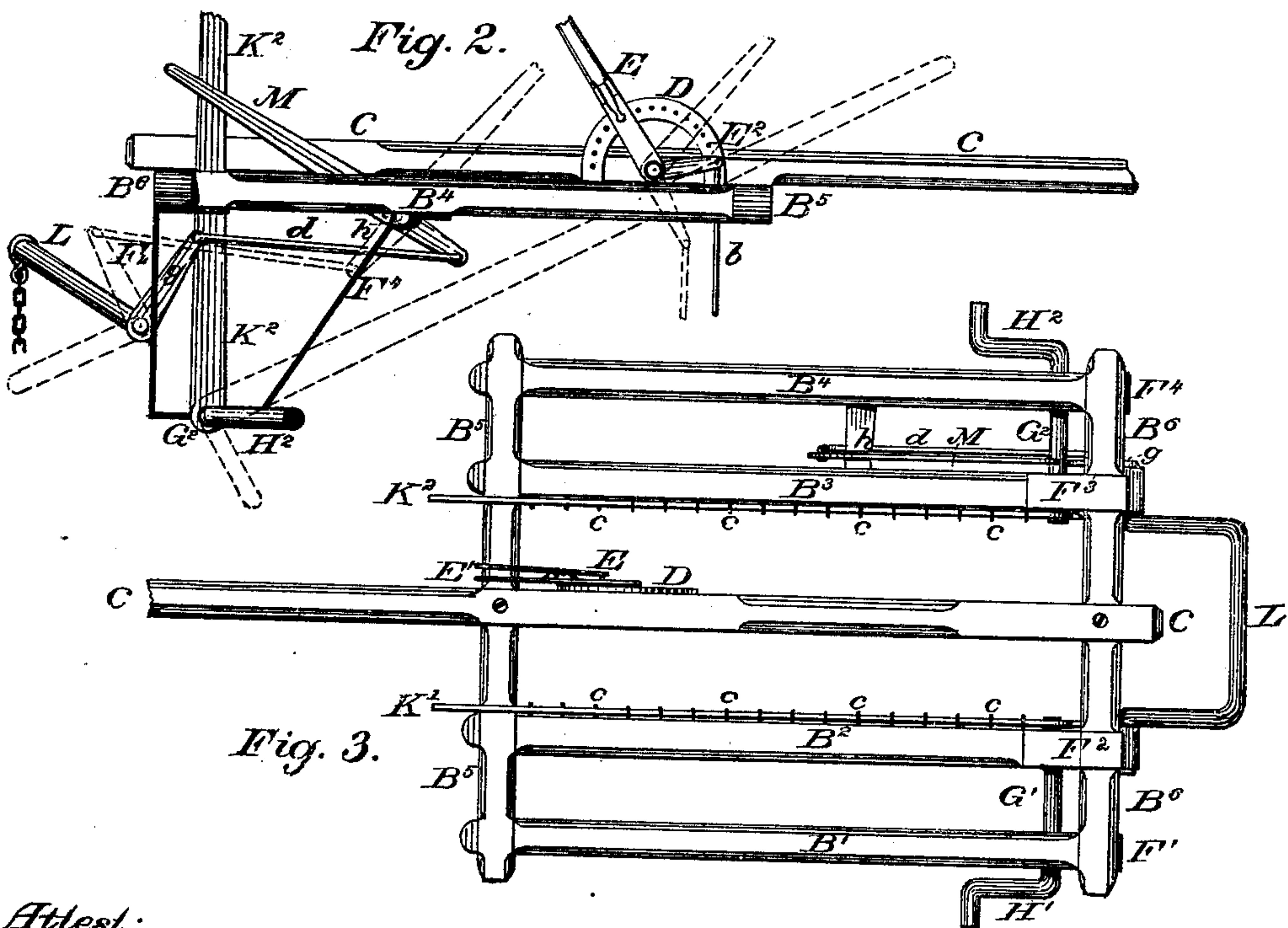
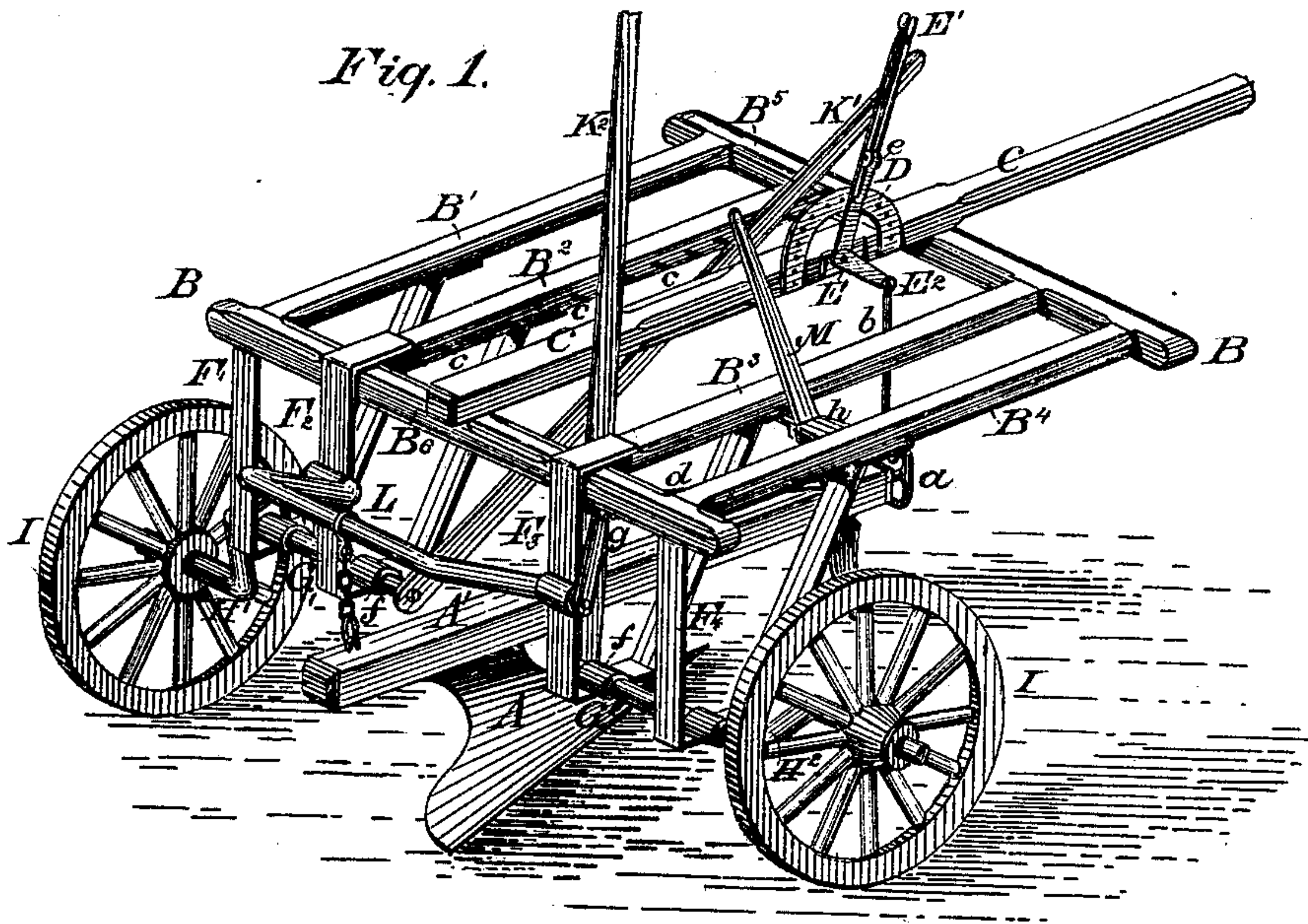


H. E. CARVER.

SULKY-PLOW.

No. 188,856.

Patented March 27, 1877.



Attest:

Wm. Bagger.
Jno. O. Madigan.

Inventor:

Henry E. Carver
by Louis Bagger
Att'y.

UNITED STATES PATENT OFFICE.

HENRY E. CARVER, OF MARION, IOWA, ASSIGNOR OF ONE-HALF HIS
RIGHT TO A. J. BOARDMAN, OF SAME PLACE.

IMPROVEMENT IN SULKY-PLOWS.

Specification forming part of Letters Patent No. 188,856, dated March 27, 1877; application filed
May 25, 1876.

To all whom it may concern:

Be it known that I, HENRY E. CARVER, of Marion, in the county of Linn, and State of Iowa, have invented certain new and useful Improvements in Attachments for Sulky and Gang Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, 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, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a perspective view, Fig. 2 is a side elevation, and Fig. 3 is a top plan.

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

This invention relates to sulky attachments for plows; and it consists in the construction of a frame having downward-projecting brackets for carrying the adjustable stub-axes, by which the lateral pitch of the plow may be regulated, all as hereinafter more fully set forth.

I shall now proceed to describe the construction and operation of my improved plow attachment, reference being had to the drawings hereto attached.

A is the plow, the detailed construction of which is immaterial, as any suitable plow may be used in combination with my attachment. A¹ is the plow-beam, and *a* is the clevis at the end of plow-beam. B denotes the frame of my attachment, which consists of four beams, represented by B¹, B², B³, and B⁴, united by cross-pieces B⁵ B⁶. C is the tongue, which is firmly bolted, or otherwise secured, onto the cross-pieces B⁵ B⁶, as shown.

To the front part of the tongue, within the frame, is secured a segmental ratchet, D, within the center of which is pivoted a bent lever, E. Lever E is easily operated from the driver's seat by a handle, E¹, having a spring catch or pawl, *e*, or equivalent device, by which the lever may be secured in any given position upon the ratchet D. To the end of the short bent arm E² of lever E is pivoted a rod, *b*, the other end of which is pivoted to the clevis *a* of the plow-beam A¹.

F¹ F², and F³ F⁴ are strong iron arms or brackets bolted onto the beams B¹ B² and B³

B⁴ respectively, as shown in the drawing. The lower ends of these brackets form journals or bearings, *f*, for shafts G¹ G², secured upon which are the bent stub-axes H¹ H². The wheels I are secured upon these axes in the usual manner. To the ends of the shafts G¹ G² are rigidly secured two levers, K¹ K², (one to each,) so that, by turning these levers, the shafts, and with them the stub axes, will be turned. The levers K¹ K² may be retained in any given position by means of pins *c* secured upon the beams B² and B³, or by equivalent devices. The levers K¹ K² are affixed upon the shafts G¹ G² in such a manner that, when one of said levers (K² in the drawing) is in a vertical or upright position, and the other (K¹) in its lowermost position, or resting upon the front cross piece B⁵, the position of the stub-axes, which are operated by these levers, will be such, in their relation to each other, that one (H² in the drawing) is raised up, and the other (H¹) is depressed. As these axes move in a circle around their respective shafts, it is obvious that their elevation may be readily controlled and adjusted by their respective operating-levers in such a manner that they, with the wheels affixed upon them, may be either on a line, or either side may be raised or lowered at the pleasure of the driver, who operates the levers K¹ and K² from his seat. By this arrangement, one side of my sulky attachment may be raised, and the other lowered, or vice versa, in passing over hill-sides or slanting ground, so that the plow will be kept in its perpendicular position, and make a straight up-and-down furrow.

Affixed to the rear part of the machine is a stout bail or projecting double-bent arm, denoted by L, which is pivoted in bearings upon the back part of the downward-projecting brackets F² and F³. This bail may be raised or lowered by means of a rod, *d*, that is pivoted at one end to a short lever-arm, *g*, rigidly secured to one end of bail L, and at the other to a lever, M, which has its fulcrum at *h*, and is so placed that it may be readily operated from the driver's seat. When lever M is pulled toward the rear of the machine, the bail L is raised, and the rear part of the plow being secured to this bail by a chain or other suitable

means, it follows that the plow is lifted out of the ground. When, on the other hand, lever M is pushed forward, the bail, and with it the plow, is lowered.

I am aware that it is not new to provide means for adjusting the lateral pitch of riding-plows, or for elevating the plow or plows above the soil; but the devices employed for these purposes have been defective in various respects. Thus, for instance, the axle of various sulky attachments, as now constructed, will prevent the plow from being suitably raised from the ground, unless the plow-beam has been shortened, or specially constructed for this purpose.

My improved sulky attachment has also the advantage of being stronger and less complicated than those now ordinarily used.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

An attachment for sulky-plows, consisting of a frame constructed of parallel beams B¹ B² B³ B⁴, arranged in pairs on each side of the tongue, and united by cross-pieces B⁵ B⁶, each pair or set carrying brackets F¹ F² F³ F⁴ for the support of the stub-axles carrying the wheels, substantially as and for the purpose herein shown and specified.

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

HENRY E. CARVER.

Witnesses:

J. F. SIMKINS,

SAML. DANIELS.