

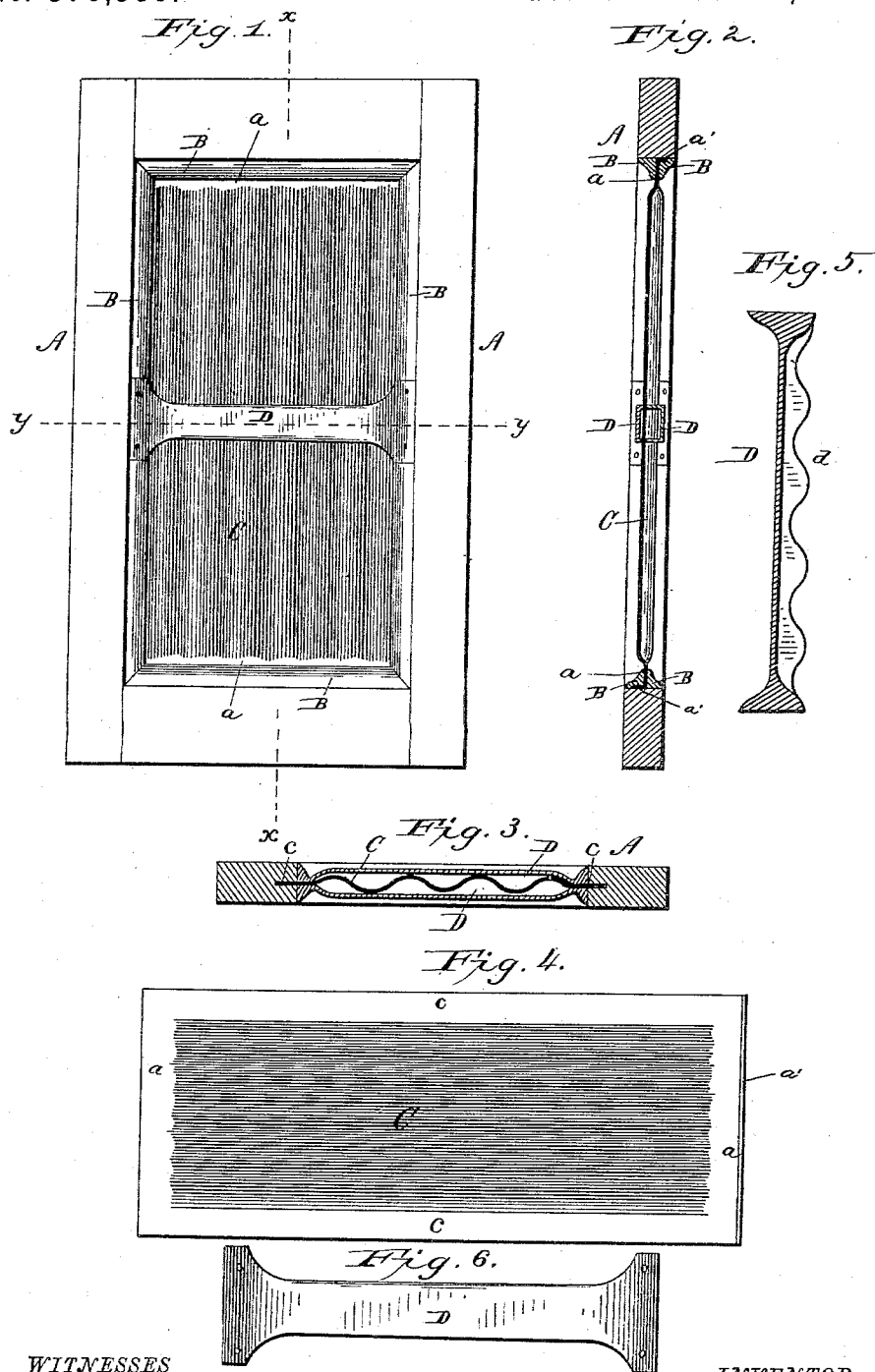
(No Model.)

L. S. ENOS.

DOOR.

No. 378,359.

Patented Feb. 21, 1888.



WITNESSES

C. H. Ramm
John S. Finch Jr.

INVENTOR,

L. S. Enos.
By C. M. Alexander
Attorney.

UNITED STATES PATENT OFFICE.

LEVI S. ENOS, OF ANDOVER, NEW YORK.

DOOR.

SPECIFICATION forming part of Letters Patent No. 378,359, dated February 21, 1888.

Application filed April 11, 1887. Serial No. 234,394. (No model.)

To all whom it may concern:

Be it known that I, LEVI S. ENOS, a citizen of the United States, residing at Andover, in the county of Allegany and State of New York, have invented certain new and useful Improvements in Doors; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in door-panels; and it is designed particularly to improve the construction of the door patented by me on the 28th day of December, 1886, No. 355,259, as will be more fully hereinafter described, and particularly pointed out in the claims appended.

In the door covered by the patent above mentioned, a serious difficulty lies in the fact that it is found extremely impractical to fit the moldings of the door to the panel, the corrugations of the same being quite numerous and extending over its entire surface, as will be seen by reference to this patent, thus making it necessary to provide the moldings with corrugations similar to the corrugations of the panel, as is evident. To corrugate the moldings to fit closely the corrugations of the panels, especially the upper and lower ends of the same, it is obvious, would increase the cost of producing the doors considerably, as the ordinary molding now in universal use could not be used, and an entirely new and expensive molding would have to be adopted. Aside from the above drawbacks, there is a great liability of the moldings being displaced or injured by the expansion and contraction of the corrugated panel. These defects are fully obviated by the door illustrated.

In the annexed drawings, making part of this specification, Figure 1 represents a side view of the door. Fig. 2 is a section on the line *x x* of Fig. 1. Fig. 3 is a section on the line *y y* of Fig. 1. Fig. 4 is a plan view of the panel itself. Fig. 5 represents a section of one of the side braces, and Fig. 6 a plan of one side of same.

In the drawings, A represents the door-frame

which carries the panel, and which is made of wood.

C represents the panel, which is made of sheet metal of suitable thickness, and which is corrugated, the corrugations appearing on both faces. The edges of the sides of the panel are plain, as seen at *c c*. The ends are also plain, as represented at *a a*. The panel is corrugated throughout its length, with the exception of the sides *c c*, and then the ends *a a* are flattened out by suitable pressure. The edges of the panel may be inserted in grooves in the frame of the door, or simply covered by and secured in place by the molding-strips B B.

D represents a brace for the panel. This brace is made plain on its face; but its side edges, *d*, are formed into flanges which are corrugated and made to conform to the corrugations of the panel C. Its ends are so formed that they fit snugly against the frame A. One of these braces is used upon each side of the door. The upper and lower edges of the panel may be provided with flanges *a'*, as indicated in Fig. 2, for the purpose of affording a means of firmly attaching the panel to the door-frame, the said flanges being formed integral with the panel and adapted to rest upon the inner faces of the end pieces of the door-frame. The moldings are secured over these flanges, thus securing the panel firmly in place.

It will be observed that by my invention I provide an ornamental, very inexpensive, and durable door, possessing all the advantages over the old wooden door that my former patent does, without any of its defects.

I am aware that J. D. Pierce and J. B. Smith procured a patent August 31, 1875, No. 167,270, on a fire-proof shutter, in which they used a longitudinally-corrugated sheet of metal provided with flat or plain longitudinal edges, the said metal sheet being secured to a plain metallic plate or base-piece, and therefore I do not claim such construction, broadly, as my invention.

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

1. The brace D, having flanged and corrugated edges *d d*, in combination with the corrugated panel, the brace being fitted over the panel, substantially as described.

2. The combination, with the door frame and moldings, of the corrugated panel provided with plain flat surfaces at its longitudinal and transverse edges, the said transverse edges being also provided with flanges *a'*, formed at right angles to the panel and adapted to fit snugly against the inner edges of the end pieces of the door frame, whereby by means of the moldings the panel may be readily and firmly secured within the frame of the door, substantially as described.

3. As a new article of manufacture, a door consisting of a frame of ordinary construction, moldings of ordinary construction, a panel corrugated over its entire surface, with the

exception of narrow plain flat surfaces around its edges, which by means of the moldings enables it to be rigidly secured within the door-frame, as described, and the transverse braces *D*, secured upon opposite sides of the door and having their inner faces corrugated to fit the corrugations of the panel, the said braces being secured to the side pieces of the door-frame, all arranged substantially as herein set forth.

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

LEVI S. ENOS.

Witnesses:

B. C. BRUNDAGE,
H. E. MINER.