

C. Atwood.

Carding Hooks & Eyes.

N^o 6745.

Patented Sep. 25. 1849.

Fig. 2.

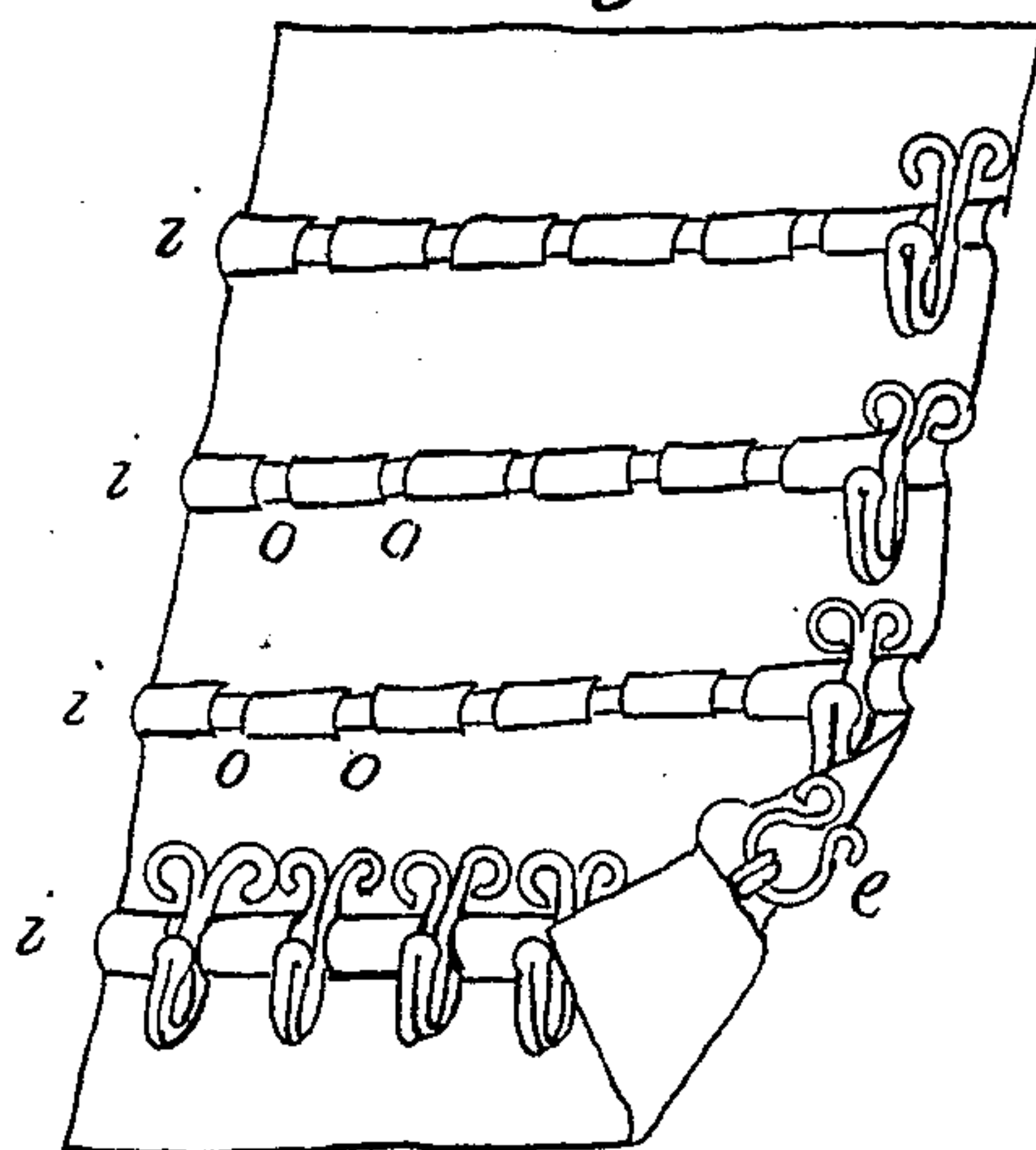
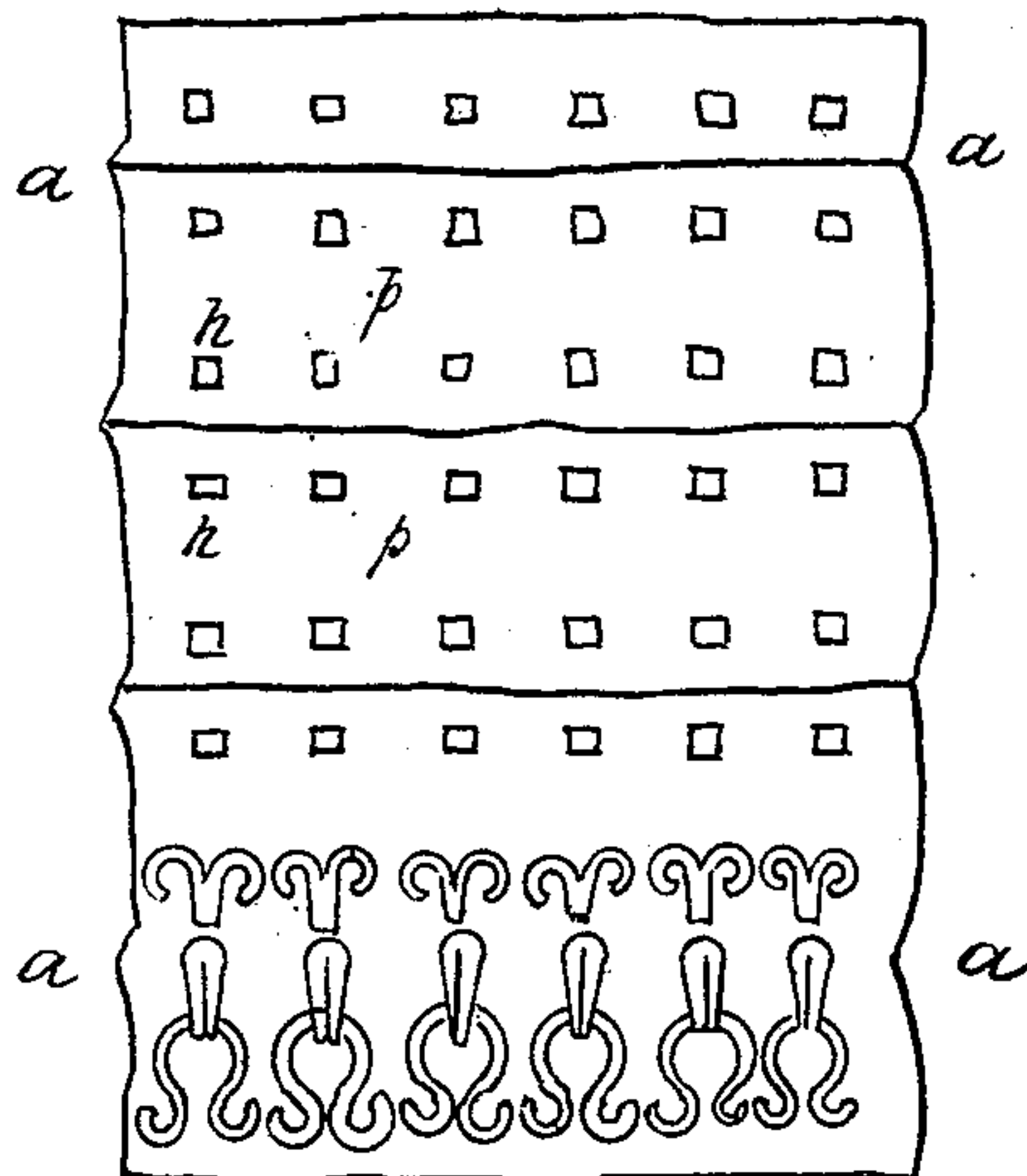


Fig. 1.



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 Unit-
ing and Attaching Hooks and Eyes to Pa-
per 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 ap-
pended to the hook, to escape from it.

To enable others skilled in the art to make use of my invention, I will proceed to de-
scribe 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 per-
formed 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 cross-
wise, and I prefer to have six holes, or pairs
of holes at suitable and nearly equal dis-
tances 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, simi-
lar 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 cross-
ing 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 pa- 15 per 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 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.