

No. 785,796.

PATENTED MAR. 28, 1905.

A. C. BUTTMAN.
CRATE.

APPLICATION FILED JULY 14, 1904.

Fig. 1.

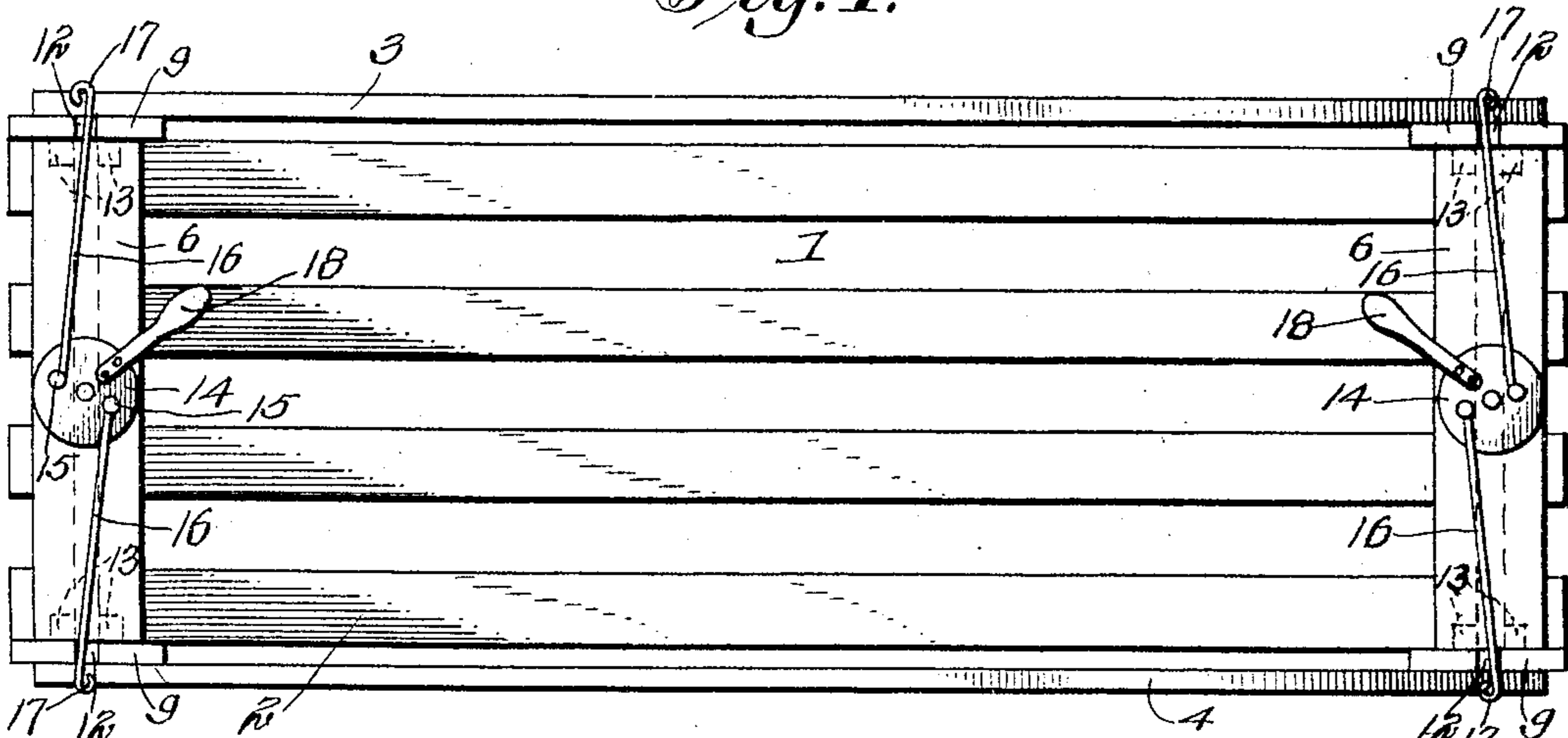


Fig. 2.

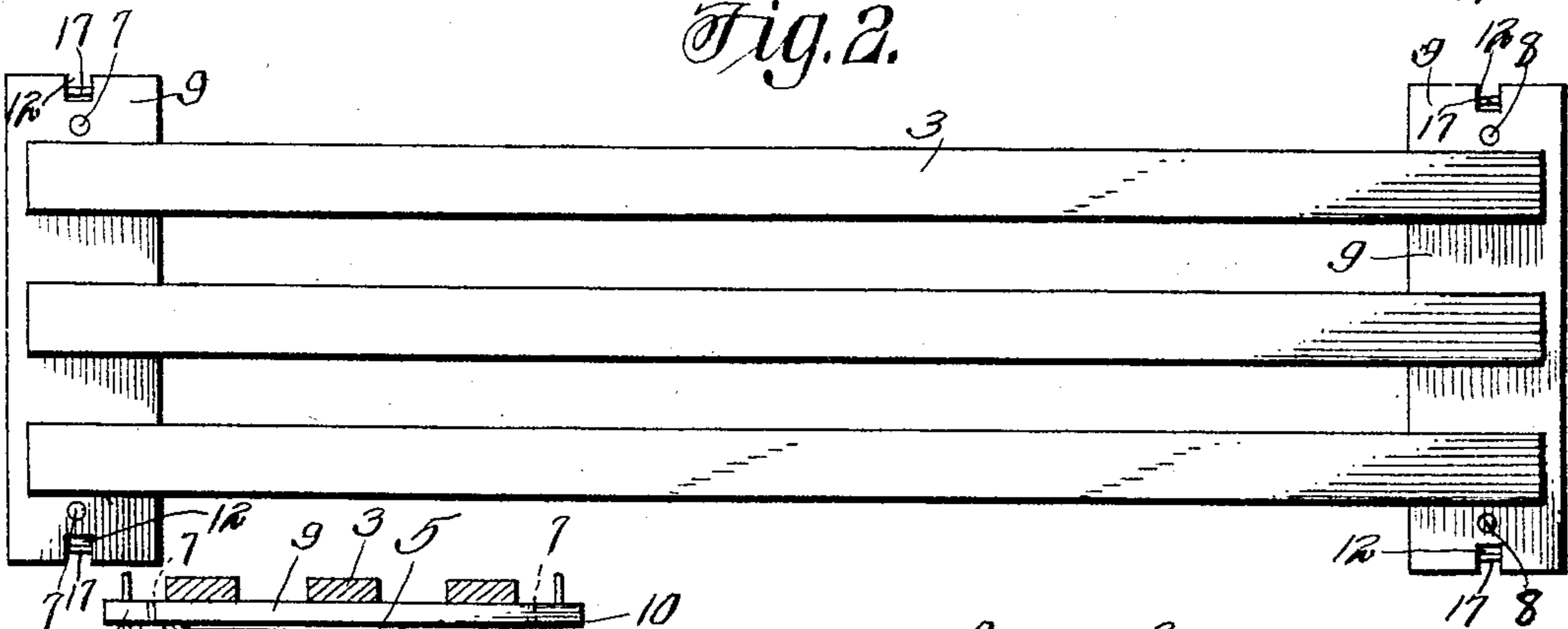


Fig. 3.

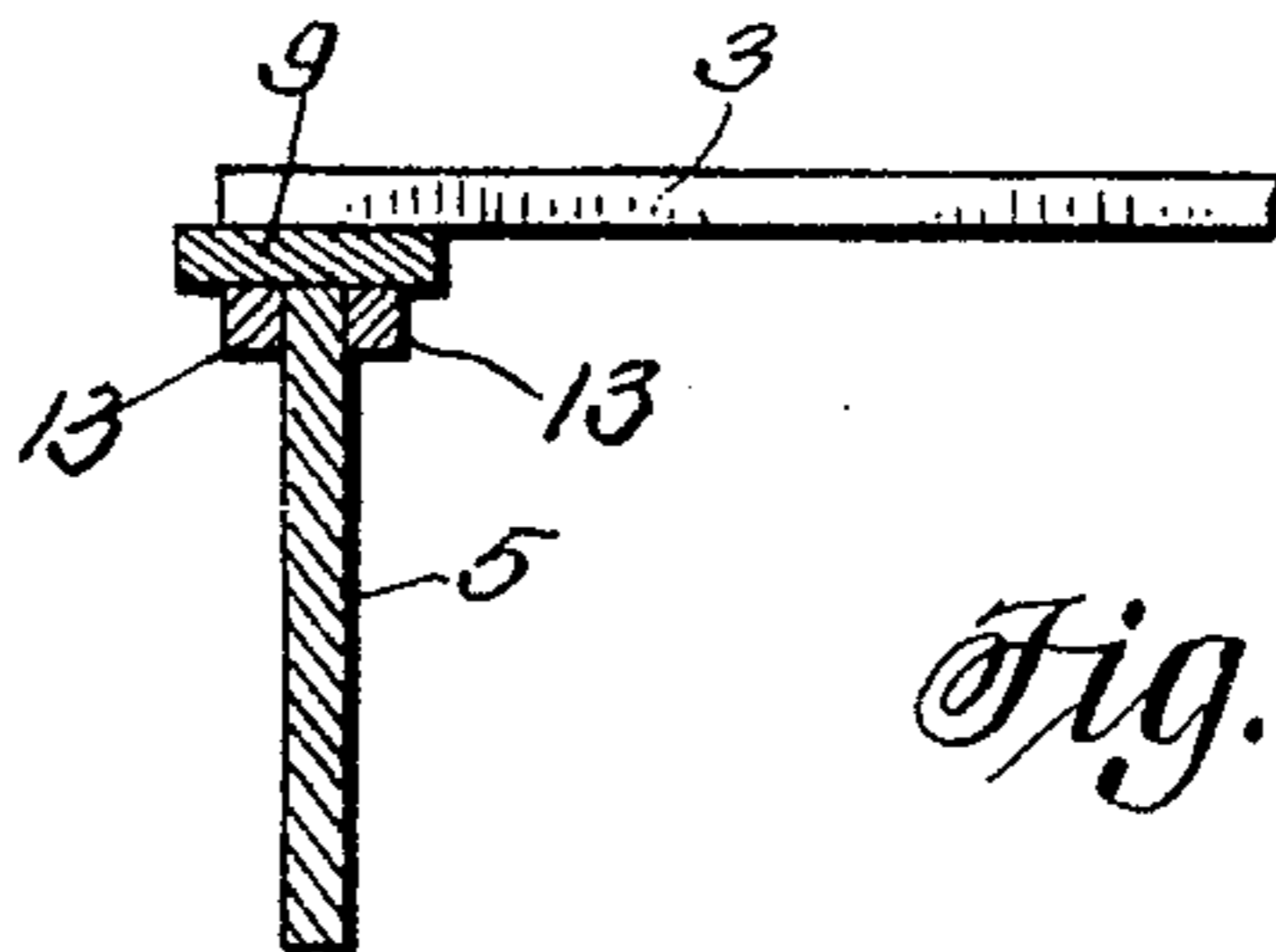
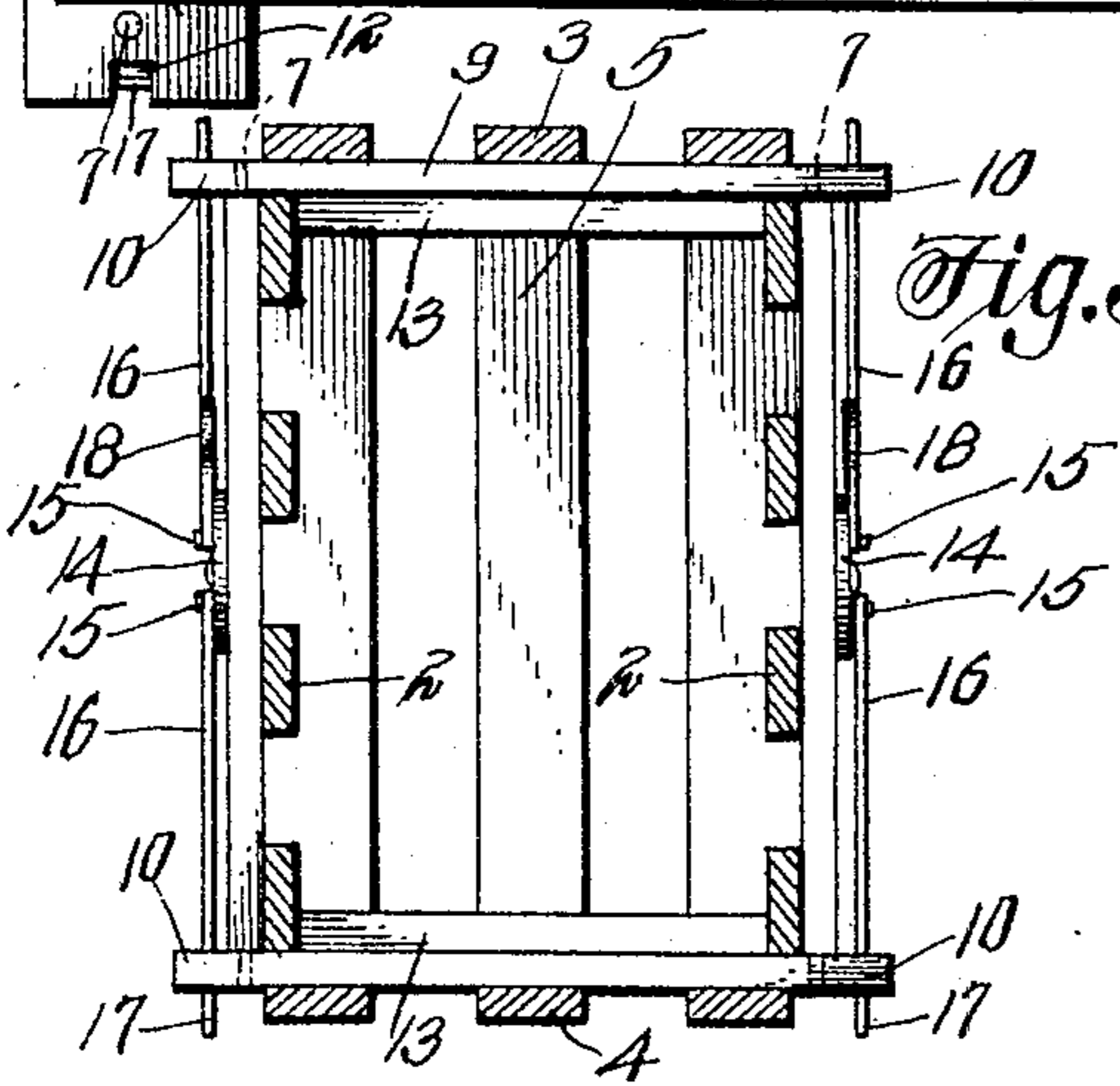


Fig. 4.

Witnesses

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CRATE.

SPECIFICATION forming part of Letters Patent No. 785,796, dated March 28, 1905.

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To all whom it may concern:

Be it known that I, ALONZO C. BUTTMAN, a citizen of the United States, residing at Columbus City, in the county of Louisa and State of Iowa, have invented certain new and useful Improvements in 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 ap-
 10 pertains to make and use the same.

This invention relates to attachments for crates.

The object of the invention is to provide an attachment for knockdown crates whereby
 15 when the same are set up in position for use the parts of the same may securely be held together and in place.

A further object is to provide a fastening and holding mechanism of this character which
 20 will be simple in construction, strong, durable, and inexpensive, and which will securely hold the parts of the crate together.

With these and other objects in view the invention consists of certain novel features of
 25 construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a side elevation of the crate, showing the ap-
 30 plication of the fastening device. Fig. 2 is a top plan view of the same. Fig. 3 is a vertical transverse sectional view thereof; and Fig. 4 is a detail vertical longitudinal sectional view of one end of the crate, showing the
 35 manner of supporting the ends of the same.

Referring more particularly to the drawings, 1 denotes a crate having sides 2, top and bottom pieces 3 and 4, and end pieces 5. The ends of the side pieces 2 are connected to the
 40 corner-posts 6, in the ends of which are fixed pins 7, which are adapted to engage apertures 8 in the end cross-bars 9 of the top and bottom pieces 3 and 4. The ends of the cross-bars 9 are adapted to project over beyond the
 45 sides of the crate a short distance, as shown at 10, and in said projecting ends are formed notches 12, the purpose of which will hereinafter appear.

On the inner side of the top and bottom
 50 pieces 3 and 4 near each end of the same are

secured pairs of cleats 13, between which when the parts of the crate are assembled are adapted to engage the upper and lower edges of the end pieces 5, thereby holding the same
 55 in place.

On the corner-posts 6 of each of the side pieces 2 is pivotally mounted a centrally-disposed disk or circular plate 14. On the outer face of each of said disks are formed outwardly-projecting stud-bolts 15, said bolts being ar-
 60 ranged on opposite sides of the pivotal center of the disks 14 and eccentric to said center. With the stud-bolts 15 are adapted to be pivotally connected the inner ends of clamp-
 65 ing-rods 16, the outer ends of which are bent out or looped upon themselves to form heads 17. The outer ends of the rods 16 are adapted to be engaged with the notches 12 in the ends of the cross-bars 9, so that when said
 70 disks 14 are turned in the proper direction the bent or looped ends of the same will be drawn into tight engagement with the outer faces of the cross-bars 9, thereby clamping
 75 and holding the top and bottom of the crate onto the outer edges of the sides and end pieces of the same, thus holding the parts of the crate in a set-up position ready for use.

In order that the disks or plates 14 may be readily turned to engage and disengage the ends of the rods with and from engagement
 80 with the cross-bars 9, the same are provided with handles 18. The position and arrangement of the stud-bolts 15 are such that when said disks are turned to fasten the parts of the plate together the said disks or plates 14 will
 85 be locked against backward movement except by means of the handles 18, thereby preventing the casual disengagement or releasing of the clamping rods or bars 16.

A crate having its parts arranged and fas-
 90 tened together as herein shown and described may be quickly and easily knocked down or taken apart to facilitate the storing or shipping of the same.

From the foregoing description, taken in
 95 connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, 100

and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

5 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

10 In a knockdown crate, the combination with the side and end pieces, of corner-posts secured to the ends of said side pieces, top and bottom pieces arranged on said side and end pieces, cross-bars secured to the ends of said top and bottom pieces, said cross-bars being provided with end notches, pins secured to
15 the ends of said corner-posts whereby a lateral movement of the parts is prevented, cleats for securing the end pieces in place, disks pivotally mounted on said corner-posts and pro-

vided with eccentrically-arranged oppositely-disposed stud-bolts, clamping-rods each pivotally connected at one end to one of said stud-bolts, a clamping-head formed on the opposite ends of said rods for engagement with the notches in the cross-bars of said top and bottom pieces, so that when said disks are turned, 20 said clamping-heads will engage said bars and securely hold the parts of the crate together, and a handle whereby said disks are turned and locked, substantially as described. 25

In testimony whereof I have hereunto set 30 my hand in presence of two subscribing witnesses.

ALONZO C. BUTTMAN.

Witnesses:

F. A. JOHNSTON,

J. F. DUNCAN.