

(No Model.)

C. J. A. SAUGMAN & S. HANSEN.
WAGON REACH PROTECTOR

No. 432,084.

Patented July 15, 1890.

Fig. 1.

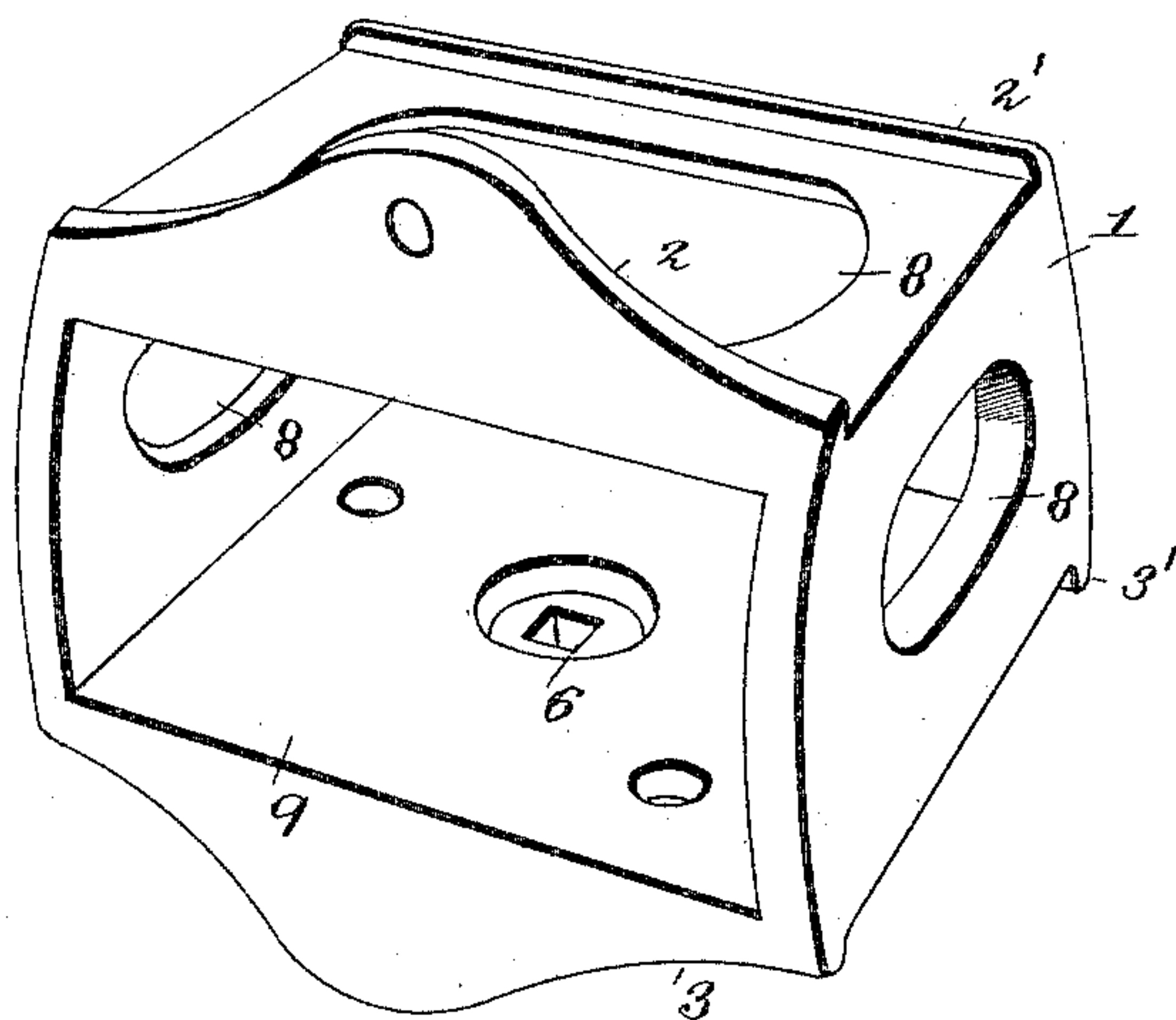


Fig. 2.

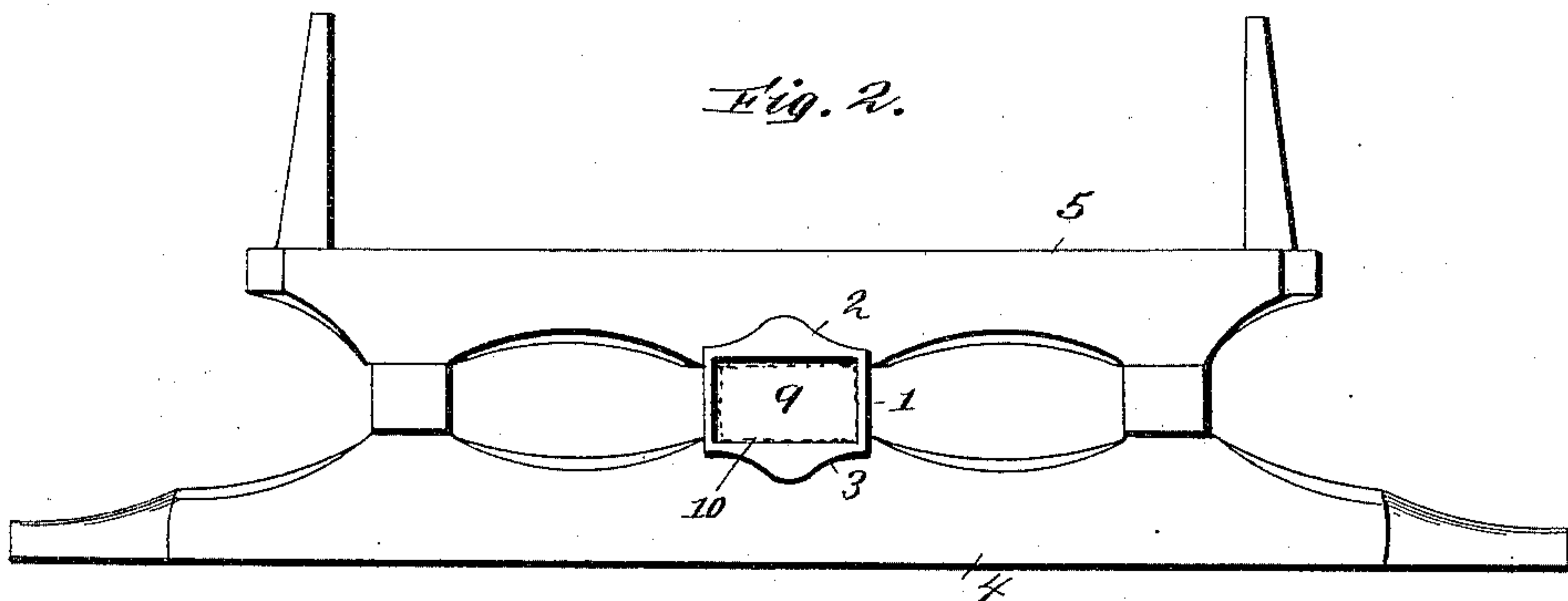
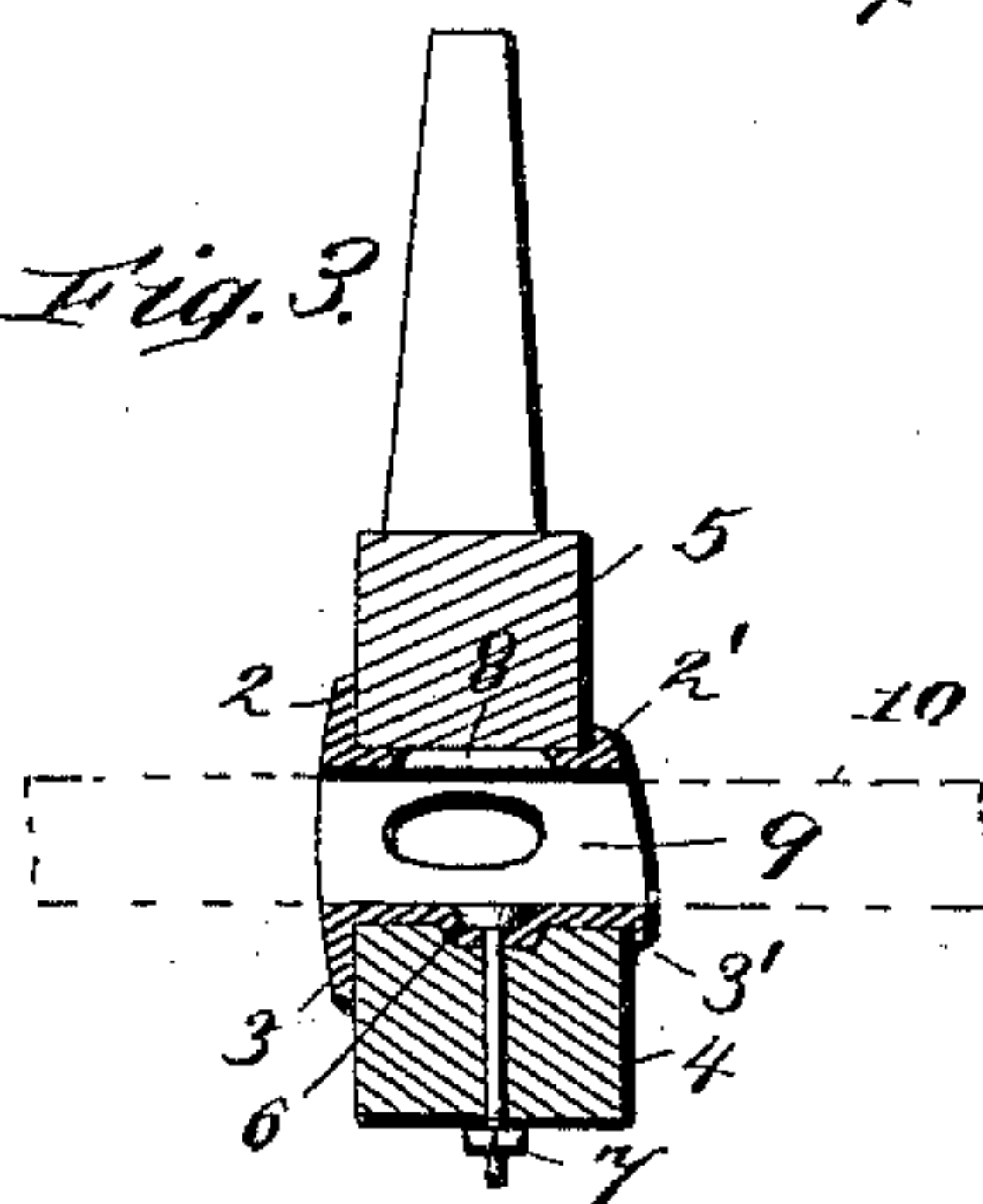


Fig. 3.



Witnesses
C. J. A. Saugman
J. E. Turpin

Inventors
Christian J. A. Saugman &
Soren Hansen
by James Sheehy Attorney

UNITED STATES PATENT OFFICE.

CHRISTIAN J. ADOLPH SAUGMAN AND SOREN HANSEN, OF RACINE,
WISCONSIN.

WAGON-REACH PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 432,084, dated July 15, 1890.

Application filed April 10, 1890. Serial No. 347,325. (No model.)

To all whom it may concern:

Be it known that we, CHRISTIAN J. ADOLPH SAUGMAN and SOREN HANSEN, citizens of the United States, residing at Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Wagon-Reach Protectors; and we do 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.

In wagons which can be coupled at different lengths—that is, with the axles farther apart or closer together—the constant shaking or moving of the coupling pole or reach within the opening, where it passes loosely between the hind axle and the bolster wears the axle and bolster more or less, and the more that the parts are worn the more play is given to the pole or reach, and every jar or movement of the wagon in traveling, and especially over rough roads, causes the parts to wear the faster, besides permitting them to rattle and add to the noise made by the wagon. To avoid this we have invented a protector, which is fitted between the axle and bolster and is provided with an opening through which the pole or reach passes, and which will prevent any wear upon them, and will also present such a surface to the pole that but little wear will take place on it.

The particular construction and use of our improvement will be hereinafter more particularly set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of our improved protector. Fig. 2 is a rear view of an axle and bolster provided with the protector, and Fig. 3 is a vertical cross-sectional view of the same.

Our improved wagon-reach protector consists of a rectangular casing 1, made in a single piece, having a top and bottom flange 2 2' and 3 3' at each end, the flanges at the rear end being extended to give a neater appearance to the wagon when the protector is applied. The length of the protector is such that the flanges will project over the edges of the axle 4 on one side and over the bolster 5 on the other side, which affords a secure means of

attachment; but, as an additional means, a hole 6 can be made through the bottom of the protector, through which a bolt 7 is passed into and through the axle. The hole is preferably countersunk in the bottom of the protector to prevent the head of the bolt from interfering with the pole or reach.

The top and side walls of the protector may be provided with openings 8, which will make it lighter without unnecessarily weakening it or detracting from its usefulness.

The front end of the protector is a trifle inclined, to make it conform to the difference in width of the axle and bolster between which the protector is clamped or held, although this is unimportant.

The walls of the protector are preferably arranged at right angles to each other, which leaves a rectangular opening 9, through which the pole 10 (shown only in dotted lines) passes. This opening is of such a size in cross-section that the pole will fit snugly within it and can be moved back and forth without binding.

Our protector can be made cheaply, as it can be cast in a single piece, and it can be applied to the vehicle without any change whatever, unless it be desired to bore a hole through the axle for the bolt 7 and to slightly recess the axle and bolster to fit down over the sides of the protector to prevent it from moving longitudinally on the axle.

Having described our invention, what we claim is—

The improved reach-protector described, formed from a single piece of material and having at its forward, upper, and lower ends the flanges 2 and 3, and on its opposite upper and lower ends the shallow flanges 2' and 3', and also having in its bottom a countersunk hole 6, to register with a hole through the axle and receive a bolt, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

C. J. ADOLPH SAUGMAN.
SOREN HANSEN.

Witnesses:

WALTER JOHNSON,
PETER SAUGMANN.