

(No. Model.)

H. W. SACKS.

COTTON CHOPPER.

No. 364,859.

Patented June 14, 1887.

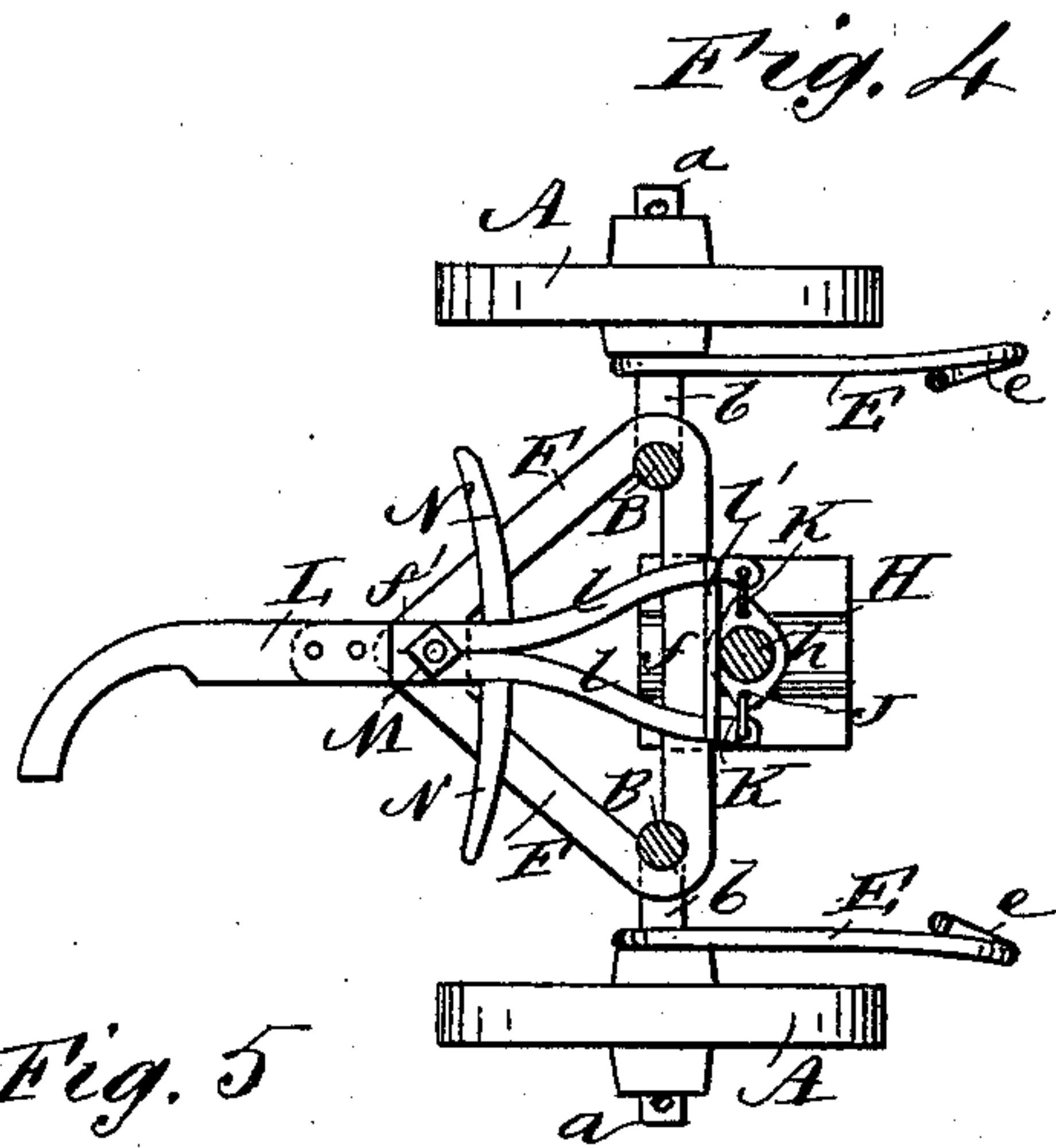
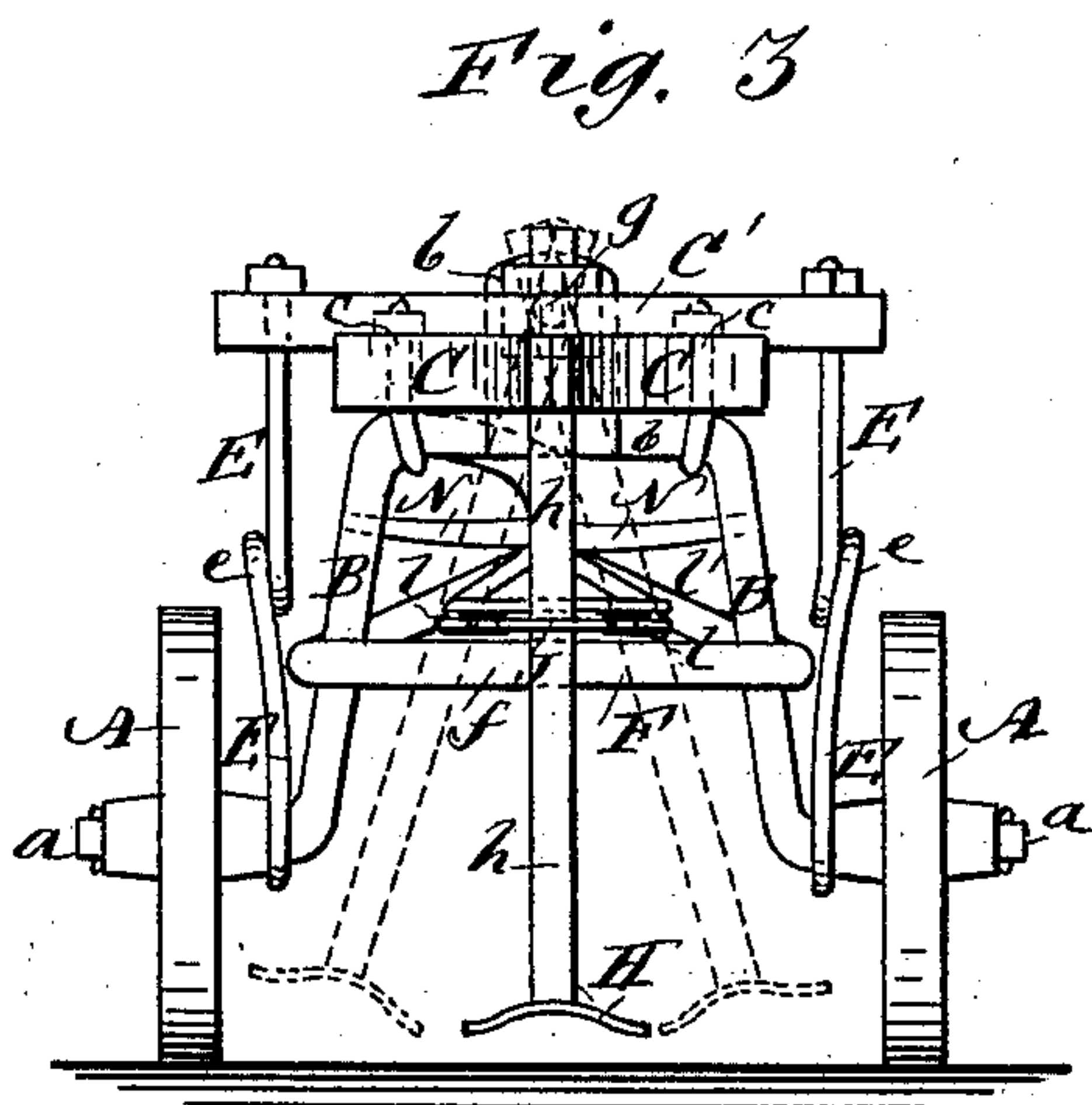
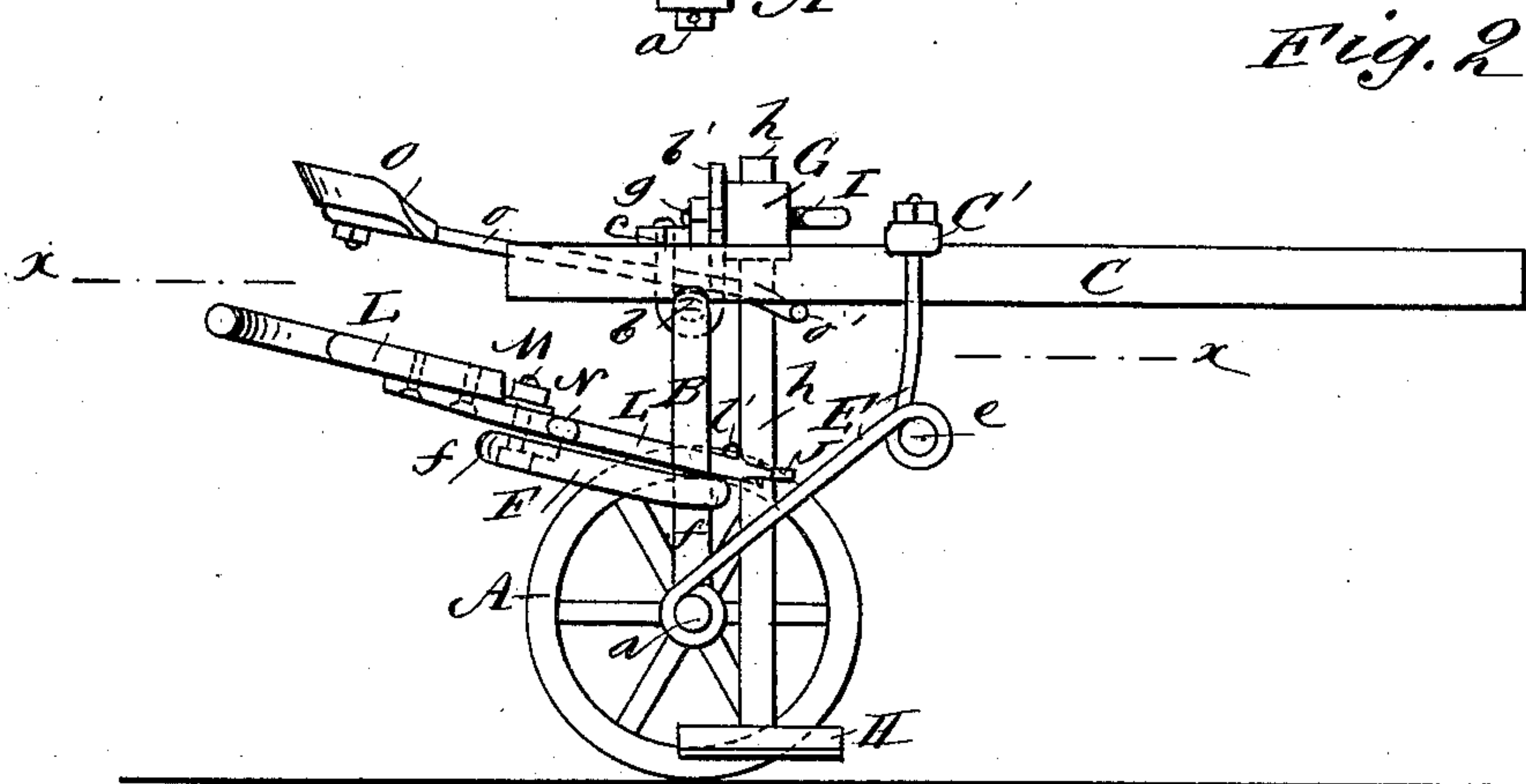
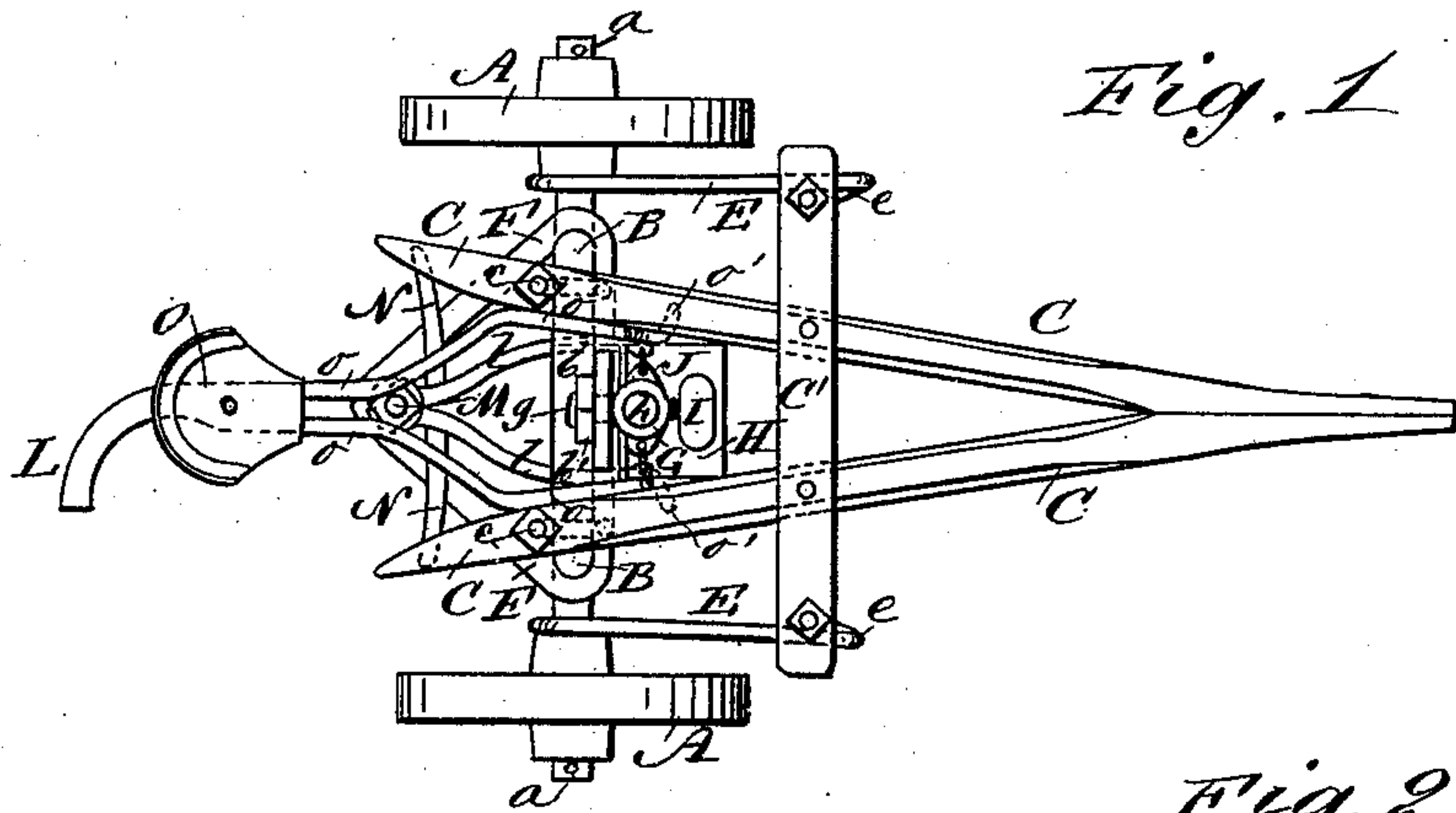
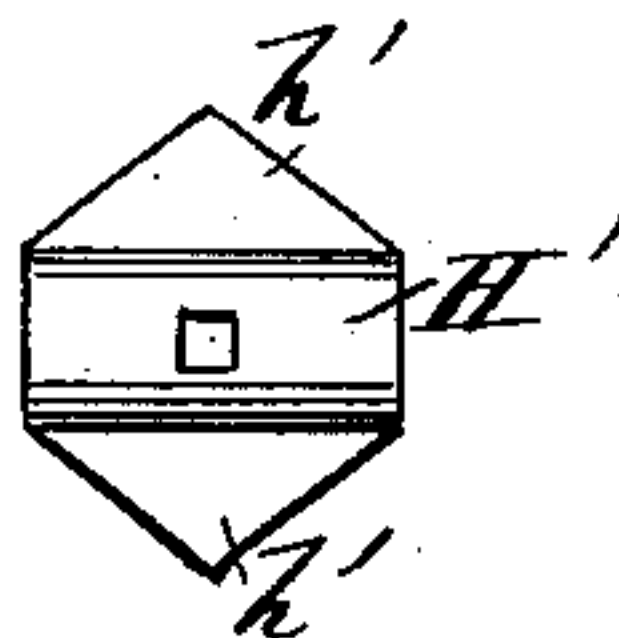


Fig. 5



WITNESSES:

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# UNITED STATES PATENT OFFICE.

HEINRICH WILHELM SACKS, OF ROUND TOP, TEXAS.

## COTTON-CHOPPER.

SPECIFICATION forming part of Letters Patent No. 364,859, dated June 14, 1887.

Application filed February 24, 1887. Serial No. 228,699. (No model.)

*To all whom it may concern:*

Be it known that I, HEINRICH WILHELM SACKS, of Round Top, in the county of Fayette and State of Texas, have invented a new and Improved Cotton-Chopper, of which the following is a full, clear, and exact description.

My invention relates to machines of that class used to chop growing plants to a stand—cotton, for instance; and the invention has for its object to provide a simple, light, strong, and effective machine of this character.

The invention consists in certain novel features of construction and combinations of parts of the cotton-chopper, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of my improved cotton-chopper. Fig. 2 is a side elevation thereof. Fig. 3 is a front view of the machine. Fig. 4 is a plan view, in horizontal section, on the line *xx*, Fig. 2; and Fig. 5 is a plan view of a modified form of the chopping-hoe.

The opposite wheels, *A A*, of the machine are journaled upon arms *a a*, formed by lateral outward bends of the lower ends of the arched metal axle *B*, to the upper cross-bar, *b*, of which are held, by clip-bolts *c c*, the rear parts of two forwardly-converging bars, *C C*, which are fastened together at their forward ends. A cross-bar, *C'*, is fixed to the bars *C C*, forming therewith an upper frame, and to the outer ends of the cross-bar there are secured, by nuts or otherwise, the upper ends of two bent draft irons or rods, *E*, the lower ends of which are turned around the axle-arms *a a* at the inner ends of the wheel-hubs, and the irons have eyes *e*, to which horses will be hitched to walk at each side of the row of plants being chopped to a stand.

To the laterally and downwardly spreading side parts of the arched axle *B* there is applied or made fast a triangular metal frame, *F*, the front bar, *f*, of which ranges laterally and parallel with the head cross-bar, *b*, of the axle, to which there is fixed a vertical plate, *b'*, to which is swiveled, by a bolt or pin, *g*, a bearing, *G*, in which the standard *h* of the

chopping-hoe *H* is fitted so as to be adjustable vertically, and held in any desired position by means of a set-screw, *I*, passed through the swiveled bearing against the standard. The hoe *H* may thus be adjusted to work at any desired depth in the ground, and may vibrate on the bolt or pin *g* as it is worked from side to side, and the hoe-standard *h* moves upon or against the front bar, *f*, of the frame *F*, which gives substantial support to the hoe against back-pressure when in use.

To operate the hoe *H*, I place loosely on or around its standard *h* a ring, plate, or collar, *J*, which is connected at opposite ends or parts by links *K K* to the forward ends of the forked arms or parts *l l* of a lever, *L*, which is fulcrumed on a pin or bolt, *M*, to the metal frame *F* at its rear angle, *f'*, and this lever *L* extends rearward and is preferably curved laterally at its back end, so as to be conveniently grasped by a man walking behind the machine and shifted on the fulcrum *M* from side to side for giving lateral motion to the hoe, which cuts both ways through and across the row of plants.

To provide for operating the hoe by foot-power, a couple of treadles or foot-bars, *N N*, are fixed to the lever *L*, and project from opposite sides of it, thus allowing an attendant seated on a seat, *O*, supported on the frame to swing the hoe from side to side by first pushing forward on one bar *N* with one foot, and then on the other bar *N* with the other foot, as will readily be understood. A tie-bar, *l'*, is preferably fixed to the arms *l l* of the lever *L*, immediately behind the standard *h* of the chopping-hoe, to give increased strength to the lever.

The seat *O* is supported at the rear ends of bars or rods *o o*, which at their forward parts are bent to rest against the opposing sides or inner faces of the frame-bars *C C* and on top of the head cross-bar, *b*, of the axle *B*, and the forward extremities of the seat-bars are bent downward and laterally to hook, at *o'*, beneath the frame-bars *C C*, to give a firm support to the seat and allow it to be swung upward and forward for detaching it from the frame when it is not desired to use the seat.

When the ground is soft, the square-edged hoe *H* (shown in Figs. 1, 2, 3, and 4 of the



drawings) will be used; but should the ground be hard, the hoe  $H'$ , provided with opposite angular cutting-edges,  $h'h'$ , and shown in Fig. 5, will be employed, as it will cut the earth more easily than the square-edged blade.

It is obvious that the hoe may be operated by either hand or foot power for chopping the cotton-plants to a stand at any desired distance apart; and the entire machine is light and strong and well adapted for its intended purpose.

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

1. In a cotton-chopper, the combination, with a bent axle, wheels on the same, a swiveled bearing on the said axle, a chopping-hoe having its standard fitted in said bearing, and a triangular frame secured to the axle, of a forked operating-lever pivoted to the triangular frame, a collar on the standard of the hoe, and links connecting the collar to the ends of the arms of the said operating-lever, substantially as herein shown and described.

2. A cotton chopper made with wheels  $A A$ , mounted on arms  $a a$  of an arched axle,  $B$ , the triangular frame  $F$ , fixed to said axle, a bearing,  $G$ , swiveled at the head of the axle, and a chopping-hoe,  $H$ , having a standard,  $h$ , fitted in the bearing, and said standard arranged to bear during the lateral oscillation of the hoe on the front of the frame  $F$ , substantially as described, for the purposes set forth.

3. The combination, in a cotton-chopper, of wheels  $A A$ , mounted on an arched axle,  $B$ , the triangular frame  $F$ , fixed to said axle, a bearing,  $G$ , swiveled at the head of the axle, a chopping-hoe,  $H$ , having a standard,  $h$ , fitted in the bearing, a lever,  $L$ , fulcrumed to the frame  $F$  and forked at its forward end, a plate or collar,  $J$ , on the hoe-standard, and connections, as  $K$ , therefrom to the lever  $L$ , substantially as described, for the purposes set forth.

4. The combination, in a cotton-chopper, of wheels  $A A$ , mounted on an arched axle,  $B$ , a frame,  $F$ , fixed to said axle, a bearing,  $G$ , swiveled to the axle, a chopping-hoe,  $H$ , having a standard,  $h$ , fitted in the bearing, a lever,  $L$ , fulcrumed to the frame  $F$ , connections from said lever to the hoe-standard to oscillate the hoe, treadles  $N N$  on the lever  $L$ , and a seat on the machine-frame, substantially as described, for the purposes set forth.

5. In a cotton-chopper, the combination, with the axle  $B$  and the converging bars  $C$ , of the draft-irons  $E$ , having eyes  $e$ , and having their ends secured to the axle and to the said cross-bar, substantially as herein shown and described.

HEINRICH WILHELM SACKS.

Witnesses:

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J. G. KAISER.