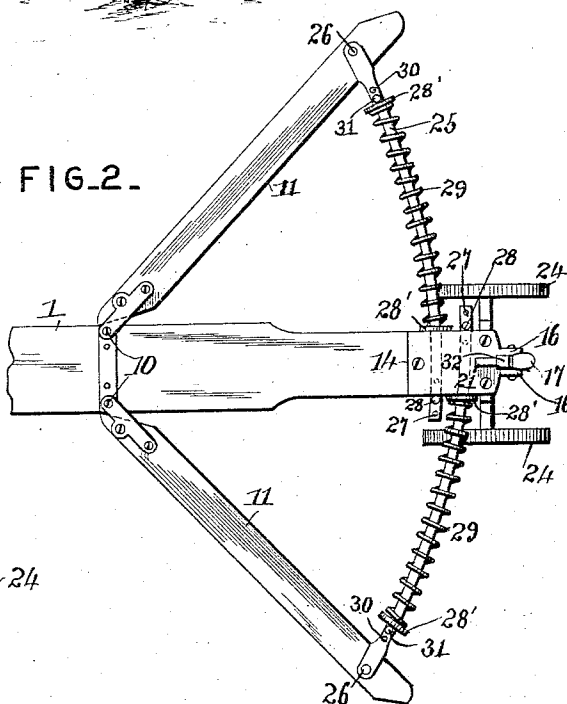
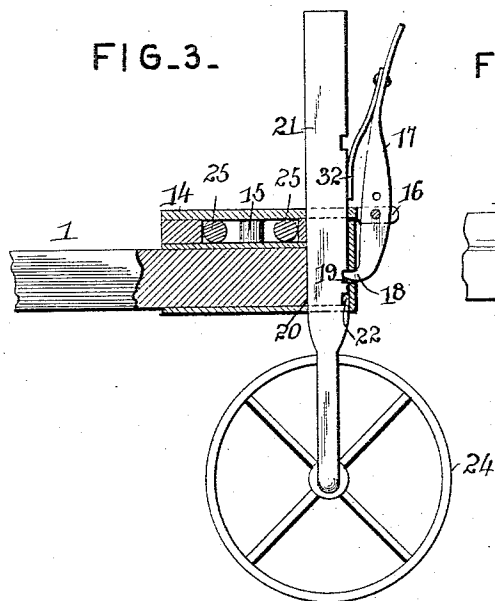
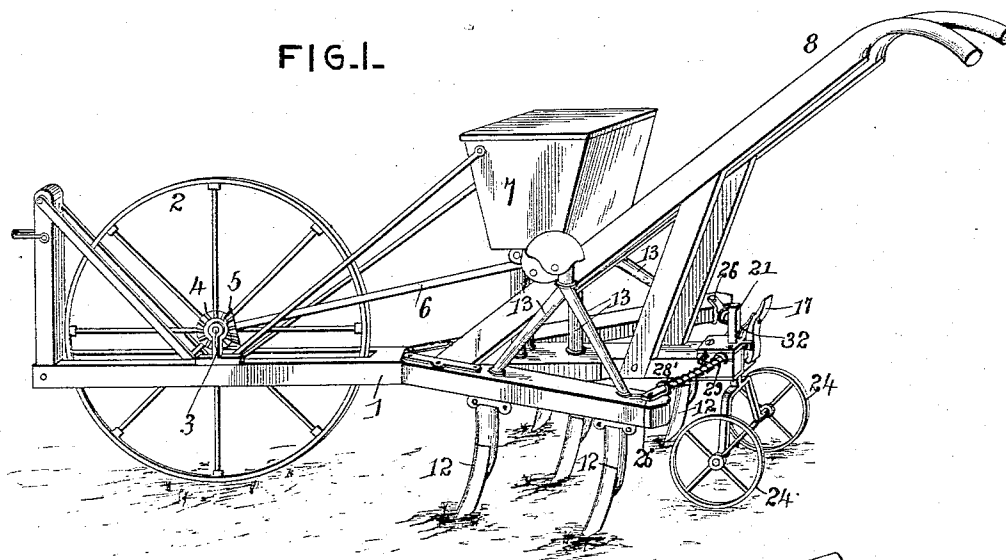


P. KESLING.
GRAIN DRILL.

Patented June 7, 1892.



Inventor

Perry Kesling

By *his* Attorneys,

CA Snow & Co.

UNITED STATES PATENT OFFICE.

PERRY KESLING, OF LOGANSFORT, INDIANA, ASSIGNOR TO THE KING DRILL COMPANY, OF SAME PLACE.

GRAIN-DRILL.

SPECIFICATION forming part of Letters Patent No. 476,391, dated June 7, 1892.

Application filed January 9, 1892. Serial No. 417,547. (No model.)

To all whom it may concern:

Be it known that I, PERRY KESLING, a citizen of the United States, residing at Logansport, in the county of Cass and State of Indiana, have invented a new and useful Grain-Drill, of which the following is a specification.

This invention relates to improvements in grain-drills, and especially to that class thereof employing a caster at their rear ends and opposite swinging side wings for carrying the drills.

The objects of my invention are to improve the casting, render the same readily adjustable, and to provide means for adjustably and yieldingly securing the adjusting-bars of the wings to the beams.

With the above objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a grain-drill constructed in accordance with my invention. Fig. 2 is a plan of the rear portion of the beam of the same. Fig. 3 is a longitudinal section through the rear end of the beam.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the beam of the grain-drill, and 2 the pilot-wheel, for the reception of which the beam is bifurcated at its front end. The wheel is mounted in bearings 3, and its shaft or axle carries a small pinion 4, which engages with a pinion 5, located at the front end of a feed-shaft 6, the rear end of which extends within the hopper 7, supported at the rear end of the beam 1.

8 designates the handles, the front ends of which are secured to the opposite sides of the beam and are suitably braced.

Hinged, as at 10, to the opposite sides of the beam is a pair of opposite wings or pivoted beams 11, each of which carries one or more, and in this instance two, ordinary grain-drill hoes 12, to each of which, by a pipe 13, grain is fed from the hopper 7.

In a cast-metal block transversely recessed and designated as 14 and secured to the rear upper side of the beam there is located a central vertical pin 15, and at the rear end of the block a pair of rearwardly-extending bearing-

ears 16 is formed. A lever 17, terminating at its lower end in a finger 18, is fulcrumed in these ears. The finger 18 extends laterally through an opening 19, formed in the end of the beam, into a vertical passage 20, formed in the block and beam.

21 designates the vertical shank or standard of a gage wheel or wheels, which fits within the passage 20 and has its rear edge notched at intervals, as at 22, whereby it may be locked at any point of elevation by the before-described finger formed at the lower end of the lever. The lower end of the shank or standard is bifurcated, as shown, and terminates in opposite bearings or journals, each of which receives and rotatably supports a gage-wheel 24. It will be obvious that by adjusting this shank through the medium of the lever the rear end of the beam, together with the drills, may be raised and lowered, and thus the machine adapted for traveling from one field to another or to and from the point of operation, or the drills lowered to a proper degree for such operation.

25 designates a pair of curved rods, the outer ends of which are bifurcated and pivoted, as at 26, to the free ends of the wings 10, and the inner ends of said rods are passed through the transverse openings formed in the metal block, being divided and prevented from contact by the vertical pin located in the block. The inner ends of the rods are provided with a series of perforations 27, in which the movable pins 28 may be inserted for the purpose of preventing a withdrawal of the arms from the block and adjusting the wings toward the beam. A pair of washers 28' is mounted upon each of the rods, and coiled springs 29 are mounted upon the rods and interposed between each pair of washers. The rods near their outer ends are perforated, as at 30, and pins 31 removably mounted therein. By locating the pins in the various perforations it will be obvious that the springs will be more or less compressed, and hence offer a greater resistance to the inward swinging of the wings.

For the purpose of maintaining the lever in a locked position with relation to the shank of the gage-wheel a curved flat spring 32 is secured to the upper front side of the lever and at its lower end bears against the front

edge of the shank of the gage-wheel. By pushing the lever to the front the lower end of the same unlocks with the shank of the gage-wheel, which latter may be raised or lowered
 5 either to wholly elevate the points of the drills from contact with the ground, so that the machine may be transported, or so as to set the points into the ground, whereby the machine is ready for operation. By adjusting the inner
 10 ends of the wings the drills are brought closer together and are yieldingly held in such adjusted relation, and by changing the location of the keys or pins in the outer ends of the curved rods the tension of the springs may
 15 be increased or decreased, as will be readily observed.

Having described my invention, what I claim is—

1. In a grain-drill, the combination, with the
 20 beam, the pivoted side wings, and the transversely-recessed block, of the curved rods pivoted at their outer ends to the wings, having their inner ends passed through the block and provided with perforations, pins removably
 25 mounted in the perforations for preventing a withdrawal of the rod, pairs of washers loosely mounted on each of the rods, and springs coiled upon the rods between the washers, substantially as specified.

2. In a grain-drill, the combination, with the
 30 central beam, the opposite pivoted wings, and the transversely-recessed block mounted on the rear end of the beam, of the curved rods pivoted at their outer ends to the ends of the
 35 wings and having their inner ends provided

with a series of adjusting-perforations and passed through the blocks, pins mounted in the perforations, pairs of washers loosely mounted on each of the rods, adjusting-perforations formed in the outer ends of the rods, and pins removably mounted therein, substantially as specified.

3. In a grain-drill, the combination, with the beam and the metal block secured at the rear end of the same and provided with a vertical
 45 passage and at its rear end with bearing-lugs, of a gage-wheel the shank of which is mounted loosely in the passage and provided with notches, a lever terminating at its lower end in an inwardly-disposed finger for engaging
 50 the notches of the standard or shank and fulcrumed between the bearing-lugs of the block, and a spring secured to the front end of the lever and bearing against the shank, substantially as specified.

4. In a grain-drill, the combination, with the opposite pivoted side wings, the curved rods pivoted at their outer ends to the wings and having their inner ends passed loosely through
 60 guideways provided on the central beam, and the springs encircling the rods and operating substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

PERRY KESLING.

Witnesses:

JOHN H. SCHWERDMAN,
 FREDERICK LANDIS.