

(No Model.)

C. T. SCHOEN.
DRAW BAR CARRIER AND FACE PLATE.

No. 487,779.

Patented Dec. 13, 1892.

Fig. 3

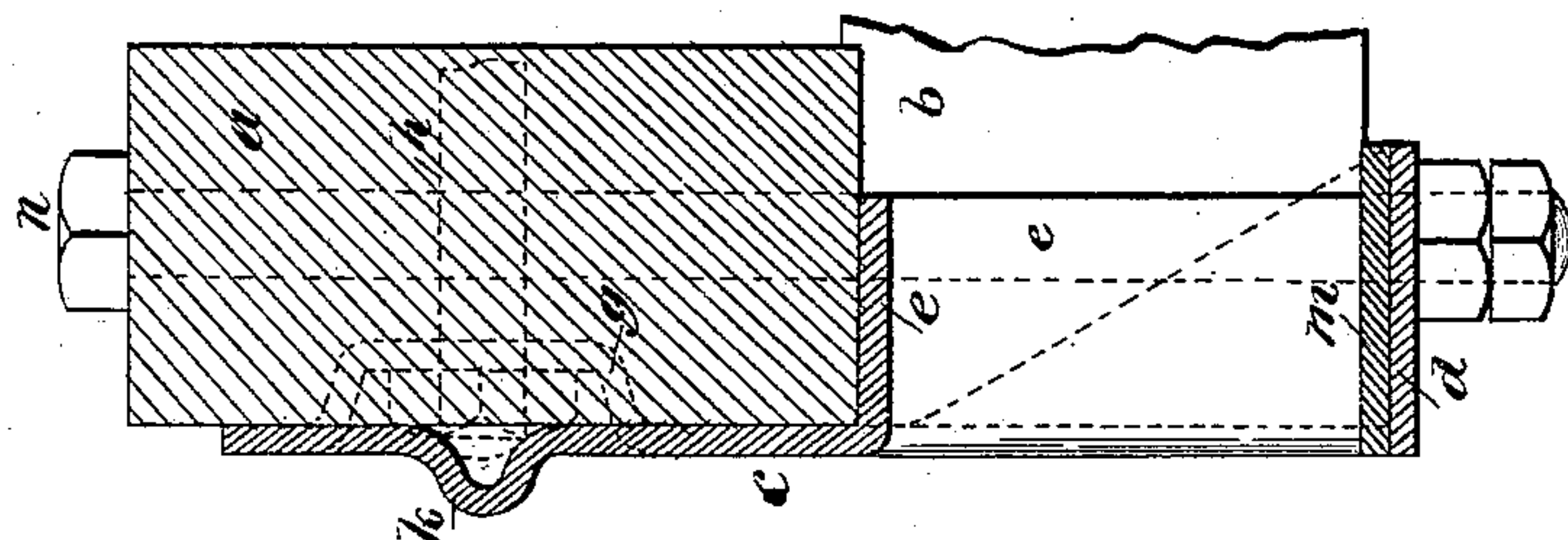


Fig. 2

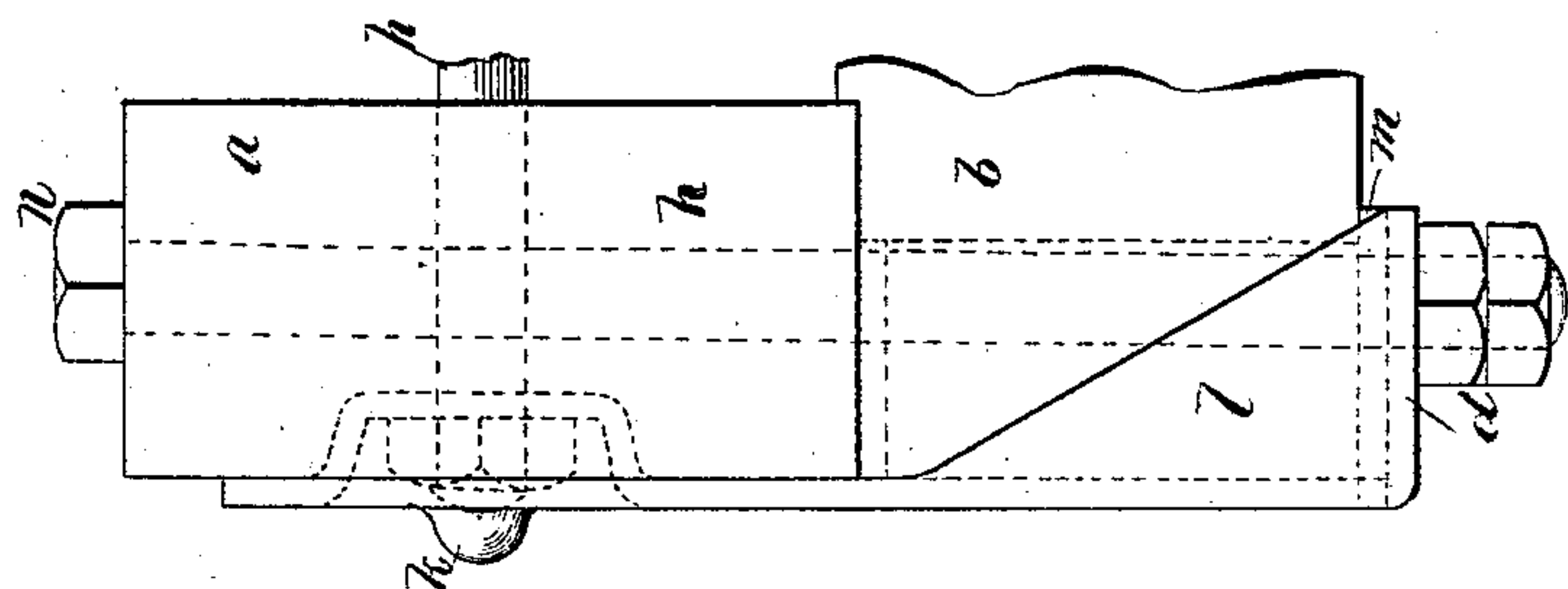
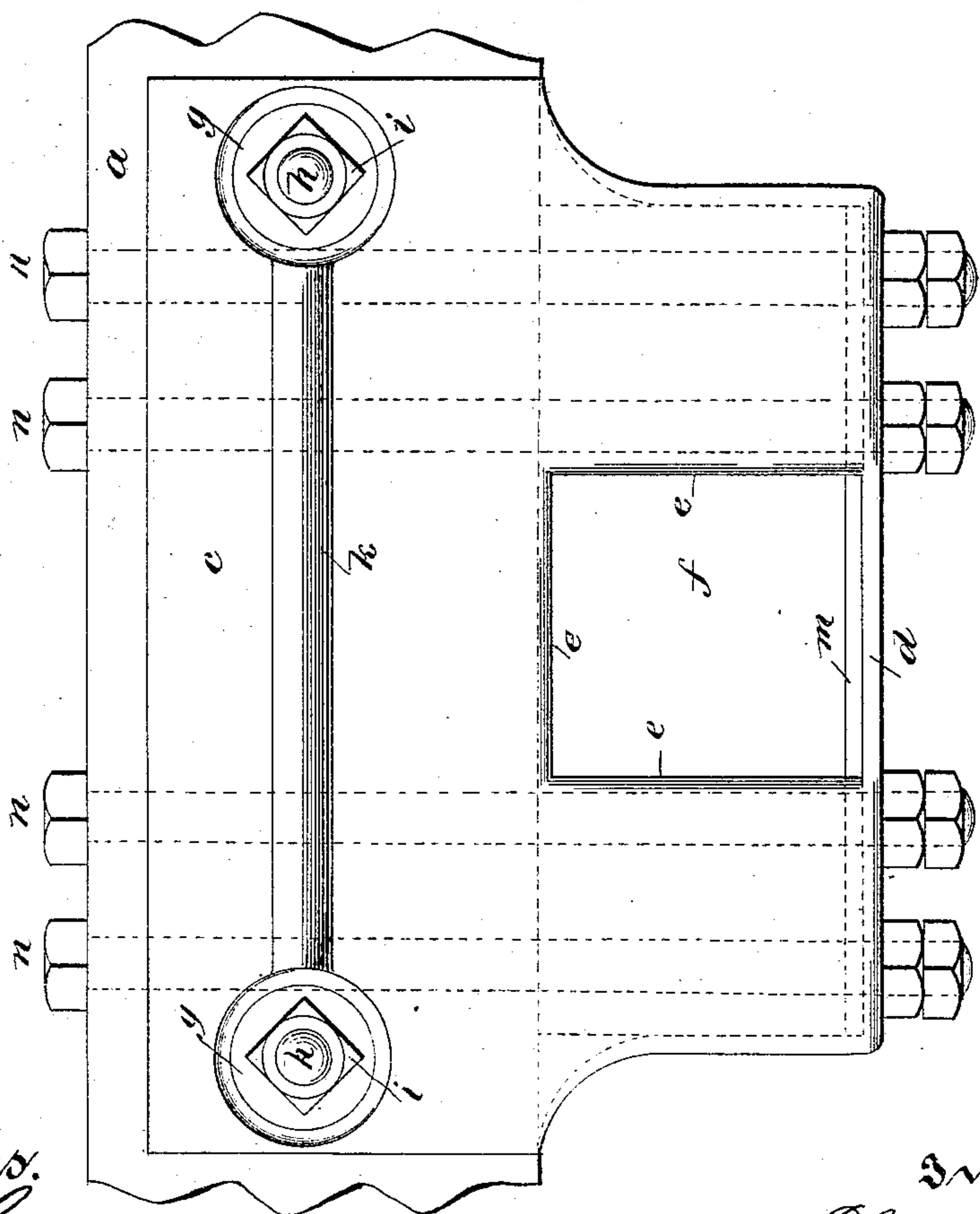


Fig. 1



Witnessed.

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UNITED STATES PATENT OFFICE.

CHARLES T. SCHOEN, OF ALLEGHENY, PENNSYLVANIA.

DRAW-BAR CARRIER AND FACE-PLATE.

SPECIFICATION forming part of Letters Patent No. 487,779, dated December 13, 1892.

Application filed September 28, 1892. Serial No. 447,111. (No model.)

To all whom it may concern:

Be it known that I, CHARLES T. SCHOEN, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Railway-Car Draw-Bar Carriers and Face-Plates, of which the following is a full, clear, and exact description.

10 This invention relates to the metal facings employed in connection with the front sill, draw-timbers, and draw-bar of railway-cars.

The invention consists of a face-plate for the front sill adjacent to the draw-head or coupling, a stirrup for the draw-bar, a chafing-plate for such draw-bar, and countersunk washers for the reception of the truss-rods and their nuts, all made in a single piece and fastened in position by the truss-rods and their nuts and the vertical bolts used to unite the draw-timbers and the front sill in ordinary freight-car construction.

25 The invention also consists in a renewable wear-plate laid on the stirrup, which takes the wear from the stirrup and is readily removed and replaced when necessary.

In the accompanying drawings, illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a front elevation; Fig. 2, a side elevation, and Fig. 3 a vertical section taken through the center of the draw-bar opening.

30 *a* designates the usual front sill, and *b* the usual draw-timbers, of a freight-car. Now my invention is applied to these timbers immediately adjacent to the draw-head or coupling; and it consists of a face-plate *c* applied to the front sill *a* and covering the ends of the draw-timbers *b*. The stirrup *d* is formed on the face-plate as a rearwardly-projecting bottom flange, and the chafing-plate *e* is constructed by punching or pressing back on three sides the metal of the face-plate to form the draw-bar opening *f*, and the countersunk washers or cups *g* are made in that portion of the face-plate designed to be applied to the front sill for the reception of the ends of the truss-rods *h* and their nuts *i*.

45 In order to stiffen the face-plate, I prefer to provide it with an outwardly or inwardly projecting cross-rib *k*, which may extend from washer to washer, as shown, or be located

elsewhere, as the requirements of service may demand. The sides *l* of the face-plate are flanged rearwardly to protect the outside corners of the timbers *b* and to assist in sustaining the stirrup. A wear-plate *m* is laid upon the stirrup to protect it against the excessive wear at this point consequent upon the use and motion of the draw-bar, and this wear-plate may be renewed easily and at slight cost at pleasure.

The device is applied to the car by means of the usual bolts *n* used to connect the sill *a* and timbers *b* and the truss-rods *h* and their nuts *i*, and no additional fastenings are necessary ordinarily. The adjacent sides of the draw-timbers may be notched to receive the chafing-plate. By this construction the force of lateral concussion in coupling on curves is transmitted to the truss-rods, and this, together with the side flanges *l*, greatly reduces the liability of splitting the draw-timbers from such concussion.

In a common construction there are five separate and distinct parts used which I have united in one structure by my invention, and each of these several old parts requires its own individual fastening. The advantages in making these several parts integral are many; but it will suffice to say that they may thus be applied by fastenings common to all, and hence at much less expense for time and labor, and, moreover, they serve, mutually, to support and stiffen one another, and, finally, the cost of production is considerably reduced.

While my device comprises in one piece or structure a face-plate, a stirrup, a chafing-plate, and washers for the truss-rods, for conciseness I refer to it as a draw-bar carrier and face-plate, meaning only to condense and simplify the title, without thereby putting a limitation upon the structure meant thereby.

My combined draw-bar carrier and face-plate may be die-shaped or pressed from sheet or plate steel or iron or other suitable metal, or may be produced in any other way—as, for example, it might be a casting, malleable or other kind. While I think the best results will follow from the use of steel in plate or sheet form shaped by dies or other machinery, I do not limit my invention thereto.

What I claim is—

1. A draw-bar carrier and face-plate for rail-

way-cars, comprising in a single structure a face-plate, a stirrup, a chafing-plate, and countersunk washers for the reception of the truss-rods, substantially as described.

5 2. A draw-bar carrier and face-plate for railway-cars, comprising in a single structure a face-plate extending crosswise of the front sill and downwardly over the ends of the draw-timbers and having an opening for the
10 draw-bar provided with a chafing-plate and a stirrup made as a rearwardly-projecting flange at the bottom of the face-plate, substantially as described.

3. A draw-bar carrier and face-plate for railway-cars, comprising in a single structure a
15 face-plate having countersunk washers for the reception of the ends of the truss-rods and their nuts, a longitudinal rib on said plate to stiffen it, a chafing-plate surrounding three sides of the draw-bar opening in
20 said face-plate, and a stirrup, substantially as described.

4. A draw-bar carrier and face-plate for rail-

way-cars, comprising in a single structure a face-plate having countersunk washers for
25 the reception of the truss-rods and their nuts, a chafing-plate, a stirrup, and end flanges to fit over the sides of the draw-timbers, substantially as described.

5. A pressed-steel combined draw-bar carrier and face-plate for railway-cars, comprising in a single structure a face-plate having
30 countersunk washers for the reception of the ends of the truss-rods and their nuts and extending downwardly to cover the ends of the draw-timbers and having an opening for the
35 draw-bar, a chafing-plate projecting rearwardly from such opening, and a stirrup, substantially as described.

In testimony whereof I have hereunto set
40 my hand this 27th day of September, A. D. 1892.

CHARLES T. SCHOEN.

Witnesses:

A. D. WILSON,

JAS. C. WILSON.