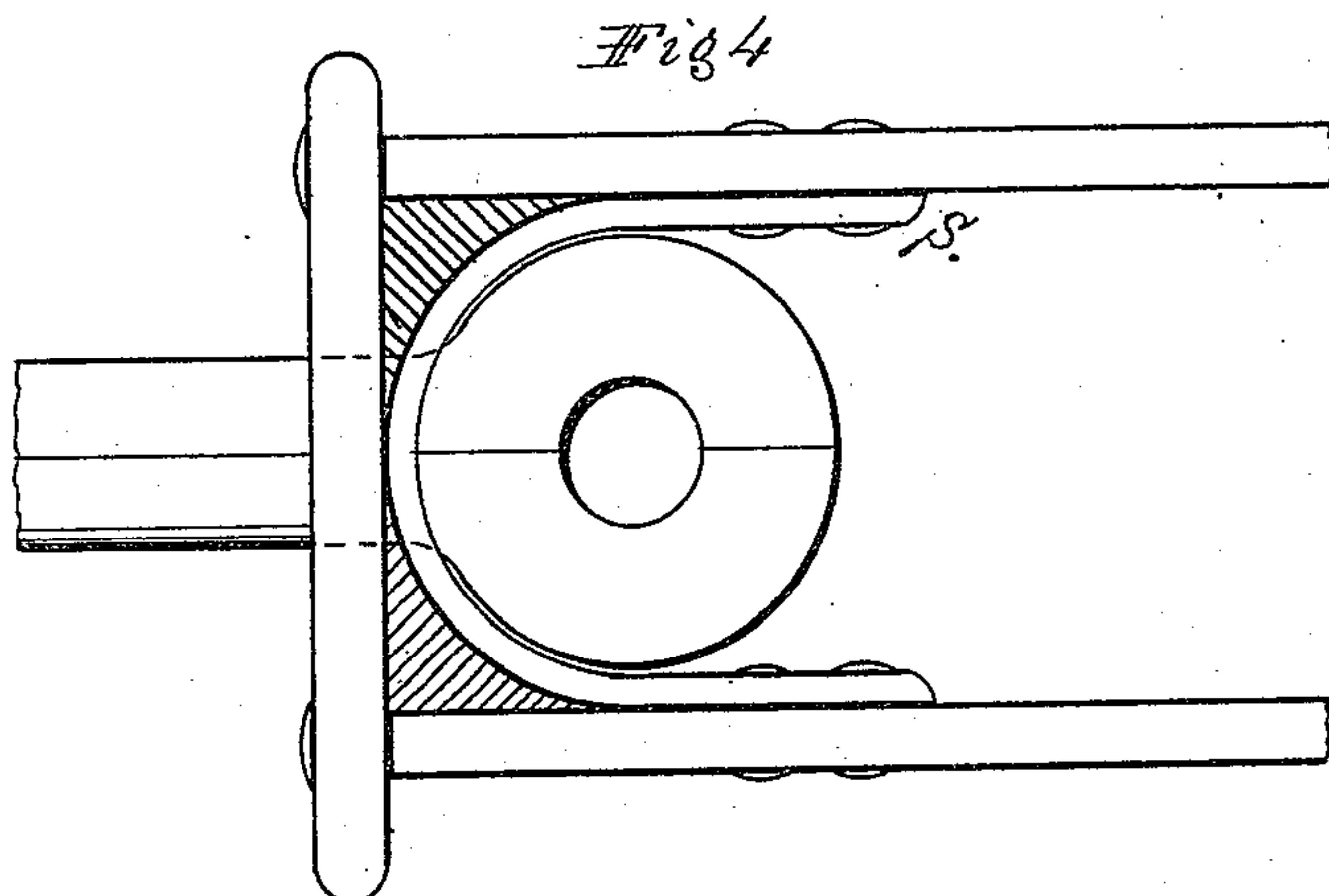
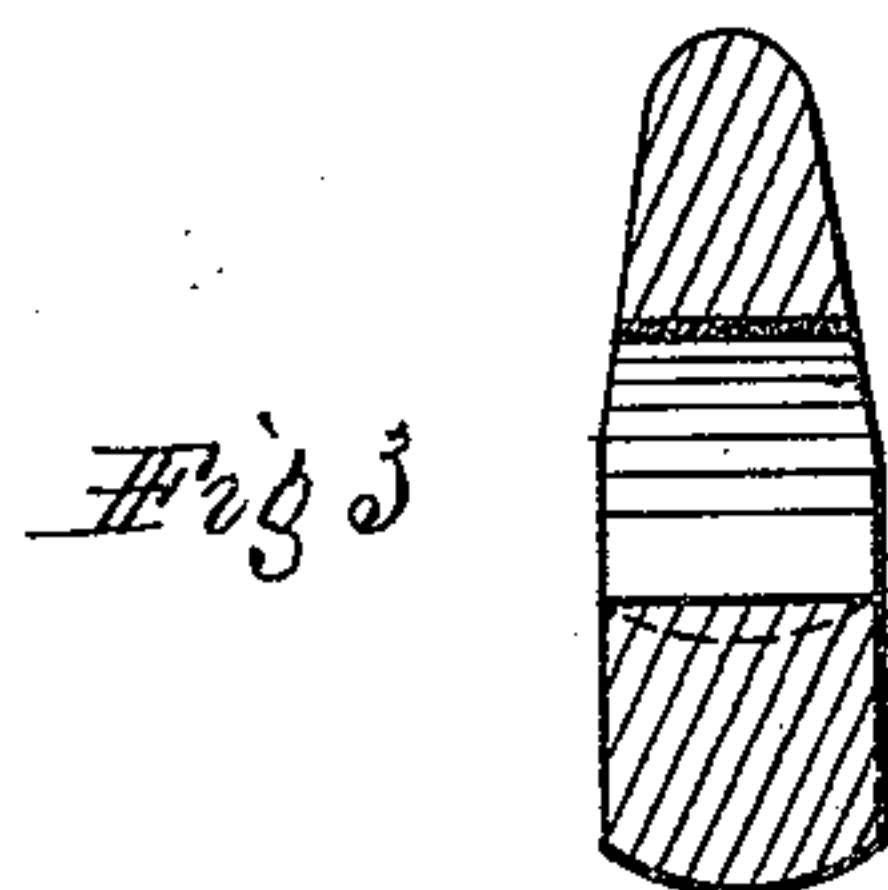
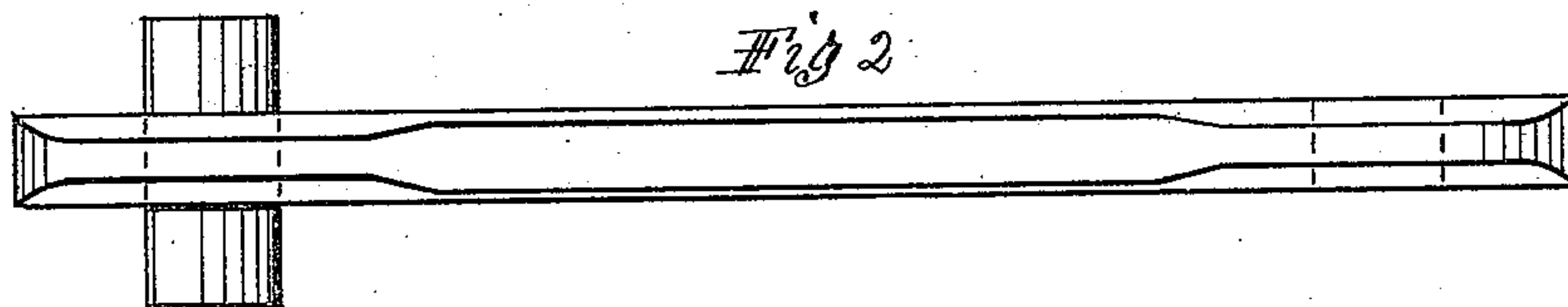
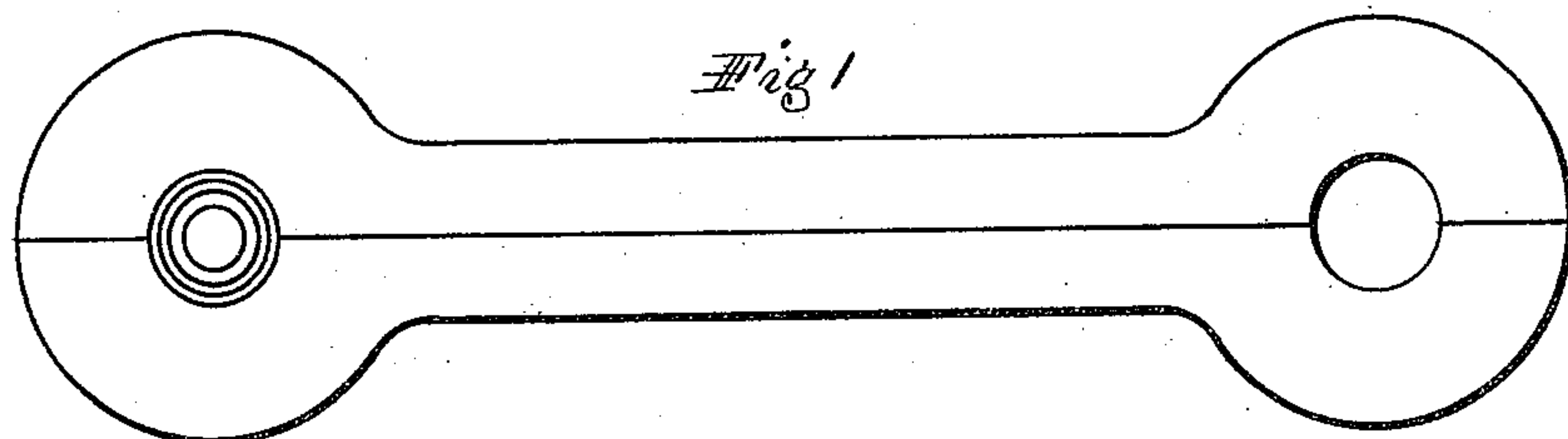


(No Model.)

W. S. SAMPSON.
Car Coupling Link.

No. 229,917.

Patented July 13, 1880.



Witnesses.
Homer S. Beardsley
Edw. H. Rutledge

Inventor.
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UNITED STATES PATENT OFFICE.

WILLIAM S. SAMPSON, OF NEW YORK, N. Y.

CAR-COUPLING LINK.

SPECIFICATION forming part of Letters Patent No. 229,917, dated July 13, 1880.

Application filed March 18, 1880. (No model.)

To all whom it may concern:

Be it known that I, WM. S. SAMPSON, of the city, county, and State of New York, have invented an Improvement in the Bars or Links to Connect Cars or similar Vehicles, of which the following is a specification.

The purpose of this invention is to couple or connect cars or similar vehicles with a single bar, in the place of the present chain-link with its two accompanying pins.

The invention consists of a single bar having a head at each end. These heads are flattened, so as to enter the mouth of the draw-head when turned to the horizontal, but not to return through the same opening when the heads are turned to the vertical, or edge upward.

The invention further consists in a pin driven through one of the heads, with ends projecting sufficient to prevent the bar from dropping out of the mouth of the draw-head or removal from the head through the opening without first having drilled or driven out the pin.

The invention further consists in the head and body of the bar having a larger amount of metal in one hemisphere than in the other, the excess of each being upon the same side of the axial line of the bar. The purpose of this excess of metal upon one side is to gravitate the bar edge upward when released from any controlling force.

In the accompanying drawings, Figure 1 is a side elevation of the new link, showing the two heads and the connecting-body. Fig. 2 is a top view of same, showing a pin through one of the heads. Fig. 3 is a section, in elevation, cut through one of the heads from pole to pole. Fig. 4 is a side elevation of a portion of a common draw-bar, showing the adaptation of this link to this class of bar when fitted with an abutment to the head, this abutment designated by the letter S, which abutment, with other features of a draw-bar, constitutes the subject-matter of another application for patent.

The single bar herewith has all of the advantages of the current link with its pins, while possessing none of the disadvantages. It is one piece of metal against what is now three pieces. Hence, if a loss is to be encountered, it is only one-third of the present loss.

To make a connection with this improved link, place the hand in the rear of the draw-head and turn the link upon its side, when it will enter the mouth-opening of the approaching draw-head. Once entered, release the grasp, and the link gravitates edge upward in working position.

To disconnect the draw-bars, place the hand once more in the rear of the head and turn the link upon its side. The forward movement of the train makes the disconnection.

The advantages of this link over the present chain-link are as follows: First, it can be used with any known draw-head in present service; second, it requires no addition to the present draw-bar, which addition would interfere with the use of the chain-link and pins as an alternative; third, it is of one piece, in lieu of three pieces for the present means of coupling; fourth, it is always in place for making the necessary connection; fifth, there is no delay of trains in vain attempts to remove bent pins; and, sixth, no loss by theft or misplacement of parts.

What I claim is—

1. A solid coupling-link having enlarged heads and one side of the body of the bar throughout its length larger than the other.
2. A solid coupling-link having enlarged heads with holes therein, with a pin fixed in one of said holes.

WM. S. SAMPSON.

Witnesses:

HOMER S. BEARDSLEY,
EDWD. D. BUTLER.