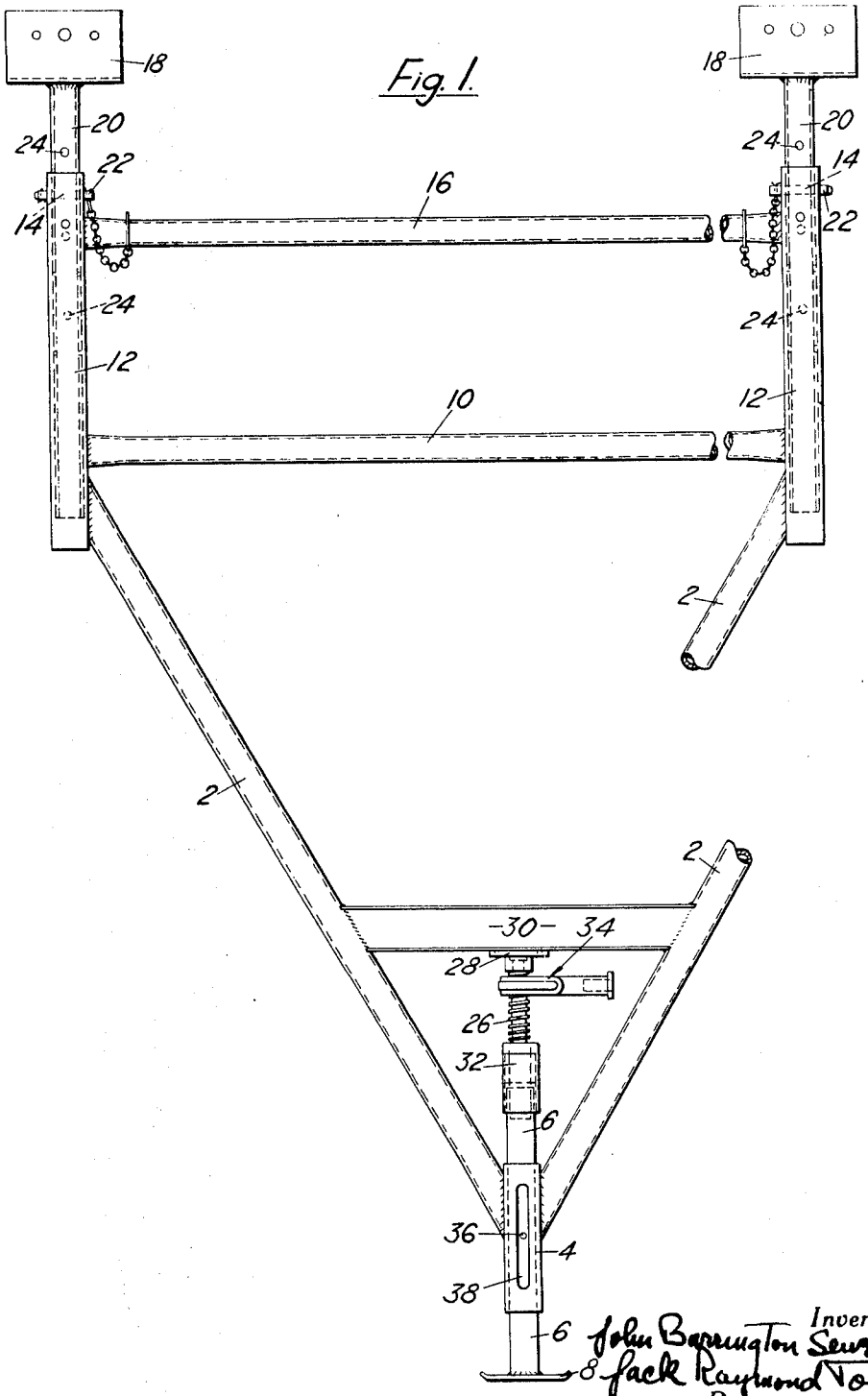
July 14, 1970 J. B. SEWELL ET AL 3,520,508

CONCRETE FORMWORK

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Fig. 1.



Inventor
John Barrington Sewell
Jack Raymond Tooley
By
Dowell & Dowell
Attorneys

July 14, 1970 J. B. SEWELL ET AL 3,520,508

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Fig. 2

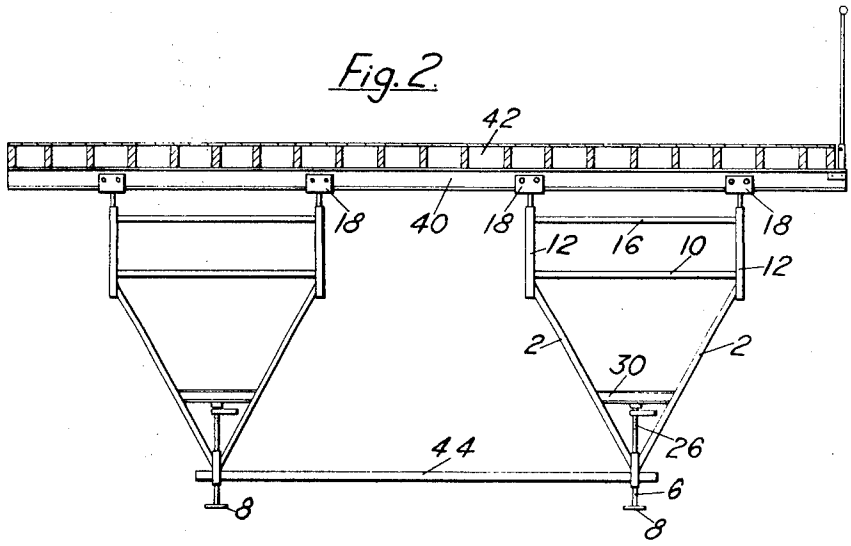
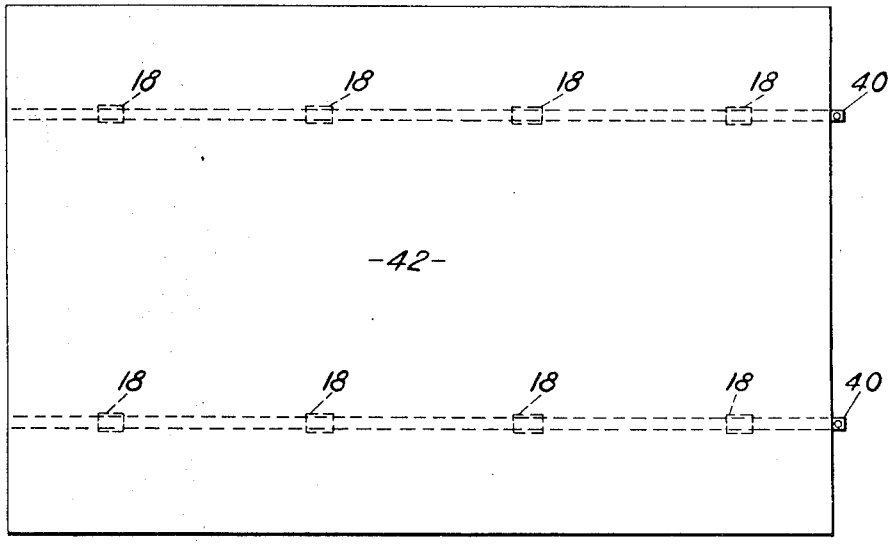


Fig. 3



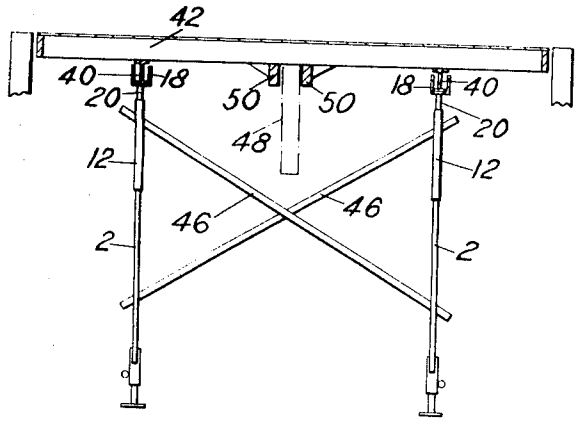
Inventor
John Bennington Sewell
Jack Raymond Tooley
By
Dowell & Dowell
Attorneys

July 14, 1970 J. B. SEWELL ET AL 3,520,508

CONCRETE FORMWORK

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Fig. 4.



Inventor
John Barrington Sewell
Jack Raymond Tooley
By
Dowell & Dowell
Attorneys

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3,520,508

CONCRETE FORMWORK

John Barrington Sewell, Brookman's Park, and Jack Raymond Tooley, Surrey, England, assignors to Acrow (Engineers) Limited, London, England, a British company

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Int. Cl. E04g 11/56
U.S. Cl. 249—18 4 Claims

ABSTRACT OF THE DISCLOSURE

The formwork panel adjustable support has two spaced apart support brackets connected by a single ground engaging member through main framework. A screw jack is operatively connected between the ground engaging member and a point on the framework which is movable relatively to the ground engaging member to enable adjustment in the height of the support brackets to be made on operation of the jack or the like. The basic shape of the framework is triangular, the apex of the triangle being connected to a sleeve surrounding the ground support member, and the base of the triangle being connected to the brackets.

DESCRIPTION OF INVENTION

This invention relates to concrete formwork. It is especially concerned with formwork e.g. "table forms" on which horizontal concrete slabs can be cast.

Hitherto concrete formwork panels which are arranged horizontally to provide a table form on which a horizontal concrete slab can be cast have normally been supported by a number of single adjustable props, the props being located regularly beneath the panel. Each prop has then to be adjusted in turn so that the table top is level and at the right height.

A formwork panel adjustable support in accordance with the invention comprises two spaced-apart support brackets or the like connected to a single ground engaging member through framework the adjustment being provided for by a jack which is operatively connected between the ground engaging member and a point on the framework which can move relatively to the ground engaging member. With such a construction in which only a single adjustment needs to be made in respect of two separate brackets, the number of supports and the number of adjustments, are halved as compared with prior constructions employing separate props.

Preferably the brackets are adjustably connected to the main framework so that a rough height adjustment can be made prior to the formwork being inserted in place, a rather more fine adjustment then being made by means of the adjustment means which conveniently comprise a screw jack operated for example by a ratchet member. It is preferable for the basic shape of the framework to be triangular with the apex of the triangle connected to a sleeve surrounding the ground supporting member and the base of the triangle connected to members carrying the brackets.

Preferably a support beam extends between the brackets of two or more aligned supports and the table form panel is supported by the beam. In one suitable arrangement four supports are provided at the corners of a rectangle the supports along one side of the rectangle being connected to their opposite supports by means of bracing.

The invention is concerned not only with the support by itself but also with a table form employing two or more such supports.

It will be appreciated that the table form panels, the beams and support members can be assembled together at a position apart from a casting position and then lifted to the casting position by means of a crane which is either connected directly through chains or the like to spaced apart points on the panel or which engages the table formwork assembly by means of a lifting member or beam in the form of a U lying on its side one arm of the U engaging beneath the table and the other arm of the U extending over the table and being connected to the lifting chains of the crane.

The invention will now be further described by way of example with reference to the accompanying drawings in which:

FIG. 1 is an elevation partly broken away for reasons of space, of one embodiment of a formwork panel support in accordance with the invention;

FIG. 2 is a side elevation of an embodiment of an assembled table form in accordance with the invention;

FIG. 3 is a plan view of FIG. 2; and

FIG. 4 is a section through the table shown in FIG. 2.

Referring to FIG. 1 the adjustable support comprises essentially an A-shaped framework comprising two support tubes **2** welded at their apex to a tube **4** through which a further tube **6** forming a ground engaging member, is inserted, the tube **6** being provided with a base plate **8**.

The base of the framework is completed by means of a tube **10** and at each side of the base of the framework there is welded a tube **12** formed with an adjustment hole **14**. A further support tube **16** connects the upper ends of the tubes **12**.

Each tube **12** supports a U-shaped bracket **18** by means of a tube **20** which is welded to the bracket and is inserted into the tube **12** and is held in any one of a number of positions by means of a pin **22** which passes through the hole **14** and a selected one of a number of holes **24** in the tube **20**.

A rough adjustment of the distance between the brackets **18** and the base plate **8** of the ground engaging member can thus be provided for by selecting an appropriate hole **22** of the tube **20**. This adjustment can be made prior to the support being located in position. It is however desirable for a rather more exact adjustment to be carried out when the support is connected to its formwork panel and the panel is located in the casting position. Such a fine adjustment is carried out by means of adjustment means comprising a screw jack **26** the head **28** of which engages the underside of an I-section beam **30** which extends across the two arms **2** of the framework adjacent the apex thereof. The screw **26** is engaged within the nut **32** secured to a tubular member **6**. Thus on turning the screw **26** for example by means of a ratchet handle assembly of known type, which is generally indicated at **34**, the framework, including the tube **4** is caused to move up and down relatively to the ground engaging member **6** so as to alter the distance between the brackets **18** and the base plate **8**.

In order to assist the rigidity of the construction a pin **36** projects outwardly from the apex of the two tubes **2** through a slot **38** in each side of the tubular sleeve **4**.

In use, a table form is assembled by securing horizontally disposed beams **40** (see FIGS. 2 to 4) within the brackets **18** of two pairs of support members. A rectangular wooden formwork panel generally indicated at **42** is then positioned over and secured to the two beams **40**. The two support members at each side of the panel are connected by a tubular brace **44** and opposite support members are connected together by a diagonally arranged bracing **46** as illustrated in FIG. 4.

The table form assembly can then be lifted into the casting position by means of a crane which is either directly connected to the panel or which engages the panel by

means of a U-shaped boom, the chains of the crane being connected to one arm of the U above the panel the other arm, shown diagrammatically in dash lines at **48**, in FIG. 4, being located beneath the panel between two guide members **50**.

When the table form has been positioned in the casting position its height can be adjusted by means of operation of the adjustment means of each support so as to ensure that the upper surface of the panel on which the concrete is to be cast, is both at the right height and is level.

After casting the panel can be lowered from the cast slab either by removal of the pins **22** or by lowering the jacks. The table form can then be removed from beneath the slab for subsequent use.

We claim:

1. A framework panel adjustable support comprising two spaced apart support brackets; a single ground engaging member; inverted triangular main framework carrying at its base the said brackets, the apex of the triangle carrying a sleeve receiving the said ground engaging member; and a screw jack operatively connected between the ground engaging member and a point on the framework which is movable relatively to the ground engaging member to enable adjustment in the height of the support brackets to be made on operation of said jack.

2. A support as claimed in claim **1**, in which the brackets are adjustably connected to the main framework.

3. Table formwork comprising a number of supports as claimed in claim **1**, a beam extending between the brackets of two or more aligned supports and a table form panel supported by the beam.

4. Table formwork as claimed in claim **3** in which four supports are provided at the corner of a rectangle the supports along the side of the rectangle being connected to their opposite supports by means of bracing.

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J. SPENCER OVERHOLSER, Primary Examiner

M. O. SUTTON, Assistant Examiner

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