J. C. HAASE.

DRIVE ANCHOR.

APPLICATION FILED MAR. 27, 1908.

904,198. Patented Nov. 17, 1908.

Fig. 1.

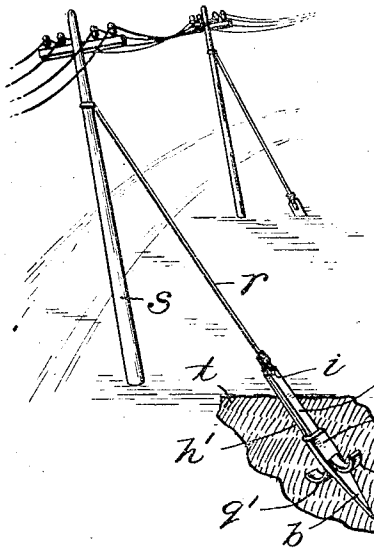


Fig. 2.

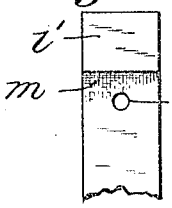


Fig. 3.

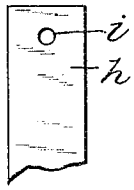


Fig. 4.

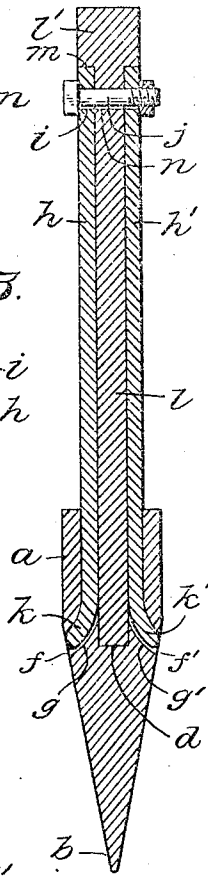


Fig. 5.

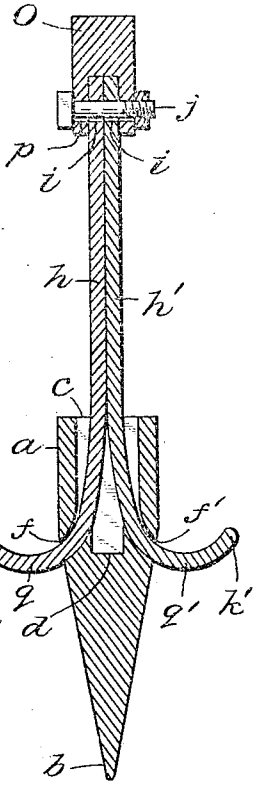


Fig. 6.

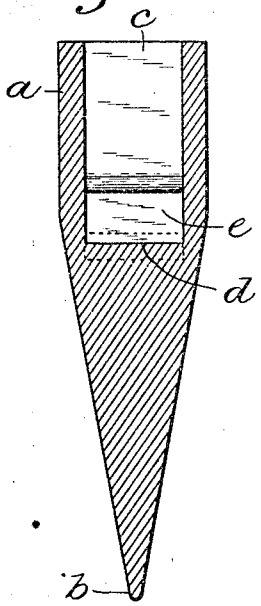


Fig. 7.

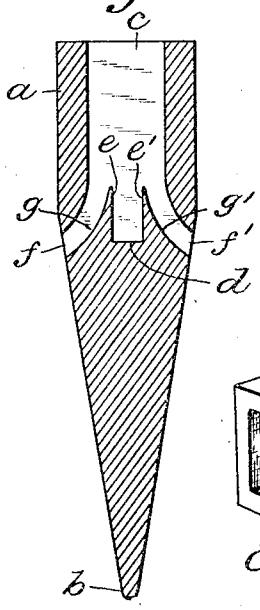
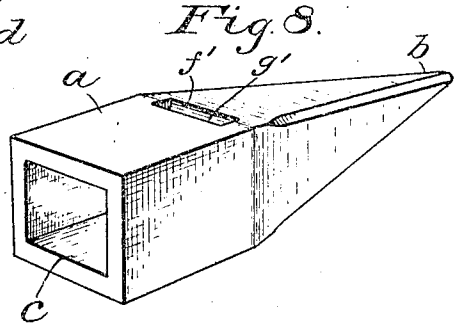


Fig. 8.



WITNESSES:

J. H. Gardner.

K. R. Woddell.

INVENTOR:

Joseph C. Haase,

BY

E. T. Silvius.

ATTORNEY.

UNITED STATES PATENT OFFICE.

JOSEPH C. HAASE, OF RAY TOWNSHIP, MORGAN COUNTY, INDIANA.

DRIVE-ANCHOR.

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To all whom it may concern:

Be it known that I, JOSEPH C. HAASE, a citizen of the United States, residing in Ray township, in the county of Morgan and State of Indiana, have invented certain new and useful Improvements in Drive-Anchors; and I do declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to the type of anchors that are adapted to be driven into the ground or earth and to have cables or chains connected thereto for staying or supporting poles or posts, especially telephone posts or telegraph posts that may be set in leaning positions along crooked or curved roadways, the invention having reference particularly to drive anchors that are adapted to be secured firmly in the ground after having been driven to the desired positions.

The object of the invention is to provide an improved anchor for the above mentioned and other purposes that may be manufactured at a relatively small cost and be highly efficient, durable and economical in use.

With the above mentioned and other objects in view the invention consist in a built-up drive anchor of improved construction, comprising a novel form of drive-head, a plural-piece shank of novel form connected to the drive-head and adapted to form outspreading arms in the ground, and a drive-bar whereby the drive-head and shank may be forced into the ground; and the invention consists in the novel parts and combination and arrangements of parts, as hereinafter particularly described and defined in the appended claims.

Referring to the drawings Figure 1 is a fragmentary perspective view showing a telephone line and the improved anchor in operative position and connected by a stay-wire that is connected to one of the telephone poles; Fig. 2, a fragmentary side elevation of the drive-bar; Fig. 3, a fragmentary side elevation of either one of the parts of the plural shank; Fig. 4, a longitudinal central sectional view of the improved anchor with the drive-bar connected thereto as when made ready for driving into the ground; Fig. 5, a longitudinal central sectional view of the anchor without the drive-bar as when completed with a driving-cap thereon which is to be removed before connecting an object to the anchor; Fig. 6, a longitudinal central sectional view of the drive-head; Fig. 7, a longitudinal central sectional view of the drive-head on a plane at right angles to the plane of the section in the preceding figure, and Fig. 8, a perspective view of the drive-head.

Similar reference characters in the different figures of the drawings designate corresponding elements or features of construction.

The improved anchor comprises a drive-head having a body portion *a* that is oblong and has a tapering point *b* on one end thereof, the opposite end having a socket-opening *c* therein, the bottom of the socket-opening having a seat *d* with walls *e* and *e'* at opposite sides of the seat. The body portion has a plurality of channels as *f* and *f'* in the walls thereof that extend from the socket-opening downward and outward to the surface of the body portion, the inner walls *g* and *g'* of the channels being preferably curved from the top of the walls *e* and *e'* to the outer side of the body portion. The anchor further comprises a shank having a plurality of parts as *h* and *h'* preferably composed of flat bars of any desired or suitable lengths, in the upper end portions of which are bolt-holes *i* to receive a bolt or pintle *j*, the opposite ends having curved extremities *k* and *k'* respectively that correspond to the channels *f* and *f'* in curvature or contour when the parts of the shank are in the socket-opening *c* and against the sides thereof. A drive-bar *l* is provided that has a head *l'* on one end thereof and shoulders *m* under the head adapted to engage the outer ends of the parts *h* and *h'* of the shank, there being a bolt-hole *n* in the drive-bar to receive the bolt *j*, the other end of the drive-bar being adapted to enter between the walls *e* and *e'* and engage the seat *d* in the drive-head when the drive-bar is placed between the parts *h* and *h'* of the shank, the shank parts and the drive-bar being connected together by the bolt *j* so that the drive-bar temporarily serves as a part of the shank of the anchor, but is removable from the other parts of the shank, as will further appear.

A driving-cap *o* of suitable length is provided that is adapted to extend as far as may be desired over the outer ends of the parts *h* and *h'* of the shank when the drive-bar is removed therefrom, the cap preferably hav-

ing a bolt-hole p therein to receive the bolt j so that the cap may be attached temporarily to the parts h and h' of the shank while the parts are being driven. Blows may be struck on the cap o by means of a sledge or maul which will result in driving the parts h and h' downward through the socket-opening c so that the extremities k and k' will be forced outward from the channels f and f', and arms q and q' will be formed of the lower portions of the shank parts h and h' for effectually anchoring or securing the shank in the ground. After having secured the shank the cap o may be disconnected therefrom, and a wire or cable r may be inserted in the holes i of the shank parts and secured therein suitably and connected also to a pole s set in the ground t, or to any other object that it may be desired to support laterally.

It will be understood that the drive-head may have any desired or suitable number of channels as f and f' and the shank may comprise any suitable number of parts to be projected through the channels.

In practical use the devices are to be arranged as shown in Fig. 4, and then by applying force to the driving-head l' the point b may be forced into the ground until the drive-head enters sufficiently far to be in firm earth, after which the bolt j may be removed and the drive-bar l withdrawn from its position, and then the cap o may be connected by the bolt j to the parts as h and h' of the shank, after which the shank may be forced downward until the arms q and q' have been formed of suitable length to rovide substantial anchorage. Then the cap o and bolt j may be disconnected from the shank, after which the wire or cable r may be connected to the shank.

Having thus described the invention, what is claimed as new, is—

1. A drive-anchor including a drive-head having a socket-opening therein and a channel extending from the opening through the wall thereof, a shank part extending into the socket-opening and having an end portion thereof extending into the channel, and a drive-bar extending into the socket-opening adjacent to the shank part and removably connected therewith.

2. A drive-anchor including a drive-head having a socket-opening therein and a channel extending from the opening through the wall thereof, a shank part extending into the socket-opening and having an end portion thereof extending into the channel, the shank part having an aperture in another portion thereof, a drive-bar extending into the socket-opening adjacent to the shank part and having an aperture therein registering with the aperture of the shank part, and a securing device in the apertures of the shank part and drive-bar and connecting the shank part and the drive-bar together detachably and thereby locking the shank part in the drive-head.

3. In a drive-anchor, the combination of a drive-head comprising a body portion having a socket-opening in one end thereof and a point on the opposite end thereof, the body portion having a seat therein at the bottom of the socket-opening and walls at opposite sides of the seat, the body portion having also a plurality of channels therein extending from the socket-opening at the outer sides of said walls to the surface of the body portion, with a shank having a plurality of parts insertible into the socket-opening and into the channels, and a drive-bar to engage said seat removably.

4. In a drive anchor, the combination of a drive-head comprising a body portion having a socket-opening in one end thereof and a point on the opposite end thereof, the body portion having a plurality of channels therein extending from the socket-opening to the surface of the body portion; a shank having a plurality of parts all extending into the socket-opening and separately into the channels; and a driving-device seated against the outer end of the shank and connected with the plurality of parts thereof, said device being seated also against the body portion of said drive-head.

5. In a drive anchor, the combination of a drive-head comprising a body portion having a socket-opening in one end thereof and a point on the opposite end thereof, the body portion having a plurality of channels therein extending from the socket-opening to the surface of the body portion; a shank having a plurality of parts all extending into the socket-opening and separately into the channels; and a driving-cap extending over the outer end of the shank and connected with the plurality of parts thereof, said driving-cap embracing said parts collectively.

In testimony whereof, I affix my signature in presence of two witnesses.

JOSEPH C. HAASE.

Witnesses:
HARRY D. PIERSON,
E. T. SILVIUS.