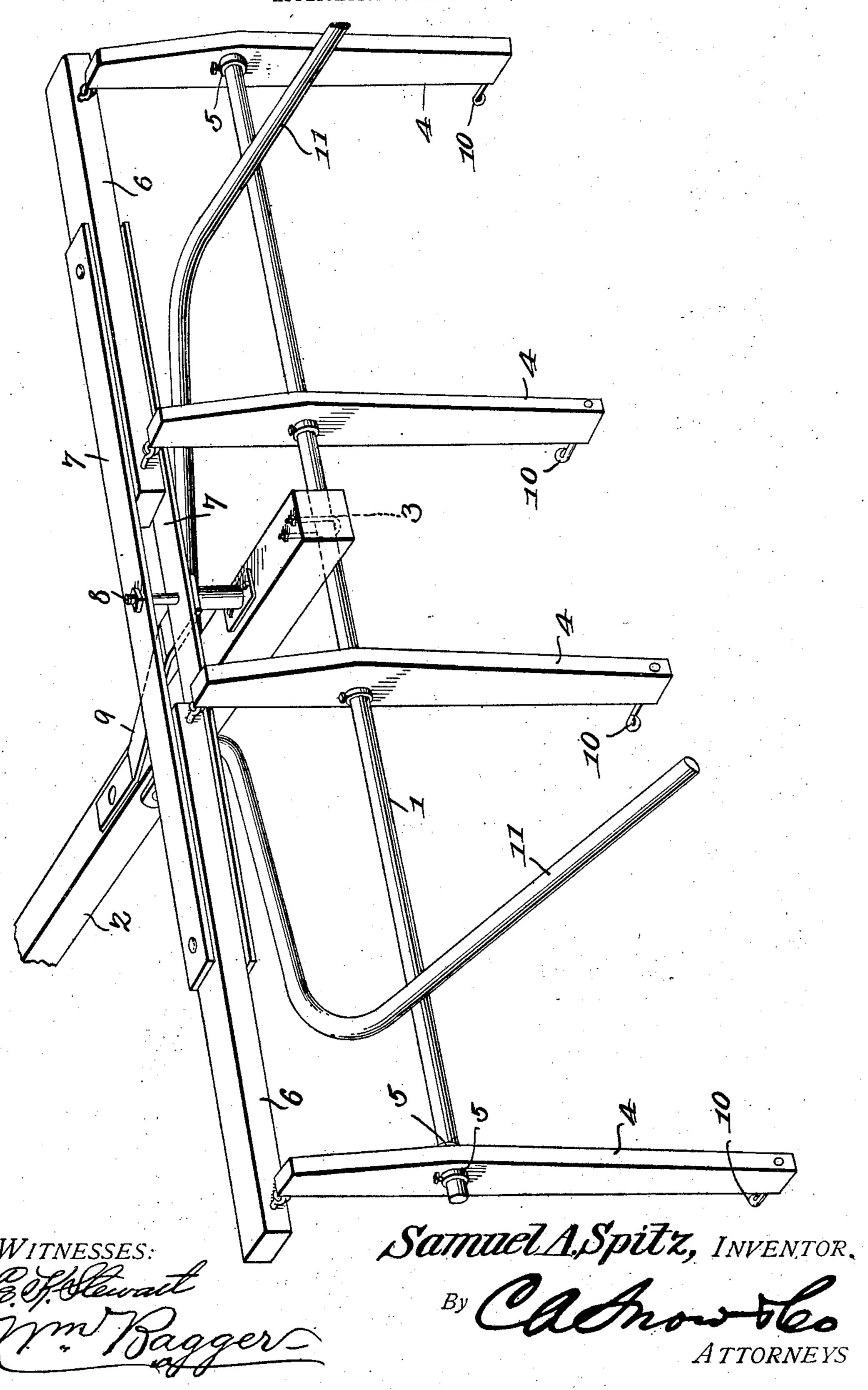
S. A. SPITZ.

DRAFT EQUALIZER.

APPLICATION FILED DEC. 11, 1905



UNITED STATES PATENT OFFICE.

SAMUEL A SPITZ, OF DAVID CITY, NEBRASKA, ASSIGNOR OF ONE-HALF TO PETER B. GAINER, OF DAVID CITY, NEBRASKA.

DRAFT-EQUALIZER.

No. 832,510.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Original application filed August 25, 1905, Serial No. 275,812. Divided and this application filed December 11, 1905. Serial No. 291,317.

To all whom it may concern:

Be it known that I, Samuel A. Spitz, a citizen of the United States, residing at David City, in the county of Butler and State of Nebraska, have invented a new and useful Draft-Equalizer, of which the following is a specification.

This invention relates to draft-equalizers; and it has particular reference to a draftequalizer adapted to be used in connection with cultivators and similar agricultural implements, a principal object of the invention being to provide an equalizer to which the traces may be conveniently attached at a low point of attachment without danger of interfering with the heels of the animals, as is liable to be the case when the ordinary equalizer and siwngletrees are used.

Other objects are to simplify and improve the general construction and operation of this

class of devices.

With these and other ends in view, which will readily appear as the nature of the invention is better understood, the present invention, which may be regarded as a division of an application for Letters Patent for improvements in cultivators, filed by myself on August 25, 1905, Serial No. 275,812, consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawing has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations, and modifications within the scope of the invention may be

40 made when desired.

In the said drawing the single figure represents a perspective view of a draft-equalizer constructed in accordance with the prin-

ciples of the invention.

Upon a draft-bar 1, which may be regarded as forming a part of the frame of the machine to which the invention is applied and which is firmly secured on the draft-tongue 2, as by means of a clip 3, there are pivoted adjustably upon the said draft-bar, as by

means of set-collars 5 5. The upper ends of these levers are connected in pairs by linkbars 6 6, which are disposed in front of the upper ends of the levers 4, and said link-bars 55 are connected intermediate their ends with a pair of evener-bars 7 7, disposed adjacent to the upper and under sides of the link-bars 6. The evener-bars 7 are pivoted upon a standard 8, extending upwardly from the tongue 2 near 60 the rear end of the latter, said standard being reinforced by an obliquely-disposed brace 9.

The draft is attached to the lower ends of the levers 4, which are provided with hooks 10, to which the tugs or traces of the draft- 65 animals are directly attached, the use of ordinary swingle and double trees being thus en-

tirely avoided.

11 11 in the drawing designate the side bars of the frame of the machine or imple- 70 ment to which the invention is applied, said side members being connected at their front

ends with the sides of the tongue.

By this improved draft attachment the draft may be applied at a point not far above 75 the ground, where it is most effective and where it will most readily yield to steering, while the absence of swingletrees avoids hampering the heels of the animals, which when draft attachments of ordinary construction 80 are used are frequently annoyed and irritated by the swingletrees swaying and striking against their heels.

The improved draft attachment is simple in construction and thoroughly efficient and 85 useful for the purposes for which it is intended.

Having thus described the invention, what

is claimed is—

1. An equalizer including a draft-bar, a plurality of levers pivoted vertically upon 90 the same, link-bars connecting the upper ends of said levers in pairs, evener-bars connecting the link-bars, and a tongue pivotally

supporting the evener-bars.

2. An equalizer including a draft-bar, 95 pairs of levers pivoted upon said draft-bar, set-collars adjacent to said levers, link-bars connecting the upper ends of the levers in pairs, draft-hooks at the lower ends of the levers, evener-bars connecting the link-bars, 100 and a tongue supporting the evener-bars and the link-bars.

3. A draft-tongue, a draft-bar connected with and supported by the tongue, pairs of levers pivoted vertically upon the draft-bar, link-bars connecting the upper ends of the bars in pairs, an evener connecting the link-bars, and a pivot upon the tongue supporting the evener.

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

SAMUEL A. SPITZ.

Witnesses:

E. WILLIAMS, A. H. ETTING.