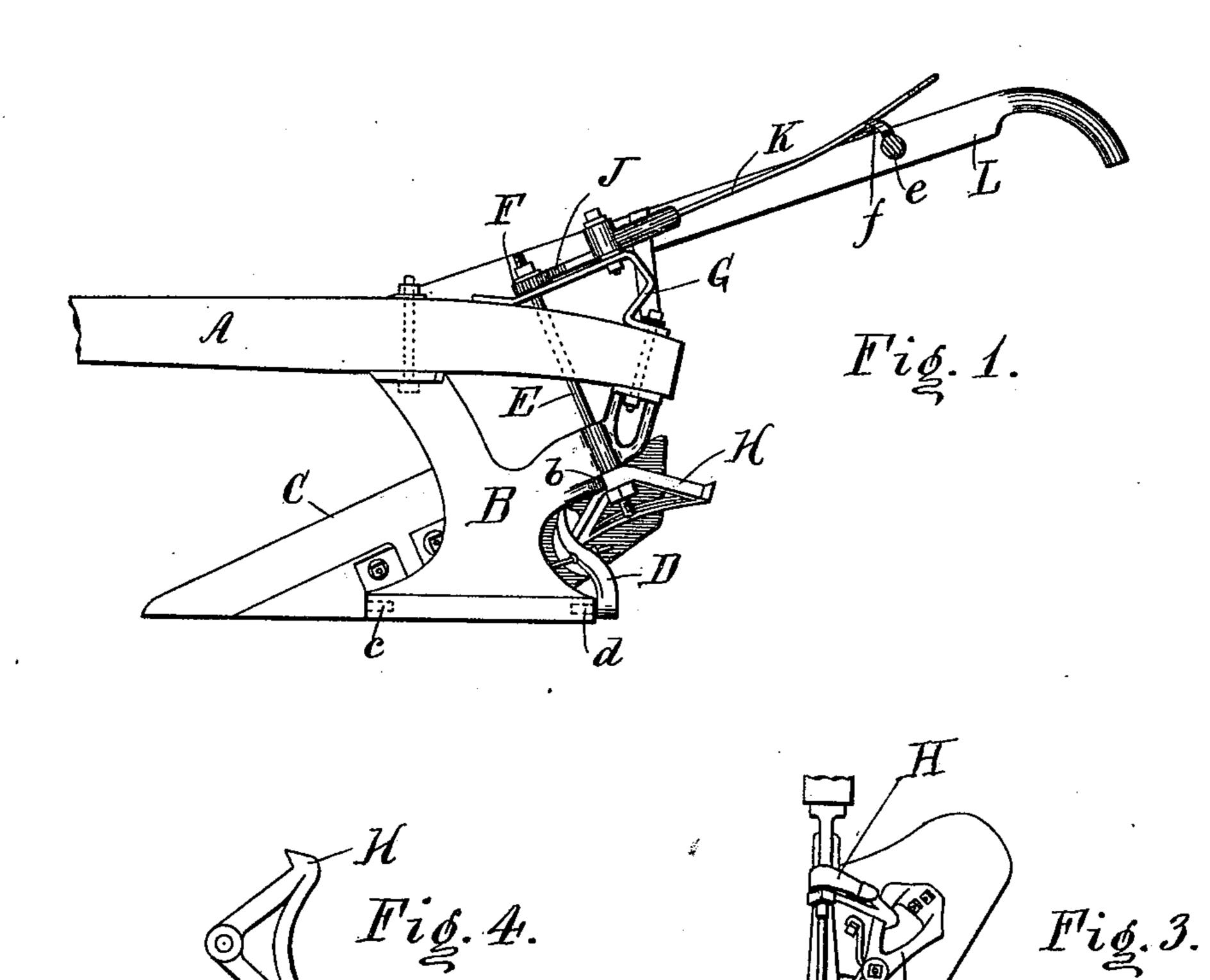
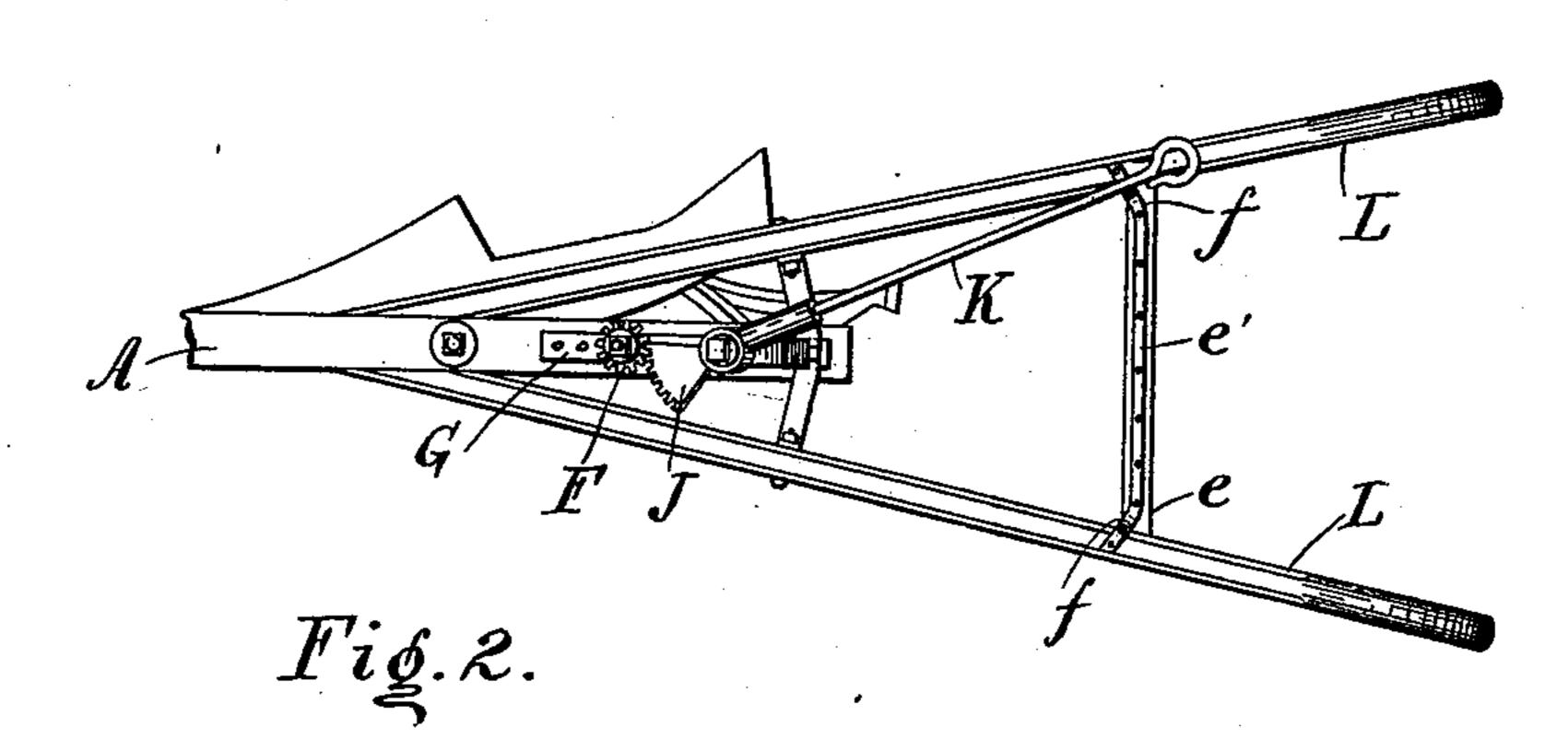
A. J. GUNTER. PLOW.

(Application filed Mar. 31, 1899.)

(No Model.)





Witnesses. Clarence & Millhofu Odward Haat

Inventor. Audrew Lounter, By Feorge Heidaux, Attorney.

United States Patent Office.

ANDREW J. GUNTER, OF NORWOOD, OHIO.

PLOW.

SPECIFICATION forming part of Letters Patent No. 635,247, dated October 17, 1899.

Application filed March 31, 1899. Serial No. 711, 292. (No model.)

To all whom it may concern:

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Be it known that I, Andrew J. Gunter, a citizen of the United States, and a resident of Norwood, in the county of Hamilton and State 5 of Ohio, have invented a certain new and useful Improvement in Plows, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to certain improvements in what are known as "hillside-plows," which are reversible and properly adjustable to the land side; and it consists in certain new and useful means for permitting such adjust-15 ment, as will be more fully hereinafter set forth and described.

In the drawings, Figure 1 is a side elevation of a section of a plow with one of the handles removed to show my improvement. Fig. 2 is 20 a top view of a plow embodying my invention. Fig. 3 is a detail of the moldboard and its supporting and locking mechanism. Fig. 4 is a detail of the locking device.

Like letters of reference indicate identical 25 parts in the various figures.

A is the plow-beam, which is affixed to and

supported by the standard B.

C is the moldboard, which is provided with a stud or pin c, projecting into an opening in 30 the front of the standard B, Fig. 1. Secured to the moldboard is a tripod-plate D, the lower arm or portion of which is provided with a forwardly-extending stud or pin d, Fig. 1. By reason of the studs or pins c and d the mold-35 board is given a pivotal support or connection with the standard B, permitting the moldboard to be swung from one side of the standard to the other, as desired.

The standard B is provided with a suitable 40 opening, which forms a bearing for the pitman E, which passes through the beam A and is provided at its upper end with a ratchetwheel F, which bears on the hooked plate G, the ratchet-wheel F being secured to the pit-45 man by any suitable means, such as a nut, whereby the pitman is also retained in place. Secured to the lower end of this pitman E is a brace-hook H, the ratchet-wheel F and bracehook H being so secured to the pitman E as 50 to turn together.

Pivotally secured on the plate G and mesh-

| ing with the ratchet-wheel F is a segmentgear J, provided with a lever K.

Secured to the cross-piece e of the handles L is a connecting-rod e', provided with shoul- 55

ders f at either side.

The lever K is preferably made of a steel rod, and its "throw" or distance of lateral movement is controlled by the degree of oscillation of the brace-hook H, which hook H is 60 limited in its oscillation by shoulders or abutments b on the standard B. The degree of oscillation of the brace-hook H is equal to the distance between the shoulders at the ends of the rod e', but by reason of the elasticity of 65 the lever K it may be passed over the shoulders f, where it is held in place. By this means the brace-hook H is put under a spring-pressure and firmly held against the shoulder or abutment b on the standard B and at the 70 same time permit of the slight rebound of the hook H when the moldboard is swung to place and the tripod-plate D contacts with the hook H, thereby permitting it to snap or hook back of one of the arms of the tripod-plate D and 75 securely hold the moldboard in place and prevent its dropping or swinging down, as it were. This brace-hook H, however, is so constructed that the lever K may be swung over to the opposite side of the cross-piece e and 80 connecting-rod e' and will readily release the tripod-plate D, and by reason of the interposition of the ratchet-wheel F, meshing with the segment-gear J and the pitman E, the bracehook will swing to the opposite side and be 85 locked in place by the lever passing over the opposite shoulder of the connecting-rod e' and engage with the opposite arm of the tripodplate D when the moldboard is swung to the other side of the standard B.

Of course it will be understood that in place of using what I have termed the "hooked plate" G other bearing-surface may be provided for the ratchet-wheel and segment-gear. For instance, the plow-beam A might be made 95 heavier or with an enlarged end, which would answer the same purpose; also, in place of the connecting-rod e' the cross-piece e might be made of a sufficient width throughout its length, so that the lever K would constantly 100 exert a downward pressure on the cross-piece, which cross-piece might be provided with

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notches at the proper points at the ends, wherein the rod or lever K could drop and the same be locked and held in place.

I do not wish to limit myself to the exact construction shown; but

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

1. In a plow having a reversible moldboard provided with a pivoted supporting-plate, an oscillating hook arranged to engage said supporting-plate, and standard having abutments to limit the oscillation of said hook, the combination of a pitman to retain said hook in its proper position, and provided at its other end with a ratchet-wheel, with a lever, having at its one end a segment-gear meshing with said ratchet-wheel, said segment-gear and ratchet-wheel having bearing on a supporting-plate, substantially as shown and in the manner specified.

2. In a plow having a reversible moldboard provided with a pivoted supporting-plate, an oscillating hook arranged to engage said supporting-plate, and standards having abutments to limit the oscillation of said hook, the 25 combination of a pitman to retain said hook in its proper position, a ratchet-wheel provided at its other end, with a spring-rod lever having at its one end a segment-gear meshing with said ratchet-wheel, whereby the oscillating hook is resiliently held and permits the swing of the moldboard to place, and means in the path of said lever to hold the same under tension, substantially as and in the manner shown and described.

ANDREW J. GUNTER.

Witnesses:

GEORGE HEIDMAN, EDWARD HAAT.