J. H. BIEHL.

COMPOUND IMPLEMENT.

APPLICATION FILED NOV. 6, 1912.

1,073,565. Patented Sept. 16, 1913.

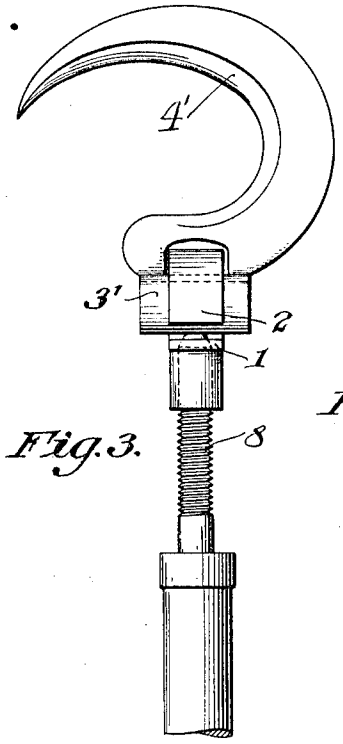


Fig. 3.

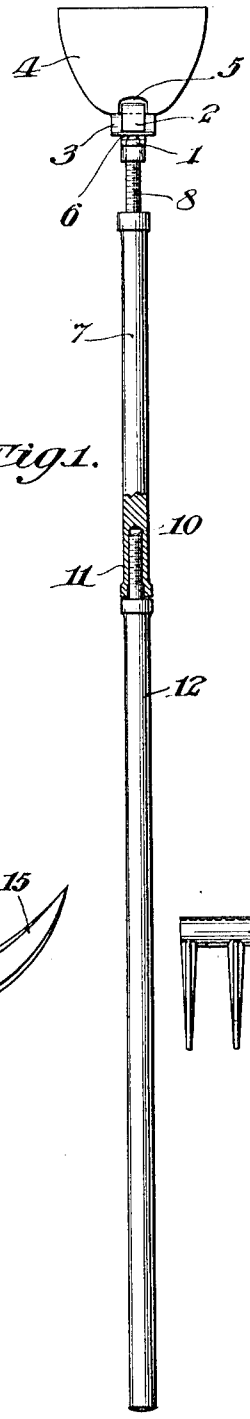


Fig. 1.

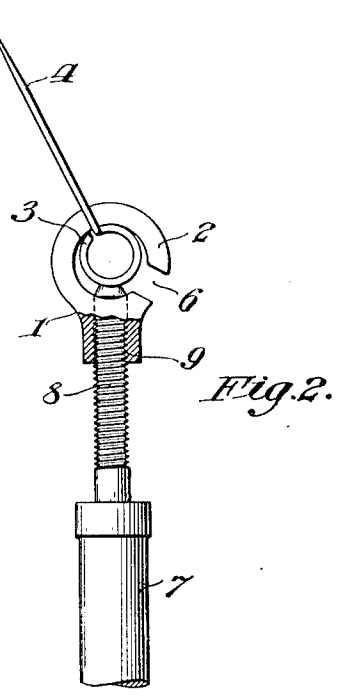


Fig. 2.

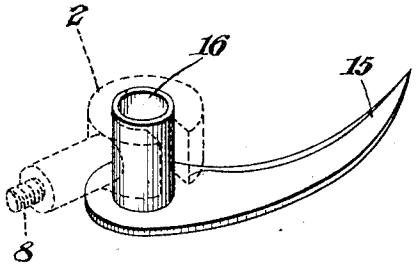


Fig. 5.

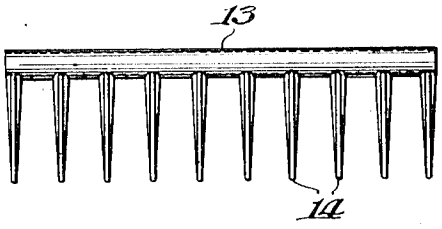


Fig. 4.

WITNESSES:

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COMPOUND IMPLEMENT.

1,073,565. Specification of Letters Patent. Patented Sept. 16, 1913.

Continuation of application Serial No. 528,446, filed November 17, 1909. This application filed November 6, 1912. Serial No. 729,755.

To all whom it may concern:

Be it known that I, JOHN H. BIEHL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain Improvements in Compound Implements, of which the following is a specification.

This invention is a compound implement having improved means for attaching various tools to a handle in various positions to adapt such tools for various uses.

In its preferred form, my invention consists of a handle having fixed thereto a head comprising a split sleeve or collar in which the hubs of various tools are adapted to be slipped, engaged and held in position by a screw connecting the head and handle.

In the drawings, Figure 1 is a view, partly in section, of a form of my invention; Fig. 2 is a side elevation of the top of the same, at right angles to the view shown in Fig. 1, with the tool at an angle; Fig. 3 is a view of my invention employing a different tool; Fig. 4 is a view of a further tool adapted for use in my invention; and Fig. 5 is a perspective view of a modified form of tool adapted for use in my invention.

As shown in Figs. 1 and 2 of the drawings, the head 1 has thereon the cylindrical split sleeve 2 adapted for receiving a cylindrical hub 3 on a blade 4 having an aperture 5 therethrough, the hub being formed by rolling the metal of the blade. These parts are engaged by moving the hub longitudinally through the sleeve, with the blade in registration with the sleeve's slot 6, until the aperture registers with the slot, when the blade is turned so that the rim of the sleeve extends through the aperture. A handle 7 has a threaded shank 8 extending from a connection therewith and screwed into the threaded socket 9 of the head to engage the hub 3 and hold the blade at the desired angle to the handle. As the blade can be held at any desired angle to the handle, the implement is adapted for performing several operations, as hoeing, scuffing and edging. The handle 7 is provided with a threaded socket 10 for engaging a threaded shank 11 of an extension handle 12, to be used or removed, depending upon the operation in hand.

As shown in Fig. 3, the head 1 has its sleeve 2 connected with the hub 3′ of a hook blade 4′, the shank 8 of the handle 7 engaging the hub to hold the plane of the blade at the desired angle to the handle for several operations, as pruning, trimming, and the like.

The several forms of tools usable with the head are further illustrated by Figs. 4 and 5. The rake head shown in Fig. 4 has a cylindrical back 13 adapted to be engaged in the head and secured by the shank 8 with the teeth 14 at any desired angle to the handle 7. The sickle blade 15, shown in Fig. 5, has the cylindrical tang 16 fixed at right angles thereto, whereby it may be fixed in the head 1 by the shank 8.

The features characteristic of the foregoing improvements can be embodied in various tools to be used with the same head and handle, so that a compact set can be provided having the several tools necessary for gardening.

This application is a continuation of my prior application Serial #528,446, filed Nov. 17, 1909.

Having described my invention, I claim:

1. An implement comprising a head having a split sleeve thereon, a tool having a bearing adapted to be engaged by said sleeve, and a handle having means engaging said bearing for fixing said tool and sleeve together, said sleeve being split transversely to the direction of movement of said means.

2. An implement comprising a head having a split sleeve, a tool having a cylindrical member adapted to be engaged in said sleeve, said sleeve being split substantially parallel to the axis of said member, and a handle having a shank which is movable in said head to engage said member.

3. An implement comprising a head having a split sleeve, a tool having a bearing member within and a member exterior to said sleeve, said exterior member containing an aperture for passing said sleeve, and

means for engaging said bearing member and said sleeve for securing them together.

4. An implement comprising a head having a sleeve, a tool comprising a blade having a rolled edge forming a hub disposed in said sleeve, and a member movable relatively to said head and engaging said hub.

In witness whereof, I have hereunto set my name this 25th day of October, 1912, in the presence of the subscribing witnesses.

JOHN H. BIEHL.

Witnesses:
Jos. G. Denny, Jr.,
Geo. A. Cunney.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."