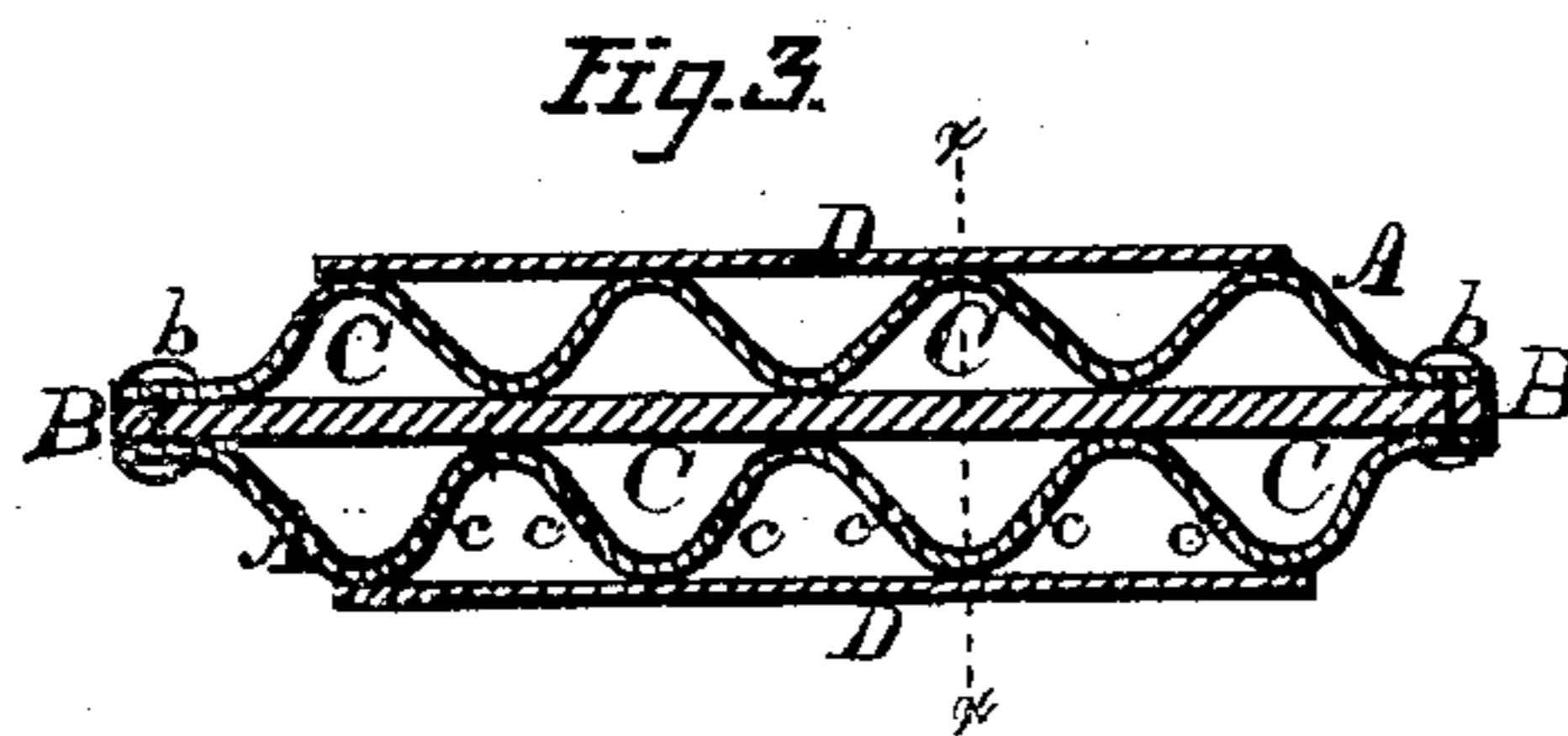
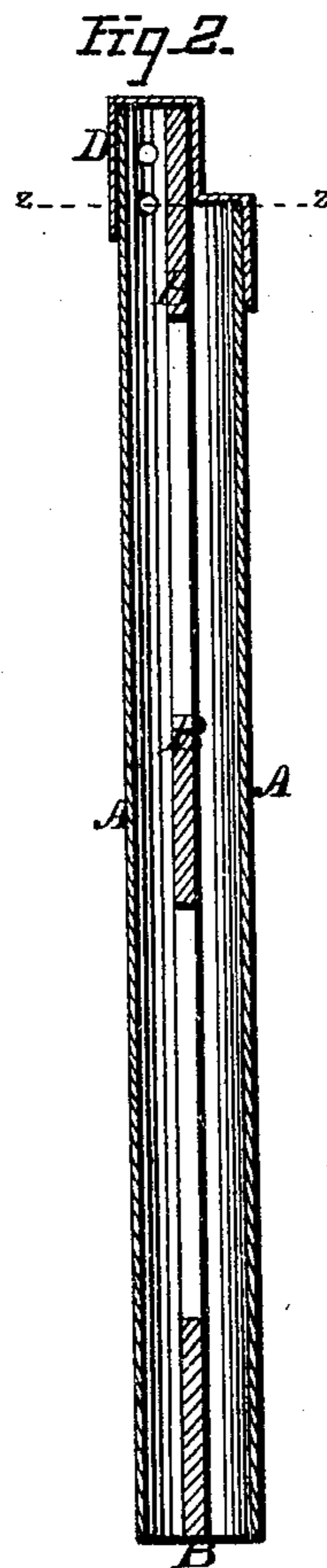
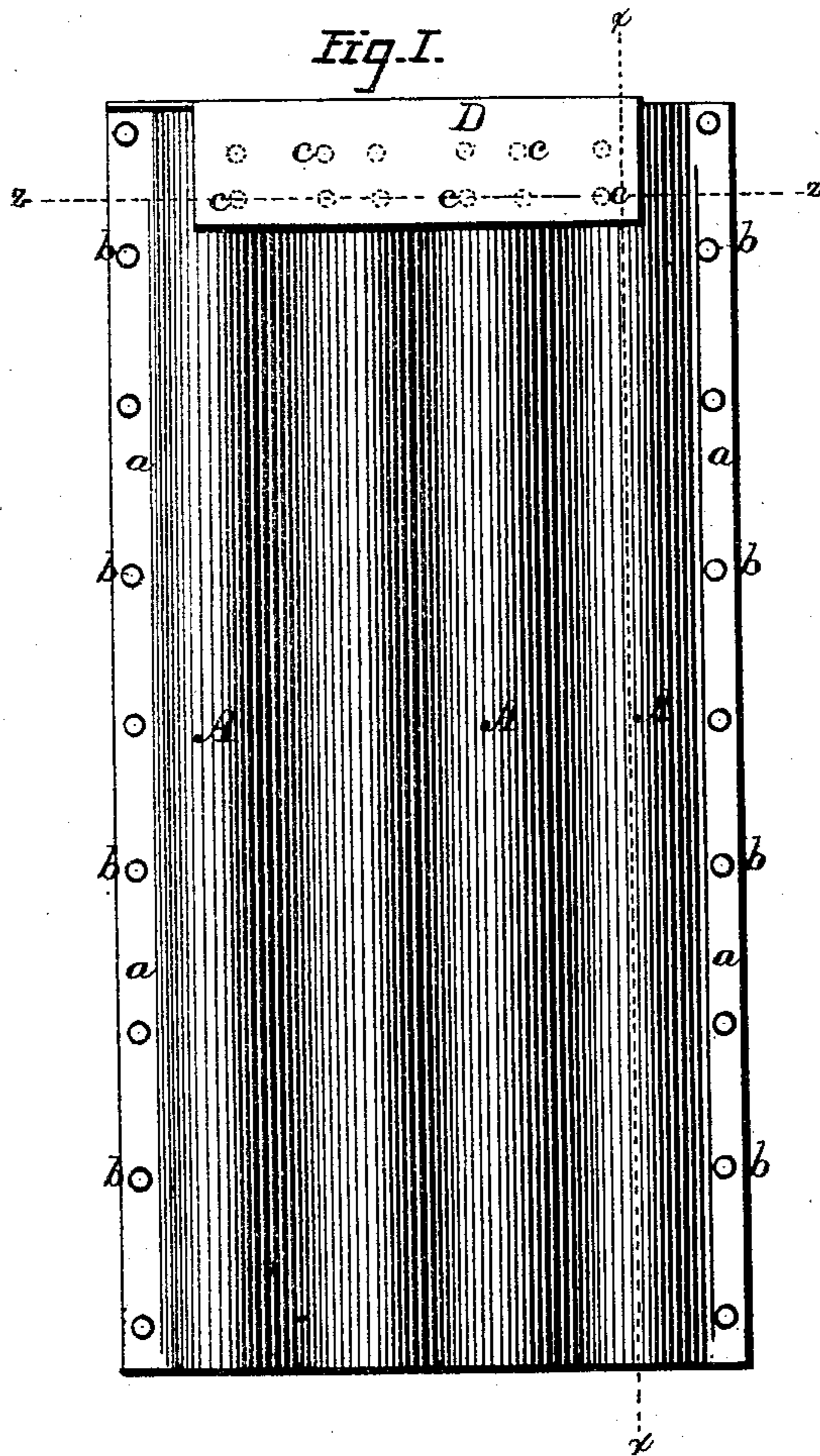


S. B. MUNSON, Jr.
Iron Window-Shutters.

No. 140,526.

Patented July 1, 1873.



WITNESSES:

Jas. C. Hutchinson.
 John R. Young.

INVENTOR

S. B. Munson, Jr., by
 Prindle and Co., his Attys

UNITED STATES PATENT OFFICE.

SAMUEL B. MUNSON, JR., OF CHICAGO, ILLINOIS.

IMPROVEMENT IN IRON WINDOW-SHUTTERS.

Specification forming part of Letters Patent No. **140,526**, dated July 1, 1873; application filed June 10, 1873.

To all whom it may concern:

Be it known that I, S. B. MUNSON, Jr., of Chicago, in the county of Cook and in the State of Illinois, have invented certain new and useful Improvements in Iron Shutters; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is an elevation of the outer side of my improved shutter. Fig. 2 is a vertical section of the same upon line *xx* of Fig. 1, and Fig. 3 is a cross-section upon line *zz* of Figs. 1 and 2.

Letters of like name and kind refer to like parts in each of the figures.

My invention is an improvement upon a metallic shutter for which Letters Patent No. 132,683 were granted to me upon the 29th day of October, 1872; and it consists in a window or door shutter composed of corrugated plates combined together to form a series of vertical air-passages, open at each end, when the upper ends of such passages communicate, by means of lateral openings, with the external air, substantially as and for the purpose hereinafter specified.

In the annexed drawing, A and A represent two plates of sheet metal, corrugated transversely except at their sides, where is left upon each a plain strip, *a*, that is in line with the inner face of the plate. A frame, B, formed of or from a plain sheet of metal that corre-

sponds in size and exterior shape to the like features of the plates A, is placed between the same and the whole firmly secured together by means of a line of rivets, *b*, which pass through said parts just within their edges, the whole being constructed thus far in accordance with the plan followed in case of my patented shutter. The lower ends of the passages C formed by the coincident corrugations of the plates A are open, so as to admit air freely to the interior of the shutter, while the upper ends of said passages are inclosed by a cap, D, or other suitable means, and communication with the external air is effected by means of a series of openings, *c*, formed in and through the outer plate.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

A window or door shutter composed of corrugated plates combined together to form a series of vertical passages open at each end, when the upper ends of such passages communicate by means of lateral openings with the external air, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of June, 1873.

SAMUEL B. MUNSON, JR.

Witnesses:

SAMUEL B. MUNSON,
WILLIAM H. SISSON.