

No. 784,089.

PATENTED MAR. 7, 1905.

K. A. WERLE.
FABRIC MARKING MACHINE.
APPLICATION FILED APR. 28, 1903.

2 SHEETS—SHEET 1.

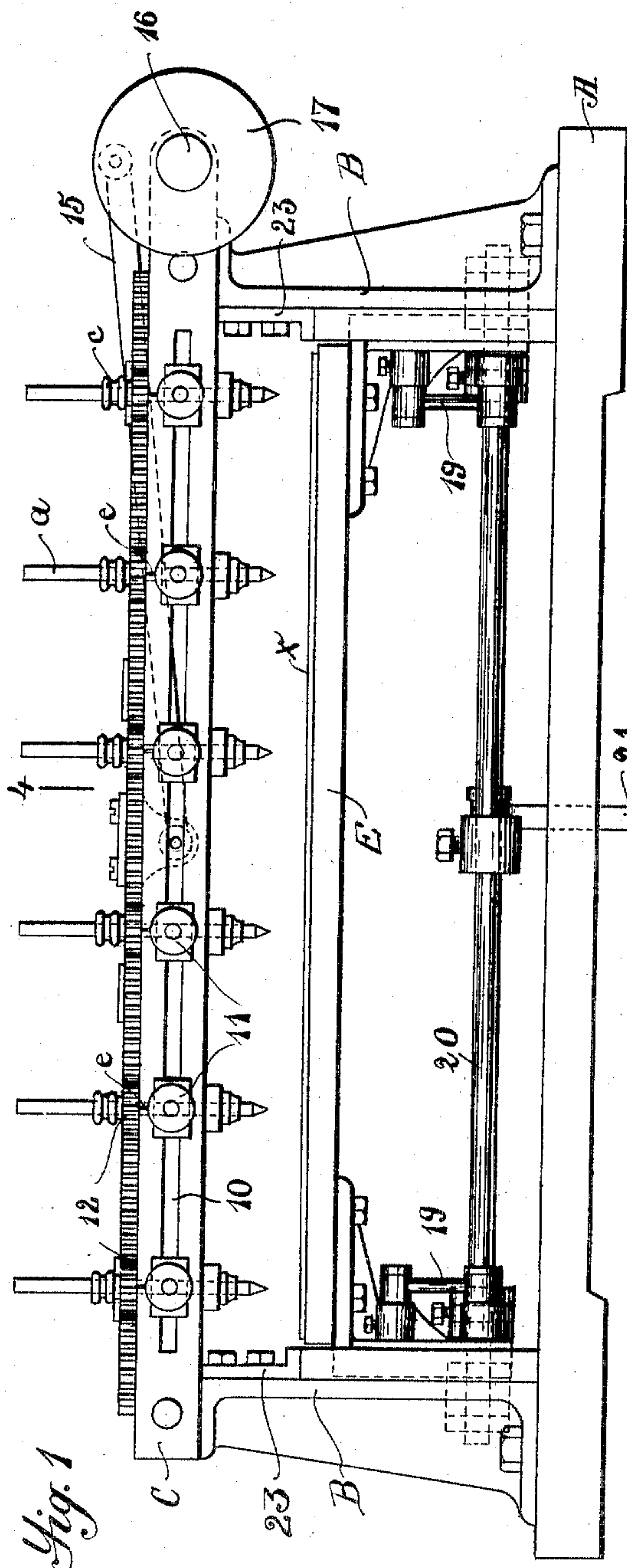


Fig. 1

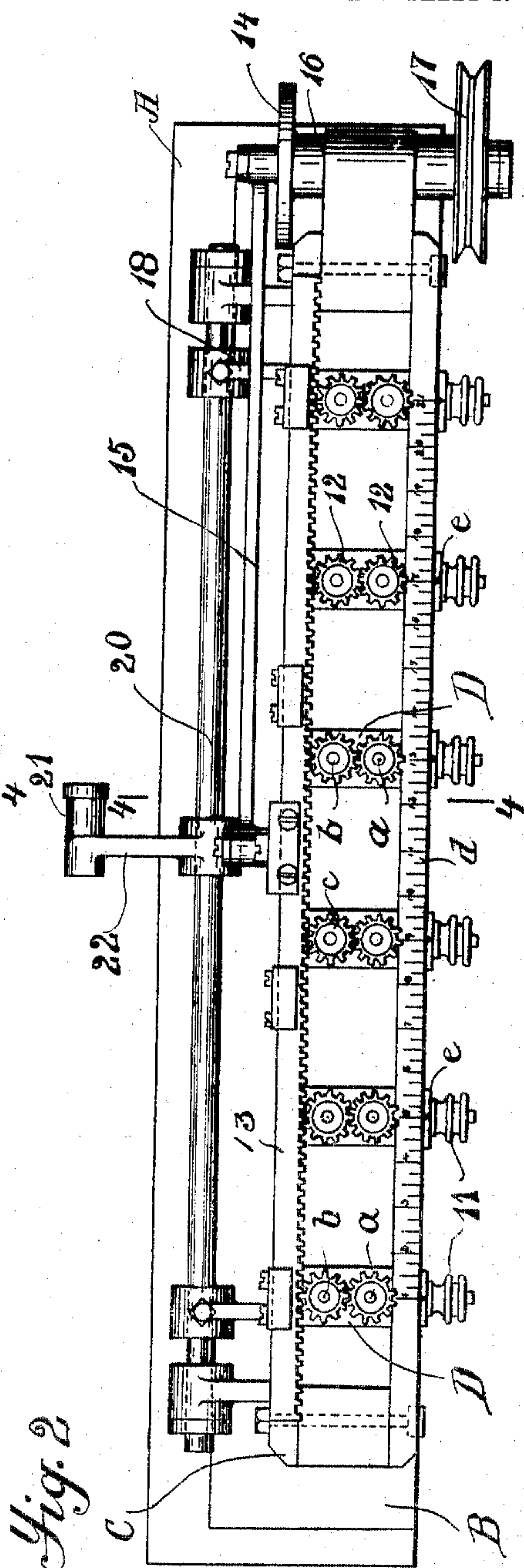


Fig. 2

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2 SHEETS—SHEET 2.

Fig. 4

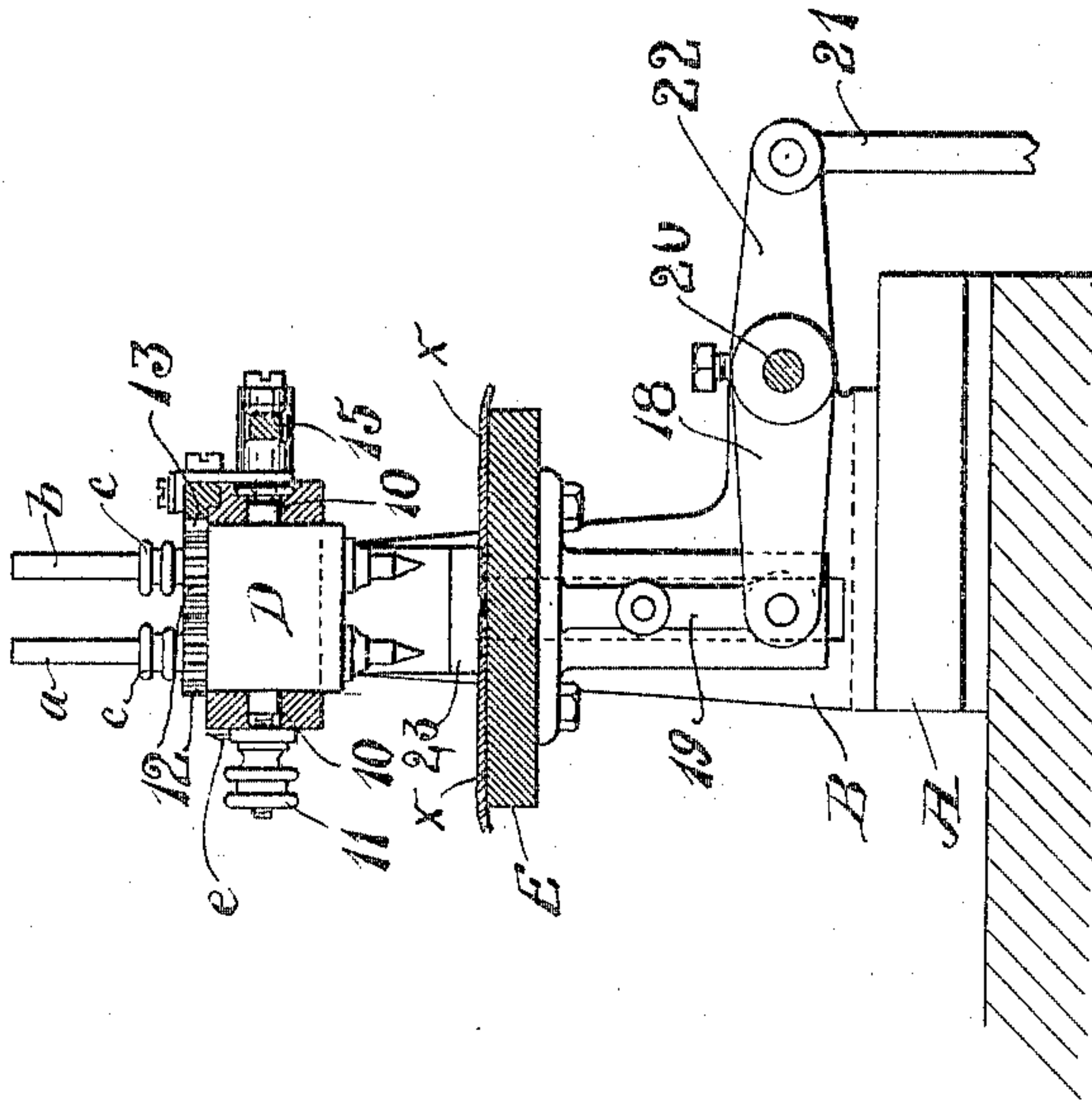
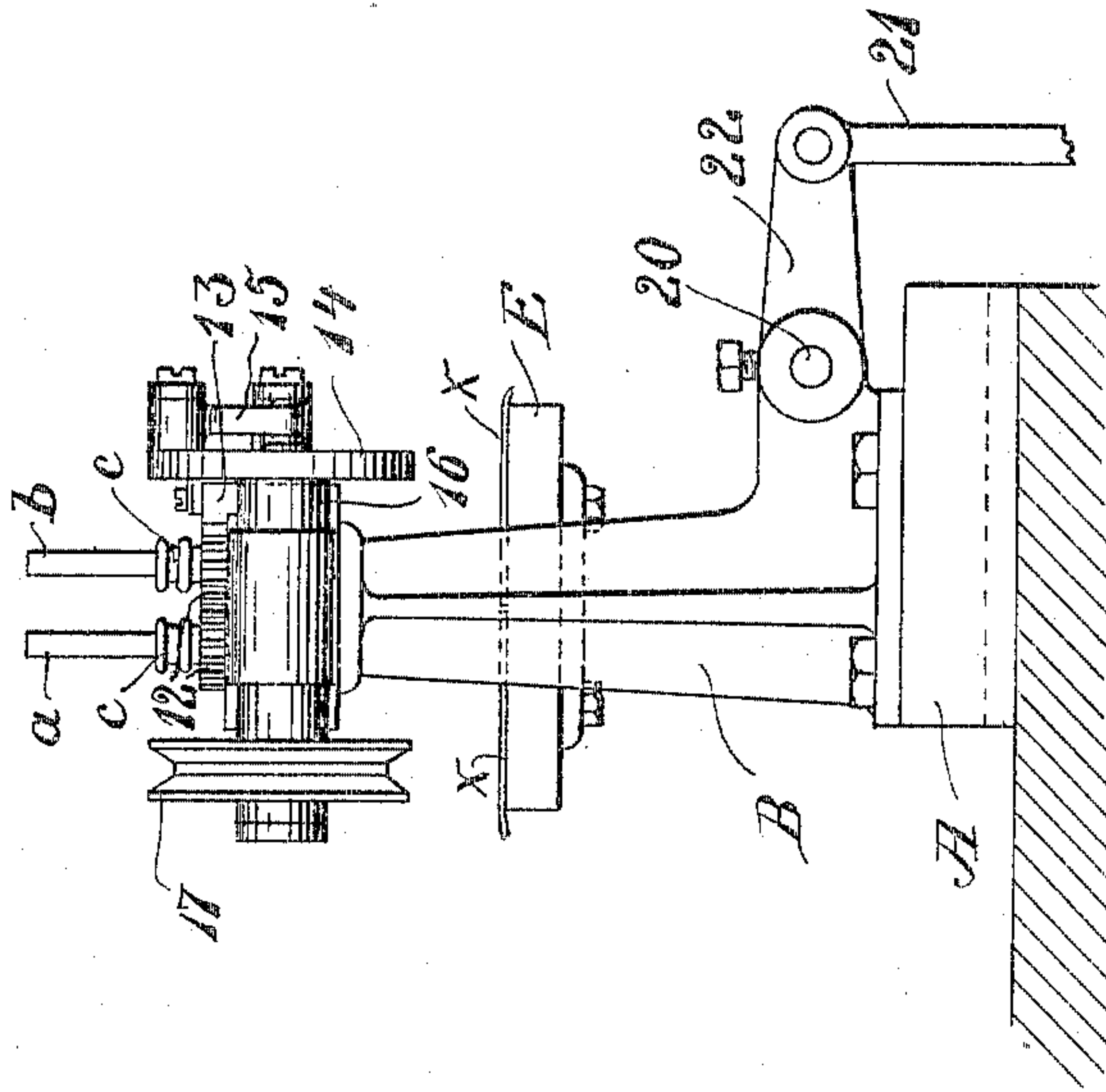


Fig. 3



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UNITED STATES PATENT OFFICE.

KATE A. WERLE, OF NAZARETH, PENNSYLVANIA.

FABRIC-MARKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 784,089, dated March 7, 1905.

Application filed April 28, 1903. Serial No. 154,644.

To all whom it may concern:

Be it known that I, KATE A. WERLE, a citizen of the United States, residing at Nazareth, county of Northampton, and State of Pennsylvania, have invented certain new and useful Improvements in Fabric-Marking Machines, fully described and represented in the following specification, and the accompanying drawings, forming a part of the same.

This invention relates to a machine for marking fabric for buttonholes and buttons or hooks and eyes or similar purposes, the especial object of the invention being to provide means by which the accurate marking of fabric at the points desired may be secured conveniently and rapidly.

A further object of the invention is to provide a construction by which the distance between the markings may be readily adjusted, as desired.

For a full understanding of the invention a detailed description of a construction embodying all the features of the same in their preferred form will now be given in connection with the accompanying drawings, forming a part of this specification, and the features forming the invention will then be specifically pointed out in the claims.

In the drawings, Figure 1 is a front view of the machine. Fig. 2 is a plan view of the same. Fig. 3 is an end view looking to the left in Figs. 1 and 2. Fig. 4 is a cross-section on the line 4 of Figs. 1 and 2.

Referring to the drawings, A is the base of the machine, having standards B, on which is mounted the top frame C, carrying the markers and parts for operating them. The markers preferably consist of pencils, and in the machine shown, which is designed to mark both button and buttonholes at a single operation, there are two rows *a b* of pencils arranged in pairs at proper distances apart. These pencils *a b* are carried in clamps *c*, in which the pencils are adjustable longitudinally, and the clamps of each pair of pencils *a b* are mounted in the same carrier, consisting of the block D, the carriers or blocks D being adjustable in slot 10 of frame C and being locked in the desired position on the frame by thumb-nuts 11, so that by loos-

ening the nuts 11 the blocks D and pairs of pencils *a b*, carried thereby, may be spaced apart in accordance with the marking desired. To facilitate the accurate spacing of the pencils in accordance with the distance desired between buttons or other devices, the top front surface of the frame C carries a scale *d*, and each of the blocks D has a pointer *e*, that moves along the scale as the blocks D are shifted.

The clamps *c* are mounted to rotate in the blocks D and carry gears 12, the gears on each pair of clamps intermeshing, so that the two pencils of each pair rotate together, and these gears are actuated to rotate the pencils in opposite directions by a rack 13, engaging the gears on the clamps *c*. This rack 13 is shown as reciprocated longitudinally of the frame C by a crank-disk 14, which is connected to the rack by a crank-rod 15, and the crank-disk 14 is carried by a shaft 16, shown as actuated by pulley 17; but other suitable means may be used for moving the rack. The pencils are thus rotated in opposite directions, which rotary movement may be any amount, either several rotations or less than a single rotation.

Below the markers *a b* is mounted a table E, which slides vertically in the standards B and is raised to carry the fabric to be marked against the lower ends of the pencils *a b* by arms 18, connected to the under side of the table by links 19 and carried by a rock-shaft 20, which is actuated when desired to raise the table E by suitable operating means, preferably a treadle, connected by link 21 to arm 22 on the shaft 20. The table is stopped in proper position for marking by the stops 23.

The operation of the construction will be understood from a brief description.

The blocks D, carrying the pencils *a b*, are adjusted along the frame C for the desired spacing between the markings and then locked in place by the thumb-nuts 11. As shown, the blocks are adjusted for a spacing of four inches between the markings, which is shown by the position of the pointers *e* on the scale *d* in Fig. 2. The pencils having thus been adjusted and locked in position, the two pieces of cloth to be marked for the

button and buttonholes or hooks and eyes or the like are placed in position upon the table E, as shown at *x* in Fig. 4, and with their edges held in proper position are pushed upward against the pencils by the operator raising the table E by the treadle or other means acting through arms 18. As the table is raised the operator also by any suitable belt-shifter or clutch connection starts the belt and pulley 17, and the rack 13 is thus reciprocated, rotating the markers *a b* in opposite directions through the gears 12, so as to assure the clear marking of the fabric, while at the same time the cloth cannot wind onto the pencils on account of the reverse motion. After the fabric has been marked the table E is lowered by the operator and the fabric removed for the insertion of other fabric for marking. The rack will preferably be thrown out of operation between markings by stopping the pulley 17, although it will be understood that this is not essential.

While I have shown a construction in which all the markers are rotated simultaneously, and this is the preferred construction, it will be understood that the markers may be rotated singly or in groups, if desired. The preferred embodiment of the invention is that shown, in which the fabric is marked at the same time for buttons and buttonholes; but it will be understood that the broader features of the invention may be embodied in a machine in which only one row of markers are used and the buttons and buttonholes, hooks and eyes, or the like marked at successive operations. While I prefer to move the fabric against the markers, it will be understood that the invention, broadly considered, includes also constructions in which the markers and fabric are brought together in any other manner.

Other modifications that are within the scope of the invention will be obvious to those skilled in the art, and the invention is not to be limited to the special devices of the machine shown.

What is claimed is—

1. In a fabric-marking machine, the combination with a series of markers, of a table for the fabric, means for bringing the table and markers together for marking, and means for rotating the markers during marking.

2. In a fabric-marking machine, the combination with a series of markers, of a table for the fabric, means for bringing the table and markers together for marking, and means for rotating the markers in opposite directions during marking.

3. In a fabric-marking machine, the combination with a series of markers, of a table for the fabric, means for bringing the table and markers together for marking, gears on the markers, and a reciprocating rack for rotating said markers in opposite directions.

4. In a fabric-marking machine, the combination with a table for the fabric, of two series of markers arranged in pairs, means for bringing the table and markers together for marking, and means for rotating the markers.

5. In a fabric-marking machine, the combination of two series of markers arranged in pairs, gears connecting the markers of each pair for rotating them simultaneously, and means for actuating said gears.

6. In a fabric-marking machine, the combination of two series of markers arranged in pairs, gears connecting the markers of each pair for rotating them simultaneously, and means for actuating said gears to rotate the markers in opposite directions during marking.

7. In a fabric-marking machine, the combination of two series of markers arranged in pairs, of gears connecting the markers of each pair for rotating them simultaneously, a rack for actuating said gears, and means for reciprocating said rack during marking.

8. The combination of carriers D, pairs of clamps *c* and markers *a, b* in said carriers, gears 12 connecting said clamps, and rack 13.

9. The combination with the pairs of markers *a, b*, of gears 12 connecting said markers, rack 13, and means for reciprocating said rack.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

KATE A. WERLE.

Witnesses:

W. E. CRANE,
DANL. D. GERSTEN.