UNITED STATES PATENT OFFICE.

CHARLES T. MASON, JR., OF SUMTER, S. C., ASSIGNOR TO THE SOUTHERN COTTON HARVESTING COMPANY, OF SOUTH CAROLINA.

COTTON-PICKER STEM.

SPECIFICATION forming part of Letters Patent No. 283,484, dated February 12, 1881.
Application filed April 25, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES THOMAS MASON, Jr., of Sumter, Sumter county, South Carolina, have invented a new and useful Improvement in Cotton-Picker Stems, of which the following is a specification.

The invention relates to certain improvements in cotton-picker stems to adapt the same for more efficiently picking and collecting cotton from the bolls; and it consists more particularly in the construction hereinafter set forth.

In the accompanying drawings, Figure 1 is a side elevation of my improved stem. Fig. 2 is a vertical longitudinal section on the line 2 2 of Fig. 3. Fig. 3 is a transverse section on line 3 3 of Fig. 1. Fig. 4 shows a portion of one of the slotted struck-up plates. Fig. 5 is a section of same on line 5 5 of Fig. 4. Fig. 6 is a transverse section of one of said plates through the slot, and showing the tooth therein detached. Fig. 7 shows a portion of a slotted plate, A, with the tooth formed integrally of said plate.

Similar letters of reference indicate like parts.

E is the supporting rod, upon which are rigidly secured the metal flanged disks F and end pieces G G.

A A are a series of bent and slotted plates of sheet metal. The inner edges of these plates rest against the flanges of the disks F. Their ends are confined between the end pieces G G and the cap-pieces B and C, the said pieces G G and B and C being suitably formed to receive said ends, and fastening-screws H or other suitable devices being provided for securing the parts together. The plates A are strips of sheet metal arched transversely. In said plates are cut slots a, and beside said slots are formed small recesses or indentations d. In each recess d, I secure, by solder or brazing, a wire tooth, D. This tooth is bent in arched form and lies in the slot a. It is essential that the teeth be so bent or curved that their pointed ends shall lie on a level or a little below the outer surface of the plates A, so that said plates thus serve as guards, which prevent the leaves or branches of the cotton plant engaging with the teeth, but do not prevent the cotton in the bolls from being so engaged. The separate plates A are secured together at their edges, preferably by solder or brazing. The upper end piece, C, is conical in form. The lower end piece, B, is substantially wedge-shaped, and has a rounded or blunt lower edge. This construction prevents the end of the stem from becoming engaged with the plant, as sometimes happens when said end is conical and pointed. I do not claim this feature in this application, inasmuch as I have already done so in another application for Letters Patent simultaneously filed herewith.

I do not limit myself to a cotton-picker stem suspended by the rod E, inasmuch as it is in some cases desirable to have a bearing for the said rod below the stem. In such event I do not make the end piece B wedge-shaped in form, but in conical form like the cap-piece C, and the rod E is extended downward through said cap-piece to enter any suitable bearing or support.

I have found it preferable to make the plates A separate and solder them together at their adjacent edges; but I do not limit myself to this construction, inasmuch as a single sheet of metal may be used struck up in a series of convex beads, each provided with slots, &c., and each bead being the same as one of said plates A. The plate may be bent around the disks F and have its meeting ends secured by solder. Neither do I limit myself to separate teeth D inserted in the recesses of the plates A. I have found it preferable to use such separate teeth made of wire on account of their strength and elasticity; but it will be obvious that teeth may be struck out of the metal of the plate itself, within the slots a, as shown in Fig. 7 at D', in which case the recesses d are unnecessary, and are omitted.

The specific construction of a cotton-picker stem containing a convex sheet-metal plate having slots and teeth integrally formed of the plate, also of a cotton-picker stem having its periphery formed of a single sheet of metal with beads struck up thereon, said beads being provided with recesses and teeth, I do not
claim herein, these features being the subject-matter of claims in another application hereafter to be filed by me.

I claim as my invention—

1. In a cotton-picker stem, the convex sheet-metal plate A, provided with slots a, recesses d, and teeth D, secured in said recesses, the said teeth lying in the slots a, substantially as described.

2. In a cotton-picker stem, a series of convex sheet-metal plates, A, provided with slots and teeth, as described, the said plates being secured together at their adjacent edges by solder or otherwise, substantially as described.

3. In a cotton-picker stem, the combination of the plate or plates A, having the slots a, recesses d, and teeth D, with the supporting-pieces F and G, cap-pieces B and C, and rod E, substantially as described.

4. In a cotton-picker stem, a periphery or outer envelope of sheet metal, substantially in the form of a series of parallel longitudinal convex beads, a series of slots being formed in each bead, and teeth arranged in said slots, substantially as described.

CHARLES T. MASON, JR.

Witnesses:

M. F. BURNS,
PARK BENJAMIN.