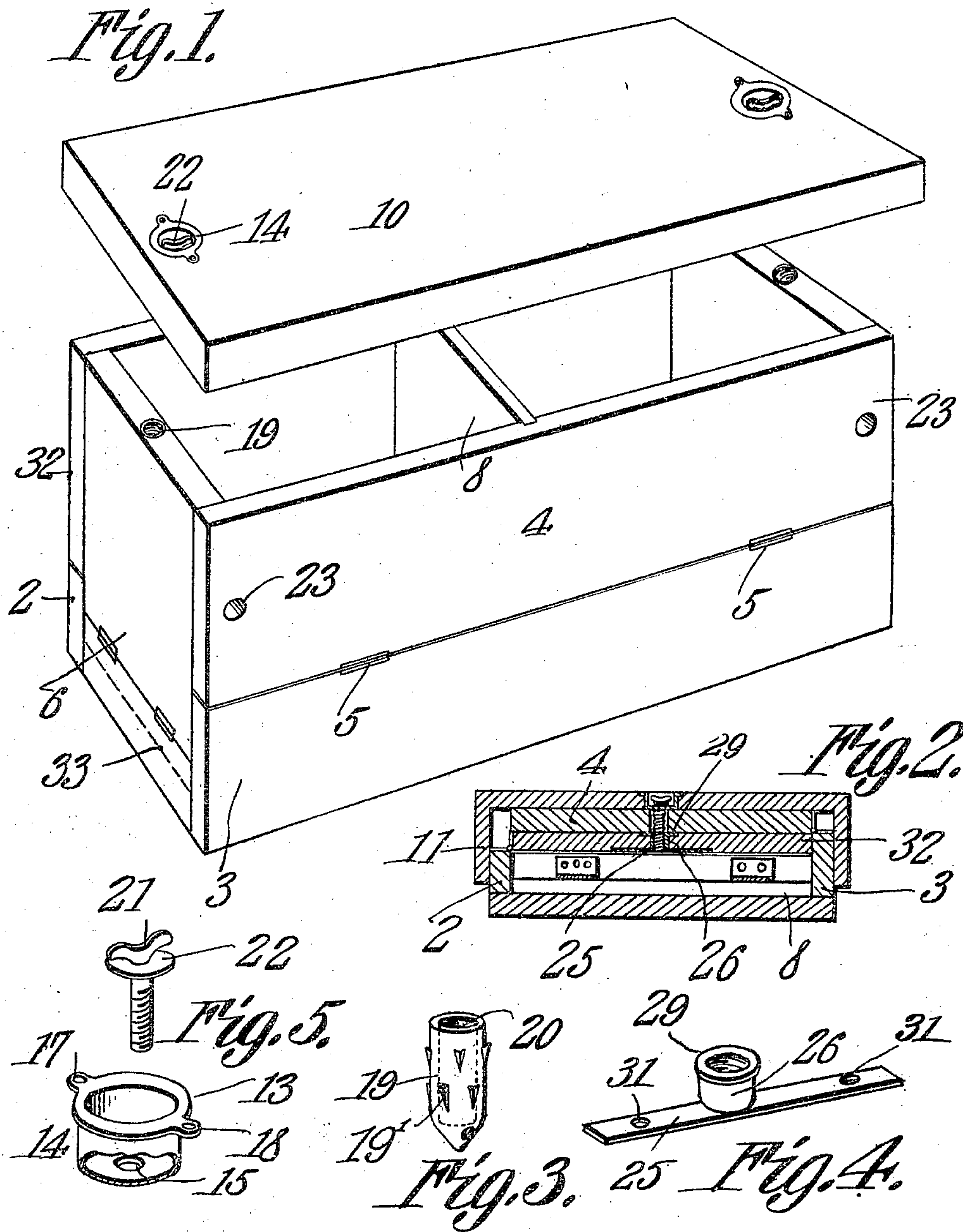


C. T. SIBOLD.
FOLDING EGG CRATE.
APPLICATION FILED AUG. 5, 1909.

959,627.

Patented May 31, 1910.



Witnesses

Charles T. Sibold
Charles T. Sibold

Charles T. Sibold. Inventor

By *C. A. Snow & Co.* Attorneys

UNITED STATES PATENT OFFICE.

CHARLES T. SIBOLD, OF DORR, WEST VIRGINIA.

FOLDING EGG-CRATE.

959,627.

Specification of Letters Patent.

Patented May 31, 1910.

Application filed August 5, 1909. Serial No. 511,388.

To all whom it may concern:

Be it known that I, CHARLES T. SIBOLD, a citizen of the United States, residing at Dorr, in the county of Monroe and State of West Virginia, have invented a new and useful Folding Egg-Crate, of which the following is a specification.

This invention relates to folding egg crates and the like and its object is to provide a device of this character the walls of which are hingedly connected and adapted to be folded together, novel means being employed whereby the removable cover of the crate can be detachably secured upon the walls whether they are set up or folded, the said securing means serving to hold the parts securely together and against accidental displacement.

A further object is to provide securing means which do not project beyond the faces of the parts of the crate and will not, therefore, injure persons handling the crate or tear the clothing worn by them.

A further object is to provide fastening elements which are connected to the crate in novel ways, the said fastening devices being designed, when the crate is folded, to extend through the hinged side walls of the crate and thus hold them fixed relative to each other and relieve the hinges of undue strain while the collapsed crate is being handled.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claim.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a perspective view of the crate set up for use, the cover thereof being shown raised out of position. Fig. 2 is a vertical transverse section through one end portion of the folded crate. Fig. 3 is a detail view of the barbed socket member used in connection with the crate. Fig. 4 is a perspective view of another form of socket member employed. Fig. 5 is a perspective view of one of the fastening screws and its receiving socket.

Referring to the figures by characters of reference 1 designates the bottom panel of the crate, the same being provided at its ends with upstanding flanges 33 while formed along the sides of the panel are upstanding flanges 2 and 3, the flange 2 being

higher than the flanges 33 and the flange 3 being higher than the flange 2. A side panel 4 is hingedly connected, as at 5, to the flange 3 and is provided at the center of each end with an aperture 23. Another side panel 32 is hingedly connected to the flange 2, and is provided adjacent each end with an aperture in which is arranged a socket member 26 mounted, at its base, upon a retaining strip 25 which is secured, in any suitable manner, upon the inner face of the panel 32, there being preferably openings 31 within this base strip for the reception of screws or the like. The socket member 26 extends entirely through the panel 32, its open end being outward and being preferably surrounded by means of an annular flange 29. Each socket member is so located that when the panel 32 is folded inwardly into position parallel with the bottom panel 1, it will lie directly under and register with the adjoining opening 23 in the panel 4.

An end wall or panel 6 is hingedly connected to each flange 33, these end walls or panels being designed to fold inwardly between the flanges 2 and 3 and with their upper faces in substantially the same plane as the upper edge of the flange 2. When the end walls or panels are thus folded, a sufficient space is left between them and the bottom panel 1 to receive a partition 8, which, when the crate is set up, is designed to be seated within opposed vertical grooves formed within the side panels 4 and 32 and within the flanges 3 and 2. A pointed fastener member 19 is adapted to be driven in the upper edge of each of the end walls or panels 6 and at the center thereof, each of these members being provided with external barbs 19', whereby, after the member has once been driven into the end wall or panel, it cannot be readily withdrawn therefrom. Each of the members 19 has a screw threaded socket 20 extending thereinto from its outer end.

The top 10 of the crate has a flange 11 extending downwardly from the sides and ends thereof and secured within the end portions of the top at points midway between the sides thereof are socket members each of which consists of a tubular casing 14 extending entirely through the top 10 and provided at its upper end with an annular flange 13 from which extend diametrically opposed ears 18 having fastener receiving openings 17 therein. Each of the

socket members is open at its upper end and closed at its lower end, there being, however, an opening 15 in the lower or bottom end of the casing 14 and which is designed to receive a screw 21 the head of which is provided with a disk like portion 22 adapted to bear upon the bottom of the casing 14.

When the crate is to be set up for use, the side panels 4 and 32 are swung upwardly into alinement with the flanges 3 and 2 after which the end walls or panels 6 are also swung into upright positions. The partition 8 can then be inserted into the grooves provided therefor within the side panels and within the flanges 2 and 3. After the parts have thus been set up the cover 10 can then be placed on the crate and with its flanges 11 lapping the side and end walls. The screws 21 can then be inserted through the openings 15 in the socket casings 14 and screwed into the sockets 20 formed within the fastening members 19. The top will thus be securely held in place and will also prevent the end walls 6 from swinging inwardly and prevent all of the panels from swinging outwardly.

When it is desired to collapse the crate the partition 8 and any fillers which might be located within the crate, are placed upon the bottom panel 1 after which the end walls or panels 6 are folded inwardly thereonto. The side panel 32 is then folded inwardly onto the end panels after which the side panel 4 is moved inwardly onto the panel 32. The openings 23 will thus be brought into register with the sockets 26. The top 10 can then be placed upon the folded crate and the flanges 11 will lap the flanges 2 and 3 and the openings 15 will register with the openings 23. The screws 21 can then be inserted into the registering openings and screwed into the sockets 26 so as to thus hold the various parts securely together. Importance is attached to the fact that when the crate is folded the screws extend through

both of the side panels 4 and 32 and thus hold them against movement either laterally or longitudinally, the hinges 5 being therefore relieved of all strain. Where the screws are not extended through the two lapping side panels it has been found that when the folded crate is subjected to rough handling the said panels are often torn from their hinges and the crate thus rendered unfit for further use. In the present instance however the screws not only constitute means for holding the various parts in folded position but also serve to prevent independent movement of the two side panels.

Various changes can of course be made in the construction and arrangement of the parts without departing from the spirit or sacrificing any of the advantages of the invention as defined in the appended claim.

What is claimed is: —

A collapsible crate including hingedly supported side panels, said panels being foldable one upon the other, a socket member extending through and secured to the lower one of said folded side panels, there being an aperture within the upper side panel and registering with the socket member, a top, a casing extending through and secured to the top and having an aperture registering with the aperture and socket member in the lapping side panels, and a threaded fastening device mounted for rotation within the apertures in the casing and the upper one of the lapping panels, said fastener being insertible into and adapted to engage the socket member in the lower one of the lapping panels to bind said panels and the top together.

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

CHARLES T. SIBOLD.

Witnesses:

J. W. LYNCH,
R. P. BOYD.