

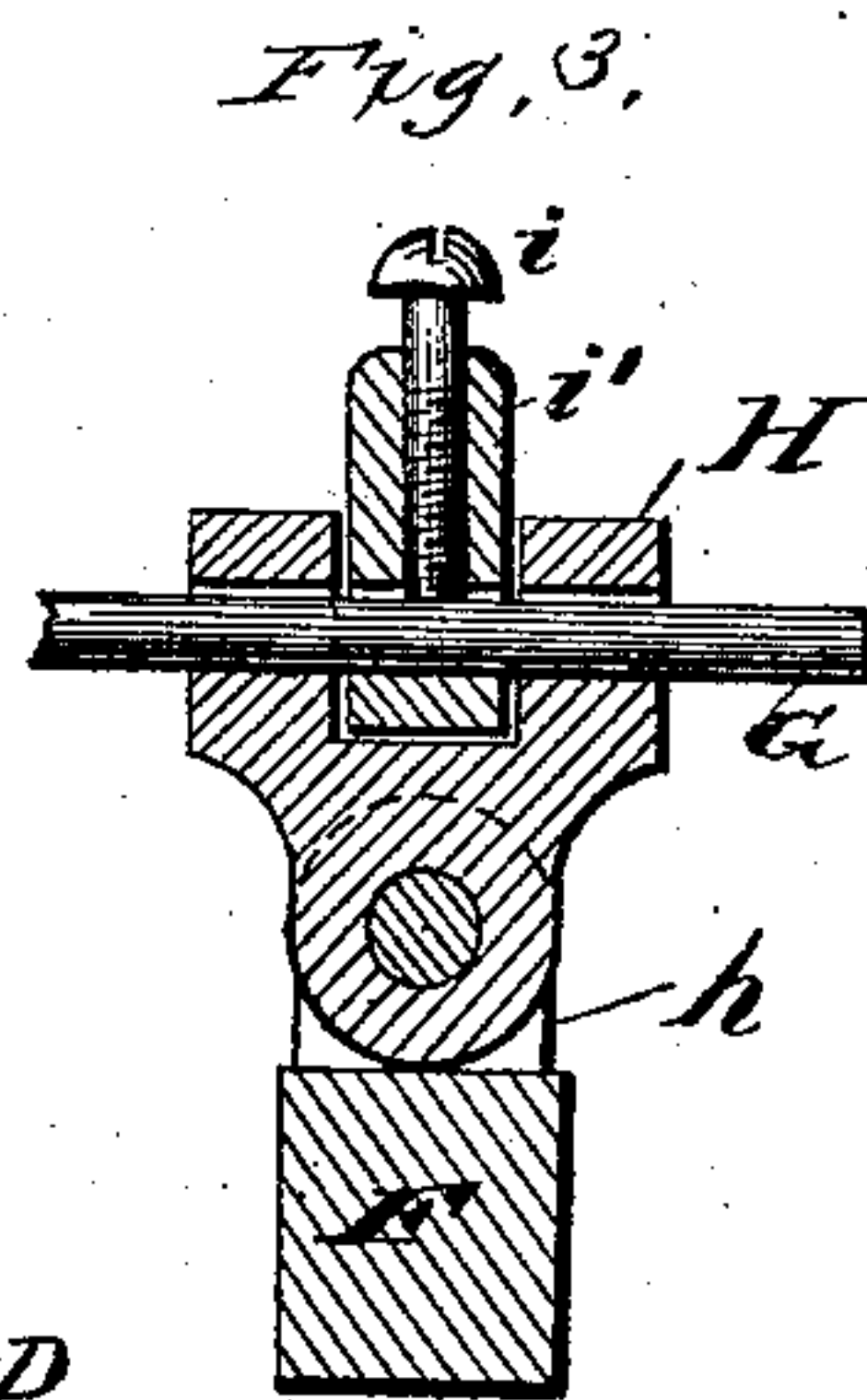
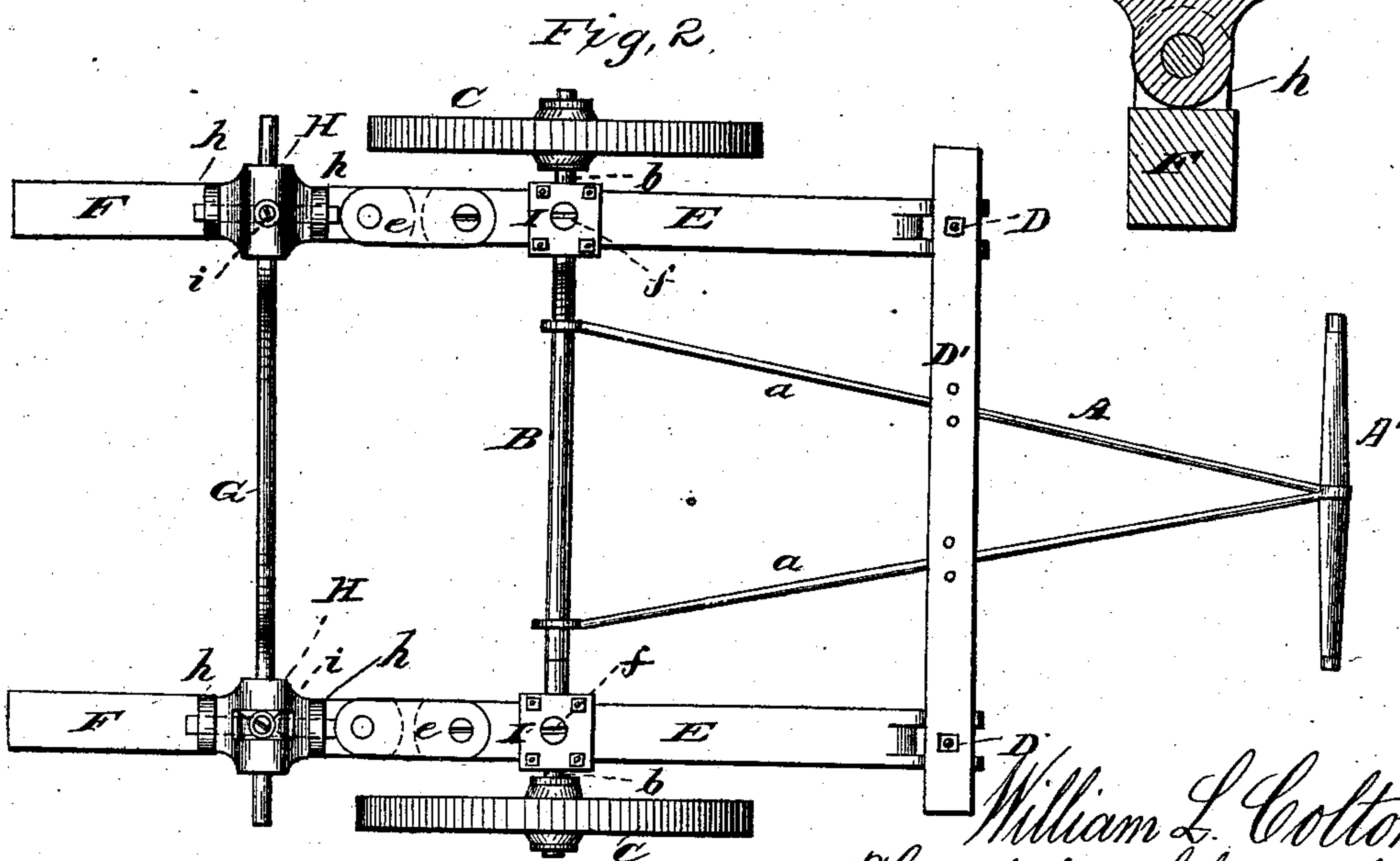
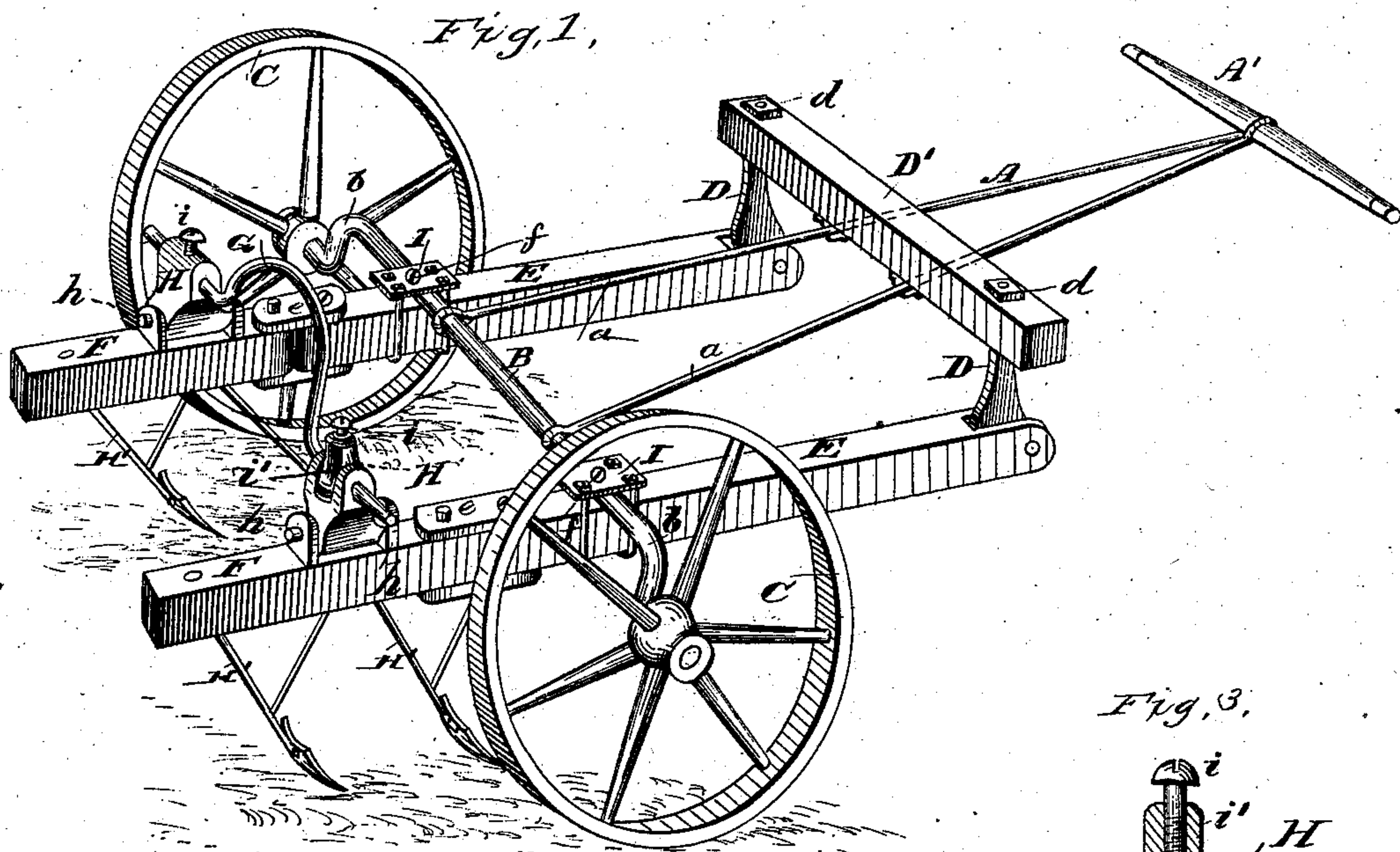
(No Model.)

W. L. COLTON & H. A. SCHERMERHORN.

CULTIVATOR.

No. 260,664.

Patented July 4, 1882.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM L. COLTON AND HERSCHEL A. SCHERMERHORN, OF WATERMAN,
ILLINOIS.

CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 260,664, dated July 4, 1882.

Application filed April 25, 1882. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM L. COLTON and HERSCHEL A. SCHERMERHORN, of Waterman, in the county of De Kalb and State of Illinois, have invented certain new and useful Improvements in Cultivators; and we 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 so much of the frame and operative parts of a riding-cultivator as is necessary to illustrate our invention. Fig. 2 is a plan or top view of the same; and Fig. 3 is a sectional detail view, on an enlarged scale, of the coupling which connects the arch to the adjustable shovel-beams.

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

Our invention has relation to so-called "riding" or "sulky" cultivators; and it consists in the means or mechanism for adjusting the position of the shovel-beams in relation to the line of draft, substantially as hereinafter more fully described and claimed.

To avoid obscurity and unnecessary prolixity in the description of our improvement, we have shown and shall describe only so much of a cultivator as is necessary to a proper understanding of the nature and operation of the operative parts which constitute our improvement.

A is the tongue, which consists of two bars, *a a*, having the double-tree *A'* attached to their converging front ends. At their diverging rear ends the tongue-bars *a a* form loops or eyes, by which they are attached to the axle B. The latter is bent at both ends to form elbows *b b*, upon which the wheels C C are journaled.

D' is a cross-bar, which is fastened transversely across tongue A, parallel to the axle B, by clips, bolts, or other suitable means, at both ends of which are hangers D D, adapted to turn upon pivot-bolts *d d*, by which they are fastened to cross-bar *D'*. In the lower ends of these hangers are hinged the parallel beams E E, at the rear ends of which are boxes *e e* for connecting them with the drag-bars or shovel-beams F F, which carry the shovel-standards and plows or shovels H'. The ends of the beams E and F, which are in-

serted into and coupled by the boxes *e*, are rounded to permit of a free motion of beams F sidewise in adjusting their angle relative to beams E, which connect them with the cross-tree D'.

The axle B is attached adjustably to beams E E by boxes or stirrups I I, which are pivoted or swiveled upon the bolts *f f*, by which they are fastened to the axle, so that the angles of the parallel beams E may be changed or adjusted without affecting the position of the axle.

The shovel-beams F F are connected, back of the coupling-boxes *e e*, by an arch, G, the bent ends of which are inserted through couplings H, each of which is hinged between ears *h h* on the top of beams F, and held in said couplings adjustably and detachably by set-screw *i*. This set-screw may be inserted through the top of coupling H, so as to bear with its lower end against its appropriate end or arm of arch G; or it may be inserted through an auxiliary box, *i'*, working in a recess in coupling H, through which the end of the arch is inserted, as shown in the sectional detail view, Fig. 3. By this construction and combination of the parts F F, G, B, E E, D D, D', and A the angle of the drag-bars or shovel-beams F F may be changed relative to the line of draft, as represented by the tongue A and axle B, without changing the angle of the shovels, which will always present a true face to the ground. In other words, the drag-bars will remain parallel to the line of draft irrespective of their adjustment to one side or to the other thereof.

We claim and desire to secure by Letters Patent of the United States—

In a cultivator, the combination of the tongue A, having cross-bar *D'*, provided with the swiveled hangers D D, axle B, having swiveled or pivoted boxes I I, jointed parallel drag-bars E F and E F, connected respectively by the boxes *e*, and having couplings H H, provided with the set-screw *i*, and transverse connecting-arch G, substantially as shown and described, for the purpose set forth.

In testimony that we claim the foregoing as our own we have hereunto affixed our signatures in presence of two witnesses.

WILLIAM LUTHER COLTON.
HERSCHEL A. SCHERMERHORN.

Witnesses:

A. C. KAUFFMAN,
C. O. DEAN.