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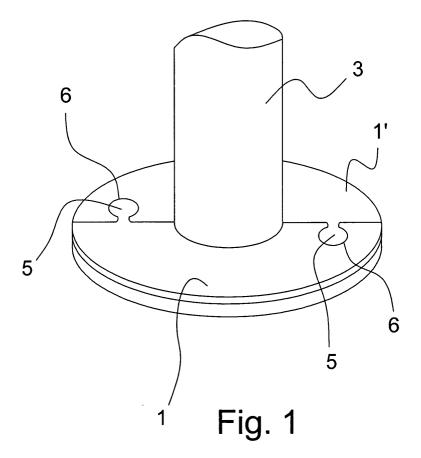
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## (54) Escutcheon

(57) The invention relates to an escutcheon (1) or a cover plate for covering openings or holes for piping (3) in vertical or horizontal parts of buildings. The cover plate comprises a number of retaining or clamping devices (5, 6) for interlocking the parts (1, 1') of the cover

plates. On horizontal surfaces the escutcheon (1) may be assembled around a pipe (3) without any tools or adhesive. The interlocking the parts of the cover plates consist of a ball on a stick, which gives effective interlocking and non-complicated cut-out.



## Description

**[0001]** The present invention relates to an escutcheon or cover plate for covering openings or passageways in vertical or horizontal surfaces in fixed items in connection with buildings, plumbing or industry.

[0002] From US 4366866, Sweeney, is known an escutcheon system which provides decorative surface about the sprinkler head of a fire protection system with two identical moulded plastic parts and a moulded plastic shim. Each of the parts can provide half of the decorative surface with end portions capable of being assembled together or capable of interlocking engagement, and with a central recess to fit about the sprinkler head. The decorative shim is capable of assembly in the system and of extending the decorative edge of the escutcheon in order to provide variations in the position of the sprinkler head and the adjoining building surface. Such parts may be assembled about a sprinkler head and are capable of being removed from about the sprinkler head by manipulation of the two parts without breaking the integrity of the fire protection system.

**[0003]** From US 4407023, Norton, is known a device that is useful in providing a seal around passages wherein a pipe or another plumbing fixture enters a wall. The device has oppositely engageable identical sections which have semi-circularly notched portions substantially in the centre thereof and adapted to be disposed about the pipe or plumbing fixture passing through the wall. Multiple clamping elements are provided to secure the oppositely positioned halves in a substantially parallel and aligned configuration.

[0004] Most of the known escutcheons or cover plates are manufactured in plastic or another mouldable material. Moulding is a preferred manufacturing process for mass production of articles for plumbing in buildings. The mass-produced products may be cheap in relation to production costs i.e. sale, as well as in relation to looks. Mass-production may not provide the opportunity to tailor the interior design in a widen sense. When mounting known cover plates, they are squeezed round the actual pipe due to their plastic nature. This operation will usually not enhance the looks of the cover plate arrangement.

**[0005]** The aim of the invention is to provide an escutcheon or similar cover plate where neat and solid construction finishes the job done by building workers when they install new or change older installations in buildings. Further, it will for the daily user of the building be possible to clean, renew and service the installations without special tools for accessing the escutcheon. The service for the daily user differs from the job done by the building workers. The daily use may include vacuum cleaning and exchange of carpets or painting.

**[0006]** According to the invention, the escutcheon for covering openings or passageways in vertical or horizontal fixed items in connection with buildings, plumbing or industry comprises two or more pieces that are inter-

lockable. The interlocking means may consist of mortise joint, flaps or lobes. The protruding part will have to correspond to the cut-out where it has to match. When water jet or laser cutting the interlocking means, they can be made with complicated contours. The shown circular ball on a stick is a simple and useful method. The contours may have ornamental effect.

[0007] Furthermore, according to the invention the interlockable means are with constant contour in one direction through the escutcheon, and for covering passageways for pipes in building surfaces the direction of constant contour is the direction of the pipe. By these means of fixation of the escutcheon it is not necessary at least in connection with horizontal mounting to procure further fixation to the building. The escutcheon according to the invention when placed on a horizontal surface will due to retaining or clamping devices for interlocking of the parts stay in place due to gravity. In situations where gravity is not sufficient some adhesive can be used between the escutcheon and the part of the building, where the escutcheon needs to be fixed.

[0008] According to the invention, the retaining or clamping devices for interlocking the pieces may be of a permanent nature, or may be of a non-permanent and more decorative nature. If a permanent interlocking is wanted a tight fit or barbed contour is most preferable. [0009] According to the invention, the escutcheon may consist of two identical end pieces with one or more intermediate pieces. It will then be able to cover a series of openings. The series of openings may occur where a radiator is positioned in buildings. The usual two passageways are positioned spaced apart. The distance between the two tubes for the radiator is usually from an esthetical point of view the same around the building. This gives the opportunity to manufacture a three-piece cover plate with the two end parts being similar, and the middle part prefabricated or produced especially for covering the distance between the pipes for the radiator. [0010] In the following, the invention is explained in more detail with reference to the drawing where:

Fig. 1 shows the escutcheon,

Fig. 2 shows a two and a three piece solution and

Fig. 3 shows individual outer contour.

[0011] The present invention relates to an escutcheon 1, 1' or cover plate for covering openings or passageways in vertical or horizontal surfaces in fixed items in connection with buildings, plumbing or industry. The retaining or clamping devices for interlocking the parts are shown at 5, 6. They are interlocking with recesses or corresponding cut-outs for interlocking.

**[0012]** The cover plate may be produced in two or more pieces for covering passageways for pipes in building surfaces.

**[0013]** The cover plate comprises at least two parts 1, 1', in the simplest way preferably two identical parts (180 degrees each), that may be interlockable 5, 6.

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**[0014]** The cover plate for covering around a pipe may comprise three parts (120 degrees each, not shown). In the simplest form, preferably three identical parts, and they are interlockable.

**[0015]** The interlocking 5, 6 means may consist of mortise joint, flaps or lobes. The protruding part will have to correspond to the cut-out where it has to match. When water jet or laser cutting the interlocking means they can be made with complicated contours. The shown circular ball on a stick is a simple and useful method. The contours may have ornamental effect.

**[0016]** The pieces may be produced by stamping or cutting. The choice of production method is only limited to the fact that it must be possible to change design according to demands. These demands may not only be a specific size of tube or pipe. The demands can also be from a flexible manufacturing point of view.

[0017] The preferred way of manufacturing is cutting either with water jet or laser. The material used for the parts is preferably stainless steel, aluminium or another metal or metal like material keeping its shape after production and during use. The weight is not unimportant. Too low weight will open the possibility for a vacuum cleaner to pick up one or more of the parts directly from the floor when cleaning the house. If parts of steel with a weight of about 30 grams are used, a vacuum cleaner will not be able to remove the parts from the floor even if no adhesive has been used.

**[0018]** The parts may comprise more parts that are arranged to cover a series of openings see fig. 2. The series of openings may occur where a radiator is positioned in buildings. The usual two passageways 8, 9 are positioned spaced apart. The distance between the two tubes for the radiator is usually from an esthetical point of view the same around the building. This gives the opportunity to manufacture a three-piece cover plate with the two end parts 1,1' being similar and the middle part 2 prefabricated or produced especially for covering the distance between the pipes for the radiator.

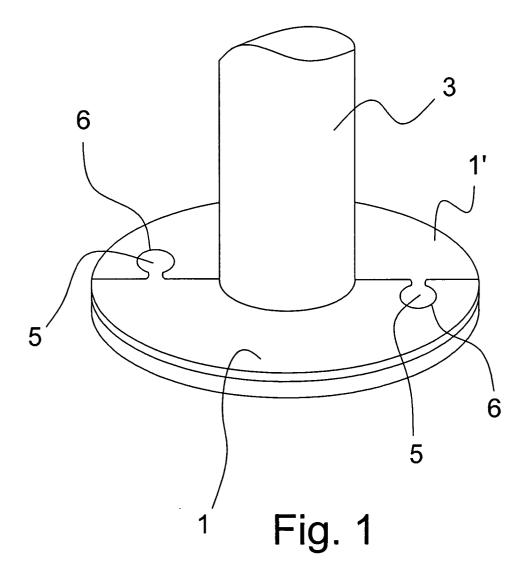
**[0019]** Another embodiment of the invention relates to the outer contour 11 of the cover plate. The outer contour may be adapted to specific demands.

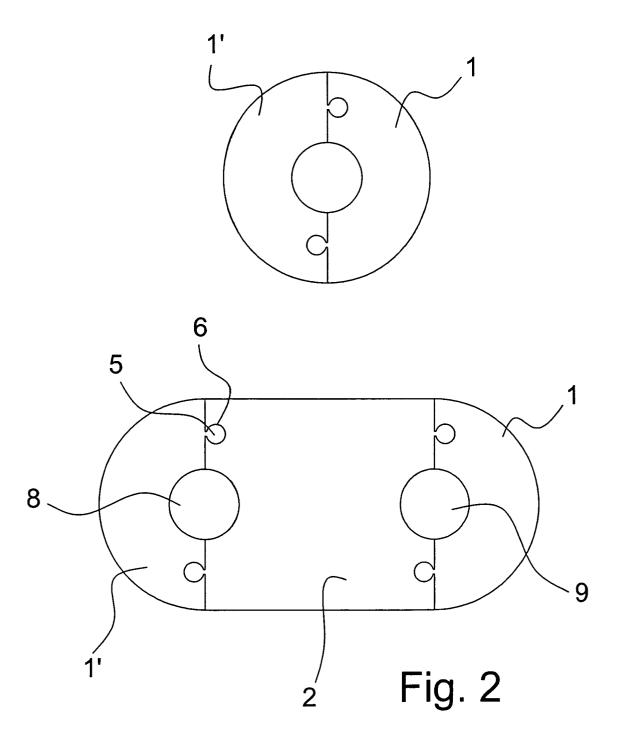
**[0020]** In a preferred embodiment, it is possible to design 11 or chose user specific parts through a computer network. The individual designs can then be routed to a production plant where optimized layout may be conducted. Optimized layout may include selection on material and delivery. By choosing among several predefined shapes you will have the possibility from a users point of view to tailor the interior design in a widen sense. From a producers point of view it is possible to utilize both the sheet of metal used for the specific production, thus making it possible to store production information of the individual design for future use.

**[0021]** The scope of the invention is not limited to the shown best modes but may be modified within the contents of the claims by a person skilled in the art.

## Claims

- An escutcheon for covering openings or passageways in vertical or horizontal fixed items in connection with buildings, plumbing or industry, characterised in that it comprises two or more pieces (1, 1', 2) that are interlockable.
- 2. An escutcheon according to claim 1, **characterised** in **that** the interlockable means (5, 6) are with constant contour in one direction through the escutcheon (1).
- 3. An escutcheon according to claims 1 or 2, characterised in that for covering passageways for pipes(3) in building surfaces the direction of constant contour is the direction of the pipe.
- **4.** An escutcheon according to one of the claims 1 to 3, **characterised in that** it consists of two identical (1, 1') pieces.
- 5. An escutcheon according to one of the claims 1 to 3, **characterised in that** it consists of two identical end pieces (1, 1') with one or more intermediate (2) pieces.
- **6.** An escutcheon according to one of the claims 1 to 5, **characterised in that** the retaining or clamping devices for interlocking the pieces (1, 1') may be of a permanent nature or may be of a non-permanent and more decorative nature.





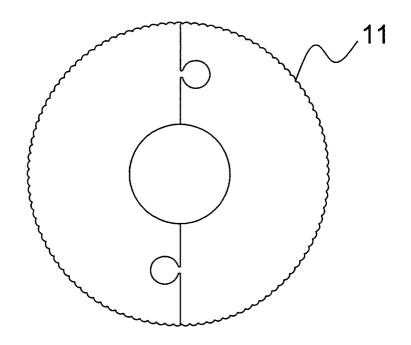


Fig. 3