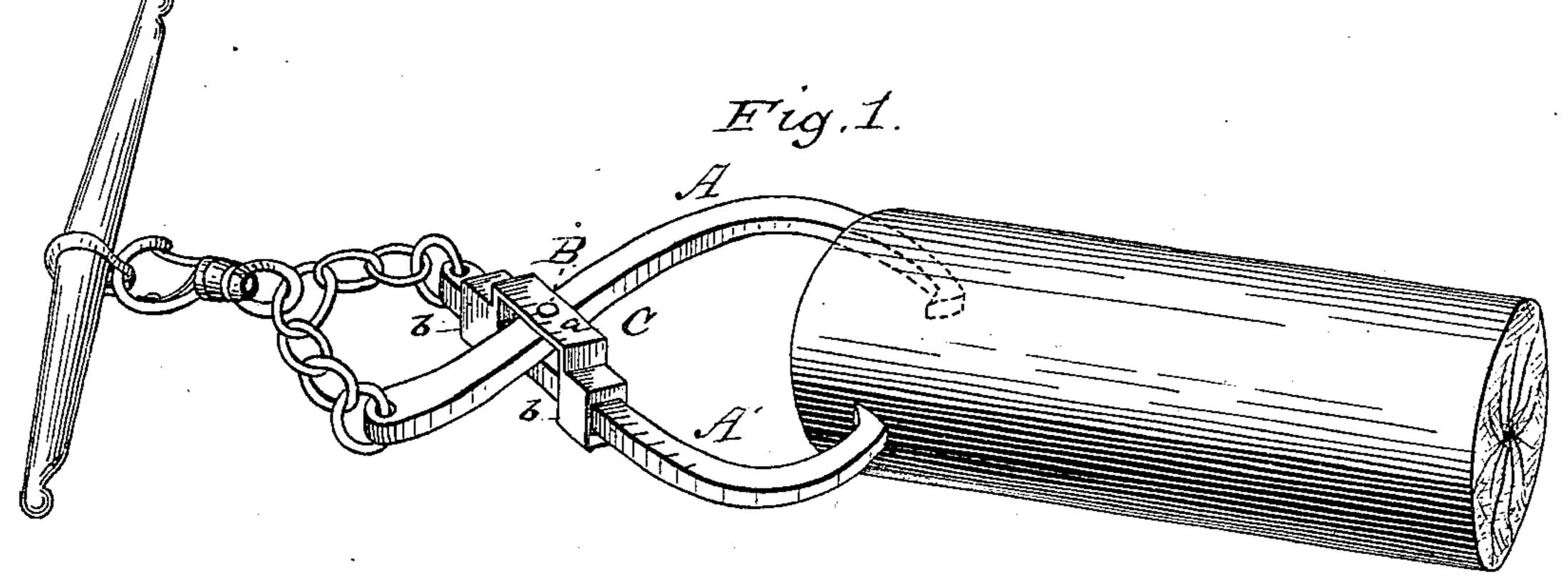
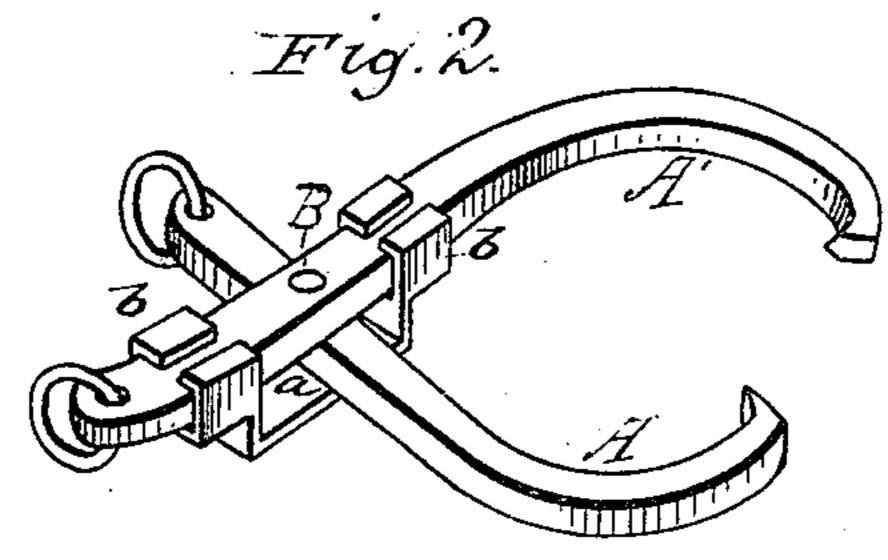
J. W. RAYMOND.

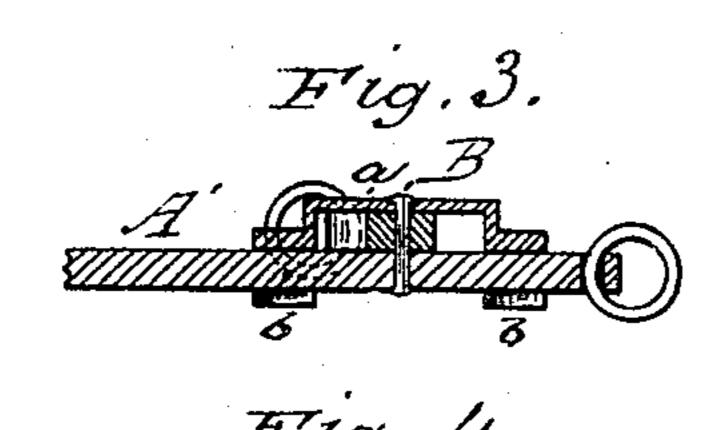
GRAPPLE.

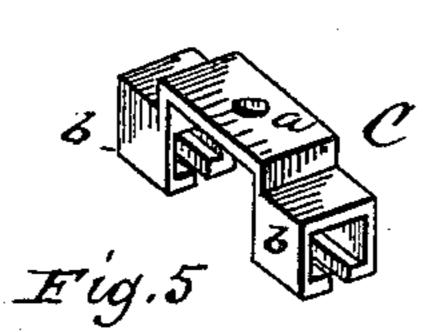
No. 270,482.

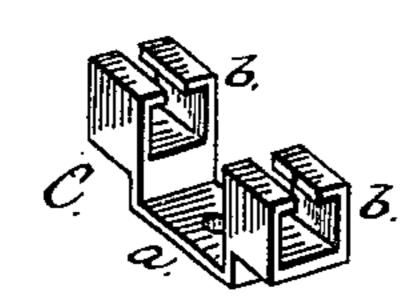
Patented Jan. 9, 1883.











Witnesses: M. Johnson Ellis Mills John M. Raymond,

Attorney

United States Patent Office.

JOHN W. RAYMOND, OF LOWVILLE, PENNSYLVANIA.

GRAPPLE.

SPECIFICATION forming part of Letters Patent No. 270,482, dated January 9, 1883.

Application filed November 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, John W. Raymond, a citizen of the United States of America, residing at Lowville, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Grapples; 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, reference being had to the accompanying drawings, and to letters or figures of reterence marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in grapples, logging dogs, or similar implements; and it consists more particularly in providing the arms of the tongue at the point to which they are pivoted to each other with a brace, which extends over one of the arms and is screwed to the adjacent arm, as will be hereinafter more fully set forth, and pointed out in the claims.

In the annexed drawings, Figues 1 and 2 are perspective views of my invention. Fig. 3 is a sectional view, and Figs. 4 and 5 are detailed perspective views of the clamp or brace.

In the annexed drawings, A and A' represent the arms of the implement, which are of 30 ordinary construction, and are provided at their ends with rings and a connecting-chain, to which is attached a swivel-hook, to which may be secured the eye of a whiffletree, as shown in Fig. 1, when the grapple is used as 35 a logging-dog. The arms are attached to each other by a pivot, B, which passes through suitable perforations in the arms and the plate C, which plate extends over one of the arms and embraces the adjacent arm. This plate C, as 40 shown in detail in Figs. 4 and 5, is made from a single piece of malleable metal which is capa-

ble of being bent, and thus secured upon one of the arms so that its ends will embrace the same. The central portion of this brace, a, is raised to a height on the under side equal to the thick- 45 ness of one of the arms, and it extends over the arm to which it is clamped, so as to allow the adjacent arm to be opened or closed. The raised portion a of the pivoted brace is perforated for the reception of the pivot, which pivot serves 50 to hold the brace more securely upon the arm A', and prevents its sliding thereon. The ends of this brace, b b, when bent over the arm will further strengthen the same. By means of this brace I am enabled to use a smaller pivot, 55 thus rendering the arms stronger at the point to which they are united to each other, as the brace will support and hold the upper portion of the pivot. It is evident that this form of brace may be used upon all such implements as 60 are provided with arms which are pivotally connected to each other.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a grapple or implement having arms pivoted to each other, the brace C, attached at each end to one of the arms and extending over the adjacent arm and uniting-pivot, substantially as shown.

2. In combination with the arms A and A', the brace C, provided with a raised central portion, a, and ends b b, bent so as to embrace one of the arms, and pivot B, extending through each arm and the plate a, and secured thereto, 75 as described, and for the purpose set forth.

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

JOHN W. RAYMOND.

Witnesses:

M. D. BARNEY, R. S. BROWN.