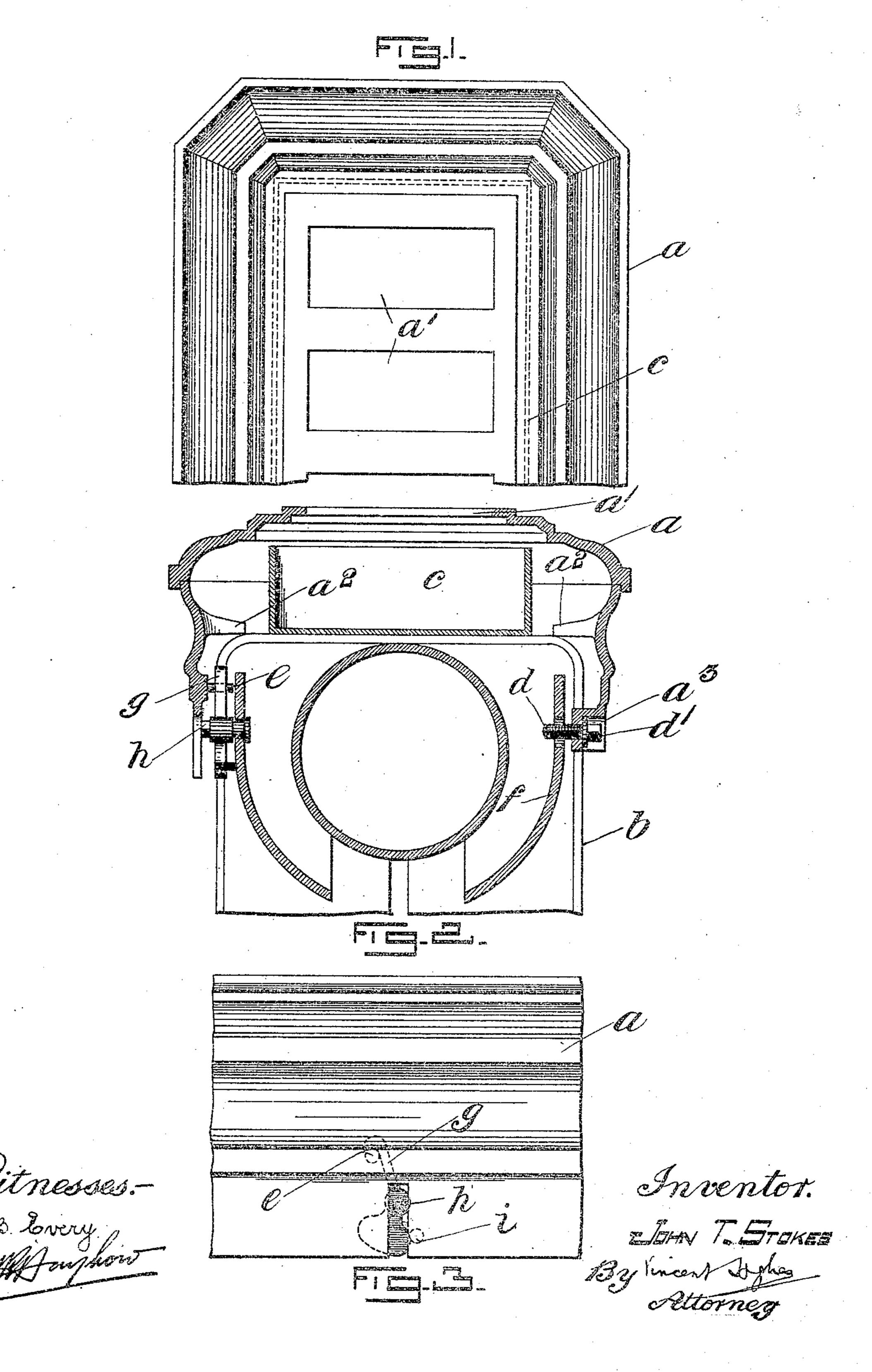
J. T. STOKES. RADIATOR. APPLICATION FILED APR. 30, 1906.



UNITED STATES PATENT OFFICE.

JOHN THOMAS STOKES, OF PUTNEY, ENGLAND.

RADIATOR.

No. 886,550.

Specification of Letters Patent.

Patented May 5, 1908.

Application filed April 30, 1906. Serial No. 314,511.

To all whom it may concern:

Be it known that I, John Thomas Stokes, a subject of His Majesty the King of Great Britain, and residing at Putney, in the county of Surrey, England, have invented a new and useful Improvement in Radiators, of which the following is a specification.

therein. On one side the said inward projections may be attached movably to the cap wards and inwards and so engage and disengage with the usual longitudinal side webs or members f of the radiator and thus fasten the

This invention relates to improvements in radiators and has reference particularly to radiators constructed of tubular members.

It has been found desirable, where such radiators are in use to provide means for humidifying the atmosphere and this is commonly effected by arranging a vessel of water upon the radiator so that the water may be vaporized by the heat of the apparatus. This practice is open to manifest objection for not only is the water vessel unsightly but there is a considerable liability of its being accidentally upset. Moreover, when the vessel is thus exposed it is frequently made use of as a receptacle for refuse.

The object of my invention is to obviate these disadvantages by providing a hollow 25 cap having a perforated cover similar to those frequently used in connection with radiators and especially with that form known as the "ventilating" type of radiator. And in order that this my invention may be more readily understood and carried into practical effect, reference is hereby made to the accompanying sheet of drawings, wherein:—

Figure 1 is a fragmentary plan view illustrating my radiator attachment. Fig. 2 being a sectional view of a well known form of radiator with my invention applied thereto, while Fig. 3 illustrates a detail of my radiator attachment.

Referring to these drawings wherein like
letters of reference indicate corresponding parts wherever occurring throughout all the figures, a represents a hollow cap provided with perforations a^1 in its top. This cap a fits upon the top of the radiator b and is supported on such radiator by means of a number of inwardly-projecting brackets a^2 , sufficient space being left between the top of the cap having the perforations a^1 therein and the top of the radiator b to enable a water vessel c to be accommodated.

To permit of the cap a being readily removed for enabling the water vessel c to be filled and at the same time to secure it from being accidentally displaced, I form inward projections d and e on opposite sides of the cap a, which engage with the members of the

radiator or with convenient slots or holes therein. On one side the said inward projections may be attached movably to the cap a, as shown at d, so as to slide or screw out-60 wards and inwards and so engage and disengage with the usual longitudinal side webs or members f of the radiator and thus fasten the cap a in position or loosen such cap for removal. The inward projections on the other 65 side of the cap a may be rigidly fixed as shown at e, while those on the other side may be movably attached as shown at d.

I form each movable projection d with a polygonal head resting in a recess or pocket 70 a^3 in the side of the said cap a, so that such screw projection shall not be easy to fasten or unfasten without a suitable key, and will form no inconvenient projection beyond the sides of the cap.

In order to place the cap a in position, such cap has to be tilted downwards on the side carrying the rigidly-fixed projections e, and the points of the projections entered into their position of engagement with the 80 radiator members or side webs as before described, after which the other side, having the movably attached projection d, is lowered into its place, and the projections on that side screwed or slid into their positions, 85 so as to fix down the cap:

Instead of the rigid projections e engaging directly with the radiator members f I may provide pivoted catches g for engaging with and holding in place such projections. The 90 said catch g (shown separately in Fig. 3) is attached to the radiator member f and placed at such a point that the cap a, when in position, renders the catch inaccessible from without, except for a polygonal head 95 h formed on same for the purpose of taking a key, such key having access to the head h through a convenient opening in the side of the cap. This form of catch is arranged to turn on a pivot and be held in position by its 100 own weight, against a suitable stop i, and the weight of such catch may be so balanced that when reversed by turning round with the key, so as to disengage the aforesaid projection e, it will remain so reversed till re- 105 turned to its original position.

What I claim and desire to secure by Letters Patent in the United States, is:—

1. The combination with a radiator for heating purposes, of a perforated cap ar- 110 ranged to contain a water-holding receptacle, said cap having inwardly projecting support-

ing brackets adapted to rest upon the upper part of the said radiator, and the water receptacle adapted to be held by said cap, sub-

stantially as specified.

5 2. The combination with a radiator for heating purposes, of a perforated cap arranged to contain a water receptacle, said cap having inwardly-projecting supporting brackets adapted to rest on the upper part of the radiator, the water receptacle, radiator members having openings therein, and movable projections arranged to project inwardly from said cap and to engage in the said openings in the radiator members, substantially as specified.

3. The combination with a radiator for heating purposes, of a perforated cap ar-

ranged to contain a water receptacle, said cap having inwardly-projecting supporting brackets adapted to rest upon the upper 20 part of said radiator, the water receptacle, rigid inward projections on said cap, and pivoted balanced catches on the said radiator, with which said fixed projections are arranged to engage, substantially as speci- 25 fied.

In testimony whereof I have signed my name to the foregoing specification in the presence of two subscribing witnesses.

JOHN THOMAS STOKES.

Witnesses:

AY. V. THORNTON, B. EVERY.