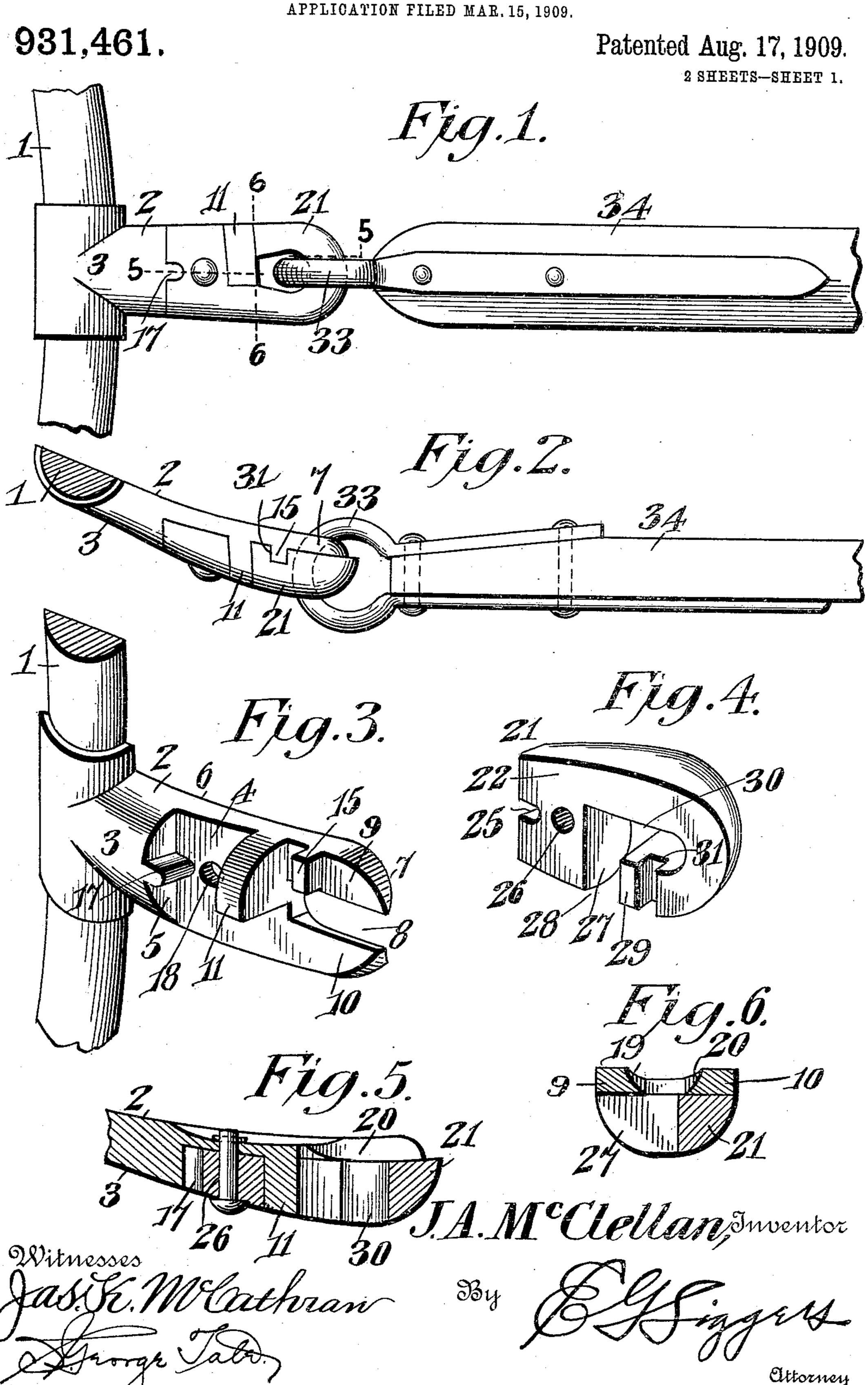
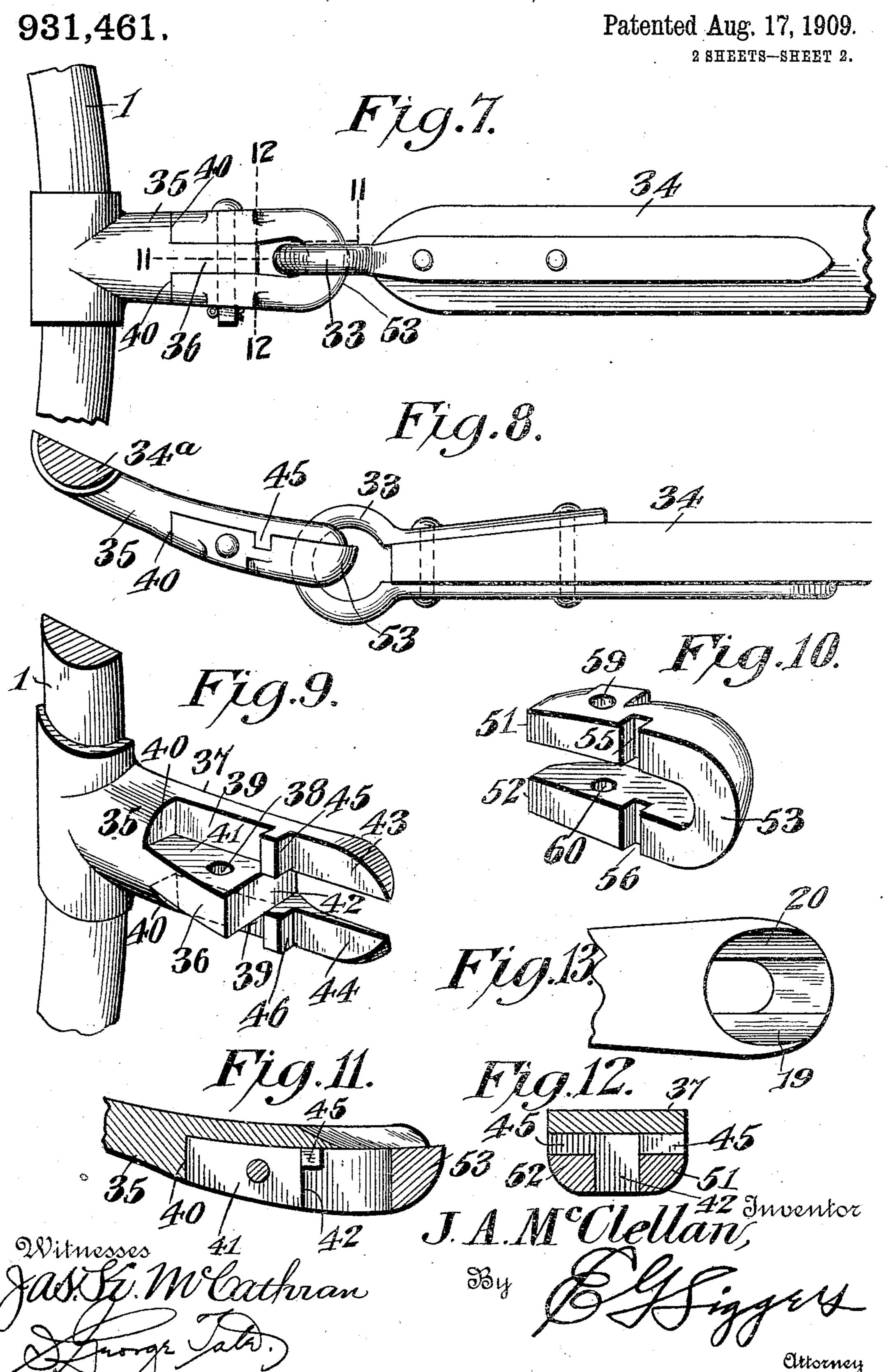
J. A. McCLELLAN. HAME CONNECTION. PLICATION FILED MAR 15.10.



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UNITED STATES PATENT OFFICE.

JAMES A. McCLELLAN, OF MENOMONIE, WISCONSIN.

HAME CONNECTION.

No. 931,461.

Specification of Letters Patent.

Patented Aug. 17, 1909.

Application filed March 15, 1909. Serial No. 483,553.

To all whom it may concern:

Be it known that I, James A. McClellan, | Menomonie, in the county of Dunn and 5 State of Wisconsin, have invented a new and useful Hame Connection, of which the following is a specification.

This invention relates to an improved hame and trace connection, and more par-19 ticularly to that class of connections embodying means for detachably securing a

trace to a hame.

The construction of hame and trace connections as now in general use comprise a 15 hame having a rearwardly extending drafteye which is brazed or otherwise secured thereto, and a clip-eye secured to the trace and engaging the draft-eye. Therefore, in this construction, whenever the draft-eye 20 wears through, it is necessary to remove the entire draft-eye from the hame and substitute an entire new one. This operation is slow and costly and necessitates the employment of a blacksmith.

a connection of malleable iron or steel, and is especially applicable to light harness, although it of course can be employed on

heavy harness with equal success.

Another object of my invention is to provide a device of this character which can be easily and quickly repaired by anyone without having to remove the draft-eye member from the hame.

A still further object of my invention is to provide a two-part hame connection which comprises a fixed member secured permanently to the hame and having a removable member secured thereon, said remov-40 able member being adapted to receive the wear produced by the trace-eye or clip, so that when the said removable member is worn out, a new one can be readily substituted, and thereby avoid the loss of the en-45 tire hame connection, as has heretofore been

The invention comprises a hame having brazed or otherwise secured thereto a rearwardly-extending member, having at its end ⁵⁰ an open-ended slot, and a clip-eye engaging member detachably secured to the member and adapted to close the open-ended slot, the two parts interlocking and co-acting to

form a draft-eye.

necessary.

In the drawings;—Figure 1 is a side elevation of my invention showing the preferred |

form, and illustrating its application to a hame. Fig. 2 is a top plan view of the same, a citizen of the United States, residing at | showing the hame in section. Fig. 3 is a detailed perspective view of that portion or 60 member of the draft-eye which is secured to the hame. Fig. 4 is a detailed perspective view of the removable member of the drafteye, and showing particularly the inner side thereof. Fig. 5 is a longitudinal sectional 65 view of the draft-eye, taken on the line 5—5, Fig. 1. Fig. 6 is a vertical sectional view of the draft-eye, taken on the line 6-6, of Fig. 1. Fig. 7 is a front elevation of my invention showing a modified form and illustrating 79 its application to a hame. Fig. 8 is a top plan view of the same, the hame being shown in section. Fig. 9 is a detailed perspective view of that portion of the draft-eye which is secured to the hame. Fig. 10 is a detailed 75 perspective view of the removable member of the draft-eye, and showing particularly the inner side thereof. Fig. 11 is a longitudinal sectional view of the draft-eye, taken on the line 11—11 of Fig. 7. Fig. 12 is a vertical 80 The object of my invention is to provide | sectional view of the draft-eye, taken on the line 12—12 of Fig. 7, and Fig. 13 is a rear view of the outer end of the draft-eye as employed in both forms of my invention.

Like numerals of reference are used to 85 designate corresponding parts throughout

the views.

In the preferred construction of my invention, 1 designates a hame to which is secured by brazing or otherwise, a rearwardly-ex- 90 tending and slightly curved and concaved member 2, which constitutes one of two members that form a draft-eye. This member is provided on its rounded and outer face 3 and at the outer end thereof, with a cut-out por- 95 tion having a bearing surface 4, and an abutment or stop 5 for a purpose hereinafter described, the former being arranged substantially parallel with the inner surface 6 of the member, and the latter preferably located in 100 close proximity to the hame and preferably arranged at right angles to the bearing surface 4. The end 7 of the member 2 is preferably rounded, and is provided with a centrally arranged and inwardly extending 105 longitudinal and open-ended slot 8, forming arms 9—10 respectively arranged on either side of said slot. Extending from the bearing surface 4 is a projection 11, one side thereof being preferably flush with the end 110 of the slot 8. This lug is preferably arranged at right angles to the member 2 and extends

approximately half way across the said member. Its outer surface is curved to conform with the curved surface 3 of the member, and the inner end thereof is preferably 5 arranged at right angles to the bearing surface 4 and at a point intermediate of the arms 9 and 10. The arm 9 is provided with an outstanding lug 15 of less size than the projection 11 and substantially parallel with 10 the same. This lug is spaced from the projection 11, as shown. The abutment or stop 5 of the cut-out portion is provided at its center with a lug 17 extending from the outer face 3 of the member to the bearing 15 surface 4 and of less size than the projection 11. The member 2 is also provided with an opening 18 which is arranged at a point intermediate of the projection 11 and lug 17. The adjacent inner edges 19 and 20 of the 20 arms 9 and 10 constituting the walls of the slot are respectively concaved on their under sides, as clearly shown in Figs. 6 and 13 of the drawings.

The invention further comprises a member 25 21 which is adapted to be seated in the cutout portion of the member 2. To facilitate a clear understanding of the invention, the member 2 will be hereinafter termed "the fixed member" and the other member 21

30 "the removable member."

The removable member is provided with a bearing face 22 of the same size as the bearing face 4 of the fixed member, and a rounded outer surface. The removable member 35 further comprises a body portion having a recess 25 located in the end thereof and an opening 26 arranged intermediate of the said opening and the wall 27 of the body portion. It is further provided with a forwardly extend-40 ing member in the form of a hook, the free end 29 of the hooked member being spaced a distance from the wall 27 to form a transverse slot 28 which has a width substantially equal to the projection 11 of the fixed mem-45 ber. The hooked end forms a longitudinal slot 30 which is arranged at right angles to the transverse slot and merges therewith to form a substantially L-shaped slot. A notch 31 is provided in the bearing surface of 50 the hooked member and is arranged transversely and near the end 29 thereof.

Having thus described the construction of the two members, it will be easily understood from the following how they co-act to form a 55 draft-eye. The clip-eye 33 of the trace 34 is passed through the transverse slot of the removable member and into the longitudinal slot. This member is then arranged on the fixed member so that their respective bearing 60 surfaces contact. It will be readily apparent that when the parts are correctly positioned, the longitudinal slot 30 of the removable member will be in register with the slot 8 of the fixed member, the projection 11 65 and lugs 15 and 17 of the fixed member will

be respectively seated within the transverse slot and the notches 31 and 25 of the removable member, the openings 18 and 26 of the members will be in register, the hooked end of the removable member will close the open-70 ended slot 8 of the fixed member, and thereby retain the clip-eye of the trace in position. The two members are thereby interlocked, the lugs of the fixed member co-acting with the removable member to prevent any lat- 75 eral or longitudinal movement of either member. To positively secure the two members in this relation, a cotter pin, rivet or other suitable fastening means is passed through the openings 18 and 26. The inner 80 surface 6 of the fixed member is hollowed out around the opening 18, as shown in Fig. 5 of the drawings, to prevent the end of the

pin from chafing an animal.

In a modified form of my invention, as 85 illustrated in Figs. 7 to 12 inclusive of the drawings, 1 designates the hame and 35 the rearwardly-extending or "fixed member" of the draft-eye. The member is provided with a central and longitudinally arranged 90 projection 36, said projection being also arranged at right angles to the rear face 37 of the said member and provided with a transverse opening 38, the purpose of which will be hereinaster described. This projection is 95 formed by cut-out portions on either side thereof, each of said portions comprising a bearing surface 39, an abutment 40, and a wall 41, each of said walls forming the sides of the projection 36. The bearing surfaces 100 39 are substantially parallel to the rear face 37 of the member, and extend beyond the end 42 of the projection 36 to the rear end of the said member. The rear end of the member is provided with a central and longitudi- 105 nally arranged open-ended slot, which is arranged in alinement with the projection 36, thus bifurcating the said bearing surface and thereby forming spaced arms 43 and 44 respectively. The closed end of the slot is in 110 alinement with the outer end of the projection 36. The arms 43 and 44 are respectively provided with outstanding lugs 45 and 46 which are preferably arranged in advance and at each side of the end 42 of the projec- 115 tion 36 and at right angles thereto, said lugs preferably being smaller than the projection 36. The respective outer ends of the arms 43 and 44 are curved toward the slot, and the rear faces thereof adjacent the slot are, re- 120 spectively, provided with concaved cut-out portions 19 and 20, as clearly shown by Fig. 13 of the drawings.

The invention further comprises a removable member which coacts with the "fixed 125 member" to form a draft-eye. This member is substantially U-shaped, and consists of parallel arms 51 and 52 which are connected at one end with an integral and curved portion or bend 53. These arms are spaced a 130

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distance apart, substantially equal to the width of the projection 36 of the fixed member, and are of a width substantially equal to the width of the bearing surfaces 39 of said 5 member. Oppositely arranged notches 55 and 56 are respectively arranged in the arms 51 and 52 at points located a distance from the outer ends of said arms equal to the distance between the abutments 40 and the lugs 10 45 and 46 of the "fixed member". The arms are further provided with registering

openings 59 and 60 respectively.

It will be observed from reference to the drawings, that when the "removable mem-15 ber" is positioned on the "fixed member", the bearing surfaces of each member will bear against each other, the lugs 45 and 46 of the "fixed member" will coact with the notches 55 and 56 of the "removable member", the 20 projection 36 of the "fixed member" will engage between the arms 51 and 52 of the "removable member", the opening 38 of the projection 36 will be in register with the openings 59 and 60 of the arms 51 and 52, and the 25 connecting portion or bend 53 of the "removable member" will close the open-ended slot of the "fixed member". To positively secure the two members in this relation, a cotter pin, rivet or the like is secured within 30 the registered openings.

From the foregoing description, it will be plain that when the "removable member" wears through, it is only necessary to withdraw the rivet, detach the said member, and 35 then secure a new "removable member" in its place. This will only occupy a very little time and will obviate the necessity, as has heretofore been done, of taking the entire draft-eye from the hame and then brazing an 40 entire new draft-eye thereon. It will also be apparent that much labor, time and material

is saved by my invention.

From the foregoing, it is thought that the construction, operation, and many advan-45 tages of the herein described invention will be apparent to those skilled in the art, without further description, and it will be understood that various changes in the size, shape, proportion, and minor details of construc-50 tion, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described the invention, what I claim and desire to secure by Letters Pat-

55 ent, is:—

1. A detachable connection for hames comprising a fixed member having a portion of its outer face cut out and provided with an open-ended slot which opens out at the end 60 of the member, and a removable member seated upon the fixed member and filling the cut-out portion and having at its outer end a curved or bent portion closing the end of the said slot whereby the pull and consequent 65 wear comes directly upon the removable

member, said removable member having a slot therein which registers with the openended slot of the fixed member.

2. A detachable connection for hames, comprising a fixed member having its outer 70 end provided with an open-ended longitudinal slot, and a removable member serving as a wear piece for the hame connection seated upon or over the fixed member and closing the end of the slot of the fixed member, said 75 removable member being provided with a slot registering with the slot of the fixed member, both slots being adapted to receive

the trace eye or clip.

3. A detachable connection comprising a 20 fixed member having its outer end provided with an inwardly extending longitudinal slot, and a removable member co-acting with the fixed member and provided with a slot which is adapted to register with the 85 slot of the fixed member, a portion of each member being adapted to close the slot in the opposite member, that portion of the removable member which closes the end of the slot of. the fixed member being adapted to receive 99 the wear of the trace clip.

4. A detachable connection comprising a fixed member having a cut-out portion and a bifurcated end, spaced lugs projecting from the member and arranged in the cut- 95 out portion, a projection extended from said member and arranged intermediate of the spaced lugs, a removable member adapted to close the bifurcated end and having notches adapted to engage the spaced lugs and arms 100 adapted to straddle the intermediate projection and thereby interlock the two said members, and means for securing the mem-

bers together in this relation.

5. A draft-eye comprising a member se- 105 cured to and rearwardly extending from a hame and provided with a cut-out portion on its front face and a longitudinal and openended slot in the outer end thereof, said cutout portion extending from a point near the 110 hame-bar to the outer end of the member, a plurality of spaced lugs or projections arranged on the member and in the cut-cut portion, a removable member provided with a slot for receiving the clip-eye of a trace, 115 said member adapted to be seated in and fill the cut-out portion and provided with notches adapted to co-act with some of the spaced lugs, the slot in each member being respectively closed by a portion of the oppo- 120 site member, and means engaging both members and adapted to retain them in their interlocked relation.

6. A separable trace connection comprising a rigid member secured to the hame and 123 extending rearwardly therefrom and provided with a longitudinal slot extending inwardly from the outer end thereof to form spaced arms, a cut-out portion arranged on the outer face of the member and extending 133

from a point near the hame to the outer end of the member, said cut-out portion having an abutment, outwardly extending lugs respectively arranged on one of the arms and 5 on the abutment, a projection arranged intermediate of and having greater dimensions than the lugs and extending from one side of the member to the center thereof, the said member being provided with an opening be-10 tween the abutment and the projection, a removable member adapted to fit in the cutout portion of the fixed member and comprising a body portion having a hook portion extending from one side thereof and providing 15 an L-shaped slot, said body portion having a notch adapted to engage the lug on the abutment of the fixed member, said hooked portion having a notch arranged near the end thereof and adapted to engage the lug on the 20 arm of the fixed member, the hooked portion being adapted to close the end of the longitudinal slot of the fixed member and thereby retain therein the clip-eye of a trace, said removable member being provided with an 25 opening in the body portion adapted to register with an opening in the fixed member, and fastening means arranged within the registered openings and adapted to secure the fixed and the removable members in 30 their interlocked relation.

7. A draft-eye comprising a member secured to and rearwardly extending from a

hame and provided with a cut-out portion on its front face and a longitudinal and openended slot in the outer end thereof, said por- 35 tion extending from a point near the hamebar to the outer end of the member, a projection extending from the member and arranged in the cut-out portion with one face flush with said slot, a removable member 40 provided with a slot for receiving the clip-eye of a trace, said member adapted to be seated in and fill the cut-out portion and interlock with the said projection, the slot in each member being respectively closed by a por- 45 tion of the opposite member, and means engaging both members and adapted to retain them in their interlocked relation.

8. In a hame connection, the combination with a hame having a rearwardly extending 50 member rigidly secured thereto and provided with a bifurcated end, and a removable member secured thereon over the bifurcated end, said last-named member being adapted to engage the trace-eye or clip and receive all 55 the wear caused by the pull of the trace.

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

JAMES A. McCLELLAN.

Witnesses:

MAURILLO MARTINSON, ARTHUR QUILLING.