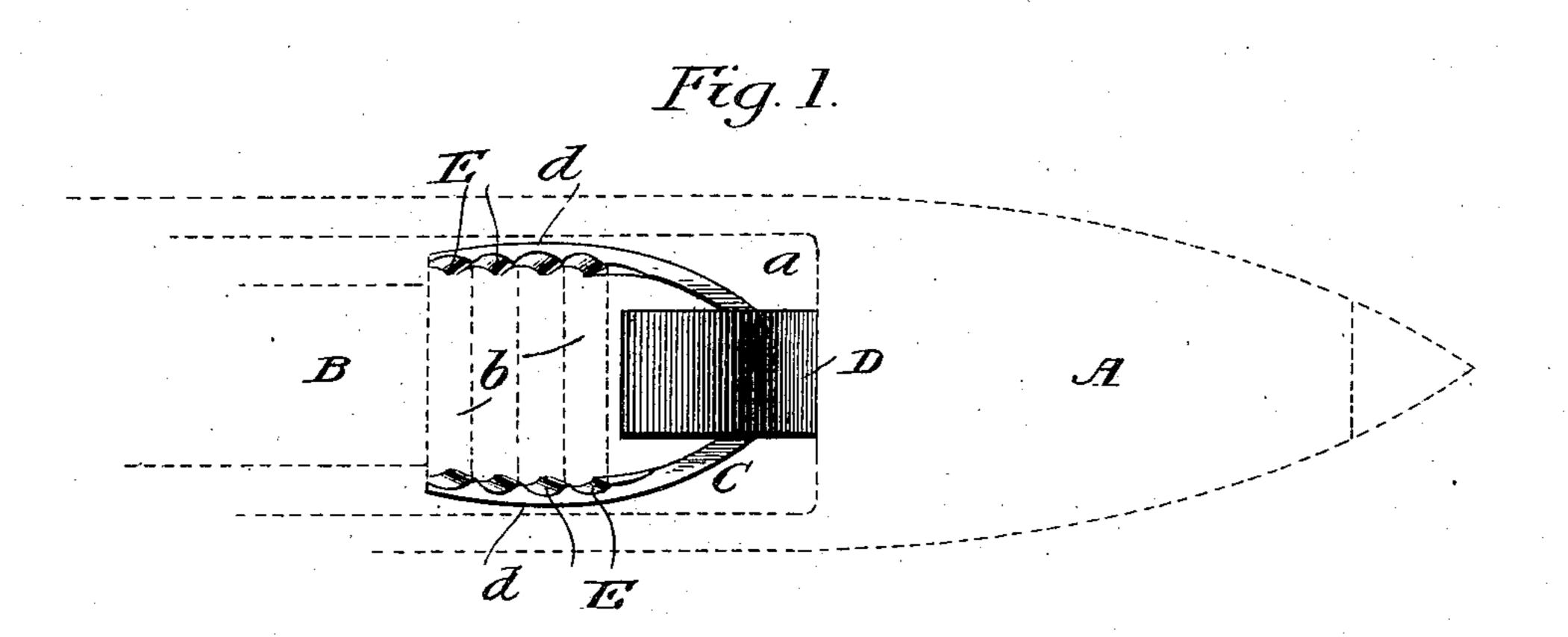
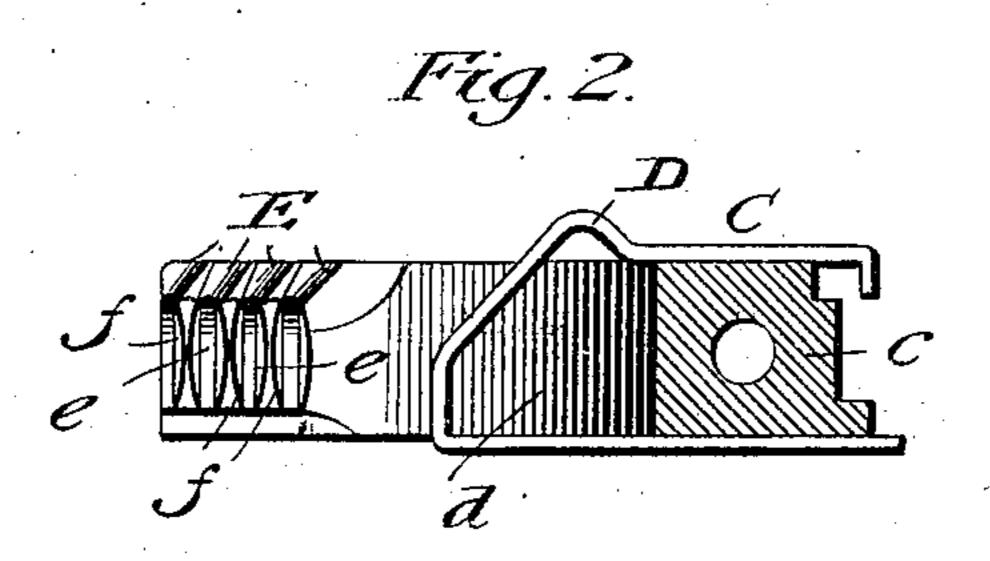
No. 844,318.

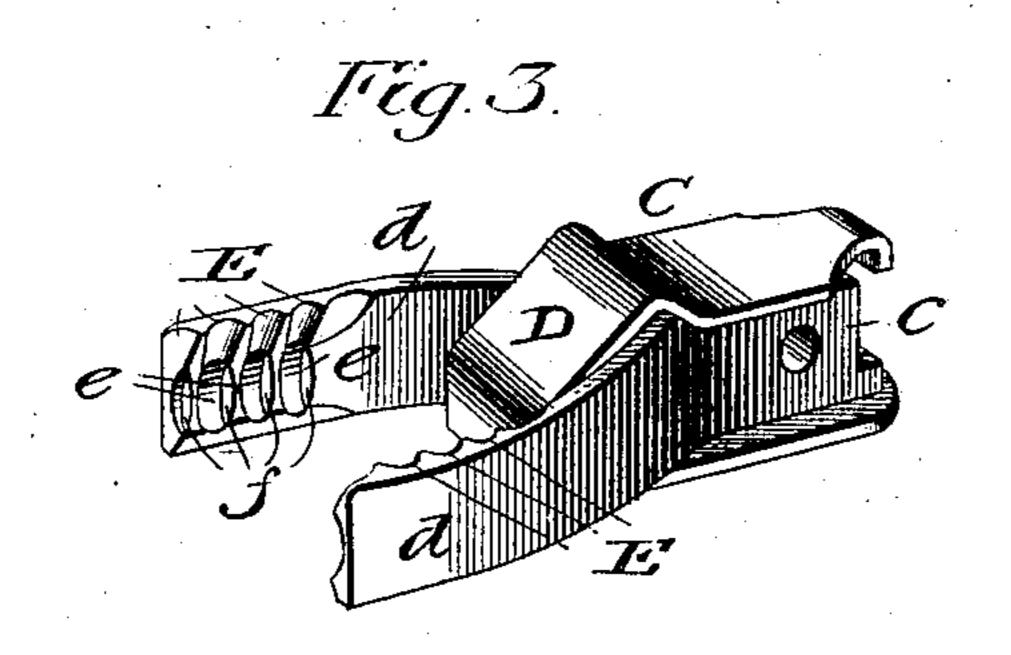
PATENTED FEB. 19, 1907.

## G. BOISONNEAULT & T. BOUCHER. HOLDER FOR FILLING CARRIERS.

APPLICATION FILED NOV. 20, 1906.







Witnesses W. C. Healy Howard ors Honormeautt + J. Boucher. James Shuly attorney

## UNITED STATES PATENT OFFICE.

GEDEON BOISONNEAULT AND THEOPHILE BOUCHER, OF MANCHESTER, NEW HAMPSHIRE.

## HOLDER FOR FILLING-CARRIERS.

No. 844,318.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed November 20, 1906. Serial No. 344,336.

To all whom it may concern:

Be it known that we, Gedeon Boison-Neault and Theophile Boucher, citizens of the United States, residing at Manchester, in the county of Hillsboro and State of New Hampshire, have invented new and useful Improvements in Holders for Filling-Carriers, of which the following is a specification.

Our invention pertains to devices for holding filling-carriers in shuttle-bodies; and it
consists in the peculiar and advantageous
filling-carrier holder hereinafter described,
and particularly pointed out in the claims
appended.

In the accompanying drawings, forming part of this specification, Figure 1 is a detail plan view illustrating in full lines our novel holder as properly positioned relative to a shuttle-body and a filling-carrier, which are shown in dotted lines. Fig. 2 is a vertical section taken through the longitudinal center of the holder and illustrating the same apart from the shuttle-body and filling-carrier. Fig. 3 is a perspective view of the filling-carrier holder.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which—

A is a shuttle-body open at its top and under sides, as indicated by a, for the reception of a filling-carrier.

B is the filling-carrier, provided with the usual circumferential projections b, and C is our novel holder for retaining the filling-carier in proper position in the shuttle-body.

The holder C comprises a shank c, designed to be fixed in the ordinary or any other approved manner in the shuttle-body A, and open jaws d, formed integral with and diverging from the inner end of said shank, and it is preferably, though not essentially, equipped with the usual spring D. Said holder C is provided in the inner sides of the forward portions of its pins d with vertical or approximately vertical grooves e, shaped to form inclined holding-surfaces f for coöperating with the circumferential projections b on the filling-carrier B and holding the same in an inclined position in the shuttle-body A,

and it is also provided in the inner sides of the 50 jaws d with grooves E, which communicate with and extend outward and upward, preferably at an obtuse angle, from the upper ends of the grooves e. These grooves E are preferably of concave form in cross-section, 55 Fig. 1, and their office is to facilitate the entry of the circumferential projections b on the filling carrier or bobbin B into the grooves e and to render easy the placing of the fillingcarrier or bobbin inside the spring D, as well 60 as to prevent the filling-carrier or bobbin jumping out of the holder. In this connection it will be noticed that it is necessary precedent to inserting the filling-carrier or bobbin in the holder C to hold said filling- 65 carrier or bobbin at such an angle of inclination as to aline its circumferential projections b with the grooves E, and from this it follows that the filling-carrier or bobbin must assume the same position before it can casually leave 70 the holder. It is obvious that the filling-carrier or bobbin is not likely to casually move to the considerably-inclined position stated, and that therefore our holder is highly efficient in preventing casual displacement of 75 the filling-carrier or bobbin.

It will be gathered from the foregoing that our improvements contribute materially to the efficiency of filling-carrier or bobbin holders of corresponding type and yet do not ap- 80 preciably increase the cost of the same.

The construction herein shown and described constitutes the preferred embodiment of our invention; but we desire it understood that in practice such changes or modistications may be made as fairly fall within the scope of our invention as claimed.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A device for holding a filling-carrier or bobbin in a shuttle-body, having open jaws, upright grooves in the inner sides of said jaws, and inclined grooves communicating with and extending at an angle from the up- 95 per ends of the upright grooves.

2. A device for holding a filling-carrier or bobbin in a shuttle-body, comprising a shank,

open jaws extending from the shank and having in their inner sides upright grooves and inclined grooves communicating with and extending at an angle upward and outward from the upper ends of the upright grooves, and a spring resting between the open jaws and straddling the shank.

In testimony whereof we have hereunto

set our hands in presence of two subscribing witnesses.

GEDEON X BOISONNEAULT. THEOPHILE BOUCHER.

Witnesses:

L. S. Boivin, J. A. BOIVIN.