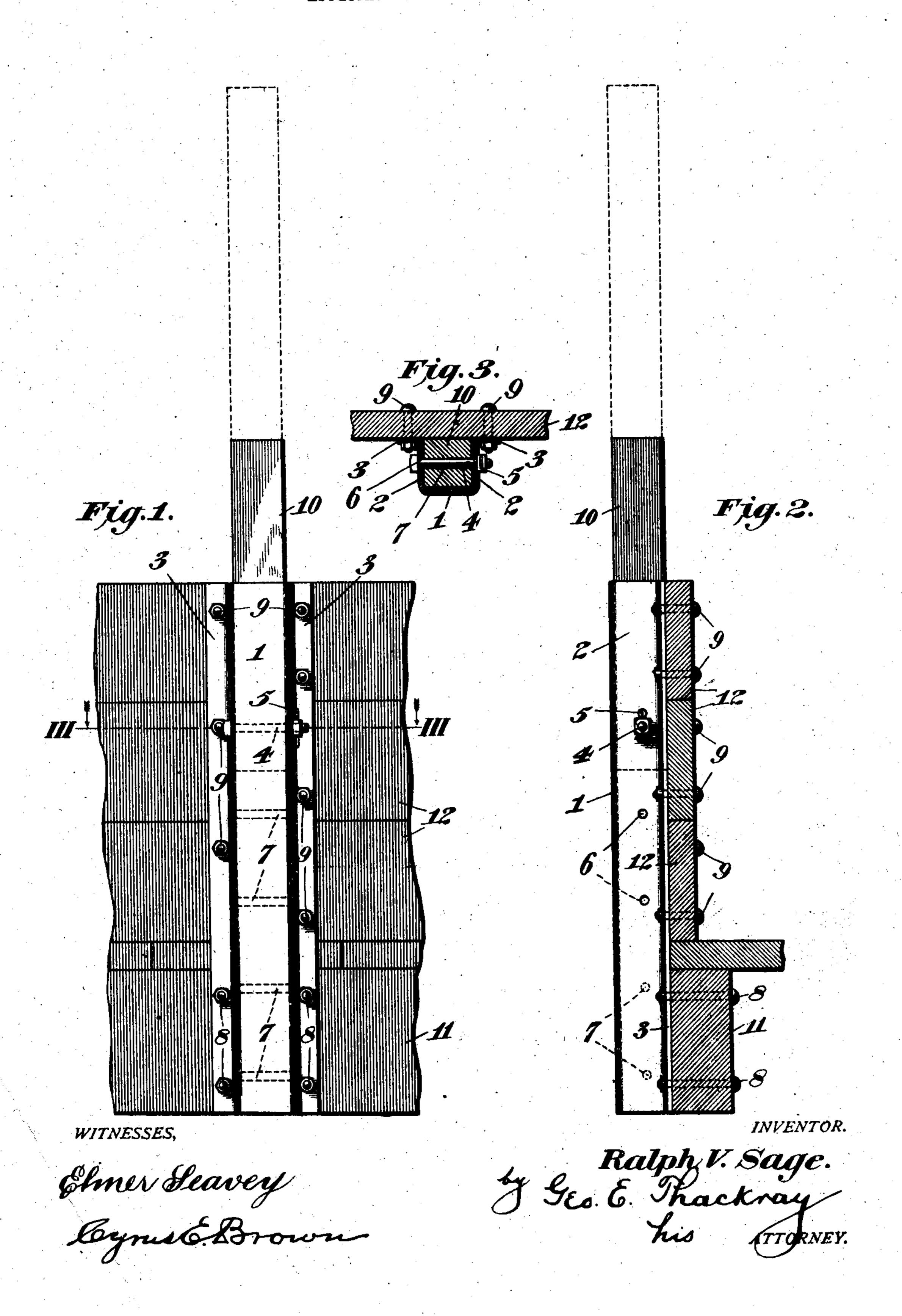
R. V. SAGE.

ADJUSTABLE CAR STAKE.

APPLICATION FILED AUG. 27, 1906.



NE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

RALPH V. SAGE, OF WESTMONT, PENNSYLVANIA.

ADJUSTABLE CAR-STAKE.

No. 834,413.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, RALPH V. SAGE, a citizen of the United States, residing in the borough of Westmont, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Adjustable Car-Stakes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists in general of a carstake which is adapted both for stiffening and supporting the permanent car sides and for projecting above same to retain light or bulky lading, such as lumber, bark, structural material, or any other kind of goods which extend above the side of the car.

My invention is particularly adapted for use on what is known as "gondola" cars, and for the sake of simplicity in description I will confine my illustration and specification to this form, although my improved stake may be used on other cars.

25 My invention in general consists of an exterior hollow stake or envelop, which may be made of pressed or rolled metal, fastened to the car-sill or underframing of the car, the car sides in turn being secured to said hollow stake. Inside of this envelop is arranged an extension-stake composed of a rectangular piece of wood or other material, which can be adjusted to any height desired within its limits.

The envelop portion of my stake, as herein illustrated, is substantially trough-shaped in section, with outwardly-extending flanges, by means of which attachment is made with the sides and sill of the car, the cross-section of 40 the envelop or body portion of said stake being substantially square or rectangular, with slightly-rounded corners and with integral flanges projecting from the sides thereof. This exterior stake or envelop serves to 45 stiffen and maintain the car sides in position and at the same time retains the extensible portion both in its lowered and in its extended positions. Means are also provided for securing the extended portion of the stake at 50 various heights.

Having thus given a general description of my invention, I will now in order to make the matter more clear refer to the annexed sheet of drawings, which forms part of this specification, and in which like characters refer to like parts.

Figure 1 is a side elevation of a portion of a wooden gondola car, showing my improved stake in its lowered position, the dotted lines indicating its location when raised to full 60 height. Fig. 2 is a vertical cross-section through the side of a car, showing my stake in side elevation, the extensible portion in this figure being also shown in its lowered position and the full height indicated by dot-65 ted lines. Fig. 3 is a horizontal cross-section on the line III III of Fig. 1.

Referring now to the various characters of reference on the drawings, 1 is the exterior portion or envelop of my stake, which is composed of a hollow trough-shaped section with integral side flanges projecting therefrom, which is secured to the car-sill 11, as shown, by means of bolts 8 8 passing through the flanges 3 thereof, and the sides of the car 12 12 75 are secured to said stake by the bolts 9 9, which pass through the upper portion of the flanges 3, as indicated.

4 is a bolt which is passed through one of the holes 6 6 in the sides 2 of the trough- 8c shaped stake and through one of the corresponding holes 7 7 in the adjustable stake 10 for the purpose of securing the latter in various positions as desired, while 5 is a cotter for holding said bolt in place in order to pre- 85 vent its loss.

It will thus be seen that my improved stake combines a fixed stake of trough section attached to the car-sill and supporting the car sides and a movable stake slidably 90 mounted therein which in its extended position will serve to retain higher and bulky ladings. When the movable portion of my stake is in its lowered position, it also serves to strengthen or reinforce the hollow or 95 trough-shaped portion, thus making it of extra strength.

Although I have shown, illustrated, and described my invention in connection with a wooden gondola car, I wish it understood 100 that it is equally applicable to metal cars, the only change required being in the length and arrangement of the fastening bolts or rivets.

I make the exterior portion or envelop of my car-stake of trough-shaped section open 105 on one side, as this is a particularly strong form and one that is capable of being rolled of iron or steel or pressed from a single plate or sheet of metal.

Although I have shown and described my 110 improvements in considerable detail, I do not wish to be limited to the exact and spe-

cific details shown and described, but may use such substitutions, modifications, or equivalents thereof as are embraced within the scope of my invention or as pointed out 5 in the claims.

Having thus given a general description of my invention, what I claim, and desire to se-

cure by Letters Patent, is—

1. A car-stake comprising a trough-shaped 10 section with substantially parallel sides having integral flanges projecting therefrom, means for securing same to the car-sill and means for securing the car side thereto through the flanges aforesaid, an adjustable 15 stake of substantially rectangular cross-section mounted within the opening of the trough-shaped stake aforesaid and means for securing said adjustable stake in various positions therein, as desired.

2. An adjustable car-stake comprising a metallic trough-shaped section with substan-

tially parallel sides having integral flanges projecting therefrom, means for securing same to the car through the flanges aforesaid, an adjustable stake of substantially rectan- 25 gular cross-section slidably mounted within the opening of the trough-shaped stake aforesaid, holes in the side of said trough-shaped stake and corresponding holes in the body portion of the adjustable stake adapted to 30 register with the said holes in the troughshaped stake, a bolt adapted to pass through said registering holes whereby the adjustable stake may be held in various positions as desired.

In testimony whereof I hereto affix my signature in the presence of two witnesses.

RALPH V. SAGE.

Witnesses:

Cyrus E. Brown, ELMER SEAVEY.