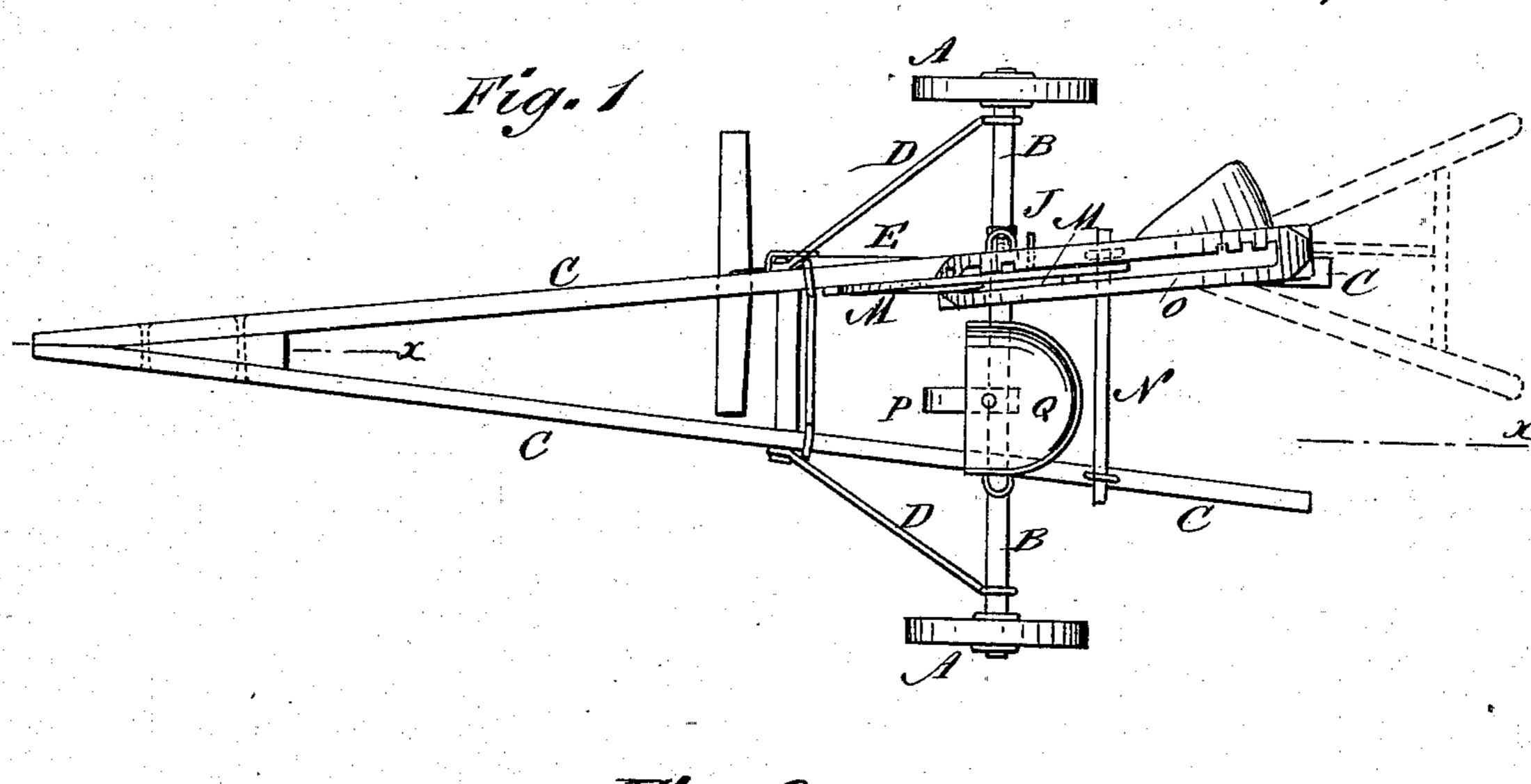
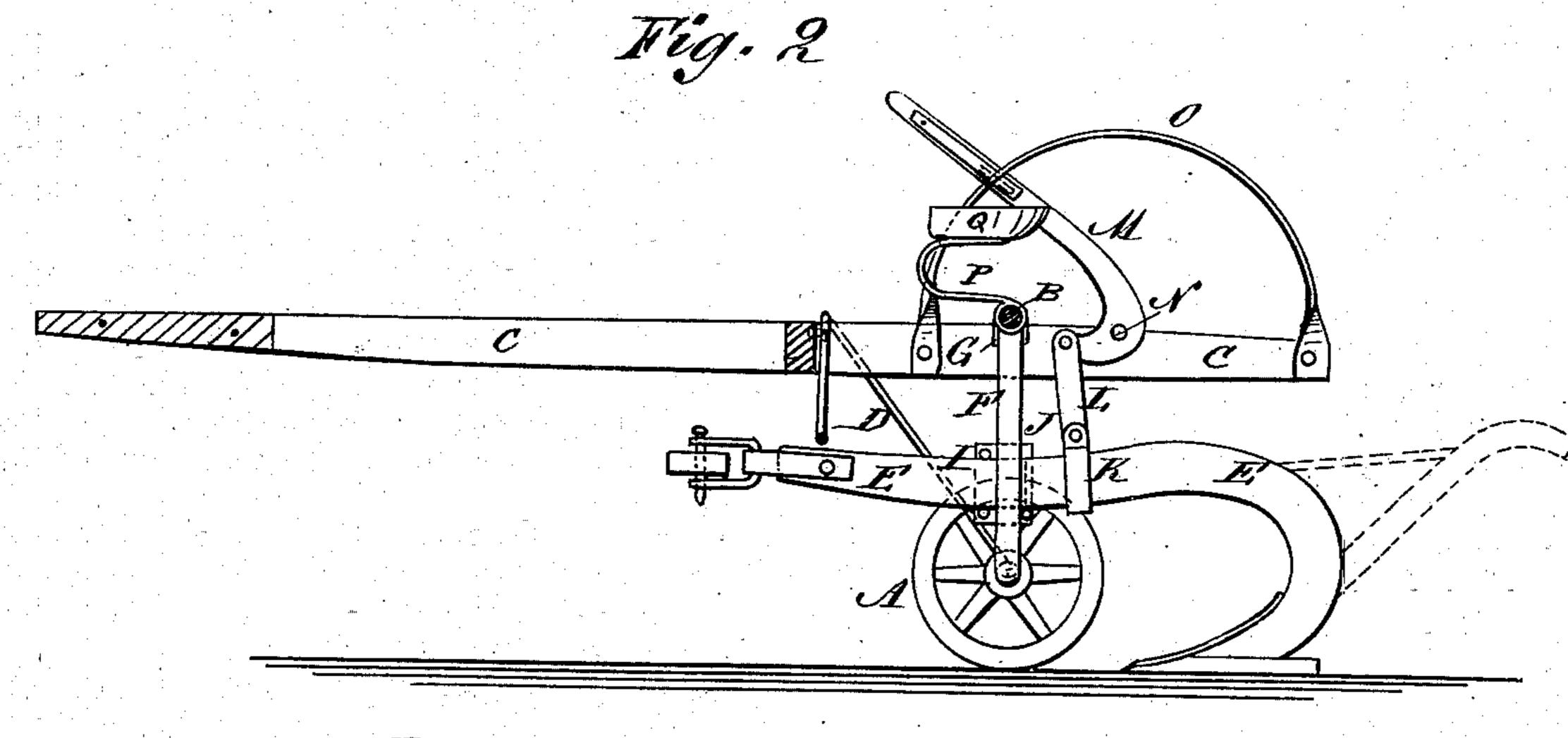
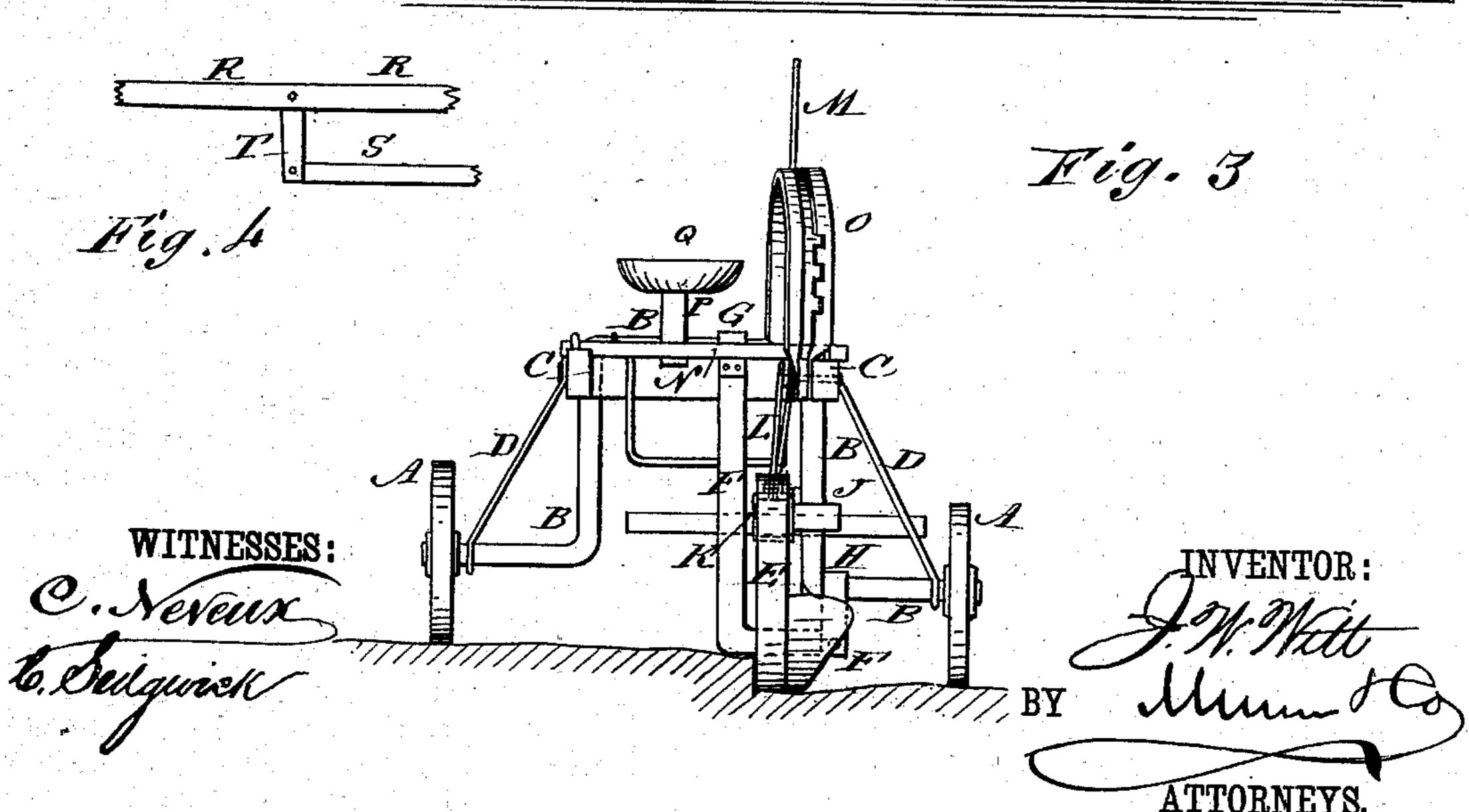
J. W. WITT.
Sulky Plow.

No. 239,587.

Patented March 29, 1881.







## United States Patent Office.

JOHN W. WITT, OF GRENOLA, KANSAS.

## SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 239,587, dated March 29, 1881.

Application filed November 26, 1880. (No model.)

To all whom it may concern:

Be it known that I, John W. Witt, of Grenola, Elk county, Kansas, have invented a new and useful Improvement in Sulky Attachments for Plows, of which the following is a specification.

Figure 1 is a plan view of the improvement. Fig. 2 is a sectional side elevation taken through line x x, Fig. 1. Fig. 3 is a rear elevation, and Fig. 4 is a plan view of the three-horse tongue.

Similar letters of reference indicate corre-

sponding parts.

The object of this invention is to furnish attachments for connecting plows to sulkies which shall be so constructed as to be used with a right-hand plow and a left-hand plow, and which will allow the plow to work with entire freedom and to be raised and lowered as circumstances may require.

A represents the wheels, B the square arched axle, and C the tongue, of the carriage, about the construction of which there is nothing new.

The connection between the axle B and tongue C is strengthened by the braces D, the rear ends of which are attached to the end parts of the said axle B, and their forward ends are attached to the said tongue C.

E represents an ordinary plow. F is an 30 angle-bar made with a long upright arm and a short horizontal arm. The end of the long arm of the bar F is secured to the upper horizontal part of the axle B by a strap or other clamp, G, and the end of its short arm is se-35 cured to the lower horizontal part of the axle B by a strap or other clamp, H. The short arm of the angle-bar F is made of such a length as to furnish space between the long arm of the said bar and the upright part of the axle 40 B, to receive the plow-beam E. The angle-bar F is connected with the right-hand part of the axle B when a right-hand plow is to be used, and with the left-hand part of the said axle when a left-hand plow is to be used.

that passes between the bar F and the upright part of the axle B are attached metal plates I, to prevent the said plow-beam from being worn. When an iron plow-beam is used the plates I are used to prevent lateral movement. The draft is applied to the end of the plow-beam E, and to the outer side of the said plow-beam is attached a flange or angle-iron, J, which may be the rear part of the facing-plate I or a sep-state plate, as may be desired. The flange J

rests against the rear side of the upright part of the axle B, so that the carriage will be drawn from the plow-beam.

To the plow-beam E, a little in the rear of the flange J, is attached a strap or other clamp, 60 K, to the upper part of which is hinged the lower end of a short connecting-bar, L. The upper end of the connecting-bar L is hinged to the short arm of the bent lever M, which is fulcrumed at its angle to a rod, N, attached to 65 the tongue C in the rear of the axle B. The upper part of the lever M moves through a guide-slot in an arched bar, O, the ends of which are attached to the tongue C, and which has notches formed in it along one side of its 70 slot to receive the lever M, or a pawl formed upon or attached to the said lever.

With this construction, by operating the lever M the plow can be raised and lowered and held securely in any position into which it may 75 be adjusted. When a left-hand plow is to be used the rod N is detached and reversed, which brings the lever M to the left-hand part of the

axle L

To the middle part of the axle B is attached 80 the lower end of a U-shaped spring-standard, P, to the upper end of which is attached the driver's seat Q.

The tongue C is designed for use when two horses are attached to the plow. When three 85 horses are attached to the plow the tongue (represented in Fig. 4) is used, which tongue is attached to the axle B in the same manner as the tongue C. The three-horse tongue is formed of a long bar, R, a short bar, S, placed parallel 90 with the rear part of the said long bar R, and the cross-bar T, attached to the long bar R, and to the forward end of the short bar S. When a left-hand plow is to be used the tongue R S T is detached and reversed.

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

The combination, with the arched axle B, plow-beam E, and lever M, of an angle-bar, F, 100 having its vertical arm attached to the top of the axle, extending downward parallel to and below said axle, bent twice at right angles and secured to the spindle-arm to form a beamguide, adjustable to either side for a right or 105 left plow, substantially as described.

JOHN W. WITT.

Witnesses:

J. M. REID, M. W. WILLIAMS.