3 Sheets—Sheet 1.

J. STEWART & J. W. JONES.

Corn-Harvester.

No. 210,818. **Patented Dec. 10, 1878.**

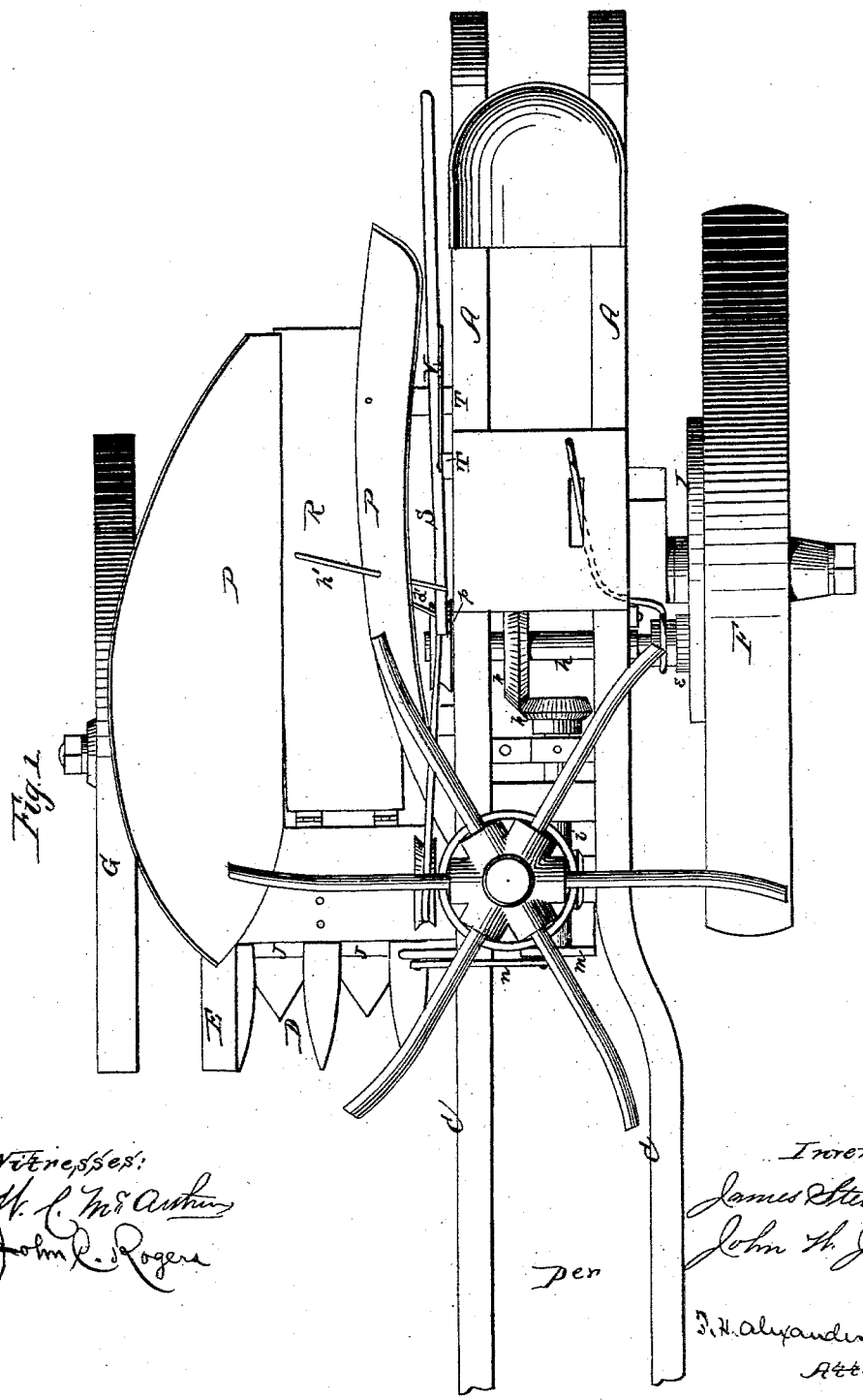

Fig. 1.

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W. L. McArthur
John R. Rogers

Inventors.
James Stewart
John W. Jones
per
D. H. Alexander & Elliott
Attorneys.

3 Sheets—Sheet 2.

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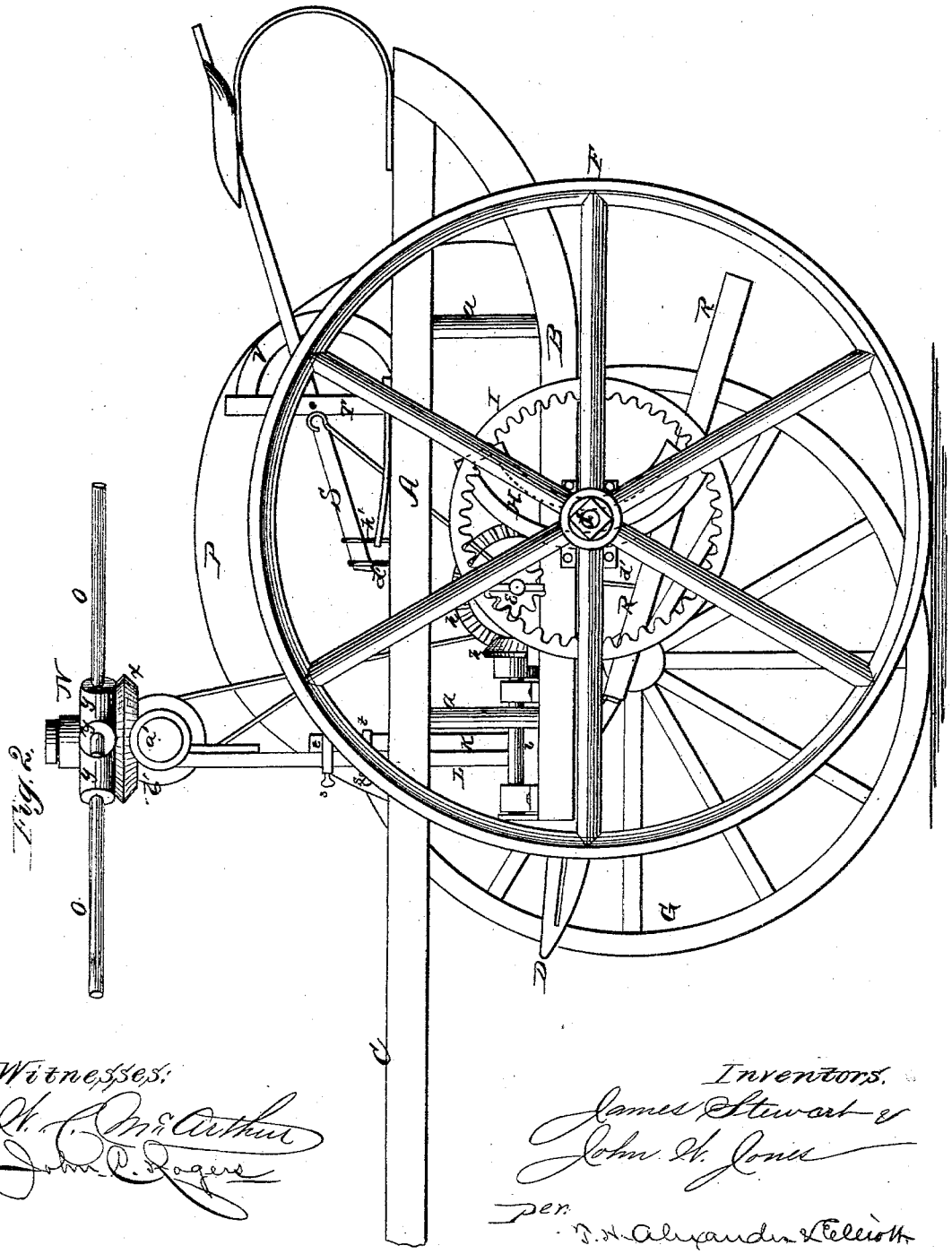

Fig. 2.

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Fig. 3.

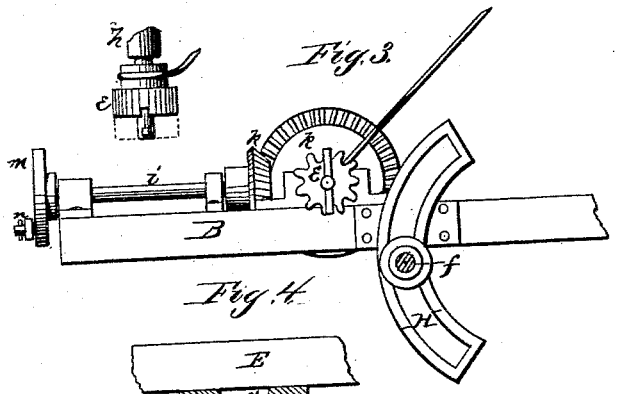


Fig. 4.

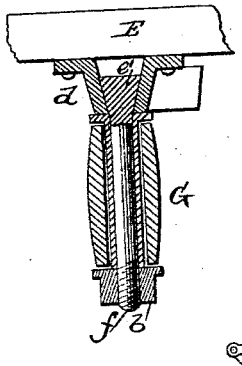


Fig. 5.

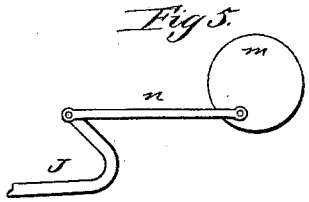
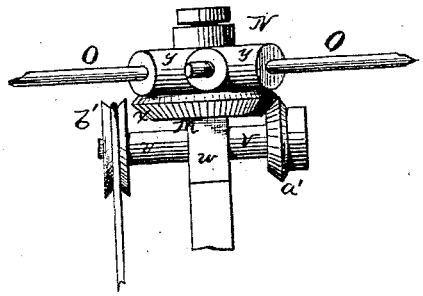


Fig. 6.



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UNITED STATES PATENT OFFICE.

JAMES STEWART AND JOHN W. JONES, OF SCHOOLEY'S STATION, OHIO.

IMPROVEMENT IN CORN-HARVESTERS.

Specification forming part of Letters Patent No. **210,818**, dated December 10, 1878; application filed October 17, 1878.

To all whom it may concern:

Be it known that we, JAMES STEWART and JOHN W. JONES, of Schooley's Station, in the county of Ross and State of Ohio, have invented certain new and useful Improvements in Corn-Harvesters; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

The nature of our invention consists in the construction and arrangement of a corn-harvester, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a plan view of our improved corn-harvester. Fig. 2 is a side elevation of the same. Figs. 3, 4, 5, and 6 are detailed views of parts thereof.

The main frame of our machine is constructed, as it were, of two frames—an upper frame, A, and a lower frame, B—connected by vertical rods *a*, and the rear end of the lower frame curved upward to connect with the rear end of the upper frame. The side bars of the upper frame, A, are extended forward, forming the shafts C C, between which the horse is attached.

To the front end of the lower frame, B, is secured the finger-bar D, which extends to the right side of the machine, and is of the usual length for corn-harvesters, according as it is desired to cut one or two rows at one time.

To the outer end of the finger-bar is attached a frame or rack, E, as shown, which completes the frame-work of the machine.

The machine is supported upon two wheels—a master-wheel, F, on the left side, and an ordinary wheel, G, on the right. The wheel G is placed on a spindle, *b*, which is adjusted vertically up and down in a slotted casting, *d*, secured to the frame or rack E. The master-wheel F is mounted on a spindle, *f*, which is adjusted up and down on the arc of a circle in a slotted segmental casting, H, secured to the side of the frame B.

It will be observed that the slot in casting H widens gradually from its front to its rear or inner side, so that the metal block *e'*, which is curved and wedge-shaped to snugly fit into the slot, and to which the spindle *f* is secured, will be securely held in place, while at the same time it may be adjusted up or down.

The shaft *h* has its bearings on the lower frame, B, and is, by beveled wheels *k k*, connected with a shaft, *i*, which runs to the forward end of the frame. On the front end of this shaft is secured a crank-disk, *m*, which, by a pitman, *n*, is connected with the cutter-bar J, thus giving the latter a reciprocating motion. On the inner end of the shaft *h* is a pulley, *p*, which is to be connected by a belt with the reel-operating mechanism.

To the front end of the main frame A B is secured a standard, K, to which another standard, L, is vertically adjustable, and held by means of clamps *t* and set-screws *s*, as shown. To the upper end of the standard L is secured a casting, M, which forms a horizontal tubular bearing, *v*, and a vertical post, *w*, in the center thereof. On the post *w* is placed the reel-head N, which forms a bevel cog-wheel, *x*, underneath, and a series of radial sockets, *y*, on top, and in these sockets the arms O are inserted. The cog-wheel *x* of the reel-head meshes with a pinion, *a'*, on a shaft passed through the tubular bearing *v*, and said shaft has on its opposite end a pulley, *b'*, to receive the belt from the pulley *p* on the inner end of the shaft *h*.

The stalks fall on a concave bottom, R, which is hinged to the rear edge of the finger-bar, and by a rod, *d'*, connected with a lever, S. This lever is pivoted to a standard, T, and passes over a segmental rack, V, as shown. When a sufficient quantity of stalks has accumulated on the bottom R, said bottom is dropped by means of the lever and its connecting-rod to let the stalks slide off, and is then raised again.

To the forward end of the lever S is attached a push-rod, *h'*, which passes through the inner guard, P, and as the lever is manipulated to

drop the bottom, this rod is forced down to push out the stalks from between the guards in case they should clog therein.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The combination of the hinged bottom R, rod d', lever S, and push-rod h', substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses.

JAMES STEWART.
JOHN W. JONES.

Witnesses:
RODMAN JONES,
WM. R. ERSKINE.