

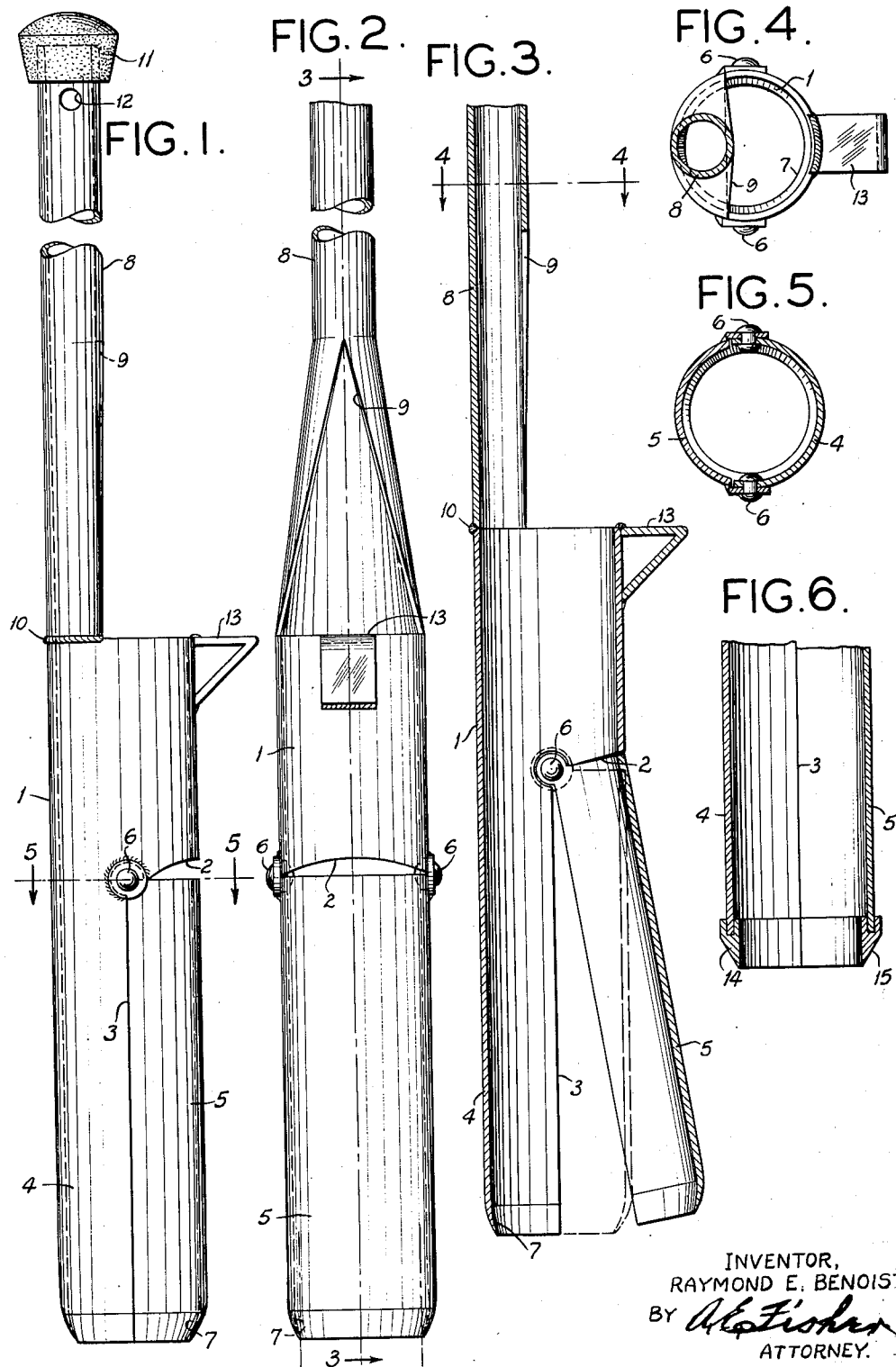
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HOLE DIGGING AND PLANTING DEVICE

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HOLE DIGGING AND PLANTING DEVICE

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2 Claims. (Cl. 294—50.9)

1

This invention pertains to a device for digging holes in the ground for planting seeds or plants or, in larger sizes, for post holes and the like.

Generally stated, the device comprises a cutting tube of a diameter to cut the size of hole desired. A tube of smaller size is secured to the upper rim of the cutting tube to provide a handle therefor. The lower end portion of the cutting tube is cut away to form a half-tube and a complementary half-tube section is fitted into the cut-away portion and hinged at its upper end to the cutting tube to form a complete tube. The lower ends of the half-tubes are formed to a cutting edge for the complete tube.

A preferred embodiment of this invention is illustrated in the accompanying drawing, in which

Figure 1 is a side view of a device embodying this invention,

Figure 2 is a front view of the same,

Figure 3 is a section on line 3—3 of Fig. 2,

Figure 4 is a section on line 4—4 of Fig. 3,

Figure 5 is a section on line 5—5 of Fig. 1, and

Figure 6 is a fragmentary section showing a modified form of cutting edge.

Referring now to the drawing, 1 designates a cutting tube of metal or other suitable material strong enough to withstand the stresses involved in its use. The lower end of this tube is cut away at 2—3 for a portion of its length and for about half its diameter, forming a half-tube 4. A complementary half-tube 5 is fitted into the opening 2—3 so as to form with the half-tube 4 a complete cutting tube. The half-tube 5 is hinged to the tube 1 at 6, 6 so that it may swing outward to the position shown in Fig. 3. The lower ends of the half-tubes 4 and 5 are flush and are finished to form a continuous cutting edge. The tube wall at this end may be swaged inwardly slightly as indicated at 7 to form an inner ledge adapted to support the earth core cut out.

A tube 8 provides a handle for the cutting tube. The handle tube is split at 9 for a sufficient distance from its lower end, and the split end is spread to fit the upper rim of the cutting tube 1 and is welded thereto at 10. The handle extends in prolongation of the tube 1 for easy manipulation of the latter. It may be provided with a hand pad 11 and a hole 12 adapted to receive a bar to provide leverage for rotating the tube. A foot plate 13 may be attached to the upper end of the tube 1 for applying foot pressure to sink the tube into the ground.

The cutting edge for the tube may be provided in the form of a pair of half-collars 14 and 15 secured to the lower ends of the half-tubes 4 and 5

2

as shown in Fig. 6. These half-collars are shown sharpened to a cutting edge. They may, however, be provided with teeth as disclosed in my co-pending application Serial No. 316,518, filed October 23, 1952.

In the use of this device the cutting tube, in the position of Fig. 1, is forced into the ground by manipulation of the handle 8, assisted if necessary by foot pressure on the upper end of the tube 1 and the plate 13, and also by rotation of the tube with the help of a bar inserted in the hole 12. By then lifting the tube the core cut out is lifted with it. Then, upon turning the implement to bring the half-tube 5 to the under side, said half-tube swings open and the core may be shaken out.

I claim:

1. A hole digging device including a vertically extending main lower member having an upper end portion of full cylindrical formation and a lower ground-engaging portion of semi-cylindrical formation, said lower portion having vertical edges at its opposite sides, the upper portion having a lower edge extending from the upper end of the semi-cylindrical portion at an obtuse angle to the axis of said portions and constituting a limit stop, an auxiliary lower member of semi-cylindrical formation having normally vertical side edges engageable with the vertical edges of said main portion and forming a complete cylinder when so engaged, the upper end of the auxiliary member having a top edge perpendicular to the axis of said auxiliary portion, and pivot means connecting the vertical and perpendicular edge portion of the auxiliary member with the vertical and obtuse angled edge portions of the main member whereby the said lower edge of the main member and the upper edge of the auxiliary member form limit stops to pivotal movement of said auxiliary member, and ground cutting means at the lower end of each member.

2. A hole digging device including a vertically extending main lower member having an upper end portion of full cylindrical formation and a lower ground-engaging portion of semi-cylindrical formation, said lower portion having vertical edges at its opposite sides, the upper portion having a lower edge extending from the upper end of the semi-cylindrical portion at an obtuse angle to the axis of said portions and constituting a limit stop, an auxiliary lower member of semi-cylindrical formation having normally vertical side edges engageable with the vertical edges of said main portion and forming a complete cylinder

3

der when so engaged, the upper end of the auxiliary member having a top edge perpendicular to the axis of said auxiliary portion, and pivot means connecting the vertical and perpendicular edge portions of the auxiliary member with the vertical and obtuse angled edge portions of the main member whereby the said lower edge of the main member and the upper edge of the auxiliary member form limit stops to pivotal movement of said auxiliary member, and ground cutting means at the lower end of each member, said ground-engaging means including a reinforcing

4

segment fixed to each of said members and provided with a cutting edge at its bottom end.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
1,407,323	Stevens	Feb. 21, 1922

FOREIGN PATENTS

Number	Country	Date
150,844	Great Britain	Sept. 16, 1920