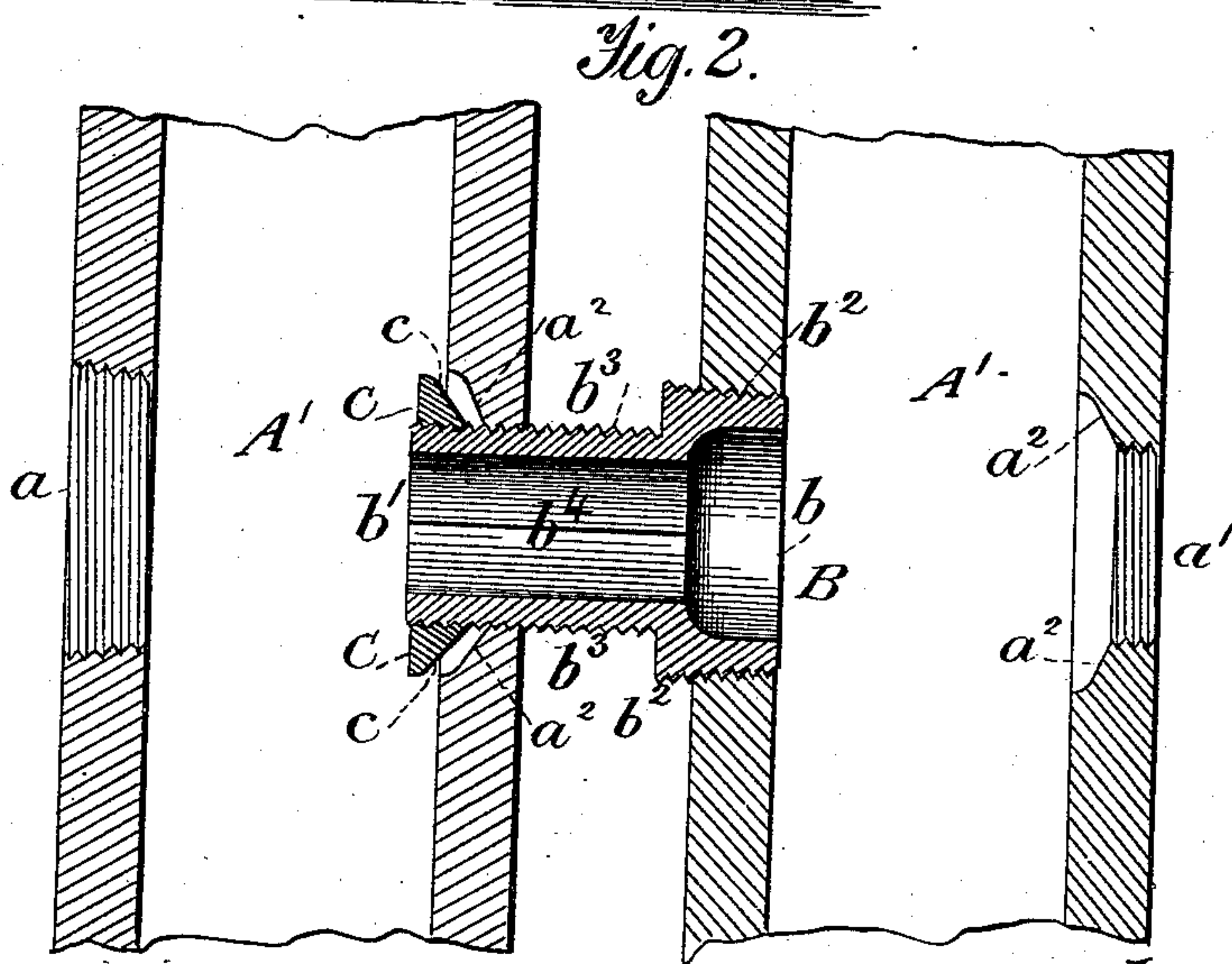
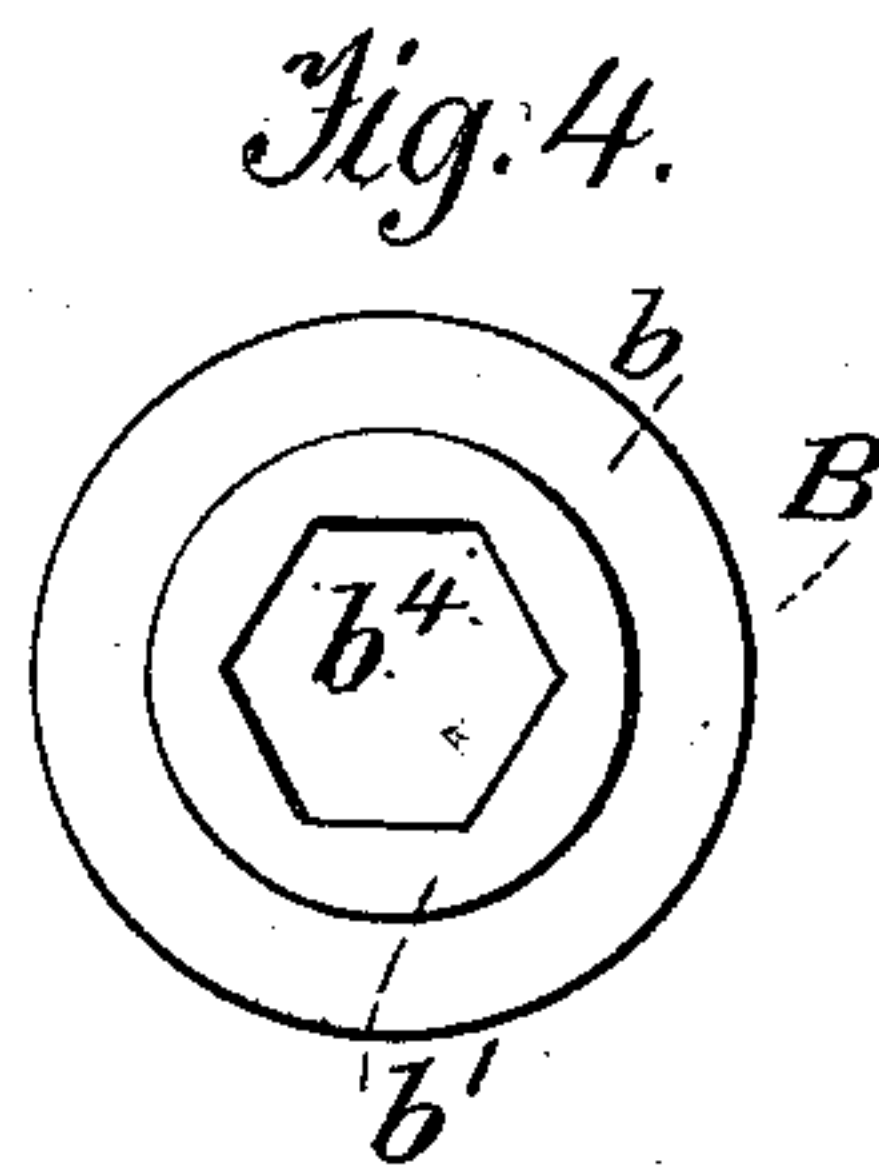
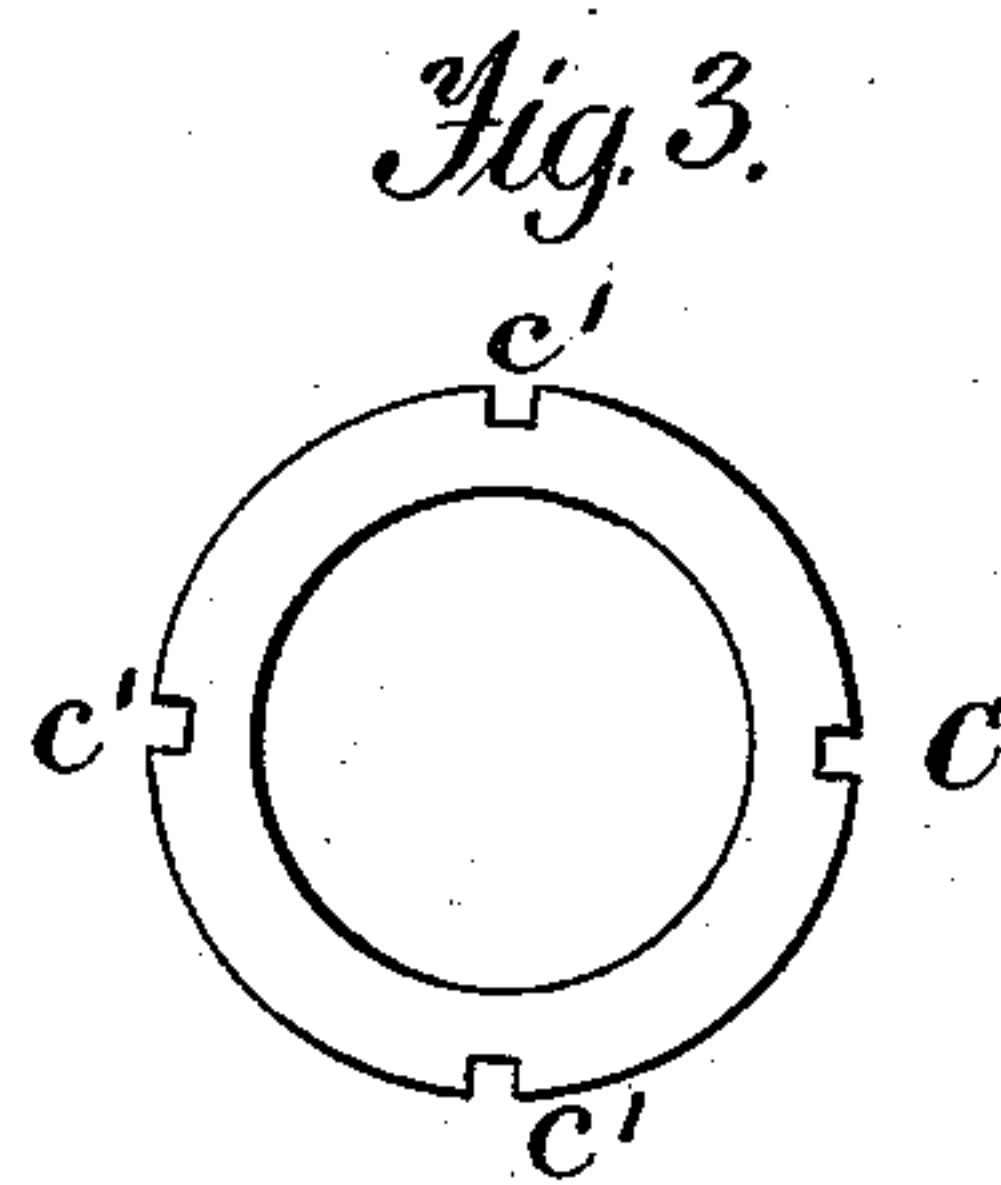
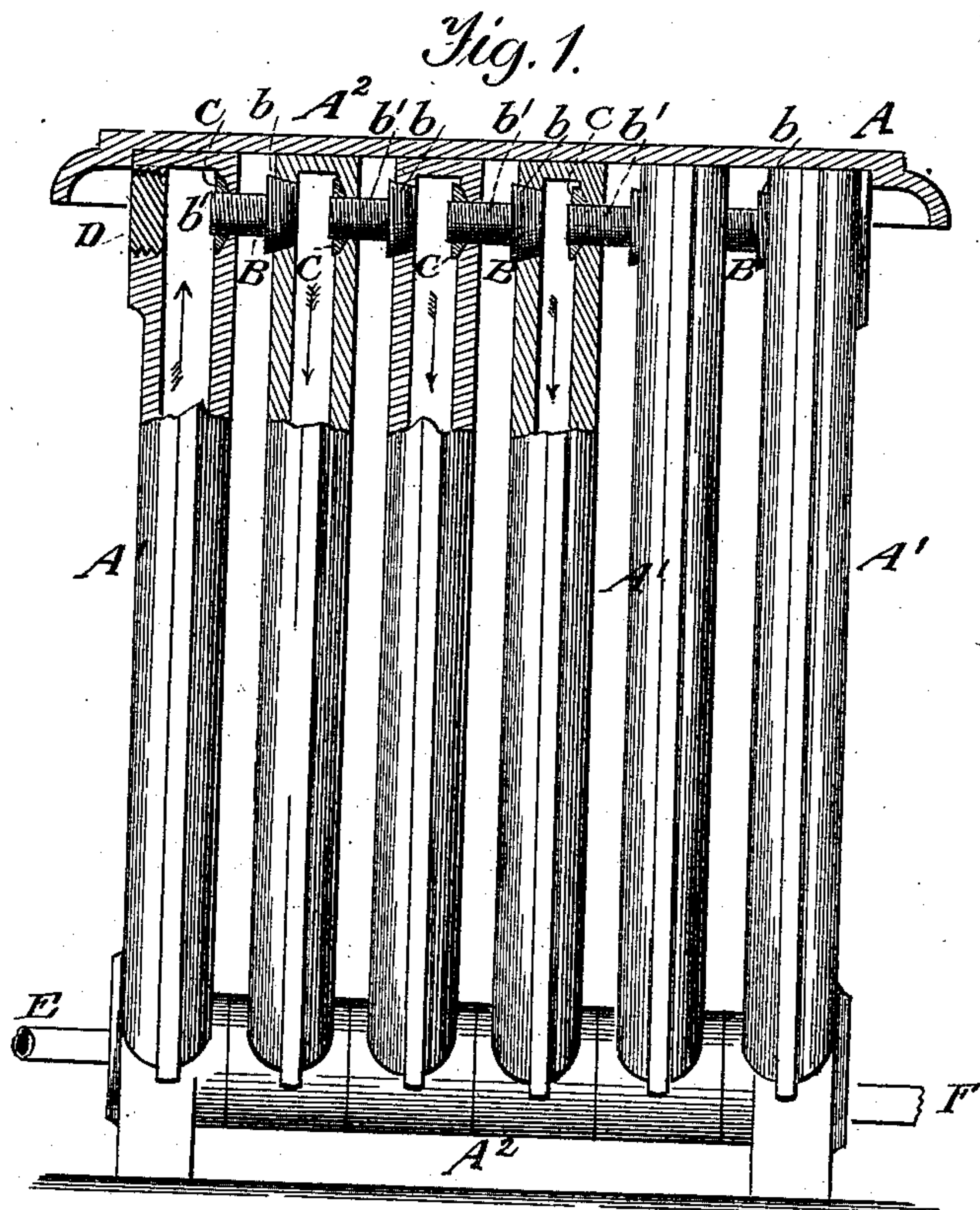


(No Model.)

G. A. KILEY.
RADIATOR CONNECTION.

No. 376,481.

Patented Jan. 17, 1888.



Witnesses.
A. Ruppert.
Thomas P. Simpson.

Inventor.
Geo. A. Kiley

UNITED STATES PATENT OFFICE.

GEORGE A. KILEY, OF ROCHESTER, NEW YORK.

RADIATOR-CONNECTION.

SPECIFICATION forming part of Letters Patent No. 376,481, dated January 17, 1888.

Application filed March 30, 1887. Serial No. 232,965. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. KILEY, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Radiator-Connections; and I do 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 ap-
10 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

15 The special object of the invention is to make a secure and reliable connection between radiator-sections at the upper end, so that they may be quickly taken apart or put together.

20 Figure 1 of the drawings is a front elevation partly in section; Fig. 2, a vertical section in detail and on an enlarged scale; Figs. 3 and 4, plan views of the nut and radiator-connection.

25 In the drawings, A represents the several sections which make up the radiator, through which hot air, steam, or water are made to circulate for heating purposes.

30 E and F are respectively the inlet and outlet for the heat-vehicle in the hollow base A², while the inner chamber, A', of each section communicates with the base-chamber.

Above the sections is arranged the top A³, or one of any preferred form.

35 What is thus far described is well known to the public and forms no part of my invention, which really consists in the particular means by which I connect the radiator sections at their upper ends.

40 In one of the sections which is put on last I use the tapering threaded plug D in the screw-threaded aperture a, whose hole is sufficiently large to permit a convex nut, C, to pass through it and be screwed on the end of the hollow screw b' and into the countersink or concavity a².
45 This nut C is screwed home, so as to slightly mash the thread, and thus effectually prevent it from turning. This will yield to the force

exerted on the wrench in removing the nut, and the threads of nut and screw will again run in their respective grooves.

50 B represents my hollow radiator-connection, which consists of two hollow integral screws, b b', the former larger in diameter than the other and provided with an outside tapering thread, b², while the screw b' has a straight thread, b³, on the outside and is not made round, but polygonal or of irregular shape, on the inside, so that it may be turned by a correspondingly-shaped wrench.

Commencing on the right of Fig. 1 of the drawings, the tapering screw b is worked into its corresponding screw-threaded aperture, a, of one section and the smaller screw, b', through the corresponding screw-threaded aperture, a', of the next section. The convex nut C is then passed through the section-nut a and turned on the end of the small screw b' by a wrench having points which fit into the notches c'. The connections are thus success-
65 70 75 80
sively applied until the last one is in place, when a plug, D, is screwed into the screw-threaded aperture a.

It will thus be seen that the sections of the radiator have all been brought into full communication, firmly bound together, and yet so connected that they may be easily taken apart.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

85
In radiators or other devices made in sections for the circulation of fluids, the two integral screws b b' of differing diameters and the convex nut C, in combination with radiator-sections having the opposite screw-threaded aperture a a' to receive said screws, as and for the purpose described.

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

GEORGE A. KILEY.

Witnesses:

A. RUPPERT,
E. L. WHITE.