Sept. 24, 1957 J. F. BULFER, JR 2,807,494

POST PULLING BLOCK

Filed Feb. 13, 1956

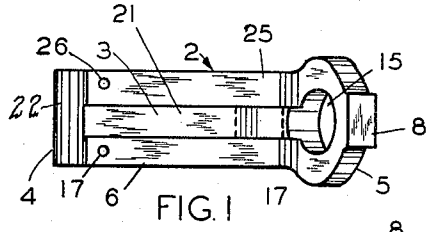


FIG. 1

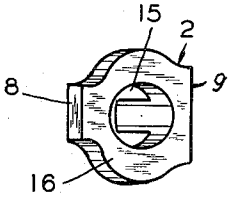


FIG. 3

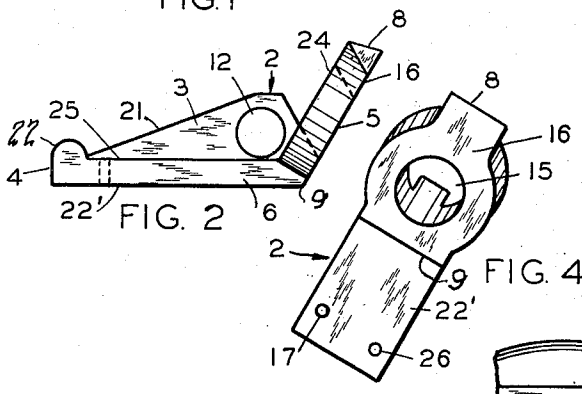


FIG. 2

FIG. 4

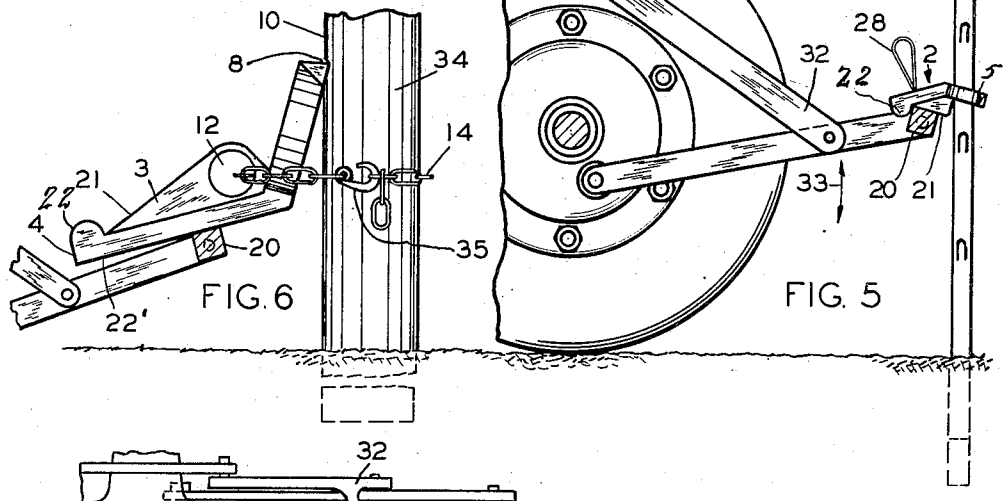


FIG. 6

FIG. 5

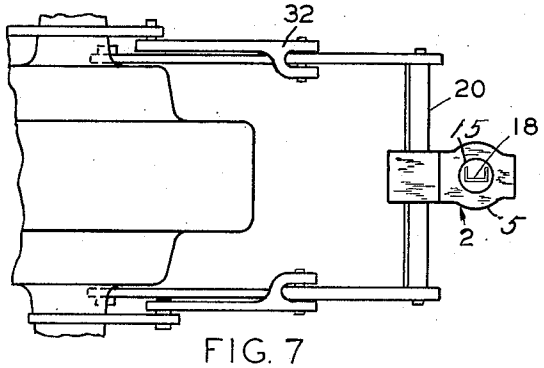


FIG. 7

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United States Patent Office 2,807,494
Patented Sept. 24, 1957

2,807,494

POST PULLING BLOCK

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Application February 13, 1956, Serial No. 564,899

4 Claims. (Cl. 294—92)

This invention concerns combination post pulling blocks for use with tractors having elevating draw bars.

One of the objects of the invention is to provide a block which can be attached to a post to be pulled and which will enable the draw bar of a tractor to pull the post from the ground;

A second object of the invention is to provide a block which has a peculiar shape and configuration and openings therein so that it may be slipped over a metal post and an elevatable tractor draw bar applied to certain under surfaces of the block whereby the block cramps on the post and holds it so that upward motion of the draw bar will pull it from the ground;

A third object of the invention is to provide a block as described above which has a shape such that it may be not only used for pulling a metal post inserted in a hole in the body of the block but may also be adapted to pulling wood posts of greater diameter than steel posts; said block having a hole adapted to receive a clamping chain which encloses the wood post to be pulled, and also having a flat under surface against which the draw bar of a tractor may be applied so that the chain binds on the post and a portion of the block clamps onto the post holding the block against upward movement and thereby pulling the post upward when the draw bar of the tractor is raised;

A fourth object is to provide a combination post pulling block which may be used to pull steel posts of small diameter by the use of an elevating tractor draw bar and which may be used in a reverse position in conjunction with a chain for pulling wooden posts of larger diameters by the use of an elevating tractor draw bar.

Other objects will appear hereinafter.

I attain the foregoing objects by means of the structure designed and formed of the block shown in the accompanying drawings in which—

Figure 1 is a plan view of a block embodying my improvements;

Figure 2 is a side elevation thereof;

Figure 3 is an elevation of the right end thereof, as shown in Figure 1;

Figure 4 is a bottom view of the block;

Figure 5 is a side elevation of the block in use as applied to the pulling of a steel post by means of a tractor draw bar; the block being drawn on a smaller scale than the first four figures above described;

Figure 6 is a side elevation of the block as used in pulling wooden posts of larger diameters; and

Figure 7 is a plan view of the block in use as shown in Figure 5.

Similar numerals refer to similar parts in the several views.

The block is indicated generally by the numeral 2. As viewed from the top there is a strengthening web 3 which extends from the left or outer end 4 of the block body to the angularly and upwardly extending cramping plate 5. This web is a part of the tractor draw bar contacting plate 6 and the web tends to strengthen this plate.

The cramping plate 5 is provided with a toe 8 which bites into a wooden post to be pulled, as shown at 10, Figure 6. The web 3 is provided with a transverse hole 12 which will receive a chain 14 when it is desired to use the block as a wooden post puller and as shown in Figure 6. The cramping plate 5 is provided with a hole 15 which extends through it at an angle to its outer face 16. The angle of this hole 15 is such that the diameter of the hole extends outwardly, somewhat toward the outer face of plate 6, rather than at right angles to the outer face 16 of the cramping plate. Thus when the plate 5 is applied to a steel post 18 with the outer face of plate 6 upward, as shown in Figure 5, and the web 3 is placed in contact with a tractor draw bar 20 which presses on the outer edge face 21 of the web, the cramping plate 5 will be held at an angle relative to the extent of post 18 and the edges of hole 15 will bite or cramp or crampingly engage onto the sides of the steel post so that the draw bar 20 may lift the block 2 together with the post upward.

It is to be noted that adjacent ends of rectangular plates 5 and 6 are joined at a junction 9 and that they extend at an obtuse angle so that the outer face 22' of plate 6 is positioned at an obtuse angle relative to the outer face 16 of the cramping plate 5. The inner face 24 of the cramping plate 5 is parallel to its outer face. Likewise the inner face 25 of plate 6 is parallel to the underface 22'.

There are two holes 17 and 26 drilled through the outer end portion of plate 6. These holes 17 and 26 are positioned on each side of web 3. The holes 17 and 26 receive the ends of a wire loop handle 28 which is used in positioning the puller body 2 upon a steel post 18, and in holding it in cramping position while the tractor bar 20 is being brought into position beneath plate 6. The loop handle 28 may be pulled through the plate and positioned in noninterfering position or removed when the block 2 is used in pulling wooden posts 34.

It is to be understood that the draw bar 20 is part of a tractor (not shown) but illustrated by a portion of one of the rear wheels 30, as shown in Figure 5. The draw bar 20 extends transversely relative to the tractor body and is supported by lever mechanism 32 on each side of the tractor body and provided with mechanism for lowering and lifting as indicated by arrow 33, Figure 5.

In use, when it is desired to pull a steel post 18, the block 2 is lowered over the post 18, while the operator is seated on the tractor, to a convenient position a short distance above the ground, as shown in Figure 5. Loop handle 28 is used, if desired. The tractor is then maneuvered so that the draw bar 20 is adjacent the post 18 and the draw bar 20 is then raised until it contacts the edge face 21 of web 3. As soon as the draw bar 20 contacts the web face 21 it is no longer necessary to hold the block body 2. Upward movement of the draw bar 20 then maintains the body 2 in clamping engagement with the post 18 and pulls post 18 upward out of the ground. The lifting movement of the post 18 is straight up, without sidewise movement.

When the block 2 is to be used to pull a wooden post 34 chain 14 is inserted through hole 12 in web 3. The chain 14 is drawn or looped around the wooden post 34 and hooked together by hook 35. The hook 35 is used to vary the size of the loop and to provide any convenient size which will encircle the post 34. The tractor is then maneuvered so that its draw bar 20 contacts the outer face 22' of plate 6. When upward motion is applied by draw bar 20, tension is brought on chain 14 and the toe 8 of the plate 5 engages into the side of the post 34 adjacent the block 2. This forms a cramping or gripping condition with the block 2 firmly clamped onto the post 34. Thereafter upward motion of the draw bar 20 will pull the post 34 directly upward. It is to be noted that the angle of

surface **22** of plate **6** bears upward and toward the post so that sliding motion of the draw bar **20** on this surface normally is toward the post **34** and the portion of this surface next to the post **34**. Thus there is no tendency of the draw bar **20** to slip out from under plate **6**.

When pulling steel posts **18** by cramping them in hole **15**, the surface **21** of web **3** is engaged by draw bar **20**, as shown in Figure 5, there is little tendency for the draw bar **20** to slip away from the block **2**. Any such movement as there may be, however, is detained by the roll **22** at the end **4** of plate **6**.

I claim:

1. A post pulling block for use with tractors having elevatable draw bars consisting of a block including a draw bar contacting plate having a flat outer face and a draw bar contacting web on the opposite inner face having a contacting edge sloping upwardly toward the center, and a post gripping plate attached to and extending at an obtuse angle from said draw bar contacting plate, provided with a hole for receiving and cramping on a metal post.

2. A post pulling block for use with tractors having elevatable draw bars consisting of a body composed of two rectangular draw bar contacting plates joined at their ends and mutually disposed at an obtuse angle, one of said plates being a flat plate and having a draw bar contacting web on one face with its inner edge slanting angularly and away from the said one face of said plate from the outer end of said plate toward the junction of said plates; the other of said plates having an inwardly slanting hole adapted to receive a post and cramp on said post when pressure is applied to the edge of said web.

3. A post pulling block for use with tractors having elevatable draw bars consisting of a body composed of a rectangular draw bar contacting plate and a rectangular cramping plate joined at adjacent end edges in obtuse angular relation; said contacting plate having a raised web on its inner face with a draw bar contacting edge formed thereon in angular relation to said plate inner face and extending from the outer end of said contacting plate to the inner end thereof adjacent the junction of said plates; and said cramping plate having an angularly extending hole adapted to receive and crampingly engage a post when pressure is applied to the edge of said web on said draw bar contacting plate.

4. A post pulling block for use with tractors having elevatable draw bars consisting of a body composed of a rectangular draw bar contacting plate and a rectangular cramping plate joined at adjacent end edges in obtuse angular relation; a raised reinforcing web on the inner face of said contacting plate of increasing depth inwardly, said web having a transverse hole, extending therethrough and said cramping plate having an angularly extending hole adapted to receive and crampingly engage a post when pressure is applied to the edge of said web on said draw bar contacting plate.

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