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STAPLES FOR PADLOCK

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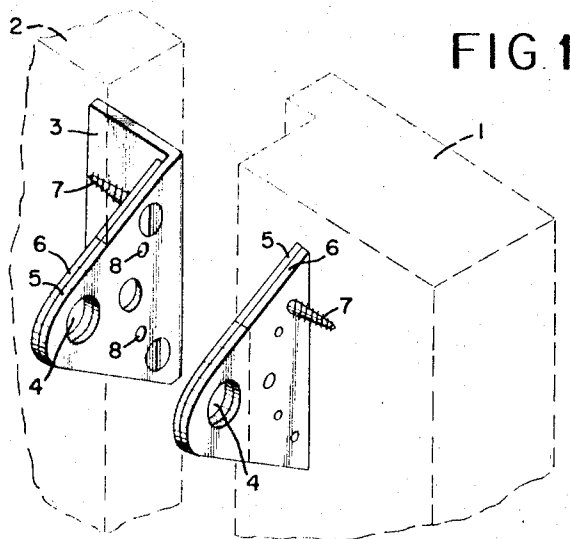


FIG. 1

FIG. 3

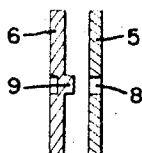


FIG. 2

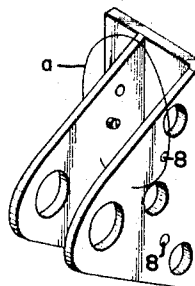
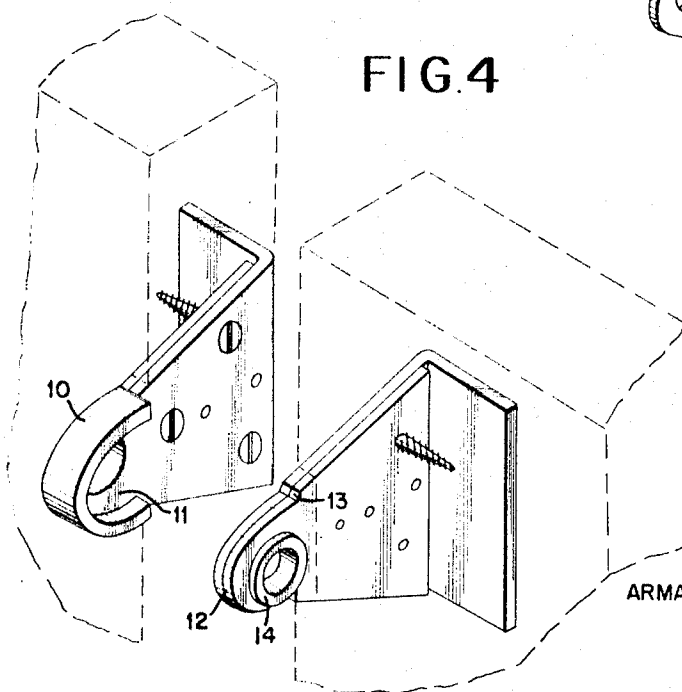


FIG. 4



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STAPLES FOR PADLOCK

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2 Claims

ABSTRACT OF THE DISCLOSURE

A pair of staples is used for a padlock, each staple or the pair consisting of two plates having hardened surfaces and firmly connected by projections carried by one plate and fitting into openings provided in the other plate and also by screws. The staples have curved projecting ends and the end of one staple is covered by a corresponding shaped flange having projecting edges and adapted to receive the curved end of the other staple. Aligned holes for the padlock shackle are provided in these edge portions of the two staples. The hole of said other staple carries an outwardly directed ring-shaped flange.

The invention deals with staples for padlock, one being fastened, e.g., to the door, the other one, e.g., to the door frame. Known staples have the disadvantage of being easy to break up due to lack of strength. So far there is no big-scale manufacture of staples suitable for standard use and therefore even the staples used in places requiring considerable protection are of individual make and made of soft iron. Consequently they can be cut by heavy tongs or by saw in a moment's time. In heavy doors the hinges give way somewhat and the door sags. For this reason the staples move in relation to each other. This is why the holes for the shackle of the padlock have to be overdimensioned. Thus an intervening space is formed around the shackle, which makes the breaking easier.

The object of this invention is to eliminate the above-mentioned drawbacks of the staples. An essential feature of the invention is that both staples are formed from at least two opposite plates, each of which is surface hardened. Thus there will be several hardened surfaces in each staple, so that the strength of the staples will increase considerably.

The parts of both staples are preferably fixed together to one single unit. Accordingly one plate in both staples may have at least one, but preferably several projections just fitting into holes in the other plates of the same staple. The plates of the staples may also be fixed together in such a way, that each plate of the staple at corresponding points has holes for plugs or other corresponding fixing means, or for welding.

It is of advantage if one of the staples is provided with a guiding element, into which a part of the other staple fits, so that both staples will be centered in respect of one another. The guiding element on the former staple may consist of a curved flange on the curved end of the same staple directed towards the other staple, into which flange the curved end of the other staple is going, and which latter curved end may have a curved flange corresponding with the interior side of the flange of the first staple.

In order to reinforce, it is also of advantage if a ring-shaped flange is provided at least around the hole for the

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padlock shackle in the staple plate facing the other staple, which flange is going through the hole in the other staple.

The invention is further described with reference to the embodiments shown in the enclosed drawing. In the drawing FIG. 1 is a perspective view of the staples according to the invention. FIG. 2 shows perspective the parts of one staple prior to its assembly FIG. 3 is a section of FIG. 2 taken at the place indicated by a circle. FIG. 4 shows staples according to another application, also perspective.

In FIGS. 1 and 2 the staple to be fixed to the door frame 1 and the staple to be fixed to the door 2 consist of two separate plates opposite to each other, both of which are made of surface hardened steel. The staple to be fixed to the door differs from that to be fixed to the door frame only in being provided with a supporting base 3. Both staples have two opposite plate-like parts 5 and 6 provided at corresponding points with a hole 4 for the padlock shackle, as well as with holes for screws 7. One staple plate 5 has two holes 8 into which the plug-like projections 9 on the other lock iron plate 6 just fit, to keep the staple parts together. As each staple part is surface hardened there will be four hardened surfaces in the staples. Staples like this are considerably stronger than single-plate staples of corresponding thickness.

Each staple shown in FIG. 4 consists of two opposite plate-like surface hardened staple parts 5 and 6, which at corresponding points are provided with a hole 4 for the padlock shackle and with holes for screws. One of the staple parts has a supporting base 3. The staple parts are joined together in the same way as in the previous application. To this end the staple part 5 has two holes and the staple part 6 plug-like projections just fitting into the holes mentioned. The curved end of the staple part 6 of the staple on the left is provided with a flange 10 directed towards the outer staple part 5 of the same staple, and extending beyond it. The correspondingly curved end 11 of the outer staple part 5 in the same staple fits into this flange. The end 12 of the staple on the right is correspondingly shaped, so that it fits into the flange 10 of the staple on the left, whereby its shoulders 13 correspond with the ends of the flange mentioned. In this way both staples are centered relatively to each other. The staple on the right is provided around the hole for the padlock shackle with a ring-shaped flange 14, which is directed away from the left staple, and is fixed to the staple part 5 of the staple to the right, passing through the other staple part 6. Thus the hole for the padlock shackle is reinforced. Both staples may also be provided around the hole for the shackle with flanges going into one another when the staples are oppositely located.

I claim:

1. In a device for interlocking two parts, a staple carried by one part and another opposed staple carried by the other part, each of said staples comprising two plates having interengaging side surfaces and means firmly interconnecting the two plates, each staple having an outwardly extending end portion, the end portions of the two staples having aligned padlock-receiving holes, a curved flange carried by the end portion of one staple and having edges extending beyond its staple and toward the other staple, the end portion of said other staple fitting inside said edges of the flange.

2. A device in accordance with claim 1, comprising a ring-shaped flange mounted in the padlock-receiving hole of at least one staple.

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