A. O. SCHULTZ.

Cotton-Augers.

No. 158,985. Patented Jan. 19, 1875.

Fig. 1.

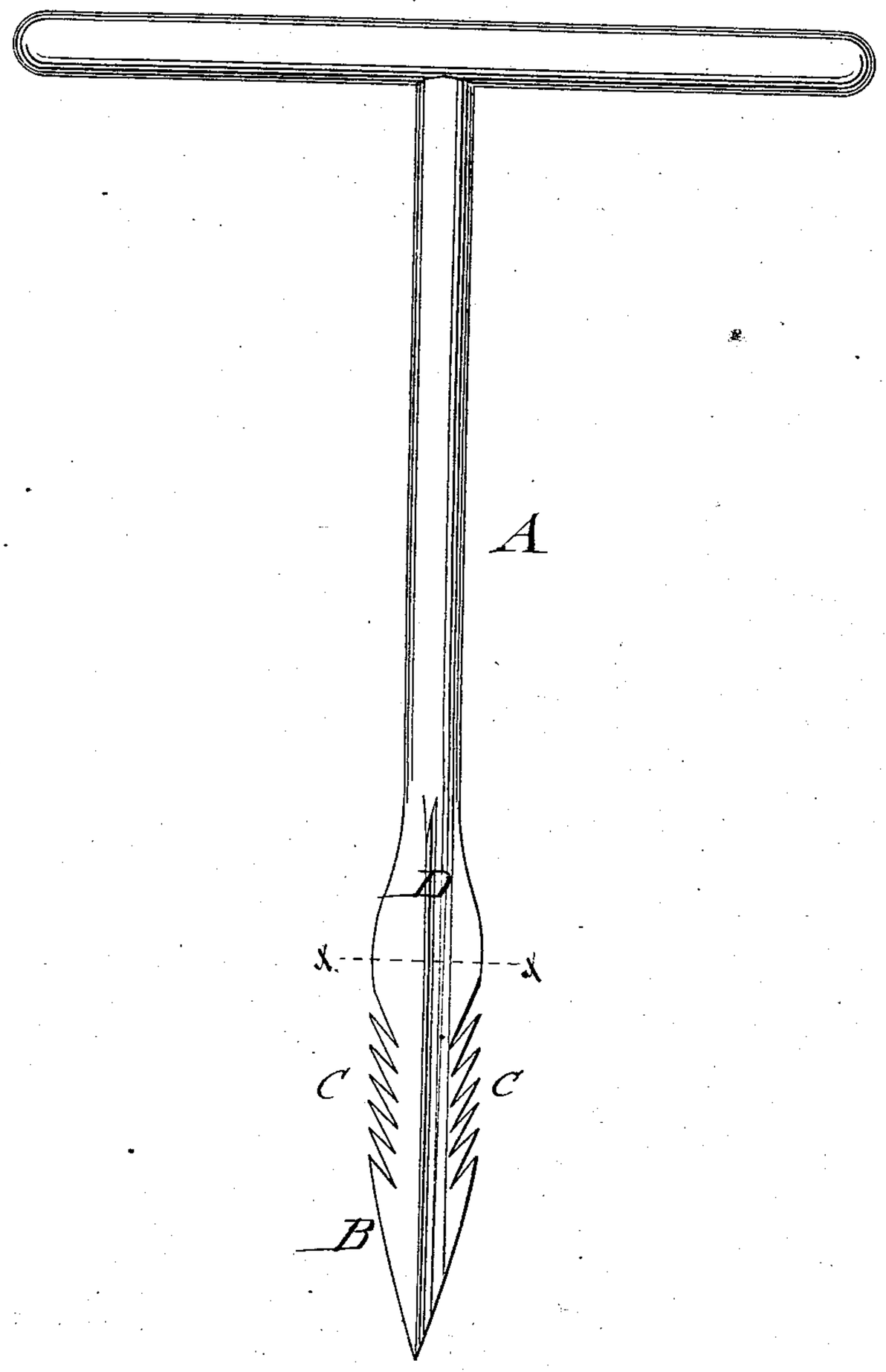

Fig. 2.

WITNESSES:

E. Wolff

A. F. Perry

INVENTOR:

A. O. Schultz

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

ALBERT O. SCHULTZ, OF MEMPHIS, TENNESSEE.

IMPROVEMENT IN COTTON-AUGERS.

Specification forming part of Letters Patent No. **158,985**, dated January 19, 1875; application filed November 14, 1874.

To all whom it may concern:

Be it known that I, ALBERT O. SCHULTZ, of Memphis, Shelby county, Tennessee, have invented a new and Improved Cotton-Auger, of which the following is a specification:

Figure 1 represents a side elevation of my improved cotton-auger, and Fig. 2 a horizontal section of the same on the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention relates to an improvement in cotton-augers, by which they may be introduced with greater facility into the bale; made of greater strength; used for longer time, as the teeth may be resharpened and the blade widened; and, lastly, the sample be drawn from the bale in an easier and fuller manner.

My invention consists of a cotton-auger with upper and tapering blade, and intermediate upward-inclined teeth, being provided with symmetrically-fluted sides for reducing the cross-section, and giving thinner and more pointed teeth and blades.

A represents my improved cotton-auger for taking out samples from cotton-bales, which is made of the best cast-steel, and provided at the lower end with a tapering-pointed blade, B, with intermediate upwardly-inclined teeth C at each side, and a top blade, D, which gradually runs into the stem or shank of the auger.

These augers have hitherto been made with the general arrangement of parts described for the purpose of being forced into a bale, and withdrawing a sample of cotton from the middle of the same, and have been constructed with flat diamond-shaped or rhombic cross-section, which caused the edges to get easily dull, requiring frequent resharpening.

For the purpose of obviating these objections I construct the auger with fluted cross-section, as indicated in Fig. 2, in the manner of a bayonet-fluting, continuing the fluting symmetrically at both sides from the stem to the point, along the teeth and blade parts. This produces thinner and sharper blades and teeth, so that the auger forces its way more readily into the cotton, and reduces, by the smaller cross-section, the resistance to the entering of the same.

The teeth can be easier, and for a longer time, resharpened without getting too blunt, and the sample quicker, and with a fuller supply, withdrawn from the bale.

After the teeth have been filed down many times the blade can be rewidened in the swage, so that a stronger, more durable, and in every way more effective, auger for cotton-bale is thus obtained.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

As an improvement in cotton-augers, an auger constructed with symmetrically-fluted cross-section, extending along blades and teeth from stem to tapering point, substantially in the manner specified and set forth.

ALBERT OSCAR SCHULTZ.

Witnesses:

JNO. S. TOOF,

W. B. GALBRATH.