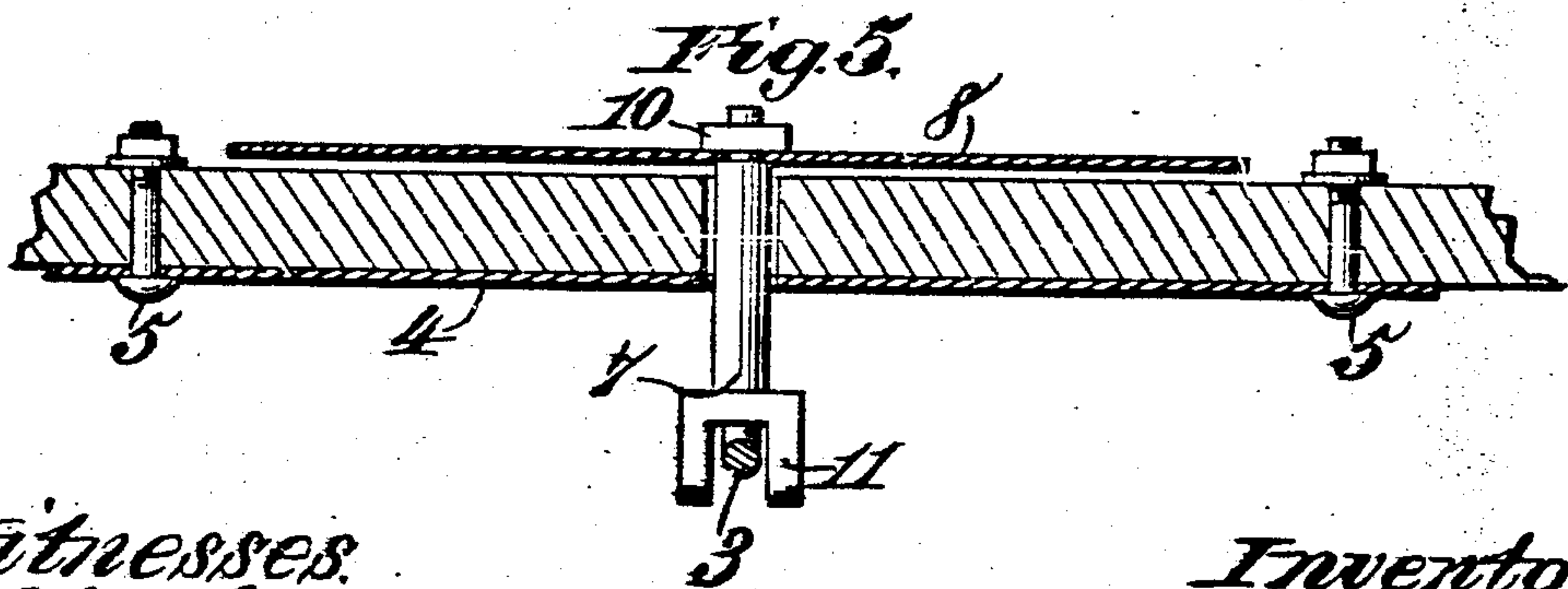
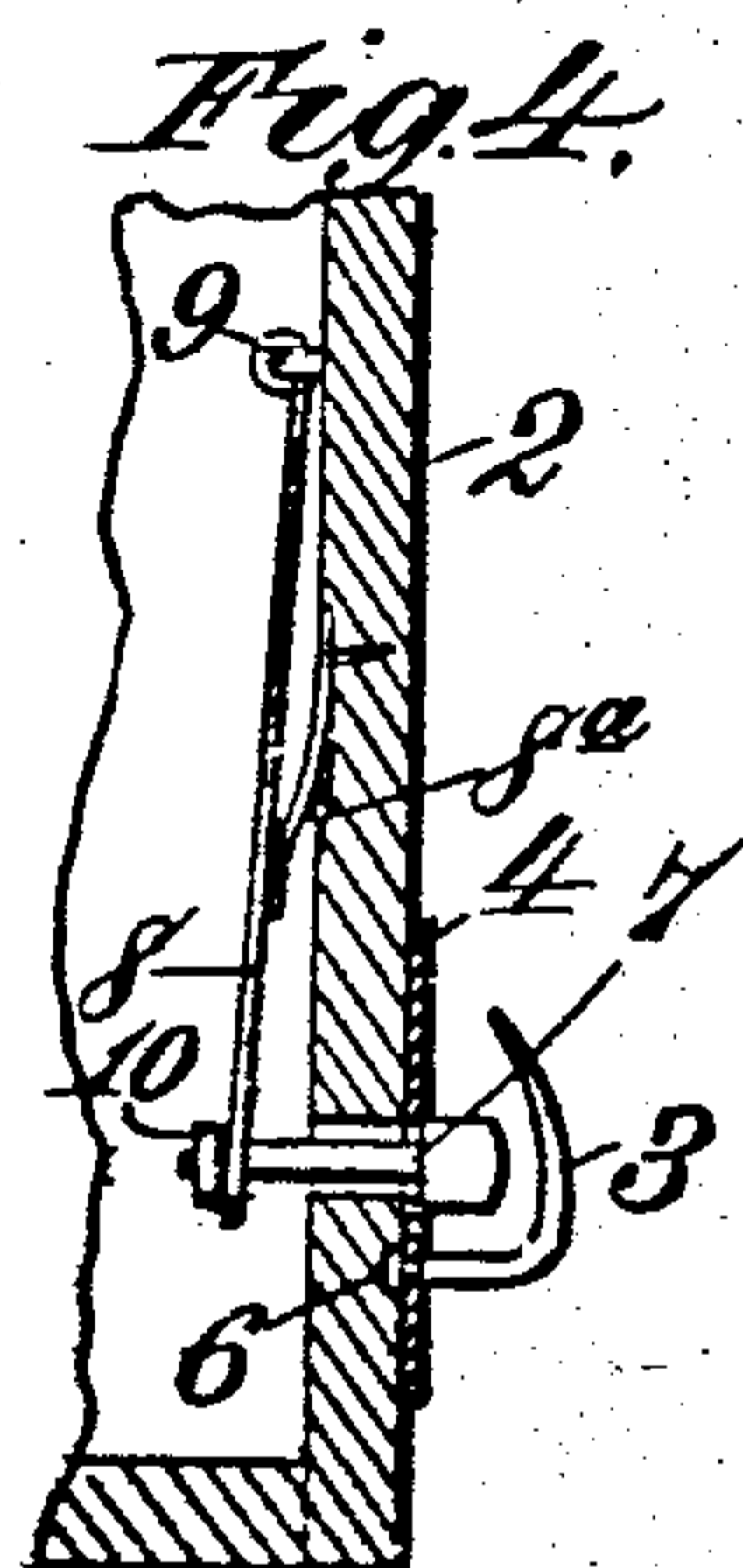
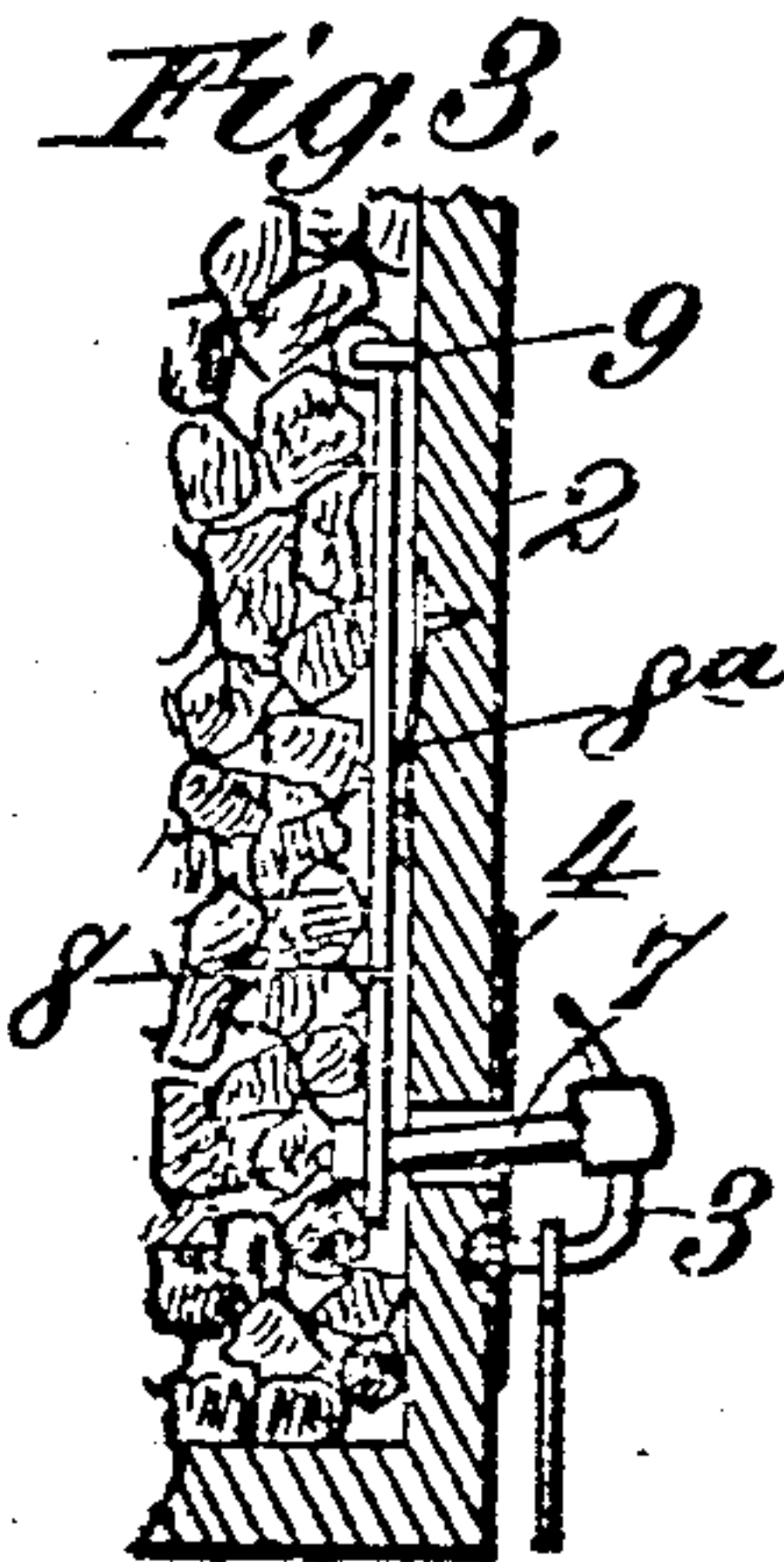
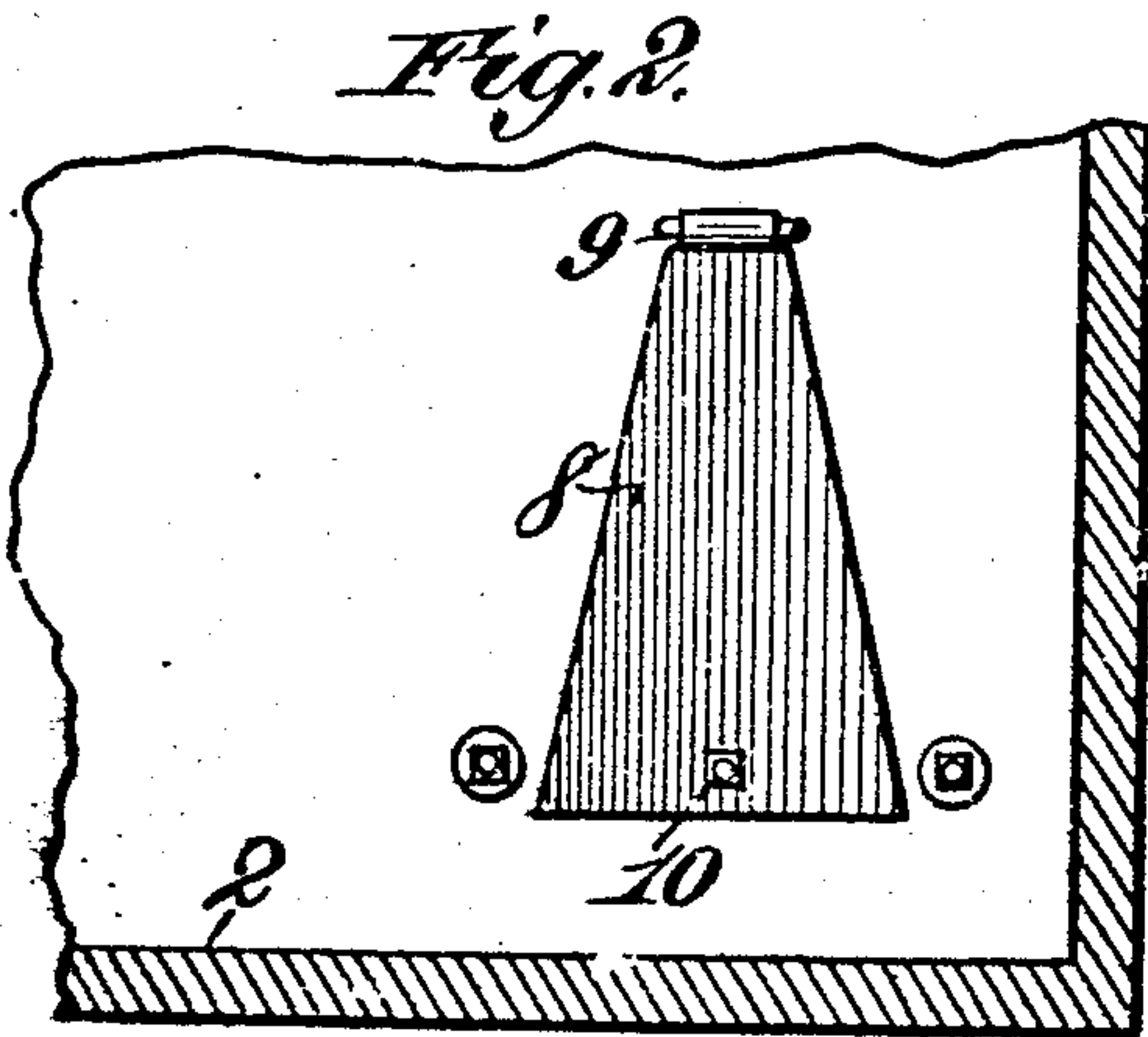
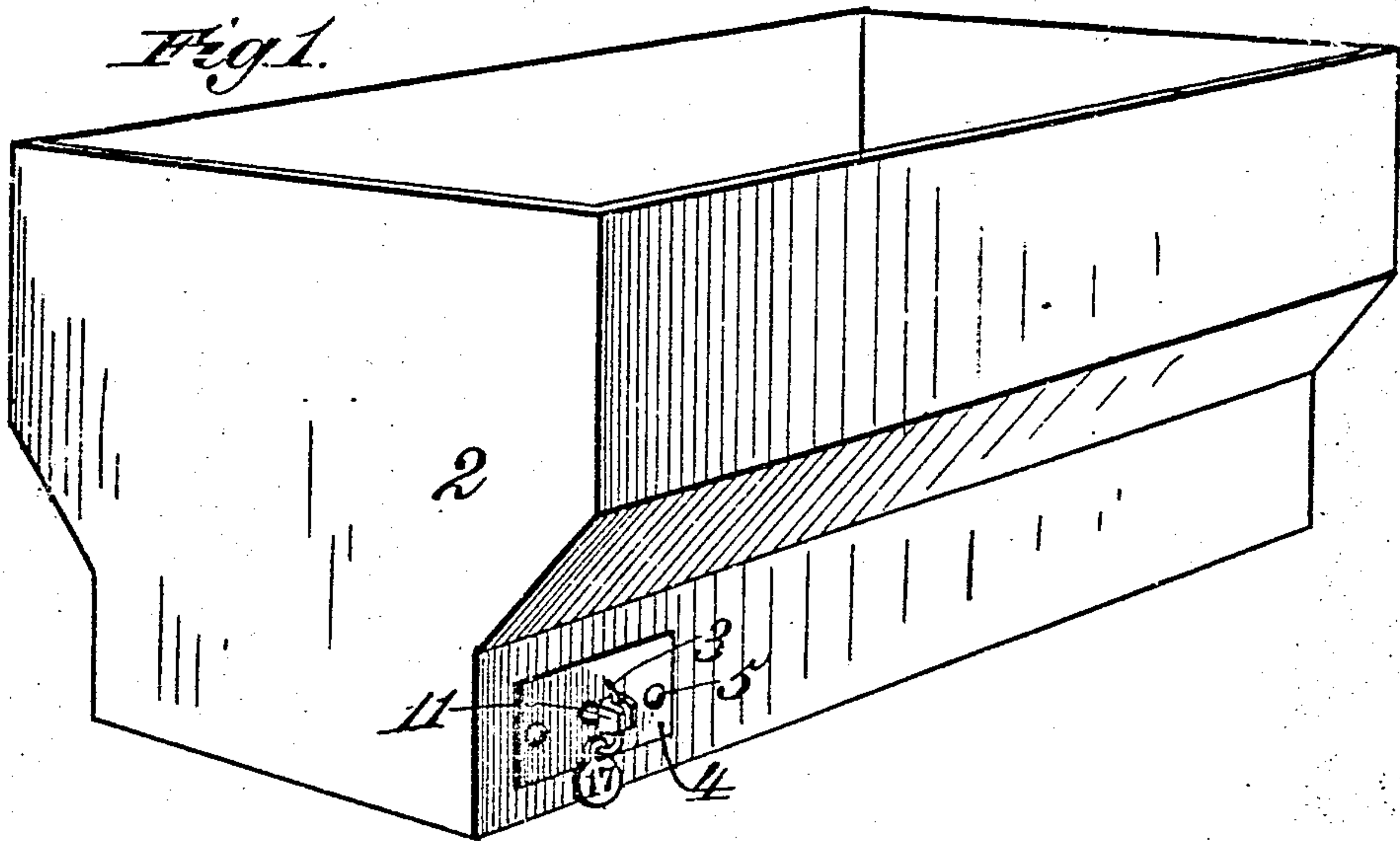


No. 876,745.

PATENTED JAN. 14, 1908.

F. P. SWEENEY.
CHECK HOLDING DEVICE.
APPLICATION FILED MAR. 30, 1907.



Witnesses:
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UNITED STATES PATENT OFFICE.

FRANCIS P. SWEENEY, OF FAYETTE CITY, PENNSYLVANIA.

CHECK-HOLDING DEVICE.

No. 876,745.

Specification of Letters Patent.

Patented Jan. 14, 1908.

Application filed March 30, 1907. Serial No. 365,499.

To all whom it may concern:

Be it known that I, FRANCIS P. SWEENEY, a citizen of the United States, residing at Fayette City, in the county of Fayette and State of Pennsylvania, have invented new and useful Improvements in Check-Holding Devices, of which the following is a specification.

This invention relates to a check-holding device, the object of the invention being to provide an article of this character which is simple in construction, easy of operation, and inexpensive to make. Said device may be put to many advantageous uses, for example, it may be connected with a receptacle in such a way that the material in the receptacle acts as the means for maintaining the device in its operative relation. The receptacle may be of any suitable character, for example, it may consist of a mine car or similar vehicle, and, when a mine car, the load of coal therein serves as the medium for retaining the check in place through the agency of the parts which constitute my invention. It will be apparent, therefore, that a check can be applied to a mining car by the miner who is supposed to fill the same, when said vehicle is empty, and that, when the car is filled, the check cannot be removed, although it may be when the car is discharged of its contents on a tippie or otherwise.

In the drawings accompanying and forming part of this specification I show in detail one effective form of embodiment of the invention which, to enable those skilled in the art to practice the same and for this purpose alone, will be set forth fully in the following description, while the novelty of the invention will be included in the claims succeeding said description.

Referring to said drawings: Figure 1 is a perspective view of a car equipped with a check-holding device involving my invention. Fig. 2 is a longitudinal central section at one corner of the car and viewing the latter from the interior, and also showing my device in position. Figs. 3 and 4 are vertical sections of the device and a portion of the car, and showing said device in its operative and inoperative positions, respectively. Fig. 5 is a horizontal sectional view, as seen from above, of the device and a part of the wall of the car. Figs. 2, 3, and 4 are upon the same

scale which is larger than that of Fig. 1, while the scale of Fig. 5 is larger than that of said Figs. 2, 3, and 4.

Like characters refer to like parts throughout the several figures of the drawings.

I show my invention as incorporated in a mining car as 2, although it will be apparent from what I have hereinbefore stated that it may be employed in many other connections, and, when I use the designation "car," it will be evident that I do so in a broad sense to include any receptacle with which my invention can be advantageously associated.

The device includes in its construction a check-carrying member of some suitable form. For this purpose I prefer to employ a hook as 3 and, while this hook may be made of any suitable material, I prefer that it be made of some material that will not bend. To prevent the latter possibility the said hook may be made of casting. It may be held to the car in any desirable way, for instance, its shank can be passed through a perforation in the plate 4 mounted upon the outside of the car at some convenient place. The said plate 4 is connected to the car in some suitable way, for example, by means of the bolts 5 which pass through the plate and preferably through one of the side walls of the car, the nuts of the bolts being at the inner ends thereof, as shown best in Fig. 5, by reason of which the plate 4 cannot be dismantled after the car is loaded. The shank of the hook 3 is headed as at 6 at its inner end to prevent its accidental separation from the reinforcing plate 4. The bill of the hook, as indicated clearly in Figs. 3 and 4, is shown as pointing toward the car.

In connection with the hook 3 I provide a keeper as 7 which may be of any desirable construction, but which generally consists of a pin rigidly connected with an actuating member as 8. This actuating member 8 may be of any desirable construction, although it is shown as consisting of a plate practically of fan-form pivotally suspended at its upper end for swinging movement. The pivot for the plate 8 may consist of a staple as 9 driven into the body of the car inside the same, from which it will be evident that said plate is situated interiorly of said car. The keeper or pin 7 may be connected with the plate 8 in any suitable way, for example, its inner reduced end can be passed

through a perforation in said plate 8 and be threaded for the reception of a nut as 10 for removably connecting the keeper or pin with the plate 8. It is, therefore, apparent that,

5 should the pin 7 be broken or should any of the other parts become so affected as to require their removal, this result can be easily accomplished owing to the fact that the several parts are removably mounted, although the removable relation is such that 10 none of the parts can be separated from the car when the same is loaded owing to the fact that the various nuts to which I have referred are situated inside the car. It will, 15 of course, be understood that the keeper or pin 7 moves through registering perforations or holes in the car 2 and reinforcing plate 4, respectively. The keeper 7 coöperates with the hook 3 in such a way that, when the 20 keeper is in its effective position, as indicated in Fig. 3, a check suspended from the hook cannot be removed when the car is loaded, and for this purpose I prefer to bifurcate or fork the enlarged head of the 25 said keeper or pin as at 11, said bifurcated portion, when the keeper is in its working relation, straddling the shank of the hook to secure the function pointed out.

When the car 2 is empty the swinging 30 plate 8 can be moved backward as shown in Fig. 4, so as to free the hook 3, and, when this is done, a check can be slipped on to the hook. The car can then be filled and, when the load in the car has been built up to a cer- 35 tain height, the lateral pressure of the material will thrust the plate 8 to a vertical or substantially vertical position, as shown clearly in Fig. 3, thereby moving the pin 7 outward and causing the bifurcated head 11 40 to straddle the hook 3 or to bridge the space between the hook and the car, so that in this condition the check carried by the hook cannot be removed therefrom. When, however, the car is emptied, the origi- 45 nal relation is restored, whereby the plate 8 can be moved backward to effect the separation of the check from the hook.

I prefer to provide automatic means for moving the keeper or pin 7 to its inoperative 50 relation as shown in Fig. 4, and this means may be of any desirable character. For example, it may consist of a spring as 8^a between the plate 8 and the car body. One end of the spring is attached to the car in 55 some suitable way, while the other or free end thereof bears against the plate whereby, when the plate is pressed toward the car as shown in Fig. 3, the spring will be put under tension. As soon as the pressure is re- 60 moved, as by the unloading of the car, the spring by its tension or power can return the plate to its original position for the purpose of moving the pin or keeper 7 to its inoperative relation.

While the hook 3 and plate 4 have been 65 described as being separate, this is not essential.

What I claim is:

1. In a device of the class described, the combination of a hook, a keeper for the 70 hook, and a load-operated actuating member adapted on its working movement to move said keeper into its operative relation.

2. In a device of the class described, a hook, a keeper for the hook having a bifur- 75 cated portion to straddle said hook when the keeper is in its operative position, and a load-operated actuating member operable on its working movement to cause the said bifurcated portion to straddle the hook. 80

3. The combination of a car, a hook supported exteriorly of the car, and means separate from the hook and operated by a load in the car for bridging the space between the 85 hook and car.

4. The combination of a car, a hook mounted exteriorly of the car, a pivotally 90 mounted load-operated member in said car, and a keeper for the hook extending through a wall of the car, rigidly connected with said member, and movable into its operative position when the member is acted upon by the load in the car.

5. In a device of the class described, the combination of a car, a plate situated ex- 95 teriorly of the car, bolts extending through the wall of the car for holding the plate in place, the nuts for the bolts being within the car, a hook held in place by said plate, a swinging plate in the car, and a keeper for 100 the hook having a bifurcated portion at its outer end, the inner end of the keeper extending through said swinging plate and being held to the latter by a nut, said swinging plate being movable in an operative 105 direction by the material in the car to cause said bifurcation to straddle said hook.

6. The combination of a car, a hook mounted exteriorly of the car, a pivotally 110 mounted member situated in the car, a keeper for the hook rigidly connected with said member and movable by the latter to its operative position by the pressure of the contents of the car against said member, 115 and a spring acting against the member to return it to its normal position for the purpose of moving the keeper to its inoperative relation.

7. The combination of a car, a stationary hook supported exteriorly of the car, the 120 latter having an opening, a keeper the shank of which extends through said opening, and a movably mounted load-operated plate in the car to which said keeper is connected, said plate when operated by the load serv- 125 ing to move the keeper outward to cause the same to bridge the space between the hook and the car.

8. In a device of the class described, a hook and a keeper for the hook one of said parts having a portion to straddle the other when the keeper is in its operative position,
5 and a load-operated actuating member operable on its working movement to move the keeper toward its operative position.

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

FRANCIS P. SWEENEY.

Witnesses:

PATRICK ROACH,
F. O. DEWAR.