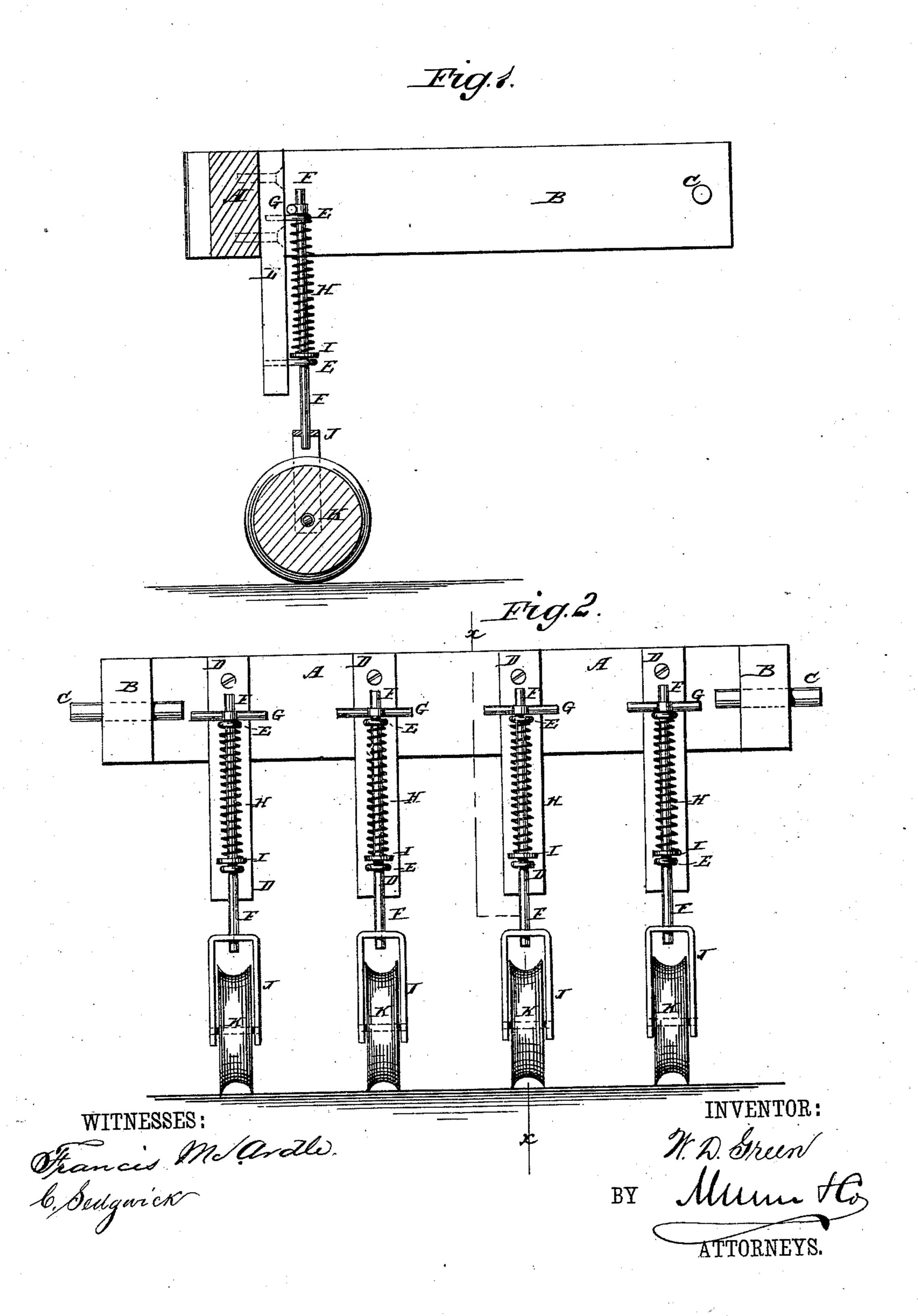
W. D. GREEN. Attachment for Grain-Drill.

No. 223,501.

Patented Jan. 13, 1880.



United States Patent Office.

WILLIS D. GREEN, OF MOUNT VERNON, ILLINOIS.

ATTACHMENT FOR GRAIN-DRILLS.

SPECIFICATION forming part of Letters Patent No. 223,501, dated January 13, 1880.

Application filed October 28, 1879.

To all whom it may concern:

Be it known that I, WILLIS DUFF GREEN, of Mount Vernon, in the county of Jefferson and State of Illinois, have invented a new and Improved Attachment for Grain-Drills, of which the following is a specification.

Figure 1 is a sectional side elevation of my improvement, taken through the line xx, Fig. 2. Fig. 2 is a front elevation of the attach-

The invention consists in an attachment for grain-drills, by which, as it follows the delivery-spout, the earth is pressed about the grain and a furrow formed as well as shaped in the manner hereinafter described.

A represents a cross-bar, to the ends of which are rigidly attached the rear ends of two bars or arms, B. The forward ends of the bars B are designed to be hinged to the frame of a grain-drill by pins C, or they may be connected with the axle of the drill by hinged couplings.

To the forward side of the bar A are firmly attached the upper ends of bars D, equal in number to the number of drill-teeth, and directly in the rear of the said drill-teeth.

To the upper and lower parts of the forward side of each of the hangers D are attached two eyes, E, through which passes a standard, F.

To the upper ends of the standards F are attached cross-pins or collars G, to rest upon the upper eyes, E, and keep the standards from dropping out. Upon the standards F, between the eyes E, are placed spiral springs H, the upper eyes, E. The lower ends of the spiral springs H rest upon shoulders or collars I, formed upon or attached to the standards F. The lower

ends, J, of the standards F are forked to receive the wheels K. The forks J may be piv-40 oted to the standards F, so that the wheels K will work like caster-wheels, if desired; or they may be rigidly attached to or formed solid upon the said standards F, in which case the standards F and eyes E should be made 45 square. The faces of the wheels K are concaved, as shown in Fig. 2.

With this attachment, when the drill is drawn forward the concaved wheels K will press the soil upon the seeds, packing it more so closely at the sides than at the top, and pressing the soil down, forming channels, which will be gradually filled by the falling in of the sides, thus hilling the stalks of grain as they come up.

The frame-work A B may be provided with levers or other devices for raising the attachment from the ground, but which are not shown in the drawings.

I am aware that a concave roll has been 60 hung to the rear of a runner by an adjustable stirrup, and that presser-rolls have been attached to and adjusted by rods; but

What I claim as new and of my invention

The combination, with frame A B, adapted to be hinged to a drill, of the bars D, having eyes E, the forked standards F J, having crosspins G and collars I, the spiral springs H, and the rim-concaved wheels K, as shown and described.

WILLIS DUFF GREEN.

Witnesses:
WILLIAM H. GREEN,
JAMES M. PACE.