

(Model.)

C. F. W. GOERNANDT.
Doubletree Attachment.

No. 238,229.

Patented March 1, 1881.

Fig. 2.

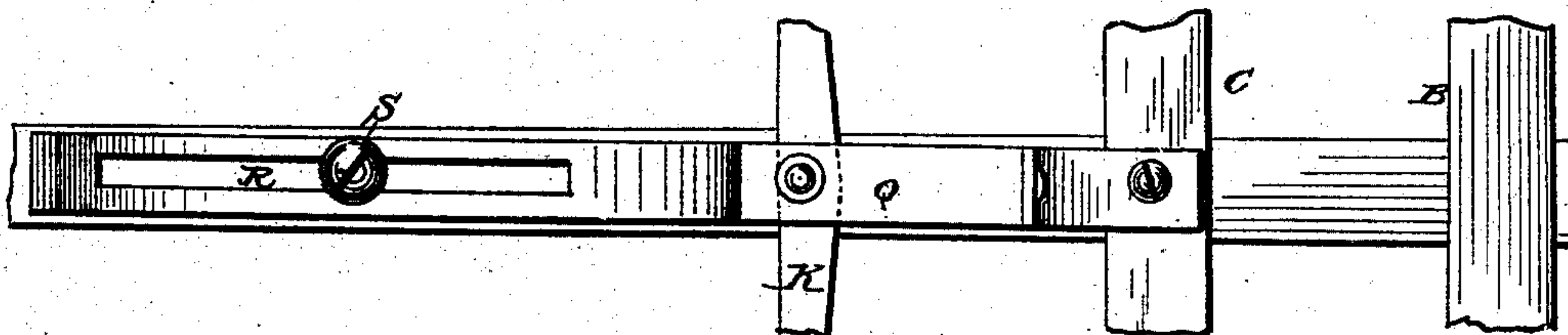
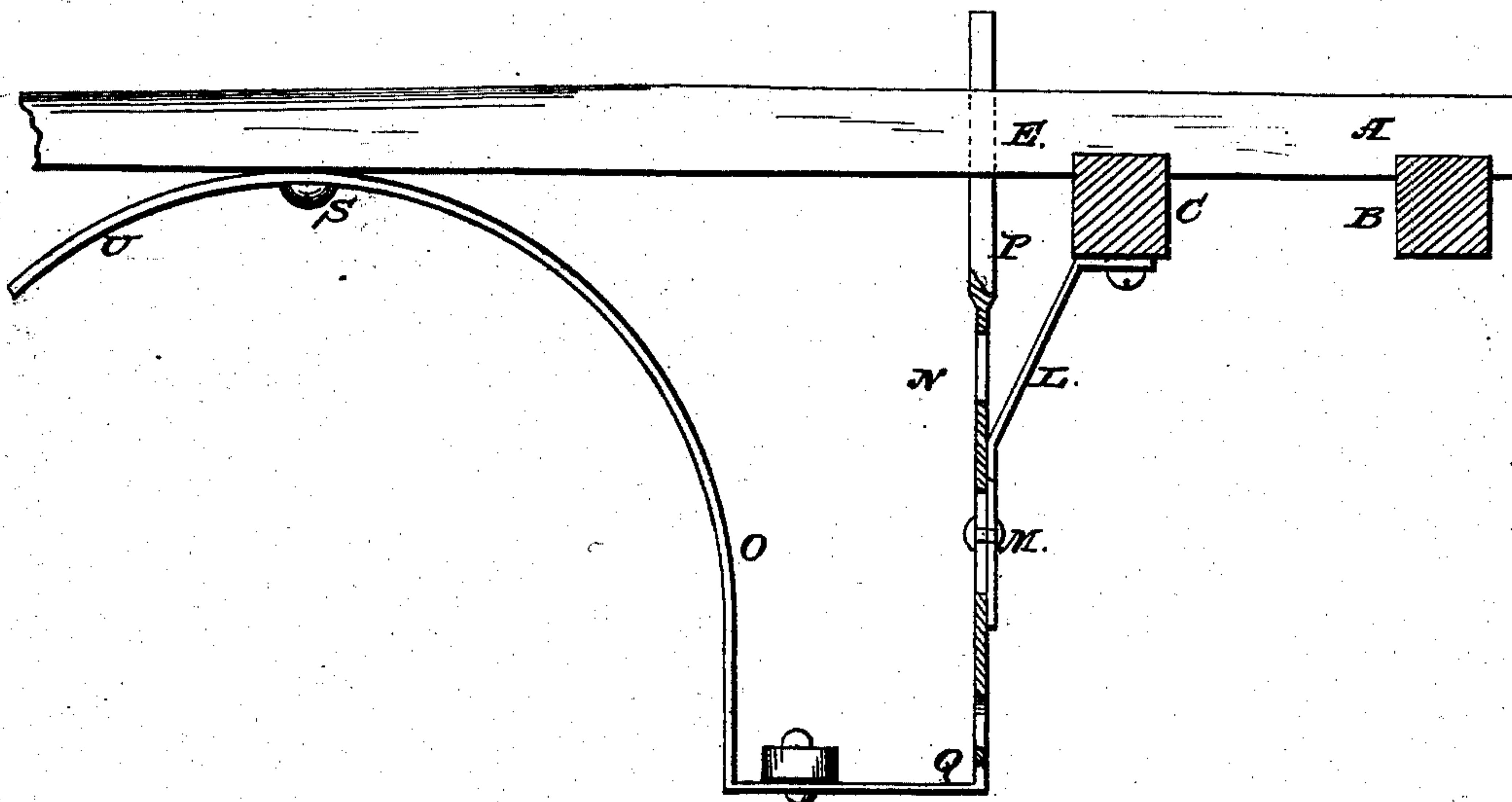


Fig. 1.



Witnesses:
Fred. G. Dietrich

J. R. Little

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by *C. A. Snow & Co.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

CHRISTIAN F. W. GOERNANDT, OF PRINCEVILLE, KANSAS.

DOUBLE-TREE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 238,229, dated March 1, 1881.

Application filed November 18, 1880. (Model.)

To all whom it may concern:

Be it known that I, CHRISTIAN F. W. GOERNANDT, of Princeville, in the county of Cloud and State of Kansas, have invented certain
5 new and useful Improvements in Double-Tree Attachments; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to
10 make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a side elevation of a device embodying my improvements. Fig. 2 is an in-
15 verted plan view.

This invention has relation to double-tree attachments; and it consists in the improved features of construction and combination hereinafter fully described, and particularly pointed
20 out in the claim.

Referring by letter to the accompanying drawings, A designates the tongue, and B the cross-bar by which it is connected to a drill, cultivator, &c.

25 C designates an auxiliary cross-bar used in many drills as now constructed.

The primary object of this invention is to relieve the horses of the strain or weight that usually comes upon their necks in drawing
30 implements of this class.

To this end I construct an arm, L, which depends from the under side of the auxiliary cross-bar C, and is connected by a bolt, M, and nut, to the vertically-slotted arm N of the
35 metal frame O. The arm N has a rounded shank, P, at its upper end, which passes through the hole E (see dotted lines, Fig. 1) in the tongue A. The arm N depends vertically, and a portion, O, is then bent forward
40 at right angles thereto, and the strap of metal

is then curved upward, forward, and downward, and is provided with a longitudinal slot, R, through which a set-screw, S, passes into the tongue A. By means of the slotted arm N and the slotted curved arm U the double-
45 tree, which is pivoted to the straight portion Q, may be elevated or lowered to regulate the weight upon the neck of the horses. The draft upon the double-tree is upward; hence the front of the pole is elevated and the weight
50 thus lifted.

This device is cheap and simple, and may be applied to drills, cultivators, and the like at little cost.

I am aware that a vertically-adjustable draft
55 or evener arranged below the tongue to cause an upward draft strain and relieve pressure upon the neck-yoke is old, and such I do not wish to be understood as claiming, broadly, as of my invention.
60

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

In a double-tree attachment for drills and the like, the combination, with the tongue A,
65 having hole E and auxiliary cross-bar C, of the arm L, with bolt M, and the metal frame O, composed of the slotted arm N, straight portion Q, and slotted curved portion U, adjustably secured to the tongue and carrying
70 the double-tree, substantially as and for the purpose herein shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

C. F. W. GOERNANDT.

Witnesses:

GEO. W. BARNES,
R. A. McCORD.