

(Model.)

P. FAGAN.
FOLDING BOX.

No. 306,599.

Patented Oct. 14, 1884.

Fig. 1.

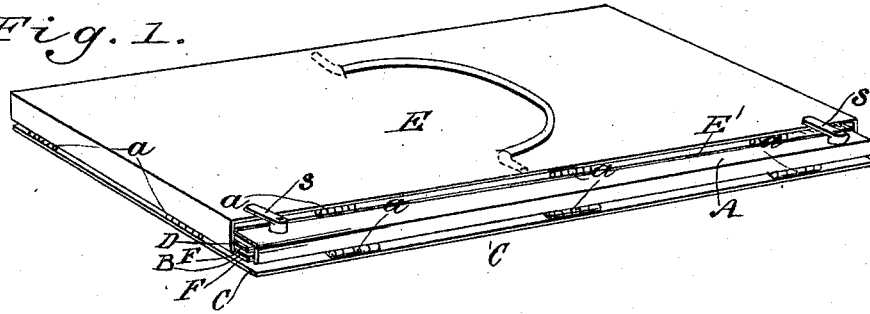
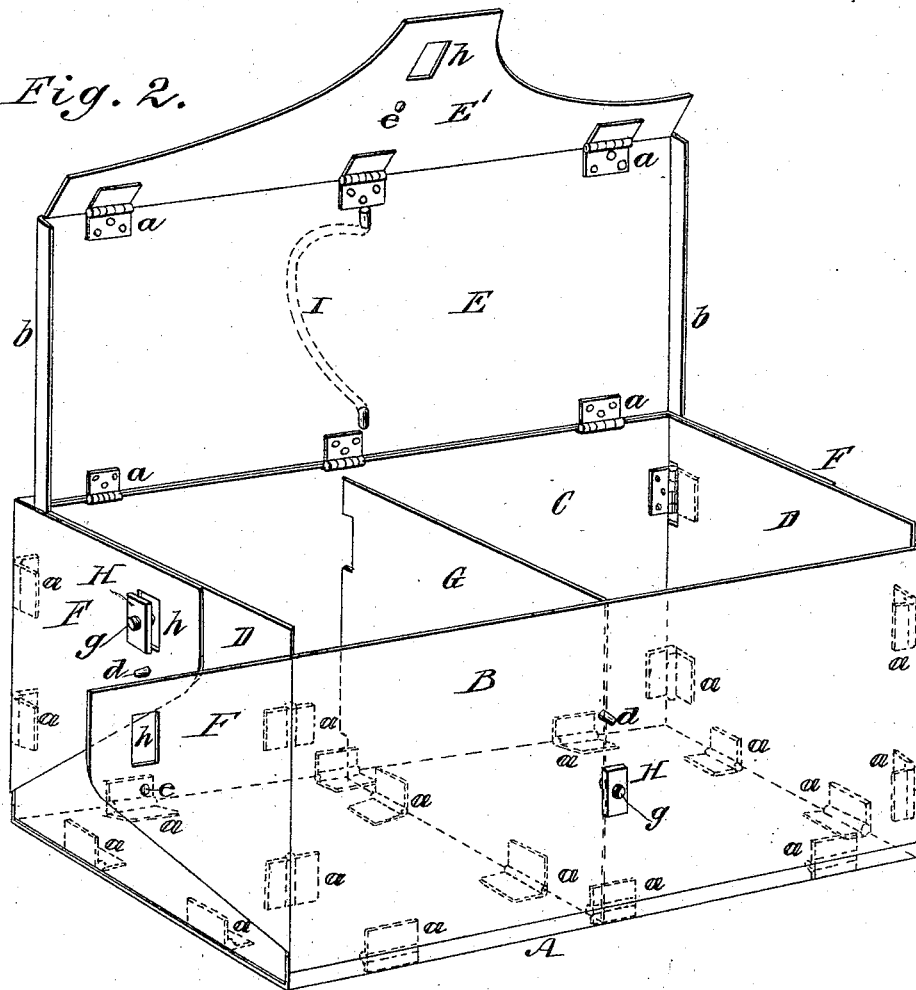


Fig. 2.



WITNESSES:

John H. Green
C. Sedgwick

INVENTOR:

P. Fagan
BY *Munn & Co.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

PATRICK FAGAN, OF ALBANY, NEW YORK.

FOLDING BOX.

SPECIFICATION forming part of Letters Patent No. 306,599, dated October 14, 1884.

Application filed June 26, 1884. (Model.)

To all whom it may concern:

Be it known that I, PATRICK FAGAN, of the city and county of Albany, and State of New York, have invented certain new and useful Improvements in Folding Boxes, of which the following is a full, clear, and exact description.

This invention relates to folding boxes in which the folding sections or parts are hinged to one another and provided with fastenings; and my invention consists in a novel construction of the box and its fastenings, whereby I am enabled to produce a folding box that may be completely folded up, lid and all, piece upon piece, thus condensing its bulk to that of the material used in its construction, and which may readily be unfolded and firmly and quickly secured when set up. The box, which may be used for holding different substances of a dry nature, including food products, dry goods, and other articles, may be made with or without one or more partitions, of any desired size and of any suitable material or materials. When used to hold merchandise, it will enhance the value of the same. It is preferred here, however, to describe the box as made of sheet metal, and as a dinner can or receptacle for use by mechanics, fishing or pleasure parties, and others, and which, when folded up, may readily be carried in a person's pocket, such construction and purposes best explaining its utility.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 represents a view in perspective of the box in its folded condition; and Fig. 2, a perspective view of the same open or set up, with one of its ends left unclosed or unsecured.

The box as here represented, and which is suitable for a dinner or luncheon can, may have its sides, bottom, ends, re-enforcing pieces, lid, and partition, where a partition is used, made wholly of sheet metal. These several parts or pieces are all hinged to their contiguous parts, so as to permit of the whole being folded or shut down flat one upon the other, as shown in Fig. 1, whereby its bulk is reduced to that of the material used in the construction of the box. Each piece may be

united with its adjacent piece either by a single continuous hinge or by two or more separate hinges, the latter arrangement being the one shown in the drawings. The bottom A of the box has its sides or front B and back C, also its ends D D, united with it by hinges *a a*, arranged along the lower edges of these parts. The lid E is similarly united by like hinges *a a* with and along the upper edge of the back C, and is provided with a hinged front flap, E, also has its ends bent or turned over, as at *b b*, to assist in holding the ends of the box in place when the box is set up and closed. Connected also by hinges *a a* to the ends of the front B and back C of the box are re-enforcing pieces or flaps F F, which, when the box is set up, lie one over the other on the outside of the ends D D. These re-enforcing pieces, being hinged as described, differ from other re-enforcing pieces used in other boxes, and are fixedly united with the ends of the box. G is a partition attached by other similar hinges *a a* to the bottom of the box. When the box is folded, the partition G and ends D D are turned down or over the bottom A of the box. The hinged end re-enforcements, F F, and hinged flap E' shut down, respectively, on the inner faces of the front B, back C, and lid E; the front B, with its closed re-enforcements F F, then close down on the bottom A or closed hinged pieces D D and G thereon; the back C, with its closed flaps F F, next shut down on the front B, and afterward the lid E, with its closed flap E', shut down over the hinged edge of the front B onto the bottom A of the box, when the whole may be secured by clamps *s*, pivoted to said bottom. This reduces the whole article or box to the compass shown in Fig. 1. When the box is unfolded and set up, as shown in Fig. 2, the ends D D and their re-enforcing flaps F F may be partly held in place by a teat or pin, *d*, on either end entering apertures *e* in the outside flaps, and the lid-flap E' may be similarly guided or held to its place, in part, by a similar pin *d* and aperture *e*, when the box is closed; but to secure the box when set up other and special fastenings are depended on. These fastenings, of which there may be any number, which may be variously arranged—as, for instance, at the four corners of the ends D D to unite them with the flaps F F, though not

shown in such numbers in the drawings—consist, mainly, of oblong nuts H, fitted to screw onto projecting screw pins or studs *g* on certain of the sections or pieces, and arranged to pass through correspondingly-shaped slots *h* in the sections or pieces to be locked or united with said certain sections or pieces. Thus either hinged end D of the box has a screw pin or stud, *g*, arranged on its outer face and carrying an oblong screw-nut, H, and each re-enforcing flap F has a correspondingly-shaped slot, *h*, in it for said nut to pass through, after which, on turning the nut, it not only acts as a button, but as a screw-clamp to firmly hold the parts together. A similar screw-button fastening, as indicated by letters H, *g*, and *h*, may be used to secure the hinged flap E' of the lid when the box is closed.

Fig. 2 of the drawings represents the one end of the box as not fully closed, in order to more clearly exhibit the fastening and slots in the two re-enforcing flaps at said end.

I is a bail or handle by which to carry the box.

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

1. The folding box having its sides, ends, and lid hinged together, said lid having a hinged flap provided with an oblong aperture, which receives an oblong nut on a screw connected to the front of the box, substantially as and for the purpose set forth.

2. In a folding box, the combination of the bottom A, the front B, the back C, and ends D D, hinged to said bottom, the re-enforcing flaps F F, hinged to said front and back, the lid E, hinged to the back, with or without a hinged front closing-flap, E', and the oblong nuts H, fitted to screw on threaded pins or studs *g* on certain of said hinged sections or pieces, and fitting through slots *h* in other hinged sections or pieces to be locked or united with them, essentially as shown and described.

3. In a folding box having its sides, ends, and lid hinged as described, and its ends re-enforced by hinged flaps secured by oblong nuts or screw-clamps H, the combination therewith of a partition, G, hinged to the bottom of the box, substantially as described.

PATRICK FAGAN.

Witnesses:

PETER C. RILEY,
Z. J. MULLEN.