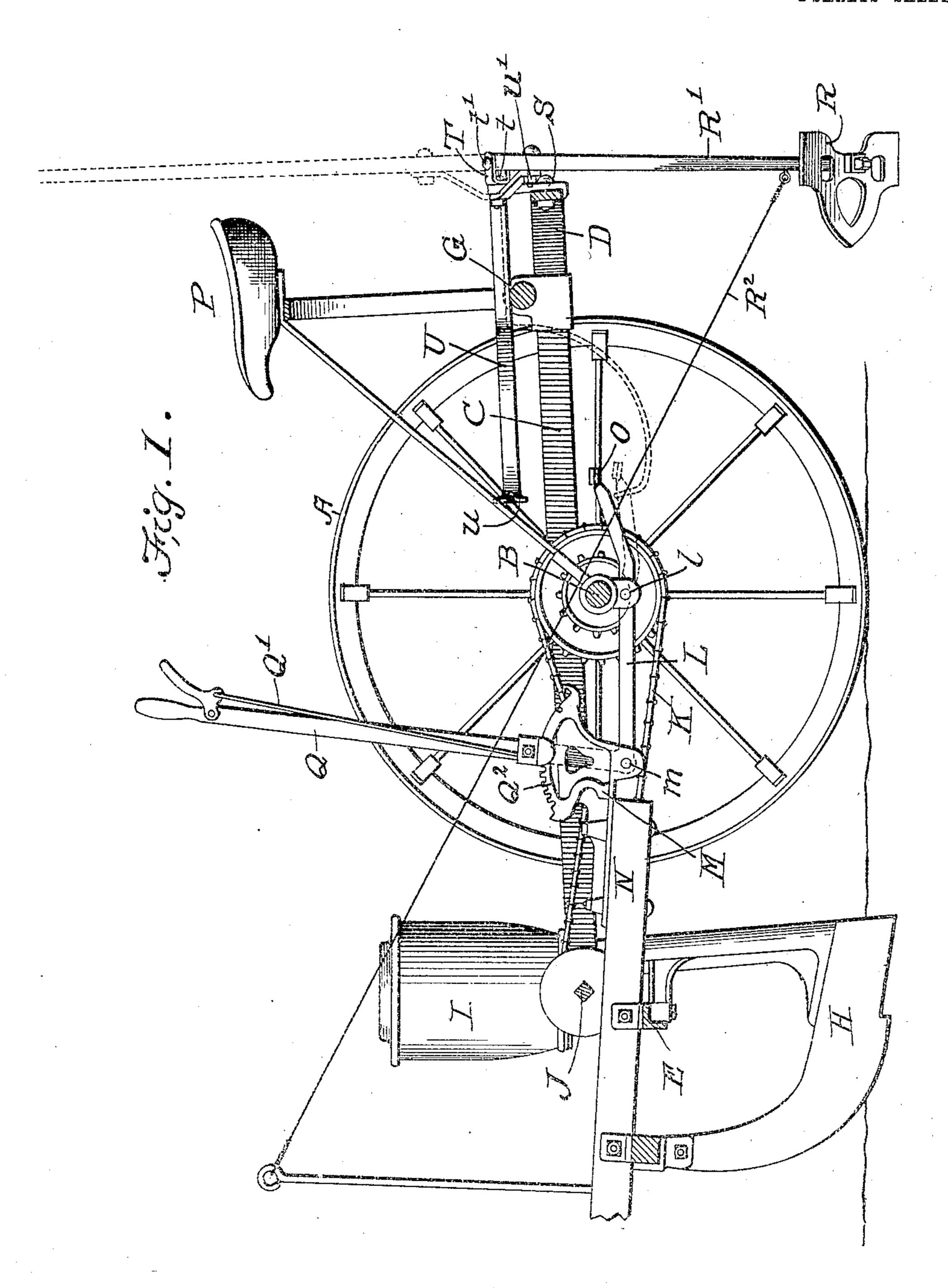
# F. E. COMSTOCK. SEED PLANTER. APPLICATION FILED OUT, 12, 1904.

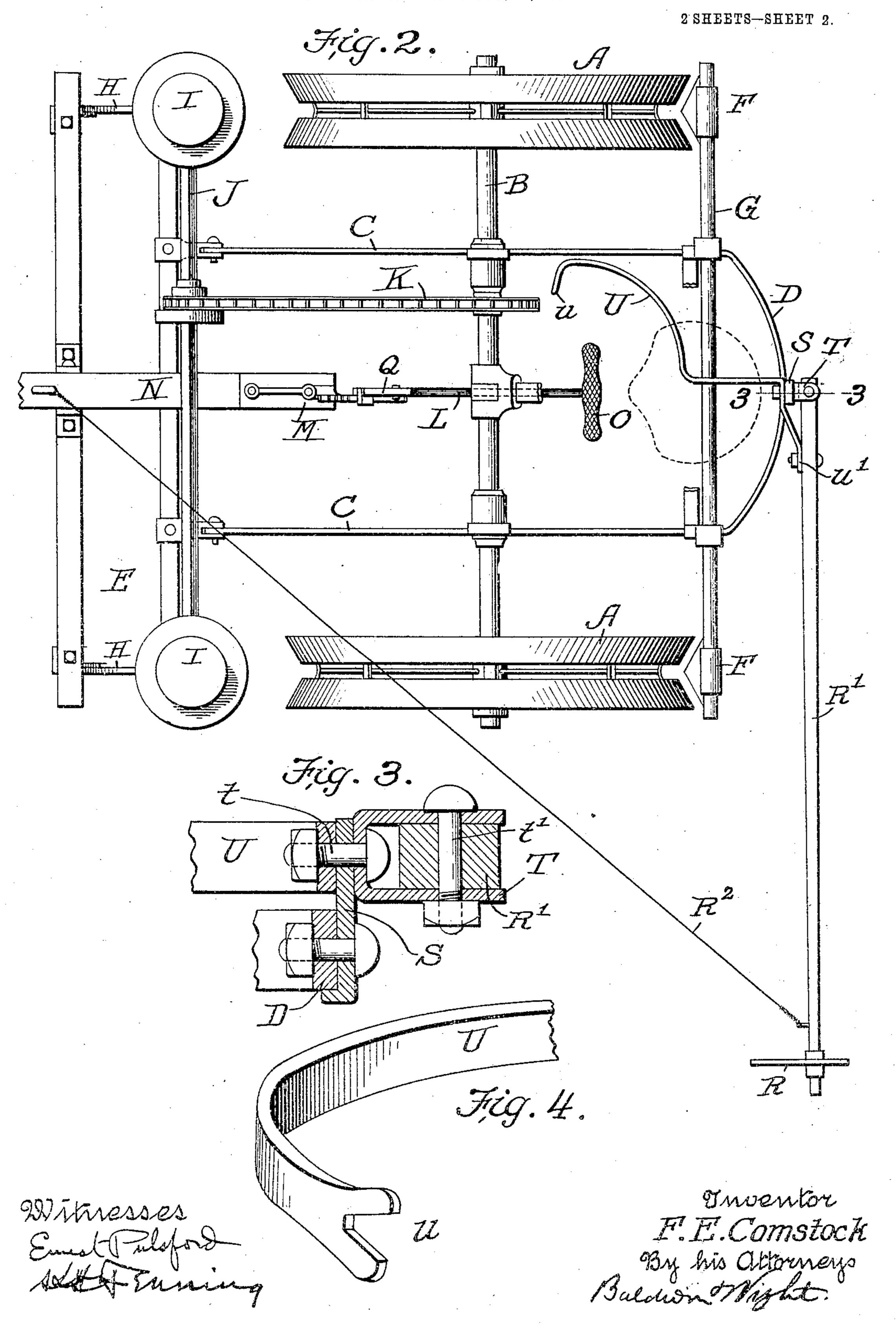
2 SHEETS-SHEET 1.



Witnesses Emet Puliford. Inventor
II. E. Comstack
By his attorneys
Seedson Heybet.

### F. E. COMSTOCK. SEED PLANTER.

APPLICATION FILED OCT. 12, 1904.



## United States Patent Office.

FREDERICK E. COMSTOCK, OF VALPARAISO, INDIANA, ASSIGNOR OF ONE-HALF TO WALTER L. DODD, OF WESTVILLE, INDIANA.

#### SEED-PLANTER.

SPECIFICATION forming part of Letters Patent No. 778,475, dated December 27, 1904.

Application filed October 12, 1904. Serial No. 228,154.

To all whom it may concern:

Be it known that I, Frederick E. Comstock, a citizen of the United States, residing at Valparaiso, in the county of Porter and State of Indiana, have invented certain new and useful Improvements in Seed-Planters, of which the following is a specification.

My invention relates to that class of seed-planters, such as check-row corn-planters, which employ a trailing marker; and the object of my invention is to provide improved machines for attaching a trailer to the various kinds of markers now commonly used.

In carrying out my invention I employ a 15 trailing marker of any well-known kind, and to the inner end of the trailer-rod I attach a lever, which is pivotally connected with the main frame of the planter in the central line of draft. From its pivotal connection with 20 the frame the lever extends forward and is curved laterally to one side and then extends farther forward, where it is formed with a bifurcated or forked front end or head, which is adapted to engage with the foot-lever of the 25 mechanism for raising the runner-frame. The arrangement is such that the trailer may be raised from the ground by the driver whenever the machine is being turned, when encountering an obstruction, or for any other 30 purpose by simply placing his foot on the marker-lifting lever, so as to depress its front end and cause it to assume a position directly under the lifting-lever of the runners. When in this position, the marker is raised to its full 35 extent behind the driver's seat. If now the foot-lever is depressed, it will engage the forked end or head of the marker lifting-lever and hold it firmly in position. When the machine has been turned or when it is desired to 40 drop the marker, the foot-lever of the runnerlifting mechanism may be released, and then the marker may be shifted to one side or the other by the foot of the driver.

My improvements do not involve any change in the construction or operation of seed-planters now generally in use. My improvements may be readily applied to well-known forms of trailers and easily attached to the frames of all seed-planters. In the accompanying drawings, Figure 1 50 shows a longitudinal section of a well-known form of corn-planter. Only so much of the mechanism is shown as is necessary to illustrate the manner in which my improvements are applied. Fig. 2 shows a top plan view of 55 the same. Fig. 3 shows a local section on the line 3 3 of Fig. 2. Fig. 4 is a perspective view of the front end of the marker-lifting lever.

As before stated, my improvements may be 60 applied to various styles of seed-planters; but in order that it may be understood how my improvements are applied I will briefly describe the general outlines of the seed-planter shown in the accompanying drawings.

The carrying-wheels A are attached to an axle B, and on the axle is supported the main frame or carriage, shown as consisting of longitudinal bars C, which are connected at their rear ends by a curved portion D and at their 70 front ends are hinged to the runner-frame E.

F indicates scrapers, which are mounted on the opposite ends of the scraper rock-shaft G.

The runners H are connected in the usual manner with the runner-frame. The seed- 75 boxes I are mounted on the runner-frame and the seed-dropping devices are operated by a shaft J, geared by a chain K with the axle B. The runner-frame is raised and lowered by means of a lever L, pivoted at l to the axle 80 and pivotally connected at m with a bracket M, attached to the tongue N. The lever L is prolonged rearwardly from the axle and is provided with a foot-piece O beneath the driver's seat P. The lever L is bent upwardly 85 to form a hand operating-lever Q, carrying detent mechanism Q', engaging the segment Q<sup>2</sup> on the bracket M. This mechanism operates in the usual manner. When the foot-lever O is depressed, it raises the rear end of the 90 tongue N, and consequently raises the runners. The same operation may be effected or assisted by means of the hand-lever and the parts may be locked by the detent mechanism.

The marker R is attached to the outer end 95 of a marker-rod R' and a draft chain or rod R<sup>2</sup> extends diagonally from the outer end of the rod R' to the runner-frame, as is usual.

In order to attach the inner end of the markerrod to the frame, I employ a bracket S, which, as shown in Figs. 1 and 3, is attached to the curved rear end D of the main frame and 5 rises therefrom behind the driver's seat. U-shaped casting T is pivotally connected at t with the upper end of the bracket S and is connected, as shown in Fig. 3, by a bolt t' to the inner end of the marker-rod R'. This 10 connection is a loose one, so that the rod R' may turn about the bolt t' to a limited extent. To the marker-rod is attached a markerlifting lever U, which is the main feature of my invention. This is preferably of the 15 shape shown most clearly in Fig. 2. Its outer rear end is secured at n' to the marker-rod a short distance beyond its inner end, and it is then extended toward the inner end of the marker-rod and is attached by the bolt t to 20 the bracket S. The lever is then extended rearwardly in the central line of draft below the driver's seat and is then curved laterally to one side, carried forward and formed at its front end with an enlarged bifurcated head u 25 of the form most clearly shown in Fig. 4.

Normally the lever occupies the position shown in Fig. 2 when the trailer is in operation, and the form and arrangement are such that the lever may be conveniently operated 30 by the foot of the driver whenever desired. When about to turn the machine, the driver, as usual, raises the runner-frame, but before doing this he depresses the lever U, causing it to swing about the pivot-bolt t until the 35 forked end u is immediately beneath the footlever O. When the driver depresses the footlever to raise the runner-frame, the lever will engage the forked end u and will hold the marker in an elevated position in the manner 40 indicated by dotted lines in Fig. 1. This will leave the hands of the driver entirely free to handle his team. As soon as the machine has been turned the driver can relieve pressure on the foot-lever, allow the runner-45 frame to drop, and at the same time allow the

marker-frame to drop over to the other side or to be directed to that side by his feet.

The precise form of the marker-operating lever is not essential. That shown is simple and efficient; but the form may be somewhat 5° changed when used on seeding-machines of the kind illustrated in the drawings, and when used on other seeding-machines the form may have to be changed somewhat in order to clear mechanism with which it would other- 55 wise come in contact.

I claim as my invention—

1. The combination with a seeding-machine of a trailing marker, means for pivoting the marker to the machine and a bent marker-op- 60 erating lever extending forwardly from the marker and adapted to engage the lever which lifts the runner-frame.

2. The combination with the main frame and the runner-frame of a seeding-machine of 65 a lever for lifting the runner-frame, a trailing marker pivotally connected with the main frame of the machine and a bent markeroperating lever attached to the inner end of the marker-rod pivotally connected with the 7° main frame and having its front end adapted to engage with the lever which raises the runner-frame.

3. The combination with the main frame and the runner-frame of a seeding-machine, of 75 a trailing marker pivotally connected with the main frame, a lever for raising the runner-frame, and a marker-operating lever pivotally connected with the main frame extending forwardly therefrom in the central line of 80 draft, curved laterally and formed with a bifurcated front end adapted to engage the lever which raises the runner-frame.

In testimony whereof I have hereunto sub-

scribed my name.

### FREDERICK E. COMSTOCK.

Witnesses:

Hannibal H. Loring, DELLA WENDELL.