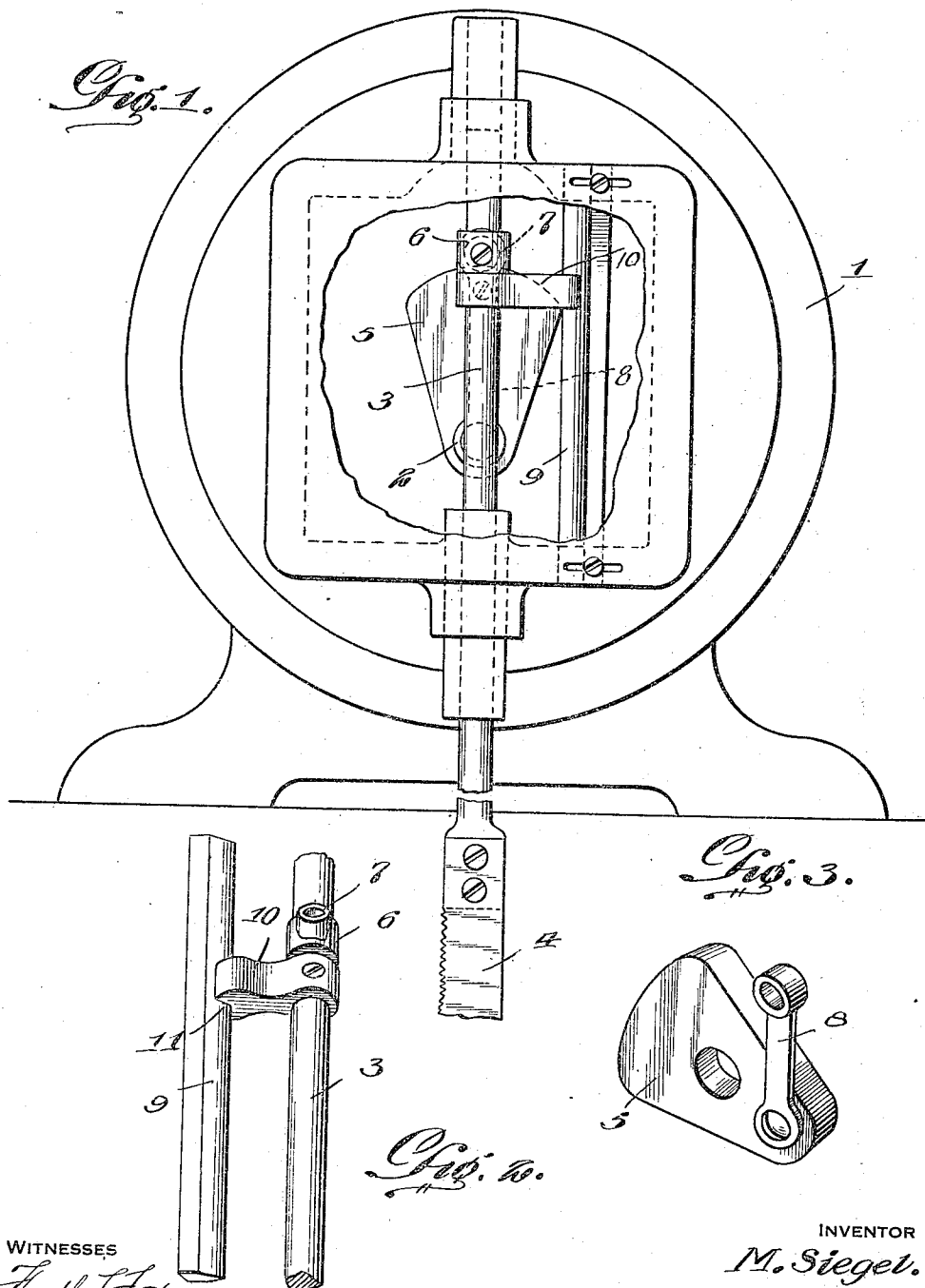


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MECHANICAL MOVEMENT.
APPLICATION FILED NOV. 3, 1917.

1,279,462.

Patented Sept. 17, 1918.



WITNESSES
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MECHANICAL MOVEMENT.

1,279,462.

Specification of Letters Patent. Patented Sept. 17, 1918.

Application filed November 3, 1917. Serial No. 200,131.

To all whom it may concern:

Be it known that I, MYER SIEGEL, a citizen of the United States, residing at New York, in the county of Bronx and State of New York, have invented new and useful Improvements in Mechanical Movements, of which the following is a specification.

This invention relates to mechanical movements for cloth cutting machines and it consists in the novel features hereinafter described and claimed.

An object of the invention is to provide a machine of the character stated adapted to be operated by an electric motor and which includes means for restraining the rod which carries the knife against vibration during the reciprocatory movement of the rod and the knife.

With this object in view the machine includes a counter-balanced crank mounted upon the shaft of the motor and a rod mounted for reciprocatory movement in the frame of the motor, there being means operatively connecting the said rod with the said crank for moving the rod from the crank. The cutting blade is carried by the said rod. A guide is mounted in the frame of the motor and is disposed parallel with the said rod and spaced from the same. A bar is mounted upon the rod and is provided at its end with a recess which receives the said guide. Thus the bar is free to move along the guide, but inasmuch as the walls of the recess have both contact with the sides of the guide the said rod is restrained against vibratory movement.

In the accompanying drawing:—

Figure 1 is a side elevation of the machine with parts of the frame or casing of the motor broken away.

Figs. 2 and 3 are detailed perspective views of parts of the same.

As illustrated in the accompanying drawing, the motor 1 is of conventional form and is adapted to be electrically operated. The said motor is provided with a shaft 2. A rod 3 is slidably mounted in the frame of the motor 1 and is adapted to move vertically therein. A knife blade 4 is carried at the lower end of the rod 3. A counter-balanced crank 5 is mounted upon the shaft 2 and rotates with the same. A collar 6 is ad-

justably secured upon the upper portion of the rod 3 and is provided at its side with a stud 7. A pitman rod 8 is pivoted at one end to one end of the crank 5 and at its opposite end upon the stud 7. A guide rod 9 is adjustably mounted in the frame of the motor 1 in parallel relation with respect to the rod 3 and spaced from the same. A bar 10 is adjustably secured to the rod 3 at a point below the collar 6 and the said bar 10 is provided at its end with a recess 11 which receives the side portion of the guide rod 9. The walls of the recess 11 fits snugly about the surface of the guide 9 but the bar 10 is free to move longitudinally along the said guide.

When the motor shaft 2 is rotating the pitman 8 transmits movement from the crank 5 through the collar 2 through the rod 3 which is reciprocated vertically in the frame of the motor 1. In view of the fact that the bar 10 is fixed to the rod 3 and moves along the guide 9 the said bar 3 is restrained from any vibratory movement and hence the knife blade 4 is reciprocated vertically in proper alinement and may be accurately directed through the cloth or other material which is being cut.

From the foregoing description taken in conjunction with the accompanying drawing, it will be seen that a cloth cutting machine of simple and durable structure is provided and that efficient means are employed for restraining the said knife blade and the rod supporting the same against vibratory movement in order that the blade may cut the material without leaving ragged edges.

Having described the invention what is claimed is:—

In a machine including a frame and a journaled shaft, a counter-balance crank mounted upon the shaft, a rod mounted for reciprocatory movement in the frame, means operatively connecting the rod with the crank for reciprocating the rod when the shaft rotates, a guide mounted upon the frame and disposed parallel with the rod, and a bar fixed to the rod and having a recess which snugly receives said guide.

In testimony whereof I affix my signature.

MYER SIEGEL.