Feb. 9, 1926. 1,572,379

H. G. CARLSON

FLIER

Filed July 25, 1924

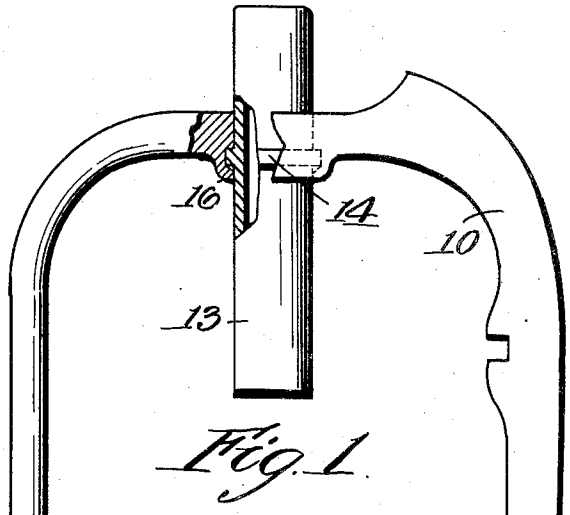

Fig. 1.

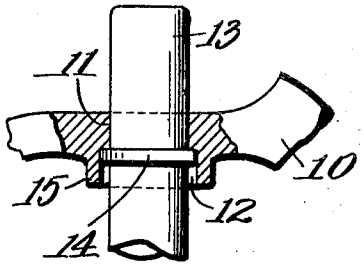

Fig. 2.

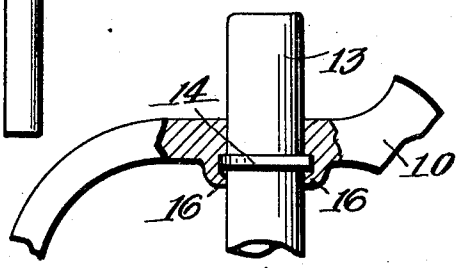

Fig. 3.

Inventor
H. G. Carlson
By attorneys
Southgate & Southgate

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UNITED STATES PATENT OFFICE.

HJALMAR G. CARLSON, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO ROCKWOOD SPRINKLER COMPANY OF MASSACHUSETTS, OF WORCESTER, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

FLIER.

Application filed July 25, 1924. Serial No. 728,273.

To all whom it may concern:

Be it known that I, HJALMAR G. CARLSON, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Flier, of which the following is a specification.

This invention relates to a method of mounting the central bearing on the crown of a flier for use on spinning frames. The principal object of the invention is to provide an inexpensive and a very accurate way of uniting these two parts of a flier of such a nature that when made in large quantities by this method they will all come out alike and evenly balanced.

Reference is to be had to the accompanying drawing, in which—

Fig. 1 is a front view of a flier partly in section and showing this invention;

Fig. 2 is a similar view showing a step in the process of manufacture, and

Fig. 3 is a similar view showing the completion of the process.

I have shown the invention as applied to an ordinary flier 10 the crown of which is provided with a central perforation 11 enlarged at 12 at one end and furnishing a square shoulder. This perforation and enlargement are provided by die-punching operations so that they will be uniformly located and the products will be uniform.

The bearing 13 consists of a tube which is upset at the center to provide a circular ring 14 around it, preferably having square shoulders on both sides as indicated. This ring fits into the enlargement 12 and the parts are assembled as shown in Fig. 2 by placing the bearing in that position with the ring snug up against the shoulder in the crown. Then the metal 15 extending around and beyond the ring 14 is forced over either in dies or by rolling to form an inwardly projecting flange 16 which surrounds the bearing 13 and engages its exterior surface all around and at the same time engages the collar 14 and locks inside the crown. While this operation is being performed, the ring 14 is held up against its shoulder in the crown firmly and as the bearing fits the smaller perforation, there is no chance for it to rock about in this position or get out of place. It is assured therefore, that the result will be an accurate anchoring of the bearing on the crown and that it will project from it at right angles and be centrally located. This constitutes a very inexpensive way of securing this result and its great advantage is that all the articles produced in this way come out in uniform condition and perfectly solid.

Although I have illustrated and described only a single method of manufacture and shown it as applied to a single article, I am aware of the fact that it is generally applicable to fliers of any similar shape to the one shown and that modifications can be made in the exact order of steps by any person skilled in the art without departing from the scope of the invention as expressed in the claim. Therefore, I do not wish to be limited in these respects, but what I do claim is:—

As an article of manufacture, a flier having its crown provided with a perforation all the way through it, a hollow cylindrical bearing member extending through said perforation and having an integral ring around it, said ring being embedded in the metal of the crown and firmly and accurately anchored therein.

In testimony whereof I have hereunto affixed my signature.

HJALMAR G. CARLSON.