H. GAWLEY.

SET-GEAR FOR SAW-MILLS.

No. 192,576. Patented July 3, 1877.

Fig. 1.

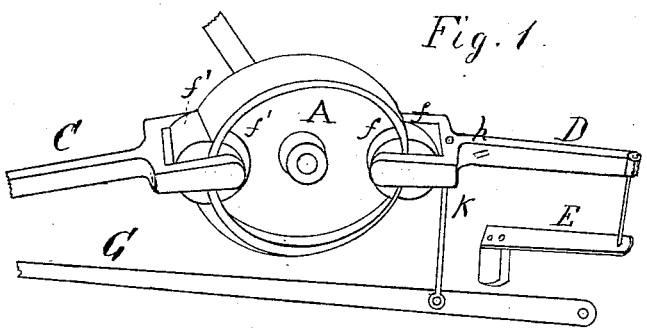


Fig. 2.

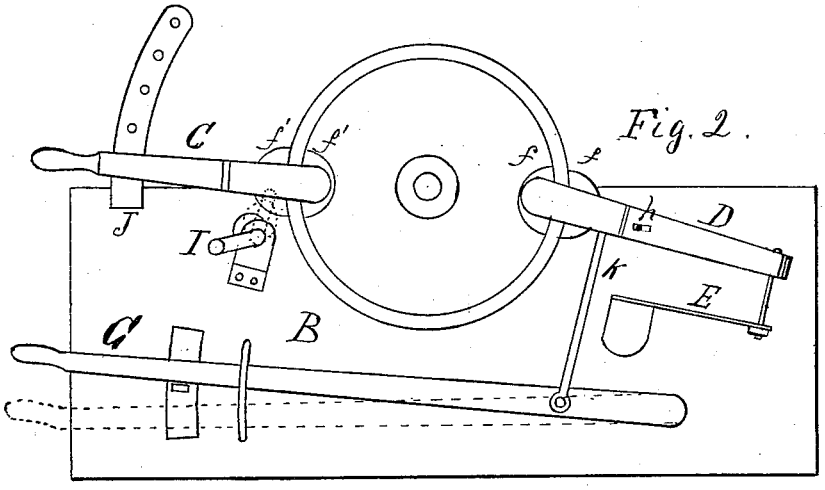
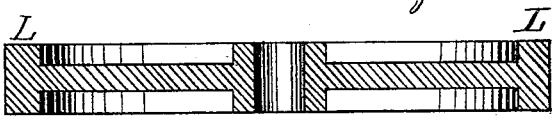


Fig. 3.



Witnesses

James Dalzarno

James Kinnealy

Inventor

Hector Gawley.

UNITED STATES PATENT OFFICE.

HECTOR GAWLEY, OF MAIDSTONE TOWNSHIP, ESSEX COUNTY, ONTARIO, CANADA.

IMPROVEMENT IN SET-GEARS FOR SAW-MILLS.

Specification forming part of Letters Patent No. **192,576**, dated July 3, 1877; application filed February 13, 1877.

To all whom it may concern:

Be it known that I, HECTOR GAWLEY, of the township of Maidstone, in the county of Essex, in the Province of Ontario, Canada, have invented a Set-Gear for Saw-Mills, of which the following is a specification:

The object of my invention is to set the log to be sawed in a circular-saw mill forward to the saw the required distance for different thicknesses of lumber more accurately than can be done by the common device of a ratchet and pawl, and to hold the log in the position to which it is set by means of levers C and D, friction-wheel A, blocks *f' f' f f*, and spring E, as shown in the perspective view, Figure 1, of the accompanying drawing; and also for releasing the friction-wheel A by means of lever G and cam I, Fig. 2, to allow it to be rotated freely in any direction when required to put a log on the blocks.

The wheel A is formed of a web and rim or flange at its periphery, as shown in Fig. 3 of the accompanying drawing, which is a section of wheel. The blocks *f' f'* and *f f* are made to fit accurately the outer and inner periphery of rim L, and are attached in the forked ends of levers C and D by pins or bolts, on which they move freely, and when the levers C and D are in line with the center of wheel A there is about a sixteenth of an inch play, so that when a pressure is brought to bear on the outer end of levers C or D the blocks *f' f'* and *f f* hug the rim L of wheel A, and, if the pressure is continued, rotate it, and with it the shaft on which it is fastened, carrying the boot and log forward to the saw, the distance being determined by the length of arc through which the lever travels, and which may be regulated by a quadrant and pin, or any convenient device. The lever D has its fulcrum at *h*, and by means of spring E holds wheel A in the position in which it is placed by the moving of lever C, except when it is required to release it, which is done by depressing lever G to the position indicated by dotted lines in Fig. 2, and throwing up cam I, so as to slightly raise the inner or forked end of lever C and blocks *f' f'*, when the wheel A may be freely rotated in either direction.

I claim as my invention—

1. The combination of wheel A, levers C and D, blocks *f' f' f f*, and spring E, for the purpose of setting the log toward the saw in saw-mills, and for holding the same in position when so set forward.

2. The combination of lever G, cam I, and connection K, for releasing the wheel A, so that it may be rotated in either direction, as required.

HECTOR GAWLEY.

Witnesses:

JAMES DALGARNO,

JAMES KIMMERLY.