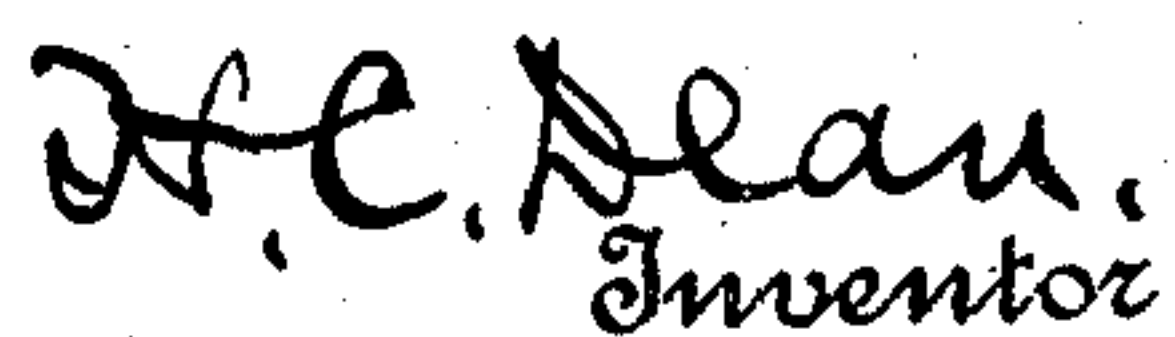


2 Sheets—Sheet 1.

No. 584,541.

Patented June 15, 1897.



Witnesses
Wm. C. Ashwell
A. D. Smith

by *A. B. Wilson*
Attorney

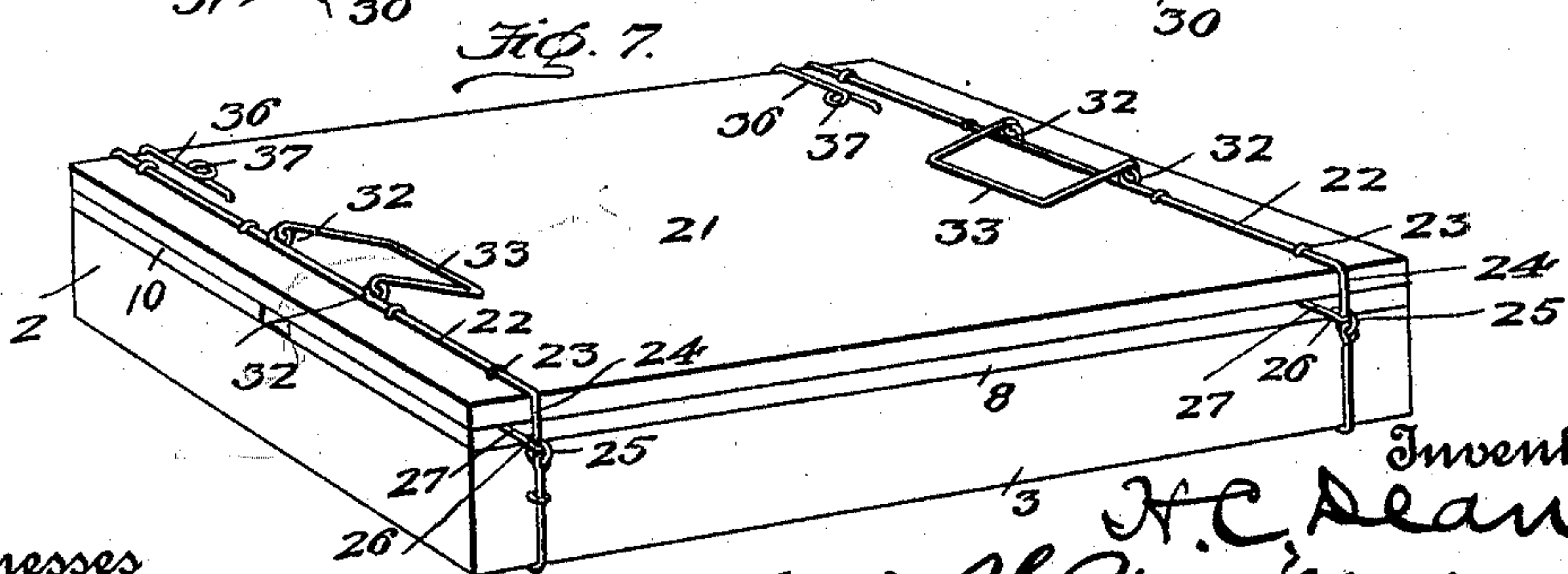
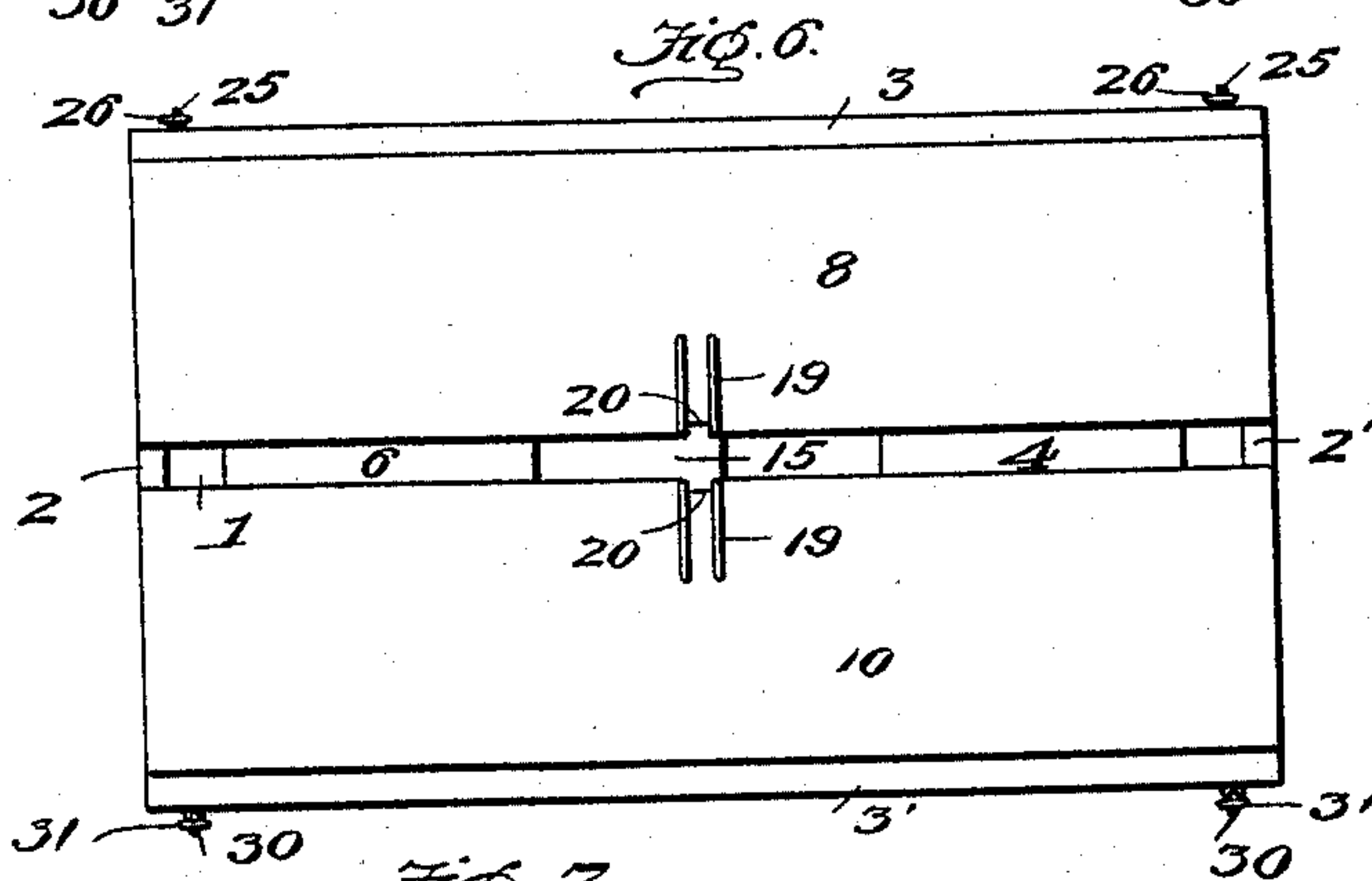
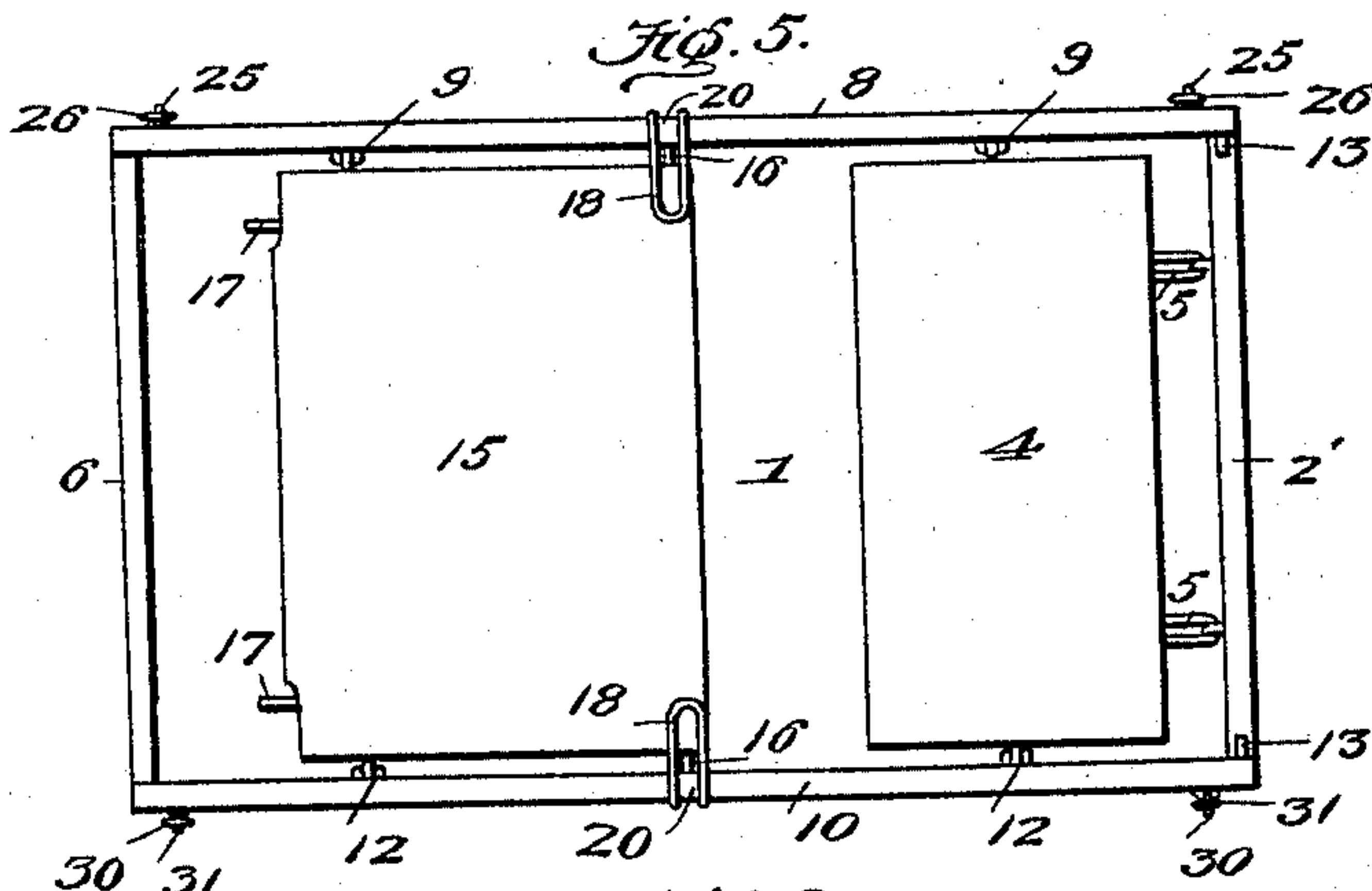
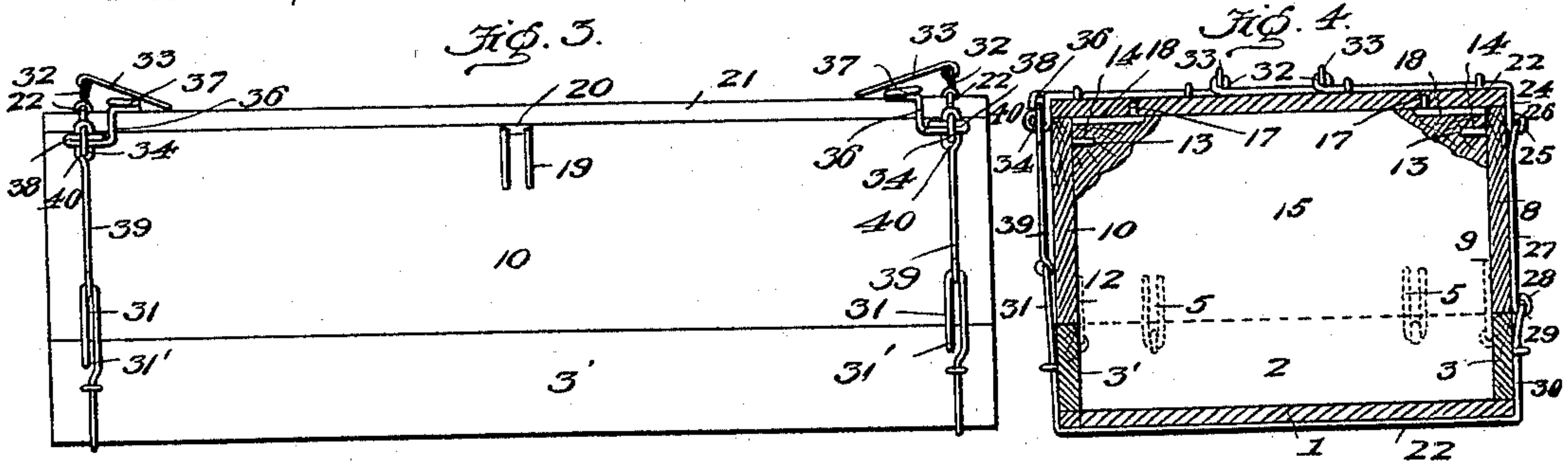
(No Model.)

2 Sheets—Sheet 2.

H. C. DEAN.
FOLDING EGG CRATE.

No. 584,541.

Patented June 15, 1897.



Witnesses

H. C. Dean
A. J. Smith

Inventor
H. C. Dean
by *A. J. Smith*
Attorney

UNITED STATES PATENT OFFICE.

HENRY CLAY DEAN, OF DIFFICULT, TENNESSEE.

FOLDING EGG-CRATE.

SPECIFICATION forming part of Letters Patent No. 584,541, dated June 15, 1897.

Application filed February 19, 1897. Serial No. 624,216. (No model.)

To all whom it may concern:

Be it known that I, HENRY CLAY DEAN, a citizen of the United States, residing at Difficult, in the county of Smith and State of Tennessee, have invented certain new and useful Improvements in Folding Egg-Crates; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to improvements in folding egg-crates, and the object is to produce a simple, cheap, and convenient device of this class for transporting eggs, and which may be folded into a small compact space to return to the shipper.

To this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same reference-characters indicate the same parts of the invention.

Figure 1 is a perspective view of my improved folding egg-crate. Fig. 2 is a similar view with the lid raised. Fig. 3 is a rear view of the crate. Fig. 4 is a vertical section through the ends of the crate. Fig. 5 is a top plan view with the lid removed and the partition and one of the end pieces folded down inside the crate. Fig. 6 shows the opposite end piece and the two sides folded down, and Fig. 7 is a perspective view of the entire crate as it appears when folded.

1 represents the solid bottom of the crate, to which are permanently fixed the end strips 2 2' and the side strips 3 3'. A swinging end piece 4 is secured at its lower edge by hinges 5 5 to the end strip 2, so that when raised it will form with the strip 2 a complete wall for that end of the crate, and when necessary may be folded down inside of the crate and parallel with the bottom 1, as shown in Fig. 3. A similar end piece 6 is secured by hinges 7 7 to the strip 2' at the opposite end of the crate.

8 represents what may be termed the "back" of the crate, and it is secured by hinges 9 9 to the strip 3, so as to fold inwardly, as shown in Fig. 4.

10 represents the folding front of the crate, secured to the strip 3' by hinges 12 12, and it

is also arranged to fold inwardly and parallel with the bottom. These back and front pieces 8 and 10 are each provided on their inner faces, near their upper ends, with dowel-pins 13 13, which engage aligned orifices 14 in the contiguous edge of the hinged end pieces 4 and 6 to hold them rigidly vertical when the crate is set up.

15 represents the central folding partition, the lower end of which is pivoted on the screws 16, extending inwardly from the inside of the side strips 3 3', so as to permit said partition to be folded down parallel with the bottom 1, as shown in Fig. 3. The upper edge of this partition near the ends is provided with upwardly-projecting pins 17 17, which engage the loops 18 on the inner ends of the spring-clips 19, the vertical shank of which is fixed in the outside of the back and front pieces 8 and 10, while the horizontal loop portions are bent inwardly and are seated in the transverse guide-recesses 20 20 in the upper end of the back and front pieces. The pointed ends of the pins 17 extend above the line of the partition and project into the lid when closed.

21 represents the lid or cover, and it is provided along its upper face near the edges with the binding-wires 22 22, secured thereto with clenched staples 23. One end of said wire extends backward to the rear edge of the lid, where it is bent downward to form an arm 24, terminating in a hook 25. This hook engages the eye 26, formed on the upper end of a rod 27, which forms the hinge, and the lower end of said rod 27 also carries an eye 28, which is swiveled in a similar eye 29, formed on the upper end of a binding-wire 30, extending around the bottom of the box and a short distance up the other side or front, where it terminates in an oblong link 31, the free end 31' of the wire, after the link is formed, being turned inwardly and driven into the side 3'. These binding-wires 22 are each provided with integral eyes 32 32, arranged about midway on top of the lid, and to them is secured the hinged bail-handles 33 33. The opposite ends of these wires 22 are turned down the front edge of the lid to form an eye 34, and after the eye is formed the free end 35 of the wire is inserted in the edge of the lid, as shown in Fig. 4, to increase the strength and durability of the eye 34.

36 represents a spring-arm secured at its rear end to the upper face of the lid and having its shank formed with a coil 37 and thence extended forwardly, downwardly, and longitudinally to form the bolt 38, which extends into the eye 34.

To the oblong link 31 of the bottom binding-wire there is hinged the lower end of a rod 39, the upper end of which is formed with a link 40, which is first passed over the eye 34, and the bolt 38 sprung through the eye 34 to securely lock the lid in place against accidental displacement.

In folding the crate the lid is first detached by releasing the bolts 38 and the hooks 25. The spring-clips 19 are then released from the pins 17 17 in the partition, which is now folded down on the bottom of the crate. The front and back 8 and 10 are sprung apart slightly to release the dowel-pins 13, and the end pieces 4 and 6 are turned down inwardly on the bottom. The back and front pieces 8 and 10 are likewise turned down inwardly, as shown in Fig. 6. The rods 27 and 39 are then turned inwardly under the back and front pieces and the hooks 25 inserted in the eyes 29 on the bottom binding-wire. The front end of the lid is now pressed snugly down, which brings the eyes 34 in alinement with the oblong links 31, which are passed over said eyes, and the bolts 38 sprung into place to secure the whole in a firm and compact manner.

Although I have specifically described the

construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

A folding egg-crate, comprising the bottom 1 provided with the fixed end and side pieces, the partition 15 hinged thereto, and provided with the projecting pins 17 17, the swinging end pieces 4 and 6, having orifices 14, the front and back pieces 8 and 10 provided with dowel-pins 13, transverse guide-recesses 20, and the spring-clips 19 formed with integral loops 18, the bottom binding-wires 30 formed with eyes 26 and oblong links 31 and the rods 27 and 39, in combination with the detachable lid 21, the binding-wire 22 secured thereto and formed with the hook 25, integral eyes 32 32, and the terminal eye 34, the bail-handle 33 hinged in said eyes 32 32, and the spring-bolt 38 adapted to engage the eye 34, substantially as and for the purpose set forth.

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

HENRY CLAY DEAN.

Witnesses:

A. H. HERRING,
L. P. GRIGG.