

(No Model.)

2 Sheets—Sheet 1.

R. P. BROWN & E. L. BAILEY.
SECTOR-SHAPED PAPER BOX.

No. 454,637.

Patented June 23, 1891.

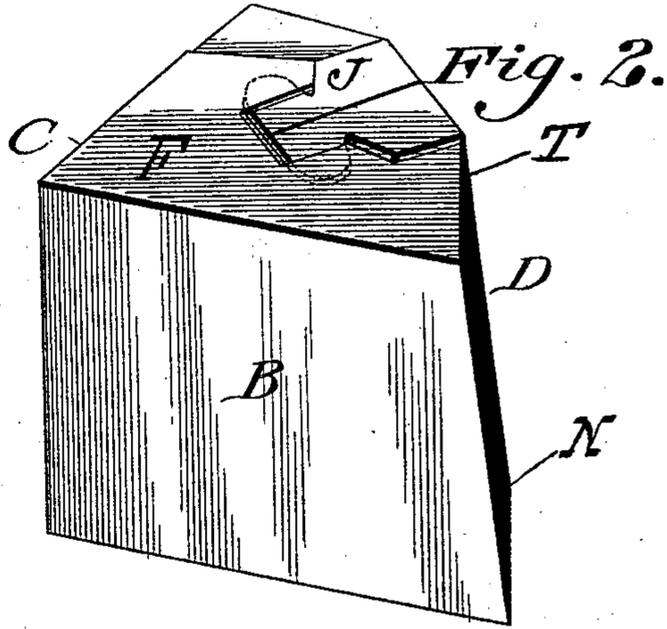
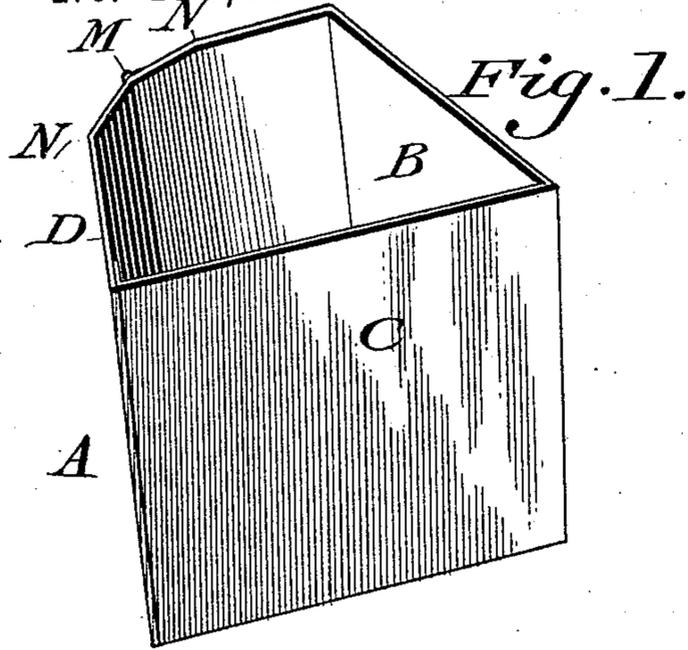


Fig. 3.

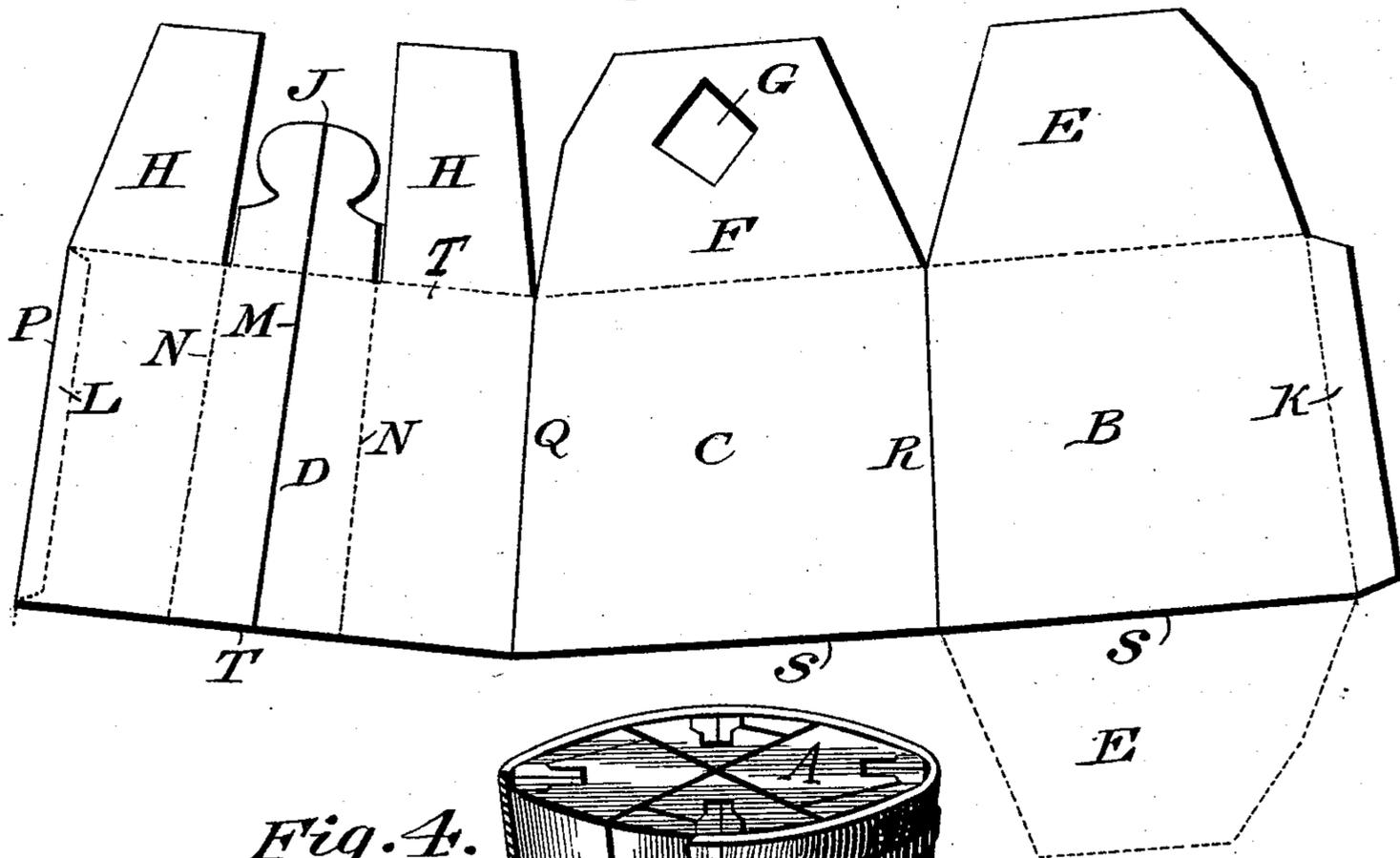
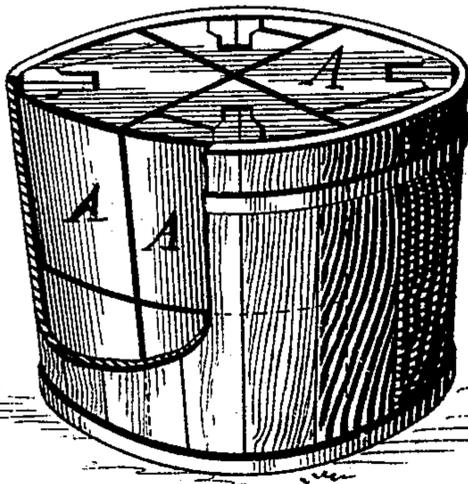


Fig. 4.



WITNESSES:

P. H. Nagle.
L. Douville.

INVENTORS.
Robert P. Brown,
Edward L. Bailey,
BY
John A. Diederichsen,
ATTORNEY.

(No Model.)

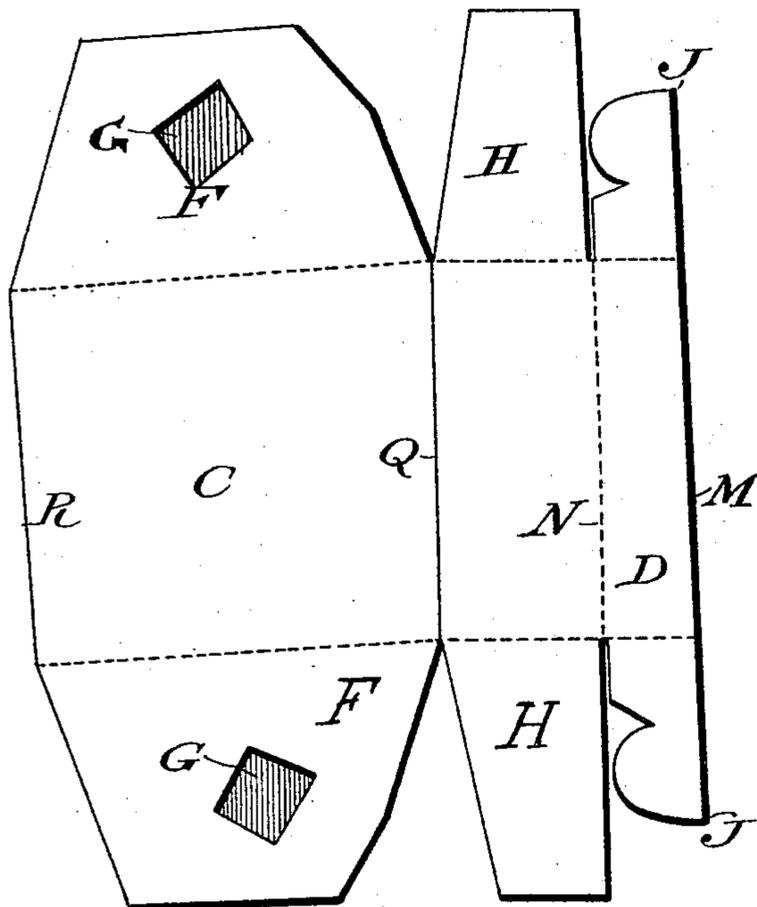
2 Sheets—Sheet 2.

R. P. BROWN & E. L. BAILEY.
SECTOR-SHAPED PAPER BOX.

No. 454,637.

Patented June 23, 1891.

Fig. 5.



WITNESSES:

P. H. Cragle.
L. Douville.

INVENTORS.
Robert P. Brown
Edward L. Bailey

BY

John D. Densmore

ATTORNEY.

UNITED STATES PATENT OFFICE.

ROBERT P. BROWN AND EDWARD L. BAILEY, OF PHILADELPHIA,
PENNSYLVANIA.

SECTOR-SHAPED PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 454,637, dated June 23, 1891.

Application filed January 6, 1891. Serial No. 376,848. (No model.)

To all whom it may concern:

Be it known that we, ROBERT P. BROWN and EDWARD L. BAILEY, citizens of the United States, both residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Paper Boxes, which improvement is fully set forth in the following specification and accompanying drawings.

Our invention relates to paper boxes, and has for its object a paper box of such construction as to adapt it to be conveniently packed in a pail or other light receptacle without waste of space; and for this purpose it consists of the combination and arrangement of parts hereinafter set forth and claimed.

Figure 1 represents a perspective view of a paper box embodying our invention. Fig. 2 represents a perspective view of the same in inverted condition. Fig. 3 represents a view of the box in opened out or knockdown condition. Fig. 4 represents a perspective view of a number of boxes packed in a pail, part of the pail being broken away. Fig. 5 represents a view of the box in flattened-out condition for packing, transportation, &c.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a paper box formed of the three side pieces B C D. On the bottom of the side B is a flap E, on that of the side C is a flap F, with an opening G therein, and on that of the side D are flaps H H, between which is a tuck J, the head of said tuck being adapted to enter the opening G when the box is set up. The side of the part B has a piece K, which is adapted to be secured to a part L of the side D by gumming or other suitable means. At the center of the side D is a crease M, which extends through the center of the tuck J, it being noticed that the side D is creased at the lines N N, which are continuous of the sides of the tuck J and flare from top to bottom, said creases or crease-lines M N permitting the side D to bend outwardly and flare, as seen in Figs. 1 and 2.

P designates the edge of the side D; Q, the crease-line between the sides C and D, and R designates the crease-line between the sides

B and C. The top edges S of the sides B C form a right line, and the top edge T of the side D extends at an angle to the edge S, so that said edges S T form a broken line, and it will be seen that the sides B C D are wider at top than at bottom.

When the box is set up and the flaps E, H, and F are folded over in their order, the tuck J comes over the flap F, and its head may be inserted in the opening G, thus locking the flaps and closing the bottom of the box.

It will be seen that the top of the box is wider than the bottom and a flaring form imparted to the side D, the box being somewhat of the form of a sector, excepting the feature of the flaring form of said side D, thereby providing a trapezoidal-sided sector, and consequently a number of boxes may be packed in a bucket or a pail having a flaring side, the sides D of the several boxes constituting the backs thereof, the same conforming to the flaring shape of the pail, by which provision the pail will be snugly filled.

It is evident that the parts E F G H J may be duplicated and applied to the top edges S T, and thus form the cover or top of a box, as will be seen in Fig. 4, it being noticed that the box shown in Figs. 1 and 2 is not provided with such cover or top.

Owing to the crease or score M, boxes, though gummed or secured at the places K L, may be flattened out, after the order of knockdown boxes, so as to be conveniently packed and transported, avoiding the necessity of nesting the boxes.

From the construction set forth it will be observed that the top edges of the sides B C, when the box is set up, form right lines and the top edge T of the side D is a broken or curved line. It will be further noticed that one of the edges of each of the sides B C D before and after folding the blank into box form is of greater extent than the opposite edge.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A sector-shaped paper box having two sides of trapezoidal outline and a third side of flaring or curved form, two of said sides being provided at their bottoms with a flap and the

third side having two flaps with an intervening tuck, the head of the tuck-flap entering an opening in one of the flaps of the first two mentioned side pieces, substantially as described.

5 2. A blank for a sector-shaped box having the side sections B C D of trapezoidal outline, the section B having the paste-strip K and the bottom flap E, the section C having the flap
10 F, with opening G therein, and the section D, provided with the flaps H H and an intervening tuck J, having a head adapted to enter the opening G of the said flap F, a crease M being formed in section D to extend through
15 tuck J and having creases N N on each side thereof continuous of the sides of said tuck, substantially as described.

3. A paper box having the three side pieces B C D, the said side B having a bottom flap
20 E, the side C having a bottom flap F, with an opening G therein, and the said side D having the flaps H H, with intervening tuck J, a piece-K, connected with one side of the piece

B and secured to a part of the side D, said side D having the crease M extending through
25 the tuck J, and the lines N N continuous of the sides of said tuck, the top edges of the said sides B C forming right lines and the top edge T of the side D being a broken or curved line, said parts being combined substantially
30 as described.

4. A paper box having three side pieces, two of which have flaps at both upper and lower ends, and the other has two flaps at each end, with an intervening tuck having a
35 head entering an opening in a flap of one of the first two mentioned pieces, one of the edges of each of the side pieces being of greater extent than the opposite edge, said parts being combined substantially as described.

ROBERT P. BROWN.
EDWARD L. BAILEY.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. JENNINGS.