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2,330,360

POST DRIVING HEAD

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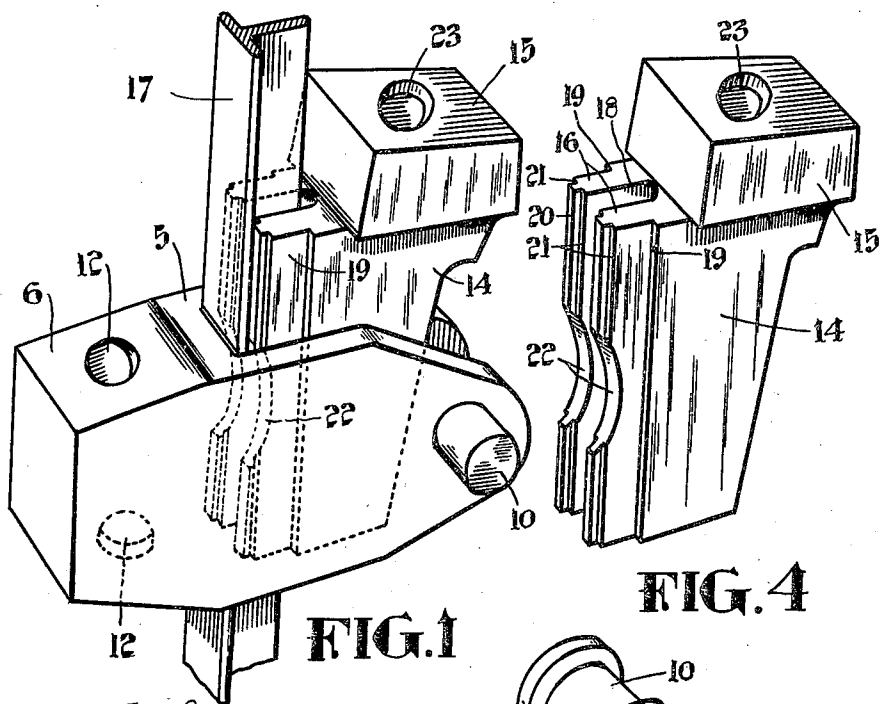


FIG. 1

FIG. 4

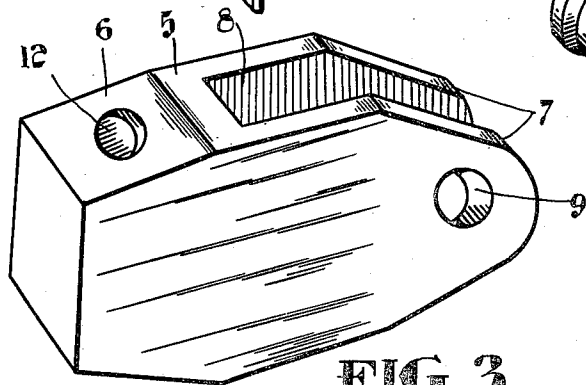


FIG. 3

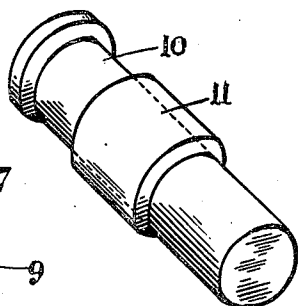


FIG. 5

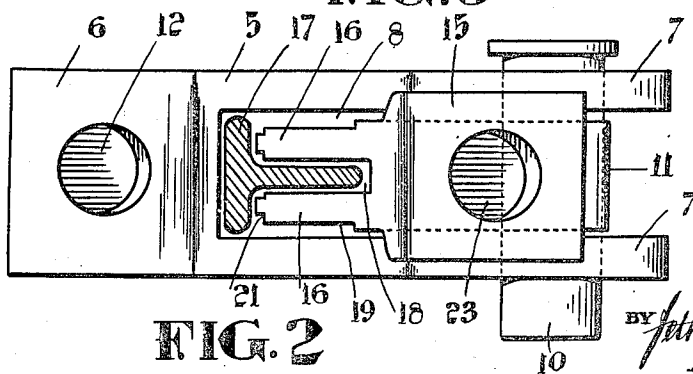


FIG. 2

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POST DRIVING HEAD

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2 Claims. (Cl. 61-77)

This invention relates to improvements in a power post driving head assembly designed for use in forcing metal posts into the ground without upsetting or otherwise mutilating said posts.

A particular object of this invention is to provide a post driving head assembly which can be applied to metal posts of different types, including T-shaped section, angle, channel, U-bar or pipe.

Another object of the invention is to provide a post driving head assembly which can be applied to a post at any point where it is most convenient to drive, thus making it possible to force very long posts into the ground even though the person driving the post be standing on the ground.

A further object is to provide a post driving head assembly which can be adapted to be driven by a power hammer, or manually with a sledge hammer.

A further object is to provide a post driving head assembly which can be readily applied to and removed from a post.

The foregoing and other objects, features and characteristics of this invention will be more readily understood from the following detailed description taken in connection with the accompanying drawing, disclosing the preferred embodiment of my invention, in which—

Fig. 1 is a perspective view of my invention shown assembled on a post.

Fig. 2 is a top plan view of the assembly shown in Fig. 1.

Fig. 3 is a perspective view of the yoke embodied in my invention.

Fig. 4 is a perspective view of the wedge.

Fig. 5 is a perspective view showing a pin and spacer ring.

Referring more particularly to the drawing, 5 designates a yoke comprising a solid end portion 6 and a pair of parallel arm members 7 extending rearwardly therefrom to provide a post and wedge receiving channel 8. The arms 7 are provided with holes 9 adjacent their free ends and adapted to receive a pin 10. The pin 10 is provided with a spacer ring 11 adapted to be positioned between the arms 7. The end portion 6 is tapered to provide flat inclined top and bottom surfaces receding from the central portion of the yoke to the front edge of said end portion. The top and bottom surfaces are provided with cavities 12 having their side walls substantially at right angles to the inclined surfaces.

A wedge 14 comprising an elongated body portion, a pair of spaced post engaging extensions 16 projecting forwardly from the front wall of the wedge, and an anvil 15, is interposed between the

arms 7 of the yoke and the spacer ring 11 to bring the extensions 16 into abutting engagement with the post 17 in the channel 8. The extensions 16 are spaced apart to provide a recess 18 adapted to receive the projecting web portion of a T-shaped post. The outer side surfaces of the extensions are inwardly offset to provide recesses 19 to permit the projecting portions of a channel, angle or U-shaped post to lie between the arms 7 and said outer side surfaces. The post engaging surfaces 20 of the extensions 16 also have their corners inwardly offset as indicated at 21 to provide clearance of the filleted portion where the angular members of the post meet. The post engaging surfaces 20 are interrupted by cut-away portions 22 to provide a plurality of interrupted gripping surfaces. It has been found that a continuous post engaging surface has not the same gripping qualities as an interrupted surface. The rear wall of the wedge 14 is inwardly offset at the top and tapers inwardly towards the bottom. The anvil 15 is mounted on top of the wedge with its side and rear edges projecting beyond the side and rear walls of the wedge, the side and rear walls of the anvil being substantially vertical. The front of the anvil is disposed slightly to the rear of the extensions 16, the front wall sloping rearwardly from the bottom. The top surface of the anvil inclines from front to rear and is provided with a cavity 23 having its side walls substantially at right angles to the inclined top surface of the anvil.

The yoke 5 is placed on the T-shaped post 17 with the end portion 6 abutting the flat side of the post so that the post lies in the channel 8 between the arms 7. The pin 10 is inserted in the holes 9 of the arms 7, the spacer ring 11 being aligned with the holes 9 between the arms 7 is held in place by the pin. The wedge is then inserted in the channel 8 between the post 17 and the spacer ring 11, with the tapering rear wall of the wedge engaging the spacer ring and the extensions 16 straddling the projecting web portion of the post 17 so that the post engaging surfaces 20 are placed in abutting relation with the opposing flat surfaces of the post. A shank or any suitable instrument may then be placed in the cavity 23 of the anvil and by a sharp blow with a hammer on the top of the shank the wedge is set and ready for driving. In order to release the wedge the shank is inserted in the upturned cavity 12 in the end portion 6 of the yoke. A sharp blow on the top of the shank causes the wedge to unseat itself and the driving head assembly can either be moved up or

removed from the post. In the latter case it is only necessary to withdraw the wedge from the channel 8 and extract the pin 10.

The yoke 5 is similarly designed at the top and bottom so as to make it reversible. The cavities 12 and 23 in the end portion 6 and the anvil 15, respectively, are adapted to receive the shank of a power hammer or any suitable shank or instrument whose function is to receive the direct shock of the hammer. The purpose of providing the end portion 6 and anvil 15 with inclined top surfaces is to offset the shank at a sufficient angle to allow free striking thereon without danger of mutilating the post.

Having thus described my invention, what I claim is:

1. A driving head assembly for application to a post comprising a U-shaped post straddling yoke arranged with its bight portion butted against one side of the post and its side arms projecting beyond the opposite side of the post, a cylindrical pin extending through openings provided adjacent the free ends of said side arms

whereby said pin is supported in spaced opposing relation to the last mentioned side of the post, an annular member rotatably mounted on the portions of the pin lying between said side arms, and a driving wedge arranged between said side arms in wedging engagement with said post and said annular member.

2. A driving head assembly for application to a T-section post, said assembly comprising a U-shaped yoke arranged with its bight portion butted against the head portion of the post and its side arms straddling the post and projecting beyond the free vertical edge of the stem portion of the post, a cylindrical pin extending through and removably supported in openings provided in the side arms of said yoke, an annular member rotatably mounted on said pin between the side arms of the yoke and a driving wedge interposed between the head of the post and said annular member in wedging engagement therewith, said driving wedge being provided with a recess in which the stem portion of the post is fitted.

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