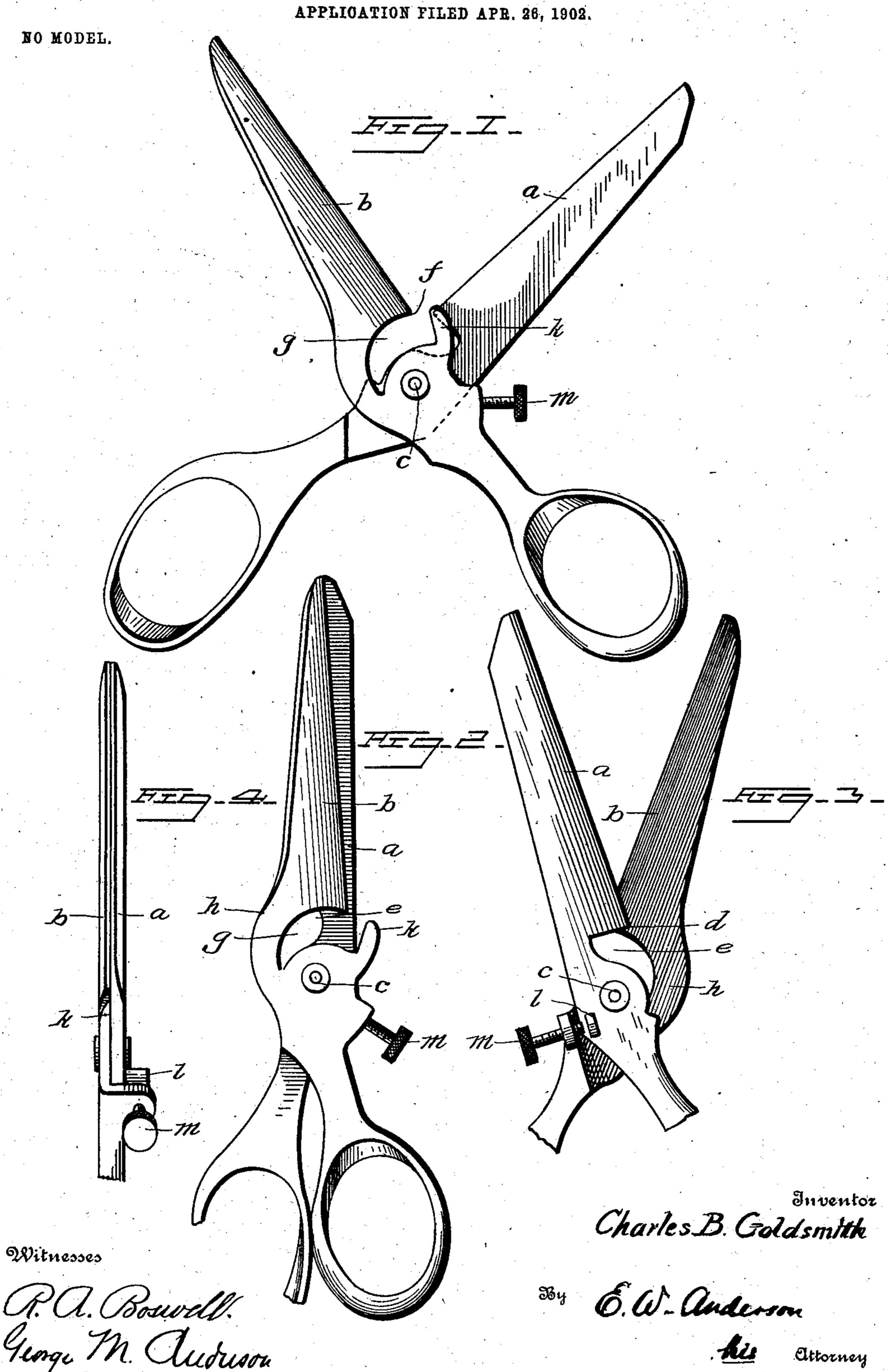
C. B. GOLDSMITH. BUTTONHOLE SHEARS.



UNITED STATES PATENT OFFICE.

CHARLES B. GOLDSMITH, OF WATERBURY, CONNECTICUT.

BUTTONHOLE-SHEARS.

SPECIFICATION forming part of Letters Patent No. 726,156, dated April 21, 1903.

Application filed April 26, 1902. Serial No. 104,839. (No model.)

To all whom it may concern:

Beit known that I, Charles B. Goldsmith, a citizen of the United States, and a resident of Waterbury, in the county of New Haven 5 and State of Connecticut, have made a certain new and useful Invention in Buttonhole-Shears; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

open completely. Fig. 2 is a similar view closed. Fig. 3 is a side elevation of the shears partly open and taken from the opposite side. Fig. 4 is an end elevation of the shears.

The invention has relation to combined shears and buttonhole-cutters; and it consists in the novel construction and combinations of parts, as hereinafter set forth.

In the accompanying drawings, illustrating 2; this invention, the letter a designates one branch of the shears, and b the other branch, these branches being provided with the usual bows for the thumb and finger. The blade of the branch a has a long shear edge termi-30 nating near the rivet c in a pointed shoulder d, back of which the blade is indented or cut away transversely just in front of the rivet | portion, as indicated at e. The blade of the branch b also has a long shear edge terminat-35 ing in a pointed shoulder f, said shoulder extending at right angles, or nearly so, to the | shear edge and forming a transverse slot or indentation g in the blade of a depth about equal to the breadth of the blade at the shoul-

40 der, this deep slot being provided for by an increase in the width of the blade, usually in the form of a bow h, where it joins the rivet portion just in front of which such slot is located, as in the case of the indentation of the branch a, which is more shallow than the indentation of the branch b. The rivet portion of this blade is extended opposite to said

pointed shoulder to form a guard-bearing lug K, which is directly opposite the point of such shoulder and which is in the plane thereof, bearing on the inner face of the blade a. By means of this bracing-lug extension, which

partly closes the notch or indentation of the blade, this portion of the blade b is not only materially strengthened and fortified against 55 torsional action, but also is provided with a guide-bearing, whereby the shoulder-point of the blade a is kept from striking against the shoulder-point of the blade b when the scissors are used as buttonhole-cutters.

A stop l and set-screw m are provided to limit the cutting in forming buttonholes to the size required. In will be observed that the buttonhole-slot of these scissors being transverse and near the rivet portion requires 65 breadth of blade, which is utilized also in providing that the shoulder-points each extends well over on the other blade when the shears are closed, and in consequence of the short radial distance, compared with that of 70 the bows from the rivet, these points do not in the ordinary use of the instrument for shearing cloth become disconnected. In order to separate the blades for buttonhole-cutting, there must be some extra separation of 75 the bows by the thumb and finger, which is easily appreciated in practice. It will also. be seen that the shoulder-points being brought nearer the rivet are provided with greater leverage in penetrating the cloth and are more 80 firmly braced against the crowding action of the material, which has a tendency to spring the blades apart, and thus prevent the cutting action when the shoulder-points are far from the rivet.

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

1. The combined shears and buttonhole-cutter, one blade of which has a swelled or engolarged portion near the rivet, and is provided with a deep cut-away portion or notch in said enlargement for the reception of the edge of the cloth, said notch having its greatest extent transversely of the blade, one side of said notch meeting the cutting edge of the blade to form a point, and the guard-lug of said blade opposite said point and partly closing the notch, the other blade of the shears having also a notch or cut-away portion, sub- 100 stantially as specified.

2. The combined shears and buttonhole-cutter, having the notches in the blades thereof, and the guard-lug extension of one of said

blades, and opposite the point formed where the cutting edge of the blade meets the edge of the notch, said lug extension partly closing the notch of the blade, substantially as

5 specified.

3. The combined shears and buttonhole-cutter, one of the blades of which has a deep indentation or notch for the reception of the cloth, and having its greatest extent transversely of the blade, and the other blade of which has a more shallow indentation or notch, substantially as specified.

4. The combined shears and buttonhole-cutter, comprising a blade having a pointed shoulder near the rivet, and a blade having also a pointed shoulder near the rivet, a transverse indentation back of its shoulder, and

a guard-lug opposite its pointed shoulder and bearing on the former blade, substantially as

specified.

ter, comprising the blades wide near the rivet, their transverse indentations and pointed shoulders in such wide portion, the guard-lug of one blade opposite its pointed shoulder 25 and bearing on the other blade, and the stop and set-screw, substantially as specified.

In testimony whereof I affix my signature

in presence of two witnesses.

CHARLES B. GOLDSMITH.

Witnesses:

WILSON H. PIERCE,
CHARLOTTE J. MERCHANT.