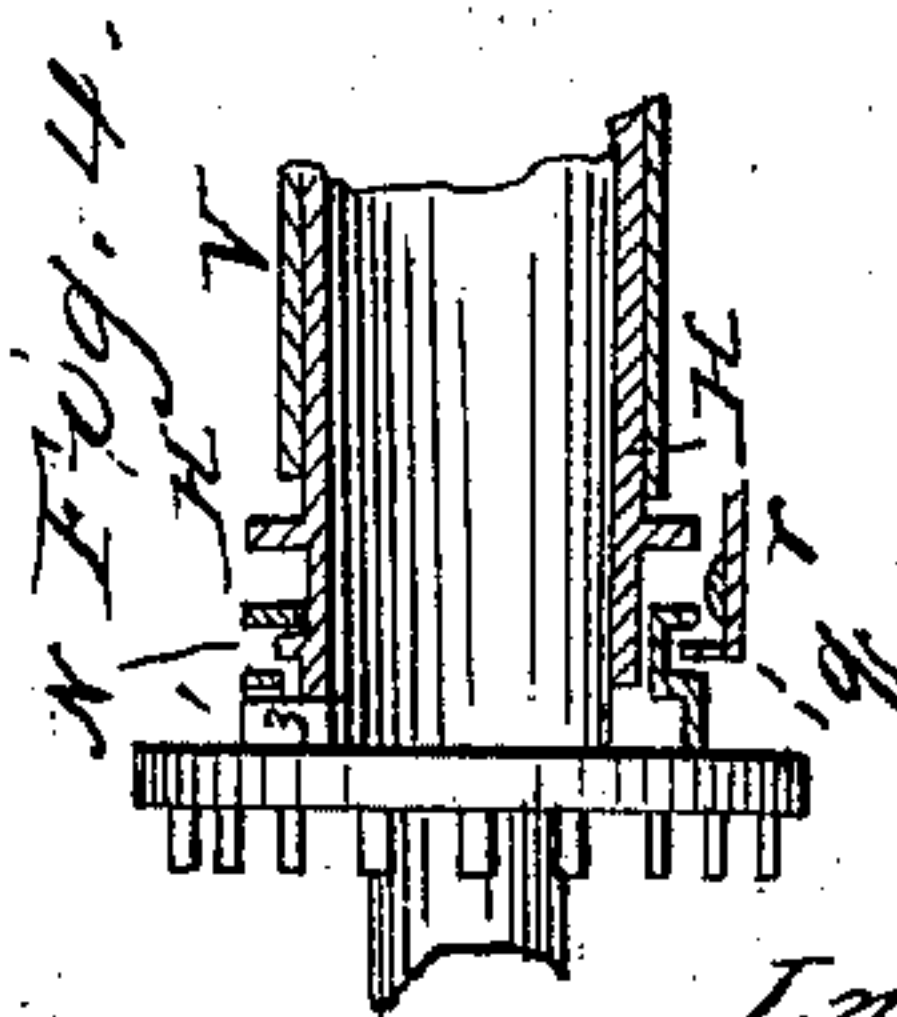
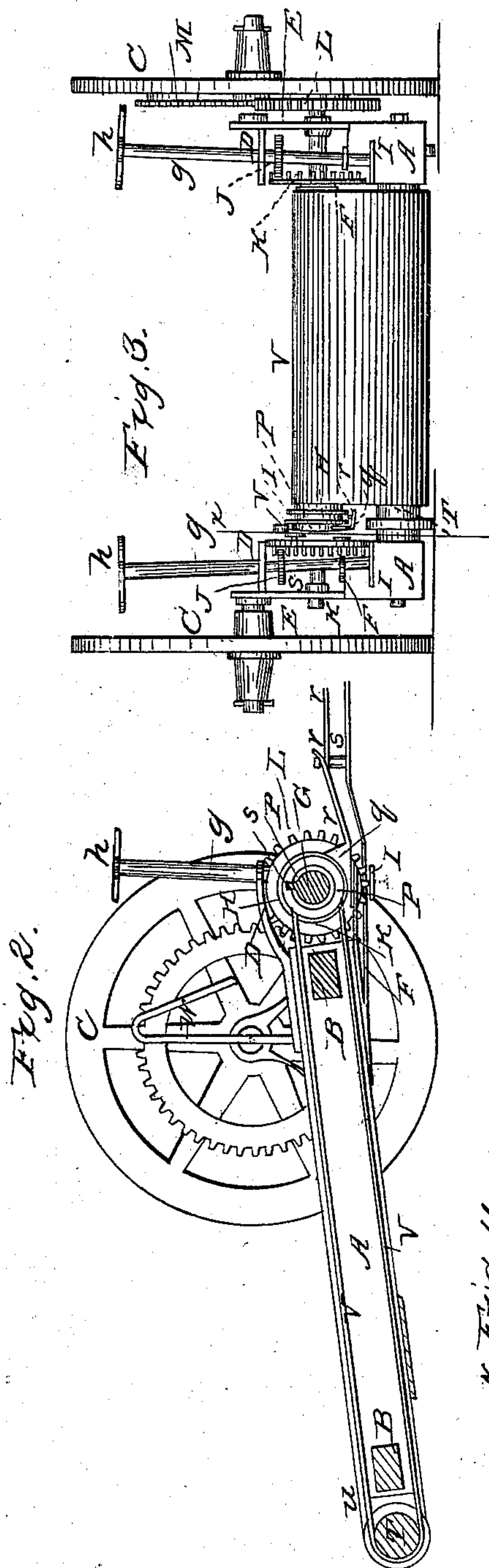


J. H. KITE.  
Corn Harvester.

No. 23,174.

Patented March 8, 1859.



Witnesses:  
H. C. Killinger  
Sam. Sam. Shiplett

Inventor:  
Jos. H. Kite.

# UNITED STATES PATENT OFFICE.

JOS. H. KITE, OF CONRAD'S STORE, VIRGINIA.

## IMPROVEMENT IN CORN-HARVESTERS.

Specification forming part of Letters Patent No. 23,174, dated March 8, 1859.

*To all whom it may concern:*

Be it known that I, JOSEPH H. KITE, of Conrad's Store, in the county of Rockingham and State of Virginia, have invented a new and useful Improvement in Corn-Harvesters; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan of a corn-harvesting machine with my improvements applied to it. Fig. 2 is a vertical longitudinal section; Fig. 3, a front view of the same, the shafts or thills being removed. Fig. 4 is a broken longitudinal section of the clutch arrangement.

Similar letters of reference in each of the several figures indicate corresponding parts.

The nature of my invention consists in the combination, in a corn-harvester, of the horizontally-revolving cutters on the lower end of the reel-shafts, the vertical bevel-wheels with peripheries which serve for the horizontal cutters to act against, and the apron which revolves at intervals by means of a peculiar spring-clutch. The said parts are arranged, operated, and controlled in the particular manner hereinafter specified.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The machine is composed of two longitudinal rails, A A, with cross-strips B B, forming a frame or body part mounted on two wheels, C C. To the top surface, on the front ends of the rails, are screwed or bolted plates of metal, D D, and on the sides of the rails are also metal plates E E, and also similar plates are attached to the under side of the rails, as at F F. These plates respectively are perforated so as to answer suitable bearings for upright rods *g g*, to which are attached at their upper ends one or more curved arms, *h h*, and to the lower extremities are similar curved cutters or blades, *i i*.

To the upright rods, between the bearing-plates D F, are attached small pinion-wheels J J, working into larger cog-gears, K K, attached to a horizontal rotating shaft-axle, G, the ends of which work in the bearings in the side plates, E E. To one end of this horizontal

axle is attached a master-gear, L, driven by a driver-wheel, M, attached to the motive wheel C. Around one end of the rotating axle or cog-gearing shaft is arranged a spring-clutch N N, attached to a tube or sleeve, H, working over the axle G. This clutch is formed with beveled notches P P, into which a catch-pin, *s'*, inserted in the circumference of the axle, falls, as presently described. Into the groove of the clutch a shifting device, *q*, fits, said device being attached to the end of a bent or curved lever, *r r r*, which has its fulcrum attached to one of the thills or shafts, as at *s*.

To the back end of the framing is a roller, T, with journal ends working in bearing-plates *u u*. Over this rear roller and the tube H of the rotary axle G, at the front of the machine, passes a revolving endless apron or platform, V V V. At suitable places to the top of the rails are inserted fender-rods, formed of any suitable materials, bent or curved, as at W W W W. Thus the whole machine being complete, the operation thereof is as follows:

The machine being set in motion through the agency of animal-power attached to the shafts, the propelling or motive wheels in their movement forward set the gearing in motion, and thus the upright rods are caused to revolve the reel-arms *h h* and the cutting-blades *i i*, which latter work inwardly toward the center of the machine and bring the standing stalks against the periphery of the cog-wheels K K, which revolve outwardly at right angles to the motion of the cutters. By thus having the cutters and wheels operate together the standing stalks are readily severed, and through the aid of the revolving arms *h h* are caused to fall and accumulate upon the endless apron, and when a sufficient amount of stalks accumulate on the apron the lever is operated by the hand so as to shift the clutch and bring it in gear with the catch-pin *s'*, and thus insure the revolution of the tube H with axle, and thereby impart motion to the endless apron, and consequently effect a discharge at the rear of the machine of the stalks which have accumulated upon the apron.

It will be observed that the machine, as shown in the drawings, is designed to cut two rows of standing corn at the same time, and to deliver the stalks in bulk by the aid of the



endless apron, which is only caused to revolve at intervals, or when a sufficient quantity to form a shock has collected on the apron.

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

The combination and arrangement of the horizontally-revolving cutters *i i*, vertically-revolving bevel-wheels *K K*, having plain pe-

ripheries, endless apron *V V V*, axle *G*, hollow shaft *H*, and peculiar spring-clutch arrangement *N N P*, *s' q r*, substantially as and for the purposes set forth.

JOS. H. KITE.

Witnesses:

WM. C. KIRLINGER,  
SAMSON SHIFLETT.