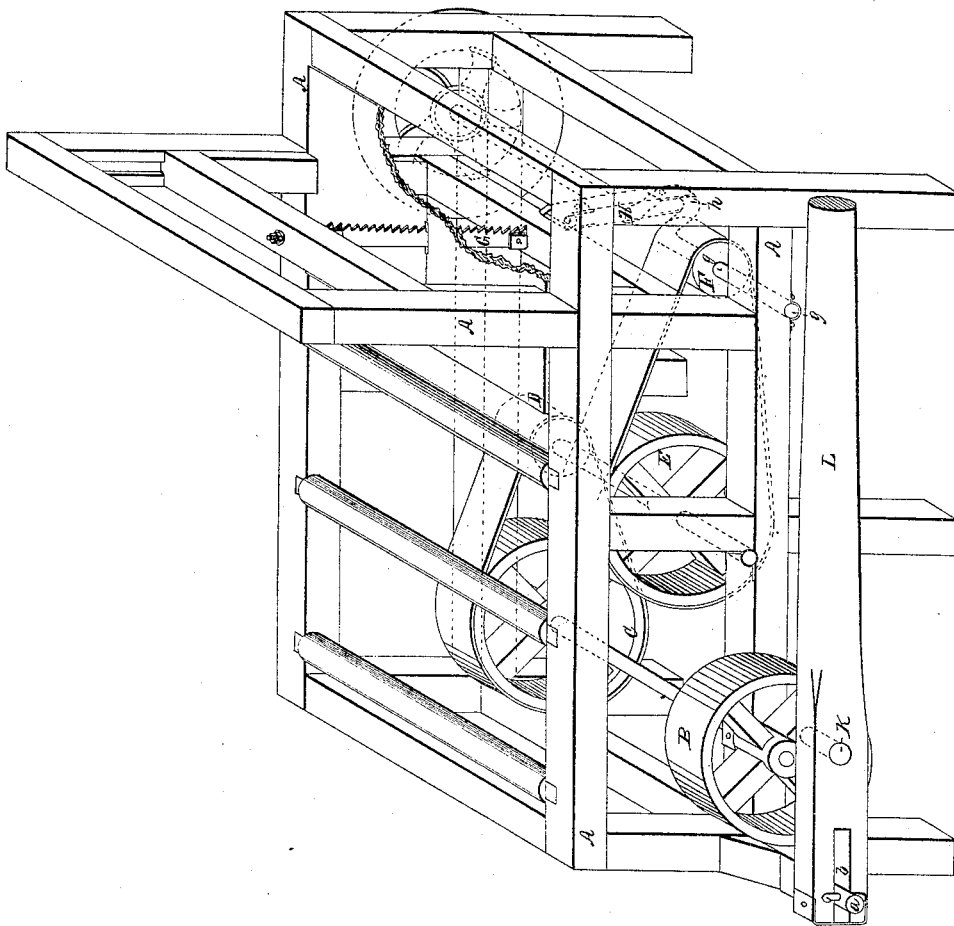


A. West,

Converting Motion.

N^o 4,575.

Patented Aug. 22, 1865.



Witnesses.

D. A. McKean
Wm. Branch

Inventor.

A. West
by his attys
Edgus & Lohr

UNITED STATES PATENT OFFICE.

AMOS WEST, OF PONTIAC, MICHIGAN.

IMPROVEMENT IN WORKING-POWER FOR SAWING.

Specification forming part of Letters Patent No. **49,575**, dated August 22, 1865.

To all whom it may concern:

Be it known that I, AMOS WEST, of Pontiac, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Working-Power Applicable to Sawing and Other Machinery; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents a perspective view of a sawing-machine to which my working-power has been applied.

To enable others skilled in the art to make and use my improvement, I will proceed to describe its construction and operation.

A represents the main frame of the machine. B represents the driving-pulley or balance-wheel, and C, D, E, and F represent belt-pulleys, which operate the crank-shaft *g* of the machine, which latter operates the saw *G* by means of the crank *h* and pitman *H*. K represents a crank-pin, which is secured to the driving-pulley B, and L represents a lever, which is pivoted to said crank-pin. The short arm of the lever L has its bearing on a stationary pin, *a*, which is secured to the main frame of the machine, and said short arm is provided with a slot, *b*, so as to permit the lever L sufficient play in a horizontal direction when it is operated.

In operating my working-power the long arm of the lever L is raised and depressed alternately, which motion results in a rotary

motion of the wheel B and its crank-pin K, and the necessary horizontal motion caused by the revolution of the crank-pin is obtained by the sliding of the short arm of lever L on the stationary pin *a*, which passes through the slot *b* of said lever.

Thus it will be seen that by this arrangement the power necessary to operate the machine can be greatly reduced by using a lever L of the desired length. This cannot be done in using an ordinary crank, as such a crank becomes very difficult to operate when it exceeds a certain length.

Another advantage in my arrangement is that when the lever L is operated by hand the raising and depressing of the same is not as fatiguing to the operator as the turning of a crank, where the entire body has to follow more or less the rotary motion of the crank-handle; but the operator can stand erect, and by using a lever of a suitable length he can work the machine with facility.

Having thus fully described the nature of my invention, what I claim herein as new, and desire to secure by Letters Patent, is—

In combination with the crank-pin K, the lever L, pivoted to said crank-pin and supported on the stationary pin *a*, which passes through the slot *b* of said lever, as and for the purposes specified.

AMOS WEST.

Witnesses:

RUDOLPH DISSENBERT,
JULIUS FECHT.