D. F. Stratton.

Gauge for Setting Wagon-Axles.

No 72427 Patented Dec. 17, 1867.

Fig. 1.

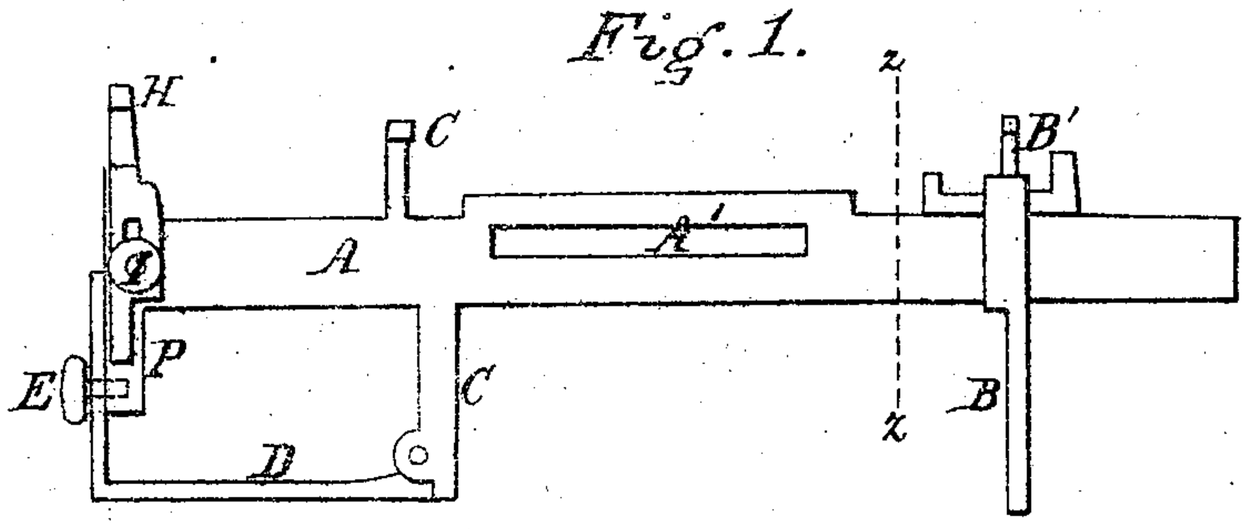

Fig. 2.

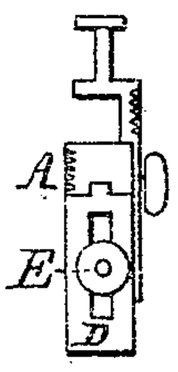

Fig. 3.

Witnesses.
Chas. F. Clausen.
D. P. Holloway.

D. F. Stratton
Inventor
by
D. P. Holloway Jr.
his attys.

United States Patent Office.

DAVID F. STRATTON, OF CHRISTIANSBURG, OHIO.

Letters Patent No. 72,427, *dated December* 17, 1867.

IMPROVEMENT IN GAUGES FOR SETTING WAGON-AXLES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, D. F. STRATTON, of Christiansburg, in the county of Champaign, and State of Ohio, have invented a new and useful Improvement in Gauges for Setting the Pitch of Wagon-Axles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a side elevation,

Figure 2 is an end elevation, and

Figure 3 is a vertical section on the line Z Z.

The same letters are employed in all the figures in the indication of identical parts.

In making wagon-axles, the spindles are not made in line with the axis of the axle. They are turned down, to give a slight outwardly inclination to the top of the wheels, and are slightly inclined towards the front, to throw the front part of the wheels towards one another, for the purpose of preventing pressure upon the linchpin. It is necessary that these angles should be the same on both ends of the axle, and upon both axles. To so construct the axle is a work of considerable delicacy, to facilitate which this gauge is intended. It is formed as follows:

A is a beam of wood, having an opening at A^2, for convenience in handling the gauge. B is an adjustable standard, sliding on the beam A, from which it projects on both sides. C is a fixed standard, of the same length as the long end of the standard B. To this standard C is hinged the swing D, bent at right angles, and adjustably fastened to the angular piece F, on the end of the beam, by a set-screw, E. The edge of the part F may be graduated, for the purpose of facilitating measurements in adjusting the swing. The vertical portion of the swing D, near the axle, should be cut away on one side, to give elasticity to that part of the swing, so as to permit it to set against the face of the projection F. G is a fixed projection, of the same height from the beam as the point of the projection B′. H is an adjustable standard, attached to the beam by a set-screw, I, passing through a slot therein. It, also, is graduated.

The gauge is applied as follows: First, the swing D is adjusted, to give the downward inclination of the spindle, and the axle is bent to conform to this guide. By reversing the gauge on the axle, the same inclination may be given to the spindle on the other end. The gather or forward inclination of the spindle is given by means of the adjustable standard H; and the angle of all the spindles is determined by the application of the same gauge. Any number of axles may thus be made precisely alike by the use of this gauge.

I am aware that gauges for determining the pitch of axles have been heretofore constructed and patented; and I do not claim broadly for such a gauge, but only for the form of my gauge in the respects in which it is peculiar as an instrument for that purpose.

What I claim as my invention, and desire to secure by Letters Patent, is—

A reversible gauge, for the purpose set forth, having on one side the adjustable standard B, fixed standard C, and adjustable swing D, and on the other the longitudinally-adjustable standard B′, fixed standard G, and vertically-adjustable standard H, when constructed to operate substantially as described.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

DAVID F. STRATTON.

Witnesses:

J. E. FENIMORE,

WILLIAM CARR.