

H. E. BARBER.
 ANCHOR FOR STUMP PULLING MACHINES AND THE LIKE.
 APPLICATION FILED AUG. 22, 1919.

1,346,933.

Patented July 20, 1920.

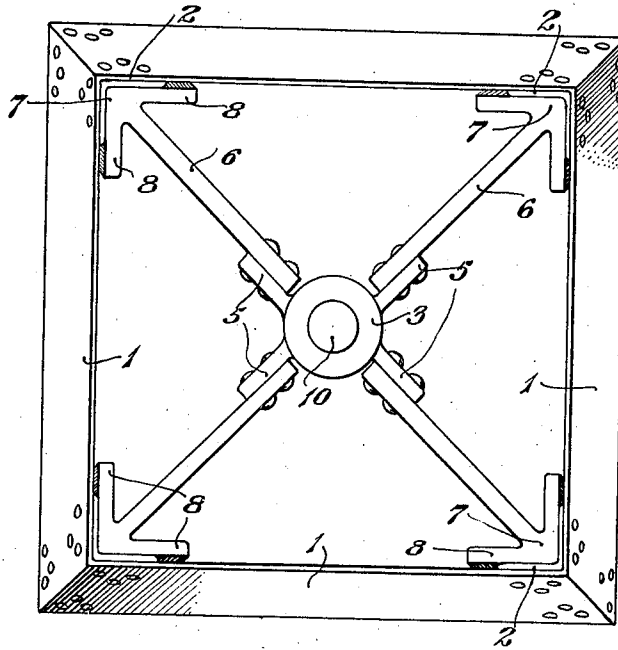


Fig. 1

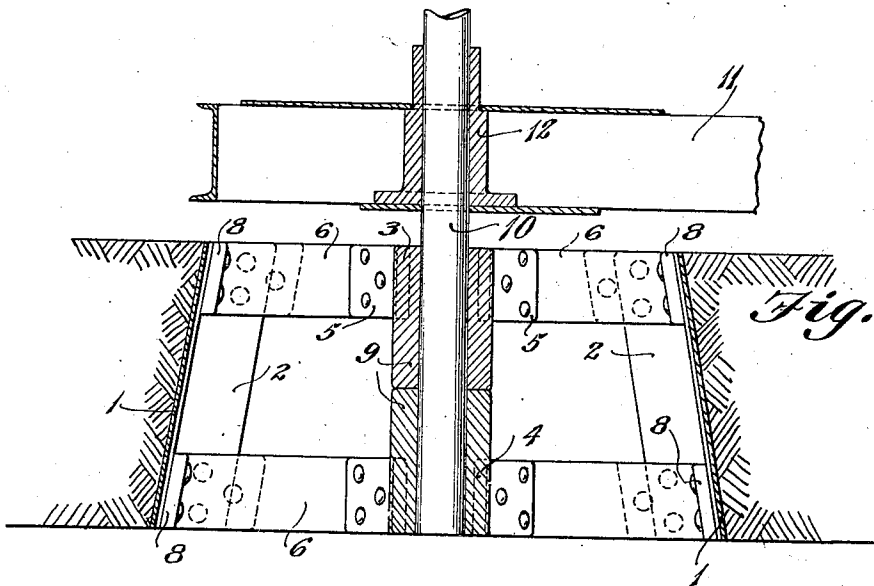


Fig. 2

INVENTOR.
Harry E. Barber
 BY *Carroll R. Barber*
 ATTORNEY.

UNITED STATES PATENT OFFICE.

HARRY E. BARBER, OF GREEN COVE SPRINGS, FLORIDA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE AMERICAN CLEARING COMPANY, OF HAMILTON, OHIO, A CORPORATION OF DELAWARE.

ANCHOR FOR STUMP-PULLING MACHINES AND THE LIKE.

1,346,933.

Specification of Letters Patent.

Patented July 20, 1920.

Application filed August 22, 1919. Serial No. 319,134.

To all whom it may concern:

Be it known that I, HARRY E. BARBER, a citizen of the United States, residing at Green Cove Springs, in the county of Clay and State of Florida, have invented certain new and useful Improvements in Anchors for Stump-Pulling Machines and the like, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to anchors for stump pulling machines and the like and is in part a continuation of the application filed by me December 26th, 1918, Ser. No. 268,235.

The object of the invention is to provide a device of this kind which will firmly anchor the stump pulling mechanism, or other device to be held, regardless of the character of the soil.

A further object of the invention is to provide such an anchor which will not be displaced by the strain imposed thereon and which will maintain the connecting device for the structure to be anchored always in a substantially vertical position.

A further object of the invention is to provide such an anchor with means for so connecting thereto the structure to be anchored that the pull on the anchor will always be in a substantially horizontal direction.

A further object of the invention is to provide such an anchor with means for connecting thereto the structure to be anchored in such a manner as to permit the latter to have swinging movement relatively to the anchor.

In the accompanying drawings Figure 1 is a top plan view of an anchor embodying my invention; and Fig. 2 is a vertical sectional view taken centrally through such an anchor.

In these drawings I have illustrated one embodiment of my invention and have shown the same as designed more particularly for use with a stump pulling machine, but it will be understood that this particular construction has been chosen for the purpose of illustration only, and that the anchor may be used with various structures and that various changes may be made therein to accommodate it to the different structures with which it may be used.

In that form of the device here illustrated, the anchor comprises a body portion open at its upper and lower ends and having its walls converging upwardly, after the manner of a truncated pyramid. This body portion may take various shapes but, as here shown, it is substantially square in cross section and comprises four side walls 1 which are preferably formed of sheet metal, such as boiler plate, and are connected one to the other at their abutting edges by means of angle brackets 2 arranged in the respective corners of the body portion and rigidly secured to the side walls thereof. The side walls are braced one against the other by means of cross bars which preferably extend diagonally across the body structure, from corner to corner, and are provided with means for supporting a device for connecting the anchor with the structure to be anchored. Preferably, the body portion of the anchor is braced at both its top and its bottom and, as here shown, it is provided with bearings to receive a shaft or upwardly extending rod, which serves as a connecting device. In the present instance, the bearings, which are shown at 3 and 4, are formed separately from the brace bars and are provided with flanges or radially extending arms 5 to which are connected the brace bars 6. These brace bars extend radially from the bearing and in connection therewith constitute a spider which serves to brace the several corners of the body portion of the structure one against the other. The outer ends of the brace bars may be connected with the body portion in any suitable manner, but preferably they are provided with angular heads 7, which are seated in the corners of the structure and, in the present instance are seated in the angle brackets by means of which the side walls are connected one to the other. In the construction here shown, these heads comprise inwardly diverging flanges 8 formed integral with the brace arms 6. The central or bearing portions, 3 and 4, of the two spiders serve to space the central portions of the spiders apart and, in the present construction, they are shown as formed separately one from the other but as having inwardly projecting extensions 9, which abut one against the other and thus brace the spiders one against the other. Mounted

in these bearings, 3 and 4, is a vertical shaft 10, which extends above the upper end of the anchor and serves to connect the same with the structure which is to be anchored.

5 In the present drawings I have shown the anchor as applied to the frame 11 of a stump pulling machine, and this frame has rigidly mounted thereon a vertical bearing 12 through which the shaft 10 extends and
10 which serves to transmit the strains from the frame to the shaft in a substantially horizontal direction.

The device constructed as herein illustrated is sunk in the ground for substantially its full depth and the structure to be anchored is placed above the same and connected thereto by means of the shaft 10. The strains imposed upon the structure which is to be anchored are transmitted
15 through the shaft to the anchor in a substantially horizontal direction and, because of the shape of the anchor, these strains tend to cause the same to dig deeper into the ground rather than to work upwardly out
20 of the ground. Further, the shape of the anchor is such that it is held firmly in position under all conditions of service and the shaft 10 is maintained in a substantially vertical position so that the frame 11 is free
25 to rotate about the same. The construction of the device is very simple and inexpensive, and further, the device is of such a character that it can be very quickly and easily connected with the structure which is to be
30 anchored, thus enabling the anchor to be first set in the ground and the structure then connected therewith.

While I have shown and described one embodiment of my invention, I wish it to be
40 understood that I do not desire to be limited to the details thereof, as various modifications may occur to a person skilled in the art.

Having thus fully described my invention, what I claim as new and desire to secure by
45 Letters Patent is:

1. An anchor of the character described, comprising a body portion rectangular in cross section and having its four upwardly
50 converging walls rigidly braced one against the other at their upper and lower ends, and means for connecting to said body portion the structure to be anchored.

2. An anchor of the character described, comprising a body portion having upwardly
55 converging walls, arms rigidly secured at their outer ends to said walls, rigidly connected one to the other near the center of said body portion and having means for connecting said body portion with the structure
60 to be anchored.

3. An anchor of the character described comprising a body portion open at its upper and lower ends, bearings arranged centrally
65 of said structure near the upper and lower

ends thereof, and arms rigidly connected with said bearings and with the walls of said structure.

4. An anchor of the character described comprising a body portion open at its upper
70 and lower ends, cross arms extending diagonally of said structure and rigidly connected thereto at their outer ends, and a bearing rigidly secured to said arms near the center of said structure.

5. An anchor of the character described comprising a body portion, cross arms extending transversely of said body portion
75 near the upper and lower ends thereof and rigidly secured at their outer ends to the walls thereof, bearings rigidly secured to said cross arms and having abutting portions.

6. An anchor of the character described comprising a body portion rectangular in cross section and having upwardly converging walls, radial arms having angular heads
80 at their outer ends seated in the corners of said body portion and rigidly secured thereto, a bearing arranged centrally of said body portion and rigidly secured to the inner ends of the several arms, and a shaft mounted in said bearing.

7. In a mechanism of the character described, the combination with an anchor
85 comprising a body portion, a vertical bearing arranged within the said body portion, arms rigidly connecting said bearings to said body portion and bracing the walls of said body portion one against the other,
90 and a shaft mounted in said bearing and extending above said body portion, of a structure to be anchored having a vertical bearing to receive the upwardly extending portion of said shaft and rotatively support
100 said structure thereon.

8. In a mechanism of the character described, the combination with a structure to be anchored having a vertical bearing, of an anchor comprising a body portion having
110 upwardly converging walls, brace bars extending transversely of said body portion, a bearing rigidly secured to said brace bars and arranged within said body portion, and a shaft adapted to extend through the bearing
115 in said structure and to enter the bearing in said anchor to rotatively connect said structure to said anchor.

9. An anchor of the character described comprising a hollow structure adapted to be
120 sunk in the ground, arms rigidly secured at their outer ends to the side walls of said structure, rigidly connected one to the other near the center of said structure, and having means for connecting said structure with the
125 device to be anchored.

In testimony whereof I affix my signature hereto.

HARRY E. BARBER.