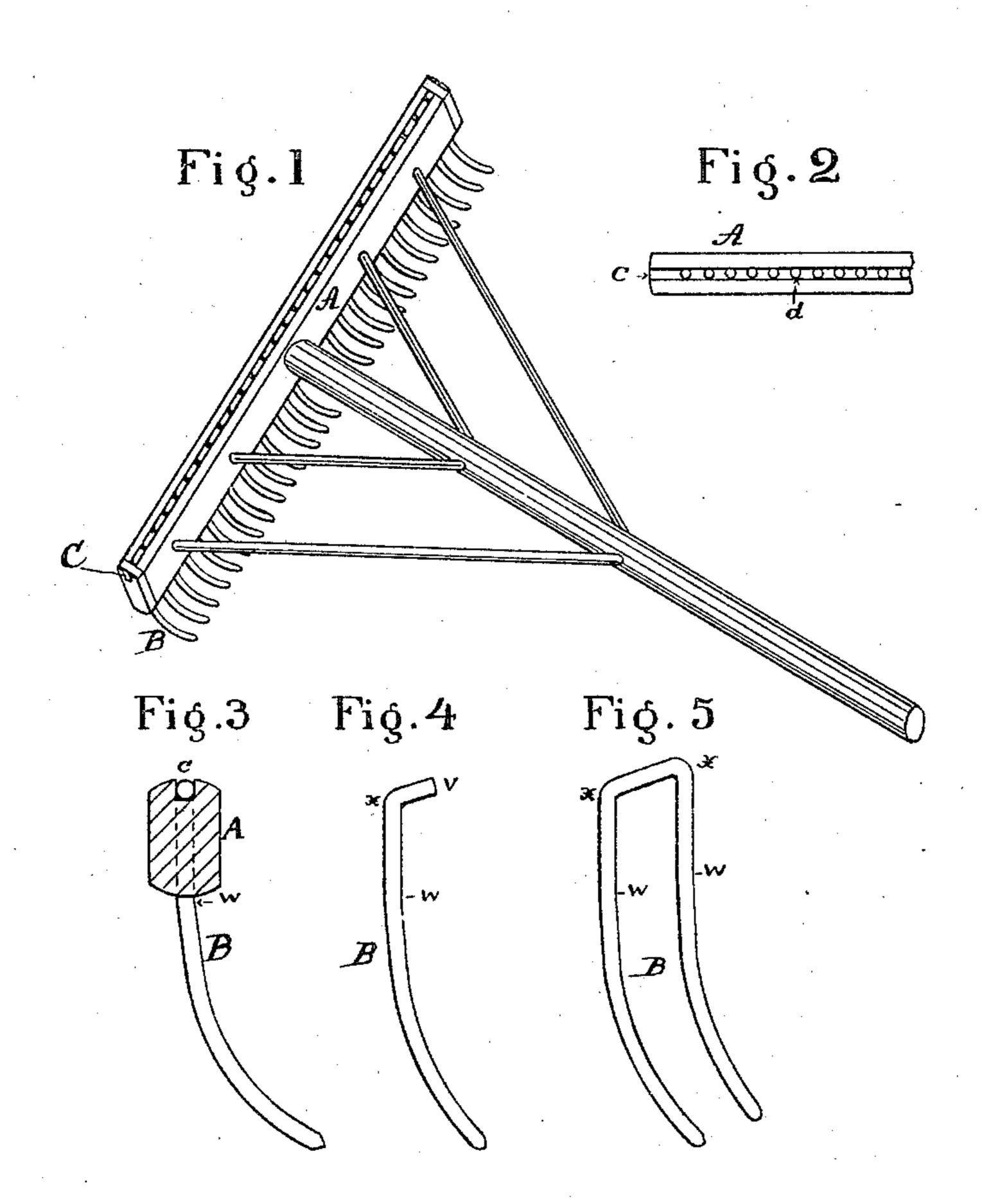
(No Model.)

W. F. DREW.

HAND RAKE.

No. 286,120.

Patented Oct. 2, 1883.



WITNESSES: Oblaham Waters Vames Wyckoff INVENTOR:

Walter & Louw,

## United States Patent Office.

WALTER F. DREW, OF SACRAMENTO, CALIFORNIA.

## HAND-RAKE.

SPECIFICATION forming part of Letters Patent No. 286,120, dated October 2, 1883.

Application filed September 4, 1882. (No model.)

To all whom it may concern:

Be it known that I, WALTER F. DREW, a citizen of the United States, residing in the city and county of Sacramento, and State of California, have invented certain new and useful Improvements in Hand-Rakes, of which the following is a specification.

My invention relates to that class of rakes having wire teeth; and it has for its object to provide means whereby wire teeth and the rake-head are adapted to the easy insertion and securing of the teeth in the head, and yet to be easily removed therefrom for repairs or other purposes.

To this end my invention consists in the construction and combination of parts hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved rake. Fig. 2 is a top view of a portion of the rake-head. Fig. 3 is a transverse vertical section of the head, showing a tooth therein in side elevation. Fig. 4 is a perspective outline of a single tooth, and Fig. 5 is a perspective outline of a double tooth according to my invention.

A represents the rake-head, having a groove, C, along the top side thereof, and holes d, leading from the bottom of the groove to the lower 30 face of the head. This head is secured to the handle in any usual manner.

B is the tooth, which, before inserting into the head, has a straight body, and its top end is bent to one side, as at x, Fig. 4. The point of this tooth is inserted in one of the holes d, 35 and the tooth pushed down until its bent top rests in the groove. Then the tooth is bent at W, forming an offset or shoulder close to the under side of the head, to keep the tooth from working up out of the head. The sidewise 40 bend at the top of the tooth is for the double purpose of preventing the tooth working out of the lower side of the head, and to prevent it from turning in the head.

Fig. 5 represents a double tooth, which is 45 practically the same as two teeth, Fig. 4, and is preferable thereto, as taking a little less wire and being more mechanical.

What I claim as my invention is—

A rake-head having holes through it, and 50 a vertical groove in the upper side of said head joining the holes, in combination with teeth in said holes bent sidewise to rest in said groove and bent forward below the head, as shown and described.

In testimony that I claim the foregoing as my own I affix my signature in the presence of two witnesses.

WALTER F. DREW.

Witnesses:

ABRAHAM WATERS, JAMES WYCKOFF.