

F. TREISCHMAN.
FOLDING METAL BOX OR CASE.
APPLICATION FILED JAN. 8, 1909.

938,916.

Patented Nov. 2, 1909.
2 SHEETS—SHEET 1.

Fig. 1.

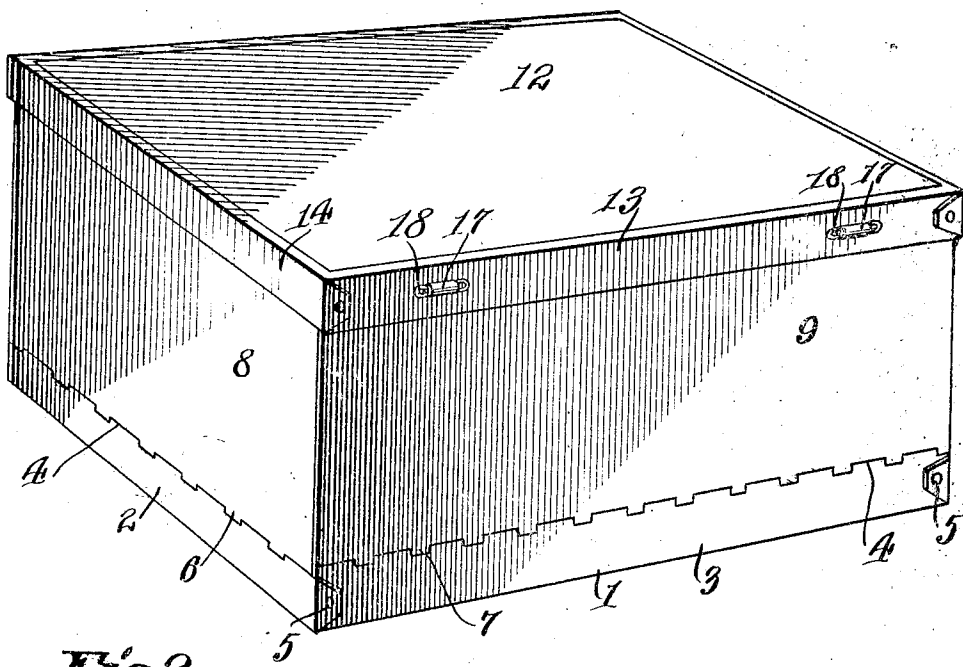
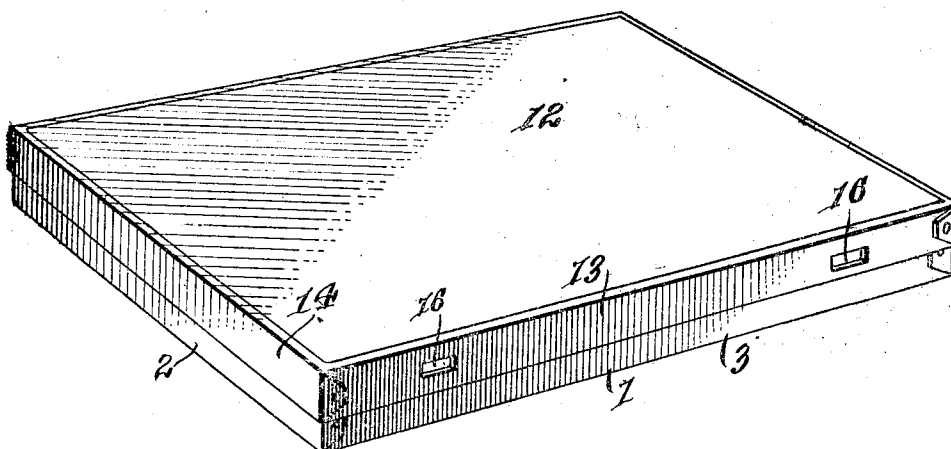


Fig. 2.



Witnesses

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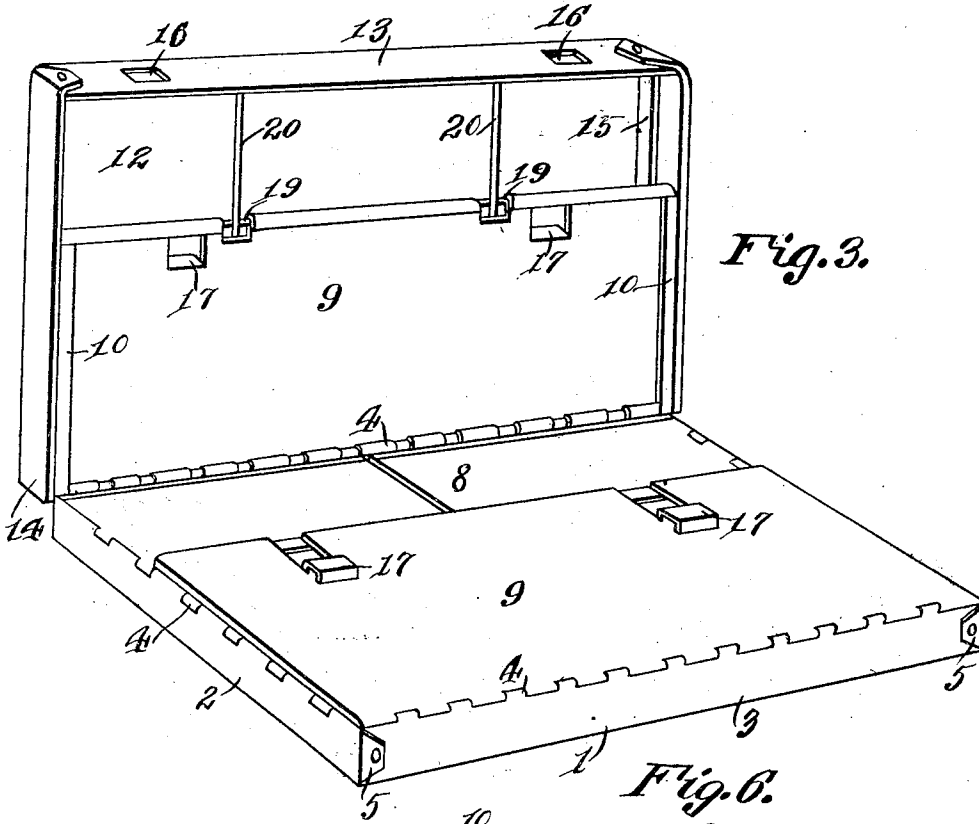


Fig. 3.

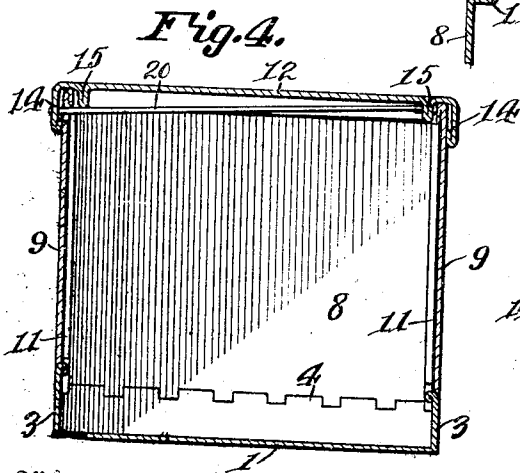


Fig. 4.

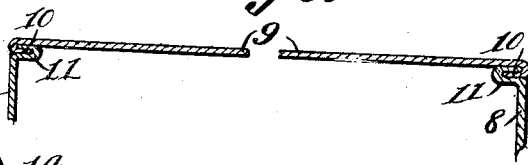
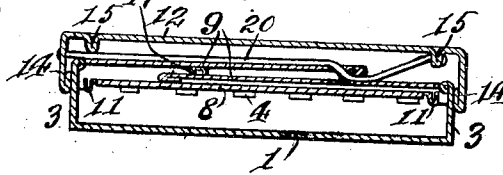


Fig. 5.



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UNITED STATES PATENT OFFICE.

FREDERICK TREISCHMAN, OF WADENA, MINNESOTA.

FOLDING METAL BOX OR CASE.

938,916.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed January 8, 1909. Serial No. 471,344.

To all whom it may concern:

Be it known that I, FREDERICK TREISCHMAN, a citizen of the United States, residing at Wadena, in the county of Wadena and State of Minnesota, have invented new and useful Improvements in Folding Metal Boxes or Cases, of which the following is a specification.

This invention relates to improvements in folding boxes or casings and is particularly directed to a metal box or case, the sides, ends and top being so constructed and arranged as to adapt the box to be collapsed or folded into a comparatively small readily transportable package.

The main object of the present invention is the provision of a box or case of approximately rectangular form, the device being provided with a base portion proper having its edges provided with upstanding flanges, the flanges being bent upon themselves to provide hinge knuckles suitably spaced apart for the reception of similar knuckles provided upon the sides and ends of the device, the end members of the device being of a width approximately equaling that of the width of the base while the hinged side members are of a height slightly less than the width of the base and the cover for the box being slidably connected upon one of the side members and of a size slightly greater than the base and the said cover being adapted to overlies the sides and ends as well as the base when the sides and ends are folded or collapsed upon the base.

A still further object of the invention is to provide a foldable box or case having its ends and sides hingedly connected with a base, the said ends and sides being provided with offset interlocking edges and the cover of the device being also provided with a continuous groove upon its inner face adapted to engage with the upper edges of the sides and ends when the box is set up, thus providing an exceedingly strong and stanch box which cannot be collapsed until the cover is raised away from engagement with the upper edges of the ends and sides.

In the accompanying drawings there has been illustrated a simple and preferred embodiment of the invention and in which,

Figure 1 is a perspective view of the device in its set up position. Fig. 2 is a similar

view of the device in its knock down position. Fig. 3 is a similar view illustrating both ends and one of the sides collapsed upon the base, the opposite side supporting the cover being shown in a vertical position. Fig. 4 is a transverse sectional view taken through the box in its raised position. Fig. 5 is a similar view taken through the box when in its collapsed position. Fig. 6 is a detail sectional view illustrating the method of connecting the edges of the ends 8 and members 9.

In the accompanying drawings the numeral 1 designates the base of the improved foldable box or case. This base 1 is preferably of a rectangular formation and is, of course, to be of the size desired in the finished box. The base 1 is provided with right angular extending projecting portions upon its edges and these projections forming the ends 2 and sides 3 of the base have their upper edges provided with spaced knuckles 4. The ends 2 of the base 1 have their edges adjacent the sides 3 bent angularly and adapted for the reception of suitable rivets 5 by which the sides and ends of the base are effectively connected together. The knuckles 4 of the projecting portions of the base 1 are provided by simply bending the spaced extending portions upon themselves in the form of an eye and these members are adapted to coact with similar knuckles 6 and 7 formed upon the lower edges of the ends 8 and sides 9 of the box proper.

The eyes or knuckles of the base and of the ends and sides are adapted for the reception of suitable pintles, whereby the sides and ends are hingedly connected with the base. By reference to Fig. 1 of the drawings it will be noted that the knuckles 4 upon the end members 2 of the base 1 are arranged in a plane below the knuckles carried by the side extensions 3 so as to provide for the thickness of the end members 8 when the end and side members are folded upon the base as will hereinafter be fully described.

The vertical edges of the side members 9 are bent inwardly so as to provide substantial hooks 10, and the end members 8 have their vertical edges provided with offset hooks 11 which are adapted to engage with the hooks 10 when the ends and sides are in their set up position. It will be noted

by reference to Fig. 6 of the drawings that the hook 10 carried by the side 9 is bent inwardly toward the box proper while the hook 11 carried by the end 8 is bent outwardly to engage the said hook 10, thus providing means whereby the ends 8 may be easily and quickly folded inwardly upon the base 1 when the box is to be collapsed.

The numeral 12 designates the cover of the box. This cover 12 is of a slightly greater size than is the base 1, and the cover is also provided with side and end depending flanges 13 and 14. The cover 12 is also provided with a depending ridge or offset portion 15 positioned a suitable distance away from the sides and end flanges 13 and 14, so as to provide a substantial channel adapted for the reception of the upper edges of the sides 9 and ends 8 of the box. By this arrangement it will be noted that when the sides 9 and ends 8 are set up and in engaged position with each other the channel provided between the offset 15 and the depending flanges 13 and 14 of the cover 12 engages the upper edges of the said ends and sides effectively sustain the latter in their set up position and prevent the accidental collapsing of the box. The flanges 13 of the cover 12 are each provided with spaced openings 16 and the outer faces of the upper portion of the sides 9 are provided with suitable outwardly extending U-shaped eyes 17 which are adapted to be projected through the openings 16 when the device is set up, and the projecting eyes are also adapted for the reception of suitable cotter pins or other retaining elements designated by the numeral 18. By this arrangement it will be noted that I have provided an extremely simple and effective means for locking the cover upon the sides and ends of the box which is not only extremely simple in construction but which is thoroughly reliable and effective for the purpose intended.

The eyes 17 may be formed by slitting the sides of the members 9 adjacent their edges and bending these cut portions to provide U-shaped eyes as clearly illustrated in Fig. 3 of the drawings. The upper edges of the side members 9 may be bent upon themselves to form reinforcements and may be also provided with a longitudinally extending wire 19 engaging the bent over reinforcing portions. One of the side members 9 thus constructed is provided with cut away portions between the wire 19 and the side proper. These cut away portions 19 are preferably positioned adjacent the eyes 17 and are adapted for the reception of flexible wire members 20 secured to the under face of the cover 12 between the offset side members 13 thereof. By this arrangement it will be noted that all the members comprising the box are effectively retained together so

that the danger of losing the cover when the latter is removed from the sides 9 and ends 8 to obtain access within the box is entirely obviated.

When it is desired to collapse or knock down the box, the cover is first raised away from engagement with the side 9 opposite to the side to which it is connected through the medium of the flexible wires 20 and sustained in a substantially vertical position as illustrated in Fig. 3 of the drawings. The ends 8 are then pushed inwardly upon the base 1, the free side 9 is now folded upon the ends 8, the side 9 carrying the cover 12 is then folded upon the opposite side 9, the cover 12 is now positioned upon the folded side and end members and its offset portions 13 and 14 are brought over the oppositely disposed offset portions 2 and 3 of the base, thus folding the box into a small compass as illustrated in Figs. 2 and 5 of the drawings.

From the above description, taken in connection with the accompanying drawings, it will be noted that I have provided a comparatively simple, cheap and effective box for the purpose set forth, one which may be quickly and easily set up or knocked down as desired, one in which the several parts are securely connected together, thus obviating the liability of the misplacement or loss of any of the parts, one in which the cover effectively sustains the hinged sides and ends when the device is set up and one in which the cover is readily folded upon the base and the hinged sides and ends positioned upon the base when the device is collapsed.

Having thus fully described the invention what is claimed as new is:

1. In a device of the character described, a base, side and end members hingedly connected with the base, interlocking lips upon the meeting edges of the sides and ends, spaced eyes upon the sides, a cover slidably and resiliently connected with one of the sides, said cover being provided with a continuous flange provided with openings adapted to align with the eyes of the side members when the latter are in their set up position, and said cover having its inner face provided with a continuous wall adjacent the offset flange, and the space between the wall and flange adapted to engage the upper edges of the sides and ends when the latter are in their raised position.

2. In a box for the purpose set forth, the combination with a base member having upturned edges provided with hinge knuckles, side and end members having their lower edges provided with knuckles adapted to cooperate with the knuckles of the base, pintles for the knuckles, the side and end members being each provided with interlocking edges, a cover provided with depending edges and having its under face adjacent its

edges provided with a continuous groove adapted to engage the upper edges of the sides and ends when the latter are in their raised position, means for locking the cover upon the sides and ends, one of said sides having its upper end provided with openings, and wire members connecting the flanges of the cover adapted to be received

within the openings, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK TREISCHMAN.

Witnesses:

CHRIS HUNSINGER,
FRANK C. FIELD.

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