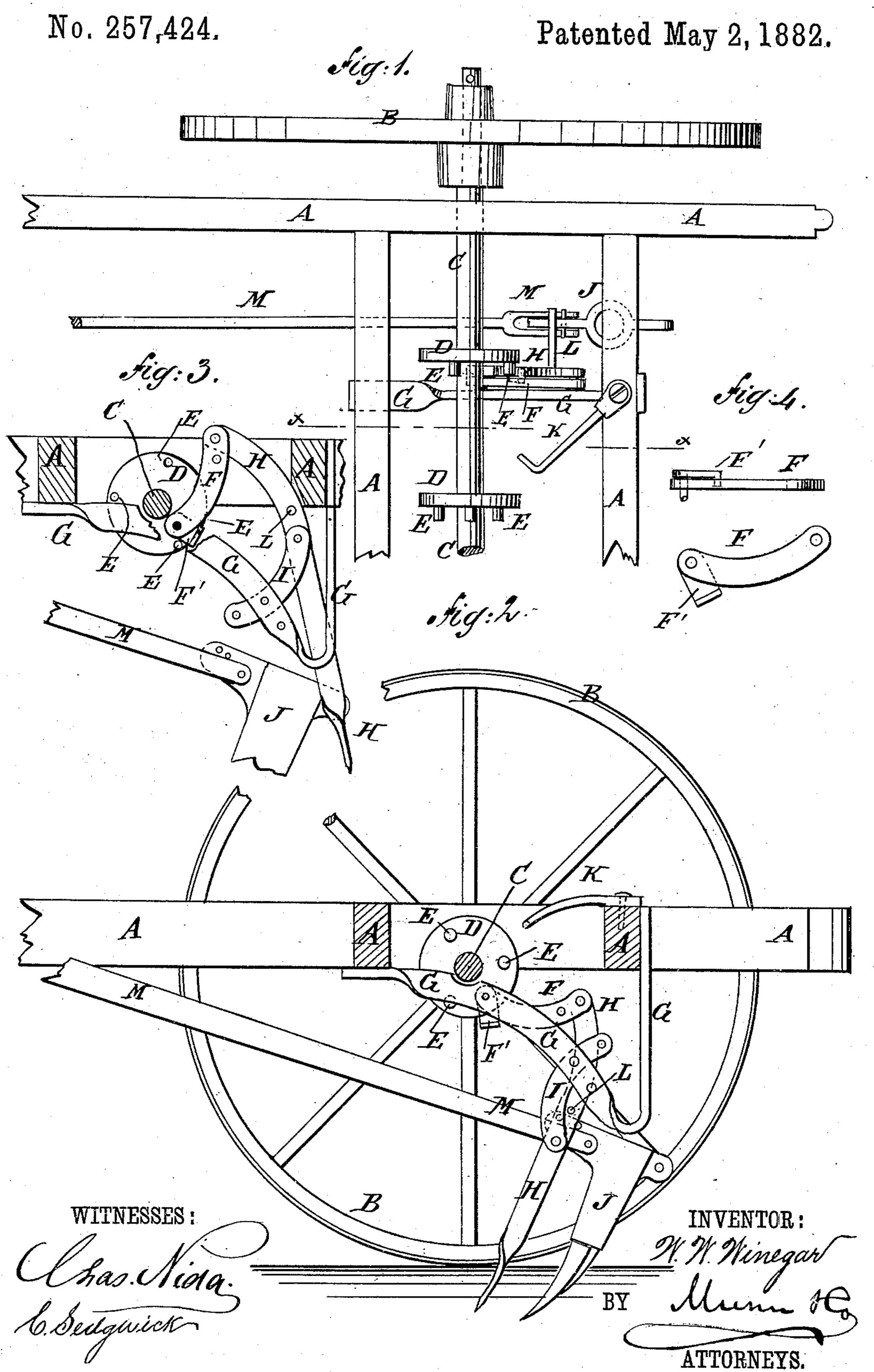
W. W. WINEGAR.

GRAIN DRILL.



UNITED STATES PATENT OFFICE.

WILLIAM W. WINEGAR, OF CHAMBERSBURG, ILLINOIS.

GRAIN-DRILL.

SPECIFICATION forming part of Letters Patent No. 257,424, dated May 2, 1882.

Application filed January 28, 1882. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM W. WINEGAR, of Chambersburg, Pike county, Illinois, have invented a new and useful Improvement in Grain-Drills, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corre-

10 sponding parts in all the figures.

Figure 1 is a plan view of a part of a graindrill to which my improvement has been applied. Fig. 2 is a sectional side elevation of the same, taken through the line x x, Fig. 1, and showing the holding-bar lowered. Fig. 3 is a sectional side elevation of a part of the same, taken through the line x x, Fig. 1, and showing the holding-bar raised; and Fig. 4 is a plan view and side elevation of the lever.

The object of this invention is to facilitate the clearing away of trash from in front of drill-

hoes.

The invention consists in the combination, with the axle or shaft of the drill, of a wheel 25 having laterally-projecting pins, a pivoted lever having a pawl operated by the said pins, a holding-bar carried by the said lever, and a crank-bar for controlling the said holding-bar, whereby the holding-bar will be operated to 30 hold the trash until the drill-hoes have been drawn past it; also, in the combination, with the pivoted lever that carries the holding-bar, of a hook whereby the said holding-bar can be supported above the ground and held sta-35 tionary; and, also, in the combination, with the holding-bar, of a projecting pin whereby the said holding-bar can be raised by and with the drill-hoe and its draw-bar, as will be hereinafter fully described.

A represents the frame, B the wheel, and

C the axle or shaft, of a grain-drill.

To the axle C are attached wheels D, to which are attached three pins, E, (more or less,) to serve as cams to operate the lever F. The lever F is pivoted at its forward end to a bracket, G, attached to the cross-bars of the frame A in such a position that the said lever,

or a pawl, F', attached to it, will be struck by the pins E.

The pawl F' is pivoted to the pin, bolt, or rivet that pivots the said lever to the bracket G, hangs below the end of the said lever, and

has a shoulder or flange formed upon its free end to engage with the lever F, as shown in Figs. 3 and 4, and raise the said lever when 55 the pawl F' is struck by each pin E. With this construction, when the machine is backed the pins E will strike the pawl F' and swing it forward without affecting the said lever F. The other end of the lever F is pivoted to the 60 upper end of the holding-bar H. The holdingbar H, near its lower end, is twisted to give the said lower end a better hold upon the ground.

To the middle part of the holding-bar H is pivoted the lower end of the crank-bar I, the 65 upper part of which is pivoted to the bracket G. Two or more holes are formed in the crankbar I and in the bracket G to receive the pivoting-pin, so that the throw of the holding-bar H can be regulated as may be required. With 70 this construction, as the drill is drawn forward the pins E successively strike the pawl F' and raise the lever F, which raises the holding-bar H from the ground. As each pin E passes away from the pawl F, the holding bar H drops 75 by its own weight and holds the trash that may be in front of the adjacent drill hoe or hoes J until the said drill hoe or hoes have passed the said trash, when the said holdingbar H will be raised by the next pin E, and 80 will be carried forward by the crank I, so that it will again drop in front of the drill-hoes.

Any desired number of holding-bars and their operating mechanisms can be used, and they can be arranged to operate successively, 85

so as to make the draft uniform.

K is a hook, which is hinged to the frame A in such a position that it can be hooked into a hole in the upper part of the lever F, when the said lever and the holding-bar H have been 90 raised to the highest point of their movement, so as to hold the said holding-bar away from the ground and stationary while the drill is drawn forward, so that it will not be necessary to detach the said holding-bar and its operating mechanism in cases where it is not necessary to use the said holding-bar.

To the middle part of the holding-bar H is attached a pin, L, which projects over the drill-hoe J or its draw-bar M, so that the said 100 dropping bar will be raised by and with the said drill-hoe when the drill-hoe is raised to pass obstructions, or for any other desired purpose. The appliances for raising the drill-hoe

are not shown in the drawings, as they form no part of my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent-

1. In a grain-drill, the combination, with the axle or shaft C, of the wheel D, having pins E, the pivoted lever F, having pawl F', the holding-bar H, and the crank-bar I, substantially as herein shown and described, whereby 10 the holding-bar will be operated to hold the trash until the drill-hoes have been drawn past it, as set forth.

2. In a grain-drill, the combination, with the pivoted lever F, that carries the holding-

bar H, of the hook K, substantially as herein 15 shown and described, whereby the said holding-bar can be supported above the ground and held stationary, as set forth.

3. In a grain-drill, the combination, with the holding-bar H, of the projecting pin L, sub- 20 stantially as herein shown and described, whereby the said holding-bar can be raised by and with the drill-hoe and its draw-bar, as set forth.

WILLIAM W. WINEGAR.

Witnesses: B. F. METZ, JAMES L. METZ.