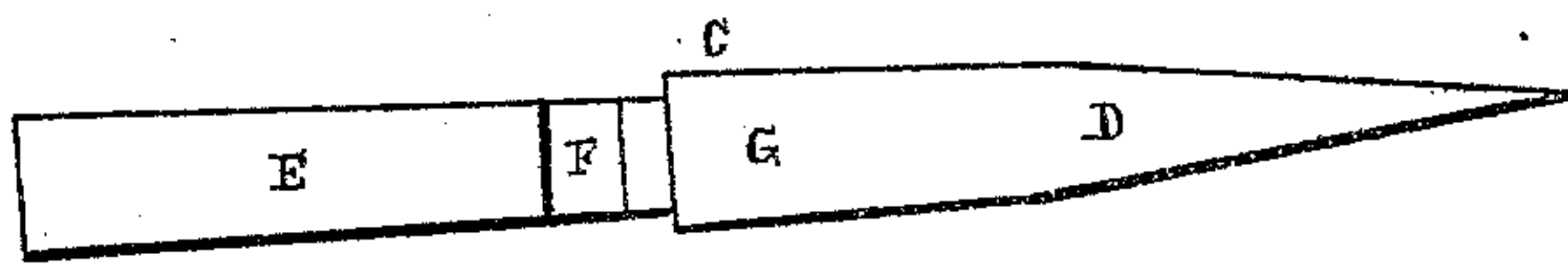
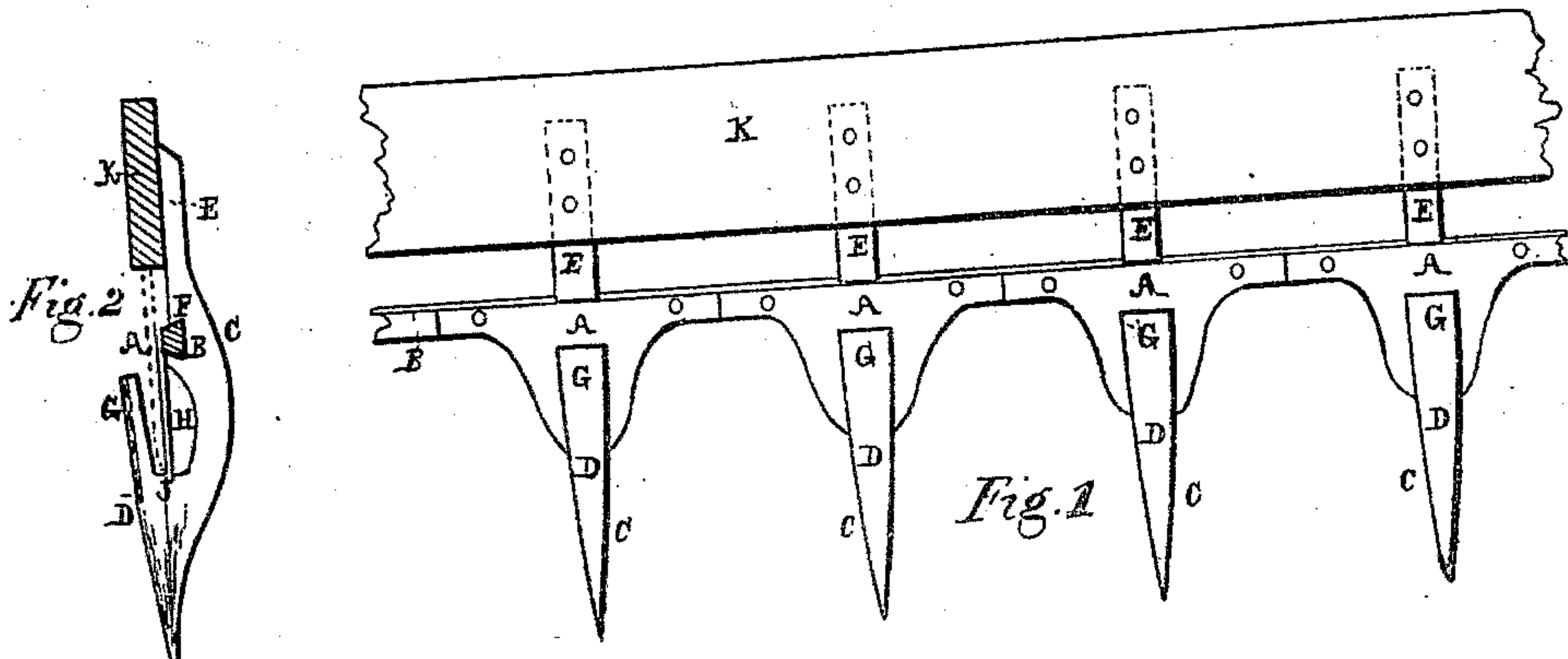


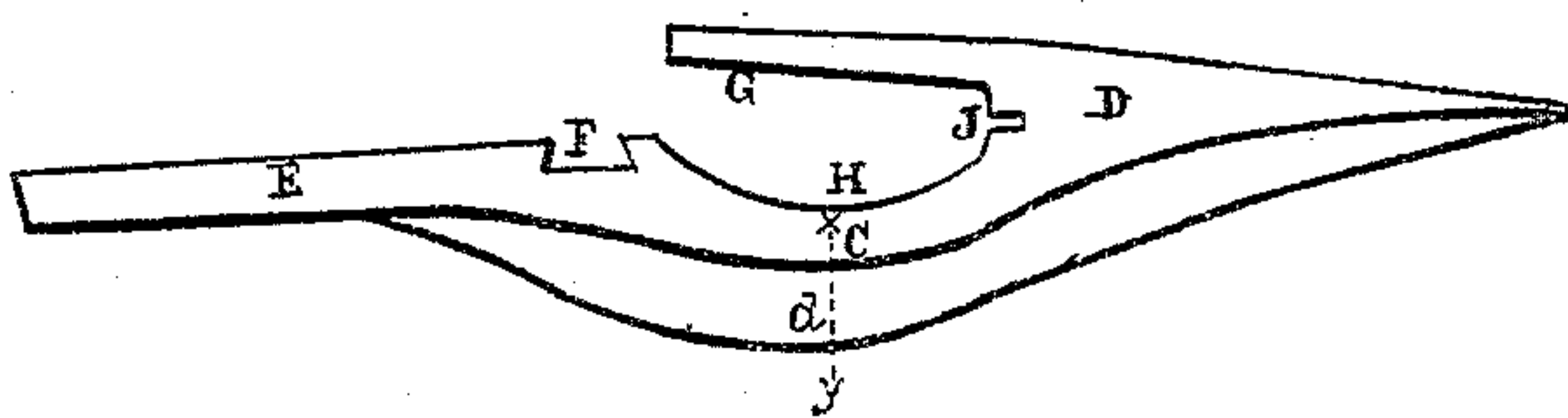
J. Schneider.
Harvester Cutter.

Patented Dec. 28. 1869.

No. 98.303.



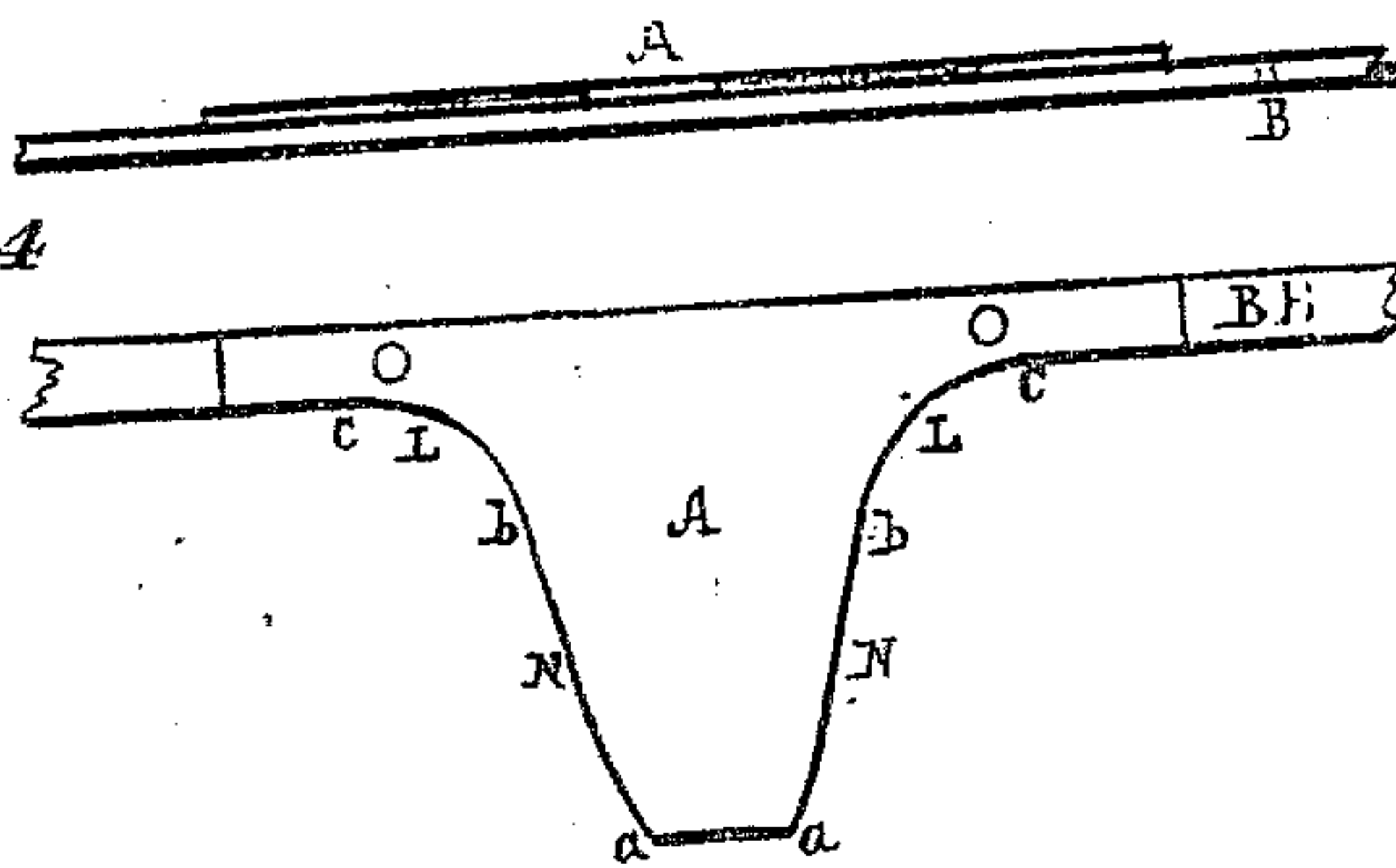
Figs. 3



Figs. 4



Fig. 5



McAmmond
et. al. Chaffin } *Witnesses.*

Jacob Schneider Inventor
by J. Abbott Attorney

United States Patent Office.

JACOB SCHNEIDER, OF CANTON, OHIO.

Letters Patent No. 98,303, dated December 28, 1869.

IMPROVED HARVESTER-CUTTER.

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, JACOB SCHNEIDER, of Canton, in the county of Stark, and State of Ohio, have invented certain new and useful Improvements in Harvester-Cutters; and I do hereby declare that the following is a full, clear, and exact description of my invention, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon, of which drawings—

Figure 1 is a plan of a portion of a finger-bar, showing my improvements.

Figure 2 is a side view of the same.

Figures 3 are plan and side views of the harvester-finger.

Figures 4 are plan and front views of an under-cutter plate and part of under-plate bar.

Figure 5 is a front view of the harvester-finger, as cut off by the plane $x y$ in figs. 3.

My invention consists, first, in constructing the harvester-fingers with a dovetail groove in their necks; and in making the under-plate bar of a dovetail section, so that said bar can be slid in at one end of the finger-bar through the dovetail grooves in the fingers, thus securing the bar, and consequently the under-cutter plates on the fingers.

My invention consists, secondly, in constructing the harvester-fingers with a dovetail groove in the neck, a slot under the lip, on the head, and a concavity under said lip, and in front of the groove in the neck, whereby both the positions of the under-plate bar and of the points of the under plates are exactly fixed, and the difficulty which might arise from grass or dirt getting on to the fingers, and preventing the under plates and bar from sliding into position, is fully prevented.

To enable others skilled in the arts to make and use my invention, I will proceed to describe its construction and operation.

In the annexed drawings, K represents the finger-bar, or a portion of a finger-bar of a harvester, to which the fingers C C are attached in an ordinary manner.

These fingers are of the form shown in figs. 3, E being the neck of the finger; D, the head; and G the lip on the head, which projects back over the cutter-knives.

The dovetail groove F is formed in the neck E, and the slot J is formed in the head D, under the lip G.

The finger is formed with the concavity H, under the lip G, and directly in front of the dovetail groove F, and the flange d is formed on the under side of the head D, and extends back to the neck E, and can be made on the side of said head, as shown in section in fig. 5; or at the centre, if desired.

The under-cutter plates a are made of steel, and are of the peculiar form shown in figs. 4, the front parts, n , of their cutting-edges, extending from a to b , being made straight, or with a slight curve at the ends a , and running toward each other at the front, $a a$, while the rear part, L, of their cutting-edges, extending from b to c , is made in a curved form, nearly or exactly circular, tangent to the part $a b$, at b , and tangent to a line parallel with the knife-bar or finger-bar at the point c .

These plates are ground off on the under side, to form the cutting-edges, the bevel of the cutting-edges being commenced near the points c , and gradually running out to the points a .

These plates are secured by rivets or screws to the bar B, which extends from one end of the finger-bar K to the other, and is of the same dovetail section as the grooves F in the finger-necks E.

The under-plate bar B, with the plates A A, is slid into the end of the finger-bar, and, when in position, the points of the plates A fit in the slots J in the head D of the fingers C, as shown in fig. 2.

The knife-bar runs on the finger-necks E, between the under-plate bar B and finger-bar K, and the knife-sections run on the plates A, and under the lip G, as shown by dotted lines in fig. 2.

The bar B is prevented from sliding in the grooves F by a screw passing through it into one of the finger-necks E.

It is evident, that by making the bar B to fit tightly in the grooves F, it will act as a truss-rod to the fingers C, and add considerably to their strength.

It is also evident, that by making the under-plate bar B of a dovetail section, and sliding it into the dovetail grooves F in the fingers, the upper surfaces of the under plates will be all drawn down parallel to the face of the fingers, and that this mode of securing the under-plate bar in the fingers, in combination with the fitting of the fronts of the under plates in the slots J in the fingers, insures a perfectly plane surface for the knives to slide on, and prevents any possibility of the knives locking against the under plates when the machine is in operation.

It is also readily seen that the concavity H, in the finger C, will prevent any grass or dirt, which might get on the face of the finger, from springing up any of the under plates as the under-plate bar was being slid into position, and disturbing the surface on which the knives slide, or even preventing the under-plate bar from being slid into position.

I am aware that under-cutter plates have been before used in combination with harvester-fingers, and I lay no claim to such plates; but

What I do claim herein as new, and of my invention, and desire to secure by Letters Patent, is—

1. The combination, on the finger-bar of a harvester, of a set of fingers, provided with dovetail grooves in their necks, an under-plate bar, with a dovetail section, and a set of under-cutter plates, one to each finger, secured on said bar, the several parts being arranged substantially as and for the purposes herein specified.

2. The harvester-finger U, constructed with head D, lip G, slot J, concavity H, and neck E, with dovetail groove F, the several parts being arranged

as shown, and the whole being used in combination with the bar B, with plate A secured thereto, substantially as and for the purpose herein specified.

As evidence that I claim the foregoing, I have hereunto set my hand, in the presence of two witnesses, this 8th day of October, A. D. 1869.

JA. SCHNEIDER.

Witnesses:

JOB ABBOTT,
A. CHOFFIN.