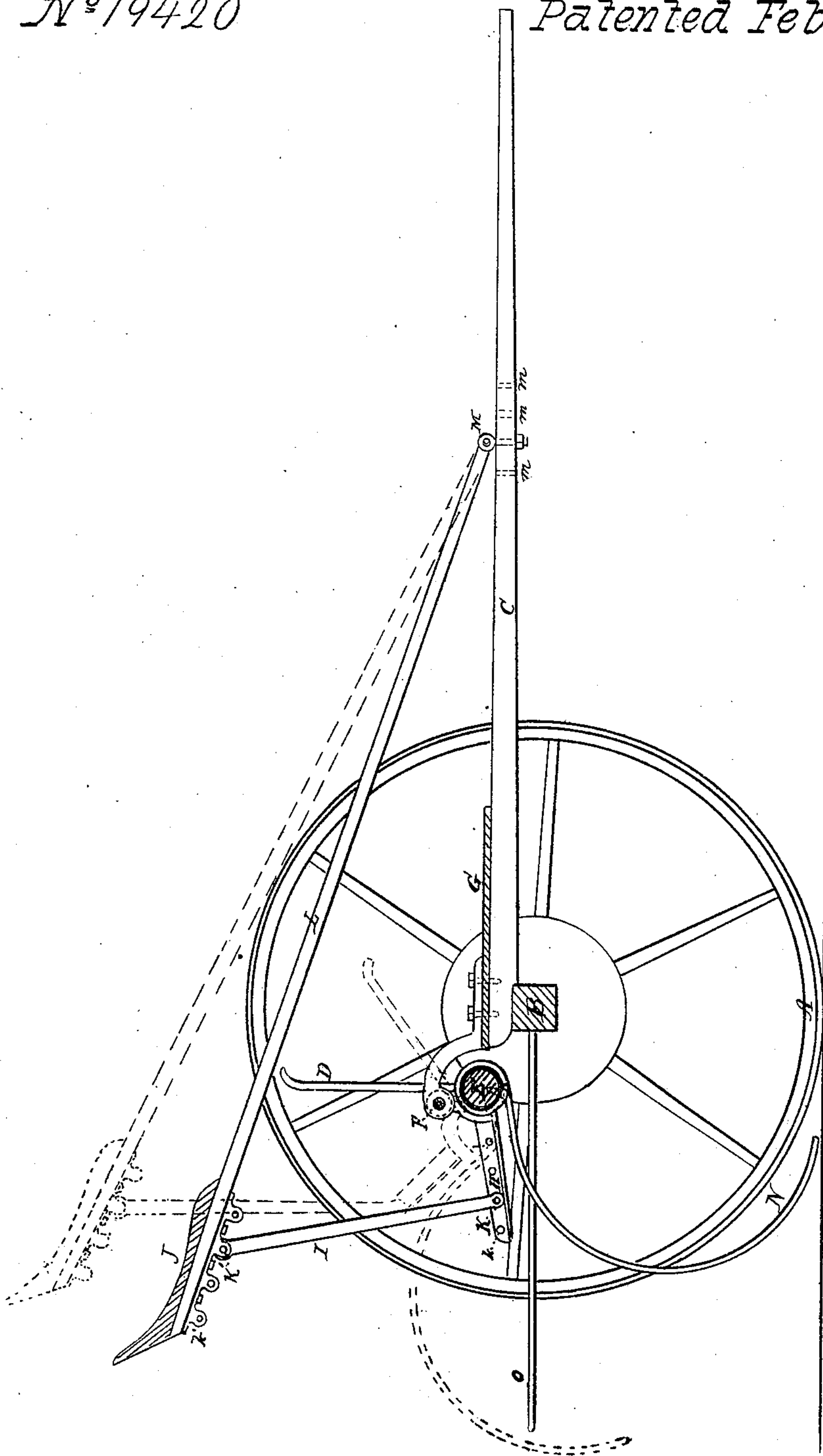


W. Horning.

Horse Rake.

N<sup>o</sup> 19420

Patented Feb. 23, 1858.



# UNITED STATES PATENT OFFICE.

WILLIAM HORNING, OF NEW LEBANON, OHIO.

## IMPROVEMENT IN HORSE-RAKES.

Specification forming part of Letters Patent No. **19,420**, dated February 23, 1858.

*To all whom it may concern:*

Be it known that I, WILLIAM HORNING, of New Lebanon, Montgomery county, Ohio, have invented a new and useful Improvement in Horse-Rakes; and I hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing, making part of this specification.

The leading feature of novelty in this invention consists in an arrangement for regulating the degree of pressure upon the teeth.

The accompanying drawing represents a vertical longitudinal section of a machine embodying my improvement.

The wheels A, axle B, thills C, treadle D, rake-head E, teeth N, clearers O, and platform G may be of customary form.

Projecting rearward from the rake-head are levers H, (one shown,) which give support to standards I, surmounted by a seat, J. The standards I are connected with the levers H and seat J, respectively, by pins K and K', occupying such of the perforations *k k'* as will give to the superincumbent weight the desired leverage force.

Projecting forward from the seat J are braces L, (one to each thill,) hinged at their front ends to pins M, which occupy such of the sockets *m* in the thills as may be suitable.

The operation is as follows: The standards I and braces L are adjusted forward or backward in accordance with the heaviness of the crop, power and speed of the team and weight of the driver, so as to afford the requisite leverage to insure raking clean, and at the same time avoid dragging the ground. The driver then, seating himself on the seat J, starts the machine, and by simply shifting his person forward or backward on the seat is enabled with great ease to graduate the pressure on the teeth as the exigencies of the case may require. To discharge the gathered hay, &c., he rises from his seat, and depressing the treadle D with one foot the rake turns on its hinges E, throwing the various parts into the positions indicated by dotted lines.

I claim as new and of my invention herein—

The arrangement of the seat J, standards I, and levers H, or substantially equivalent devices in the described combination with the rake E N, for the purposes set forth.

In testimony of which invention I hereunto set my hand.

WILLIAM HORNING.

Witnesses:

GEO. H. KNIGHT,  
EDMUND BABB.