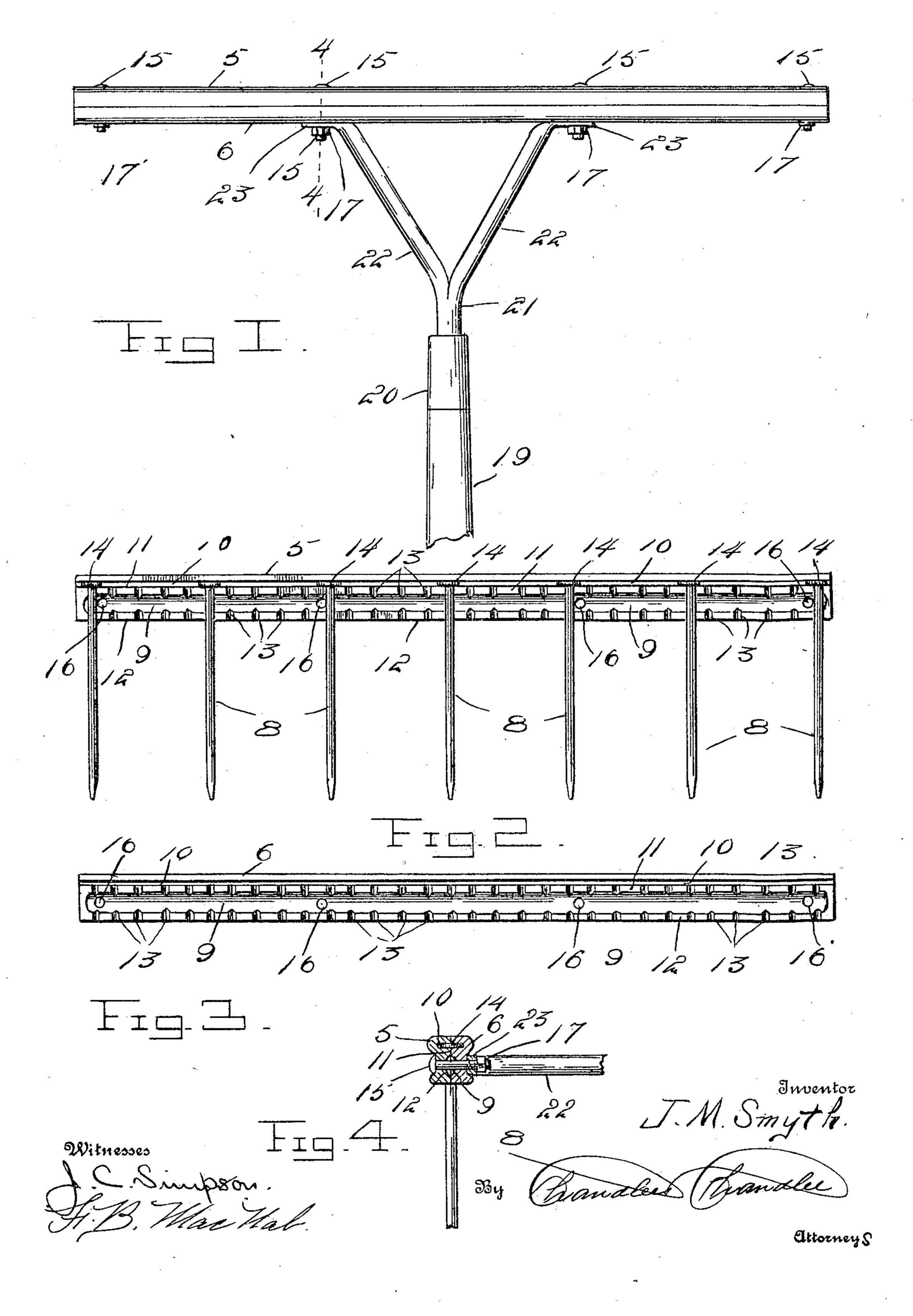
J. M. SMYTH.

GARDEN RAKE.

APPLICATION FILED JUNE 8, 1906.



## UNITED STATES PATENT OFFICE.

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## GARDEN-RAKE.

No. 837,140.

Specification of Letters Patent.

Patented Nov. 27, 1906.

Application filed June 8, 1906. Serial No. 320,782.

To all whom it may concern:

Be it known that I, John M. Smyth, a citizen of the United States, residing at Plato, in the county of Pulaski, State of Kentucky, have invented certain new and useful Improvements in Garden-Rakes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to garden-rakes in which the teeth are made detachable and in which there is provision for the employment of as many or as few teeth as may be desired.

It is the object of my invention to provide a garden-rake in which wire nails of varying size may be used for teeth, and in which the teeth may be held with the utmost security when adjusted for use, and from which they may be removed and replaced with the greatest readiness when such thing is desired.

The invention consists of a garden-rake having a head-bar composed of two members grooved longitudinally to form shank-holding ribs and a head-retaining groove, half-round notches being formed in the ribs, in which the shanks of the nail-teeth may lie, the two members being adapted to be clamped together to hold the teeth firmly in place. Bolts and nuts are employed to secure the two members composing the head-bar together, and two of the same perform the additional office of securing the divergent arms of the shank of the handle to the head-bar.

The foregoing explanation, in view, of the annexed drawings, is all that is essential at this point and time to indicate the nature of the invention, which will be hereinafter described in detail and then pointed out with particularity in the subjoined claims.

The said drawings and the numerals of reference marked thereon form a part of this specification and are to be referred to as such.

Figure 1 of the said drawings is a plan view of my improved rake complete. Fig. 2 is an elevation of the front half of the head with the teeth in place. Fig. 3 is a similar view of the rear half. Fig. 4 is a section on line 4 4 of Fig. 1.

Similar figures of reference designate simi-

lar parts or features, as the case may be, wherever they occur.

In the drawings, 5 designates the outside member, and 6 the inside member, of the headbar which carries the rake-teeth 8. Both members are grooved longitudinally and centrally, as at 9, and each is provided near 60 its upper edge with a narrow longitudinal slot 10. By this construction a rib, or what would be ribs 11 and 12, are formed below the slot 10 and the groove 9, respectively. The said features 11 and 12 are each provided 65 at short intervals with half-round notches 13 for the reception of bearings of the shanks of the wire nails 8, forming the teeth, the heads 14 of said nails resting in the slot 10. Upon bringing the two members together the half- 70 round notches will form what will practically be round holes, through which the shanks of the nail-teeth 8 will extend and be clamped when the bolts 15 are extended through the holes 16 in the inside member and the nuts 17 75 are turned on their inner ends, as seen in Fig. 1.

19 designates the wooden handle, of usual form, having a ferrule 20 on its lower end through which and into the handle then pro- 80 jects the shank 21 of the divergent arms 22, provided at their ends with apertured angular bends 23, by which the arms are secured to the head-bar, two of the bolts 15 passing through the apertures of the angular bends 85 and having their nuts 17 turned securely down thereon.

It is designed to use twenty, thirty, or forty penny nails and to change from one number to another, if desired.

By the means described a most efficient and highly serviceable garden-rake is produced. It is strong in all of its parts, easily repaired if anything should get out of order, and readily changed from a fine-toothed 95 rake to one of larger and longer teeth with slight expense.

It is to be observed that changes may be made in parts and features within the limit of mechanical skill without departing from the 100 general nature, spirit, or scope of the improvements.

What is claimed as the invention is—

1. The combination, in a rake, of a headbar composed of two members, each having 105
two longitudinal ribs provided at short inter-

vals with half-round notches, and a longitudinal slot near the upper edge, individual teeth in the form of wire nails having their shanks resting in said half-round notches of the two ribs and their heads arranged in said slot, means for clamping said members together with the nail-teeth in place as described, and a handle secured to the head-bar.

2. The combination, in a rake, of a headto bar composed of two members, each having two longitudinal ribs provided at short intervals with half-round notches, and a longitudinal slot near the upper edge, individual teeth in the form of wire nails having their shanks resting in said half-round notches of

the two ribs and their heads arranged in said slot, holes formed through said members, threaded bolts extended through said holes, nuts turned on said bolts to clamp the members of the bar together, and a handle, two of

bers of the bar together, and a handle, two of said bolts and nuts engaging the said handle after passing through the said members to connect the handle to the head-bar.

3. The combination, in a rake, of a headbar comprising two members, each grooved 25 and slotted longitudinally and notched transversely, individual teeth in the form of wire nails having the shanks arranged in said notches and the heads in the said slot, holes formed through the said members from front 30 to rear, threaded bolts extended through said holes, nuts turned on said bolts, a handle provided on its front end with divergent arms, apertured angular ends formed on the said arms, two of said bolts projecting 35 through the said apertured ends of the arms after passing through said members and the nuts on the latter bolts being tightened on their outer ends.

In testimony whereof I affix my signature 40

in presence of two witnesses.

JOHN M. SMYTH.

Witnesses:

E. M. PORCH, W. T. SCOTT.