

No. 682,614.

Patented Sept. 17, 1901.

E. E. HARRIS.  
MEANS FOR ATTACHING SAW TEETH.

(Application filed June 24, 1901.)

(No Model.)

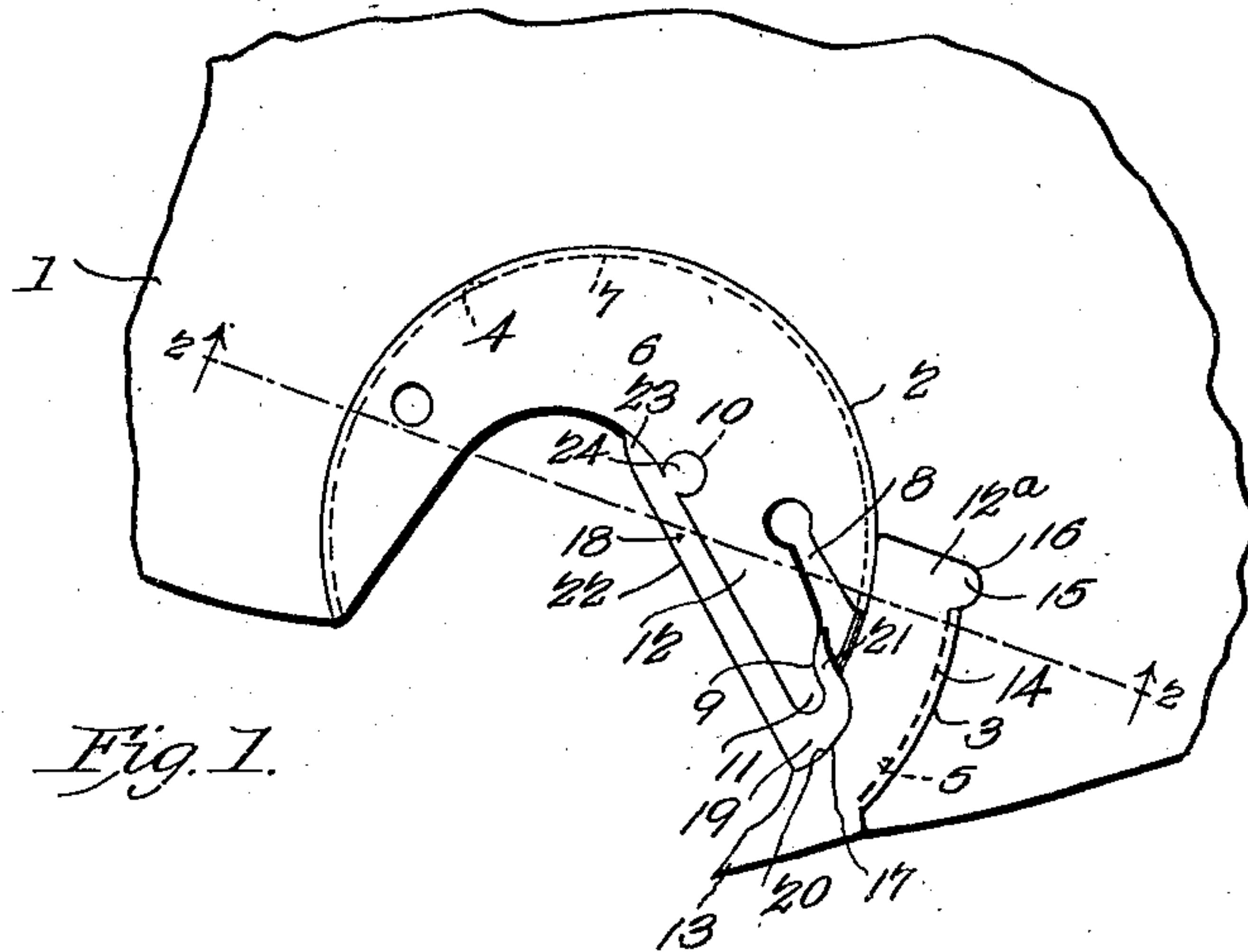
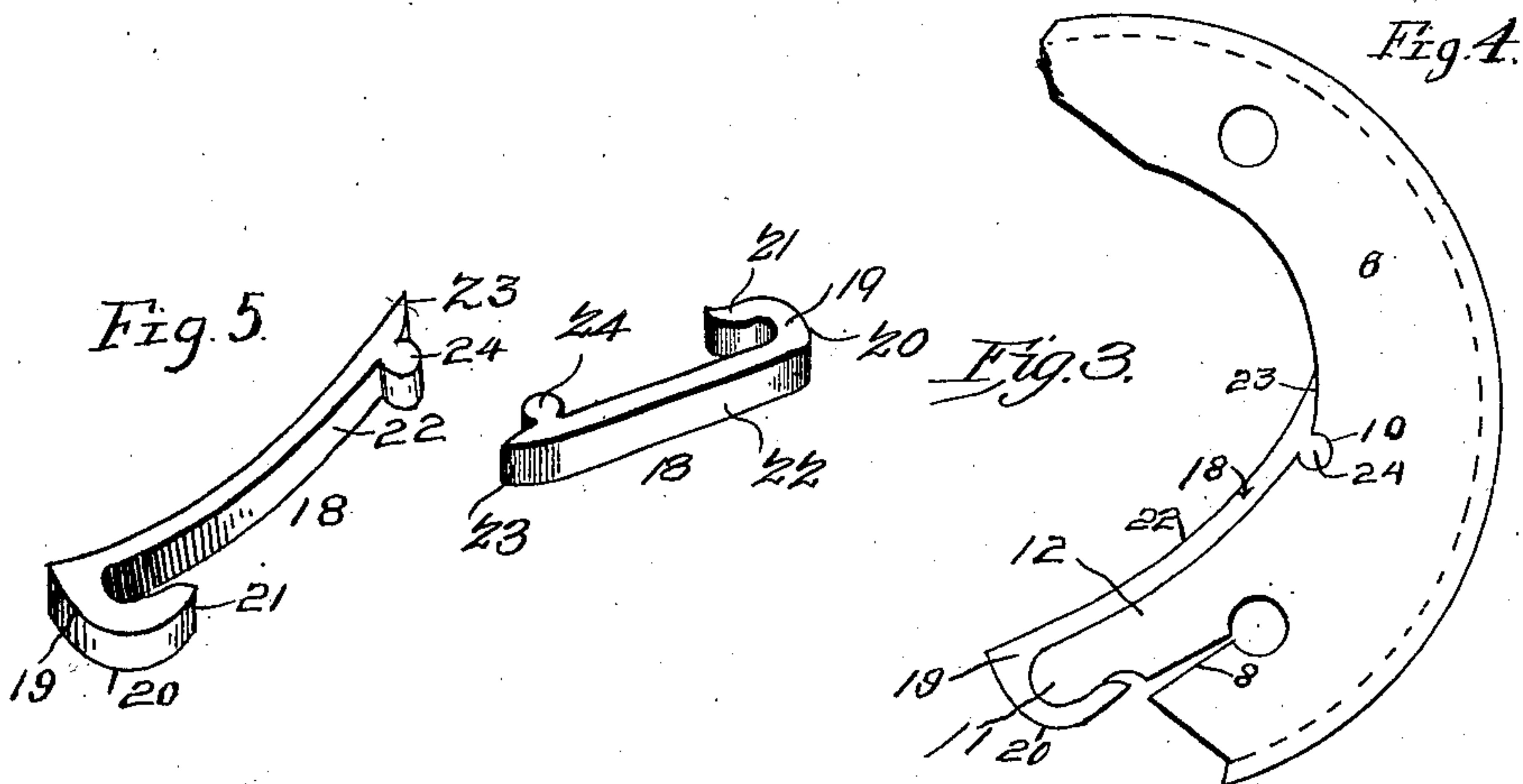
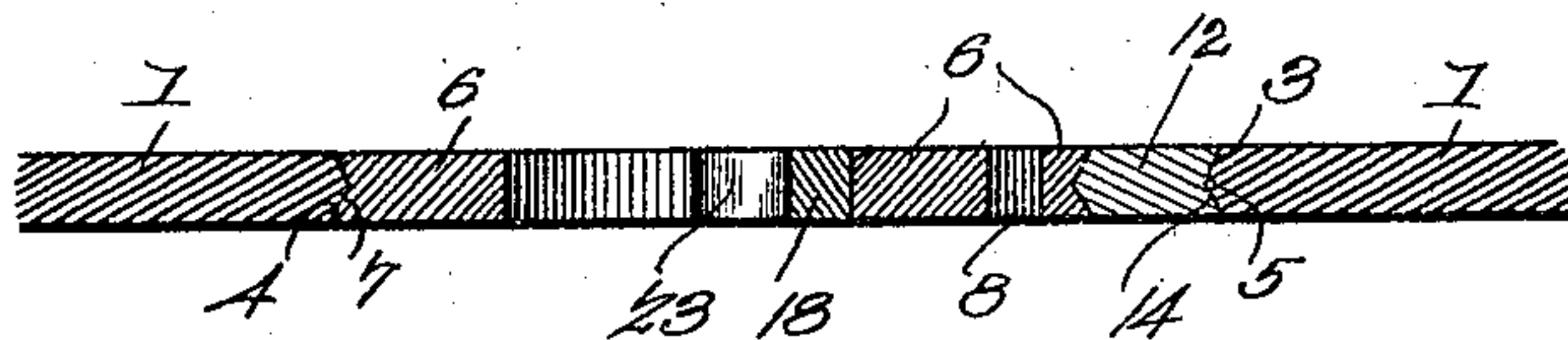


Fig. 1.

Fig. 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## MEANS FOR ATTACHING SAW-TEETH.

SPECIFICATION forming part of Letters Patent No. 682,614, dated September 17, 1901.

Application filed June 24, 1901. Serial No. 65,868. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD E. HARRIS, a citizen of the United States, residing at Aberdeen, in the county of Chehalis and State of Washington, have invented a new and useful Means for Attaching Saw-Teeth, of which the following is a specification.

This invention relates to means for attaching saw-teeth; and the object of the same is to have a clamp of such form that it may be turned to lock the tooth in place after the latter has been applied and also to prevent wear directly on the portion of the edge of the clamp adjacent to the tooth by applying a removable device thereto of a considerably less costly nature than the clamp, and thus reduce the expense of maintaining saws in proper practical working condition and also always have a straight or flat edge adjacent the inner portion of each tooth, with obvious advantages in the cutting operation of the saw.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is an elevation of a portion of a saw body or blade, showing the clamp, tooth, and protecting device in operative assembled relation. Fig. 2 is a section on the line 2 2, Fig. 1. Fig. 3 is a detail perspective view of the protector shown applied in Figs. 1 and 2. Fig. 4 is a detail elevation of the clamp with a slightly-different form of protector thereon. Fig. 5 is a detail perspective view of the form of protector shown by Fig. 4.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates the body or blade of a saw, having sockets 2 formed therein at regular intervals in the arcs of circles, each socket being provided at one end with a recess 3, also in the arc of a circle concentric with but larger than the socket-arc. The wall or edge of each socket is V-shaped in cross-section, as at 4, and likewise the wall 5 of the recess 3 is V-shaped in cross-section.

The tooth-clamp 6, which removably fits in the socket 2, has its inner convex edge formed with a V-shaped groove 7 to receive the

correspondingly-shaped wall of said socket. The clamp is formed with oppositely-disposed key-receiving openings to assist in removing the same, and from the opening nearest the tooth-recess 3 a slot 8 extends outwardly through the clamp edge, and in the forms of clamps shown by Figs. 1 and 4 the outer portion of one wall of the said slot 8 is formed with a recess 9. The clamps shown by Figs. 1 and 4 also have a circular recess 10 opening out through the outer edge thereof near the center to provide a seat for a purpose which will be presently set forth. In the two clamps just referred to the finger 12, which is formed by the slot 8, has a rounded terminal 11. The clamps shown are adapted to receive a protector.

Referring now to the arrangement shown by Fig. 1, the tooth 12<sup>a</sup> is fitted in the recess 3 and has the usual outer cutting-head 13 and is also formed with a groove 14 in its back edge of the same form as the wall of the said recess to receive the latter wall. The tooth also has a lug 15 projecting from the back edge at the inner end to enter a correspondingly-shaped recess or seat 16 in the body of the blade, and the front edge of the tooth also has a recess 17 therein for a purpose which will hereinafter appear. The tooth is locked in place by the head 19 of a protector 18, said protector being carried by the clamp and moved into place with the latter. The protector has its head 19 formed with a curved edge 20 to fit into the recess 17 of the tooth, the said latter edge 20 continuing into a lip 21 to engage the recess 9 and also form a seat to receive the rounded terminal 11 of the finger 12. A shank 22 extends from the head 19 to fit closely against the outer edge of the clamp from the location of the tooth inwardly, the shank of the protector shown by Figs. 1 and 3 being straight and that shown by Figs. 4 and 5 being curved, both forms of the protector being duplicates in construction, except this simple change of form to correspond to the edge of the clamp engaged thereby. The shank 22 also has a free unengaged inner end 23 and a circular or other tongue 24 at the inner edge to enter the recess 10.

In the ordinary forms of saw-teeth clamps the edges thereof adjacent to the teeth be-



come worn by constant use and assume a rounded contour in cross-section, and thereby the efficiency of the cutting action of the saw is materially impaired, particularly after  
5 a long period of wear at the point mentioned. These clamps are also expensive when it is considered that they wear rapidly and have to be replaced to maintain a straight edge adjacent to the teeth to facilitate the cutting  
10 action of the saw, and the protector heretofore set forth has been provided principally to overcome the defects heretofore encountered, and especially to obviate the necessity of entirely dispensing with the use of a worn  
15 clamp, and thereby materially reduce the cost of keeping the saw in good working condition. The protectors will be applied in the first instance, and it will be seen that they can be made of materially harder metal than  
20 the clamps, and when said protectors become worn so as to be unfit for further service they can be quickly withdrawn and other like de-

vices substituted therefor. The clamps and protectors can be easily and quickly removed and applied.

Having thus described the invention, what  
is claimed as new is—<sup>25</sup>

1. The combination with a tooth-holding clamp for a saw of a removable protector for the throat and tooth engaging portions of  
30 such clamp.

2. The combination with a saw-body having a socket for a clamp, of a clamp mounted in the socket, a protector removably applied to the clamp, and a tooth held in place by  
35 said devices.

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

EDWARD E. HARRIS.

Witnesses:

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S. W. PEARSON.