Dec. 25, 1956 P. KRASSOWSKI 2,775,431

BASEBOARD HEATER

Filed March 24, 1954 2 Sheets-Sheet 1

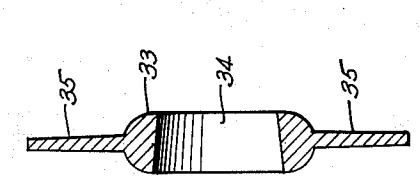


Fig. 6

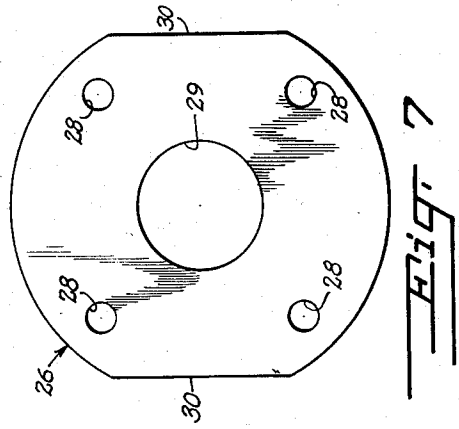


Fig. 7

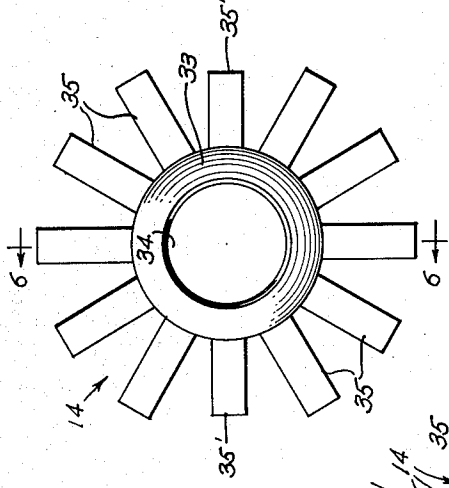


Fig. 5

Fig. 1

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BASEBOARD HEATER

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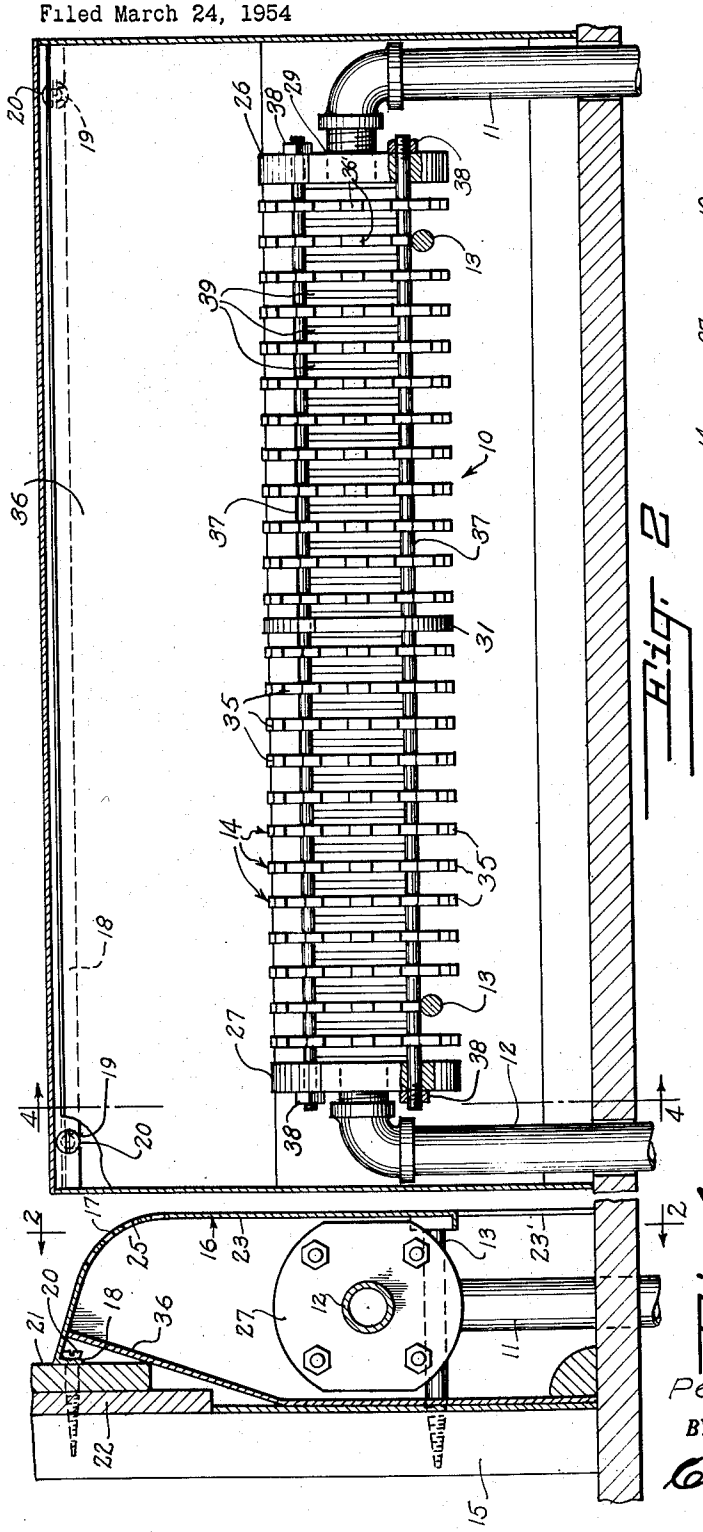


Fig. 2

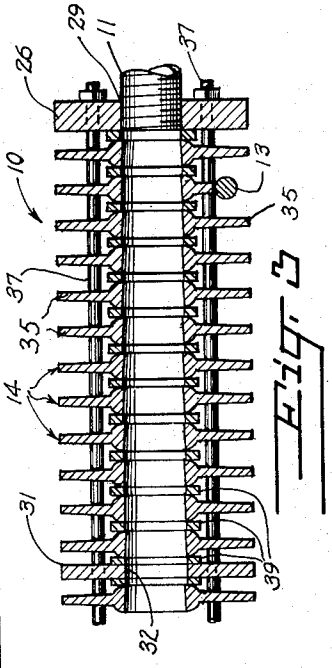


Fig. 3

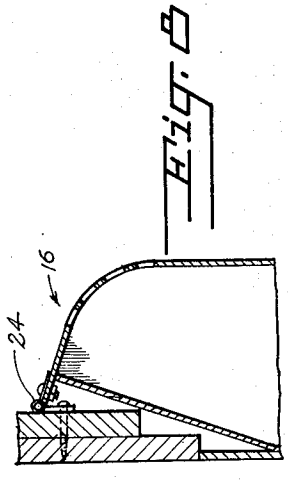


Fig. 5

Fig. 4

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BASEBOARD HEATER

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Application March 24, 1954, Serial No. 418,274

1 Claim. (Cl. 257—133)

This invention relates to a heater and more particularly to a baseboard heater, and it consists in the constructions, arrangements and combinations herein described and claimed.

It is the cardinal object of the invention to provide a heater of the convection type which may be readily installed in the baseboard of rooms of a dwelling or other enclosures.

More specifically, it is an important object of the invention to provide a heater which embodies a plurality of disks suitably coupled together, each disk having a bore, which when in assembled relation forms a passage for the heating medium; each disk having a plurality of spaced, tapered radiating fins for even distribution of heat within a room or other enclosure.

It is also an object of the invention to provide a heater of the character described in which a front cover or heat deflecting shield is mounted upon the baseboard of a room so as to conceal the heater and which is detachable, enabling ready cleaning of the heater and the floor surfaces of dust or other foreign matter.

Additional objects, advantages and features of invention will be apparent from the following description, considered in conjunction with the accompanying drawings, wherein,

Figure 1 is a perspective view of the heater with the heat deflecting shield in position, part of which is broken away.

Figure 2 is a front elevation with the shield removed.

Figure 3 is a fragmentary longitudinal sectional view through the heater.

Figure 4 is a vertical section through the heater.

Figure 5 is a plan view of one of the heating disks.

Figure 6 is a cross section of the line **6—6** of Figure 5.

Figure 7 is an end elevation of one of the end members, and

Figure 8 is a fragmentary detail showing the heat deflecting shield as hinged to the wall.

There is illustrated a heater generally indicated by the reference character **10** having a heat medium inlet **11** and an outlet **12**.

The heater **10** is supported above the floor of an enclosure, such as a room, by a suitable number of lag screws **13** spaced between a pair of disks **14** and secured in studding **15** of the wall of the enclosure. A front cover or hot air deflecting shield **16** is employed to conceal the heater **10** and for this purpose includes an upper arcuate portion **17** having a downwardly turned flange **18** suitably notched as at **19** to engage over a headed screw **20** secured in the plaster **21**, plaster board **22** and the studding **15**. The shield has a downwardly extended skirt **23** of a length extending slightly below the lag bolts **13** so as to engage the heads thereof for lateral support. The respective ends of the skirt **23** may be formed as ornamental legs **23'**. If desired, the shield **16** may be hingedly connected to a wall surface as indicated at **24** and shown in Figure 8. Any suitable grill **25** may be formed in the shield for the outflow of hot air.

The heater comprises a series of disks **14** secured between respective end members **26** and **27** as will now be described, reference being had to Figure 4.

The end members **26** and **27** are of identical construction and are of heavy cast iron formed with four openings **28**, circumferentially spaced with respect to an axial threaded opening **29** for receiving threaded ends of the inlet and outlet **11** and **12**. The end members **26** and **27** are formed with a pair of flat faces **30**. If desired, an intermediate plate **31** may be employed which has a contour corresponding to the end members **26** and **27** and has a bore **32**.

As shown in Figures 5 and 6, the heating disks **14** embody a cast iron body **33** of substantial thickness having an axial opening **34** which, as shown in Figure 6, is of tapered formation, the lesser diameter being presented to the next adjacent disk in the direction of the outflow of the heating medium. The disks **14** include a plurality of tapered, radial fins **35** formed integrally with the body **33**, two opposed fins **35'** being of shorter length so that the heater unit when assembled will align with the flat faces **30** of the end members **26** and **27**, this construction permitting close spacing of the unit with a reflector **36** positioned behind the heating unit. As shown in Figure 3, where a lag bolt **13** is positioned so as to intersect a fin **35**, such fin may be shorter than the other fins so as to rest upon the lag bolt. However, the lag bolt may be accommodated between a pair of fins if desired.

Four tie rods **37** are employed for securing the heating unit disks **14** in assembled relation, these bolts being extended through the openings **28** of the end members **26** and **27** and between paired fins **35**. One end of the tie rods **37** is formed with left hand screw threads, while the other end is provided with right hand screw threads for receiving correspondingly formed nuts **38**. This formation of threads it has been found, overcomes a twisting torque under heating and prevents looseness between gaskets **39** interposed between respective disks.

In use, the heating medium enters the unit **10** through the inlet **11** and passes through the series of disks **14** to the outlet **12**. The disks will become quickly heated, the fins **35** and **35'** radiating heat in radial directions, thus providing a uniform heat and by virtue of termination of the skirt **23** above the floor level, an efficient upward and outward circulation of air is provided.

It will be understood that the heating unit **10** may be assembled in different lengths, the only requirement being that tie rods **37** are of proper lengths.

While I have shown and described a preferred form of the heating unit, this is by way of illustration only, and I consider as my own, all such modifications in construction as fairly fall within the scope of the appended claim.

I claim:

A baseboard heater comprising a series of horizontally spaced cast iron disks, each disk having a body member arranged in abutting relation with a gasket and the body of the next adjacent disk to provide a heater of elongated form, each of said body members having a tapered heat medium passage therethrough, each of said disks further having a plurality of radially disposed spaced apart tapered fins, an end member abutting respective end disks and having a gasket therebetween, said end members being apertured for reception of tie rods extended between certain pairs of fins of said disks, said tie rods including nuts for securing the disks in assembled relation, one end of said tie rods being formed with left hand screw threads, while the other end of said tie rods are formed with right hand screw threads, and each end member having a threaded axial opening for connection of standard pipe of a heating system.

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