

(No Model.)

C. R. THOMAS.
SULKY PLOW.

No. 335,400.

Patented Feb. 2, 1886.

Fig. 1.

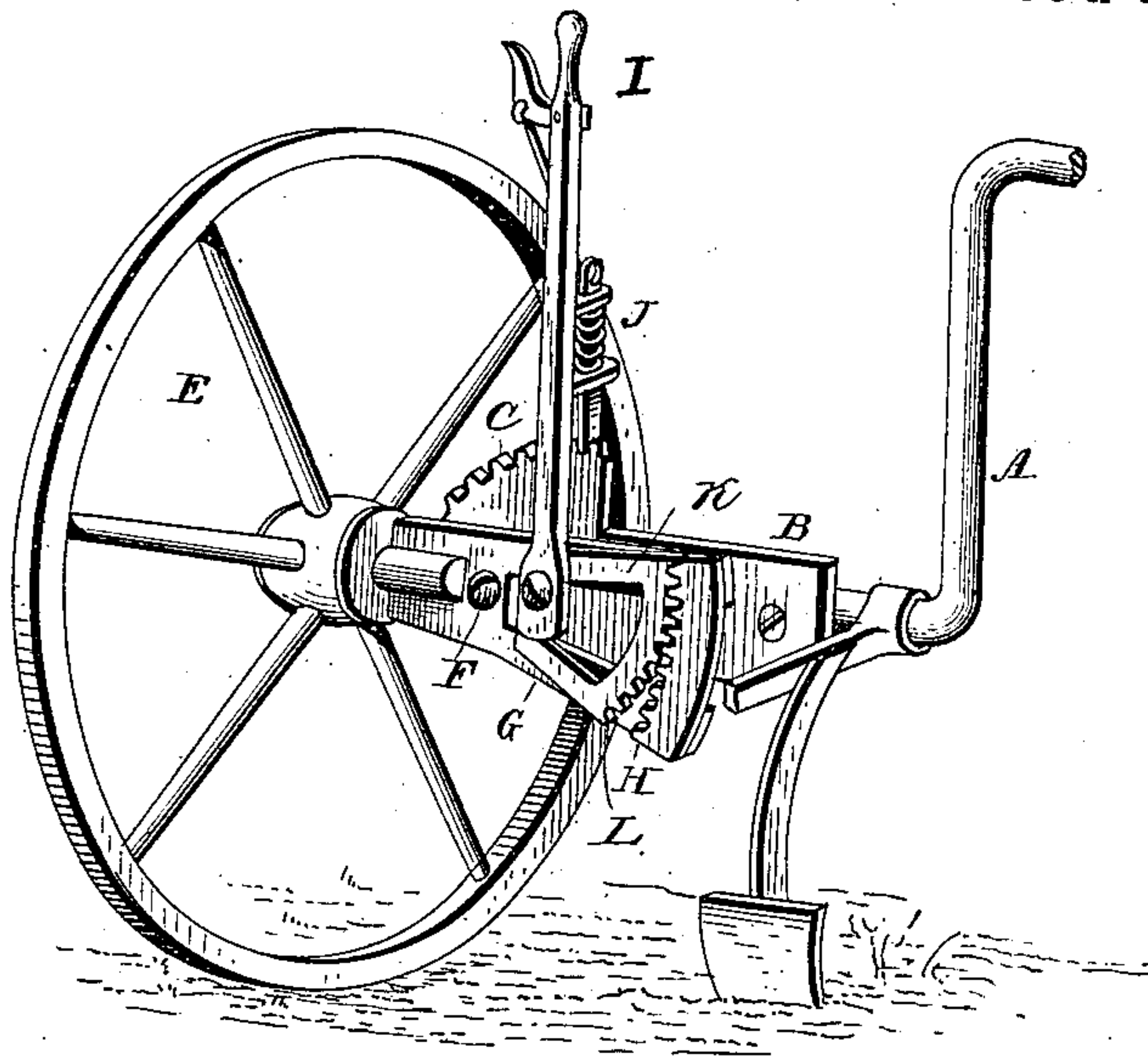
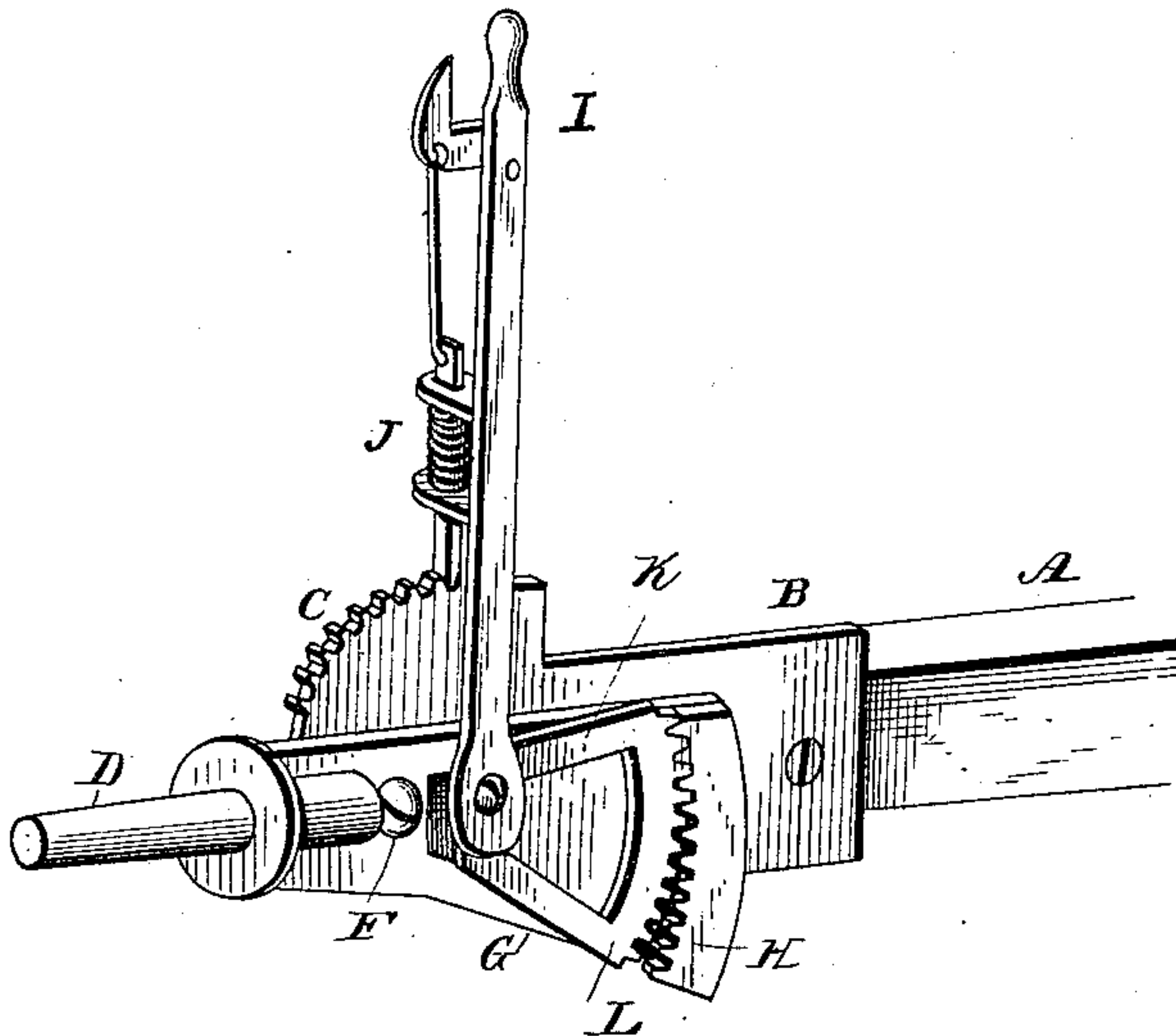


Fig. 2.



WITNESSES

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CHARLES R. THOMAS, OF LYONS, MICHIGAN.

SULKY-PLOW.

SPECIFICATION forming part of Letters Patent No. 335,400, dated February 2, 1886.

Application filed November 13, 1885. Serial No. 182,740. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. THOMAS, a citizen of the United States, and a resident of Lyons, in the county of Ionia and State of Michigan, have invented certain new and useful Improvements in Sulky-Plows; 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 make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a portion of a sulky-plow provided with my improvement; and Fig. 2 is a similar detail view of a portion of the axle, the stub-axle, and its operating segments and lever comprising my improvement.

Similar letters of reference indicate corresponding parts in both the figures.

My invention has relation to sulky-plows; and it consists in the improved construction and combination of parts of the axle for such a plow, which axle is provided with a stub-axle or spindle at its end for the furrow-wheel, and with means for adjusting the said stub-axle or spindle at various inclinations, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the axle of a sulky-plow frame, which frame may be of any desired construction, and which may carry the plow in any suitable manner, and the end of the axle nearest to the furrow is provided with a plate, B, secured vertically upon one side of the same, and formed at the outer end of its upper edge with a cogged segment, C, projecting upward.

D is the stub-axle or spindle, upon which the furrow-wheel E is journaled, and this spindle is pivoted at its inner end upon the plate upon the axle near its outer end, and formed at its inner end, inside of the pivotal bolt F, with a flat arm, G, widening toward its inner end, and provided with an inwardly-facing concave cogged segment, H, at its end, the said arm being cut out to form an open frame widening toward the aforesaid segment. A hand-lever, I, having a spring-latch, J, engaging the cogged segment upon the axle, is pivoted at its lower end at the cen-

ter of the said segment, and is provided at that end with a laterally-projecting flat arm, K, formed at its widening end with a cogged segment, L, which meshes with the segment upon the end of the arm of the stub-axle. It will now be seen that as the lever is tilted the cogged segment upon the lever-arm will engage the segment upon the spindle-arm and move it with it, tilting the spindle, and the power gained for the hand-lever is in proportion to the length of the hand-lever compared with the lever-arm, and the length of the spindle-arm in comparison to the length of the spindle. The furrow-wheel may thus be tilted by the driver without necessitating the dismount of the latter, and the lever may be adjusted by its spring-latch in any one of the notches in the cogged segment upon the axle, adjusting the spindle at a corresponding incline.

The cogged segments upon the lever-arm and upon the spindle-arm form a movable joint, in which very little friction exists, and in which the force exerted upon the hand-lever will be more directly applied to the inner end of the spindle-arm through the lever-arm than by any movable joint—such as a movable arm pivoted to the ends of both the lever-arm and the spindle-arm—the force being exerted directly between the meshing cogs.

I am aware that in the construction of sulky-plows it is not new to pivotally secure to the main axle a stub-axle for the furrow-wheel, and provide means for adjusting the said stub-axle at various inclinations; and I do not, therefore, claim such construction, broadly; but

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

In a sulky-plow, the combination of the axle, a plate secured upon the side of the furrow end of the axle and formed with a cogged segment upon the outer end of the upper edge, a spindle for the furrow-wheel having an open arm or frame at its inner end formed with an inwardly-facing concave cogged segment at the wide inner end and pivoted at its middle upon the plate of the axle at the end of the same, and a hand-lever having a spring-latch

engaging the segment upon the plate upon
the axle, pivoted at the center of the said seg-
ment, and provided with a laterally-project-
ing arm at its pivotal point formed with a
5 cogged segment at its end meshing with the
segment of the spindle-arm, as and for the pur-
pose shown and set forth.

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

CHARLES R. THOMAS.

Witnesses:

A. K. ROOF,

JOHN MCQUILLIN.