June 7, 1966 N. C. POWELL 3,254,876

POST REMOVING DEVICE

Filed Jan. 29, 1964

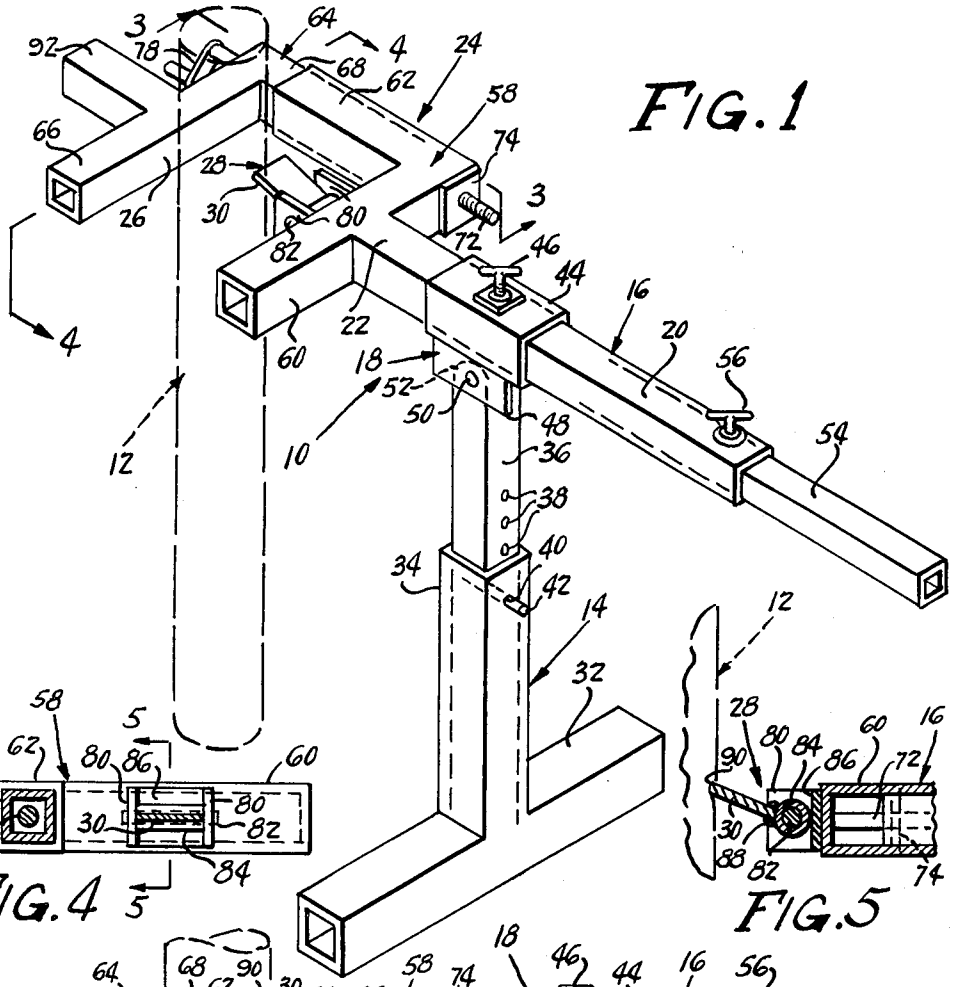


FIG. 1



FIG. 4



FIG. 5

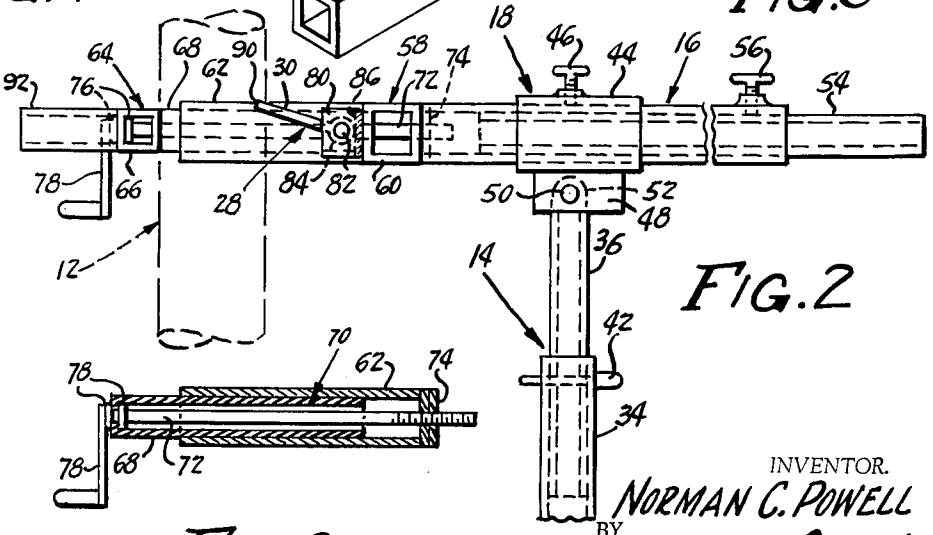


FIG. 2



FIG. 3

INVENTOR.
NORMAN C. POWELL
BY
Kimmel & Crowell
ATTORNEYS.

United States Patent Office

3,254,876
Patented June 7, 1966



3,254,876

# POST REMOVING DEVICE

Norman C. Powell, Box 31, Hunter, Kans.

Filed Jan. 29, 1964, Ser. No. 340,942
2 Claims. (Cl. 254—132)

This invention relates to a post removing device and relates more particularly to a device for gripping and pulling upwardly on a fence post or the like to remove the same from engagement in a supporting surface such as the ground or the like.

A primary object of this invention is the provision of a post removing device which is sturdy and durable in construction, reliable and efficient in operation, and relatively simple and inexpensive to manufacture, utilize, assemble and maintain.

Another object of this invention is the provision of a device of the type described which is readily adjustable for accommodating posts of various dimensions, both cross-sectional and longitudinal.

A further object of the instant invention is to provide a device of the character described which may be utilized with either a pushing or a pulling force depending upon the article to be removed and also depending upon the area in which the article is located.

A still further object of the instant invention is the provision of a post removing device having extensible handle means to increase the leverage on an article being removed.

Other and further objects reside in the combination of elements, arrangement of parts, and features of construction.

Still other objects will in part be obvious and in part be pointed out as the description of the invention proceeds, and as shown on the accompanying drawing wherein:

FIGURE 1 is a perspective view of a post removing device in accordance with the instant inventive concept showing a post or the like being removed thereby in dotted lines;

FIGURE 2 is a fragmentary front elevational view of the device, with parts being broken away for illustrative convenience;

FIGURE 3 is a cross-sectional view taken substantially on line 3—3 of FIGURE 1 and showing in detail the means for adjusting the post gripping means of the device of the instant invention;

FIGURE 4 is a cross-sectional view taken substantially on line 4—4 of FIGURE 1; and

FIGURE 5 is a fragmentary cross-sectional view taken substantially on line 5—5 of FIGURE 4.

Like reference characters refer to like parts throughout the several views of the drawing.

Referring now to the drawing in general, a post removing device in accordance with the instant inventive concept is designated generally by the reference numeral **10** and is shown as associated with a post **12** which may be any elongated article such as a fence post or the like formed of wood or other suitable materials. Although the post **12** is particularly shown as cylindrical in form, it is to be understood that the device of the instant invention will work equally well with posts of other cross sections.

The post removing device **10** is comprised basically of a base means **14**, a cross-bar member **16**, a hinge means **18** secured to the upper end of the base means **14** and pivotally carrying the cross-bar member **16** intermediate its ends, one end **20** of the cross-bar member defining a handle member, the other end **22** of the same carrying a post gripping means designated generally by the reference numeral **24**, portions of the post gripping means **24** defining a bearing surface **26** engageable with one side of



the post **12**, and a wedge means **28** secured to the post gripping means **24** and having a wedge member **30** engageable with the post **12** at a point substantially diametrically opposed to the point where the bearing surface **26** engages the same whereby downward pivotal movement of the handle member **20** about the hinge means **18** engages the post **12** between the bearing surface **26** and the wedge member **30** to pull the post upwardly. Release of the downward pressure allows the wedge member **30** to disengage itself from contact with the post **12** whereby upward pivotal movement of the handle member **20** drops the post gripping means **24** to a point where the wedge member **30** may be re-engaged with the post **12** in a manner similar to an automobile jack.

The base means **14** is substantially T-shaped and includes a horizontally disposed foot member **32** engageable on a supporting surface which may be the ground or the like in which the post **12** is carried, or which may be a different supporting surface, and a standard member including a lower element **34** secured to the foot member **32** and an upper element **36** carrying the hinge means **18** and telescopingly engaged with the lower element **34**, a plurality of apertures **38** being provided in the upper element **36** alignable with an aperture **40** in the lower element **34** whereby a pin member **42** may be engaged through selected apertures as a locking means to selectively secure the lower and upper element **34, 36** to each other in adjusted relation.

The hinge means **18** includes a substantially square tube member **44** which telescopingly receives cross-bar member **16**, a thumb screw or the like **46** being provided to secure these elements to each other in adjusted relation. A pair of spaced ear members **48**, only one being shown for illustrative convenience, depend from the tube **44** and carry a hinge pin **50** extending in pivotal relationship through the upper element **36** of the base means **14**, the upper end **52** of which is arcuate.

The cross-bar member **16** is also preferably a substantially square tubular member, and the end defining the handle member **20** telescopingly receives a handle extension member **54** secured in adjusted relation by a thumb screw **56** whereby increased leverage may readily be provided.

The post gripping means **24** is adjustable in order to accommodate posts of varying cross-sectional dimensions and is comprised basically of a first substantially L-shaped member **58** having one leg **60** secured to or integral with the end **22** of the cross-bar member **16**, and a second leg **62** extending substantially at a right angle to the leg **60**, a second substantially L-shaped member **64** having one leg **66** disposed substantially parallel to the leg **60** of the first L-shaped member **58**, and a second leg **68** extending at substantially a right angle to the leg **66** and being telescopingly engaged with the leg **62** of the first L-shaped member **58**, adjusting means designated generally by the reference numeral **70** being provided to selectively secure the first and second L-shaped members **58, 64**, respectively in adjusted relation. The adjusting means **70** includes a rod member **72** extending through the legs **62** and **68** of the two L-shaped members and threadably engaging a nut member **74** secured to one of the L-shaped members, a pair of washers or the like **76** being secured to the opposite end of the rod member **72** and bearing against portions of the other L-shaped member defining an aperture through which the rod member **72** extends. A crank or handle member **78** may be integrally formed on the rod member **72** or secured thereto in any conventional manner to facilitate rotation of the same and thereby adjustment of the post gripping means **24**.

The inner surface of the leg **66** of the second L-shaped member **64** defines the bearing surface **26** and the inner

surface of the leg **60** of the first L-shaped member **58** carries the wedge means **28**.

The wedge means **28** includes a pair of spaced ears **80** having a connecting member **86** secured to the inner surface of the leg **60** of first L-shaped member **58** and having a pin member **82** extending thereacross and pivotally supporting a circular sleeve **84** welded at **88** to the wedge member **30**. In operation the wedge member **30** is canted upwardly above the horizontal to engage the forward end **90** of the same against the post **12** on downward pivotal movement of the handle member **20** about the hinge means **18**. Note particularly FIGURE 5.

An auxiliary cross-bar member **92** may be secured to the leg **66** of the second L-shaped member **64** in longitudinal alignment with cross-bar member **16** and extending in an opposite direction therefrom with respect to the post gripping means **24**. Under certain circumstances, it may be desirable to lift upwardly on the auxiliary cross-bar member **92** thereby engaging the post **12** between the bearing surface **26** and the wedge member **30** to lift the same. However, the auxiliary cross-bar member **92** is basically designed to be used by telescopingly engaging the same in the tube member **44** of the hinge means **18** when the cross-bar member **16** has been removed therefrom thereby providing the handle member **20** and the auxiliary handle member **54** on the opposite side of the hinge means **18** whereby upward pivotal movement of the same about the hinge means **18** will engage the post **12** between the bearing surface **26** and the wedge member **30** to pull the post **12** upwardly. It has been found that a person can frequently lift more than he can push down and, therefore, this reversible feature of the device of the instant invention facilitates removing a post where such upward pivotal movement is desirable. Also, this allows the base means **14** to remain stationary while the operator of the device can position himself on the opposite side of the post **12** in the event there is insufficint room to actuate the device on the side where the base means has been placed.

The use and opration of the device of the instant invention will now be apparent. The foot member **32** of the base means **14** is positioned on any convenient supporting surface and the lower and upper element **34, 36** of the same are vertically adjusted to a desired height. The post gripping means **24** is then positioned in surrounding relationship to the post **12** and the legs **62, 68** of the same are adjusted as by means **70** to position the bearing surfrace **26** against one side of the post **12** and the end **90** of the wedge member **30** juxtaposition to the diametrically opposed side of the post **12**. The handle extension member **54** can then be adjusted with relation to the handle member **20** to provide additional leverage following which the post **12** may be readily removed by repeated downward and upward pivotal movement of the same. If desired, the cross-bar member **16** may be removed from the hinge means **18** and replaced with the auxiliary cross-bar member **92** to allow for repeated upward and downward movement from the opposite side of the post **12** to remove the same from its engagement with the ground or the like.

The components of the device of the instant invention are preferably formed of a heavy steel or the like, but it is to be understood that other suitable materials may be utilized. Similarly, where square tubular elements have been shown, it will be readily seen that other cross-sections may be provided.

It will now be seen that there is herein provided an improved post removing device which satisfies all of the objectives of the instant invention, and others, including many advantages of great practical utility and commercial importance.

Since many modifications may be made to the instant inventive concept, and since many embodiments may be made of the modifications hereinbefore described, it is to be understood that all matter herein is to be interpreted merely as illustrative and not in a limiting sense.

I claim:

**1.** A post removing device comprising base means having an upper end and a lower end, said lower end being engageable with a supporting surface, a cross-bar member having two ends, hinge means secured to said upper end of said base means and pivotally carrying said cross-bar member intermediate its ends, one end of said cross-bar member defining a handle member, post gripping means secured to the other end of said cross-bar member, portions of said post gripping means defining a bearing surface engageable with one side of the post, a wedge means secured to said post gripping means and having a wedge member engageable with the post at a point diametrically opposed to the point where said bearing surface engages the same, whereby downward pivotal movement of said handle member engages the post between said bearing surface and said wedge member to pull the post upwardly, said post gripping means being adjustable to accommodate posts of different cross sectional dimensions and including a first substantially L-shaped member having one leg secured to said other end of said cross-bar member, and a second leg extending at substantially a right angle to said one leg in an opposite direction to said cross-bar member, second substantially L-shaped member having one leg disposed substantially parallel to said one leg of said first L-shaped member and a second leg extending at substantially a right angle to said one leg and being telescopingly engaged with said second leg of said first L-shaped member, and adjusting means selectively securing said first and second L-shaped members in adjusted relation, said wedge means being carried by the inner surface of said first leg of said first L-shaped member, and said bearing surface being defined by the inner surface of said first leg of said second L-shaped member.

**2.** The structure of claim **1** wherein said adjusting means includes a rod member extending through said second legs of said first and second L-shaped member, said rod member threadably engaging portions of one of said L-shaped members and including a flange means bearing against portions of the other L-shaped member.

**References Cited by the Examiner**

UNITED STATES PATENTS

| | | | |
|---|---|---|---|
| 831,780 | 9/1906 | Ferriss | 254—131 |
| 892,236 | 6/1908 | Eubank | 254—132 X |
| 897,991 | 9/1908 | McCoy | 254—132 X |
| 1,043,223 | 11/1912 | Grady | 254—132 |
| 1,234,243 | 7/1917 | Williams | 254—131 |
| 1,260,041 | 3/1918 | Powell | 254—132 |
| 1,666,454 | 4/1928 | Johnson | 254—132 |

FOREIGN PATENTS

| | | |
|---|---|---|
| 102,478 | 12/1923 | Switzerland. |

WILLIAM FELDMAN, *Primary Examiner.*

OTHELL M. SIMPSON, *Examiner.*