No. 886,777. PATENTED MAY 5, 1908.

J. M. DUNGAN.

RADIATOR ATTACHMENT.

APPLICATION FILED APR. 26, 1906.

Fig. 1.

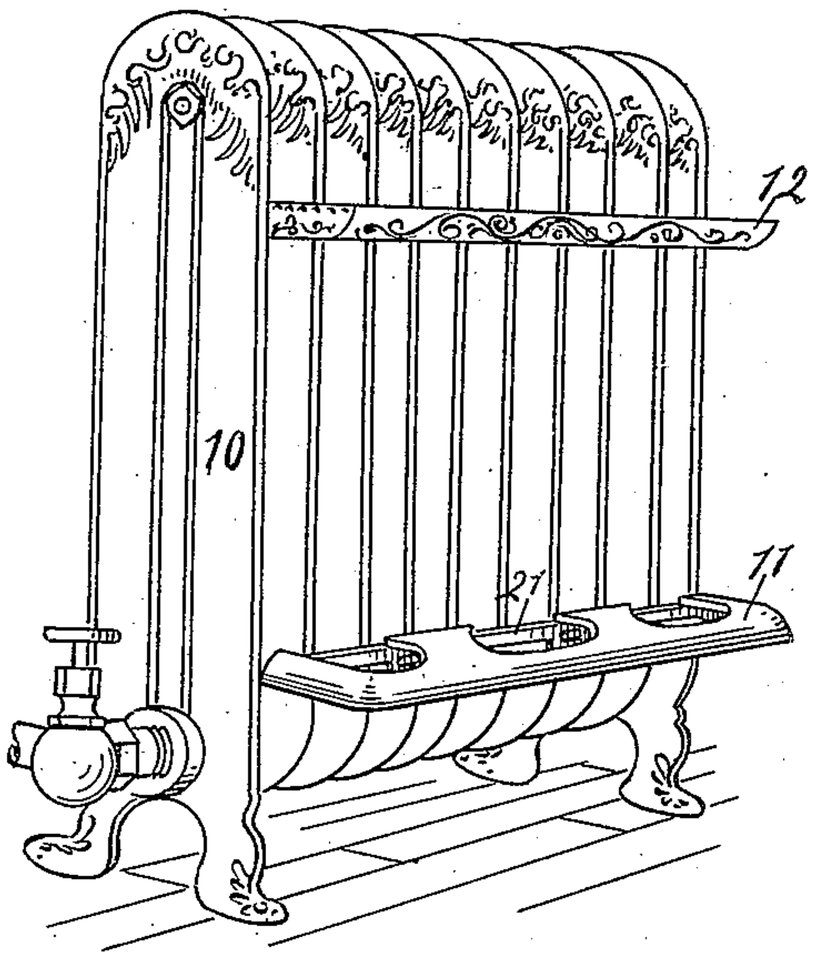


Fig. 2.

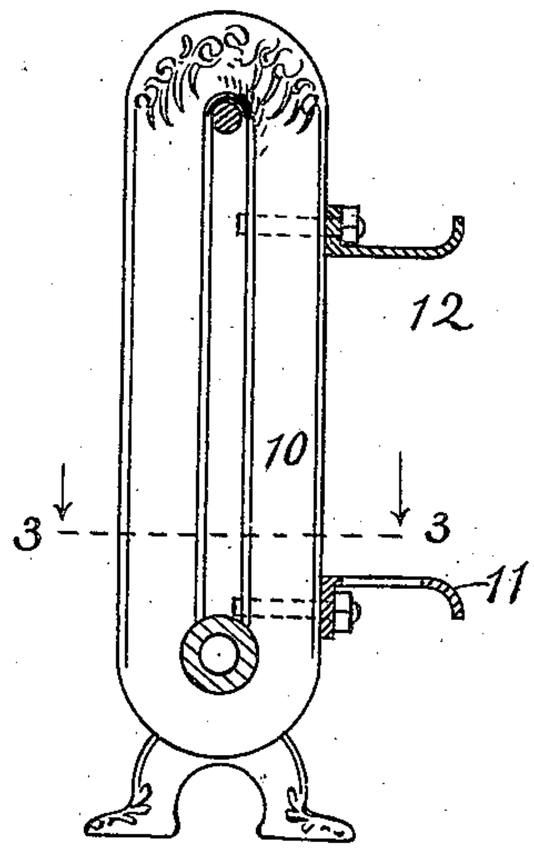


Fig. 3.

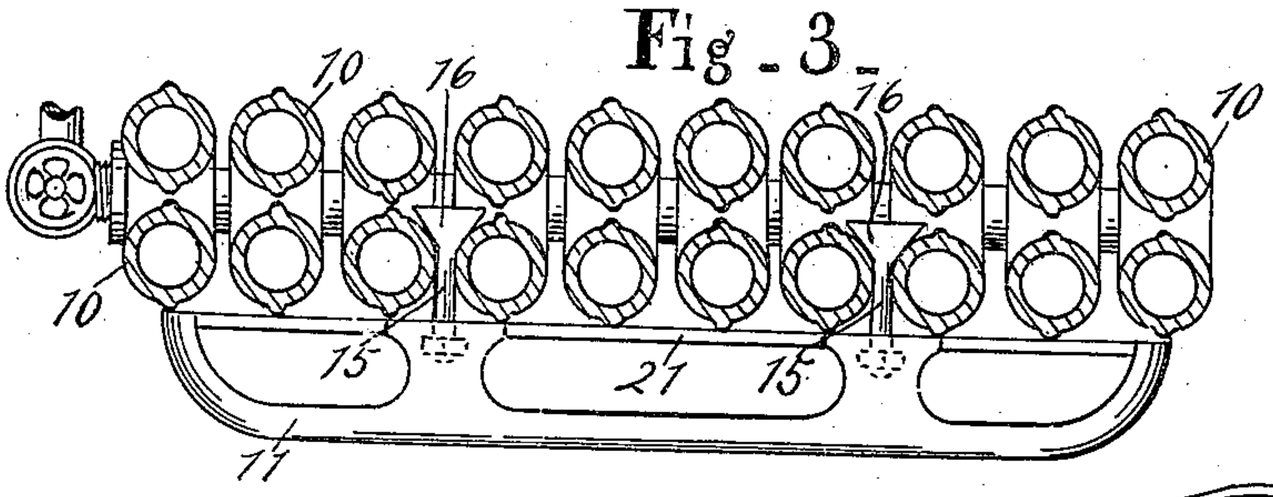
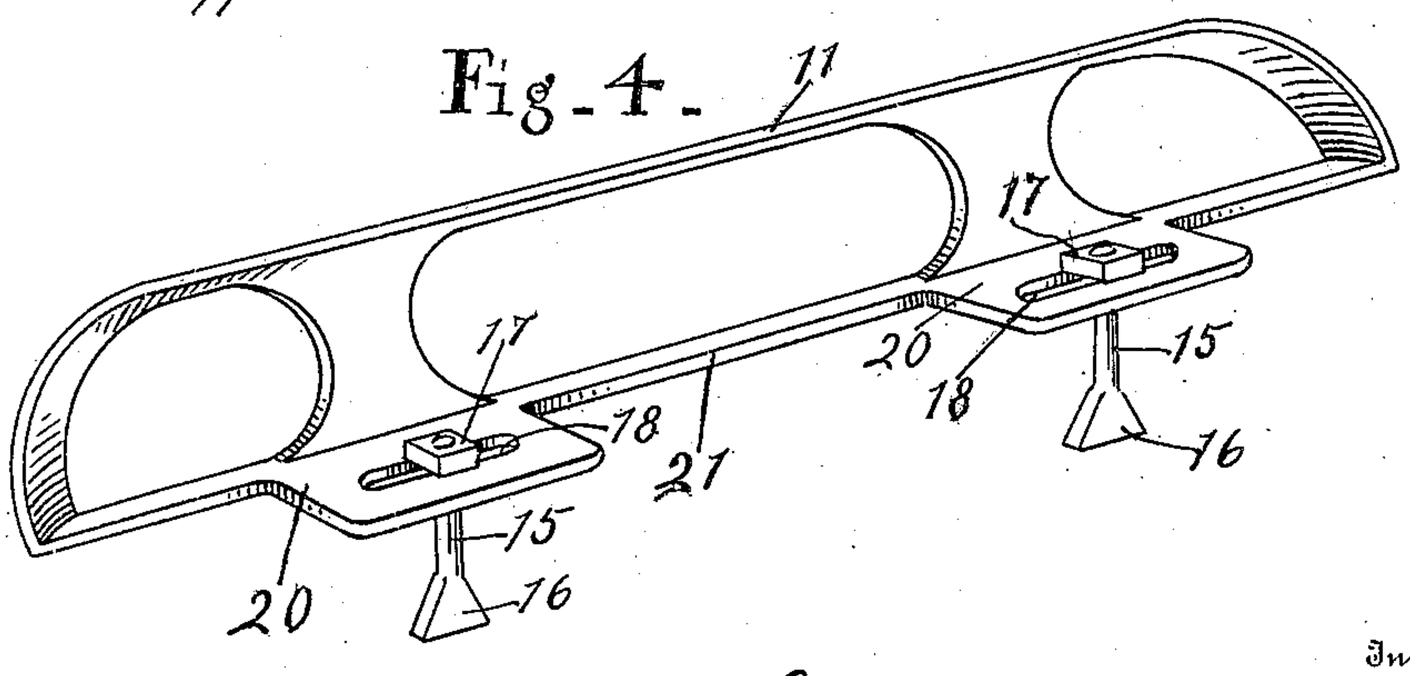


Fig. 4.



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RADIATOR ATTACHMENT.

No. 886,777. Specification of Letters Patent. Patented May 5, 1908.

Application filed April 26, 1906. Serial No. 313,747.

To all whom it may concern:

Be it known that I, JAMES M. DUNGAN, of Indianapolis, county of Marion, and State of Indiana, have invented a certain new and useful Radiator Attachment; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like letters refer to like parts.

The object of this invention is to provide convenient and economical means attached to radiators for serving as a foot-rest or shelf or any like purpose.

The nature of the invention will be understood from the accompanying drawing and the following description and claims.

In the drawings Figure 1 is a perspective view of a radiator provided with a shelf and also with a foot-rest. Fig. 2 is a vertical transverse section through the same. Fig. 3 is a horizontal section through the same on the line 3—3 of Fig. 2. Fig. 4 is a perspective view of the under side of the foot-rest and attached parts.

In the drawings there is shown a radiator formed of double sections 10 so that there is a space centrally throughout the radiator between the halves of the sections, as appears in Fig. 2 A foot-rest 11 and a shelf 12 are attached to the radiator. These two are shown for illustrating the nature of the invention although both or either one, can be used, as desired.

The feature of the invention consists in providing means that is connected with the shelf or foot-rest or other attachment that can be readily inserted between pipes and turned to a holding-position and be as readily removable, the holding portion of such means being wedge-shaped so as to wedge in the space between the halves of the radiator sections, substantially as shown in Fig. 3.

The fastening means consists of a bolt 15 with a head 16, preferably triangular or flattened, with inclined edges so as to be wedge-shaped as shown, and threaded at the end opposite said head and provided with a nut 17. The bolt extends through a horizontal slot 18 in the attachment to be secured to the radiator. This construction permits the attaching means, the bolts 15, to be inserted between pairs of radiator pipes by turning the heads 16 into vertical positions, and after the same are inserted, turning the bolts so that the heads will be horizontal, as shown in Fig. 3. Then the nuts 17 are tightened, thus clamping the attachment, whether it be a foot-rest or something else, rigidly to the side of the radiator. The attachment can be as readily removed by merely loosening the nut 17, turning the bolts 15 so that the heads will be vertical, and then withdrawing them from between the pipes of the radiator.

It is thus seen that the device is very readily attached or removed and by reason of the slots 18, the attaching bolts can be adjusted so that they can be placed between pipes, and this is permitted by the flattened head 16. The side edges of the head 16 are inclined so as to wedge in between the pairs of pipes at all times, regardless of the expansion or contraction due to sudden and great changes in temperature of the pipes and securely grip the pipes. This form of bolt-head avoids the turning of the bolt as the nut is being tightened. This is convenient for double section radiators because the nuts are on the outer ends of the bolts 15 so as to be readily accessible. With the nuts in the middle of the radiator, they would be inaccessible, and the same is true if the bolts should extend entirely through the radiator, because radiators are usually placed against a wall and are not readily removable.

In the case of the foot-rest 11 and the shelf 12 there is a vertical portion or plate 20 through which the bolts pass and which bears against the sides of the radiator pipes. This maintains the attachments 11 and 12 in a horizontal position and makes them capable of resisting weight or downward pressure.

The attachment is preferably provided with an inner longitudinal plate 21 which extends the full width of the radiator and bears against its pipes for the purpose of strengthening and bracing all parts of the attachment and resisting the strain during the use of the attachment.

In the case of the foot-rest, like that shown, it may be made skeleton in form, while in the case of the shelf, it may be imperforate, but I do not wish to limit my invention to foot-rests, shelves or any other particular use or uses to which said attachment may be adapted.

What I claim as my invention and desire to secure by Letters Patent is:

The combination with a radiator having a plurality of pipes, of a radiator attachment with horizontal slots therein, bolts for securing said attachment to the radiator each pro-

vided with a flattened, wedge-shaped head rigidly secured on its inner end adapted when turned in one position to be inserted between the pipes of a radiator and when turned into another position to be wedged between two adjacent radiator pipes, and with a nut on the outer end of the bolt.

In witness whereof, I have hereunto affixed my signature in the presence of the witnesses herein named.

JAMES M. DUNGAN.

Witnesses:
HELEN B. MCCORD,
N. ALLEMONG.