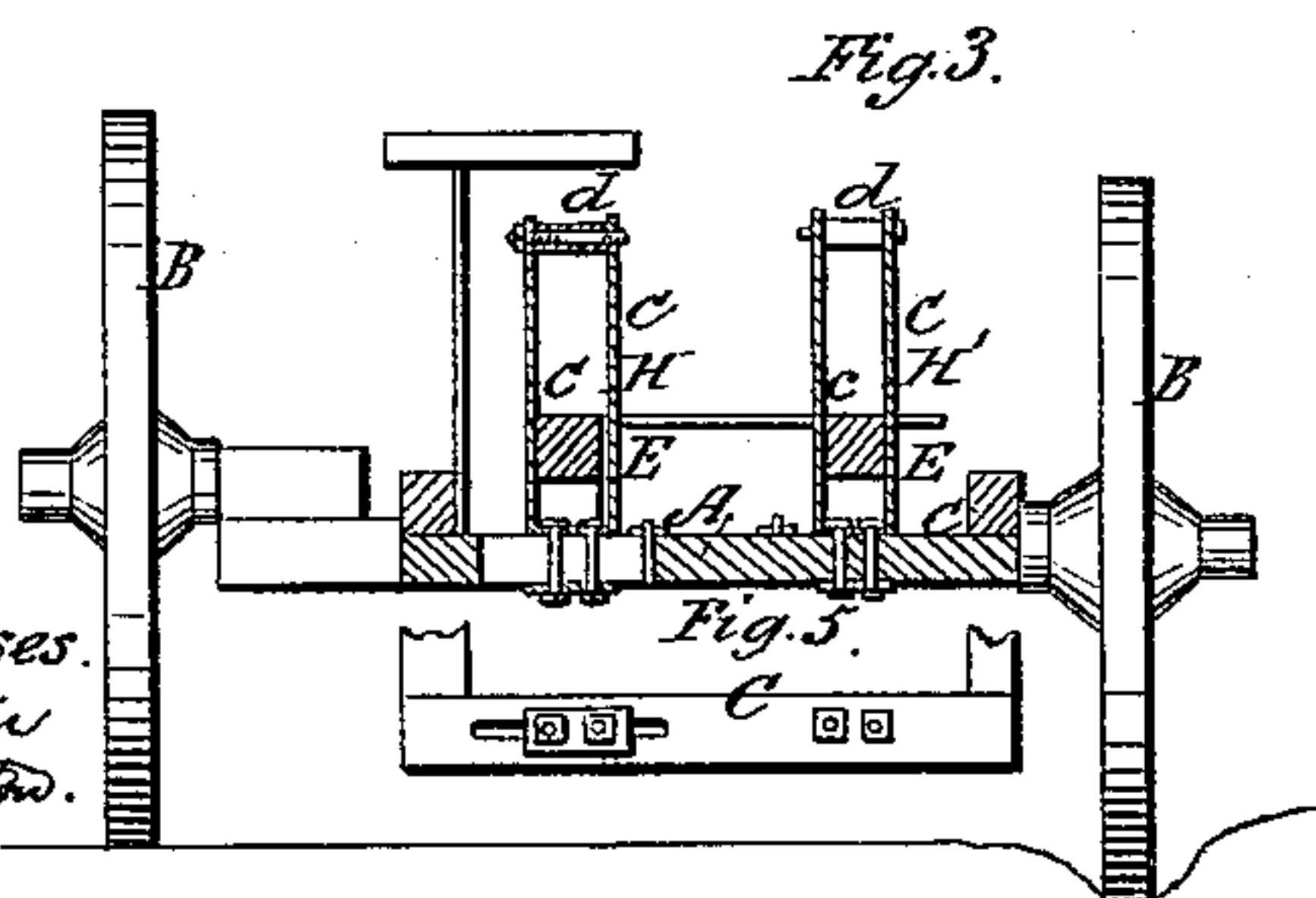
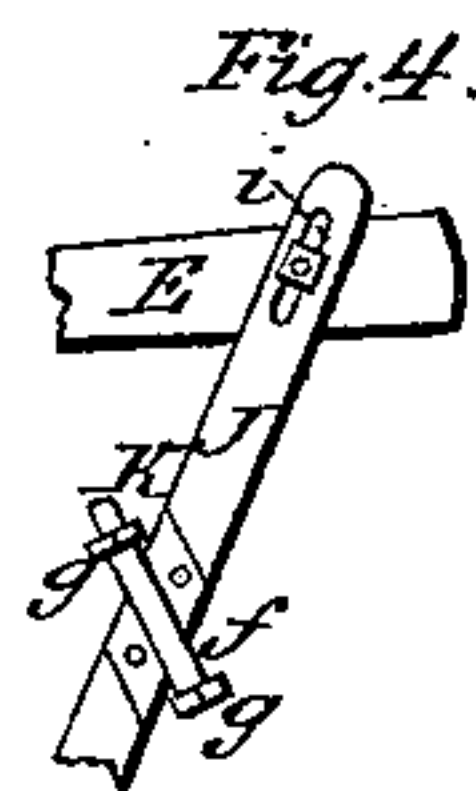
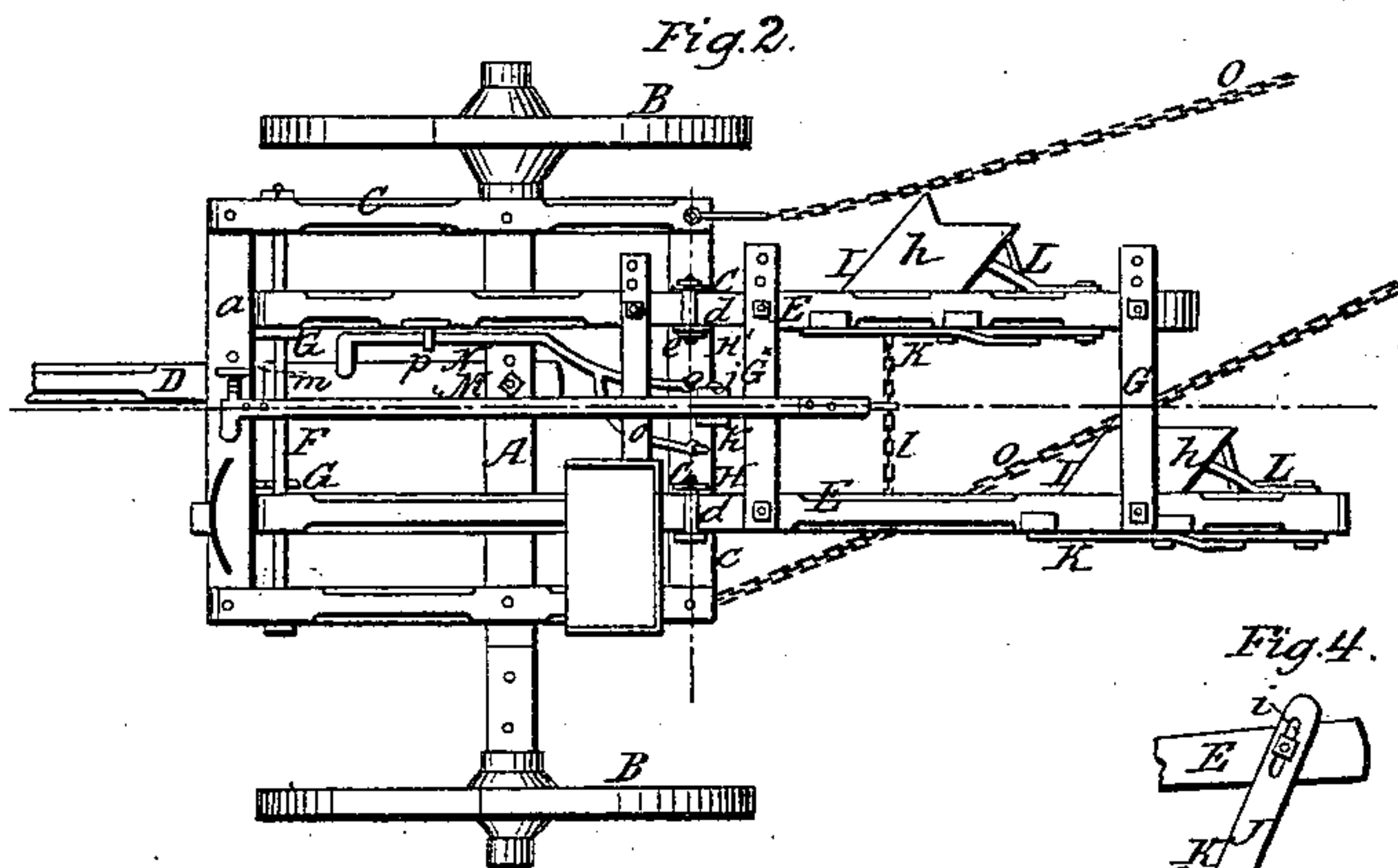
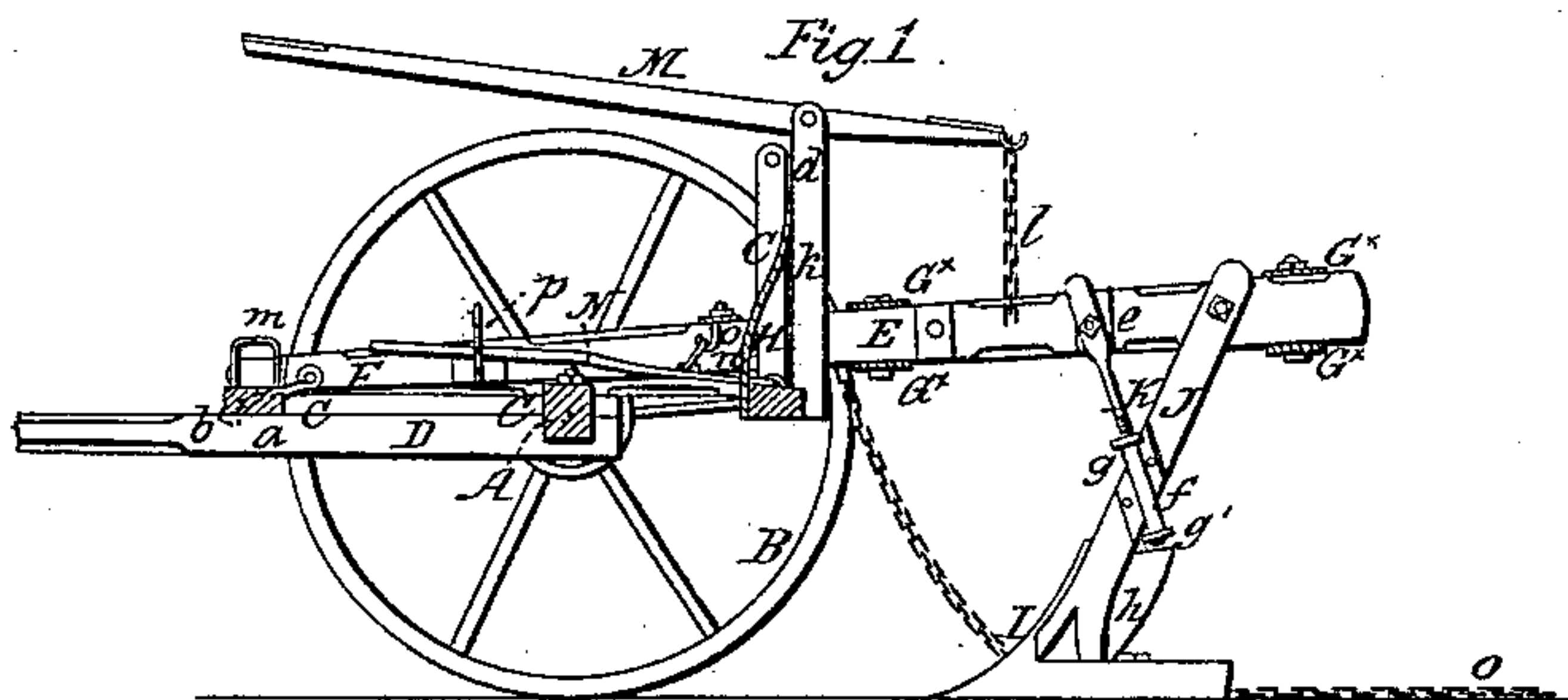


J. H. ECKERT.

Wheel-Plow.

No. 53,424.

Patented Mar. 27, 1866.



Witnesses.
W. H. Hewitt
J. H. Huntington.

Inventor.
Jno. H. Eckert.
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Att'y.

UNITED STATES PATENT OFFICE.

JOHN H. ECKERT, OF LEBANON, ILLINOIS.

IMPROVEMENT IN GANG-PLOWS.

Specification forming part of Letters Patent No. 53,424, dated March 27, 1866.

To all whom it may concern:

Be it known that I, JOHN H. ECKERT, of Lebanon, in the county of St. Clair and State of Illinois, have invented a new and Improved Gang-Plow; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is side sectional view of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a plan or top view of the same; Fig. 3, a transverse vertical section of the same, taken in the line *y y*, Fig. 2; Fig. 4, a detached side view of a portion of the same; Fig. 5, a detached under view of the rear part of the frame of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved plow of that class which are commonly termed "gang-plovs;" and it consists in a novel construction and arrangement of parts, as hereinafter fully shown and described, whereby the driver has full control over the implement both as regards the adjustment of the plovs temporarily, while the device is at work, and also as regards their adjustment permanently—that is to say, nearer to or farther from the land, their point of attachment to the beams, &c.

A represents an axle provided with two wheels, B B, one of which has its arm rather higher than the other in order to keep the device in a horizontal position when one wheel is running in a furrow, which is the case when the device is at work.

C represents a frame, which is bolted to the axle A and is of rectangular form; and D is the draft-pole, which is bolted to the under side of the axle and to the under side of the front cross-bar, *a*, of the frame C. This frame is made strong and firm, and is sufficiently wide to admit of the plow-beams being spread apart at a greater or less distance, as may be required in any case.

E E represent two plow-beams, the front ends of which are fitted on a rod, F, which passes transversely through the front part of the frame C. This rod F is braced by two rods, G G, which pass through the front bar of the frame C and have screw-nuts *b* on their

outer ends. By this means the rod F is prevented from being bent under the pull or strain of the plovs, and if bent it may be remedied by screwing up or loosening the nuts *b*.

The two plow-beams E E are connected by transverse bars G^x G^x, bolted to the upper and under sides of the beams, said bars being provided with a plurality of holes to admit of the beams being secured at a greater or less distance apart, as may be desired.

H H' are guides attached to the rear cross-bar of the frame C. These guides retain the plow-beams in proper position, and one of them, H, is adjustable, so that it may be placed to suit the adjustment of the plow-beams in a lateral direction. The other guide is fixed or permanent. These guides are composed of two upright bars, *c c*, connected at their upper ends by a bolt, *d*, and at any time when it may be necessary to remove or detach the plow-beams the bolts *d* are taken out from the bars. This obviates the necessity of detaching the guides from the frame C.

I I represent the plovs, the standards J of which are secured to the rear parts of the beams E E, and are braced by rods K, the upper ends of which are attached, by light bolts *e*, to the beams, and the lower ends having screws cut upon them and passing through sockets *f* in or on the standards J J, a nut, *g*, being both above and below the sockets. In case the plovs I meet with any obstructions the bolts *e* will break and thereby relieve the plovs, preserving them as well as other parts of the machine from breakage.

The wings or mold-boards *h* of the plovs are braced by rods L, the upper ends of which are secured to the beams E E. These braces prevent the wings or mold-boards from bending and firmly support them.

One plow-beam is a trifle longer than the other, so that one plow will work in advance of the other, and the standard J and brace-rod L of the rear plow are secured to their beam by bolts passing through oblong slots *l*, to admit of the vertical adjustment of said plow, as may be required.

M is a lever, the fulcrum-pin *j* of which passes through an upright, *k*, on frame C. The rear end of this lever is connected, by a chain, *l*, to the beams E E, and by depressing the front end of the lever M and securing it under or

within a loop, *m*, on the front part of frame C the plows will be elevated above the surface of the ground. This lever M may be operated by the foot of the driver.

In order to keep the plows down to their work, a link, *n*, which is attached to a cross-bar, *o*, on the beams, is connected to foot-lever N, secured to the rear part of frame C. This lever N is held down by a notched plate, *p*, attached to frame C. Whenever the plows are to be raised the foot-lever N is disengaged from the plate *p*. The advantage of these foot-levers is obvious. Whenever the plows require to be raised the driver most generally has his hands engaged in guiding or turning the team, as in turning at the ends of a field, passing around and over obstructions, &c.

The depth of the penetration of the plows into the earth may be regulated with the greatest facility.

OO are chains attached to the rear end of the

frame C for the purpose of holding the weeds and stubble down. These answer an admirable purpose, effecting that object in a perfect manner.

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

1. The arrangement of the plow-beams E E, lever M, adjustable bars G^x, adjustable guide H, rod F, and screw-rods G G, in combination with the standards J, rods K, sockets *f*, plows I, and braces L, constructed and operating in the manner and for the purposes herein specified.

2. The combination of the lever N, cross-bar *o*, notched plate *p*, and frame C, constructed and arranged to operate in the manner and for the purpose herein specified.

JOHN H. ECKERT.

Witnesses:

CHARLES SAGER,
CHAS. H. SMITH.