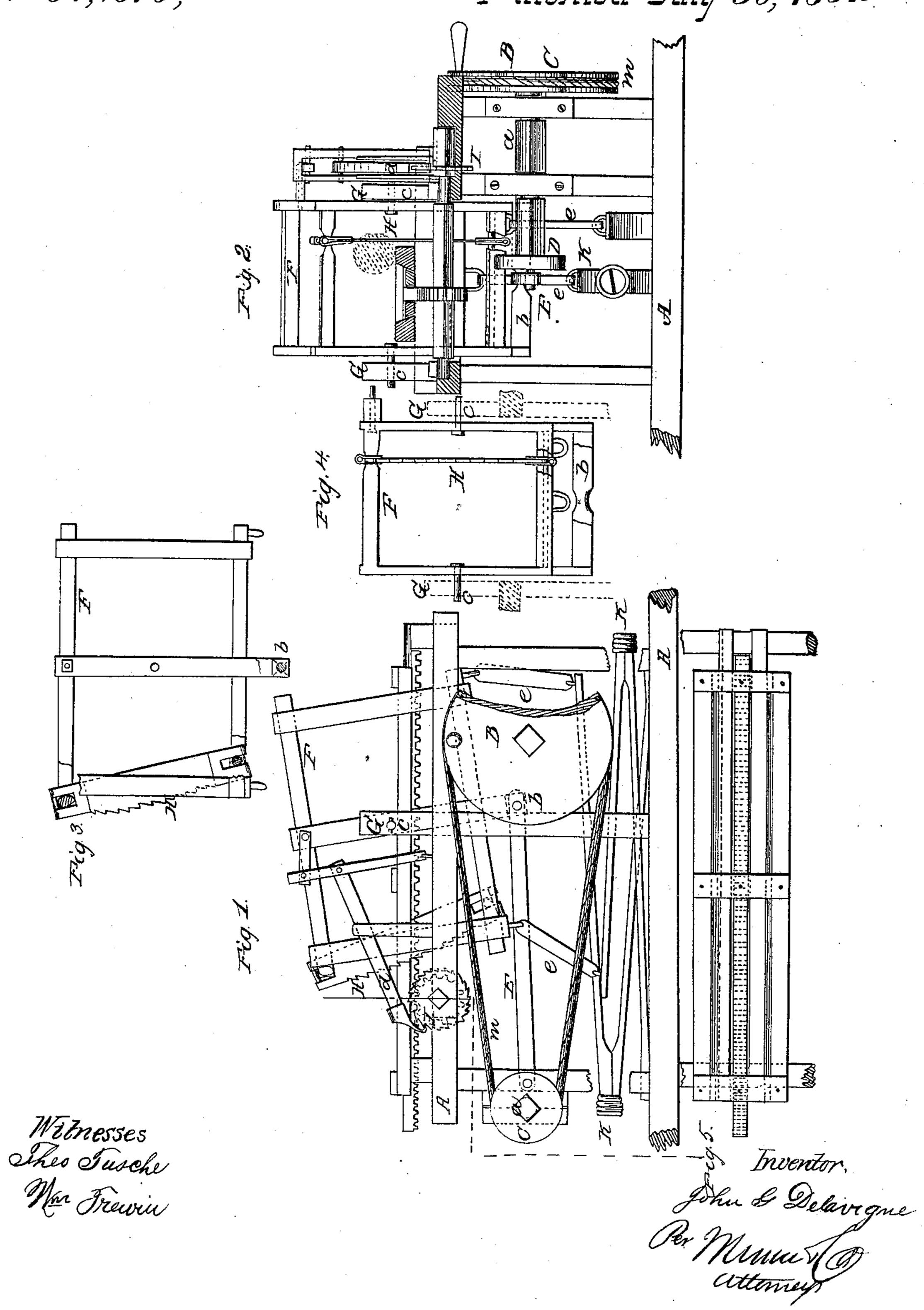
J. G. Belavigne,

Reciprocating Sam Mill,

Nº 67,275, Patented July 30, 1867.



Anited States Patent Pffice.

JOHN C. DELAVIGNE, OF NEW ORLEANS, LOUISIANA.

Letters Patent No. 07,275, dated July 30, 1867.

IMPROVEMENT IN SAW-MILLS.

The Schedule referred to in these Xetters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, John C. Delavigne, of New Orleans, parish of Orleans, Louisiana, have invented a new and useful Improvement in Saw-Mill; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved walking-beam saw-mill.

Figure 2 is a transverse sectional view of the same, taken in the line x x, fig. 1.

Figure 3 is a detached side view of the walking-beam and saw.

Figure 4 is an end view of the same detail; and

Figure 5 a top view of the saw-mill carriage, detached.

Similar letters of reference indicate corresponding parts.

This invention relates to an improvement in a reciprocating saw-mill, and consists in connecting the saw or saws with a walking-beam to produce their motion, in connection with springs, which are depressed by each end of the walking-beam alternately, and react to aid in lifting each end alternately. The "saw-gate" of ordinary saw-mills is thus dispensed with advantageously, resulting in a great economy of power; steadier motion; freedom from jar and shaking common to saw-mills and heating of the gate-slides; and facility for connecting directly the piston of a steam engine or other power.

A represents the frame of a saw-mill of ordinary construction, as regards all its parts except those of my invention, and none, therefore, are referred to further than is necessary for the explanation of my improvements. B represents a large driving-pulley, connected by belt m with a small pulley, C, on the crank-shaft a, which may carry a fly-wheel. The crank-disk D on the other side of the shaft a is connected by a pitman, E, with the lower cross-bar b of a walking-beam frame, E, suspended by pivots e, on both sides of the mill-frame, to beam E. On one end of the walking-beam frame E is affixed the saw E, and connected with it also is the pawl e, working in the ratchet-wheel E, to give the feed-motion. Each end of the walking-beam frame E is connected below, by link-bars e e, with long spring-boards E, which are depressed alternately as the ends of the walking-beam frame descend, and by their reacting power assist the reciprocating motion upwards, and downwards at the turn, and steady the working of the saw.

Instead of a pulley and crank connection, the piston of a steam engine may be directly attached to the walking-beam of frame, and various modifications of the machinery may be adapted to operate the walking-beam frame.

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

1. The pivoted walking-beam frame F, having at one end the saw H, its lower cross-bar b connected to one end of pitman E, whose outer end is pivoted concentrically to disk D on shaft a, when all are constructed, arranged, and operating as herein set forth, for the purpose specified.

2. The spring-boards K K, pivoted by link-bars e e to each end of the walking-beam frame F, as herein set forth, for the purpose specified.

JNO. C. DELAVIGNE.

Witnesses:

C. W. CULBERTSON,

G. DE FERIET.