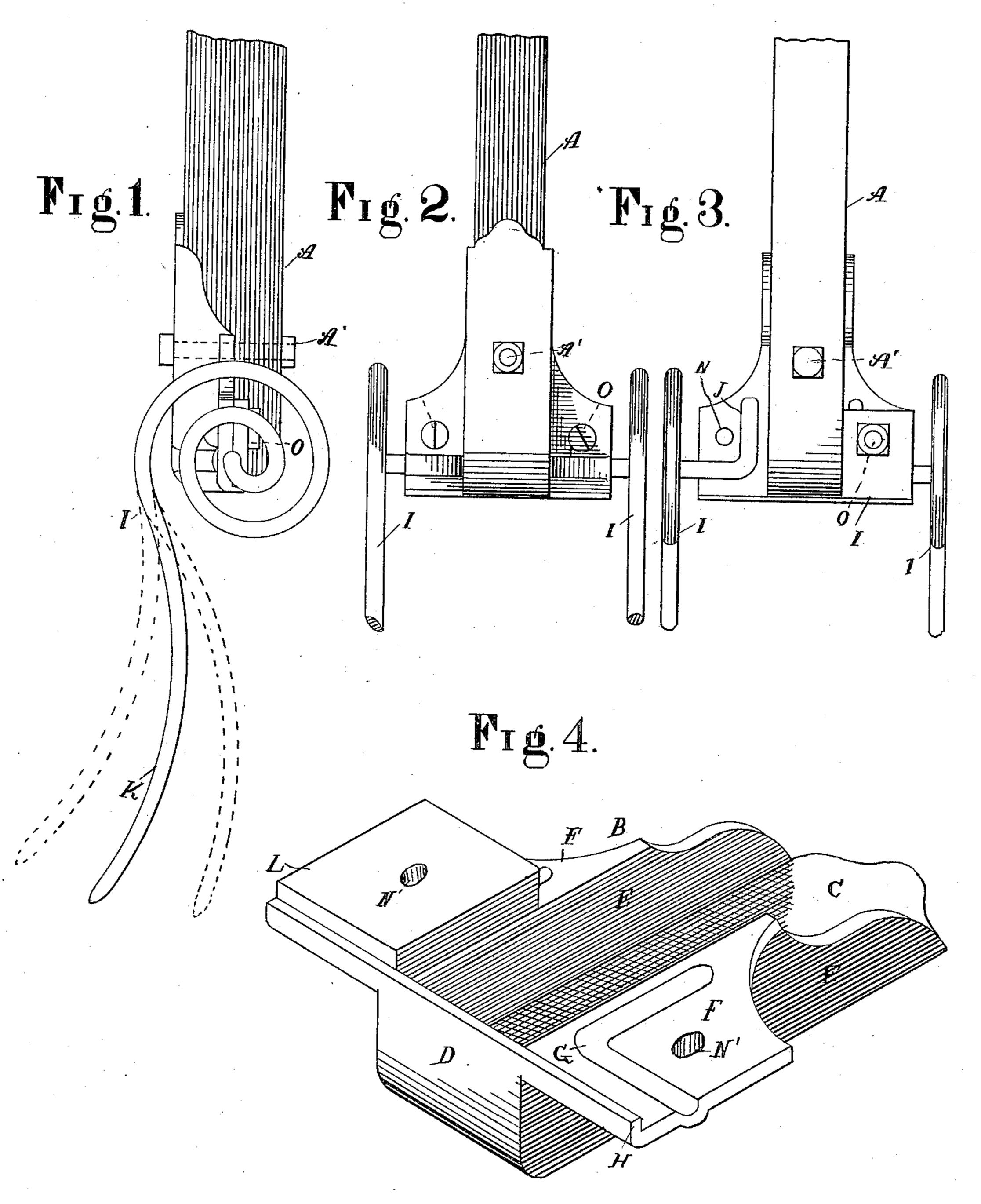
(No Model.)

R. W. DIXON.

TEDDER TOOTH.

No. 309,443.

Patented Dec. 16, 1884.



Attest: G. Bowler A.S. Way.

Inventor.

Robert-W. Dixon
By Chase Stewart

## UNITED STATES PATENT OFFICE.

ROBERT W. DIXON, OF SPRINGFIELD, OHIO, ASSIGNOR TO THE SPRINGFIELD MANUFACTURING COMPANY, OF SAME PLACE.

## TEDDER-TOOTH.

SPECIFICATION forming part of Letters Patent No. 309,443, dated December 16, 1884.

Application filed April 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, ROBERT W. DIXON, a citizen of the United States, residing at Springfield, in the county of Clark and State 5 of Ohio, have invented certain new and useful Improvements in Hay-Tedder Teeth and Couplings, of which the following is a specification, reference being had therein to the ac-

companying drawings.

This invention relates to certain new and useful improvements in hay-tedder teeth and the means for attaching them to the tedderarms; and it has for its objects, first, to provide a tooth which shall possess great flexi-15 bility, and, second, to provide a casting which shall firmly hold the teeth, and yet allow of the removal of one for repair or the substitution of a new one without affecting the other.

In the accompanying drawings, forming a 20 part of this specification, and on which like letters of reference indicate the same or corresponding features, Figure 1 is a side elevation of my improved coupling and tooth, showing a portion of the tedder-arm; Fig. 2, a rear 25 elevation of the same; Fig. 3, a front elevation thereof, having one of the fasteningplates removed; and Fig. 4, a detached per-

spective view of the casting for connecting and holding the teeth and tedder-arm together, 30 showing one of the fastening-plates removed.

The letter A designates the tedder-arm, the same being constructed of wood or any suitable material, its lower end fitting in a coupling, to which it is firmly secured by means of 35 a bolt,  $\Lambda'$ , which extends through an aperture formed in the body of the coupling, and

through the lower portion of the arm.

The casting is preferably made in one piece, and consists of a body, C, having an end piece, 49 D, and cheeks E, having flanges F. These flanges are provided with grooves G, approximately rectangular in shape, which are cast or otherwise formed on the face of the flange, the same being for the purpose of receiving one 45 end of the convolute tooth. Running along the edge of the flanges, and connecting them with the end of the coupling, is a bead, H, the same being for the purpose of affording greater strength to the flanges, and at the same time | 50 to serve as a seat for the lower portion of the plates L.

The letter I refers to the tedder-tooth, which in the present instance I construct of convolute form, one end of which terminates in a projection, J, which is bent at right angles to 55 the convolute portion, and is the part held by the coupling, and the other end terminates in a prong or tooth, K.

I have ascertained by actual trial that a tooth of the configuration above described possesses 60 great flexibility, and will therefore readily yield to any obstructions which may occur in use, and yet at the same time quickly return

to its normal position.

L L are plates which are used in connection 65 with the flanges of the coupling for the purpose of securing the teeth, and are provided on their face with grooves M, coincident with the grooves G on the faces of the flanges, and are further provided with apertures N through 70 their center, which are also coincident with

similar apertures, N', on the flanges. When it is desired to place the tooth in position, the plate L is removed and the shorter end of the tooth laid in the groove on the face 75

of the flange. The plate L is then replaced and securely fastened to the flange by means of a bolt, O. The side of the plate abuts squarely against the side of the tedder-arm, while its lower end rests on the bead H, formed 80 on the lower face of the coupling, and in this way the connection between the coupling and the plate L is rendered permanent and secure. It is to be observed, however, that two teeth may be made of one piece, the grooves in the 85 flanges and plates being somewhat elongated,

and the portions of the teeth fitting therein extending beyond the flanges and across the forward portion of the tedder-arm, as shown in dotted lines in Fig. 3. .90 *\** 

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. In a hay-tedder fork, the combination, with the casting having flanges provided with 95 grooves, and the fastening-plates having corresponding grooves, of the teeth, terminating at one end in portions adapted to fit said grooves, at the other in prongs, and having an intermediate portion bent into convolute form. 100

2. In a hay-tedder fork, the combination; with the tedder-arm, the coupling having

cheeks, flanges projecting therefrom, provided with rectangular grooves, and a bead along their lower edges, and the fastening-plates having corresponding grooves, of the tedder-5 teeth, terminating at one end in portions adapted to fit said grooves, at the other in prongs, and having an intermediate portion bent into convolute form.

3. In a hay-tedder, the combination, with to the tedder-arm, the casting having a body, side pieces or cheeks, flanges extending therefrom, provided with rectangular grooves and a bead along their lower edges, and fasteningplates, of the tedder-teeth having a rectangu-

lar termination at one end, and portions bent 15 into convolute form at right angles to the rect-

angular portions.

4. A tedder-tooth casting having a body, side pieces or cheeks, flanges extending therefrom, provided with rectangular grooves and 20 a bead along their lower edges, and fasteningplates.

In testimony whereof I affix my signature in

presence of two witnesses.

ROBERT W. DIXON.

Witnesses:

W. G. HALL, L. B. CORRY.