

April 28, 1931.

G. E. BALCH
GUY HOOK

1,802,934

Filed July 27, 1928

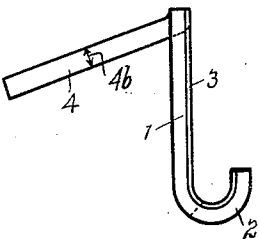


FIG. I

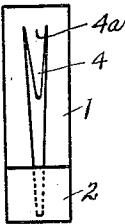


FIG. II

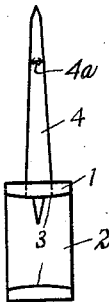


FIG. III

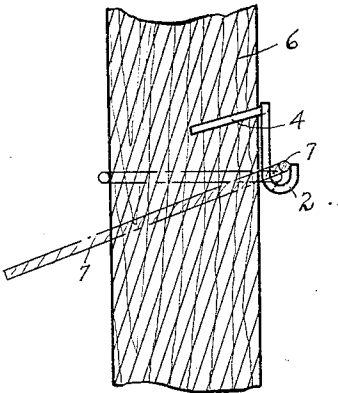


FIG. IV

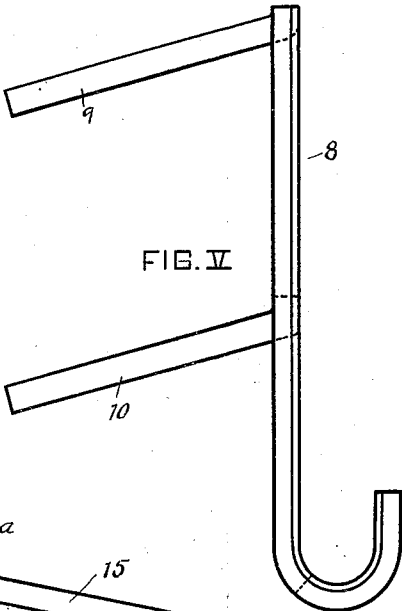


FIG. V

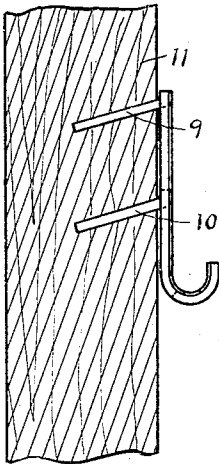


FIG. VI

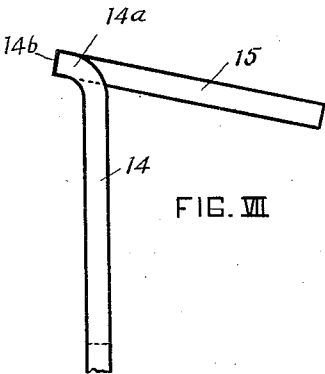


FIG. VII

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UNITED STATES PATENT OFFICE

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GUY HOOK

Application filed July 27, 1928. Serial No. 295,723.

This invention relates to an improvement in a guy hook.

In running guy lines from telegraphic poles, it has been the practice to attach one or more J shaped hooks to the pole before passing the guy wire or rope therearound to fix the vertical position of the said wire or rope on the pole. In the past, it has been the practice to affix these so-called guy hooks to the poles by means of lag screws or bolts.

Aside from the initial cost of lag screws, and aside from the usual loss of the same occasioned by the inadvertency of workmen, the use of lag screws has proven a costly manner of attaching these hooks, due to the time and labor required for each installation.

The object of this invention is to provide a hook structure, which has attaching means formed integrally therewith.

A further object of the invention is to provide a hook structure, which is formed with attaching means so positioned that the hook and said attaching means may be formed in one machine operation.

In the accompanying drawings Figure I is a side elevation of the guy hook of this invention; Figure II is a front elevation of the same; Figure III is a top plan view of the guy hook; Figure IV shows a section of a telegraph pole, and illustrates the manner in which the guy hook is affixed thereto; Figure V is a side elevation of a slightly modified form of guy hook, this hook having two mounting prongs; Figure VI is a view similar to Fig. IV showing the mounting of the latter hook on a telegraph pole; and Figure VII is a fragmental side elevation of the top of a hook, showing a slightly modified structure.

The hook of the present invention comprises a back portion 1 having the hook portion 2 formed on one end thereof. Although it is not necessary, it is preferable to form the hook of strip metal having the slightly convexed face 3, because this prevents a wire or rope that may rest in the hook from contacting a sharp edge or corner.

There is a prong member 4, which is

stamped and deflected from the back portion 1, as illustrated. In Figures II and III, it will be apparent that the prong 4 is substantially triangular or tapered in longitudinal section, and rectangular in cross section, and although it need not, of necessity, be formed rectangular in cross section, it is desirable that it should be. This is for the reason that the prong will enter and remain more readily in the longitudinal grain of the pole 6, when it is so formed. For the same reason, it is desirable to deflect the said prong from 70 to 80 angular degrees from the plane of the back member 7. It is very desirable to form the prong relatively narrow in cross-sectional width (4a) to adapt it to readily enter and remain rigidly in the vertical grain of a pole. To obtain strength to withstand the forces applied to the hook in use, it is desirable to have the cross-sectional height (4b) of the prong as great as possible. In forming the hook of stock having the convex face 3, and by stamping the prong from the central portion of the convex face (the region of greatest stock thickness) it has been found that a prong of exceedingly effectual characteristics is had. Furthermore, at this angle, it was found easier to hammer the prong into a pole, and after it is positioned in a pole, it seats tighter when and as tension is exerted on a rope, such as the rope 7 shown in dotted lines, seated in the hook portion 2.

In order that the hook may have proper rigidity, it is preferable that the metal, from which it is formed, be at least twice as wide as it is thick. It is important that the hook be of sturdy construction in every detail.

Figures V and VI show the same principle applied to a larger hook 8, which has the two mounting prongs 9 and 10. These prongs are formed in the same general manner referred to in connection with the prong 4, and may be readily driven into place in the pole 11. In order that there will be no tendency for the hook to twist when a force is applied on it, the prong or prongs should be aligned centrally of the back portion of the hook. It is, however, conceivable that

two prongs may be horizontally aligned on the said back portion, and spaced to afford a balanced attachment to a pole.

Figure VII shows a fragmentary side elevation of the top of a hook 14, which is similar to the hook 1. The modification in hook 14 comprises the form in which the prong 15 is stamped and deflected from the back portion thereof. Instead of simply deflecting the prong portion alone, the top 14a is bent therewith, and results in a surface 14b which is aligned at right angles to the center line of said prong portion. This surface 14b may prove of value in large sized hooks where relatively heavy blows are required to mount the hook, as a whole, on a telegraphic pole, or on any similar object.

It is important to note that the structure of this hook is such that it may be formed in a single machine operation. That is, stock may be fed into a die machine, sheared off to length, the prong stamped and deflected by a male die, and a forming die may then follow to shape the hook portion.

What I claim is:

1. A guy hook comprising a back portion and a hook portion formed integrally of metallic stock having an outwardly rounded face, and a prong stamped and deflected from said back portion centrally of the rounded face.

2. A guy hook comprising a back portion and a hook portion formed integrally of metallic stock having a convex face, and a prong sheared and deflected from the body of said back portion centrally of the convex face, said prong extending from said back portion to an outer pointed end and the body of said sheared and deflected prong adjacent its point of attachment to said back portion being of a width approximately equal to its depth.

In witness whereof, I hereunto set my hand.

GEORGE E. BALCH.