No. 743,492. PATENTED NOV. 10, 1903.

E. V. S. GUICHARD.

HAME TUG.

APPLICATION FILED MAR. 18, 1903.

NO MODEL.

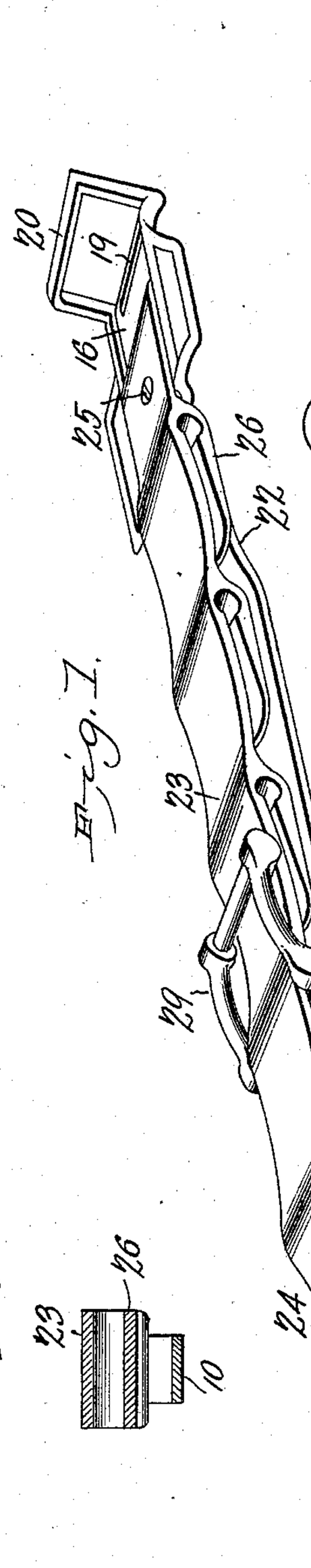

Fig. 1.

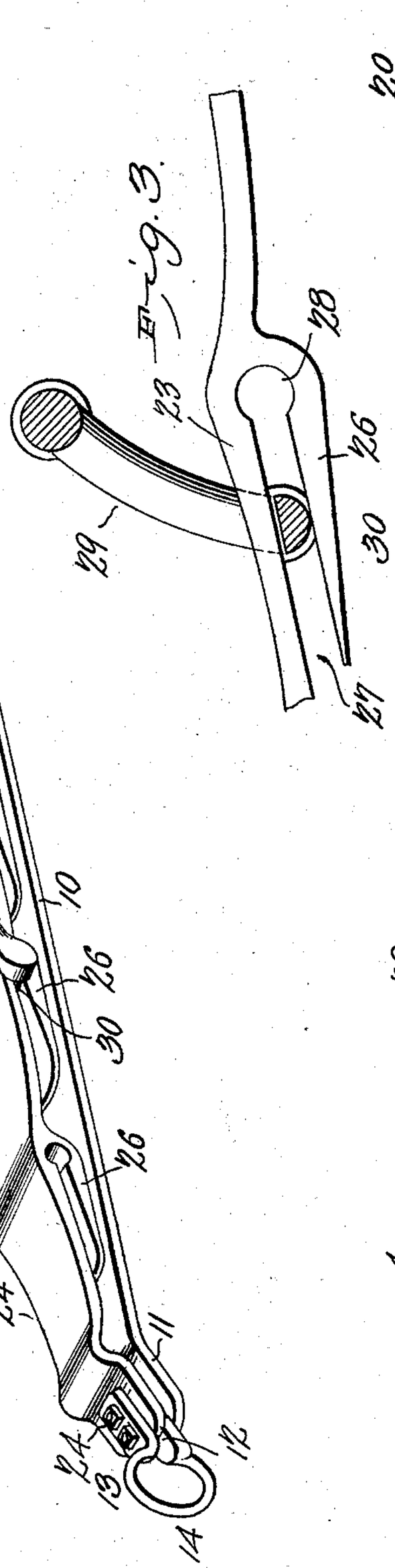

Fig. 3.

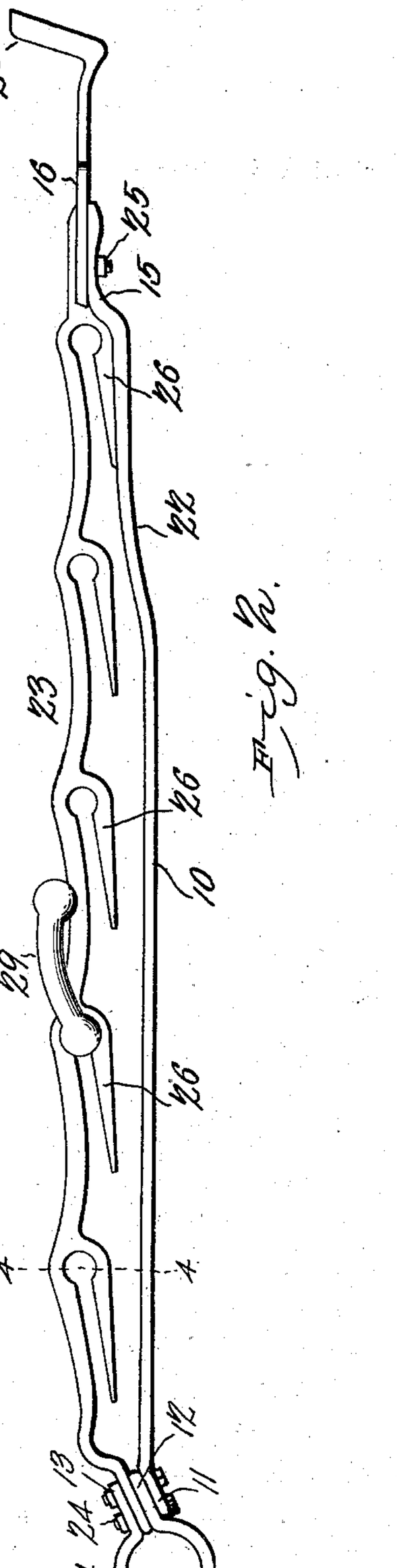

Fig. 2.

Fig. 4.

Witnesses
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No. 743,492. Patented November 10, 1903.

UNITED STATES PATENT OFFICE.

EMILE V. S. GUICHARD, OF CASSADAGA, NEW YORK.

HAME-TUG.

SPECIFICATION forming part of Letters Patent No. 743,492, dated November 10, 1903.

Application filed March 18, 1903. Serial No. 148,408. (No model.)

To all whom it may concern:

Be it known that I, EMILE V. S. GUICHARD, a citizen of the United States, residing at Cassadaga, in the county of Chautauqua and State of New York, have invented a new and useful Hame-Tug, of which the following is a specification.

This invention relates to the "hame-tugs" or the "short tugs" employed between the back and girth band connections and the hame connections whereby the traces or tugs are adjustably coupled to the harness, and has for its object to improve and simplify devices of this character and to increase the efficiency and at the same time decrease the weight and expense of manufacture.

The invention consists in certain novel features of the construction, as hereinafter shown and described, and specified in the claim.

The improved device may be employed upon any style of double harness, but is more particularly applicable for the heavier forms of draft-harness; but I do not wish to be limited in its use upon any style or form of harness to which it is applicable.

In the drawings illustrative of the invention, in which corresponding parts are denoted by like designating characters, Figure 1 is a perspective view of one of the improved devices detached from the harness parts. Fig. 2 is a top plan view of the device. Fig. 3 is a sectional detail, enlarged, illustrating the operation of the tug-loop. Fig. 4 is a transverse section on the line 4 4 of Fig. 2.

The improved device consists of a base-plate 10, having an offset 11 at one end and adapted to be connected to an extension 12, projecting from an eye 14, the latter adapted to be connected to the hame-loop in the ordinary manner. The opposite end of the plate 10 is likewise formed with an offset 15, adapted to be connected to a plate 16, having the back-band loop 17, girth-loop 18, and holdback-loop 19, together with the "keeper" 20 for the long tug or trace.

The plate 10 comes next to the horse and is inclined outwardly at one end, as shown at 22, so that the plate 16 and its attachments will be maintained out of contact with the animal and prevent chafing. This is an important feature of the construction and adds materially to its value and efficiency.

Spaced from the base-plate 10 is another or outer plate 23, connected by one end to the plate 16 and by the other end to the extension 12 of the hame-coupling eye 14, as shown. The bar 10 is formed of metal of sufficient thickness to brace the bar or plate 23. The eye 14 is provided with two of the extensions spaced apart, as shown, one, 12, between the parts 11 23, and the other extension, as 13, outside the part 23, as shown in Figs. 1 and 2.

The parts will be connected by fastening devices 24 25 at their respective ends, as shown, and thus be firmly clamped together.

Extending from one face of the plate 23 are a plurality of tongues 26, inclined toward one end of the plate 23 and likewise toward the plate 10, leaving relatively contracted spaces between their free ends and the base-plate, as shown. The tongues are so disposed with relation to the plate 23 that a guide-space 27 will be formed for the introduction of the trace-connecting device. This guide-space communicates with an enlargement or recess at the base of the tongue, in which recess the connecting device will be secured.

The means for connecting the trace or tug to the improved device consists of an oblong loop 29, formed of spaced side bars and reversely-disposed spaced transverse connecting-bars, one of the transverse bars, as 30, passing through the space 27 between the tongue and the plate 23 and flattened on one side, as shown in Fig. 3, to enable it to pass through the contracted throats 27 when the loop is turned into the position shown in Fig. 3.

The bar 30 will freely turn in the recess 28 after it is inserted therein, but cannot be withdrawn therefrom unless the loop be turned into the position shown in Fig. 3.

When loop 29 is in its proper position with relation to the recess 28, the greatest diameter of the bar 30 will be disposed at a right angle to the restricted outlet of the recess, so as to insure a perfect connection of the loop 29 with the recess. The bar 23 is formed with a series of intermediate curved portions

conforming to the curvature of the tongues, so that the intervening spaces between the tongues and the bar will have substantially parallel walls to easily guide the loop 29 into one of the recesses 28. By this arrangement the loop 29 can be adjusted along the bar 23 and engaged with any of its plurality of tongues, but must be first turned into the unusual position shown in Fig. 3, a position which the loop would never assume when in use, no matter how severely the harness might be thrown about or agitated. It will be observed that the plate 10 is spaced a sufficient distance from the ends of the tongues 26, so that the loop 29 can pass between the plate 10 and the tongues to effect the desired adjustment. The integrity of the coupling would not then be disturbed while the harness is in use and would remain intact and in the operative position to which it is adjusted under all conditions, while at the same time readily adjustable when required.

The parts of the device will preferably be of malleable iron or steel suitably "finished" and ornamented to conform to the other metal parts of the harness.

The device will possess ample strength, while at the same time, owing to the manner of constructing and uniting the parts, can be manufactured of relatively light material and at small expense.

Having thus described my invention, what I claim is—

The combination with a rigid inner base-plate, of an outer plate connected therewith and arranged parallel with and spaced from the base-plate to form between them a permanently free longitudinal channel, said outer plate having upon its inner face a plurality of transverse openings, a plurality of tongues extending forwardly one from each opening and coöperating with the outer plate to form each a reduced entrance-throat to one of the openings, said reduced throat communicating with the longitudinal channel between the plates, and a loop having a substantially semicircular bar designed to travel through the reduced throats and seat within the openings, said bar being adapted to travel freely through the channel from one opening to another.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

EMILE V. S. GUICHARD.

Witnesses:

F. W. BEEBE,

F. H. PICKETT.