

(No Model.)

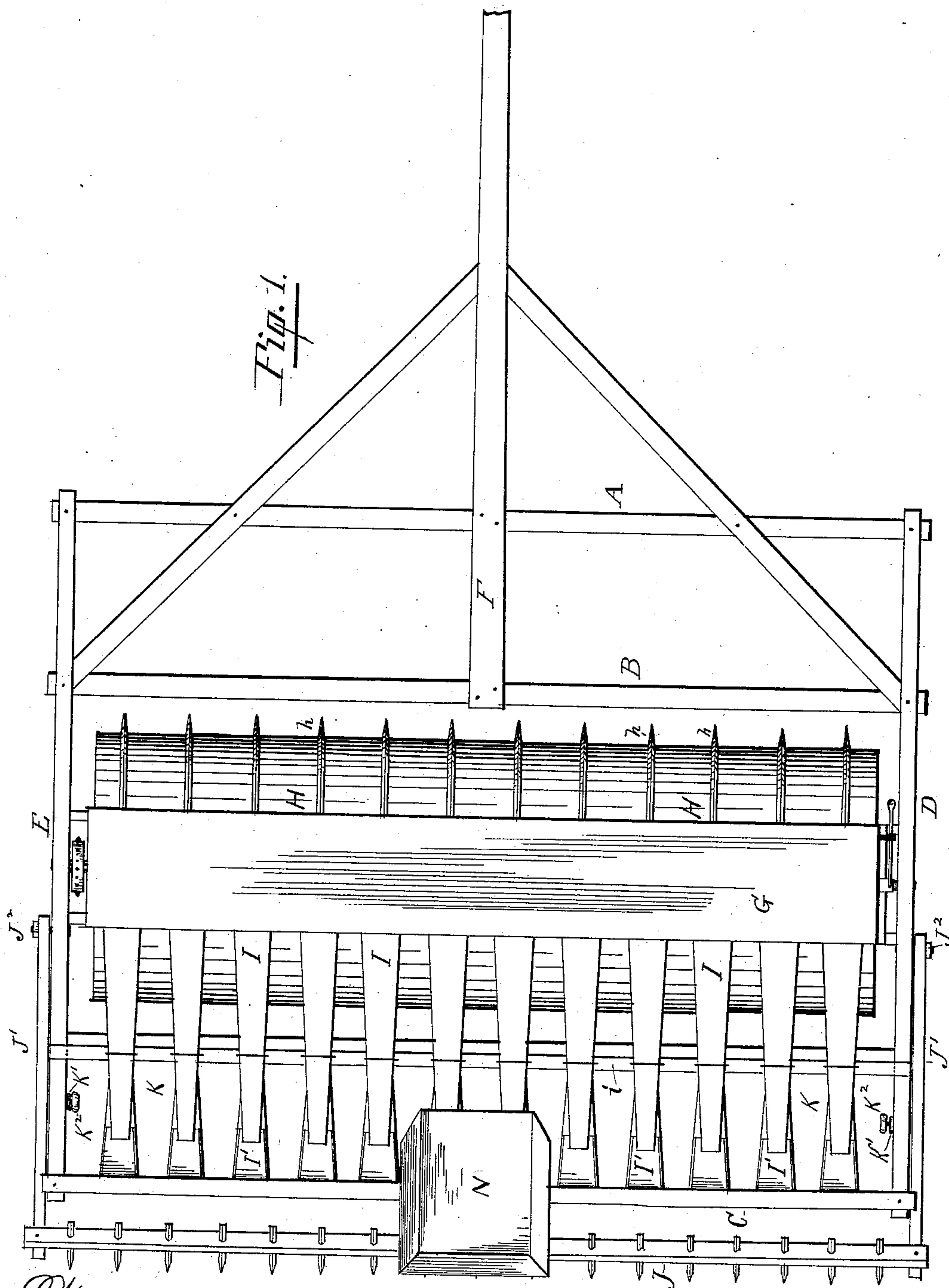
2 Sheets—Sheet 1.

O. C. KROH.

COMBINED ROLLER AND GRAIN DRILL.

No. 393,839.

Patented Dec. 4, 1888.



Witnesses,
Elihu B. Stowe,
Geo. Homage.

Inventor,
O. C. Kroh.
By Joshua B. Webster Att'y.

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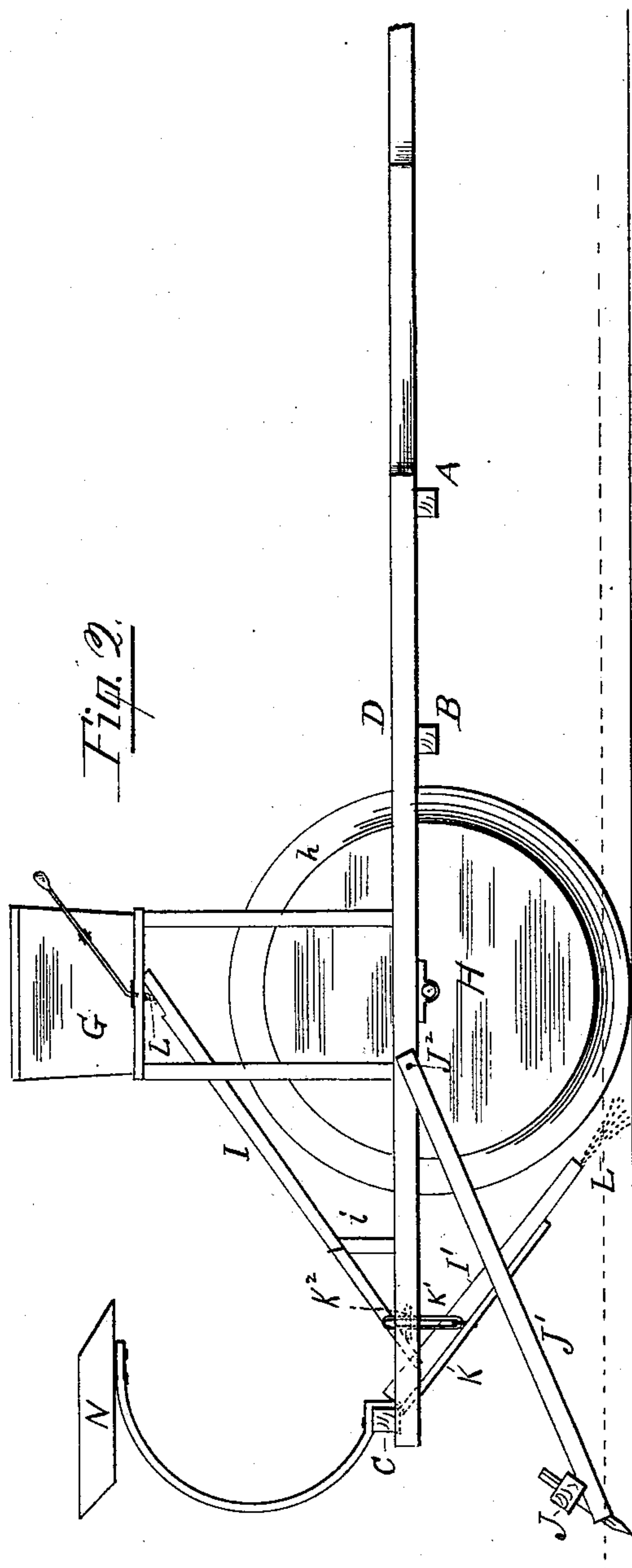
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UNITED STATES PATENT OFFICE.

OLY C. KROH, OF RIPON, CALIFORNIA.

COMBINED ROLLER AND GRAIN-DRILL.

SPECIFICATION forming part of Letters Patent No. 393,839, dated December 4, 1888.

Application filed March 23, 1888. Serial No. 268,255. (No model.)

To all whom it may concern:

Be it known that I, OLY C. KROH, a citizen of the United States, residing at Ripon, in the county of San Joaquin and State of California, have invented certain new and useful Improvements in a Combined Roller and Grain-Drill; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

Figure 1 is a plan view of my invention. Fig. 2 is a right-hand side elevation of the same.

Similar letters of reference indicate corresponding parts.

The object of my invention is to provide a roller and grain-drill that shall be convenient in use and effective in operation.

It consists of a roller provided with flanges on its surface and mounted in a suitable frame and in the manner of combining the roller and the frame with the seeding and harrowing apparatus, and in such other devices as will be more fully set forth hereinafter, and particularly pointed out in the claims.

A and B represent the front cross-beams of the frame of my machine.

C represents the rear cross-beam.

D represents the left-hand side beam, and E the right-hand side beam.

F is the tongue, suitably attached to beams A and B.

G is a seed box or hopper, of any suitable construction, mounted on legs attached to beams D and E, and located over a heavy roller, H, which is mounted in the frame above described upon a suitable shaft having its journal-bearings upon beams D and E. The roller H is provided with a number of flanges, *h*, at suitable intervals, so that the roller by its weight levels the plowed ground and the flanges *h* cut the trenches for the reception of the seed which is discharged from the hopper G into rearwardly-extending spouts, I, which in turn discharge into forwardly-inclined spouts I' at nearly a right angle to spouts I. The spouts I rest upon a cross-bar, *i*, which

is attached to beams D and E. The spouts I' are secured to a board, K, which is hinged to the beam C. The board K and spouts I' may be set at any desired pitch by means of links K', flexibly secured to the board K and to the beams D and E by adjusting set-screws K².

After the seed has been deposited in the trenches made by the flanges *h* it is covered by a rear harrow, J, attached to arms J', which are flexibly attached to beams D and E by bolts J².

Having thus described my invention, what I claim is—

1. In a roller and grain-drill, the frame composed of the longitudinal beams D and E, the transverse beams A, B, and C, and the tongue F, attached to beams A and B, in combination with the roller H, provided with the flanges *h*, and a suitable seeding and harrowing attachment consisting of the seed-box G, mounted above the roller H, the spouts I I', the board *i*, the flexibly-attached board K and its controlling mechanism, consisting of the links K' and adjusting set-screws K², and the harrow bar and teeth set transversely in the rear of the machine and flexibly attached to the side beams of the machine by the pins J², all operating substantially as set forth.

2. The combination, substantially as described, of the front cross-beams, A and B, the rear cross-beam, C, the left-hand side beam, D, the right-hand side beam, E, the tongue F, attached to the beams A and B, the seed-box G, mounted on legs attached to the beams D and E, parallel with and over the roller H, the roller H, provided with flanges *h*, the discharge-spouts I, the spouts I', at right angles to spouts I, the transverse bar *i*, attached to beams D and E, and having the spouts I reclining thereon, the board K, hinged to the beam C, and having the spouts I' secured thereto, and the adjusting mechanism of the board K, consisting of the links K', flexibly secured to the board K and beams D and E by the adjusting set-screws K².

In testimony whereof I affix my signature in presence of two witnesses.

OLY C. KROH.

Witnesses:

JOSHUA B. WEBSTER,
HENRY I. WARD.