No. 614,729. Patented Nov. 22, 1898.

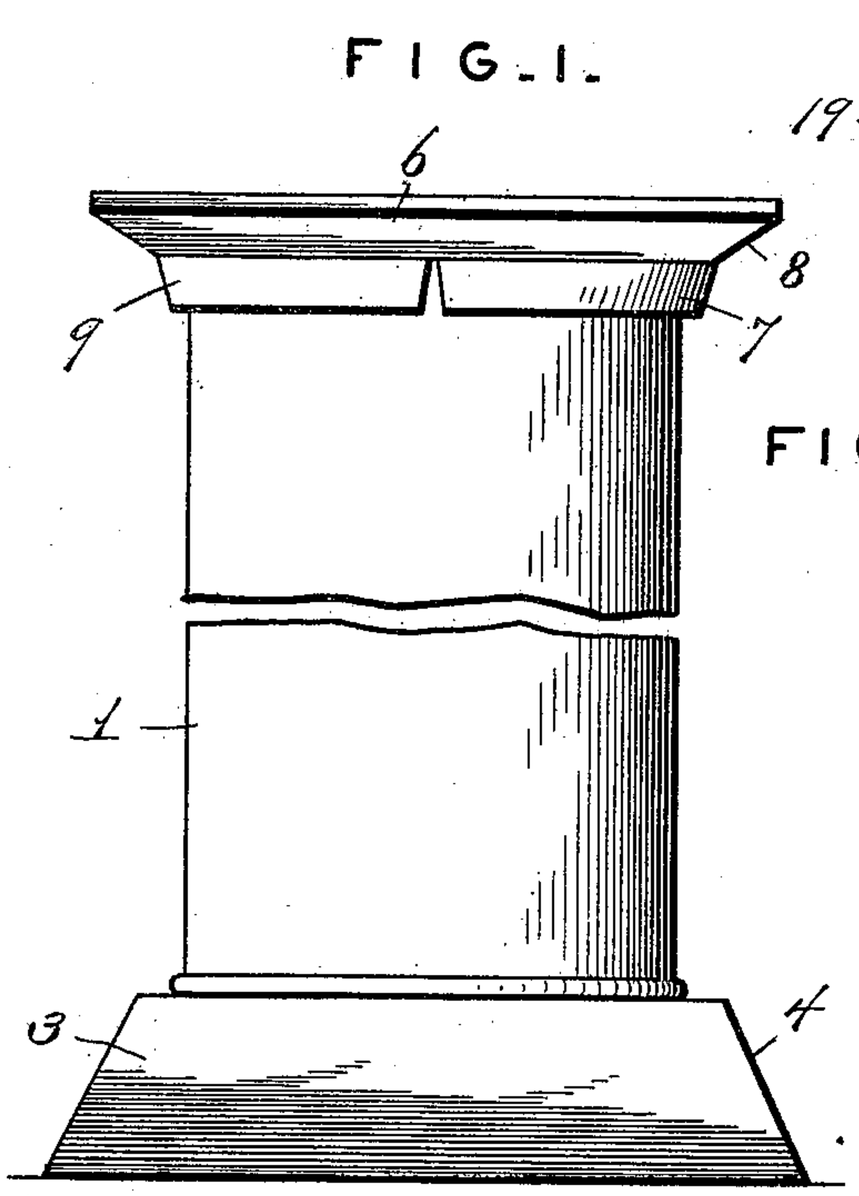
J. LALLY.

COLUMN.

(Application filed May 6, 1898.)

(No Model.)

FIG. 1.



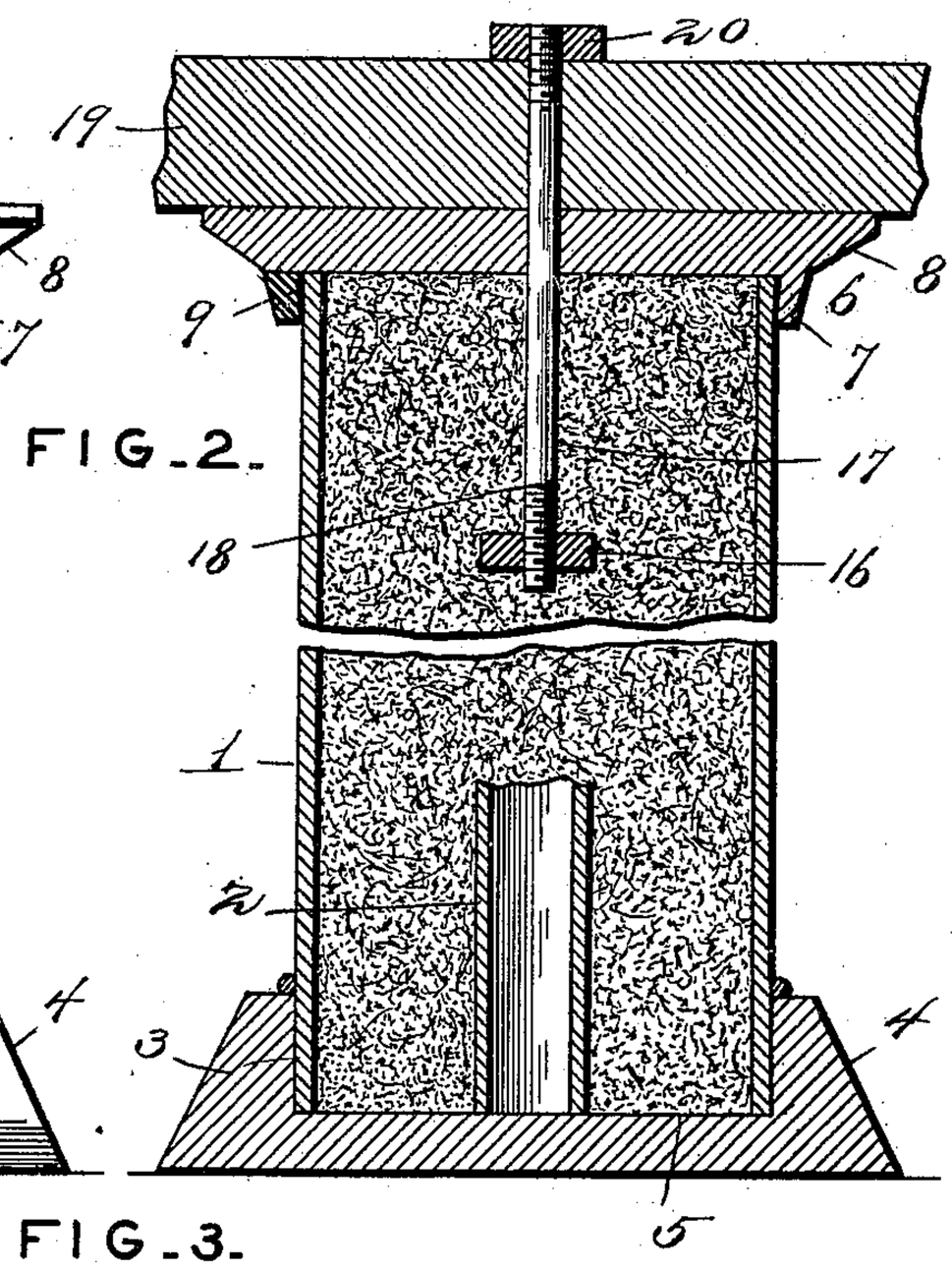


FIG. 2.

FIG. 3.

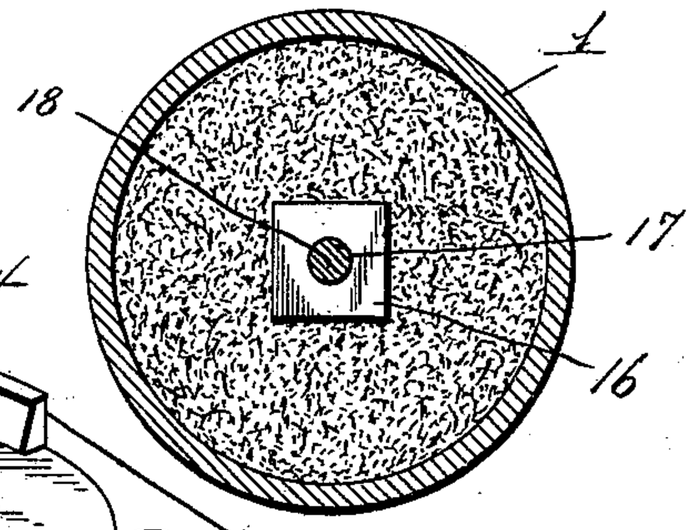


FIG. 4.

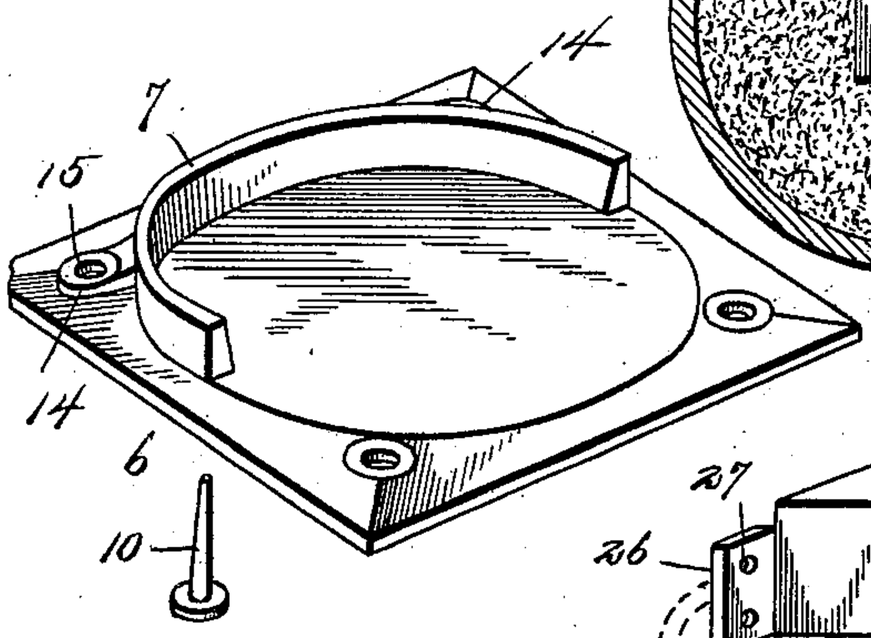


FIG. 5.

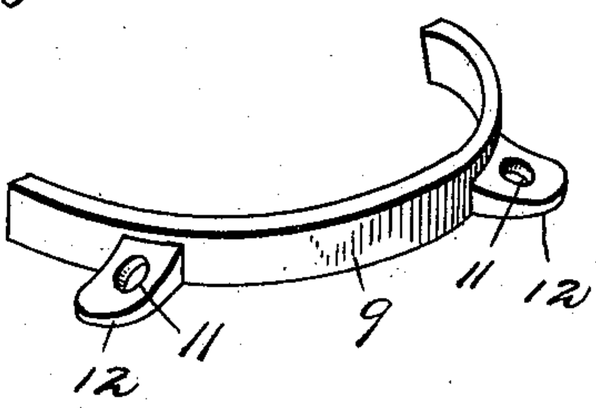
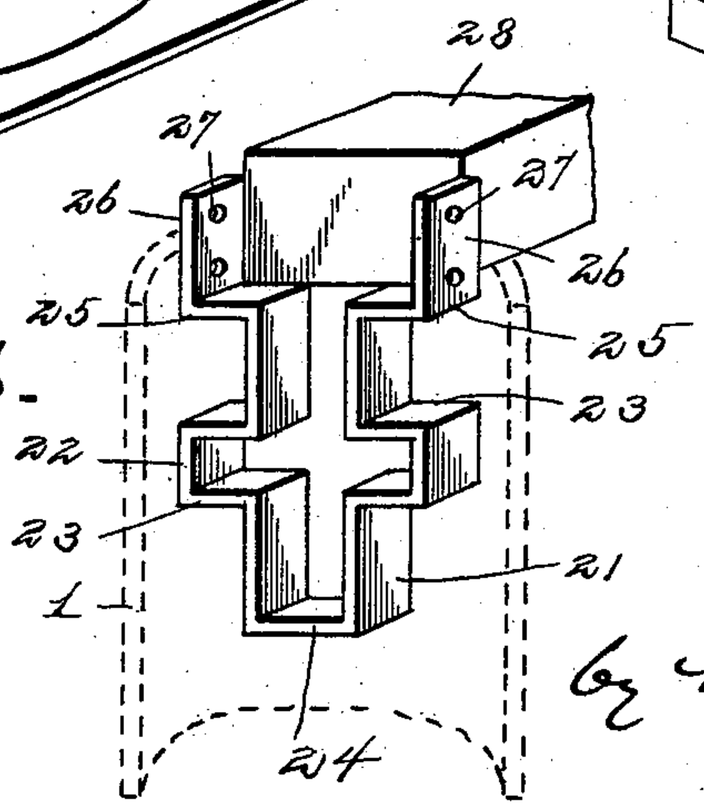


FIG. 6.



Witnesses

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COLUMN.

SPECIFICATION forming part of Letters Patent No. 614,729, dated November 22, 1898.

Application filed May 6, 1898. Serial No. 679,948. (No model.)

To all whom it may concern:

Be it known that I, JOHN LALLY, a citizen of the United States, residing at Waltham, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Columns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to columns for supporting masonry, buildings, chimneys, piazzas, roofs of coal-mines, &c.

The object of the invention is to provide, in connection with a composite column or post, a cap of novel construction adapted to be interposed between the extremity of the column and the object to be supported without the necessity of jacking up such object. The cap is so constructed that it may be first secured in place and the column afterward applied thereto, or the column may be first set in position and the cap then applied between the end of the column and the object to be supported. The column, base, and cap are manufactured separately, thus adding to the portability of the column and its attachments and enabling the same to be readily shipped or transported from place to place. The column is constructed with special reference to durability, and in fact improves with age, thereby attaining a decided advantage over columns of the ordinary construction, which are subject to corrosion and decay.

The invention also contemplates novel means for anchoring the supported object to the column and embodies other novel features which will appear in the course of the subjoined description.

The invention consists in certain novel features and details of construction and arrangements of parts, as hereinafter fully described, illustrated in the drawings, and incorporated in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a column, base, and cap constructed in accordance with the present invention. Fig. 2 is a longitudinal section through the column, base, and cap and also through a timber supported upon the cap, showing the interior construction of the column and the manner of anchoring the superimposed timber or supported object thereto. Fig. 3 is a cross-section through the column. Fig. 4 is a detail perspective view of the cap with its integral half-collar. Fig. 5 is a detail perspective view of the separable half-collar. Fig. 6 is a detail sectional perspective view showing means for anchoring the column to a superimposed beam.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

The column used in connection with this invention consists of an outer metallic casing or jacket 1, which may be cylindrical in form or of any preferred shape in cross-section, either square, rectangular, or fluted, &c. Extending centrally within said column is a tube or rod 2 of about one-quarter the size of the jacket 1, thus leaving an annular space within the jacket designed to be filled with an artificial-stone composition, the column being filled with said composition while in a plastic state, the composition being allowed to harden before the column is placed in position. It is of course not necessary to employ the centrally-arranged tube or rod, and this may in some instances be omitted.

In connection with the column above described I employ an artificial-stone base 3, preferably formed with chamfered or beveled side edges 4 and provided in its upper side with a socket 5 to receive and form a firm seat for the lower end of the column.

6 represents the improved cap, which for convenience is shown as square in plan view and provided on its under side with a collar 7, forming, in connection with the body of the cap, a socket to receive the upper end of the column. The central portion of the lower surface of the cap is parallel to the flat upper surface thereof, so that the cap may be firmly seated upon the column. Outside of the plane of the collar 7 the lower surface of the cap is beveled or chamfered, as indicated at 8, the object of which is to make the edge of the cap wedge-shaped, whereby it may be the more readily inserted and interposed between the top of the columns and the object to be supported thereon. One half of the collar 7 constitutes a stop or abutment for the column and forms an integral part of the cap, being cast thereon by preference. The remaining

half 9 of the collar is formed separately and is designed to be applied in position after the column and cap have been properly associated. The separable half-collar 9 conforms in shape, dimensions, and appearance exactly to the integral half-collar on the cap, so that when it is combined with the cap the effect of a continuous collar is produced. The separable half-collar 9 is secured in place by means of nails, screws, or other fasteners 10, which are inserted through openings 11 in ears 12, extending radially outward from said half-collar, the openings 11 being in alinement with other openings 13 in the cap-plate. Extending radially from the permanently-attached half-collar are other similar ears 14, having openings 15 to receive other fasteners.

Either of two methods of combining the cap and column may be utilized. One method is to first secure the cap, with its integral half-collar, in proper position under the object to be supported, and after that the column is moved to bring its upper end beneath the cap and into engagement with the half-collar. The separable half-collar is then applied and secured in place by fasteners, the latter also serving as additional securing means for the cap. The other method is to set the column primarily in its proper position and thereafter to introduce the cap between the upper end of the column and the object to be supported, such introduction being facilitated by the beveling or chamfering of the edge of the cap-plate. After the cap is driven into place the auxiliary half-collar is applied and secured in a manner readily understood.

From the foregoing description it will be seen that the necessity of jacking the object to be supported before the column can be placed beneath the same is obviated, at the same time obviating the incidental injury to the building, which often results from having to jack up portions of the same, especially in plastered buildings. The collar on the cap may be of any suitable shape, but is preferably quadrant-shaped in cross-section, or, in other words, provided with a flat inner surface to conform to the exterior surface of the column and an outer rounded surface for giving it a finished and ornamental appearance.

For the purpose of anchoring the supported object to the column a plate or nut 16, having a threaded opening, is placed in the jacket 1 of the column during the process of filling the same with the plastic composition, and an opening 17 is left, extending from said nut or plate upward and out of the end of the column. After the column has been placed in position a bolt 18 is inserted through the supported object 19, and the lower threaded end thereof passes into engagement with the nut or plate 16, after which a second nut 20 is firmly secured upon the upper threaded end of the bolt 17.

In Fig. 6 I have shown another form of anchoring device, the same consisting of a piece of strap metal, which is bent near its central portion to form a three-sided loop 21. The terminal portions of the strap are then bent to form oppositely and outwardly extending three-sided loops 22, forming upper and lower horizontal shoulders 23, designed, in connection with the base 24 of the lower loop, to engage the plastic composition within the jacket 1 when hardened, so as to prevent any possibility of the anchoring device becoming detached from the column. The terminal portions of the strap are then extended through and out of the upper end of the column, whence they are bent in opposite directions, as shown at 25, and then extended upwardly to form ears 26, which are provided with openings 27 to receive bolts or fasteners, which may be passed through a superimposed beam 28, which rests on the column.

From the foregoing description it will be seen that I have provided a support for buildings, chimneys, piazzas, and other objects which combines strength, durability, and convenience, besides being fire and damp proof. The outer metallic jacket gives an ornamental and finished appearance to the column and also gives the appearance of strength and solidity, while the composition within the jacket improves with age instead of deteriorating, as is the case with columns formed entirely of iron, wood, and brick. The column, with its cap and base, is also economical in construction, may be made in a variety of sizes and shapes, is portable, and will form an efficient means of support wherever columns, pillars, or posts are required, and especially in places where the same are subjected to dampness.

If desired, the metal jacket may be omitted and the column used without any outside covering, or a covering or jacket of other material may be employed. For instance, no jacket would be needed in foundation-piers. The cap and base, one or both, may be used in connection with other forms of columns and will be found of great advantage on account of their convenience, economy, and ease of application.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. The combination with a supporting-column, of a cap adapted to be inserted between the column and object to be supported, the said cap comprising a sectional or two-part collar forming a socket for the end of the column and having its edge beveled or chamfered, substantially as and for the purpose described.

2. A cap for a column, consisting of a plate or body portion having a beveled or chamfered edge, and a sectional collar to embrace the end of the column, one section of the collar being separable and the other section permanently secured to the cap, substantially as described.

3. A cap for a column, designed for inser-

tion between the column and object to be supported, the said cap comprising an integral half-collar, and a separable half-collar forming the complemental portion of the integral section and having provision whereby it may be secured in place on the cap, substantially as described.

4. A cap for a column, consisting of a body portion, a half-collar integral therewith, and a separable or detachable half-collar having radially-disposed ears designed to receive fastening means for securing the half-collar in place relatively to the cap, substantially as described.

5. A cap for a column, consisting of a flat central portion forming the seat for the end of the column, and a sectional collar extending around such flat central portion of the cap, one section of the collar being removable, the edge of the cap outside of the collar being beveled or chamfered, substantially as and for the purpose specified.

6. The combination with a column, consisting of an outer metallic jacket and an inside composite filling, of an artificial-stone base having a socket to receive the lower end of the column, a cap for the opposite end of the column having an integral half-collar to partially embrace the column, and a separable half-collar having provision for its attachment to the cap and designed to form the complemental portion of the integral half-collar on the cap, substantially as described.

7. A column, consisting of an outer metallic jacket and an inner plastic filling, in combination with an internally-threaded plate or nut anchored in said filling, and a threaded bolt designed to enter the end of the column and to engage said threaded plate or nut, thereby providing means for anchoring the supported object to the column, substantially as described.

8. The combination with a hollow column designed to be filled with a plastic composition, of an anchoring device embedded in the composition and extending above the top of the column where it is designed to be engaged with a superimposed structure, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN LALLY.

Witnesses:
CLARENCE F. FRENCH,
THOMAS F. CAREY.