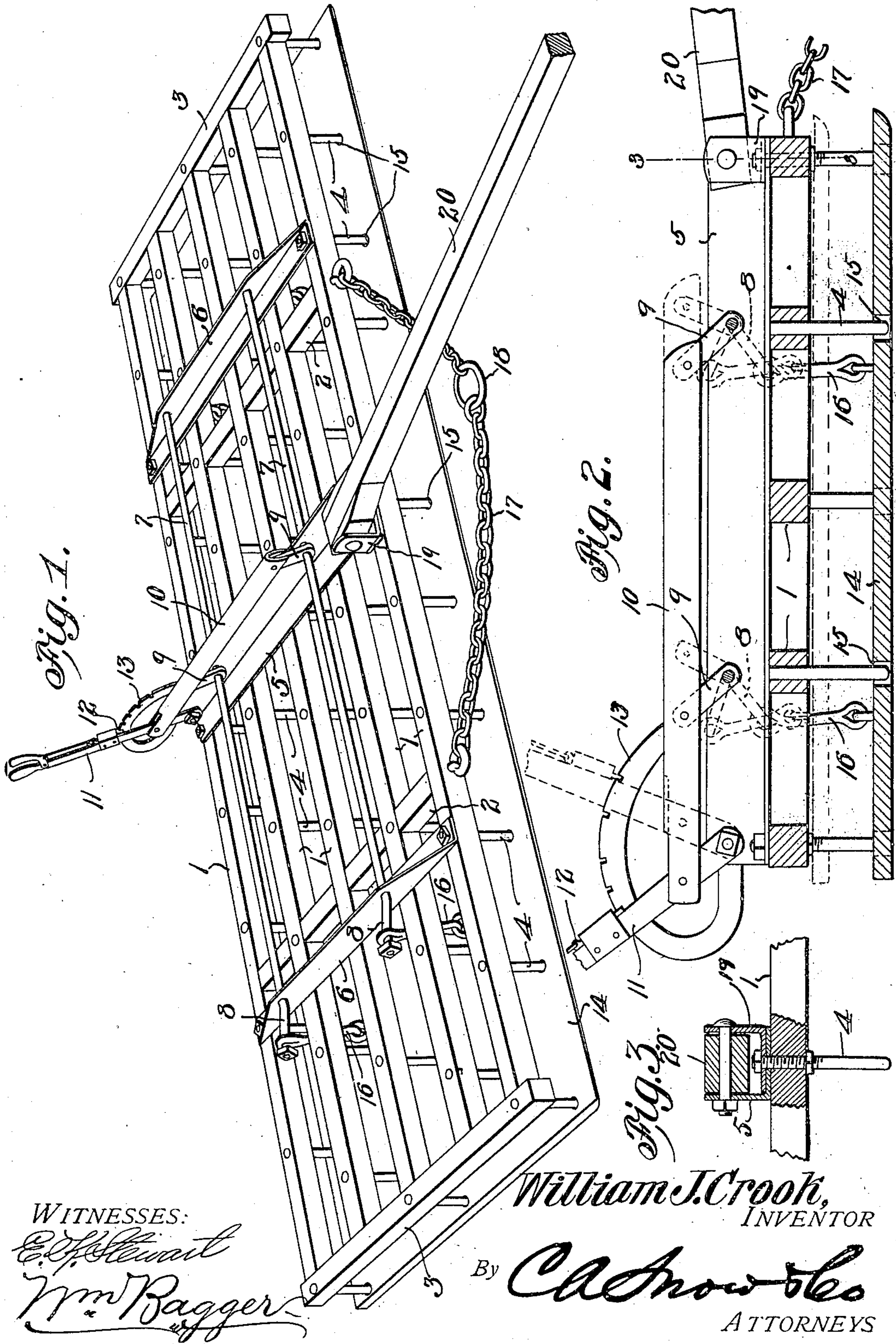


No. 837,450.

PATENTED DEC. 4, 1906.

W. J. CROOK.
COMBINED BRUSH RAKE AND HARROW.

APPLICATION FILED FEB. 5, 1906.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM J. CROOK, OF SMOOT, WYOMING.

COMBINED BRUSH-RAKE AND HARROW.

No. 837,450.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed February 5, 1906. Serial No. 299,581.

To all whom it may concern:

Be it known that I, WILLIAM J. CROOK, a citizen of the United States, residing at Smoot, in the county of Uinta and State of Wyoming, have invented a new and useful Combined Brush-Rake and Harrow, of which the following is a specification.

This invention relates to an improved combined brush-rake and harrow—that is to say, an improvement which may be usefully employed for the purpose of raking together or gathering sage-brush and other rubbish that has been previously loosened by means of a plow or grubbing-machine and also as a harrow or leveler.

The objects of the present invention are to simplify and improve the construction and operation of this class of implements; 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 arrangement and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of an implement constructed in accordance with the principles of the invention, showing the same in dumping position. Fig. 2 is a longitudinal vertical sectional view showing the implement in dumping position and with dotted lines illustrating the dumping-platform in a raised position. Fig. 3 is a sectional detail view taken on the plane indicated by the line 3 3 in Fig. 2.

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

The frame of the improved implement includes a plurality of transverse parallel bars 1 1, of which five have been shown in the drawings, said bars being connected and spaced apart by means of intermediate longitudinal bars 2 2 and end members 3 3, the parts being securely framed together in any suitable manner. The frame is provided with a plurality of teeth or spikes 4 4, which are secured in staggering relation upon the frame-bars 1 1.

Suitably secured upon the upper sides of the frame-bars 1 1 are longitudinal frame-stiffening reinforcing angle bars or braces 5 and 6 6, three in number, said angle bars or braces affording bearings for a pair of transversely-disposed rock-shafts 7 7, having terminal cranks 8 8. These rock-shafts are

provided adjacent to the central angle bar or brace 5 with upstanding arms 9, which are connected with each other by means of a link 10, which latter is extended rearwardly 60 and is pivotally connected with a lever 11, fulcrumed upon the angle-bar 5, said lever being provided with a suitable stop member 12, engaging a rack-segment 13, whereby said lever and the parts operated thereby 65 may be retained securely at various adjustments.

14 designates a platform made of wood or other suitable material and having a plurality of apertures 15 engaging the teeth or 70 spikes 4 4 of the frame. The platform 14 is connected, by means of links or pitmen 16, with the terminal cranks 8 of the rock-shafts 7, so that when said rock-shafts are oscillated by means of the hand-lever 11 the plat- 75 form 14 may be raised or lowered, as will be readily understood. It will also be seen that by means of the locking mechanism provided for the lever the platform 14 may be sustained at various adjustments upon 80 the teeth 4.

Suitably connected with the front beam 1 of the frame are the ends of a chain 17, having a centrally-disposed draft-link 18, to which the draft may be applied in the usual 85 manner, as by means of an equalizer. Secured upon the forward end of the flange bar or brace 5 is an angular or L-shaped plate 19, between which and the upstanding flange of the member 5 there is pivoted a tongue 20. 90 The tongue is intended to be used in connection with a holdback device, such as an ordinary neck-yoke, the object being to prevent the implement from being thrown forward against the heels of the draft-animals at the 95 moment when it is lightened by dumping or discharging the accumulated load.

The operation and advantages of this invention will be readily understood from the foregoing description, taken in connection 100 with the drawings hereto annexed. The implement may be utilized for raking together or gathering said brush and other rubbish, which when gathered may be deposited in windrows to facilitate its subsequent gathering for fuel or destruction, as the case may be. While a load is being gathered or accumulated, the platform will be lifted and sustained directly beneath the frame, as will be best seen by reference to the dotted lines 110 in Fig. 2 of the drawings. In order to discharge the load, the hand-lever 11 is manipu-

lated to lift the frame from the platform, which latter will then readily slide from over the accumulated material. When the implement is utilized as a harrow, the platform
5 may be sustained in any desired position to enable the teeth to penetrate into the ground to the desired depth, and when the implement is to be used for smoothing or leveling purposes only the platform will be sustained
10 in the dumping position illustrated in Fig. 1.

This improved implement while simple in construction and capable of being manufactured at a small expense is thoroughly efficient for the purposes for which it is de-
15 signed.

Having thus described the invention, what is claimed is—

1. A frame having a plurality of downwardly-extending teeth, a platform having
20 apertures engaging said teeth and slidable thereon, frame stiffening and reinforcing angle-bars secured longitudinally upon the frame, rock-shafts journaled in said angle-bars and having terminal cranks, pitmen con-

necting said cranks with the platform, and means for oscillating the rock-shafts and for securing them at various adjustments.

2. A frame having downwardly-extending teeth, a platform having apertures engaging the teeth and slidable thereon, frame stiffening and reinforcing angle-bars secured longitudinally upon the frame, rock-shafts journaled in the angle-bars and having terminal cranks, pitmen connecting said cranks with the platform, arms extending upwardly
3 from the rock-shafts, a lever pivoted upon one of the angle-bars, a link connecting the arms with each other and with the lever, and means for locking the lever at various ad-
4 justments.

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

WILLIAM J. CROOK.

Witnesses:

MOSES S. MOFFETT,
GEORGE N. PERKINS.