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(19)

(54) HOSE CLIP

(71) We, LEA BRIDGE SANDBLAST CO. LIMITED, a British Company, of 6 The Industrial Estate, Victoria Avenue, Swanage, Dorset BH19 1BJ, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a clip for securing hosepipes and like uses.

According to this invention a releasable clip is provided which comprises a band for encircling the hose or other article to be secured, the band carrying complementary coupling elements of a ratchet coupling for connecting ends of the band and drawing them together to contract the clip, the coupling elements consisting of a serrated tongue on one end of the band and a pair of serrated jaws on the other end of the band, which jaws define a jaw mouth through which the tongue is insertible in its longitudinal direction tip first into the jaws, the tongue having serrations on opposite sides thereof adapted to interlock with the serrations of the jaws respectively and thereby form a double bond holding the inserted tongue to prevent withdrawal movement thereof in its longitudinal direction, the tongue and jaws being movable relative to each other sideways such that the inserted tongue is disengageable sideways from the jaws to release the clip.

The coupling elements, or either of them such as particularly the jaws element, will possess sufficient inherent resilient yieldability to allow the tips of the serrations to pass over one another to enable the serrations to be brought into interlocking relation.

The bearing face of each serration acts as a pawl, locking into its reverse counterpart and being held there by the diametrically opposed counterparts on the opposing jaws, thus producing the double bond abovementioned of great strength, the dynamic tension being enhanced when the pressure produced by the clip encircling and clamping a hose exerts an impacting action on the resilient hose material. The tighter the clamping, the greater the dynamic tension and the stronger the double bond grip.

The clip may be made of a plastics material suitable for the purpose of use. It may be moulded in one piece. The clip may, however, be made of suitable metal such as steel which may be preferred for larger sizes of clip where greater pressures in use are involved.

The clip may be provided with grips associated with coupling elements to facilitate pressing the tongue into the jaws manually or with the aid of a suitable tool.

In the accompanying drawing,

Figs. 1 and 2 are views at right angles to one another of a preferred embodiment of clip according to the invention, and

Fig. 3 shows a detail of the clip on a larger scale.

Referring to the drawing, the clip shown has the band 1 pre-shaped in the form of an open flexible ring which is of an oval shape in the open condition to allow for being closed towards a circular shape by drawing the band ends together by means of their ratchet coupling 2, 3. The tongue coupling element 2 has a root portion 4 from which extends the tongue 5 provided on its opposite sides with serrations 6 and 7. The jaws coupling element 3 has a root portion 8 from which the two jaws 9 and 10 extend as forklike branches. The jaw 9 has serrations 11 for interlocking with the tongue serrations 6 and the jaw 10 has serrations 12 for interlocking with the tongue serrations 7. Extending as they do from the root portion 8 the jaws 9 and 10 have sufficient inherent resilience to yield to the tongue 5 when inserted through the jaws mouth 13 and to return to interlock the serrations 6 with 11 and 7 with 12. The root portions 4 and 8 have surface rib grips 14 to facilitate gripping the coupling elements 2 and 3 when closing the clip. To open the clip when closed, the then interlocked coupling elements 2 and 3 are grasped and moved relative to each other in opposite directions sideways (perpendicular to the plane of the drawing) to disengage

the coupling elements sideways. This clip may be formed in one piece of a suitable plastics material.

WHAT WE CLAIM IS:—

1. A releasable clip comprising a band for encircling an article such as a hosepipe to be secured, the band carrying complementary coupling elements of a ratchet coupling for connecting ends of the band and drawing them together to contract the clip, the coupling elements consisting of a serrated tongue on one end of the band and a pair of serrated jaws on the other end of the band, which jaws define a jaw mouth through which the tongue is insertible in its longitudinal direction tip first into the jaws, the tongue having serrations on opposite sides thereof adapted to interlock with the serrations of the jaws respectively and thereby form a double bond holding the inserted tongue to prevent withdrawal movement thereof in its longitudinal direction, the tongue and jaws being movable relative to each other sideways such that the inserted tongue is disengageable sideways from the jaws to release the clip.

2. A releasable clip as claimed in claim 1 and being mounted in one piece of a plastics material.

3. A releasable clip as claimed in claim 1 or 2 substantially as hereinbefore described with reference to and as shown in the accompanying drawing.

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1600601 COMPLETE SPECIFICATION

1 SHEET *This drawing is a reproduction of the Original on a reduced scale*

Fig.1.

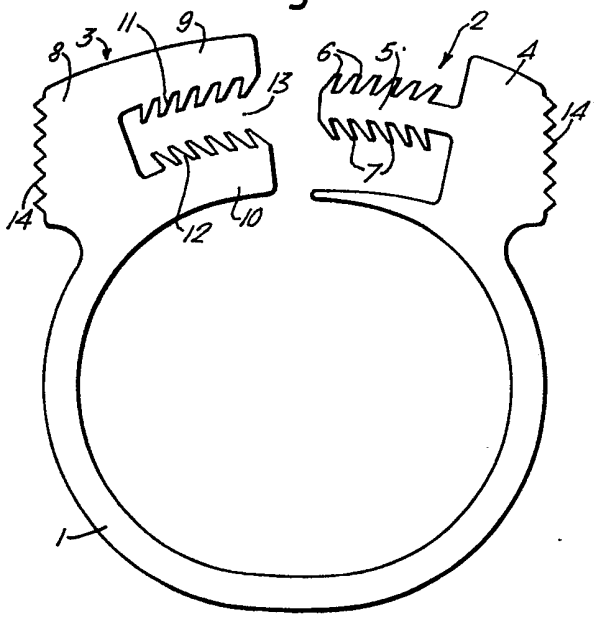

Fig.2.

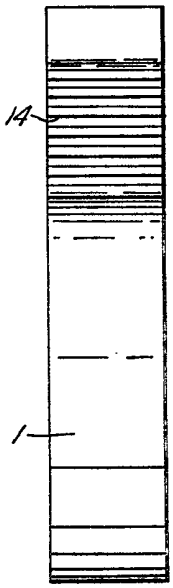

Fig.3.