This invention relates to a tamper-proof jack post for a construction fence comprising two posts with a portion of their extent in telescoped relation, a sleeve in telescoped relation with the said two posts and in threaded relation with the first one of said two posts, said sleeve and said second post being formed to receive a first removable coupling device for said sleeve and said second telescoped post, said first post and said second post being formed to receive a second removable coupling device for said first post and said second post.

3 Claims, 5 Drawing Figures
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SUPPORT FOR CONSTRUCTION FENCE

This invention relates generally to a construction fence. More particularly, it relates to a jack for a construction fence which combines with the fence panels to form a fence structure.

It is common practice in the construction of high buildings to pour the concrete floors into place before the exterior walls. There is a need for a temporary fence at the edge of the floor structure as a safety measure. These fences comprise panels that are secured to temporarily located jacks that are in turn held in place between the floor and the overlying ceiling.

The jacks that have been employed for this purpose are of a design that is not related to the fence. Once in place, they are subject to easy tampering with the result that they can be rendered unsafe for their intended purpose by an unauthorized person.

This invention provides a fencing arrangement with a jack that is especially designed for construction fencing and that is substantially tamper-proof by unauthorized persons. The nature of the temporary fencing arrangement of this invention is safer than that of the prior art. Moreover, the setting up and knocking down of the fencing according to this invention is easier than with the prior art.

An important feature of the present invention is the construction of the jack that supports the fencing panels and according to the invention, a jack post for a construction fence according to this invention comprises two posts with a portion of their extent in telescoped relation, a sleeve in telescoped relation with said two posts and in threaded relation with the first one of said two posts, said sleeve and the second one of said two posts being formed to receive a first removable coupling device for coupling said sleeve and said second post, said first post and said second post each being formed to receive a second removable coupling device for coupling said first post and said second post together.

The invention will be clearly understood after reference to the following detailed specification read in conjunction with the drawings.

In the drawings;

FIG. 1 is a perspective view of a construction fence according to the present invention;

FIG. 2 is a view along the line 2-2 of FIG. 1;

FIG. 3 is an exploded perspective view illustrating the corner construction of a panel of a fence;

FIG. 4 is an illustration partly broken away showing a jack post for this invention; and

FIG. 5 is a detail illustrating the upper portion of a jack post.

Referring to the drawings, the numeral 10 refers to the floor of a building under construction and the numeral 12 refers to the ceiling above the floor. It is desired to provide a fence at the edge of the floor 10 to insure the safety of the workers working on the floor and the fence is constructed from panels generally indicated by the numeral 14 which are retained in place by spaced apart jacks generally indicated by the numeral 16. It will be appreciated that panel sections 14 are placed end to end around the peripheral edge of the floor 10. In the drawings, only one panel has been illustrated.

The panel 14 is constructed from a tubular steel frame 15 formed with an open channel to receive the edge of a coarse wire mesh screen 18. The horizontally extending wire 20 of the wire mesh at the top and at the bottom of the screen is held captive in the channel 15 as illustrated in FIG. 2 to positively locate the screen within the frame. The side portions of the screen can be similarly retained or alternatively the free ends of the horizontal sections can be bent over to retain them within the channel of the vertically extending frame members of the channel 15. The manner of securing the mesh 18 in the channel members 15 of the frame 14 is not part of this invention and is not described in detail in the specification. The corners of the frame are held together by means of co-operating brackets 22 which are bolted together through co-operating bolt openings 24.

The jacks 16 comprise two posts 26 and 28 with a portion of their extent in telescoped relation. A sleeve 30 threads onto the outer side of the post 26 as at 32.

A coupling pin 34 can be projected through aligned holes in the sleeve 30 and the post section 28 to couple the sleeve to the post. It will be noted that there are a series of holes vertically spaced apart in both the sleeve 30 and the post section 28 so that the sleeve 30 and the post section 28 can be coupled together by the coupling pin 34 in various positions of telescoped relation. Sleeve 30 has a turning handle 36 which will be described later.

A second coupling pin 38 is provided and the post 26 and post 28 are each formed with a series of vertically spaced apart holes designed to receive the coupling pin 38. Thus, posts 26 and 28 can be coupled together in different positions of adjustment with respect to each other.

The bottom free end of the post 26 has a foot 40 that is designed to bear on the floor 10 in use and the upper end of the post 28 has a bearing pad 42 that is designed to bear against the ceiling 12 in use.

Bearing pad 42 of post 28 is formed on a tubular cap member 44 and a compressible spring 46 extends between the interior of the cap member 44 and the upper end of the post 28. In use, as pressure is applied by extension of the jack members when located between a floor, the spring 46 is compressed and the amount of compression is measured on the scale 48 by the position of the pin 50 along the slot 45. Pin 50 is carried by post section 38 and extends through the vertically extending slot 45 of the cap member 44 as illustrated.

As will be noted in FIG. 1 of the drawings, the coupling member 28 has its free end formed to engage in locked relation with the fencing panel 14. When the jack is tightened into position as illustrated in FIG. 1, there is a very substantial downwardly extending spring force urging the coupling member 38 into contact with the upper edge of the fence 14 to locate it in position.

In order to locate a panel of construction fence according to this invention into position, one first mounts the spaced apart jacks 16 between the floor and the ceiling of a building. To do this, coupling device 38 is first loosely inserted to couple the posts 26 and 28 at a height that will locate their bearing pads 40 and 42, a close but easy fit between the floor and ceiling. The sleeve 36 is then rotated and coupling device 34 is inserted. Coupling device 38 is then removed and handle 36 is rotated to carry the section of post 28 in an upward direction to cause the jack to expand and to exert
a pressure between the floor and the ceiling. Spring 46 is compressed until the desired amount of compression is achieved as indicated on the dial 48. A pressure of about 200 pounds is desirable. However, by means of the dial 48 which is calibrated according to the needs of the particular job, one can accurately measure for the desired amount of compression.

The coupling device 38 is then inserted to couple the posts 26 and 28 and in this connection it may be necessary to rotate post 28 upwardly or downwardly somewhat to achieve alignment of the holes in the telescoped post sections.

Coupling device 38 is inserted at the height of the construction fence panel 14 and its hooked end is turned downwardly so that it locks with the upper edge of construction fence and retains the upper edge of the fence against the post. By backing off the sleeve slightly, one can relieve the pressure from the coupling device 34 and transfer the pressure to the coupling device 38. Coupling device 34 is then removed. At the same time, all of the pressure of the jacked sections is borne by the coupling device 38 so that it cannot be removed. It thus locks the upper edge of the gate in position.

The fence thus mounted is substantially tamper-proof because rotation of the handle 36 of the sleeve 30 no longer has any effect on the pressure of the jack. One cannot remove the jack by turning the handle 36 unless the coupling device 34 is relocated.

Once in place, the fence is rigid and free from tampering by unauthorized persons. It is easy to assemble and to disassemble. In order to disassemble a fence, one would merely recouple the sleeve 30 with the post section 28 and rotate the sleeve to relieve the stress on the coupling member 38, remove coupling 38 and then remove the pressure on the jack.

What I claim as my invention is:

1. A jack post for a construction fence comprising two posts with a portion of their extent in telescoped relation, one of said posts being compressible axially of itself, a sleeve in telescoped relation with the said two posts and in threaded relation with the first one of said two posts, said sleeve and said second post being formed with openings that are alignable by relative rotation of said sleeve and said first post to receive a first coupling device for coupling said sleeve and said second telescoped post, said first post and said second post being formed with openings that are alignable by relative rotation of said first post and said second post when said sleeve and second telescoping post are coupled, to receive a second coupling device for coupling said first post and said second post.

2. A jack post for a construction fence as claimed in claim 1 including said second coupling device, said second coupling device having a shank that enters said openings in said posts, and including said first coupling device, said first coupling device having a shank that enters said openings in said sleeve and said second post.

3. A jack post for a construction fence as claimed in claim 2 in which said shank of said second coupling device is formed with a hook to hook over the top edge of a construction fence panel in use.