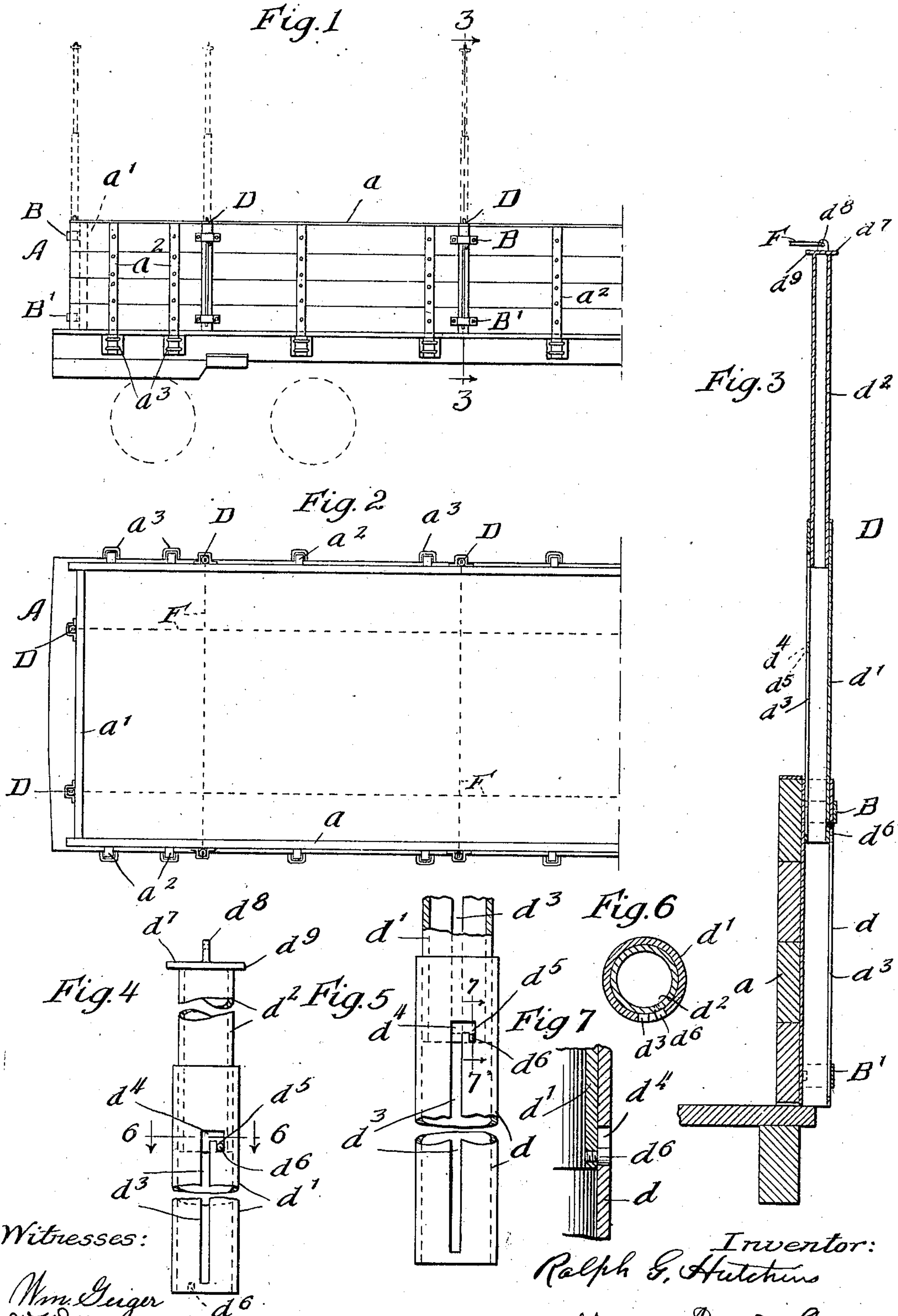


No. 828,290.

PATENTED AUG. 7, 1906.

R. G. HUTCHINS.  
GONDOLA CAR.

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# UNITED STATES PATENT OFFICE.

RALPH G. HUTCHINS, OF CHICAGO, ILLINOIS.

## GONDOLA CAR.

No. 828,290.

Specification of Letters Patent.

Patented Aug. 7, 1906.

Application filed February 12, 1906. Serial No. 300,573.

*To all whom it may concern:*

Be it known that I, RALPH G. HUTCHINS, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Gondola Cars, of which the following is a specification.

My invention relates to improvements in gondola cars or cars which are used for carrying coal or other merchandise in one direction and in the other direction lumber or other like freight, requiring the load to be piled higher than the sides and ends of the car-body.

Heretofore the sides and ends of such cars have usually been furnished with sockets or straps to receive wooden stakes to enable the car to be loaded higher than its sides and ends, the lumber-shipper himself making and fitting the stakes into the sockets or straps provided on the sides and ends of the car to receive them. The supplying and fitting of these wooden stakes to these sockets is not only a matter of great inconvenience and delay, but also a matter of considerable expense, both on account of the high quality and cost of the lumber necessary for such use, but also on account of the time and labor involved, the same amounting ordinarily to several dollars per car, as the stakes are not returned even in the remote contingency of the same car being sent directly back for another load to the same shipper. The wooden stakes, also, if not made from very carefully-selected lumber, are also liable to bend and permit the load to shift to one side and derail the car and wreck the train or to break, and thus cause loss and damage. These temporary wooden stakes also occasion difficulty and inconvenience between the shipper and the railroad, as the weight of the empty car is ordinarily taken without the stakes, although the railroad companies make an allowance of five hundred pounds to cover the weight of the wooden stakes which the lumber-shipper makes, supplies, and adds to the car to adapt it to hold the load.

The object of my invention is to provide the gondola car itself with permanent metallic stakes of a strong, simple, efficient, and durable construction which may be collapsed within the weight of the car-body when the stakes are not required for use and extended to the desired height when required for use.

My invention consists in the means I employ to practically accomplish this object or

result—that is to say, it consists, in connection with the sides and ends of a gondola-car body provided with a series of sockets or straps to receive stakes, of a series of extendible and collapsible metallic stakes, composed each of a plurality of hollow cylindric telescoping sections, the lower section fitting in the stake sockets or straps of the car-body and provided with a longitudinal slot or groove, terminating at its upper end in a short transverse slot and a short downwardly-extending slot, and the next upper adjacent or middle section having an externally-projecting lug or pin adapted to fit and slide in said groove of the lower section for the purpose of holding the middle section extended in the lower section, and the upper and middle sections having corresponding means for holding and locking the upper section extended in the middle section, the middle section being adapted to rotate in the lower section and the upper section to rotate in the middle section. The upper section of each of the stakes is also preferably provided with a flange or cap at its upper end to cover the ends of the sections below it to prevent rain, snow, ice, or dirt from entering between the sections and interfering with the operations.

My invention also consists in the novel construction of parts and devices and in the novel combinations of parts and devices herein shown and described, and more particularly specified in the claims.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation of a gondola car embodying my invention, the figure, however, only showing one-half of the entire length of the car-body. Fig. 2 is a plan view. Fig. 3 is a detail vertical section on line 3 3 of Fig. 1. Fig. 4 is an enlarged partial elevation, showing the bayonet-catch connection between the upper and lower sections of the stake. Fig. 5 is a similar view showing the bayonet-catch connection between the middle and lower sections of the stake. Fig. 6 is a cross-section on line 6 6 of Fig. 4, and Fig. 7 is an enlarged detail longitudinal section on line 7 7 of Fig. 5.

In the drawings, A represents the body of a gondola car having the customary upright sides *a* and ends *a'* and upright posts *a<sup>2</sup>*, fitting at their lower ends in post sockets or straps *a<sup>3</sup>*, secured to the outer framework of the car-body.

BB' are the stake sockets or straps secured to the upright sides and ends of the car-body.



These stake sockets or straps may be of the ordinary construction with which gondola cars have heretofore been provided for the reception of temporary wooden stakes.

5 D D are a series of extensible and collapsible hollow cylindric metallic stakes, each composed of a lower section  $d$ , a middle section  $d'$ , and an upper section  $d^2$ , the several sections telescoping together, so that when  
10 the stakes are collapsed they only extend to the upper edge of the upright sides and ends of the car-body. Each of the stake-sections  $d$ ,  $d'$ , and  $d^2$  is of cylindric form, although, of course, the lower section  $d$  need necessarily  
15 only be of cylindric shape on the inside. The two lowermost cylindric stake-sections  $d$   $d'$  are each provided with a longitudinal slot or groove  $d^3$ , terminating near its upper end in a short transverse slot or groove  $d^4$  and a  
20 short downwardly-extending slot or groove  $d^5$ , the several grooves forming an ordinary bayonet-catch slot or groove, and each of the two uppermost stake-sections  $d'$   $d^2$  is provided near its lower end with a lug or pin  $d^6$ ,  
25 which fits and works in the bayonet-catch slot or groove of the coöperating contiguous section. These bayonet-catch slots or grooves and bayonet-catch lugs or pins thus form a simple and convenient means for locking and  
30 holding the several stake-sections in their extended positions. The middle stake-section  $d'$  may preferably, also, be provided with one or more intermediate transverse slots or grooves  $d^4$  and depending slots or grooves  $d^5$ ,  
35 so that the upper stake-section may be only half or partially extended when desired. The bayonet-catch pins or lugs  $d^6$  are preferably in separate pieces from the stake-sections to which they are secured, so that by perma-  
40 nently fixing these bayonet-catch lugs or pins in place after the stake-sections are assembled they will themselves serve as means for preventing the several stake-sections from being withdrawn from each other. The up-

per section  $d^2$  is preferably provided with a 45 cap or cover  $d^7$ , having a lug or eye  $d^8$  for attachment of a wire or other tie  $F$ , by which the opposite stakes may be wired or tied together when desired. This cap  $d^7$  has a projecting flange  $d^9$  to overlap and cover the up- 50 per ends of the lower sections when the stake is collapsed.

I claim—

1. In a gondola car, the combination with the car-body provided with stake sockets or 55 straps, of a series of collapsible and extensible metallic stakes, each having a plurality of cylindric telescoping sections provided with bayonet-catch devices for holding the sections extended, substantially as specified. 60

2. In a gondola car, the combination with the car-body provided with stake sockets or 65 straps, of a series of collapsible and extensible metallic stakes, each having a plurality of cylindric telescoping sections provided with bayonet-catch devices for holding the sections extended, said bayonet-catch devices also serving to prevent complete withdrawal of the sections from each other, substantially 70 as specified.

3. A collapsible and extensible gondola-car stake consisting of a plurality of cylindric metallic telescoping sections provided with bayonet-catch devices for locking and holding the sections in their extended positions, sub- 75 stantially as specified.

4. A collapsible and extensible gondola-car stake consisting of a plurality of cylindric metallic telescoping sections provided with bayonet-catch devices for locking and holding 80 the sections in their extended positions, said sections also having means for preventing withdrawal of the sections from each other, substantially as specified.

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