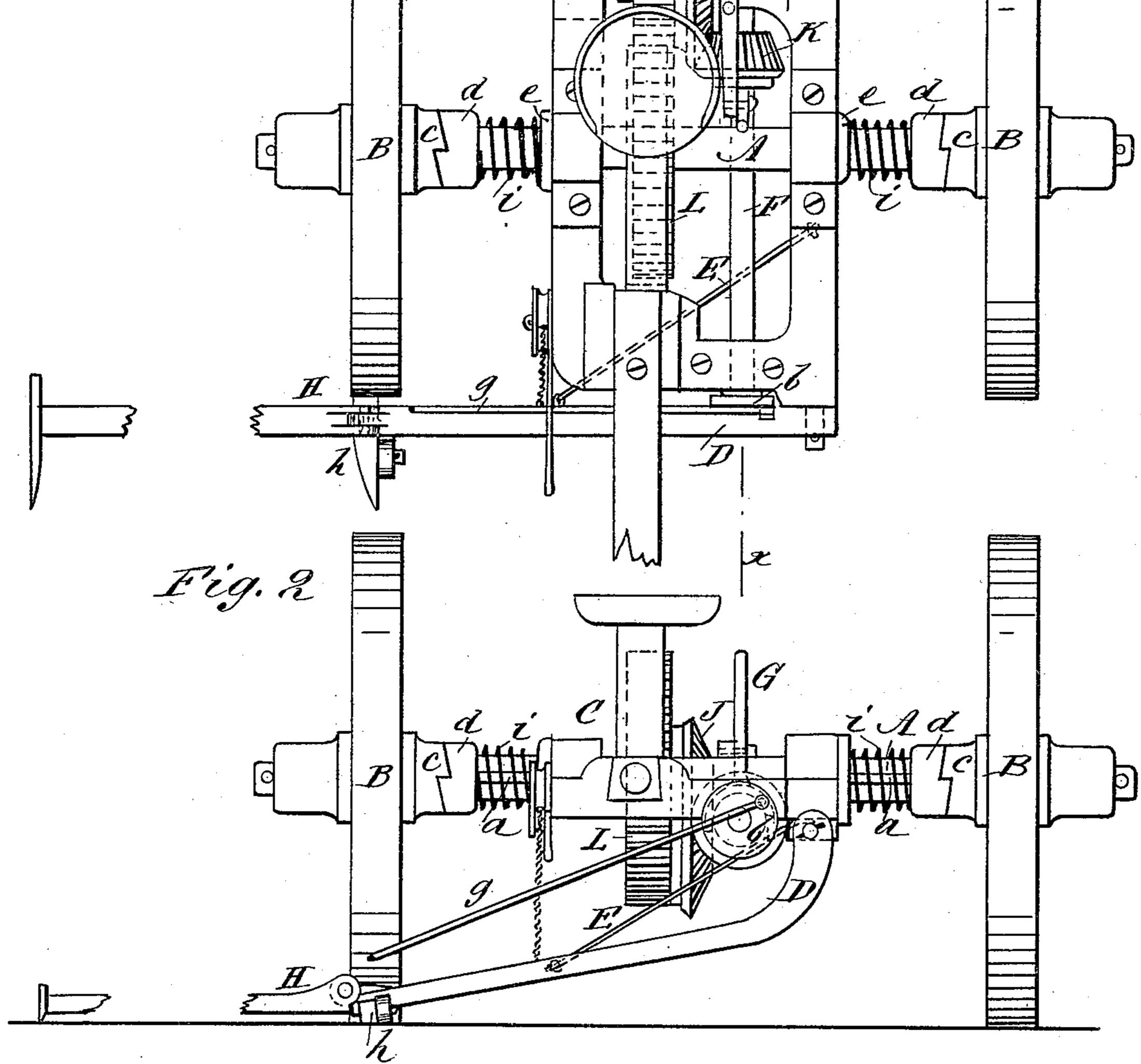
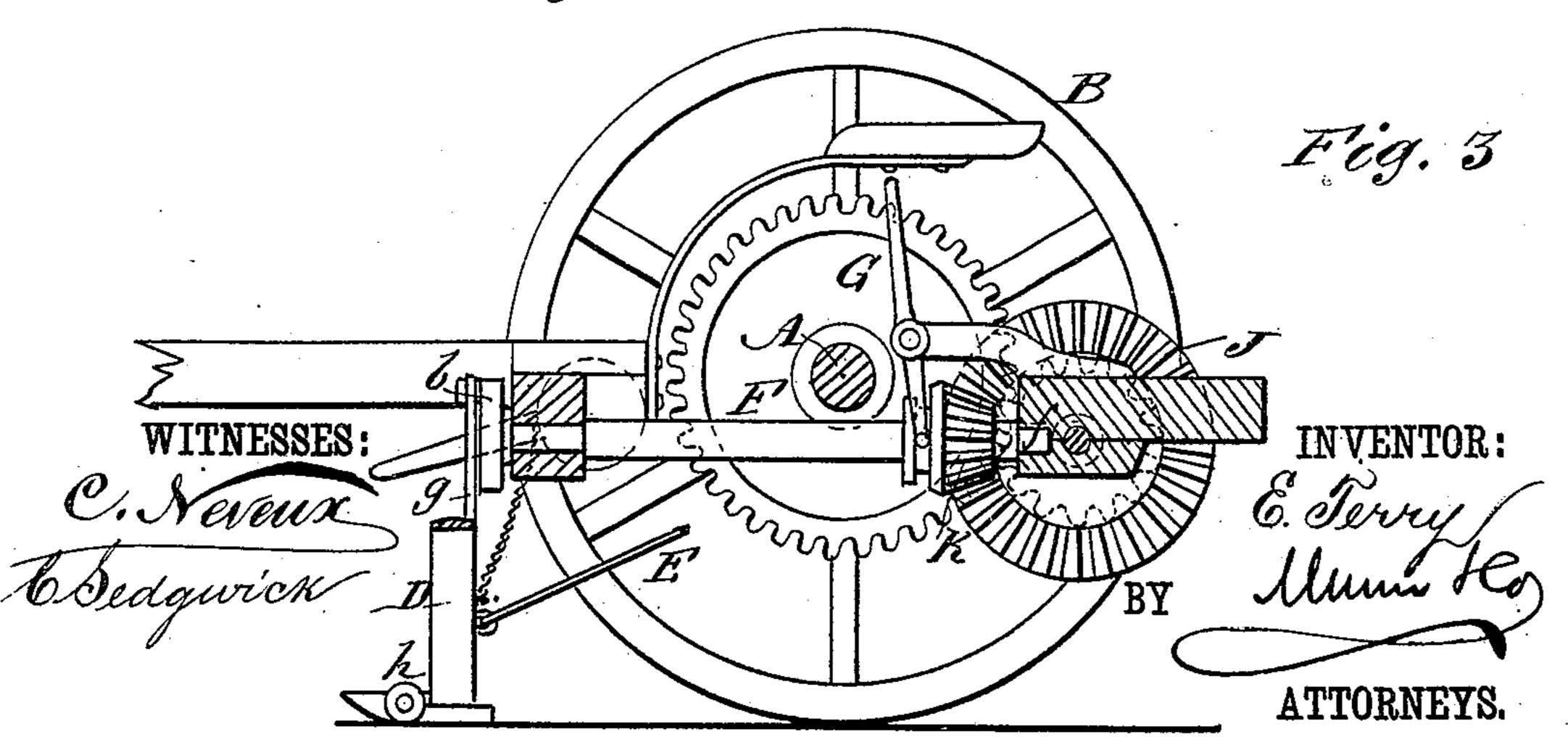
E. TERRY.

MOWING MACHINE. No. 249,116. Patented Nov. 1, 1881. Fig. 1





## United States Patent Office.

EUGENE TERRY, OF WATERBURG, NEW YORK.

## MOWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 249,116, dated November 1, 1881.

Application filed June 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, EUGENE TERRY, of Waterburg, in the county of Tompkins and State of New York, have invented certain useful Improvements in Mowing-Machines, of which the following is a specification.

My invention relates to an improved means of connecting the cutter-bar to the frame of a

mowing-machine.

In order to equalize the draft it is common to connect the cutter-bar of a mowing-machine | to the forward end of the frame, at the corner thereof farthest removed from the cutter-bar, by means of a straight, or nearly straight, coup-15 ling-arm. I have found, however, that certain objections to a straight coupling-arm may be overcome by using a curved coupling-arm and arranging the pitman-crank above the arm, so that the pitman shall work in the curve of the 20 arm. This arrangement allows the shaft of the pitman-crank to be firmly supported by its forward bearing, and at the same time protects the crank from coming in contact with any obstruction calculated to interfere with its 25 action. I also provide a brace, which is attached to the rear of the arm and to the frame near the axle, whereby a firm support is afforded to the coupling-arm without adding unnecessarily to the weight of the machine.

In the accompanying drawings, Figure 1 is a plan view of a mowing-machine embodying my improvements. Fig. 2 is a front elevation of the same; and Fig. 3 is a cross-section there-

of, taken on the line x x of Fig. 1.

Similar letters of reference indicate corre-

sponding parts.

The shaft A and the drive-wheels B B are of ordinary construction, the shaft being provided with the feathers a a and the hubs of the wheels formed with the ratchets cc. Placed upon the shaft so as to engage with the ratchets of the drive-wheels are the sliding clutch-collars d d, which are revolved with the shaft by means of the feathers a a, and are held in close contact with the ratchets of the wheels by the springs i i, which are placed upon the shaft between the said clutch-collars and the fixed collars e e.

To the forward end of the frame C, and to the left of the pitman-crank b, is hinged the coupling-bar D, which is curved downward, as shown, and is provided at the end which rests near the ground with the shoe and small wheel h, which runs upon the ground in front of the drive-wheel. Jointed to the end of this

bar is the cutter-bar H, which is provided on its under side with a shoulder, which comes against a corresponding shoulder on the end of the bar D, by which, when the bar D is raised by the hand-lever, the cutter-bar will 60 also be elevated for passing over obstacles and uneven ground. The bar D is braced from the frame of the machine by the rod E, which is linked to the rear side of the bar, and extends to the under side of the frame, as shown.

The frame of the machine is extended in rear of the shaft A, and the pitman-shaft F passes under the main shaft, and its rear end is journaled in the bearing f, formed in the frame in rear of the main shaft, as shown in Fig. 3, and 70 the beveled cog-wheel K, which is adapted to be moved on the shaft by the lever G for throwing the machine in and out of gear, is in rear of the main shaft and meshes with the beveled gear J, which is journaled also in rear of the 75 main shaft, and receives motion from the large cog-wheel Lupon the main shaft and the pinion L', formed upon the back of the beveled-gear wheel J. By this arrangement of the gearing the weight thereof, being behind the shaft, 80 counterbalances the weight of the forward part of the machine, and thus relieves the team of a great deal of weight and renders the machine of lighter draft.

It will be understood that when the bar D 85 is raised to elevate the cutting-bar to pass over obstructions, the action of the pitman g, which pitman is of more than ordinary length—viz., nearly the length of the bar D—will not be much disturbed by the change in the position 90 of the knives, but will operate smoothly and without cramping or unnecessary straining, and that the bar also serves as a guard or protection to the crank and pitman, making them less liable to be bent, broken, or otherwise injured.

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

In a mowing-machine, the combination of 100 the pitman, the coupling-arm hinged in line with the pitman-crank and curved downward, so as to extend beneath the pitman, and a brace, E, hinged to the rear of said coupling-arm and to the frame near the axle, substantially as shown and described.

EUGENE TERRY.

Witnesses:

JAMES H. Moss,

HOWARD MORGAN.