

C. Atwood.

Carding Hooks & Eyes.

N^o 6745.

Patented Sep. 25. 1849.

Fig. 2.

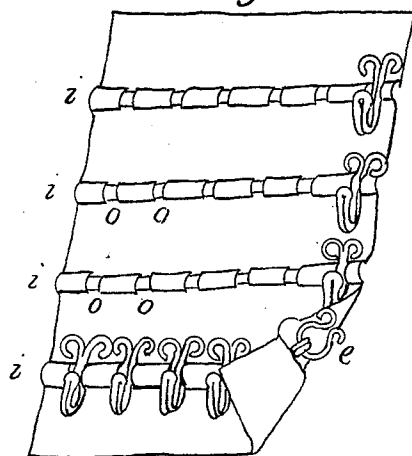
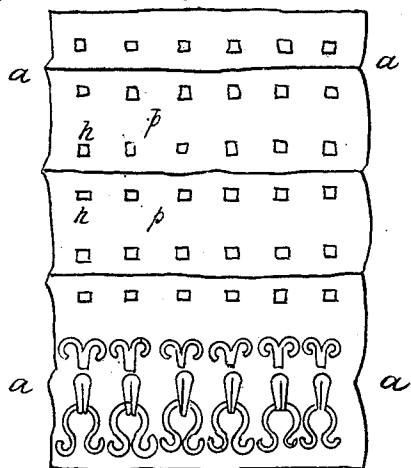


Fig. 1.



UNITED STATES PATENT OFFICE.

CHARLES ATWOOD, OF BIRMINGHAM, CONNECTICUT.

ATTACHING HOOKS AND EYES TO CARD.

Specification of Letters Patent No. 6,745, dated September 25, 1849.

To all whom it may concern:

Be it known that I, CHARLES ATWOOD, of Birmingham (Derby,) in the county of New Haven and State of Connecticut, have invented a new and Improved Mode of Uniting and Attaching Hooks and Eyes to Paper Cards, Without Sewing or Stitching Them Thereto; and I do hereby declare that the following is a full and exact description of my mode and process of attachment.

The nature of my invention consists in fastening them by perforations through the paper, and by embossing it so as to show almost the whole form of the hook on the face of the card, and in such manner that it will not recede nor permit the eye, when appended to the hook, to escape from it.

To enable others skilled in the art to make use of my invention, I will proceed to describe my process more minutely.

I take long strips of paper of suitable texture and thickness, slitted from the web (that is, from the whole piece before it is cut into sheets)—into ribbons of suitable breadth for the card; which slitting is performed by closely winding the web upon a wooden roller, and then with the point of a knife rested firmly at the proper places in succession, and when the roll is turned around against the knife the web is slitted into suitable ribbons of even breadth, which is an operation extensively known and used for similar purposes. These ribbons I pierce with double rows of mortise-like holes crosswise, and I prefer to have six holes, or pairs of holes at suitable and nearly equal distances apart, in the breadth of the ribbon;—and these pairs of holes should be about half as far apart as the length of the hooks which are to be attached by them to the card. These double rows of holes may be placed at any suitable distances from each other lengthwise of the ribbon, but the distances should not be less than the whole length of a hook and eye when linked together. The piercing of these holes through the paper ribbons may be performed by a variety of devices, either by hand, or foot, or other power, which may be easily adapted and applied by any machinist at his discretion. These ribbons I cut off into proper lengths for a card, and I prefer the length of four double rows of holes, which will contain two dozens of pairs of hooks and eyes. I take one of these perforated cards, and doubling or folding it at exactly the middle between

a double row of holes so as to bring each pair of holes to meet and agree together,—and thus doubled it is holden in the left hand, and a row of hooks thrust through the holes with the fingers of the right hand, with their beaks upward, and into each hook, an eye is linked; and when a row is thus filled with hooks and eyes, and the fold of card in that part is drawn straight or flat with moderate force,—that row is set and in like manner for each row of hooks;—and when the whole card is set and drawn flat as above, each hook is found attached to the card so that it cannot easily recede without tearing the paper; and each eye is prevented from escaping from its hook by the ridge or elevation of the paper under its beak,—which ridge is maintained by a part of the shank of the hook passing under it.

For further explanation reference is had to the drawings annexed and forming a part of this specification. Figure 1 represents a card perforated and partly filled with hooks and eyes, attached to it as before described. *x, x,* is the ridge under the beaks of the hooks, by which the escape of the eyes is prevented, and at this place I cause a strongly depressed line to be made in the paper where it is pierced, in order to enable the operator readily to find the place to double the card to insert the hooks, and also to incline the paper to fold at this line.

I have another mode of attaching hooks and eyes to the card without stitching, similar to the foregoing, but differing in some parts of the process and arrangement,—which I will also describe. Instead of the double row of perforations across the card I have only a single row of mortise-like holes across it being one for each hook,—and the card is embossed or raised in a line across it corresponding with each row of holes so that the paper of the card is raised between the perforations somewhat above its general face, so that each hole forms a gap through the ridge, or a recess suitable to the breadth of the back or shank of the hook,—and only the hooks are seen upon the face of the card as lying in the recesses,—but they are holden there by the eyes which are seen only on the back of the card,—the bow of the eyes crossing the recesses in which the hooks lie, and by passing over the shanks of the hooks, each eye binds its hook into its recess, and each hook and eye, thus combined becomes attached to the card, and will not readily

be detached from it without tearing the paper.

For further explanation of this mode of attachment reference is had to the drawings.

- 5 Fig. 2 represents a card perforated, and partly set in this manner, and having one of its corners turned up to show a part of the back side, and to show how the hooks are holden in their recesses by the eyes, as at *e*.
- 10 The manual process to attach hooks and eyes by this mode, is to thrust a hook from the face of the card through the recess, and link an eye into it upon the back side and withdraw it so far as to bring the eye to the paper under the ridge, and slide the hook under the bow of the eye, in the recess to its place. By these means and processes, or
- 15 such as are substantially the same, of which I consider the foregoing to be the best, I

attach both the hooks and eyes to the card 20 without sewing or stitching them on, which has ever heretofore been practiced.

I do not claim any peculiar method of cutting the paper, nor any particular kind of machinery for perforating it for the cards. 25

What I claim as my invention and desire to secure by Letters Patent is—

The fastening of hooks and eyes to the cards in the manner set forth; that is, by means of suitable perforations and crimp- 30 ing, folding or doubling of the cards or paper, thereby dispensing with the use of thread and much labor.

CHS. ATWOOD.

Witnesses:

GEO. KELLOGG,
ADDISON SMITH.