

No. 682,306.

Patented Sept. 10, 1901.

W. A. WOOLSEY.

COLLAPSIBLE BOX.

(Application filed Jan. 3, 1901.)

(No Model.)

Fig. 1.

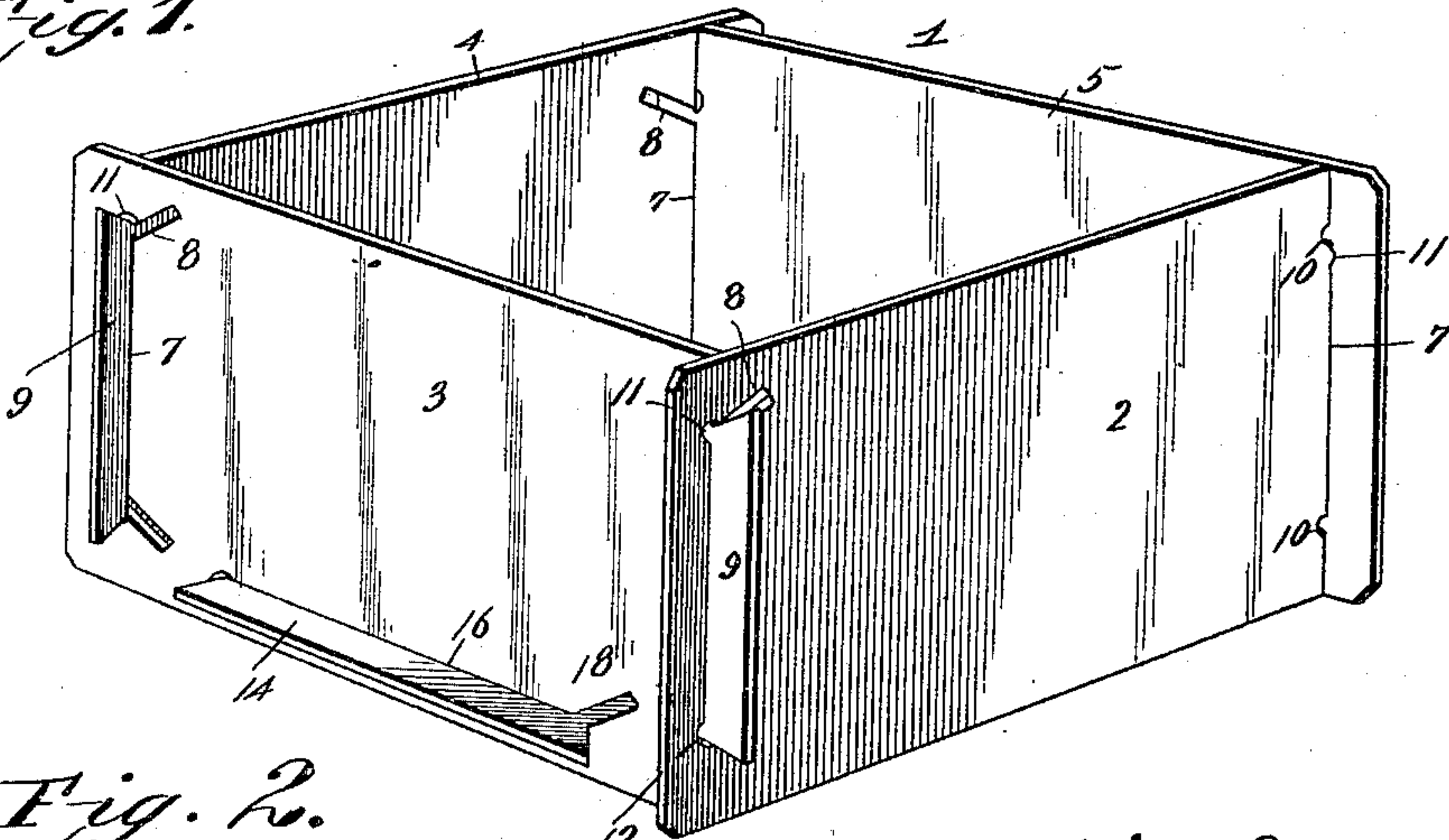


Fig. 2.

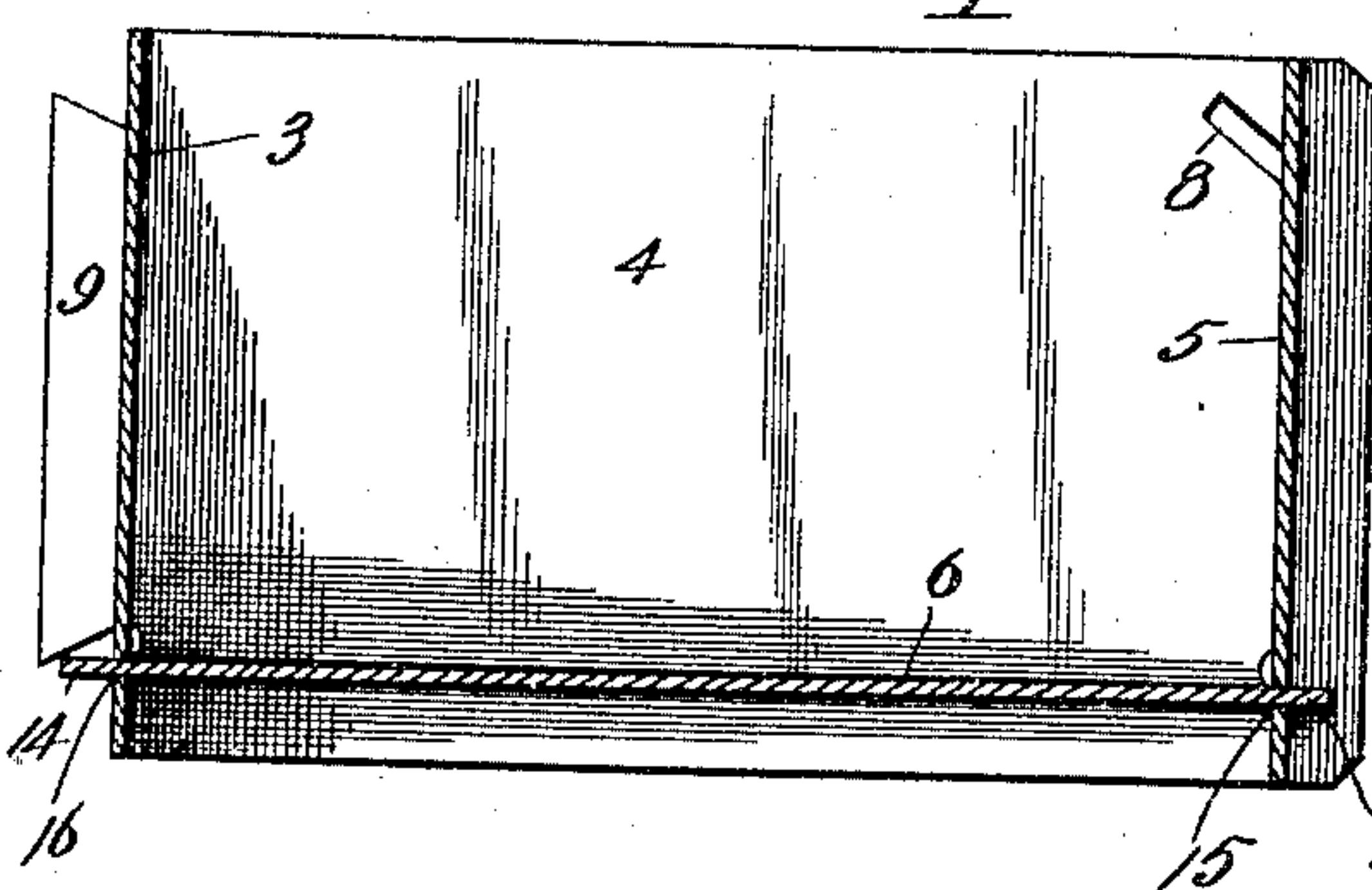


Fig. 3.

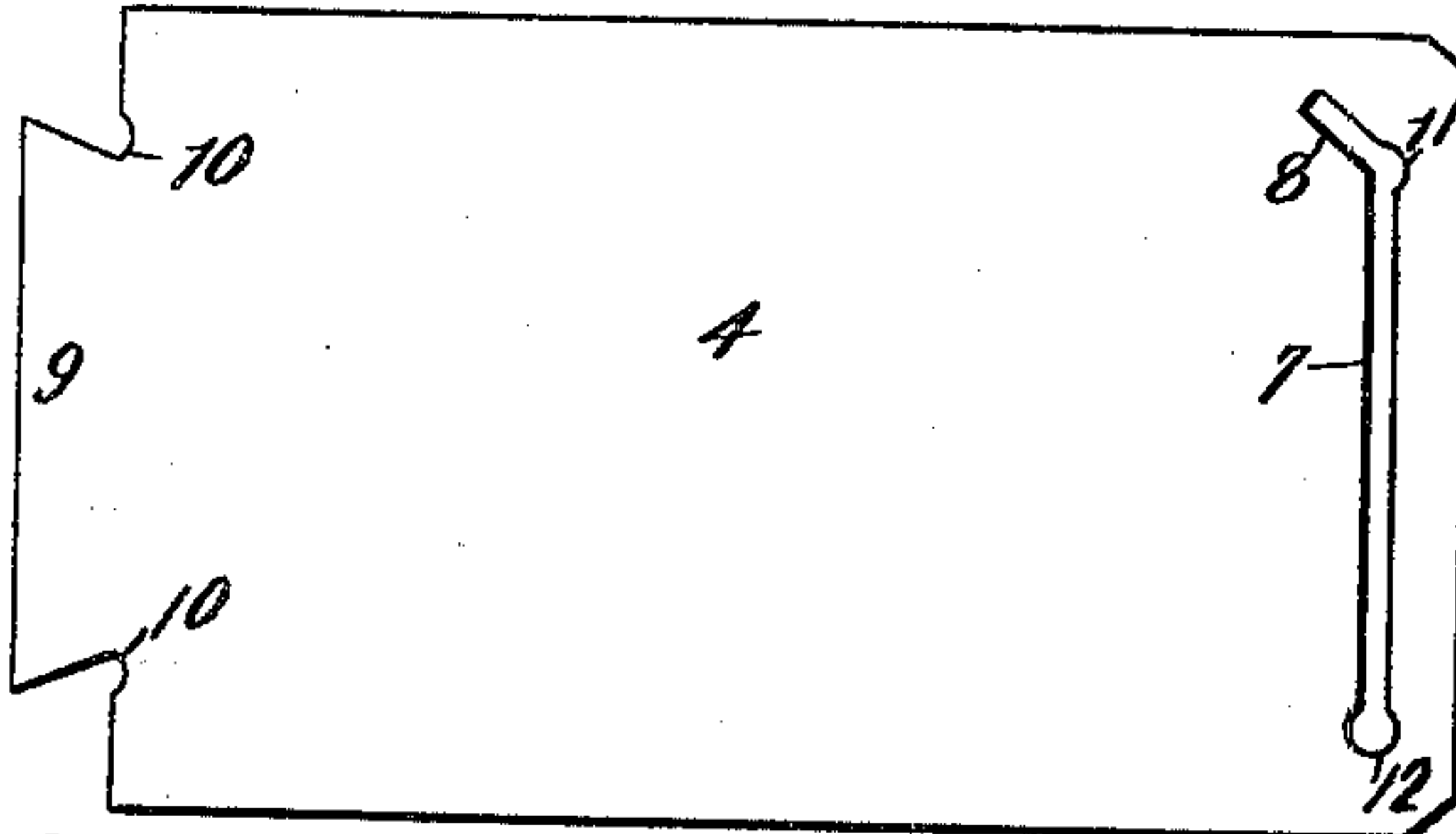
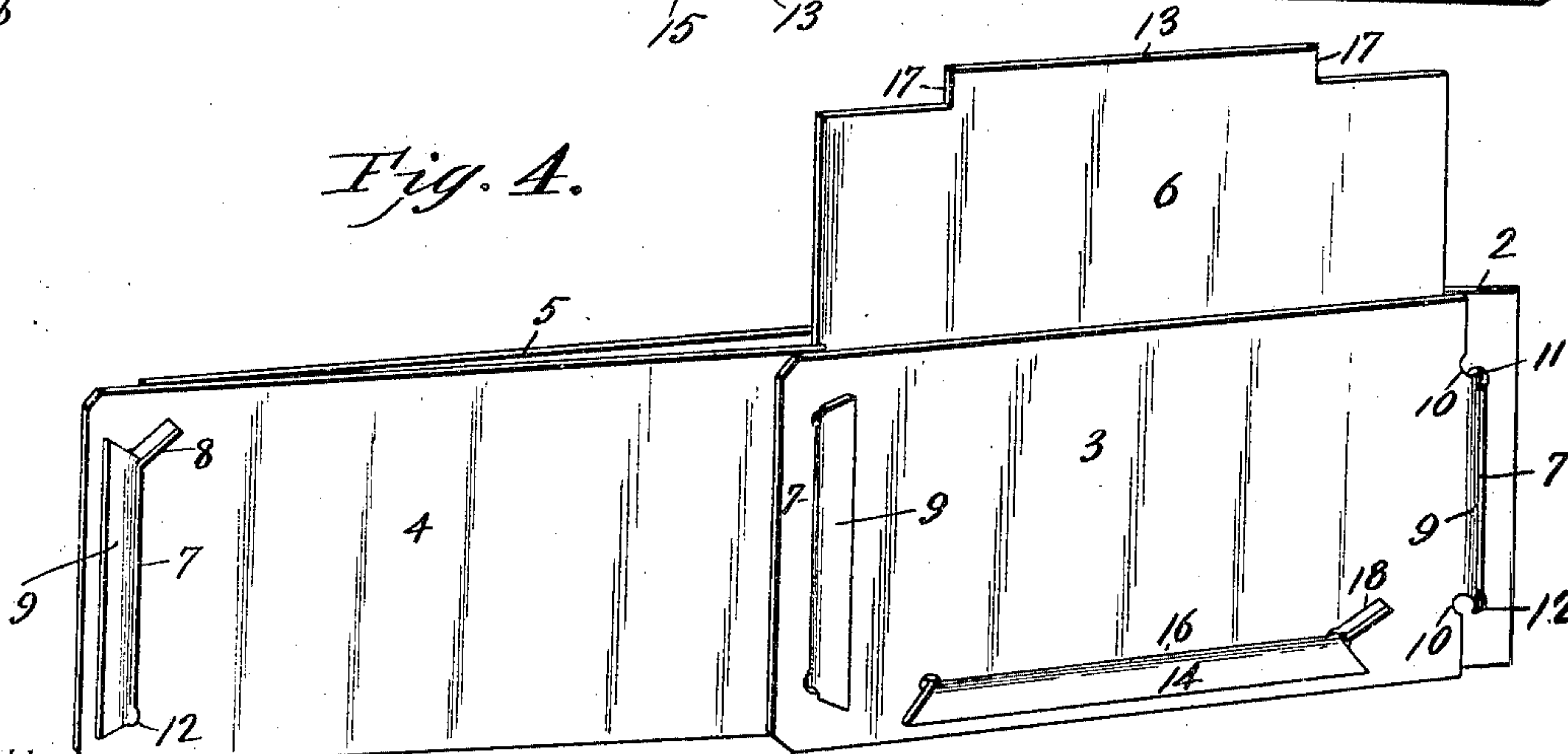


Fig. 4.



Witnesses

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# UNITED STATES PATENT OFFICE.

WARREN A. WOOLSEY, OF YPSILANTI, MICHIGAN.

## COLLAPSIBLE BOX.

SPECIFICATION forming part of Letters Patent No. 682,306, dated September 10, 1901.

Application filed January 3, 1901. Serial No. 42,016. (No model.)

*To all whom it may concern:*

Be it known that I, WARREN A. WOOLSEY, a citizen of the United States, residing at Ypsilanti, in the county of Washtenaw and State of Michigan, have invented a new and useful Collapsible Box, of which the following is a specification.

The invention relates to improvements in collapsible boxes.

10 The object of the present invention is to improve the construction of knockdown boxes and to provide a simple, inexpensive, and efficient one designed for the shipment of berries and the like and adapted to be constructed  
15 of paper, wood, or metal and capable of being compactly folded for shipment or storing.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated  
20 in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a collapsible box constructed in accordance with this invention. Fig. 2 is a  
25 vertical sectional view of the same. Fig. 3 is a detail view of one of the sides. Fig. 4 is a perspective view, the box being folded.

Like numerals of reference designate corresponding parts in all the figures of the drawings.  
30

1 designates a collapsible box designed to be constructed of paper, pasteboard, wood, metal, or other suitable material and adapted to contain berries and the like and composed  
35 of similar sides 2, 3, 4, and 5 and a bottom 6, and each side is provided at one end with a vertical slot 7, having an inclined extension 8 at the top, which extends inward and upward toward the center of the upper edge of  
40 the side. The other end of the side is provided with an inwardly-tapered or dovetailed tongue 9, having inclined upper and lower edges and adapted to fit in the slot 7 of the adjacent side, as clearly indicated in Fig. 1  
45 of the accompanying drawings. The dovetailed tongue 9 is located equidistant of the upper and lower edges of the side of the box, and the said side is provided at the inner ends of the inclined edges of the horizontal  
50 tongue 9 with curved notches 10, and the opposite end of the side of the box is provided with upper and lower curved edges 11

and 12. These curved edges are adapted to prevent the material from splitting or tearing at the terminals of the slots and at the sides  
55 of the tongue. The tongue 9 of one side is introduced into the slot of the adjacent side by first engaging the lower portion of the tongue at the bottom of the slot, and the upper portion or corner of the tongue is temporarily deflected or bent at an angle to enable it to pass through the inclined upper  
60 branch 8 of the slot 7, and after the tongue has been passed through the slot the upper corner or portion is returned to a vertical position and the resiliency of the material  
65 will cause the tongue to remain in such position and will prevent its upper portion from accidentally becoming disengaged. The joint or connection between the ends of the  
70 sides of the box form hinges and will permit the box to collapse, as illustrated in Fig. 4 of the accompanying drawings, whereby the boxes may be compactly arranged for shipping or storing. The bottom 6 of the box is  
75 detachably interlocked with one of the sides and is hinged to the opposite side, and for this purpose it is provided at opposite sides with tongues 13 and 14, adapted to fit in slots  
80 15 and 16 of the adjacent sides of the box. The tongue 13, which extends through the slot 15 of the adjacent side of the box, has straight side edges 17, and is readily introduced into and removed from the slot 15 by  
85 springing the side outward sufficiently. The tongue 14 is inwardly tapered or dovetailed similar to the tongues of the sides, and the adjacent side is provided with the said slot  
90 16, which has an inclined extension 18 at one end. The tongue 14 is introduced into the slot 16 in the same manner that the tongues of the sides are interlocked with the slotted  
95 portions of the adjacent sides, and one of the corners or ends of the tongue 14 is deflected to permit it to pass through the inclined branch 18 of the horizontal slot 16, and after  
100 the tongue 14 has been passed through the slot 16 the bottom is hinged to the side in which the slot 16 is formed, and the said bottom is adapted when the tongue 13 is disengaged from the slot 15 to swing upward, as illustrated in Fig. 4, to fold the box. The box when folded may be quickly arranged in the position illustrated in Fig. 1 of the draw-



ings by opening the sides and swinging the bottom downward. Should it be desirable to provide a cover for the box, the construction at the bottom may be duplicated and an efficient hinged cover will be produced.

It will be seen that the collapsible box is exceedingly simple and inexpensive in construction, that it is adapted to be constructed of a variety of materials, and that it is adapted to be compactly folded and may be quickly arranged for use.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention, such as applying the particular construction of the lock at the terminals of the sides to boxes having the sides formed integral with the bottom.

What I claim is—

1. A collapsible box comprising sides connected at their ends, one of the sides being provided with a straight slot and the opposite side being provided with a slot having an inclined branch, and a bottom provided at opposite sides with tongues to engage the said slots, one of the tongues being dovetailed and adapted to be deflected to pass through the said inclined branch, substantially as described.

2. A collapsible box comprising sides provided at one end with a slot and having a tongue at the other end for engaging the slot of the adjacent side, said slots and tongues forming hinged connections and permitting the sides to collapse, two of the sides being provided with horizontal slots, and a bottom provided with tongues engaging the horizontal slots, said bottom being hinged at one side and detachably connected at the other, substantially as described.

3. A collapsible box comprising the sides having dovetailed tongues at one end and provided at the other end with vertical slots having inclined branches, two of the sides being also provided with horizontal slots, and one of such slots having an inclined branch, and a bottom provided at opposite sides with tongues to engage the horizontal slots, one of the tongues of the body being straight and the other being dovetailed and adapted to be deflected to pass through the inclined branch of the bottom horizontal slot, substantially as described.

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

WARREN A. WOOLSEY.

Witnesses:

GEORGE McELCHERSON,  
DARWIN C. GRIFFEN.