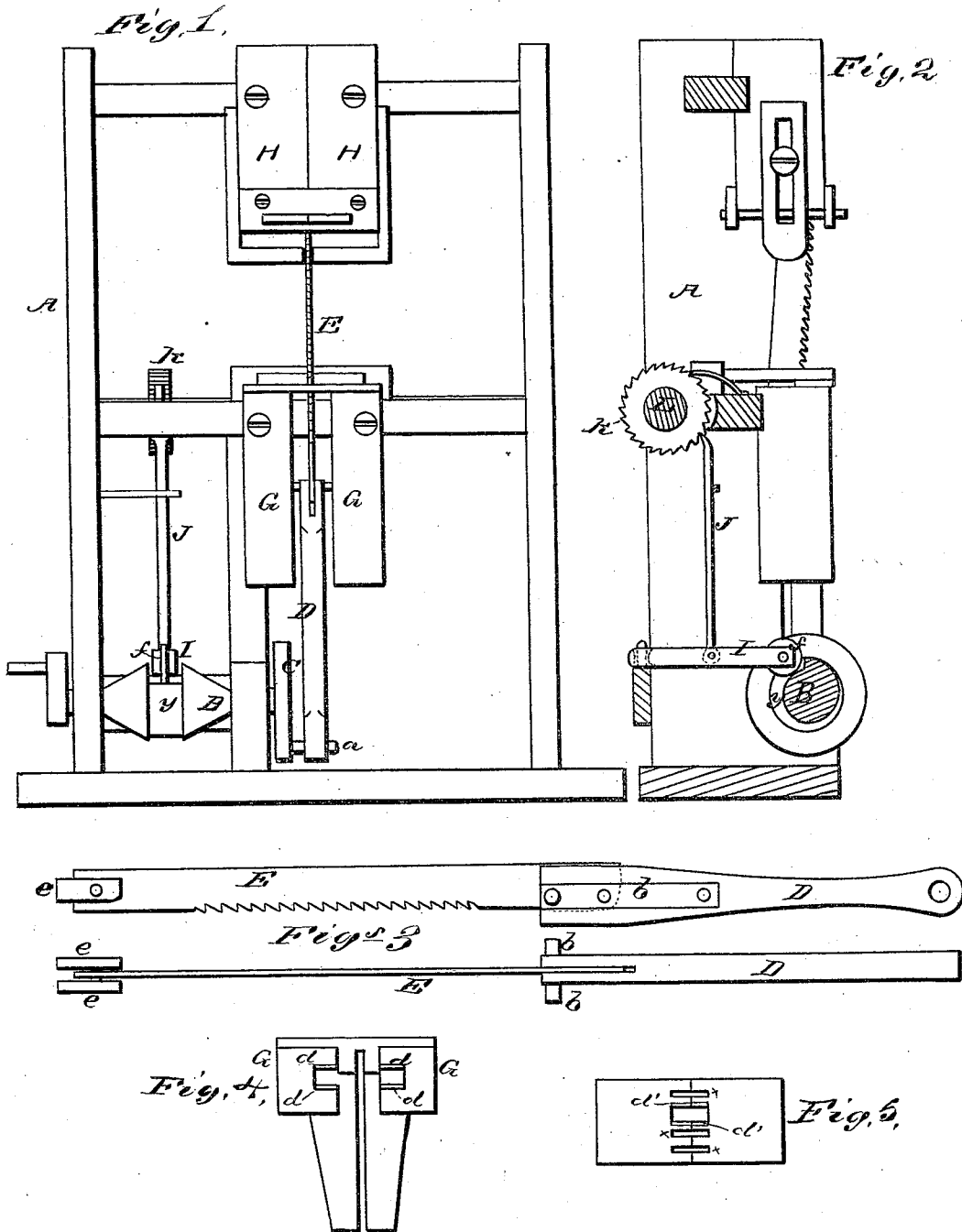


W. A. STOLTZ.

SAW-MILL.

No. 179,368.

Patented June 27, 1876.



WITNESSES
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WALTER A. STOLTZ, OF SEDGE GARDEN, NORTH CAROLINA.

IMPROVEMENT IN SAW-MILLS.

Specification forming part of Letters Patent No. **179,368**, dated June 27, 1876; application filed April 29, 1876.

To all whom it may concern :

Be it known that I, WALTER A. STOLTZ, of Sedge Garden, in the county of Forsyth and State of North Carolina, have invented a new and valuable Improvement in Saw-Mills; 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 annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front elevation of my saw-mill, and Fig. 2 is a vertical sectional view thereof. Figs. 3, 4, and 5 are detail views of the same.

My invention relates to saw-mills; and it consists in certain improvements thereon, as will be hereinafter more fully set forth.

In the annexed drawings, A represents part of the frame-work of a saw-mill. B is the main shaft, provided at its inner end with a disk, C, having wrist-pin *a*, upon which the pitman D is placed. This pitman is made of wood, and has the saw inserted in its upper end, the saw E being secured by a bolt passing directly through the pitman and its irons *b b*, which irons form two right angles at the top of the pitman. These irons run in grooved blocks G, the grooves in said blocks being lined front and rear with cast-steel, as shown at *d*.

The saw, being fastened below the angle, receives from the crank a backward movement in going up, which prevents friction, as well as protects the saw from wearing dull by an upward drag against the timber.

H H are guide-blocks, which serve to secure the upper end of the saw E in the desired position by means of two small slats, *e e*, of steel, fastened to the upper end of the saw, and allowed to run in a groove in the guide-blocks, which groove is also lined, front and rear, with steel slats *d'*. In these blocks are other grooves *x*, for the escape of sawdust, which otherwise would gather, and produce friction and heat. In the main shaft B is cut a track, *y*, of oval form, so as to cause a lever, I, to rise and fall at each revolution of the main wheel, the end of said lever having a wheel, *f*, running on said track. To the lever I is attached a spur, J, which rises and falls therewith, and revolves a ratchet-wheel, K, on the roller L, thereby moving the carriage at any desired rate of speed. By these improvements a vertical saw is relieved of a vast amount of weight and friction common to saws of this kind, and a large saving in power is thereby effected.

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

The combination of the shaft B, with eccentric track *y*, the lever I, with roller *f*, the spur J, ratchet-wheel K, and roller L, all substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WALTER ALEXANDER STOLTZ.

Witnesses:

H. D. POINDEXTER,
JOHN W. KING.