

No. 840,621.

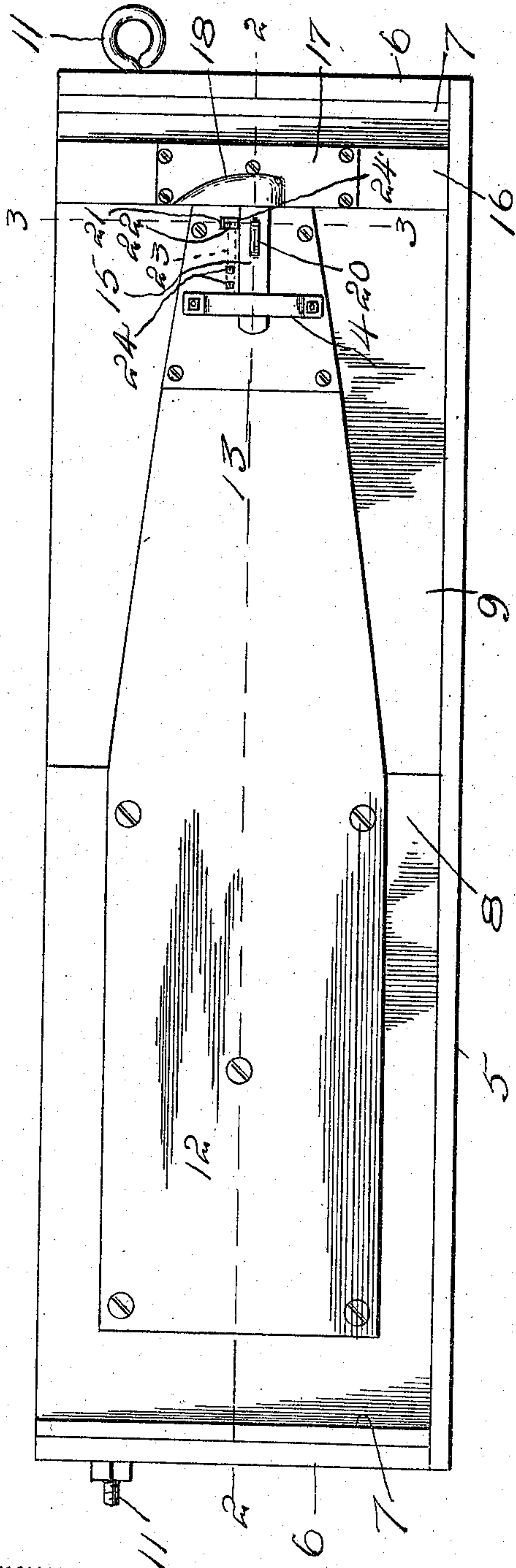
PATENTED JAN. 8, 1907.

J. P. HANSEN.  
END GATE.

APPLICATION FILED APR. 18, 1906.

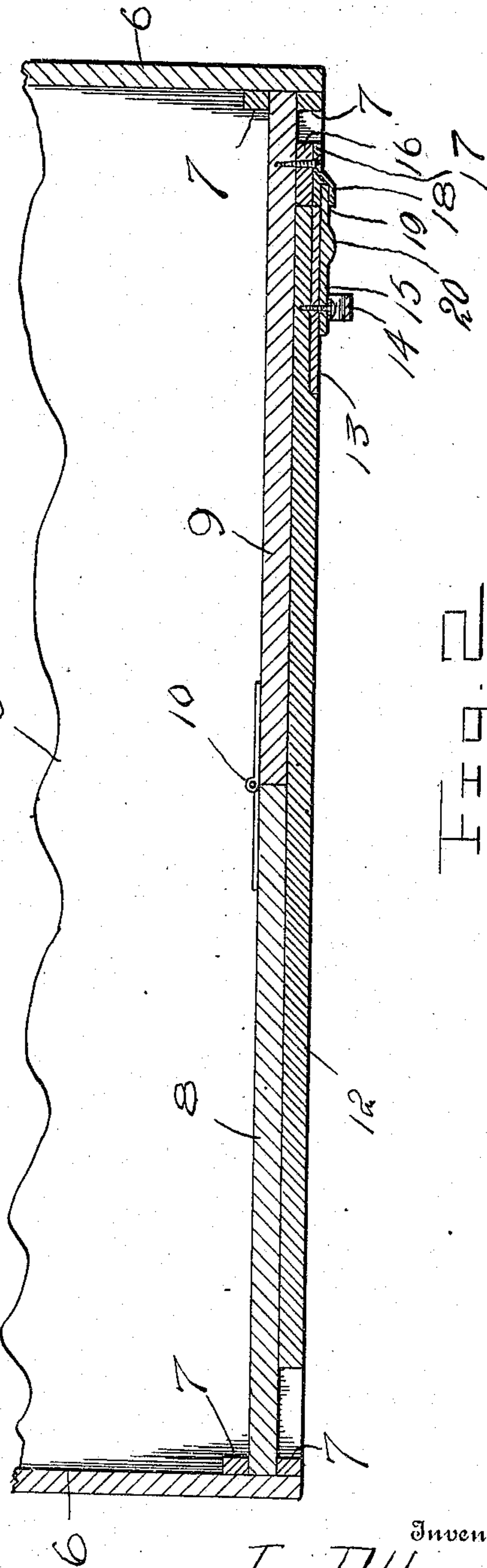
2 SHEETS—SHEET 1.

FIG. 1.



Witnesses  
J. C. Simpson.  
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FIG. 2.



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By

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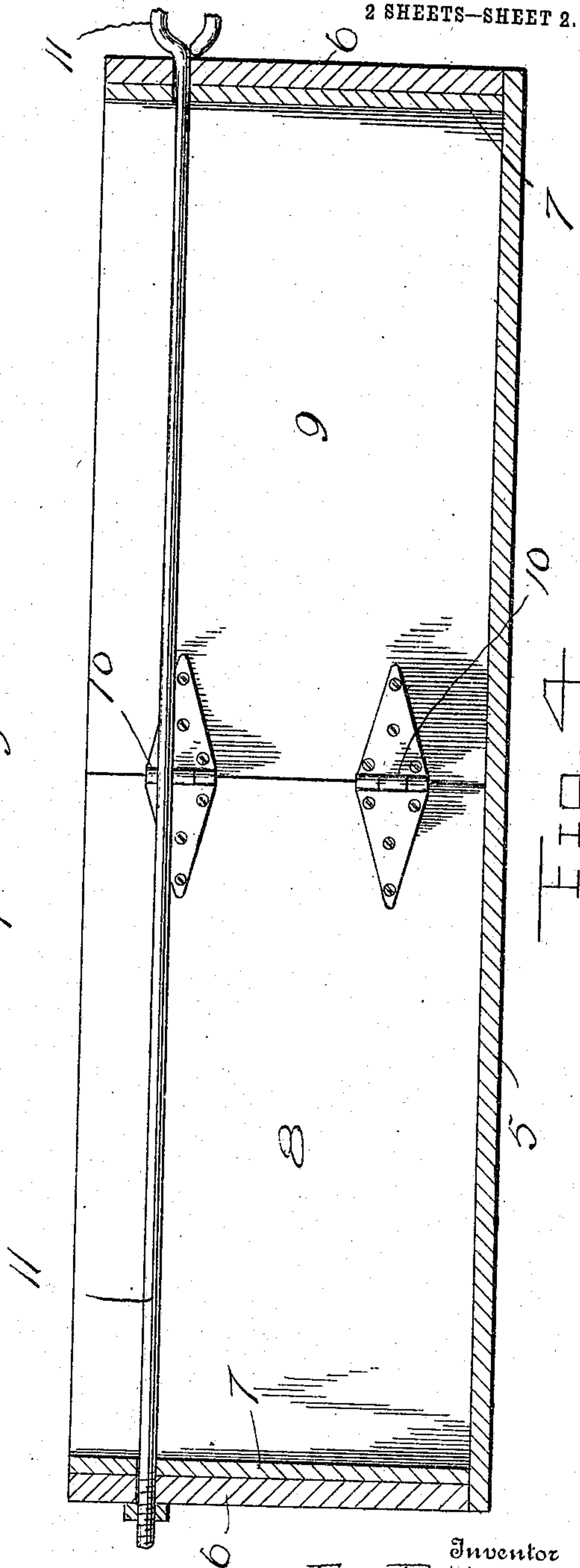
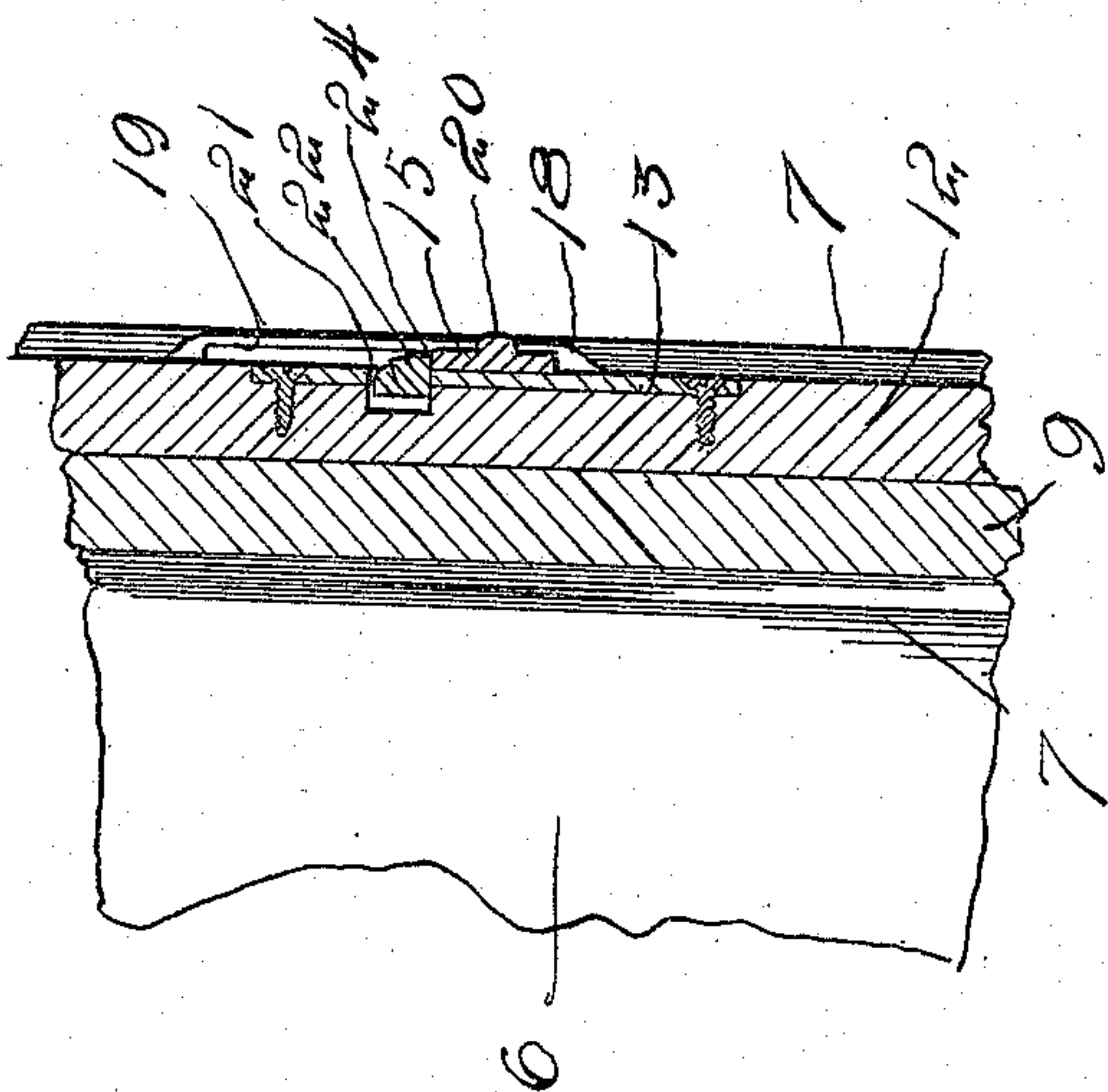
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2 SHEETS—SHEET 2.



Witnesses  
J. C. Simpson.  
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# UNITED STATES PATENT OFFICE.

JENS P. HANSEN, OF KAMSACK, SASKATCHEWAN, CANADA.

## END-GATE.

No 840,621.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed April 18, 1906. Serial No. 312,489.

*To all whom it may concern:*

Be it known that I, JENS P. HANSEN, a citizen of the United States, residing at Kamsack, in the Province of Saskatchewan, in the Dominion of Canada, have invented certain new and useful Improvements in End-Gates; and I do hereby 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 appertains to make and use the same.

This invention relates to end-gates; and the several objects thereof are to provide a device of that nature which shall be simple, inexpensive, and durable, which may be readily placed in and removed from operative position, and which when placed in operative position will be absolutely prevented from accidental opening.

With these and other objects in view the invention consists in the particular construction, arrangement, and combination of parts, all as hereinafter described, pointed out in the claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a rear view in elevation of an end-gate constructed in accordance with the invention. Fig. 2 is a section on line 2 2 of Fig. 1. Fig. 3 is a section on the line 3 3, Fig. 1. Fig. 4 is a transverse section through the wagon-body in advance of the gate and looking rearwardly.

Similar parts are referred to by like numerals in the several views.

Referring to the drawings, 5 designates the bottom, and 6 the side-boards, of a wagon, the latter being provided with parallel cleats 7, secured to their inner sides at the rear end thereof to form grooves between them.

The end-gate is constructed on the break-joint principle and consists of two sections 8 and 9, hinged together at their inner sides at 10.

11 designates the rod binding the sides and located adjacent the inner side of the end-gate, as shown in Fig. 2. Section 8 of the gate carries a rigid arm 12, which when the gate is in its locked position extends across and bears squarely against the face of the section 9. The end of said arm adjacent section 9 is slightly undercut on its outer face to provide a seat for a steel plate 13, the outer face of which is flush with the outer face of the arm, said plate being attached to the arm

by screws or in any other preferred manner and carrying the bracket 14, bolted thereto, as shown.

Pivoted between the plate and bracket, as shown in Fig. 3, is the bolt 15, the outer end of which projects beyond plate 13.

Section 9 of the gate is provided adjacent the plate 13 with a slat 16, attached thereto in any preferred manner and carrying on its outer face a second steel plate 17, provided with an enlarged portion 18, which is slotted, as at 19, to receive the outer end of bolt 15, said bolt being provided with a thumb-piece 20. As shown in Fig. 3, plate 13 is provided with a short vertical slot 21, through which projects the head 22 of a flat steel spring 23, fastened by bolts 24 to the under face of said plate and capable of sufficient movement to permit its head 22 to be pressed inwardly beyond the outer face of the plate, the under face of arm 12 being further undercut for this purpose. The head 22 of the spring has its outer faces rounded, as shown, to provide a cam-surface over which bolt 15 may ride in its downward movement, but which will prevent any upward movement of said bolt when the head is in its normal position, extending through slot 21, owing to the shoulder 24 on said head. The spring 23 and its head are formed of a single piece of steel, the head extending at right angles to the body of the spring, as shown. It is obvious then when the several parts are in the position shown in Fig. 1 that any accidental upward movement of bolt 15 will be prevented by its contact with the shoulder on the spring-head and that such movement is only possible when the head is positively pushed back through slot 21, when the bolt may be swung upwardly and its end removed from slot 18, which is curved for this purpose, it being understood that bracket 14 is of sufficient length to permit said bolt to be swung clear out of said slot. The joint between the sections 8 and 9 may then be broken, the binding-rod 11 having been first withdrawn, and the end-gate removed in the usual manner.

While the drawings have shown an end-gate in which the arm is fastened to the left-hand section thereof and provided at its rear end with the bolt locking in the slotted plate on the right-hand section, it is understood, of course, that such construction may readily be revised and that the slotted plate may be



carried by a slat on the left-hand section, while the arm is attached to the right-hand section and extending across the left-hand section. It is not thought necessary to illustrate this latter construction, as it is in every way identical with that already shown except for the change of direction of the bolt-carrying arm and the consequent removal of the locking-plate from one section to the other.

What is claimed is—

1. In combination with a wagon provided with vertical cleats at its inner sides, a break-joint end-gate comprising two sections hinged together at their inner sides, and adapted to project into the grooves between said cleats; a rigid arm attached to the rear side of one of said sections and extending across the face of the other said sections, the outer face of said arm adjacent its rear end being undercut to provide a seat; a plate fitting in said seat and attached to said arm; said plate being provided with a vertical slot adjacent its outer end, a bolt pivoted to the outer face of said plate, and having its free end extending beyond said plate; a spring fitting on said arm in the undercut portion thereof, and provided with a head normally projecting through said slot; and a slat carried by the other section and provided with a locking-

plate slotted to receive the projecting end of said bolt.

2. A break-joint end-gate consisting of two sections hinged together at their inner sides; a rigid arm attached to the rear side of one of said sections, and extending across the rear side of the other sections, the rear end of said arm being undercut to provide a seat; a plate carried by said arm and fitting in said undercut portion, said plate being provided with a vertical slot adjacent its rear side; a bolt pivoted to the outer face of said plate and having its free end projecting beyond the rear side of said plate; a spring attached to the inner face of said plate and fitting in the undercut seat in said arm; a head on said spring normally extending through said slot, the outer face being rounded to form a cam-surface; a slat carried by the other of said sections; and a plate attached to the outer face of said slat, said plate being provided with a slotted enlargement adapted to receive the projecting end of said bolt.

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

JENS P. HANSEN.

Witnesses:

ALLIE M. McDONALD,  
E. ENDERLE.