

No. 666,355.

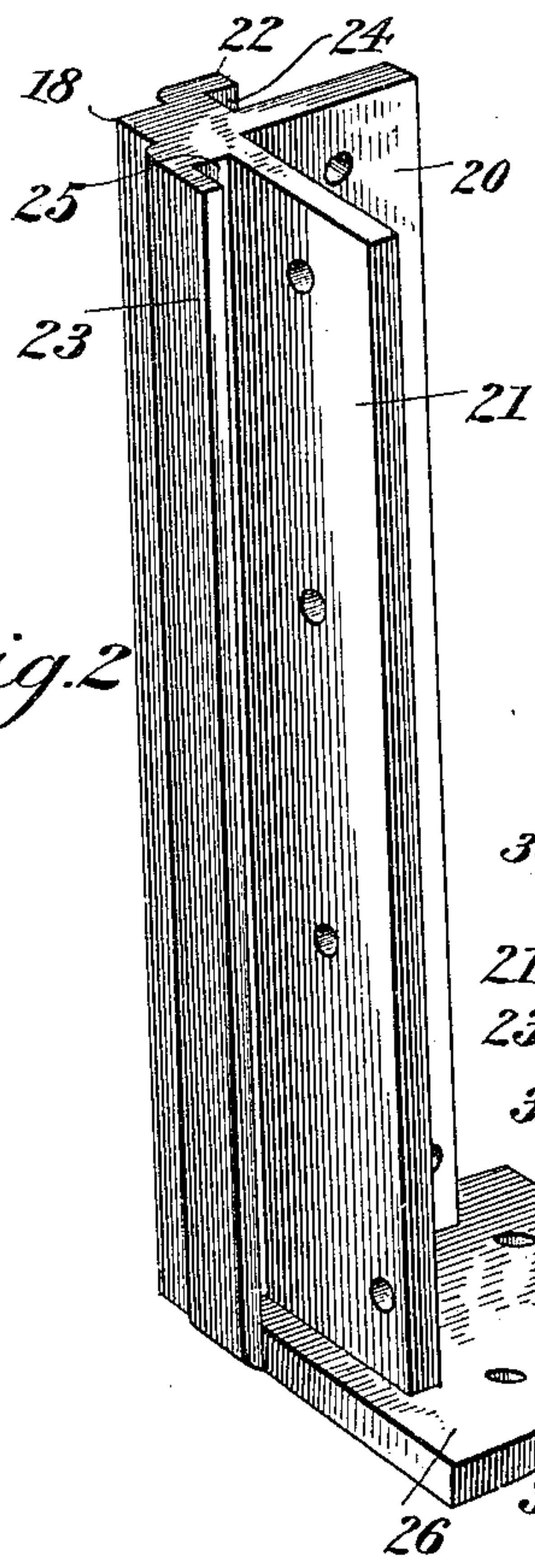
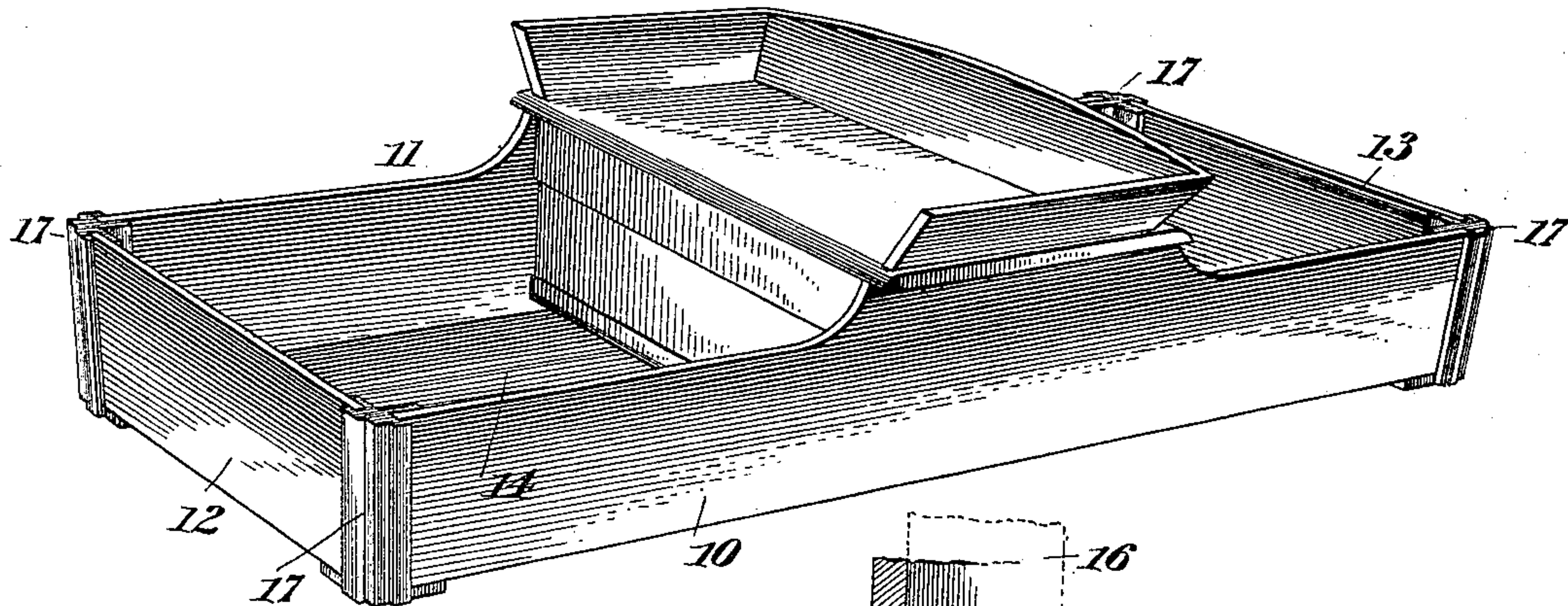
Patented Jan. 22, 1901.

W. W. RICHARDS.  
CORNER IRON FOR VEHICLE BODIES.

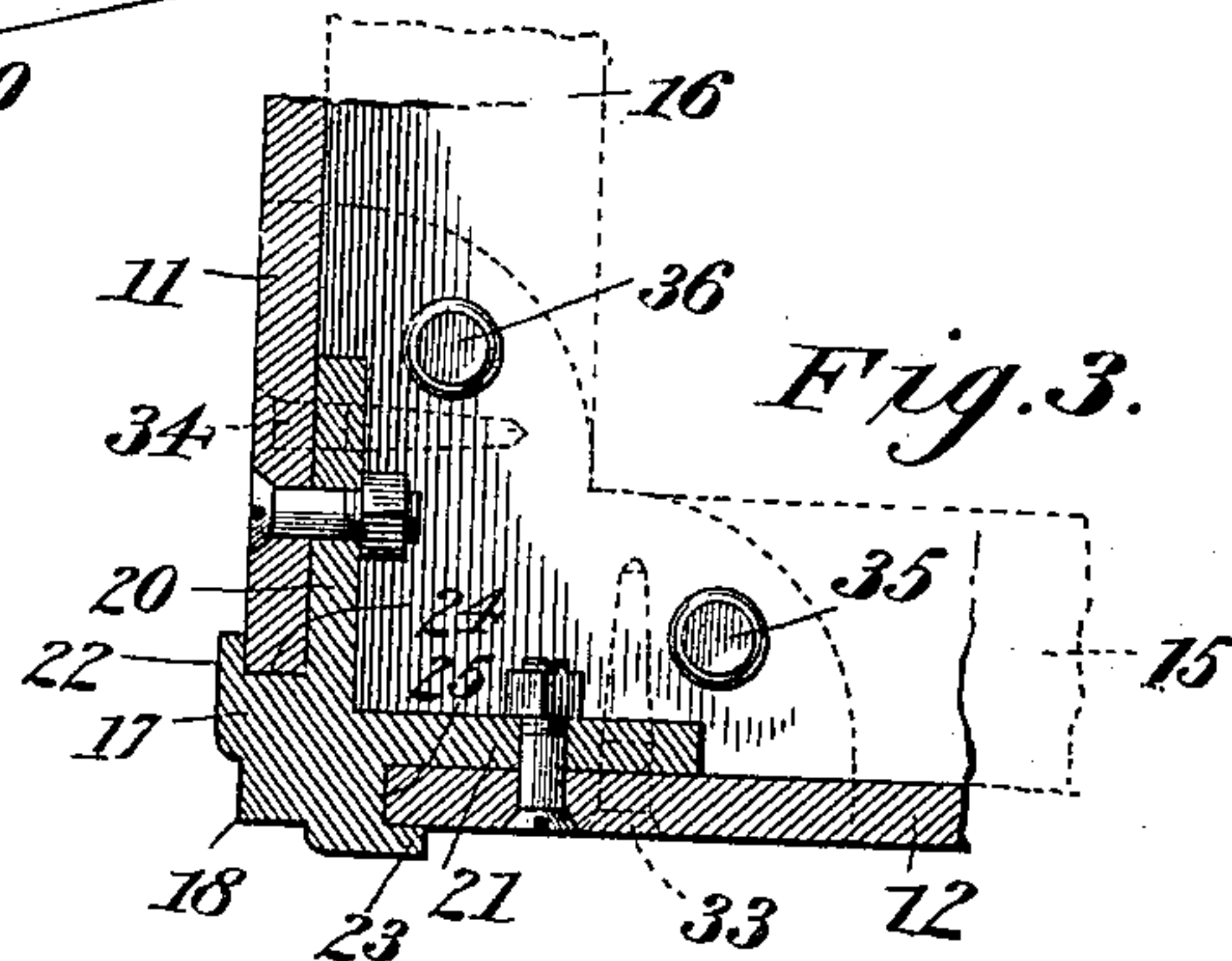
(Application filed Apr. 20, 1898.)

(No Model.)

*Fig. 1.*

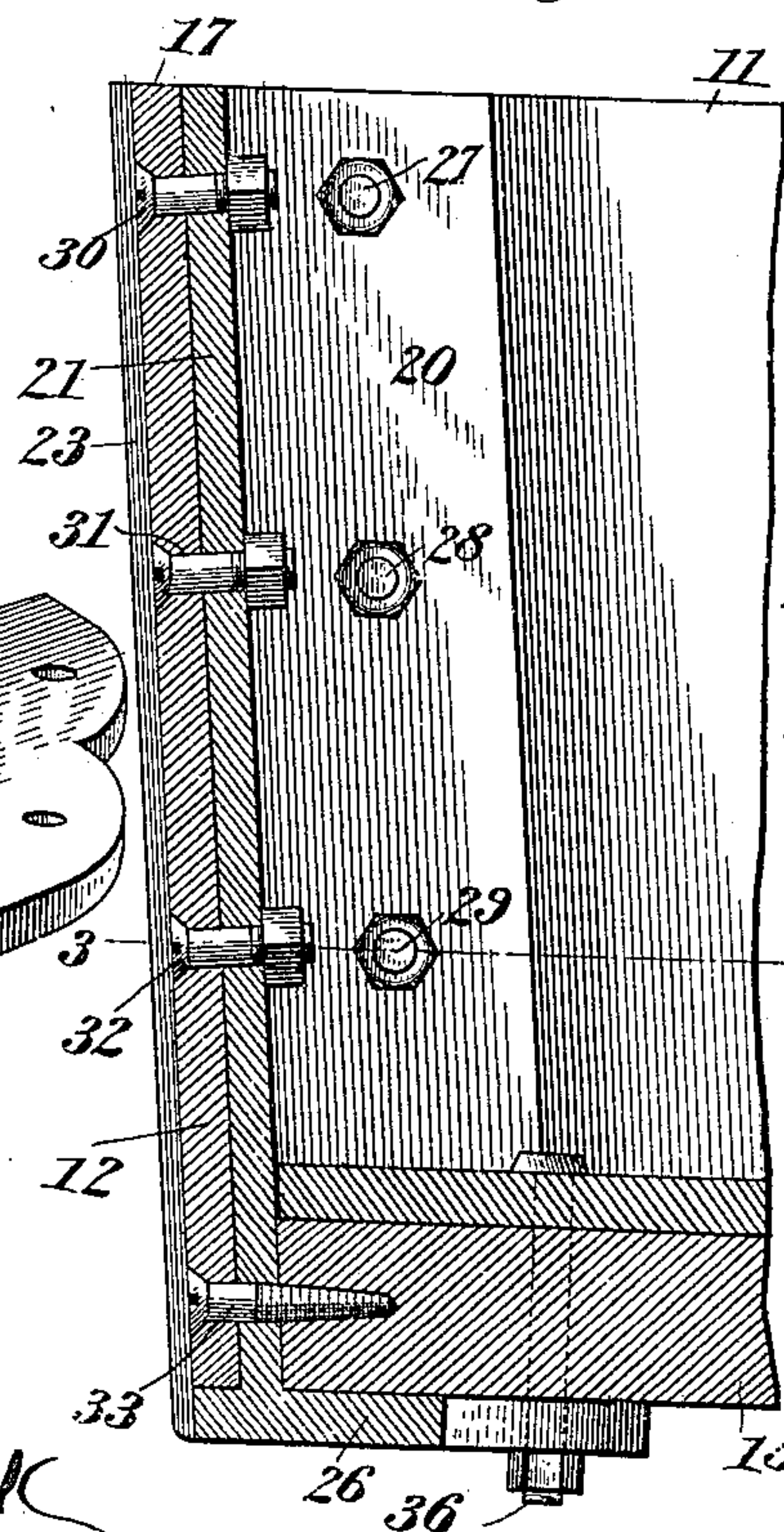


*Fig. 2.*

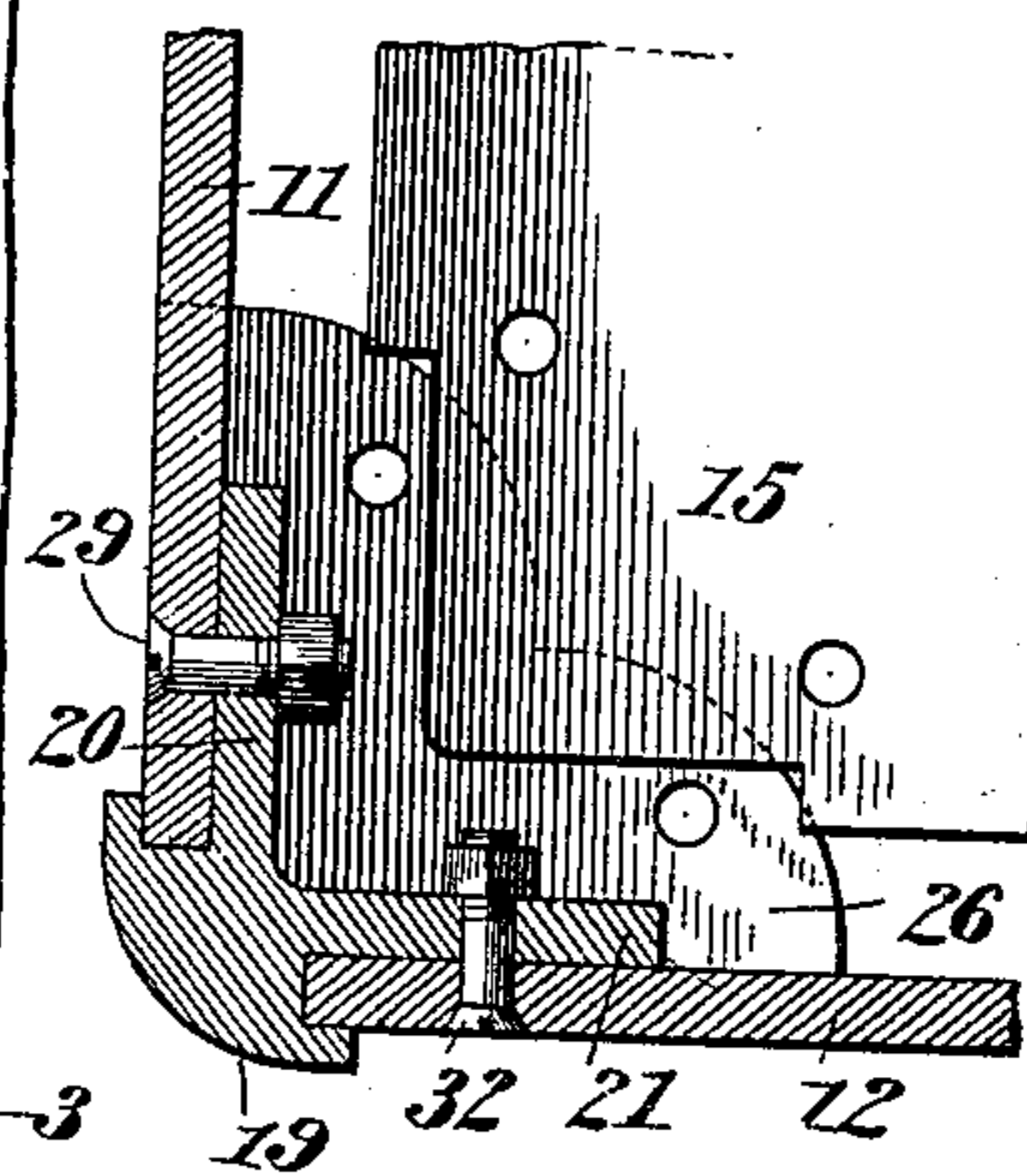


*Fig. 3.*

*Fig. 4.*



*Fig. 5.*



Witnesses

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# UNITED STATES PATENT OFFICE.

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## CORNER-IRON FOR VEHICLE-BODIES.

SPECIFICATION forming part of Letters Patent No. 666,355, dated January 22, 1901.

Application filed April 20, 1898. Serial No. 678,286. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM W. RICHARDS, a citizen of the United States, residing at Fremont, in the county of Mahaska and State of Iowa, have invented a new and useful Corner-Iron for Vehicle-Bodies, of which the following is a specification.

My invention relates to bodies for vehicles, and more particularly to corner-irons therefor, the object of the invention being to provide corner-irons which while neat and tasty in appearance will firmly bind the sides, ends, floor, and sills together and greatly strengthen and stiffen the entire body, thereby economizing by lengthening the life of the structure.

With this object in view my invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically pointed out in the appended claims.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of a buggy-body provided with corner-irons constructed in accordance with my invention. Fig. 2 is a detail perspective view of one of my corner-irons detached. Fig. 3 is a horizontal sectional view through one corner of the body above the floor on the line 3 3 of Fig. 4, looking downward. Fig. 4 is a vertical sectional view through one of the ends of the body on a plane parallel with and a short distance from the side, looking toward the side. Fig. 5 is a view similar to Fig. 3, with the floor omitted and the sills and corner-iron slightly parted.

Like numerals of reference mark the same parts wherever they occur in the different figures of the drawings.

Referring to the drawings by numerals, 10 and 11 indicate the sides, 12 and 13 the front and rear ends, 14 the floor or bottom, and 15 and 16 the side and end sills, of a buggy box or body. The sills in this instance are located under the floor, and the sides and ends of the box are carried down until their lower edges

are flush with the lower edges of the sills. The sills, floor, sides, and ends are all connected together at each corner by a corner-iron 17, the principal subject-matter of this invention. This corner-block will preferably be cast of malleable iron and may have its outer corner or edge square, as shown at 18 in Figs. 1, 2, and 3, or rounded off, as shown at 19 in Fig. 5. From the main body of each corner-piece two flanges 20 and 21 project at right angles to each other, and when the blocks are in position in the box these flanges are inside, while outside are two flanges 22 and 23 parallel with the flanges 20 and 21, but not so wide, and separated from said flanges by grooves 24 and 25, into which are fitted the ends of the boards composing the sides 10 and 11 and ends 12 and 13 of the box.

In the detail Figs. 3, 4, and 5 the left hand forward corner of the box is illustrated, and as a consequence the side 11 and front end 12 are the parts engaged in the grooves 24 and 25 of the corner-iron in these figures. At the bottom of the corner-iron and formed integrally therewith is a horizontal flange 26, which passes under the boards composing the sides and ends of the box, and projecting farther inward than the width of these boards serves to support the junction of the side and end sills 15 and 16 at each corner. In the particular corner illustrated in Figs. 3, 4, and 5, as before stated, and which illustrations show but duplicates of the corresponding parts of the other corners, the flange 20 of the corner-iron is secured to the side board 11 by bolts 27, 28, and 29, provided with suitable nuts, while the end board 12 is secured to the flange 21 by bolts 30, 31, and 32, also provided with suitable nuts inside of the box, all of these bolts being countersunk into the outer surface of the side and end boards to permit of giving a proper finish to the outside thereof. The screws 33 pass through suitable openings in the end board 12 and flange 21 and into the sill 15, while a similar screw 34 passes through the side board 11 and flange 20 into the sill 16, as shown in dotted lines in Fig. 3. A bolt 35 passes through the floor, the sill 15, and the flange 26 of the corner-iron and is secured underneath the sill by a suitable nut, while a



similar bolt 36 passes through the floor, the sill 16, and flange 26 and is also secured by a suitable nut below the sill.

From the foregoing description it will be apparent that by the use of my improved corner-iron the sides and ends of the buggy or other vehicle box are securely fastened to each other and to the floor and sills, the whole structure being stiffened and strengthened, and accidental loosening or displacement by ordinary wear and tear is rendered impossible.

The corner-iron may be cheaply made and its construction is such that it may be easily and quickly secured in position, reducing the cost of labor in fitting up the box and producing an infinitely superior article to such boxes constructed without corner-irons.

While I have illustrated and described what I now consider efficient means for carrying out my invention, I do not wish to be understood as limiting myself to the exact details of construction shown and described, but hold that such slight changes or variations as might suggest themselves to the ordinary mechanic would properly fall within the limit and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. As a new article of manufacture, a corner-iron for vehicles, comprising a central portion and a base portion, the central portion being provided with two sets of parallel wings extending laterally therefrom at right angles to each other, the wings of each set being spaced from each other and the inner wing of each set being wider than the outer set and perforated, and the base extending upon both sides of the inner wing, the outer edges being at the inner walls of the outer wings and the inner portion being smooth and perforated.

2. As a new article of manufacture, a corner-iron for vehicles, comprising a body portion formed with two sets of vertically-disposed parallel wings, said sets being spaced from each other and the inner set being of greater width than the outer set and perforated, and a base-flange connecting the wings of the inner set and extending beyond the outer faces thereof and terminating at the inner faces of the outer set of wings, forming shoulders to support the lower edges of the side pieces of the vehicle-body, said base-flange being perforated, substantially as described.

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Witnesses:

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