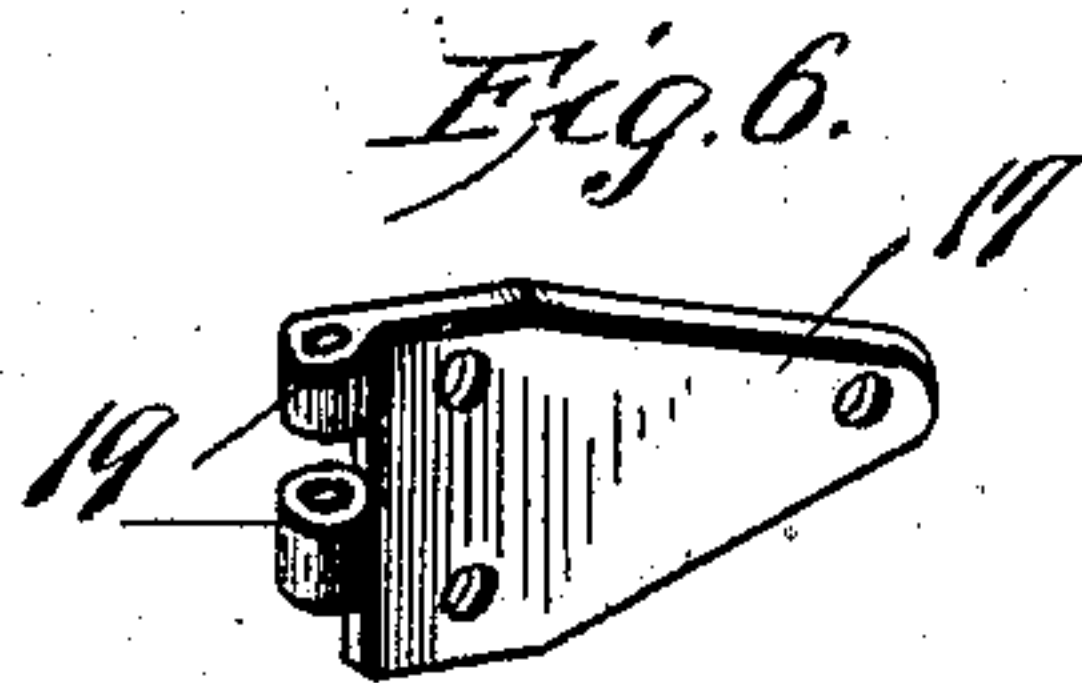
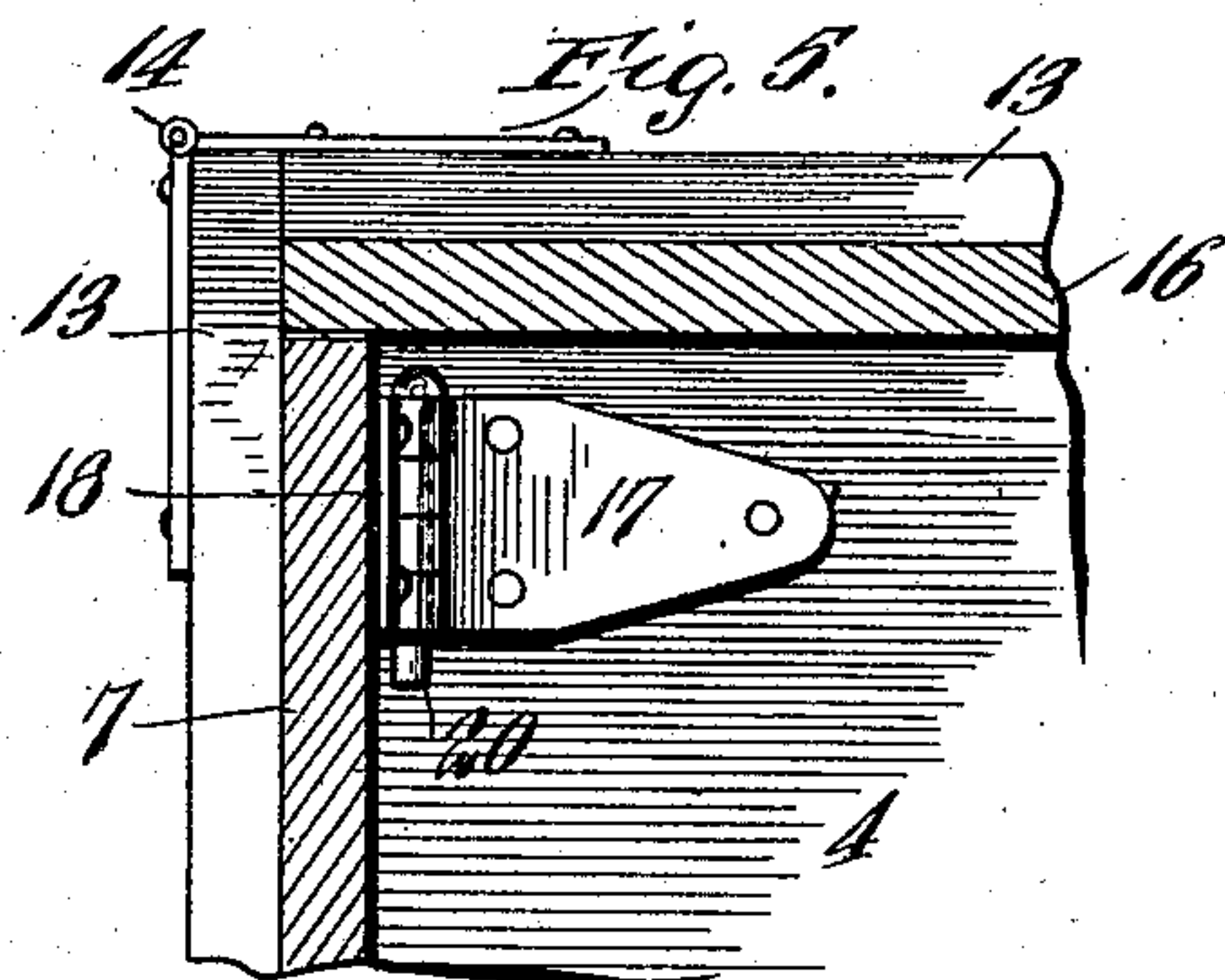
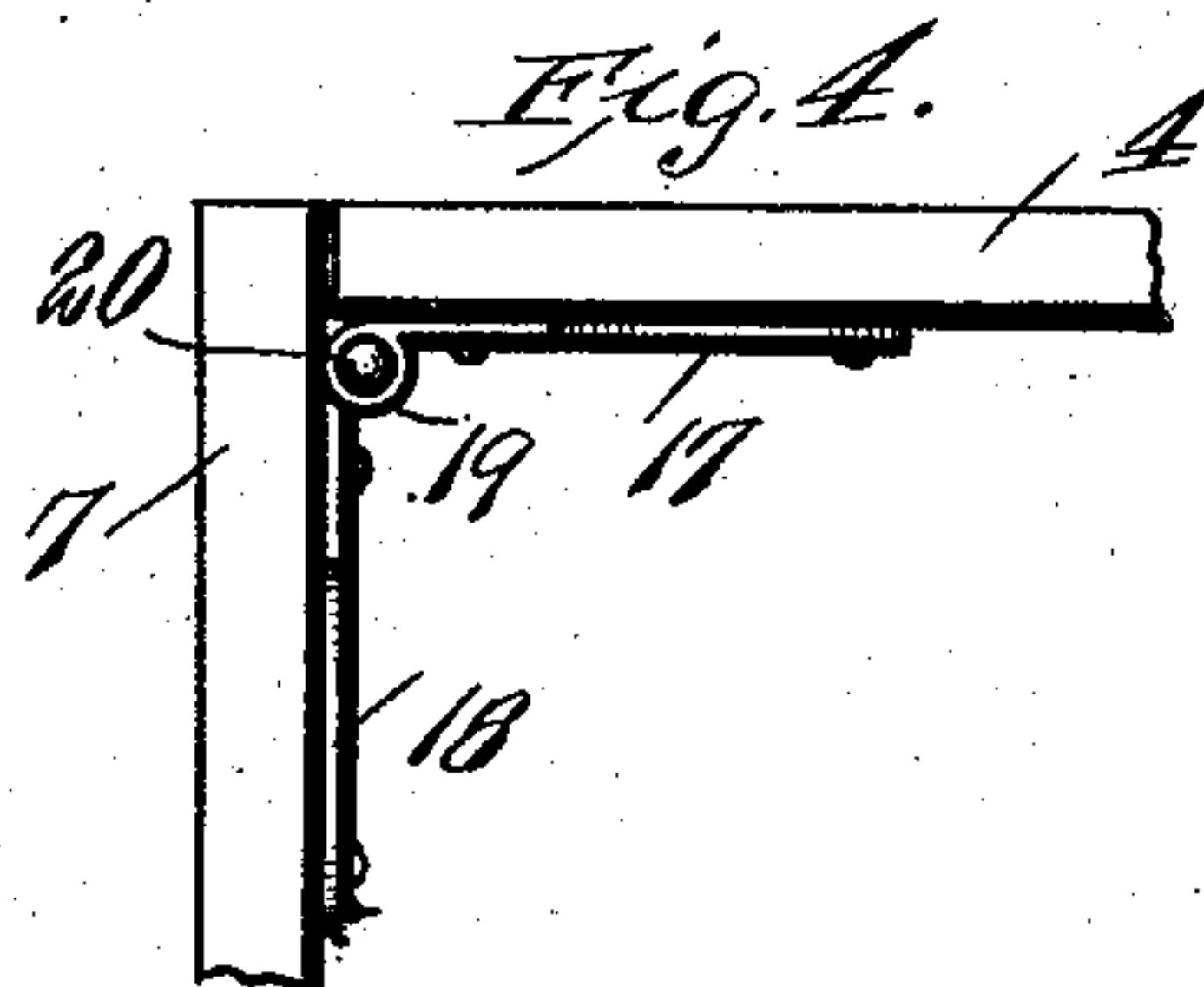
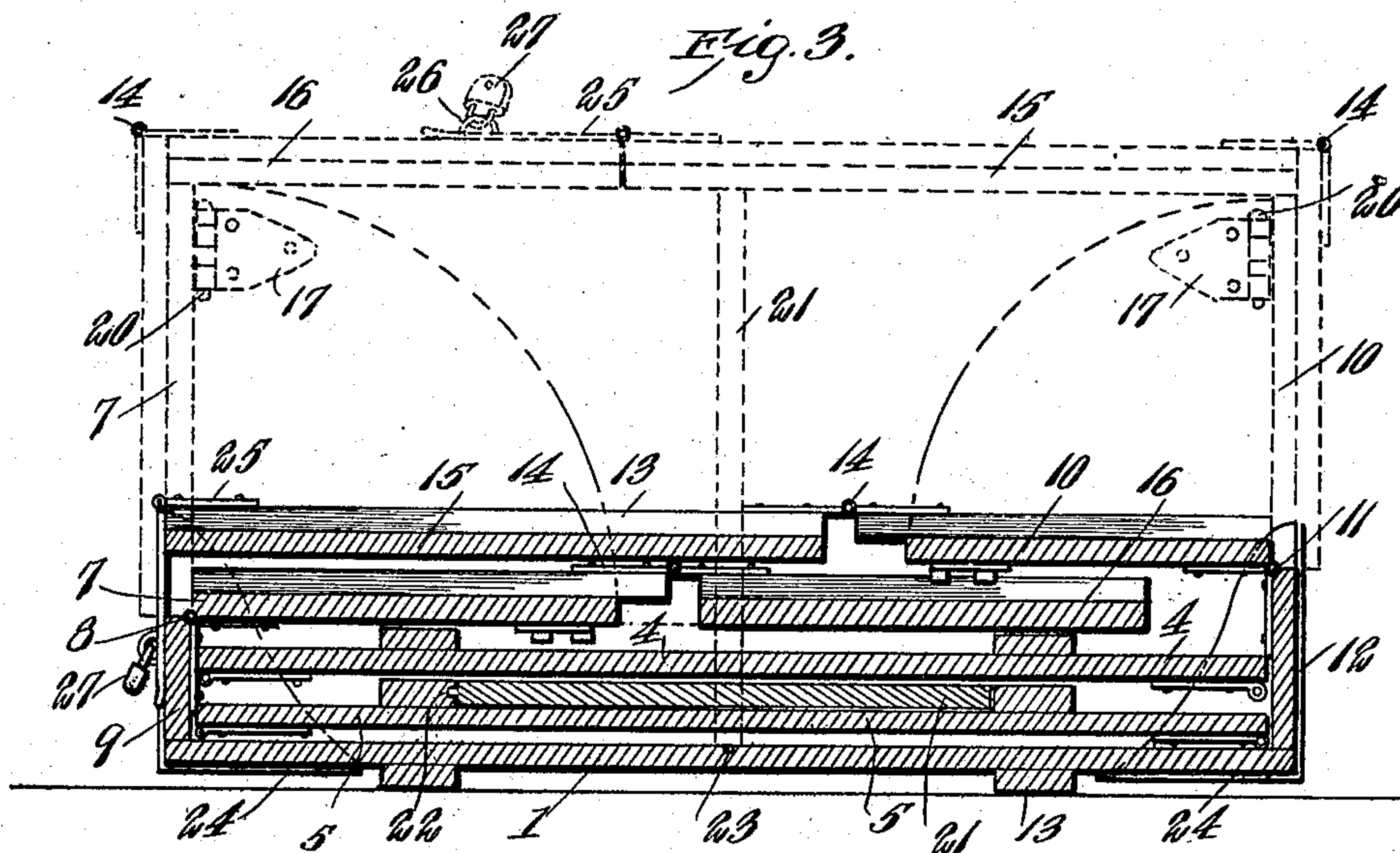


L. E. POUND.
COLLAPSIBLE CRATE.
APPLICATION FILED AUG. 13, 1908.

916,012.

Patented Mar. 23, 1909.

2 SHEETS—SHEET 2.



WITNESSES
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UNITED STATES PATENT OFFICE.

LEWIS E. POUND, OF MOBILE, ALABAMA.

COLLAPSIBLE CRATE.

No. 916,012.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed August 13, 1908. Serial No. 448,385.

To all whom it may concern:

Be it known that I, LEWIS E. POUND, a subject of Canada, residing at Mobile, in the county of Mobile and State of Alabama, have invented certain new and useful Improvements in Collapsible Crates, of which the following is a specification.

My invention relates to crates, and the object thereof is to provide an improved device of this character which can be knocked down when returned to the shipper so as to occupy a minimum amount of space, and be handled at much reduced rates.

To the accomplishment of the recited objects and others coördinate therewith, the preferred embodiment of my invention resides in that construction and arrangement of parts hereinafter described, illustrated in the accompanying drawings and embraced within the scope of the appended claims.

In said drawings:—Figure I is a perspective view of the crate. Fig. II is a transverse sectional view of the crate showing the sides thereof knocked down. Fig. III is a longitudinal sectional view of the crate showing the sides and ends folded. Fig. IV is a plan view of a portion of the side and end of the crate, showing particularly the hinge connection therefor. Fig. V is a fragmentary section of one corner of the crate, and Fig. VI is a detail perspective view of one of the hinge sections.

Similar numerals of reference indicate corresponding parts throughout the several views.

The numeral (1) designates the bottom of the crate having secured on one side thereof a longitudinally disposed, vertically arranged section (2), to which is hinged, as at 3, the side portion (4), the opposite side portion (5) being hingedly connected directly to the bottom (1), at 6. One of the ends of the crate, as for example 7, is fastened by means of the hinges (8) to the transversely extending portion (9), carried by the bottom, the other end (10) being similarly connected at 11, to the transverse section (12), which it will be noted is extended farther in a vertical direction than the corresponding opposite end portion (9). I preferably arrange all of the hinges hereinbefore referred to on the interior of the crate.

I have found it desirable to provide the sides, ends, top, and bottom of the crate with reinforcing strips (13), those arranged on the end portions being connected, by the hinges

(14), to the reinforcing strips carried by the top sections (15) and (16). At each corner formed by the junction of the side and end portions and adjacent the top thereof I arrange a pair of complementary hinge sections (17) and (18) which are provided with tubular projections (19), so arranged when the box is set up, as will be presently explained, that they can be readily coupled together by permitting them to be placed in vertical alinement with each other and subsequently inserting the detachable pin (20). A central partition (21) is adapted to be seated between the transversely extending reinforcing strips carried by the side portion (5), the said partition having projections (22), which are adapted to engage recesses on the inner side of one of said reinforcing strips, and recesses (23) provided in the bottom (1) of said crate. Each lower corner of the crate has suitably secured thereto an angle armor plate (24).

When it is desired to fold the crate, the side section (5) is swung inwardly so that the same will be parallel with the bottom (1), whereupon the opposite side section (4) is forced inwardly to occupy a position directly above and contiguous the section (5). The relation assumed by these portions is obviously due to the difference in the location of the respective hinge connections, that is, the point of connection of the side piece (4) with the rigid section (2) is sufficiently above the bottom (1) to permit the reception of the side (5) in the intervening space. The end portion (7) and the top section (16) carried thereby are swung inwardly so as to lie on the top of the side (4), when the opposite end portion (10) and top section (15) are forced to occupy a position on top of the preceding portions of the crate. The same principle of connecting the end portions to permit folding in this manner is maintained by the variance in the vertical extent of the transversely disposed sections (9) and (12). In this condition the crate may be transported from place to place without occupying any great amount of space and in compact form. Thus folded, the hinged clasp (25), carried by the top sections, is passed over the staple (26) mounted on the short section (9), the two being locked together by a suitable padlock, as 27.

To unfold the crate, the end sections (7) and (10) are pushed in a vertical alinement

with the short sections (9) and (12), the top sections (15) and (16) gravitating at right angles to said end portions. Subsequently, the side sections (4) and (5) are oscillated 5 until the correlative tubular sleeve portions (19) of the hinge sections (17) and (18) register with one another, whereupon the sides and end portions are locked together by inserting the pin (20) through said tubular portion of the hinges. The central partition (21) is then removed from the side section (5) and secured in the recess (23) of the bottom (1), transversely of this organization. Thus distended, the clasp (25) is secured to the staple (28) by the padlock (27). 15

While the angle armor plates serve more especially to protect the crate when the same is in its knocked down condition they are of considerable advantage in resisting 20 the wear and tear resulting from the rough usage to which crates and the like are usually subjected. Contribution is also made to this feature by providing the entire box with the reinforcing strips, and in this connection it is deemed of great advantage 25 that the upper distal ends thereof be extended to points beyond the sides and end portions of the crate so as, in a sense, to inclose and brace the top portions against any lateral displacement. 30

It should be understood that in its broader aspect my invention comprehends the employment not only of the various means described, but of equivalent means 35 for performing the recited functions. While the arrangement shown is thought, at the present time, to be preferable, it is desired to reserve the right to effect such modifications and variations thereof as may come 40 fairly within the scope of the appended claims.

Having thus described the invention, what is claimed, is:—

1. In a crate, the combination of a bottom, a side designed to be folded against 45 the bottom, a second side folded against the first mentioned side, ends carried by the bottom and adapted to be folded against the before mentioned sides, a cover section connected to each end, one of the ends and the cover 50 section connected thereto folded against the last mentioned side, while the opposite end and the corresponding cover section folds against the first mentioned end and cover 55 section, reinforcing strips mounted on each section, means for detachably securing a partition intermediate the strips mounted on one of the side sections when the sections are folded, means for removably arranging said 60 partition centrally and transversely of said sections when the latter are distended, means

mounted interiorly of the side and end portions for detachably securing the latter portions together when the crate is distended, means for locking the crate when knocked 65 down.

2. In a crate, the combination of a bottom, a side designed to be folded against the bottom, a second side folded against the first mentioned side, ends carried by the bottom 70 and adapted to be folded against the before mentioned sides, a cover section connected to each end, one of the ends and the cover section connected thereto folded against the last mentioned side, while the opposite end 75 and the corresponding cover section folds against the first mentioned end and cover section, reinforcing strips mounted on each section, means for detachably securing a partition intermediate the strips mounted on one 80 of the side sections when the sections are folded, means for removably arranging said partition centrally and transversely of said sections when the latter are distended, complementary hinge sections mounted interiorly 85 of the side and end portions, pins adapted to detachably couple said sections when the crate is distended, means for locking the crate when distended, and means for locking the crate when knocked down. 90

3. In a crate, the combination of a bottom, a side designed to be folded against the bottom, a second side folded against the first mentioned side, ends carried by the bottom 95 and adapted to be folded against the before mentioned sides, a cover section connected to each end, one of the ends and the cover section connected thereto folded against the last mentioned side, while the opposite end and the corresponding cover section folds against 100 the first mentioned end and cover section, reinforcing strips mounted on each section, the bottom and one of the strips mounted on one of the side sections having sockets, a partition having projections for engagement 105 with said sockets and adapted to occupy a position intermediate the last mentioned strips when the sections are folded and a position centrally and transversely of the sections when the latter are distended, complementary hinge sections mounted interiorly 110 of the side and end portions, pins adapted to detachably couple said sections when the crate is distended, means for locking the crate when distended, and means for locking the 115 crate when knocked down.

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

LEWIS E. POUND.

Witnesses:

WILLIAM COWLEY,
JNO. R. FINCH.