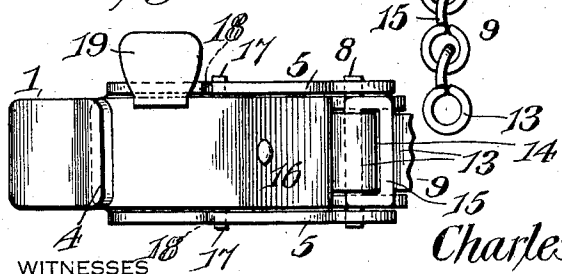
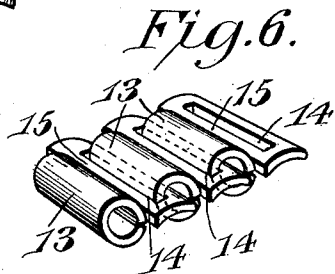
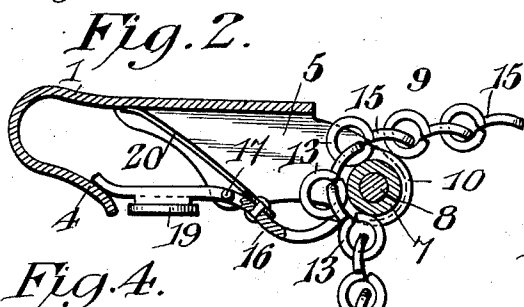
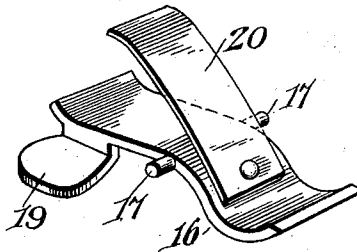
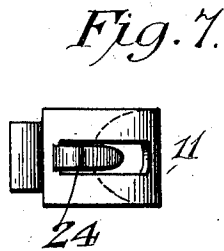
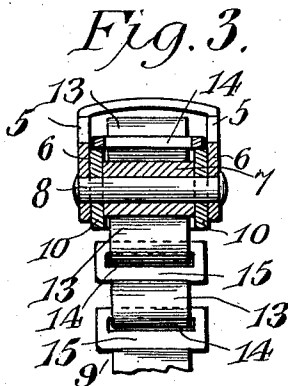
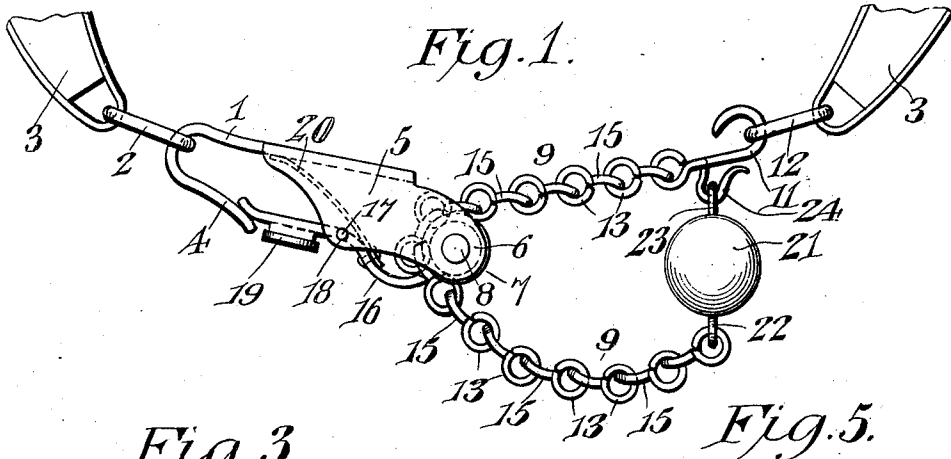


C. S. WAYBRIGHT.
HAME FASTENER.
APPLICATION FILED JULY 23, 1910.

976,414.

Patented Nov. 22, 1910.



WITNESSES

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HAME-FASTENER.

976,414.

Specification of Letters Patent.

Patented Nov. 22, 1910.

Application filed July 23, 1910. Serial No. 573,403.

To all whom it may concern:

Be it known that I, CHARLES S. WAYBRIGHT, a citizen of the United States, residing at Crabbottom, in the county of Highland and State of Virginia, have invented a new and useful 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 that type of hame fasteners employing a chain and a pivoted pawl or catch for engaging the links of the chain to afford an adjustable connection for the hames, and to provide a simple, inexpensive and efficient construction of increased strength and durability, capable of easier operation and adapted to afford an increased adjustment.

20 With these and other objects in view, the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claims hereto appended; it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claims, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

30 In the drawing:—Figure 1 is a side elevation of a hame fastener, constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is a reverse plan view. Fig. 5 is a detail perspective view of the pivoted pawl or catch. Fig. 6 is a detail view of a portion of the chain. 40 Fig. 7 is a detail view of the hame-engaging hook of the chain.

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

45 In the embodiment of the invention illustrated in the accompanying drawing, the hame fastener comprises in its construction a hook 1, adapted to engage a loop 2 of one of a pair of hames 3 in the usual manner. The hook 1, which has an elongated bill 4, is provided at opposite sides of its shank portion with longitudinal side flanges 5, forming a casing at the inner portion of the hook 1, as clearly illustrated in Figs. 1 55 and 2 of the drawing. The side flanges 5

are provided at their outer ends with projecting portions or extensions 6 between which is arranged an anti-friction roller 7, mounted on a suitable pivot or spindle 8 and receiving a chain 9. The anti-friction 60 roller consists of a cylindrical sleeve and separate terminal disks or heads 10, loosely mounted on the pivot or spindle 8 and projecting beyond the periphery of the sleeve and forming end flanges.

65 The chain is provided at its outer end with a hook 11, engaging the loop 12 of the other hame 3. The links of the chain, which are constructed of suitable metal, consist of reduced cylindrical eyes 13 and relatively narrow transverse slots 14 of a width corresponding to the thickness of the metal of which the chain is constructed and of just sufficient size to have the eye of an adjacent link engage with it. By this construction 75 the links are relatively short and the eyes occur close together, being separated only by the solid intermediate portion 15.

80 The roller 7 is spaced from the end of the shank of the hook 1 by the projecting portions or extensions of the side flanges, and the chain passes through such opening over the anti-friction roller and downward at the inner side thereof and is engaged by a pivoted pawl or catch 16, preferably provided 85 at its side edges with integral laterally extending studs or projections 17, located at an intermediate point between the ends of the pawl or catch and mounted in suitable perforations 18 at the inner end portion of the side flanges 5, which are spaced from the bill 4 of the hook 1. The engaging portion of the pawl or catch 16 is curved and presents a lower or outer convex face and an inner or upper concave face, and it engages 95 the links of the chain between the eyes 13, the space between the eyes at the solid intermediate portion 15 being approximately equal to the thickness of the metal of the pawl or catch. The eyes 13 of the chain rest against the body portion of the latter, 100 and the slotted portions of the links are curved and are supported by the end flanges of the latter. The engaging portion of the pawl or catch is of a width equal to the chain, and the construction besides furnishing a better adjustment than hame fasteners in which the catch is provided with a tongue to project through slots or openings in the 110 chain provides a stronger construction and

is easier to operate, as it is only necessary to move the engaging portions outwardly a relatively short distance. Also the pawl or catch will not become caught in the chain.

5 The chain is supported on the roller both at the eyes and at the lower portions, and wide bearing or wearing surfaces are provided where the pawl or catch comes in contact with the chain.

10 The inner portion of the pawl or catch extends across the space between the side flanges and the bill 4 of the hook 1, and it is provided at such space with a laterally extending operating arm 19, arranged in a convenient position to be pressed by the operator to disengage the pawl or catch from the chain.

The pawl or catch is maintained in engagement with the chain by a spring 20, riveted or otherwise secured to the inner face of the engaging portion of the catch and arranged at an angle to the inner or rear portion thereof, and having its free end bearing against the shank of the hook 1 between the side flanges 5. The free end of the chain is equipped with a ball 21, preferably hollow and constituting a handle or grip for the chain, but a bell or other ornamental device may be substituted for the ball. The ball 21 is provided at one side with a loop 22, which is linked into the free end of the chain 9. The opposite side of the ball is provided with an eye 23, adapted to engage a depending hook 24, formed integral with the shank of the hame-engaging hook 11. The depending supporting hook 24 is formed by splitting the shank of the hook 11 on opposite sides of the center and at one end to form a partially severed tongue, which is bent into the form of a hook. The depending hook 24 supports the ball and prevents the same from being thrown from one side to the other by horse motion. The hame fastener is operated in the usual manner to adjust the hames to a horse collar, but when the pawl or catch is released, it is automatically engaged with the chain by the spring. The depending hook 24 of the hame-engaging hook 11 forms a handle and is adapted to be grasped by the operator to enable him to readily introduce the hook 11 into the hame loop 12 and to remove it therefrom. This is especially advantageous as there is not sufficient space at the horse collar to permit the fingers to be placed above or back of the hook 11. Also the bill of the supporting hook is curved downwardly and outwardly from the shank of the hook 11, and the curved portion is arranged sufficiently close to the said shank to prevent the ball from becoming accidentally disengaged from the supporting hook. The resiliency of the supporting hook enables the eye 23 of the ball to be readily placed on and removed from the supporting hook.

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

1. A hame fastener including a casing provided with means for connecting it with one of a pair of hames, a transverse roller mounted within the casing, a chain provided with means for connecting it with the other one of the pair of hames and extending through the casing and arranged on the said roller and composed of relatively short links consisting of cylindrical eyes and narrow slots spaced from the eyes by a solid intermediate portion, and a spring actuated pawl or catch pivotally mounted in the casing and directly engaging the chain and holding the same against the roller, the engaging portion of the pawl or catch being of the same width as the chain and extending entirely across the intermediate solid portion of the links and being of substantially the thickness of the space between the eyes of the chain, and the said eyes substantially filling the slots.

2. A hame fastener including a casing provided with means for connecting it to one of a pair of hames, a transverse roller mounted within the casing and composed of a cylindrical sleeve, and heads or disks projecting beyond the periphery of the sleeve, a chain having means for connecting it with the other one of a pair of hames and composed of short links consisting of reduced eyes arranged to fit between the disks or heads of the latter and bear against the sleeve thereof, and a curved slotted portion arranged to rest upon the peripheries of the heads or disks, the slots being relatively narrow and separated from the eyes by solid intermediate portions, and a pawl or catch pivoted within the casing and having an engaging portion of the same width as the chain and extending entirely across the solid intermediate portions and engaging the chain directly between the eyes, and the latter substantially filling the said slots.

3. A hame fastener including a casing provided at one end with a hook and having extended side portions at the other end, the sides of the casing being spaced from the bill of the hook, a transverse roller mounted between the extended portions of the sides of the casing, a chain arranged on the roller and composed of short links having relatively large eyes and narrow slots separated from the eyes by a solid intermediate portion, and a spring actuated catch pivoted between the sides of the casing and being of the same width as the chain at its engaging end and engaging the solid portion of the link between the eyes of the chain, said pawl or catch being provided at the open space between the casing and the bill of the hook with a laterally projecting operating arm.

4. A hame fastener including a chain, a
hame-engaging hook connected with one end
of the chain and having a shank provided
with a depending supporting hook formed
5 by partially severing the metal of the shank
and constituting a handle for operating the
hame-engaging hook to engage the same
with and disengage it from a hame, a casing
receiving the chain and provided with means
10 for engaging a hame, a locking device car-
ried by the casing for engaging the chain,

and a handle carried by the free end of the
chain and provided with an eye to engage
the said depending supporting hook.

In testimony, that I claim the foregoing 15
as my own, I have hereto affixed my signa-
ture in the presence of two witnesses.

CHARLES S. WAYBRIGHT.

Witnesses:

JOHN H. SIGGERS,
EDITH L. BROWN.