

G. W. N. Yost.

Harvester.

N<sup>o</sup> 85349

Patented Dec. 29, 1868

Fig. 1.

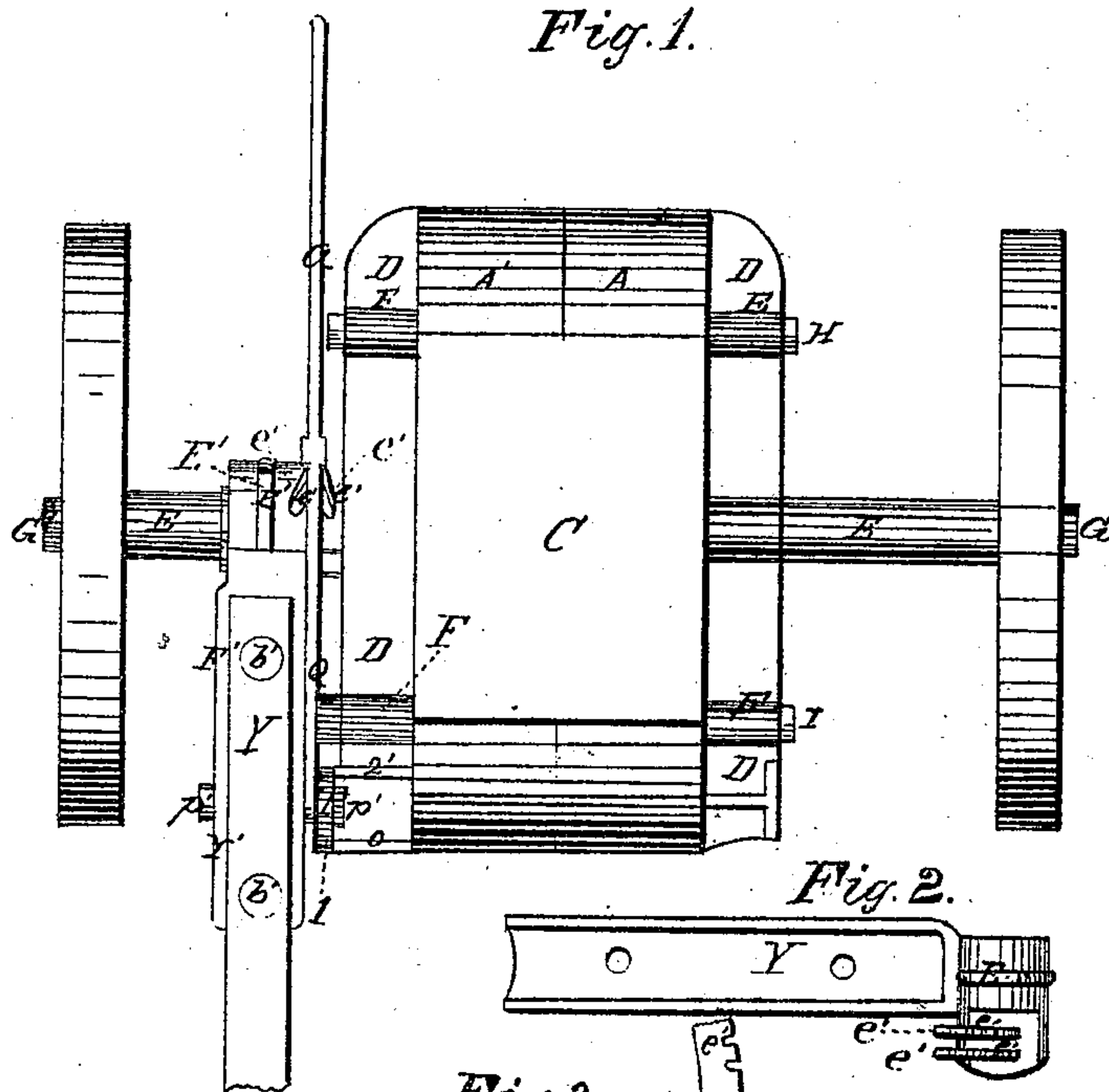


Fig. 2.

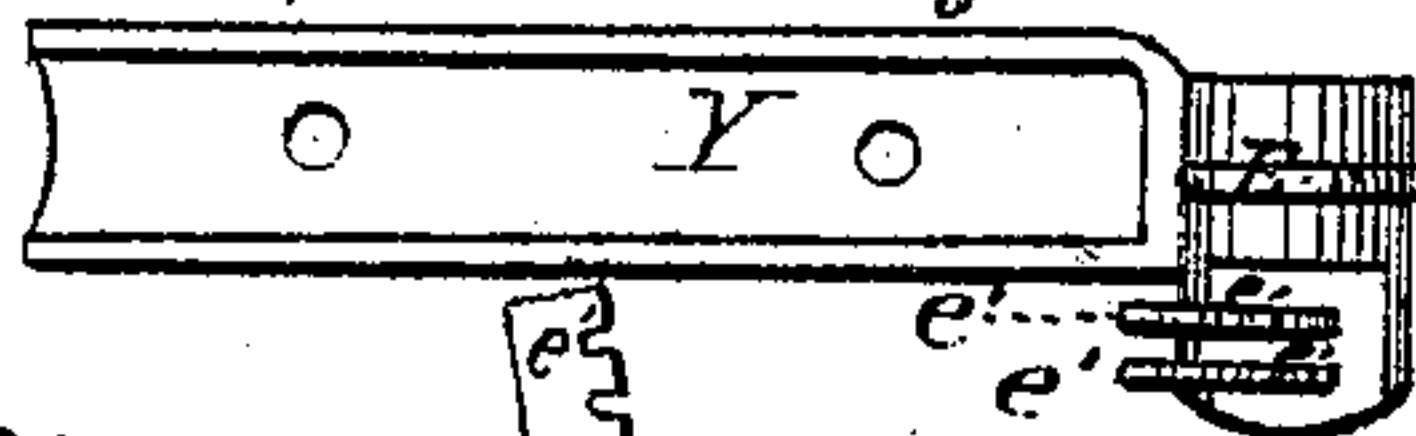


Fig. 3.

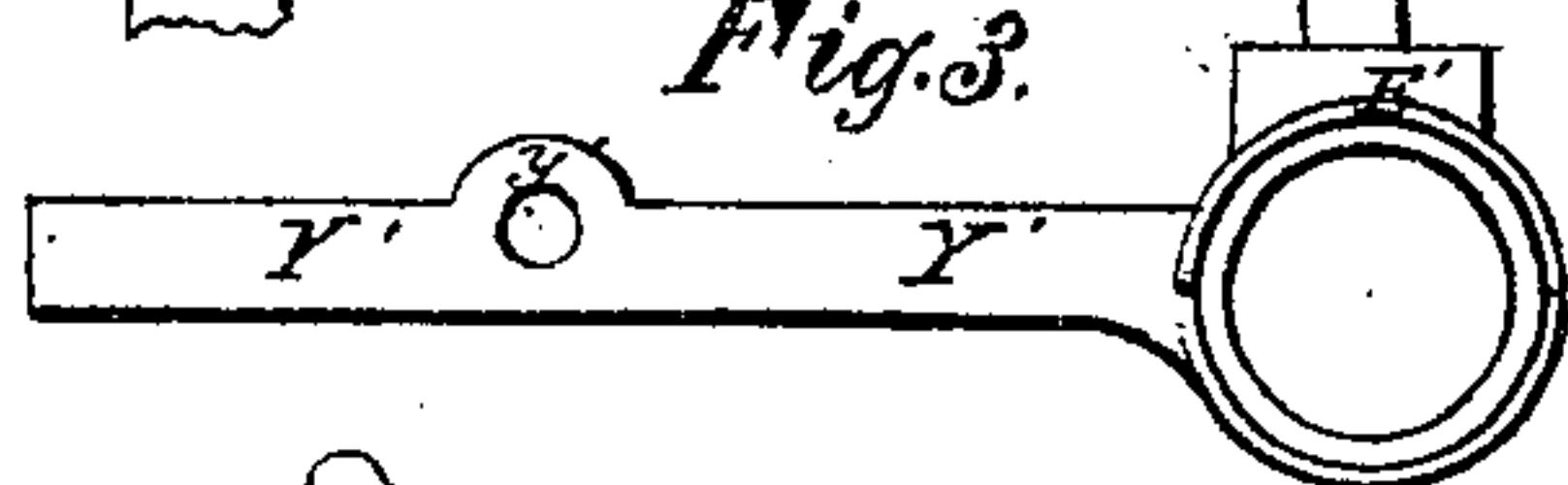
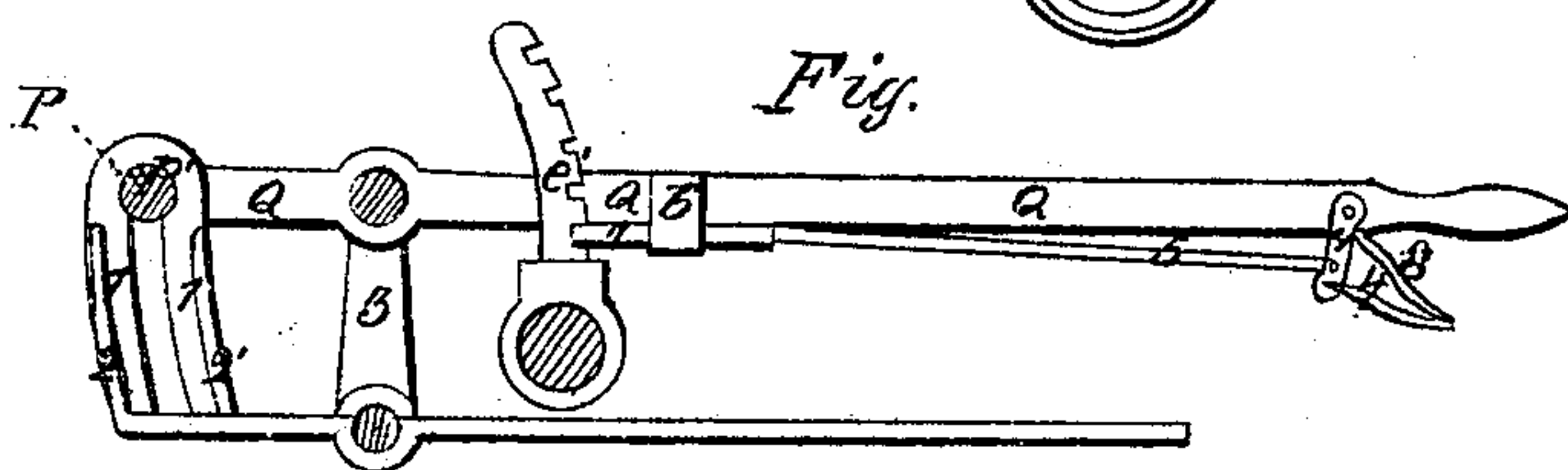


Fig.



Witnesses

James Denmore,

William Handlen,

Inventor

G. W. N. Yost

by Atty. J. C. Clayton



# United States Patent Office.

GEORGE W. N. YOST, OF CORRY, PENNSYLVANIA, ASSIGNOR TO  
CORY MACHINE COMPANY.

*Letters Patent No. 85,349, dated December 29, 1868.*

## IMPROVEMENT IN HARVESTERS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern :*

I, GEORGE W. N. YOST, of Corry, Erie county, Pennsylvania, have invented a new and useful Climax-Body Lever—an improvement on my climax-body—for Grass and Grain-Cutting Machines.

The following description, illustrated by the accompanying drawings, will enable others to make the invention, description and drawings having corresponding specifying-characters.

Figure 1 of the drawings is a combined view of my climax-body and climax-body lever attached.

Figures 2, 3, and 11 are views of detached parts of the climax-body-lever apparatus.

Of the specifying-characters—

A and A' are cases forming my climax-body.

C is a lid of the opening of the body.

D is a rib along the middle of the outside of each case.

E is the main axle-hub in the middle of each case.

G and G' are the main axles, and

I is a bolt through the hubs F of the body.

Make a socket-collar, Y' and E', the collar E' part thereof six inches long, more or less, with the hole through it, or ring large enough to go on and work loosely over the main axle G', and the socket Y' part thereof fifteen inches long, more or less, and three and a half inches wide, and an inch deep inside, all more or less, with ears, y', on the sides, near the fore end, for holes for a bolt or pin to go through. I make this in one piece of cast-iron.

Make a tongue, Y, suitable for horses, and fasten the hind end thereof in the socket Y', by the bolts b' and pin p', through the tongue and socket, or by any desired obvious way.

Pivot the tongue Y to the main axle G' by putting the tongue-collar E' over the axle, the tongue and socket-collar being made practically one instrument by being attached, and the collar being only a hole in the hind end of the tongue.

To the top of the collar E', near the edge next the case A', attach the arcs e', set half an inch, more or less, apart, three-eighths of an inch thick, an inch wide, and six inches high, all more or less, and with notches three-eighths of an inch, more or less, wide and deep, and three-fourths of an inch apart, more or less, in and laterally across the outer edges, projecting up and circling forward. A simple way is to make the arcs of "wrought"-iron, and mould and pour the collar around them of "cast"-iron.

From the outer edge of the fore end of the rib, D, of the case A', up and circling back, project a slotted segment, 1, an inch thick, three inches wide, and seven inches high, all more or less, with the slot, an inch wide, and six inches long, more or less, laterally through it. This may be cast with the case A', and be supported by ribs, 2 and 2', on and across the rib D, connecting the edges of the arch with the case.

Make a support, 3, an inch thick, an inch and a half wide, and six inches long, all more or less, and pivot it perpendicularly at the edge of the rib, D, of the case A', midway between the slotted segment 1 and the main axle-hub E, with the top nearly on a level with the top of the arch 1.

The support 3 may be pivoted to the rib D by extending the bolt I through the forward hub, F of the case, A', and through a hole in the bottom of the support, to work loosely over the end of the bolt for that purpose.

Make a lever or bar, Q, half an inch thick, one and a half inch wide, and three feet long, all more or less.

Fasten and pivot the fore end of the bar Q to the tongue Y. This may be done simply by extending the bolt or pin p' out from the tongue Y and socket Y', through and working loosely in a hole in the fore end of the lever.

Attach the tongue Y and bar Q to the slotted segment 1 by extending the pin p' through the slot, with a broad head on the inner end of the pin, the pin to work loosely within the slot.

Pivot the bar Q to the top of the support 3, with the bar between the arcs e'.

Make a trigger, 4, one-fourth of an inch thick, half an inch wide, and seven inches long, all more or less, with two inches, more or less, of the fore end bent up at a right angle.

Pivot the top of the bent end of the trigger 4 to the bar Q, six inches, more or less, forward of the hind end thereof, by putting the bent end of the trigger up into a slot made for that purpose in the bar, with a pivot-pin through bar and slot and trigger, or by bifurcating the bent end of the trigger and lapping the forks over the bar, with pivot-pin through forks and bar, or by any obvious way.

Make a loop, 6, under the bar Q, two inches, more or less, back of the arcs e'.

Make a trigger-rod, 5, one-fourth of an inch in diameter, and twelve inches long, more or less.

Make a pawl, 7, three-eighths of an inch thick and one and a fourth inch wide and deep, all more or less, and forge or attach it rigidly to the fore end of the trigger-rod 5.

Put the trigger-rod 5 through and rest it loosely in the loop 6, and pivot the hind end thereof to the fore end of the trigger 4, an inch, more or less, below the pivot of the trigger in the bar Q.

Make a spring, 8, of suitable size, and rest one end loosely on the hind end of the trigger, and attach the other end rigidly to the under edge of the bar Q, back of the pivot of the trigger 4, and set the spring so its tension will press the hind end of the trigger as far from the bar as possible.

Clasping the hand round and bringing the trigger up against the hind end of the bar Q, will swing the fore end of the trigger 4 back half an inch, more or less, and pull the pawl 7 out of a notch in the arcs e'.



Unclasping the trigger will permit the spring 8 to press its hind end down and swing its fore end forward and push the pawl into a notch of the arcs. This allows the lever Q to be set in any desired position within the arcs *e'*.

When the tongue Y is firmly held, lifting the hind end or handle of the lever Q, will raise the fore end of the body A and A', and the points of the knives of the cutting-machinery thereto attached, and lowering the lever-handle will lower the fore end of the body and the points of the knives of the cutting-machinery. And the driver, setting over the hind end of the body A and A', can reach the handle of the lever Q, and therewith, by raising or lowering it, regulate the cut of the cutting-knives.

The nature of the invention is, connecting the body A and A' and tongue Y by a lever, Q, within reach of a driver sitting over the hind end of the body, to raise and lower the points of the knives of the cutting-ma-

chinery attached to the fore end of the body, by attaching and pivoting the lever to the tongue, and pivoting the tongue to the main axle, and thus making the main axle G', working within the tongue, the ultimate fulcrum of that lever.

There is nothing new in the trigger and pawl-attachments of the lever-bar, nor in moving the cutting-machinery by a lever attached to the body; but the combination described I think new; I know it is useful, and I limit myself thereto. Therefore,

I claim the combination and arrangement of the lever Q with the arcs *e'*, the body A and A', the tongue Y, the tongue-collar E', and the main axle G', made and used as described, for grass and grain-cutting machines.

G. W. N. YOST.

Witnesses:

C. W. ARCHBOLD,  
FRANK H. W. GREGG.