Nov. 5, 1963 E. F. EMERY 3,109,212

PLASTIC CABLE BANDING

Filed May 1, 1961

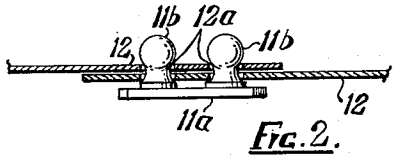


FIG. 2.

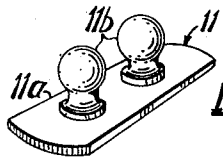


FIG. 1.

EDGAR FRANK EMERY

INVENTOR:

BY

Brennan & Brennan

United States Patent Office

3,109,212
Patented Nov. 5, 1963

1

3,109,212

PLASTIC CABLE BANDING

Edgar Frank Emery, Prestbury, England, assignor to Insuloid Manufacturing Company Limited, a corporation of Great Britain

Filed May 1, 1961, Ser. No. 106,939
Claims priority, application Great Britain May 5, 1960
1 Claim. (Cl. 24—16)

This invention relates to plastic cable banding, which is the accepted description for a perforated plastic strip adapted to be cut to a suitable length and used with a fastening device resembling a collar stud for fixing the band around for example, a group of electric wires or cables.

A known weakness of such a banding is that the plastic stretches, the holes enlarge, the stud tilts and the band easily becomes unfastened of itself or with the least touch.

The object of the present invention is an improved fastening means, so as to obtain better security.

According to the invention, a fastening device for plastic cable banding comprises a base with a plurality of relatively rigid upstanding stud-like heads, so spaced as to be engaged with a plurality of in-line holes in the banding.

The invention will now be described further, by way of example only with reference to the accompanying drawings in which:

FIG. 1 is a perspective view of a device according to the invention; and

FIG. 2 is a view, partly in section, of the device of FIG. 1 in use.

Referring now to the drawings a fastening device **11** comprises a base strip **11***a* having moulded integrally therewith two stud-like heads **11***b*. The device is conveniently of polyvinyl-chloride, which is elastic.

The spacing of the heads **11***b* upon the base strip **11***a* is determined by the pitch of the apertures **12***a* in the bands **12** and corresponds to such spacing.

To join the ends of bands **12**, referring now particularly to FIG. 2, wrapped around a bundle of wires, the heads **11***b* are engaged with two of the apertures at one end of the band, the band is wrapped around the bundle of wires and the band is tightened about the bundle and those apertures of the band most closely adjacent the heads **11***b* are engaged with such heads.

When the band is secured by the fastening device, the tension is not only distributed over a plurality of holes, thereby reducing their elongation, but the connecting base

2

between the stud-like heads holds them relatively upright and, in fact, the tension operates to pull the base into line with such tension. Consequently, even if the holes elongate beyond the size of the stud head, the banding is still held thereon and is, being tensioned, less easily displaced therefrom.

The invention is not restricted to the exact feature of the embodiment hereinbefore described since alternatives will readily present themselves to one skilled in the art. For example, the number of stud-like heads provided may be varied to suit particular requirements and it is to be appreciated that in not all cases is it necessary for the ends of the band to overlap each other on the fastening device.

I claim:

A fastening device for a plurality of wires comprising an elongated flexible base, a pair of studs on said base, said studs being spaced apart a predetermined distance, said studs being relatively rigid and upstanding from said base, and an elongated band having a pair of overlapping ends, each of which has a plurality of spaced apertures, the spacing of said apertures being substantially equal to the distance between said studs, the length of said band being sufficient so that when cut to a suitable length there is present at each of the ends thereof at least one pair of said apertures, the diameter of said apertures being less than the diameter of the heads of said studs, said apertures and said heads being approximately circular, said band being elongatable under tension and embracing a plurality of wires, the ends of said band being held on said studs and being under elastic tension, the elasticity of the band and the flexibility of the base enabling the studs to be fitted through apertures in the band ends even though said apertures are not accurately alined with the studs.

References Cited in the file of this patent

UNITED STATES PATENTS

1,275,094	Sandifur	Aug. 6, 1918
1,345,750	De Baumont	July 6, 1920
1,854,125	Faber	Apr. 12, 1932
2,824,351	Webb	Feb. 25, 1958

FOREIGN PATENTS

1,064,464	France	Dec. 23, 1953
67,926	France (Addition to 1,064,464)	Oct. 14, 1957
1,212,605	France	Oct. 19, 1959
2,663	Great Britain	of 1869