

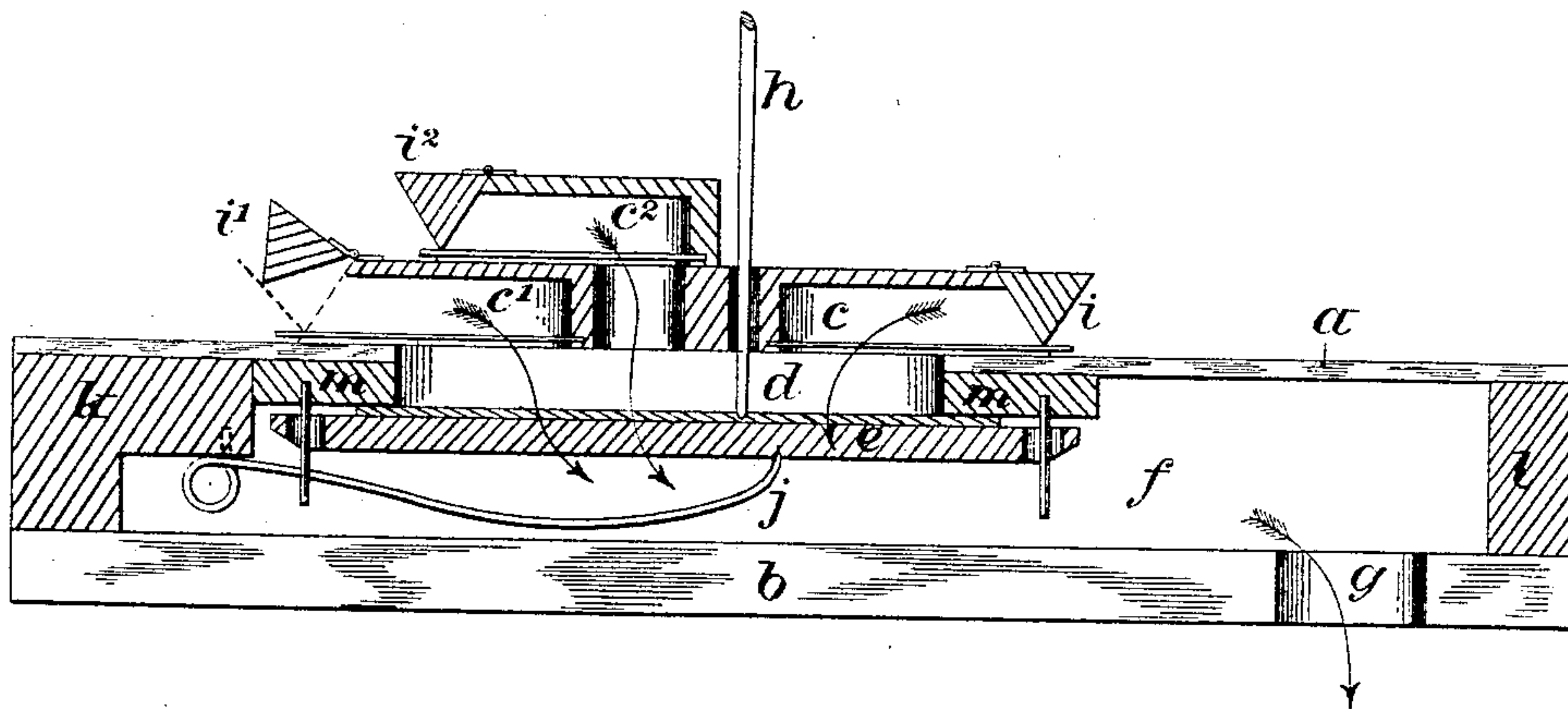
(No Model.)

J. HESSLER.

REED ORGAN.

No. 388,490.

Patented Aug. 28, 1888.



Witnesses;

A. D. Clark.

C. C. Clark.

Inventor.

Jacob Hessler.

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UNITED STATES PATENT OFFICE.

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COMPANY, OF SAME PLACE.

REED-ORGAN.

SPECIFICATION forming part of Letters Patent No. 388,490, dated August 28, 1888.

Application filed March 24, 1888. Serial No. 268,336. (No model.)

To all whom it may concern:

Be it known that I, JACOB HESSLER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Reed-Organs, which are fully set forth in the following specification, reference being had to the accompanying drawing, forming a part hereof, and in which the figure 10 represents a vertical section across the instrument cut through the center of the valve and cells closed by it.

The object of my invention is, first, to make a more resonant sounding-board; second, to 15 enlarge the air-chamber between the reed and valve, so as to give more room for the free vibration of the reed and thereby produce a more voluminous sound, and, third, to enlarge the air-chamber back of valve-seat toward the bellows. To accomplish this end I 20 make the sounding-board *a* as thin as possible, and strengthen it at the reed-cells by attaching a piece, *m*, running lengthwise of the instrument under the reed-cells. Said board *m* 25 may be made quite thick, so as to increase the vertical depth of the valve air-chamber *d* under the reeds as much as possible, and thereby give greater freedom of air-space and less resistance to the vibration of the reed.

30 The reed-cells *c c' c''* communicate directly with the valve air-chamber *d*, as shown, and are provided with mutes *i i' i''*. The valve *e*,

tracker-pin *h*, and spring *j* are constructed and applied in the usual way.

The bottom *b* of the air-chamber *f* is made 35 heavy, as are also its lateral sides, as *k* and *l*, so as to more completely retain the vibration in the thin sounding-board *a*. The arrows show the direction of the air-currents through the passages and air-chamber out through the 40 opening *g* into the bellows. The air-chamber *f*, by this construction, is also enlarged at the side where the air escapes into the bellows, and through this construction gives an additional freedom to the air-currents, and through 45 this better vibration to the reeds.

What I claim is—

1. In a reed-organ, a thin sounding-board, *a*, provided with a board, *m*, on its inner or under and valve-seat side, deepened-valve air- 50 chamber, and an enlarged wind-chest under said thin board *a* and discharging end, substantially as specified.

2. In a reed-organ, a thin sounding-board, *a*, provided with a board, *m*, on its inner or 55 under and valve-seat side, deepened-valve air-chamber, enlarged wind-chest under said thin board *a*, and discharging end and rigid and enlarged walls *b k l*, substantially as specified.

JACOB HESSLER.

Witnesses:

WM. ZIMMERMAN,
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