

(No Model.)

J. T. WILSON.
Car Coupling.

No. 229,849.

Patented July 13, 1880.

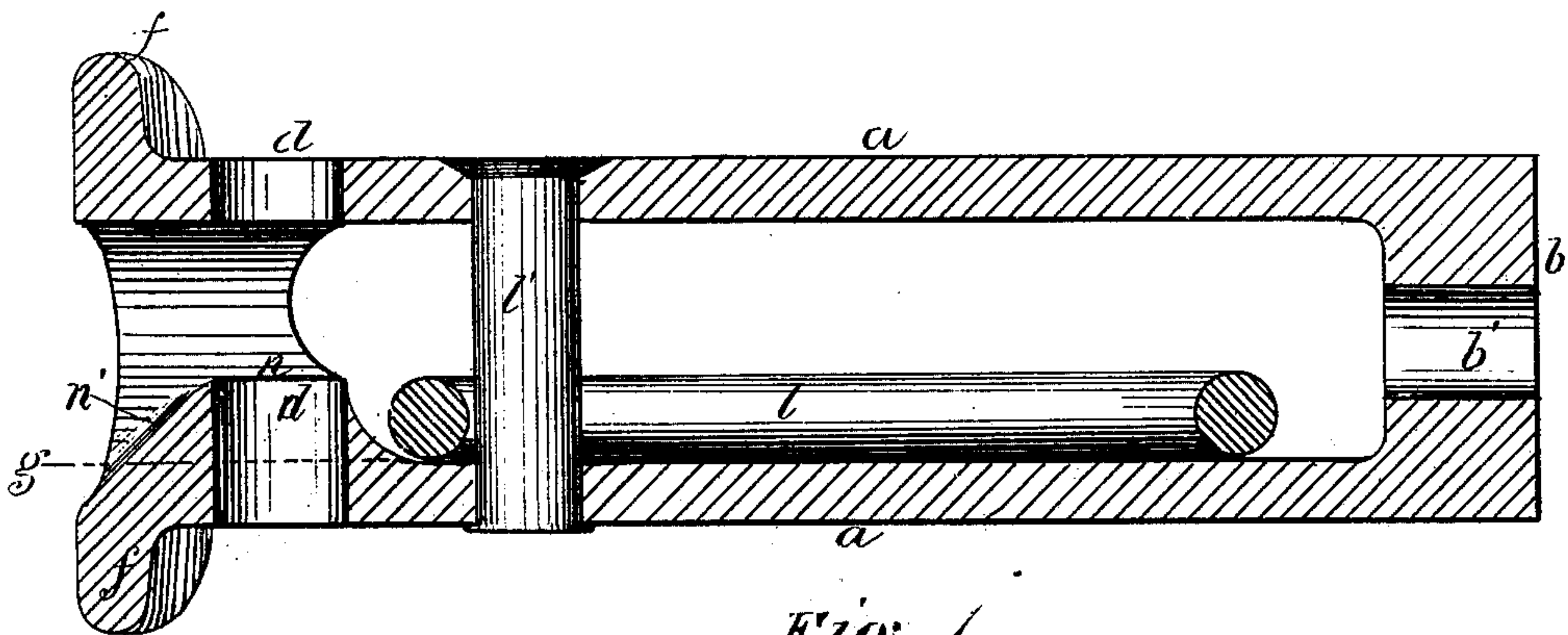


Fig. 1

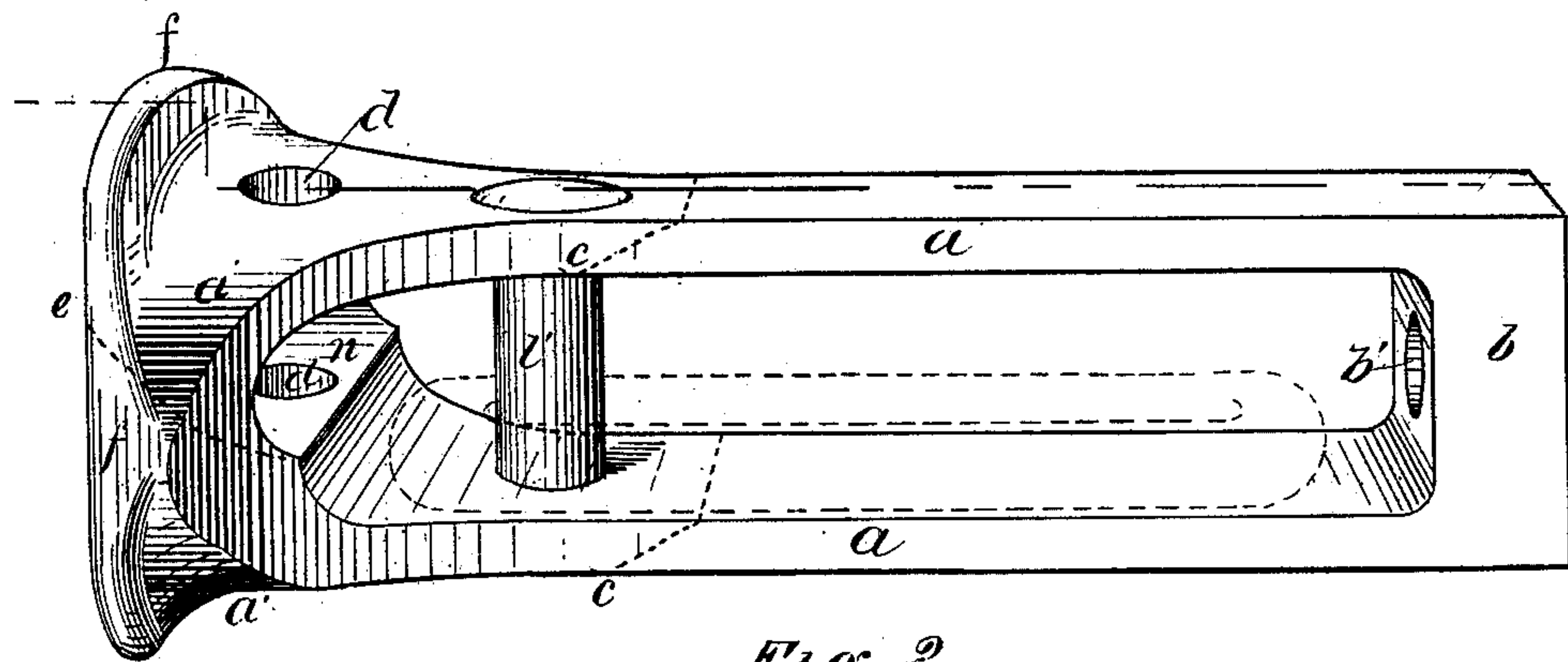


Fig. 2

Witnessed
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UNITED STATES PATENT OFFICE.

JOHN T. WILSON, OF PITTSBURG, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 229,849, dated July 13, 1880.

Application filed June 5, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. WILSON, of Pittsburgh, county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Draw-Heads and Couplers; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a longitudinal sectional view of a coupling embracing my improvement, and Fig. 2 is a perspective view thereof.

My present invention relates to a coupling and draw-head having the general features of the ordinary construction, but with certain improvements added, which better adapt it for the purposes for which it is intended.

As shown in the drawings, it consists of two uprights, *a*, which, with the rear perforated end, *b*, are forged in the usual way from an upright of suitable proportion, and then bent with scarf ends, as represented by the lines *c*, to the shape substantially as shown, a hole, *b'*, being punched in the rear end by which to make connection with the car-body.

The draw-head proper is forged between suitable dies in any of the ways known to the art, but for convenience in two pieces, the line or plane of division being represented by the line *e*.

In forging draw-heads of this description it has heretofore been usual to extend the uprights *a* of a uniform width up to their junction with flange-head, or "bull-nose," as it is sometimes called. Pin-holes *d* being then punched, the vertical plane which passes transversely through the draw-head and through the holes *d* indicates the plane of the least strength, and, in fact, the usual breaking-point of such devices.

To obviate this objection and secure the necessary strength at that point, I curve out the heavy fillets *a'* at the angle formed by the uprights *a* with the bull-nose, and extend them out until they meet the flanges *f* of the bull-nose, whereby I secure the desired strength at that point.

It has also been found that where the upper

surface of the lower upright is carried directly forward to its junction with the bull-nose, as represented by dotted lines *g* in Fig. 1, the distance between the bearing-points of the pin above and below is so great that the pin is liable to break, and also that when the link is hanging loose in one coupling its free end usually hangs too low to enter readily the opposite coupling, and also that in the operation of coupling the entering link is liable to strike and displace the extra or permanent link which usually is provided, as shown, at *l*, and which when in use draws by the post *l'*.

To overcome these objections in making the lower part of the bull-nose, I forge up what may be termed a "bridge," *n*, which I make preferably of the height equal to the thickness of the link *l*, though it may be made higher if so preferred. The lower end of the pin will pass through or back of this bridge, so that the length of pin subject to strain in the drawing of cars is lessened by an amount equal to the height of the bridge, and consequently the danger of breaking the pin is correspondingly lessened. Also, the bridge aids in holding the link in the position more nearly horizontal for purposes of coupling, and also, by its sloping forward face *n'*, aids in coupling, and still further protects the permanent link *l*, which is lying back of it. These parts of the coupling are forged or shaped in separate pieces by means of suitable dies, or in any of the ways known to the art, and are united by welding along the scarf-line *c c* and *e*, and the device being otherwise finished in the usual way it is ready for sale or use.

I claim herein as my invention—

A forged draw-bar and coupler containing fillets *a'*, extending from back of the pin-holes *d* to the periphery of the flange of the bull-nose, and a bridge, *n*, resting above the upper level of the lower upright in the path of the pin-hole, substantially as set forth.

In testimony whereof I have hereunto set my hand.

JOHN T. WILSON.

Witnesses:

R. H. WHITTLESEY,
C. L. PARKER.