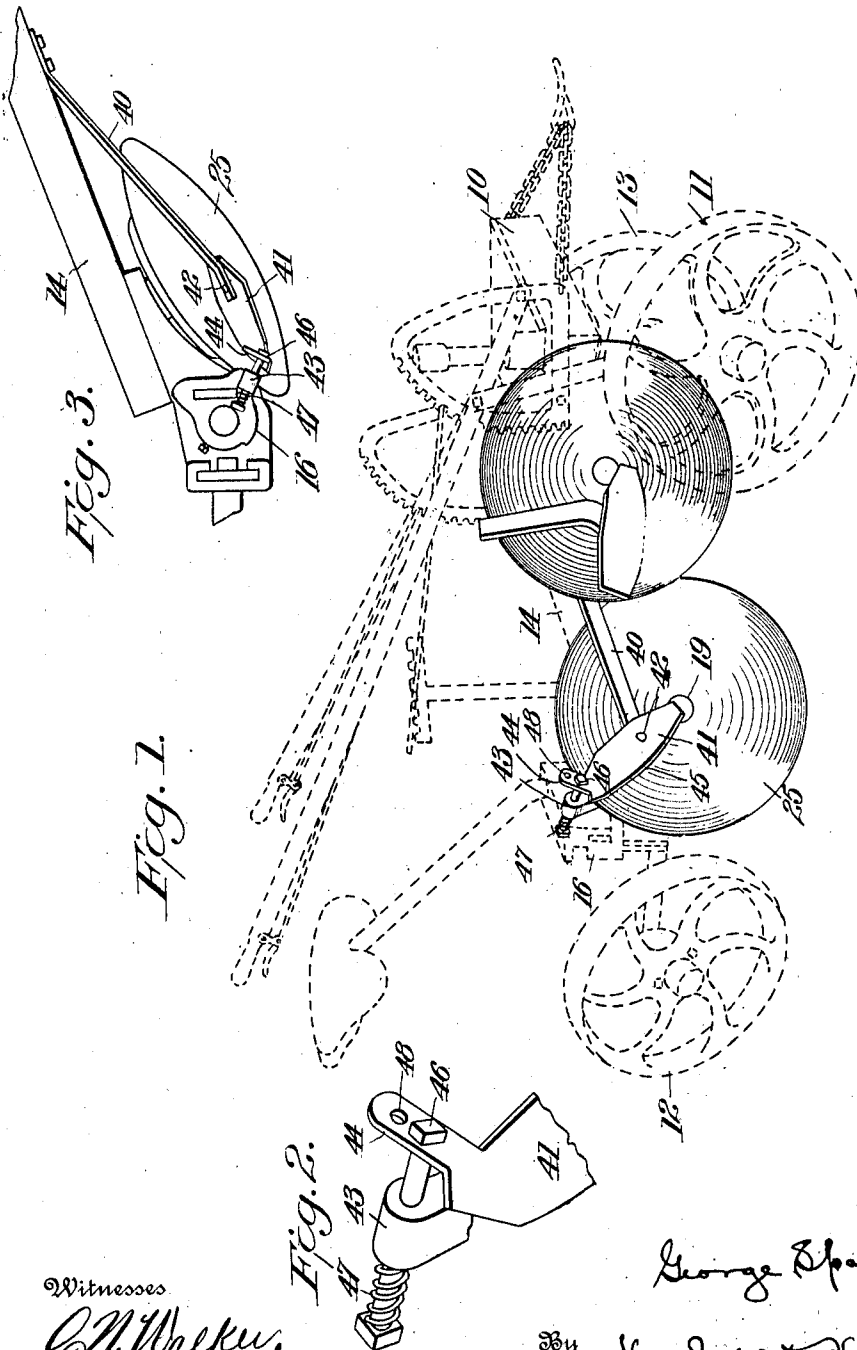


G. SPALDING.
TILLING MACHINE.
APPLICATION FILED MAY 16, 1910.

988,741.

Patented Apr. 4, 1911.



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UNITED STATES PATENT OFFICE.

GEORGE SPALDING, OF CLEVELAND, OHIO, ASSIGNOR TO SPALDING PLOW COMPANY,
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TILLING-MACHINE.

988,741.

Specification of Letters Patent.

Patented Apr. 4, 1911.

Application filed May 16, 1910. Serial No. 561,671.

To all whom it may concern:

Be it known that I, GEORGE SPALDING, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Improvements in Tilling-Machines, of which the following is a specification.

This invention contemplates certain new and useful improvements in tilling machines and relates more particularly to machines of this character in which rotary disks are employed.

The invention has for its object to provide an improved moldboard for a rotary disk adapted to turn the earth as it is raised by said disk.

A further object is to provide improved means for supporting the moldboard whereby the same may yield temporarily, if trash or other material gathers under it, and thereby prevent the same from acting as a brake.

A further object is to provide means for varying the position of the moldboard.

The invention will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings:—Figure 1 is a perspective view of a tilling machine, the form illustrated being that covered by Letters Patent 942,469, granted to me Dec. 7, 1909. Fig. 2 is a detailed perspective view illustrating the yielding support for the moldboard. Fig. 3 is a detail.

Referring to the drawing, 10 designates the frame of the tilling machine provided with the front furrow wheel 11, the rear furrow wheel 12, and the land wheel 13, suitable levers being provided for raising and lowering the frame in accordance with the depth it is desired to plow.

It will be noted that while I have illustrated a tilling machine of the character covered by the Letters Patent above mentioned, I do not desire to limit myself to the use of the present invention in connection with such a tilling machine, as the said invention is adapted for use in connection with any tilling machine in which rotary disks are employed.

For the sake of clearness in the illustration the parts above described are shown in dotted lines.

Near the rear end of the backbone 14 is

located a casting 16, which in the construction illustrated, serves as a support for the journal 19 of the disk 25. Rigidly secured to said backbone and extending rearwardly over the face of the disk 25 is an arm or brace 40, and to the rear end of this brace, a moldboard 41 is pivoted, as indicated at 42. The rear upper end of the moldboard 41 is held in place by means of an ear 43 secured to or formed with the casting 16, said moldboard being provided with a shoulder 44 adapted to rest against said attachment. It will be noted that this moldboard is thus in a sloping position with its front end at about the center of the disk and with its rear end much higher and at the edge of the disk. The arrangement of the arm or brace 40 and attachment 43 is such that the edge 45 of the moldboard, which conforms to the curvature of the disk, is held in place close to the latter. In practice there is more or less vibration and wobbling of the disks owing to the various strains they encounter, and when a moldboard is set rigidly in place close to the disk there is danger that at times trash or other material will gather and clog between it and the face of the disk and that it will become a brake by reason of the disk rubbing against it. To overcome this braking tendency on the part of the moldboard I have passed a bolt 46 through the shoulder 44 and also through ear 43 by which said bolt is supported. A spiral spring 47 encircles said bolt and is interposed between the head of the latter and the said ear 43. In order to vary the position of the moldboard the shoulder 44 is provided with a plurality of openings 48 through any one of which the bolt 46 may be passed.

In practice when rubbish or trash gathers under the moldboard the latter will yield, and in so doing will compress the spring 47, which after the pressure ceases, will return the moldboard to its original position close to the face of the disk. It will also be noted that the spring 47 will compensate for any vibration or wobbling of the disks and thereby prevent the moldboard from acting as a brake.

Having thus explained the nature of my invention, and described a manner of constructing and using the same, although without attempting to set forth all of the forms

in which it may be made or all of the modes of its use, what I claim is:—

1. The combination with a rotary disk, of a supporting arm extending across the face of said disk, a mold board having one end supported by said arm at a point adjacent the center of the disk the other end of said moldboard extending toward the top of the disk, and means located adjacent the top of the disk for supporting the upper end of said moldboard.

2. The combination with a rotary disk of a moldboard, means for supporting one end of said moldboard adjacent the center of said disk, and independent means adjacent the top of the disk for yieldingly supporting the other end of said moldboard.

3. The combination with a rotary disk of a moldboard, for controlling the discharge of the earth plowed by said disk, means adjacent the center of the disk for supporting one end of said moldboard, and independent means adjacent the top of the disk and to the rear of the center thereof for supporting the other end of said moldboard.

4. The combination with a rotary disk, of a moldboard, an arm extending across the face of said disk and supporting one end of said moldboard, and means for yieldingly supporting the other end of said moldboard.

5. The combination with a rotary disk, of an inclined moldboard, a stationary support to which the lower end of said moldboard is secured, a supporting arm loosely engaging the upper end of said moldboard, and a spring acting against the loose end of said moldboard.

6. The combination with a rotary disk and a support therefor, of an inclined moldboard, a stationary support to which the lower end of said moldboard is secured, a supporting bolt carried by the disk support

and loosely engaging the upper end of said moldboard, and a spring acting against the loose end of said moldboard.

7. The combination with a rotary disk and a support therefor, of an inclined moldboard having an opening in its upper end, a bolt engaging said disk support and passed through the opening in said moldboard, a spring encircling said bolt and cushioning the movement of said moldboard, and a stationary support to which the lower end of said moldboard is secured.

8. The combination with a rotary disk, of an inclined moldboard, means for pivotally supporting the lower end of said moldboard, supporting means to which the upper end of said moldboard is secured, and means for permitting adjustment of said moldboard with relation to the last mentioned supporting means.

9. The combination with a rotary disk of a diagonally disposed moldboard, means adjacent the center of the disk for pivotally supporting the lower end of said moldboard, and means located adjacent the top of the disk for adjustably supporting the upper end of said moldboard.

10. The combination with a rotary disk, and a support therefor, of a moldboard, means for pivotally supporting one end of said moldboard, and a bolt carried by said support, said moldboard being provided with a plurality of openings adapted to receive said bolt.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE SPALDING.

Witnesses:

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WM. S. HODGES.