

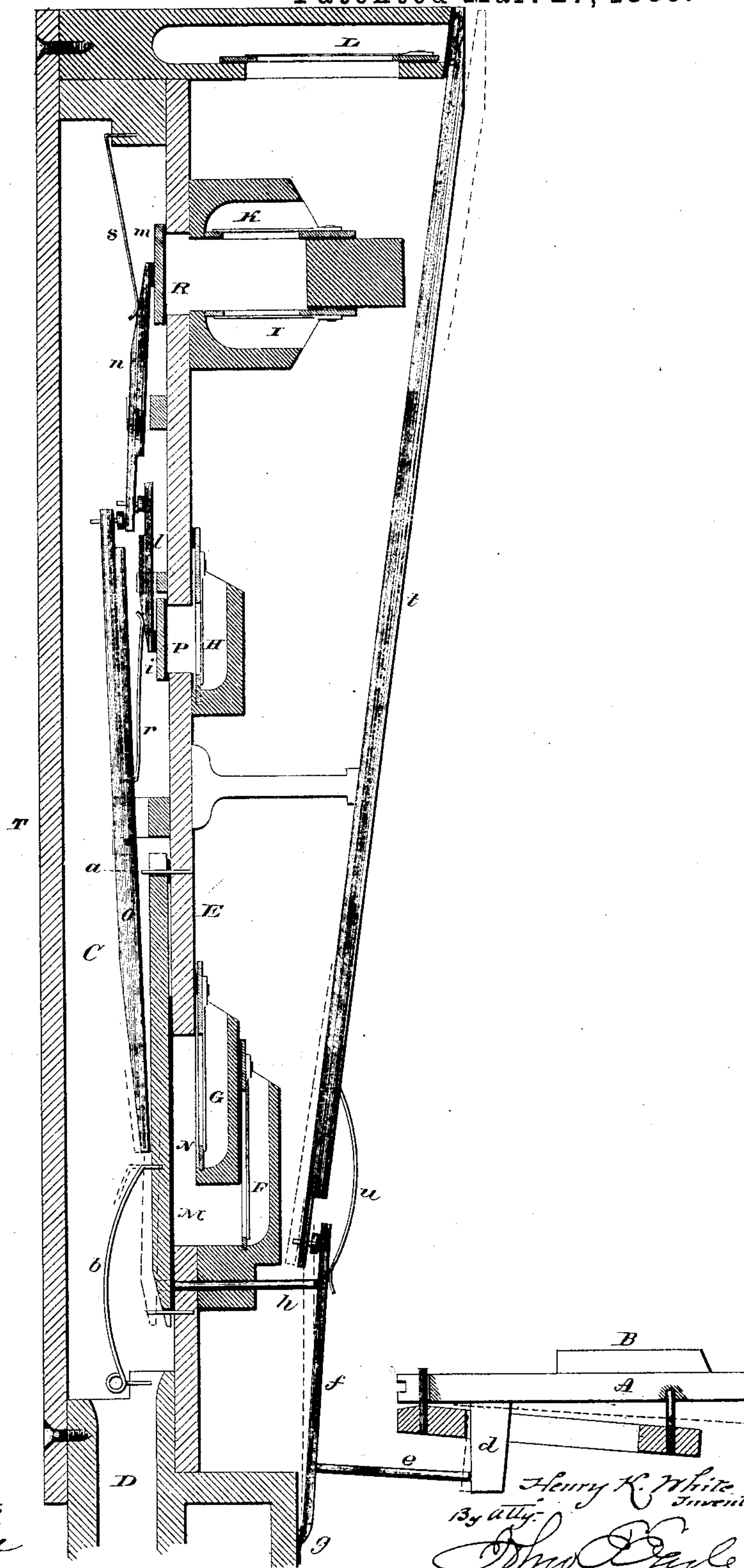
(No Model.)

H. K. WHITE.

REED ORGAN.

No. 274,686.

Patented Mar. 27, 1883.



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY K. WHITE, OF MERIDEN, CONNECTICUT, ASSIGNOR TO THE WILCOX
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REED-ORGAN.

SPECIFICATION forming part of Letters Patent No. 274,686, dated March 27, 1883.

Application filed October 14, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY K. WHITE, of Meriden, in the county of New Haven and State of Connecticut, have invented a new Improvement in Reed-Organs; and I do hereby declare the following, when taken in connection with accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents a vertical central section through the wind-chest and keys.

This invention relates to an improvement in reed-organs, the object of the invention being to arrange the reeds in connection with a vertical chamber above the bellows; and the invention consists in the details of construction whereby the object of the invention is accomplished, as hereinafter described, and more particularly recited in the claims.

A B represent the keys in their usual arrangement; C, the wind-chest, arranged in a vertical position at the back of the organ, and from which the air is exhausted by bellows through openings D at the bottom.

E is the front side of the wind-chest, and upon which the reeds and mechanism are arranged. As here represented, there are five sets of reeds, F G H I K, and sub-bass L, arranged in position one above another, as shown, each set closed by a flap operated by the stop in the usual manner, so as to cut off or permit the air to pass in through the reed-openings when the respective valves are open.

M is the first or principal valve, which closes the opening N through the reed-board, and is hung at *a*.

b is the usual spring for holding the valve in its closed position.

From the under side of each of the keys an arm, *d*, extends downward, and from this a tracker, *e*, extends to a lever, *f*, having its fulcrum at *g*, below the tracker. The upper end of the lever *f* bears against the valve-pin *h*, so that when the key is depressed the valve M is opened, as indicated in broken lines, and which opens communication with the two sets of reeds F G.

i is the valve which closes the opening P to the reeds H. The valve *i* is hung to a lever, *l*.

m is the valve which closes the opening R to the reeds I K, and is hung to one arm of a lever, *n*.

On the principal valve M one arm of a lever, *o*, bears, the other arm extending up and arranged to bear upon the lever *n* of the valve *m*, and the lever *n* extends down to bear upon the arm of the lever *l*, opposite the valve *i*, thereto attached. Between the valve end of the lever *l* and the lever *o* is a spring, *r*, the tendency of which is to hold the valve *i* closed and to bear the one arm of the lever *o* upon the valve M, and on the valve-lever *n* another spring, *s*, bears, tending to close the valve *m*, and also to operate upon the lever *o* to force its one arm upon the valve M. By this arrangement of levers and springs, when the key is depressed, as indicated in broken lines, it opens the valve M, turns the lever *o*, which in its turn moves the lever *n* to open the valve *m*, and the said lever *n* bears upon the lever *l* of the valve *i* to open that valve *i*, this opening of the valves being against the resistance of the springs *b*, *r*, and *s*, which in their turn react to bring the levers and valves to their closed or normal position. These levers and valves are all arranged within the wind-chest. The back or sound board, T, is secured to the edges of the wind-chest so as to be readily removed, and on such removal the action is exposed for repairs or adjustment. From the front the reeds are equally as well exposed for adjustment or tuning purposes. The sub-bass reeds L are arranged above the other reeds. Their key-levers *t* extend downward, and are hung midway of their length, their lower arm coming in rear of the lever *s*, so that depression of the key will turn that lever and open the valve, as indicated in broken lines.

On the lever *t* is a spring, *u*, which bears upon the front side of the lever *f*, serving to hold the two levers in connection, but yet allow their free play. The usual adjusting-screws and collars are applied as shown.

I am aware of the Patent No. 178,650, and therefore claim nothing shown in said patent.

I claim—

1. In a reed-organ, the combination of a vertical wind-chest arranged in rear of and

above the keys, the several sets of reeds arranged outside of and upon the front of said wind-chest, the valves for said reeds and their connecting-levers, arranged upon the inside of said wind-chest, the sub-bass reeds *L*, arranged at the top of said wind-chest, with lever extending from the valve of said sub-bass into connection with the lever which operates the valves in the wind-chest, the keys constructed with a downwardly-projecting arm, and trackers leading from said downwardly-projecting arm to the levers which operate the valves in the wind-chest, and whereby all the valves are

simultaneously operated, substantially as described.

2. The combination of the valve *M* and valve *i* with the lever *o*, the spring *b*, and the spring *r* between the valve *i* and the lever *o*, the arrangement of the spring *r* being such that its action tends to close both of said valves, and substantially as described.

HENRY K. WHITE.

Witnesses:

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