C. E. BRADSHAW.

ADJUSTABLE SUPPORT FOR CONCRETE BUILDING FORMS.

APPLICATION FILED MAR. 7, 1912.

1,061,658. Patented May 13, 1913.

Fig. 1.

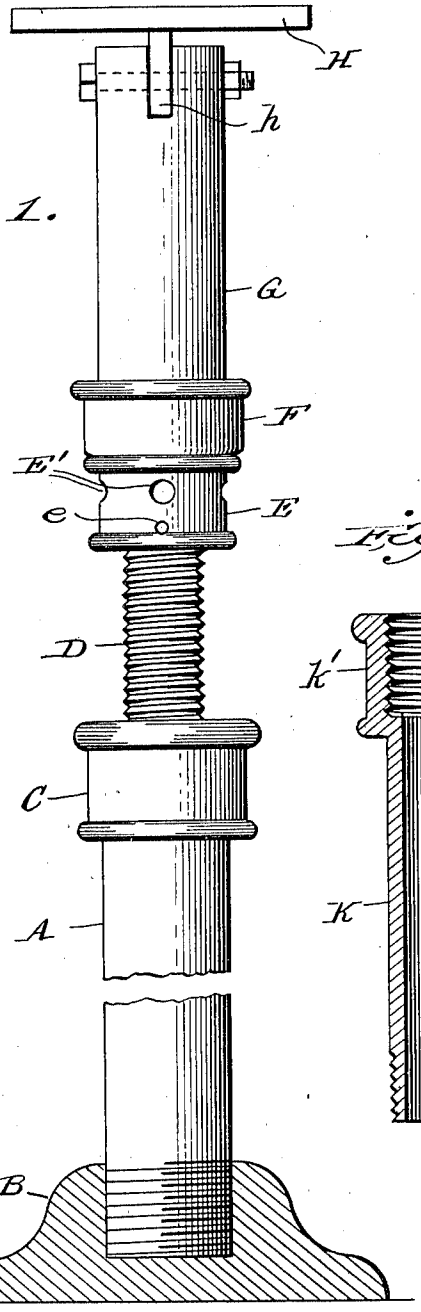


Fig. 2.

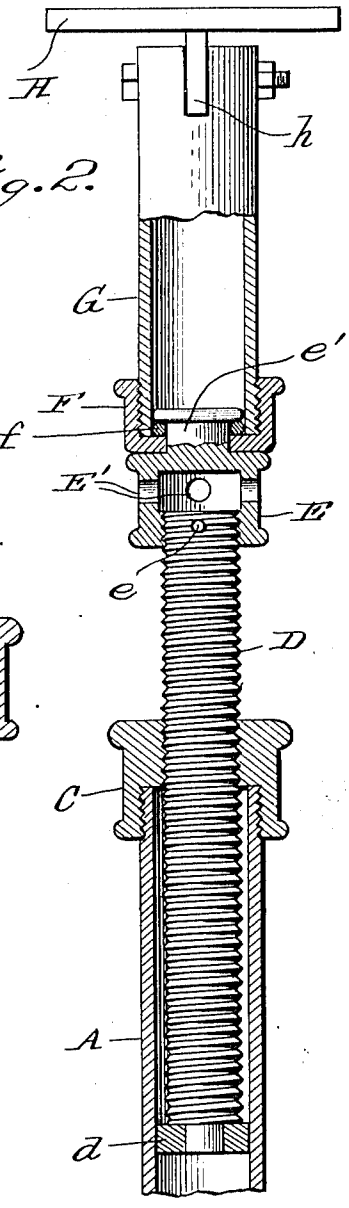
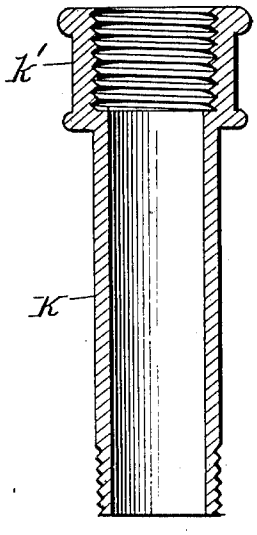


Fig. 3.



Witnesses

Marguerite Crandell

Halbert Brown.

Inventor

Charles C. Bradshaw

By Church & Church

his Attorneys.

UNITED STATES PATENT OFFICE.

CHARLES E. BRADSHAW, OF CLEVELAND, OHIO, ASSIGNOR OF ONE-HALF TO WILLIAM DUNBAR, OF CLEVELAND, OHIO.

ADJUSTABLE SUPPORT FOR CONCRETE-BUILDING FORMS.

1,061,658. Specification of Letters Patent. Patented May 13, 1913.

Application filed March 7, 1912. Serial No. 682,105.

To all whom it may concern:

Be it known that I, CHARLES E. BRADSHAW, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Adjustable Supports for Concrete-Building Forms; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

The present invention relates to devices primarily designed for supporting the forms used in concrete building construction, as set forth in my prior application, Serial No. 580,399, the objects of the invention being to provide an exceedingly simple and reliable support which may be readily adjusted to hold the forms in proper alined position and which may be constructed from stock material easily obtainable and readily assembled to constitute the complete article.

Referring to the accompanying drawings—Figure 1 is an elevation of a support embodying the present improvements, a portion of the lower section being broken away in order to show the parts on an enlarged scale; Fig. 2 is a sectional view illustrating the internal construction and arrangement of the parts; Fig. 3 is a detail of an extension section which may be used where the desired elongation is beyond the adjustable capacity of the device.

Like letters of reference in the several figures indicate the same parts.

In some respects the device of the present invention resembles an ordinary screw jack, thus it is provided with a base section adapted to rest squarely on a firm foundation and an upper adjustable section which is adapted to support the load, such as the forms for concrete building construction.

In accordance with the present invention, the base section A of the device, which is usually several feet in length, so as to reach from the floor line to a point near the underside of the ceiling or beam form, is made of iron pipe preferably of two inches or more in diameter and at the bottom threaded into a foot or flange socket B, which latter may be of cast iron and such as is ordinarily employed for holding a pipe to a flat surface. At the upper end the base section A has threaded upon it a boxing cap C, said boxing cap having an internal thread for the reception of a long threaded piece of pipe D, which latter is adapted to pass down through the boxing cap C and into the base section A. To prevent lateral movement and brace the threaded section D it is preferably provided at the lower end with a guide collar *d* which will work against the inner surface of the pipe A, as will be readily understood from Fig. 2. At its upper end, the threaded section D carries a head casting E, preferably secured rigidly thereon by screw threads and transverse pins, such as *e* and said head casting is furthermore preferably provided with transverse openings E′ for the insertion of a bar or suitable tool whereby the threaded section may be turned and adjusted into or out of the base section A. The head casting E is provided with an upwardly extending journal *e′* which is adapted to be upset or headed upon the inner side of an inverted cap F, there being preferably interposed between the cap and the head of the journal a suitable washer *f* for preventing undue wear on the headed portion of the journal. The cap F seats upon the upper face of the head E and is adapted to receive the lower end of an upper pipe section G which latter is relatively short and at the upper end is slotted for the reception of the downwardly extending flange *h* of a T-iron H. The pipe sections A and G may correspond in size or the section G may be of smaller diameter, if so desired.

All of the parts described may be stock materials, there being little or no machine work required for any of the parts and no special fittings or castings save the head E and the latter is of simple and cheap design.

It is not the intention to provide for a very wide range of adjustment by means of the screw threaded pipe section D, but in order to provide for the utilization of the device with ceilings or beams which may vary considerably in distance from the floor level, the base section A is made in sections, there being as many supplemental sections K, Fig. 3, as is desired for the work in hand. Said sections are simply short sections of pipe corresponding to the section A and each having a union or coupling *k′* into

which the section A may screw, while the lower end of the supplemental section itself will be screwed into the flange base B.

It will be noted that all of the sections or parts of the device are connected together in such wise that they may be handled as a single unit for positioning, etc., and that the screw threaded connections are such that the several parts may be joined together rigidly so as to prevent lateral play or wabbling by reason of loose joints, this being a defect in adjustable supports for concrete building construction which has heretofore resulted in the production of poorly alined beams and ceiling panels to say nothing of the danger incident to a loosely supported mold during the time the cement is taking on its initial set and before it has sufficient strength to be self-sustaining.

Having thus described my invention, what I claim and desire to secure by Letters Patent of the United States, is:—

1. An adjustable support such as described, embodying a tubular base section screw threaded externally at top and bottom, a base flange internally screw threaded, a boxing cap internally screw threaded engaging the upper end of said base section and having an internally screw threaded opening therethrough, an externally screw threaded section passing through said boxing cap, a guide collar mounted on said last mentioned section within the base section, a head casting carried on the upper end of said externally screw threaded section, a cap journaled on the head casting, and an upper pipe section screw threaded into said cap.

2. In a support such as described, the combination with the bottom section formed of pipe threaded at its opposite ends, a base flange secured to its threaded lower end and a boxing cap secured to its threaded upper end and having an internal threaded aperture therethrough in alinement with the interior of the pipe, of an externally threaded pipe section adjustable in said boxing cap, a head casting rigidly mounted on said headed pipe section and embodying means whereby it may be turned for adjustment, said head casting having an upwardly projecting journal, an internal threaded cap mounted to rotate on said journal, and an upper pipe section having its lower end threaded and secured in said cap, substantially as described.

CHARLES E. BRADSHAW.

Witnesses:
C. C. MINN,
ALEXANDER CARROLL.