G. W. FOULGER.
Broom-Corn Tabler.

No. 212,454. Patented Feb. 18, 1879.

Fig 1

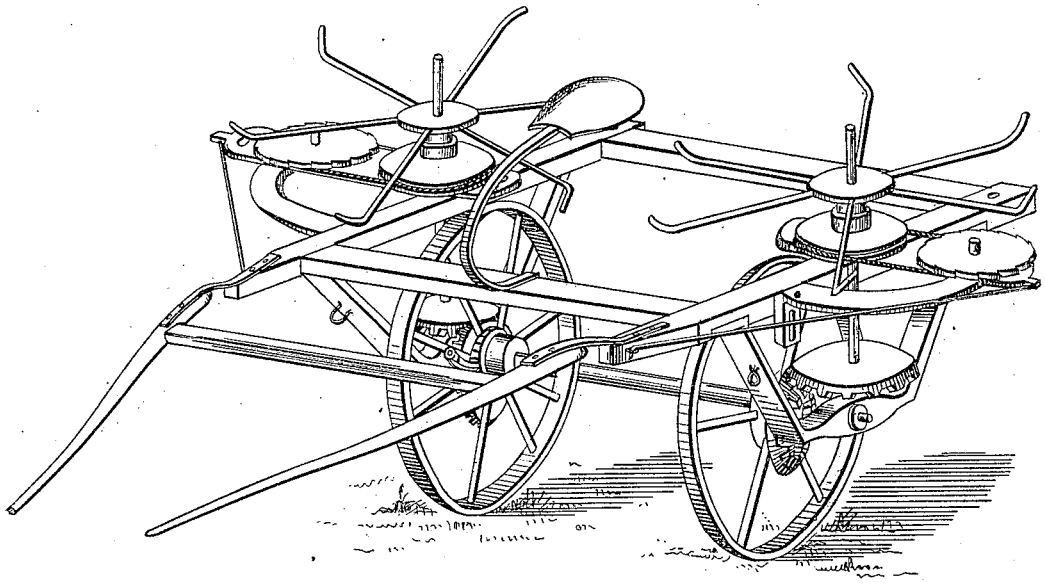
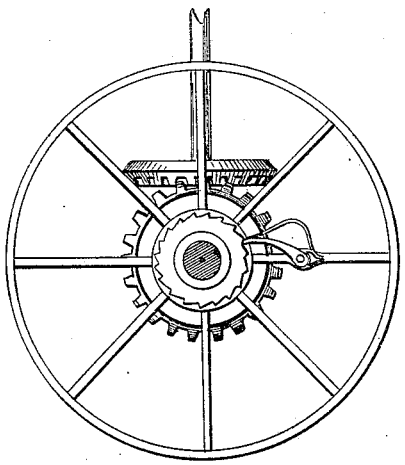


Fig 2



Attest:

Eli Kiley

H A Bard

Inventor:

G. W. Foulger

UNITED STATES PATENT OFFICE.

GEORGE W. FOULGER, OF CHARLESTON, ILLINOIS, ASSIGNOR OF ONE-FOURTH HIS RIGHT TO F. M. PARKER.

IMPROVEMENT IN BROOM-CORN TABLERS.

Specification forming part of Letters Patent No. **212,454**, dated February 18, 1879; application filed June 20, 1878.

To all whom it may concern:

Be it known that I, GEORGE W. FOULGER, of Charleston, Coles county, Illinois, have invented a Broom-Corn Tabler, of which the following is a specification:

My machine consists of two master-wheels, placed upon and near the outer ends of an axle, suited in length to pass between two rows of broom-corn standing in the field as ordinarily planted and grown. On the outside of each of these wheels, and made fast to such axle by keys, is a cog-wheel. Outside of these cog-wheels, and on an extension of such axle, is placed a boxing, in which such axle revolves when the machine is in motion. The top sections of these boxings extend a short distance forward and back of the axle, and from the ends of these sections of the boxings, and attached thereto, rise, at an angle of about twenty-five degrees forward and backward to a point above such master-wheels, supports, on which rests the frame-work of the machine. From the top and center of each of such boxings, sitting in a cup therein, rises a vertical shaft, which, above its base, is attached to the outer edge of the frame-work aforesaid by a boxing also. These shafts rise above the frame-work. On the lower end of each of these shafts is placed another cog-wheel, meshing at right angles into the cog-wheels before described.

When the machine is in motion the action of these cog-wheels causes the vertical shafts before described to revolve. Immediately on the top of the frame-work aforesaid, and on each side of it, an arm is located, which extends, a short distance at right angles therefrom, parallel with the axle of the machine, through the inner ends of each of which arms said vertical shafts pass.

From the outside of the frame-work of the machine, and secured thereto on each side, there extends horizontally a half-circle, on which the outer ends of the arms aforesaid rest. Immediately above the inner ends of the arms aforesaid is secured on each of such vertical shafts by a set-screw a pulley, around which a band or belt operates. On the top of the outer ends of each of the arms aforesaid is situated another pulley, intended to be operated also by the belt aforesaid; and immediately above the pulleys located on the outer ends of the arms aforesaid, and on the same bearings, and attached to such pulleys, are wheels having serrated margins, which revolve horizontally with the pulleys last named.

Immediately above the pulleys before described as on the vertical shafts, and attached to each of such shafts by a set-screw, is a wheel with six arms extending horizontally therefrom, the outer ends of which arms are bent upward and laterally at an angle of about forty-five degrees, and are intended, when in use, to gather, break, and table the broom-corn ready for cutting, in the same manner as it is done by hand. These arms are so adjusted on the shafts that when in motion they make alternate strokes relatively.

The serrated wheels above described when in motion press against the broom-corn as it stands in the field, and over the edges of which wheels the corn is broken by the motion of the arms aforesaid; and the further office of said wheels is to facilitate the passage of the machine through the broom-corn after it is broken; and such wheels are adjustable, with the arms on which they rest, by moving the outer ends of such arms backward or forward on the half-circles by which they are supported, thereby varying the angle at which the broom-corn is crossed (when broken) behind the machine.

All this combination of arms, pulleys, and serrated wheels used in breaking and tabling the broom-corn is capable of adjustment, so it may be raised or lowered.

To the outer ends of the arms on which rest the serrated wheels above described is attached a rod, which extends forward therefrom horizontally to the forward end of the frame-work of the machine, to which it is attached, and which is also adjustable, so that it may be lengthened or shortened, as the break-wheel may be moved backward or forward. The office of this rod in the operation of the machine is to crowd the broom-corn to the center of the wheel over which it is to be broken.

On the inside of the master-wheels of this machine are attached ordinary springs and ratchets, to facilitate the turning round with the machine and the driving of the machinery.

To the frame-work of this entire machine are attached ordinary shafts, in which to hitch a horse, by which the machine is moved and operated.

I claim as my invention—

In a machine for tabling broom-corn, the combination of the serrated rotary wheels, the pulleys, the vertical shafts geared with the main axle, and the bent arms or beaters mounted on said shafts, substantially as and for the purposes set forth.

G. W. FOULGER.

Attest:
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