

(No Model.)

J. F. MAHON.
Harvester.

No. 230,302.

Patented July 20, 1880.

Fig. 4

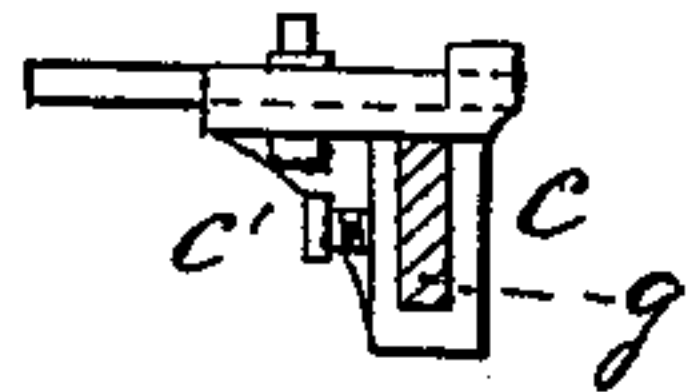


Fig. 1

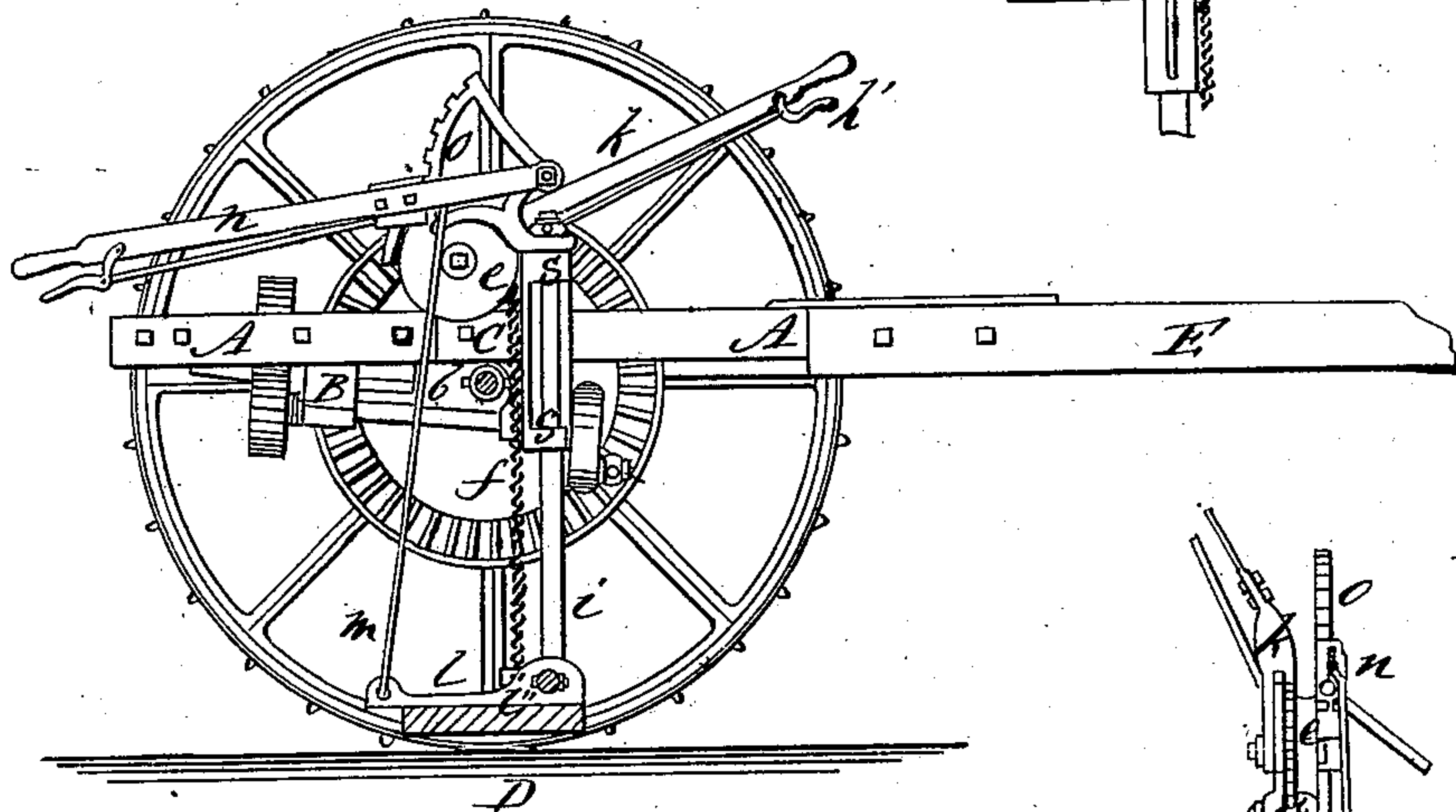


Fig. 2

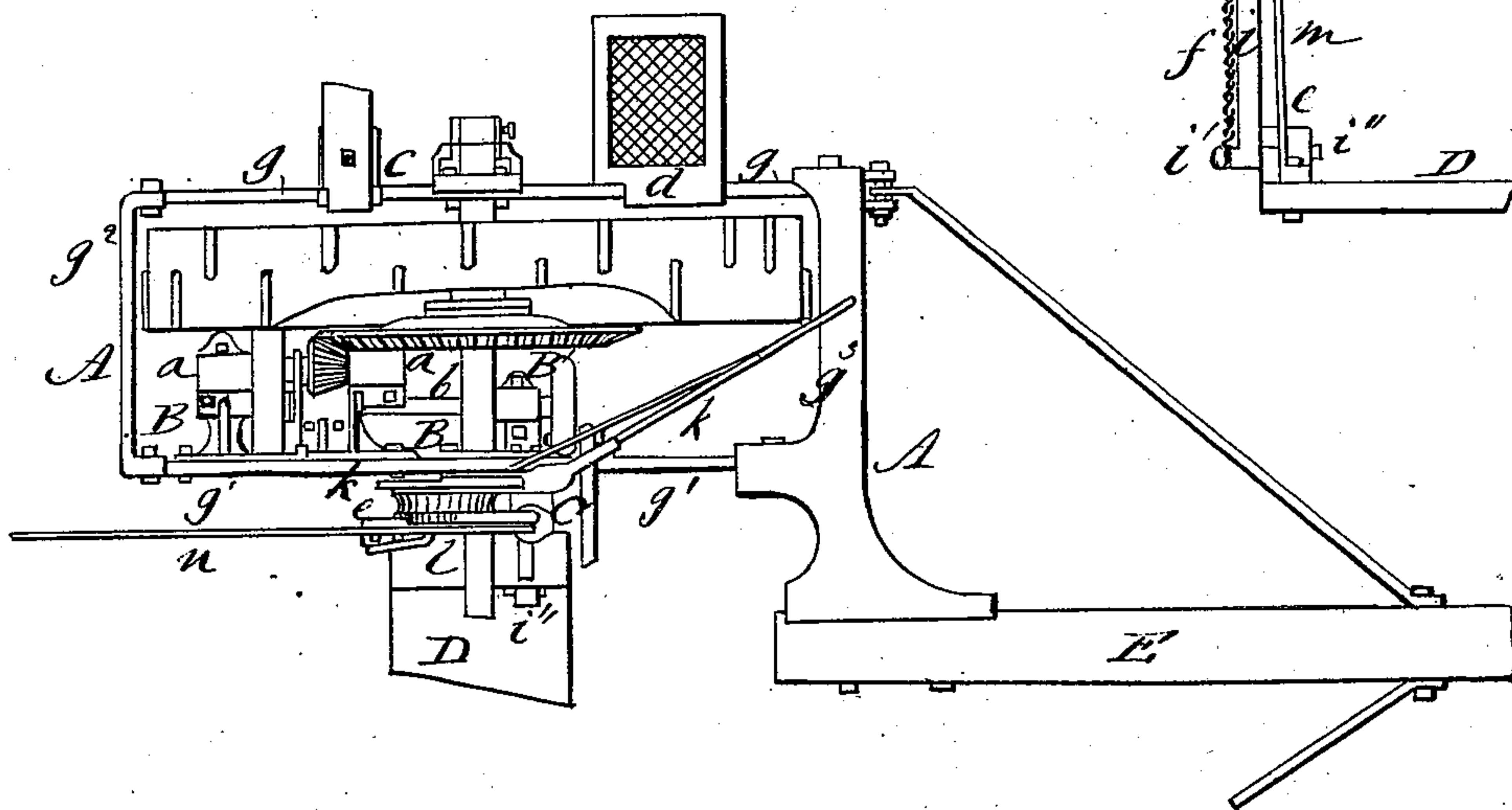


Fig. 5

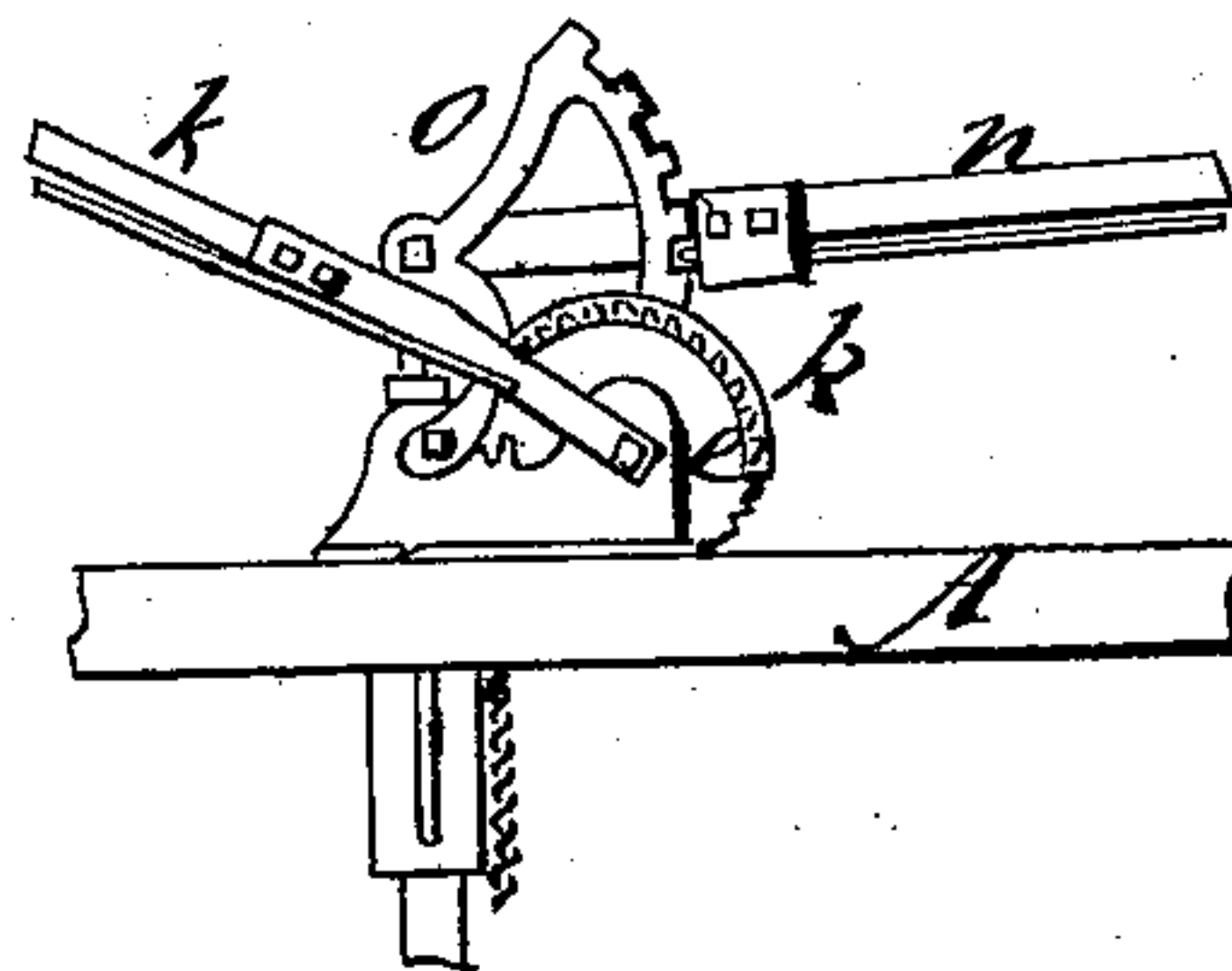
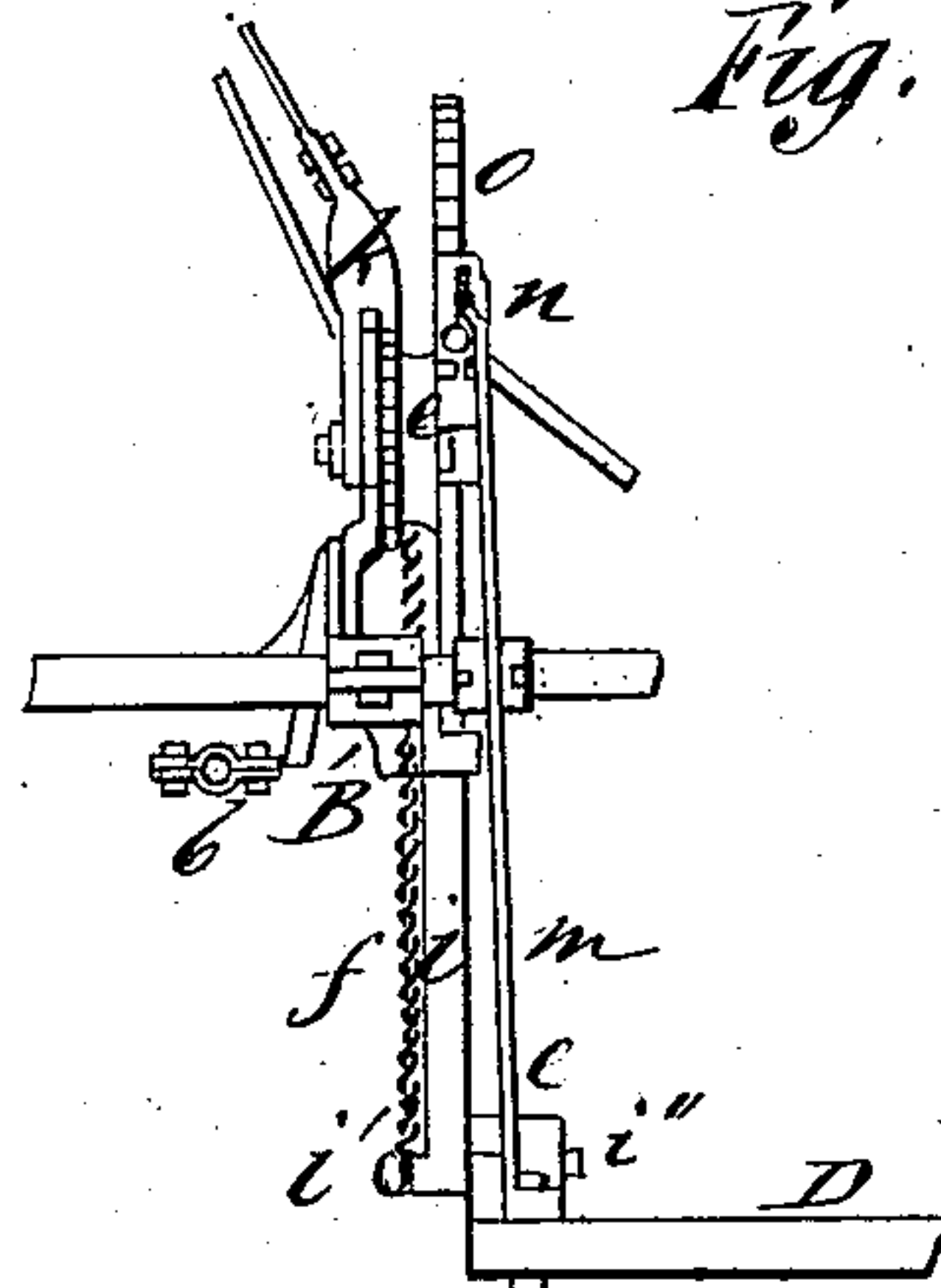


Fig. 3



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UNITED STATES PATENT OFFICE.

JOHN F. MAHON, OF LONDON, ONTARIO, CANADA.

HARVESTER.

SPECIFICATION forming part of Letters Patent No. 230,302, dated July 20, 1880.

Application filed May 17, 1880. (No model.) Patented in Canada May 7, 1880.

To all whom it may concern:

Be it known that I, JOHN FRANCIS MAHON, of London, Province of Ontario, and Dominion of Canada, have invented a new and Improved Harvester, of which the following is a specification.

The object of my invention is to produce a harvesting-machine which shall be simple in construction, light, strong, durable, and easily operated.

This object I effect by the mechanism shown in the accompanying drawings, in which, Figure 1 is a side elevation, and Fig. 2 a top view, of so much of a complete harvesting-machine as is necessary to illustrate my improvements. Fig. 3 is a view of the tilting device upon a larger scale than in Fig. 1. Fig. 4 is a detail view of the adjustable seat-piece; and Fig. 5 shows, upon an enlarged scale, the means for operating the tilting device and the raising and lowering device.

Like letters designate like parts in the different figures of the drawings.

A is the main frame of the machine, consisting of the side bars, *g g'*, bolted or riveted to the end pieces, *g'' g'''*. In order to combine strength with lightness the bars are made of wrought-iron.

To the front end of the frame is secured in the usual manner the draft-pole E, properly braced, as shown.

B is the gear-bracket, secured by bolts or other suitable fastenings to the main frame, and made of one or more pieces, as desired. At the rear part of the bracket are bearings for the counter-shaft *a* and the bearing for the rear of the shaft *b*, by which motion is imparted to the cutting mechanism, the front end of the shaft *b* having its bearing at the front end, B', of the gear-bracket. These bearings may be either capped bearings, as shown, or they may be made solid and bored out.

As the gear proper and the cutting mechanism form no part of my invention, they need not be particularly described.

c is the adjustable seat-supporting piece, arranged to slide upon the side bar, *g*. It is secured at the desired point upon the side bar by means of the set-screw *c'*.

The driver adjusts the position of the seat-piece at a point on the frame where his weight

will serve to balance the machine and prevent undue weight and strain upon the necks of the draft-animals.

The foot-piece *d* is made adjustable for the convenience of the driver, in the same manner as the seat-supporting piece. These pieces may be made of cast, malleable, or forged iron or steel, or of any other suitable material, and they may be constructed in one or more pieces, as desired.

To the side bar, *g'*, of the frame A, next the platform or table bar D, is bolted or otherwise secured the bracket C, the parts of which are forged or cast in one piece. Near the upper end of the bracket C is journaled the revolving ratchet-wheel *e*, to which is attached the upper end of the lifting-chain *f*, the lower end of which is attached to the inner end of the platform or table bar D in a manner presently pointed out.

The ratchet-wheel *e* is provided with the lever *k*, carrying the stop-pawl *h*, having thumb-lever *h'*. By operating the lever *k* the lifting-chain is wound upon the wheel, raising the table-bar D, the pawl retaining it in place.

To lower the table the pawl *h* is disengaged by means of the thumb-latch *h'*, and the lever permitted to move forward, unwinding the chain and allowing the table to move downward by its own weight.

On the forward part of the bracket C are eyes or guides *s s*, through which loosely passes the upper end of the retaining or coupling post *i*. At the lower end of the post *i* is a foot or projecting piece, *i''*, which passes through an eye or loop upon the flange piece or projection *l* of the inner end of the table-bar D, and is secured thereto by a bolt or pin. A brace passes at a suitable inclination from the top of the post *i* to a point in the table, being attached to an eye provided therefor, thereby completing the connection between the frame of the machine and the platform or table.

By attaching the chain *f* of the ratchet-wheel *e* to the foot *i'* of the sliding coupling-post *i*, the table-bar D is held suspended and is free to oscillate on said foot.

The post *i* is free to slide perpendicularly through the guides *s s* when the table is raised or lowered by winding or unwinding the lifting-chain.

To the top of the sliding, retaining, or coupling post *i* is secured a toothed sector, *o*, provided with a lever, *n*, having a spring-latch and retaining pawl or plunger. A rod, *m*, connects the lever *n* to the rear end of the projection *l* on the table-bar D.

Upon withdrawing the retaining plunger or pawl from engagement with the teeth of the sector and raising the lever *n*, the table or platform is tilted to any desired angle, and is there held in position by allowing the plunger or pawl to again engage with the teeth of the sector *o*.

The raising and lowering device, the tilting device, and the sliding coupling-post all operate in conjunction, and permit of the raising and lowering of the table or platform without impediment, as they rise and fall with the table itself.

The table, being suspended by means of the lifting-chain, and oscillating freely upon the foot of the coupling-post, can be easily tilted to any desired angle without binding or in any manner interfering with the operation of the other parts of the machine.

By the described mode of constructing and operating the machine strength and simplicity are obtained, and a perfect control of the machine while operating in the field secured, thereby adding materially to the utility of harvesting-machines and reducing their cost of construction.

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

1. In combination with the platform or table bar D and sliding coupling-post *i*, the toothed sector *o*, having lever and retaining-plunger *n*, and the rod *m*, connected to the rear part of the projection *l* of the bar D, substantially as and for the purpose set forth.

2. The combination of the platform-bar D, having projection *l*, the sliding coupling-post *i*, the lifting device *e h k f*, and the tilting device *o n m*, substantially as described, and for the purpose set forth.

JOHN FRANCIS MAHON.

Witnesses:

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J. C. MEREDITH.