

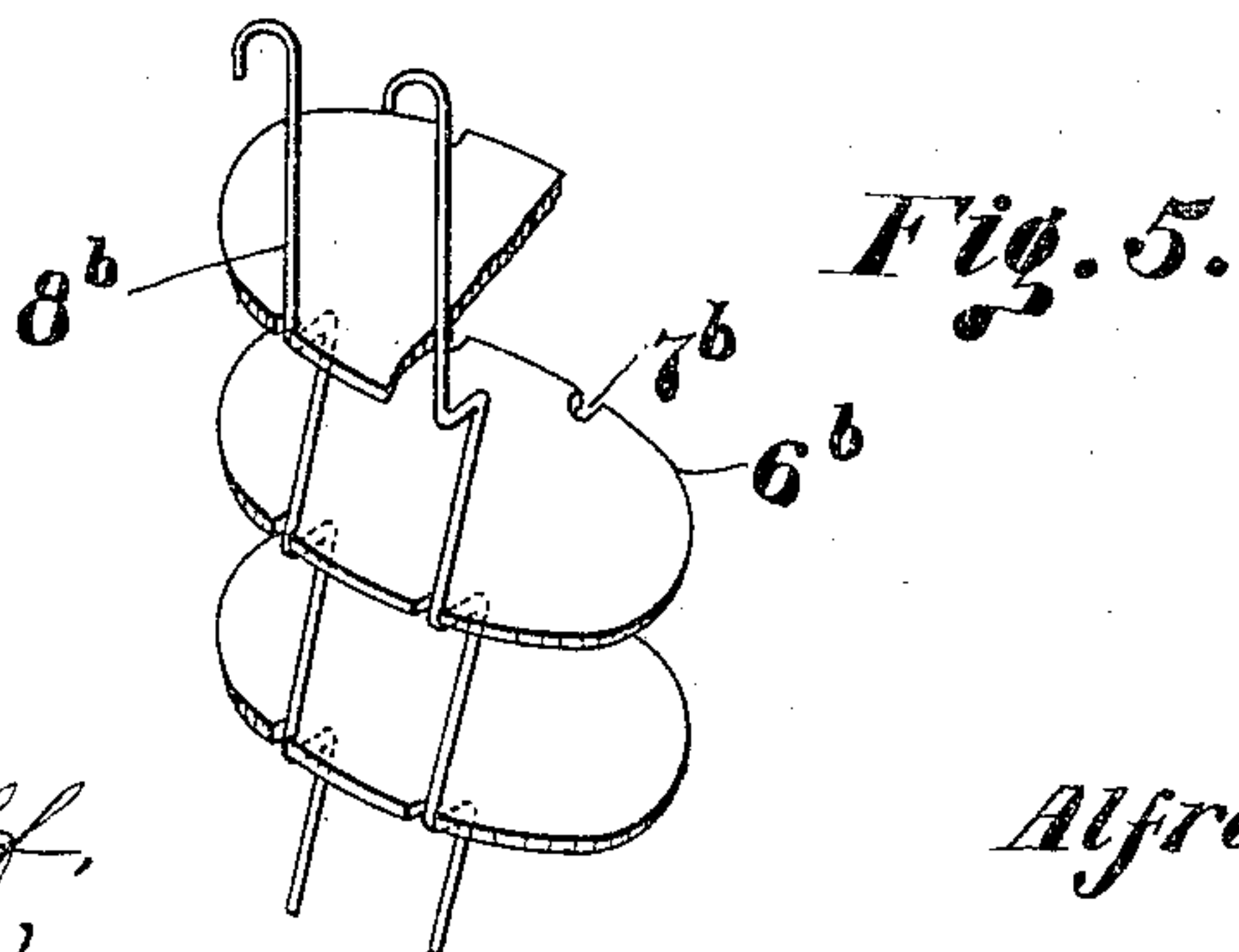
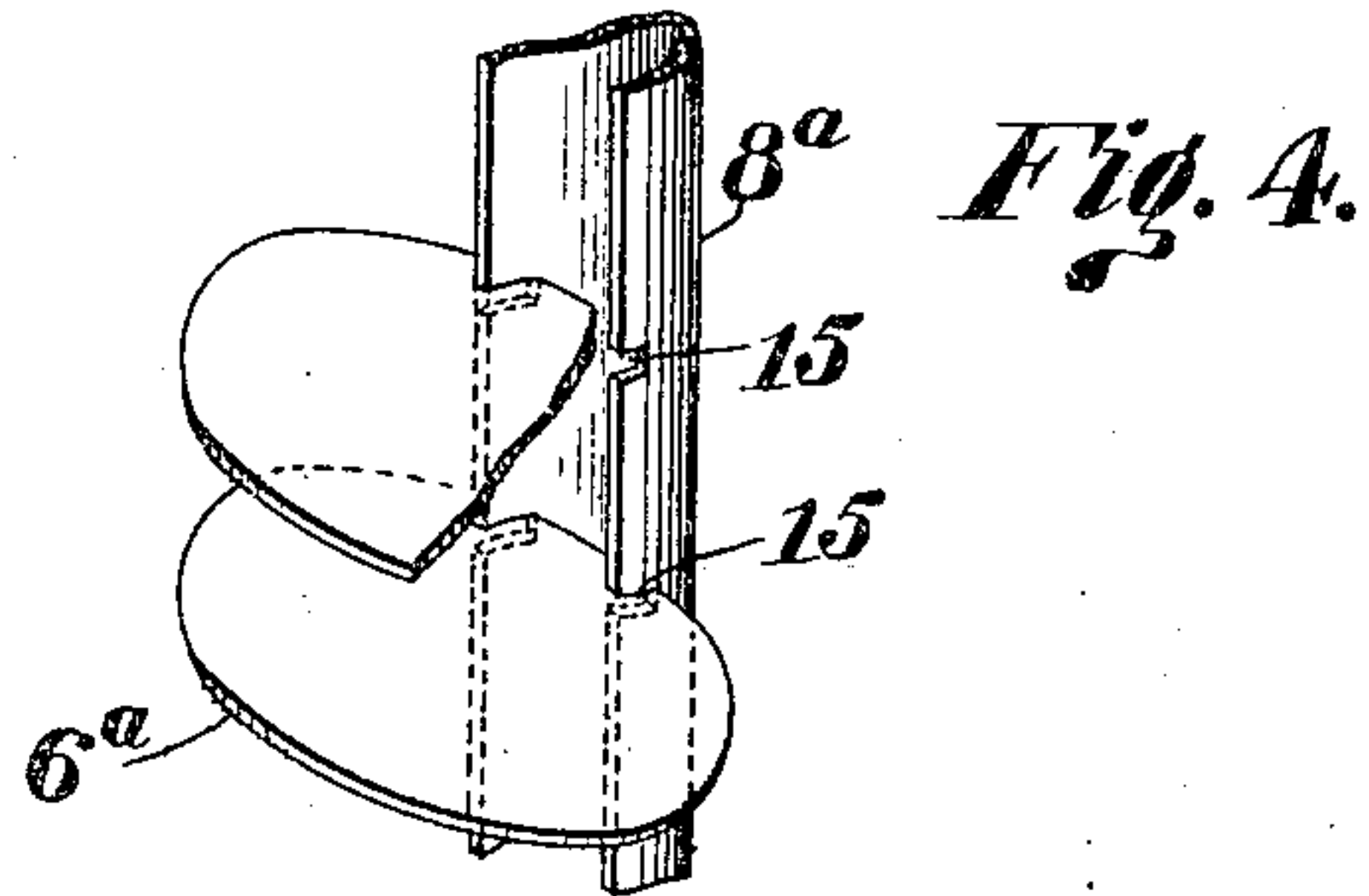
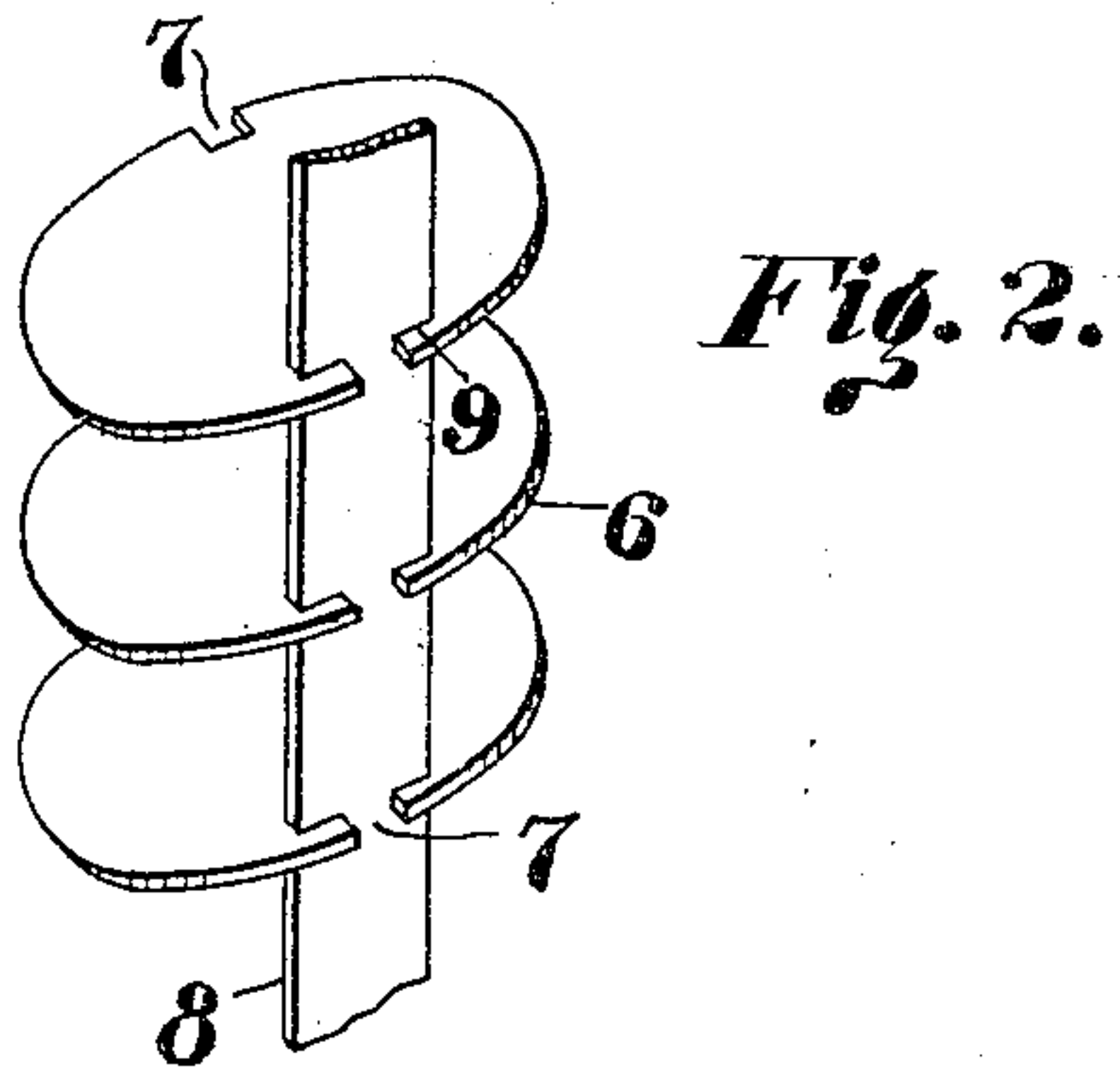
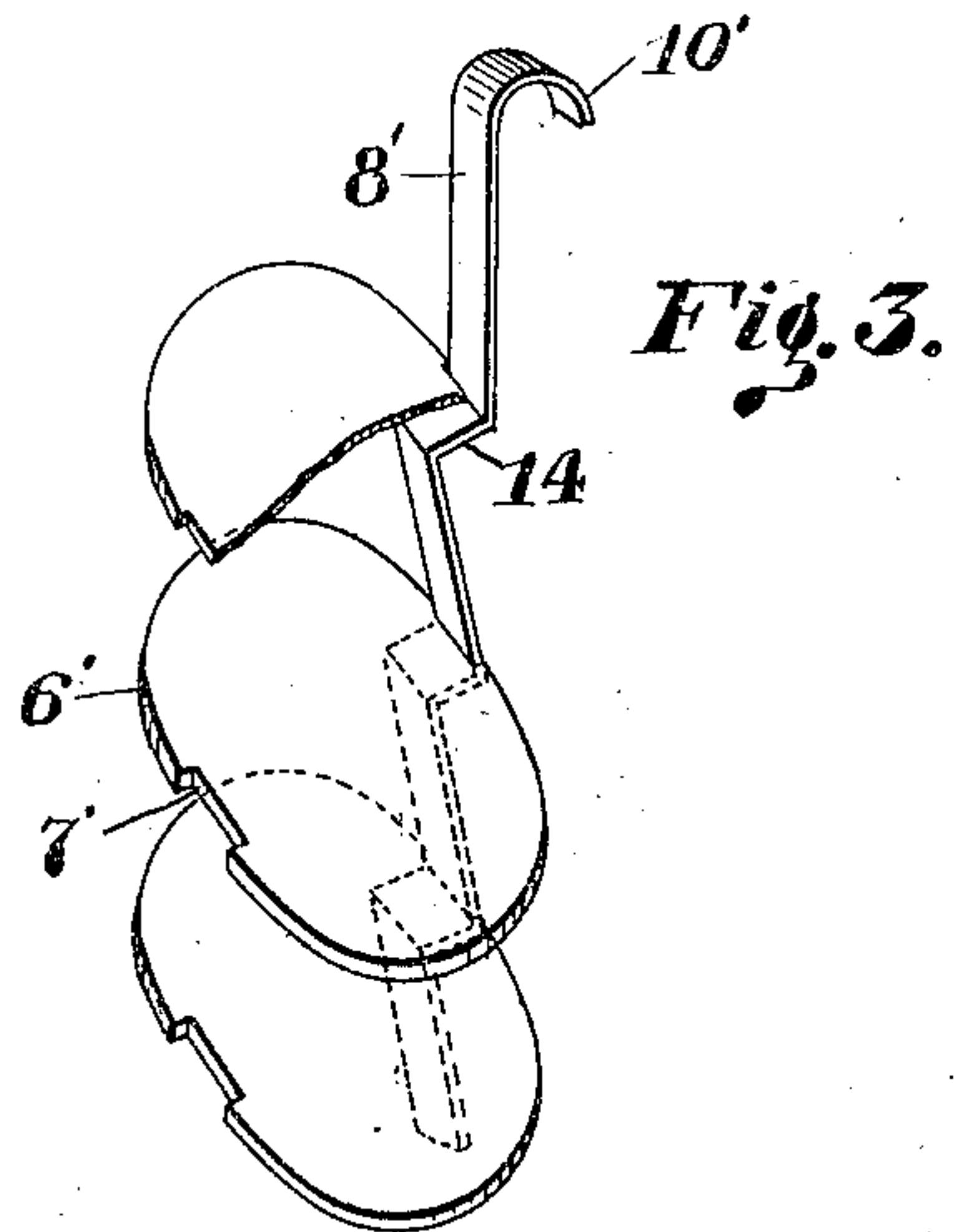
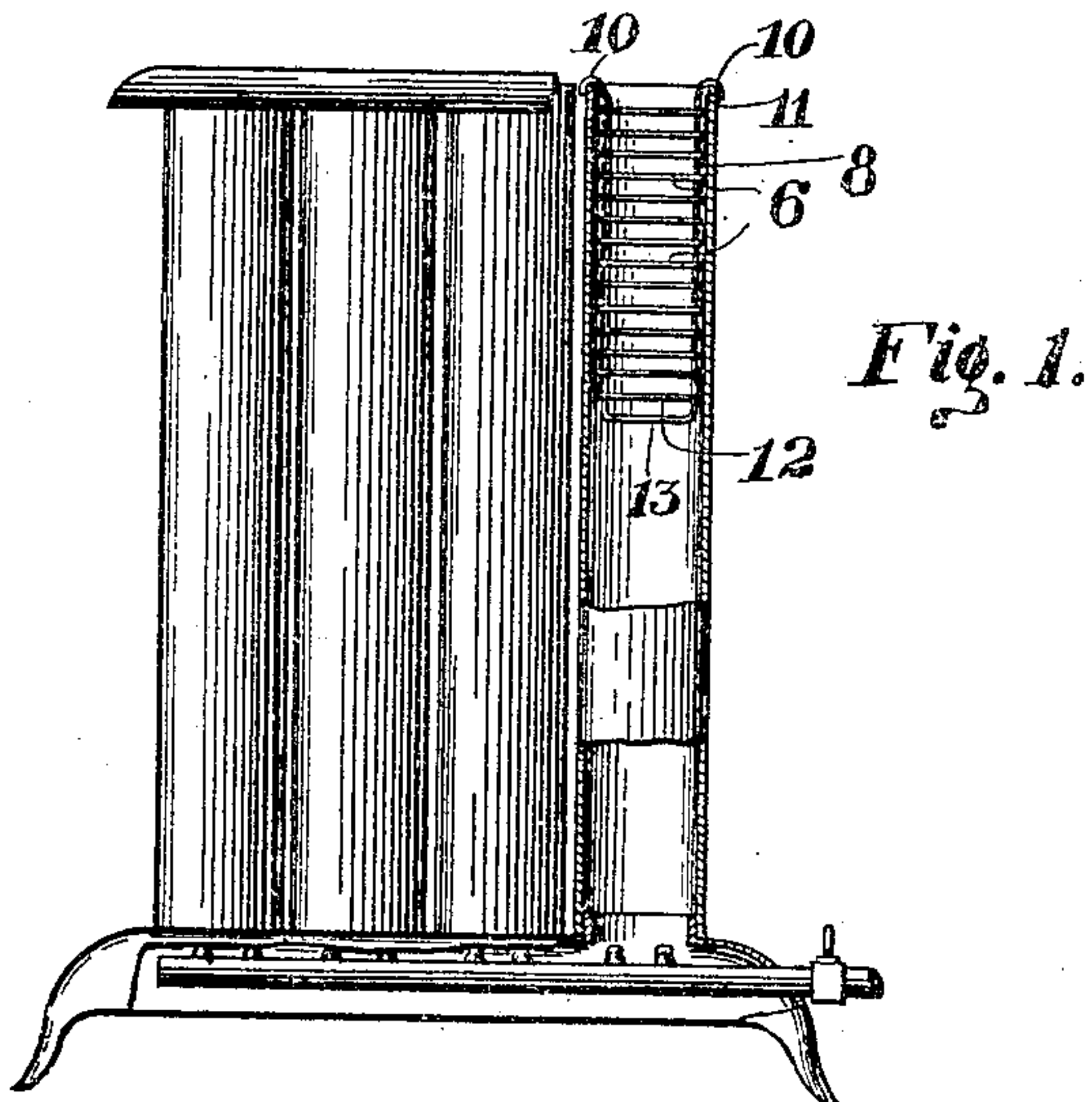
No. 768,785.

PATENTED AUG. 30, 1904.

A. G. BAYLES.  
RADIATOR.

APPLICATION FILED OCT. 16, 1902.

NO MODEL.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

ALFRED G. BAYLES, OF NEW YORK, N. Y., ASSIGNOR TO DUPLEX RADIATOR COMPANY, A CORPORATION OF NEW JERSEY.

## RADIATOR.

SPECIFICATION forming part of Letters Patent No. 768,785, dated August 30, 1904.

Application filed October 16, 1902. Serial No. 127,534. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED G. BAYLES, a citizen of the United States, residing at New York, in the county and State of New York, have invented a new and useful Radiator, of which the following is a specification.

My invention relates to radiators in which gas or oil is used as a fuel, and is designed as an improvement on the radiator shown in my application of May 23, 1902, Serial No. 108,675.

The object of my present invention is to provide a cheaper and simpler way of mounting the baffle-plates in the tubes of the radiator.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a radiator, partly in section, constructed according to my invention. Fig. 2 is a perspective view of part of the baffle-plates and of a section of the supporting band or frame. Fig. 3 is a view of a modified form of construction. Fig. 4 is a view of another modified form, and Fig. 5 is a view of another modified form of construction.

In the accompanying drawings the several parts of my invention are indicated by numerals of reference, and in the practice of my invention I provide a plurality of baffle-plates 6, which are preferably provided in the sides thereof with notches 7, and a supporting-frame 8, preferably constructed of a single metal band bent U-shaped, is provided with notches 9 in the sides thereof of a width to receive the plates 6, and the notches 7 are proportioned in width so that the walls of the notches 9 will engage the upper and lower surfaces respectively of the plates 6, as clearly indicated in Fig. 2. The ends of the frame or band 8 are bent to form hooks 10, adapted to engage the top of the sides of the radiator-tube 11, in which each frame is mounted and by means of which the frame and plates are supported in the radiator-tubes, as clearly shown in Fig. 1.

In practice the bands are preferably composed of spring metal and the sides forming the frame may be sprung apart, as will be readily understood, admitting first the lowest plate 12, which is mounted a sufficient distance

above the bottom 13 of the frame to allow the edges of the plates to be inserted in the notches 9. When all the plates are in place and the frame is mounted within the tube 11, the spring action of the sides of the band will securely hold the band in engagement with the plates. However, I do not limit myself to the band being of spring metal, for the reason that a malleable band when once in engagement with the plates would be displaced with great difficulty when in the tube. It will be understood that the distance between the plates will be regulated by the vertical distance between the notches 9, and by this construction I am able to secure the baffle-plates in position in a simple, cheap, and efficient manner.

In Fig. 3 I have shown a modified form of construction in which the plates 6' are provided with notches 7' of the same width as the band 8', and the band is provided with steps 14, on which the respective plates rest. The other parts of construction and the operations are practically the same as in the form previously described.

In Fig. 4 the band 8<sup>a</sup> is made U-shaped, and the edges thereof are provided with notches 15, which may be passed over the edges of the plates 6<sup>a</sup>.

In Fig. 5 wires are used instead of a single band, and the plates are provided with a corresponding number of notches 7<sup>b</sup> on each side in which the wires are seated, and the wires are stepped, as in Fig. 3.

By the construction disclosed in the several figures the plates are held within the radiator-tubes at the proper distance apart without being secured to the supporting-frame, the construction of frame being such that the plates are interlocked therewith and held securely in position. As a result the plates can be very quickly mounted in the frame with a very small amount of labor. The supporting-frames are formed in a die, and no further work is required except to place the plates in position and place the same in the top of the tubes.

It will thus be seen that I accomplish the object of my invention in a simple and efficient



manner. It will be understood, however, that I do not limit myself to the exact construction here disclosed, as the supporting-frame may be made in various ways. My invention  
5 lies in the frame so constructed that the plates will be held therein in the proper positions without riveting the plates thereto or using bolts and nuts to clamp the plates in position.

Having thus described my invention, what  
10 I claim as new, and desire to secure by Letters Patent, is—

1. A plurality of baffle-plates for a radiator-tube, and a U-shaped supporting-frame therefor, said frame being provided in the sides  
15 thereof with engaging means whereby said plates may be interlocked therewith, as and for the purpose set forth.

2. A plurality of baffle-plates for a radiator-tube, and a U-shaped supporting-frame therefor, said frame being provided in the sides  
20 thereof with engaging means whereby said plates may be interlocked therewith, and at the free ends with hooks adapted to engage

the radiator-tube, as and for the purpose set forth.

3. A plurality of baffle-plates for a radiator-tube having notches in the sides thereof, and a U-shaped supporting-frame provided with notches in engagement with the notches of  
25 said plates, as and for the purpose set forth. 30

4. A plurality of baffle-plates for a radiator-tube having notches in the sides thereof, and a U-shaped supporting-frame having hooks at the free ends thereof, and notches in the sides thereof adapted to engage the notches in said  
35 plates, said frame being proportioned in width whereby it will be forced inward when mounted in the tube, as and for the purpose set forth.

In testimony whereof I have hereunto subscribed my name in the presence of two sub-  
40 scribing witnesses.

ALFRED G. BAYLES.

Witnesses:

JULIUS WATERMANN,  
R. H. VANDERBROOK.