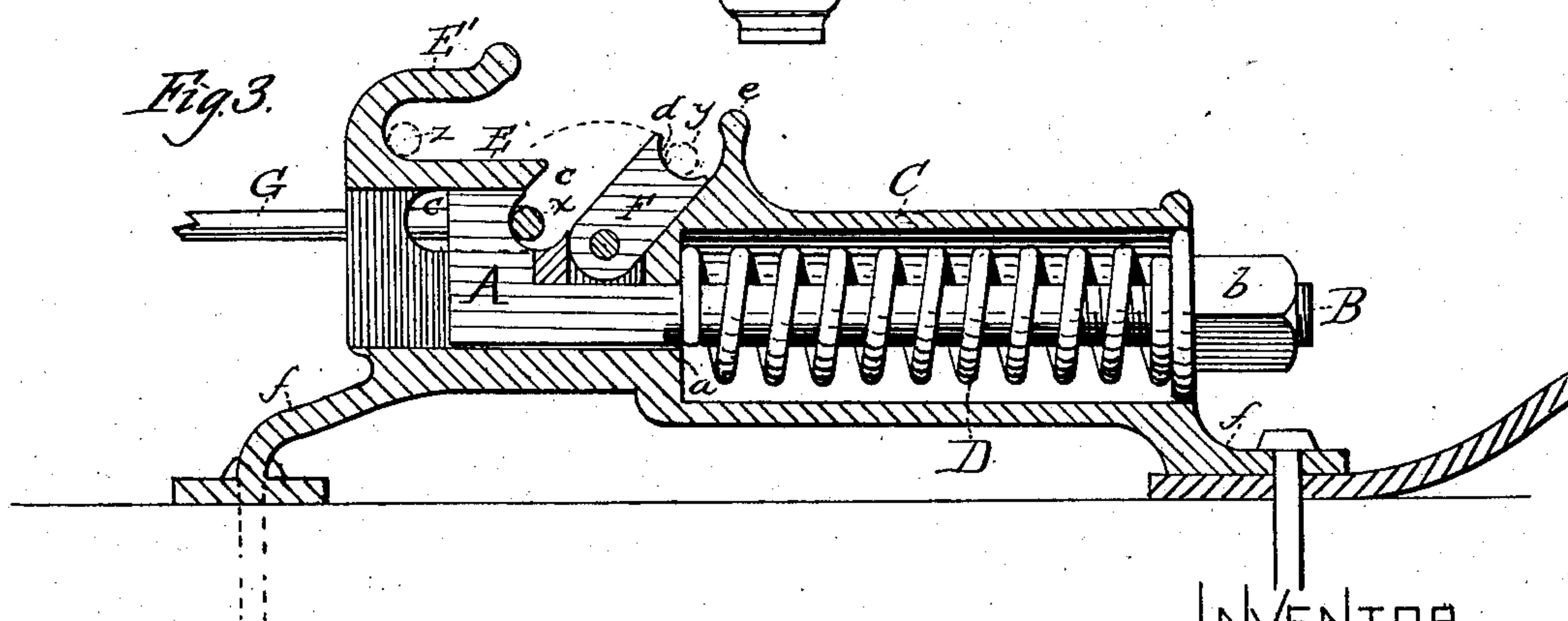
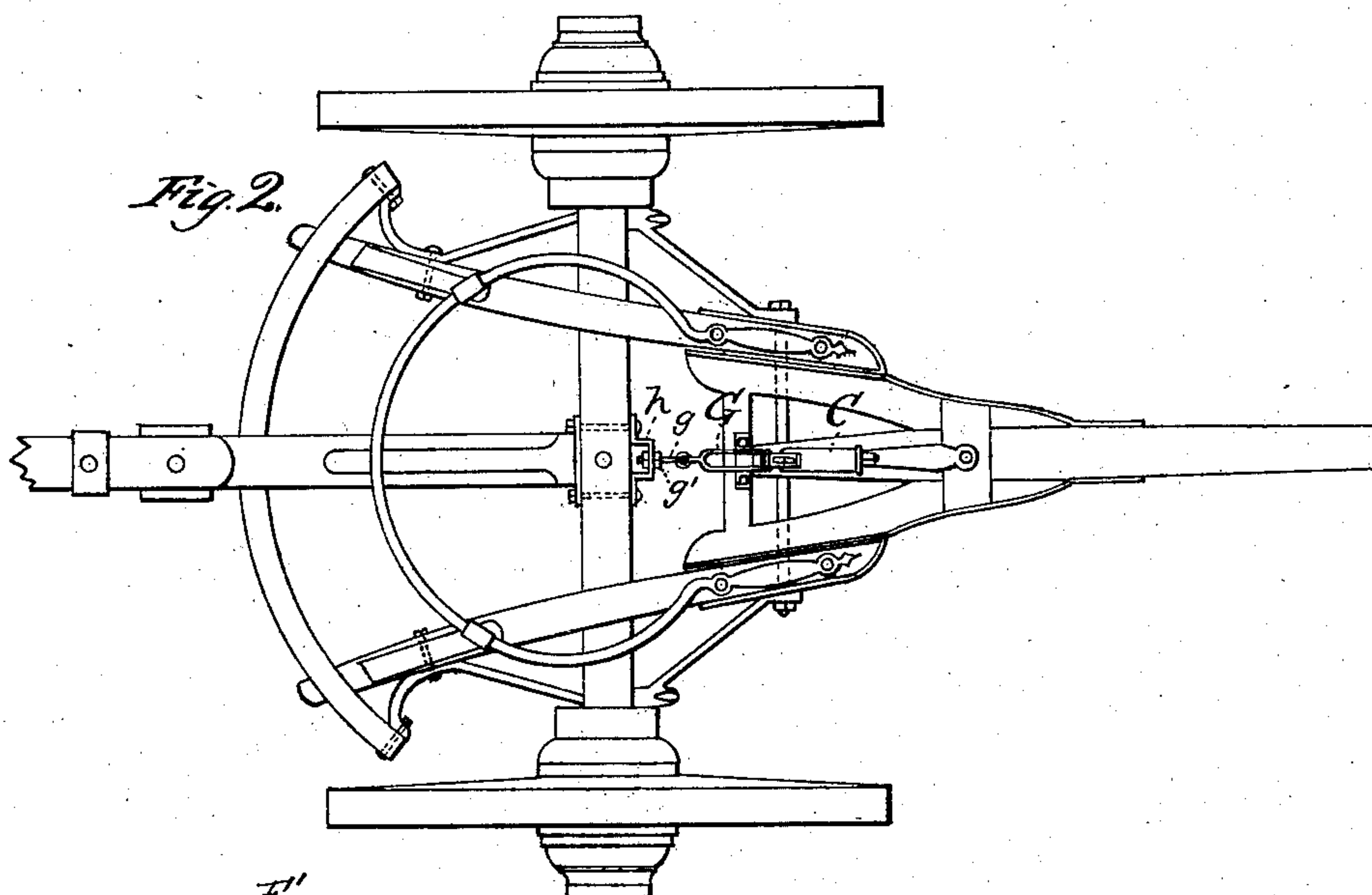
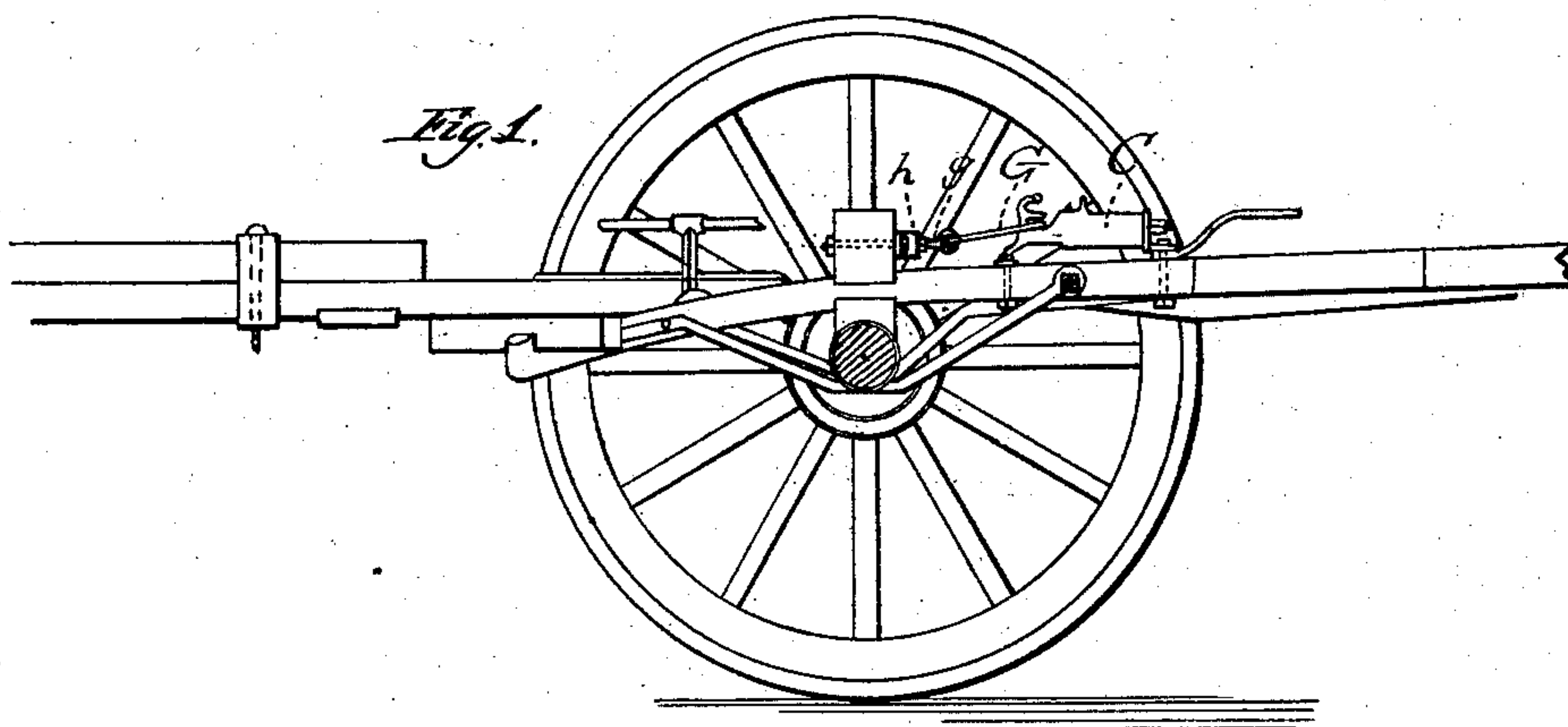


(No Model.)

M. CONRAD.
TONGUE SUPPORT.

No. 248,026.

Patented Oct. 11, 1881.



WITNESSES—
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UNITED STATES PATENT OFFICE.

MARTIN CONRAD, OF CHICAGO, ILLINOIS.

TONGUE-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 248,026, dated October 11, 1881.

Application filed February 1, 1881. (No model.)

To all whom it may concern:

Be it known that I, MARTIN CONRAD, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Tongue-Supports, of which the following is a specification.

The object I have in view is to provide a loose-tongue wagon with an automatic tongue-support, the parts of which will be arranged in such a manner that the tongue will be supported thereby in a horizontal working position, and the relative position of the tongue-support and the parts with which it is connected will not be changed by the turning of the front gearing on the king-bolt, such support being adapted to be locked and unlocked wholly by the vertical pivotal movement of the tongue on the queen-bolt; and my object is also to provide such a tongue-support with a spring arranged to yield somewhat under the weight carried by the tongue; and, further, to produce a simple, durable, and efficient construction of the parts of the support to accomplish the foregoing objects.

In the accompanying drawings, forming a part hereof, Figure 1 is a side elevation of the forward part of the running-gear of a wagon with my tongue-support mounted in position; Fig. 2, a top view of the same, and Fig. 3 a longitudinal vertical section of the supporting device.

Like letters denote corresponding parts in all three figures.

The tongue-support is composed of two general parts, one of which is mounted upon or attached to the tongue itself and the other connected with the sand-board or some other member of the front gearing, which is that part of the wagon (excepting the tongue) that turns with the front wheels upon the king-bolt.

One of the general parts of the supporting device is composed of a locking-hook, A, which forms the head of a bolt, B. This hooked bolt is inclosed in a suitable case, C, and a spiral spring, D, surrounds the shank of the bolt within such case. This spring is compressed between a shoulder, *a*, in the case and a nut, *b*, on the end of the bolt. By turning this nut the spring can be given more or less tension, as may be desired. The hook A works within

the case C, such case being provided with a horizontal slot, *c*, to allow the link to draw on the hook against the tension of the spring D. Above the slot *c* the case C has a rest, E, on which the link rests when the tongue is dropped to the ground, the link being prevented from displacement by a guide-finger, E'.

In a slot in the case C, just in front of the slot *c* and the hook A, is pivoted the latch F, which is a small block having a notch, *d*, in its upper end. When swung forward this latch assumes an inclined position, as shown in Fig. 3, and when moved back to an opposite position the latch will cover the open end of the slot *c* and project a short distance above the rest E, so that the link will push it forward and drop into the slot *c* when the tongue is raised.

The case C is provided with a vertical projection, *e*, just in front of the latch F, which projection prevents the link from being pushed beyond the top of the latch when the same is thrown forward. The case C is preferably mounted upon the tongue above the queen-bolt, with the hook end of the case turned toward the sand-board, and for this purpose the case is provided with flanges or legs *f*, through which the securing-bolts are passed. The other part of the supporting device is the link G, which is secured to some member of the front gearing, if the case C is attached to the tongue, or to the tongue, if the case is secured to the gearing. The position shown in Figs. 1 and 2 is, however, preferred. This link is connected by a double eye with a screw-bolt, *g*, which is secured by two adjusting-nuts, *g'*, to a stirrup-plate, *h*, attached, preferably, to the front side of the sand-board. The nuts *g'* allow the bolt and link to be adjusted so as to support the tongue at the desired elevation.

The operation of the device is as follows: When the wagon is in use the tongue will be supported in a horizontal position, and the link G will rest in the slot *c*, against the hooked head A of the bolt B, as shown in full lines in Fig. 3 at the point *x*. After the team is unhitched from the wagon the driver will raise the tongue at the forward end, and the link will travel up the latch F and drop into the notch *d* on top of the same, and will be prevented from further movement by the projec-

tion *e*. This position of the link is shown in dotted lines at *y*. Now, the tongue can be dropped to the ground, the latch turning on its pivot and carrying the link over to the rest *E*, as shown at *z*. When the tongue is again raised the link will strike the end of the latch, pushing it away, and will drop into the slot *c* and engage with the hook *A*. By means of this support the tongue can be raised and locked and unlocked and lowered with great ease, since the tongue can be moved vertically from its front end, and the locking and unlocking of the two parts of the support will be accomplished through this movement.

By arranging the parts of the support as shown, so as to connect the tongue with the sand-board or some other member of the front gearing, important advantages are secured.

The parts of the support will always retain the same horizontal position relative to each other and to the members of the wagon to which they are secured. For this reason the tongue can be supported in a horizontal working position, and can be turned to either side when in that position without unlocking the parts of the support, and without its being necessary for the tongue to move vertically in order to keep the parts of the support locked together.

What I claim as my invention is—

1. An automatic wagon-tongue support con-

sisting of two general parts, as described, connecting the tongue with a member of the front gearing, said parts being arranged to support the tongue in a horizontal working position, and to be engaged and disengaged by vertical movements of the tongue, in combination with a spring connected with one of said parts, for giving the tongue a yielding or elastic support, substantially as set forth and shown.

2. An automatic wagon-tongue support consisting of two general parts, arranged and operating as described, in combination with a spring connected with one of said parts and provided with a device for adjusting its tension, substantially as and for the purpose set forth.

3. In an automatic tongue-support, the combination, with the pivoted link and the hook, of the pivoted latch having a notch in its upper end, for carrying the link over the point of the hook, substantially as described and shown.

4. In an automatic tongue-support, the combination, with the link *G*, of the case *C*, the supporting-hook *A*, automatic latch *F*, bolt *B*, spiral spring *D*, and adjusting-nut *b*, substantially as described and shown.

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Witnesses:

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