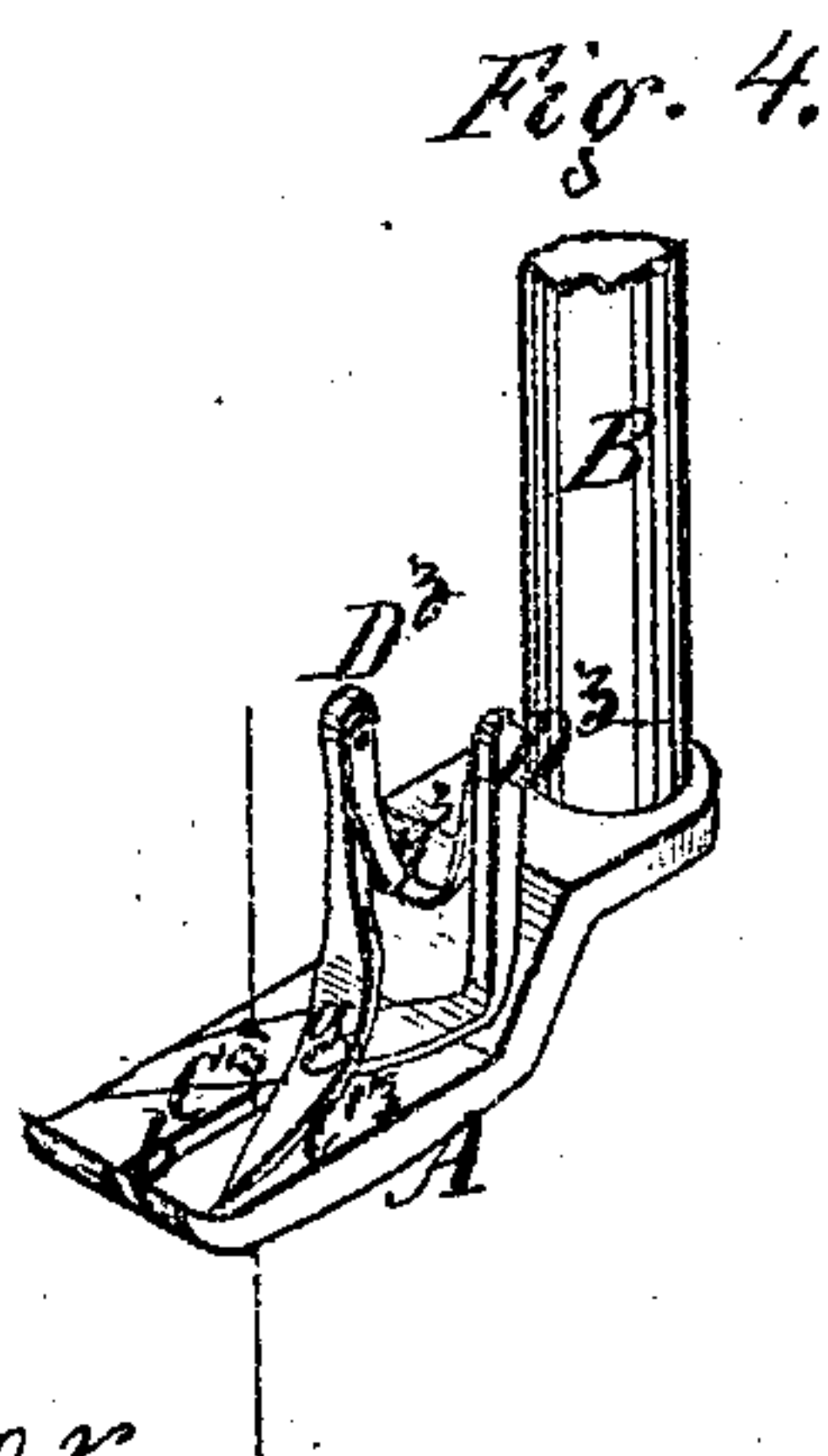
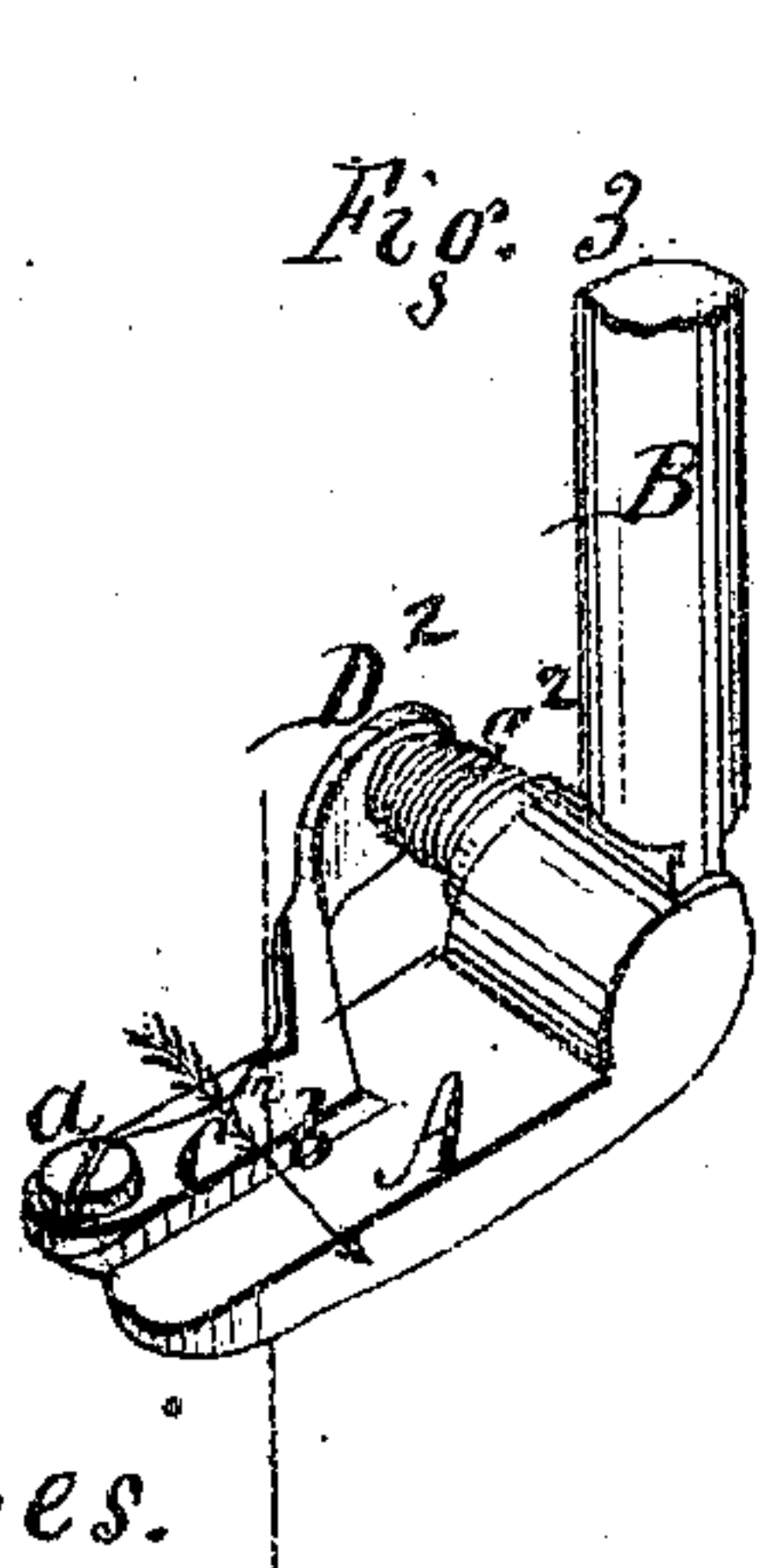
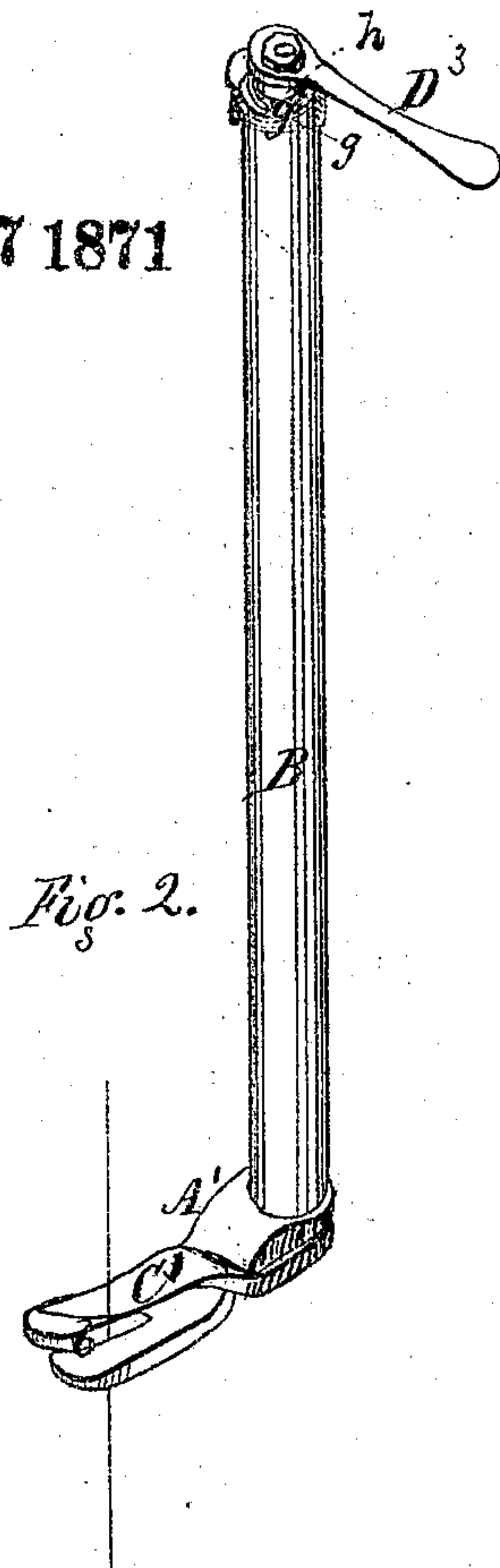
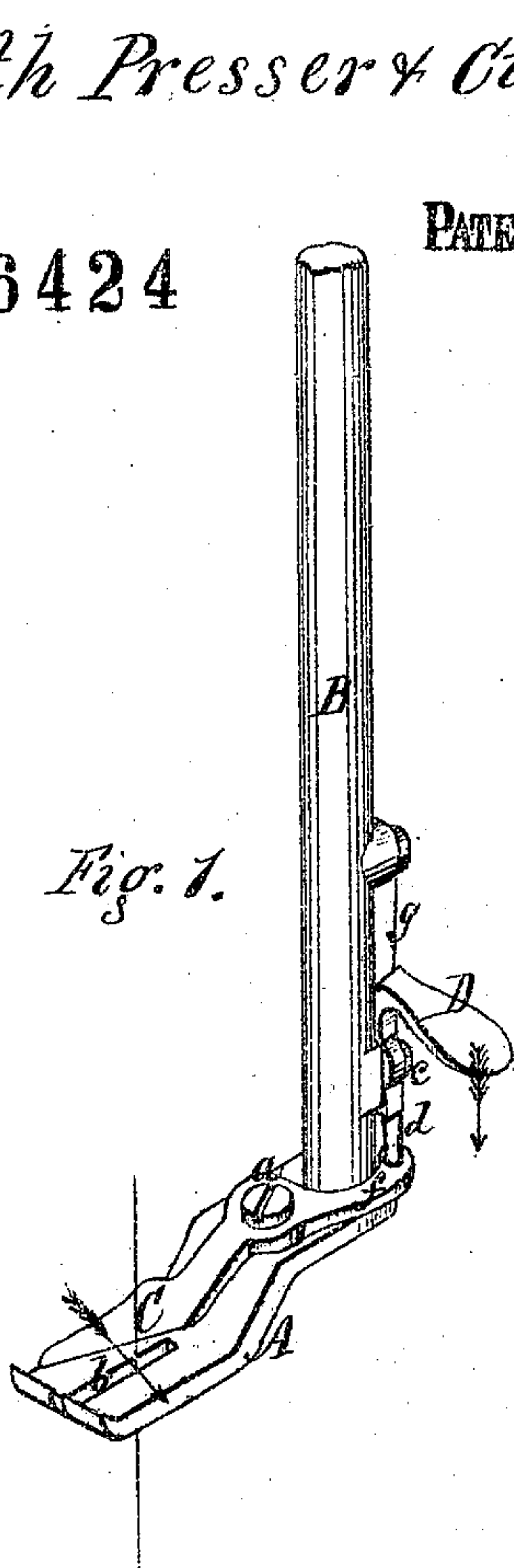


F. H. Furniss.

Cloth Presser & Cutter.

116424

PATENTED JUN 27 1871



Witnesses:
R. H. Osgood
Archibald Baine

Inventor:
Fred. H. Furniss,
By J. Fraser & Co.,
attys.,

UNITED STATES PATENT OFFICE.

FRED. H. FURNISS, OF WATERLOO, NEW YORK.

IMPROVEMENT IN THREAD-CUTTING DEVICES FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. 116,424, dated June 27, 1871.

To all whom it may concern:

Be it known that I, FRED. H. FURNISS, of Waterloo, in the county of Seneca and State of New York, have invented a new and useful Improvement in Combined Cloth-Presser Foot and Cutter for Sewing-Machines, of which the following is a specification:

This invention consists of the combination of a cutter, a spring, and a thumb-lever, as hereinafter described, with the presser-foot of a sewing-machine.

In the drawing, Figures 1, 2, 3, and 4 exhibit different but equivalent forms of my improvement.

In Fig. 1, A represents an ordinary cloth-presser foot of a sewing-machine, and B its shaft. These are connected with the working parts in the usual way. C represents a cutter, which is pivoted at *a* on the top of the presser-foot, the blade conforming closely to the upper surface of the foot, and sweeping over the needle-slot *b* so as to cut the thread that rests therein when it is operated. This cutter is operated at any time to cut the thread by means of a thumb-lever, D, within convenient reach of the operator. This lever is shown as pivoted at *c*, with a point, *d*, that engages with a projection, *f*, of the cutter, and connecting at the top with a flat spring, *g*, by which it receives its reaction. In Figs. 2, 3, and 4 are shown modifications of the device, equivalents of each other and of the one shown in Fig. 1. In Fig. 2 the cutter is lettered C¹, and connects with a rod, *h*, which runs down through the hollow shaft of the presser-foot A' and is held by an inclosed spring, *g*¹. In Fig. 3 the free end of the cutter C² is turned up to form a thumb-piece, D², and rests against the spring *g*², the forward end of the said cutter being pivoted. In Fig. 4 the cutters C² resemble a pair of shears in their action, and are pivoted to the presser-foot, the two arms being bent or turned up so as to form thumb-pieces or

bearings D³, and are connected together by a spring, *g*³, which holds them open. This arrangement of the cutter or cutters is a great convenience in cutting thread when it is desired to do so, as the upper or needle-thread always rests in the needle-slot *b*, and the mere sweep of either of the cutters employed across the slot will always sever it. To cut the lower or shuttle-thread the cloth has only to be raised so as to draw the thread into the slot, when it is severed in the same manner. The close conformation of fit of the cutter or cutters to the surface of the presser-foot is essential to cut the thread perfectly. The thumb-lever in each is necessary to operate the cutter; the spring is desirable to produce the proper reaction and to retain the cutter in position.

It will be readily understood that, if desired, either of the cutters may be placed on the bottom instead of the top of the presser-foot, though the same would not be quite so convenient in use. Either of these devices or their equivalents, when properly applied to a presser-foot, will be in compact compass, and not in the way, and obviates the necessity of breaking the thread by hand or cutting it with scissors. It is evident that the side of the slot *b* will form the stationary shear for the cutting action of the blade.

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

The cutter C, spring *g*, and thumb-lever D, constructed as described, in combination with the presser-foot of a sewing-machine, substantially as and for the purpose specified.

In witness whereof I have hereunto set my hand this 18th day of March, 1871.

FRED. H. FURNISS.

Witnesses:

R. F. OSGOOD,
J. S. CONE.