



BAKER HEATER.

1. Bottom plate.
2. Ash pit.
3. Grate.
4. Fire pot.
5. Inside casing.
6. Outside casing.
8. Cast-iron top.
9. Safety lid.
11. Heat guard.
12. Smoke top.
13. Feed door.
16. Rocking-bar for grate.
18. Ring for smoke top.
20. Coil.
23. Circulating drum.
25. Combination cock.
26. Safety valve.
28. Filling funnel.
30. Indicator.

BAKER HEATERS.

To insure satisfactory results in the use of the heater, the following instructions must be strictly observed:

1. The heater should be kept half full of coal at all times. The coal should never be allowed to get below top of worm. This will give about fifteen inches of fire.

2. The inside safety lid should never be opened except to build the fire or to put in coal. (Never force the fire by opening inside safety lid.)

3. To increase the heat open inside lower damper, and close upper damper.

4. To reduce the heat close the lower damper and open the upper damper about two inches, or according to the amount of heat required. With both dampers closed, the car will not be too warm at any time, and, by proper working of the lower and upper dampers, and watching the indicator, the car can be kept at any temperature desired.

5. Failure of the heater arises from neglect or mismanagement, generally from allowing fire to run too long without putting in coal, then filling them full and opening drafts, producing a rapid fire, which, instead of warming the car, stops the circulation and creates gases, which are liable to explode.

6. It will be readily understood that, with the large amount of piping in the cars, the circulation (which is principally caused by the weight of the column of water falling from the drum into the pipes and the difference in weight of a column of cold and hot water) must be necessarily slow, and that a forced fire will do no good, but will only cause the effect mentioned above.

7. In filling the heater pipes, be sure that the water contains all the salt it will hold in solution, and that no undissolved salt enters the drum (except in case of Pullman sleeping cars, in which no salt should be used). Open the combination cock on end of drum, on top of car, and pour

in water until it runs freely from same. The water should always stand at height of combination cock, which may be tried by opening the cock, but only when the fire is very low and no pressure on. Pipes should be warm all round before passengers enter the car. It takes from three to four hours to get up a good circulation.

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