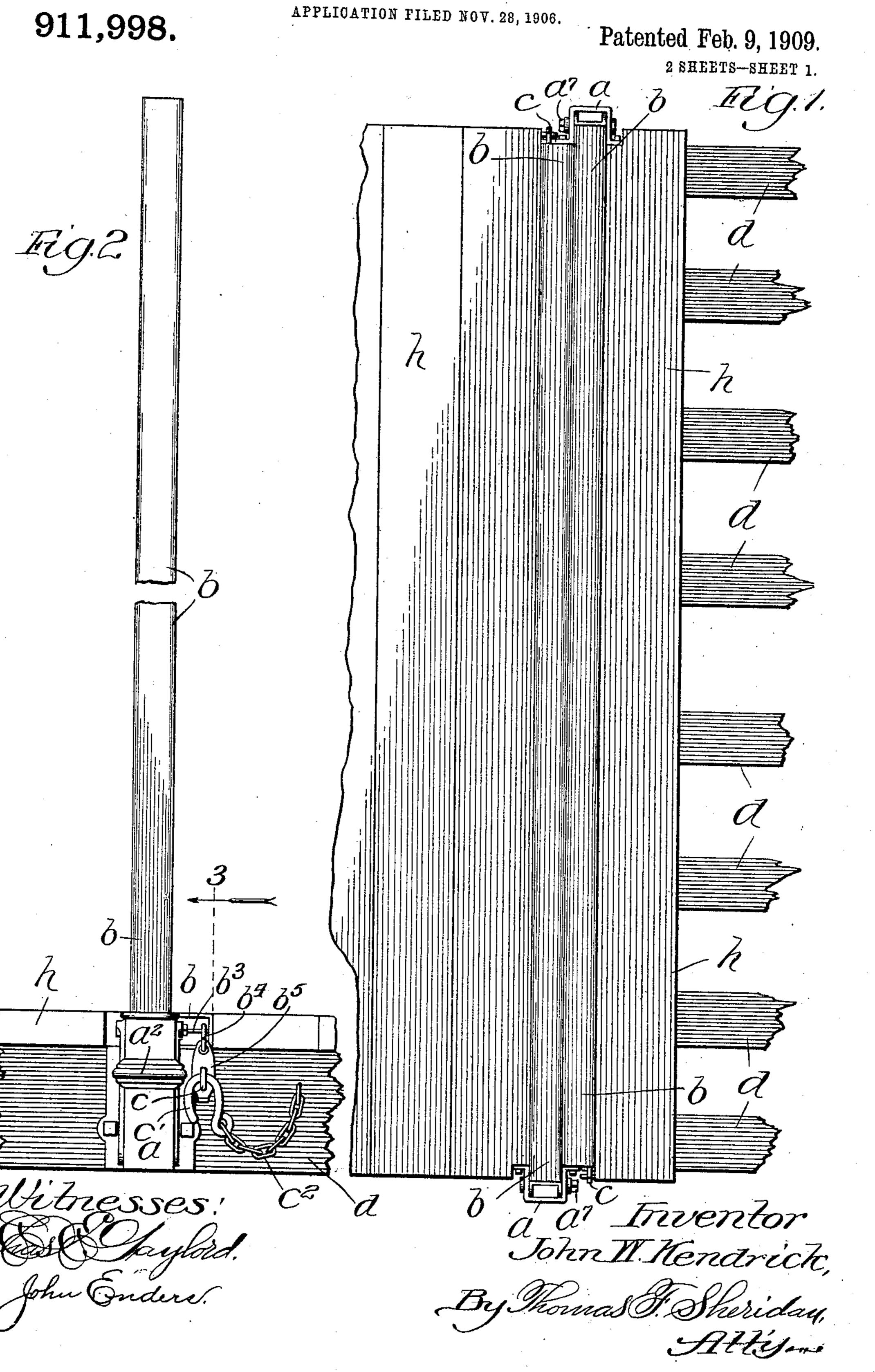
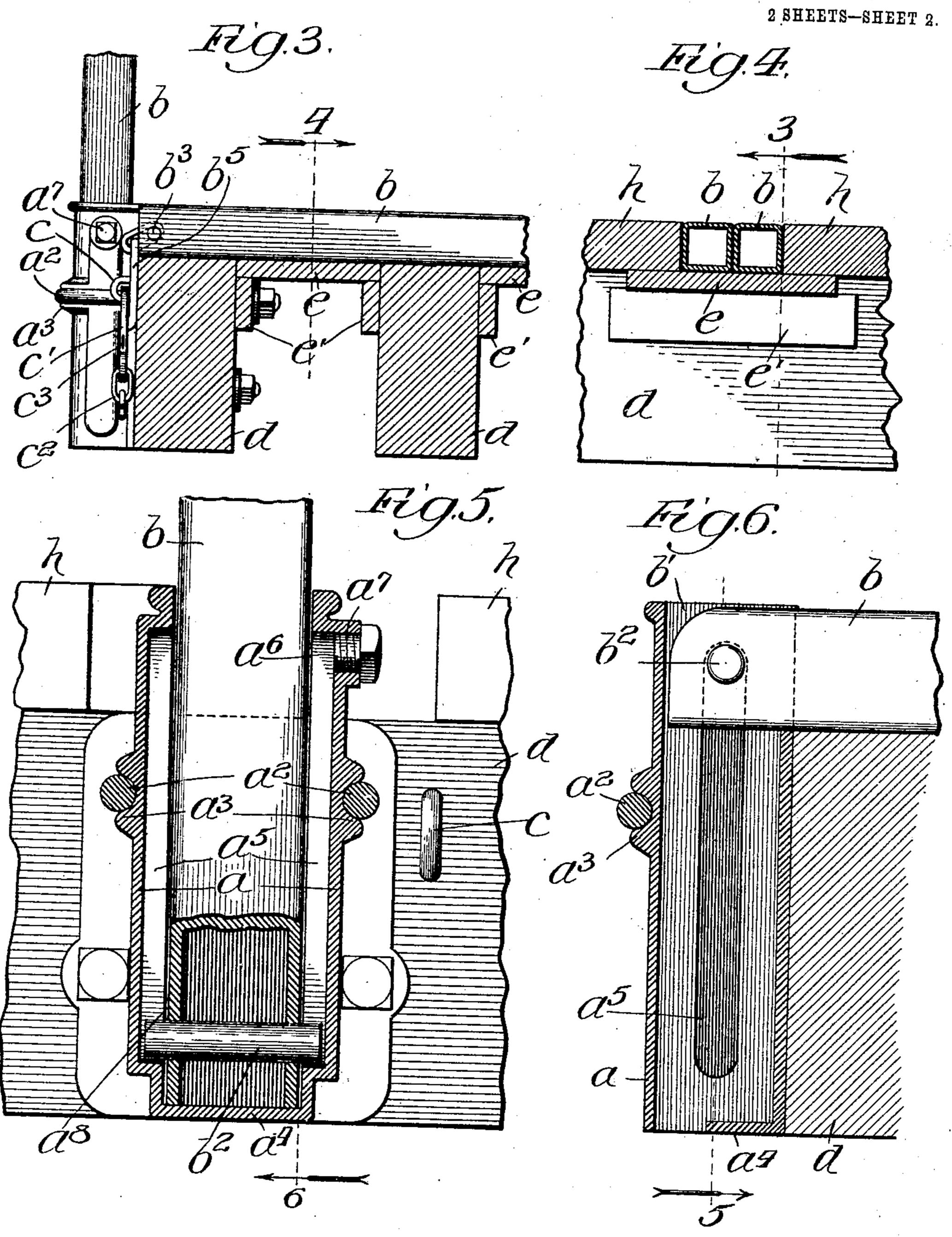
J. W. KENDRICK.
FOLDING STAKE FOR RAILWAY CARS.



## J. W. KENDRICK. FOLDING STAKE FOR RAILWAY CARS. APPLICATION FILED NOV. 28, 1906.

911,998.

Patented Feb. 9, 1909.



Inventor; John W. Kendrick,

## UNITED STATES PATENT OFFICE.

JOHN W. KENDRICK, OF CHICAGO, ILLINOIS.

## FOLDING STAKE FOR RAILWAY-CARS.

No. 911,998.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed November 28, 1906. Serial No. 345,492.

To all whom it may concern:

Be it known that I, John W. Kendrick, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Folding Stakes for Railway-Cars, of which the following is a specification.

My invention relates to stakes for railway cars; and has for its object to provide an improved stake which may be folded down flush with the floor of the car in operative position.

With this and other objects in view, which will hereinafter appear, my invention consists in the combinations and details hereinafter set forth and claimed.

In the accompanying drawings—Figure 1 is a plan view of a portion of the floor of a car, showing my improvements applied thereto. Fig. 2 is a side elevation of a portion of a car, showing one of my improved stakes in operative position. Fig. 3 is a broken sectional detail on the line 3 of Fig. 2.

Fig. 4 is a section on the line 4 of Fig. 3. Fig. 5 is a sectional view on the line 5 of Fig. 6. Fig. 6 is a sectional view on the line 6 of Fig. 5.

It is very desirable to provide flat cars with stakes which may be used when the cars are loaded with lumber or like material. As is well-known when flat cars are used for this purpose, the provision of stakes is a trouble-some matter, some roads requiring that these stakes be provided by the shipper. With my invention a flat car may be provided with side stakes which may readily be folded down across the floor of the car and received in the recesses therein so as to be flush with the floor and form a practical continuation thereof.

In the drawings, a represents a stake pocket comprising a casting having flanges a' and a pocket portion a's, said pocket portion being adapted to receive the lower end of a stake b. This pocket portion is secured to the side sill of the car by a U-shaped bolt a' which surrounds the stake pocket and serves to retain the same in position, flanges a' being formed upon the exterior of the pocket for receiving the U-bolt.

The stake pocket is provided upon its opposite interior walls with guideways  $a^5$ , and the pocket is partially closed at its lower end by a web  $a^4$ . The stake b is provided at its lower end with a transverse perforation

adapted for the reception of a pin  $b^2$ , which projects on either side of the stake, the ends of the pin entering the guideways upon the inner walls of the pocket. It will be observed that the lower end of the stake is rounded off at one corner, so as to permit the stake to turn when it is raised to its uppermost position—as shown in Fig. 6.

In order to permit the ready insertion of 65 the pin  $b^2$  into the transverse passageway in the stake, I provide one of the side walls of the pocket with a hole  $a^6$  through which the pin  $b^2$  may be inserted when the stake is in its upper position. In order to close this 70 hole after the insertion of the pin, I provide a headed screw  $a^7$ ,—being understood that the walls of the hole are correspondingly screw threaded.

As shown in the present case, the stake is 75 formed of metal approximately rectangular in cross section,—as clearly shown in Fig. 4—and the floor of the car is provided with a transverse recess which extends entirely across the floor from side to side of the car. 80 This recess is formed by spacing apart two of the floor boards h, and beneath the recess thus formed, I mount boards e, which are supported upon cleats e' attached to the longitudinal members of the car frame. 85 These boards e serve to close the openings formed by the separation of the floor boards h. The depth of the openings is such that when the stake b is turned down into them, the stake will fill the openings and form a 90 practical continuation of the car floor. I may employ as many of these stakes along each side of the car as may be desired—in usual practice ten stakes or five on each side are sufficient for a car of ordinary 95 length; and I may arrange the stakes on opposite sides slightly out of alinement, so that they may fold down into a single recess side by side,—as indicated in Fig. 4—or, if desired, I may space these recesses some- 100 what apart, each stake in this case filling a single recess—as will be readily understood.

In order to provide means for securing the stake in its folded position, I provide the stake at its free end with a cross pin  $b^3$  to 105 which it is attached by means of a link  $b^4$  to a hasp  $b^5$  adapted to receive a staple c mounted on the side sill of the car. This staple c receives a hook c', which is connected to the side sill of the car by a chain  $c^2$ . If desired, 110 this hook may be provided with an opening  $c^3$  through which a seal may be inserted for

the purpose of preventing unauthorized withdrawal of the hook.

It will be seen that I have provided a flat car which may be used either with or without side stakes; that the side stakes form a permanent attachment to the car and are always ready for use when they may be desired and which, when not in use, form a part of the car floor.

10 I claim:

1. A railway car having a stake pocket, a stake having a sliding connection with the pocket, and means permitting the folding of the stake inwardly across the car when in one position in the pocket.

2. A railway car having a stake pocket provided with guideways in its opposite walls, and a stake movably mounted in the pocket, said stake being provided with pro-

20 jections engaging the guideways.

3. A railway car having a stake pocket provided with guideways in its opposite

walls, and a stake movably mounted in the pocket, said stake being provided at one end with projections and also having a rounded 25 corner at this end.

4. A railway car provided with a stake pocket having guideways on the inner faces of its opposite walls, a stake in the pocket having a passageway at one end, said pocket 30 also having an opening in one of its walls for the insertion of a pin into the stake passageways, and means for closing the opening in the pocket wall.

5. Arailway car having a side stake, means 35 on one side of the car for folding such stake transversely of the car, and means on the opposite side of the car for detachably connecting the end of the stake to the car.

JOHN W. KENDRICK.

Witnesses:

F. A. LEHMAN, EDWARD POSSON.