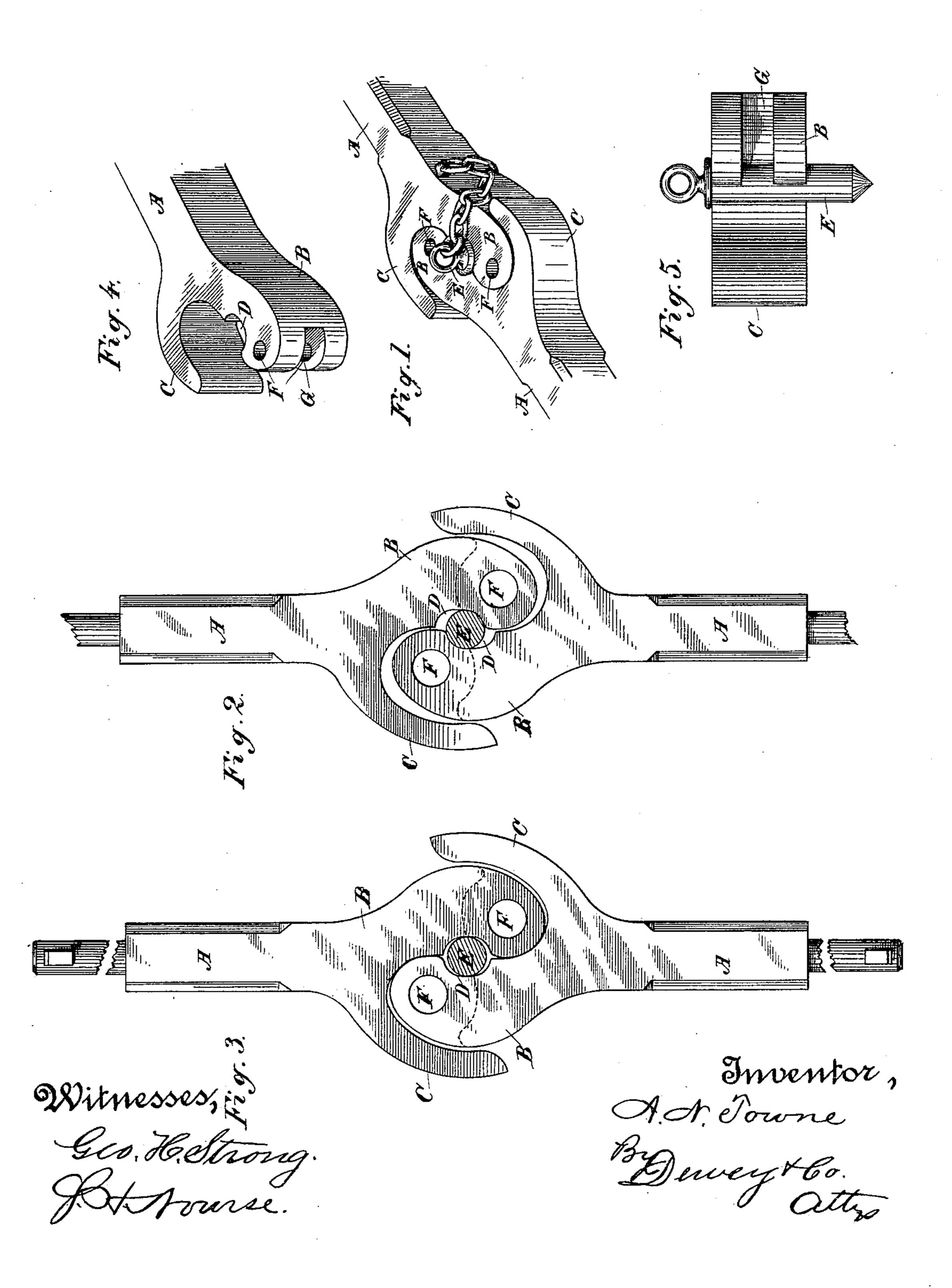
A. N. TOWNE.

CAR COUPLING.

No. 353,518.

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United States Patent Office.

ALBAN N. TOWNE, OF SAN FRANCISCO, CALIFORNIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 353,518, dated November 30, 1886.

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To all whom it may concern:

Be it known that I, Alban N. Towne, of the city and county of San Francisco, State of California, have invented an Improvement in Car-Couplers; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a device for coupling or connecting railway-cars; and it consists of peculiarly-formed heads which are adapted to interlock with each other when the cars come together, and they are provided with a pinopening, part of which lies within each of the heads, so that when the pin is introduced it will serve to hold the two together.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view showing the two parts of the coupler united. Fig. 2 is a plan view of the coupler in tension. Fig. 3 is a plan view showing the parts in position

previous to tension. A A are draw-bars, having heads formed, as shown at B, so as to interlock or pass each 25 other when cars come together which have these draw-bars attached to them. The head B is formed upon one side of a central line of the draw-bar, and upon the opposite side is an extension or wing, C, which forms, with the 30 part B, a chamber or depression of sufficient size to admit the head B of the opposite drawbar, while at the same time its own head enters a corresponding space in that bar. This extension acts as a resistance-guide to prevent 35 the lateral separation of the two heads when tension is brought upon them. The two inner faces of these heads B B stand nearly or quite in a vertical plane passing longitudinally through the draw-bars, and each of them has 40 a semi-cylindrical vertical hole made in it, so that when the two parts are brought together these two openings correspond with each other, and thus form a hole, as shown at D, for the admission of the coupling-pin E.

suitable or desirable shape; but I have shown the pin in the present case as being made cylindrical, and there is sufficient play between the parts of the two couplers to allow of a certain amount of end motion, and also to allow them to turn about each other and about the pin to accommodate themselves to curves. It will be seen by this construction that the ex-

tending wings or resistance-guides which pass around the outside of the two heads B will present these heads from being separated laterally, and consequently the pin-hole will always remain closed about the pin when the latter is in place.

Holes F may be made through each of the 60 ends of the heads B, and horizontal slots or chambers G are also made to receive the end of a link, so that if this coupler is to be used in connection with one of the ordinary kind it will only be necessary to allow the end of 65 the link to enter this slot and to use the pin in the hole F.

When these couplers are used, it will be manifest that any amount of vertical movement may take place short of entirely separating the two heads without interfering with the connection of the cars; but if any accident should take place the cars will very readily separate by the slipping of one part out of the other. These draw-bars are very economically made, 75 consisting of only a single piece, which may be cast, forged, or otherwise constructed, and no finishing work is necessary upon them.

Having thus described my invention, what I claim as new, and desire to secure by Letters 80 Patent, is—

1. An improved bar and coupling composed of an integral piece having curved heads provided with wings or resistance-guides C, forming an open vertical channel between them, 85 and vertical recesses in said channel adapted to receive the coupling-pin, said head also having a pin-hole, whereby a coupling-pin may be attached, substantially as herein described.

2. The draw - bars having curved heads formed in a single piece with each head, with vertical channels in each, open at the top and bottom and having wings or resistance-guides at the opposite sides of the channel from the 95 coupling-head, and an elongated vertical recess made with one-half in the meeting faces of each of the heads and in a plane transverse to the line of draft, substantially as described.

In witness whereof I have hereunto set my rochand.

ALBAN N. TOWNE.

Witnesses:

S. H. Nourse,

H. C. LEE.