

No. 885,159.

PATENTED APR. 21, 1908.

B. KEYS.
CARTON.

APPLICATION FILED OCT. 13, 1905.

Fig. 1.

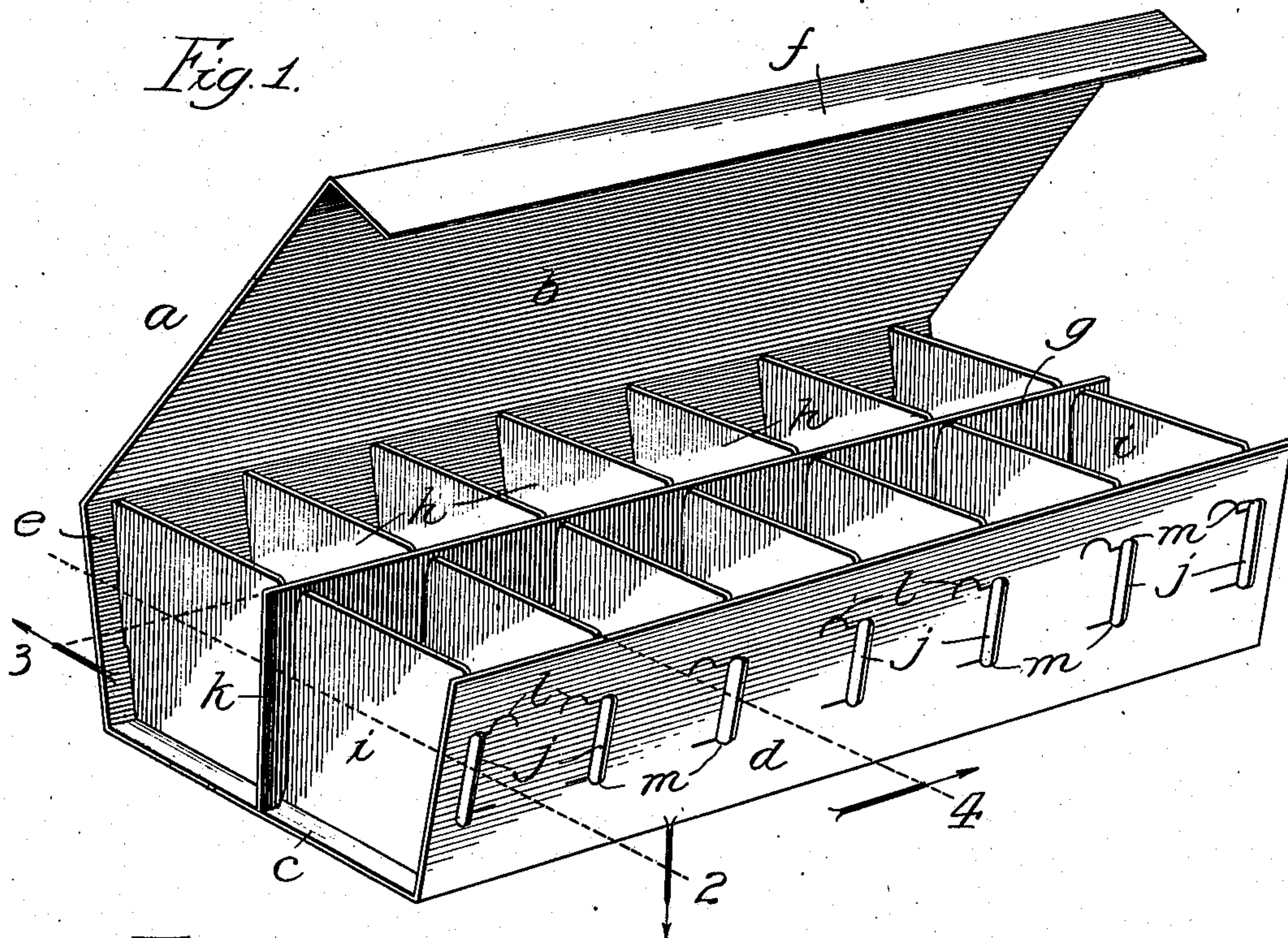


Fig. 2.

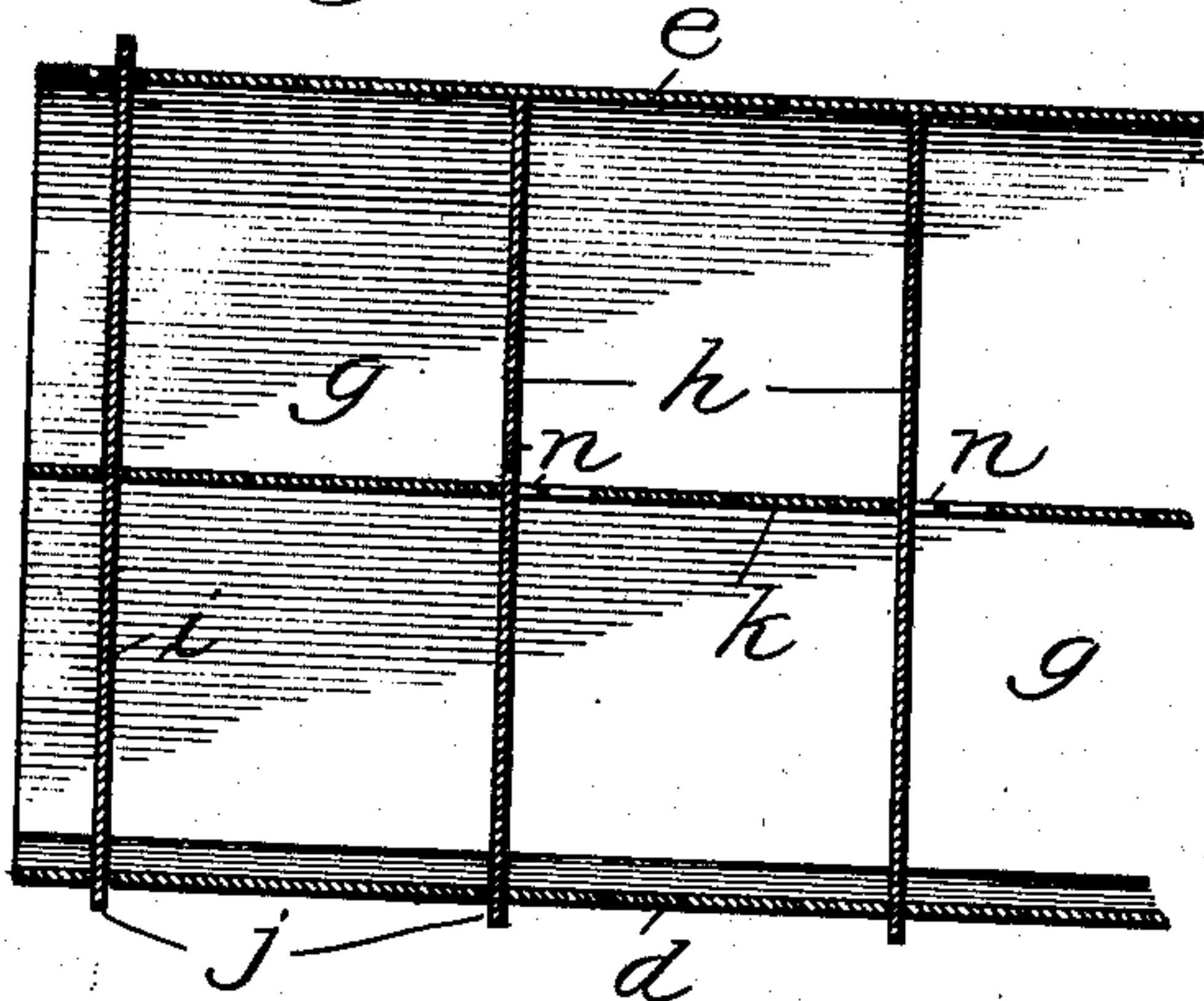


Fig. 3.

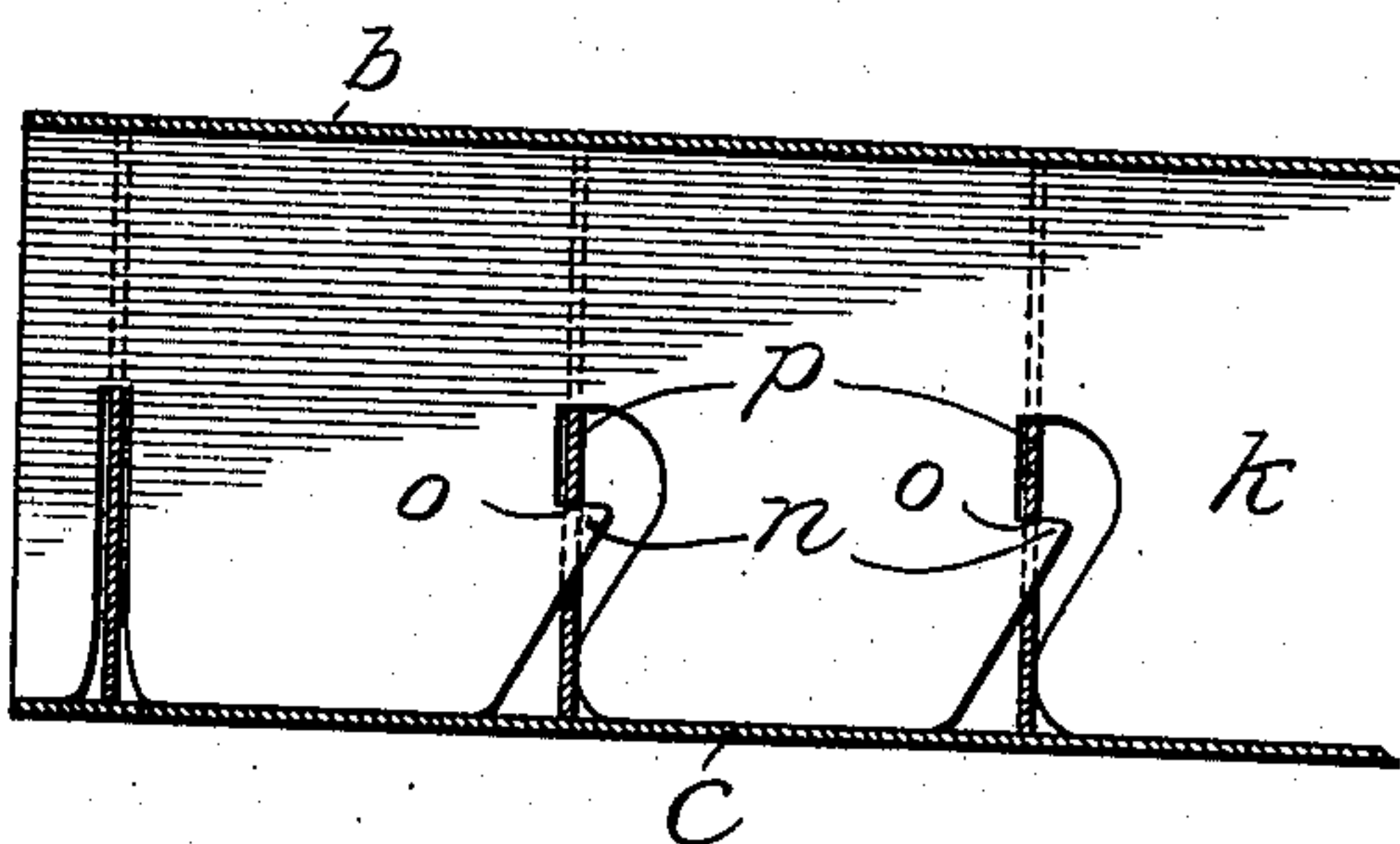
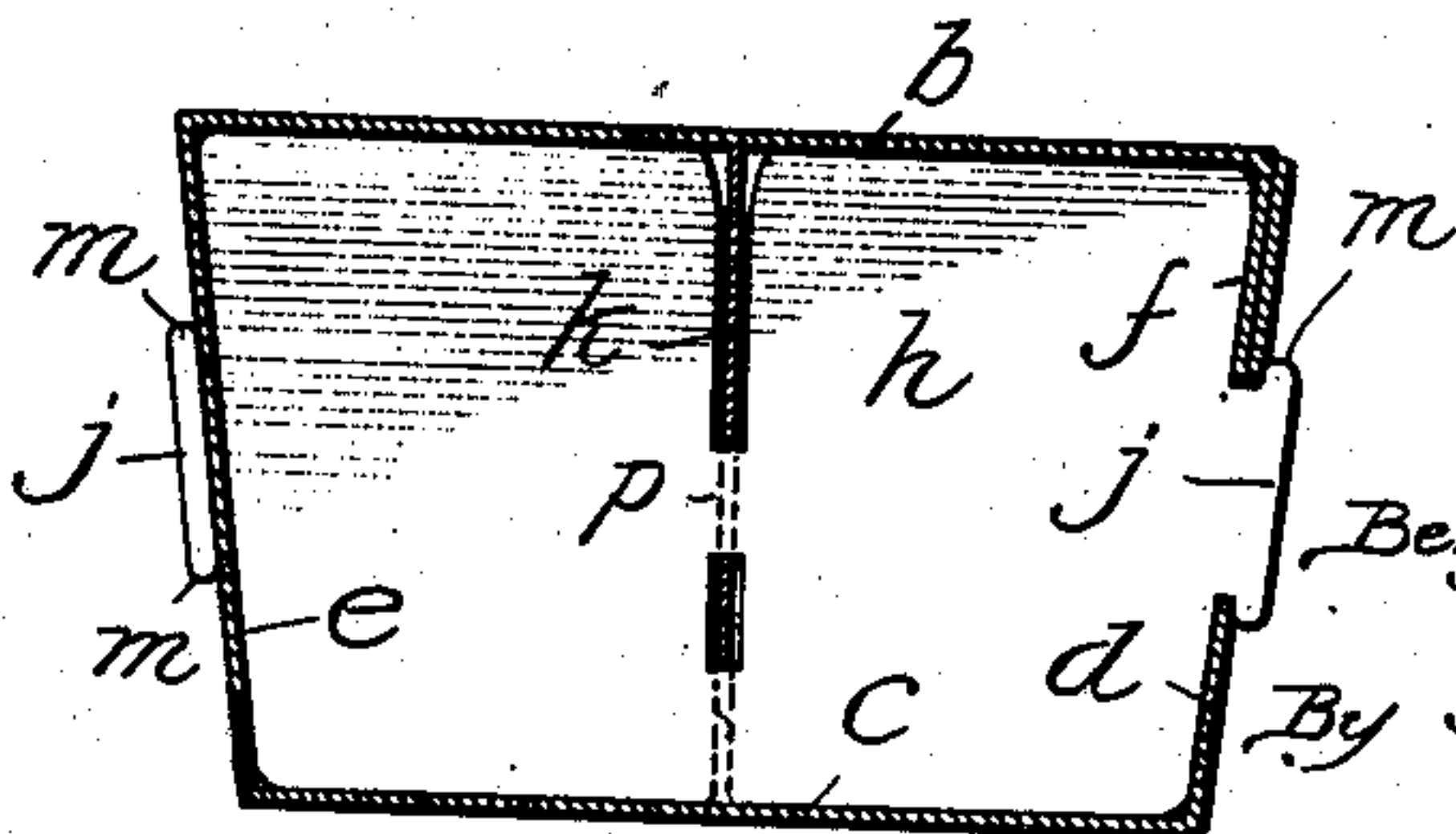


Fig. 4.



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CARTON.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, BENJAMIN KEYS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cartons, of which the following is a specification.

My invention relates to that class of cartons having a foldable outer casing member and a filler articulately secured thereto.

The principal object of the invention is to provide a simple, economical and efficient egg carton.

A further object is to provide an egg carton having a filler provided with outer transverse filler members adapted to form the outer end walls of the carton when in operative position, whereby end walls formed by the casing member are dispensed with, and the time required for adjusting the carton into operative position minimized.

Other and further objects of the invention will appear from an examination of the drawings and the following description and claims.

The invention consists in a carton having a foldable outer casing member and a filler provided with outer transverse members articulately secured to the casing member and forming the end walls of the carton when in operative position.

It consists further, and finally, in the features, combinations and details of construction hereinafter described and claimed.

In the accompanying drawings—Figure 1 is a perspective view of a carton constructed in accordance with my improvements; Fig. 2 a sectional plan view of a portion thereof; Fig. 3 a sectional view in elevation, taken on line 3 of Fig. 1 looking in the direction of the arrow; and Fig. 4 a transverse sectional view in elevation, taken on line 4 of Fig. 1.

In constructing a carton in accordance with my improvements, I provide a foldable casing member *a* made, preferably, of light fibrous material, such as pasteboard, and forming, when in operative position, a top portion *b*, bottom portion *c* and side portions *d* and *e* of a carton, all in one integral piece, the top portion being provided with a flap *f* extending longitudinally along the side edge thereof adapted to be inserted between one of the side portions and the filler hereinafter described. In order to enable the side, top and bottom portions of the outer casing member to be substantially flat when in both operative and inoperative positions,

the casing blank is flexed in straight lines at the points where such side, top and bottom portions meet, so that they are connected by such flexible portions and are thus adapted to be readily adjusted into operative position. A filler is also provided formed, preferably, of light stiff material, such as pasteboard, and having a longitudinal central member *g* articulately secured to a plurality of intermediate transverse filler members *h* and a plurality of transverse end members *i*, which are adapted, when in operative position, to form the outer end walls of the carton.

The outer casing member is made of a single piece of material, such as pasteboard, which is substantially rectangular and which forms integral top, bottom and side walls, the end edges of which are flush with each other when in either operative or inoperative positions. The casing thus has open end portions, and the outer transverse members of the filler are adapted to form the end walls of the carton when in operative position. All of the edges of the blank, which form the outer casing, are thus straight. The amount of material required to form such casing is reduced to a minimum and the waste which accompanies cutting irregular end portions is entirely dispensed with. The inclosing end portions of the ordinary outer casing member being dispensed with, the necessity of folding the same is no longer imposed upon the user, and all that he is required to do in the way of assembling the device or adjusting it to operative position is reduced to a minimum, the assembling being completed in the factory so as to leave only the fastening of a plurality of lugs or securing shoulders to be performed by the user.

The side walls of the outer casing member extend upward and outward at an incline when in operative position, so as to provide a space between the adjacent side walls of a plurality of cartons when mounted side by side, and the projecting ends *j* of the transverse members of the filler, as well as the projecting end portion *k* of the longitudinal member of the filler and also the projecting edges of the casing at the opposite ends thereof, all form cushion portions adapted to minimize the shocks to which a carton and its contents are subjected in use.

In order to provide means for articulately and removably connecting the opposite ends of the transverse members of the filler with

the casing member, the casing member is provided with a plurality of notches or slits *l* having vertical portions through which the projecting end portions *j* of the transverse members of the filler extend. The projecting end portions of the transverse filler members are each provided with upper and lower lug or shoulder portions *m*, which extend, respectively, above and below the upper and lower edges of the vertical portions of the slots *l*, so as to form articulate connections between the filler and the casing member. A plurality of the transverse filler members, preferably the outer end members *i*, are secured in this manner at both ends of such transverse members, and a plurality of the intermediate members are secured, if desired, only at one end thereof to the casing in the manner above described, so that their free ends are adapted to swing into and out of engagement with the side portion of the casing when the carton is to be used, and are adapted to permit the filler to be collapsed when desired.

In order to provide means for securing the longitudinal member of the filler articulately to the transverse members thereof, such longitudinal member is provided with slots at suitable intervals in its lower edge and with projecting lug portions *n*, which form side portions of such slots, the shoulder portions being adapted to engage the lower edges *o* of central portions *p* of the intermediate transverse filler members. The intermediate transverse members are each provided with central slots above and below their central portions *p* above described, and a continuous upper side portion of the longitudinal central filler member extends without interruption from end to end of the carton through the upper slots thus formed in the intermediate fillers and through the similar upper slots in the outer end filler members *i*.

At its opposite ends the longitudinal filler member is provided with projecting portions *k*,—already described—which extend downward beyond the lower edge of the slots in the transverse end members of the fillers, and the lower edges of the outer transverse filler members or end members are continuous and unbroken—as shown in Fig. 1. The transverse end members of the filler are thus strengthened by having a vertical slot only in their upper edges.

By this arrangement it will be seen that a carton is provided having a filler formed of a longitudinal central member and a plurality of transverse members, all of such transverse members being articulately secured at one end to the casing member and adapted to be

collapsed, so that the sides of all of the filler members are in engagement with each other when in inoperative position. The casing member is adapted to be laid flat, so as to permit a large number of the cartons to be packed in a small space for shipment and to remain in collapsed condition until they are to be used. The fillers when collapsed are almost flat so that they, together with the casing member to which they are attached, occupy the minimum amount of space, and yet the carton is practically completely assembled and is ready for use upon simply connecting one end of each end filler member to the casing member by inserting them in the slots provided for that purpose.

The casing member is of course readily folded into the position shown in Fig. 1 and the filler adjusted to operative position, so that its transverse members extend at right angles to its longitudinal member and from side to side of the casing portion. The securing lugs of the end members being inserted through the slots in the side portion of the casing, a receptacle is formed having the desired number of compartments suitable for containing eggs or similar articles.

When the cover of the carton is closed the lap *f* should, preferably, extend between the side wall portions *d* and the ends of the transverse members of the filler, as shown in Fig. 4. This somewhat increases the rigidity and strength of the carton. The entire carton, with its contents, can be lifted, if desired, when the cover is raised by grasping the central portion of the longitudinal filler member, and the whole carton is properly cushioned by the projecting end portions of the filler members and casing—as already described.

I claim:

1. A compartment carton comprising a rectangular sheet bent to form the bottom and side walls, end walls having tongues, said tongues being locked in slits in both side walls, and transverse partitions having tongues at one end only locked into slits in one of the side walls, the other end of each of said transverse partitions abutting against the other side wall.

2. A compartment carton comprising a rectangular sheet bent to form the bottom and side walls, end walls having tongues, said tongues being locked in slits in both side walls, and transverse partitions having tongues at one end only locked into slits in one of the side walls, the other end of each of said transverse partitions being free.

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