May 25, 1926. 1,585,961

A. S. BLUM ET AL

ADJUSTABLE CRANE

Filed April 14, 1924

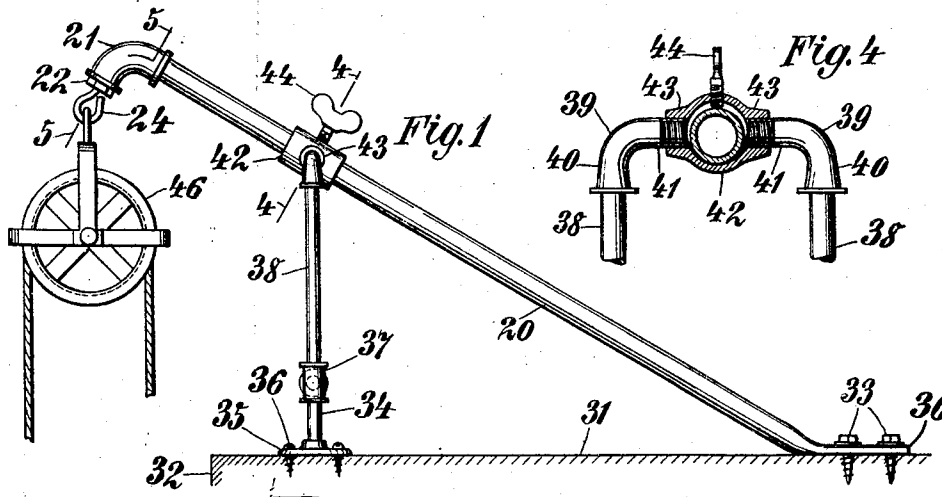

Fig. 1

Fig. 4

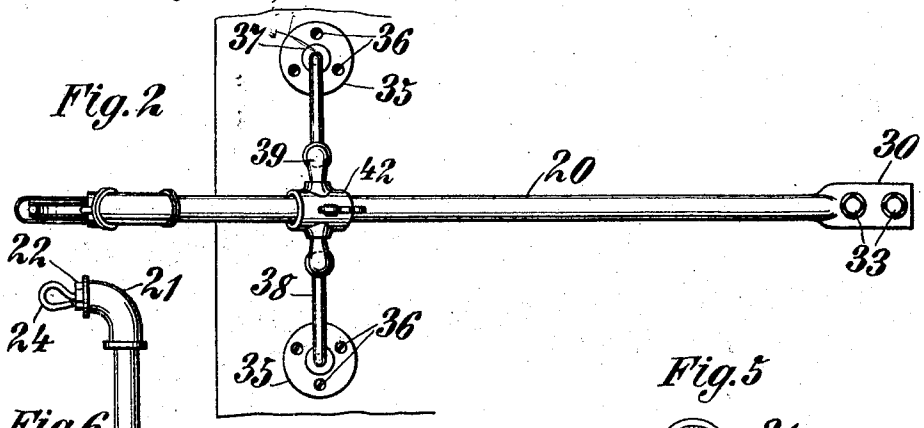

Fig. 2

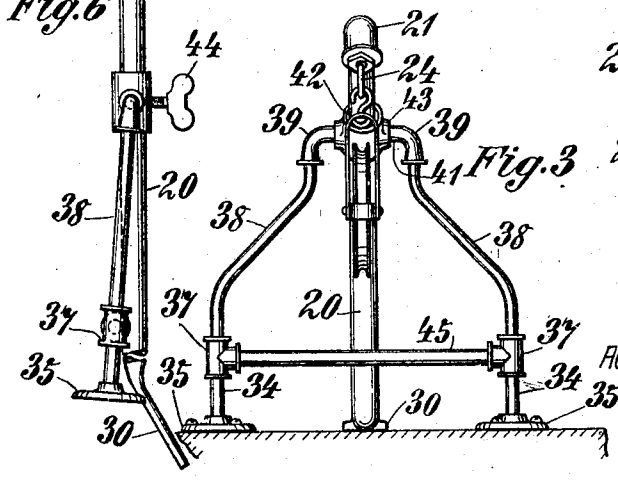

Fig. 6

Fig. 3

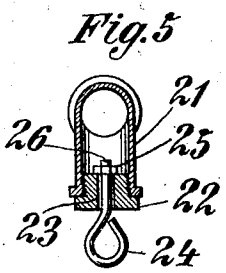

Fig. 5

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UNITED STATES PATENT OFFICE.

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ADJUSTABLE CRANE.

Application filed April 14, 1924. Serial No. 706,390.

This invention relates to an adjustable crane.

It has for its object the production of a crane, comprising a pipe structure in which the jib thereof can be located in different positions. A second object is to produce a collapsible crane for its easy transportation from place to place. A third object is the production of a crane, wherein the upper end of its jib can be located at various vertical and also horizontal distances from the supporting structure for the crane, such as the roof of a building.

The members of the crane consist of a structure of piping, to obtain a low first cost of manufacture, and secure a device, which will be durable for outdoor use, such as the roof of a building. The crane of the applicant obviates the danger of the deterioration of a wooden crane, which is easily broken and detached from its support by early decay and for other causes.

In the accompanying drawings Fig. 1 represents a side elevation of a crane exemplifying the invention supported on the roof of a building; Fig. 2 shows a top plan view of Fig. 1; Fig. 3 indicates a front view of the crane; Fig. 4 represents an enlarged section of Fig. 1 on the line 4, 4; Fig. 5 is an enlarged section of Fig. 1 on the line 5, 5; and Fig. 6 shows the members of the crane in a collapsed position with the hoisting mechanism detached therefrom.

Referring to the drawings, the jib of the crane comprises a metallic pipe indicated at 20, which at its upper end has in threaded engagement therewith one of the ends of the elbow 21. A reducer 22 having the axial opening 23 is in threaded engagement with the other end of said elbow. An eyelet 24 extends through the opening 23, and is held in position by the nut 25, which is in threaded engagement with the shank 26 of said eyelet. At the lower end of the jib 20 is indicated the foot 30 which is formed by flattening the pipe, comprising the jib.

A supporting structure for the crane is indicated in this instance diagrammatically, by a building, having the roof 31 and the vertical wall 32. The foot 30 is fastened to the roof 31 by means of the screws 33 or the like.

The stationary post of the crane is also composed of piping, and is shown to comprise two lines of piping. It consists of the pair of pipes 34, which at their lower ends are in threaded engagement with the pipe flanges 35, which constitute the feet 35 of the post. The feet are fastened to the roof 31 by means of the screws 36.

T's 37 are in threaded engagment with the upper ends of the pipes 34. Curved pipes 38 extend from the T's 37 and converge toward the jib 20. An elbow 39 is indicated with the legs 40 and 41. The legs 40 are in threaded engagement with the upper ends of the pipes 38. A cross is indicated with its longitudinal barrel 42 and its side members 43. The longitudinal barrel 42 of the cross is slidably supported on the jib 20. A set screw 44 is in threaded engagement with said cross and clamps the jib 20 thereto in predetermined positions. The legs 41 are in adjustable threaded engagement with the side members 43 of said cross. A pipe 45 connects the T's 37.

A pulley 46 for a hoisting mechanism is shown suspended from the eyelet 24.

It will be noted that the cross having the longitudinal barrel 42 can be clamped to the jib 20 at different locations of the latter, and thereby the upper end of the said jib with the elbow 21, can be located at different vertical positions from the roof 31 and different horizontal positions from the wall 32.

The crane can be collapsed by swinging the post thereof to the position shown in Fig. 6, which can easily be accomplished because the legs 41 of the elbows 38 can oscillate in the cross members 43.

Various modifications may be made in the invention and the present exemplification is to be taken as illustrative and not limitative thereof.

Having described our invention what we desire to secure by Letters Patent and claim is:—

1. In a pipe structure for a crane the combination of a stationary post, a cross connected to the upper end of the stationary post and adapted to swing relatively thereto, a jib extending through said cross and means to clamp it thereto in different positions.

2. In a pipe structure for a crane, the combination of a stationary post, elbows for the upper ends of the stationary post, a cross with a longitudinal barrel and side members, the latter in engagement with said elbows and adapted to swing relatively thereto to collapse the crane, a jib slidably extending through the longitudinal barrel of the cross and means to clamp the jib to said cross.

3. In a pipe structure for a crane the combination of a stationary post, comprising two lines of piping, an elbow in threaded engagement with the upper end of each line of piping, a cross comprising a longitudinal barrel and side members, the latter in threaded engagement with said elbows and adapted to swing relatively thereto, a jib slidably extending through the longitudinal barrel of the cross and having a foot formed at its lower end, means to clamp the jib to the cross, an elbow in threaded engagement with the upper end of the jib and an eyelet extending from the latter elbow.

Signed at the borough of Manhattan, city of New York in the county of New York and State of New York this 7th day of April A. D. 1924.

ABRAHAM S. BLUM.
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