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PRECAST CONCRETE FOUNDATION HOLDING JIG

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Fig. 1

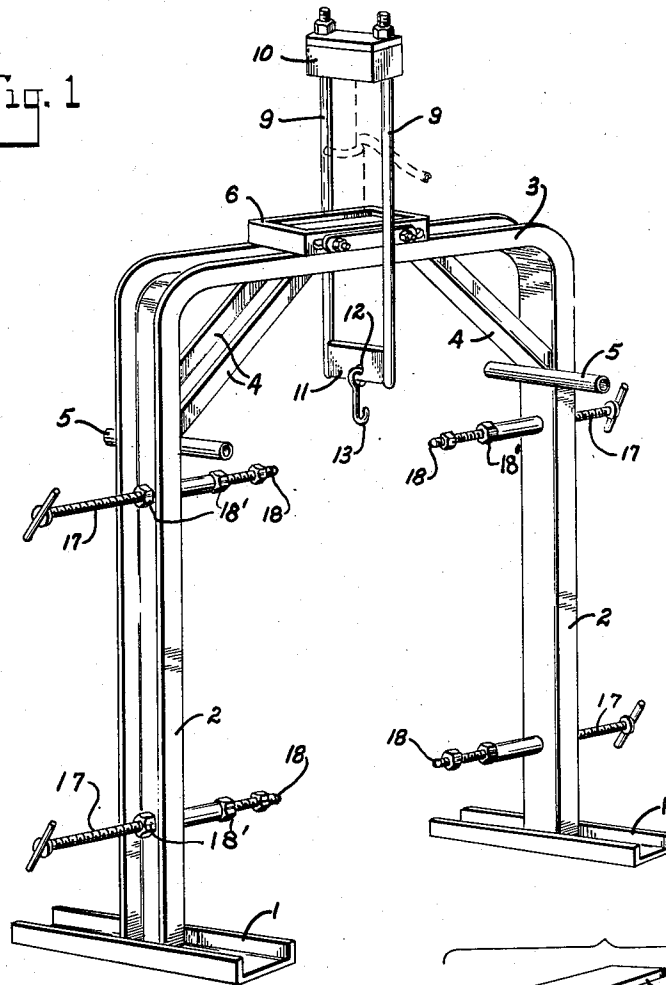


Fig. 2

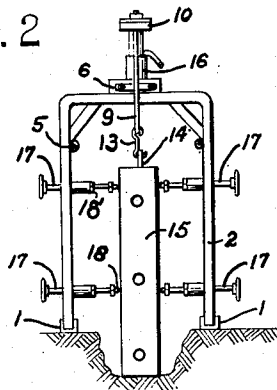
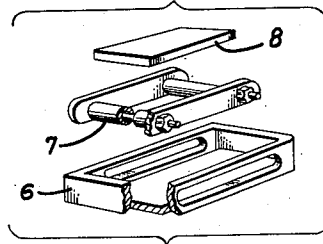


Fig. 3

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PRECAST CONCRETE FOUNDATION
HOLDING JIG

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4 Claims. (Cl. 29—284)

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This invention relates to improvements in pre-cast concrete foundation holding jigs and more particularly to a jig or tool in which pre-cast concrete foundations may be placed for leveling and plumbing and holding in the desired position having been leveled and plumbed to enable a poured concrete footing thereunder to set or harden while the pre-cast concrete foundation is held in aligned relation.

Heretofore foundations have been of two general types, one in which a monolith foundation was poured on the job and allowed to harden, and the other consisted primarily of blocks, timbers, or masonry piers that were more or less of the temporary or semi-permanent construction.

The monolith construction offered certain advantages of a permanent nature; however, with the advent of pre-fabricated concrete houses much trouble was experienced in obtaining the desired placing of bolts, holes, reinforcing and the like, which would align with pre-cast slabs. In the molding of pre-cast concrete foundation slabs, the holes and bolts were located by placement jigs to register with complementary holes, bolts, and reinforcing members in the pre-cast concrete building slab; however, unless the pre-cast concrete foundation members were accurately placed and aligned the value of the placement of the holes was greatly diminished; however, with the present alignment and holding jig a pre-cast concrete foundation member may be lowered into contact relation with spaced concrete footings poured in the earth until the top of the pre-cast concrete slab is at the desired height, level and plumb. Screws are provided for holding the pre-cast concrete foundation member when it is in the desired position. The pre-cast concrete foundation slab is held in this position until the footings thereunder are securely set, which then enables the removal of the jig or tool therefrom. After the removal of the jig or tool, the pre-cast concrete foundation member is substantially as secure as if it had been poured of monolithic construction.

An object of this invention is to provide a concrete foundation holding jig that will hold a pre-cast concrete foundation member in aligned, plumbed, leveled and suspended relation until a footing thereunder may set so as to hold the pre-cast concrete foundation member in permanent relation thereto.

Another object of the invention is to provide a tool for setting pre-cast concrete foundation members which is light in weight, sturdy in construction, easy to apply and remove from the pre-cast concrete foundation member.

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Another object of the invention is to provide a hydraulically operated leveling tool for leveling pre-cast concrete foundation members.

With these objects in view and others that will manifest themselves as the description proceeds, reference is to be had to the drawings, in which:

Fig. 1 is a perspective view of the invention showing a side, front, and top;

Fig. 2 is an elevational view of the invention showing a pre-cast concrete building slab positioned therein; and

Fig. 3 is an exploded perspective view thereof, with parts broken away and shown in section, of a jack abutting member.

With more specific reference to the drawings, the numeral 1 represents base members upon which an inverted U-member 2, preferably constructed of structural metal which forms supporting legs for a top member 3. The top member 3 may be braced with additional braces 4 to insure rigidity.

Handles 5 are positioned on each side of the device and secured to upright members 2, which enables the placing of the device about the pre-cast concrete foundation building member, prior to the placement of the foundation member.

A box member 6 is formed on the upper side of top member 3 and preferably has roller elements 7 positioned therein, as indicated in Figs. 1 and 3. A plate 8 is positioned on the roller elements 7 for rolling relation therewith and forms a seat or base for a jack member 16, as will be more fully described hereinafter.

A pair of bars 9 are arranged to straddle box member 6 and top member 3, and have coupling members 10 and 11 at the top and bottom, respectively. The top member 10 forms an abutting head to receive the jack 16 thereunder, as will be seen in Figs. 1 and 2. The bottom member 11 preferably has an aperture 12 therein, which is adapted to receive a hook 13 for engagement with eye members 14, either formed on or attached to the precast concrete foundation elements 15. The bars 9 are of sufficient length to enable the foundation member 15 to be raised and lowered within prescribed limits and to be moved from side to side by a rolling action of plate 8, jack 16, and rod assembly members 9—11, so as to procure the correct aligned relation of the concrete foundation member 15 with adjacent concrete foundation members of similar construction. When aligned transversely within the inverted U-shaped member 2, the jack 16 is used to raise or lower an end of the foundation member 15 until the member is substantially level. It is preferable to have two or more of these

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members for each foundation member 15. Screw members 17, having points 18, are screwed inward to engage the sides of the foundation member 15, as shown in Fig. 2, and a lock nut 18' is positioned on screw 17, which nut may be used to engage the inverted U-member 2 to lock the screws 17 in set relation.

It will be appreciated that the foundation member 15 may be plumbed by alternate application of pressure by screw members 17 and when in plumbed and leveled relation the screw members 17 are screwed inward to hold the foundation member 15 securely.

It will be appreciated that foundations can be set expeditiously and accurately with this tool with a minimum of labor.

While the invention has been illustrated and described somewhat in detail, it is to be understood that minor changes in the construction thereof may be made within the scope of the appended claims without departing from the spirit of the invention.

Having thus described my invention, I claim:

1. In a tool for supporting a precast concrete foundation member, a pair of base members, an upright member secured to each of said base members, a transverse member secured to and interconnecting the upper ends of said upright members, a pair of rollers positioned on the upper side of said transverse member and forming a seat for a jack, a yoke straddling said transverse member and projecting thereabove and therebelow, a jack seated on said rollers and positioned within and supporting said yoke, said downwardly depending portion of said yoke being engageable with said precast concrete foundation member for supporting same, and pairs of vertically and horizontally aligned, adjustable screw actuated members for securing said precast concrete foundation member in an adjusted position both horizontally and vertically.

2. In a tool for supporting a precast concrete foundation member, a pair of base members, an upright member secured to each of said base members, a transverse member connecting the upper ends of said upright members, a yoke straddling said transverse member and projecting thereabove and therebelow, a jack mounted for movement relative to said transverse member and supporting said yoke, said depending portion of said yoke member being engageable with said precast concrete foundation member for supporting same, and pairs of horizontally aligned screw actuated members on each of said upright members for securing said precast foundation

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members in an adjusted position both vertically and horizontally.

3. In a tool for supporting a precast concrete foundation member, a pair of spaced base members, an upright member secured to each of said base members, a transverse member connecting the upper ends of said upright members, a yoke straddling said transverse member and projecting thereabove and therebelow, rollers mounted for limited longitudinal movement on said transverse member, a jack seated on said rollers and positioned within and supporting said yoke member, said yoke member and said jack being movable longitudinally of said transverse member, said downwardly depending portion of said yoke member being engageable with said precast concrete foundation member for supporting same and inwardly extending, pairs of screw actuated means on said upright members for securing said precast concrete foundation member in an adjusted position both vertically and horizontally, and means for locking said screw actuated means in said adjusted position.

4. In a tool for supporting a precast concrete foundation member, a pair of base members, an upright member secured to each of said base members, a transverse member connecting the upper ends of said upright members, a yoke straddling said transverse member and projecting thereabove for receiving a jack between the upper surface of said transverse member and the upper closed end of said yoke member, said yoke member having a portion thereof depending downwardly below said transverse member, which downwardly depending yoke portion has a hook on the lower end thereof for engaging and supporting said precast concrete foundation member, and pairs of pointed, horizontally aligned, screw actuated members on each of said upright members for securing said precast concrete foundation member in an adjusted position both horizontally and vertically.

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