

T. H. SYMINGTON.  
DRAFT SEAT.  
APPLICATION FILED NOV. 10, 1914.

1,167,130.

Patented Jan. 4, 1916.  
2 SHEETS—SHEET 1.

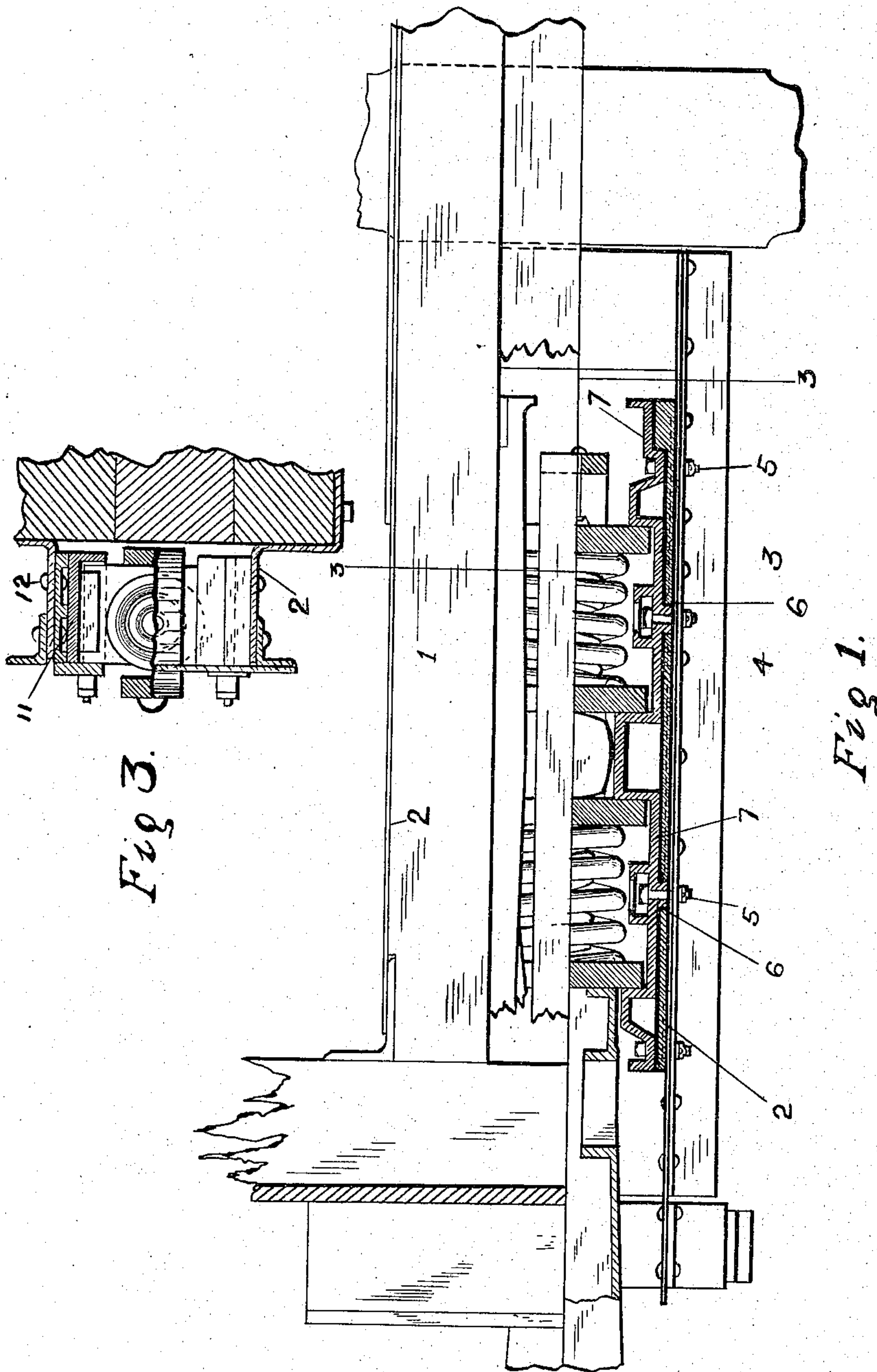


Fig. 3.

Fig. 1.

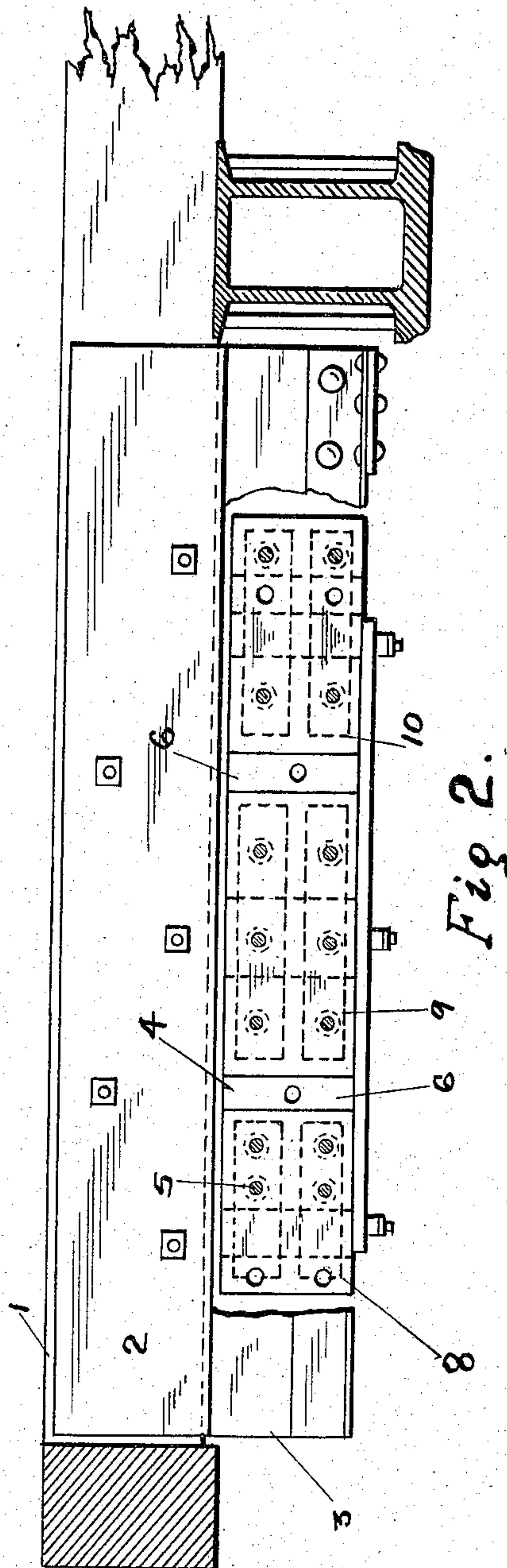
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Stuart M. Yeatman

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# UNITED STATES PATENT OFFICE.

THOMAS H. SYMINGTON, OF ROCHESTER, NEW YORK.

## DRAFT-SEAT.

1,167,130.

Specification of Letters Patent.

Patented Jan. 4, 1916.

Application filed November 10, 1914. Serial No. 871,278.

*To all whom it may concern:*

Be it known that I, THOMAS H. SYMINGTON, a citizen of the United States of America, residing at the city of Rochester, county of Monroe, State of New York, have invented certain new and useful Improvements in Draft-Seats, of which the following is a specification.

To meet the new conditions of traffic constantly being presented in the way of increased weight of trains and power of locomotives, and at the same time to avoid excessive expense in replacing old cars, it is necessary to repair and reconstruct the old wooden underframes.

Under present conditions, wooden draft sills are not deemed serviceable and these are being replaced in wholesale quantities by metal draft plates. This results in an important saving to the railroads, but it is only a partial saving for the cheek plates constructed for use in connection with wooden draft timbers are not adapted for use with metal draft plates. This is due to the fact that in order to cause the cheek plates to hold firmly to the wooden sills, they must be formed with projecting lugs which are seated in corresponding grooves and rabbets in the sills. As no draft plate has been designed with which it is found practical to use these cheek plates, the latter have been discarded and replaced at an expense to the railroads which reduces in a very considerable degree the possible saving or profit which should result from the reconstruction of the underframe so that the old cars are rendered serviceable.

To the end that the old cheek plates used in connection with the wooden draft beams may be retained and used in connection with the new metal draft plates, I have provided means whereby the old cheek plates adapted for use with wooden draft sills are firmly seated upon the new metal draft plates so that they may be retained and used to the very best advantage in connection with the metal draft plates applied to the wooden underframe cars, whereby the wooden draft sills are replaced and the cars reinforced.

In order that my invention and the method of applying and utilizing it may be fully understood, I have illustrated in the accompanying drawings, an underframe and draft gear to which it is applied, in which—

Figure 1 is a view, half in top plan and

half in horizontal section of a draft arm to which the invention is applied; Fig. 2 is an elevation of a cheek plate to which the filler blocks are applied, showing their relation to each other when in operation; and Fig. 3 is a section on the line 3, 3 of Fig. 1.

Referring to the drawings by numerals, each of which is used to indicate the same or similar parts in the different figures, the device illustrated includes wooden center sills 1 to which are secured draft plates 2 having depending fins or flanges 3 to which the cheek plates 4 are fastened, in this instance by means of bolts 5. To hold the cheek plates in position on the old-fashioned wooden draft sills, they are provided with projecting lugs 6 and recesses 7, upon which dependence is placed to hold the cheek plates in fixed relation to the wooden sills, but, as has been previously pointed out, rolled or similar metal beams or plates cannot be conveniently constructed to cooperate with such a cheek plate and it has been necessary on this account to discard large numbers of old cheek plates. In the present instance however, this difficulty has been overcome by building up the plate till it presents a seating surface like that of the wooden draft sill. To this end I secure to the draft plates one or more metal blocks 8, 9 10. These are secured to the draft plates adjacent the cheek plates. They are preferably made with a thin central web 11 which is pierced by suitable rivet holes and the blocks are fastened to the draft plates by means of rivets 12. These blocks are so formed as to enter the recesses in the cheek plates and so arranged as to provide a suitable seating surface for the cheek plates engaging the lugs 6 and the recess 7 to prevent longitudinal displacement of the plates, for with the old cheek plates intended to cooperate with the wooden sills, this was the function of the lugs and recesses and unless they are utilized in the remounting of the cheek plates, it is difficult or impossible to hold the cheek plates in position on the draft plates or sills.

Thus by providing a new seating surface for the draft plates adapted to cooperate with the peculiar form of cheek plates used in connection with the old wooden sills, I am able to utilize these cheek plates in the new form of end construction and accomplish an important saving by rendering the provision of new cheek plates unnecessary.



Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

1. In an end construction for cars, in combination, metal draft plates, cheek plates having on their back faces projecting lugs of the kind adapted to be used to cooperate with wooden draft sills and seating members secured to the draft plates forming seats for the lugs.

2. In an end construction for cars, wooden center sills, depending metal draft plates, cheek plates having on their back faces projecting lugs of the kind adapted to be used to cooperate with wooden draft sills, the cheek plates being secured to the draft plates and the latter having secured to their surfaces a seating member forming seats for the lugs on the cheek plates, the seating

member being between the cheek plates and the draft plates.

3. In an underframe construction for cars, in combination, wooden center sills, depending draft plates, cheek plates secured to the draft plates, the cheek plates having projecting lugs and recesses on their back or outer faces, seating members secured to the draft plates between the cheek plates and the draft plates, the seating members entering the recesses and forming seats for the lugs and serving to prevent longitudinal play of the cheek plates.

Signed by me at Rochester, New York, this 7th day of November, 1914.

THOMAS H. SYMINGTON.

Witnesses:

EDWIN J. MOHR,  
J. O. WRIGHT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."