

V.H. Buschman.
Mach. for Cutting Cloth.

N^o 54681.

Patented May 15, 1866

Fig. 2.

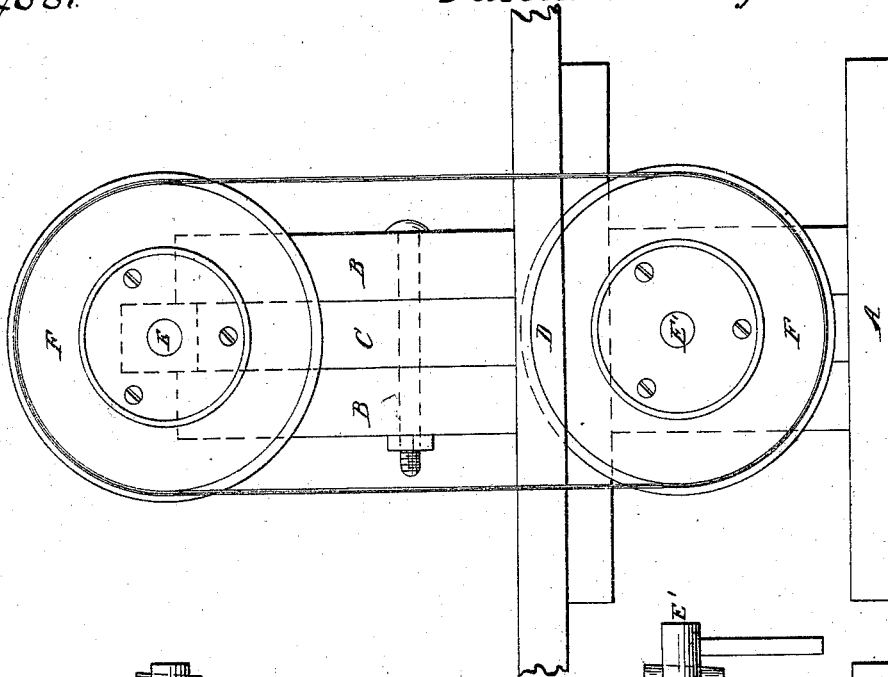
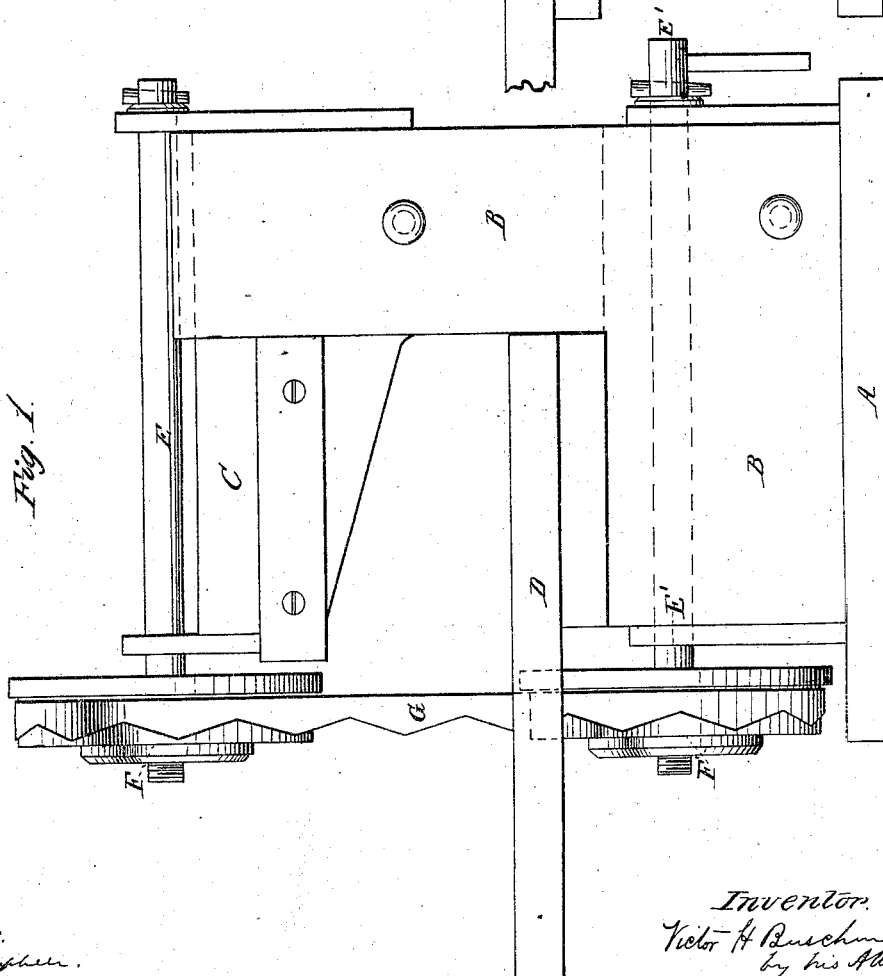


Fig. 1.



Witnesses.
B. D. Campbell.
Edw. Schaffer.

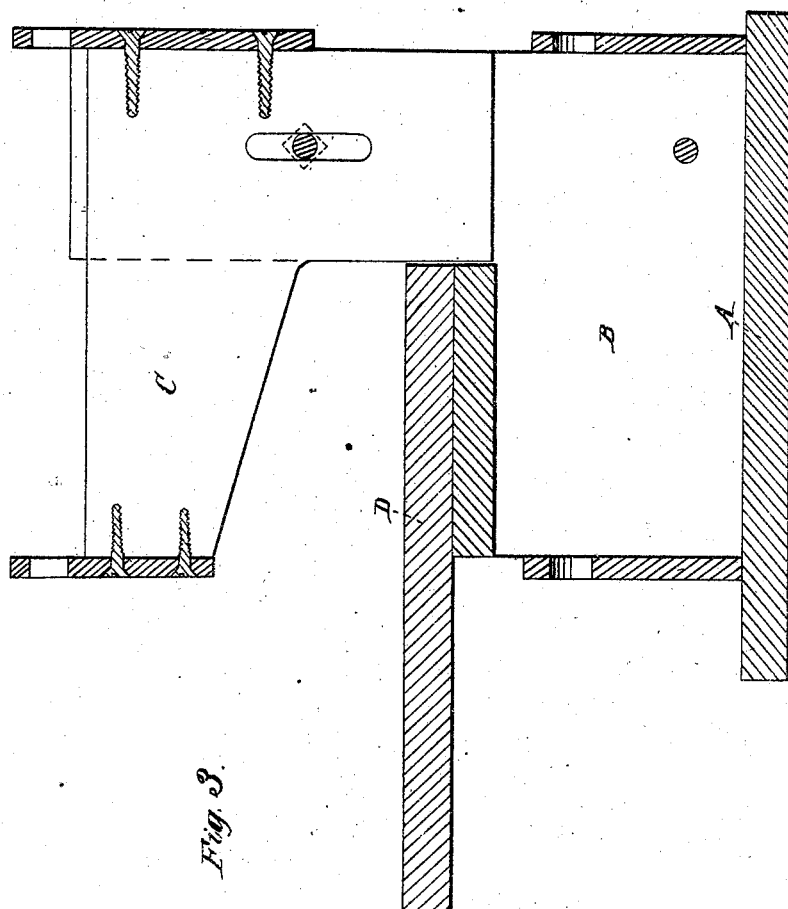
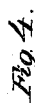
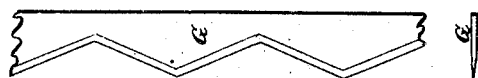
Inventor.
Victor H. Buschman
by his Atty.
Mason, Hemrich & Lawrence.

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UNITED STATES PATENT OFFICE.

VICTOR H. BUSCHMAN, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN MACHINES FOR CUTTING CLOTH.

Specification forming part of Letters Patent No. 54,681, dated May 15, 1866.

To all whom it may concern:

Be it known that I, VICTOR H. BUSCHMAN, of the city and county of Baltimore, State of Maryland, have invented a new and useful Machine for Cutting Cloth, Leather, and Paper; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an elevation of one side of my improved machine. Fig. 2 is a front view of the machine. Fig. 3 is a vertical longitudinal section through the frame of the machine. Fig. 4 is a section of the knife shown in Fig. 1. Fig. 5 is an end view of the knife.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improved machine which is intended particularly for facilitating the work of cutting garments, although it may be used for cutting leather, paper, and other like substances which cannot be smoothly cut by a saw.

In machines which have been made before my invention for cutting cloth reciprocating knives have been used resembling saws; but with such machines the knives or saws are liable to tear the cloth and leave uneven edges, and such knives or saws will only cut in their downward stroke. To obviate these and other objections to such machines, the nature of my invention consists in the employment of a continuously-revolving or belt knife, which is so arranged and operated that one or a number of thicknesses of cloth or other similar substance can be cut smoothly, and in straight or curved lines, as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings, A represents the base of the machine, B B two vertical standards, and C a vertically-adjustable bracket-arm, which is confined between the standards B B, so that it can be elevated or depressed and rigidly secured in the desired position.

D is a table which is secured to the standards beneath the overhanging bracket-arm C, upon which table the work to be cut is placed.

E E' are two parallel shafts, carrying on one end the pulleys or drums F F', which are securely affixed to their respective shafts and constructed with flanges projecting from their peripheries, as shown in Figs. 1 and 2. These pulleys are arranged to rotate in the same vertical plane, and they receive around them a belt-knife, G, which is properly strained by adjusting the bracket C upward. This belt-knife is kept in place upon its pulleys by means of the shoulders or flanges on them, and slots are cut through the table D to allow the knife a free rotation and communication with both pulleys.

The machine which I have thus described is portable, both supports for the knife being upon the same frame. In some cases it may be desired to have the knife established, and in this event the shaft of the upper pulley may be attached over the work-table to the joists of the room in which the machine is located, the shaft of the lower pulley being supported beneath the work-table, as above described.

It may be found necessary, in constructing my machines for some kind of work, to have the vertical portions of the knife arranged at a considerable distance apart, in which event the knife can be stretched, or rather strained, over four or more pulleys arranged in pairs above and below the work-table.

The belt-knife G which I have represented in the drawings has its back edge perfectly straight, but its front cutting-edge is scalloped, as clearly shown in Fig. 4. These edges may be brought to a cutting-edge by sharpening on both sides of the blade, as shown in Fig. 5, or only one side may be beveled. The object of forming the scalloped edge is that the knife may operate with a drawing cut upon the work, so as to leave the severed edges perfectly smooth. A knife with a perfectly straight cutting-edge will operate very well; but I prefer to use the scalloped edge, as I believe that it will require less power to operate the machine with such a knife.

By sharpening all the scalloped edges of the belt-knife it may be operated in one direction until one set of edges become dull, and then the motion of the knife can be reversed so as to bring the opposite cutting-edges into play.

By the employment of a belt-knife I am en-

abled to avoid the necessity of moving the knife upward through the cloth during the operation of cutting.

I do not claim an endless saw for sawing wood, as shown in the patent of Benjamin Barker, January 6, 1836, as such a contrivance is not adapted for the smooth clean cut which is necessary in operating upon cloth, paper, and leather, or other material of like nature; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

The endless belt-knife, constructed and applied and operating substantially as described and for the purpose set forth.

VICTOR H. BUSCHMAN.

Witnesses:

G. SCHNIGDTON,
RICHARD NALLEY.