

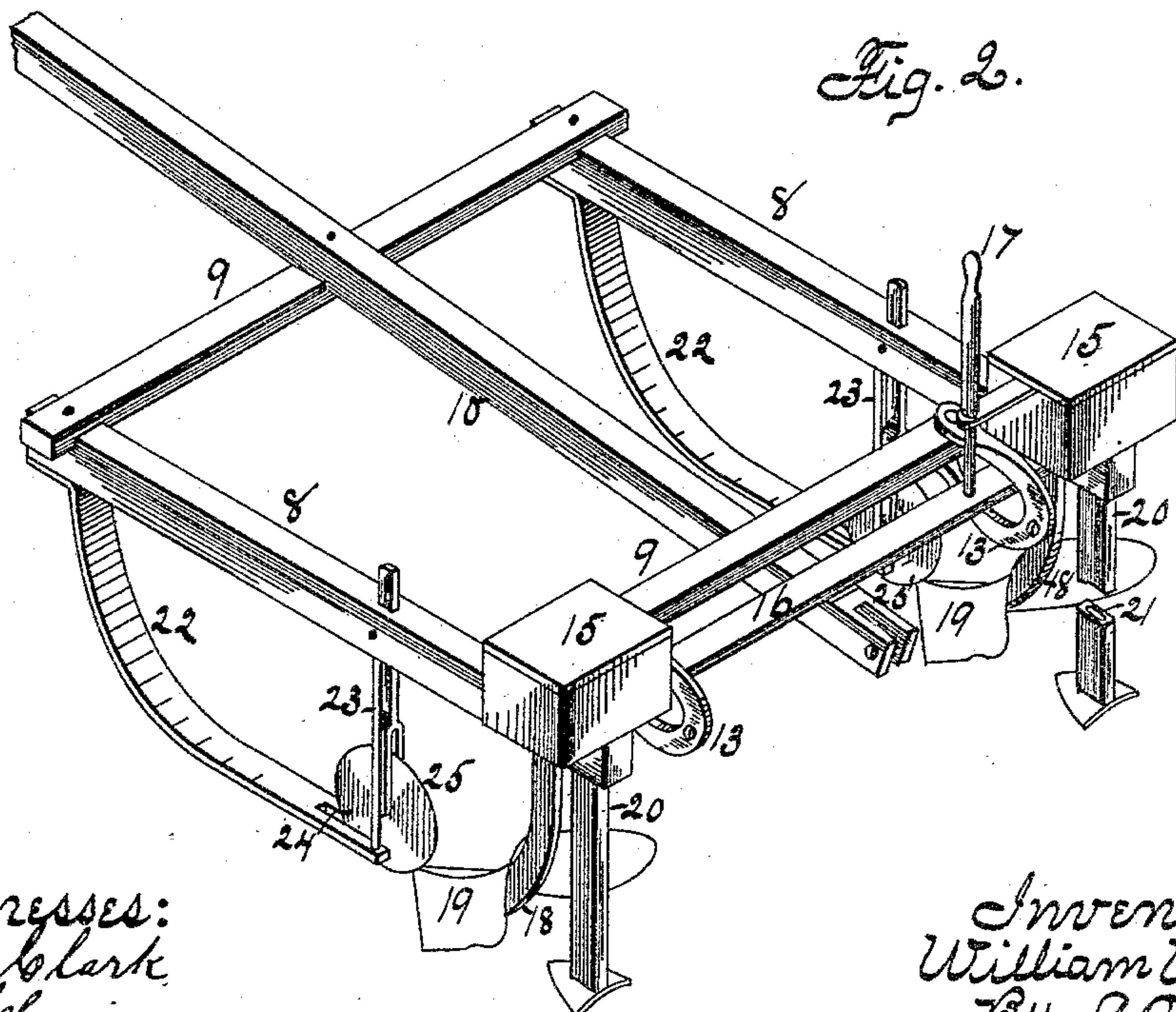
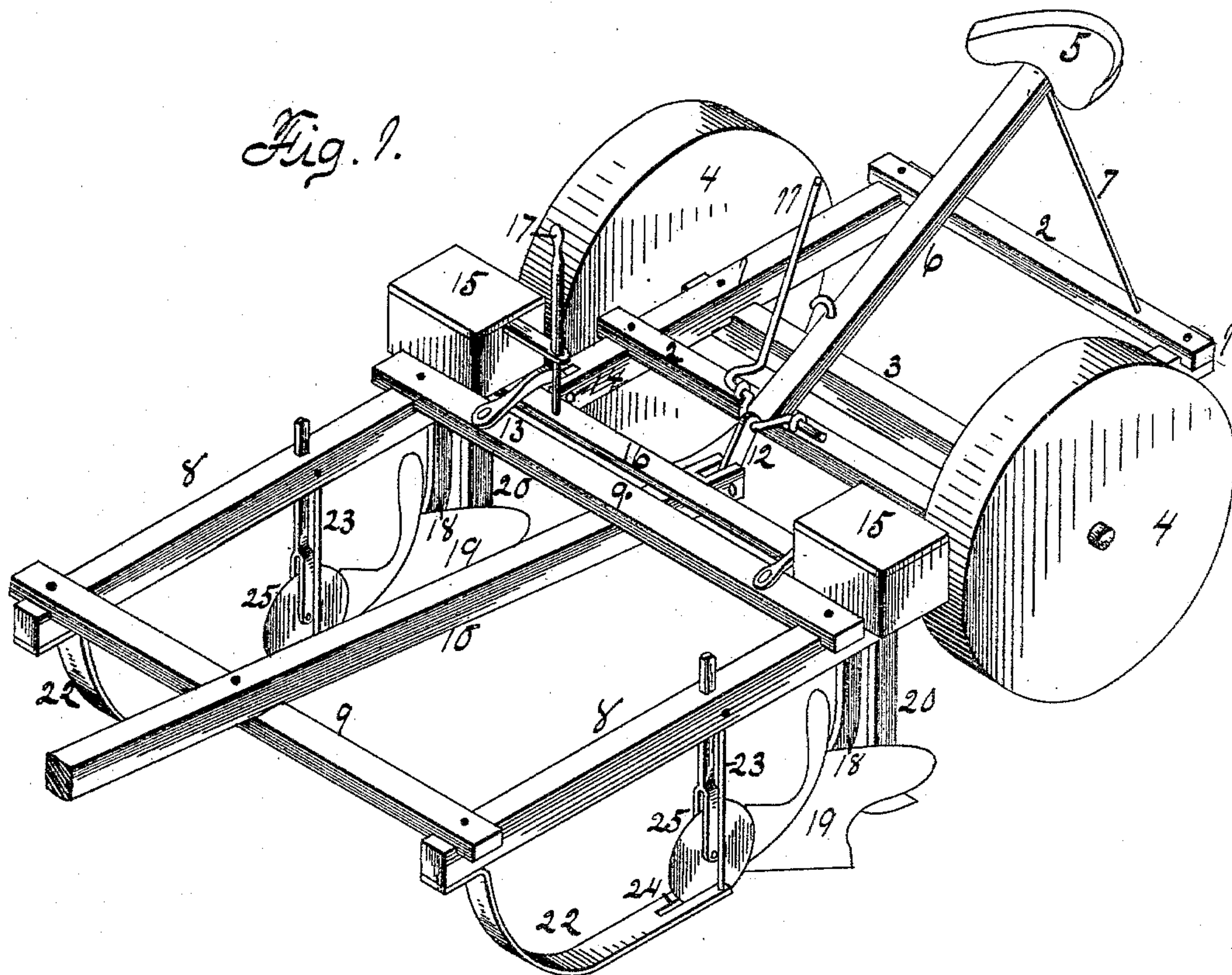
(No Model.)

W. WATSON.

DOUBLE LISTER CORN PLANTER.

No. 411,696.

Patented Sept. 24, 1889.



Witnesses:
C. B. Clark
& Behel.

Inventor:
William Watson.
By A. O. Behel
Attg.

UNITED STATES PATENT OFFICE.

WILLIAM WATSON, OF FAIRFIELD, NEBRASKA.

DOUBLE-LISTER CORN-PLANTER.

SPECIFICATION forming part of Letters Patent No. 411,696, dated September 24, 1889.

Application filed April 6, 1889. Serial No. 306,250. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WATSON, a citizen of the United States, residing at Fairfield, in the county of Clay and State of Nebraska, have invented a certain new and useful Improvement in Double-Lister Corn-Planters, of which the following is a specification.

The object of this invention is to connect two plows and subsoilers to a frame upon which is supported the seed-boxes, said frame having a hinged connection with a main carrying-frame, upon which is mounted a driver's seat and a lever mounted upon the carrying-frame and having a connection with the lister-frame, by means of which the lister-frame and the parts attached thereto may be raised and held supported.

In the accompanying drawings, Figure 1 is an isometrical representation of a seeding-machine embodying my invention as viewed from the front. Fig. 2 is also an isometrical representation of the lister-frame detached from the carrying-frame, as viewed from the rear.

The carrying-frame consists of the lengthwise beams 1, held separated by transverse bars 2. An axle 3 is secured to the under side of the lengthwise beam 1 and has carrying-wheels 4, mounted on its projecting ends. A driver's seat 5 is secured upon the end of the lengthwise beam 6 and braces 7 hold the seat firmly in its position.

The lister-frame is composed of lengthwise bars 8, having transverse bars 9, connected therewith, which holds them separate. A tongue 10 is connected with the lister-frame, the rear end of which extends beyond the lister-frame. A lever 11 has a pivotal connection with the carrying-frame, and by means of the link 12 connects the carrying-frame with the rear extension of the tongue. The carrying-frame has a hinged connection with the lister-frame by means of brackets 13, connected to the lister-frame and extending rearward and engaging the forward ends of the lengthwise beam 1 by a bolt 14, passing through the parts.

On the upper side of the lister-frame are secured seed-boxes 15. A seed-slide 16 is operated by the usual handle 17 to drop the corn in hills in the usual manner. The seed-boxes and the seed mechanism located there-

in may be any of the well-known forms now in use.

To the rear ends of the lengthwise bars 8 are secured plow-standards 18, having double plows 19 connected to their lower end. In rear of the plows 18 subsoilers 20 depend from the under side of the lengthwise beams 8. This subsoiler has a lengthwise opening 21, which communicates with the seed-boxes, for a purpose to appear hereinafter. To the front under side of the lengthwise beams 8 are secured runners 22, having their front ends curved and extending nearly to the point of the plow. Their rear ends are connected to the lengthwise beams 8 by rods 23. The rear ends of the runners are slotted, as at 24. Rolling colters 25 have a connection with the lengthwise beams 8 and extend below the runners by passing through the slots 24. By this construction of a double-lister frame hinge-jointed to the main carrying-frame I am enabled to turn the soil for two rows of corn, and also provide means by which the driver may ride upon the machine. The construction of the plows herein represented is such that the soil will be turned as in ordinary plowing, and because of the double faces of the plows the soil will be divided and turned in opposite directions, leaving a furrow, and the subsoilers following immediately after the plows will loosen the soil forming the bottom of the furrow, and the seed will be deposited in this loose soil by descending the lengthwise opening in the subsoiler, which will be covered by the carrying-wheels. The runners in front of the plows regulate the depth of the furrow.

I claim as my invention—

The combination of a lister-frame carrying two double mold-board plows, a subsoiler in rear of each of said plows, runners secured to the frame and extending rearwardly, colters located in front of the plows, a main frame having a hinge-joint connection with the lister-frame, a driver's seat located thereon, and a hand-lever for adjusting the relation of the two frames with each other, substantially as set forth.

WILLIAM WATSON.

Witnesses:

M. D. GATES,
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