(No Model.)

W. H. HANNIGAN.

HAME.

No. 492,157. Patented Feb. 21, 1893.

FIG. 1.

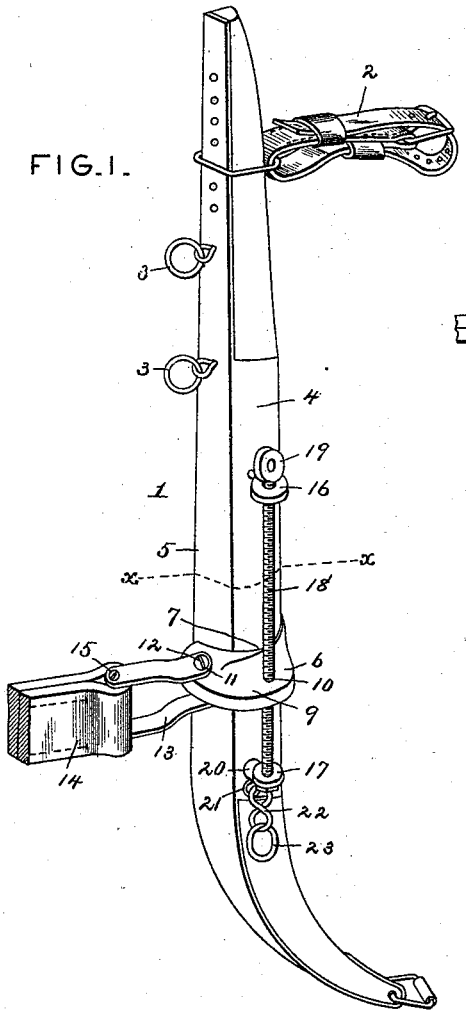


FIG. 2.

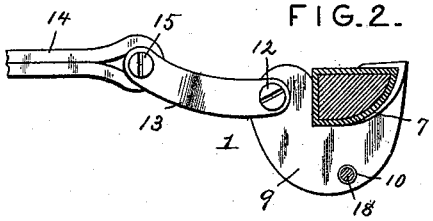
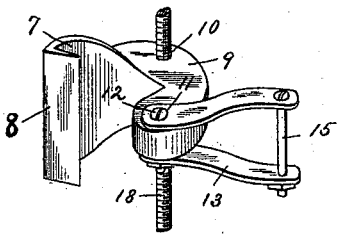


FIG. 3.



Witnesses

Harry L. Amer.

Chas. B. Hyer

Inventor

Willis H. Hannigan.

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

WILLIS H. HANNIGAN, OF MANISTIQUE, MICHIGAN.

HAME.

SPECIFICATION forming part of Letters Patent No. 492,157, dated February 21, 1893.

Application filed July 14, 1892. Serial No. 440,044. (No model.)

To all whom it may concern:

Be it known that I, WILLIS H. HANNIGAN, a citizen of the United States, residing at Manistique, in the county of Schoolcraft and State of Michigan, have invented a new and useful Adjustable Hame, of which the following is a specification.

This invention relates to certain new and useful improvements in adjustable hames, and has for its object to produce a hame that can be readily made to conform to various sizes of collars used without losing in any degree its efficiency, and also to adjust the line of draft to increase a given amount of power applied by the animal and proportionately lighten the labor and increase the comfort of the animal while performing his work.

With this end in view the invention consists of the construction and arrangement of the parts as will be hereinafter more fully described and claimed.

In the drawings:—Figure 1 is a perspective view of the improved hame. Fig. 2 is a transverse horizontal section on the line *x. x*, Fig. 1. Fig. 3 is a detail perspective view of the improved attachment disconnected and looking toward the rear thereof.

Similar numerals of reference are employed to indicate corresponding parts in the several figures.

Referring to the drawings, the numeral 1 designates a hame of suitable form of construction and having a top strap loop 2, and rings 3, and will also be provided with other parts necessary for the proper adjustment and mounting of the said hame. A portion of the hame wood is surrounded by a metal binding 4, extending throughout a portion of the length thereof, and in addition to the usual back iron or metallic covering 5, and on said metallic binding 4, is directly and adjustably mounted a metallic clip 6. The said metallic clip 6, is formed with a slot 7, conforming to a portion of the contour of the hame covered by the metal binding 4, against which said clip has bearing. The rear portion of one end of the clip is provided with a right-angular flange 8, which loosely engages the inner portion of the hame, and the front central part of the said clip has an outwardly projecting enlargement 9, with a screw eye or opening 10, extending vertically therethrough. Adjacent to the end of the clip opposite to that on which the flange 8, is formed, a vertical opening 11, is constructed to receive the pivot bolt 12, connecting the rear ends of the yoke or clevis 13, to which the tug-strap 14, is secured, the outer ends of the yoke or clevis being connected by a bolt 15, to which said tug strap 14, is secured.

Extending transversely into the hame and through the binding 4, above the clip 6, is the shank of a screw-eye 16, which is horizontally arranged and substantially parallel therewith and extending inward through the same parts, but below the clip 6, is another horizontally disposed eye 17, which forms a swivel eye and in which the lower end of a vertically disposed screw rod 18, is swiveled. The said screw rod 18, passes downward through the screw eye 16, and also through the screw eye or opening 10, in the enlargement or projection 9, of the clip 6, and at the upper end of said screw rod is formed a head 19, by means of which the same may be turned. By turning the screw rod 18, in opposite directions the clip 6, may be raised or lowered on the binding 4, of the hame and carry therewith the yoke or clevis 13, and also the tug strap or trace chain connected to said yoke or clevis. By this means the line of draft can be adjusted by being raised or lowered and the labor of the horse or other animal decreased proportionately to a given amount of draft, and be made more comfortable and also provide for a centralization or concentration of the draft relatively to the power applied and thereby materially increase the drawing power of a single animal without additional strain. On the shank of the eye 17, is mounted a collar 20, having an eye 21, in which is mounted a twist link 22, carrying a ring 23; this forms a convenient connection for the ring and provides a free movement thereof.

The device herein set forth is strong and durable and a hame constructed in accordance with the description need not be as large as the ordinary form of said devices, in view of the fact that the strain is transferred from eye bolts or such devices and applied directly to the hame proper, as will be readily understood.

Though wood and metal have heretofore been set forth as the materials of which the

improved hame is composed, it will be understood that metals alone may be used of any preferred nature and degree of hardness and shaped in any suitable manner.

Having thus described the invention, what is claimed as new is—

In an adjustable hame, the combination of a metal binding surrounding a portion thereof, an adjustable metallic clip bearing directly upon said metal binding and having a slot extending vertically therethrough conforming in outline to a portion of the contour of the hame, the rear portion of said clip being provided with a right-angular flange and the front central part of the same having an outwardly-projecting horizontally-disposed enlargement with a screw-threaded opening therein extending vertically therethrough, and a bolt-opening at the end of said clip opposite to that on which the said flange is formed, eyes arranged above and below the said clip, a screw-rod swiveled in said eyes and extending through the screw-threaded opening in said clip for the purpose of adjusting the latter, and a yoke or clevis pivotally connected to said clip for the purpose of attaching the tug strap or trace, 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.

WILLIS H. HANNIGAN.

Witnesses:

GEO. M. CRACKEN,

JOHN W. MILLER.