

(No Model.)

J. R. GULLEN.

STOVE BOARD.

No. 361,409.

Patented Apr. 19, 1887.

Fig. 1.

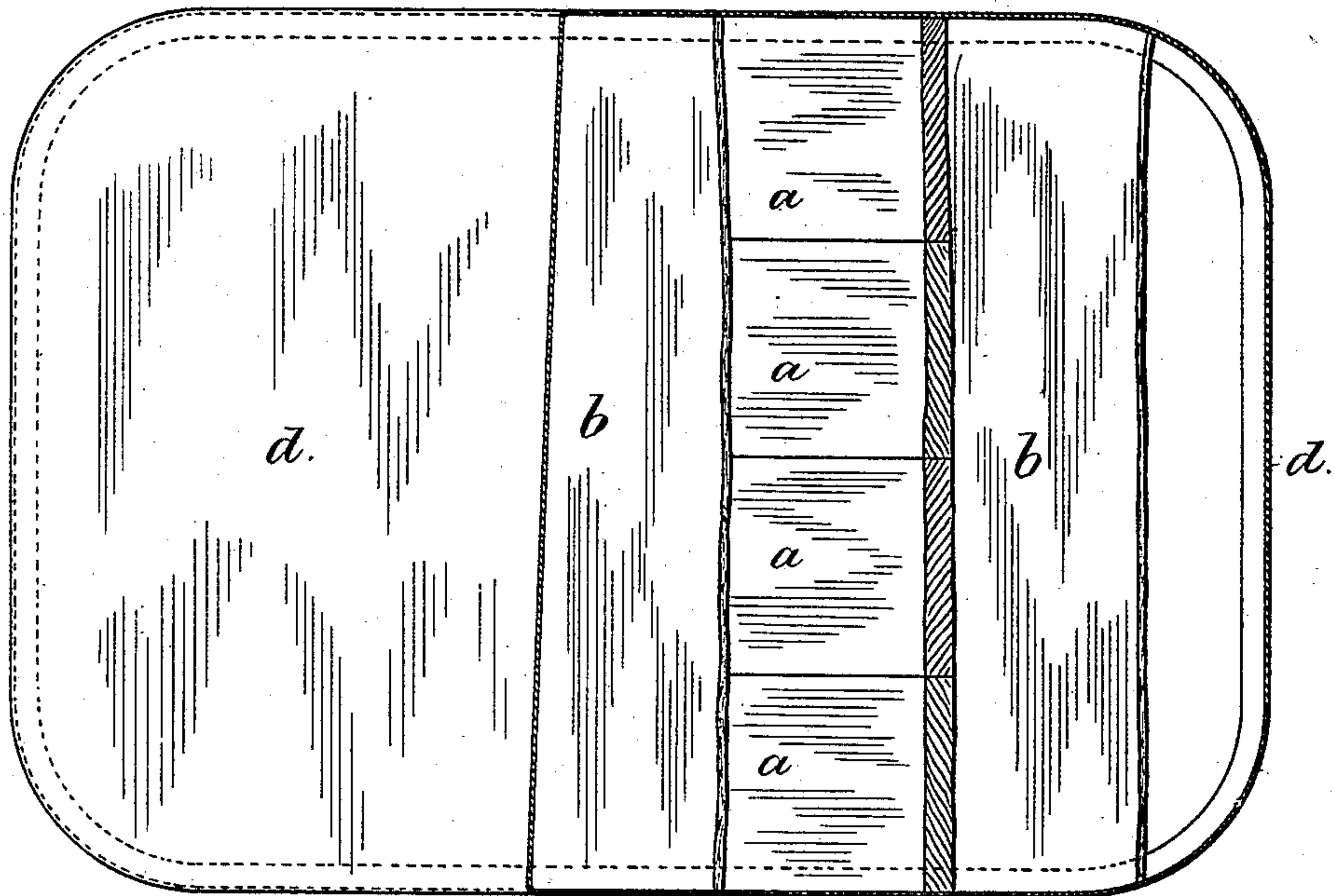


Fig. 2.

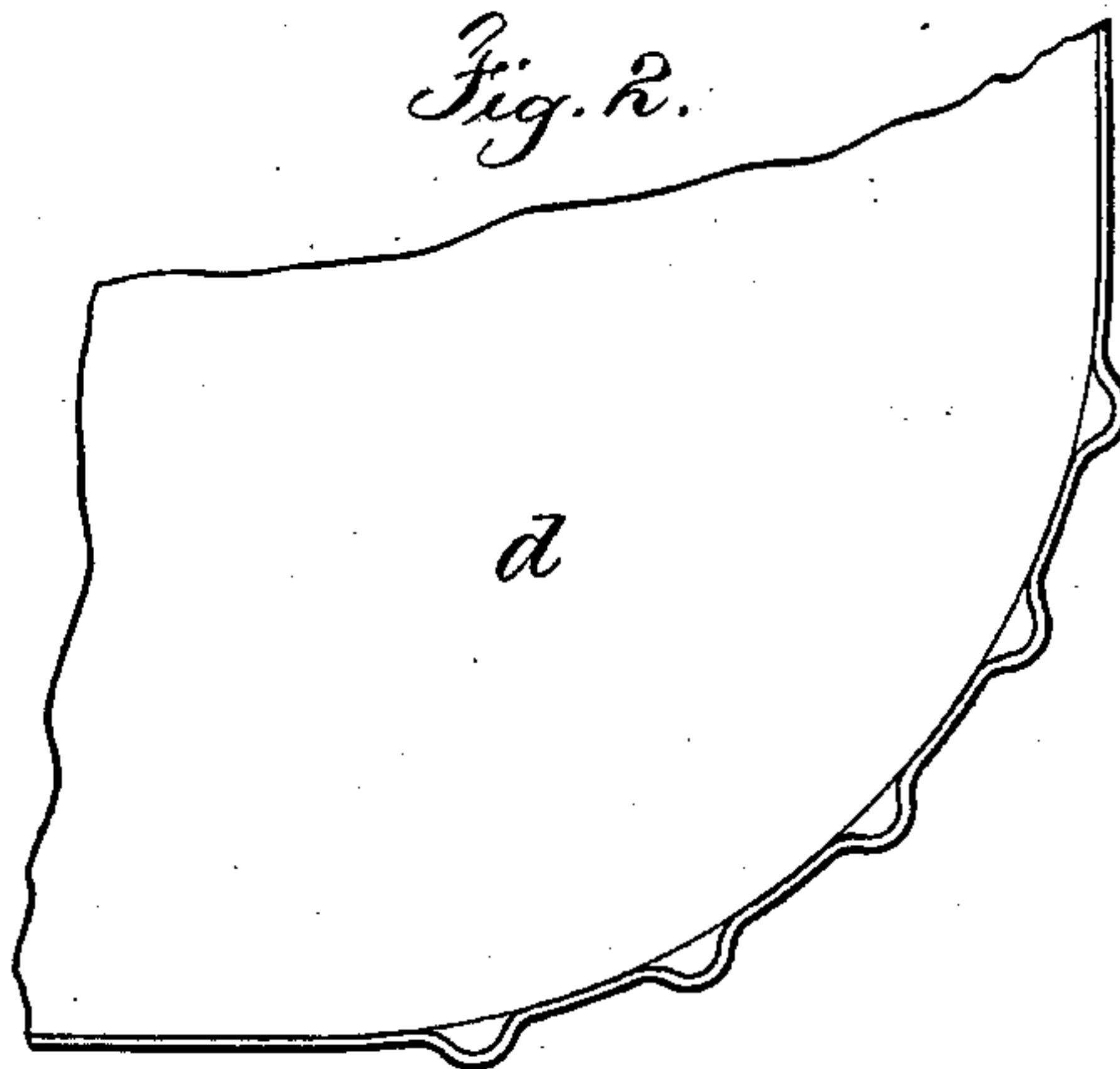


Fig. 3.

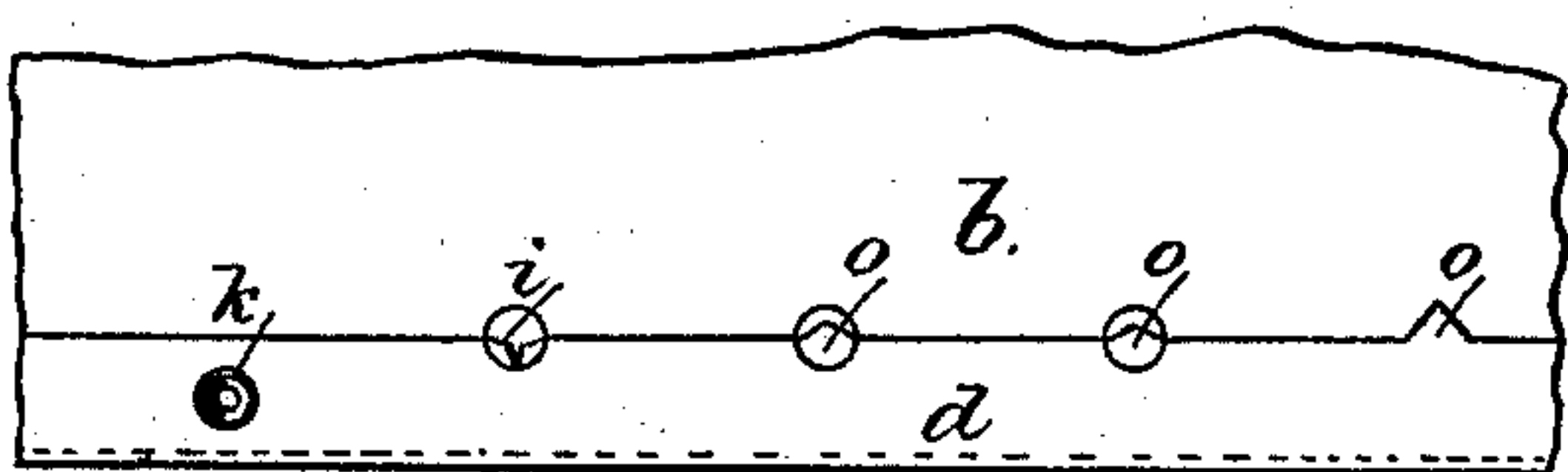


Fig. 4.

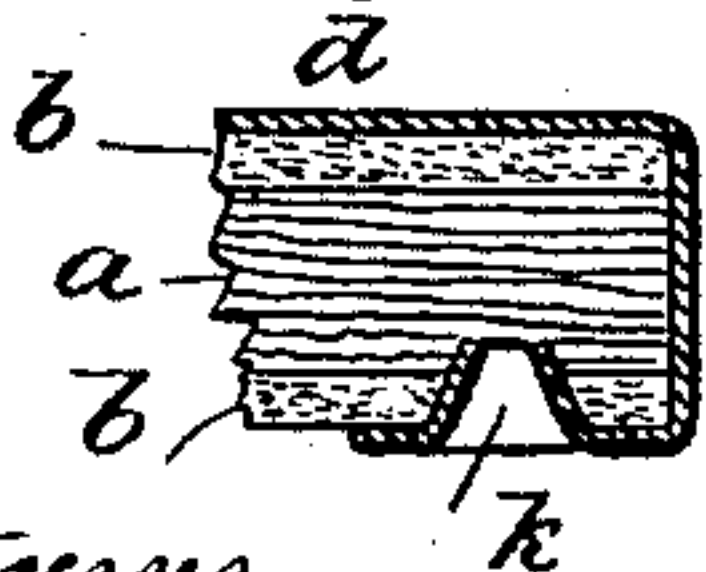
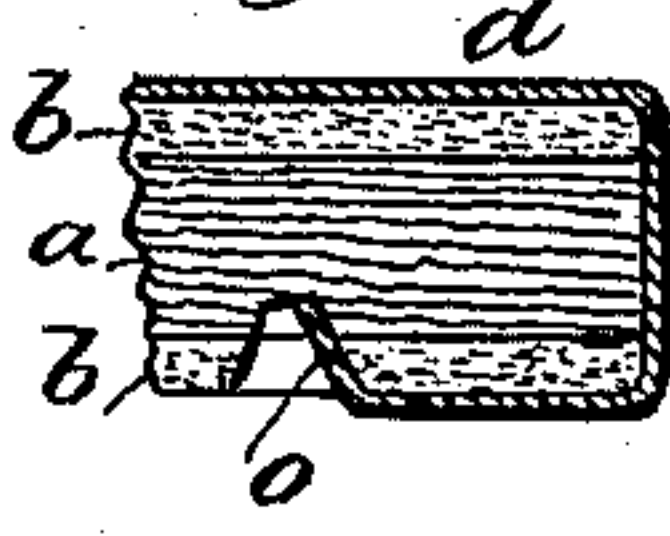


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN R. GULLEN, OF ANSONIA, CONNECTICUT.

STOVE-BOARD.

SPECIFICATION forming part of Letters Patent No. 361,409, dated April 19, 1887.

Application filed October 2, 1886. Serial No. 215,113. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. GULLEN, of Ansonia, in the State of Connecticut, have invented an Improvement in Stove-Boards, of which the following is a specification.

Circular and elliptical stove-boards have been made with ribs or beads struck up by dies; but the dies have to act upon the entire sheet of metal, and are expensive, and one die is only adapted to one size of stove-boards. Wood has also been used as a base or foundation for the sheet-metal covering, and the edges of the sheet metal have been secured by tacks to the wood.

In my improvements I strengthen the wood forming the foundation by layers of paper glued or pasted upon the same, and I make the sheet-metal corners rounding and of the same sheet as the rest of the metal covering, and I attach the metal to the board without the use of tacks.

In the drawings, Figure 1 is a plan of a stove-board with part thereof broken open and in section. Fig. 2 represents the corner as stamped upon the sheet of metal. Fig. 3 is an inverted plan at one edge of the stove-board; and Figs. 4 and 5 are sections in larger size, showing the manner in which the sheet metal is attached without tacks.

The wood foundation for stove-boards is liable to shrink from the action of the heat, and usually several pieces are necessarily employed to make one foundation-board in consequence of the width.

I apply to the surfaces of the wood *a* the sheets of heavy paper *b*, and glue or paste the same securely together, so that the different pieces of thin wood may be held firmly together and the risk of warping, splitting, and separating be lessened.

The stove-board is made with straight or nearly straight edges and with rounding corners. I therefore fold the sheet-metal covering *d* at the proper places to correspond to the straight sides of the foundation-board, and I make use of quarter-circle dies to strike up the sheet metal at each corner and form rounding corners corresponding to the rounding corners of the foundation-board. The corners, however, are of the same metal and in one with the rest of the covering sheet of metal, thereby avoiding the expense of separate metal corners and making the parts much smoother, as there are not any seams or edges where one piece of metal joins to another, or

any tacks, as in corners that are separate pieces, and my dies are adapted to any size of stove-boards, instead of requiring a separate set of dies for each size of board, as heretofore usual. I prefer to corrugate the metal of the rounding corner flanges, as shown in Fig. 2, as by so doing creases are prevented.

The edges of the sheet metal are folded over upon the under surface of the foundation-board after the same has been laid between the flanges or rim of the sheet metal. In cases where this has before been done tacks have sometimes been driven through the metal.

I insure a firm and reliable connection between the foundation-board and the edges of the sheet metal by driving projections or claws on the sheet metal itself into the wood or foundation.

By using a row of blunt punches the edge of the sheet metal is pressed into the board at intervals in the form of claws, as seen at *i*, or the punches may go through the metal itself, as shown at *k*; but by cutting the edge of the sheet metal in teeth, as shown at *o*, the ends of the teeth can be bent down into the wood by the punches and form claws of the most reliable character for connecting the edges of the sheet metal, and there are no roughnesses, projections, or tacks to injure the carpet or surface upon which the stove-board rests.

I claim as my invention—

1. The stove-board having a foundation and a complete covering in one piece of sheet metal, the edges being straight and the corners rounding, and the sheet metal of the covering being bent to form the round corners and folded back beneath the foundation, substantially as set forth.

2. A stove-board having a foundation and a sheet-metal covering with straight or nearly straight edges and rounding corners, the metal at the corners being bent in corrugations and folded in under the foundation, substantially as set forth.

3. The stove-board having a foundation and a sheet-metal covering, the edges of which are bent around and beneath the foundation, and claws bent in the sheet metal and forced into the foundation, substantially as set forth.

Signed by me this 27th day of September, 1886.

J. R. GULLEN.

Witnesses:

GEO. T. PINCKNEY,
WILLIAM G. MOTT.