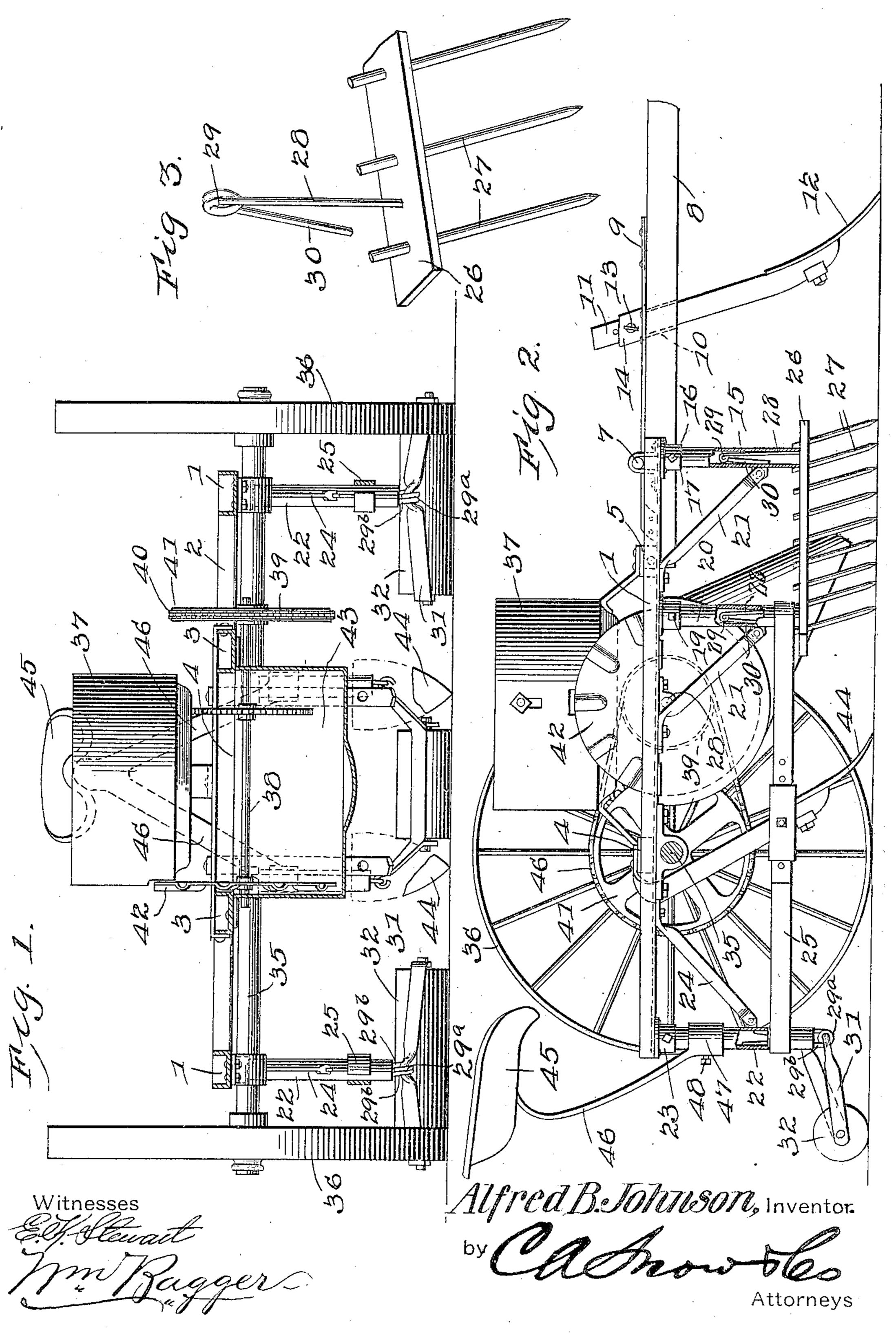
A. B. JOHNSON.

COMBINED CULTIVATOR, HARROW, AND PLANTER.

APPLICATION FILED NOV. 23, 1905.



UNITED STATES PATENT OFFICE.

ALFRED BUTLER JOHNSON, OF GREENVILLE, TEXAS.

COMBINED CULTIVATOR, HARROW, AND PLANTER.

No. 822,609.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed November 23, 1905. Serial No. 288 755.

To all whom it may concern:

Be it known that I, Alfred Butler Johnson, a citizen of the United States, residing at 5 of Texas, have invented a new and useful Combined Cultivator, Harrow, and Planter, of which the following is a specification.

This invention relates to agricultural implements in which a single frame is utilized ro to support various kinds of mechanisms, and in the present invention there is included a frame of simple and improved construction adapted for carrying and to be used in connection with earth-engaging implements, 15 such as harrow-teeth and cultivator-blades, as well as rollers, for the purpose of crushing clods and leveling the surface of the land.

The objects of the invention are to simplify and improve the construction and op-20 eration of this class of machines; and with these and other ends in view, which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrange-25 ment and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the 30 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 35 made when desired.

In the drawings, Figure 1 is a transverse sectional view. Fig. 2 is a side elevation; and Fig. 3 is a perspective detail view, partly in section, illustrating the means for mount-40 ing the earth-engaging implements upon the frame.

Corresponding parts in the several figures are indicated throughout by similar characters of reference.

The frame of the machine is composed of longitudinal beams 1 1 3 3 and transverse beams 2, 4, and 5.

7 is a rod supporting a tongue 8, having hounds 9. Said tongue has a slot 10 for the 50 shank 11 of a furrow-opener 12, said shank being secured by a set-screw 13, extending through a collar 14, surrounding the slot.

The intermediate frame-beams 3 3 are provided near their front ends with depending

tubular legs or standards 15, which have 55 been shown as secured, by means of setscrews 16, in collars 17 upon the under sides Greenville, in the county of Hunt and State | of said beams. Similar tubular legs or standards 18 are secured, as by means of setscrews 19, in collars 20 upon the under sides 60 of the side beams 1 1 of the frame at some distance from the front ends of said side beams. The tubular standards are reinforced, as by means of braces 21.

Tubular standards 22, in all respects simi- 65 lar to the standards 15 and 18, are secured in collars 23 at the rear corners of the frame and upon the under side of the rear beam 2 intermediate the sides of the frame, said standards being reinforced, as by braces 24. The rear 70 corner-standards 22 are also connected with the standards 18 upon the sides of the frame

by means of extension-braces 25.

The standards 15 and 18 are adapted to support earth-engaging cultivating imple- 75 ments, including bars 26, having teeth or blades 27, which may be of any desired construction according to the nature of the work that is to be performed. The bars 26 are provided with upstanding resilient members 80 28, twisted at their upper ends to form eyes 29, having downwardly-extended free ends 30. These members are so disposed upon the bar 26 near the ends of the latter as to be capable of being readily inserted into the 85 lower ends of the tubular standards, where the implements will thus be frictionally retained in position for operation. The standards 22 at the rear end of the frame are in like manner adapted for the support of earth- 90 engaging implements, and in the accompanying drawings have been shown frames 31, carrying rollers 32, said frames being provided with standard-engaging resilient devices, including eyes, here designated 29a, 95 having free standard-engaging members 29b, adapted for insertion into the lower ends of the standards, with which the rollers will thus be connected, the roller-frames having link connection with the eyes 29^a.

The frame is supported upon an axle 35, having wheels 36. A seedbox 37 is also shown, as well as seed-dropping mechanism, including sprocket-wheels 39 41, link belt 40, a disk 42, and a discharge-funnel 43.

44 44 are covering-plows.

45 is a seat for the operator, said seat being mounted upon supporting-bars 46, terminating in sleeves 47, engaging the standards 22 at the rear end of the frame and secured adjustably upon said standards by set-screws 48.

Having thus described the invention, what

5 is claimed is—

1. In a machine of the class described, a frame having downwardly-extending tubular legs or standards, and earth-engaging members having resilient standard-engaging devices

10 Vices.

2. A frame having tubular standards adjustably and detachably connected therewith, in combination with earth-engaging implements having resilient standard-engaging

15 Ing means.

3 A frame having a ne

3. A frame having a pair of downward-extending tubular standards, in combination with a bar having earth-engaging teeth or blades, and resilient standard-engaging members connected with said bar.

4. In a machine of the class described, the combination with a tubular standard, of a

resilient engaging member including a springeye, and arms extending from the eye.

5. In a machine of the class described, a 25 frame having downward-extending collars or sockets, tubular standards detachably secured in said collars or sockets, earth-engaging implements having resilient standard-engaging means, and extension-braces con-30 necting the standards.

6. In a machine of the class described, a frame having tubular standards detachably connected therewith, and a seat having supporting-bars provided with terminal sleeves 35

adjustably engaging the standards.

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

ALFRED BUTLER JOHNSON.

Witnesses:

J. F. Eidson, A. B. Yantis.

"这多数的"。"我们就是一个大大的一个大大的一个大大的人,我们就是一个大大的人,我们就是一个大大的人,我们就是一个大大的人,我们就是一个大手的人,这个人的人,不