

C. W. VOGEL.
Reed-Organs.

No. 147,202.

Patented Feb. 3, 1874.

Fig. 1.

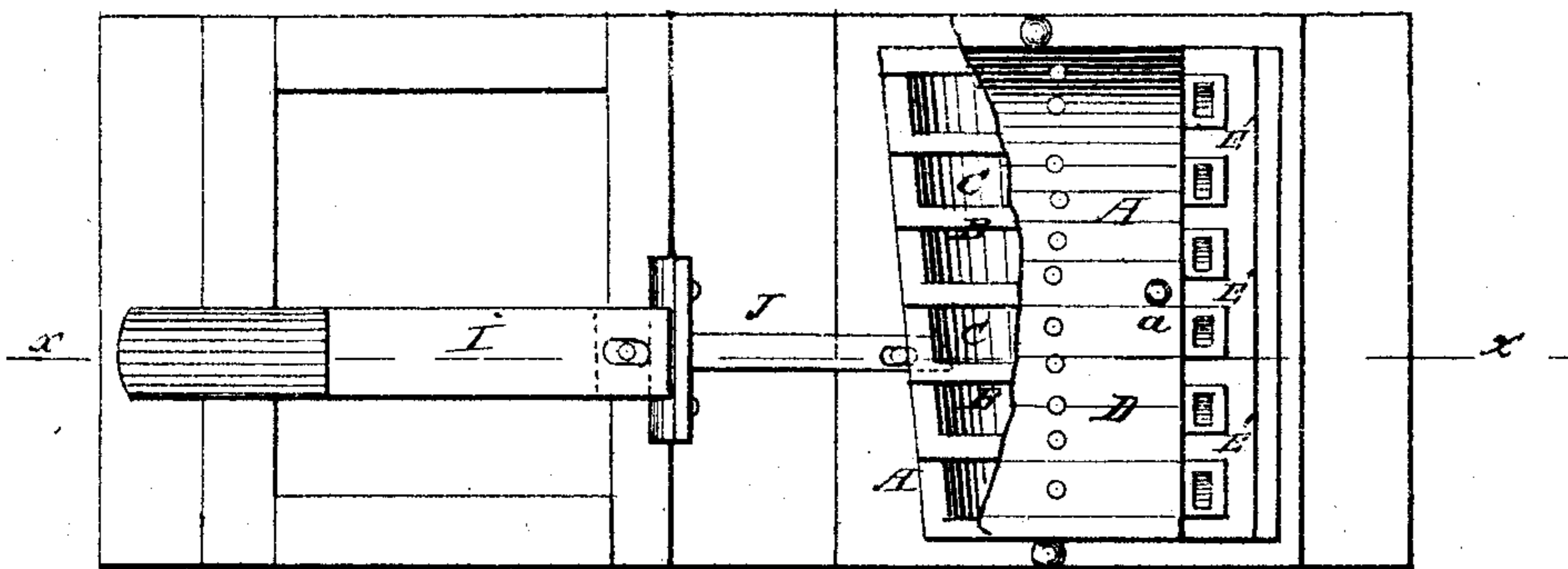


Fig. 3.

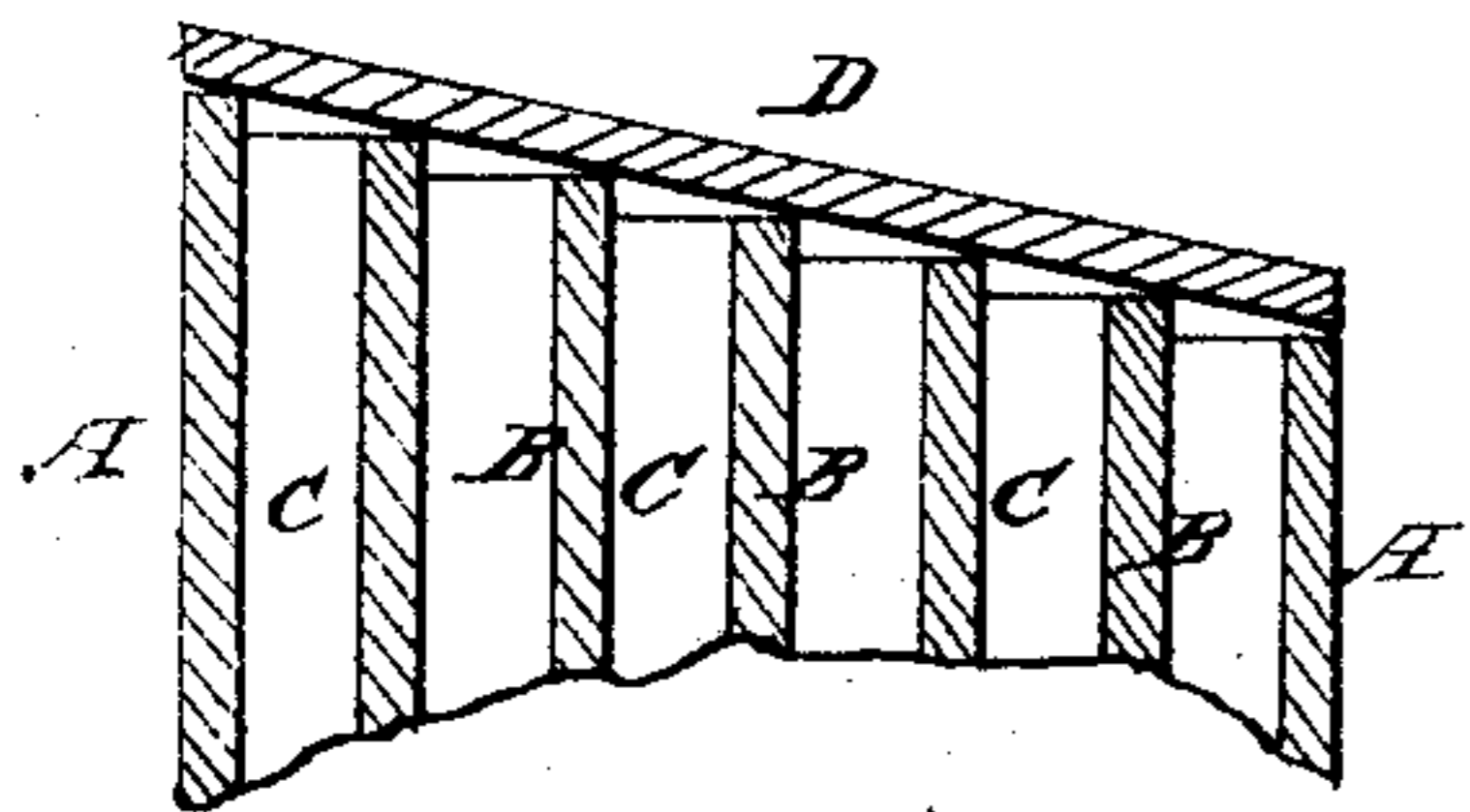


Fig. 2.

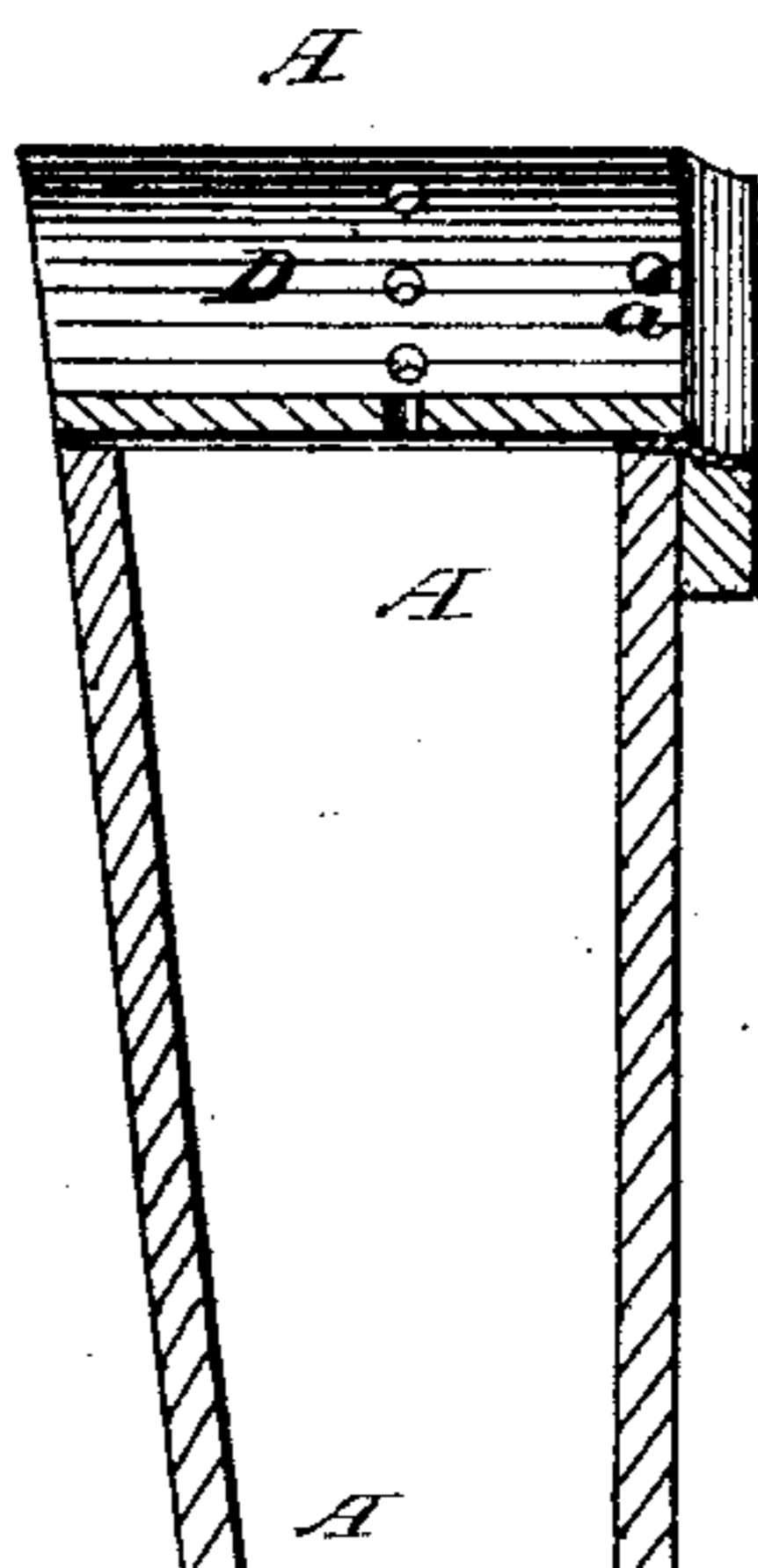
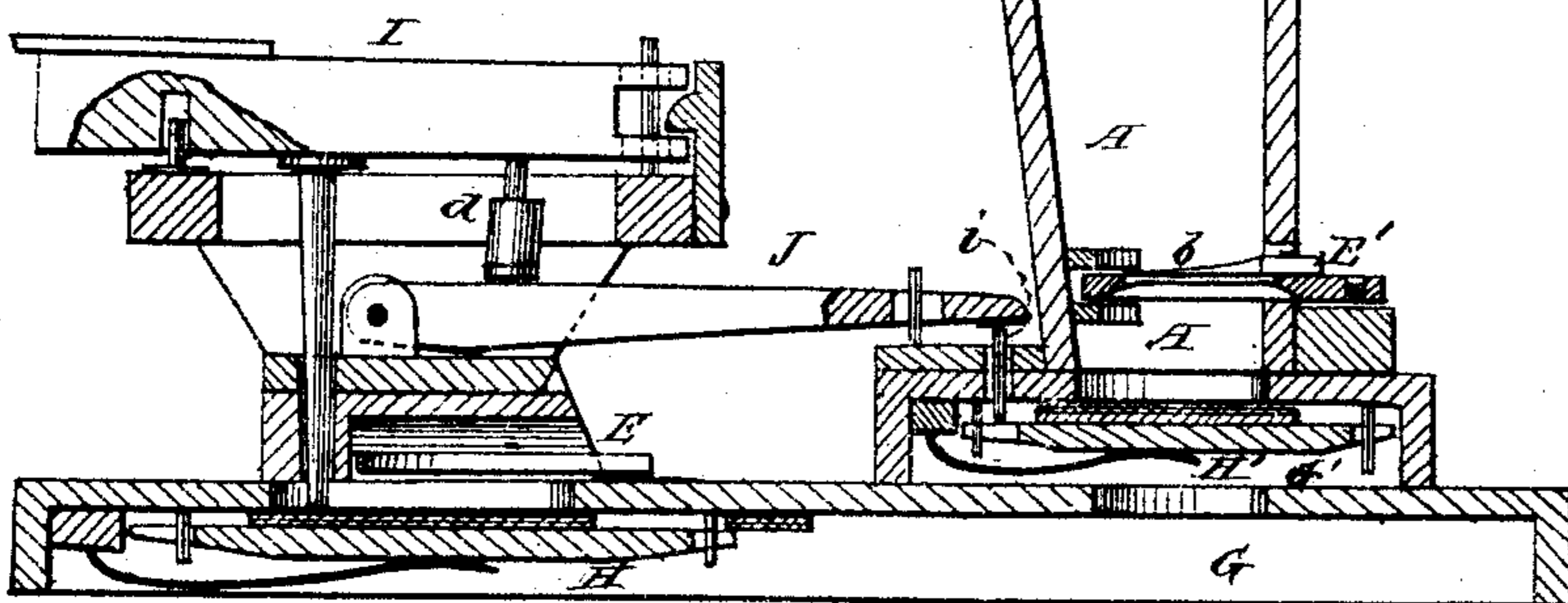


Fig. 4.



WITNESSES:

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IMPROVEMENT IN REED-ORGANS.

Specification forming part of Letters Patent No. **147,202**, dated February 3, 1874; application filed January 2, 1874.

To all whom it may concern:

Be it known that I, C. WILLIAM VOGEL, of Norwich, in the county of New London and State of Connecticut, have invented certain new and useful Improvements in Cabinet-Organs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of the pipes and reeds of a cabinet-organ; also, in the arrangement of the pipes on a double air-chamber, in the arrangement of the levers for opening the valves under the reeds, and in the adjustable valve on top of the pipes, all of which will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view; Fig. 2, a vertical section on line *x x*, Fig. 1. Fig. 3 is a detail, showing construction of pipes. Fig. 4 is a view of the reeds.

The pipes are constructed in the following manner: A represents an upright casing, the back and sides of which are perpendicular, and the front inclined forward, so as to make the casing gradually increasing in depth from the bottom upward. In this casing are a series of transverse vertical partitions, B B, forming the pipes C C. The top of the casing is inclined from one side to the other, and the partitions gradually diminish in height, the upper edge of the front of the casing being cut out in step form, as shown, to correspond with the height of the partitions. On top of the casing A, at the rear edge, is hinged a perforated valve, D, which is provided with a set-screw, *a*, by means of which the valve is raised or lowered at will, so that the pipes may be tuned to a concert pitch. *b b* represent the

reeds, which are made of ivory or horn, and riveted to a brass block, E'. By the use of these materials in the construction of the reeds, a soft pipe-like tone is produced. The pipes and reeds thus constructed rest upon a double air-chamber, G G', thereby improving and increasing the tone materially. H H' represent the valves under the reeds, which may be constructed in any of the known and usual ways, and are operated by means of their respective keys, I. Each key, I, has on its under side a padded adjustable knob or projection, *d*, which, as the key is depressed, strikes and depresses a lever, J. This lever is hinged or pivoted under the key-frame, and extends back to the pipes, and rests upon a pin, *i*, which, in turn, rests upon the corresponding valve H'. As the lever J is depressed by the depression of the key, the pin *i* is forced downward, opening the valve.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the pipes C C, formed as described, and the double air-chamber G G', for the purposes herein set forth.

2. The combination, with the valve H' and key I, of the padded adjustable knob or projection *d*, lever J, and pin *i*, all constructed and arranged substantially as and for the purposes herein set forth.

3. The valve D, arranged on top of the pipes C C, and made adjustable by means of the set-screw *a*, substantially as and for the purposes herein set forth.

4. The combination of pipes C C, double air-chamber G G', reeds *b*, valve H', pin *i*, key I, and lever J, all arranged as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

C. WILLIAM VOGEL.

Witnesses:

ALBERT F. PARK,
MILLARD F. AVERY.