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PATENT SPECIFICATION

Application Date: May 16, 1922. No. 13,769/22. **198,201**

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PROVISIONAL SPECIFICATION.

Improvements in Darts or like Missiles.

I, GEORGE EDWARD JONES, British subject, of 186, Usher Road, Bow, London, E. 3, do hereby declare the nature of this invention to be as follows:—

5 The present invention relates to improvements in darts or like missiles, and being particularly applicable to toy darts or the like provided with radial tail feathers or their equivalent it will be hereinafter described in that application.

10 The present invention aims at providing an improved construction of loaded dart or the like by which the weight is brought nearer to the dart-head and the throw, and appearance of the dart are improved.

15 To this end, the present invention consists in constructing the shaft so that its head-end shall be completed or constituted by a relatively heavy mount.

20 This mount formed or fashioned in accordance with the desired figuring of the head-end of the shaft and merging into the general configuration thereof as if formed in one piece therewith instead of being provided as an attached piece, may be adapted for either push or screw union with the shaft.

25 By way of example of a point head dart a turned metal casting or a metal stamping, in the form of a part substantially cylindrical and part conoidal cap or mount is pushed conoidal end outwards onto the head-end of the shaft which is so

shouldered down or reduced in size as to preserve the smooth exterior surface of the dart, and produce a strong frictional grip union between the attached parts.

35 The conoidal end of such a cap or mount is axially perforated to permit the passage of a needle for securing which an axial hole, preferably an inwardly tapering hole is provided in the head end of the shaft into which the needle is driven pointed end outwards, the point of the needle being shielded as by a protector of white metal, while being driven.

40 A screw union may be employed in place of the friction grip union hereinbefore mentioned.

45 In another example, the cylindrical part of the axially perforated cap or mount is dispensed with, and in lieu thereof a hollow push or screw-in stem is employed to receive which the head-end of the shaft is provided with an axial hole, the bottom portion of which is arranged to extend beyond the stem and is preferably made to taper inwards to secure the dart-needle with a driving fit after the needle is inserted in the cap or mount.

Dated this 16th day of May, 1922.

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Patent Agents for the Applicant.

COMPLETE SPECIFICATION.

Improvements in Darts or like Missiles.

I, GEORGE EDWARD JONES, British subject, of 186, Usher Road, Bow, London, E. 3, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly

[Price 1/-]

described and ascertained in and by the following statement:—

The present invention relates to improvements in darts or like missiles, and being particularly applicable to toy

Price 25p

darts or the like provided with radial tail feathers or their equivalent it will be hereinafter described in that application.

The present invention aims at providing an improved construction of loaded dart or the like of the type in which the weight is brought nearer to the dart-head.

According to the present invention, in a dart or the like having a head-end heavy mount, the mount, formed or fashioned in accordance with the desired figuring of the head-end of the shaft and merging into the general configuration thereof as if formed in one piece therewith instead of being provided as an attached piece, is adapted for either push or screw union with the shaft, and the mount and the dart shaft are provided with co-axial holes for the reception of the dart needle which is secured to the dart shaft by a driving fit in the hole therein.

The present invention is illustrated in the accompanying drawings, in which—

Fig. 1 is a side elevation of a dart with push-on mount.

Fig. 2 is a side elevation of a dart with screw-in mount.

By way of example Fig. 1 of a point head dart, a turned metal casting or a metal stamping, in the form of an end heavy part substantially cylindrical and part conoidal cap or mount *a* is pushed heavy conoidal end outwards onto the head-end *b* of the shaft *c* which is so shouldered down or reduced in size at *d* as to preserve the smooth exterior surface of the dart, and produce a strong frictional grip union between the attached parts.

The heavy conoidal end of such a cap or mount *a* is axially perforated to permit the passage of a needle for securing which

an axial hole *e*, preferably an inwardly tapering hole is provided in the head end *b* of the shaft *c* into which the needle *f* is driven pointed end outwards, the point of the needle being shielded as by a protector of white metal while being driven.

A screw union may be employed in place of the friction grip union hereinbefore mentioned.

In another example, Fig. 2 the cylindrical part of the end heavy axially perforated cap or mount *a* is dispensed with, and in lieu thereof a hollow push or screw-in stem *g* is employed to receive which the head-end of the shaft is provided with an axial hole, the bottom portion *h* of which is arranged to extend beyond the stem *g* and is preferably made to taper inwards to secure the dart-needle *f* with a driving fit after the needle is inserted in the cap or mount *d*.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A dart or like missile having a head-end heavy mount, wherein a dart needle passes through an axial hole in the mount and is secured to the dart shaft by a driving fit in an axial hole of the shaft, substantially as described.

2. A dart or like missile constructed substantially as described with reference to Fig. 1 or Fig. 2 of the accompanying drawings.

Dated this 6th day of February, 1923.

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