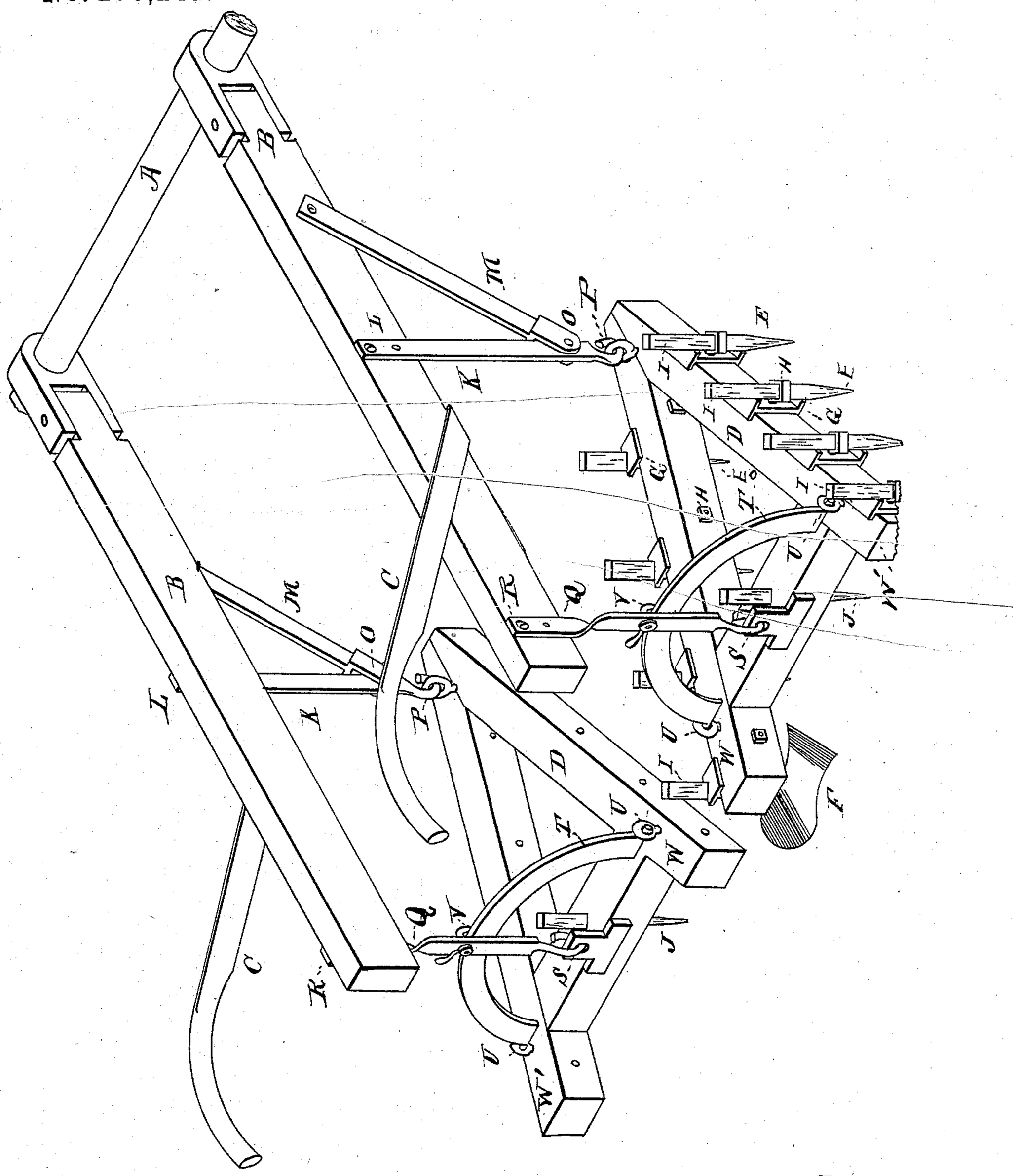
(No Model.)

S. Y. MILLER.

CORN HARROW.

No. 270,241. Patented Jan. 9, 1883.



attest:-
John Lorenz
John R. Woods

Samuel Y. Miller, Inventor
by James W. Sees
Attorney

UNITED STATES PATENT OFFICE.

SAMUEL Y. MILLER, OF UNION COUNTY, INDIANA.

CORN-HARROW.

SPECIFICATION forming part of Letters Patent No. 270,241, dated January 9, 1883.

Application filed August 28, 1882. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL Y. MILLER, residing in Union county, Indiana, near Contreras, Butler county, Ohio, have invented certain new and useful Improvements in Corn-Harrows, of which the following is a specification, and the accompanying drawing a perspective view.

This invention relates to harrows for operating at once upon both sides of a corn-row, as hereinafter specified.

The device is to be used in connection with a wheeled frame or sulky, such as is commonly used in connection with sulky plows and cultivators.

In the drawing, A represents the axle of a common sulky used for plows, &c. This axle may be straight, as shown, or it may be arched to pass over higher corn.

B B are parallel beams freely attached to the axle A, so as to oscillate vertically and horizontally, and projecting rearward; C C, handles attached to the beams; D D, harrow-frames below the rear ends of the beams; E, harrow-teeth; F, a share-tooth at inner rear extremity of harrow-frame; G, iron tooth-seats, located against the sides of the harrow-frame; H, eyebolts to receive the tooth-shank and clamp the tooth and tooth-seat against the harrow-frame; I, the shanks of the teeth; K, a suspension-bar from beam to prow of harrow-frame; L, the attaching point of suspension-bar K to beam, being a pivot-bolt with two or more holes provided for it, so as to admit of vertical adjustment of the suspended harrow-frame; M, a diagonal draft-rod from beam to a point near the bottom of the suspension-rod K; O, a break-pin at juncture of draft-rod M and suspension-rod K; P, a hook-and-eye connection between bottom of suspension-rod K and harrow-frame; Q, a rear suspension-rod, pivoted to beam at R, in a manner similar to L, and attached to the harrow-frame at S, the same as the suspension-rod K is attached at P; T, a metal arch-bar, journaled at U to the harrow-frame; V, a clamp for binding the rear suspension-rod, Q, to the arch T when desired; W, the inner rear extremity of the harrow-frame, and W′ the outer rear extremity of the harrow-frame. While only one of the harrow-frames is shown as provided with teeth, it is to be understood that both frames are similarly provided.

In operation the double harrow D D straddles the corn-row, the inner rear extremities, W, running close to the growing corn. The share-teeth F, thus running close to the corn, throw the soil away from the corn and leave the corn upon a slightly-elevated ridge. Only certain conditions of crops and soil render this necessary, and the share-teeth F, having shanks like the harrow-teeth E, may be removed and harrow-teeth put in their place. In some cases it may be desirable to put harrow-teeth at W in place of share-teeth F, and to put the share-teeth in the next forward position, which brings them farther from the corn and gives a harrow-tooth close to the corn. The two harrow-frames D D, being hung freely at points S and P, are at liberty, when clamp V is loosened, to be self-adjusting to suit the slope of the land each way from the corn-row. The arches T permit the two harrow-frames to be adjusted to suit a certain slope, and to be firmly clamped in the proper position. The suspension-rods K and Q being adjustable in length, by altering the pivot positions at L and R permits either the front or rear of the harrow-frames to be adjusted to work at a greater or less depth with reference to the radial position of the beams B. The form of tooth-holder G gives a substantial means for attaching and detaching the teeth.

Instead of the triangular form of harrow-frame shown, any of the well-known shapes may be employed.

I claim as my invention—

The combination, substantially as set forth, of axle A, beams B, harrows D, suspension-rods K and Q, arches T, and clamps V.

SAMUEL Y. MILLER.

Witnesses:
M. J. MOON,
HENRY L. BAKE.