(No Model.)

A. JENNINGS.

WAGON.

No. 498,553. Patented May 30, 1893.

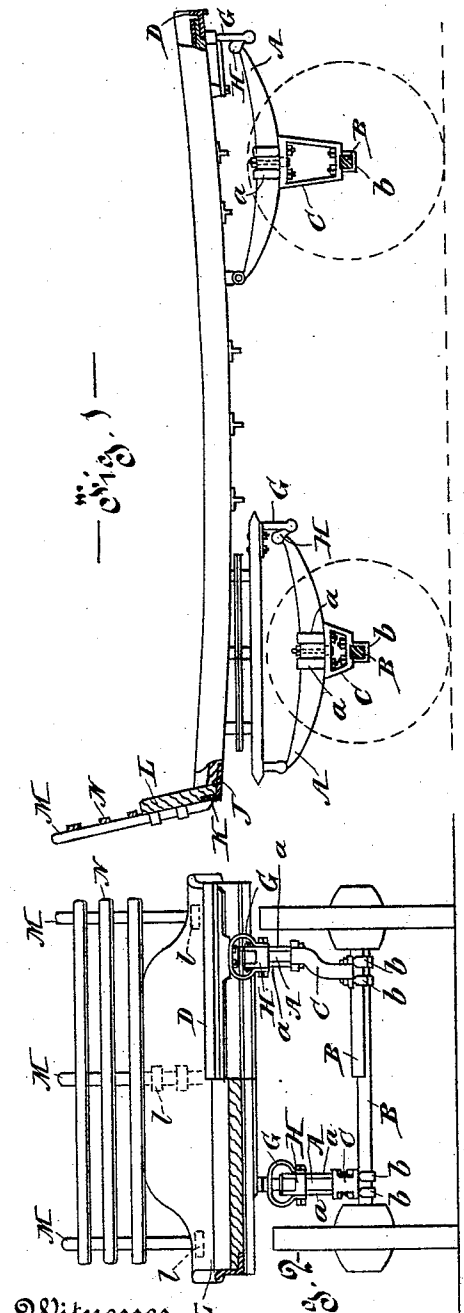

Fig. 1.

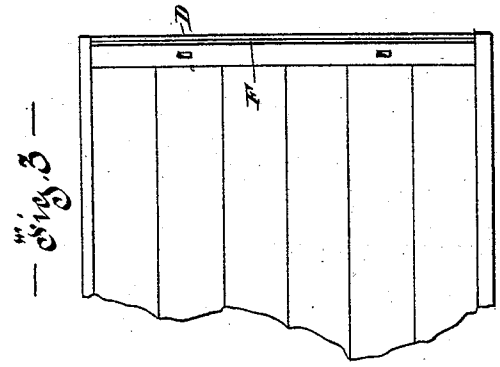

Fig. 3.

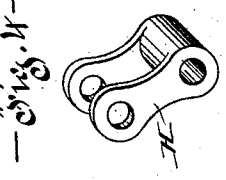

Fig. 4.

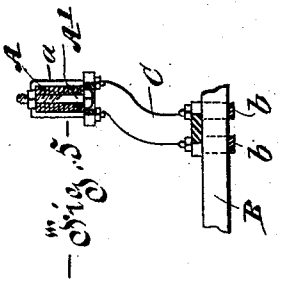

Fig. 5.

Witnesses

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ARTHUR JENNINGS, OF MONTREAL, CANADA.

WAGON.

SPECIFICATION forming part of Letters Patent No. 498,553, dated May 30, 1893.

Application filed June 7, 1892. Serial No. 435,840½. (No model.) Patented in Canada October 2, 1891, No. 37,509.

To all whom it may concern:

Be it known that I, ARTHUR JENNINGS, of the city of Montreal, in the district of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Wagons, (for which I have obtained Letters Patent of the Dominion of Canada, No. 37,509, granted October 2, 1891;) and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to platform wagons and more especially to those of the "lorry" type used principally for carrying heavy freight goods.

The invention embraces several improvements which taken together go to form a wagon cheaper to construct, lighter and more durable in numerous ways, and, further, an improved arrangement whereby the use of the usual skid for loading and unloading is facilitated.

The invention consists first in the substitution for the heavy wooden axle bed and spring bearers now in use, of open metal frames combining in a single body the axle bed and spring bearer the advantages derived from the change being an economy in cost of manufacture, a diminishment of weight, increased durability and an avoidance of the necessity of weakening the axle by perforations as now required to attach the wooden bed to it without introducing any new form of springs or spring pedestals and furthermore the open frame allows of an arrangement whereby the center bolt of the usual springs can be easily reached and displaced if circumstances require such.

The invention comprises, secondly, an arrangement of the rear angle iron of the main frame in such a way that the usual skid used in loading and unloading can have a wider range of connection therewith, and, thirdly, an improvement which consists in the arrangement of an angle iron at the front of the wagon similarly to that at the rear so that an upright wooden bearer can be inserted between the angle iron and the end of the flooring of the wagon, which bearer serves to receive the necessary staples wherein the standards of the usual rack bar are set.

For full comprehension however of the invention, reference must be had to the annexed drawings forming part of this specification in which like symbols indicate corresponding parts and wherein—

Figure 1 is a side elevation of a wagon partly broken away at the rear and front; Fig. 2 a rear end elevation of same broken away to show the arrangement on the front axle; Fig. 3 a plan view of the rear portion of the platform; Fig. 4 a detail perspective view of the shackle bolt and Fig. 5 an enlarged detail sectional view of one of my metal bearers.

Heretofore the axle beds or "bunks" have been made of heavy blocks of wood extending the full length of the axle and secured to same by bolts passing through both and in addition to these beds, bearers or spring jacks set on them have been required to receive the springs and the whole bound together by extensive metal bands, a construction which is not only expensive but detrimental to the life of the axle by reason of the perforating thereof. Up to the present time these objections have only been met by the substitution of spring pedestals containing coiled springs and held in place by metal trusses. But this arrangement does not attain the degree of lightness desired and it furthermore calls for the discarding of all the old forms of springs in use on wagons of the kind mentioned.

To connect the two rear springs A A (of the usual form which I retain) with the hind axle B, I use two vertical open metal frames C C in side elevation substantially quadrangular or the top bar slightly longer than the bottom and in rear view curving from the top, or point of attachment to the spring, inward and downward to the axle to allow the wheels to be brought sufficiently central for tracking. These frames or bearers C C are connected to the springs A A and axle B respectively by clips *a a* and *b b* and the top sides of the bearers have square vertical perforations through them corresponding to the size of the head of the center bolts A′ A′ of the springs A A and in which such heads will fit, the object being to secure easy displacement of such bolts by punching them out from above should occasion require it. If desired, the axles could be attached to the top sides of the bottom bars of the bearers C C when a wagon of less height is required. The same arrangement is followed in connecting the front springs to

the front axle, like letters of reference being used to denote similar parts.

In order to allow of securing a holding for the usual skid at any point along the rear of the wagon I use a strip of angle iron D preferably in T-form to form the rear section of the main frame the web of such T-iron being parallel with the bottom of the wagon and the flanges projecting one downward to protect the blades to which its "jew's harps" are attached from breakage and the other upward to give the skid irons a grip and the floor boarding E shortened sufficiently to leave an open space F the full width of the wagon so that the skid irons can be inserted at any point.

G G are the "jew's harp" hangers from the wagon body and H H the drop shackles having sides and a central bushing formed in one piece of malleable iron instead of part wood and part iron as heretofore.

J is a strip of angle iron forming the front section of the main frame being arranged precisely in the same way as the rear strip D and together with the front end of the flooring shortened as at the rear forming a seat or socket K for a wooden bearer L extending across the front of the wagon and serving to receive the staples *l* in which the standards M of the usual rack N are socketed.

What I claim is as follows:

1. The combination with a wagon body, its springs and axles,—of open or skeleton quadrangular integral metal frames or bearers interposed between the springs and the axles, and rigidly secured to both the upper bars of such frames in contact with the springs being provided with perforations to fit the heads of the center bolts of said springs, and means for securing the whole together as shown and described.

2. In a wagon, the combination with the side irons of the main platform frame,—of the rear main frame section formed of a strip of angle iron one of the sides of such iron being parallel with the bottom of the wagon and the other vertical with its edge upward, and the floor boarding shortened to leave an open space between its end and the upwardly projecting portion of said angle iron, for the full width of the wagon.

3. In a wagon, the combination with the side irons of the main platform frame,—of the front frame section formed of a single angle iron, one of the sides of such iron being parallel with the bottom of the wagon and the other vertical with its edge upward and the floor boarding shortened to leave an open space between its end and the upwardly projecting portion of said angle iron, a wooden bearer with edge secured in such space and serving to carry front rack of wagon, as set forth.

ARTHUR JENNINGS.

Witnesses:
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