G. SCHLATTER AND P. BOECKLY.

DUMPING BODY FOR TRUCKS, &c.

APPLICATION FILED OCT. 9, 1920.

1,393,169. Patented Oct. 11, 1921.

2 SHEETS—SHEET 1.

Fig. 1.

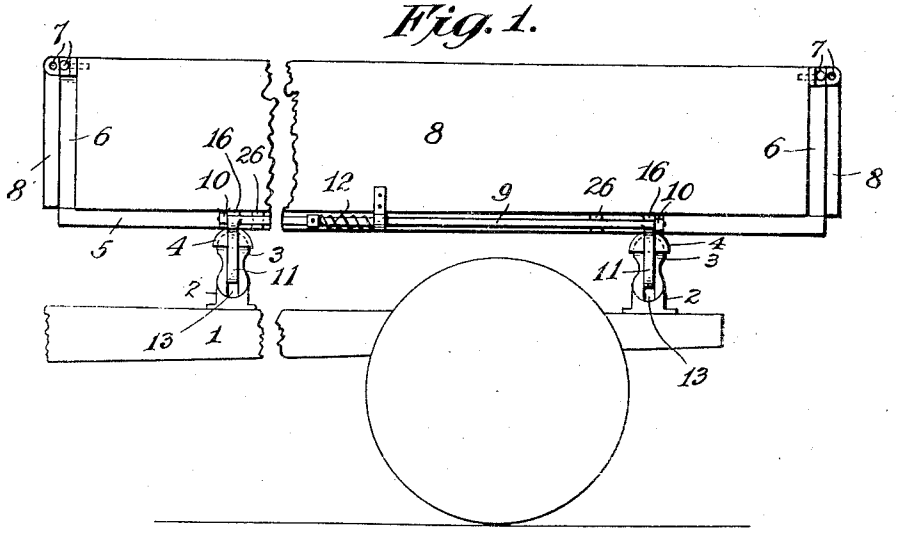
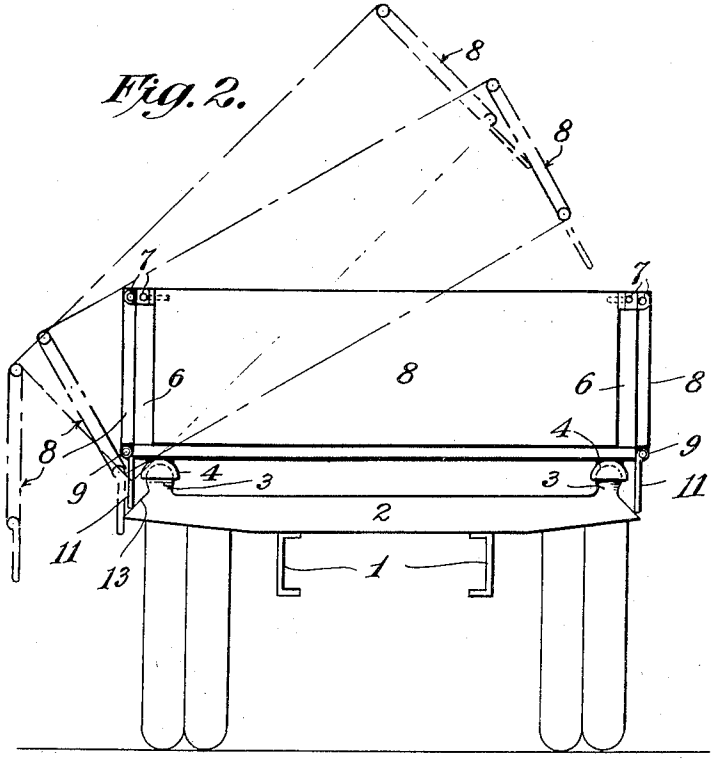


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

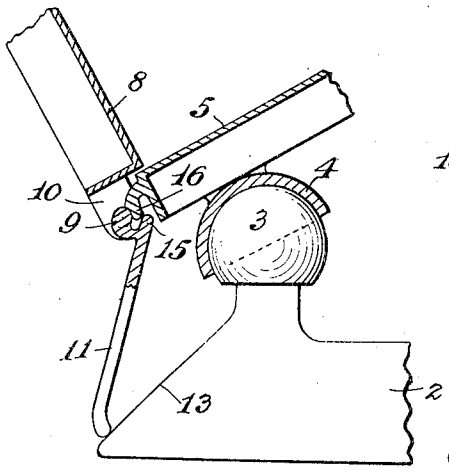


Fig. 4.

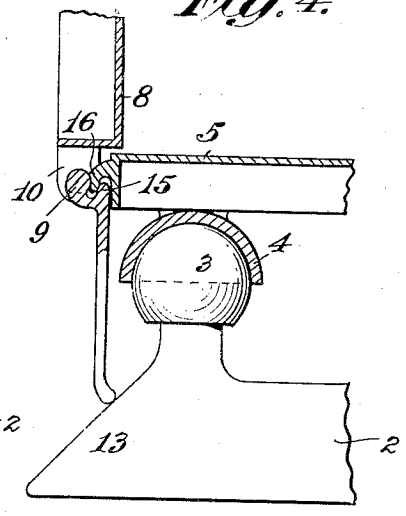


Fig. 5.

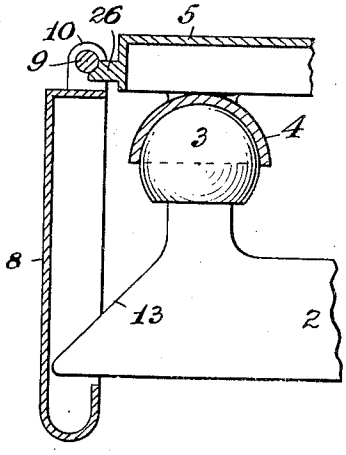
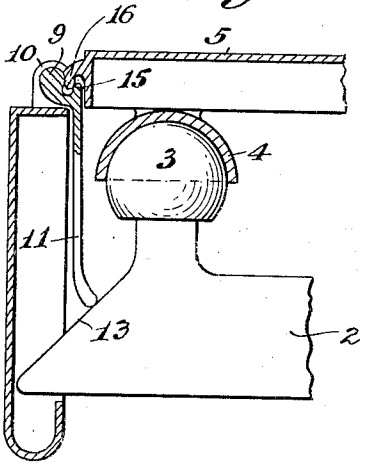


Fig. 6.



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UNITED STATES PATENT OFFICE.

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DUMPING-BODY FOR TRUCKS, &c.

1,393,169. Specification of Letters Patent. Patented Oct. 11, 1921.

Application filed October 9, 1920. Serial No. 415,733.

To all whom it may concern:

Be it known that we, GUSTAV SCHLATTER and PAUL BOECKLY, citizens of the Swiss Republic, residing, respectively, in Steinach, Villa Seeheim, and Seefelastrasse 7, Arbon, Switzerland, have invented certain new and useful Improvements in Dumping-Bodies for Trucks, &c., of which the following is a specification, reference being had to the accompanying drawings, forming a part hereof.

In the construction of dumping bodies for horse-drawn wagons and especially for motor trucks, as heretofore practised, the walls (including the tail-board as well as the lateral walls) of the box body are usually hinged or hingedly supported along either the upper edge or the lower edge. If hinged along the lower edge, as is best suited for loading, the wall, when released for the purpose of discharging the load, usually falls with great violence against the road surface or some portion of the truck with resulting injury. If the wall is hinged along its upper edge, the difficulty just mentioned is obviated, but the loading of the body becomes more difficult because of the height to which the load must be lifted in placing it in the body. One object of the present invention is to provide for the support of the wall of the body (including the tail-board as well as either side under the general term "wall") in such manner that it can be swung or hinged on either its upper edge or its lower edge,—on its upper edge for facility in unloading and on its lower edge for facility in loading. Another object is to provide means whereby the wall can be unlatched or disengaged at its lower edge as the body is tilted, without requiring the driver to leave his seat. The invention will be more fully explained hereinafter with reference to the accompanying drawings in which it is illustrated and in which—

Figure 1 is an outline view in side elevation of so much of a dumping body truck as is necessary to enable the invention thereto to be understood.

Fig. 2 is a view of the same as seen from the rear, tilted positions of the body being indicated by broken lines.

Figs. 3, 4 and 6 are detail views, partly in section through one of the latching devices.

Fig. 5 is a similar view, but on a different plane of section.

In the embodiment of the invention illustrated in the drawings, the longitudinal members 1 of the chassis of a motor truck of ordinary construction, are shown as supporting two cross bearers 2, each of which is provided on its upper side, near each end, with a spherical head or knuckle 3, adapted to engage the corresponding socket member 4 of the ball and socket joint thus formed. The socket members, as indicated, are secured to the under-side of the floor 5 of the tilting body, and on these joints the body can be tilted to either side or to the rear. The floor 5 is presumed to have at each corner a post 6, to the upper ends of which each wall 8, (either the side wall or the tail-board), is hingedly connected, as by means of removable pins 7, such pins forming, with the upper edge of the side or end, as the case may be, a hinged joint at the upper edge on which the side may swing outwardly, as indicated by dotted lines in Fig. 2, when released at the lower edge and when the body is tilted.

Mounted in bearings 10 secured to the side or end wall 8 and supported at intermediate points by lugs 26 projecting from the floor 5, is a shaft 9, which is provided, in line with each bearer 2, with an arm 11, a spring 12 shown in Fig. 1, being applied to the shaft 9 so as to press the arms 11 normally inward to bear against corresponding cam faces or inclines 13 formed at the ends of the bearers 2. Each arm 11 is also provided with a claw or catch 15 adapted to engage a corresponding lug 16 secured to the floor 5.

When the hinged members or pins 7 at the upper edge of the side 8 are detached or pulled out, the wall is then free to swing outwardly on the hinged joint formed by the shaft 9 and its lower edge, the wall being shown in Figs. 5 and 6 as having swung through 180° from its upright position, shown in Fig. 2, to a depending position, so that the loading of the body can be carried on with facility. During such movement of the side the latches 15 continue to engage the lugs 16 and so hold the shaft 9 in position on its supporting lugs 26. On the

other hand, when the pins 7 are in place and the body is tilted, as represented by broken lines in Fig. 2, the wall swings, with respect to the body, upon the hinged joint at its upper edge and the arms 11, sliding at their ends on the cam faces or inclines 13, disengage the latches 15 from the lugs 16 and, thus detaching the lower edge of the wall from the body, permit the side to swing with respect to the body and the load to be dumped.

It will be obvious that if the arms 11 are not conveniently placed for coöperation with inclines 13, carried by the chassis, the arms can be operated by hand or by any convenient means under the control of the driver. In either case, when the body is restored to normal position, the latches 15 are caused by the action of the spring 12 and by the weight of the arms 11, to swing into locking position to hold the shaft 9 in place.

It will be understood that various changes in details of construction and arrangement can be made to suit different conditions of use and that the invention is not restricted to the particular construction shown and described herein except as pointed out in the claims.

We claim as our invention:

1. The combination of a truck chassis, a body and means to support the body on the chassis so that the body can be tilted to discharge the load, the body comprising a floor, vertical posts, a wall, a detachable hinged joint between the posts and the wall at its upper edge, a shaft mounted in bearings on the wall at the lower edge thereof and latches carried by said shaft to engage lugs on the floor.

2. The combination of a truck chassis, a body and means to support the body on the chassis so that the body can be tilted to discharge the load, the body comprising a floor, vertical posts, a wall, a detachable hinged joint between the posts and the wall at its upper edge, a shaft mounted in bearings at the lower edge of the wall, latches carried by said shaft to engage lugs on the floor, and means to cause the latches normally to engage the lugs on the floor.

3. The combination of a truck chassis, a body and means to support the body on the chassis so that the body can be tilted to discharge the load, the body comprising a floor, vertical posts, a wall, a detachable hinged joint between the posts and the wall at its upper edge, a shaft mounted in bearings at the lower edge of the wall, supports for said shaft carried by the floor, and latches to hold the shaft to the floor.

4. The combination of a truck chassis, a body and means to support the body on the chassis so that the body can be tilted to discharge the load, the body comprising a floor, vertical posts thereon, a wall, a hinged joint between the posts and the wall at its upper edge, latches mounted on the wall and adapted to engage the floor to hold the lower edge of the wall to the floor and cams carried by the chassis to coöperate with the latches to cause the same to disengage the wall at its lower edge from the floor when the body is tilted.

This specification signed this 24th day of August, A. D. 1920.

GUSTAV SCHLATTER.
PAUL BOECKLY.