

(No Model.)

J. W. CURRIER.

WEAR PLATE.

No. 379,210.

Patented Mar. 13, 1888.

Fig. 1.

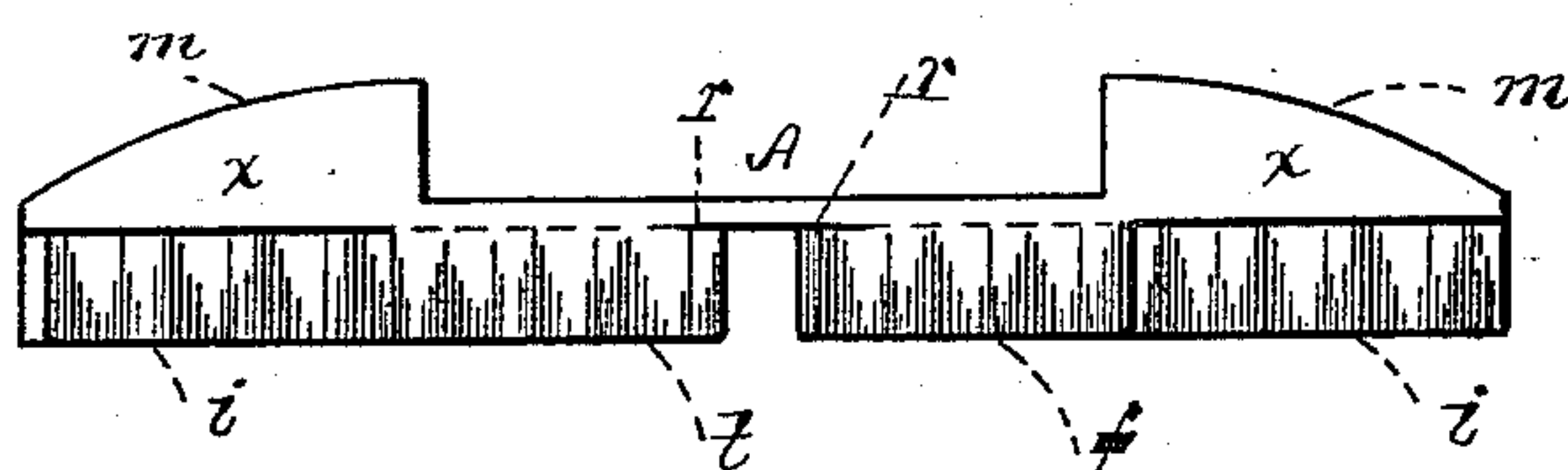


Fig. 2.

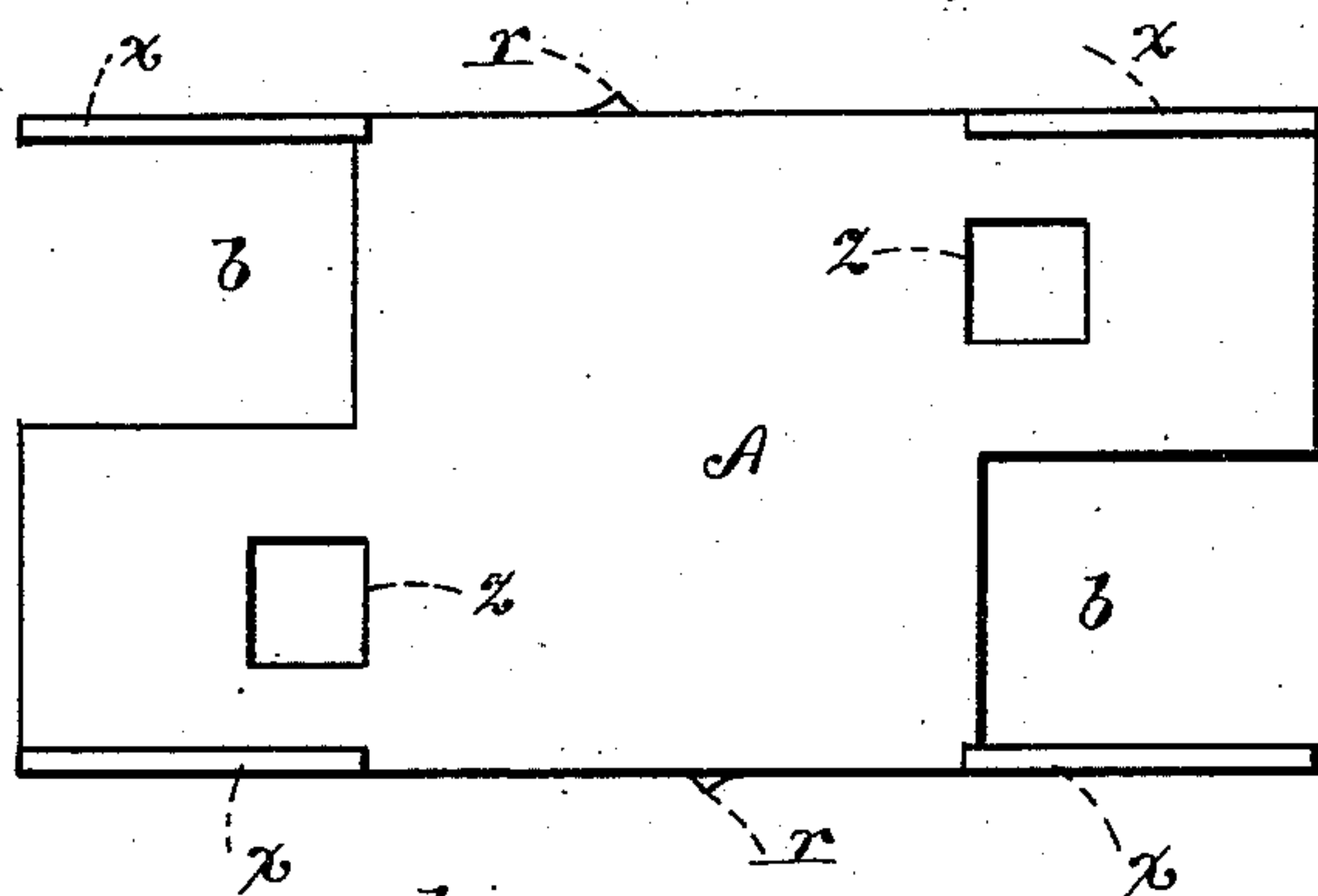


Fig. 3.

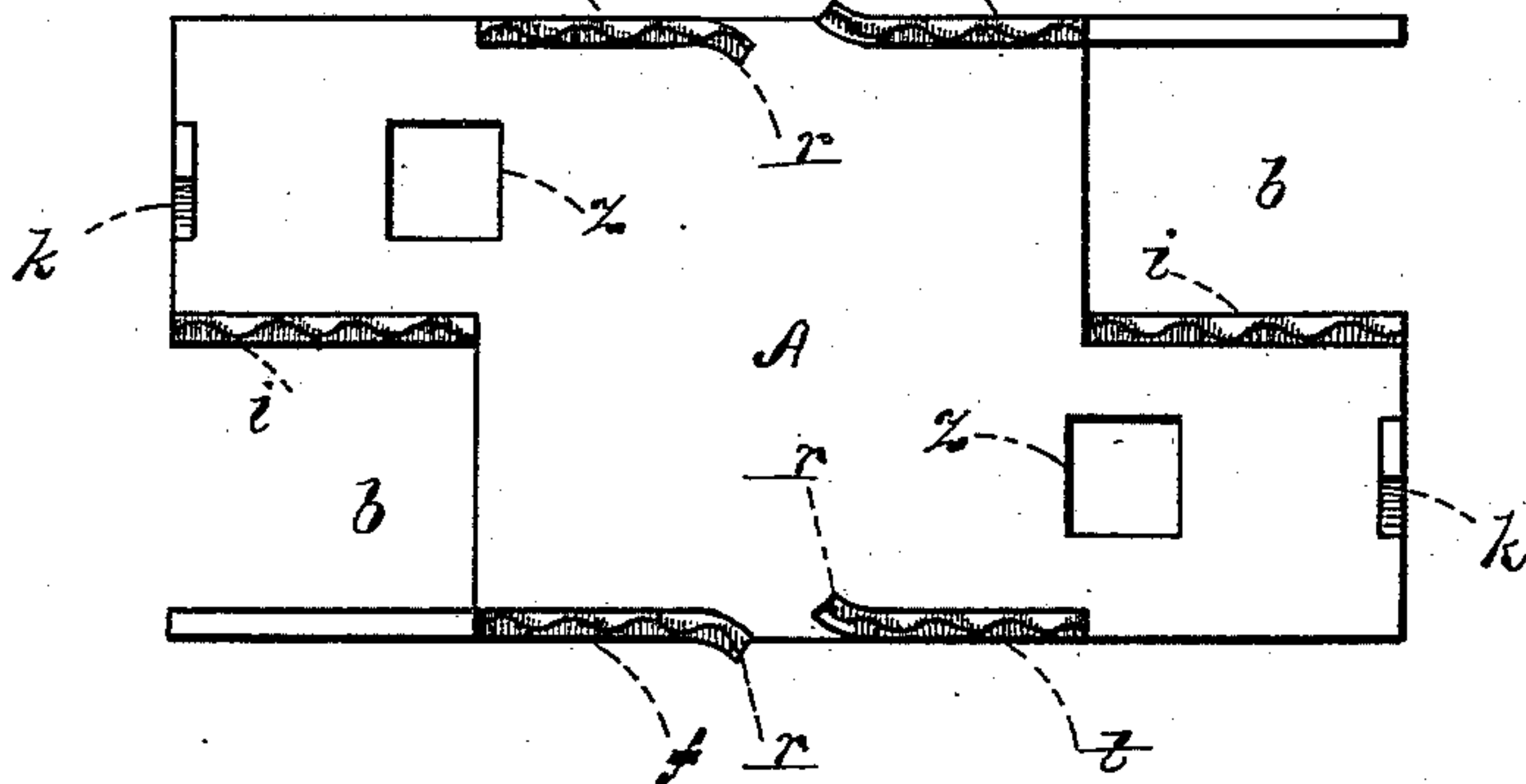


Fig. 4.

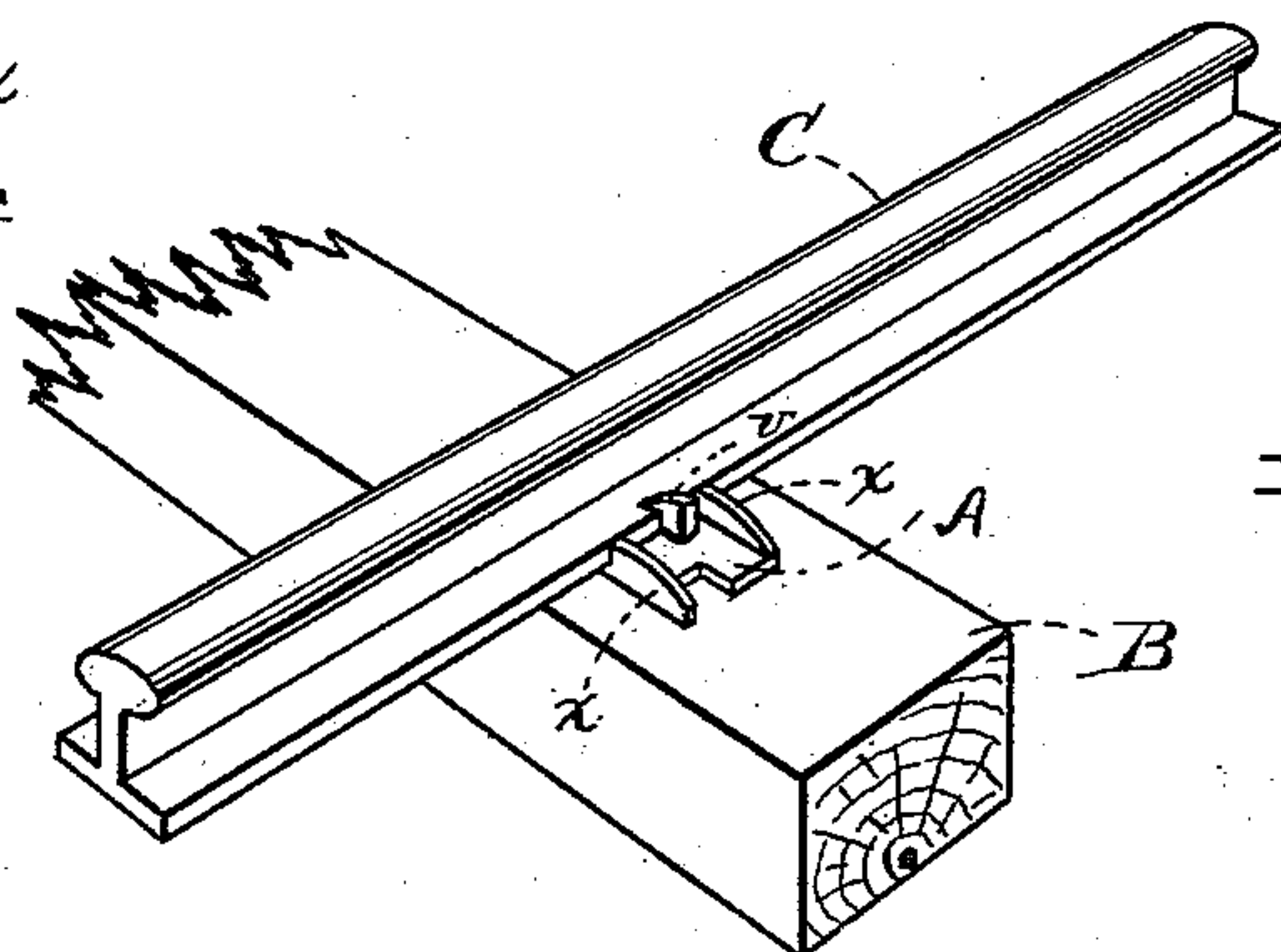
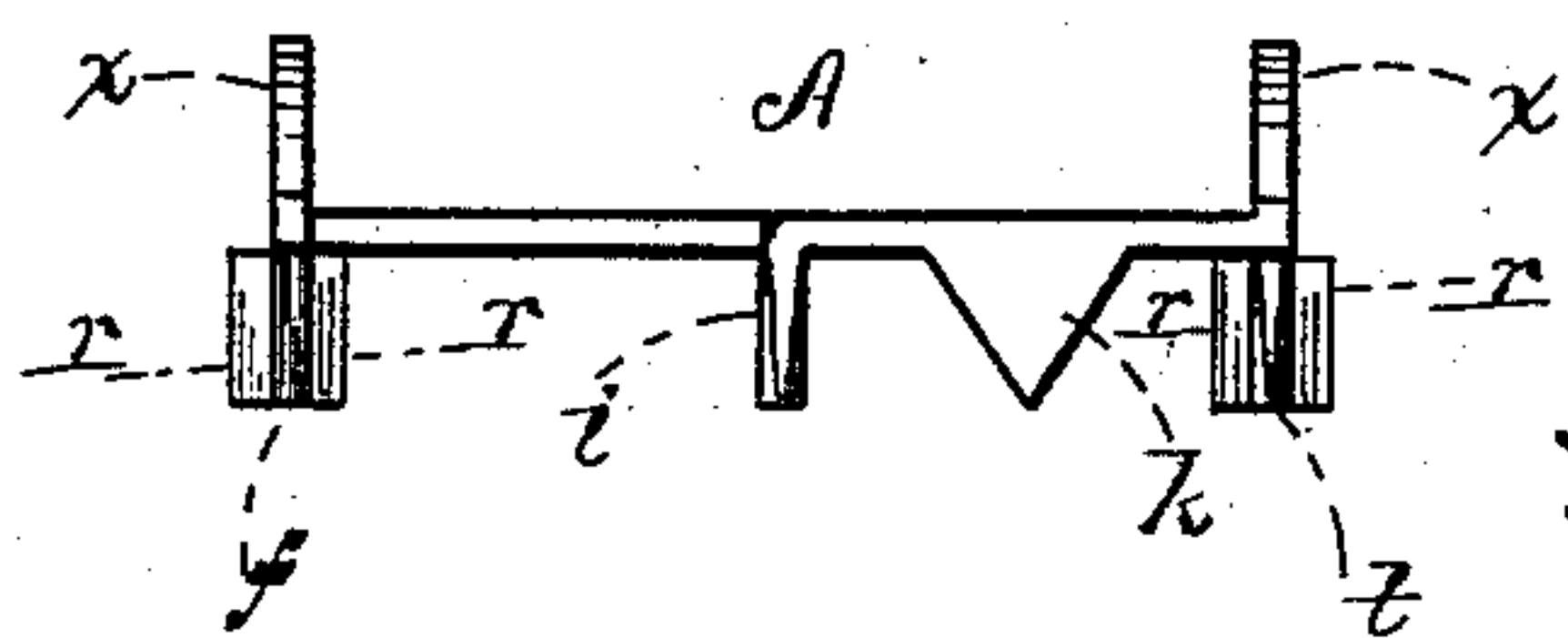


Fig. 5.

WITNESSES:

Robt W. Matthews.
C. W. Sprinney.

INVENTOR:

John W. Currier
PER C. A. Shaw & Co.,
ATTY'S.

UNITED STATES PATENT OFFICE.

JOHN W. CURRIER, OF NORTH TROY, VERMONT.

WEAR-PLATE.

SPECIFICATION forming part of Letters Patent No. 379,210, dated March 13, 1888.

Application filed January 17, 1888. Serial No. 261,029. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. CURRIER, of North Troy, in the county of Orleans, State of Vermont, have invented a certain new and useful Improvement in Wear-Plates, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved wear-plate; Fig. 2, a top plan view; Fig. 3, a bottom plan view; Fig. 4, an end elevation, and Fig. 5 an isometrical perspective view representing the plate in position for use.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to that class of wear-plates which are employed on railways for preventing the rails from cutting into or wearing away the ties; and it consists in certain novel features, as hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the body of the plate, which is provided with spike-holes *z*, and at both sides on its top with two upwardly-projecting flanges, *x*, which have their outer ends inclined downwardly, as shown at *m*.

Projecting downwardly at each side of the body A there are two vertically-arranged corrugated flanges, *t f*, the adjacent ends of which are bent laterally in opposite directions, as best seen in Fig. 3, the ends *r* of the flanges *t* being curved inwardly over the bottom of the body A and the ends *r* of the flanges *f* outwardly beyond the sides of said body.

Two centrally-disposed corrugated flanges, *i*, project vertically from the lower side of the body A near its center, as shown in Fig. 3, said flanges being arranged in parallelism with the flanges *t f*, and at either end of said body there is a downwardly-projecting spur, *k*. A portion of the body is cut away at each end, as shown at *b*, to reduce its weight, and all of

the parts described, including the body A, flanges *x t f*, and spurs *k*, are cast integral or formed in one piece.

The object in corrugating the flanges *t f* is not to strengthen them, but to cause them to take a greater hold of the wood, which is forced into the corrugations as the flanges are driven into it, thereby greatly increasing the friction between the wood and flanges and preventing the plate from moving endwise when subjected to the lateral movement of the rail, the spurs *k* also serving to assist in firmly seating the plate and to hold it in position on the tie.

The object in curving the inner or adjacent ends, *r*, of the flanges *t f* to the right and left, as shown in Fig. 2, is to cause said flanges to offer a greater resistance to the endwise movements of the plate than they would otherwise afford when the plate is subjected to the strain caused by the lateral movements of the rail.

In the use of my improvement the plate is placed lengthwise on the tie B and the flanges *t f i* and spurs *k* driven into the tie until the body of the plate rests thereon, after which the rail C is placed on the plate between the flanges *x* and secured in position by ordinary rail-spikes, *v*, inserted in the holes *z* and driven into the tie, the heads of the spikes overlapping the lower flange of the rail in the usual manner.

The lower or outer ends of the flanges *t f i* are cast or formed thinner than their inner ends to enable them to be driven into the tie easily. The flanges *i*, being farther from a line drawn transversely through the center of the body A than the flanges *t f*, subserve in assisting to keep the plate from turning on its seat.

Having thus explained my invention, what I claim is—

1. In a wear-plate of the character described, a body having one or more flanges projecting from its lower side and adapted to be driven into the tie, said flanges being corrugated, substantially as and for the purpose set forth.

2. In a wear-plate, the body A, provided with the end flanges, *i*, substantially as shown and described.

3. In a wear-plate, the flange *t*, having its end *r* curved or bent laterally inward, substantially as described.

4. In a wear-plate, the flange *f*, having its

end *r* curved or bent laterally outward, substantially as set forth.

5 5. In a wear-plate, the flanges *t f*, having their adjacent ends *r* curved or bent laterally in opposite directions, whereby said flanges are adapted to take a firmer hold of the tie, and thereby offer greater resistance to the lateral movements of the rail, substantially as described.

10 6. The improved wear-plate hereinbefore

described, the same consisting of the body *A*, having the upwardly-projecting flanges *x*, holes *z*, downwardly-projecting corrugated flanges *t f i*, and spurs *k*, all being constructed and arranged substantially as shown and 15 specified.

JOHN W. CURRIER.

Witnesses:

C. A. SHAW,

E. M. SPINNEY.