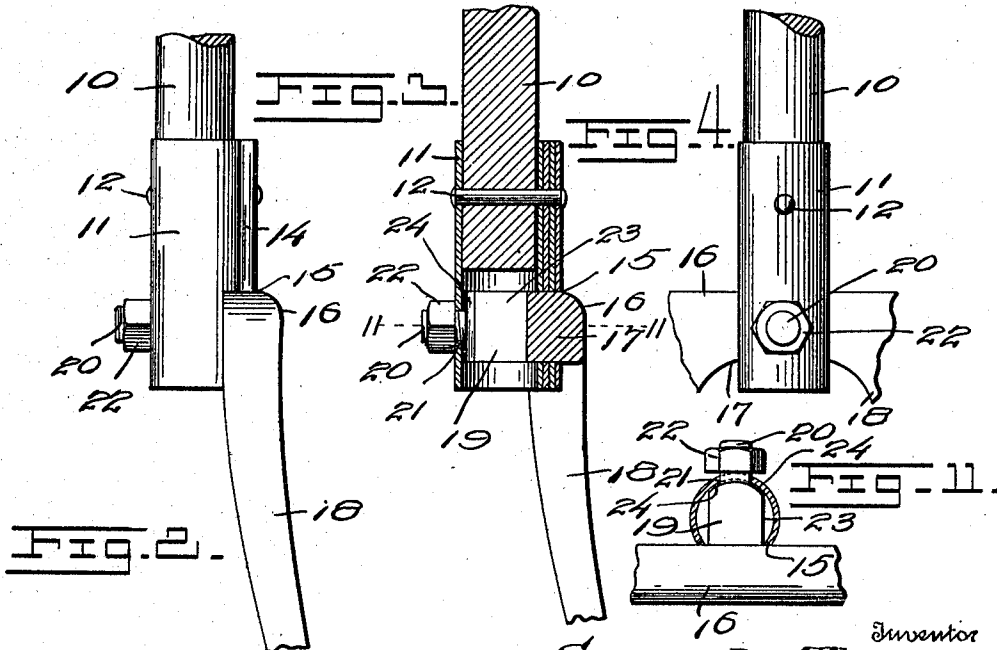
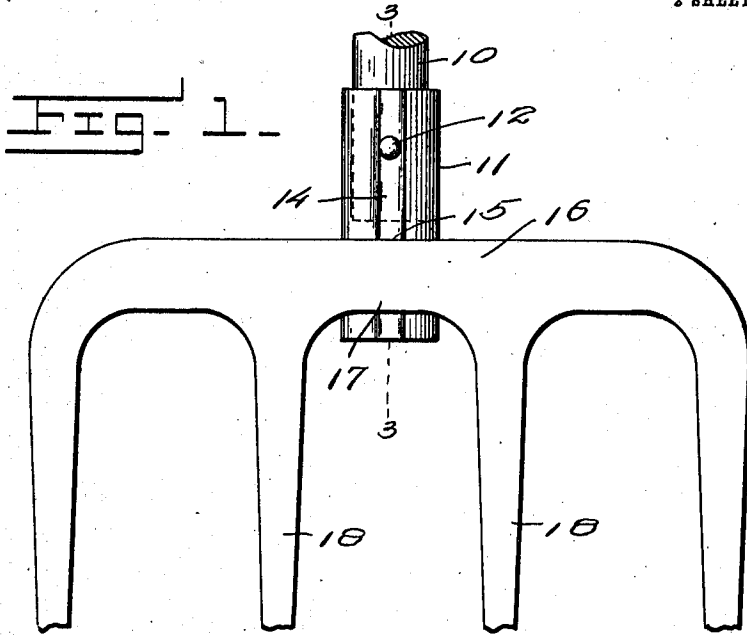


S. THOMAS.
GARDEN IMPLEMENT.
APPLICATION FILED JUNE 24, 1910.

974,539.

Patented Nov. 1, 1910.

2 SHEETS—SHEET 1.



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Samuel Thomas

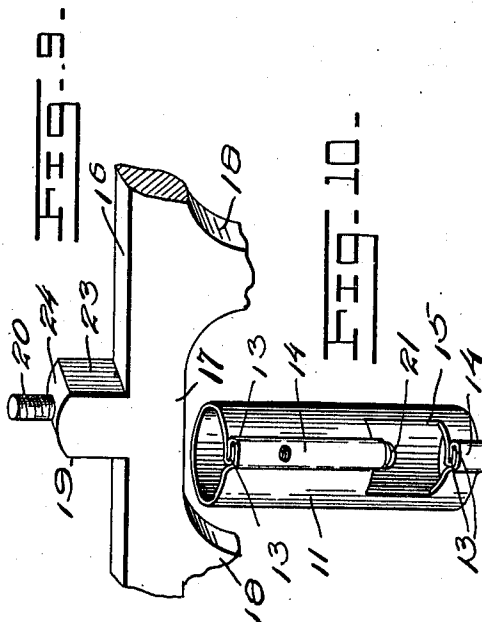
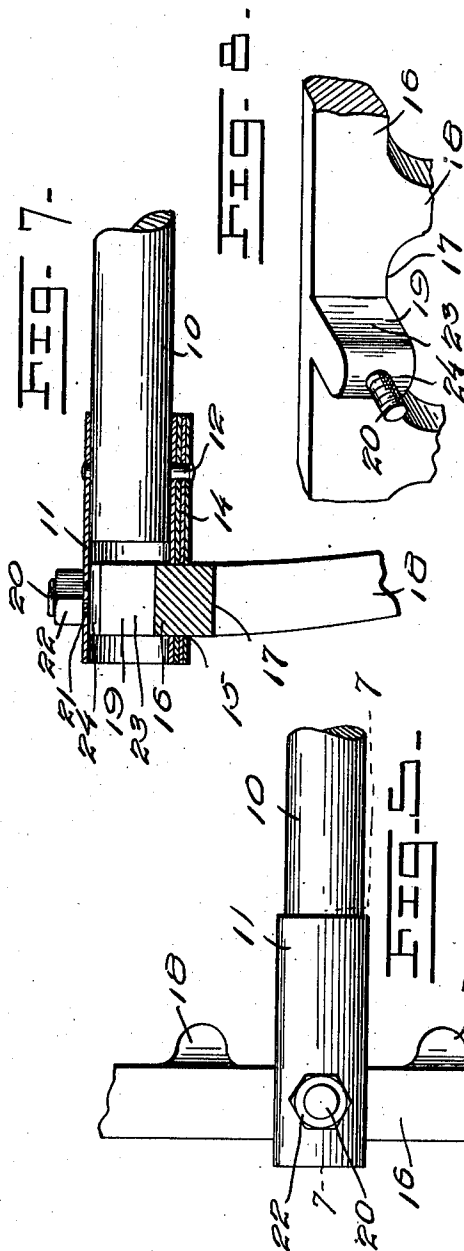
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2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

SAMUEL THOMAS, OF RANDALL, MINNESOTA.

GARDEN IMPLEMENT.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, SAMUEL THOMAS, a citizen of the United States, residing at Randall, in the county of Morrison and State of Minnesota, have invented certain new and useful Improvements in Garden Implements, of which the following is a specification.

This invention relates to improvements in garden tools, and particularly to forks and hoes.

One object of the present invention is to form a head for the above-named tools, which will be simple, effective, and cheap of manufacture.

Another object is to provide a garden tool head and fastening therefor, of such construction that the weight of the user may be applied at the point necessary for the proper operation of the tool in digging.

A still further object is to provide a tool head of such construction that the same may be readily attached or detached from the handle, and is securely clamped thereto and prevented from turning.

With these and other objects in view, the invention consists in the construction, combination, and arrangement of the parts as will be more fully hereinafter described and pointed out in the claims, but it will be understood that changes in the specific structure may be made within the scope of the claims without departing from the spirit of the invention.

In the drawings; Figure 1 is a front elevation of a fork made in accordance with my invention, Fig. 2 is a side elevation of the same, Fig. 3 is a section on the line 3—3 of Fig. 1, showing the fastening means for the handle, Fig. 4 is a rear elevation of the same, Fig. 5 is a top plan view of the device applied as a weeding hoe, Fig. 6 is a side elevation of the same, Fig. 7 is a section on the line 7—7 of Fig. 5. Fig. 8 is a detailed perspective view of the fork head, Fig. 9 is a similar view of the hoe head, and Fig. 10 is a similar view of the fastening sleeve for the heads, Fig. 11 is a section on the line 11—11 of Fig. 3.

Referring now more particularly to the drawings, it will be seen that 10 represents the handle of a fork to which a head and fastening, made in accordance with my invention, is applied. A sleeve 11 is slipped on the lower end of the handle, and secured thereto in any suitable manner, as the rivet

12 shown in the drawings. The sleeve is formed of a single piece of sheet metal, rolled in the shape of a tube, with its meeting edges 13 bent into a double lap seam 14, which forms a longitudinal strengthening rib, running the entire length of the tube or sleeve. In the side of the sleeve and adjacent one end thereof, and through the rib or seam 14 is formed a rectangular cut 15, which extends on either side of the rib and into the body of the sleeve.

A fork head 16 is adapted to have its arch 17 passed into this rectangular cut, and said arch being rectangular in cross section will be held therein, and prevented from turning. The arch is so applied to the sleeve that the central portion between two of the tines 18 will enter the cut. In the form shown in Figs. 1 to 4, inclusive, the tines 18 are arranged to extend in a plane parallel with the handle. Formed integrally with the arch and extending laterally therefrom is a stub bolt 19, having the reduced and threaded portion 20, adapted to pass through a circular opening 21 formed in the side of the sleeve at a point diametrically opposite to the rectangular cut, and have applied to its end a fastening nut 22. The bolt 19 is rectangular in cross section, at 23, but has the shoulder adjacent the threaded portion rounded, as at 24, and is adapted to fit the rounded portion of the sleeve 11 adjacent the opening 21.

From the foregoing it will be seen that the fact that the handle is in a plane to the rear of the tines of the fork, will produce the proper leverage when a lifting force is exerted on the fork in digging, and that there will be no perceptible jar on forcing the tool into the ground.

In the form shown in Figs. 5 to 10 inclusive, I have represented the device as applied to a weeding hoe. In this form the tines 18 extend in a direction diametrically opposite to the stub bolt 19, but the sleeve 11 and fastening means is the same as in the other form, the only difference being the arrangement of the tines, so that they extend at right angles to the handle, instead of parallel thereto, as in the case of the fork. When the nut is tightened, the parts are securely clamped together, the sleeve being drawn tightly against the bolt and arch.

The rib or seam 14, not only serves to strengthen the sleeve 11, but takes up the wear of the arch of the head against the

sleeve. The lower edge of the sleeve, adjacent the arch of the tool head, acts as a fulcrum to the handle when the same is used as a lever in the act of raising the earth being dug. The rectangular opening in the sleeve and the shape of the shoulder of the stub bolt prevent any lateral or transverse movement of the tool head.

From the foregoing it will be readily seen that I have provided a simple, cheap, and effective tool for use in gardening, and one which is not easily broken or deranged. The head of the tool being easily removable makes the same readily repairable.

What is claimed is:

1. A garden tool comprising a handle, a sleeve secured at one end thereof, a tool head having an arch, the sleeve having an opening in one side adapted to receive a portion of said arch and an opening in the opposite side thereof, a threaded extension on said arch positioned within the sleeve and extending through the second opening, and a fastening nut on the threaded extension for holding the head to the sleeve.

2. A garden tool comprising a handle, a sleeve secured at one end of said handle, a tool head having an arch and tines formed integrally therewith, said sleeve having a longitudinal rib on one side thereof, said sleeve having a rectangular opening formed in said rib and extending laterally on either side thereof, the arch of said tool head being rectangular in cross section and adapted to be positioned within said opening, a lug

on said arch projecting within the sleeve, a shoulder on said lug fitting within the sleeve, a threaded extension on the lug and projecting through an opening in the opposite side of the sleeve, and a clamping nut on the outer end of said threaded extension.

3. A garden tool comprising a handle, a cylindrical sleeve secured on one end of the handle, a tool head having an arch and tines formed integrally therewith, said sleeve having a longitudinal rib formed by overlapping the meeting edges of said sleeve, the sleeve having a rectangular opening cut through said rib and extending on opposite sides of said rib, the arch of said head being rectangular in cross section and adapted to be seated within said rectangular opening, a lug projecting laterally from said arch and extending within said sleeve, the said lug having a shoulder curved to fit the inner wall of the sleeve, a threaded extension on said lug projecting through a circular opening formed in the diametrically opposite wall of the sleeve, and a clamping nut on the threaded extension, whereby the arch and the sleeve will be securely bound together, the said curved shoulder and said nut clamping a portion of the sleeve therebetween.

In testimony whereof I affix my signature, in the presence of two witnesses.

SAMUEL THOMAS.

Witnesses:

G. W. MASSY,
E. E. HALL.