No. 797,689. PATENTED AUG. 22, 1905.

L. L. KELLOGG.

EGG CRATE.

APPLICATION FILED SEPT. 8, 1904.

Fig. 1.

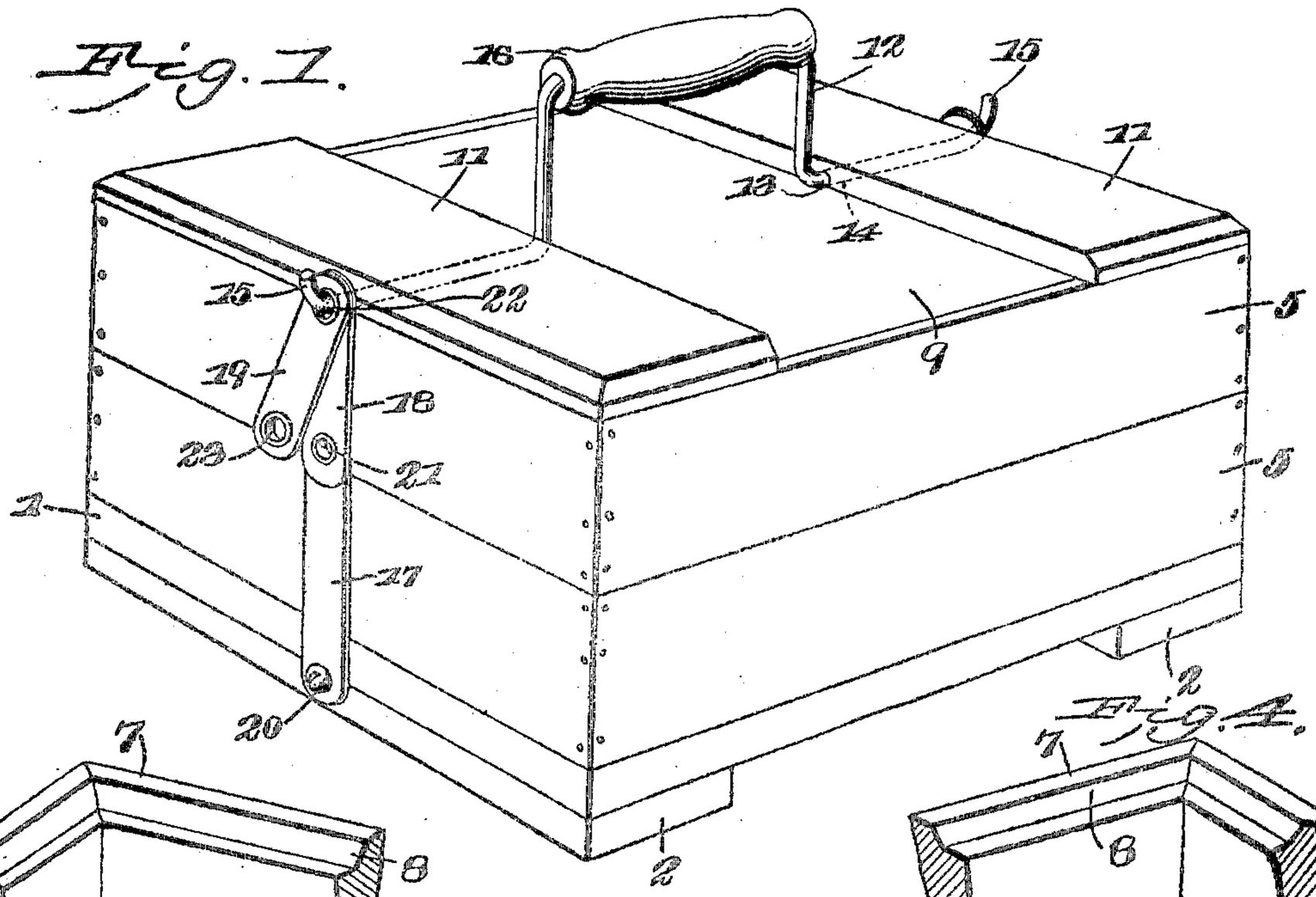


Fig. 4.

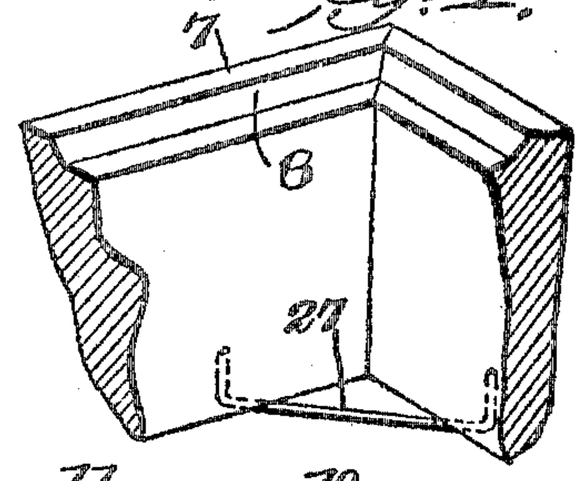


Fig. 2.

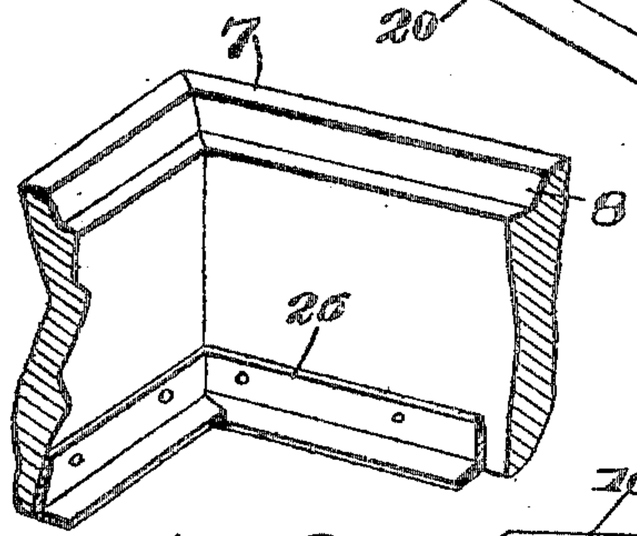
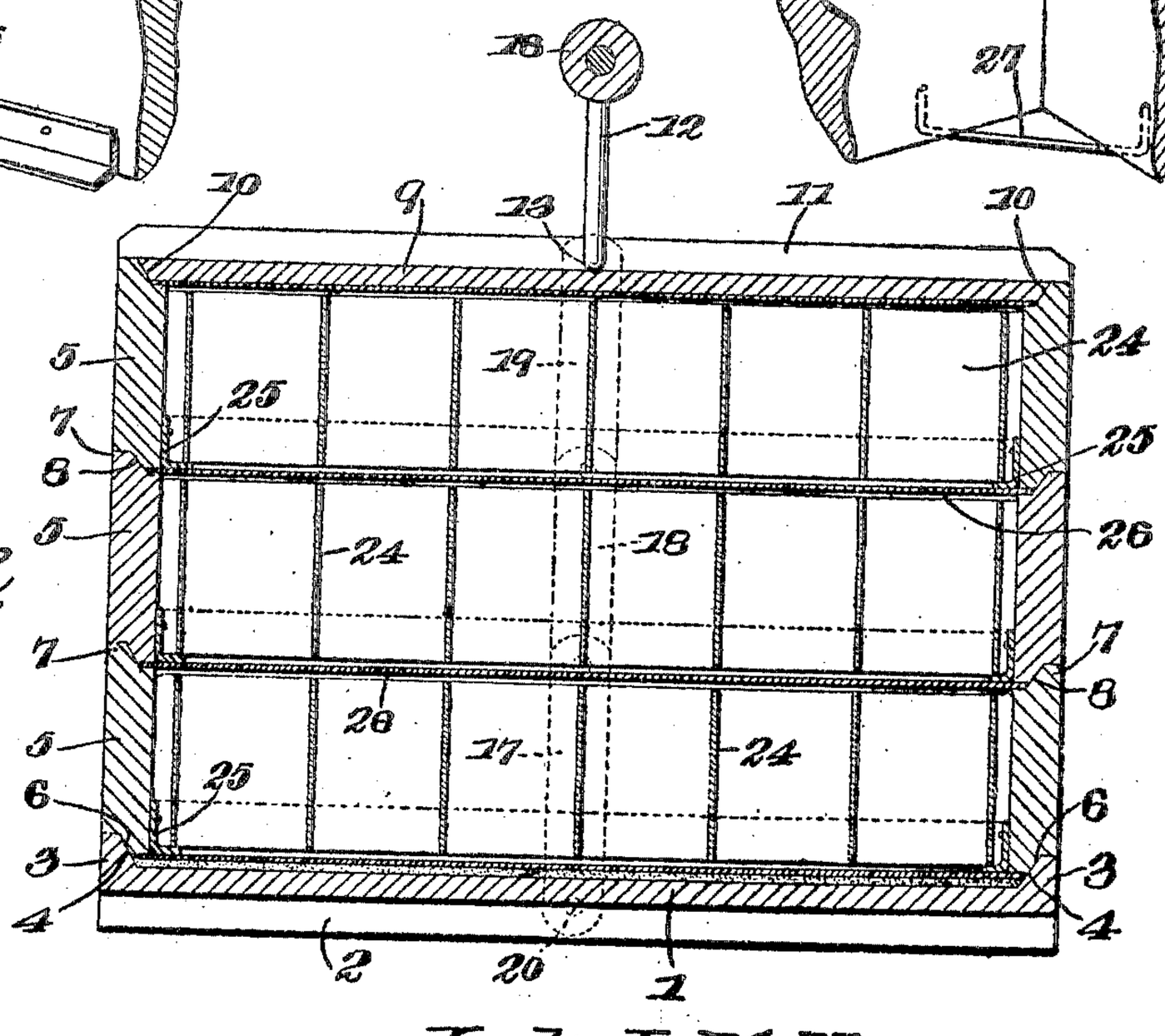


Fig. 3.



Witnesses

E. C. Stewart

H. C. Shepard.

Luke L. Kellogg, Inventor.

by Crosby & Co

Attorneys

UNITED STATES PATENT OFFICE.

LUKE L. KELLOGG, OF FREDONIA, NEW YORK.

EGG-CRATE.

No. 797,689. Specification of Letters Patent. Patented Aug. 22, 1905.

Application filed September 8, 1904. Serial No. 223,722.

To all whom it may concern:

Be it known that I, LUKE L. KELLOGG, a citizen of the United States, residing at Fredonia, in the county of Chautauqua and State of New York, have invented a new and useful Egg-Crate, of which the following is a specification.

This invention relates to crates, and is particularly designed to provide an improved device of this character especially adapted for containing eggs and capable of being extended and contracted according to the desired capacity.

Another object of the invention is to produce a novel arrangement of crate-sections which are effectually interlocked in rigid condition when the crate is being carried by hand and which may be readily released for convenience in separating the crate-sections and to give access to the contents thereof.

A still further object of the invention is to permit of the crate-sections being successively removed from the top to the bottom of the series and to leave the contents of each crate-section supported upon the top of the next below section, thereby to avoid individual handling of the eggs and also to obviate the necessity of removing the cells from the crate-sections in order that the eggs may also be removed therefrom, as is usually the case in egg-crates as now in general use.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of an egg-crate embodying the features of the present invention. Fig. 2 is a cross-sectional view of the crate at the limit of its capacity. Fig. 3 is a fragmentary perspective view looking at the inner corner of one of the crate-sections. Fig. 4 is a similar view showing a modification in the manner of supporting the cells upon one of the crate-sections.

Like characters of reference indicate corresponding parts in each of the several figures of the drawings.

In carrying out the present invention there is provided a base 1, having transverse cleats or sill members 2 secured across the bottom thereof and surrounded by an upstanding peripheral flange 3, the inner wall 4 of which is beveled or inclined downwardly and inwardly. Superimposed upon this base is a series of crate-sections 5, which are duplicates in construction, and therefore a description of one section is deemed sufficient. Each section is rectangular in shape and of an external size corresponding to that of the base and provided upon its bottom edge with a peripheral pendent flange 6, which is substantially flush with the inner periphery of the section and has its outer beveled face located inwardly or offset from the exterior of the section. At the top of the section there is an upstanding peripheral flange 7, flush with the outer face of the section, with its inner face 8 terminated short of the inner periphery of the crate-section and beveled or inclined downwardly and inwardly, so as to form an upper peripheral rabbet or seat corresponding to the rabbet or seat formed upon the base by the flange 3. The lowermost section has its flange 6 fitted in the peripheral seat or rabbet upon the base, while the successive crate-sections have their lower pendent flanges fitted in the seats 8 at the tops of the respective next below crate-sections, whereby the several crate-sections are snugly assembled and are held against edgewise displacement.

The uppermost crate-section is closed by means of a flat top 9, having its peripheral edge beveled, as at 10, and of a size to fit snugly within the rabbet or seat 8 at the top of the uppermost section, thereby to lie flush with the upper edges of said section. Across the upper face of the top are stiffening-cleats 11, disposed at opposite edges of the top and projected beyond the latter, so as to rest upon the adjacent top edge portions of the uppermost crate-section.

A bail-shaped handle 12 is employed for convenience in handling the top of the crate and has its opposite side portions directed outwardly to form journals 13, which are received within bearing openings or grooves 14, intersecting the bottoms of the respective cleats 11 and projected beyond the sides of the crate, with the extremities of the journal portions formed into crank or cam terminals 15. A suitable hand-grasp 16 is provided upon the middle portion of the bail.

In order that the several crate-sections may be connected in a rigid manner and capable of being collectively handled as a single crate, it is proposed to clamp the same between the base proper and the top, and this is carried out by means of connections between the terminals of the bail-shaped handle and the base. Each of these connections consists of a plurality of links, three such links being shown in the drawings and designated 17, 18, and 19, respectively, of which the lowermost link 17 is pivotally connected to one edge of the base, as at 20, the other links being pivotally connected to one another by means of eyelets 21 and 22, there being an eyelet or perforation 23 in the free extremity of the uppermost link 19. Each of these links is of a length to project slightly above and below the adjacent crate-section, whereby when the handle is applied the uppermost seat or perforation of the adjacent link may be engaged with the cam or crank terminal 15 of the handle when the latter has been folded down against the top of the crate, whereby upon raising the handle into its operative position the cam or crank 15 will operate to place a tension upon the connection, and thereby bind the crate-sections between the base and the top members.

It will here be explained that the number of links in each connection determines the number of crate-sections which may be assembled in a single crate, or, in other words, the capacity of the crate in sections corresponds to the number of links in each connection. When the greatest number of sections are assembled, the cam or crank terminals 15 of the handle are engaged with the upper openings or seats of the uppermost links, and when a less number of sections are employed the upper links are turned down, as indicated in Fig. 1, and the crank or cam terminals engaged with the adjacent openings or eyelets, whereby any number of crate-sections may be assembled within the capacity of the link connections.

Each crate-section is of course provided with a collapsible cell 24 of the common or any preferred type, and each cell rests upon a support consisting of an inner annular shoulder 25, provided within the crate-section and substantially flush with the lower edge of the bottom flange 6 thereof, said inner annular shoulder being formed by angle-bars secured to the respective sides of the crate-section. By this arrangement of parts the cell is supported upon the crate-section when the latter is lifted from the lower sections. A plate or horizontal partition 26 is supported within the bottom of the rabbet or seat at the top of each crate-section, and thereby constitutes bottoms for the respective upper sections, so as to support the eggs therein, whereby upon lifting any section from the next below section the eggs of the upper section remain upon the plate or partition and are prevented from rolling off by the upstanding peripheral flange 7 of the next below section, whereby it is not necessary to individually remove the eggs from the section in order to remove the cell therefrom, as the latter is carried with the section when said section is taken from the crate. This is a very important advantage of the present device, for the reason that it obviates the necessity of individual handling of the eggs from the respective crate-sections, and the cells may remain within the sections at all times, which saves wear and tear thereon and materially increases the life of the crate.

In Fig. 4 of the drawings there has been shown modified means for the support of a cell, wherein the support is a corner-bar 27 at the bottom of each corner of the crate-section, with its terminals bent up and driven into the bottom of the lower flange 6, thereby to form a corner-brace in addition to supporting the cell.

Having thus described the invention, what is claimed is—

1. In a crate, the combination of a base, a series of superimposed crate-sections supported upon the base, a top upon the uppermost section, cams carried by opposite edge portions of the top, connections extending between the base and the cams and consisting of pivotally-connected links having openings for individual engagement with the respective cams, and means to actuate the cams to place a tension upon the links.

2. In a crate, the combination of a base, a series of superimposed crate-sections supported thereon, a top, cams carried by opposite edge portions of the top, connections between the base and the cams, each connection consisting of pivotally-connected links, the lowermost link being pivoted to the base and the uppermost link having an opening in the free end thereof to receive the adjacent cam, there being openings at the pivotal connections of the other links to individually receive said cam, and means to rotate the cams and place a tension upon the link connections to clamp the crate-sections between the base and the top member.

3. In a crate, the combination of a base, a series of superimposed crate-sections supported thereon, a top, cams carried by opposite edge portions of the top, link connections extending between the cams and the base, the uppermost link of each section having an opening in its free end to receive the adjacent cam, the pivotal connections of the links being formed by eyelets of a size to individually receive said cam, and means to actuate the cams to place a tension upon the link connection.

4. In a crate, the combination of a base, a series of crate-sections superimposed thereon, a top, a bail-shaped-handle having its side

portions extended laterally outward and rotatably mounted upon the top, the extremities of the handle being projected beyond the opposite edges of the crate and provided with cams, and link connections extending between the base and the respective cams, each link having an opening to receive the adjacent cam and the latter being rotatable to place a tension upon the links.

5. In a crate, the combination of a base, a series of crate-sections superimposed thereon, a top support upon the uppermost crate-section, connections carried by the base and extending between the base and the top which are capable of extension and reduction in length according to the number of crate-sections interposed between the base and the top, and clamping means carried by the top for engagement with the connections to bind the base and top against the crate-sections, each connection having a series of elements for individual engagement with the clamping means to accommodate different numbers of crate-sections between the base and the top.

6. A crate-carrier comprising a base, a top capable of adjustment toward and away from the base, opposite connections extending between the base and the top and carried by one of these members, each connection being extensible and contractible in length according to the number of crate-sections interposed between the base and the top, and clamping means carried by one of the members and connectible with the connection between said members to clamp the top and bottom upon a series of crate-sections, each connection having a succession of elements for individual engagement with the clamping members to accommodate different numbers of crate-sections.

7. In a crate, the combination of a series of superimposed crate-sections open at their bottoms and closed at their tops, cells carried within the respective sections and removable therewith from the other section, the closed top of each section constituting the bottom of the adjacent upper section.

8. In a crate, the combination of a series of superimposed crate-sections, each section being open at the bottom and provided with an inner annular shoulder below its top edge, cells carried within each section and removable therewith, and tops supported upon the inner annular shoulders of the respective crate-sections and constituting bottoms for the next adjacent upper sections.

9. In a crate, the combination of superimposed crate-sections having inner shoulders at the bottoms thereof, and rabbeted upper edges, cells carried within the sections and supported upon the shoulders thereof, and tops carried by the respective sections and supported within the rabbeted portions thereof.

10. A crate having a series of superimposed sections each section being open at its bottom and provided with an external rabbet at its bottom and an internal rabbet at its upper end, the rabbeted bottom portion of each section fitting in the rabbeted upper portion of each adjacent lower section, loose substantially horizontal partitions supported in each upper rabbet and held between the adjacent superimposed sections, supports within the bottom portions of the respective sections, and cells supported upon said supports.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

LUKE L. KELLOGG.

Witnesses:

JOHN LEO SULLIVAN,

LOUIS L. THRASHER.