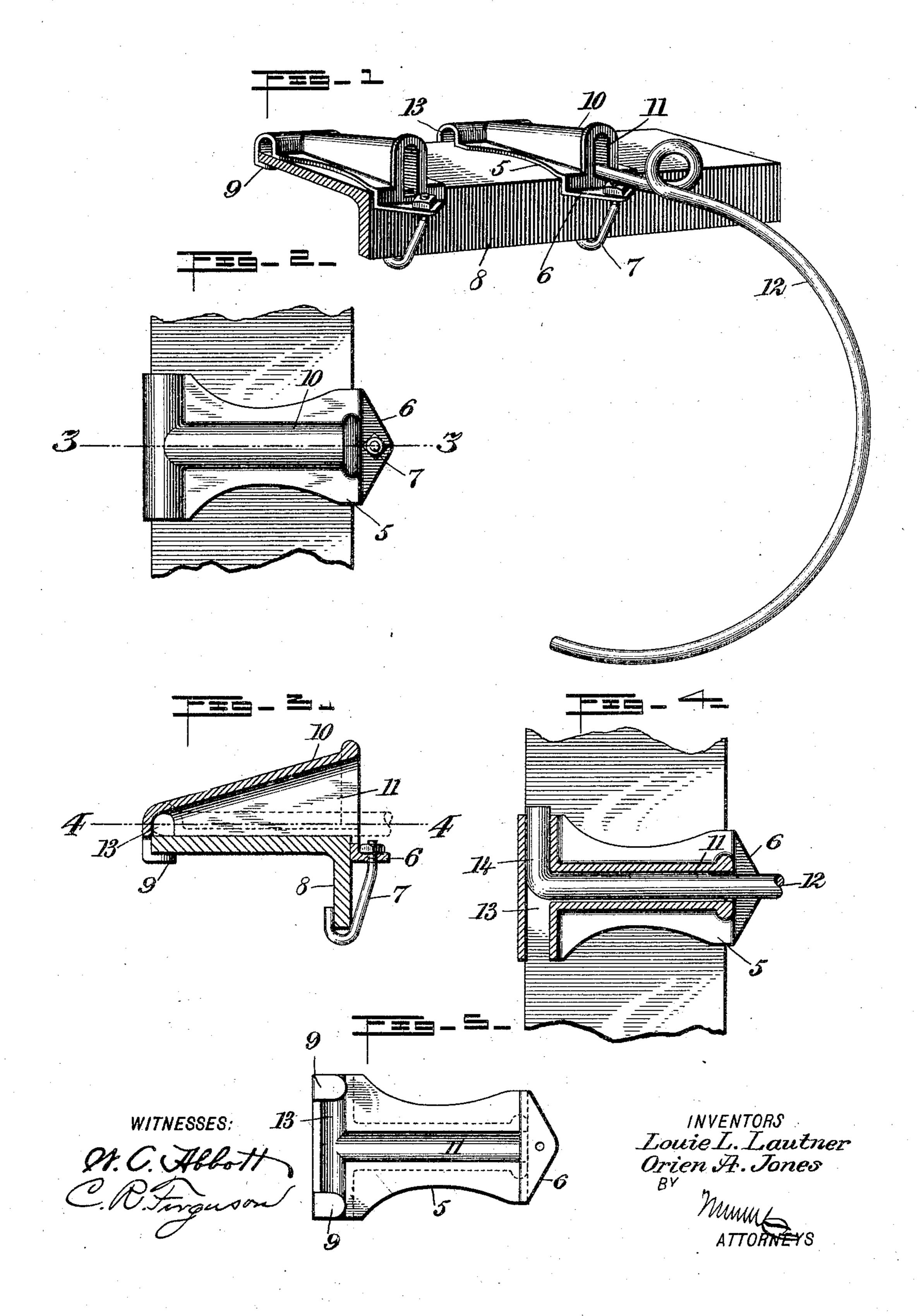
L. L. LAUTNER & O. A. JONES. RAKE TOOTH CLIP.

APPLICATION FILED JAN. 6, 1904.



United States Patent Office.

LOUIE LEWIS LAUTNER AND ORIEN ANNICE JONES, OF TRAVERSE CITY, MICHIGAN, ASSIGNORS OF ONE-THIRD TO QUINCY E. BOUGHEY, OF TRAVERSE CITY, MICHIGAN.

RAKE-TOOTH CLIP.

SPECIFICATION forming part of Letters Patent No. 783,290, dated February 21, 1905.

Application filed January 5, 1904. Serial No. 187,842.

To all whom it may concern:

Be it known that we, Louie Lewis Lautner and Orien Annice Jones, citizens of the United States, and residents of Traverse City, 5 in the county of Grand Traverse and State of Michigan, have invented a new and Improved Rake-Tooth Clip, of which the following is a full, clear, and exact description.

This invention relates to improvements in 10 clips or caps for securing the teeth to the angle-head of a horse hay-rake, the object being to provide a clip or cap with which either a right or left hand tooth may be engaged that is, a tooth having its end turned either 15 to the right or to the left.

We will describe a rake-tooth clip embodying our invention and then point out the novel

features in the appended claims.

Reference is to be had to the accompanying 20 drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view illustrating a rake-tooth clip embodying our invention. 25 Fig. 2 is a plan view thereof. Fig. 3 is a section on the line 3 3 of Fig. 2. Fig. 4 is a section on the line 4 4 of Fig. 3, and Fig. 5 is an inverted plan view.

The clip comprises a casting 5, having at 30 its rear end an outwardly-extended flange 6, provided with an opening through which a hook-bolt 7 passes, the said hook-bolt being engaged around the lower edge of the anglehead 8, and at its forward end the casting has 35 hook-lugs 9 for engaging around the front edge of the angle-head. On the casting is a cap or housing 10, having a channel 11, through which the upper end of the rake-tooth 12 passes. This channel diminishes in depth 40 from its rear end to its forward end, thus permitting the tooth to swing up and down to accommodate the same to unevenness of ground. At the forward end there is a transverse or T channel 13, which communicates 45 with the channel 11 at about the center of the

laterally from both sides of the channel 11, so that the angular head 14 of the tooth 12 may engage in either side.

Ordinarily both right-hand clips and left- 5° hand clips are employed for fastening the teeth to the angle-head at opposite sides of the center. Our form of clip may be used at both sides of the center.

Having thus described our invention, we 55 claim as new and desire to secure by Letters

Patent— 1. A rake-tooth clip having a base portion to rest on the upper face of an angle-head, a flange at the rear end of the clip consisting of 60 a downwardly-extending portion and an outwardly-extending portion below the plane of the base portion and provided with an opening, a cap or housing on the clip forming a central longitudinal channel to receive the 65 upper portion of a rake-tooth, the said channel diminishing in depth from its rear end to its forward end, and a transverse channel at the forward end of the clip communicating at its center with the central longitudinal chan- 70

nel, and hook-lugs at the forward end of the clip, the said opening in the outwardly-extending flange of the clip being midway between the sides of the clip and directly in line with the said longitudinal channel.

2. The combination with the angle-head of a horse hay-rake, of a rake-tooth clip having a base portion resting on the upper face of the angle-head, a flange at its rear end consisting of a downwardly-extending portion 80 adapted to engage the upper rear portion of the angle-head, and an outwardly-extending portion below the plane of the upper face of the angle-head and provided with an opening, a hook-bolt passing through said opening and 85 engaging the lower rear edge of the anglehead, a cap or housing on the clip forming a central longitudinal channel to receive the upper portion of a rake-tooth, said channel diminishing in depth from its rear end to its 9° forward end, and a transverse channel at the channel 13—that is, this channel 13 extends | forward end of the clip communicating at its

center with the central longitudinal channel, and hook-lugs at the forward end of the clip at each side thereof, for engaging around the front edge of the angle-head, the said opening in the flange of the clip for the hook-bolt being midway between the sides of the clip and directly in line with the said longitudinal channel; as set forth.

In testimony whereof we have signed our names to this specification in the presence of 10 two subscribing witnesses.

LOUIE LEWIS LAUTNER.
ORIEN ANNICE JONES.

Witnesses:

NELLIE W. HARRIE, W. H. FOSTER.