper position relatively to the key-board, and is then stopped by its lower edge coming to a bearing on the side pieces, *r r*, of the key-board.

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

1. The arrangement of the reed-board *C* and the key-board *D*, in combination with each

other and with the extended portion *B* of the case *A B*, substantially as and for the purpose herein described.

2. In combination with such arrangement of the reed-board and key-board within the case, the combination of the reeds and keys by means of jacks *G G*, applied substantially as herein specified, to permit the closing up of the key-board.

R. W. CARPENTER.

Witnesses:

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