

United States Patent Office.

JOHN G. PERRY, OF KINGSTON, RHODE ISLAND.

IMPROVEMENT IN POLES AND THILLS FOR CARRIAGES, &c.

Specification forming part of Letters Patent No. 53,478, dated March 27, 1866.

To all whom it may concern:

Be it known that I, JOHNG, PERRY, of South Kingston, in the county of Washington, in the State of Rhode Island, have invented a new and Improved Mode of Constructing the Poles and Thills for Mowing-Machines, Harvesters, Carryalls, and other Vehicles; and I do hereby declare that the following is a full and correct description thereof, reference being had to the accompanying drawings, forming part of this specification, and to the letters of reference marked thereon.

Similar letters denote the same parts in all the figures.

The object of my invention is to produce a combined tongue and thills that can be readily changed from one to the other, and so used for moving machines, harvesters, carryalls, &c.

Figure 1 is a top view of the device when used as a pole or tongue. Fig. 2 is a side view of the same. Fig. 3 is a top view of the device when used as thills. Fig. 4 is a top view of the lower part of the clasp that goes on the end of the pole. Fig. 5 is an end view of the same.

The construction, arrangement, and operation of this device, by which means a mowing-machine or any carriage can be used with one or two horses, is as follows:

To form the tongue the parts $k\,k$ are placed side by side and connected at their inner ends by the curved plates $a\,b$ to the pieces $m\,m$, which are hinged to the clasps around the axle o. (See Fig. 1.) The plates $a\,b$ cross each other and are secured by the bolts ff,gg, and $z\,z$. These also hold the parts $k\,k$ very secure and rigid in their places at their inner ends, and a metallic cap, q, (see Figs. 4 and 5,) formed by two pieces, with recesses $u\,u$ in them to receive the outer ends of the parts $k\,k$, is placed thereon and fastened by a bolt, b, and by adding two whiffletrees and an evener it is made complete for two horses.

When used as thills the cap q is removed the bolts zz withdrawn, which allows the plates

 $a\ b$ to swing around on the other bolts, and when the parts $k\ k$ are drawn back and entered in place and the bolts $z\ z$ are inserted in the holes $e\ e$, with the bolts passing through both plates, one above and the other below the parts $k\ k$, and the plates $a\ b$ crossing each other, the whole becomes rigid again, and, the two whiffletrees being removed, leaves the evener for one horse.

The plates a b may be curved more, as represented by the red dotted lines in Fig. 1, so as to make more room for the team.

If at any time it should be necessary to have the tongue or thills rigidly connected to the axle or frame of the machine or carriage the hinged pieces m m may be removed therefrom and the cross-pieces k k directly attached thereto; and the pieces m m may be made with solid projections, as at i in Fig. 2, to connect the pole or thills therewith, or they may be made with removable projecting pieces, as at j in Fig. 1, to connect the tongue and thills to the pieces m m, or directly to the axle or frame of the machine or carriage. It will be seen that by this convertible arrangement the tongue and thills are drawn in and out in changing them from one to the other, so as to leave them the different lengths required for use.

Thus having described my combined tongue and thills, what I claim, and desire to secure by Letters Patent thereon, is—

1. The convertible pole and thills k k, in combination with the adjustable cross-plates a b, constructed as herein described, and for the purpose set forth.

2. In combination with the foregoing, the use of the projections $i\ j$ to connect the pole and thills to the machines and carriages, substantially as herein described.

JOHN G. PERRY.

Witnesses:

JAMES E. ARNOLD, BENJAMIN ARNOLD.