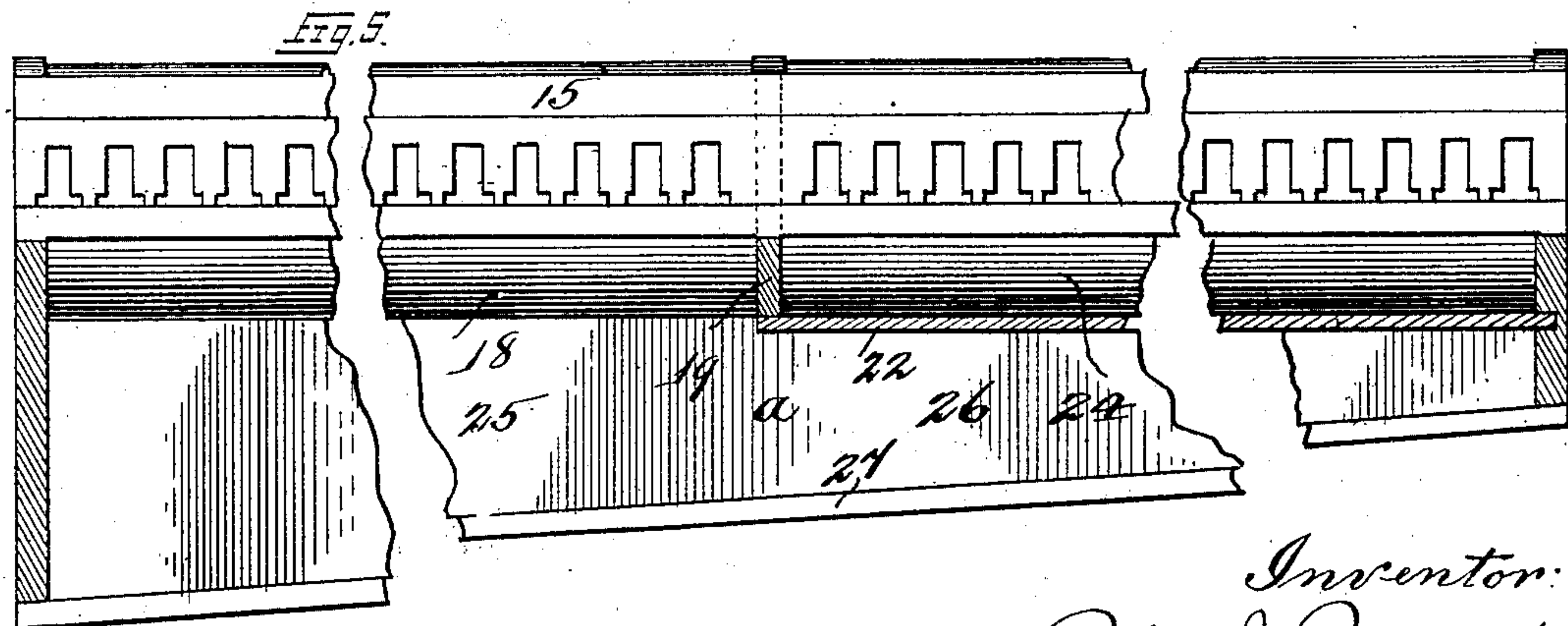
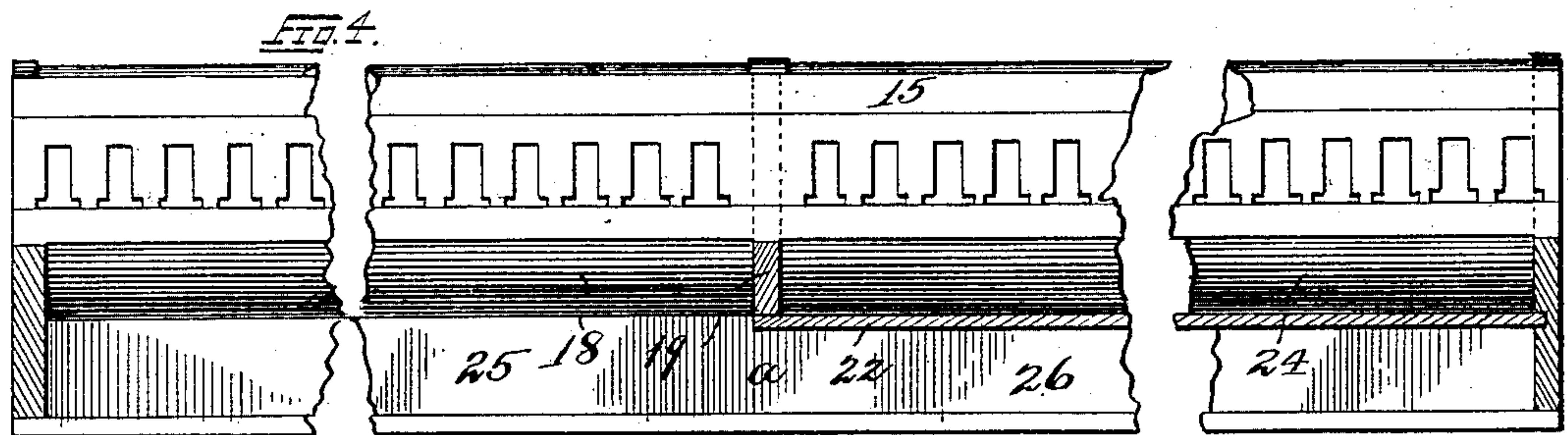
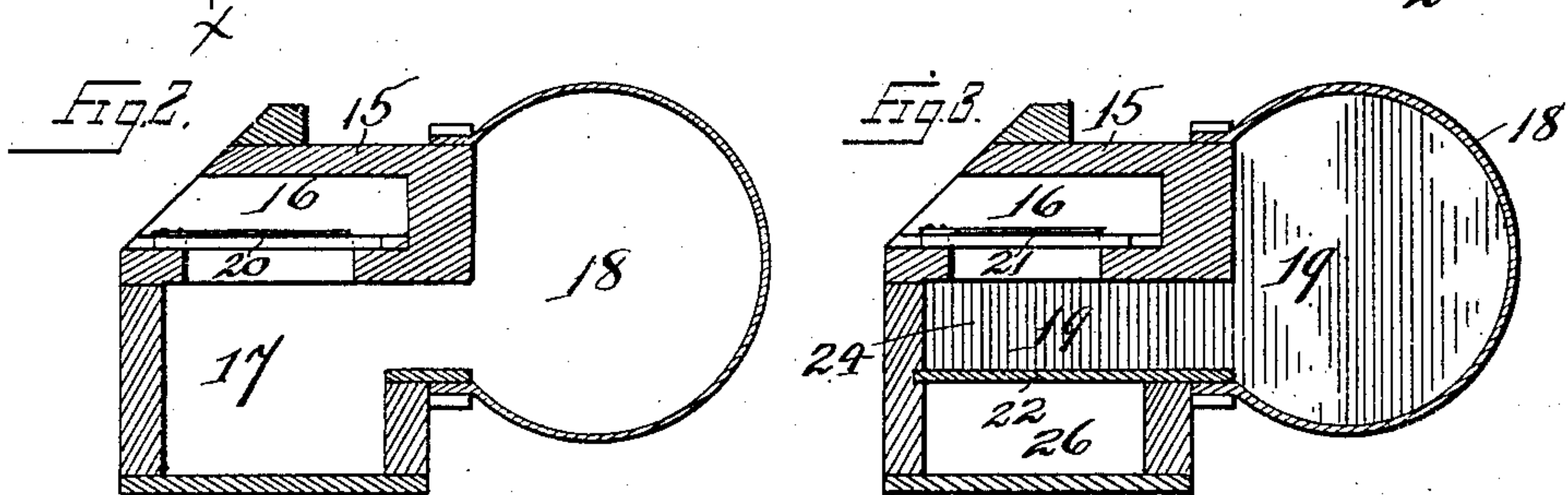
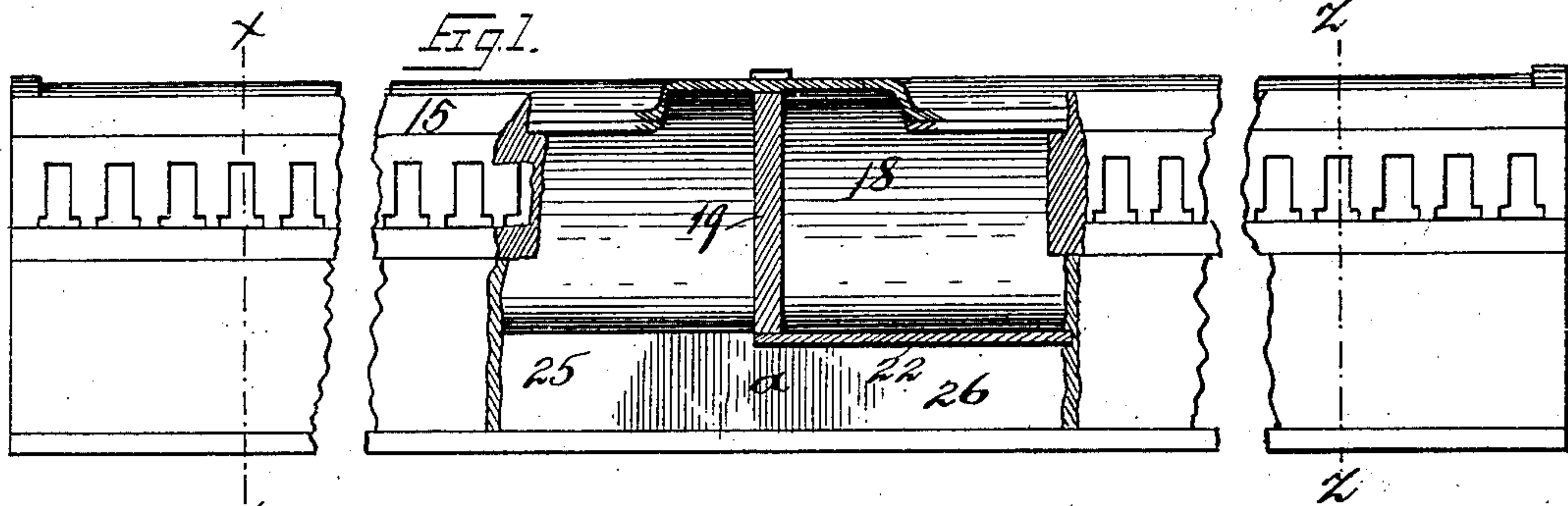


(No Model.)

R. J. BENNETT.
REED ORGAN.

No. 549,344.

Patented Nov. 5, 1895.



Witnesses:
a. Reink
W. T. Tompkins

Inventor:
Robert J. Bennett
by Chas. C. Bulkley
Atty.

UNITED STATES PATENT OFFICE.

ROBERT J. BENNETT, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE LYON & HEALY, OF SAME PLACE.

REED-ORGAN.

SPECIFICATION forming part of Letters Patent No. 549,344, dated November 5, 1895.

Application filed July 27, 1895. Serial No. 557,319. (No model.)

To all whom it may concern:

Be it known that I, ROBERT J. BENNETT, 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, of which the following is a specification.

My invention relates to certain improvements in reed-organs, and has more particular reference to that character of reed-organ which is separated into bass and treble portions.

In reed-organs having a divisional partition in the resonator or resonators which separates the instrument into bass and treble portions it has been found, by reason of the circumscribed space of the wind-chest, that certain or all of the bass tones were inaudible, nearly inaudible, or lacking in strength, fullness, or volume to an appreciable extent, whereas, on the contrary, the treble tones were free from such defects, not requiring such a relatively-large resonator or wind-chest.

It is the object of my invention to overcome this difficulty without increasing the size of the instrument and without interfering in any manner with the operation of any of its parts.

My invention consists in certain features of construction and arrangement to be hereinafter described, and pointed out in my claims, reference being now had to the accompanying drawings, in which—

Figure 1 is a front view of a reed-board and wind-chest or primary resonator, broken away to show the divisional partition separating the bass from the treble. Fig. 2 is a cross-sectional view on the line $x x$ of Fig. 1. Fig. 3 is a like view on the line $z z$ of Fig. 1. Fig. 4 is a front view of the reed-board and wind-chest, the front portion of the casing being removed to show the internal construction. Fig. 5 is a like view of a modified form.

I have shown my present invention in conjunction with a reed-board and wind-chest, which latter may be said to constitute a primary resonator the auxiliary resonator of which is a circular horizontal chamber in the rear thereof, the external air being drawn by an exhaust-bellows through pallet-ports to and through the reeds in the usual man-

ner, the course of the air after vibrating the reeds being through the wind-chest or primary resonator into and through the auxiliary resonator.

The reed-board is designated at 15, within which are the reed-cells 16, the admission of air to and through these cells being controlled by the key-actuated pallets in the usual manner.

Below the reed-cells 15 is the wind-chest or primary resonator 17, which is of particular form and disposition, and in the rear thereof is the auxiliary resonator 18. The primary resonator or wind-chest 17 is partly divided by the transverse partition or wall 19, which wall completely divides the auxiliary resonator 18 into two parts or portions. The reeds to the left of the divisional wall 19 in the drawings are the bass reeds 20 and those to the right the treble reeds 21.

As the treble reeds may be sounded with a relatively-smaller or more circumscribed area of wind-chest or resonator than the bass reeds, I have provided a construction and arrangement whereby the space beneath or in connection with the bass reeds may be increased without increasing the size of the instrument or interfering with the operation of any of its parts. In order to accomplish this desired result, I provide a horizontal partition or wall 22, which is joined to the lower end of the vertical divisional wall 19 and extends through the primary resonator or wind-chest 17 along and beneath the reed-cells 16 for the treble reeds 21 to the ends of said wind-chest 17.

It will be observed that the divisional wall 19 completely divides the auxiliary resonator 18, Fig. 3, and partially divides the wind-chest or primary resonator 17 sufficiently to form with said divisional wall 19 and the horizontal partition 22 a treble wind-chest or treble primary resonator 24.

As the space below the horizontal partition 22 opens at a into that portion of the wind-chest or primary resonator 17 below the bass reeds 20, there is provided a continuation of the primary resonator or wind-chest 17 beneath the treble wind-chest or primary resonator 24. I therefore term that portion of the space beneath the reed-cells for the bass

reeds as the "main-bass" wind-chest or primary resonator 25, and that portion of the communicating space below the treble wind-chest 24 as the "supplemental-bass" wind-chest or primary resonator 26. By this means I provide an additional space below the treble-reeds, which, communicating with the space below the bass reeds, provides a chamber of maximum size, whereby the base tones are produced with fullness, strength, and volume, and accomplishing this result without increasing the dimensions of the instrument. It is also evident that the range of bass tones may be increased and deeper tones produced, which are full and strong, without increasing the height of the instrument.

In Fig. 5 I have shown a modified form in which the lower wall 27 of the casing is inclined from the treble end thereof to the bass end, thereby obtaining a still larger main and supplemental bass wind-chest or resonator.

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

1. In a reed organ divided into bass and treble parts the combination with the bass and treble reeds arranged in independent sets upon the reed board and reed cells therefor, of a treble wind chest or resonator located below the treble reeds, a main bass wind chest or resonator located below the bass reeds and a supplemental bass wind chest or resonator located beneath the treble wind chest or resonator.

2. In a reed organ the combination with the reed board having reed cells and bass and

treble reeds therein of a primary resonator or wind chest, an auxiliary resonator communicating with said primary resonator, a divisional wall completely dividing the auxiliary resonator and partially dividing the primary resonator, the bass reeds being disposed on one side divisional wall and the treble reeds on the other and an approximately or relatively horizontal partition forming the primary resonator or wind chest into a treble primary resonator located beneath the treble reeds, a main bass primary resonator and a supplemental bass primary resonator having communication with the main bass primary resonator.

3. In a reed organ divided into bass and treble parts the combination with the bass and treble reeds arranged in independent sets upon the reed board and reed cells therefor, of a treble wind chest or resonator located below the treble reeds, a main bass wind chest or resonator located below the bass reeds and a supplemental bass wind chest or resonator located beneath the treble wind chest or resonator, the lower or bottom wall of the casing of the main and supplemental bass wind chest or resonator being inclined from the treble end of the instrument toward the bass end thereof.

In testimony whereof I affix my signature in presence of two witnesses.

ROBERT J. BENNETT.

Witnesses:

CHAS. C. BULKLEY,
W. T. TOMPKINS.