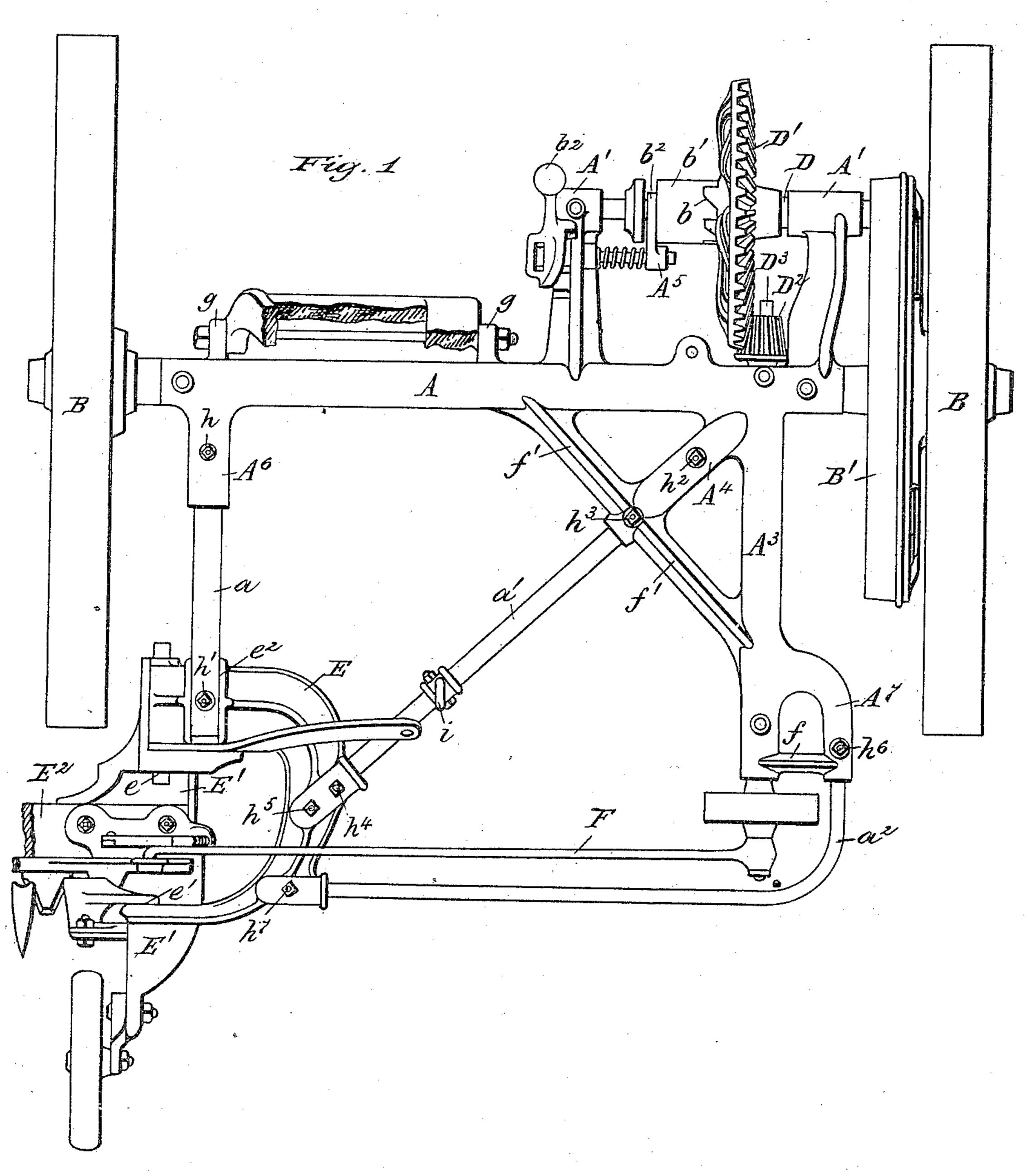
G. H. BARTLETT. MOWING MACHINE FRAME.

No. 427,537.

Patented May 13, 1890.



Halter M. Lovegrove Love

INVENTOR

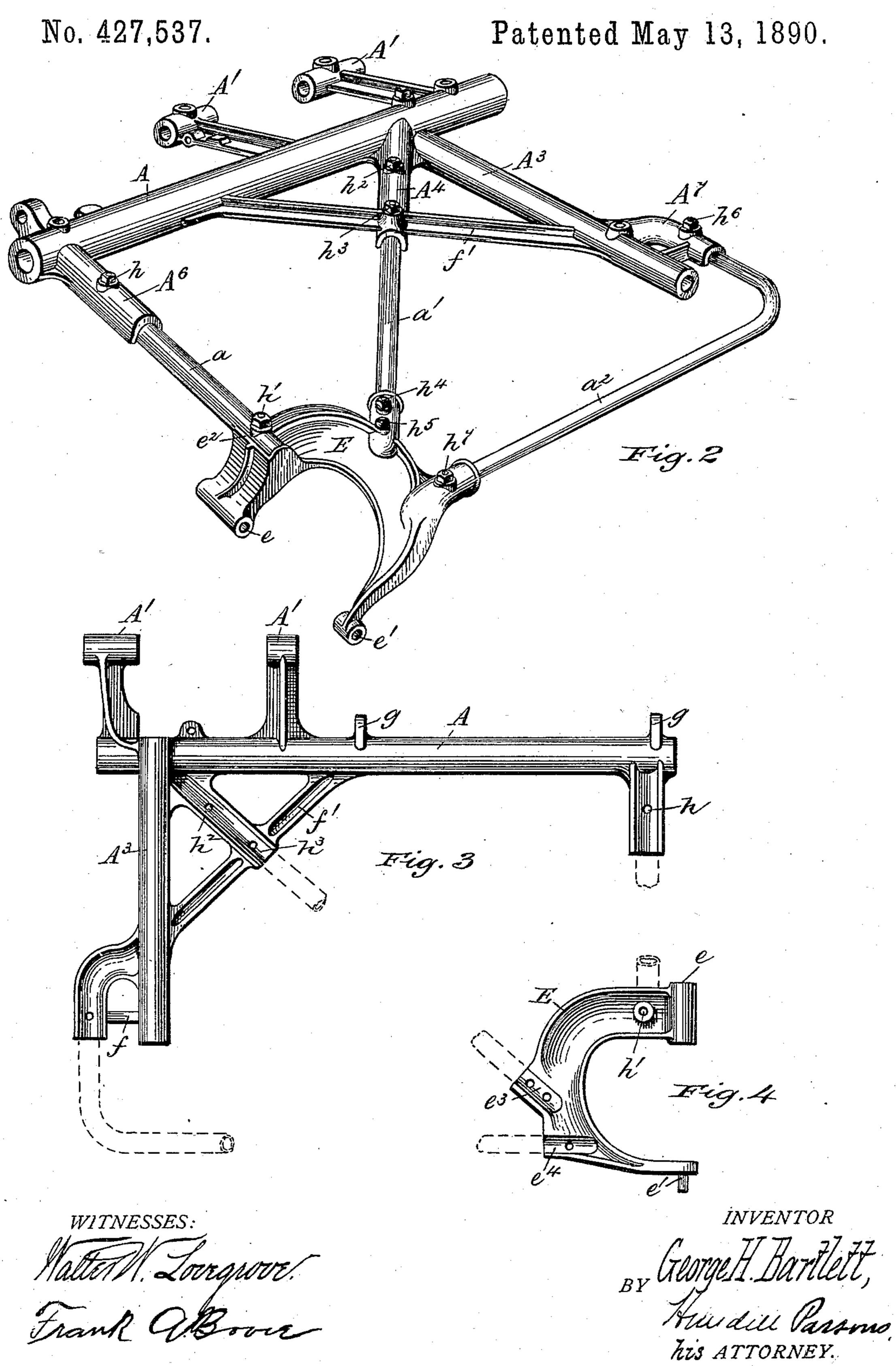
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BY

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G. H. BARTLETT. MOWING MACHINE FRAME.



United States Patent Office.

GEORGE HERMAN BARTLETT, OF HOOSICK FALLS, NEW YORK.

MOWING-MACHINE FRAME.

SPECIFICATION forming part of Letters Patent No. 427,537, dated May 13, 1890.

Application filed February 24, 1890. Serial No. 341,561. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HERMAN BART-LETT, a citizen of the United States, residing at Hoosick Falls, county of Rensselaer, and 5 State of New York, have invented certain new and useful Improvements in Frames for Mowing-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a

10 part of this specification.

The invention has for its object the provision of a frame for a mowing-machine which will be cheap to manufacture, lighter and less cumbersome than those now in use, and which 15 will be at the same time durable and adapted to resist the strains incident to machines of this class. To this end a cast frame is provided, in one arm of which the axle has its bearing and in a second right-angled arm the 20 crank-shaft has its bearings. This cast frame is united to the shoe-support by tubular braces, preferably of gas-pipe, extending from the grass side of the cast frame, from the angle of the axle and crank-shaft bearing, and from 25 the forward end of the crank-shaft bearing. The cast frame is also provided with rearwardly-extending arms to support the countershaft, and also with the rearwardly-extending lugs, between which is supported the pole or 30 tongue frame.

Referring to the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is a top plan view of a mowing machine constructed with my im-35 proved frame. Fig. 2 is a top plan view of my improved frame. Fig. 3 is an inverted view of the cast portion of the frame. Fig. 4 is an inverted view of that portion of the

frame which supports the shoe.

The cast portion of the frame is formed with a tubular portion A, which provides a bearing for the axle, to which are connected the driving and carrying wheels B B by any suitable pawl-and-ratchet mechanism. Se-45 cured to the axle is the large internal gear B', which meshes with a pinion secured to a counter-shaft D. The counter-shaft D is journaled in suitable bearings A' A', extending rearwardly from the portion A of the frame 50 and cast integral therewith. Loosely mounted on the shaft D is the gear-wheel D', which

meshes with a pinion D², secured to the rear end of the crank-shaft D³, which has its bearing in an arm A³, extending forwardly from the tubular bearing A and cast integral there- 55 with. The gear-wheel D' is provided with a clutch-face b, and a longitudinally-sliding collar b', also provided with a clutch-face, is secured to the shaft D. The clutch-collar b', by means of the lever b^2 , may be thrown into 60 and out of engagement with the clutch on the gear-wheel D', thus causing the latter to turn

with the shaft or remain idle thereon.

The shoe-support E is curvilinear in form and has the shoe E', to which is secured the 65 finger-bar E^2 , pivoted thereto at e e'. The shoe-support E is provided on its upper side with a recess e^2 and at its under side with the two recesses $e^3 e^4$. The cast portion of the frame is formed with an outwardly or for- 70 wardly extending arm A⁶, recessed on its under side to receive one end of the tubular brace a, securely bolted thereto at h. The other end of the tubular brace α fits into the recess e^2 in the shoe-support E, and is bolted 75 thereto at h'.

At the angle of the bearings A A³ a diagonal arm A4, also recessed on its under side to receive the tubular brace a', bolted thereto at $h^2 h^3$, extends toward the shoe-support E. The 80 brace a' fits into the recess e^3 in the shoe-support, and is by the bolts h^4 and h^5 secured thereto. The draft-hook i is bolted to the brace a'. From the arm A^3 extends outwardly and forwardly an offsetting arm A7, recessed 85 on its under side to receive the tubular brace a^2 , secured thereto by the bolt h^6 , and in the recess e^4 in the shoe-support by the bolt h^7 . The offsetting arm A⁷ is united to the arm A³ by the strengthening-rib f, and the arms A 90 A³ A⁴ of the cast frame are severally united and strengthened by the rib f'. The rod a^2 extends around in front of the crank-wheel H, which carries the pitman F and forms a shield therefor. The cast frame A is fur- 95 thermore provided with the lugs g g, between which is pivoted the pole-frame.

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

1. The mowing-machine frame herein described, consisting of a cast frame provided with an axle-bearing, the crank-shaft-supporting arm at right angles thereto, rearwardly-extending arms supporting the counter-shaft, an offsetting arm from the forward end of the crank-shaft support, an arm extending diagonally from the junction of crank-shaft support and the axle-bearing, an arm extending from the grass side of the axle-bearing, the shoe-support, and braces secured to the latter, to the offsetting arm from the crank-shaft support, to the diagonal arm at the junction of the latter and the tubular axle-bearing, and to the arm at the cutting or grass side of the machine.

2. The combination, with the curved shoesupport, of the triangular integral frame provided with the axle-bearing and the crank-shaft support at right angles thereto, an offsetting arm from the forward end of the crank-shaft,

and the tubular braces secured to the shoe- 20 support, to the offsetting arm from the crank-shaft support, to the integral frame at the junction of the axle-bearing and crank-shaft support, and to the tubular axle-bearing at the grass or cutting side of the machine, sub- 25 stantially as and for the purpose specified.

3. The combination, with the integral frame composed of the tubular axle-bearing A, crankshaft bearing A^3 , arms A^6 , A^7 , and A^4 , and the strengthening-rib f', of the shoe-support E 30 and braces a a' a^2 , substantially as and for the purpose specified.

In witness whereof I have hereunto set my hand this 4th day of February, 1890.

GEORGE HERMAN BARTLETT.

Witnesses:
Walter W. Lovegrove,
Frank A. Bovie.