

No. 781,027.

PATENTED JAN. 31, 1905.

A. SEITZ.  
TONGUE TRUCK FOR BINDERS.

APPLICATION FILED MAY 17, 1904.

2 SHEETS—SHEET 1.

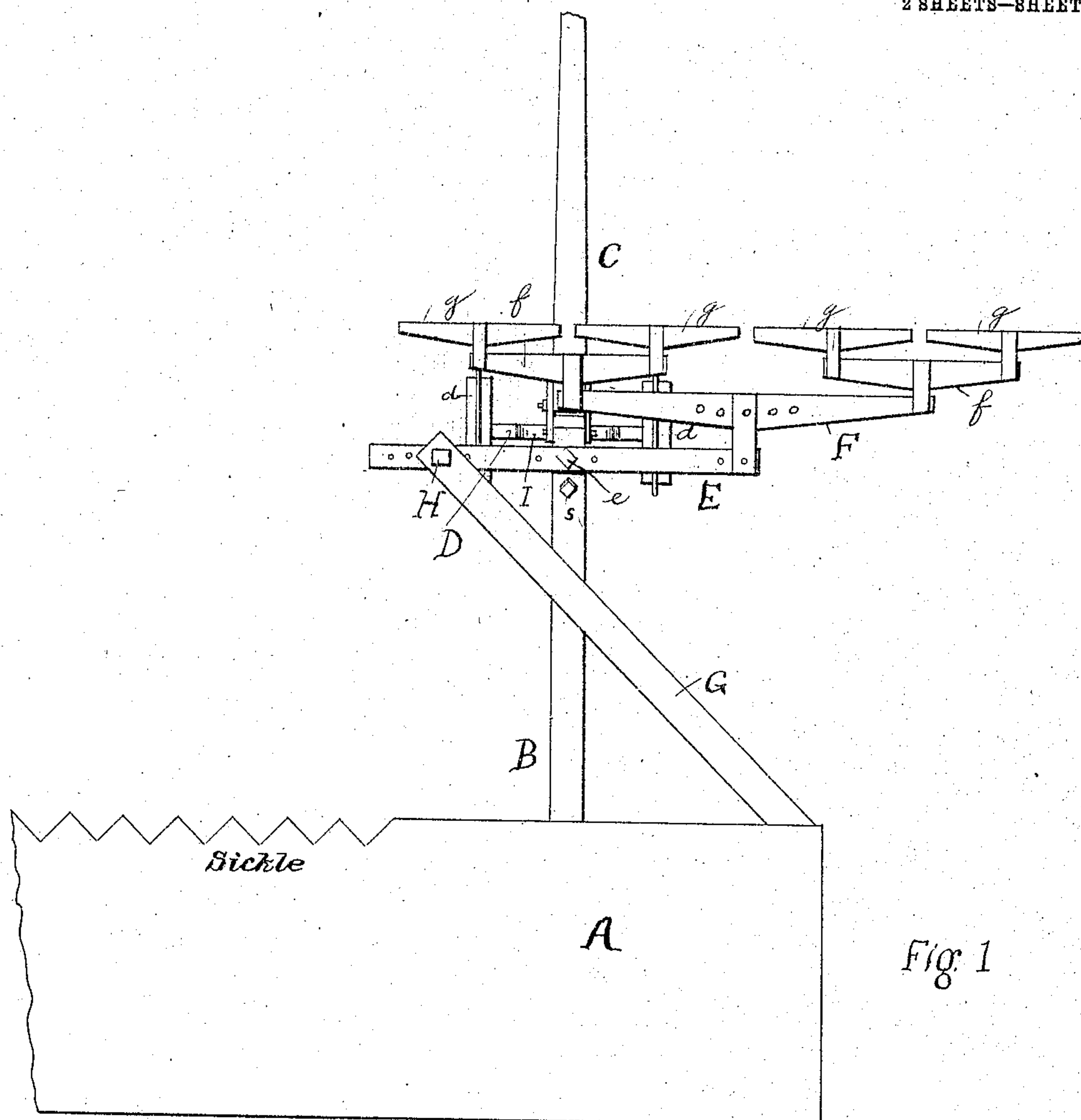
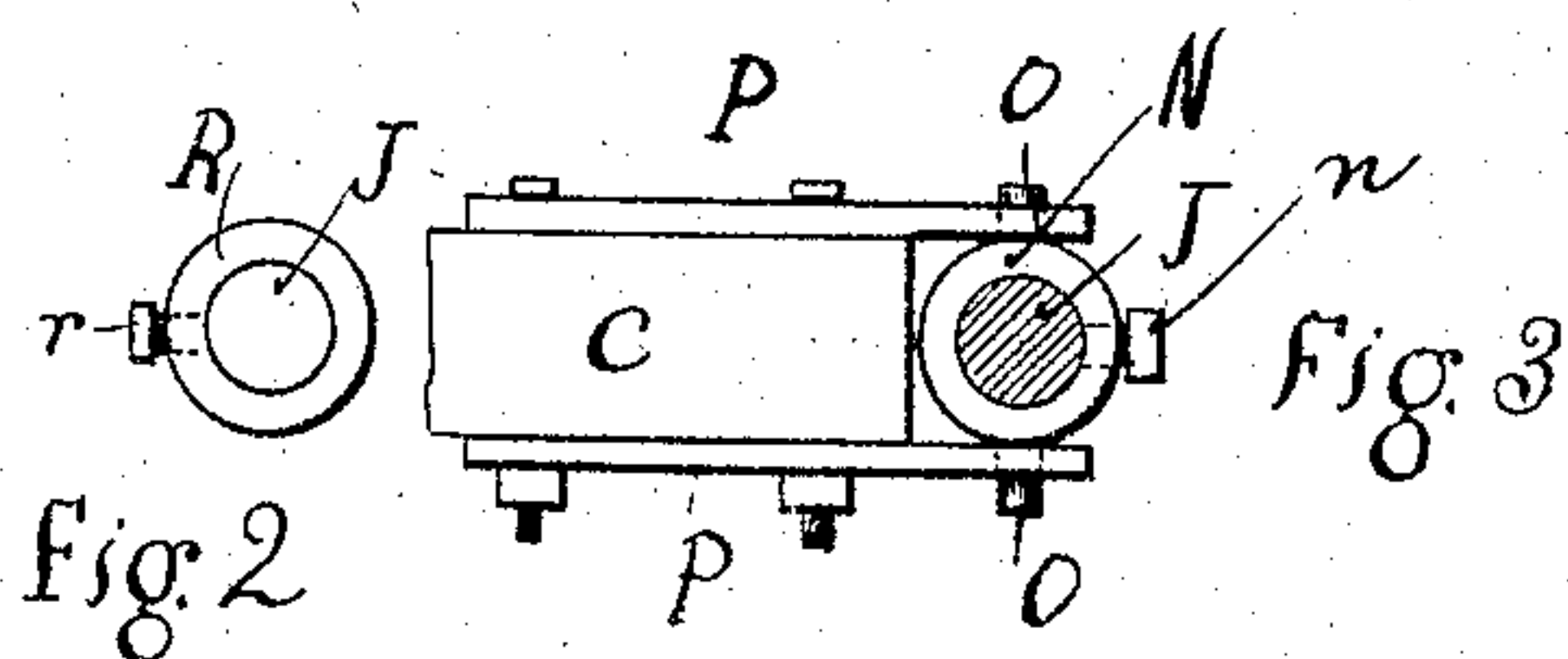


Fig. 1



Witnesses  
J. T. Fisher  
J. Rosen

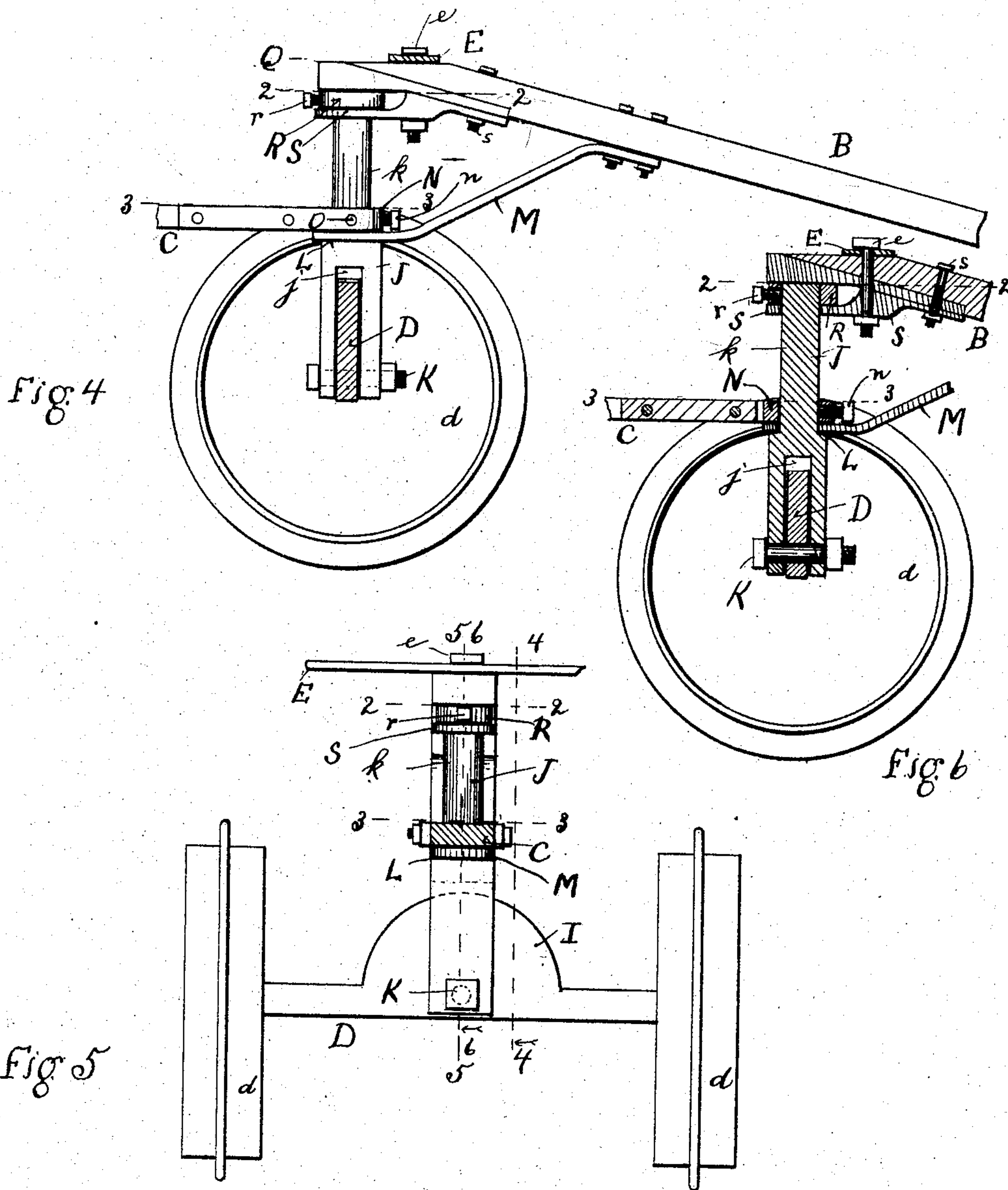
Inventor  
Alvah Seitz  
By J. A. Rosen  
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# UNITED STATES PATENT OFFICE.

ALVAH SEITZ, OF ANSON, KANSAS.

## TONGUE-TRUCK FOR BINDERS.

SPECIFICATION forming part of Letters Patent No. 781,027, dated January 31, 1905.

Application filed May 17, 1904. Serial No. 208,371.

*To all whom it may concern:*

Be it known that I, ALVAH SEITZ, a citizen of the United States of America, residing at Anson, in the county of Sumner and State of Kansas, have invented new and useful Improvements in Tongue-Trucks for Binders, of which the following is a specification.

The invention relates to a two-wheel tongue-truck for grain-binders, the purposes of such trucks being to relieve the horses from the weight of the binder-tongue, as well as to relieve them from the vibrations and side draft thereof.

The object is to provide such a device in which the long tongue is free from the vertical motions of the truck by reason of irregularities of the path over which the wheels pass, as well as to improve upon draft-equalizer; and this object is accomplished mainly by securing the long tongue to the short tongue and truck, so that the long tongue is free from both short tongue and truck in its vertical movement, so that the truck-wheels are free both from the long tongue and the short tongue as to vertical movement, and so that the long tongue and truck are permanently fixed together as to horizontal motion, further details appearing hereinafter.

The invention consists in the novel combination, arrangement, and disposition of the parts, the preferred form of the embodiment whereof is set forth in this specification and shown in the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view intended to show more particularly the draft-equalizer. Figs. 2 and 3 are details of the pivots at 2 2 and 3 3, respectively, in Figs. 4, 5, and 6, which latter figures are intended to show more particularly the truck and its connections, the equalizer being removed. Fig. 4 is a side view, the near wheel and a portion of the axle being cut away as through the line 4 4, Fig. 5. Fig. 5 is a front view, the long tongue being shown in section; and Fig. 6 is a vertical section through the line 6 6, Fig. 4, illustrating the manner of securing the truck and connections together. Fig. 1 is drawn to a somewhat smaller scale than the remaining figures.

Like letters of reference indicate like or

corresponding parts throughout the several views.

A is a graphic representation of the binder, of which B is the short or "stub" tongue.

C is the long tongue.

D is the truck-axle, provided with the two truck-wheels *d d*, preferably of the form shown as to rim and flange.

E is the cross-arm of the equalizer, pivoted to the short tongue at *e*. The four-horse doubletree F is secured to one end of the cross-arm. The two-horse doubletrees *f f* are secured to the four-horse doubletree, and these carry the swingletrees *g g* in the usual manner.

G is a beam extending from the other end of the equalizer cross-arm E to the opposite side of the tongue B, where it bears against the corner of the binder-frame by a bracket or any suitable means. Now it will be observed that the draft is on the pivot *e* and short tongue and that the back pressure on the beam G tends to force the sickle side of the binder forward, thereby equalizing the side draft caused by reason of the lateral extension of the sickle without driving the draft-animals onto the growing grain.

At the middle of the axle D is a semicircular enlargement I, to the center of which is pivoted the standard J, which is slotted, as shown at *j*, by means of the bolt K. The upper portion of standard J is round *h*, the junction between the two portions forming a shoulder L, on which rests the brace M, through which the standard extends rotatably, the said brace being bolted to the short tongue, as shown. Just above the brace is the collar N, rigidly secured to the standard by set-screw *n* and having the lateral pintles O O on which are pivoted the bars P P, which are bolted to opposite sides of the long tongue C, whereby the said long tongue is free to move thereon vertically, but whereby the tongue will carry the axle with it when moving horizontally. The upper end of the standard bears against the plate Q, secured to the short tongue, or rather the outer end of the long tongue rests on the upper end of the standard, the plate Q being used to prevent the wearing of the wood. The collar R is secured to the upper end of the standard by the set-screw *r*, and the upper



end of the standard is held in place by the brace S, through which it extends rotatably. The several pieces at the outer end of the short tongue are held together by means of the bolts *e* and *s*, as shown in the drawings.

The foregoing arrangement is obviously simple and economic in construction and may readily be assembled. The short tongue is carried on the truck, and all the weight and side strain is taken up and borne thereby. As the truck passes over irregular ground the wheels are free to move vertically on the bolt K, but are controlled as to horizontal motion by the long tongue C by reason of the described collar N, pintles O O, and plates P P. An especial feature of this arrangement is its overcoming the tendency of the long tongue to be run into the ground, as when turning a corner on an irregular surface.

Obviously the draft arrangement herein shown may be altered to meet the requirements of a three-horse rigging, as well as any other rigging, and there may be other variations from the exact description herein shown without departing from the spirit of the invention.

What I claim is—

1. The combination with the short tongue and the two-wheel truck comprising the wheels and the axle, of the standard pivoted to the short tongue and axle so as to rotate horizontally but not moving vertically with relation to the short tongue and so that the wheels may move vertically but not horizontally with relation to the standard, and the long tongue

pivoted to the standard so as to be free to move vertically but not horizontally with relation thereto; substantially as set forth.

2. The combination with the short and long tongues and the two wheels and axle of the truck, of the vertically-disposed standard pivoted to the axle so as to permit vertical movement thereof, and the collars and braces for securing the standard rotatably in fixed vertical relation to the short tongue and for securing the long tongue in fixed horizontal and movable vertical relation to the standard; substantially as set forth.

3. The combination with the short and long tongues and the two wheels and axle of the truck, of the slotted standard pivoted to the axle by the horizontally and longitudinally disposed bolt K, the bearing-plate Q secured to the outer end of the short tongue and resting on the upper end of the standard, the collar R secured to the upper end of the standard, the collar N secured to the standard and having the laterally-extending pintles whereby the long tongue may be hinged thereto, and the braces secured to the short tongue for holding the standard securely and rotatably in fixed vertical relation to the short tongue; substantially as set forth.

In testimony whereof I have hereunto subscribed my name in the presence of witnesses.

ALVAH SEITZ.

Witnesses:

J. H. MYERS,  
W. R. SHOUSE.