

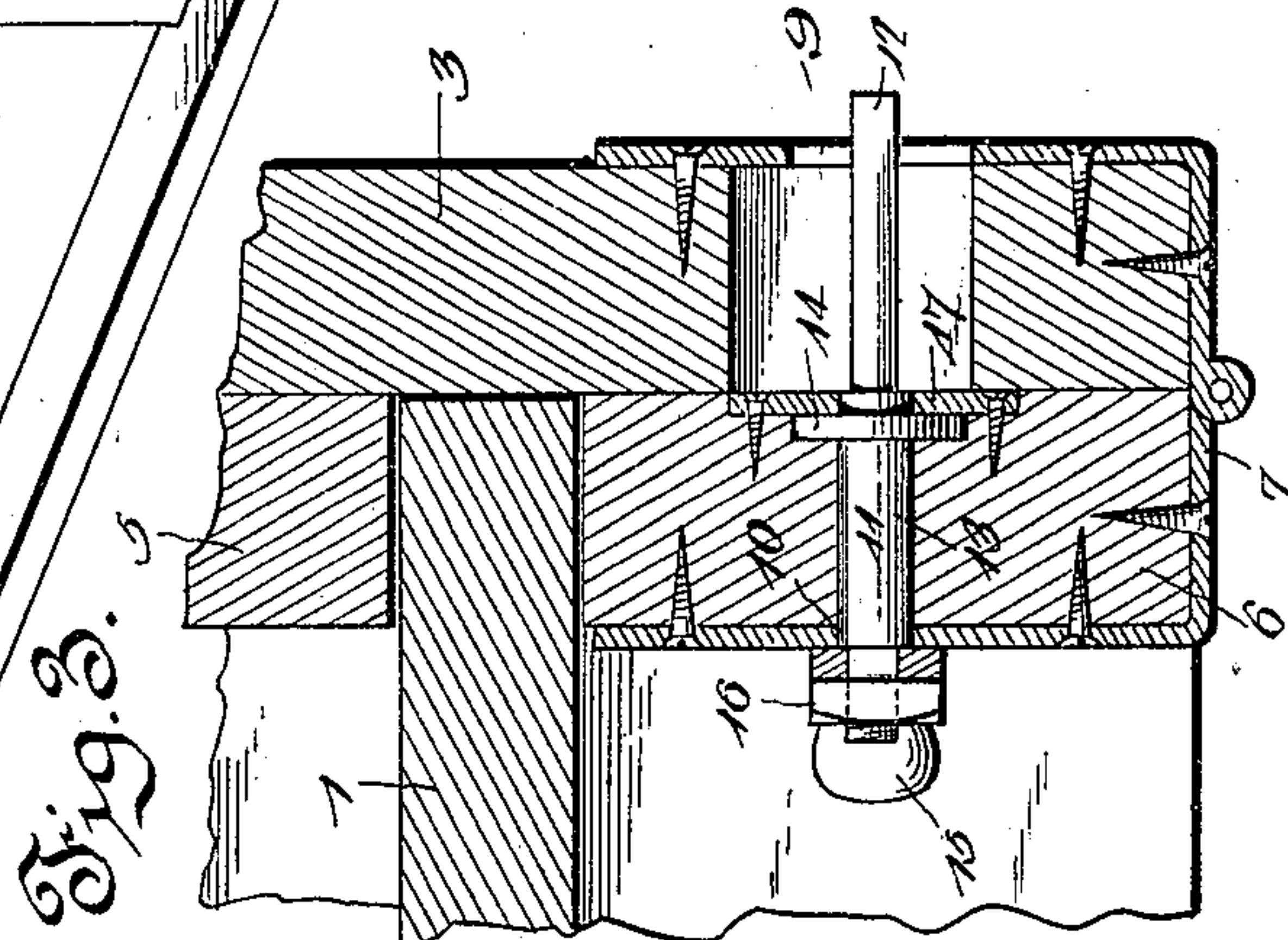
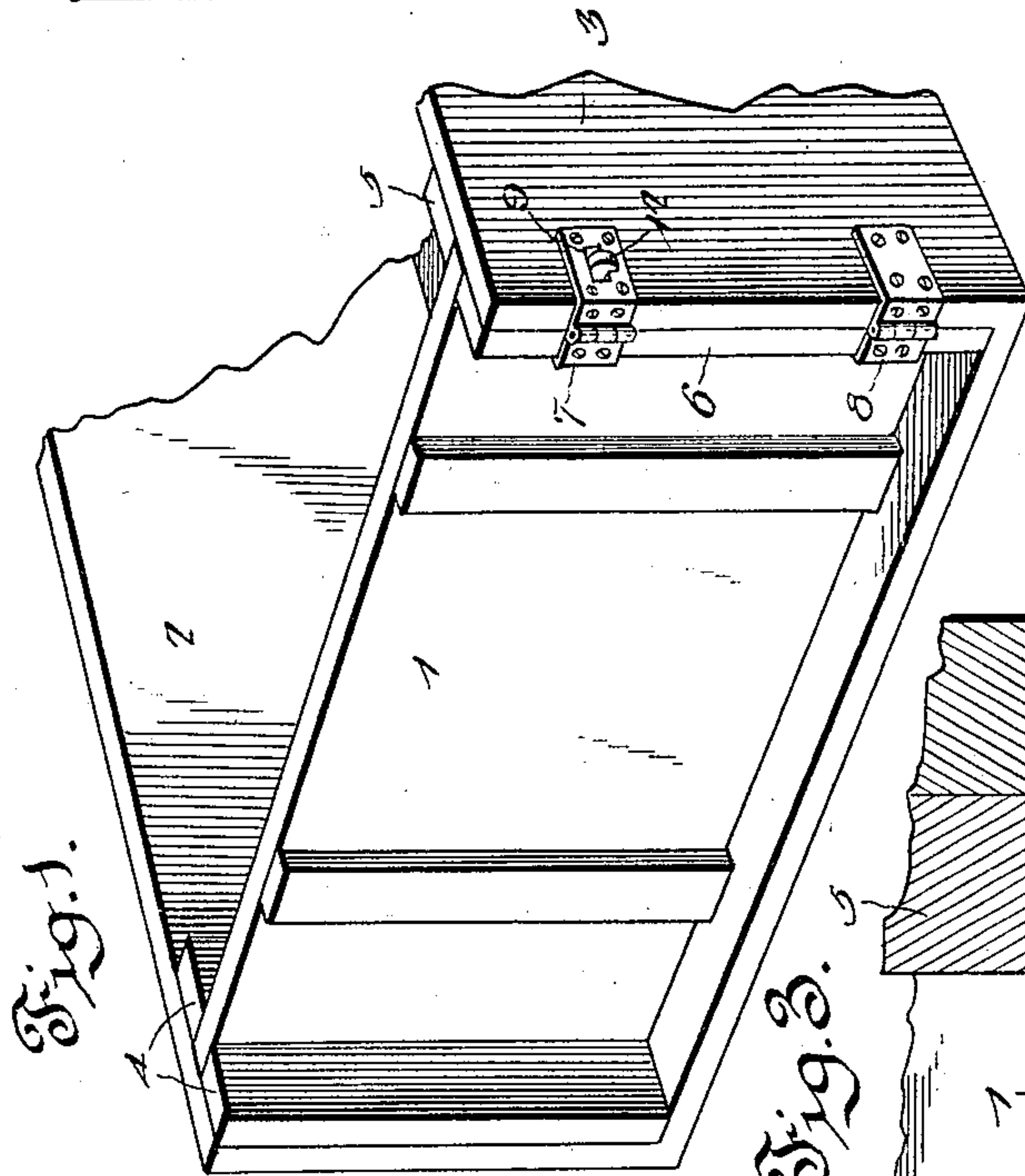
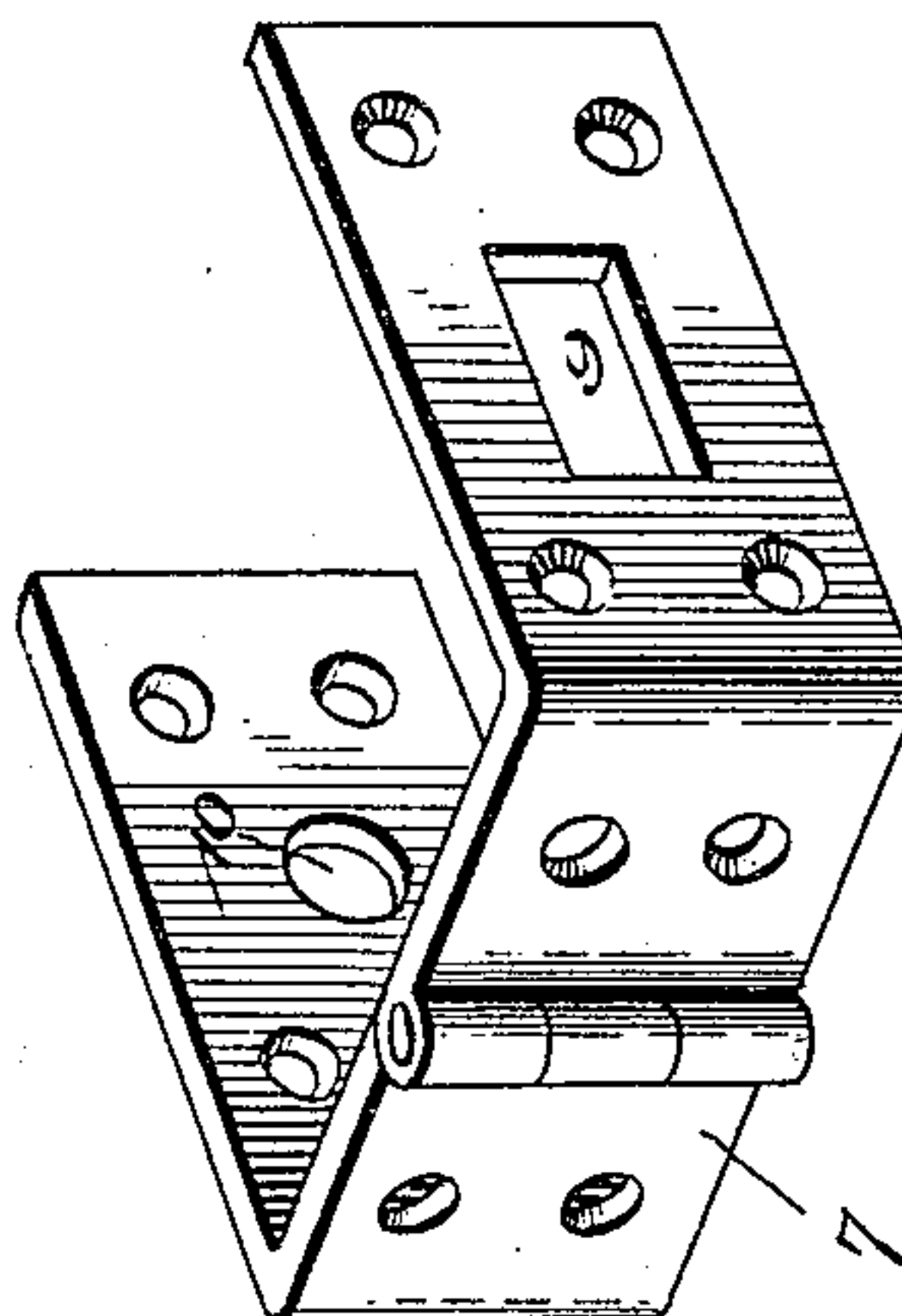
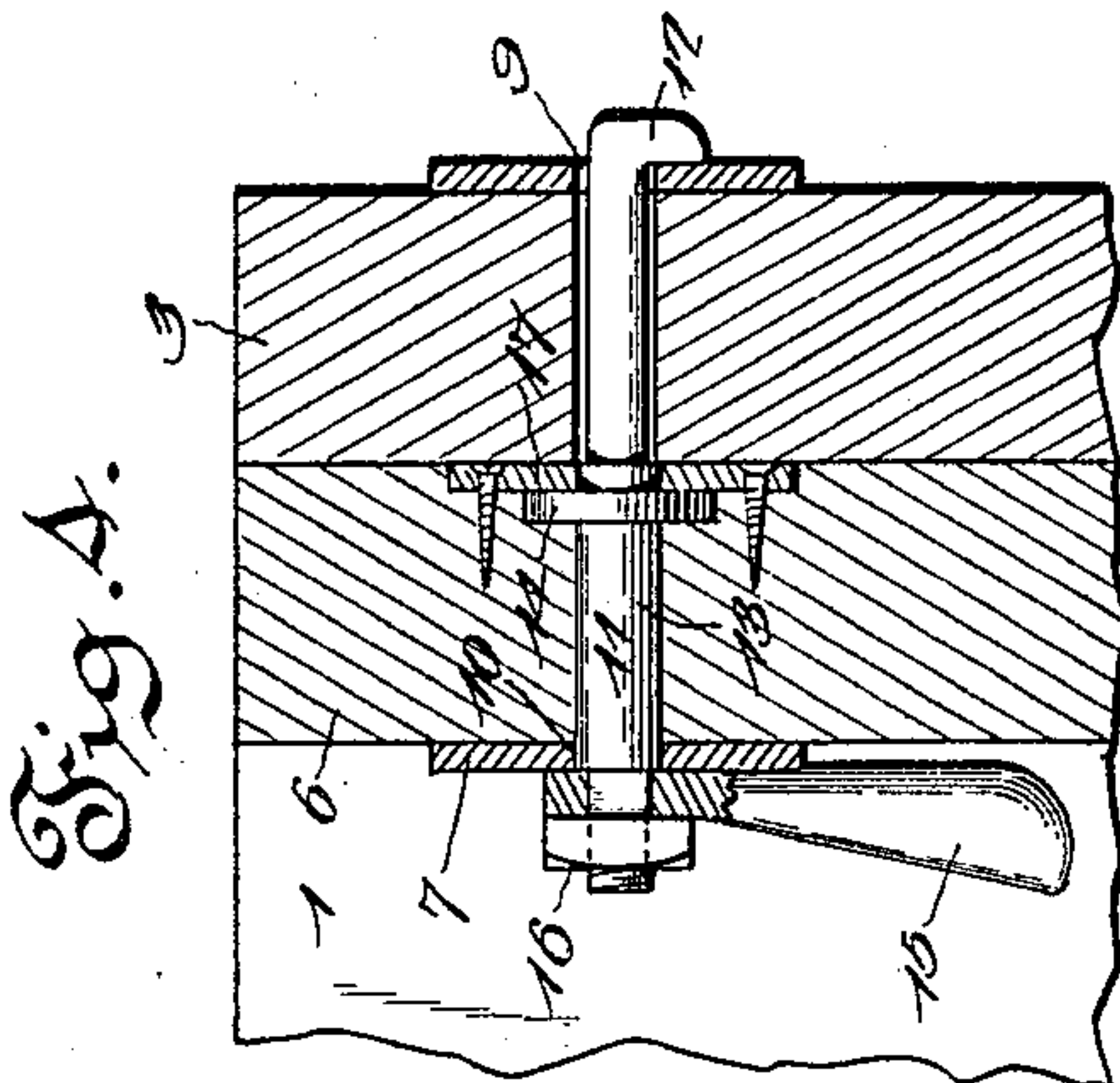
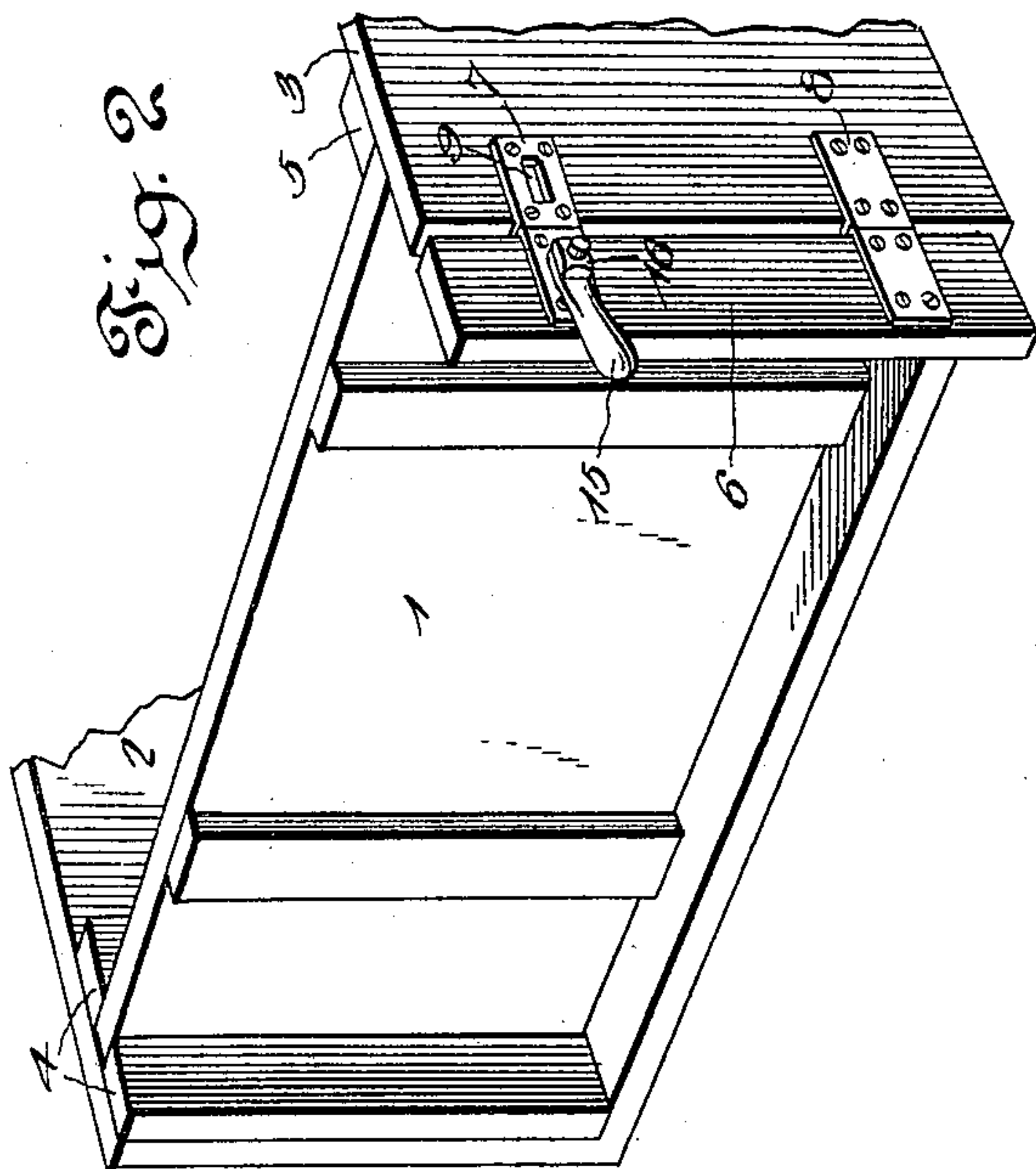
No. 629,492.

Patented July 25, 1899.

F. A. CARLSON.
END GATE FASTENER.

(Application filed Jan. 13, 1899.)

(No Model.)



Witnesses

Witnesses
J. Frank Culverwell.

By *his* Attorneys.

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UNITED STATES PATENT OFFICE.

FRANK A. CARLSON, OF ATTICA, INDIANA.

END-GATE FASTENER.

SPECIFICATION forming part of Letters Patent No. 629,492, dated July 25, 1899.

Application filed January 13, 1899. Serial No. 702,052. (No model.)

To all whom it may concern:

Be it known that I, FRANK A. CARLSON, a citizen of the United States, residing at Attica, in the county of Fountain and State of Indiana, have invented a new and useful End-Gate Fastener, of which the following is a specification.

The invention relates to improvements in end-gate fasteners.

10 The object of the present invention is to improve the construction of end-gate fasteners and to provide a simple, inexpensive, and efficient device adapted to enable an end-gate to be readily secured in position in a wagon-body and removed therefrom without unscrewing nuts and similar fastening devices.

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

20 In the drawings, Figure 1 is a perspective view of a portion of a wagon-body provided with an end-gate fastener constructed in accordance with this invention, the end-gate being fastened. Fig. 2 is a similar view, the parts being arranged to permit the end-gate to be removed. Fig. 3 is a horizontal sectional view of one side of the wagon-body, illustrating the arrangement of the parts when the end-gate is locked. Fig. 4 is a vertical sectional view of the same. Fig. 5 is a detail perspective view of the upper hinge.

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

30 1 designates an end-gate arranged between the sides 2 and 3 of a wagon-body, and the side 2 is provided with a pair of fixed cleats 4, arranged at the inner and outer faces of the end-gate in the usual manner. The other side 3 of the wagon-body is provided adjacent to the inner face of the end-gate with a fixed cleat 5, and the outer face of this end-gate is engaged by a hinged cleat 6, adapted to be arranged in the positions illustrated in Figs. 1 and 2 of the accompanying drawings, to confine and release the end-gate.

35 The swinging cleat 6, which is adapted to be turned into and out of engagement with the end-gate, is connected with the side 3 of the wagon-body by upper and lower hinges 7

and 8, each composed of a pair of L-shaped leaves adapted to embrace the outer faces and vertical edges of the cleat 6 and the side 3 of the wagon-body, whereby the end-gate is firmly supported in its closed position. The L-shaped leaves of the hinges are perforated for the reception of screws or other suitable fastening devices which engage the faces and end edges of the side 3 and the cleat 6.

40 The upper hinge is provided at its outer leaf with a horizontal slot 9, and the inner leaf has a circular opening or perforation 10, in which is journaled a bolt or pin 11, having a hook or projection 12 at its outer end to engage the outer face of the outer leaf. The inner portion 13 of the bolt or pin 11 is rounded and is journaled on the cleat, being provided at its inner terminus with a flange or collar 14 and having a handle 15 detachably secured to its outer terminus by means of a nut 16. This rounded portion 13 is provided at its outer end with a reduced polygonal portion to receive the handle 15 and has a threaded extremity for the reception of the nut. The handle extends from the inner end of the pin or bolt in the same direction as the hook or projection 12 and is adapted to be oscillated to bring the said hook or projection longitudinally or transversely of the slot 9 to release and secure the cleat 6.

45 The collar or flange 14, which is circular, is seated in a recess or housing at the inner face of the cleat and is supported by a disk or plate 17, having a bearing opening and adapted to prevent the fastening device from wobbling.

50 The invention has the following advantages: The end-gate fastener, which is simple, strong, and durable, is easily operated and is adapted to enable an end-gate to be readily fastened and unfastened, and it permits a solid continuous end-gate to be employed and detached without removing a rod, nut, or analogous fastening device or constructing the end-gate in sections to permit it to break.

55 Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. In a device of the class described, the combination of a wagon-body, and an end-

gate, a cleat arranged at the outer face of the end-gate, a hinge composed of two substantially L-shaped leaves embracing the outer faces and vertical edges of the said cleat and the adjacent side of the wagon-body and hinging the former to the latter, and a fastening device connecting the leaves, whereby the cleat is held in engagement with the end-gate, substantially as described.

16 2. In a device of the class described, the combination with a wagon-body, and a cleat adapted to engage an end-gate, of a substantially L-shaped hinge secured to the cleat and to the adjacent side of the wagon-body, one 15 of the leaves of the hinge being provided with a slot and the other having an opening, a rotary pin or bolt journaled in said opening and provided at one end with a head or projection adapted to pass through said slot and engage 20 the leaf, and a handle mounted on the other end of the pin or bolt, substantially as described.

3. In a device of the class described, the

combination of a wagon-body provided at one side with cleats 4, the cleats 5 and 6 located 25 at the other side of the wagon-body, the upper and lower hinges having L-shaped leaves and embracing the outer face and vertical edge of the cleat 6 and the adjacent side of the wagon-body, the upper hinge being provided at its outer leaf with a slot, a rotary pin or bolt passing through the cleat 6 and the wagon-body, provided at its outer end with a projection or hook to pass through the said slot and having a handle at its inner end, and 35 a collar or flange carried by the pin or bolt and journaled on the cleat, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 40 the presence of two witnesses.

FRANK A. CARLSON.

Witnesses:

ISAAC E. SCHOONOVER,
GEO. W. MENTZER.