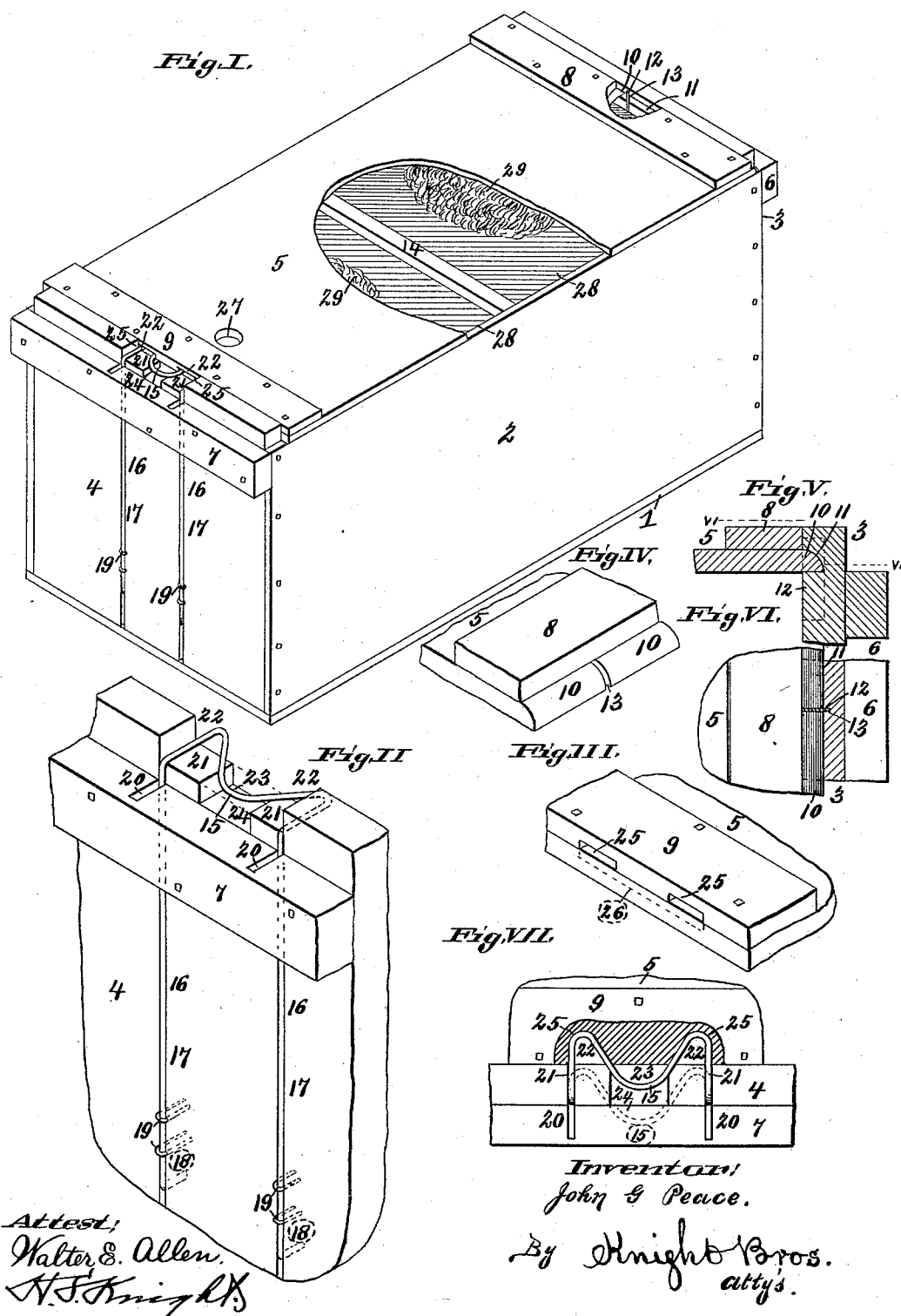


(No Model.)

J. G. PEACE.
BOX FASTENER.

No. 468,687.

Patented Feb. 9, 1892.



UNITED STATES PATENT OFFICE.

JOHN G. PEACE, OF SALEM, MISSOURI.

BOX-FASTENER.

SPECIFICATION forming part of Letters Patent No. 468,687, dated February 9, 1892.

Application filed August 24, 1891. Serial No. 403,581. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. PEACE, of Salem, in the county of Dent and State of Missouri, have invented a certain new and useful Improvement in Egg-Case Fasteners, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to an egg-case whose lid has a curved initial fastening end that engages in a like-curved channel-groove in one end piece of the case, and is there retained from lateral displacement by a metal lug that is fastened transversely across said channel-groove, and which a notch in said curved edge of the lid embraces, and the other end of which lid is fastened, when closed, by a snapping embedded and secured in the corresponding end of the case, and which latches in a recessed seat in said lid.

Figure I is a perspective view of the case with its lid latched in place and parts broken away to show, respectively, the fastening at the initial attachment end of the lid and two bunches of excelsior that act as springs between said lid and the upper cover-plate to keep the packing intact and hold it elastically from injury by concussion. Said spring-pressure also secures a tension hold to the latch to prevent its accidental withdrawal. Fig. II is an enlarged detail of the latch-bearer end of the case and shows said latch embedded in its channel-groove seat therein. Fig. III is an enlarged perspective detail of the latching end of the lid, and shows the slots in which the duplex latching-lugs are seated when said lid is fastened. It also shows in broken lines an elongated slot, which may be made in the lid itself instead of the double slot in the cleat for seating the latch. Fig. IV is an enlarged perspective detail of the lid at the reverse end to that of Fig. III, and shows its curved projecting tongue that fits in the semi-concave recess in the corresponding end of the case. It also shows the key-slot in which the key-lug engages that locks that end from lateral displacement. Fig. V is an enlarged vertical detail section of the initial fastening end of the lid and the corresponding end of the case, and shows the projecting

tongue of the lid seated in its semi-concave seat in said end of the case. Fig. VI is an enlarged horizontal detail section taken on the stagger line VI VI, Fig. V, and shows the metal key-lug engaged in its locking-seat in the projecting curved tongue of the lid; and Fig. VII is an enlarged horizontal detail section and shows the duplex spring-latch secured in its channel-groove seat in one end of the case and latched into its double-slotted seat in the lid-cleat.

Referring to the drawings, 1 represents the bottom of the egg-case; 2, its sides; 3, its initial fastening end; 4, its latching end, and 5 the lid of said case. 6 represents the cleat on the end 3 of said case, and 7 the cleat on the end 4. 8 is the cleat on the initial fastening end of the lid, and 9 the cleat on the spring-latching end of said lid.

10 represents the projecting curved tongue at one end of the lid, which fits, when the lid is seated, in the semi-concave channel-groove 11.

12 represents a metal key-lug that is seated vertically inside and near the top midway of the end 3 of case, reaching transversely across the channel-groove 11. The said key-lug is seated in the key-slot 13 in the projecting tongue 10 when the lid is closed, and prevents the lateral displacement of said lid. 14 represents the middle partition between the two sections of the case.

15 represents a duplex spring-wire latch, the vertical legs 16 of which are embedded in the channel-grooves 17 in the end 4 of the case, in which end the angle-feet 18 of said legs are embedded. The lower ends of said legs are still further secured in their seats in said channel-grooves by the staples 19, that saddle over said leg-wires and are driven into said end 4 of the case.

20 represent slots in the cleat 7, that allow free scope for the reactionary drawback of the duplex spring 15 when its hold is withdrawn to release the lid.

21 represents a recess midway at top of the end piece 4 of the case, in which recess is seated and works the angle-bent locking-keys 22 of the duplex spring 15, and 23 is a catch-loop that bends back from the locking projections of said duplex spring, and said loop makes a finger or thumb hold for the with-

drawal of said spring. 24 represents a further center recess midway of said spring-seat, which allows the free introduction of the finger or thumb tip when withdrawing the spring.

25 represent twin horizontal locking-slots in the lower front side of the lid-cleat 9 immediately above the lid, in which twin slots the duplex bent locking-keys 22 of the latching-spring 15 are seated when locking down the lid of the case. In Fig. III is shown, partly in broken lines, an elongated slot 26 in the upper portion of the lid itself, which slot is a modification instead of the key-seat slots 25 in the cleat 9 to hold the projecting locking-keys 22.

27 represents a vent-hole in the lid, which also constitutes a finger-hole for lifting the lid from its seat.

28 represents the usual cover-plates that cover the usual cell-sections in which the eggs are stored, and 29 are bunches of excelsior that are placed on said covers and against which the lid 5 presses. The said excelsior constitutes an elastic packing for the cellular egg-frames, and spring-cushions the same to preserve the eggs from concussion. The said excelsior also tightens the lid in its lock-bearings and prevents its rattling loose, and when the duplex spring is withdrawn the same element elevates that end of the lid and so as to facilitate its removal, which is an object of importance where large numbers of egg-cases are being handled and repacked.

While I prefer to place the locking-slots in the lid-cleat 9, as shown in Figs. I and VII and in the full lines of Fig. III, yet I do not confine myself to that construction, for an elongated slot 26, as shown in broken lines in said Fig. III, or twin slots 25 may be made in the lid itself instead of in the cleat and will not substantially change the device and will have the same operative effect; also, while I prefer to attach the lid-cleats on top of said lid, as shown, yet they may be foreshortened sufficiently and secured beneath the lid when shippers object to any projecting surfaces on top of the case. In said modified form the projecting surmounting ends of the case should be lowered accordingly, as also the end cleat 7 and the lock-fastening devices.

The operation of the invention has been set forth in the foregoing description, but may be briefly recapitulated as follows: The eggs having been packed in the usual cell-frames and the covers 28 placed on each department of the case, a bunch of excelsior is placed on each cover to spring-bind the packing. The projecting tongue 10 of the lid 5 is then seated in the channel-groove 11 of the end 3 of the case, the center key-slot 13 in said tongue embracing the metal key-lug 12, and thereby preventing any lateral displacement of the lid, which is then pressed down, at the same time pulling back the locking-spring 15, so as to retire its projectile keys 22 out of the course of the closing lid, which withdrawal is done by the thumb or finger on the loop 23, the re-

cess 24 beneath said loop facilitating the operation. When the lid is pressed down, the said spring is let go, and the projectile locking-keys 22 immediately spring forward into the twin horizontal locking-slots, and by said simple operation securely fasten the attachment of the lid. The elastic tension on the fastening devices exercised by the spring-pressure of the excelsior on the lid prevents any accidental danger of the fastenings working loose, besides elastically packing and holding the contents of the case from danger in case of concussions. It also elevates the lid when the spring is withdrawn to facilitate its withdrawal.

I claim as my invention—

1. In an egg-case fastener, the combination of the end 3 of said case, provided with the channel-groove 11, the end 4, the locking-spring 15, secured to said end 4, and the lid 5, having the projecting tongue 10 and provided with the locking key-holes 25, in which the projectile ends of said locking-spring engage, substantially as and for the purpose set forth.

2. In an egg-case fastener, the combination of the initial fastening end 3 of said case, the said end provided with the channel-groove 11, the ultimate locking end 4 of said case, the locking-spring 15, secured to said end piece 4 and provided with the projecting ends 22 and the rear-turned catch-loop 23 between said projecting ends, and the lid 5, with its projecting curved tongue 10, that is seated, when locked, in said channel-groove 11, and the ultimate locking end of said lid provided with the key-holes 25, in which the projectile ends of said locking-spring 15 engage to lock the same, substantially as and for the purpose set forth.

3. In an egg-case fastener, the combination of the initial fastening end 3 of said case, provided with the channel-groove 11, the metal key-lug 12, seated in said end across said channel-groove, the end 4 of said case, provided with the channel-grooves 17, the locking-spring 15, whose lower limbs are seated in said channel-grooves, and the lid 5, having the projecting convex tongue 10, that fits in said channel-groove 11 of the end piece 3, the said tongue provided with the key-slot 13, that embraces the key-lug 12, and said lid provided with the locking-slots 25, in which the projectile ends of said locking-spring 15 engage to lock said lid, substantially as and for the purpose set forth.

4. In an egg-case fastener, the combination of the initial fastening end 3 of said case, provided with the channel-groove 11, the metal key-lug 12, seated across said channel-groove, the end 4 of said case, the channel-grooves 17 in said end 4, the legs 16 of the locking-spring 15, that are seated and work in said channel-grooves 17, the intumed feet 18 and holding-staples 19, that secure said legs in said slots, the end cleat 7, provided with the slots 20, in which said legs work when said spring is withdrawn, the said end

piece 4, provided with the recesses 21 and 24, the angle-bent locking-keys 22, that surmount said legs 16 of said spring, and which work in said recess 21, the rear-turned catch-loop 5 23 between said locking-keys 22, the lid 5, having the projecting tongue 10, said projecting tongue being provided with the key-slot 13, in which said key-lug 12 is seated when

the case is locked, and the locking-slots 25, in which the projectile duplex locking-keys 22 so engage to lock the case, substantially as and for the purpose set forth.

JOHN G. PEACE.

In presence of—

BENJ. A. KNIGHT,

E. S. KNIGHT.