No. 648,308. Patented Apr. 24, 1900.

A. A. SCOTT.

COMBINED PLOW, CULTIVATOR, AND HARROW.

(Application filed Nov. 27, 1899.)

(No Model.) 4 Sheets—Sheet 1.

Fig. 3.

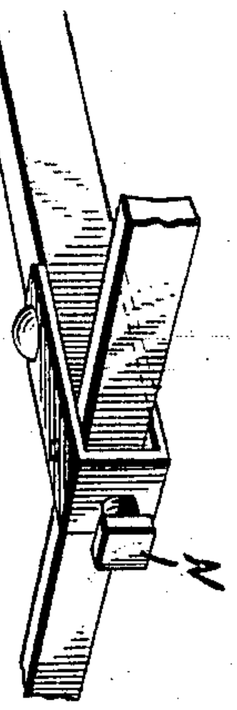

Fig. 1.

Fig. 2.

Witnesses

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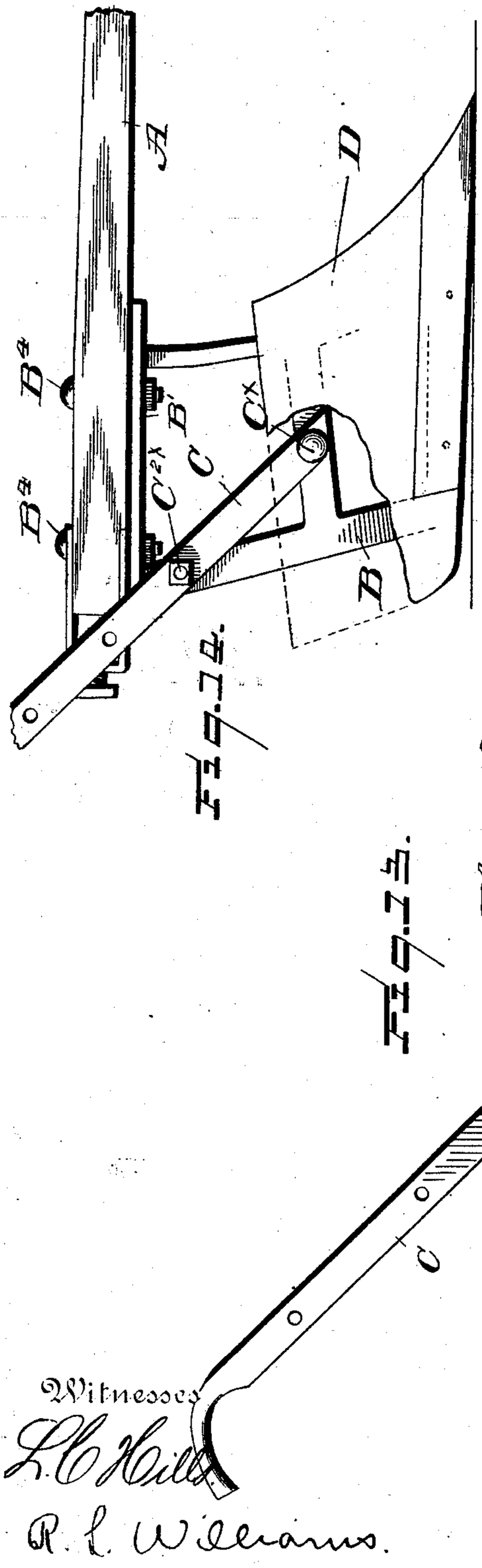

Fig. 1.

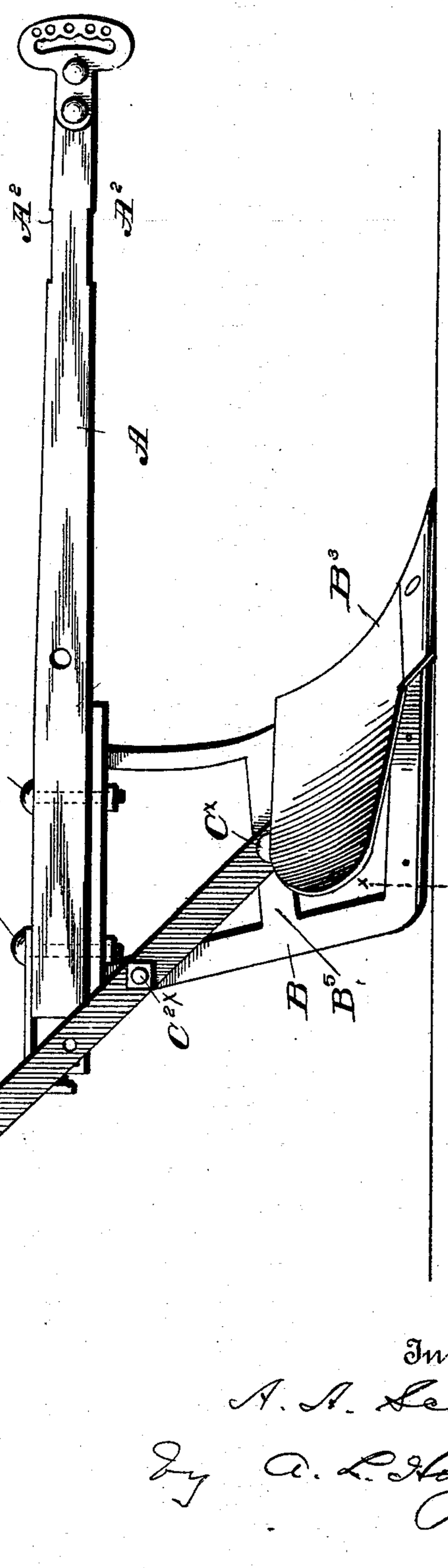

Fig. 2.

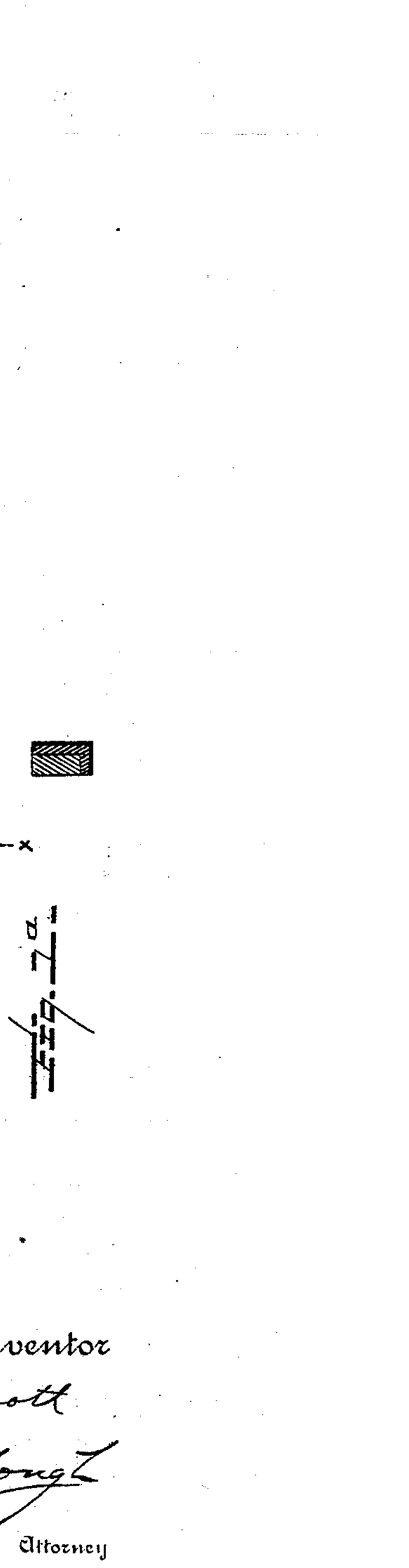

Fig. 2a.

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Fig. 3.

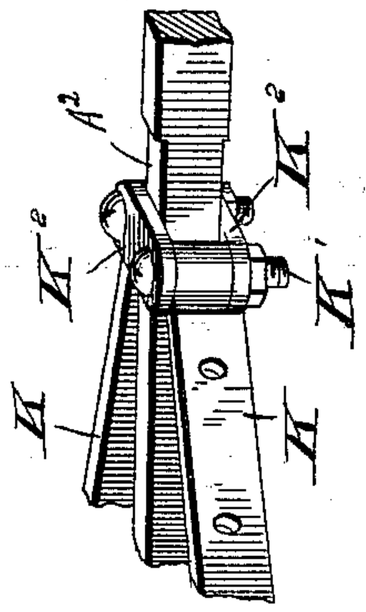


Fig. 5.

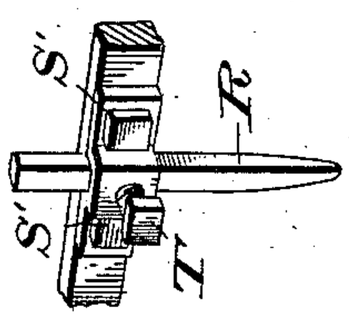


Fig. 4.

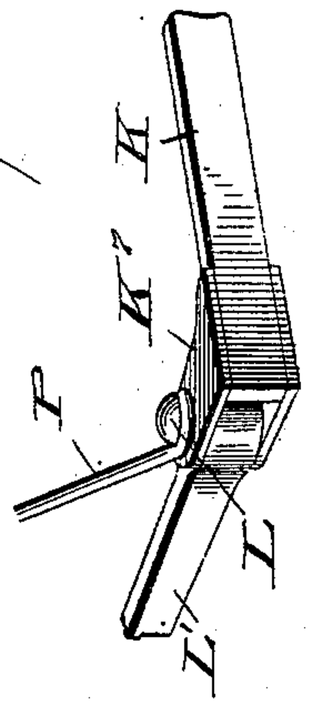
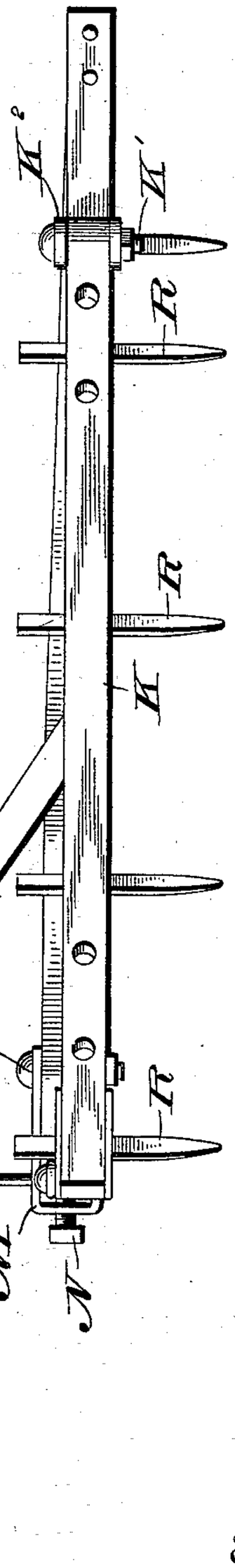


Fig. 2.



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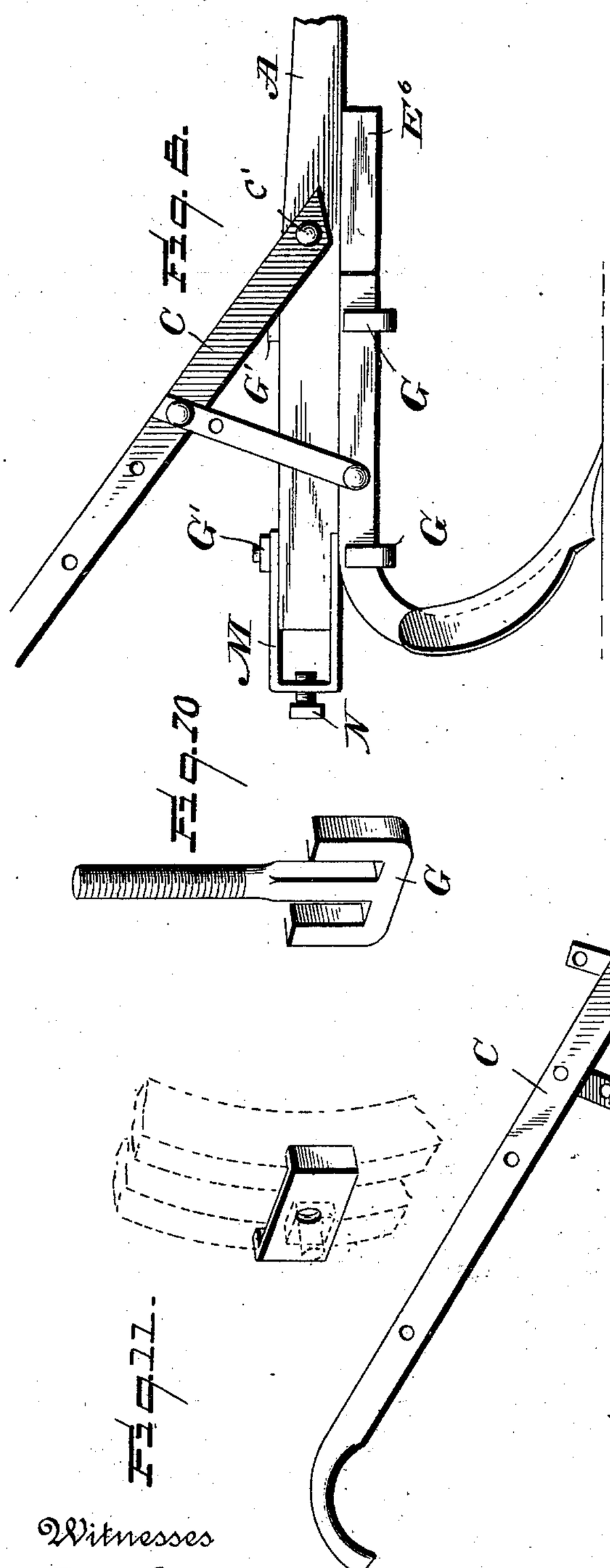

Fig. 6.

Fig. 10.

Fig. 11.

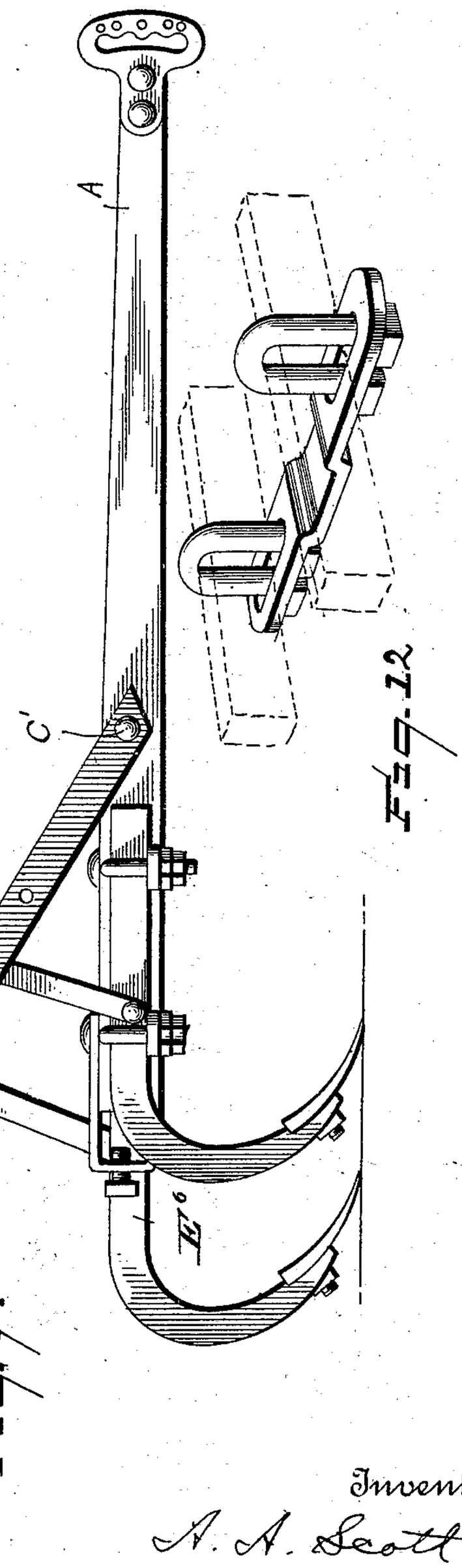

Fig. 7.

Fig. 12.

Witnesses
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UNITED STATES PATENT OFFICE.

AARON A. SCOTT, OF CROCKETT MILLS, TENNESSEE.

COMBINED PLOW, CULTIVATOR, AND HARROW.

SPECIFICATION forming part of Letters Patent No. 648,308, dated April 24, 1900.

Application filed November 27, 1899. Serial No. 738,413. (No model.)

To all whom it may concern:

Be it known that I, AARON A. SCOTT, a citizen of the United States, residing at Crockett Mills, in the county of Crockett and State of Tennessee, have invented certain new and useful Improvements in a Combination Cultivator, Harrow, &c.; and I do declare the following to be a full, clear, and exact description of the invention, such as 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.

This invention relates to new and useful improvements in agricultural implements, and especially to a folding cultivator to which may be applied harrow teeth, said cultivator having a beam with suitable handles secured thereto, which beam is designed to be interchangeable with other agricultural tools, as plows, scrapers, &c.

To these ends and to such others as the invention may pertain the same consists, further, in the novel construction, combination, and adaptation of parts, as will be hereinafter more fully described and then specifically defined in the appended claims.

My invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form part of this application, and in which drawings similar letters of reference indicate like parts throughout the several views, in which—

Figure 1 is a top plan view of my invention, showing a cultivator fastened to a beam which is adapted to be adjusted to plows, scrapers, &c. Fig. 1^a is a detail sectional view on line *x x* of Fig. 13. Fig. 2 is a detail view of one of the cultivator-teeth. Fig. 3 is a detail view showing the manner in which the pivoted bars at the rear ends of the cultivator-bars are held together. Fig. 4 is a detail in perspective of the rear end of one of the cultivator-bars, to which is pivoted a bar. Fig. 5 is a detail view of a harrow-tooth held to one of the cultivator-bars. Fig. 6 is a detail view of the forward end of the folding cultivator-frame. Fig. 7 is a detail view of the device adjusted as a harrow. Fig. 8 is a side elevation showing a cultivator fastened to the standards held to the beam by T-bolts. Fig. 9 is a side elevation showing two cultivators mounted on standards fastened to the beam on opposite faces thereof. Figs. 10, 11, and 12 show details of the adjustments. Fig. 13 is a side elevation of a moldboard-plow and share fastened to the beam and handles. Fig. 14 is a side elevation of a scraper secured to the beam.

Reference now being had to the details of the drawings by letter, A designates the beam, which has bolted thereto by means of the bolt C′ the handles C. The beam is cut away, as at A^2, on opposite sides of the beam, in which recessed portions the plates K^2 rest and are held together by means of the bolts K′. To these bolts are pivoted the forward ends of the cultivator-bars K, which have eyes at their ends. Secured to the sides of said cultivator-bars are the cultivator-standards K^3, which are held to said bars by means of the bolts K^4, on which are the threaded nuts K^5. In the lower end of the said standards K^3 are bolted the cultivator-teeth K^6. Near the rear ends of the bars K are the right-angled projections K^7, which are apertured to receive the bolts L, to which bolts are pivoted the swinging bars L′, which when not in use may be folded against the inner faces of the bars K, but when adjusted for use are swung out into the positions shown in the drawings, with their free ends passed through the clevis M, which is secured to the rear end of the beam by means of a bolt M′, passing through apertures in the ends of said clevis and beam. In the right-angled bent portion of said clevis is mounted a set-screw N, passing through a threaded aperture in said clevis, and its free end is adapted to bind against the outer face of one of the bars L′ and bind the two free ends securely against the end of the beam, thus securely holding the bars K of the cultivator in the position shown in the drawings. A detail view of this clevis and set-screw is clearly illustrated in Fig. 3 of the drawings. Mounted midway between the rear ends of the bars K is a cultivator Q, which is secured to the rear end of the beam by means of retaining-bolts, a detail top plan view of which is shown in the drawings. Suitable braces P, held to the right-angled projections K^7 by means of the bolts L, are provided, the upper ends of which are bolted to the handles C

for the purpose of making the cultivator more rigid.

In adjusting the invention as a harrow the bars K, handles, braces, and swinging bars L′ are adjusted as in the cultivator; but in place of the cultivator-teeth the harrow-teeth R are placed in the sockets S, said socket members being held to the bars by means of bolts S′ and the harrow-teeth held in place by means of set-screws T.

While my invention as described and illustrated consists, essentially, in the provision of a peculiar form of beam to which a cultivator and harrow are secured, still it is my purpose to make the beam interchangeable and secure to it, as illustrated in Fig. 13, a one-piece frame B, having a moldboard B^3 secured thereto, said frame being held to the beam A by means of bolts B^4, and the handles C are fastened to said frame by means of bolts $C^{2\times}$ and $C'^{\times}$. In Fig. 14 I have shown a scraper adjusted to the beam, and in Figs. 8 to 12, inclusive, I have shown cultivators secured to the beam. In these views the feet E^6 are held to the beam by inverted-T-shaped bolts G, on which nuts G′ are screwed. In Fig. 9 the cultivators are arranged one in advance of the other.

While I make no claim for the constructions shown in Figs. 8 to 14, inclusive, I have illustrated these forms to show how the beam and braces, together with the handles forming a part of my invention, may be applied to various forms of agricultural implements.

Having thus described my invention, what I claim to be new, and desire to secure by Letters Patent, is—

1. In combination with the beam having recesses A^2 in opposite faces thereof, the two plates K^2 seated in said recesses, bolts holding said plates in the recesses, the bars K pivoted at their forward ends to said bolts, the clevis having its right-angled bent portion behind the rear end of said beam, the bars L′ pivoted to the rear ends of said bars K, and means for holding the bars L′ in adjusted positions, as set forth.

2. In combination with the beam having recesses A^2 in opposite faces of the beam, the two plates seated in said recesses and held therein by means of bolts, the pivoted bars K, the clevis having its right-angled bent portion behind the rear end of said beam, the bars L′ pivoted to the bars K, the set-screw held in said bent portion of the clevis, and in alinement with the beam, and designed to hold the bars L in adjusted positions, as set forth.

3. In combination with the beam, recessed on opposite faces, the plates held together and in said recesses, the pivoted bars K, the bars L′ pivoted to the rear ends of said bars K, the clevis having a right-angled bent portion with threaded aperture therein, the ends of said clevis held to the opposite faces of the beam near its rear end, and a set-screw mounted in said threaded aperture and adapted to hold said bars L′ in adjusted positions between the end of the screw and the rear end of said beam, as set forth.

4. In combination with the beam recessed on opposite faces, the plates held in said recesses, the pivoted bars K, the plates K^7, secured to the rear ends of said bars, the bars L′ pivoted to said plates, the clevis and set-screw for holding said bars L′ in adjusted positions against the rear of said beam, the handles C secured to the beam, and the braces between said handles and the plates K^7, as shown and described.

5. In combination with the beam, recessed on opposite faces, the plates held therein, the pivoted bars K, the harrow-teeth secured thereto, the plates K^7, fastened to the rear ends of said bars, the bars L′ pivoted to said plates, the harrow-teeth carried by the bars L′, the clevis secured to the rear end of said beam, the set-screw designed to hold the free ends of said bars L′ in adjusted positions between the end of said screw and the rear end of the beam, as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

AARON A. SCOTT.

Witnesses:
J. A. PERRY,
I. D. L. AGEE.