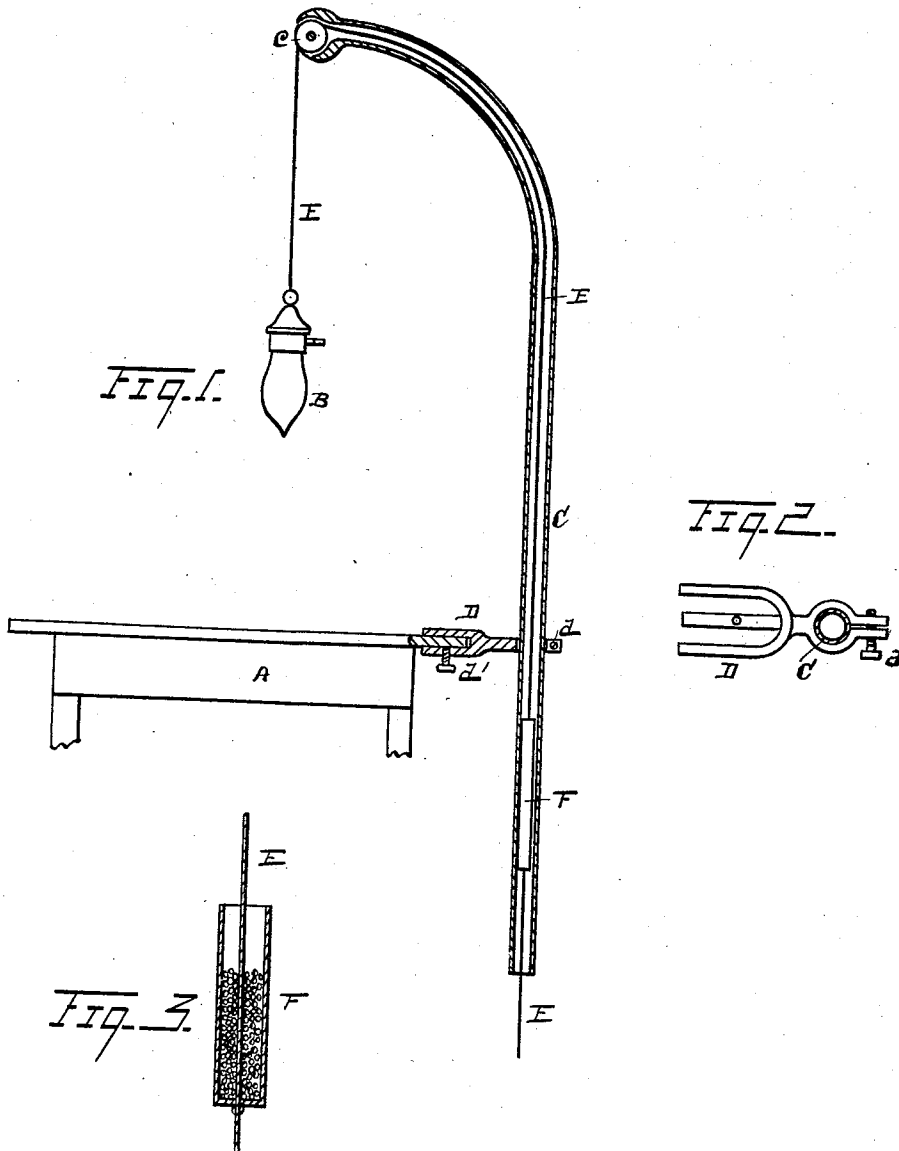


(No Model.)

F. A. KIRBY.
SUPPORTING CRANE.

No. 509,227.

Patented Nov. 21, 1893.



Witnesses
John Schuman.
John F. Miller.

Inventor
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UNITED STATES PATENT OFFICE.

FITZ A. KIRBY, OF WYANDOTTE, MICHIGAN.

SUPPORTING-CRANE.

SPECIFICATION forming part of Letters Patent No. 509,227, dated November 21, 1893.

Application filed March 3, 1892. Serial No. 423,573. (No model.)

To all whom it may concern:

Be it known that I, FITZ A. KIRBY, a citizen of the United States, residing at Wyandotte, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Supporting-Cranes; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to certain new and useful improvements in a supporting crane or standard for various uses, and consists of the devices and appliances hereinafter specified and claimed and illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section showing my invention. Fig. 2 is a plan view of the clamping device, showing the standard in section. Fig. 3 is a separate view of the weight in section.

The object of my invention more particularly is to provide a portable crane or standard for supporting any desired device, as for example an incandescent lamp, which may readily be attached to any desired article, as a desk, table or chair, and whereby the article supported thereby may be adjusted in various positions vertically and horizontally as may be required.

I have shown my invention in the drawings submitted herewith applied to a table A and supporting an incandescent electric lamp B.

I carry out my invention as follows:

C represents a hollow standard or crane, preferably constructed of a piece of piping with a curved upper extremity, as shown to carry the lamp or other article supported thereby forward of the upright portion of the crane.

D is any suitable clamping device having a movable engagement upon said standard and held in any desired position thereupon by suitable means, as by a set screw *d*. A set screw *d'* is employed to bind the clamping device upon the table.

By forming the crane or support of round material with its upper end curved as shown,

its straight or vertical portion can be rotated axially and clamped at any desired point of its rotation, and can be vertically adjusted, thus enabling the article being suspended from the upper end of the crane to be swung around in a circle with the clamp as a center and also be secured at any height relatively to the clamp or object to which the same is secured.

E denotes a suspending cord or cable passed through the hollow standard. At the upper end of the standard the cord is passed over a pulley "c" located in the standard, the standard being enlarged at that point to form a housing for the pulley. In the lower end of the standard is located a movable weight with which the cord is connected. It will be evident that the cord will have contact with the inner surface of the standard producing more or less friction, which will to some extent diminish the weight required, the weight being simply sufficient to hold in suspension any article supported by the upper end of the cord, allowing said article to be adjusted up or down by the movement of the weight in the base of the standard.

As shown in the drawings, where an electric lamp is connected with the cord, the cord constitutes or consists of an electric insulated cable. The cable in this case passes through the weight as shown in Fig. 3.

The weight preferably consists of a smaller pipe than the standard, with its lower end closed except a small opening through which the wire or cord passes. As thus constructed the weight may be filled with any desired material and as the cord passes through its lower end and out at the lower end of the support, the weight can be drawn down out of the support at any time and the amount of material in it can be changed to correspond with the weight of the article to be supported, after which it can be drawn back into the support out of the way. This construction will also permit of the weight and cord being drawn up in the support any desired distance to accommodate the vertical adjustment of the article being supported. The weight may be secured to the cord or wire at any desired point by means of a knot

which will engage with the bottom of the weight and hold it at that point. I do not however limit myself to any particular manner of forming the weight.

5 Instead of a lamp, anything else desired may be suspended from the cord passing through the upper extremity of the standard. In such a case the cord might be provided with any desired attaching device.

10 It will be evident that as so constructed the lamp or other article may be suspended at any desired height. The standard may also be turned in the clamping device to or fro as required.

15 The lamp or other suspended article is also adjustable vertically so as to be readily raised or lowered as circumstances or convenience demand.

20 It will be seen that such a crane or standard is light, easily moved from place to place, and readily adjusted vertically or laterally, as may be desired.

What I claim as my invention is—

25 1. The combination, with a hollow, open ended support or standard, of means intermediate the ends of the support for adjust-

ing the same vertically or axially, and a cord through the standard and longitudinally movable relatively thereto, independent of the movement of the support, of a weight secured 30 to said cord, within the standard, and the upper end of the cord projecting from the standard and adapted to receive an article to be suspended therefrom, substantially as set forth.

35 2. The combination with a round, hollow support or standard, the upper end of which is gradually curved and provided with a pulley, of a cord through the standard, provided with a weight, and a clamp, one end of which 40 engages with the support or standard, intermediate its ends and holds it in its vertical or axial adjustment, and the other end is adapted to engage with a support, as a table, 45 substantially as set forth.

In testimony whereof I sign this specification in the presence of two witnesses.

FITZ A. KIRBY.

Witnesses:

N. S. WRIGHT,
JOHN F. MILLER.