

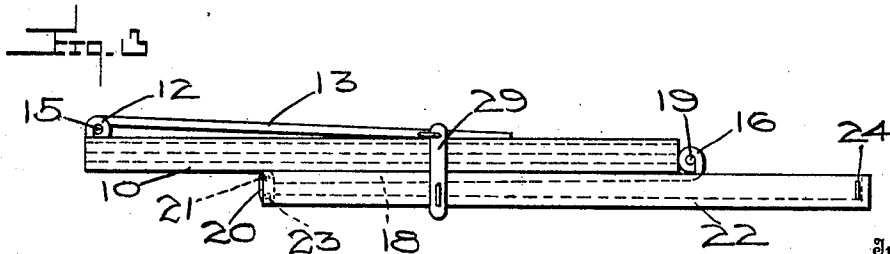
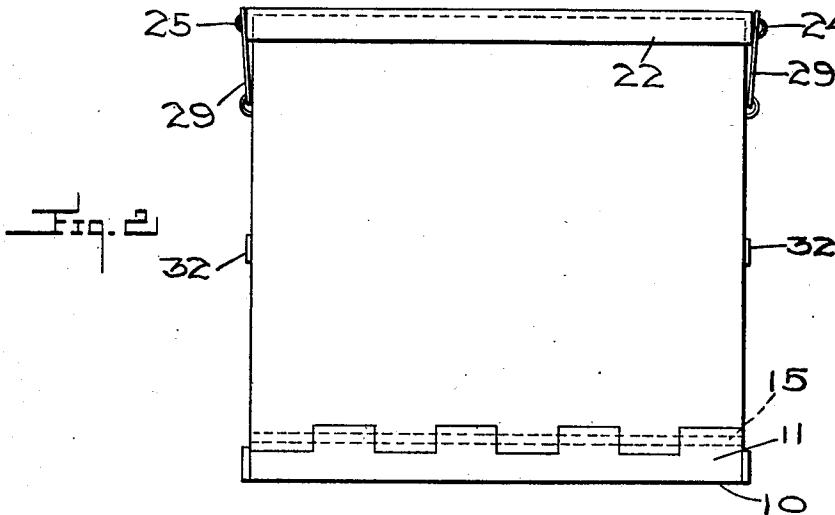
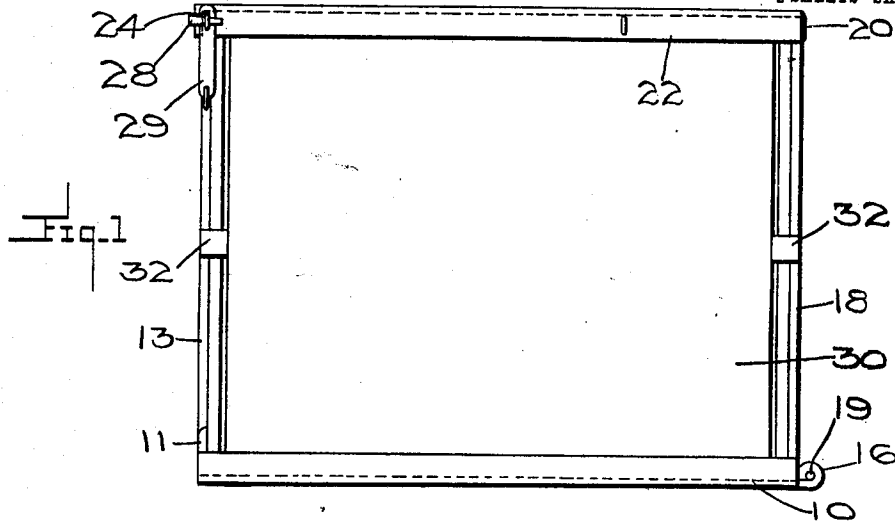
W. N. LUFT.
FOLDING GRATE.

APPLICATION FILED JUNE 4, 1908.

920,358.

Patented May 4, 1909.

2 SHEETS—SHEET 1.



Inventor

William N. Luft

Witnesses
Ed. R. Luby
E. L. Chandler

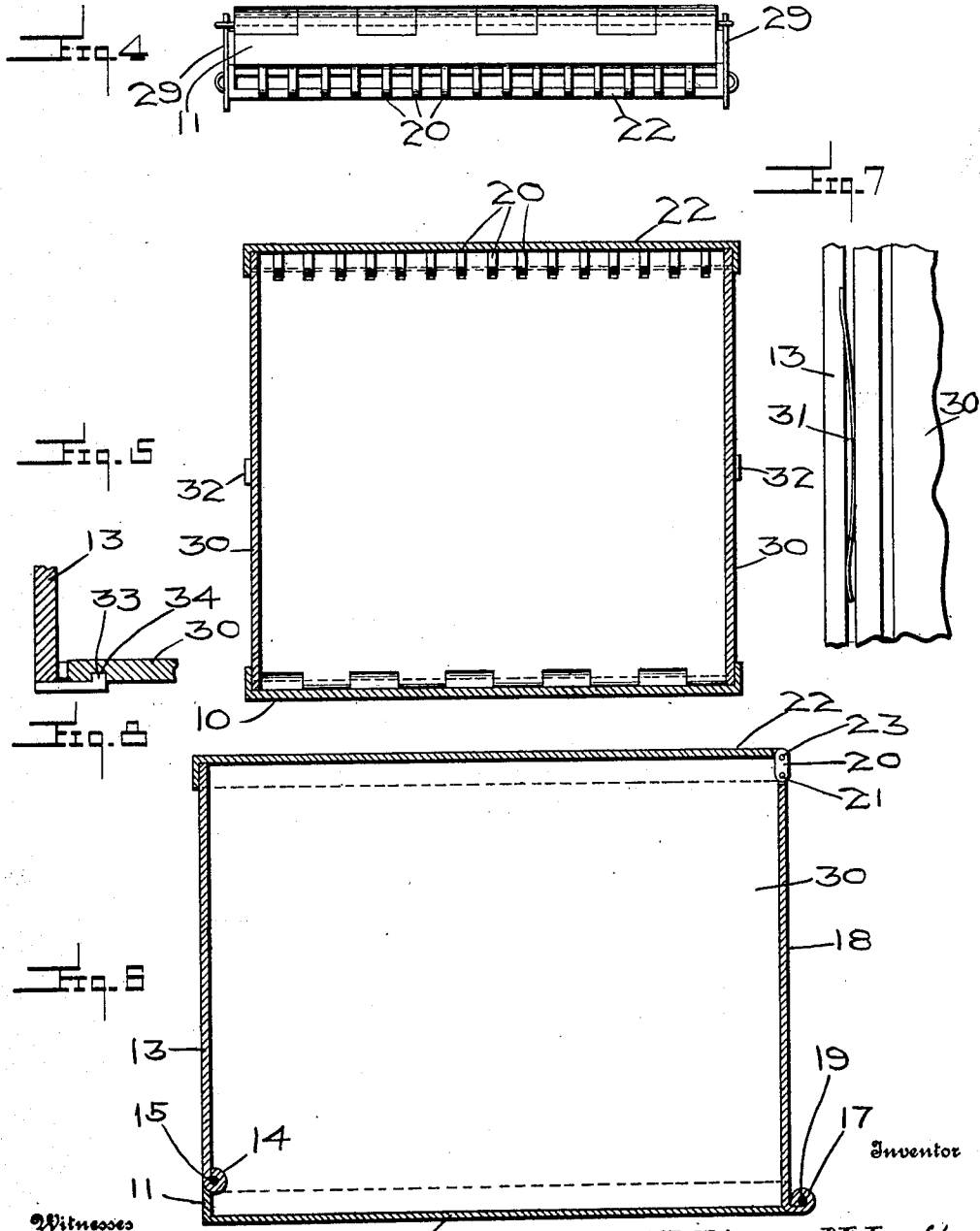
By Woodward & Chandler

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Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM N. LUFT, OF TREMONT, ILLINOIS.

FOLDING CRATE.

No. 920,358.

Specification of Letters Patent.

Patented May 4, 1909.

Application filed June 4, 1908. Serial No. 436,675.

To all whom it may concern:

Be it known that I, WILLIAM N. LUFT, a citizen of the United States, residing at Tremont, in the county of Tazewell and State of Illinois, have invented certain new and useful Improvements in Folding Crates, of which the following is a specification.

This invention relates to crates and especially to that class of crates which are adapted to be knocked down.

An object of this invention is to provide a crate of this nature that will occupy the least possible space when folded to be shipped.

A further object is to produce a crate that will be as compact as possible and that will have practically all of its parts secured together so as to eliminate the danger of losing any section of the crate which would render it useless.

Another object is to construct a device of this character that can be readily and easily set up and knocked down without the use of any tools and within a short time.

A still further object of the invention is to provide a crate of this nature that will have as little weight as possible consistent with strength and durability.

Other objects and advantages will be apparent from the following description and it will be understood that changes in the specific structure shown and described may be made within the scope of the claim, and that any suitable materials may be used without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a front elevational view of the crate set up, Fig. 2 is an end elevation of the same, Fig. 3 is a front elevation of the crate in folded position, Fig. 4 is an end elevation of the same, Fig. 5 is a lateral cross section of the crate set up, Fig. 6 is a longitudinal cross section of the same, Fig. 7 is a detailed and enlarged view of the spring for frictionally holding the sides of the crate in position, Fig. 8 is a detailed view of one of the engaging arms showing the manner in which it is applied.

Referring to the drawings, 10 designates the bottom of the crate which is made from wood or metal as preferred. The front edge of the bottom 10 carries an upturned flange 11 extending the full length of the crate and which is provided with a series of equidis-

tantly disposed inwardly turned cleats 12 upon its upper edge. A front section 13 is provided with a like series of cleats 14 which are adapted to interfit with the cleats 12 and are secured therein by a suitable pin 15. Disposed at the rear edge of the bottom 10 is a second set of cleats 16 which engage with cleats 17 formed upon the back 18 of the crate and which are secured by a pin 19.

Instead of the employment of the cleats and pins as above described any form of hinge may be applied to the bottom 10 and the front 13 and back 18 which will be strong and will not prevent of the folding of the parts of the crate.

The upper edge of the back 18 carries links 20 which are hinged to the back 18 by pivot pins 21 and which are engaged upon a cover 22 by a pivot pin 23. The lid or cover 22 is provided upon its opposite ends with outwardly extending eyes 24 and 25 which are adapted to be engaged by the hasps 29 and are secured thereby and are adapted to carry pins 28. The front piece 13 is provided with hinged hasps 29 at the upper portions of its ends which are adapted to engage over the eyes 24 and 25 respectively when the crate is set up or folded.

The ends of the crate comprise panels 30 which are positioned upon the bottom 10 and which are held in vertical position by inwardly extending spring members 31 carried by the front 13 and back 18 which engages the edges of the ends 30. To prevent the outward displacement of the ends 30 the front 13 and the back 18 are provided with engaging arms 32 extending inwardly from their ends which are provided with flanges 33 for engagement in vertical grooves 34 formed in the outer faces of the ends 30.

In operation, when the crate is set up the hasps 29 are engaged over the eyes 24 and held thereon by the pins 28 to lock the cover 22 in closed position. To fold the crate the hasps 29 are disengaged from the cover 22 and the cover 22 is raised, the ends 30 are then drawn upwardly out of engagement with the flanges 33 and springs 31 and disposed longitudinally on the bottom 10. The front 13 is then folded inwardly upon the ends 30 and the back 18 is swung around beneath the bottom 10 carrying the cover 22 which is folded down upon the inner face of the back 18. When in this position it will be noted that the hasps 29 register with the eyes 24 and 25 and the hasps 29 are engaged over the

eyes 24 and 25 and locked by the pins 28. The crate now occupies but small space and is ready for reshipment.

What is claimed is:

5 In a crate the combination of a bottom, a front hinged to said bottom adapted to fold inwardly thereupon, a back hinged to said bottom adapted to fold under the same, a cover hingedly supported by said back
10 adapted to fold against the inner face thereof, flanges formed upon the ends of said bottom, leaf springs disposed upon the opposite inner

faces at the opposite extremities of said front and said back and ends disposed against said flange between said springs and 15 held in such position by inwardly extended arms from said front and said back.

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

WILLIAM N. LUFT.

Witnesses:

NICHOLAS LUFT,
JACOB W. BARTDALL.