No. 837,324.

## J. H. MITCHELL. PAPER BOX.

APPLICATION FILED DEC. 27, 1904. RENEWED MAY 18, 1906.



# UNITED STATES PATENT OFFICE.

# JAMES H. MITCHELL, OF PHILADELPHIA, PENNSYLVANIA.

#### PAPER BOX.

No. 837,324.

#### Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed December 27, 1904. Renewed May 18, 1906. Serial No. 317,420.

### To all whom it may concern:

Be it known that I, JAMES H. MITCHELL, a citizen of the United States, residing in the city and county of Philadelphia, in the State 5 of Pennsylvania, have invented a certain new and useful Improvement in Paper Boxes, of which the following is a true and exact description, reference being had to the accompanying drawings, which form a part thereof. 10 My invention relates to the construction of

<sup>10</sup> Invention relates to the construction of paper boxes provided with an interior lining—such, for instance, as are desirable for use in packing biscuit—my object being to provide a box of this character of novel construction
<sup>15</sup> which will be sufficiently moisture - proof without requiring an outer cover of paper and which will also be of such character and construction that the labels and decorations usually applied to such packages can be
<sup>20</sup> printed directly on the box itself.

The nature of my improvements will be best understood as described in connection with the drawings, in which they are illustrated, and in which—

- Figure 1 illustrates the method of forming the inner box or lining of the package. Fig. 2 is a plan view of a blank which I prefer to use for the outer casing or box proper. Fig. 3 illustrates in connection with the description the various steps of folding the blank
- 3° tion the various steps of folding the blank over and around the inner lining of the box. Figs. 4 and 5 show the steps of closing the box; and Fig. 6 is an exaggerated sectional view through the end of the box as on line
- 35 6 6 of Fig. 5, showing the mode in which the cementing material holds the flaps of the outer box together and to the end wall of the inner box or lining.

Referring first to Fig. 1, A indicates a 40 sheet of paper of suitable character for a boxlining, and C the former over which the paper can be folded to the requisite form. As shown, the paper, placed on the former, as shown in Fig. 1, is first folded down on the 45 lines A' A' and then the ends folded down and creased on the lines A<sup>2</sup>. This also re-

and creased on the lines A<sup>2</sup>. This also results in or is immediately followed by the formation of the diagonal folds A<sup>4</sup> A<sup>4</sup>, and the inner-box lining is then completed to the 5° form it occupies before the closure of the package by folding in the end flaps on the lines A<sup>5</sup> A<sup>5</sup>, &c.

My preferred form of blank for the outer casing, as shown in Fig. 2, has, extending out 55 from the ends of the section B', which forms the bottom of the box, the end flaps B<sup>2</sup> B<sup>2</sup>, which are perforated, preferably by slotted peforrations arranged in diagonal lines, as indicated at B<sup>10</sup>. The portions of the blank which form the front and back walls of the 60 box and which are marked B<sup>3</sup> and B<sup>6</sup> are also provided with end flaps, of which the ones which are to be inner flaps B<sup>4</sup> B<sup>4</sup>, for instance, are formed with perforations, as indicated at B<sup>11</sup>, while the end flaps B<sup>7</sup> B<sup>7</sup>, 65 which are the outer flaps of the box, are formed without perforations, as shown. By preference I form my blank also with the laterally-extending flaps B<sup>8</sup> B<sup>8</sup>, extending from the sides of the flaps B<sup>7</sup>, and also, by preferrow terminal flap B<sup>5</sup> and the rear wall B<sup>6</sup> with a broad cover-flap, (indicated at B<sup>9</sup>.)

In assembling the box the blank B is placed on the former, as indicated in Fig. 3, and the 75 inner end flaps B2 B2 turned down upon the ends of the lining-box, as shown. The front and back walls of the blank are then bent down over the former, as shown, and, preferably at this time, cementing material is ap- 80 plied to the perforated flaps B<sup>4</sup> B<sup>4</sup>. The cementing material which I prefer to employ is sealing-wax of proper consistency. The per-forated flaps  $B^4 B^4$  are then turned in on the flaps B<sup>2</sup>, and the outer end flaps B<sup>7</sup> B<sup>7</sup> are 85 then folded in against the ends of the box and pressure applied, which will cause the cementing material applied to the flaps B<sup>4</sup> to force its way through and between the perforated flaps and through the inner perforated flap into 90 contact with the inner lining and beneath the folds A<sup>4</sup> of this lining, the disposition of the cementing material being indicated in the distorted view, Fig. 6, where the distributed cement is shown at E. The lined box is then 95 removed from the former C, and after it has been filled with biscuit or other material the top flaps are folded down, as shown in Figs. 4 and 5, and sealed or secured in place. By preference the top flaps B<sup>8</sup> B<sup>8</sup> are folded in, 100 as shown in Fig. 4, pressing the upstanding end walls of the inner lining down upon the contents of the box and causing the formation of the angular front and rear flaps A<sup>6</sup> A<sup>6</sup>. The narrow top flap B<sup>5</sup> is then folded down, 105 pressing the front flaps A<sup>6</sup> with it, and then by preference lines or dots of cementing material, as indicated at F, Fig. 5, are applied to the end flap B<sup>4</sup> and the outer edge of the flaps B<sup>8</sup> B<sup>8</sup>. The package is finally closed, 110 preferably by first folding down the flap  $A^6$ , the end of which may be tucked under the

flap B<sup>5</sup>, if it is long enough to require such treatment, and then the cover-flap B<sup>9</sup> is folded down, its edges pressing on the lines of cement F and being firmly attached to the 5 flaps on which the cement is applied.

It will be readily seen that my package is of simple construction, which can be both easily made and used, that the sealing is secure both against moisture and with respect to the outer casing, and that the completed

package has the panels of the outer casing unmarred, so that the labels or decoration appearing thereon will be in no wise injured either by the manufacture or closing of the 15 box.

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

A lined paper box, the lining of which
 consists of a sheet of paper folded into the form of a rectangular box, and the outer shell of which consists of a blank folded over the lining and having perforated flaps folded over each other and secured together and to the
 inner lining by cementing material extending through the perforated flaps to the end wall

of the lining. 2. A lined paper box, the lining of which

consists of a sheet of paper folded into the form of a rectangular box, and the outer shell 30 of which consists of a blank folded over the lining and having flaps folded over each other and over the end wall of the lining-box, the outer flap being unperforated and the inner flap or flaps perforated and said flaps being 35 secured together and to the lining by cementing material extending from the inner face of the unperforated outer flap through the perforated flaps to the lining-box.

3. A lined paper box, the lining of which 40 consists of a sheet of paper folded into the form of a rectangular box, and the outer shell of which consists of a blank folded over the lining and having perforated flaps folded over each other and secured together and to the 45 inner lining by cementing material extending through the perforated flaps to the end wall of the lining, the outer blank having narrow top flaps B<sup>8</sup>, B<sup>5</sup>, adapted to fold down over the contents of the box, and a broad lid-flap B<sup>9</sup>, 50 adapted to fold down upon the narrow flaps and secured thereto by cementing material. JAMES H. MITCHELL.

Witnesses:

ARNOLD KATZ, D. STEWART.