H. W. PLEISTER.

GUY ROD.

APPLICATION FILED JULY 17, 1917.

1,258,140. Patented Mar. 5, 1918

Fig. 1

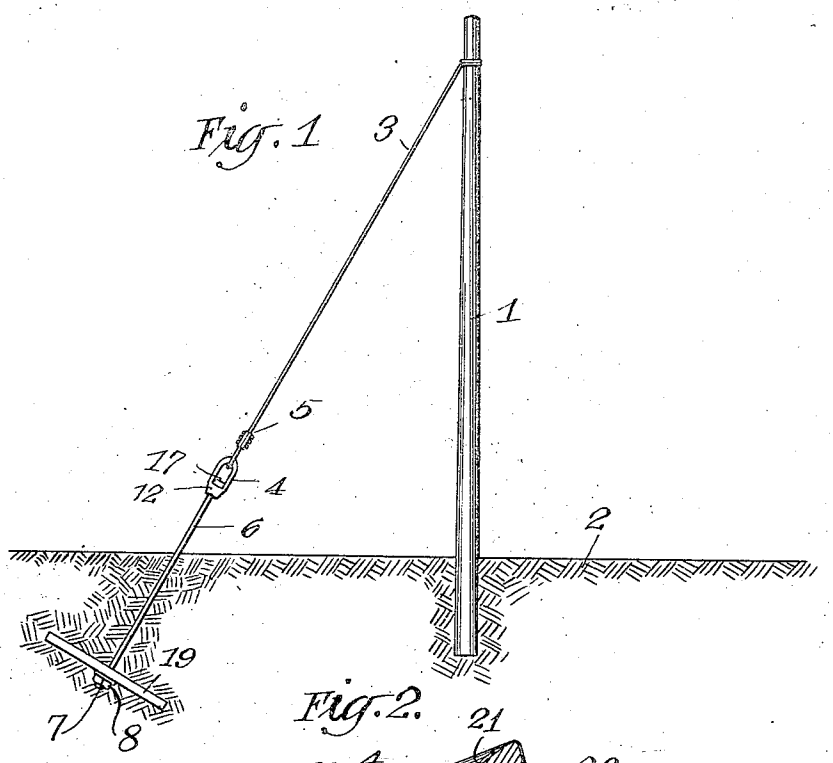


Fig. 2.

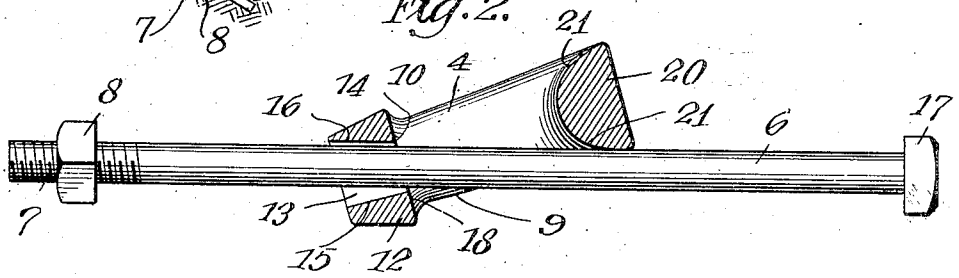


Fig. 3.

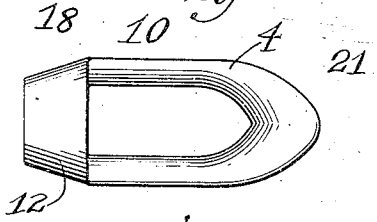


Fig. 4.

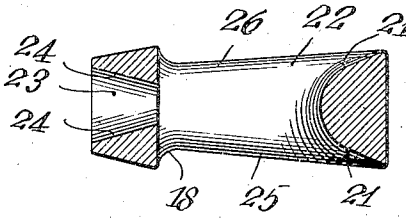
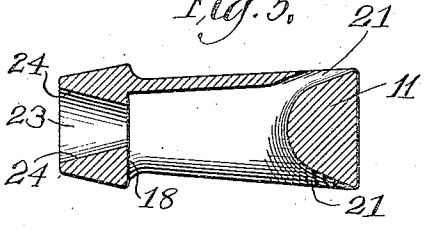


Fig. 5.



Inventor
Henry W. Pleister

By his Attorney
Wm. M. Johnson

UNITED STATES PATENT OFFICE.

HENRY W. PLEISTER, OF WESTFIELD, NEW JERSEY, ASSIGNOR TO HENRY B. NEWHALL.

GUY-ROD.

1,258,140. Specification of Letters Patent. Patented Mar. 5, 1918.

Application filed July 17, 1917. Serial No. 181,000.

To all whom it may concern:

Be it known that I, HENRY W. PLEISTER, a citizen of the United States, residing at Westfield, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Guy-Rods, of which the following is a specification, taken in connection with the accompanying drawings.

My invention relates to guy rods used more particularly in telegraph and telephone installations. In such constructions it is necessary to use a guy rope, connected to a suitable anchorage, to take the terrific strains thrown upon the telegraph and telephone poles, due to the normal load, as well as the abnormal strains due to wind, sleet and storms. My invention relates to a guy rod free from a weld and one which will avoid the expense of welding, and the weakness inherent in such a welded guy rod as is now commonly employed. It further relates to a guy rod in which a separate thimble does not have to be used. In my invention an ordinary commercial square-headed bolt may be used with my improved guy head, which head may be sold as a separate article of manufacture, or in combination with the square-headed bolt.

My invention further relates to certain details of construction which will be more fully hereinafter described in the specification and covered by the claims.

I have shown in the accompanying drawings different illustrative embodiments of my invention but, of course it is to be understood that my invention is not to be confined simply to the forms illustrated except as required by the scope of the appended claims, nor to the particular use described herein, for it would be equally useful on bridge rods, turnbuckle rods, as a means of attaching grab hooks to chains and many other purposes where swivel eyes may be used. By the use of a round headed bolt or other shape for insertion in the head a swiveling action could be obtained. In these drawings the same reference numeral refers to similar parts in the several figures.

Figure 1 is a side elevation of a telephone pole shown braced by a guy rope secured to my improved guy rod.

Fig. 2 is a longitudinal vertical section through the guy head showing the rod being located in the head.

Fig. 3 is a plan view of my improved guy head.

Fig. 4 is a longitudinal vertical section through a modified form of guy head.

Fig. 5 is a detail view of a modification.

In the illustrative embodiments of my invention shown in the drawing 1, is a telephone or telegraph pole having its end embedded in the ground 2. Near the other end of the pole 1 is secured one end of the guy rope 3, the other end of which passes through the guy head 4 and is looped back upon itself and secured by any approved cable clamp 5.

My guy rod comprises the guy head 4 and an ordinary headed bolt 6 having a screw threaded end 7 to coöperate with the nut 8.

This guy head 4 is cut away, preferably on both sides 9 and 10, so as to form an open eye, though, of course, only one side of the head 4 may be opened as shown by the guy head 11 in Fig. 5.

In the base 12 of the guy head 4 I provide an opening 13, the upper portion of which 14 is of substantially the same diameter as the rod 6. In the preferred construction one surface 15 of the opening 13 will be substantially parallel to the axis of the guy head while the surface 16 will be inclined to said axis so as to form an offset ellipse or flared opening. This flared opening permits the rod 6 to be inserted through the open side 9, after, of course, first removing the nut 8, the rod being brought into its operative position by bringing its head 17 within the guy head 4 and allowing it to rest upon the surface 18 of the guy head.

In use the end of the rod 6 is passed through an opening in a piece of wood 19, which may be a railroad tie or any other form of anchor, and then embedded the required depth in the soil, which in practice is about five to six feet.

The upper solid portion 20 of my guy head 4 is provided with continuous inclined bearing surfaces 21, 21 to coöperate with the guy rope 3 and performs the same function as a wire rope thimble preventing the cutting or marring of the strands of the wire rope 3 by giving a continuous unbroken bearing surface.

In some cases I may have a guy head 22, Fig. 4 in which the opening 23 will have a double flare or inclined surfaces 24, 24

which will permit the rod 6 to be inserted in the guy head at either side 25 or 26.

My guy head may be either cast or drop forged, and may be sold, as previously noted, as a separate article of manufacture. By my invention I avoid using a rod having a weld in it thereby avoiding the weakness of the weld and the expense of making it. The tensile strength of my guy rod is raised to the strength of the rod 6 itself and not limited to the strength of any weld which may be made in the rod.

Having thus described this invention in connection with several illustrative embodiments thereof to the details of which I do not desire to be limited, what is claimed as new and what is desired to secure by Letters Patent is set forth in the appended claims:

1. An article of manufacture comprising a guy head having one or more open sides to permit the insertion of a bolt, a solid upper portion having a continuous inclined bearing surface for a guy rope forming an integral unbroken thimble preventing the cutting or marring of the wire rope, and a base having an opening for the passage of a bolt.

2. An article of manufacture comprising a guy head having one or more open sides to permit the insertion of a bolt, a solid upper portion having a continuous inclined bearing surface for a guy rope forming an integral unbroken thimble preventing the cutting or marring of the wire rope, and a base having an elliptical opening for the passage of a bolt.

3. A guy rod to be used with wire rope including in combination an ordinary commercial headed bolt, and a removable guy head having one or more open sides to permit the insertion of the bolt at an angle to the longitudinal axis of the guy head, the guy head having a solid upper portion having a continuous inclined bearing surface for a wire rope forming an integral unbroken thimble preventing the cutting or marring of the strands of the wire rope, the guy head having a base provided with a flaring opening to assist in the insertion of the rod within the side of the guy head.

4. An article of manufacture comprising a guy head provided with a base having a tapering hole to admit a bolt at an incline to the longitudinal axis of the guy head, the guy head having an integral elliptical eye provided at its upper end with a solid unbroken bearing surface for the wire rope said upper end of the integral eye being of greater cross section than the base to form a bearing surface and avoid the use of a separate thimble.

HENRY W. PLEISTER.

Witnesses:
ELIZABETH J. ROTH,
MARY R. RYAN.