(No Model.)

L. A. CARSON.

BUTTON HOLE CUTTER.

No. 362,817. Patented May 10, 1887.

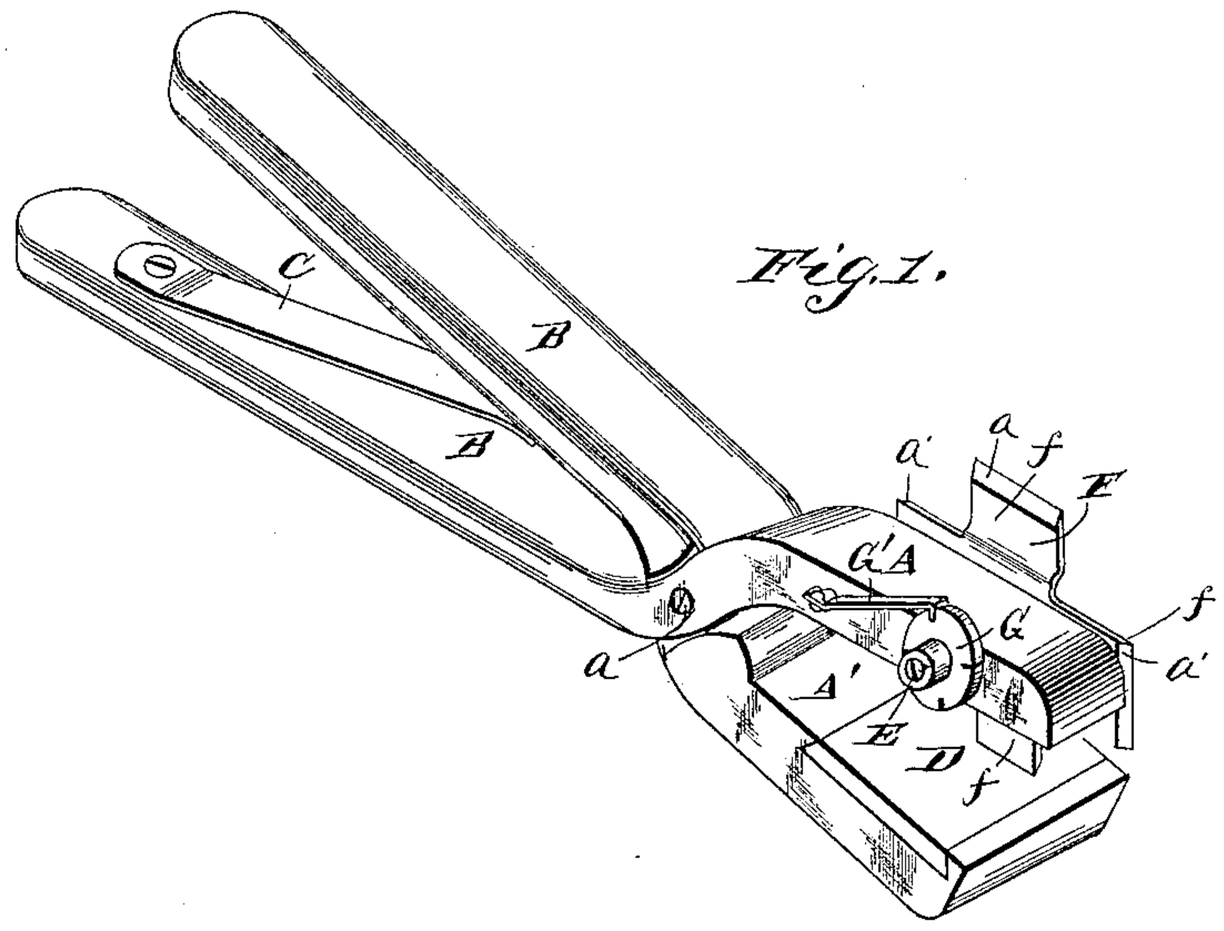

Fig. 1.

Fig. 2.

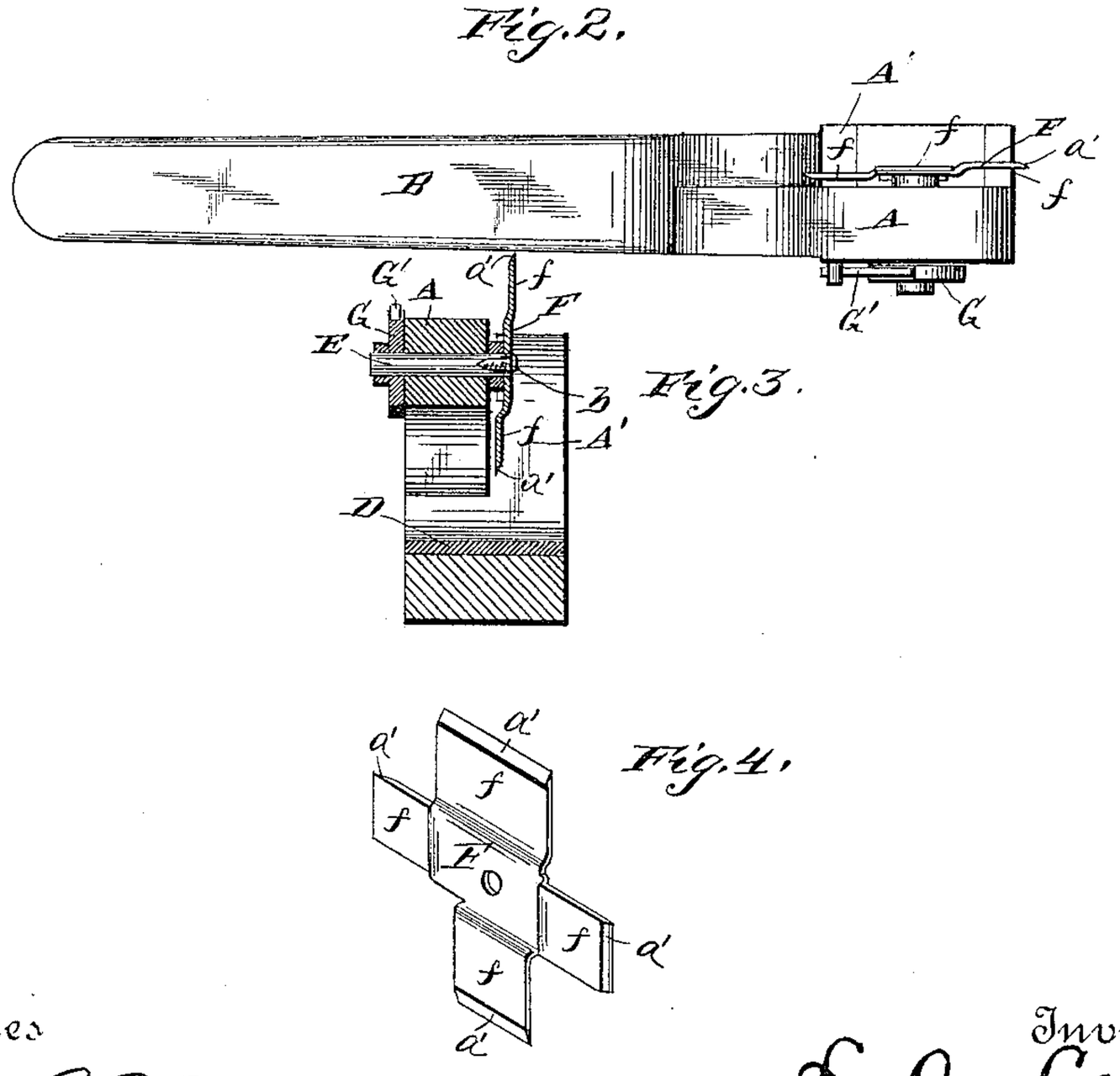

Fig. 3.

Fig. 4.

Witnesses

Chas. L. Taylor,

Wm. H. Moore,

Inventor

L. A. Carson

By his Attorneys

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

LUCIUS ALAXANDER CARSON, OF UNIONTOWN, PENNSYLVANIA.

BUTTON-HOLE CUTTER.

SPECIFICATION forming part of Letters Patent No. 362,817, dated May 10, 1887.

Application filed October 21, 1886. Serial No. 216,866. (No model.)

To all whom it may concern:

Be it known that I, LUCIUS ALAXANDER CARSON, a citizen of the United States, residing at Uniontown, in the county of Fayette and State of Pennsylvania, have invented new and useful Improvements in Button-Hole Cutters, of which the following is a specification.

My invention relates to improvements in button-hole cutters; and the novelty consists in the details of construction, arrangement, and adaptation of parts for service, substantially as hereinafter described and claimed.

The object of my invention is the provision of a device of the character named, which can be easily operated to cut button-holes of different sizes with a smooth shear-cut.

I attain the desired objects by the device illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a button-hole cutter constructed in accordance with my invention. Fig. 2 is a top plan view of the same, and Fig. 3 is a transverse sectional view thereof. Fig. 4 is a detail view of the cutting-blades.

Referring to the drawings, in which similar letters of reference denote corresponding parts in the several figures thereof, A and A′ designate the jaws of my improved button-hole cutter, pivoted together at *a*, and provided with the usual arms or handles, B. A curved flat spring, C, is secured to the upper face of one of the handles and bears against the lower face of the other, so as to always retain the jaws apart or out of contact with each other. The lower jaw, A′, is formed broader than the upper jaw and is recessed on its upper face to receive a piece or plate of hard wood or soft metal, D, which provides a wear-plate for the cutter of my device. The recess has its sides dovetailed, and the sides of the wear-plate are correspondingly dovetailed, as shown clearly in Fig. 1. By reason of this wear-plate D fitting, as it does, in the jaw, it can be readily removed whenever it becomes worn and useless and a new one inserted in its place. A suitable rod, pin, or shaft, E, is passed through the upper jaw, A, and has its opposite ends projecting beyond the sides of said jaw. On one end of the shaft E is rigidly secured by a screw, *b*, a rotary cutter, F, having a series of rectangular-shaped cutting-blades, *f*, of different sizes, the outer edges of the blades being made straight and beveled to form cutting-edges *a′*. Each of the blades is bent or formed so that the cutting-edges are in different planes, so that the wear upon the wear-plate will be distributed over its surface, and thereby render it more durable, and, furthermore, each of the blades will be provided with its own respective bearing. In this instance I have illustrated the rotary cutter having four blades; but I would have it understood that any number may be employed, as circumstances or necessity may dictate. On the other end of the said shaft E is rigidly secured a ratchet-wheel, G, with which engages a detent or pawl, G′, to retain the shaft E from movement, and thereby hold the blades of the rotary cutter in their adjusted positions, and prevent all danger of the cutter revolving during the operation of cutting the button-hole.

From the foregoing description, taken in connection with the drawings, the operation of my invention will be readily understood.

The flat spring, which is placed between the handles, always serves to keep the jaws apart and allow the insertion of the material upon the lower jaw. The rotary cutter is then turned or rotated to present any one of the various-sized cutting-blades for action as may be required for the particular instance of its use, the pawl and ratchet serving to retain the cutter in its adjusted position. The handles are then depressed, causing one of the blades of the rotary cutter to pass through the cloth or other material until it strikes upon the wear-plate, thus effecting a clean cut.

The many advantages gained by my device will be readily apparent to those skilled in the art. It combines in one device a button-hole cutter which is adapted to cut button-holes of different sizes in a moment and in a more thorough manner than has heretofore been known.

It will also be seen that my device combines simplicity of construction with strength and durability. It is easy to operate, and is also very cheap, thus producing a device for the purpose mentioned which commends itself to tailors and others who stand in need of such a device.

Of course I would have it understood that I do not limit myself to the precise details of construction herein shown and described, as minor changes may be made therein without departing from the spirit or sacrificing any of the advantages of my invention.

I claim—

1. In a button-hole cutter, the jaws, in combination with a rotary cutter journaled to one of the jaws, and having blades whose cutting-edges are in different planes, for the purpose set forth, substantially as described.

2. In a button-hole cutter, the jaws, the rotary cutter journaled in the upper jaw, having blades whose cutting-edges are in different planes, and the detent for retaining the blades of the cutter in their proper positions, for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

LUCIUS ALAXANDER CARSON.

Witnesses:
Z. B. SPRINGER,
W. H. PICKARD.