T. W. CARMICHAEL.

Improvement in Sawing-Machines.

No. 129,211. Patented July 16, 1872.

Fig. 1.

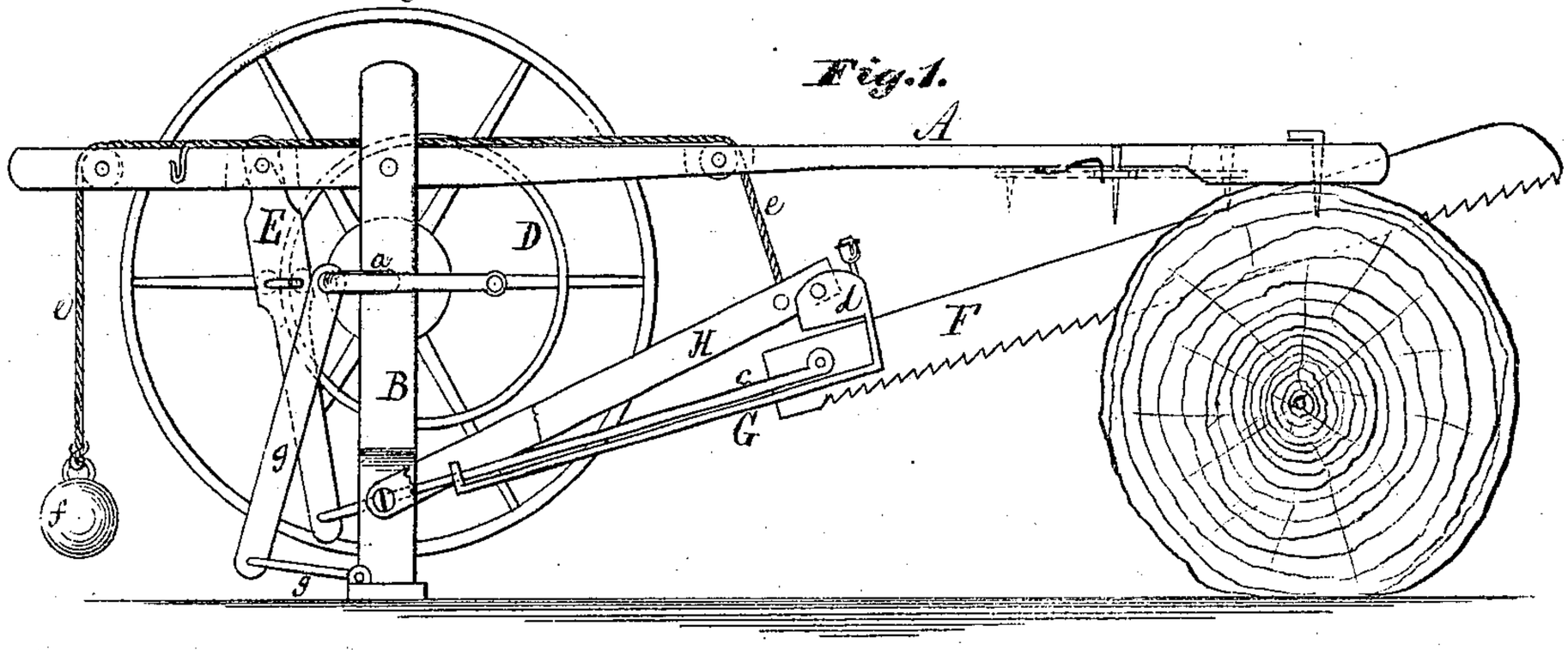


Fig. 2.

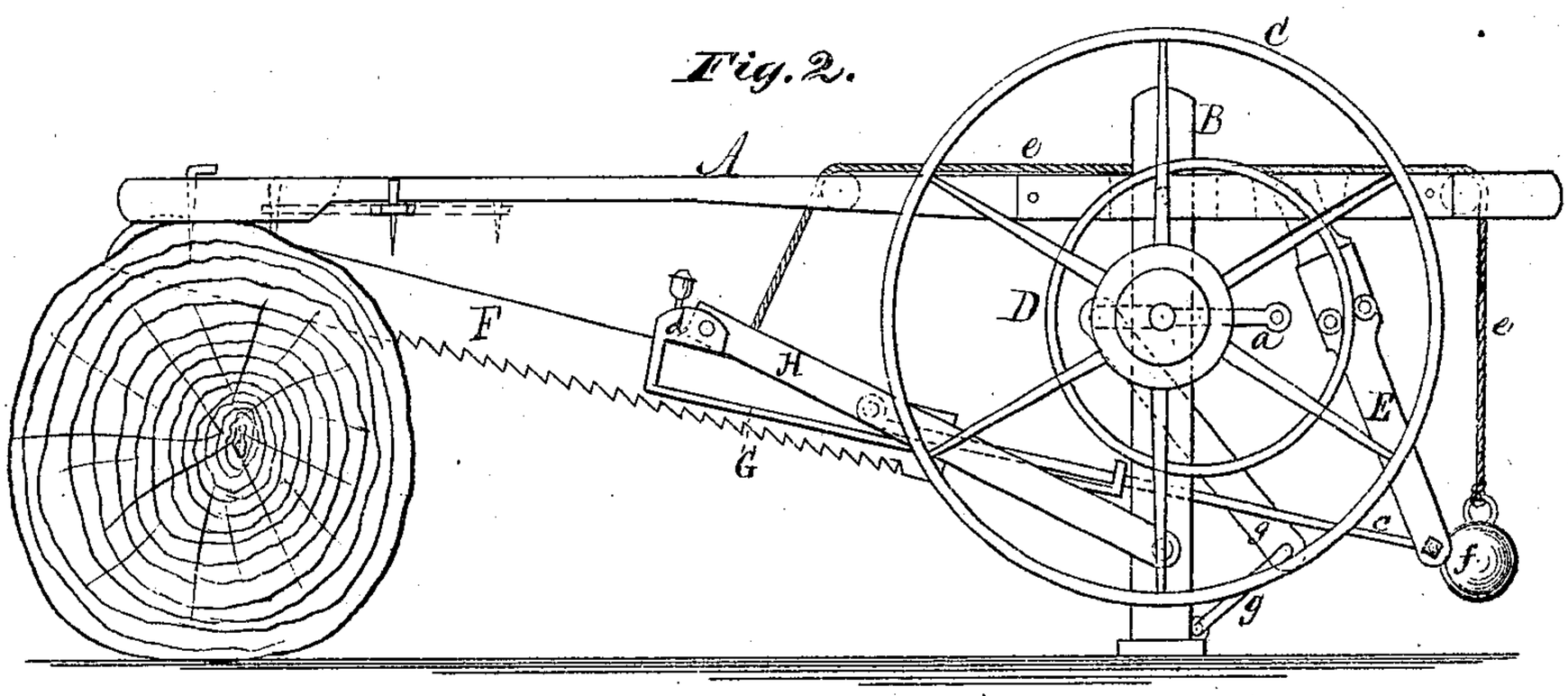
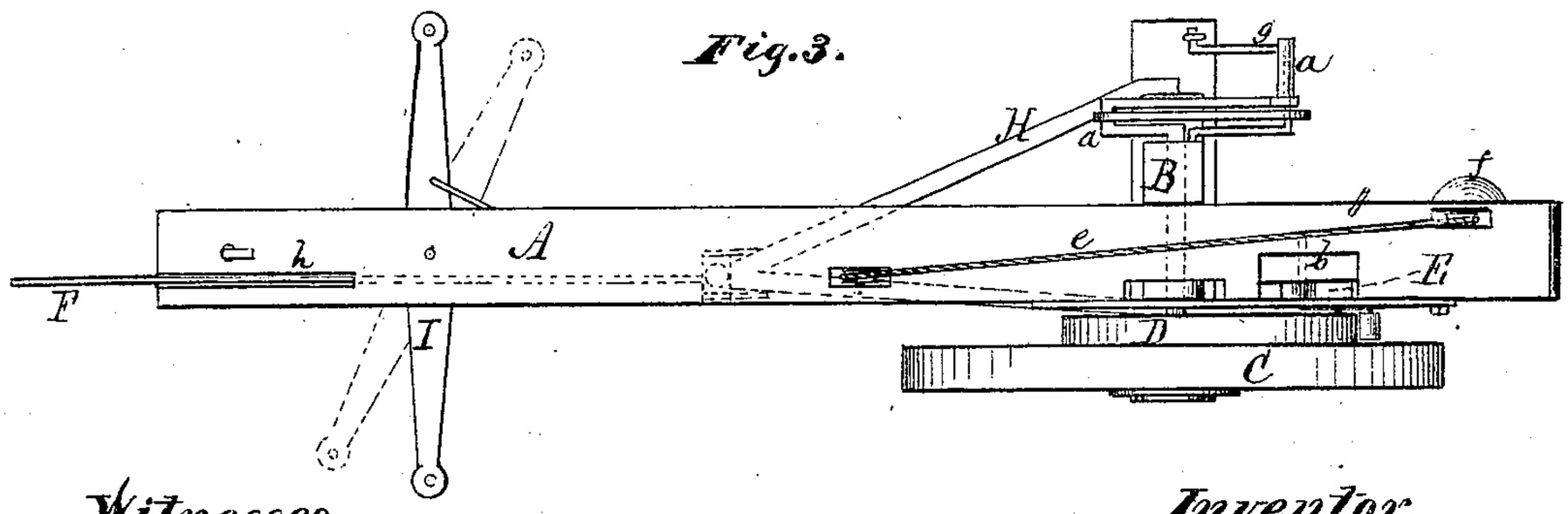


Fig. 3.



Witnesses.
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129,211

UNITED STATES PATENT OFFICE.

THOMAS W. CARMICHAEL, OF ROCKVILLE, INDIANA.

IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. 129,211, dated July 16, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, THOMAS W. CARMICHAEL, of Rockville, in the county of Parke and State of Indiana, have invented a new and useful Improved Sawing-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, sufficient to enable those skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing making part of this specification, and to the letters and figures marked thereon.

My invention relates to certain improvements in that class of sawing-machines known as drag-saws, and is used for sawing up logs and felled trees; and, on account of the means I provide for its transportation, I have denominated it "The Velocipede Drag-Saw." It consists of a long beam supported on a stand, and hinged thereto, and to the stand or framework the operating mechanism is affixed as follows: A driving-wheel and an eccentric rim are attached to a crank-shaft which passes through the standard. The eccentric rim engages with a lever suspended from the beam, and this lever is connected with the saw-blade by a pitman. The saw works in a slotted guide-plate, which is attached to a frame hinged to the standard, and which is raised and lowered by means of a cord attached thereto and passing over pulleys in the beam to the rear of the machine, where a weight is secured to it. Motion is imparted to the wheel by a crank-handle or treadle, as shown, or by any other suitable device.

In the accompanying drawing, Figures 1 and 2 are elevations of opposite sides of the machine. Fig. 3 is a top view of the same.

A represents the beam, to which is hinged the standard B. They are made of wood, and of any desired lengths, the standard being situated near the rear end of the beam, as shown, and provided with a flat base or pedestal. A shaft bearing the crank-handle *a* passes through the standard B, and upon said shaft is a fly-wheel, C, to which (or upon the shaft) is secured eccentrically a rim, D, or, if desired, the two may be cast together. The rim D engages with a lever, E, by means of two rollers thereon, said lever being hinged in the beam A, in such a manner as to allow it to swing freely when moved by the eccentric rim. This lever is thrown in and out of contact with the rim by inserting and removing a block, *b*, in the recess in the beam, wherein the lever is hung, as hereinafter more particularly described. F is the saw-blade, connected with the lever E by a pitman-rod, *c*, and working in a slotted guide-plate, G. This plate is secured to a swinging frame, H, by means of its head *d*, in which is a lubricator for supplying the saw with oil as it passes through the slot in the plate G. The rod *c* passes through an opening in the opposite end of the plate, and thus, in connection with the frame H, supports it. This frame H is hinged to the standard B, and the raising and lowering of the saw, as it becomes necessary, is effected by means of a cord, *e*, attached to the free end of the frame, and passing over pulleys in the beam A, and having a weight, *f*, attached to it. The weight of this frame and the guide-plate is sufficient to carry the saw through the log when it is cutting. Motion is applied to the saw by means of the crank-handle *a* or a treadle, *g*, or by any other suitable means, according to the kind of motive force used. The end of the beam is slotted at *h* to further guide the saw, and through this end of the beam a pin passes, which is driven into the log to be sawed to hold it in place. A cross-piece, I, is pivoted to the beam, and provided with sharp-pointed pins, which are to be used to secure the log when lying on uneven ground or on hill-sides.

To move the machine from one place to another the block *b* is removed and the lever thrown out of contact with the rim D, and the block inserted on the other side of said lever to keep it out of contact. The standard is pushed backward or forward, so as to allow the wheel C to rest on the earth. The machine can then be drawn from place to place.

The lightness, cheapness, durability, and

compactness of this machine render it very desirable to farmers and others needing such a saw.

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

The combination and arrangement of the beam A, standard B, wheel C, eccentric rim D, hinged lever E, saw F, suspended frame H, and guide G, all as herein shown and described.

The above specification of my invention signed by me this 20th day of October, 1871.

THOMAS W. CARMICHAEL.

Witnesses:

DANIEL A. PORTER,

JOHN B. DOWD.