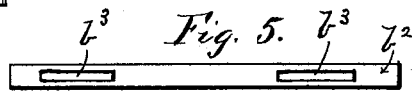
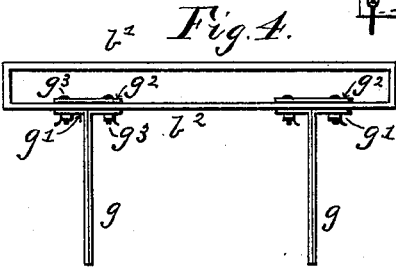
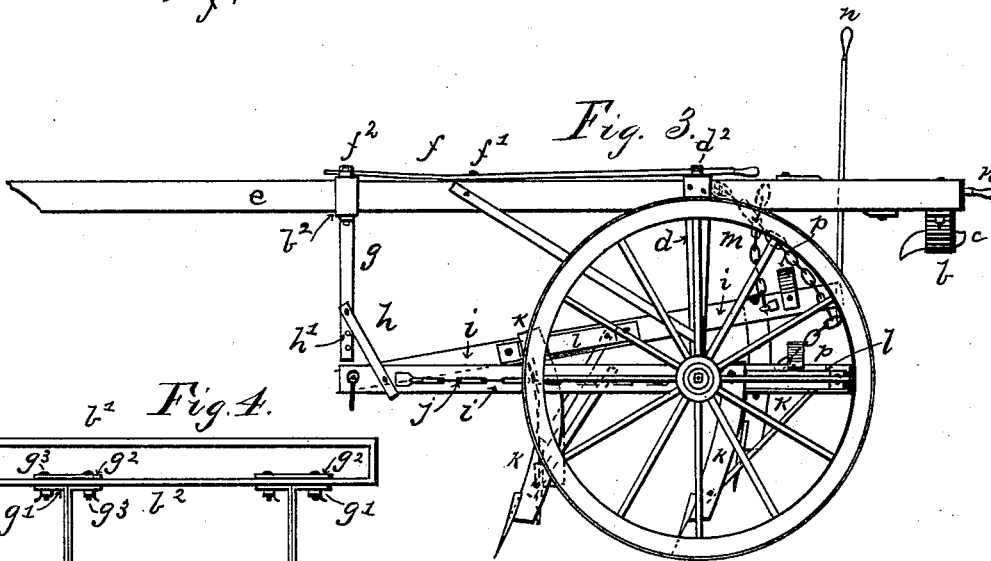
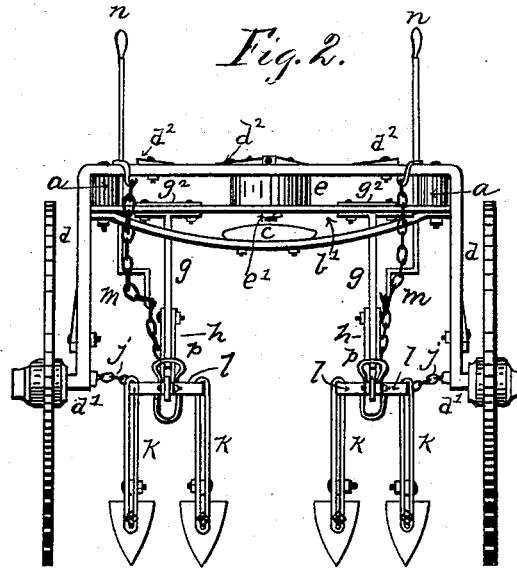
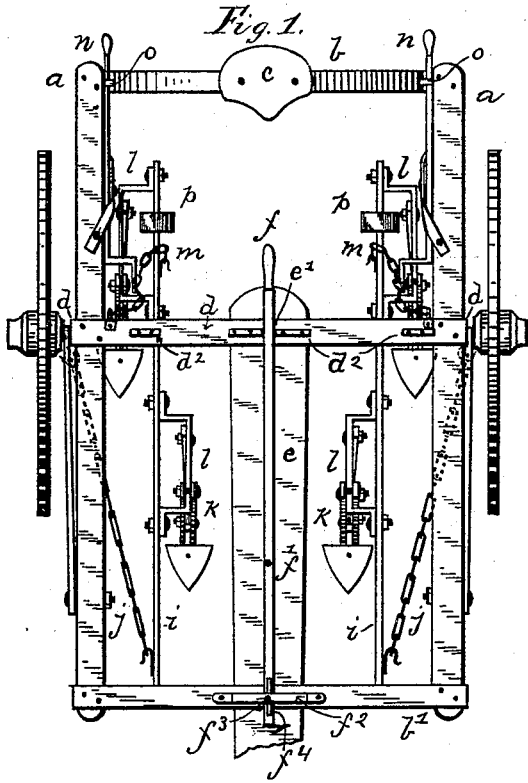


(No Model.)

W. R. McCONNELL.
SULKY CULTIVATOR.

No. 340,138.

Patented Apr. 20, 1886.



Witnesses.
Geo. C. Ingram.
M. B. Toule

Inventor.
William Reed McConnell
By his atty John S. Duffie

UNITED STATES PATENT OFFICE.

WILLIAM REED McCONNELL, OF ANDERSON, SOUTH CAROLINA, ASSIGNOR
OF ONE-HALF TO JOHN M. McCONNELL, OF SAME PLACE.

SULKY-CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 340,138, dated April 20, 1886.

Application filed February 11, 1886. Serial No. 191,536. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM REED McCONNELL, a citizen of the United States, residing at Anderson, in the county of Anderson and State of South Carolina, have invented certain new and useful Improvements in Sulky-Cultivators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to sulky-cultivators; and it consists in the novel construction and arrangement of its parts.

In the accompanying drawings, Figure 1 is a top plan view of my cultivator. Fig. 2 is a rear end view of the same. Fig. 3 is a side view of the same. Figs. 4 and 5 are detail views.

My invention is described as follows: *a a'* represent the side pieces of the frame-work; *b b'*, the end pieces of the same. The end piece *b* is provided with a seat, *c*.

To the upper faces of the side pieces, *a*, of the frame is secured a bent axle, *d*, the lower ends of which are bent out to form the spindle *d'*; or the spindle may be made of different material and the elbow part bolted to the bowed part of axle. The front end of the frame consists of two bars—an upper bar, *b'*, and a lower bar, *b²*. Between these two bars plays the tongue *e*, the rear end of which is pivoted to the lower face of the bent axle *d* by a bolt, *e'*. A lever, *f*, is pivoted on top of the tongue *e* by a bolt, *f'*. The rear end of this lever is within reach of the driver, while its front end works on top of the bar *b'*, under a bowed strap, *f²*, bolted to said bar, in which position it is loosely pivoted by a bolt, *f³*, which passes through a slot, *f⁴*, in the front end of said bar.

The lower bar, *b²*, on the front end of the frame, is provided with slots *b³*. From the lower face of said bar are extended two flat arms, *g*, consisting of two flat bars of iron, the upper ends, *g'*, of which are bent out at right angles. On top of the bar *b²* are two short bars, *g²*. Through either end of these bars *g'* *g²* pass two

bolts, *g³*, the upper ends of which are counter-sunk, and on the lower ends of which are nuts. This arrangement enables me to widen or narrow the distance between the plow-beams *i*. On the lower ends of these arms *g* are pivoted swings *h*, which may be raised or lowered by means of the perforations *h'* in the arms *g*. The plow-beams *i* are pivoted and swing in the lower ends of the said swings *h*.

The plow-beams *i* have attached near their front ends a chain, *j*, the rear ends of which are attached to the bent axle *d* near the spindle *d'*. This arrangement makes the draft direct from the spindle of the axle, and allows the plows each to act independently of the other, and the swings *h* being pivoted to the arms *g* allows the plows to fall back when they strike against any solid substance, and thus prevents a sudden jar or strain on the sulky.

The plow-beams *i* each carry two slotted plow-feet, *k*, which are secured to the looped straps *l*, one on the inside and one on the outside of said beams. The rear ends of said plow-beams *i* are suspended from the bow of the axle *d* by chains *m*. In rear of the bent axle *d*, and on the inner face of the side beams *a*, are pivoted levers *n*, their front or short ends hooking into a link of the chains *m*, and their long ends capable of being brought under the pins *o*. When they are in this position, Fig. 1, the plow-points are held up from the ground. When let go from under the pins *o*, the plow-points fall to the ground, Fig. 2.

On the rear ends and upper edge of the plow-beams *i* are bolted stirrups *p*.

The operator occupies the seat *c*, puts his feet into the stirrups *p*, and regulates the movements of the plow-beams *i*, and consequently the plow-points. He is within easy reach of the levers *n*, and can raise the plow-points at pleasure. He is within easy reach of the lever *f*, and by moving it either to the right or left can change the direction of the sulky at will. The upper face of the bent axle *d* is provided with catches *d²*, to hold said lever in whatever position it may be placed.

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

1. In a sulky-cultivator, as above described, 100

the combination, with the frame having the side pieces, *a a'*, and end pieces, *b b'*, and the bowed axle *d*, of the tongue *e*, its rear end pivoted to the lower face of said axle *d* by bolt *e'*,
 5 its front end playing between the bars *b'* and *b²*, lever *f*, having the slot *f⁴*, and pivoted on the upper face of the tongue *e* by a bolt, *f'*, bowed strap *f²*, bolted over said lever *f* and on the upper side of the bar *b'*, bolt *f³*, passing
 o through strap *f²*, slot *f⁴*, and bar *b'*, and catches *d²* on the upper side of axle *d*, adapted to hold the rear end of the lever *f* in place, substantially as shown and described, and for the purposes set forth.

5 2. In a sulky-cultivator, as above described, the combination, with the frame, of the bar *b²*, having the longitudinal slots *b³*, perforated plates *g²*, perforated arms *g*, having the perforated bent upper ends, *g'*, and bolts *g³*, passing
 o through said perforated plates *g²*, slot *b³*, and

bent ends *g'*, and held in place by nuts, substantially as shown and described, and for the purposes set forth.

3. In a sulky-cultivator, as above described, the combination, with the frame, as shown, of 25 the slotted plate *b²*, arms *g*, secured to the same, as described, swing *h*, pivoted to said arms, plow-beams *i*, pivoted to said swings *h*, chains *m*, hooked to said plow-beams *i* and to the bowed part of the axle *d*, and levers *n*, 30 adapted to be secured under the pins *o*, substantially as shown and described, and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM REED McCONNELL.

Witnesses:
 W. W. WHITE,
 M. B. JACKSON.