J. SCHNEIBLE.

TUBULAR SECTION COUPLING.

APPLICATION FILED AUG. 2, 1919.

1,366,955.

Patented Feb. 1, 1921.

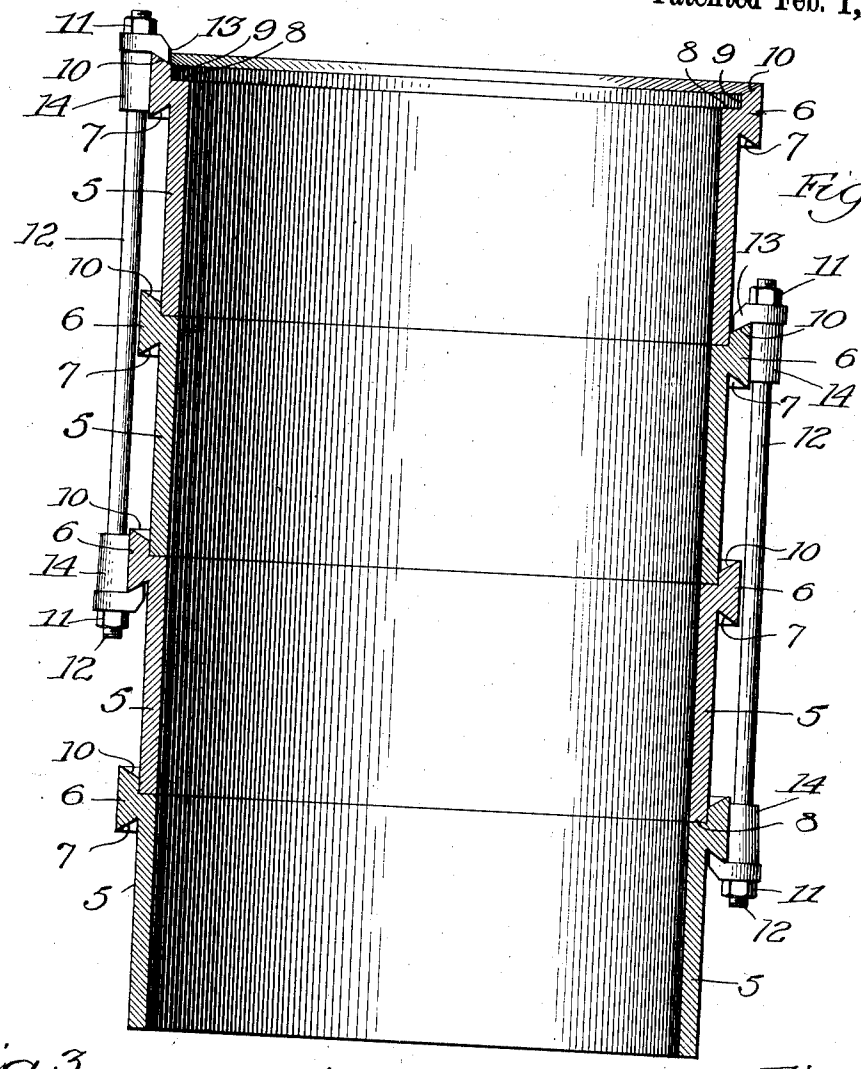


Fig. 1.

Fig. 3.

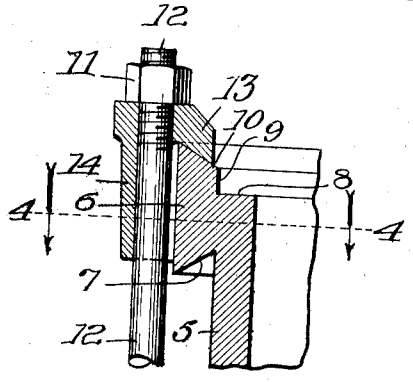
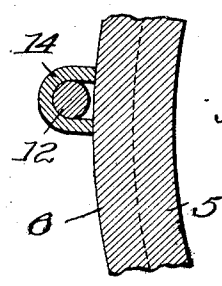


Fig. 4.



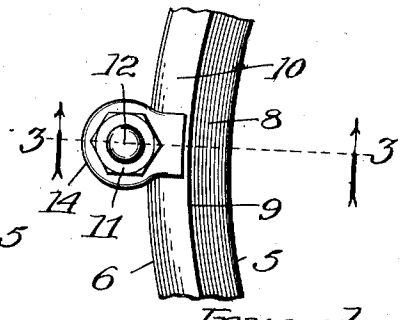


Fig. 2.

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UNITED STATES PATENT OFFICE.

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TUBULAR-SECTION COUPLING.

1,366,955. Specification of Letters Patent. Patented Feb. 1, 1921.

Application filed August 2, 1919. Serial No. 314,816.

To all whom it may concern:

Be it known that I, JOSEPH SCHNEIBLE, a citizen of the United States, residing at 130 North Wells street, Chicago, in the county of Cook and State of Illinois have invented a new and useful Improvement in Tubular-Section Couplings, of which the following is a specification.

My invention relates to improved means for coupling and uncoupling tubular sections designed to be erected into columns, stacks and towers and to form conduits and the like.

The primary object of my invention is to facilitate building and also dismantling and adding to structures such as those above exemplified and to render the sections accurately interfitting to afford a degree of tightness in their union amounting practically to that of integral structures in the class referred to.

In the accompanying drawing, Figure 1 is a view in vertical section of a plurality of coupled tubular sections embodying my invention; Fig. 2 is an enlarged broken plan view of the same, and Figs. 3 and 4 are enlarged sections respectively on line 3—3, Fig. 2, and line 4—4, Fig. 3.

The sections 5, of which four are shown in Fig. 1, though the number may be any that is desired for, say, a column-still, stack, conduit, or the like, and which are represented of cylindrical form and are preferably metal, are each provided on one edge with an external flange 6, which by preference extends continuously, as an annulus, about the section. This flange has its rear surface undercut on a bend, as shown at 7, and extends beyond the edge of the section, the upper end of which thus forms a shoulder at 8, the adjacent side of the flange forming a cheek 9 toward which the upper or forward surface of the flange is inclinedly beveled circumferentially, as represented at 10.

The sections 5 interfit with desirable accuracy, being assembled in successive arrangement with the end of one bearing against the shoulder 8 and cheek 9 of the section preceding it.

For coupling the sections together, bolt-like rods 12 are used, each having nuts 11 threaded in its opposite ends and forming abutments for hooks 13 on U-shaped sleeves 14 loosely surrounding the rod.

With a plurality of the sections assembled for the structure they are to form, the upper hooks on a rod employed for the coupling purpose is applied to the upper beveled surface 10 of the flange of one section and the lower hook on the rod is applied to the undercut surface 7 of a lower-section flange, whereupon the nuts 11 are turned to tighten the junction of the coupled sections. The U-shaped form of the sleeves 14 affords stable bearing against the outer surfaces of the flanges 6 and prevents the sleeves from turning on the rods. The coupling-rods may be employed in any desired number about the structure. They may be applied in staggered arrangement and in relatively short lengths, as shown in Fig. 1, or rods may be used of a length to enable the upper hook on each to be engaged with the flange on the uppermost section and the lower hook to be engaged with the flange on the lowermost section, such rods being applied at suitable intervals about the structure.

I realize that considerable variation is possible in the details of construction thus specifically shown and described, and I do not intend by illustrating a single specific or preferred embodiment of my invention to be limited thereto, my intention being in the following claims to claim protection for all the novelty there may be in my invention as broadly as the state of the art will permit.

I claim:

1. A structure of the character set forth, comprising a plurality of tubular sections having flanges on one end, and bolts carrying on their opposite ends hook-like projections engaging the opposite flange-surfaces of different sections.

2. A structure of the character set forth, comprising a plurality of tubular sections having flanges on one end provided with beveled forward and rear surfaces, and bolts carrying on their opposite ends hooks conforming to and engaging the opposite flange-surfaces of different sections.

3. A structure of the character set forth, comprising a plurality of interfitting tubular sections having annular flanges extending externally about and projecting beyond one end and provided with beveled forward and rear surfaces, bolts and hooks on sleeves loosely surrounding the bolts and conforming to and engaging the opposite flange surfaces of the different sections.

4. A structure of the character set forth,

comprising a plurality of interfitting tubular sections having annular flanges extending externally about and projecting beyond one end and provided with beveled forward and rear surfaces, bolts, U-shaped sleeves loose on the bolts and terminating in hooks conforming to and engaging the opposite flange-surfaces of different sections.

5. A structure of the character set forth, comprising a plurality of tubular sections each having an annular flange extending about and projecting beyond its forward end to form a shoulder of such end and a cheek for interfitting the sections endwise, said flanges having beveled forward and rear surfaces, bolts having nuts on their ends and U-shaped sleeves loose on the bolts 7, terminating in hooks abutting against the nuts and conforming to and engaging the opposite flange-surfaces of different sections.

JOSEPH SCHNEIBLE.