No. 799,469. PATENTED SEPT. 12, 1905.

J. H. KENNEBREW.

PLOW.

APPLICATION FILED MAY 6, 1905.

FIG. 2.

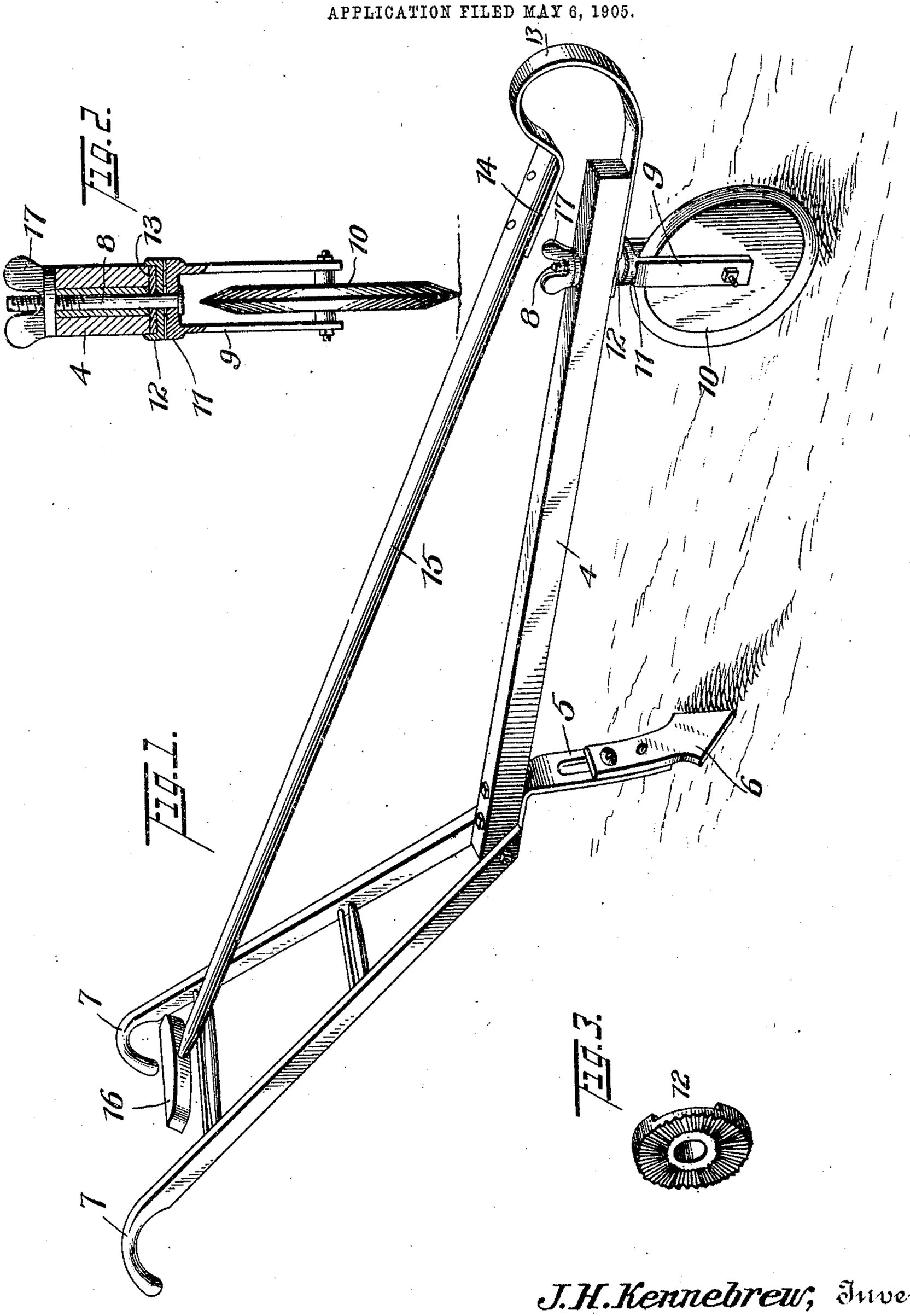

FIG. 1.

FIG. 3.

Witnesses

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PLOW.

No. 799,469. Specification of Letters Patent. Patented Sept. 12, 1905.

Application filed May 6, 1905. Serial No. 259,176.

To all whom it may concern:

Be it known that I, JOHN HARRISON KENNEBREW, a citizen of the United States, residing at Columbus, in the county of Lowndes and State of Mississippi, have invented a new and useful Plow, of which the following is a specification.

This invention relates to improvements in hand or garden plows, and is applicable to turning or shovel plows, cultivators, seeders, and like devices of this character.

The principal object is to provide means whereby the weight and body-pressure of an operator may be transmitted to the front end of the plow, so that the same will be driven with comparatively great power and with ease to said operator, the structure being such that all shocks or jars and the like imparted to the plow will be absorbed by the structure and not transmitted to the operator.

A still further object is to provide simple means for guiding the plow, which means is also adjustable in order to secure the proper lead of the plow under varying conditions of work.

The preferred embodiment of the invention is illustrated in the accompanying drawings and is described in the following specification. The claims, however, are not limited to the exact structure shown, as will be apparent upon an inspection of said claims.

In said drawings, Figure 1 is a perspective view of the improved plow. Fig. 2 is a vertical sectional view through the front portion of the same. Fig. 3 is a detail perspective view of one of the locking-disks.

Similar reference-numerals designate corresponding parts in all the figures of the drawings.

In the embodiment illustrated an ordinary type of plow is employed comprising a beam 4, having a stock 5, to the lower end of which is secured a suitable shovel 6. Handles 7 are fastened to the rear end of the beam and extend at an inclination upwardly and rearwardly with respect thereto. In the front end of the beam is located a stem 8, from which depends a yoke 9, having journaled therein a guide-wheel 10. Secured to the upper end of the yoke is an adjusting-disk 11, having teeth which interfit with the teeth on a similar disk 12, located thereover. This disk 12 is secured to the lower end of a forwardly and upwardly bowed leaf-spring 13, the upper portion of which is downwardly bent with the terminal offset, as shown at 14. To said terminal 14 is fastened the front lower end of a push-bar 15, extending longitudinally over the beam 4 and having at its rear end a cross-head 16, that is located between the handles. The disks 11 and 12 are normally clamped together, and thus held against relative rotation, by means of a nut 17, threaded upon the upper end of the stem.

In use the operator grasps the handles 7 and places his chest against the cross-head 16. The pressure is thus transmitted through the bar 15 and applied at the front end of the beam. The plow can thus be operated with comparatively great power, and at the same time no shocks or jars are imparted thereto—as, for instance, by the plow-shovels striking an obstruction—as such shocks or jars will be absorbed by the spring connection 13, and consequently not transmitted to the body of the operator. The guide-wheel not only regulates the depth of plowing, but controls the direction of movement of the plow. The operator by moving toward one handle or the other will of course change the angle of direction of the bar 15 and correspondingly turn the wheel on its upright axis. Furthermore, by adjusting the wheel with respect to said bar the permanent lead may be changed as desired. This may be readily accomplished by loosening the disks and relatively changing the same.

The advantage of this arrangement will be readily understood, particularly in connection with turning-plows, wherein there is a side draft. This draft will be overcome by setting the wheel at a suitable angle, which angle, however, will not interfere with the directing of the wheel through the medium of the push-bar. The spring in itself is an exceedingly important feature, subserving three distinct purposes: first, maintaining the push-bar at the proper height for the operator; secondly, absorbing the shocks and jars, as above described, and, thirdly, constituting a connection between the push-bar and the wheel, which permits the directing of the wheel or the swinging of the plow-beam by means of the handles with respect thereto.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be apparent to those skilled in the art without fur-

ther description, and it will be understood that various changes in the size, shape, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a plow, of handles connected thereto, and a yielding pushing device connected to the plow independently of the handles.

2. The combination with a plow including a beam, of handles connected to the rear portion of the beam, and a yielding body-engaged pushing device connected to the front end of the beam, independently of said handles.

3. The combination with a plow, of handles connected to the plow; a pushing device, and a yielding connection between said device and plow, independently of the handles.

4. The combination with a plow, of a pushing device, and a leaf-spring connecting the pushing device and plow.

5. The combination with a plow, of a pushing device, and a bowed spring having one end secured to the plow and the other end to the pushing device.

6. The combination with a plow having a beam and handles secured to the rear end of the beam, of a pushing device located longitudinally over the beam and extending between the handles, and a spring connecting the pushing device and the front end of the beam.

7. The combination with a plow including a beam and handles secured to the rear end of the beam, of a push-bar located longitudinally over the beam and having a cross-head disposed between the handles, and a bowed spring connected to the front end of the push-bar and to the front end of the beam, said spring extending in advance of the bar and beam.

8. The combination with a plow comprising a beam, a body, handles secured to the rear end of the beam, and a wheel located beneath the front end thereof, of a push-bar extending longitudinally over the beam, a bowed spring secured to the push-bar, and common means for securing the spring and wheel to the beam.

9. The combination with a plow, of a guide-wheel journaled thereon, a body-engaged pushing device for moving the wheel, an adjustable connection between the device and said wheel, and means for normally holding the device and the wheel against such relative adjustment.

10. The combination with a plow, of a guide-wheel journaled thereon on a substantially upright axis, a device for moving the wheel, said device extending to the rear of the plow and having an adjustable connection with the wheel, said device furthermore moving in a substantially horizontal direction with respect to the wheel, and means for normally holding the device and wheel against relative adjustment.

11. The combination with a plow, of a stem journaled thereon, a wheel carried by the stem, a push-bar, and an adjustable connection between the push-bar and stem including interfitting teeth which normally hold the stem and push-bar against relative movement.

12. The combination with a plow including a beam, of a guide-wheel journaled on the front end of the beam, a spring connected to the wheel, and a push-bar connected to the spring.

13. The combination with a plow including a beam, of a stem journaled on the beam, a wheel carried by the stem, a bowed spring connected to the stem, and a push-bar connected to the bowed spring.

14. The combination with a plow-beam, of handles secured to the rear ends thereof, a stem journaled in the front end of the beam and having a depending yoke, a wheel journaled in the yoke, a bowed spring connected to the stem, said spring and stem having interfitting teeth normally holding the same against relative adjustment, a push-bar connected at its front end to the spring, and a cross-head carried by the push-bar and disposed between the handles.

15. The combination with a plow including a beam, of a body-engaged pushing device, and a spring connected at one end to the pushing device and at its other end to the beam, said spring constituting a direct yielding connection between the beam and pushing device.

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

JOHN HARRISON KENNEBREW.

Witnesses:
B. A. LINCOLN,
D. D. RICHARDS.