

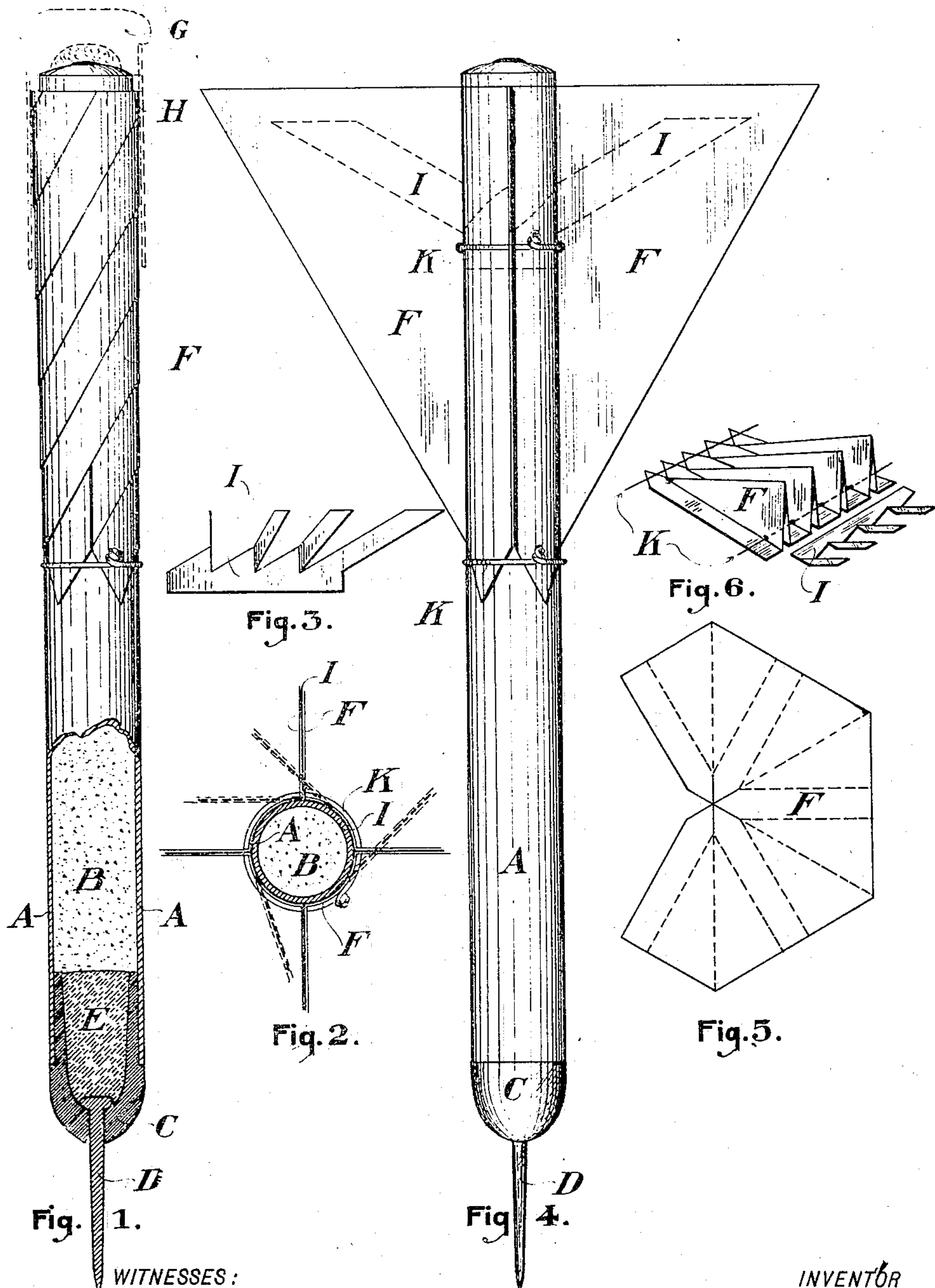
No. 617,376.

Patented Jan. 10, 1899.

H. M. WARNER.
RAILROAD SIGNAL FUSEE.

Application filed July 18, 1898.

(No Model.)



WITNESSES:
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RAILROAD SIGNAL-FUSEE.

SPECIFICATION forming part of Letters Patent No. 617,370, dated January 10, 1899.

Application filed July 18, 1898. Serial No. 686,303. (No model.)

To all whom it may concern:

Be it known that I, HARRY MARTINE WARNER, a citizen of the United States, residing at Somerville, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Railroad Signal-Fusees, of which the following is a specification.

My invention relates to an improvement in signal-fusees; and it consists of a fusee having the construction hereinafter described in the following specification.

Accompanying this specification, to form a part of it, there is a sheet of drawings containing six (6) figures illustrating my invention, with the same designation of parts by letter used in all of them.

The object of my invention is to produce a fusee which can be thrown from railroad-trains while in motion, and that will stand erect without placing the employees in danger while throwing same.

Of the illustrations, Figure 1 is a side elevation of the improved fusee ready for carrying purposes, with a part longitudinal section through the point or balanced end. Fig. 2 is a horizontal section showing the manner of placing the steadying attachment at top of fusee. The solid lines show the steadying attachment when opened for use with braces in same, while the dotted lines show the manner in which the same is rolled around fusee when not in use. Fig. 3 shows the brace which is placed in the steadying attachment. The braces are shown in different positions. Fig. 4 shows side elevation of fusee with steadying attachment unrolled ready for use. Fig. 5 shows the manner in which the steadying attachment is cut while Fig. 6 shows manner in which same is folded before being rolled on fusee, and also showing how brace is placed in same.

A represents the tube, which is made of paper; B, the illuminating material.

C represents the casing of balance-weight, which is made of metal, preferably cast-iron.

D is a steel spike (of any desired length) placed in the end of C, as shown, and then C is filled with liquid metal E and allowed to harden. For this purpose lead or Babbitt metal is best. The idea of this construction is to make the balance-weight as heavy as

possible to counterbalance the illuminating material B, which is very heavy.

F represents the steadying attachment, which is made to roll up, so it can be easily carried in the least possible space.

When the fusee is to be used, the attachment is unrolled and held in an open position by a piece of metal or some other suitable material I. F is made of stiff paper or other suitable material and folded as shown in the drawings and fastened to fusee with glue and wire K, as shown, or by whatever other means better suited.

H represents a paper ferrule made to hold the attachment F in place when rolled up.

G is a plug in the end of H to protect the fusee from being lighted by accident.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A steadying device composed of a tubular body adapted to fit the fusee-body, and wings integral with said tubular body adapted to roll closely around said fusee-body.

2. A steadying device composed of a tubular body adapted to fit the fusee-body, wings integral with said tubular body adapted to roll closely around said fusee-body, and a stiffening device composed of flexible inelastic material, having stiffening-strips which hold the wings in adjusted position.

3. A steadying device comprising a tubular body adapted to fit the fusee-body, wings integral with said tubular body and adapted to roll closely around said fusee-body, and stiffening devices for said wings composed of a flexible, inelastic collar having projections or prongs struck therefrom adapted to hold said wings in adjusted position.

4. A balance-weight for a fusee, comprising a metallic casing, a headed spike projecting through said casing, a filling disposed in said casing over said headed spike, said filling serving to retain the spike in position and to give additional weight to said casing, and means for attaching said casing to the fusee.

In testimony whereof I affix my signature in presence of two witnesses.

H. MARTINE WARNER.

Witnesses:

BENJAMIN F. GOODNOUGH,
CHARLES M. ADAMS.