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(54) **Heat exchanger with coil constituted by a tubular element with drop-shaped cross-section**

(57) The invention relates to a heat exchanger that is particularly suitable for use in boilers designed for heating and production of sanitary water, wherein the coil through which the water passes has a drop-shaped cross-section, and more particularly a cross-section in which the lower part is semi-circular, or preferably parabola-shaped with a rounded tip, and the upper part is

substantially cusp-shaped, ie. has a cross-section that tapers towards the top, with slightly concave sides.

This solution produces the ideal balance between the amount of heat that can be transferred across the surface of the pipe which constitutes the coil and the volume of water that is circulated in it, and therefore improves the dynamics of the heat and water flows, at the same time aiding the flow of fumes and gases.

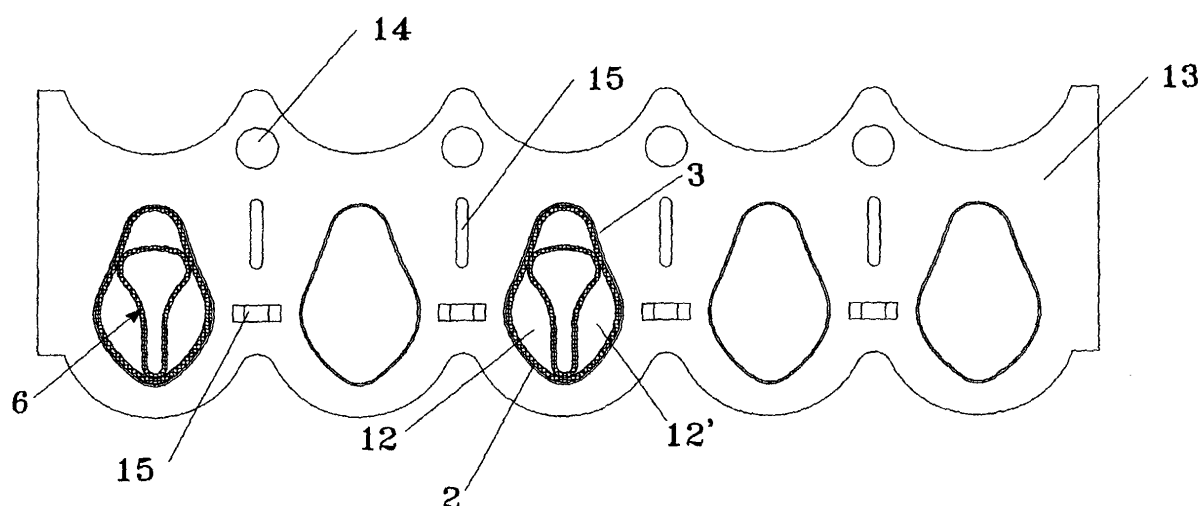


Fig. 4

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EP 02 00 3789

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Place of search MUNICH		Date of completion of the search 15 January 2004	Examiner von Mittelstaedt, A
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