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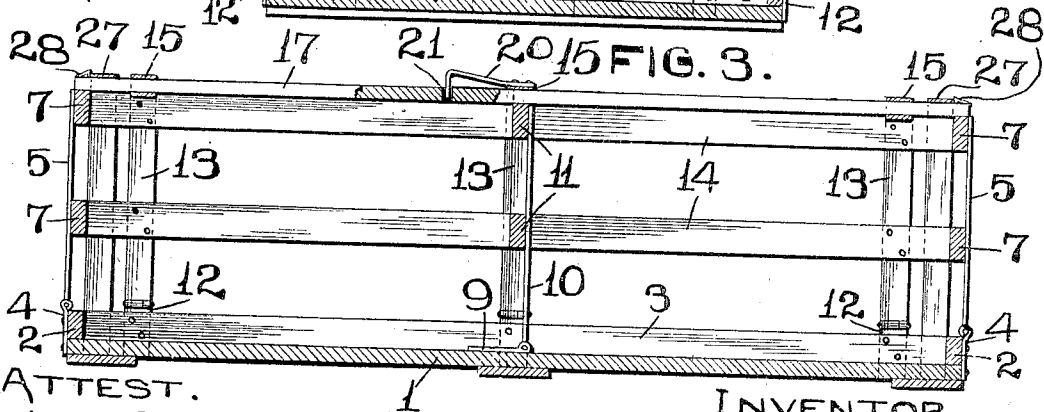
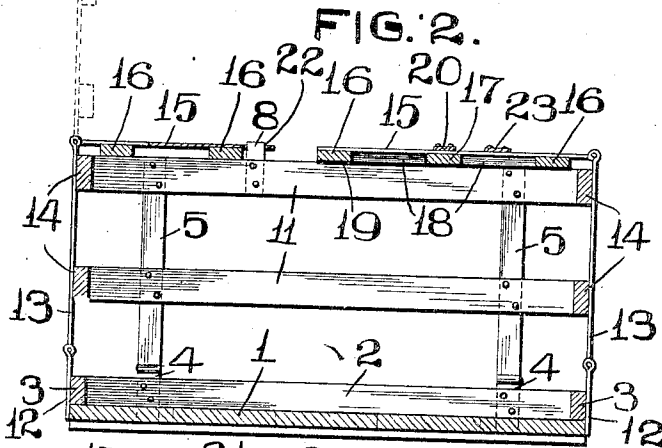
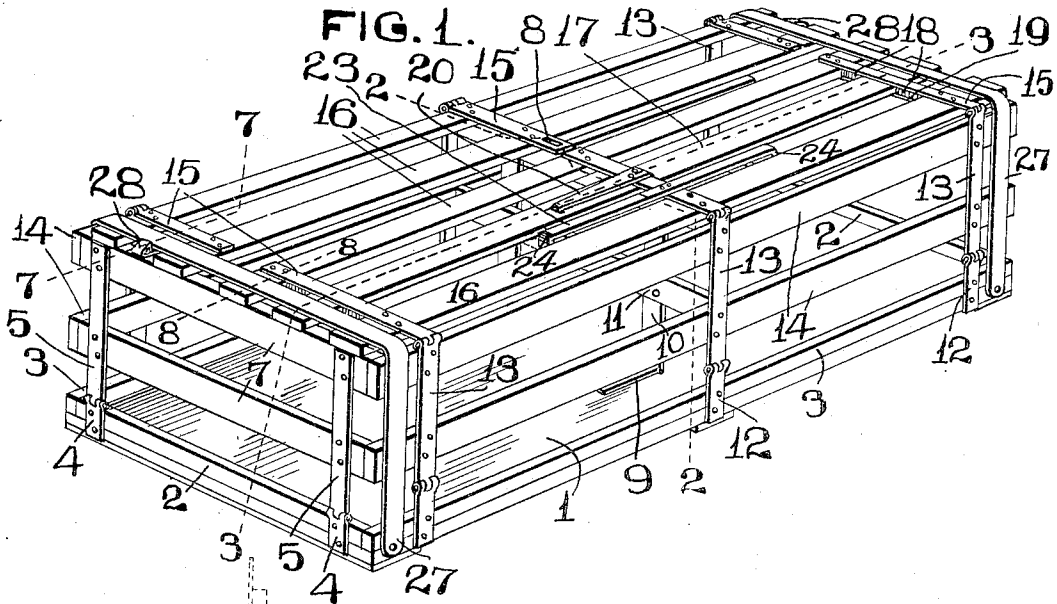
PATENTED AUG. 14, 1906.

C. SMITH.

FOLDING CRATE.

APPLICATION FILED OCT. 30, 1905.

2 SHEETS—SHEET 1.



ATTEST.

L. J. Fletcher.
M. Smith

INVENTOR.

CLAUDE SMITH.

BY *Higdon & Lougan.*
ATTY'S.

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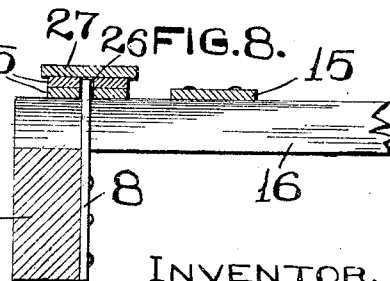
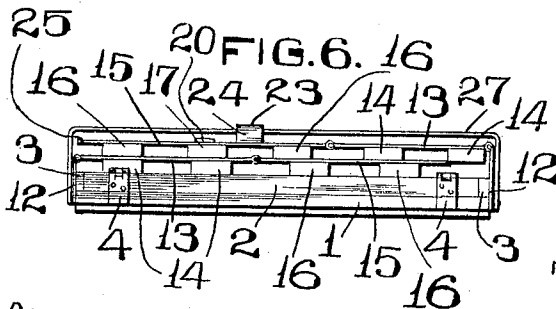
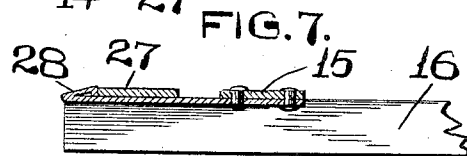
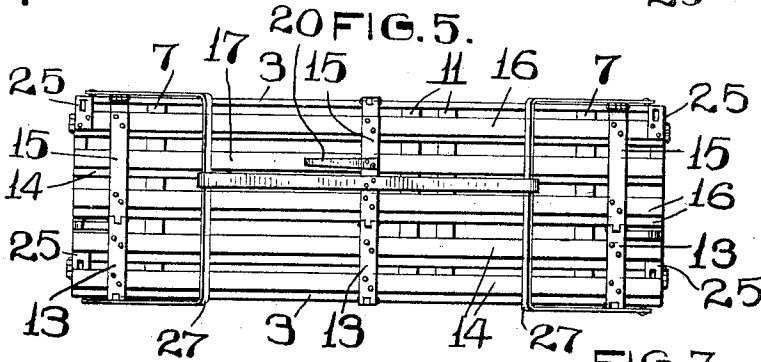
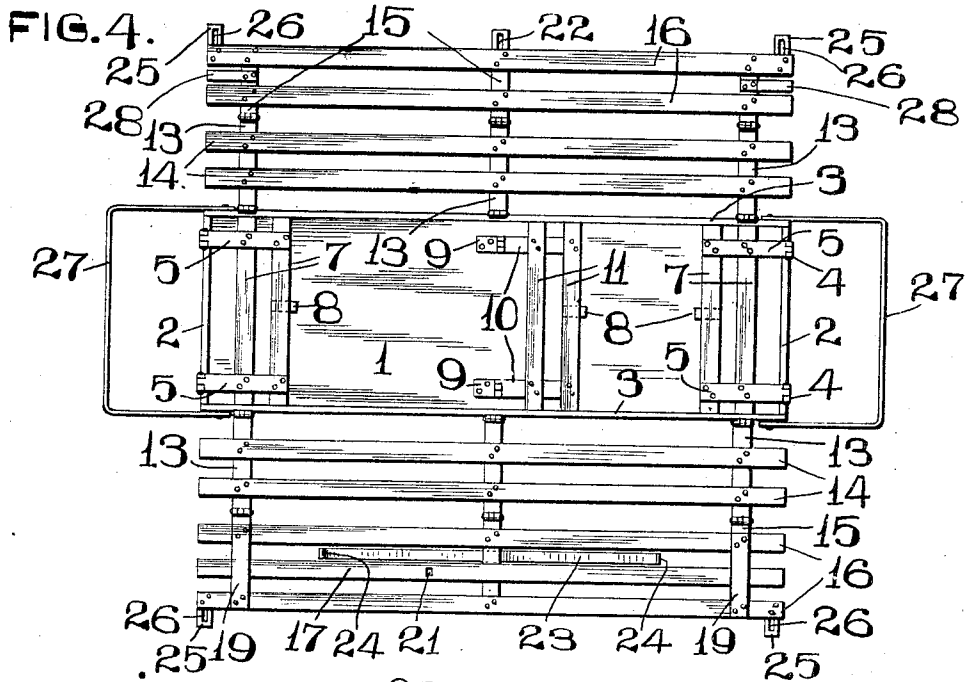
PATENTED AUG. 14, 1906.

C. SMITH.

FOLDING CRATE.

APPLICATION FILED OCT. 30, 1905.

2 SHEETS—SHEET 2.



ATTEST.

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UNITED STATES PATENT OFFICE.

CLAUDE SMITH, OF ST. LOUIS, MISSOURI.

FOLDING CRATE.

No. 828,686.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed October 30, 1905. Serial No. 285,200.

To all whom it may concern:

Be it known that I, CLAUDE SMITH, a citizen of the United States, and a resident of St. Louis, Missouri, have invented certain new and useful Improvements in Folding Crates, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates generally to folding crates, and more particularly to folding crates adapted for the shipment of poultry and the like; and the object of my invention is to provide a simple and inexpensive folding crate that may be quickly and easily set up in position to receive poultry to be shipped and which crate may be quickly and easily folded into compact form to be returned to the original shipper or owner of the crate, thus saving considerable express or freight charges in the return of the empty crates.

A further object of my invention is to construct a folding crate wherein all the folding parts are maintained in position by parts that are carried by and fixed to the crate, thereby doing away with the necessity of making use of unattached parts to maintain the crate in open or folded positions.

To the above purposes my invention consists in certain novel features of construction and arrangement of parts, which will be hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a crate of my improved construction set up in position to receive its contents. Fig. 2 is a transverse section taken on the line 2 2 of Fig. 1. Fig. 3 is a longitudinal section taken on the line 3 3 of Fig. 1. Fig. 4 is a plan view of my improved crate in a knockdown condition. Fig. 5 is a plan view of the crate in a folded condition ready for the return shipment. Fig. 6 is an end elevation of the crate in a folded condition. Fig. 7 is an enlarged detail section taken on the line 7 7 of Fig. 1. Fig. 8 is an enlarged detail section taken on the line 8 8 of Fig. 1.

Referring by numerals to the accompanying drawings, 1 indicates the bottom of my improved crate, to the ends of which are secured transversely-arranged end rails 2 and to the sides of which are secured the longitudinally-extending rails 3. Secured to the outer faces of the end rails 2 are plates 4, and hinged to the outer ends thereof are the

vertically-arranged plates 5, which are fixed to transversely-arranged slats 7. These slats, together with the plates 5, form the folding end sections of my improved crate. Fixed to and extending upwardly from the top pair of slats 7 are short locking-plates 8, adapted to receive slotted plates, hereinafter described. Secured to the top side and center of the bottom one is a pair of plates 9, and hinged thereto is a pair of straps 10, that are in turn secured to transversely-arranged slats 11, and which form a central partition for the crate when the same is set up for use. The top slat 11 carries one of the upwardly-projecting locking-plates 8.

Secured to the side rails 3 are plates 12, and hinged to the upper ends thereof are plates 13, to which are secured longitudinally-extending slats 14. These slats 14, together with the plates 13, form the side walls of my improved crate, and hinged to the upper ends of the plates 13 are similar plates 15. Secured to each of the plates 15 is a series of longitudinally-extending slats 16, which, together with the plates 15, form the top of the crate.

One slat 17, arranged between the slats 16 on one of the top sections, is not secured to the hinge-plates 15, but is arranged to slide beneath said plates between blocks 18, that are fixed to the under sides of the plates 15. Sheet-metal keepers 19 are secured to these blocks 18, and thus maintain this sliding slat 17 in proper position.

Secured to one of the plates 15 at the center of the crate is a leaf-spring 20, having a downwardly-turned outer end which is adapted to engage in a recess 21, that is formed in the slat 17, thus maintaining said slat against longitudinal movement until the point of said spring is elevated from the recess. By means of this sliding slat access is had to the interior of the crate when it is set up for use.

One of the plates 15 at the center of the crate is extended a slight distance and is provided with a slot 22, into which the locking-plate 8 projects that is carried by the upper transverse slat 11 of the centrally-arranged partition.

Fixed to one of the plates 15 at the center of the crate, and which plate carries the spring 20, is an elongated leaf-spring 23, which extends equally in both directions from this plate 15, and the ends of this leaf-spring are bent downwardly, as indicated by 24.

Secured to the outer ends of the outer pair

of the slats 16 are plates 25, provided with slots 26, and which are so arranged as to engage over the locking-plates 8, carried by the top pair of transverse slats 7 of the end sections.

Pivottally secured to the ends of the side rails 3 are the lower ends of a pair of inverted-U-shaped keepers 27, preferably formed of metallic straps and which are of such size as that they will readily fit over the ends of the side and top sections of the crate when it is set up for use.

Spring-keepers 28 are rigidly fixed to the under sides of the plates 15 on one side of the folding top, which keepers project outwardly and are adapted to engage the inverted-U-shaped keepers 27 when the same are swung upwardly over the ends of the top and side sections of the crate.

To set up my improved crate from its folded condition, the end sections and centrally-arranged partition are first swung into vertical positions and so held until the side and top sections are swung upwardly and over said end sections and the central partition, and to maintain the parts together the slotted plates 25 are engaged over the locking-plates 8, carried by the top slats 7 of the end sections, and the slotted end of the central one of the plates 15 is engaged over the locking-plate 8, carried by the top slat 11 of the partition. The inverted-U-shaped keepers 27 are now swung upwardly over the ends of the set-up crate until they are engaged by the spring-keepers 28, and the crate is now in its set-up form ready to receive its contents and to be shipped. To gain access to the interior of the crate to place poultry and the like therein, the leaf-spring 20 is elevated, so that slat 17 can be moved longitudinally in either direction, thereby creating an opening large enough to insert or remove said poultry and the like to and from the crate. To fold up my improved crate for return to the original shipper, the inverted-U-shaped keepers 27 are swung downwardly off from the ends of the crate, after which the top and side sections are swung outwardly and downwardly, the crate now being in the condition shown in Fig. 4. The end sections and the central partitions are now folded downwardly onto the bottom 1, after which one of the side sections and its corresponding top section are swung downwardly onto the end sections located on the bottom, and then the opposite side and its corresponding top section are swung downwardly onto the parts previously positioned on the bottom 1. The inverted-U-shaped keepers 27 are now swung upwardly and over onto the slatted sections that are located on the bottom 1, and the ends of the leaf-spring 23 are pulled upwardly, so that the downwardly-bent ends 24 engage over the keepers 27. Thus the keepers 27 are effect-

ally locked upon the ends of the slatted sections and maintain said sections in their folded positions. Thus the entire crate is folded into a comparatively small space and can thus be returned to the original shipper at a very low expense of shipping charges.

A folding crate of my improved construction is simple, strong, and durable, is very rigid when set up or when folded to return to the original shipper, and each crate is complete in itself and requires no detached parts or devices for holding it in an open or closed position.

I claim—

1. In a folding crate, a bottom, slatted end sections hinged thereto, slatted side sections hinged to said bottom, slatted sections forming the top hinged to the side sections, inverted-U-shaped keepers pivottally carried by the ends of the bottom for engaging the slatted sides and tops when either open or closed, and a spring-latch secured to one of the slatted sections forming the top of the crate, and provided with downwardly-bent ends for engaging the keepers when in folded positions; substantially as specified.

2. A folding crate, constructed with a bottom, slatted end and top sections hinged thereto, slatted side sections hinged to the bottom, locking-plates projecting upwardly from the top slats of the end sections, slatted plates carried by the ends of the top sections for engaging said locking-plates, straps pivottally arranged on the ends of the bottom for passing over the ends of the side and top sections when the crate is open or folded and a spring-latch secured at its center to the center of one of the top sections, and the ends of said catch being bent downwardly and adapted to engage the straps when the crate is folded; substantially as specified.

3. In a folding crate, a bottom, slatted end and side sections hinged thereto, slatted top sections hinged to the side sections, a slat arranged to move longitudinally in one of the top sections in which slat is formed a slot, a leaf-spring secured to one of the top sections and having its free end bent downwardly to engage in the slot formed in the moving slat, inverted-U-shaped keepers pivottally arranged on the ends of the bottom and adapted to pass around the side and top sections when open or closed, and a spring-catch secured at its center to one of the top sections and being provided with downwardly-bent ends adapted to engage the keepers when the crate is folded; substantially as specified.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

CLAUDE SMITH.

Witnesses:

M. P. SMITH,

E. M. HARRINGTON.