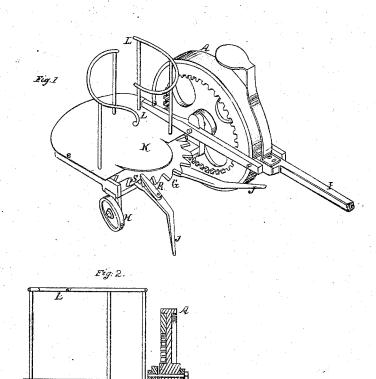
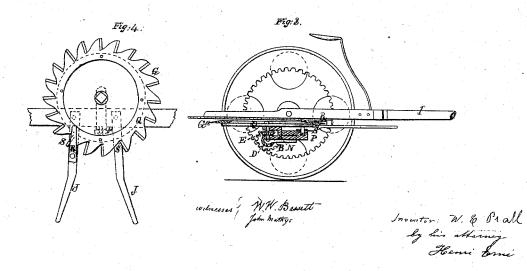
## N.L. Frall, Corn Harvester. No. 54.951.

Fatented. May, ez. 1866.





## UNITED STATES PATENT OFFICE.

WILLIAM E. PRALL, OF KNOXVILLE, TENNESSEE.

## IMPROVEMENT IN CORN-HARVESTERS.

Specification forming part of Letters Patent No. 54,951, dated May 22, 1866.

To all whom it may concern:

Be it known that I, WILLIAM E. PRALL, of Knoxville, in the county of Knox and State of Tennessee, have invented a new and useful Machine for Cutting Corn and Cane; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

Figure 1 represents a perspective view; Fig. 2, a cross-section; Fig. 3, a side elevation, and Fig. 4 the circular cutter of the machine.

A represents the main carriage and driving wheel, with an inner toothed wheel that drives the pinion B, that revolves the shaft C, and bevel-wheel D, that gears into bevel-wheel E, that operates the horizontal circular cutter G. There is a carriage-wheel, H, on the opposite side of the carriage-axle, that is smaller than the driving-wheel, but keeps the machine running on a level.

I is the tongue of the machine. J are the guides, that are spread open when the machine is advancing against the cornstalks, and as the stalks are cut off by the cutter G the

operator, standing on the platform K, receives them at the opening of the railing L and collects them in a sheaf and pushes them off in the rear opening of the railing.

A brace, M, firmly attached to the under side of the carriage-axle, supports the bevelpinion E of the cutter-shaft and a friction-roller, P, that balances the cutter G and gives ease to the motion of the cutter.

The right-hand guide J moves on a pivotbolt in the carriage-axle, and has a cutter-bar, R, at top, and a lip, S, that catches into the ratchet edge or rim Q of the under side of the cutter, for the purpose of stopping the motion of the cutter G.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of the cutter provided with the ratchet-edge upon its under side, cutterbar R, provided with a lip, S, and friction-wheel P, when arranged and operated substantially as and for the purpose set forth.

WM. E. PRALL.

Witnesses:

B. P. STACY,

S. P. ANGEL.