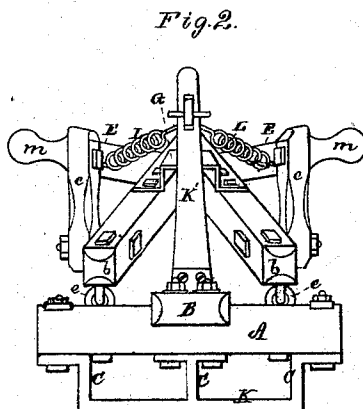
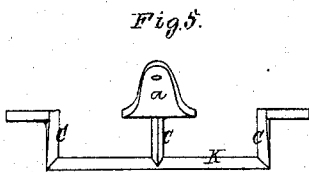
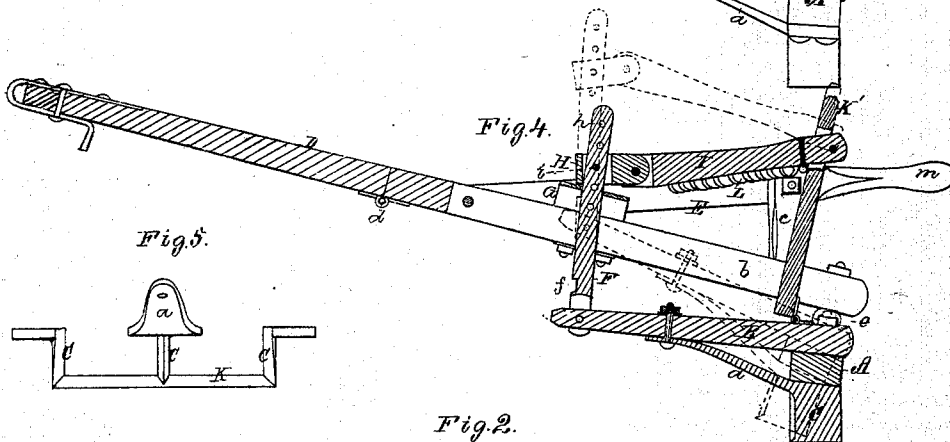
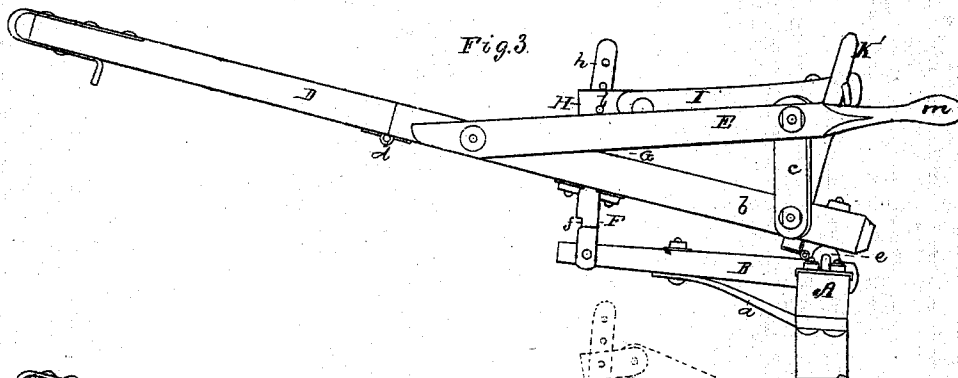
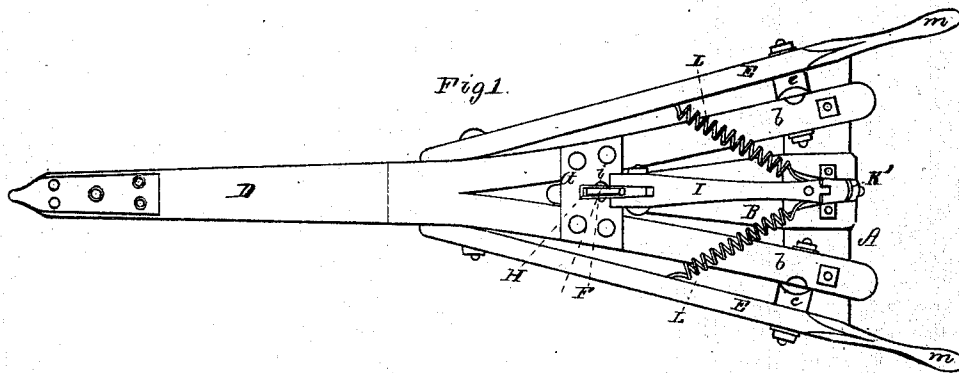


B. GOODRICH.
Road-Trimmers.

No. 144,532.

Patented Nov. 11, 1873.



Witnesses.

S. N. Piper
E. W. Miller

Barnard Goodrich.

by his attorney.

R. K. Lacy

UNITED STATES PATENT OFFICE

BARNARD GOODRICH, OF STRATHAM, NEW HAMPSHIRE.

IMPROVEMENT IN ROAD-TRIMMERS.

Specification forming part of Letters Patent No. **144,532**, dated November 11, 1873; application filed August 1, 1873.

To all whom it may concern:

Be it known that I, BARNARD GOODRICH, of Stratham, of the county of Rockingham and State of New Hampshire, have made a new and useful invention of a Road-Trimmer; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a rear elevation, Fig. 3 a side elevation, and Fig. 4 a longitudinal section, of it.

The purpose of the article is to trim roads or cut sods, and it is useful for various other purposes.

In the drawings, A denotes the cutter-head of the machine, provided with a tongue, B, a horizontal knife, K, and three or other suitable number of vertical knives, C C C, arranged as shown more particularly in Fig. 5, which is a front view of such knives. The combined knives are placed below the cutter-head and fastened to it by bolts and nuts, a metallic brace, *a*, being extended from the cutter-head to the tongue B, in manner as represented. The said tongue B is arranged midway between the prongs *b b* of another or draft tongue, D, provided with two arms, E E, arranged with it, as shown, and fixed to it, and two standards or posts, *c c*, erected on it, as represented. The draft-tongue, at or near its middle, may be cut in two, with the portions connected by a hinge, *d*, in order that the front part of the tongue may be folded back underneath the rear part for reducing the machine in length, for the purpose of storage in a smaller compass, or to cause it to take up less room than it would were the tongue in one solid piece. The cutter-head is pivoted or hinged to the two prongs *b b* in manner as shown at *e e*, and there is hinged to the tongue B a catch-bar, F, which is notched, as shown at *f*, and extends up through a bridge, G, spanning the prongs *b b* from one to the other. The said catch-bar F, provided near its top with a series of holes, *h*, goes through a short arm, H, and is connected thereto by a pivot,

i, which extends through the arm H and one of such holes. The said arm H is jointed to a bar, I, which, in turn, is jointed to a post, K', stepped upon and hinged to the tongue B, all being arranged as represented. Two helical springs, L L, fastened to the arms E E, project therefrom obliquely. At their inner ends such springs are secured to the bar I. The springs serve to hold the notch of the catch-bar F in engagement with the bridge.

By pulling the post K' backward, the catch-bar or latch F will be unlatched from the bridge and the tongue B will drop, so as to turn the cutter-head in a manner to set its cutters in position for trimming a road or for cutting turf or sods.

Each of the arms E E terminates at its rear part in a handle, *m*.

When oxen or draft animals are attached to the tongue D, and the machine is being drawn along by them, an attendant seizes hold of the handles with his hands and guides the machine. While the inner tongue is in the position shown in dotted lines in Fig. 4, the cutting-edges of the knives or scrapers will be out of action upon the surface of land; but by pulling back the bar I so as to unlatch the catch-bar from the bridge, the draft on the machine will cause the cutter-head to take the inclined position necessary to bring its cutters into action. On backing the machine, the cutter-head will be tipped forward, and its tongue B will be thrown up and latched to the bridge.

I claim as my invention, as follows, viz:

1. The combination of the bridge G, the latch F, the post K', the springs L L, and the arms H I, arranged and applied to adjust the pitch of the cutters, as explained.
2. The combination of the adjusting mechanism, as described, with the draft-tongue D, the cutter-head A, its tongue B, and cutters K C C, substantially as set forth.

BARNARD GOODRICH.

Witnesses:

R. H. EDDY,
J. R. SNOW.