

W. R. KALES.
GIN POLE.

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957,216.

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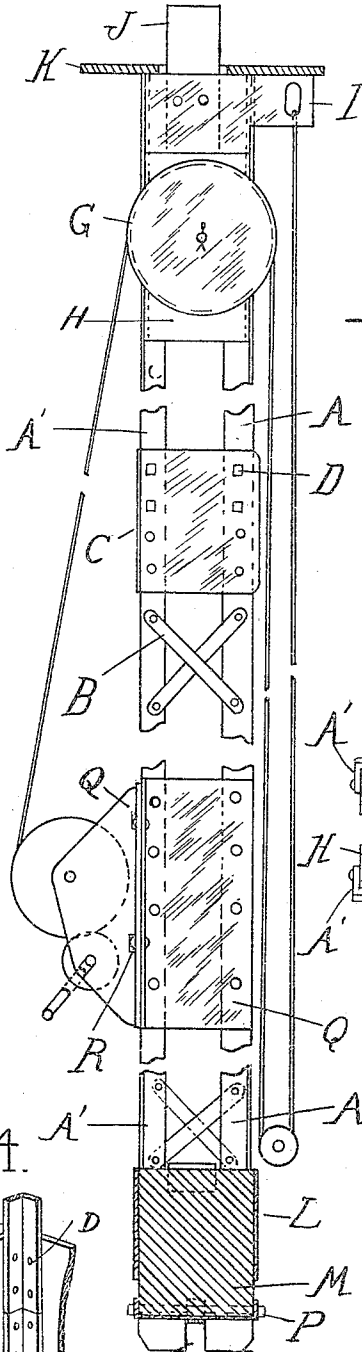
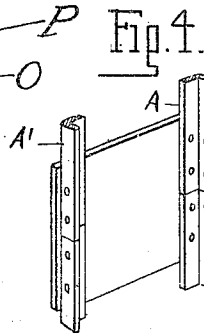
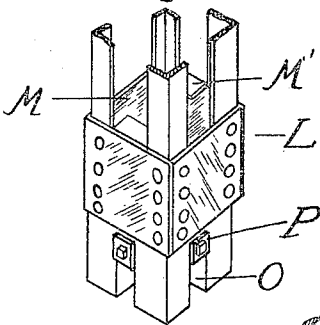
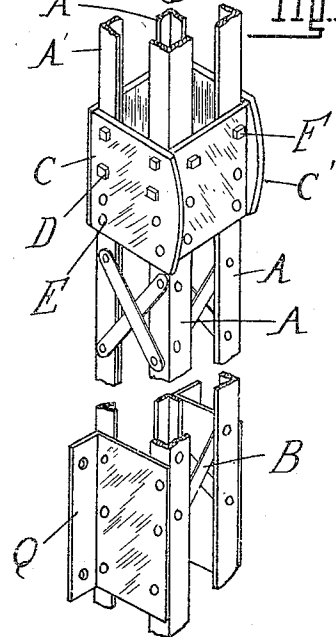
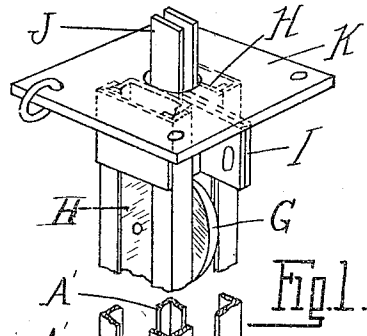
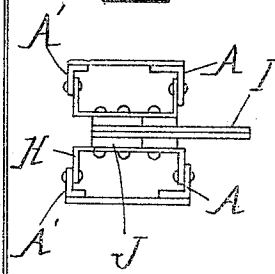


Fig. 2.

Fig. 3.



Witnesses
W. R. Ford
C. B. Belknap

Inventor
William R. Kales
By [Signature]

UNITED STATES PATENT OFFICE.

WILLIAM R. KALES, OF DETROIT, MICHIGAN, ASSIGNOR TO THE WHITEHEAD AND KALES IRON WORKS, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

GIN-POLE.

957,216.

Specification of Letters Patent.

Patented May 10, 1910.

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To all whom it may concern:

Be it known that I, WILLIAM R. KALES, a citizen of the United States of America, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Gin-Poles, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates to hoisting apparatus, and more particularly to a construction of "gin pole." Usually a wooden pole is employed for this purpose, but where the point of erection is at a distance the transportation of such a pole involves considerable inconvenience and expense.

It is therefore the object of the present invention to obtain a construction of portable sectional metallic pole, and the invention consists in various features of construction as hereinafter set forth.

In the drawings—Figure 1 is a perspective view of the pole; Fig. 2 is a vertical longitudinal section through portions thereof, and Fig. 3 is a plan view with the guide plate removed. Fig. 4 is a fragmentary perspective view showing the manner of securing the meeting ends of adjacent sections.

My improved construction comprises essentially a plurality of sections, which may be easily united with each other, and which, when separated, are limited in length sufficiently for convenience in shipment. Each section is preferably formed of angle bars connected by lattice braces, and one end of each section is further provided with a socket for coupling with the adjacent section. More in detail, A A and A' A' are four angle bars united to each other by the lattice bracing B to form a rectangular column. The bars A A are preferably of greater section than the bars A' A', as they constitute the front side of the pole, and are subjected to greater stresses than the other bars.

C are plates at the end of the sections, and on the four sides thereof, said plates being riveted at D to the angle bars of the section to which they are permanently attached, while bolt holes E are provided for attachment to the bars of the adjacent sections.

To avoid projections which might catch upon the load, the lattice bracing for the

front side of the beam is arranged on the inside of the angle flanges, but on the remaining sides is riveted to the outside of said flanges, which may be more conveniently done. Bolts F are used for coupling the adjacent sections and on the front side of the pole the bolt heads are guarded from catching upon the load by extending the side plates C' beyond the front plate. These extensions are tapered at top and bottom—as shown in Fig. 1.

The top section of the pole has journaled therein near the upper end a sheave G. Above this member is swiveled a guy plate K, and there is also arranged an arm for the hoisting cable. Flanged plates H are secured to the inner faces of the angle bars so as to extend parallel to each other, and spaced sufficiently to receive the sheave therebetween. Between the upper ends of these flanged plates is arranged a bar I which projects forward, and is apertured to form an anchored connection for the hoisting cable. The bar I which is preferably formed of a plurality of plies of metal plates is also provided with an upward extending member J constituting a post upon which is swiveled the guy plate K, and the corners of this plate are apertured for attachment to the guy.

The lower section of the pole is provided with a socket L formed by plates at the sides thereof, and in this socket is placed a wooden plug M, which forms a supporting bearing for the pole. The plug M abuts against angle flanges M' riveted to the inner faces of the angle bars A A', while at the lower end of the plug cross slots O are formed for engagement of a pinch bar used in erecting the pole. In these cross slots shoes P are preferably arranged to form a bearing against which the pinch bar may operate.

For operating the hoisting apparatus, a winch Q, of any suitable construction, is secured preferably to the rear face of the lower section, being detachably secured by bolts R.

With the construction as described, during transportation the various sections of the pole may be separate from each other so as to permit of being compactly stored. At the point of erection, the sections are quickly attached to each other, and the pole is then erected in the usual way. Any suitable

hoisting block may be employed, one of the lines being anchored to the forwardly projecting arm I and the hoisting strand passing over the sheave G and downward to the winch Q. The position of the pole may be easily shifted by stepping along the base by the use of a pinch bar, and the cross slots O guarded by the shoes will greatly facilitate this operation.

10 What I claim as my invention is:

1. A gin pole comprising a plurality of sections of metallic column, means for detachably securing said sections to each other, a sheave carried by the upper section, and a plug secured to the lower section, constituting a supporting bearing.

2. A gin pole comprising a metallic column formed of a plurality of sections, and braces connecting said sections, a socket at the lower end of said column, and a wooden plug engaging said socket and forming a supporting bearing.

3. A gin pole comprising a metallic column, having a socket in its lower end, a wooden plug engaging said socket and having a cross slot therein for the engagement of a pinch bar.

4. A gin pole comprising a metallic column, a socket formed at the lower end of said column, a wooden plug secured in said socket having a cross slot therein, and a metallic shoe for protecting the top of said cross slot.

5. A gin pole comprising a metallic column formed of angle bars at the corners and lattice bracing, the bars adjacent to the front side of the column being of greater section than those upon the rear side.

6. A gin pole comprising a metallic column formed of corner bars and cross bracing, parallel plates secured to said bars at the upper end of the column and a sheave

journalled in said plates and arranged therebetween.

7. A gin pole comprising a plurality of sections, each section consisting of angle bars at the corners thereof and lattice bracing, a socket for securing said sections to each other formed of plates bolted to the angle bars of one section, and a guard for the bolt heads on the front side of the pole formed by a projection of one of the side plates.

8. A gin pole comprising a plurality of sections, each consisting of angle bars and lattice bracing, a sheave journalled on the upper section, parallel flanged plates secured to the angle bars adjacent to said sheave, and a metallic member secured between said parallel plates having a forward projection forming an anchor for the load, and an upward projection and a guy plate swiveled upon said upper projection.

9. A gin pole comprising a plurality of sections of metallic column, means for detachably securing said sections to each other, a projection carried by the upper end of the top section, and a guy plate swiveled upon said projection.

10. A gin pole comprising a plurality of sections, each consisting of angle bars and lattice bracing, a sheave journalled on the upper section, parallel flanged plates secured to the angle bars adjacent to said sheave, and a metallic member secured between said parallel plates, having a forward projection forming an anchor for the load.

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

WILLIAM R. KALES.

Witnesses:

W. J. BELKNAP,
N. KENSELLA.