

H. H. ROBERTSON.

Wheel Plow.

No. 29,104.

Patented July 10, 1860.

Fig. 1.

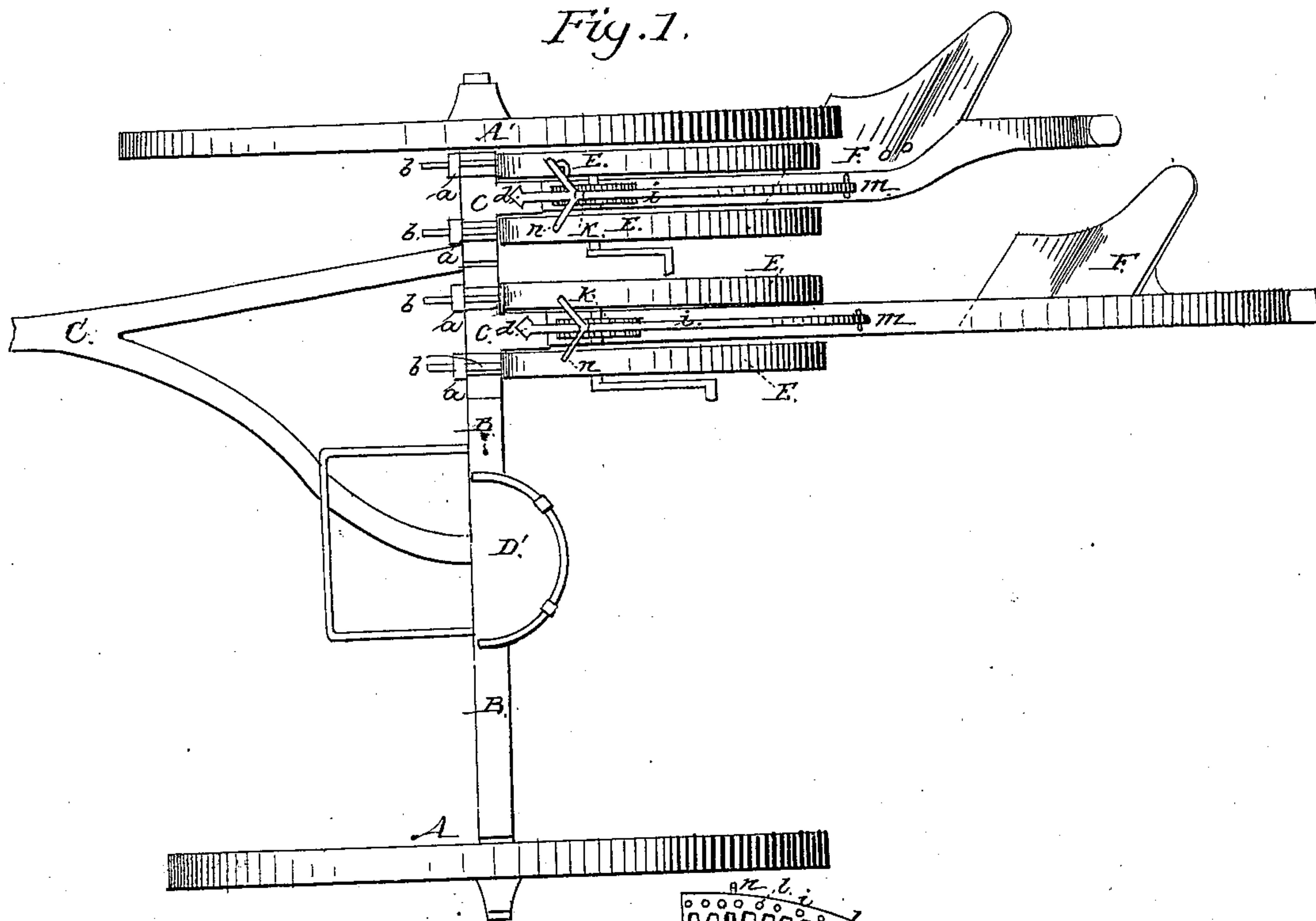
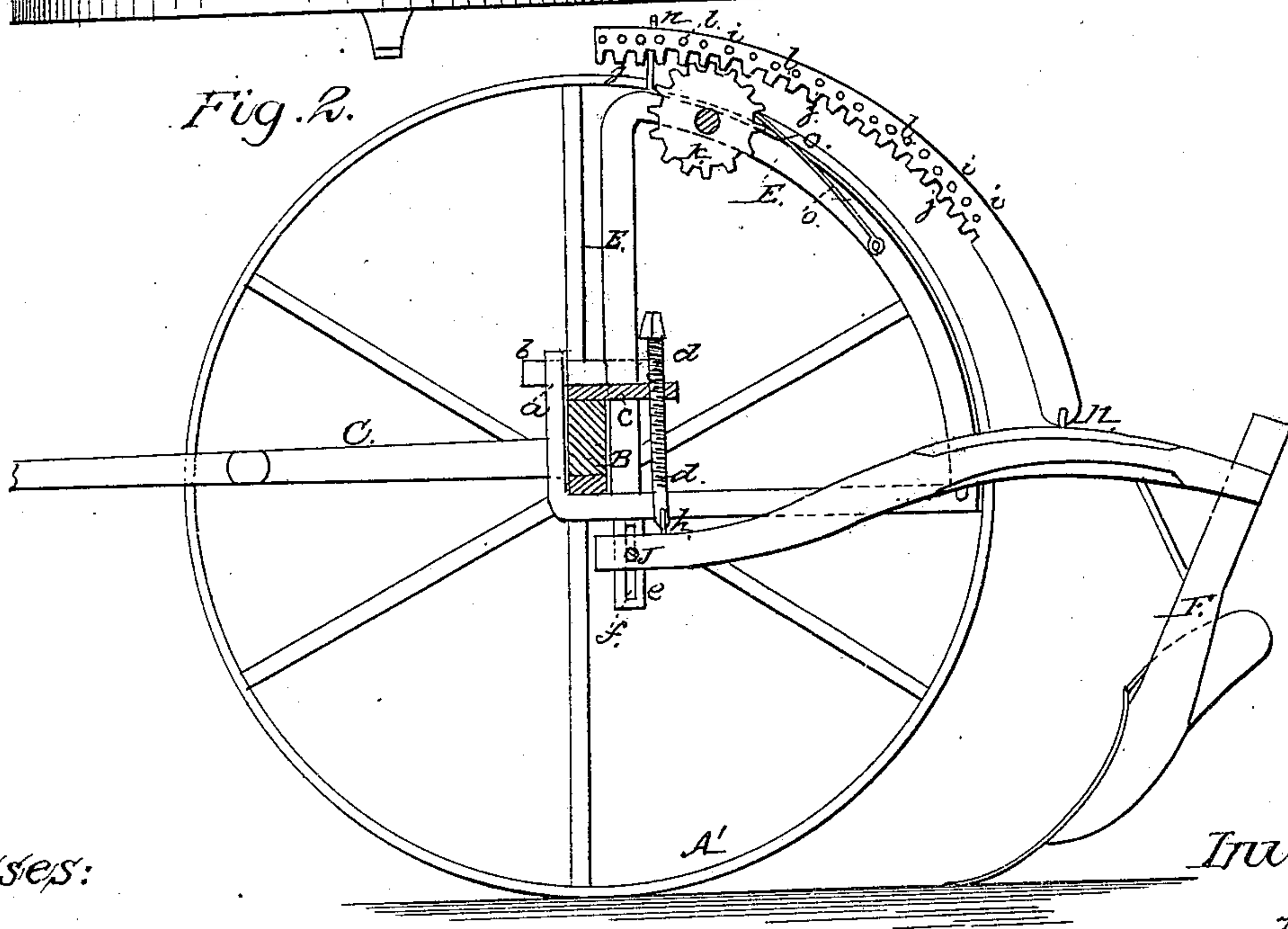


Fig. 2.



Witnesses:

Goodwin & Son,
Custodian of the Patent

Inventor:

H. H. Robertson
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UNITED STATES PATENT OFFICE.

HENRY H. ROBERTSON, OF KINGSTON, MISSOURI.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **29,104**, dated July 10, 1860.

To all whom it may concern:

Be it known that I, HENRY H. ROBERTSON, of Kingston, in the county of Caldwell and State of Missouri, have invented a new and useful Improvement in Plows; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan or top view, and Fig. 2 a vertical longitudinal section, of my improved plow.

Similar letters of reference in each of the several figures indicate corresponding parts.

My invention consists in the arrangement of a hinged plow, vertical adjusting-screw, carriage, segment guide-frames, toothed segmental adjusting-bars, cog-pinion, and pawl or stop, in the manner and for the purposes hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A A' B represent a carriage constructed with a tongue, C, and driver's seat D, as shown. One of the wheels (that A) of this carriage is of smaller diameter than the other, A'.

On the axle B of the carriage I arrange one or more segment guide-frames, E, and so attach the same by open yokes *a a* and wedge-keys *b b* that they can be moved laterally apart or toward each other on the axle. I also arrange one or more T-shaped plates, *c*, on top of the axle in such relation to the guide-frames that they shall be confined securely in place by the same wedge-keys that are used for confining the guide-frames on the axle. Each of the T-plates has a screw-hole cut vertically through it, into which a vertical screw, *d*, screws, as represented; and in each of the legs *e* of the guide-frames a slot, *f*, is cut, for a purpose presently stated.

Behind the axle of the carriage, and to one side of the center of the same, one or more plows, F, are arranged to run, the front end of the beam of each of these plows being attached by means of a pin, *g*, to the legs of a guide-frame, and to a vertical adjusting-screw, *d*, by means of a staple or loop, *h*, and the rear portion of the beam, with the plowshare or

mold-board, being sustained by means of a segment adjusting-bar, *i*, which has cog-teeth *j* on its under side, and a cog-pinion, *k*, which is furnished with a crank-handle, and has its bearing in the top of the guide-frame. The segment-bar has adjusting-boles *l* through its side, so that it, with the plows, may be set at different heights. A loop or strap, *m*, of the guide-frame serves to hold the segment-bars in place, and also as a shoulder for a stop-pin, *n*, which passes through the holes *l*, to bear against. In addition to or as a substitute for the stop-pin I employ a pawl, *o*, and have the same fall between the teeth of the cog-pinion after the plows have been adjusted to the proper height, as shown in the drawings.

In the drawings I have shown two plows, two guide-frames, two pinions, and two segment adjusting-bars; but I may find it useful to use only one, or to use a greater number than two. Therefore I do not confine myself to any number.

From the above description of parts it will be evident that by providing the vertical screws *d* the front end of the beam can be lowered or raised, and thus the draft of the plowshares regulated. It will also be evident that by providing the guide-frames, segment-bars, and pinions, and arranging them as described, either of the plows can be readily and quickly thrown out of action whenever obstruction from a stump or stone is encountered, and likewise that the plows can be set nearer together or moved farther apart, and so as to plow deep or shallow.

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

The arrangement of a hinged plow, F, carriage A A' B, vertical adjusting-screw *d*, segment guide-frames E, toothed segmental adjusting-bars *i j*, cog-pinion *k*, pawl *o*, or stop *n*, substantially as and for the purposes set forth.

The above specification of my improvement in plows signed by me this 9th day of June, 1860.

H. H. ROBERTSON.

Witnesses:

GOODWIN Y. ATLEE,
ROBT. W. FENWICK.