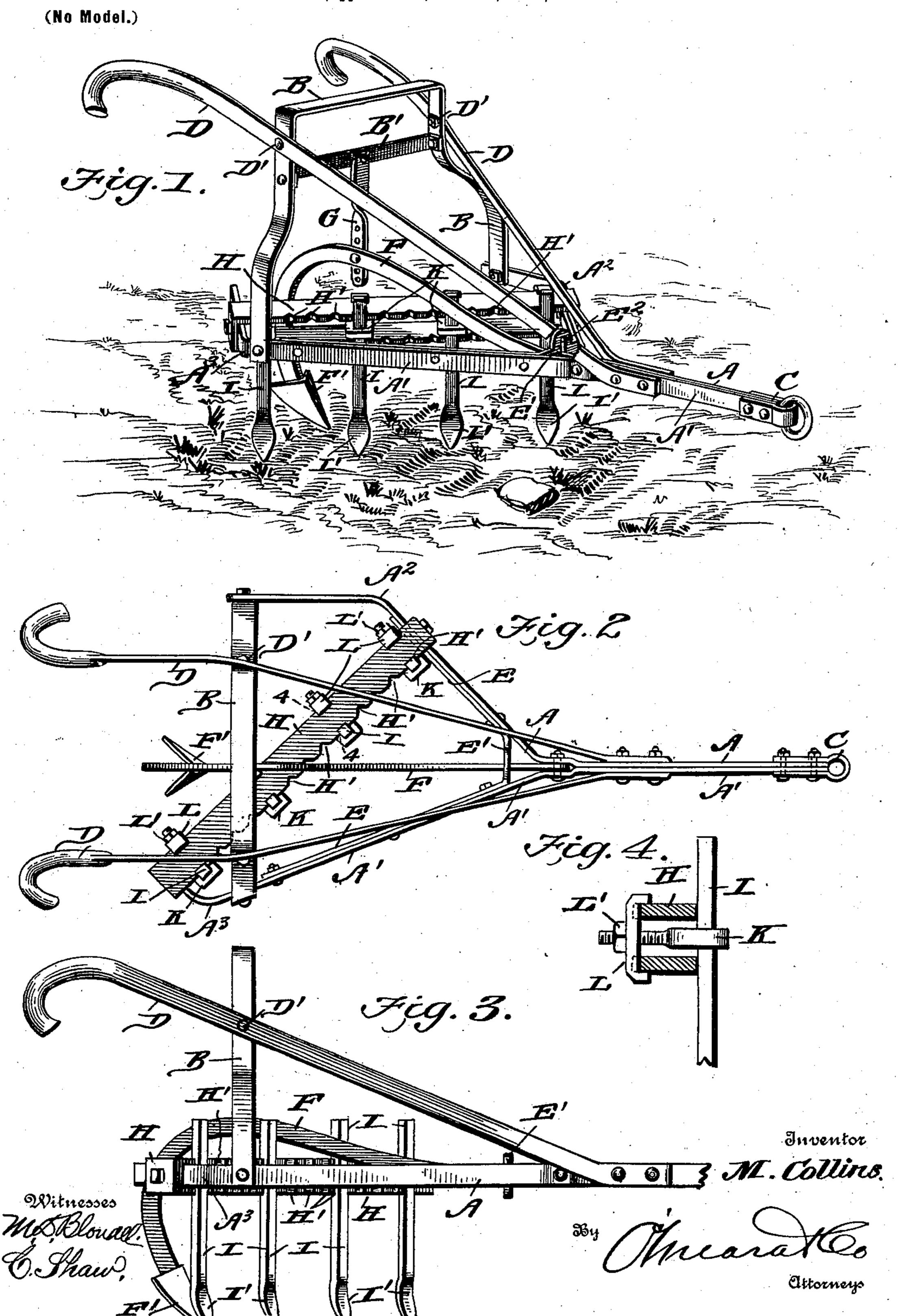
M. COLLINS. CULTIVATOR OR HARROW.

(Application filed June 22, 1901.)



UNITED STATES PATENT OFFICE.

MARCELLERS COLLINS, OF STURGIS, MISSISSIPPI.

CULTIVATOR OR HARROW.

SPECIFICATION forming part of Letters Patent No. 692,830, dated February 11, 1902. Application filed June 22, 1901. Serial No. 65,685. (No model.)

To all whom it may concern:

Beitknown that I, MARCELLERS COLLINS, a citizen of the United States, residing at Sturgis, in the county of Oktibbeha and State of 5 Mississippi, have invented a new and useful Cultivator or Harrow, of which the following is a specification.

This invention is an improved construction of cultivator, the object being to provide a to highly practical and exceedingly simple construction of cultivator susceptible to a multiplicity of adjustments.

With this object in view the invention consists in the peculiar construction of the va-15 rious parts and in their novel combination and arrangement, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming part of this speci-20 fication, Figure 1 is a perspective view, one of the handles being broken away adjacent to the forward end for the purpose of more clearly illustrating the centrally-slotted reinforcing-bar through which the central beam 25 works. Fig. 2 is a top plan view. Fig. 3 is

a side elevation, and Fig. 4 is a detail sec-

tion on the line 44 of Fig. 2.

In carrying out my invention I employ a main frame comprising side beams A and A' 30 and the arched standard B, connected at its lower end to the said side beams A and A', said arched beam B having a horizontal bracebar connecting the side members and arranged parallel with the upper member of the 35 arched standard. The forward portions of the side beams A and A' are securely fastened together, and a clevis C is connected to the extreme forward ends of the said beam. The handles D are also connected to the said 40 beams, said handles extending upwardly and rearwardly, as shown, and are connected to the side members of the arched standard, as shown at D'. Directly to the rear of the forward ends of the handles the beams ${\bf A}$ and ${\bf A}'$ 45 diverge, beam A being carried rearwardly for a considerable distance in an inclined direction, then curved, as shown at A2, and continued rearwardly in a direct line. The beam A' extends rearwardly to a point A3, 50 where it is bent and carried rearwardly in a direction substantially parallel to the main

portion of the beam A, as most clearly shown |

in Fig. 2. The diverging portions of the beams A and A' are braced or reinforced by means of a bar E, angular or bow-shaped in 55 general contour, the side members being securely bolted to the beams A and A', as most clearly shown, the central or intermediate portion E' of the said bar extending across the angle between the said bars A and A' a 60 short distance to the rear of the point where said beams meet, and it will be noted that this central or intermediate portion is enlarged and slotted vertically, as shown at E2. A central beam F is pivoted at its forward 65 end between the beams A and A' just before they begin to diverge, and it will be noted that the said beam F passes through the slot E² in the central portion E' of the brace or reinforcing bar E. The bar F extends up- 70 wardly and rearwardly and is fastened to a depending bar G, which hangs down centrally of the brace-bar B'. The beam F is then curved downwardly to provide a standard for the cultivator tooth or point F'.

A double tooth-bar H is securely fastened between the main portion of the side beam A and the end of the beam A', said tooth-bar being arranged at an oblique angle to the line of draft. The forward faces of the members 80 of this tooth-bar are notched, as shown at H', to receive the shanks I of the cultivator-teeth I', eyebolts K being arranged between the members of the tooth-bar, the shanks of the cultivator-teeth passing through the eye, the 85 threaded portions of said eyebolts passing through plates L, arranged upon the rear of the tooth-bar H, nuts L' being employed to securely fasten all of the said parts together. By means of this construction the cultivator- 90 teeth can be adjusted to any height desired, and they can also be shifted laterally whenever necessary.

By constructing the frame in the manner herein shown and described an exceedingly 95 light and rigid structure is obtained, and in addition to the adjustments of the cultivatorteeth in connection with the tooth-bar I am also enabled to adjust the central tooth carried by the central beam. 100

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

1. In a cultivator, the combination with the

side beams and arched standard, of the handles connecting the forward portions of the side beams and the arched standard, and the tooth-bar secured to the diverging portions of the side beams and the vertically-adjustable central beam, all arranged substantially

as described.

2. In a cultivator, the combination with the side beams connected at their forward ends and diverging rearwardly, the extreme ends of the side beams being bent toward each other, of the arched standard connecting the end of one beam to the intermediate portion of the other beam, and a tooth-bar connecting the intermediate portion of the first-named beam and the end portion of the second-mentioned beam, substantially as shown and described.

3. The combination with the side beams connected at their forward ends and diverging rearwardly, the arch-shaped standard connecting the side beams, the reinforcing or

brace bar attached to the side beams, the central portion of said bar being enlarged and slotted vertically, and the central beam pivoted between the side beams and working in 25 the slot of the brace or reinforcing bar, sub-

stantially as described.

4. In a cultivator, the combination with the side beams constructed as described, of the arch-shaped standard connecting said beams, 30 the brace-bar attached to the said standard and having a depending hanger, a brace or reinforcing bar slotted centrally, and the central beam pivoted between the side beams, working through the slot of the brace-bar and 35 attached to the depending hanger, substantially as described.

MARCELLERS COLLINS.

Witnesses:

M. MAXWELL, McD. McIlvaine.