

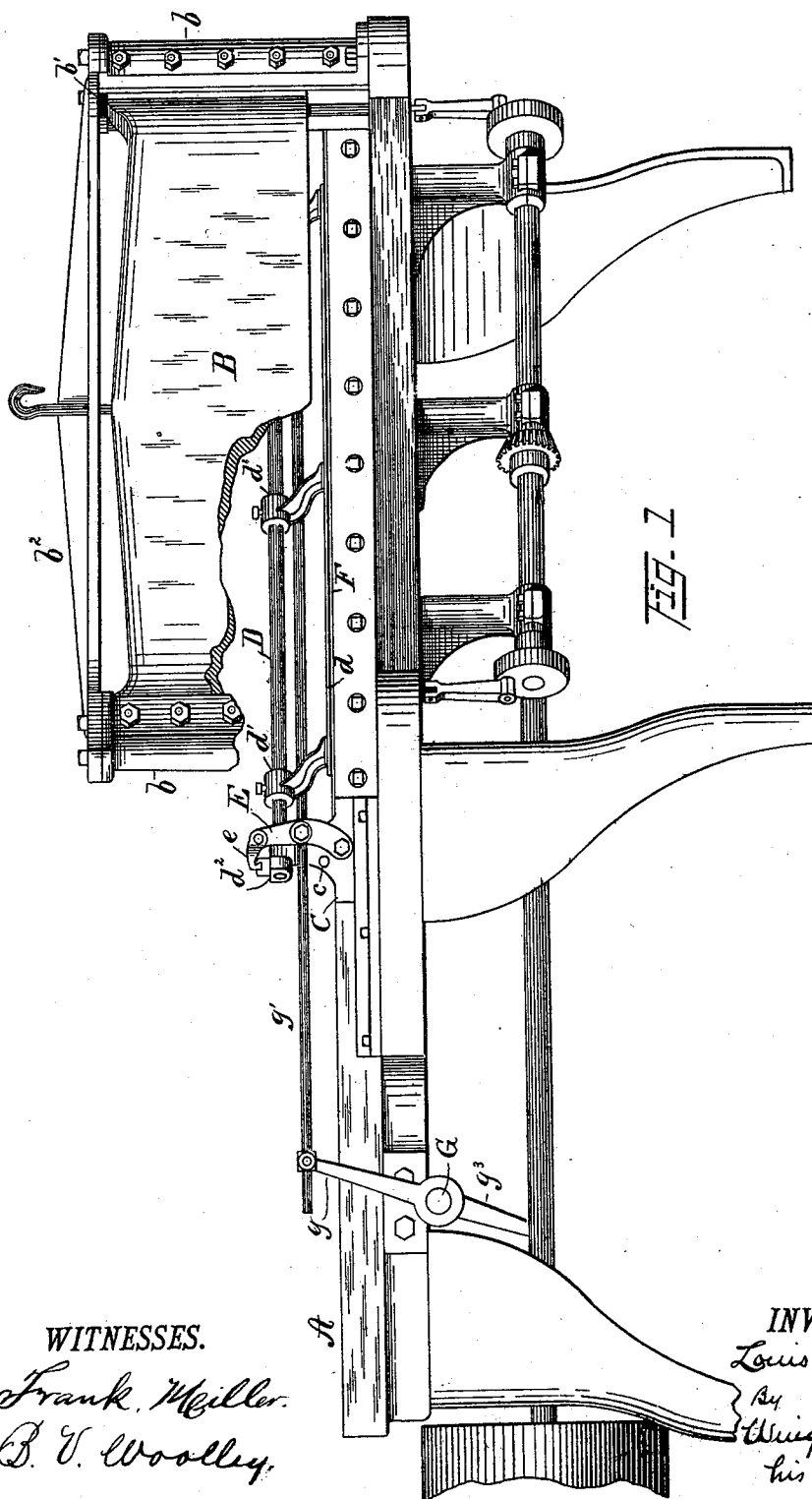
(No Model.)

2 Sheets—Sheet 1.

L. SMITH.
CLOTH CUTTING MACHINE.

No. 510,717.

Patented Dec. 12, 1893.



WITNESSES.
Frank Miller.
B. V. Woolley.

INVENTOR.
Louis Smith
By
Wing + Thurston
his attorneys

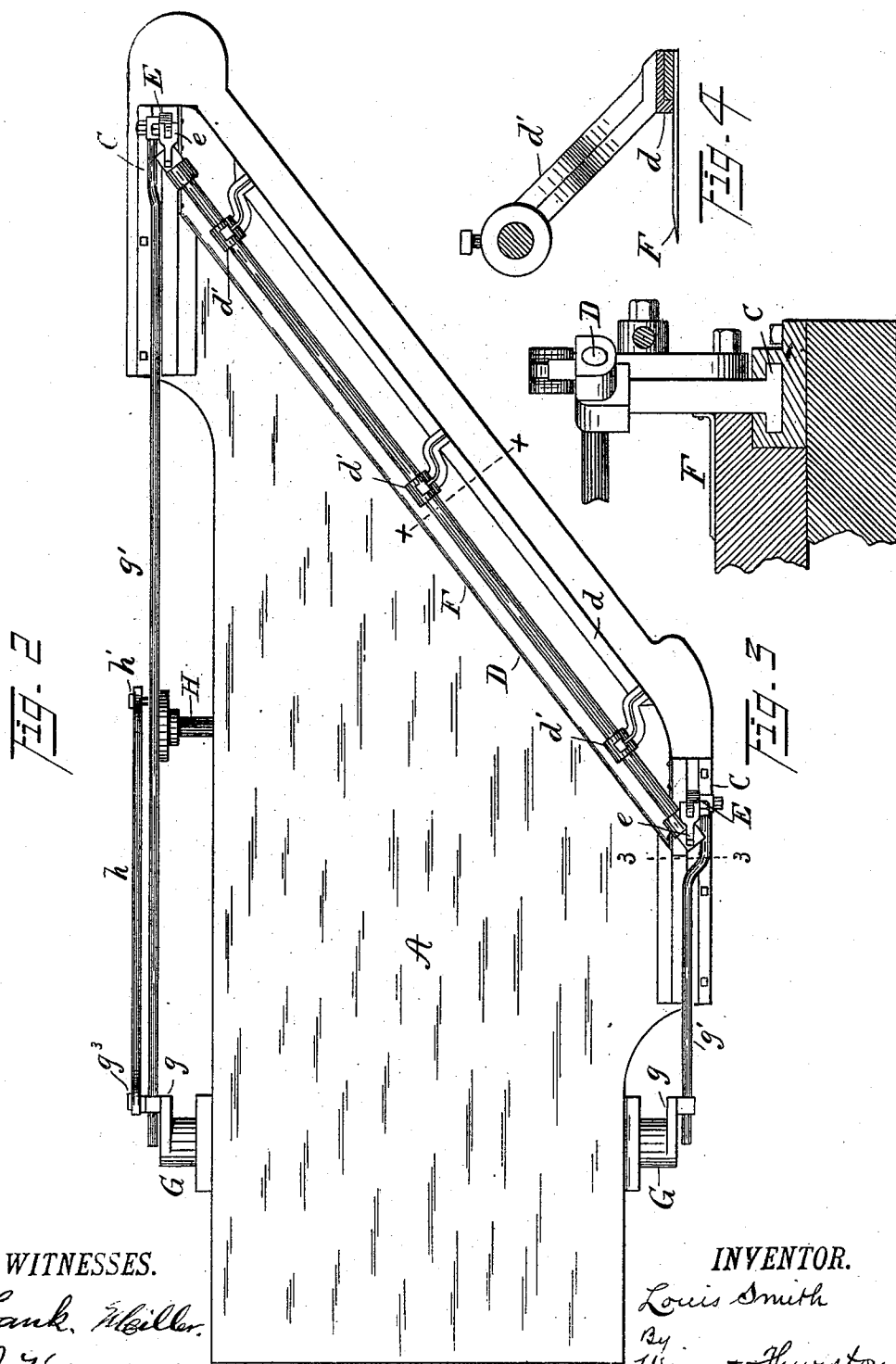
(No Model.)

2 Sheets—Sheet 2.

L. SMITH.
CLOTH CUTTING MACHINE.

No. 510,717.

Patented Dec. 12, 1893.



WITNESSES.

Frank Miller.
B. V. Woolley.

INVENTOR.

Louis Smith
By
Wing & Thurston
his attorneys

UNITED STATES PATENT OFFICE.

LOUIS SMITH, OF CLEVELAND, OHIO.

CLOTH-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 510,717, dated December 12, 1893.

Application filed March 23, 1893. Serial No. 467,299. (No model.)

To all whom it may concern:

Be it known that I, LOUIS SMITH, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Feed Mechanism for Cloth-Cutting Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates particularly to a machine adapted to cut bias strips from velveteen or other fabric. In the use of a machine of this character, it is desirable that all of the strips cut by the successive operations of the knife shall be of equal width, and that the strips be cut rapidly.

The object of my invention is to provide means for automatically feeding the fabric forward uniform distances after each shearing operation; and my invention consists in the construction and combination of parts herein-after described and pointed out definitely in the claims.

In the drawings, Figure 1 is a side elevation of a cloth cutting machine containing my invention. Fig. 2 is a plan view of the same, with the knife and the mechanism for supporting and operating it removed. Fig. 3 is a vertical sectional view on line 3—3 in Fig. 2; and Fig. 4 is a sectional view through the feed plate, rock shaft and presser bar.

Referring to the parts by letters, A represents the bed or table of machine, at one end of which a vertically movable knife bar B is mounted obliquely with respect to the table. The knife bar is guided by grooves *b'* in the vertical posts *b*, which posts are connected by a yoke *b*.

It is not claimed that there is anything novel in the construction of the head as shown nor in the mechanism for operating the knife bar. Any suitable construction of these parts may be adopted; and since my invention does not relate to these parts, it is believed that a description thereof is unnecessary.

Mounted in longitudinal guide ways in each side of the machine near the head, are the slides C. On the top of each slide is a bearing for one end of the rock shaft D, which extends obliquely across the machine parallel to the

knife bar. To this rock shaft at intervals the arms *d' d'* are rigidly attached, and to the lower ends of these arms the presser bar *d* is secured.

A feed plate F extends obliquely across the machine close to the table, and its ends are secured to said slides. The presser bar lies above the front edge of the feed plate.

Pivoted to each slide C is a lever E. To the upper end of each lever a link *e* is pivoted, and this link is connected with the rock shaft by means of a finger on its end which enters a groove in the upper side of a collar *d*² on the rock shaft D. A transverse rock shaft G is mounted below the bed plate and to it are attached two arms *g g*. Links *g' g'* are connected at their ends respectively with the said arms *g* and the levers E. The rock shaft G may be operated by any convenient mechanism. I have shown a crank shaft H having the crank *h'* thereof connected by the rod *h* to an arm *g*³ on the rock shaft.

The operation of the described parts is as follows: When by the movement of the rock shaft G the links *g' g'* are drawn backward, the first effect of the movement is to rock the levers E. The movement of these levers first causes the rock shaft D to rock, thereby lifting the presser bar and freeing the fabric from the grasp of said presser bar and feed plate. When this result is attained, the levers E strike stops *c c* on the slides, whereupon said slides are drawn backward carrying with them the feed plate, presser bar and rock shaft, which parts slide freely without moving the fabric. When the links *g' g'* are moved forward by the rock shaft G, they first rock the levers E in the opposite direction to that above described, with the result of first moving the presser bar on to the fabric, which is thereby pressed firmly against the feed plate. The further continuance of the forward movement of links *g' g'* causes the slides C to be moved forward, together with the feed plate and presser bar, thereby carrying the fabric with them.

Having described my invention, I claim—

1. In a cloth cutting machine, in combination, two slides mounted on opposite sides of the bed of the machine, a feed plate connected with said slides and lying close to said bed, with a presser bar and its actuating mechanism.

ism carried by said slides, substantially as and for the purpose specified.

2. In a cloth cutting machine, the combination, of two slides mounted on opposite sides
5 of the bed, and a feed plate lying close to said bed and connected with said slides, with a rock shaft mounted on said slides, arms secured to said rock shaft, a presser bar secured to said arms, and mechanism for operating said
10 slides and rock shaft, substantially as and for the purpose specified.

3. In a cloth cutting machine, the combination of two slides mounted on opposite sides
15 of the bed, and a feed plate lying close to said bed and connected with said slides, a rock

shaft extending across the machine mounted on said slides, arms secured to said rock shaft, and a presser bar secured to said arms, with levers pivoted to said slides respectively, mechanism connecting said levers with the rock
20 shaft, a rock shaft G, arms secured thereto, and links connecting said arms with said levers, substantially as and for the purpose specified.

In testimony whereof I affix my signature in
25 presence of two witnesses.

LOUIS SMITH.

Witnesses:

E. L. THURSTON,
FRANK MILLER.