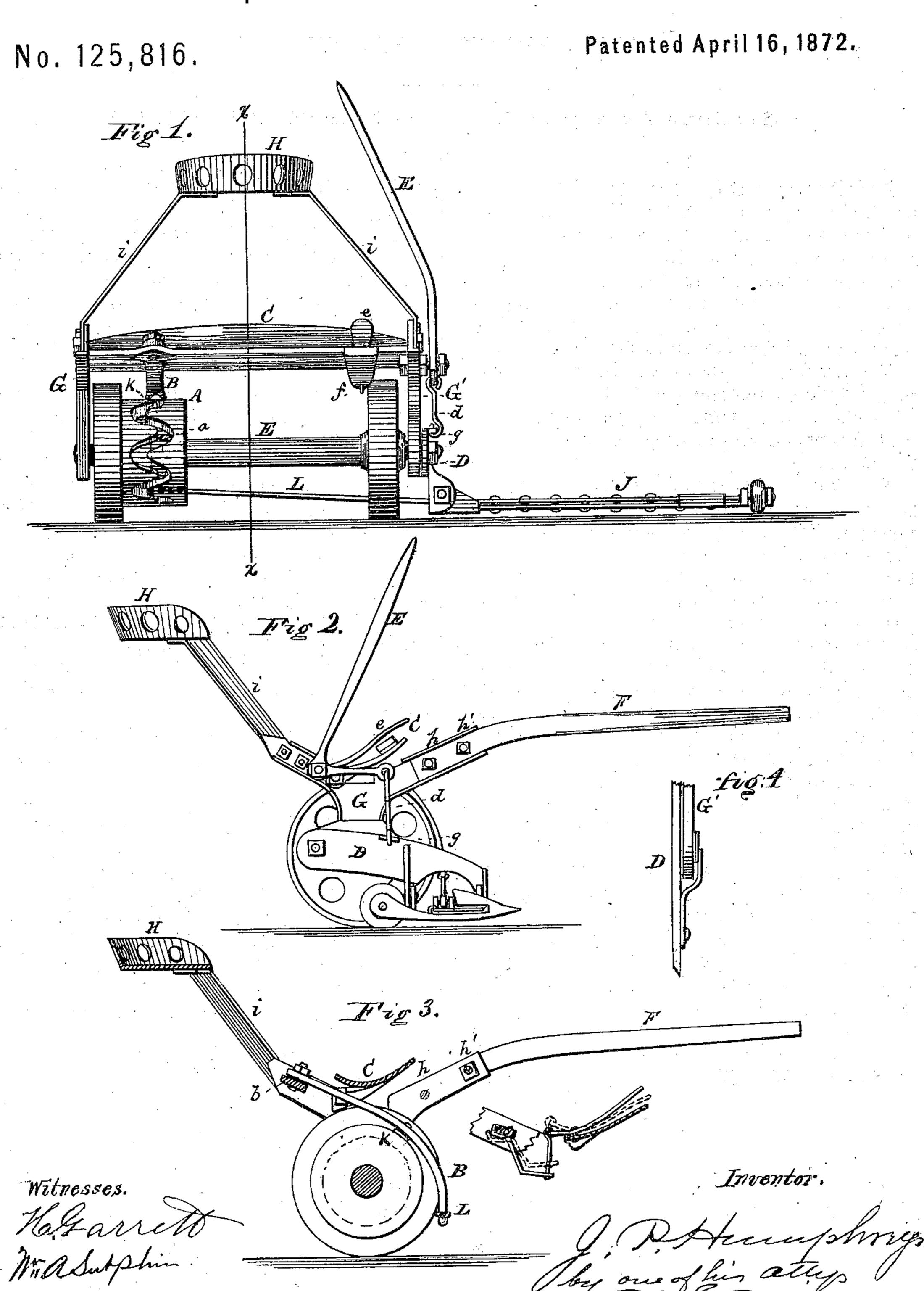
J. P. HUMPHREYS.

Improvement in Harvesters.



UNITED STATES PATENT OFFICE.

JEROME P. HUMPHREYS, OF NASHVILLE, TENNESSEE.

IMPROVEMENT IN HARVESTERS.

Specification forming part of Letters Patent No. 125,816, dated April 16, 1872.

Be it known that I, Jerome P. Humphreys, of Nashville, in the county of Davidson, State of Tennessee, have invented certain Improvements in Reaping and Mowing Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of the specification.

My invention relates to certain improvements in the construction and arrangements of parts of a mowing and reaping machine, first described and afterward pointed out in

the claim.

The frame consists of the two sides, G G', seat-supports i i', and two rods, h h'. The side pieces G G' support the machine and forms the bearings for the axle E. The rods h h'serve the double purpose of ties for the frame and for holding the thills F or pole to the front part of the carriage or side pieces G G'. The seat-supports i i' are attached to the rear ends of the sides G G', and serve as ties to the rear ends of the side pieces. The foot-board C, immediately in front of the seat-support ii, braces and gives additional strength to the carriage. D is a coupling-bar, to which the finger-bar I is attached, and is pivoted to G'. F, seen in Fig. 4, is a coupling guide lug, attached to coupling-bar D, and extending over side piece G to prevent a lateral motion. A is a camwheel, smaller in circumference and attached to and revolving with the wheel of the harvester, having a zigzag groove, a, in its periphery. K is a steel or other metal cam-roller, attached to a reciprocating lever, B, and works in groove a. The upper end of lever B works on a pivot, and is attached to rockershaft b. The lower end is connected by a joint with the pitman L, to which, on the revolving of wheel A, it imparts the necessary recipro-

cating motion. e is a foot-lever, connected with rocker-bar b at f, (an ear protruding from the bar,) and governs the lever B, cam-roller, and motion of the sickle. By pressing down on the lever e with the foot, the roller is lifted out of the groove a, and the machine thrown out of gear. By slipping this foot-lever e under the catch e, the machine is kept out of gear without further effort on the part of the operator. E is a hand-lever, connected with the fingerbar E by a simple link, E0, attached to protuberance or lug E0 on the coupling-bar E1, by means of which the finger-bar is raised over ordinary obstacles, &c., without the necessity of halting or interfering with the action of the sickle.

With my machine the driver can under any ordinary circumstances and without any danger or inconvenience to himself gear or ungear his machine, pass obstructions, &c. The peculiar form and construction of the machine and carriage, and its arrangements of motive power overcome any tendency to a side-draft, and makes it so light that it can readily be

used with one horse.

Having now described all that is necessary to make my machine known and understood, what I deem and esteem as my invention, and desire to protect by Letters Patent, is—

1. The combination of the frame G G', constructed as described, rocker-shaft b, cam-lever B, cam-wheel A, and foot-lever e, all arranged

as described and set forth.

2. The coupling-bar D provided with guiding lug g, coupling-guide F, in combination with side frame G', link d, and lever E, substantially as shown and described.

J. P. HUMPHREYS.

Witnesses:

I. N. Heims,

R. B. CASTLEMAN.