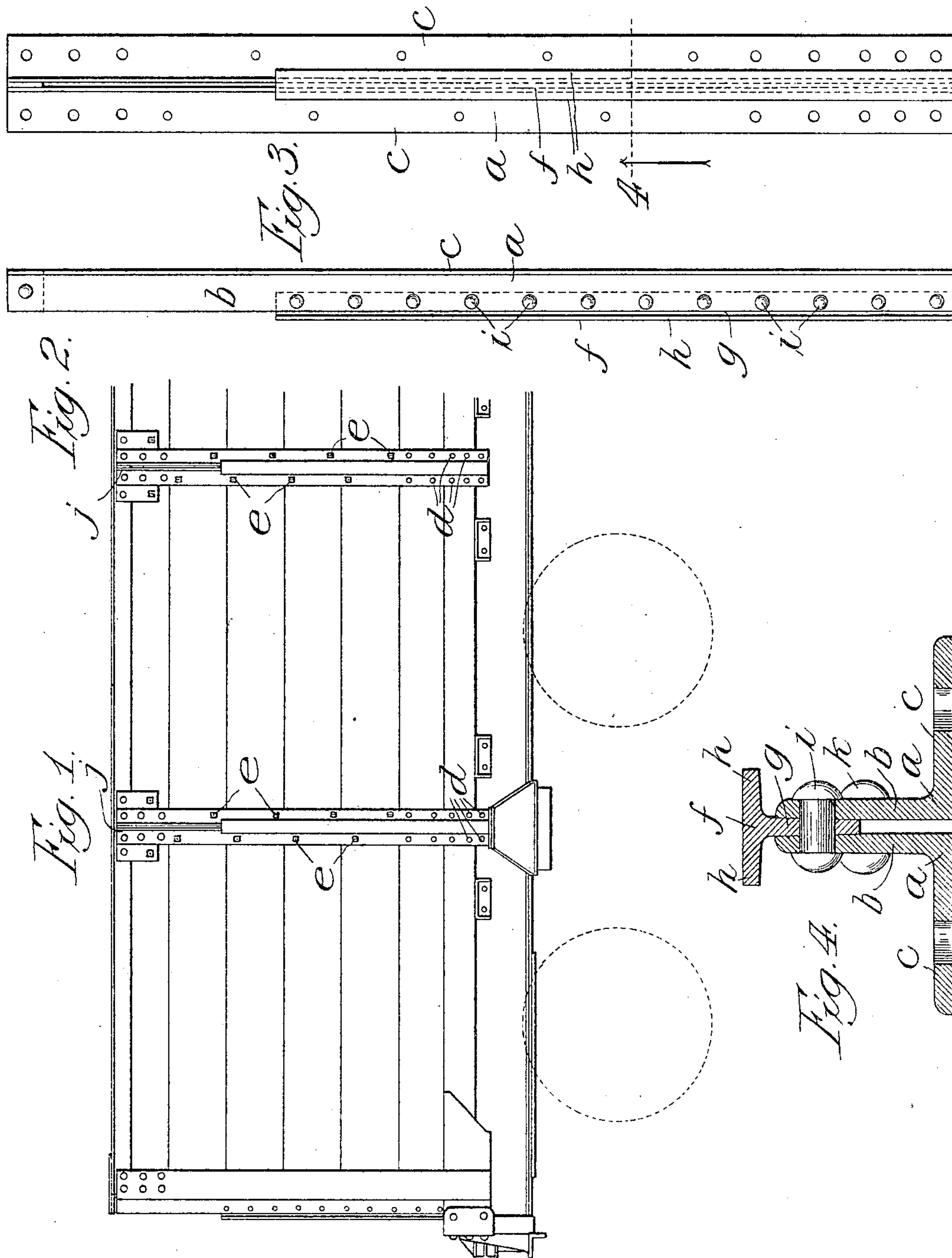


No. 795,416.

PATENTED JULY 25, 1905.

E. POSSON.  
STAKE FOR CARS.  
APPLICATION FILED APR. 24, 1905.



Witnesses:  
*Ed. Paylor.*  
*John Enders.*

Inventor:  
*Edward Posson,*  
By *Thomas F. Sheridan,*  
Att'y.



# UNITED STATES PATENT OFFICE.

EDWARD POSSON, OF CHICAGO, ILLINOIS.

## STAKE FOR CARS.

No. 795,416.

Specification of Letters Patent.

Patented July 25, 1905.

Application filed April 24, 1905. Serial No. 257,231.

*To all whom it may concern:*

Be it known that I, EDWARD POSSON, 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 Stakes for Cars, of which the following is a specification.

My invention relates to that class of stakes having parallel metallic flange or web portions provided with integral flange portions extending outward therefrom in opposite directions.

The principal object of my invention is to provide a simple, economical, and efficient stake for railway-cars.

A further object of the invention is to provide a built-up metallic stake for cars comprising flanges or flange and web portions so disposed and connected as to provide the maximum strength in the direction of the lines of stress to which such stakes are subjected in use and to enable the necessary strength to be afforded by the use of the least possible weight or quantity of material.

A still further object of the invention is to provide a built-up metallic stake having flange or flange and web portions so disposed and connected as to afford the necessary strength and economy of construction and also to provide means for enabling the parts to be readily secured together and to the car.

Other and further objects of the invention will appear from an examination of the drawings and the following description and claims.

The invention consists in the features, combinations, and details of construction hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a car provided with my improved stakes employed as side and end stakes; Fig. 2, a side elevation of my improved stake; Fig. 3, a view in elevation of the stake shown in Fig. 2 looking in the direction of the arrow; and Fig. 4 a transverse sectional view of the stake, taken on line 4 of Fig. 3.

In constructing my improved stake for cars I provide a pair of angular members *a*, made, preferably, of commercially-rolled steel in the form of angle-irons and adapted to form the centrally-disposed web portion and securing-flange portions of the stake. These angle-irons or angular members are so disposed that their flange or web portions *b* extend in parallel relation to each other, and their flange

portions *c* extend outward from such parallel flange or web portions in opposite directions and in alinement with each other, being provided with perforations *d* for admitting bolts or rivets *e* for securing such stakes to the side sills or to the ends of the bolster or transverse bearers or any other desired portion of the supporting-framework of the car and to the side or end boards, whether of metal or wood.

A reinforcing member in the form of an angle *f*, which is T-shaped in cross-section and preferably formed of rolled steel, is provided, having a flange portion *g* arranged between the parallel web or flange portions of the angle-irons above described and forming a filler therebetween, and integral flange portions *h* of such T-shaped reinforcing member extend in opposite directions at an angle to its filler or web portion, forming outer flanges for the stake. The flange or web portions *b* of the angle-irons *a* are secured together by means of a series of rivets *i*, which extend through such parallel flange or web portions and through the central filler or web portion *g* of the T-shaped reinforcing member. These T-irons preferably extend from the bottom of the stake to a point above the center thereof, but not entirely to the top of the stake, a filler *j* being mounted at the upper end of each stake between the parallel flange or web portions and secured in place by means of one or more rivets *k*. The parallel flange or web portions *b* of the angle-irons *a* thus form the central double-web portion of the complete stake and serve to connect the flange portions formed at the outer edge of the stake by the reinforcing T-shaped angle-iron with the securing-flanges *c*, all forming a stake having a central double web and flanges extending in opposite directions from both the outer and inner edges of the stake. By this arrangement it will be readily seen that the flange portions of the stake are so arranged as to provide the necessary strength or resistance in the direction of the lines of stress and strains to which the stake is subjected in use and that the minimum amount of material is required consistent with the required strength. It will also be seen that the built-up stake above described may be formed of commercially-rolled steel angle members and may be employed either as a side or end stake for cars and that it is adapted to be readily attached to the side or end boards and to the side or end sills or to the



ends of the bolsters or transverse bearers or any other desired part of the supporting-framework of the car.

I claim—

1. A stake for cars having metallic angular members forming parallel web portions and having flange portions extending in opposite directions from such parallel web portions at an angle thereto, and a reinforcing member provided with a filler portion extending between such parallel web portions and secured thereto and having flange portions extending at an angle to the parallel web portions.

2. A stake for cars having metallic angular members forming parallel web portions and having flange portions extending in opposite directions from such parallel web portions at an angle thereto, and a reinforcing member T-shaped in cross-section extending between such parallel web portions and secured thereto and having integral flange portions extending in opposite directions at an angle to the parallel web portions.

3. A stake for cars having metallic angular members forming parallel web portions and having flange portions extending in opposite directions from such parallel web portions at an angle thereto, a reinforcing member T-

shaped in cross-section extending between the parallel portions of such angular members and longitudinally of the stake throughout a portion of its length, and a filler member mounted between the parallel portions of the angular members beyond the end of such T-shaped reinforcing member.

4. In a stake for cars, the combination of a plurality of angular members having perforated flange or web portions arranged in parallel relation, an integral flange portion extending at an angle to each of such parallel perforated portions and provided with perforations therethrough for receiving bolts or rivets for securing such members to the car, a reinforcing metallic member T-shaped in cross-section extending between such parallel perforated portions and provided with integral flange portions extending in opposite directions at an angle to such parallel perforated portions, and a series of rivets extending through such parallel portions and through the portion of the T-shaped reinforcing members therebetween.

EDWARD POSSON.

Witnesses:

HARRY I. CROMER,  
NORMAN A. STREET.