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2,812,834

ADJUSTABLE COLUMN

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Fig. 1

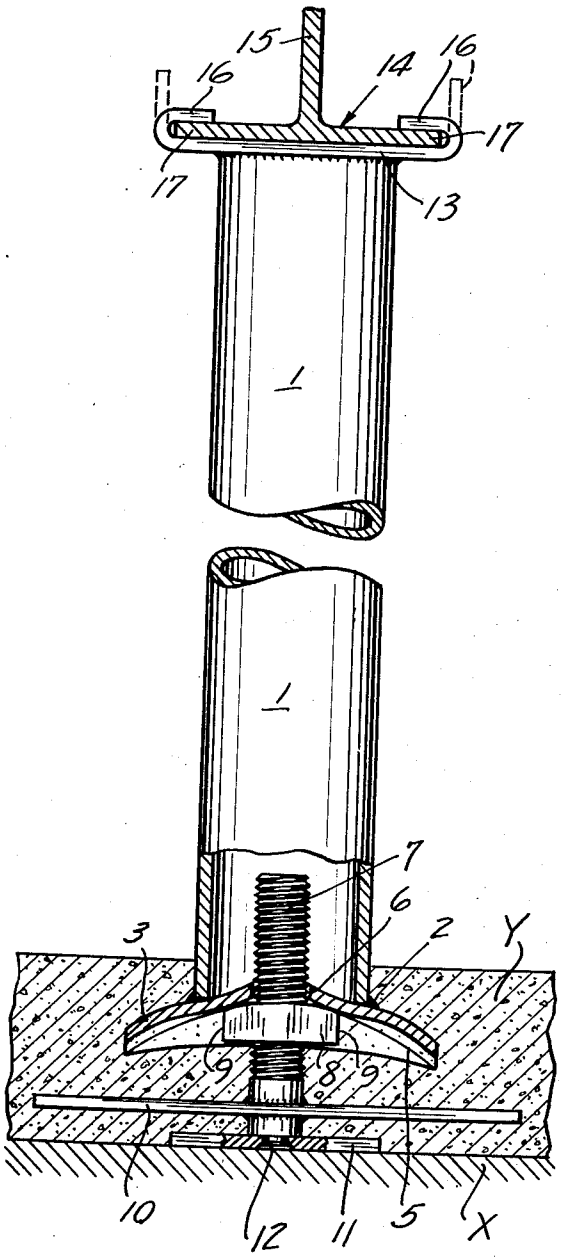
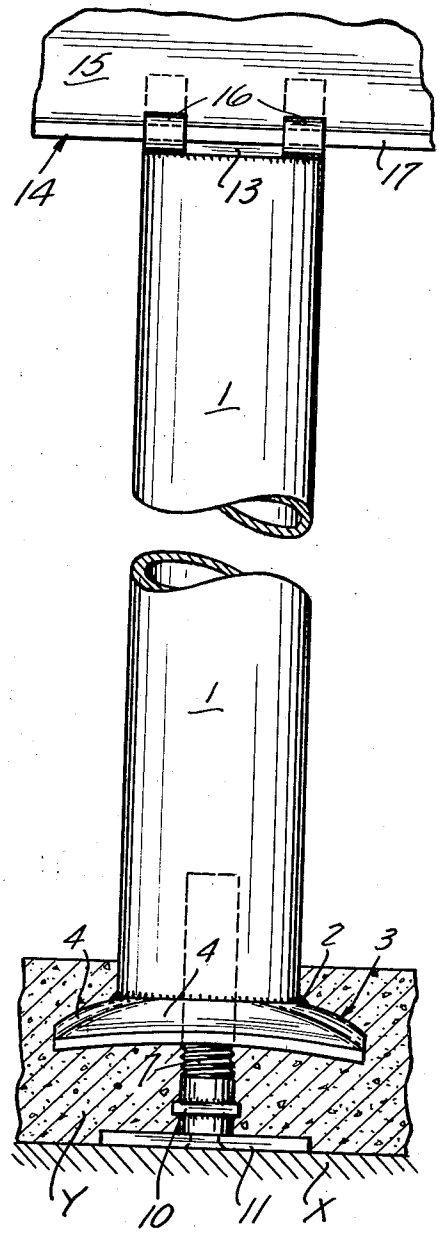


Fig. 2



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ADJUSTABLE COLUMN

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2 Claims. (Cl. 189—42)

My invention provides a permanent column with an adjustment for height or longitudinal direction for use in building construction, and more particularly, to columns of the type adapted to be used as a support between a footing and an overlying beam.

Still more particularly, my invention provides a column which may be adjusted for height between a footing and an overlying beam prior to the pouring of the concrete floor, and in which the adjustable elements become imbedded within the concrete floor so as to seal the adjustable elements against further adjustment and permanently maintain in the desired adjusted positions.

To the above end, I provide an adjustable column including a tubular leg having a concave flange projecting radially from its bottom end, a nut-equipped screw projecting loosely through a central opening in said flange axially into the said tubular leg, a handle on said screw below said flange and projecting radially outwardly beyond said flange so as to facilitate adjustment, and a bearing plate journalled for rotation on the lower end of said screw and adapted to be received on the footing or other supporting means—said flange, nut, handle, and bearing plate all being imbedded in the concrete floor during pouring of same.

A further object of my invention is the provision of a novel adjustable column which is relatively inexpensive to produce, is relatively light in weight and is compact in size.

A still further object of my invention is the provision of a device of the class described which is extremely easy to install and adjust.

The above and still further objects and advantages of the invention will become apparent from the following detailed specification, appended claims and attached drawings.

Referring to the drawings, wherein like characters indicate like parts throughout the several views:

Fig. 1 is a view in front elevation of my novel structure, some parts being broken away and some parts shown in section;

Fig. 2 is a view in side elevation of the structure of Fig. 1, some parts being broken away.

Referring with greater particularity to the drawings, the numeral **1** indicates a tubular leg, preferably formed from a steel pipe section. Rigidly secured to the bottom end portion of leg **1**, by welding or the like, as indicated at **2**, is a generally concave flange **3** which projects radially outwardly therefrom in all directions. Preferably, and as shown, the flange **3** is rectangular in shape and has four sloping faces **4**, which meet to cause angular radially projecting undersurfaces **5**. In its center, the flange is provided with an opening **6** through which an elongated screw **7**, having a multi-faced nut **8** threadedly received thereon, loosely extends. The angular edges **9** of the

nut **8**, formed by the several faces thereof, engage the radially projecting angular undersurface portions **5** of the flange **3** and prevent relative rotation of the nut **8** and flange **3** when force is exerted upon the leg **1**.

The screw **7** is provided with a handle **10**, below the flange **3** and nut **8**, which projects radially outwardly beyond the flange **3** to facilitate adjustment of the screw **7**. At its extreme lower end, the screw **7** is provided with a bearing plate **11** which is journalled thereto as at **12** by means of a screw or the like.

Welded, or otherwise rigidly secured, to the upper end portion of the leg **1** is a horizontal plate **13** which is adapted to receive thereon the lower horizontal flange **14** of a conventional I-beam **15**. Preferably, and as shown, the plate **13** has opposite edge portions or lips **16** which are adapted to be folded by being hammered or the like, over the opposite longitudinal edges **17** of the I-beam **15**.

In use, the bearing plate **11** of my novel structure is placed upon the footing or other floor supporting structure X, immediately beneath the I-beam **15**. Handle **10** is then rotated to cause the leg **1** to be elevated to a point where the horizontal plate **13** engages the undersurface of the horizontal flange **14** of the I-beam **15**. At this time, the portions or lips **16** are then put into the full line position. Lastly, the concrete floor Y is poured to a level above the flange **3** so that the flange **3** of nut **8**, the handle **10** and the bearing plate **11** are encased in concrete and locked in their desired set positions. It will be noted that, when the concrete floor hardens, the load of the column and overlying beam is carried at least partly by the flange **3**.

My device has been thoroughly tested and found to be satisfactory for the accomplishment of the above objects; and while I have shown the preferred embodiment thereof, it should be obvious that the same is capable of modification without departure from the scope of the appended claims.

What I claim is:

1. An adjustable column for use in connection with a cement floor and an overlying beam, said column comprising a tubular supporting leg, a generally concave flange rigidly anchored to and projecting radially outwardly from the lower end of said leg and having an axial opening therein of considerably smaller diameter than the diameter of said leg, a screw projecting loosely through the axial opening in said flange, a multi-sided nut on said screw engaging the under side of said flange, a bearing plate journalled on the lower end of said screw, and a radially projecting handle on said screw intermediate said flange and said bearing plate.

2. The structure defined in claim 1 in which said flange is formed to provide four sloping under faces which intersect to define a plurality of angular radially extended portions which cooperate with the angular portions of the multi-faced nut to positively prevent rotation of said nut with respect to said flange, and in which said handle projects radially outwardly beyond said flange.

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