

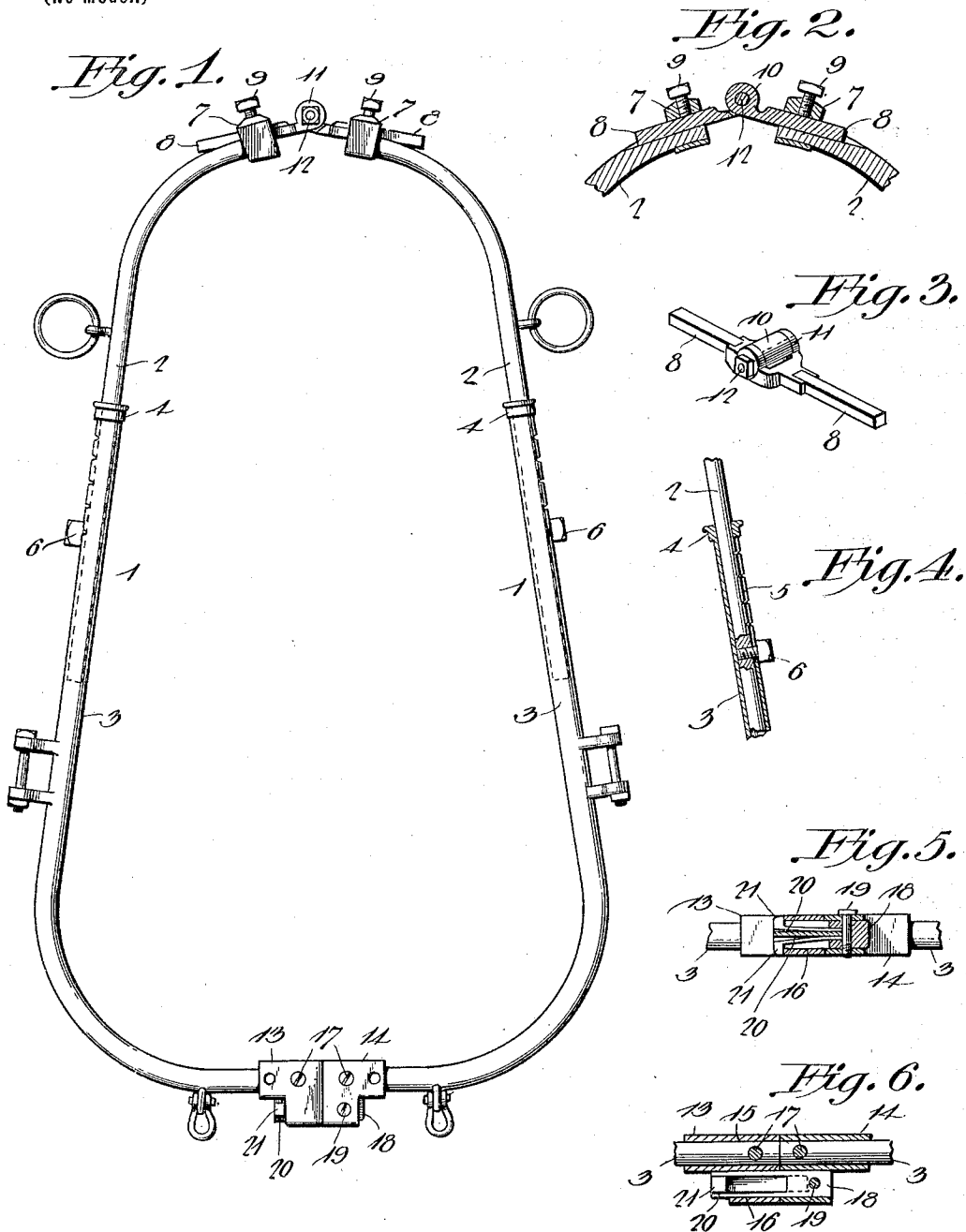
No. 699,482.

Patented May 6, 1902.

F. J. BOYLE.
ADJUSTABLE HAME FASTENER.

(Application filed Oct. 14, 1901.)

(No Model.)



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by

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UNITED STATES PATENT OFFICE.

FRANK J. BOYLE, OF GALVESTON, TEXAS.

ADJUSTABLE HAME-FASTENER.

SPECIFICATION forming part of Letters Patent No. 699,482, dated May 6, 1902.

Application filed October 14, 1901. Serial No. 78,604. (No model.)

To all whom it may concern:

Be it known that I, FRANK J. BOYLE, a citizen of the United States, residing at Galveston, in the county of Galveston and State of Texas, have invented a new and useful Adjustable Hame-Fastener, of which the following is a specification.

The invention relates to improvements in hame-fasteners.

10 The object of the present invention is to improve the construction of adjustable hames, more especially the means for connecting their lower ends, and to provide a simple and comparatively inexpensive device capable of detachably connecting the lower ends of a pair
15 of hames and adapted to permit the said hames to be adjusted laterally to vary the distance between them.

20 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

25 In the drawings, Figure 1 is an elevation of a pair of hames constructed in accordance with this invention. Fig. 2 is a detail sectional view of the top of the hames, illustrating the manner of adjustably connecting their upper ends. Fig. 3 is a detail perspective
30 view of the hinged connecting-bars. Fig. 4 is a detail sectional view illustrating the construction of the adjustable telescoping sections. Figs. 5 and 6 are detail views illustrating the construction of the hame-fasteners.

35 Like numerals of reference designate corresponding parts in all the figures of the drawings.

40 1 1 designate a pair of hames composed of upper and lower sections 2 and 3, capable of longitudinal adjustment to vary the length of the hames. The lower section 3 of each hame is tubular and receives the lower portion of the upper section 2, which is preferably solid, but which may be of any desired construction.
45 The lower section is preferably reinforced at its upper end by a collar 4, and it is provided with a longitudinal slot 5, extending downward from the collar and receiving a set-screw 6, mounted in a threaded perforation of the upper section 2 and having a square head for engaging the lower section.
50 The sections 2 and 3 are preferably provided

adjacent to the slot with marks arranged at intervals to enable the sections to be accurately adjusted without measuring the distance with a rule or the like. The set-screw
55 is adapted to move freely in the longitudinal slot, and it is capable of securely fastening the hames at any desired adjustment. The upper sections of the hames are curved inward, as shown, and are provided at their terminals with sleeves 7, receiving the outer portions of hinged connecting-bars 8 and provided with clamping-screws 9 for engaging the connecting-bars, as clearly illustrated in
60 Fig. 2 of the accompanying drawings, whereby the hames are secured at the desired lateral adjustment. The connecting-bars, which are rectangular in cross-section, are provided at their inner ends, which are enlarged, with
65 eyes 10 and 11, receiving a pintle 12, which preferably consists of a bolt, but which may be of any other desired construction. The hinged connecting-bars are adapted to slide freely in the sleeves of the upper ends of the
70 hames, which are capable of lateral adjustment without increasing or diminishing their length. The hinged joint also permits the hames to swing readily apart, and they are adapted for use in fire-engine houses, where
75 the harness is suspended. 80

The lower ends of the lower sections of the hames are extended inward horizontally and have casings 13 and 14 adjustably secured to them for varying the width of the hames
85 at the bottoms thereof. The casings 13 and 14 are provided with upper and lower sleeves 15 and 16, the upper sleeves having circular bores and conforming to the configuration of the lower sections of the hames, and the
90 lower sleeves 16 are provided with rectangular openings. The upper sleeves are provided with a plurality of perforations for the reception of screws 17 or other suitable fastening devices, and by changing the fasten-
95 ing devices from one perforation to another the hames may be varied in width.

A bar 18 is secured by a transverse screw 19 or other suitable fastening device in the lower sleeve of the casing 14, and it extends
100 longitudinally of the lower portions of the hames and is provided at opposite sides with recesses 20, receiving resilient catches 21. The resilient catches consist of resilient

shanks secured at their inner ends to the bar 18 and provided at their outer ends with laterally-extending engaging heads adapted to project outward beyond the bar and engage
5 the adjacent side edges of the lower sleeve of the casing 13, whereby the hames are securely locked and are effectually prevented from becoming accidentally unfastened through any
10 jar or vibration incident to horse motion or the like. The heads of the catches are adapted to be readily compressed or forced inward to unfasten the hames.

What I claim is—

The combination of the hames, the casings

provided with upper and lower sleeves, the 15 upper sleeves of the casings being adjustably secured to the lower ends of the hames, and a bar secured in one of the lower sleeves of the casings and provided with a pair of oppositely-disposed catches for engaging the 20 other lower sleeve, substantially as described.

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

FRANK J. BOYLE.

Witnesses:

JOHN H. GERNAUD,
ARTHUR F. ROACH.