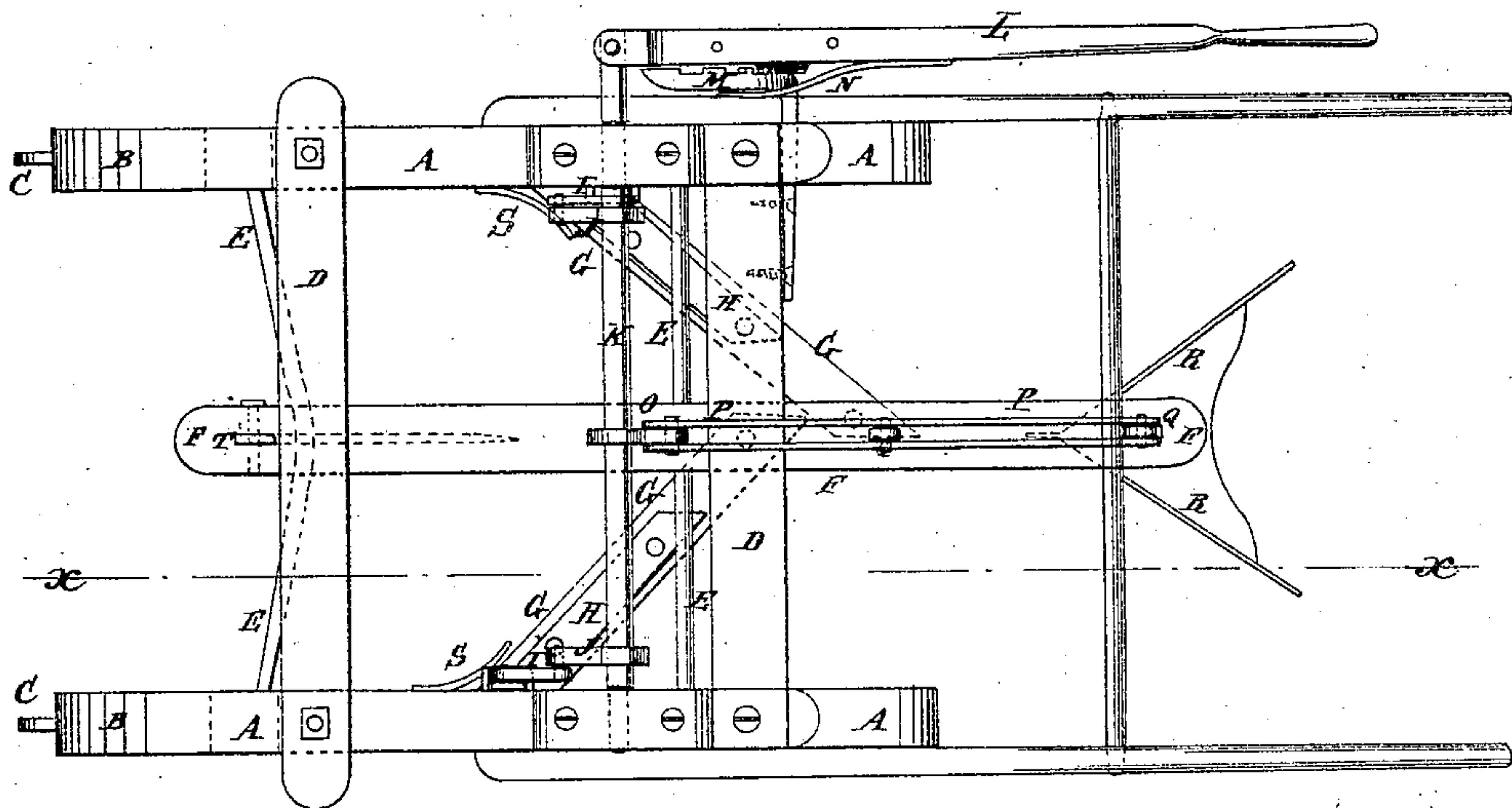
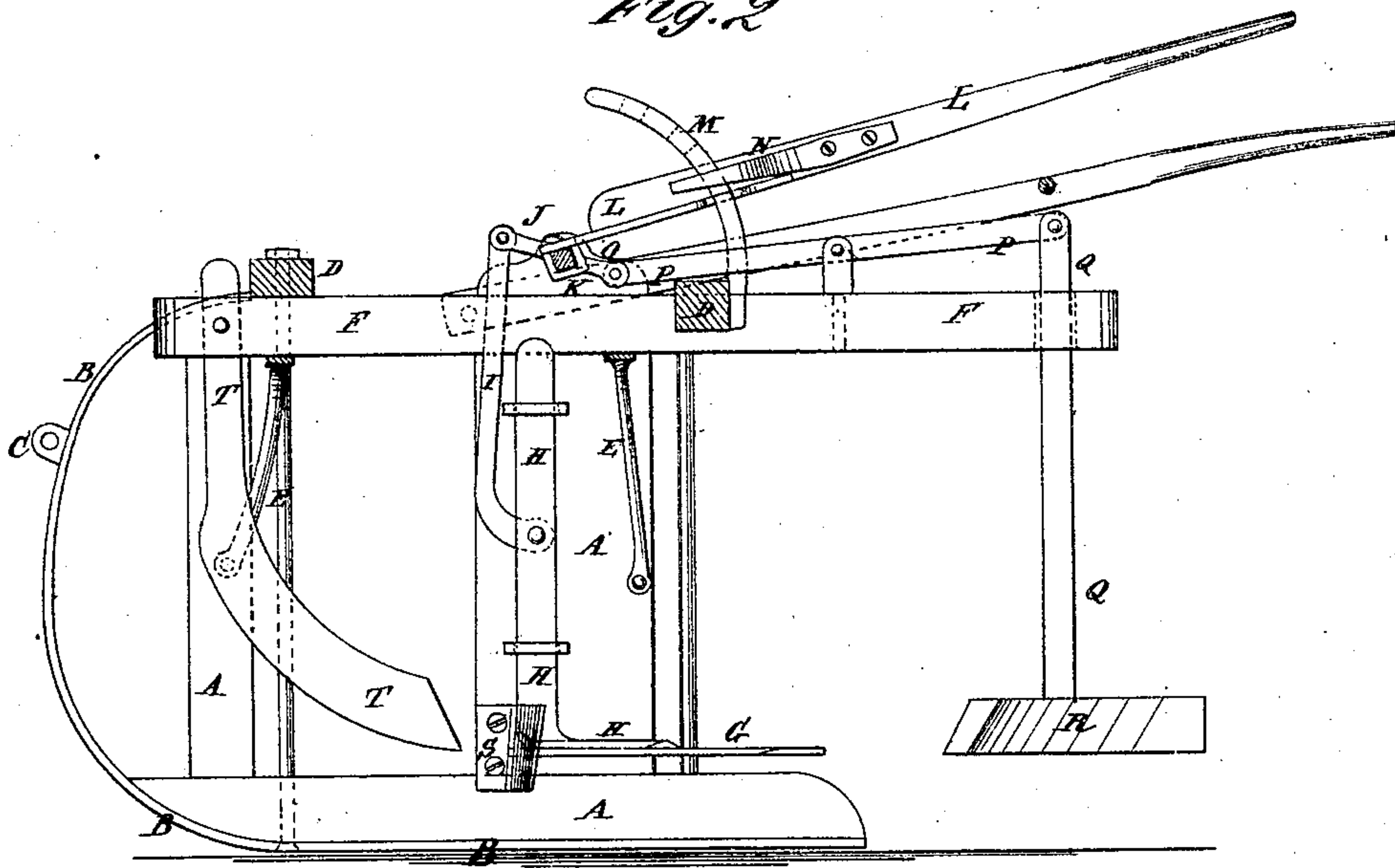


**H. VON PHUL, Jr. & J. MALLON.**  
**Combined Stubble Shavers and Scrapers.**  
 No. 144,933. Patented Nov. 25, 1873.

*Fig. 1*



*Fig. 2*



**Witnesses.**  
*A. W. Amqvist*  
*C. Sedgwick*

**Inventor.**  
*H. Von Phul, Jr.*  
*J. Mallon*  
**Per** *Mumt Co*  
**Attorneys.**



# UNITED STATES PATENT OFFICE.

HENRY VON PHUL, JR., AND JAMES MALLON, OF HOLLY WOOD, LA.

## IMPROVEMENT IN COMBINED STUBBLE SHAVERS AND SCRAPERS.

Specification forming part of Letters Patent No. **144,933**, dated November 25, 1873; application filed August 16, 1873.

*To all whom it may concern:*

Be it known that we, HENRY VON PHUL, Jr., and JAMES MALLON, of Holly Wood, in the parish of East Baton Rouge and State of Louisiana, have invented a new and useful Improvement in Combined Stubble Shaver and Scraper, of which the following is a specification:

Figure 1 is a top view of our improved machine. Fig. 2 is a vertical longitudinal section of the same taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

Our invention is an improved machine for grubbing or shaving and scraping sugar-cane stubble, the same being constructed and operated as hereinafter described.

A are the vertical side frames of the machine, the lower forward parts of which are rounded up to adapt them to serve as runners, and have shoes B attached to them, which, at the front ends of the frames, are extended upward, and are attached to the top bars of said frames, and to them are attached the eyes C, to which the cross-bar or roller of the tongue is pivoted. The frames A are connected and held in their proper relative position by two or more cross-beams, D, attached to their top bars, and by the braces E, the lower ends of which are attached to the side-frames A, and their upper ends are attached to the cross-beams D, or to the longitudinal beam F attached to the centers of said cross-beam D. G are the knives, which are bolted to the horizontal arms of the angular bars H. The knives G have an edge formed upon both of their side edges, so that when one edge becomes dull the knives may be detached and reversed. The bars H are so formed that their horizontal arms may incline to the rearward, as shown in Fig. 1, to bring the knives G into a good working position. The vertical arms of the bars H extend up along the vertical bars of the frames A, and slide up and down in keepers attached to said vertical bars. To the vertical arms of the bars H are pivoted the lower ends of the connecting-bars I, the upper ends of which are pivoted to short crank-arms J, rigidly attached to the square shaft K, the journals of which revolve in bearings attached to the top bars of the frames A. To one end of the shaft K is rigidly attached

a lever, L, which moves up and down along a curved notched arm, M, rigidly attached to the frame A, and against which the said lever L is held by a spring, N. This construction enables the knives G to be conveniently raised and lowered, as desired. To the middle part of the shaft K is also attached a third crank-arm, O, to the outer end of which is pivoted the forward end of the lever P, which is pivoted in its middle part to a short stud attached to the beam F. To the rear end of the lever P is pivoted the upper end of a bar, Q, which passes down through a hole in the rear end of the beam F, and to its lower end is attached a triangular or V-shaped block or frame, R, the sides of which are made slightly inclined, and are faced with metal, so as to push or scrape from the ridge the stubble and soil cut by the knives G. By this arrangement the knives and scraper are raised and lowered at the same time and by the same operation. S are guards attached to the frames A to overlap the inner ends of the knives and prevent them from becoming choked with stubble or other rubbish. T is a cutter, the shank of which is designed to split the ridge in advance of the knives and scraper to enable them to operate more easily and with better effect.

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

1. The combination of the knives G, sliding angular bars H, connecting-bars I, crank-arms J, shaft K, lever L, and catch-bar M, with each other and with the frame A D, substantially as herein shown and described.

2. The combination of the scraper R, bar Q, and lever P with the shaft K, having crank-arms O, the lever L, knives G, and bars H, all as shown and described, whereby the two cutting devices may be simultaneously raised and lowered by operating said lever, as set forth.

3. The combination of the cutter T with the knives G, scraper R, and frame A D, substantially as herein shown and described.

H. VON PHUL, JR.  
JAMES MALLON.

Witnesses:

V. M. DE MAINE,  
JOHN P. THURLOW.