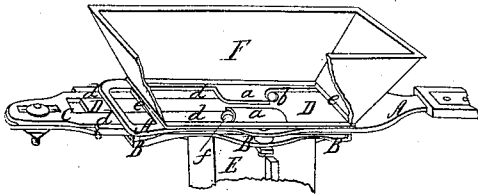


A. Runstetter, Corn Planter.

No. 88,812,
Fig. 1.



Patented Apr. 13, 1869.

Fig. 2.

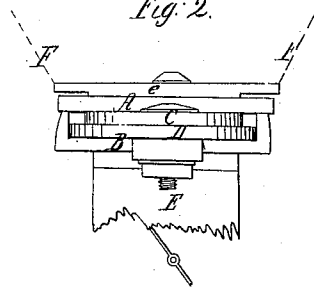


Fig. 3.

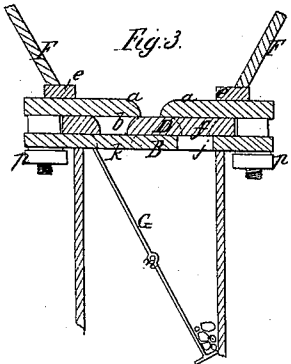


Fig. 4.

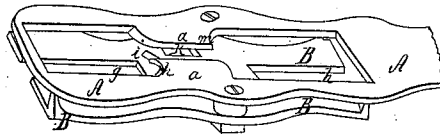


Fig. 5.

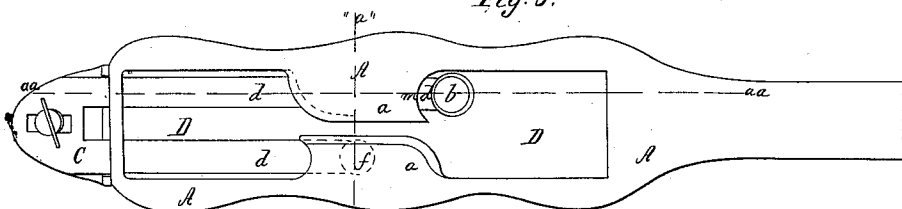


Fig. 6.

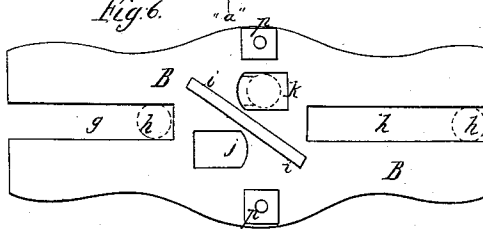


Fig. 7.

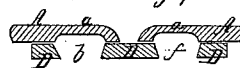
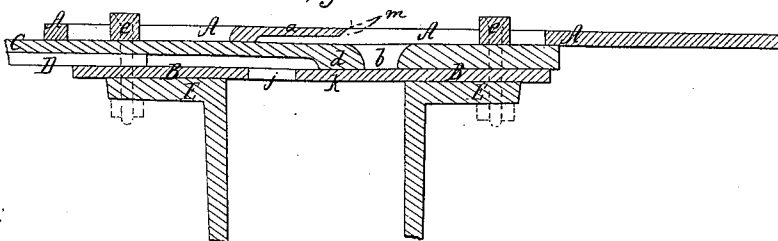


Fig. 8.



Witnesses;
C. Hurlow
J. M. Cochran

Inventor;
Andrew Runstetter

United States Patent Office.

ANDREW RUNSTETLER, OF PEORIA, ILLINOIS.

Letters Patent No. 88,812, dated April 13, 1869.

IMPROVEMENT IN 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, ANDREW RUNSTETLER, of the city and county of Peoria, in the State of Illinois, have invented a new and useful Improvement in Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view.

Figure 2 is an end elevation.

Figure 3 is a transverse section of cut-off and slide on the line *a a* of fig. 5.

Figure 4 is a perspective view of cut-off and teeth.

Figure 5 is a plan view of "cut-off" with gauge inserted.

Figure 6 is an under side view of lower plate of "cut-off."

Figure 7 is a transverse section of teeth of "cut-off" closing the holes in the slide.

Figure 8 is a longitudinal section of "cut-off," showing its upper and lower plates through the red lines *a a* of fig. 5.

Like letters in the figures of the drawings indicate like parts.

This cut-off is composed of two pieces of cast-iron, about one foot long and four inches wide, the upper one, *A*, fig. 4, being bolted to the connecting bar which connects both cut-offs, and to which the lever of machine is attached.

The upper piece *A* is about one-fourth of an inch thick, and has an oblong perforation about six inches long and two and a half inches wide through the middle, with two teeth, *a a*, projecting from each side of it, and opposite each other, designed for cutting off the supply of corn to shank, and large enough to cover corresponding holes in the gauged slide *C D*, over which they pass.

These teeth present a concave edge to the corn, the upper edge sloping also downwards and inwards, and then curving into a concavity running the whole length of the teeth, of the same diameter as the hole beneath. (See profile of teeth at *a*, fig. 8, and transverse section *a*, fig. 7.)

At the distance of one-fourth inch below the plate *A*, just described, and to which the latter is bolted, but kept at a proper distance by lugs at the four corners, and at each side *p p*, is another iron plate, *B*, of the same size and thickness as the upper one, and has a hole, *J K*, for passage of corn, about three-fourths of an inch in diameter, opposite and under each of the teeth.

There are also two slots, *g h*, cut in this plate, running from each end, and leaving a space between the inner ends of about three or four inches.

These slots admit the legs *h h*, uniting the two pieces *D E* of the shank, another slot, *i i*, not perfor-

rating the plate, running obliquely across the centre of same between the corn-holes *J K*.

This slot admits pin at the upper end of reversible valve *G*, and gives it motion.

The cut-off being now described, I will proceed to the slide or adjustable gauge composed of two pieces, *C D*, which are inserted between the plates composing cut-off.

This gauge is made in the common manner and simply provided with corresponding holes *b f* for passage of corn, and with a slide, *C*, with two arms *d d*, running along slots, and stretching up to the holes just mentioned, so as to be used in the regulation of the number of grains to be dropped.

This "slide" is kept at one-fourth inch distance above the iron box *F*, to which shank of runner *E* is attached by blocks, through which the parts are bolted together.

In the shank of runner is an iron valve or square plate, *G*, capable of closing the passage of the corn, and whose axis lies lengthwise of the apparatus or parallel with the front of the planter, and in the runner-shank at *n*.

This valve has a pin or leg on its upper edge which enters the slot *i i* above described, the reciprocating motion of the cut-off throwing the valve from side to side of the shank, or rather in a motion from front to rear of machine, or in a contrary direction from all other valves of the kind now used with what is called the straight slide.

The operation of this device is as follows:

The reciprocating motion of the "cut-off" *A B*, communicated thereto by the connecting bar and lever, opens, alternately, each hole *b f* in the slide *D* beneath, where it is momentarily retained on the surface of the lower plate *B* of "cut-off" until one of the holes therein lets it fall on to the valve *G*, where it is intercepted by the shelf at the bottom of valve, and then finally dropped to the ground; all this in order to prevent too much scattering of seed. The corn passes from the hole on one side of slide, and shoots down incline of valve over to the opposite side of shank at each reverse of valve.

I claim the construction of the edge of teeth so that they present a concave edge, *m*, commencing at upper surface of teeth and receding downwards until they curve into a hollow in the thickness of teeth, which hollow extends to nearly the rear of the teeth, as in the profile *a* and *m*, fig. 8, allows the tooth to cut off without destroying seed, and presenting no corners, either on the tooth or in the hole in which a grain might be nipped. The hollow also on under side of each tooth allows the same to pass freely over the retained corn.

Having thus fully described my invention,

What I claim therein as new, and desire to secure by Letters Patent, is—

1. The adjustable slide D, combined with movable or reciprocating cut-off, the latter made in two parts, one A above, with teeth *a a*, the other below the slide D, and having the holes for dropping corn into runner opposite and under the teeth, substantially as described.

2. The valve G, as arranged in combination with

the oblique slot *i i*, substantially in the manner and for the purpose as herein set forth.

As evidence that I claim the foregoing, I have hereunto set my hand in the presence of two witnesses.

Witnesses: ANDREW RUNSTETLER.

E. THURLOW,

J. M. COCHRAN.