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H. T. ANDERSON.
MANUFACTURE OF DRAWBAR YOKES.
FILED FEB. 25, 1920.

Fig. 1.

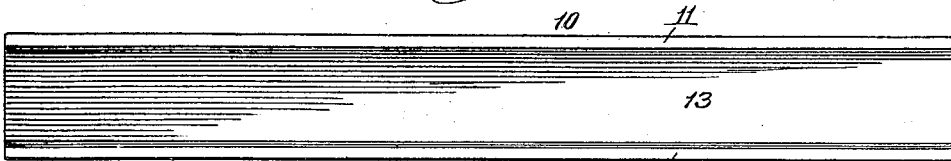


Fig. 2.

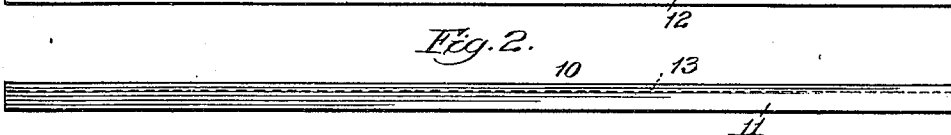


Fig. 3.

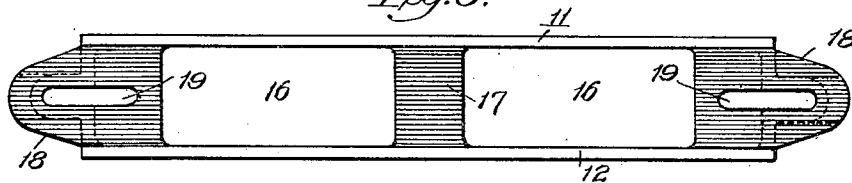


Fig. 4.

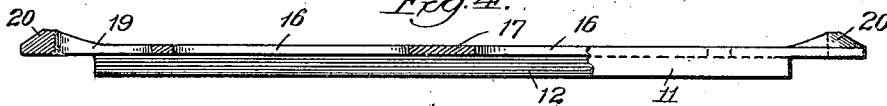


Fig. 5.

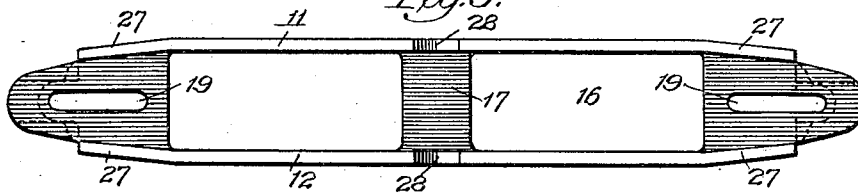


Fig. 6.

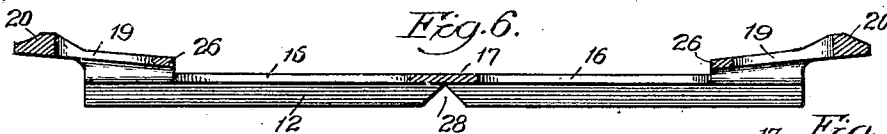


Fig. 9.

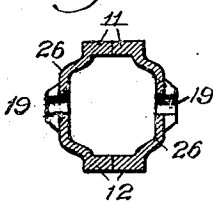


Fig. 7.

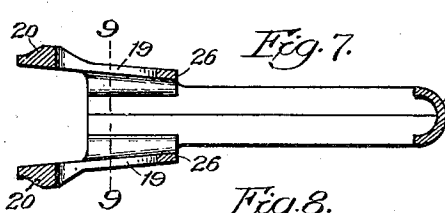


Fig. 8.

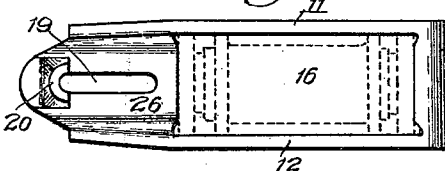


Fig. 10.



Fig. 11.



Witness:
John Anders

Inventor:
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by Fred Gerlach

His Atty.

UNITED STATES PATENT OFFICE.

HARRY T. ANDERSON, OF BUTLER, PENNSYLVANIA, ASSIGNOR TO HARRY VISSEHING AND COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

MANUFACTURE OF DRAWBAR YOKES.

Application filed February 25, 1920. Serial No. 261,077.

To all whom it may concern:

Be it known that I, HARRY T. ANDERSON, a citizen of the United States, and a resident of Butler, in the county of Butler and State of Pennsylvania, have invented certain new and useful Improvements in Manufacture of Drawbar Yokes, of which the following is a full, clear, and exact description.

The invention relates to the manufacture of drawbar yokes and its object is to provide an improved method of forging one-piece yokes.

The invention consists in the several novel features hereinafter set forth and more particularly defined by claims at the conclusion hereof.

In the drawings: Fig. 1 is an elevation and Fig. 2 is a plan of a channelled blank from which the yoke is forged. Fig. 3 is an elevation and Fig. 4 is a section showing the blank after it has been cut to form draft-gear openings and key-slots and after its ends have been trimmed. Fig. 5 is an elevation and Fig. 6 is a section of the blank after the end-portions have been bulged outwardly and shaped and the flanges have been notched so the blank may be doubled and bent at its medial portion. Fig. 7 is a horizontal section and Fig. 8 a side elevation of the finished yoke. Fig. 9 is a section on line 9—9 of Fig. 7. Fig. 10 is a horizontal section showing a modified way of notching the medial portion of the blank for bending. Fig. 11 is a section showing a yoke formed after such notching.

The improved method consists in forming the yoke of a bar 10 preferably of rolled or wrought steel. Said bar has top and bottom flanges 11 and 12 and a connecting web 13. This bar is of sufficient length to form both sides of the yoke and may, if desired, be cut from long length of stock. Two openings 16 are cut through the web 13, as shown in Fig. 3. These openings are spaced apart to leave a vertical column-portion 17 medially of the blank and connecting the top and bottom flanges and are of sufficient size to receive one side of a draft-gear. The portion 17 is adapted to be formed into the back of the yoke which is integral with its sides. A longitudinal key-slot 19 is cut through the web adjacent each end. The end portions of the flanges are cut off and the web is

trimmed on convergent lines, as at 18, to form rounded and narrowed ends. The metal adjacent the outer end of each key-slot 19 is swaged or upset, as shown at 20, to form an enlarged or reinforced bearing for the key in the slot. Next, the web-portions 26 which are outwardly of the openings 16 are bulged outwardly, so they will be disposed outside of the blank portions above and below the openings 16, as shown in Figs. 5 and 6. The purpose of this bulging is to provide a wide coupler shank pocket. These portions are also inclined away from the flanges of the web. In bulging these portions 26, the flanges are made convergent, as at 27. Medially, the flanges are notched or cut away, as at 28, and then the blank will be of the shape shown in Figs. 5 and 6.

Next, the blank will be bent or doubled transversely on a medial line to form sides in juxtaposition to bring the edges of the flanges together. In this operation, the openings 16 are brought into transverse alignment with each other and the key-slots 19 are also brought into transverse alignment. This bending operation forms the blank into a yoke with sides, back, top and bottom which are integral and which has continuously extending flanges 11 and 12. The edges of the columnar portion 17 and the back edges of web-portions 26 form abutments for the draft-gear. These openings permit lateral insertion of the draft-gear into the yoke. The outwardly bulged portions 26 provide a wide coupler shank pocket while the flange-portions forming the connections are disposed in close relation. The medial notching of the blank permits the doubling of the blank without distortion of the columnar portion 17 and so that the edges of said portion will be transversely aligned. By bringing the flanges on the sides into contact, the yokes will have a closed top and bottom.

The V-shaped notching exemplified in Fig. 6 results in the formation of a round back. The flanges of the blank may be plurally notched, as shown at 29, in Fig. 10, so that when the blank is doubled over, the columnar portion will be formed, as shown in Fig. 11.

The invention is not to be understood as restricted to the details set forth, since these

may be modified within the scope of the appended claims, without departing from the spirit and scope of the invention.

Having thus described the invention, what
5 I claim as new and desire to secure by Letters Patent, is:

1. That improvement in making railway draft-gear yokes which consists in cutting a plurality of draft-gear openings in the web
10 of a longitudinally and marginally flanged bar of metal, forming the ends of the blank for keying to a coupler shank, removing some of the metal of the flanges medially of the blank and doubling and bending the
15 blank about its medial portion to form a one-piece open-ended yoke and bringing the flanges on the sides into contact.

2. That improvement in making railway draft-gear yokes which consists in cutting a

plurality of draft-gear openings in the web 20
of a longitudinally and marginally flanged bar of metal, forming the ends of the blank for keying to a coupler shank, notching the flanges medially of the blank, and doubling and bending the blank medially to form a 25
one-piece open-sided yoke.

3. That improvement in making railway draft-gear yokes which consists in cutting a plurality of draft-gear openings in the web
30 of a longitudinally and marginally flanged bar of metal, forming the ends of the blank for keying to a coupler shank, notching the flanges medially of the blank, and doubling and bending the blank about its medial portion, to form a one-piece open-sided yoke and 35
bringing the flanges on the sides into contact.

HARRY T. ANDERSON.