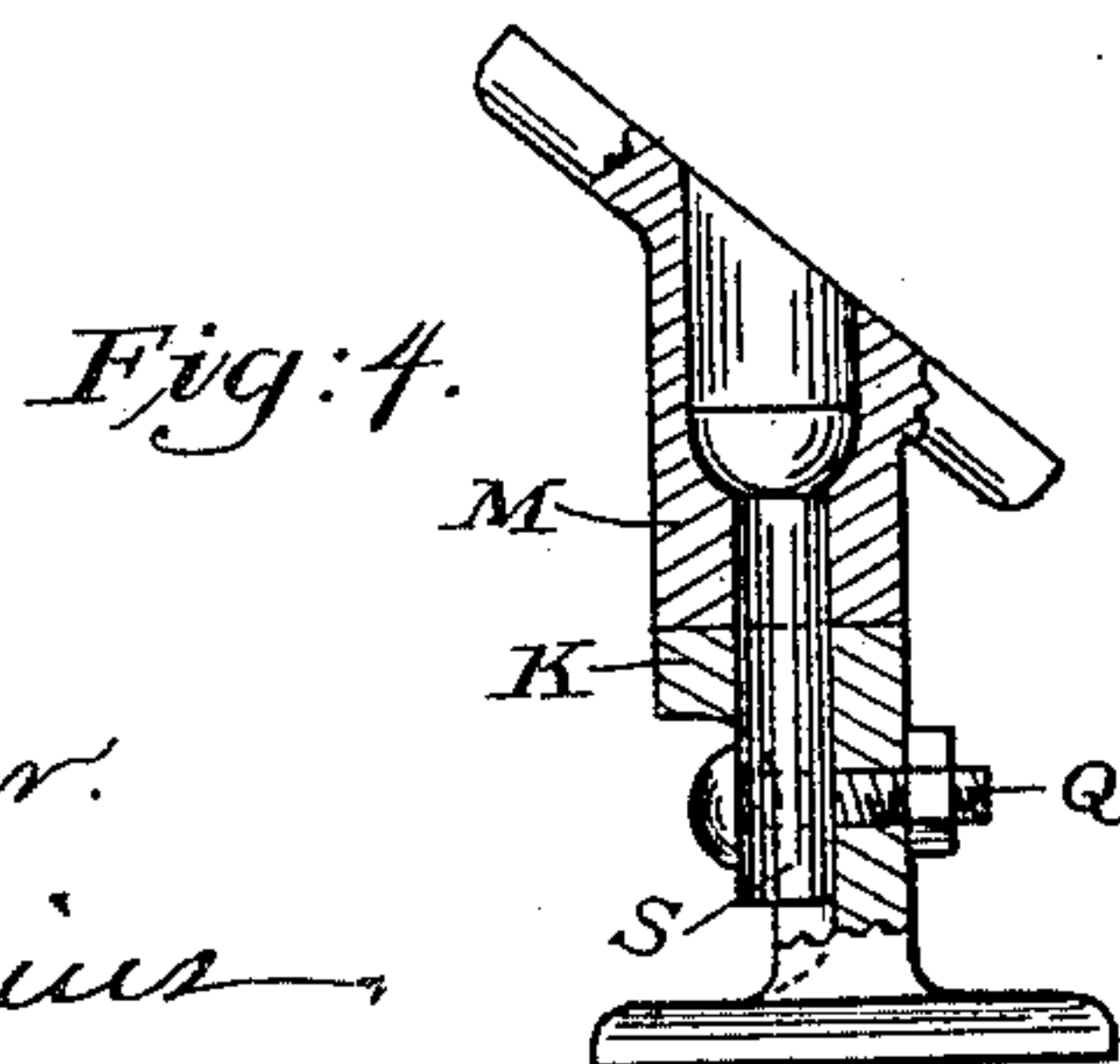
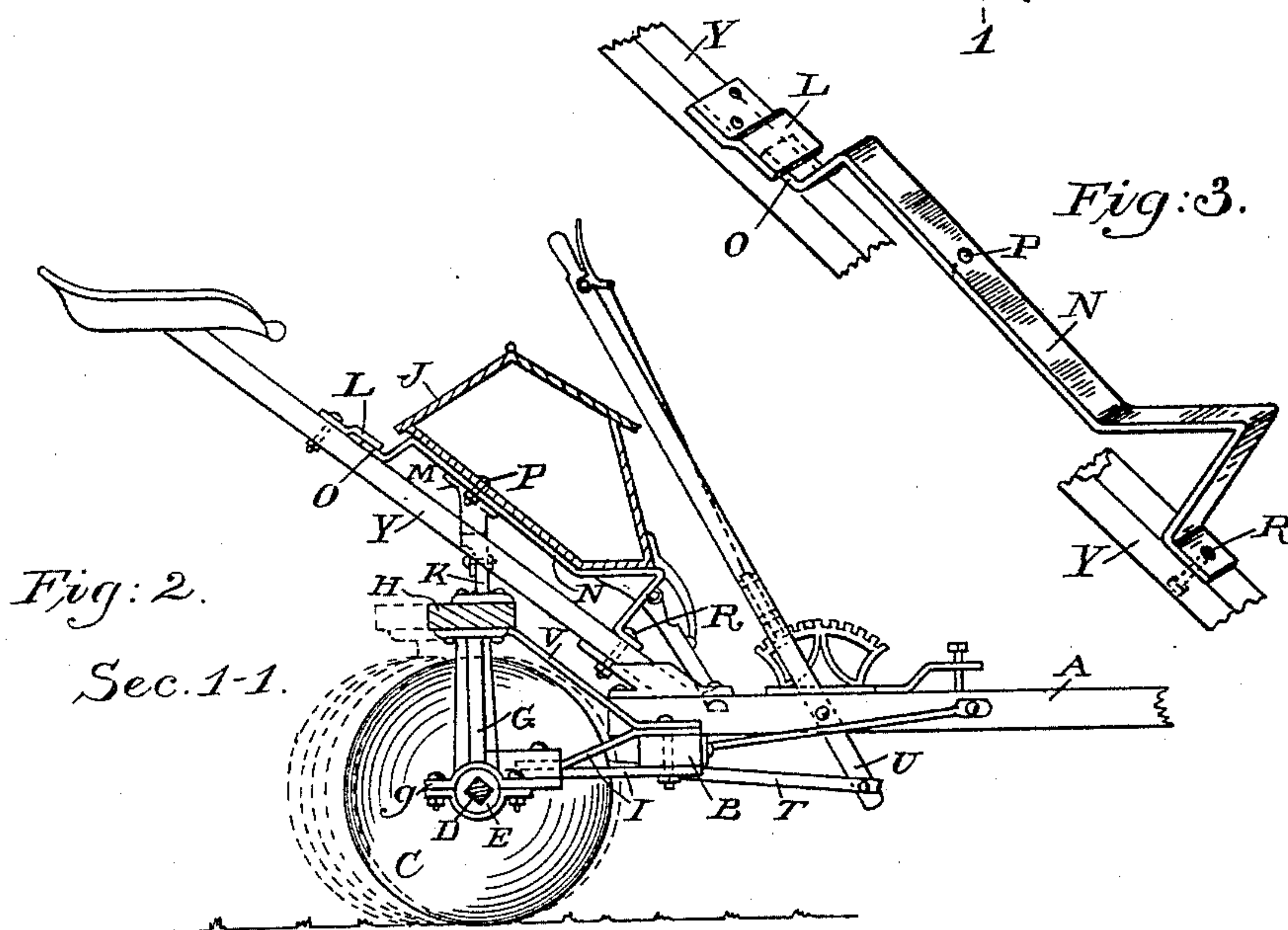
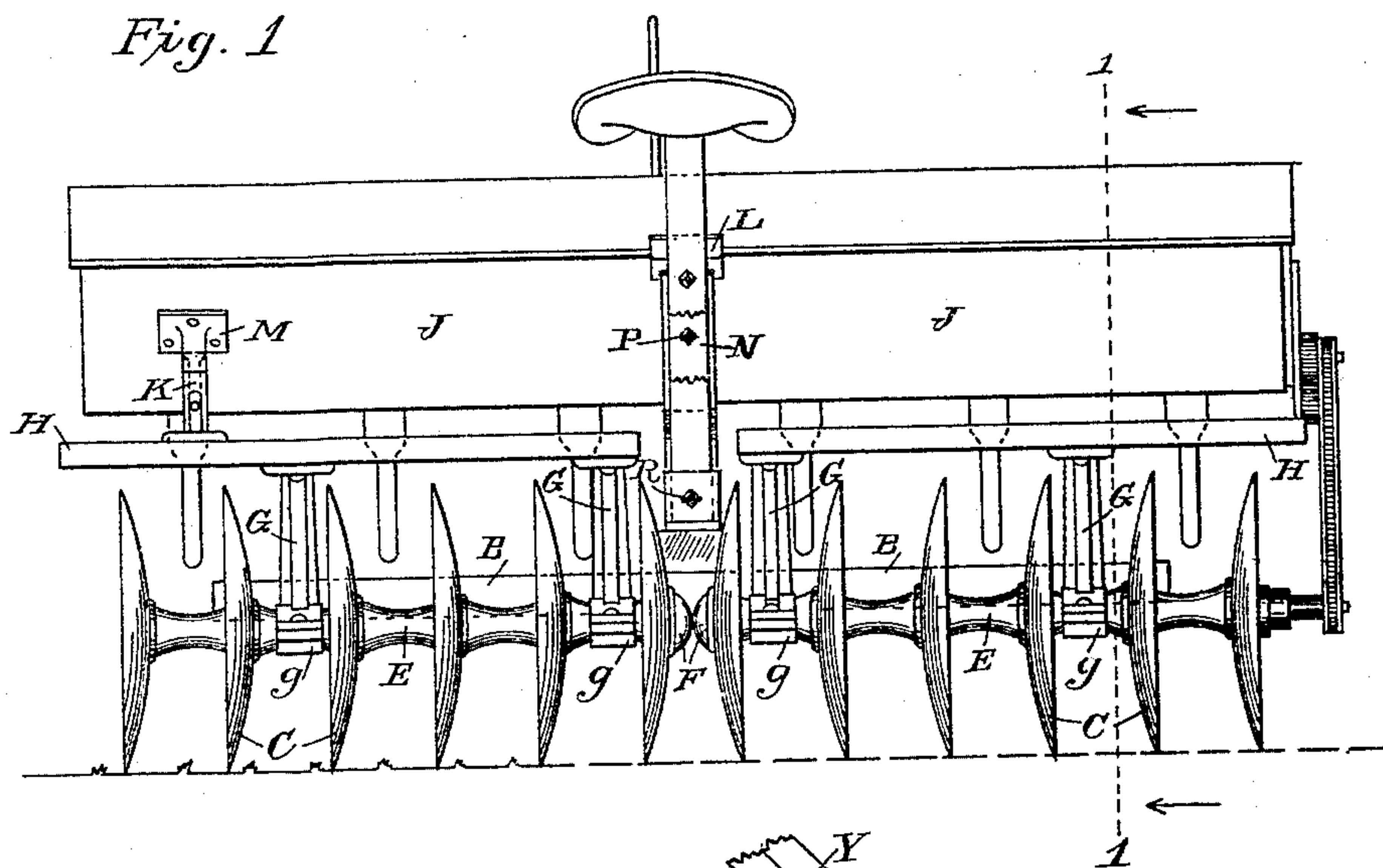


(No Model.)

S. C. COBB.  
SEEDING MACHINE.

No. 454,458.

Patented June 23, 1891.



WITNESSES:

*John W. Fisher.*  
*Walter Melius.*

INVENTOR,

*Samuel C. Cobb*  
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ATTORNEY.



# UNITED STATES PATENT OFFICE.

SAMUEL C. COBB, OF JANESVILLE, WISCONSIN.

## SEEDING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 454,458, dated June 23, 1891.

Application filed April 17, 1891. Serial No. 389,373. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL C. COBB, a citizen of the United States, residing at Janesville, in the county of Rock and State of Wisconsin, have invented certain new and useful Improvements in Seeding-Machines; and I do hereby 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.

My invention has for its object to support a seed-box upon disk-gangs having an endwise movement independently of a main frame, so that said box will assume a level and uniform position during all changes of the disk-gangs. This I accomplish by the means illustrated in the accompanying drawings, in which—

Figure 1 is a rear view of a machine embodying my invention. Fig. 2 is a vertical cross-section of the same, taken on line 1 1 of Fig. 1. Fig. 3 is a perspective view of a central supporting-standard. Fig. 4 is a vertical cross-section of an end standard.

As illustrated in the drawings, each disk-gang consists of a series of disks C, secured upon an axle-rod D and separated by spools E. The inner end of the rod D is provided with a head or buffer F. Standards G, having their upper ends connected by means of the cross-bar H and their lower ends provided with bearing-boxes g, engaging with the spools E, complete the disk-gangs.

The main frame consists of a pole A, a laterally-extending cross-bar B, and a seat-standard Y. The disk-gangs are connected to the main frame by means of laterally-movable draft-bars I, pivoted at their forward ends to the cross-bar B and at their rear ends to the standard G, and by brace-bars V, which are pivoted to the cross-bar H and to the bar B.

When the machine is not in operation, the gangs are arranged in a line at right angles to the line of progression of the machine; but when in operation the inner ends of the gangs are thrown backward, as illustrated by dotted lines in Fig. 2, the gangs then being arranged obliquely to said line of progression. In moving backward the inner ends of the gangs separate from each other, thereby leaving a wide strip of ground uncultivated. To over-

come this objection and to bring the inner ends of the gangs together, so that the buffers F may come in contact, the draft-rods I, which connect the gangs to the main frame, swing laterally on their pivots and permit a limited bodily movement of the gangs endwise. The buffers F are brought into contact, in order that each gang may resist the side thrust or pressure of the opposite gang, and thereby avoid the lateral friction on the journal-bearings commonly found in this class of machines.

In order to support a seed-box upon disk-gangs having the bodily endwise movement already described, it is necessary to provide some means for compensating for said endwise movement and at the same time hold the box in a level position at right angles to the central longitudinal line of the machine. To accomplish this result the seed-box J is supported at one end by a standard composed of two sections, the upper section M being secured to the seed-box and the lower section K attached to the cross-bar H or other suitable portion of the disk-gang. The two sections are united by means of a bolt S, which is held in place by means of a transverse bolt Q. The seed-box is supported at its center by a standard N, having its lower end pivotally secured to the main frame by means of a pin or bolt R and its upper end clasped freely by the overlapping lip L, so as to allow a limited lateral movement to said end of the standard. The seed-box is preferably pivoted to the standard N by means of a bolt P, so that the box may adjust itself to a horizontal position during all changes of the disk-gangs.

What I claim is—

1. The combination, with a main frame and disk-gangs pivoted thereto, of a seed-box, a sectional end supporting standard, and a central standard pivoted at its lower end to the main frame and movable laterally at its upper end, substantially as shown and described.

2. The combination, with a main frame, of disk-gangs movable vertically and laterally independently of said frame, a seed-box pivotally supported upon a standard pivoted at its lower end to the main frame and movable laterally at its upper end, and a sectional end supporting standard, substantially as shown and described.

3. The combination, with a main frame, of  
disk-gangs pivoted to the main frame, a seed-  
box, a swivel end supporting standard, and a  
central standard pivoted at its lower end to  
5 the main frame and movable laterally at its  
upper end, substantially as shown and de-  
scribed.

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

SAMUEL C. COBB.

Witnesses:

ROBERT W. HARDIE,  
COLIN C. MCLEAN.