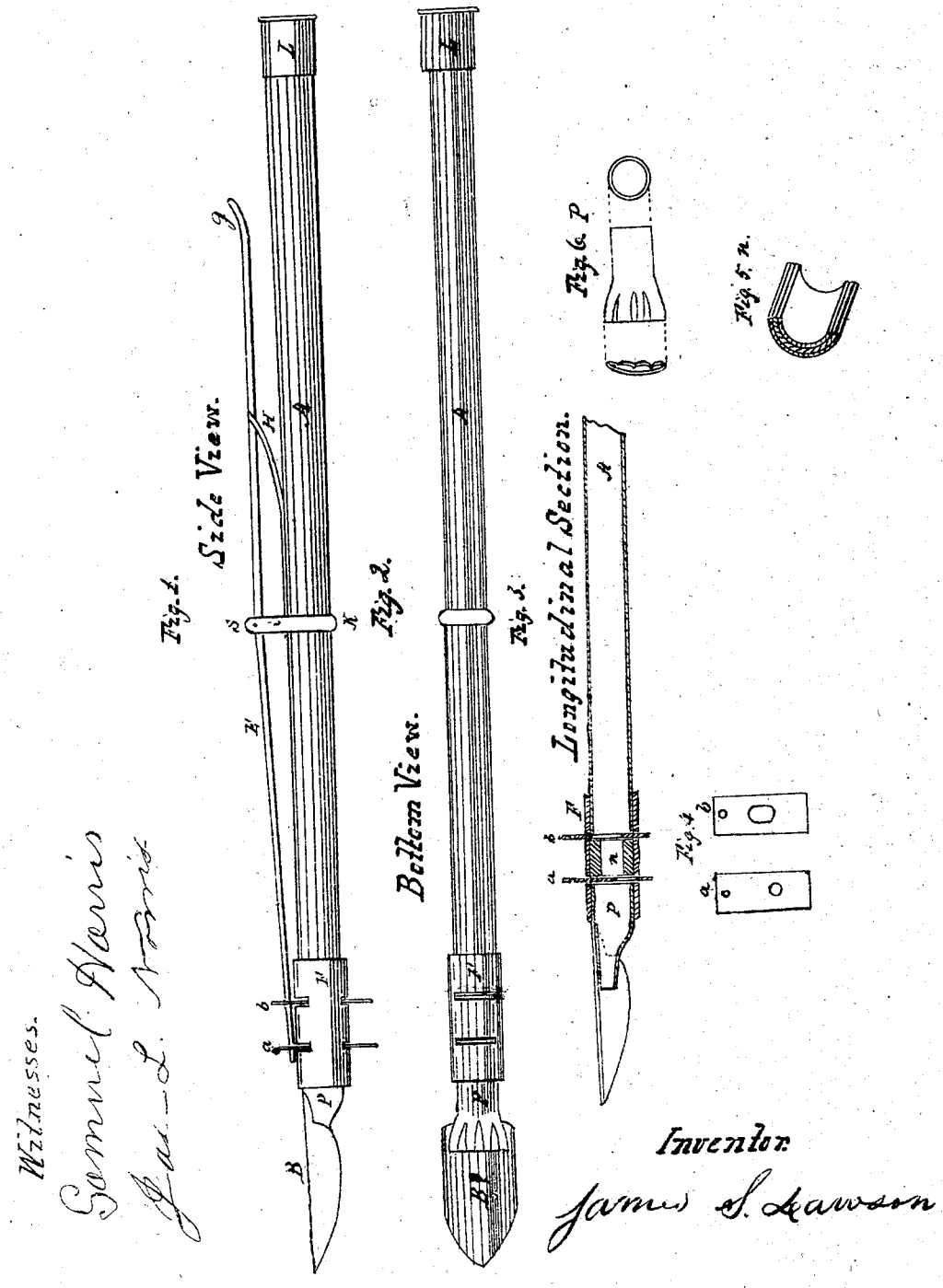
J. S. Lawson.

Hand Corn-Planter.

No. 74231 Patented Feb. 11, 1868.



Witnesses.
Samuel Harris
Geo. L. Morris

Inventor
James S. Lawson

United States Patent Office.

JAMES S. LAWSON, OF DISCO, MICHIGAN.

Letters Patent No. 74,231, *dated February* 11, 1868.

IMPROVEMENT IN HAND CORN-PLANTERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES S. LAWSON, of Disco, in the county of Macomb, and in the State of Michigan, have invented an Improved Hand Corn-Planter; and 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, in the following order, in which—

Figure 1 is a perspective view.

Figure 2, a longitudinal view.

Figure 3, a sectional view through C D.

Figure 4, a view of the sliding valves *a* and *b*.

Figure 5, a view showing the concentric rings or tubes *f f*, &c., by which the chamber *m* is enlarged or diminished, to regulate the quantity of seed.

Figure 6 is a view of the tube P, divided or flattened in such a manner as to separate the kernels in the hill.

A, fig. 1, is a tube, of metal or other suitable material, and of the required length and size. F is a portion of this tube, containing the chamber *m*, as shown in fig. 3, and firmly fastened to A by screws or otherwise. P is another portion of this tube, of required length, &c., enlarged and flattened, or divided at its lower end, and firmly attached to F at its upper end. B is a blade of steel, of desired form and dimensions, and firmly fastened to the lower end of P. *a* and *b* are slides or valves, made of thin strips of steel or other suitable material, and working through the slots *c c* in the portion F. *d d*, fig. 4, are holes through the ends of the slides *a b*, through which the end of the lever E passes, somewhat loosely, in order to secure a free movement of the slides through the slots *c c*. *o* and *h* are openings through the slides *a* and *b*, so arranged as to open and close alternately above and below the chamber *m*, in the throttle *n*, by a simple movement of the lever E. *k* is a band clasped around the tube A, and forming the fulcrum of the lever E. H is a spring between the lever and the tube A, and above the fulcrum *k*. E is a lever, of light and strong material, for the purpose of operating the slides *a* and *b*, one end of which passes through the holes *d d* in these slides, and the other, reaching nearly to the top of the tube A, is bent outward, to form a rest for the hand of the operator. L is a cap fitting closely upon the top of the tube A, to secure the grain. The chamber *m* is enlarged or contracted to suit the kind and quantity of seed, by inserting or withdrawing thin tubes, fitting one within another, as shown at *f f* in fig. 5. The openings *h* and *o*, in the slides *a* and *b*, are placed diagonally to each other in reference to the chamber *m*, and so arranged that when the lever E is in the position shown in fig. 1, where it is always kept by the spring H, when not pressed by the hand in using the planter, the opening *h* in the slide *b* is directly over the chamber *m*, and the chamber is filled with the seed-grain. Now, by depressing the lever by the hand at G, the upper valve is closed, and the opening *o* in the slide *a* is brought directly beneath the chamber *m*, and the seed escapes through the portion of the tube P, and is deposited in the ground beneath the blade B. The construction of the openings in the slides is such that *a*, in *a*, is brought beneath *m* before *h* in *b* is entirely closed. This arrangement allows the seed to pass out of the chamber *m* before the slide *b* comes in contact with the kernels below in the chamber, thereby preventing the grain from clogging in the throttle, and securing a nearly uniform quantity at each deposit. The lower portion of the tube P is divided or flattened in such a manner as to separate the kernels somewhat in the hill, as may be seen in fig. 6.

My planter is operated by placing the hand upon the lever at G and around the tube A, in such a manner that two or more fingers can clasp the lever, the planter being held in an upright position in advance of the operator. B is then thrust into the ground to a sufficient depth, and the top of the planter carried forward sufficiently to leave an opening in the ground beneath this blade. The end of the lever E is then brought down to the tube A, at G, and the grain falls into the ground beneath the blade B, which is then withdrawn, and the operator places his foot upon the place as he advances to the next hill, at the same time relaxing his hold upon the lever at G, and so on continually.

When two planters are used by the same person at one time, a harrow or roller should be passed over the field after planting, to better secure the covering of the grain, as in such case the foot could not be placed upon both hills without considerable delay.

Now, what I claim as my invention, and desire to secure by Letters Patent, is—

A combination of all the principal parts above described, essentially and for the purposes set forth, constituting an entire machine.

In testimony that I claim the foregoing hand corn-planter, I have hereunto set my hand, this 7th day of September, 1867.

JAMES S. LAWSON.

Witnesses:

WM. A. LAWSON,

H. S. CHIPMAN.