S. H. HAMILTON.
MANUFACTURE OF DOORS FROM PAPER.

To all whom it may concern:

Be it known that I, SILAS H. HAMILTON, of Bushnell, in the county of McDonough, and in the State of Illinois, have invented certain new and useful Improvements in the Manufacture of Doors from Paper; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of a door constructed in accordance with my improved method, and Fig. 2 is a section of the same upon line x x of Fig. 1.

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

In the use of wood for constructing doors great difficulty is experienced from the shrinkage, swelling, and warping to which the material is subject, while the general use of metal for such purposes is rendered impracticable by its weight.

To obviate these objections is the design of my invention, which consists, as an improved article of manufacture, in a door composed of two or more sheets of paper-board, secured together and rendered homogeneous in the manner and for the purpose substantially as hereinafter specified.

In the use of my invention I take boards of properly-prepared paper, which have each the requisite dimensions for a door and a thickness of one-third or one-half the proposed thickness of such door, and within the outer board or boards, A, cut openings a, that correspond in size, shape, and location to the ordinary panel-openings. The edges of these openings a are preferably molded, as seen in Fig. 1, but, if desired, may be left plain, as shown in Fig. 2, and separate moldings secured thereon after the door is completed. The outer boards, A, thus constructed are then coated upon their inner faces with a suitable adhesive mixture, preferably composed of forty-nine parts of glue and one and one-eighth parts of bichromate of potash dissolved in water, and placed upon opposite sides of a central panel-board, B, after which they are passed between rollers and subjected to a heavy pressure, which causes said boards to firmly adhere to and become practically homogeneous. The door may now be covered exteriorly with any desired fire or water proof coating, and then painted in the ordinary way, after which it may be hung and trimmed in the usual manner, and from the nature of the material employed it is free from all changes which are produced by atmospheric causes upon wood, costs much less than metal, and has less weight even than a door constructed from pine.

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

As an improved article of manufacture, a door composed of two or more sheets of paper-board secured together and rendered homogeneous in the manner and for the purpose substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 12th day of August, 1878.

SILAS H. HAMILTON.

Witnesses:

Geo. S. Prindle,
Jas. E. Hutchinson.