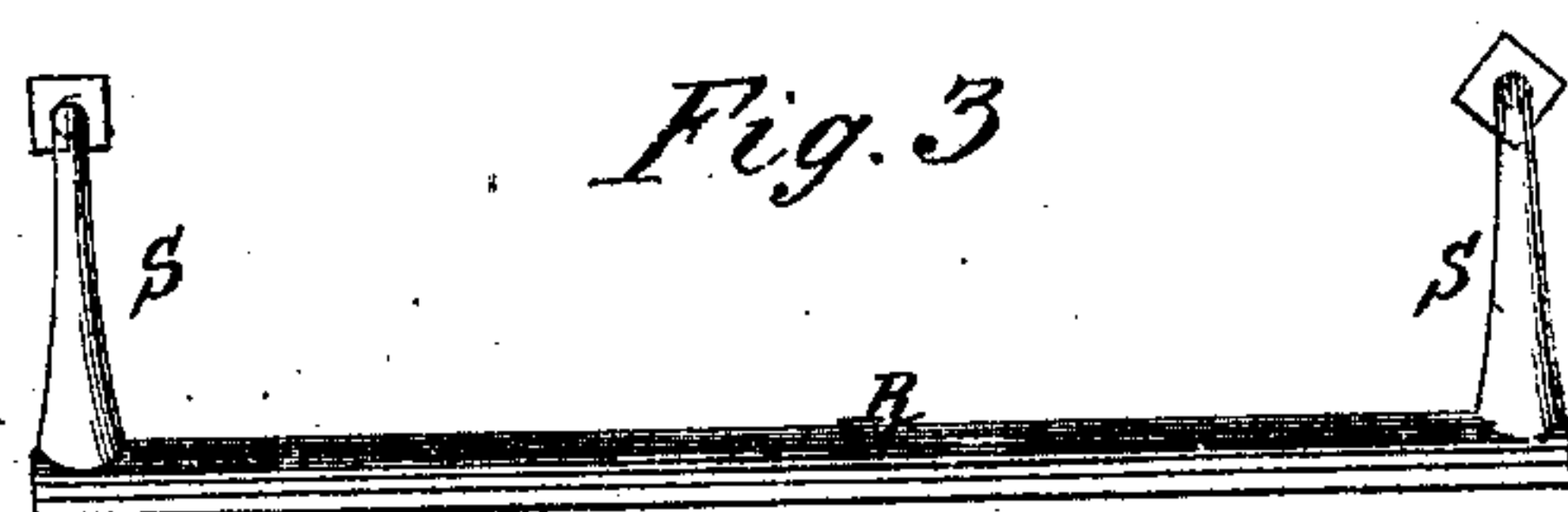
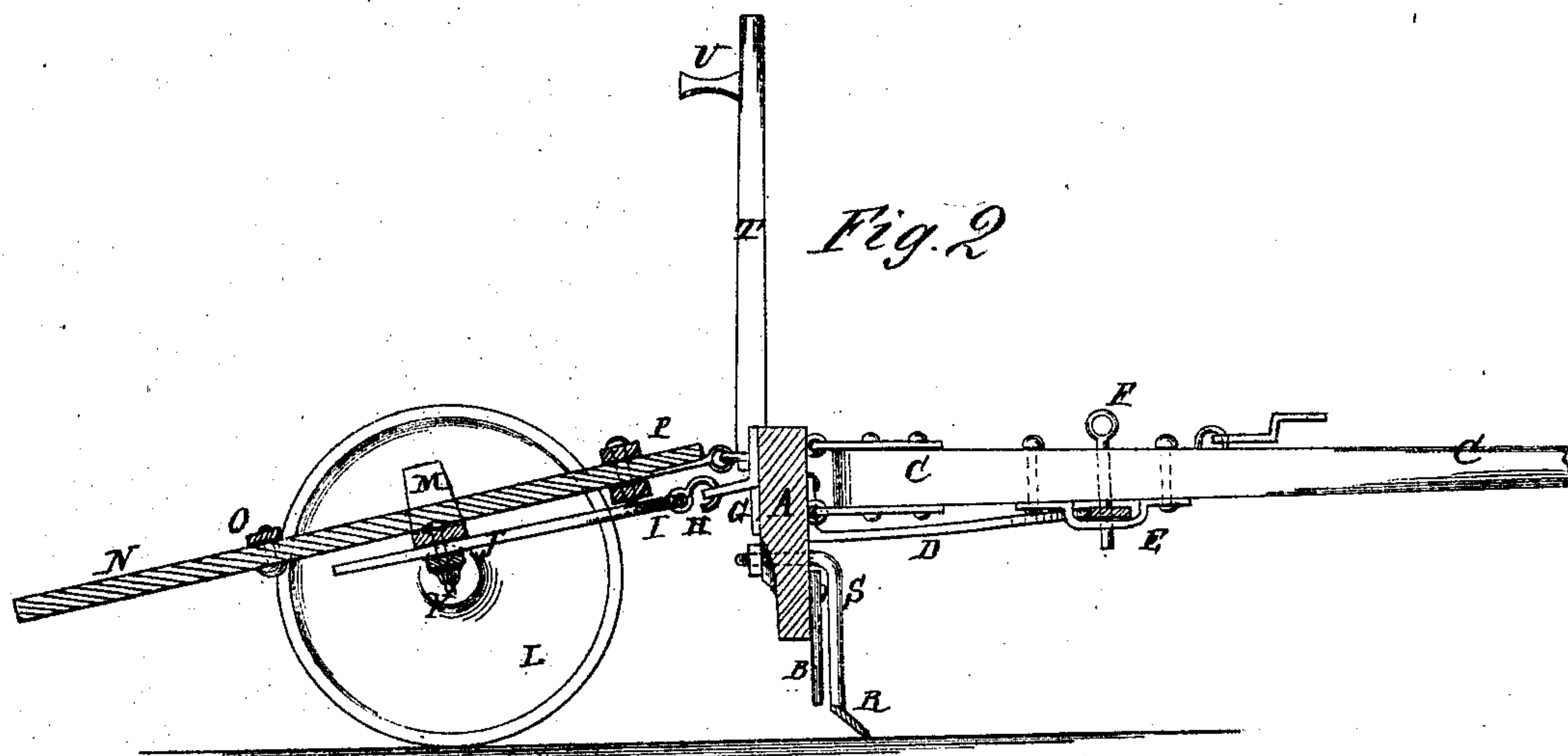
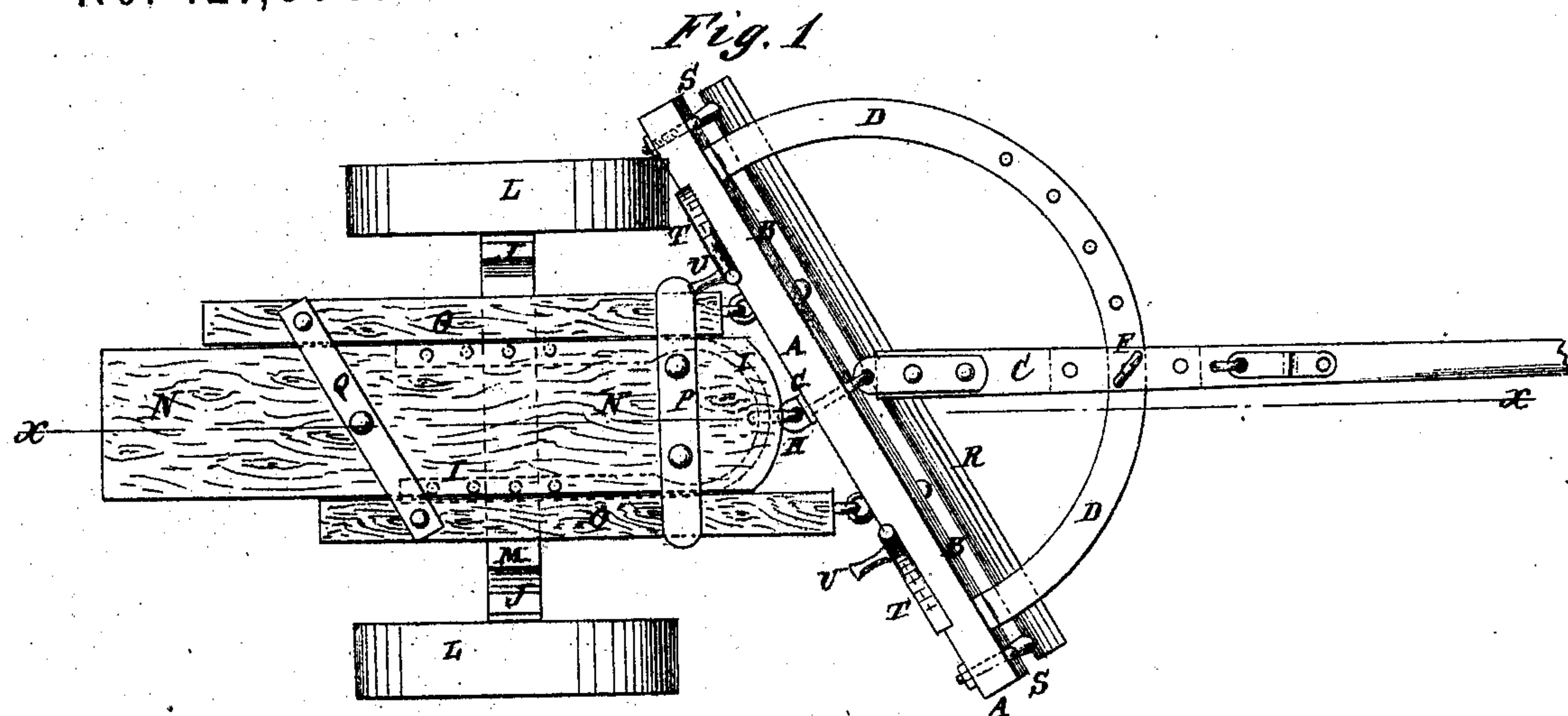


(51.)

GEORGE W. BAYLY.  
Improvement in Scrapers.

No. 121,576.

Patented Dec. 5, 1871.



Witnesses:

A. W. Amqvist  
Francis Mc Ardle

Inventor:

George W. Bayly.  
PER *Munn & Co*  
Attorneys.



# UNITED STATES PATENT OFFICE.

GEORGE W. BAYLY, OF STUYVESANT, NEW YORK.

## IMPROVEMENT IN SCRAPERS.

Specification forming part of Letters Patent No. 121,576, dated December 5, 1871.

*To all whom it may concern:*

Be it known that I, GEORGE W. BAYLY, of Stuyvesant, in the county of Columbia and State of New York, have invented a new and useful Improvement in Grading-Scraper and Road-Cleaner; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a top view of my improved scraper. Fig. 2 is a detail sectional view of the same taken through the line *x x*, Fig. 1. Fig. 3 is a detail view of the knife or shear.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved grading-scraper for grading roads, lawns, &c., which shall be simple in construction, effective in operation, and convenient in use, and which may readily be adjusted for use for cleaning grass, &c., from private roads; and it consists in the construction and combination of various parts of the machine, as hereinafter more fully described.

A is a thick heavy plank set edgewise, and to the lower part of the forward side of which is attached the scraper-plate B, which should project below the lower part of the plank A. To the middle of the forward side of the plank A is attached the tongue C in such a way that it may have a free lateral but no vertical movement. To the forward side of the plank A, near its ends, are rigidly attached the ends of a curved bar, D, which passes through a keeper, E, attached to the under side of the tongue C. The curved bar D has several holes formed through it to receive the pin F, which passes down through the tongue C, through one of the holes in the curved bar D, and through the keeper E, so as to hold the scraper A B and tongue C rigidly in place when adjusted at any desired angle with each other. This construction enables the scraper to be readily adjusted at right angles with the tongue for filling up hollows in the ground or roadway being graded, or at any desired inclination with said tongue for moving the dirt laterally for filling the wagon-ruts in or rounding up the center of the roadway. To the center of the rear side of the plank A is attached an eye-

bolt or plate, G, into the eye of which is hooked the hook H attached to the center of the U-shaped bar I, the arms of which pass through holes in the axle J, and have several holes formed in them to receive the pins or bolts K by which they are secured to said axle. This construction allows the axle J to be adjusted closer to or further from the scraper A B, according to the inclination at which said scraper may be adjusted, the object being to have the axle J as near as possible to the scraper A B and not have the said scraper interfere with the operation of the wheel L placed upon the journals of said axle. The wheels L are made with wide rims so as not to sink into the ground leveled or smoothed by the scraper. To the axle J, near its journals, are attached two short stakes, M, to keep the platform upon which the driver stands in place and prevent it from coming in contact with the wheels L. The platform consists of a wide central board, N, and two narrow boards, O, placed at its side edges. To the upper and lower sides of the forward part of the wide board N are securely bolted two narrow strips, P, between the projecting ends of which the narrow side strips O work, and which serve as guides to said side strips O. To the rear part of the central board N is pivoted the center of a cross-bar, Q, the ends of which are pivoted to the rear parts of the side strips O. The forward ends of the side strips O are pivoted to the rear side of the plank A by means of eyebolts, eye-plates, staples, or other convenient means. By this construction the platform N O can adjust itself as the inclination of the scraper A B is adjusted, allowing the wheels to freely follow the line of draft. R is a knife or shear, designed for use more especially in cleaning private roads from grass, &c. The cutter R is set at an inclination, as shown in Fig. 2, and to its ends are attached or upon them are formed two arms, S, which project vertically to pass up along the forward side of the scraper A B. The upper ends of the arms S are bent to the rearward at right angles to pass through holes in the upper part of the plank A, where they are secured in place by nuts. The arms S should be of such a length as to leave a clear space between the blade R and the lower edge of the scraper-plate B for the dirt to pass through, so that it may fall back into the place from which it was raised, leaving the surface of the roadway



as level and smooth as it was before, so that all that will be necessary will be to rake off the grass, &c., cut off beneath the surface by the cutter R. To the plank A are attached the lower ends of two bars or stakes, T, which may have handles U attached to them at or near their upper ends, and which are designed for the driver to take hold of or lean against when standing upon the upper edge of the plank A, or for him to fasten his reins to when desired. By this construction the driver, by standing upon the plank A, can throw his whole weight upon the scraper. When less weight is required upon the scraper he can stand upon the forward part of the platform N O, and by standing upon the rear end of the platform N O he can with his weight raise the scraper A B entirely away from the ground, enabling him to pass along freely without at all operating upon the ground. This construction also enables the driver, by adjusting his position upon the platform N O, to raise and hold the scraper-plate away from and at any desired distance above the ground, so as to fill all cavities and

leave the surface perfectly smooth and level; or he can deposit at any desired point the whole or any part of the soil accumulated before the scraper for forming a ridge or filling a cavity.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The self-adjusting platform N O, in combination with the scraper A B, wheels and axle L J, and adjustable connecting-bar I, substantially as herein shown and described, and for the purpose set forth.

2. The adjustable U-shaped connecting-bar I, in combination with the scraper A B and wheels and axle L J, substantially as herein shown and described, and for the purpose set forth.

3. The cutter R S, in combination with the scraper A B, substantially as herein shown and described, and for the purpose set forth.

GEO. W. BAYLY.

Witnesses:

JAMES T. GRAHAM,  
T. B. MOSHER.

(51)