

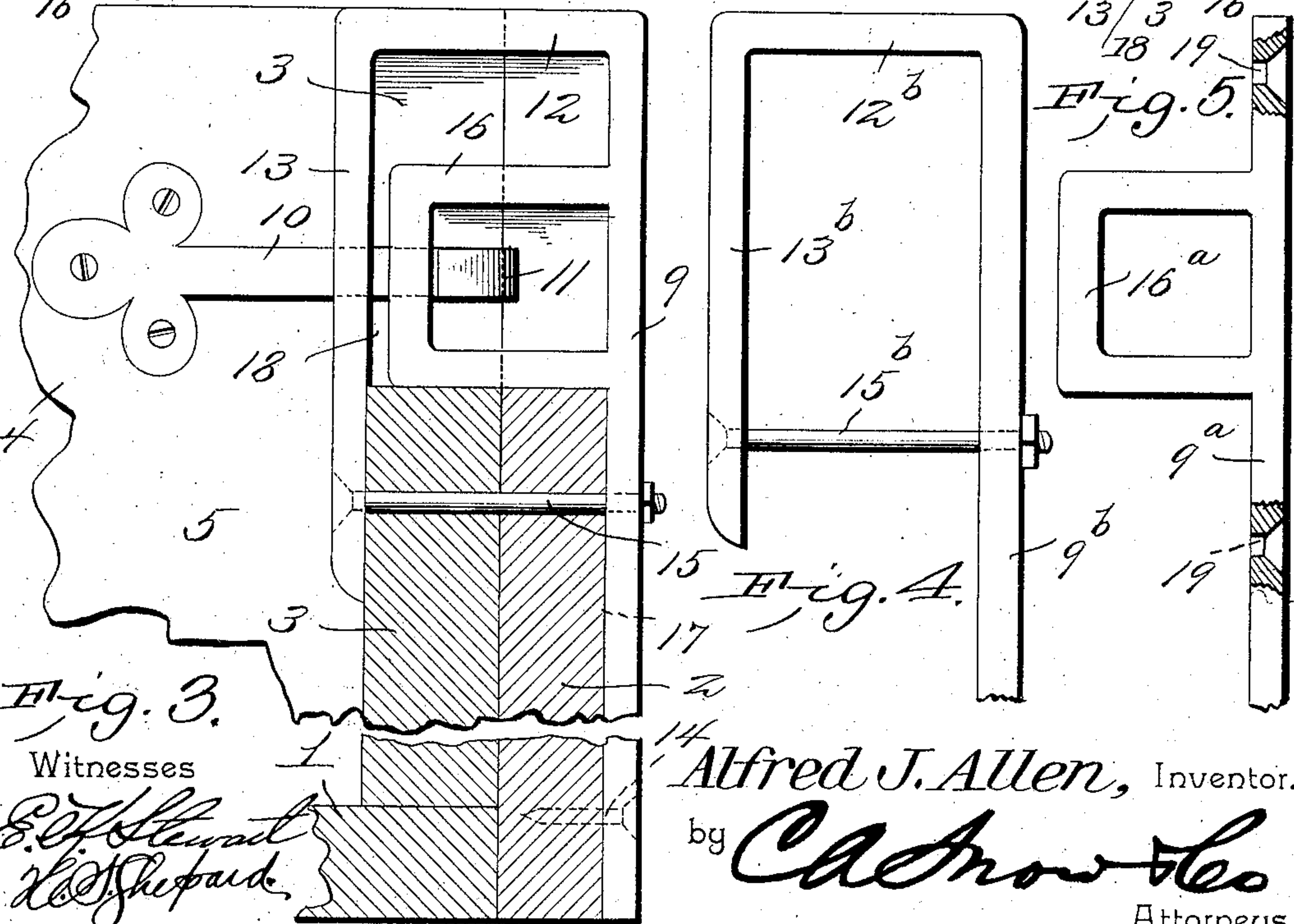
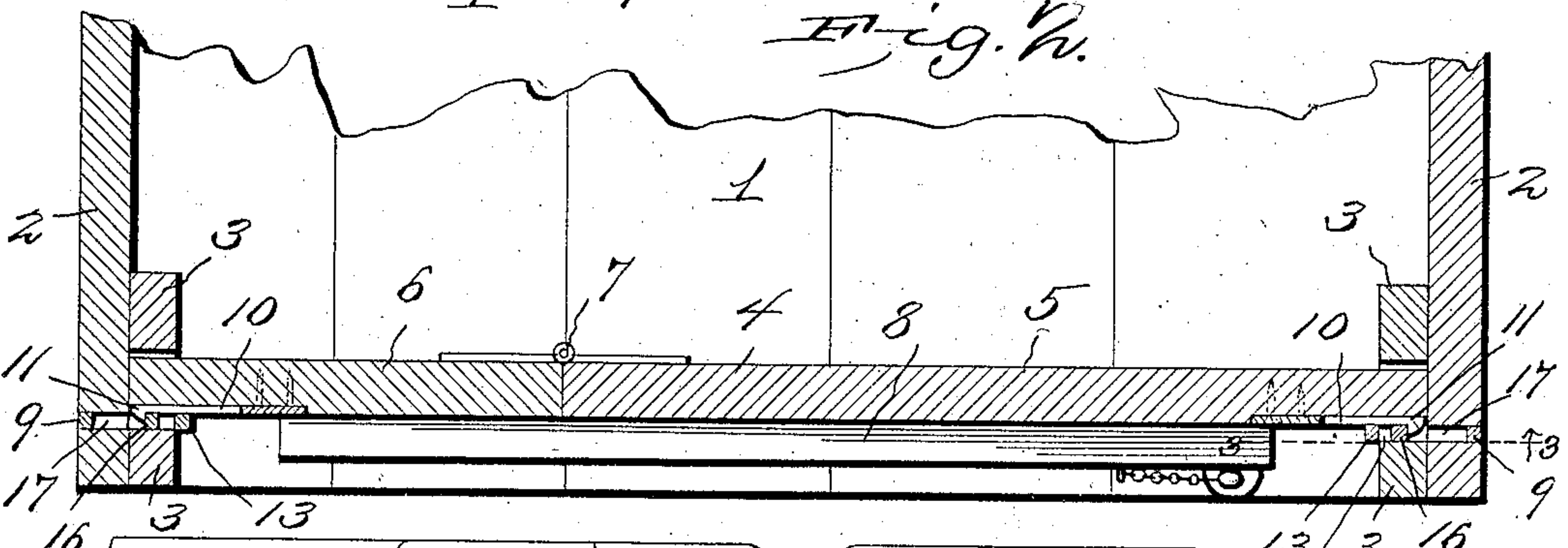
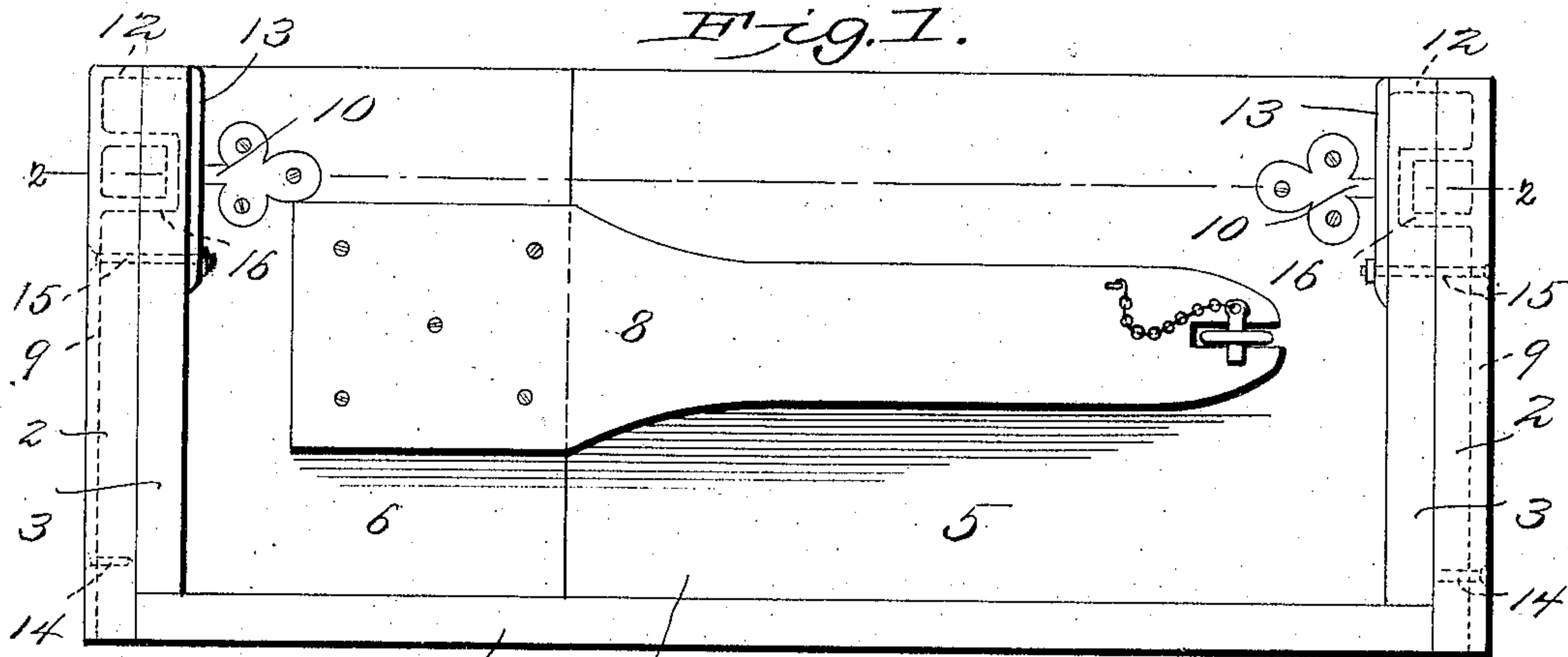
No. 768,165.

PATENTED AUG. 23, 1904.

A. J. ALLEN.
END GATE.

APPLICATION FILED JUNE 14, 1904.

NO MODEL.



UNITED STATES PATENT OFFICE.

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END-GATE.

SPECIFICATION forming part of Letters Patent No. 768,165, dated August 23, 1904.

Application filed June 14, 1904. Serial No. 212,541. (No model.)

To all whom it may concern:

Be it known that I, ALFRED J. ALLEN, a citizen of the United States, residing at Henderson, in the county of Henderson and State of Kentucky, have invented a new and useful End-Gate, of which the following is a specification.

This invention relates to end-gates, and has for its object to improve the construction of such devices and in particular to dispense with the transverse rods commonly employed for connecting and bracing the sides of a wagon-body and to have the end-gate operate as a brace for said sides.

Another object of the invention is to provide an improved connection between the end-gate and each side of the wagon-body and to embody such connection in the form of an attachment capable of convenient application without materially altering the construction of the end-gate and the wagon-body.

It is furthermore designed to facilitate the application and removal of the end-gate and at the same time to provide a rigid and durable connection between the gate and the wagon-body, so as to prevent the former from being jolted loose.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is an elevation of the rear end of a wagon-body provided with the end-gate of the present invention. Fig. 2 is a detail cross-sectional view on the line 2 2 of Fig. 1. Fig. 3 is a sectional view on the line 3 3 of Fig. 2. Figs. 4 and 5 are detail views showing modified forms of the wagon-body attachment.

Like characters of reference designate corresponding parts in each and every figure of the drawings.

Referring to the accompanying drawings,

1 designates the bottom, and 2 the sides, of any ordinary form of wagon-body having the usual upstanding cleats or bars, 3 secured to the inner faces of the sides 2 at the rear ends thereof to form guides or shoulders against which the end-gate 4 is designed to rest. This end-gate is made up of a relatively long section 5 and a shorter section 6, which have a hinged joint connection 7. A locking-bar 8 is rigidly connected to the outer side of the smaller end-gate member 6, so as to overlap and lie against the larger section 5 when the gate is in place to lock the same against accidental breaking of the hinged joint between the end-gate sections.

The attachments of the present invention include a wagon-body member 9 and an end-gate member 10, one of the latter being secured to the outer or rear side of the end-gate at each end thereof and terminating at its outer end in a hook or projection 11, which is directed outwardly from the gate. The wagon member is in the nature of a bracket and consists of an upright bar or body which is fitted against or let into the outer face of the adjacent side of the wagon-body and provided at its upper end with a lateral extension 12 to lie across and upon the tops of the side 2 and the cleat 3, there being a pendent extension 13 at the outer end of the extension 12 to lie against the cleat 3 and terminated short of the lower end of the bar member 9. This bracket member is secured at its lower end by a suitable fastening 14, which pierces the bar and the adjacent side of the wagon-body, there being another fastening 15, such as a bolt, which pierces the lower end of the pendent extension 13, the cleat 3, the side 2, and an intermediate portion of the body of the bracket, whereby said bracket operates as a brace for the cleat. Between the bolt 15 and the upper end of the bracket there is a loop-shaped keeper 16, which is formed integral with the body 9 of the bracket and lies between the latter and the pendent extension 13 in the plane common to said members. Prior to fitting the bracket to the wagon-body each side thereof is provided with a transverse opening 17, disposed to receive the keeper 16, said opening being in the nature of a deep groove or bifurcation

in the top edge of the side to permit of the bracket being fitted downwardly upon the side 2, the upper end of the cleat 3 of course having an upright edge groove 18 formed therein to register with the bifurcation 17 and receive the outer end of the keeper.

When the end-gate has been placed within the wagon-body and the locking-bar 8 swung against the section 5, the hooks or projections 11 of the members 10 will be projected into engagement with the respective keepers 16, the latter being exposed through the grooves 18, formed in the cleats 3, whereby the end-gate is rigidly connected to the opposite sides of the wagon-body and operates as a brace therefor, while at the same time the gate is rigidly held against being jolted loose. By drawing outwardly upon the free end of the locking-bar 8, so as to break the hinged joint 7, the hooks 11 will be disengaged from the keepers 16, whereupon the end-gate may be readily removed from the wagon-body.

It will here be noted that whatever outward strain comes upon the sides of the wagon-body is transferred directly to the end-gate through the bracket 9 and the hooks upon the end-gate without placing any strain whatsoever upon the cleats 3. However, as said cleats are embraced between the bodies and the extensions 13 of the brackets they will be rigidly held against working loose.

In view of the fact that it is the keeper which takes the strain the top and pendent extensions of the bracket may be omitted, as shown in Fig. 5 of the drawings, wherein 9^a indicates the body of the bracket and 16^a the looped keeper disposed between the ends of the body, the latter being provided with suitable openings 19 for the reception of fastenings to connect the bracket with one of the sides of the wagon-body.

A still further modified form of bracket has been shown in Fig. 4, which embodies the body 9^b, the top 12^b, and the pendent extension 13^b, with the fastening 15^b piercing the extension and the body of the bracket, from which it will be understood that the only difference between this form of the bracket and that shown in Fig. 3 resides in the omission of the keeper 16, the extension 13^b being employed as a keeper with which the hook on the end-gate is designed to engage. When the loop-keeper 16 is omitted, the cleat 3 should of course be cut away to expose a portion of the inner face of the part 13^b for engagement by the adjacent hook on the end-gate.

From the foregoing description it will be apparent that the attachment of the present invention is complete in itself and capable of being applied to an end-gate and a wagon-body without materially altering the same and when fitted in place operates to rigidly connect the end-gate to the sides of the wagon-body, so as to prevent jolting loose of the ends

of the gate and to brace the sides of the body through the medium of the end-gate.

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

1. The combination with a wagon-body and the end-gate thereof, of a bracket applied to the outer face of each side of the wagon-body and having a keeper exposed at the inner side of the body, and means carried by the end-gate for detachable engagement with the respective keepers.

2. The combination with a wagon-body and the end-gate thereof, of a bracket secured to the outer face of each side of the wagon-body and provided with a keeper projected through an opening in said side, and means carried by the end-gate for engagement with the respective keepers.

3. The combination with a wagon-body and the end-gate thereof, of a bracket applied to the outer face of each side of the wagon-body with its upper portion embracing the top of said side and also provided with an intermediate keeper projected through an opening in the side, and hooks carried by the end-gate for engagement with the respective keepers.

4. The combination with a wagon-body having upstanding cleats at the rear ends of the inner faces of the sides of the wagon-body, and an end-gate to bear against said cleats, of a bracket applied to the outer face of each side of the wagon-body with its upper portion embracing said side and the cleat and having a portion exposed at the inner side of the wagon-body to form a keeper, and means carried by the end-gate for engagement with the keeper portion of the bracket to lock the end-gate.

5. The combination with a wagon-body having upstanding cleats at the rear ends of the inner faces of the sides thereof, and an end-gate, of a bracket applied to the outer face of each side of the wagon-body and provided with a keeper projected through an opening in the side and received and exposed in a recess formed in the cleat, and means carried by the end-gate for engagement with the exposed portions of the keepers to lock said gate.

6. The combination with a wagon-body having upstanding cleats at the rear ends of the inner faces of the sides thereof, and an end-gate, of a bracket applied to the outer face of each side of the wagon-body and embracing the top of the side and the adjacent cleat, the bracket being provided with a keeper which is projected through an opening in the adjacent side of the wagon-body and exposed within a recess in the cleat, and means carried by the end-gate for engagement with the exposed portions of the keepers.

7. A fastening for end-gates, comprising a bracket for application to one side of a wagon-

body and provided with a hooked upper portion to embrace the top edge of a side of the wagon-body and provided with an intermediate keeper to project through an opening in said side, and a hook for connection with an end-gate and for engagement with the keeper.

8. A fastening for end-gates comprising a bracket for application to one side of a wagon-body and provided with a portion to be exposed at the inner face of said side and con-

stitute a keeper, and a hook for engagement with the keeper and having means to connect the same with an end-gate.

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

ALFRED J. ALLEN.

Witnesses:

NATHAN M. LAUCHHEIM,
NORTON H. ROSENFELD.