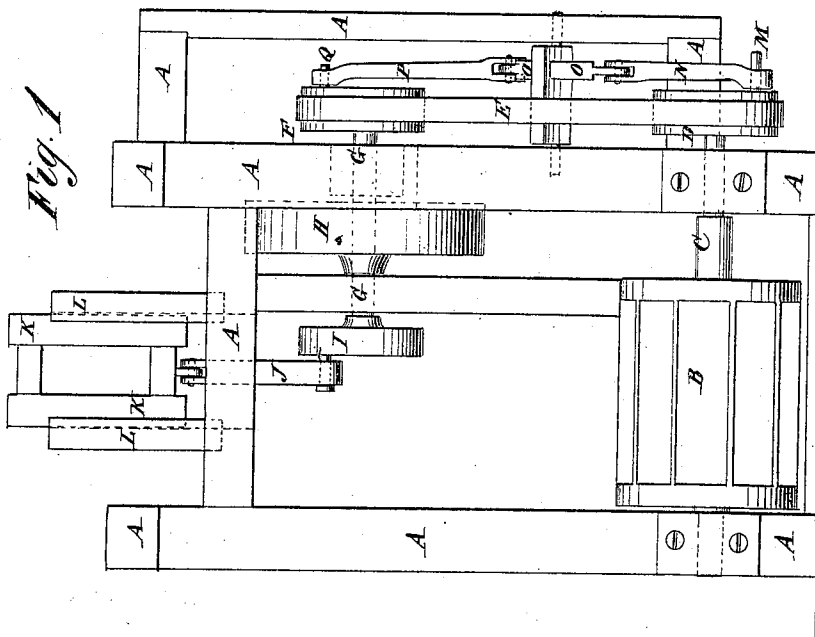
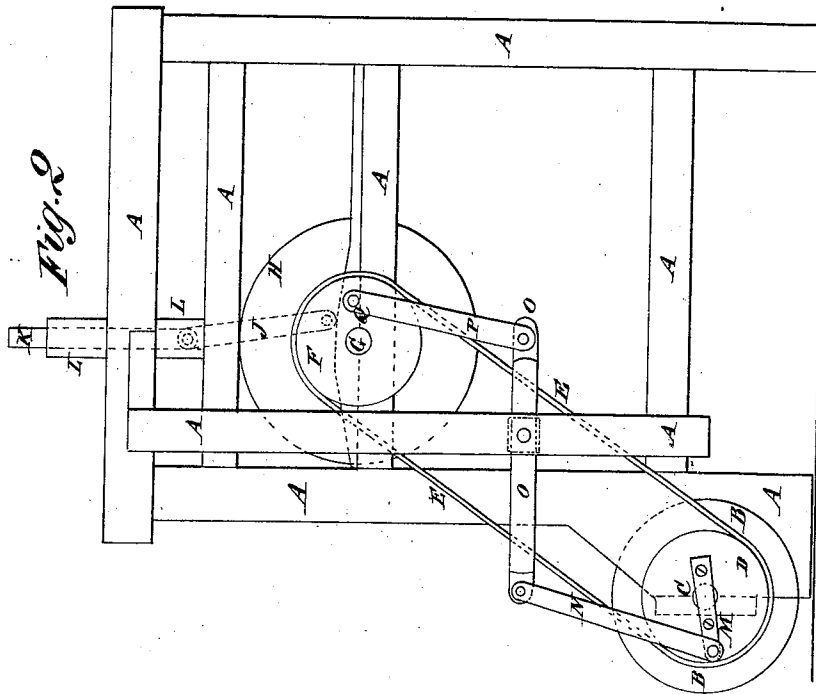


E. LESLIE.
MECHANICAL-MOVEMENT.

No. 170,280.

Patented Nov. 23, 1875.



WITNESSES:

A. W. Almqvist
Alex. F. Roberts

INVENTOR:

E. Leslie
mnw

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ELLISON LESLIE, OF BROWN'S CROSS-ROADS, KENTUCKY, ASSIGNOR TO
HIMSELF AND GEORGE W. HUNT, OF SAME PLACE.

IMPROVEMENT IN MECHANICAL MOVEMENTS.

Specification forming part of Letters Patent No. **170,280**, dated November 23, 1875; application filed
September 11, 1875.

To all whom it may concern:

Be it known that I, ELLISON LESLIE, of Brown's Cross-Roads, in the county of Clinton and State of Kentucky, have invented a new and useful Improvement in Mechanical Movement, of which the following is a specification:

In the accompanying drawing, Figure 1 is a front view of my device, shown as applied to a saw-mill. Fig. 2 is a side view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved device for transmitting motion from the power to the machinery to be driven, by means of which the effectiveness of the power may be greatly increased, and which shall be simple in construction and convenient in use.

The invention consists in the combination of the cranks, the pitmen, and the lever with the pulleys and the belt, that connect the power-shaft with the working shaft, as hereinafter fully described.

I will describe the device as applied to a saw-mill driven by water; but the device is equally applicable to any other machinery driven by any other power.

A represents the frame of the saw-mill. B is the water-wheel, to shaft C of which is attached a pulley, D. Around the pulley D passes a belt, E, which also passes around a pulley, F, attached to the shaft G. The shaft G revolves in bearings attached to the frame A, and to it is attached the balance-wheel H. To the shaft G is attached a pulley or crank wheel, I, or a crank, to which is pivoted the

end of the pitman J, the other end of which is pivoted to the saw-sash K, that works in the ways L.

The machinery may be driven by a belt passing around the pulley I or balance-wheel H. As thus far described there is nothing new.

To the pulley D is attached a crank, M, to the crank-pin of which is pivoted the end of a pitman, N. The other end of the pitman N is pivoted to the end of the long arm of a lever, O, which is pivoted to the frame A, or to a short rock-shaft pivoted to said frame. To the end of the short arm of the lever O is pivoted the end of a pitman, P, the other end of which is pivoted to the crank or crank-pin Q attached to the pulley F.

By this construction the cranks, pitmen, and lever will prevent any loss of motion from the slipping of the belt, and the belt will prevent any loss of motion from the dead-points of the cranks, so that the power will be transmitted more perfectly, and will be much more effective than when transmitted in the usual way.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the cranks M Q, the pitmen N P, and the lever O, with the pulleys D F and belt E, that connect the power-shaft with the working shaft, substantially as herein shown and described.

ELLISON LESLIE.

Witnesses:

J. M. BRISTOW,
C. P. GRAY.