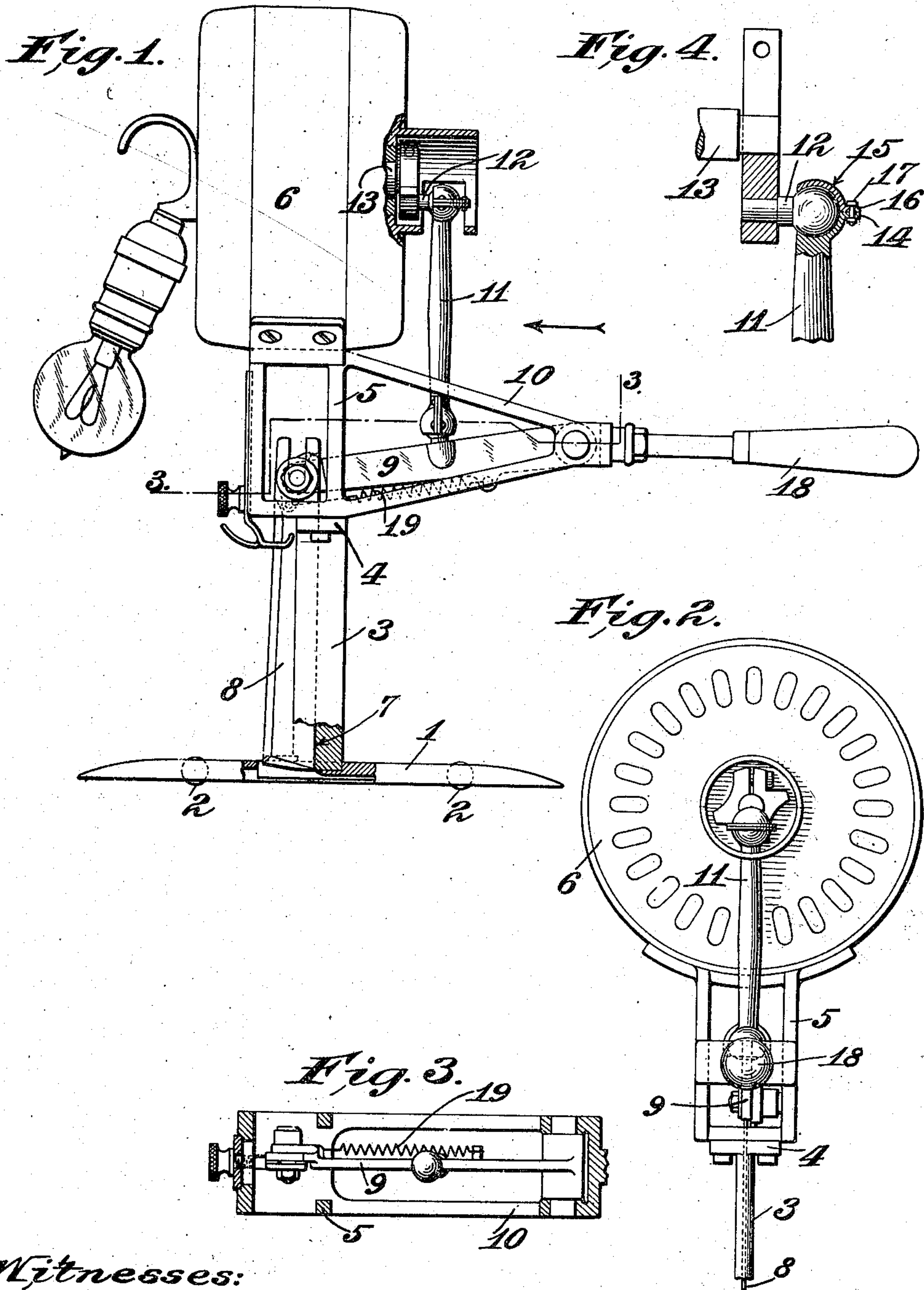


No. 840,767.

PATENTED JAN. 8, 1907.

J. B. GURY.
CLOTH CUTTING MACHINE.
APPLICATION FILED AUG. 11, 1906.



Witnesses:

G. A. Pennington
J. B. Megown,

Inventor:
John B. Gury,
By *Ramsey* Attys.

UNITED STATES PATENT OFFICE.

JOHN B. GURY, OF ST. LOUIS, MISSOURI.

CLOTH-CUTTING MACHINE.

No. 840,767.

Specification of Letters Patent.

Patented Jan. 8, 1907.

Application filed August 11, 1906. Serial No. 330,174.

To all whom it may concern:

Be it known that I, JOHN B. GURY, a citizen of the United States, and a resident of the city of St. Louis and State of Missouri, have invented a new and useful Improvement in Cloth-Cutting Machines, of which the following is a specification.

My invention relates to cloth-cutting machines, and has for its principal objects to minimize the friction, to minimize the pulsation, and to simplify and improve the mechanical construction.

My invention consists in the parts and in the arrangements and combinations of parts hereinafter described and claimed.

In the accompanying drawings, which form part of this specification, and wherein like symbols refer to like parts wherever they occur, Figure 1 is a side elevation of a cutting-machine embodying my invention, a portion of the base and standard and of the guard-case being shown in section. Fig. 2 is an elevation of the upper part of the machine looking in the direction of the arrow in Fig. 1. Fig. 3 is a horizontal section on the line 3-3 of Fig. 1; and Fig. 4 is a sectional detail view showing the universal joint connecting the wrist-pin and the actuating-link.

The cutting-machine is mounted upon a base 1, supported on rollers 2. The standard 3 is mounted on the base and terminates at its top in a table 4, on which is screwed or otherwise fastened a skeleton frame 5. This skeleton frame 5 has a motor-frame 6, screwed or otherwise fastened thereto directly above the standard—that is, in alignment with the standard, so that its weight is symmetrically distributed and balanced above said standard.

The standard 3 is preferably made of a single piece and is provided with a slot or slide-way 7, which serves as a guide for a knife 8. The upper end of the knife projects above the top of the standard and is secured to a rock-lever 9, which is pivotally mounted in a bracket or lateral extension 10 of the skeleton frame, whereby said lever or rock-arm 9 is free to oscillate in a vertical plane.

The rock-arm 9 is connected by a link 11 to a wrist-pin 12, eccentrically secured to the driving-shaft 13 of the motor. The connections of the link 11 are preferably ball-and-socket joints, which will permit a slight angular motion of the link in every direction. For this purpose the wrist-pin terminates in a spherical head or ball and the link termi-

nates in a hemispherical socket having a lateral flange 14. Above the head of the wrist-pin is a spherical segment 15, which is likewise provided with a lateral flange 16. Bolts 17, extending through the flanges 14 and 16, hold the segment 15 firmly on the end of the body-piece of the link 11. A similar arrangement is used at the lower end of the link; but in this latter case the removable spherical segment is jointed along a vertical plane instead of in a horizontal plane.

It is obvious that the rock-shaft 9 may be arranged to reciprocate in a plane perpendicular to the vertical plane of the shaft; but it is preferable to have the rock-shaft 9 arranged in the same plane with the motor-shaft. This latter arrangement has the great advantage of permitting a direct connection of the wrist-pin to the rock-shaft, to which the knife is directly connected, in consequence of which there are fewer moving parts, and those few parts (with the exception of the upper end of the link) are in the same plane. The vibration or pulsation of the machine is therefore very much reduced. The machine is manipulated by means of a handle 18, extending from the lateral bracket 10 in the plane of the moving parts.

The connection of the knife 8 to the rock-arm 9 is a pivotal connection, which is more fully described in applicant's pending application Serial No. 326,389, filed July 16, 1906. The knife is kept in proper position by means of a tension-spring 19, fastened at one end to the bracket 10 and at its other end to the knife or a part connected thereto, as more fully described in said application.

Obviously my device admits of considerable modification within the scope of my invention, and therefore I do not wish to be limited to the specific construction shown and described.

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

1. A cloth-cutting machine comprising a base, a standard thereon, a motor mounted on said standard, a rock-arm mounted in the plane of the motor-shaft, a link universally connected to said motor-shaft and to said rock-arm, and a knife pivotally connected to said rock-arm.

2. A cloth-cutting machine comprising a base, a standard thereon, a motor mounted on said standard in alignment therewith, a rock-arm mounted in the plane of the motor-

shaft, a link universally connected to said motor-shaft and to said rock-arm, and a knife pivotally connected to said rock-arm.

3. A reciprocating cutting-machine comprising a standard having a knife-guide therein, a motor mounted on said standard, a rock-arm pivotally mounted on said standard, a knife pivotally connected to said rock-arm, and a link universally connected to the motor-shaft and to said rock-arm.

4. A reciprocating cutting-machine comprising a standard having a knife-guide

therein, a motor mounted on said standard, a rock-arm pivotally mounted on said standard, a knife pivotally connected to said rock-arm, and a link connected by ball-and-socket joints to the motor-shaft and to said rock-arm. 15

Signed at St. Louis, Missouri, this 9th day of August, 1906.

JOHN B. GURY.

Witnesses:

JAMES A. CARR,
J. B. MEGOWN.