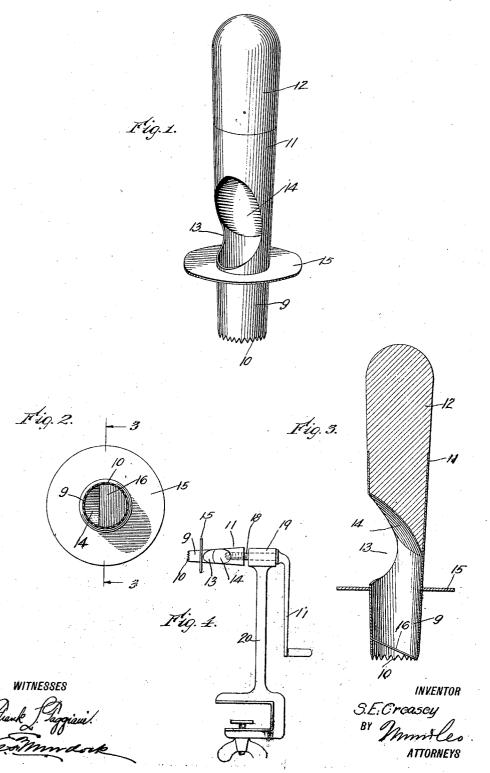
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CORE REMOVING TOOL.

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UNITED STATES PATENT OFFICE.

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CORE-REMOVING TOOL.

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Specification of Letters Patent.

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To all whom it may concern:
Be it known that I, SAMUEL E. CREASEY, a citizen of the United States, and a resident of Sanford, in the county of York and State 5 of Maine, have invented a new and Improved Core-Removing Tool, of which the following is a full, clear, and exact descrip-

Among the principal objects which the 10 present invention has in view are to provide means for readily removing the core from fruit of certain characters, such as grapefruit or other citrous products; to perform the operation with despatch and neatness; 15 to reduce the need for handling the fruit, with the consequent soiling of the hands; and to produce a tool of the character mentioned at reduced cost.

Drawings.

Figure 1 is a perspective view of a core-removing tool constructed in accordance with the present invention;

Fig. 2 is a bottom end view of the same; Fig. 3 is a longitudinal section, the section being bent as on the line 3—3 in Fig. 2; and Fig. 4 is a side view of a power attachment used for operating the said tool.

As seen in the drawings the tool has a 30 hollow tubular body 9 which is slightly tapered, terminating at the lower and advancing end in sharp saw-cutting teeth 10. The upper end of the body 9 forms a ferrule 11 to receive a handle 12.

Intermediate the ends of the body 9 a delivery orifice 13 is formed through which the macerated core of the fruit being operated upon is delivered. To assist the delivery referred to an inclined shield 14 is 40 disposed transversely of the body 9 and is supported in operating position by the handle 12. The shield 14 is rigidly and permanently secured to the body 9.

To regulate the depth to which the cutting 45 end of the tool is to operate, a shield 15 is removably attached to the body. In practice one shield 15 is usually employed and, as shown in the drawings, the central perforation of the said shield permits the extension 50 thereof over the body 9 to a position adjacent the lower end of the orifice 13. It is obvious that if it be desired to limit the insertion of the cutting end of the body 9 further than that shown in the drawings, this 55 may readily be accomplished by employing

tral opening which would engage the tapered side of the body 9 at a point nearer the cutting edge thereof.

Just inside of the tubular body 9, and dis- 60 posed in an inclined position, is a cutting blade 16. The inclination of the blade 16 serves the added function of lifting the material severed thereby from the stock or body of the fruit being operated upon.

When using the tool constructed as above described and as shown in the accompanying drawings, the operation is as follows: The person using the tool grasps the same by the handle 12, places the guiding edge 10 70 thereof in line with the axis of the core of the fruit, and depresses the said cutting edge with a revolving or rotary movement. This serves to sink the cutting end of the tool into the fruit until the cutting blade 16 is 75 brought in contact therewith, when it will be found that the lower end of the inclined blade will engage and cut the core, removing the same from the body of the fruit for delivery upward over the inclined blade adja- 80 cent the inner wall of the tubular body 9. With the continued revolution of the tool the blade 16 sinks farther into the body of the fruit and the separated or macerated portion thereof continues to pass up the incline of the blade 16, taking thereby a spiral course relative to the wall of the body 9, this being in reality a straight line, due to the fact that the severed or macerated portions are not revoluble by the operation of 90

The operation above set forth is continued until the shield 15 engages the outside of the fruit and serves to arrest the further introduction of the cutting edge of the tool there- 95 into. At the latter end of the operation it will be found that the severed or macerated portion of the fruit, to wit, the core thereof, has been partially delivered through the orifice 13.

The tool herein disclosed is used principally for the purpose of removing the core from grapefruit, and generally from a half section thereof. A great saving of time is found to be effected by its employment. The 105 core of the fruit is also removed more carefully and thoroughly and with less trouble to the operator.

When using the arrangement shown in Fig. 4 of the drawings, where the tool is 110 manipulated by means of a crank and a a shield 15 having a relatively smaller cen- mandrel having a screw-threaded portion 18

mounted in a bearing 19 on a bracket 20, the screw-threaded portion 18 engages a block introduced in the ferrule 11, the handle 12 being removed or modified in form. bracket 20 is intended for use in connection with a table, bench, or other suitable support. When so arranged the tool is most. advantageously employed for removing the cores of such fruit as the apple, pear, or 10 similar soft-centered or cored bodies.

Claims.

1. A tool as characterized having a hollow. tubular body provided with a delivery orifice intermediate the ends thereof, said body having at the receiving end a series of cutting teeth; a lifting cutter rigidly mounted in said body to extend partially across the same, said cutter being inclined to the axis 20 of said body and provided with a straight cutting edge, the depressed end whereof is adjacent the plane of said teeth, said cutter being disposed to form an elevating surface at the upper side thereof for lifting the ma-25 terial cut from the body of the fruit.

2. A tool as characterized having a hollow tubular body provided with a delivery orifice intermediate the ends thereof, said body having at the receiving end a series of cutco ting teeth; a lifting cutter rigidly mounted

in said body to extend partially across the same, said cutter being inclined to the axis of said body and provided with a straight cutting edge, the depressed end whereof is adjacent the plane of said teeth, said cutter 35 being disposed to form an elevating surface at the upper side thereof for lifting the material cut from the body of the fruit; and a delivery shield mounted in said body adjacent the delivery opening therein for eject-40 ing the severed portions of the fruit from

said tubular bodŷ. 🗼

3. A tool as characterized having a hollow tubular body provided with a delivery orifice intermediate the ends thereof, said 45 body having at the receiving end a series of cutting teeth; a lifting cutter rigidly mounted in said body to extend partially across the same, said cutter being inclined to the axis of said body and provided with a 50 straight cutting edge, the depressed end whereof is adjacent the plane of said teeth, said cutter being disposed to form an elevating surface at the upper side thereof for lifting the material cut from the body of the 55 fruit; and a shield removably disposed on said tubular body for regulating the depth of the insertion of the tool in the fruit.

SAMUEL ELLIOTT CREASEY.