

No. 665,577.

Patented Jan. 8, 1901.

A. F. McCOLLUM.
PILE WIRE FOR LOOMS.
(Application filed Dec. 5, 1899.)

(No Model.)

Fig. 1.

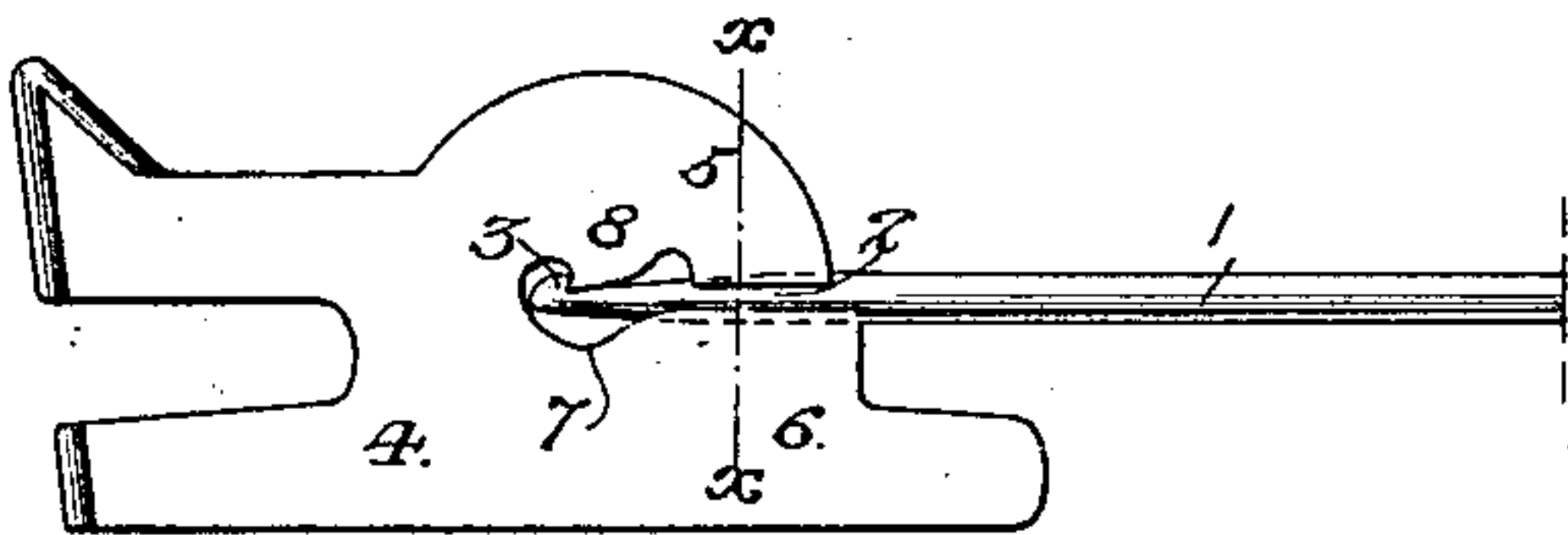


Fig. 2.

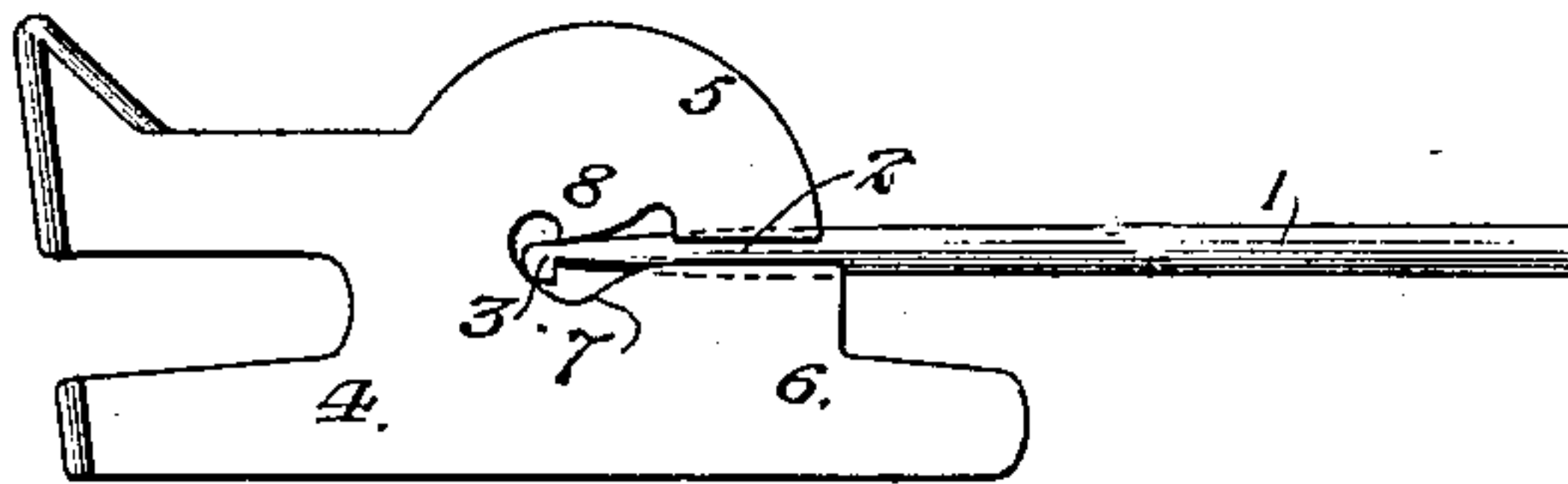


Fig. 5.

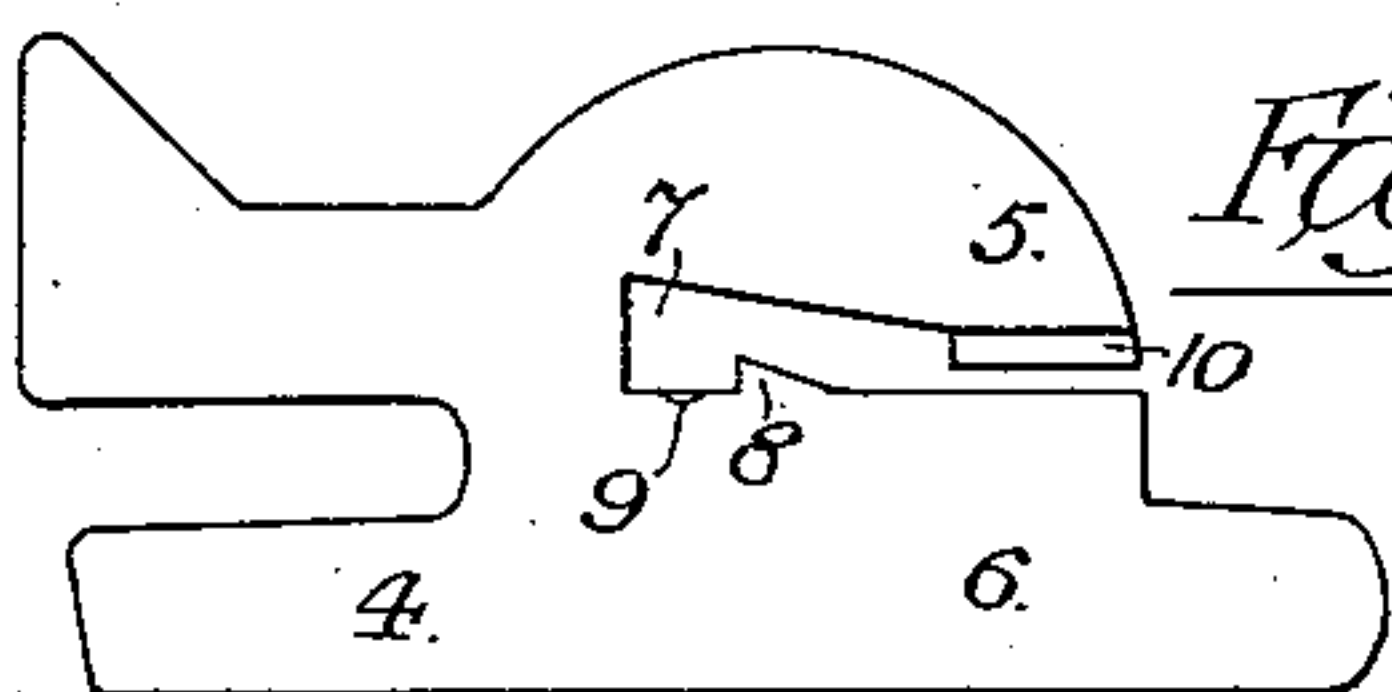


Fig. 6.

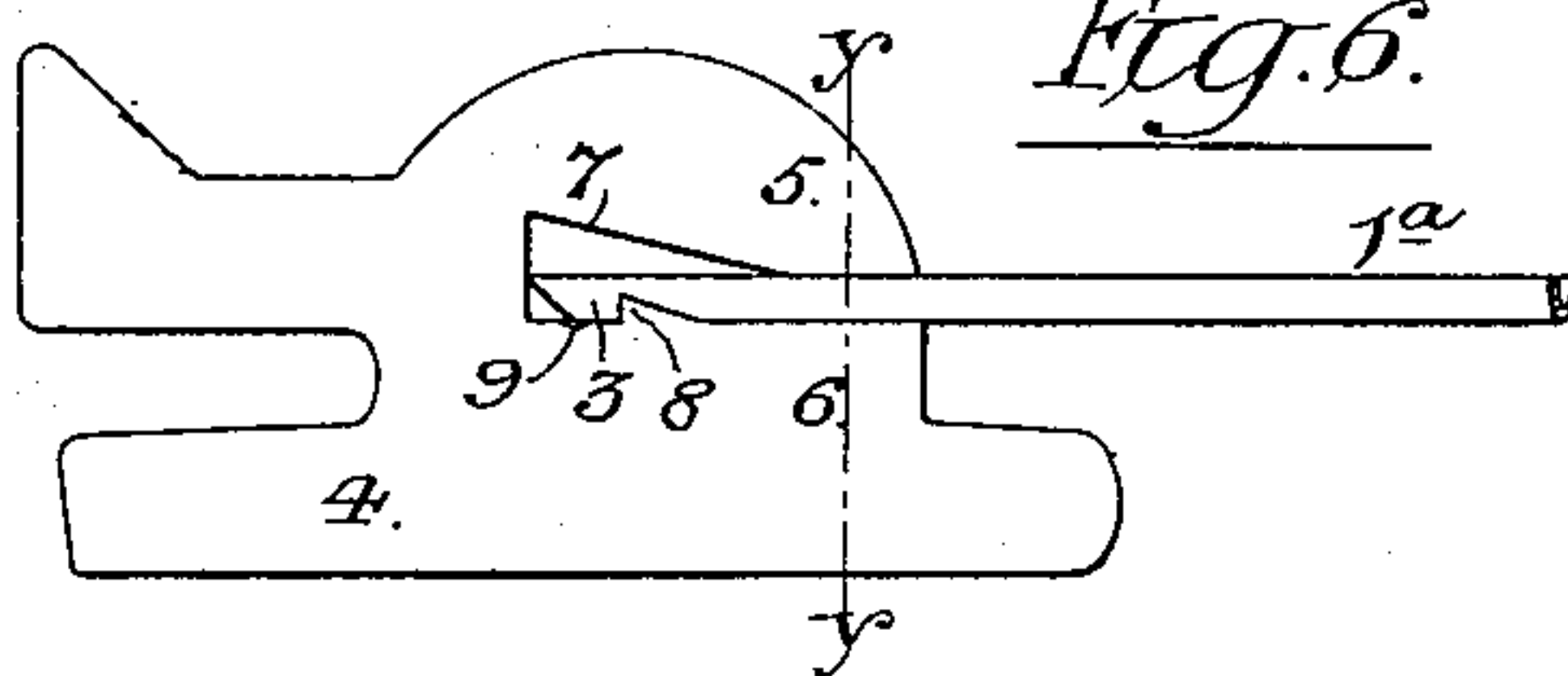


Fig. 7.

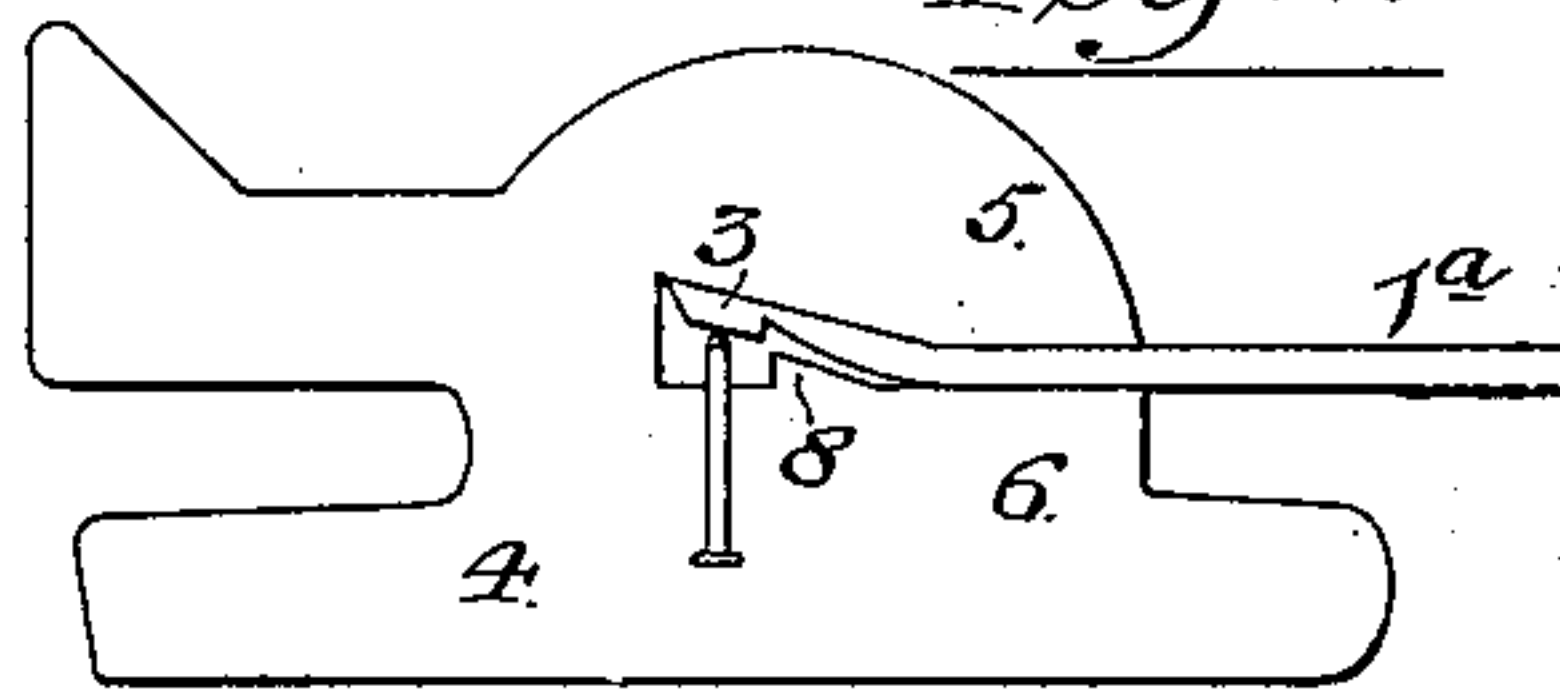


Fig. 3.

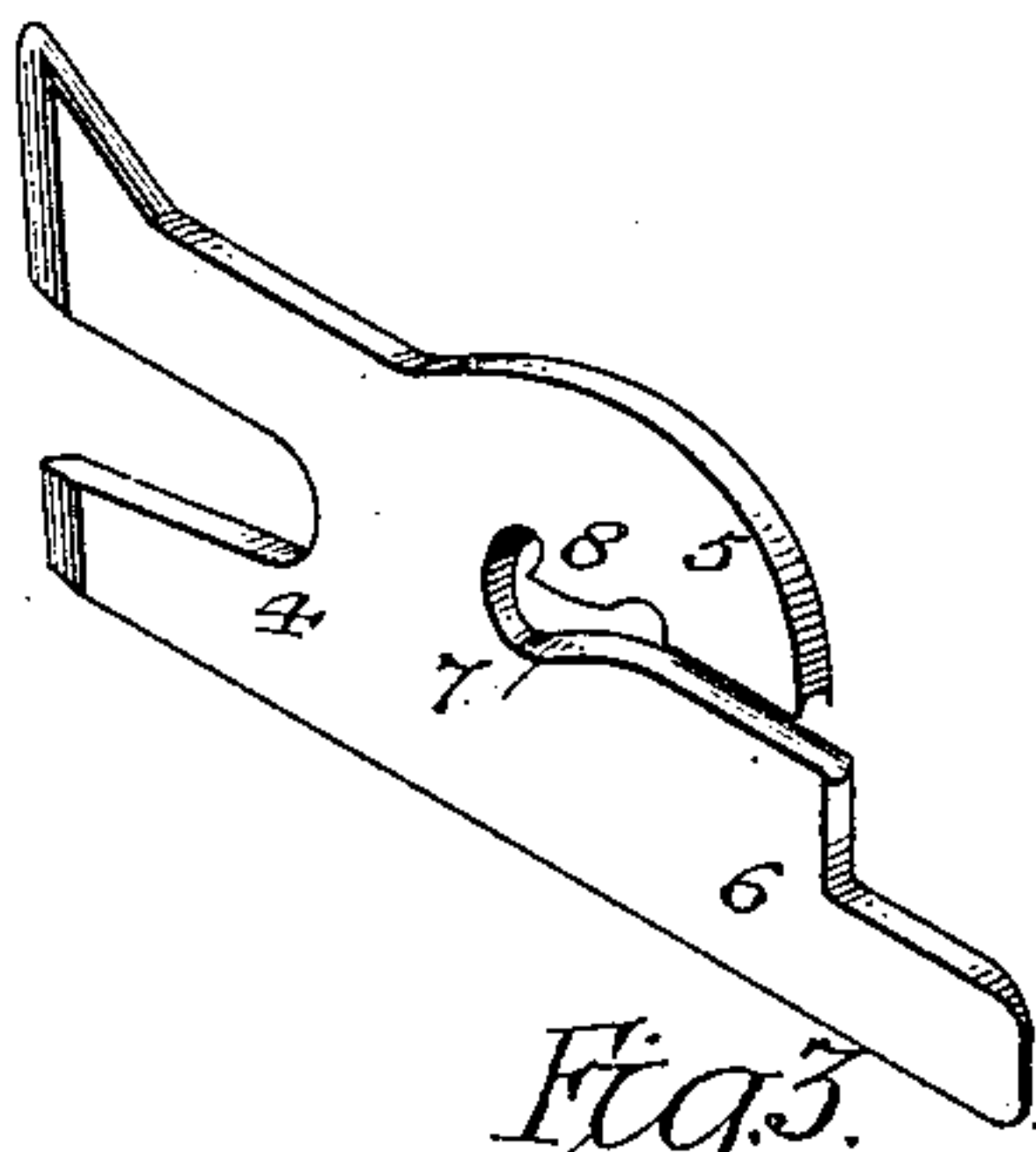


Fig. 4.

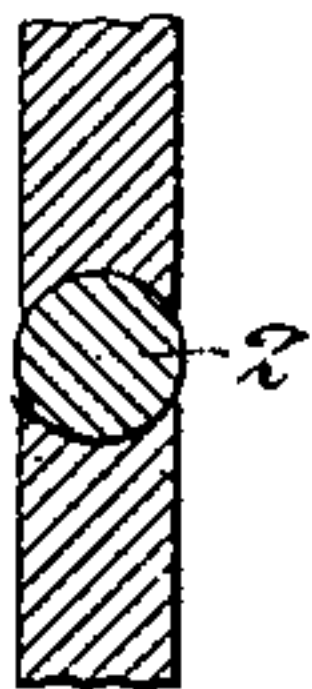
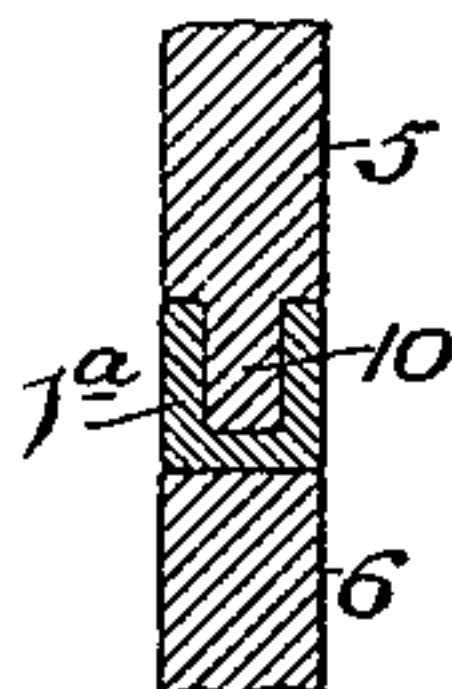


Fig. 8.



Witnesses:-
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ALFRED F. McCOLLUM, OF ESPY, PENNSYLVANIA, ASSIGNOR OF THREE-FIFTHS
TO JAMES MAGEE, 2D, OF BLOOMSBURG, PENNSYLVANIA.

PILE-WIRE FOR LOOMS.

SPECIFICATION forming part of Letters Patent No. 665,577, dated January 8, 1901.

Application filed December 5, 1899. Serial No. 739,276. (No model.)

To all whom it may concern:

Be it known that I, ALFRED F. McCOLLUM, a citizen of the United States, and a resident of Espy, Pennsylvania, have invented certain Improvements in Pile-Wires for Looms, of which the following is a specification.

The object of my invention is to so construct a pile-wire that the same can be readily applied to or detached from the head with which such wire is usually provided in order that it may be properly moved and controlled by the mechanism of the loom.

In the accompanying drawings, Figure 1 is a side view of a portion of a pile-wire with head secured thereto in accordance with my invention. Fig. 2 is a similar view showing the wire adjusted to a position which will permit it to be detached from the head. Fig. 3 is a perspective view of the head and of the end portion of the wire intended for engagement therewith. Fig. 4 is an enlarged transverse section on the line *x x*, Fig. 1. Fig. 5 is a side view illustrating the construction of the head for the reception of a wire of U-shaped cross-section. Fig. 6 is a view showing such a wire applied to the head. Fig. 7 is a view showing the manner of releasing the wire from the head; and Fig. 8 is an enlarged section on the line *y y*, Fig. 6.

The pile-wire 1, which is shown in Figs. 1 to 4, is a solid wire with shank 2, terminating in a hook 3; but my invention is applicable to grooved wires as well as to solid wires, as will be explained hereinafter. The head 4 has upper and lower jaws 5 and 6 for the reception of the solid shank 2 of the pile-wire, the adjoining faces of these jaws being grooved, as shown in Fig. 4, so as to fit snugly to said solid shank. Inwardly beyond the grooved portions of the jaws is a recess 7, and into this recess projects from the upper jaw 5 a finger 8, which when the pile-wire has been fully inserted into the head, as shown in Fig. 1, is adapted to engage with the hooked end 3 of said pile-wire in order to retain the same longitudinally in position in respect to the head.

In applying the head to the wire said head may be slipped over the end of the wire while the hook of the latter is uppermost and then

hammered lightly until the hook has passed inwardly beyond and into engagement with the finger 8, the natural spring of the shank of the pile-wire, as well as the spring of the jaws 5 and 6, permitting the relative movement of the parts necessary for this purpose.

When it is desired to detach the wire from the head, the wire is turned half-way around, as shown in Fig. 2, so as to carry the hook of the same downward, and the head can then be withdrawn longitudinally from the wire and, if desired, the wire can be inserted by a reverse operation.

When the wire is grooved or U-shaped, the recess 7 is preferably formed in the upper jaw of the head and the finger 8 on the lower jaw, as shown in Figs. 5, 6, and 7, and the hook is formed on the under side of the wire, as also shown in said figures. When it is desired to release the wire from the head, said hook may be pressed upward by means of a suitable implement until it is clear of the finger 8, and the wire can then be withdrawn longitudinally. A recess 9, formed in the side of the jaw 6 just beyond the finger 8, facilitates the pressing upward of the hook. The upper jaw 5 is grooved on each side, so as to form a central rib 10, which enters the groove of the wire and effectually prevents lateral displacement of the same.

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

1. The combination of a pile-wire having a hooked end with the head having a grooved portion for the reception of the pile-wire and inwardly beyond said grooved portion a recess with finger projecting thereinto for engagement with the hook of the wire, said recess being of such size as to permit engagement and disengagement of the hook and finger by movement of the wire, substantially as specified.

2. The combination of a pile-wire having a hooked end, with the head having upper and lower jaws, forming a groove for the reception of the pile-wire, and also having, inwardly beyond said jaws, a recess with finger projecting thereinto, for engagement with the hooked end of the wire, said recess being of

such size as to permit engagement and disengagement of the hook and finger by movement of the wire, substantially as specified.

3. The combination of a pile-wire having a
5 round shank and a hooked end, with the head
having a groove for the reception of said
shank, and a recess with projecting finger for
engagement with the hooked end of the wire,
said recess being of such size as to permit en-
10 gagement and disengagement of the hook and

finger by movement of the wire, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALFRED F. McCOLLUM.

Witnesses:

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R. L. ORANGE.