J. N. OVENS.

RAKE.

APPLICATION FILED MAR. 21, 1914.

1,100,323. Patented June 16, 1914.

Fig. 1

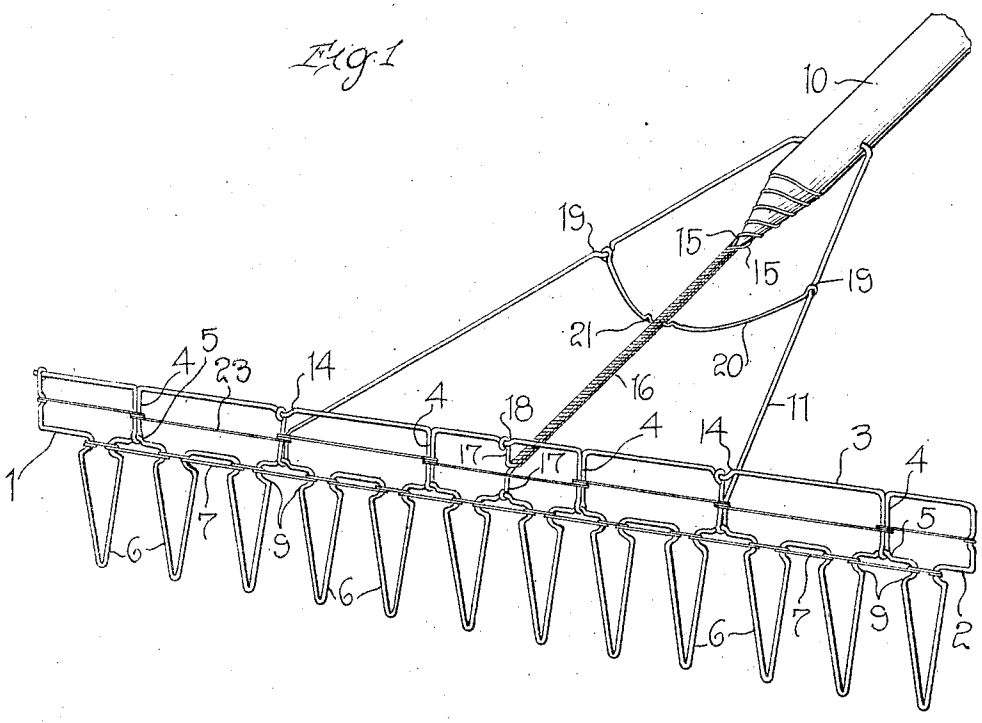


Fig. 2

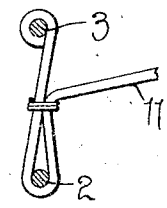
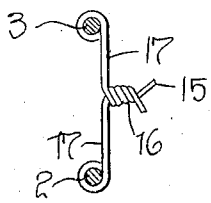


Fig. 3



Inventor

J. N. OVENS

Witnesses

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UNITED STATES PATENT OFFICE.

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RAKE.

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To all whom it may concern:

Be it known that I, JAMES NOBLE OVENS, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Rakes, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in rakes and has relation more particularly to a device of this general character especially designed and adapted for use in connection with lawns and the like; and the object of the invention is to provide a device of this general character having novel and improved means whereby a light and durable rake may be produced from a minimum of parts wherein the head and teeth of the implement are produced from substantially a single strand of wire.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved rake whereby certain important advantages are attained and the device is rendered simpler, less expensive and otherwise more convenient and advantageous for use, all as will be hereinafter more fully set forth.

The novel features of the invention will be carefully defined in the appended claims.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein—

Figure 1 is a view in perspective of a rake constructed in accordance with an embodiment of my invention; Fig. 2 is an enlarged fragmentary view illustrating a connection between the handle portion and the head; Fig. 3 is a view similar to Fig. 2 illustrating in detail a second connection.

As disclosed in the accompanying drawings, 1 denotes the head of the rake formed of a single strand of wire bent upon itself to afford upper and lower strands 2 and 3, the uppermost strand 3 at predetermined points being bent inwardly, as at 4, to afford elongated loops to interlock or engage the opposite portion of the strand 2, such strand 2 being provided with the inturned portions 5 to receive the loops 4 whereby such loops will be held in operative position. The strand 2 is suitably bent at predetermined intervals to afford the tooth members 6 of predetermined length and curvature. In order to maintain the teeth against spreading, as would otherwise tend to distort the head 1, I find it of advantage to connect the upper portions of the teeth 6 with the reinforcing or bracing wire 7, such wire being coiled around each stretch of a tooth, as indicated at 9.

Employed in connection with the head is the elongated handle member 10 formed of wood or any other material which may be employed with convenience and directed through the lower extremity of such handle and in close proximity to the lower end thereof is the wire 11, herein disclosed as substantially V-shaped in form and having its outer extremities interlocked with the strands 2 and 3 of the head, such engagement being had by having the extremities of such wire 11 disposed upwardly and suitably interwoven with the strands as is believed to be clearly shown in the accompanying drawings. In order to prevent movement of the wire 11 lengthwise of the strands 2 and 3, it is to be observed that the engagement of such wire with the head is within the pockets or depressions 14 produced in such strands 2 and 3. To further connect the handle member 10 with the head 1, I find it of advantage to have the inner extremity of such handle 10 tapered and suitably grooved or channeled in order to have securely connected therewith the strands 15—15 which have their intermediate portions in twisted relation, as indicated at 16, with their lower extremities disposed in opposite directions, as indicated at 17, and adapted to be engaged within the depressions 18 produced in the strands 2 and 3 at substantially their longitudinal centers whereby an effective and convenient engagement therewith is afforded. In order that additional rigidity may be given to the brace or connection afforded by the strands 15, I find it of advantage to provide the wire 11 at opposite sides of the handle 10 with the depressions 19 in which are suitably secured the extremities of the substantially U-shaped brace rod 20, the intermediate portion of which is connected with the brace 15, as indicated at 21.

In order to prevent the loops 4 from becoming separated, I find it of advantage to twist therearound the reinforcing wire 23, as is believed to be fully shown in the ac-

companying drawings, such wire also serving as an additional means to increase the rigidity of the head.

From the foregoing description, it is thought to be obvious that a rake constructed in accordance with my invention is of an extremely simple and comparatively inexpensive nature and is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and by reason of the effectiveness with which it performs its functions, and it will also be obvious that my invention is susceptible of some change and modification without material departure from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice.

I claim:

1. A device of the character described including a head comprising superposed strands of wire, the lowermost strand being bent to afford a plurality of teeth and the uppermost strand being bent to form intermediate loops adapted to interlock with the lower strand.

2. A device of the character described including a head comprising superposed strands of wire, the lowermost strand being bent to afford a plurality of teeth and the uppermost strand being bent to form intermediate loops adapted to interlock with the lower strand, an elongated handle, and a wire directed through the handle and having its opposite extremities secured to the strands of the head.

3. A device of the character described including a head comprising superposed strands of wire, the lowermost strand being bent to afford a plurality of teeth and the uppermost strand being bent to form intermediate loops adapted to interlock with the lower strand, an elongated handle, and a wire directed through the handle and having its opposite extremities secured to the strands of the head, the strands of the head being provided with depressions to accommodate the connected extremities of the wire of the handle.

4. A device of the character described including a head comprising superposed strands of wire, the lowermost strand being bent to afford a plurality of teeth and the uppermost strand being bent to form intermediate loops adapted to interlock with the lower strand, an elongated handle, a wire directed through the handle and having its opposite extremities secured to the strands of the head, and a brace member secured to the adjacent end of the handle and comprising a plurality of interwoven strands, the lower extremities of such strands being oppositely directed and engaged with the strands of the head.

5. A device of the character described including a head comprising superposed strands of wire, the lowermost strand being bent to afford a plurality of teeth and the uppermost strand being bent to form intermediate loops adapted to interlock with the lower strand, an elongated handle, a wire directed through the handle and having its opposite extremities secured to the strands of the head, a brace member secured to the adjacent end of the handle and comprising a plurality of interwoven strands, the lower extremities of such strands being oppositely directed and engaged with the strands of the head, and a brace wire secured to the first mentioned wire and operatively connected with the first mentioned brace.

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

JAMES NOBLE OVENS.

Witnesses:
W. C. PENTON,
AMOS RIEHL.