

(No Model.)

H. W. FOWLER.

SPIKE.

No. 272,676.

Patented Feb. 20, 1883.

Fig. 1.

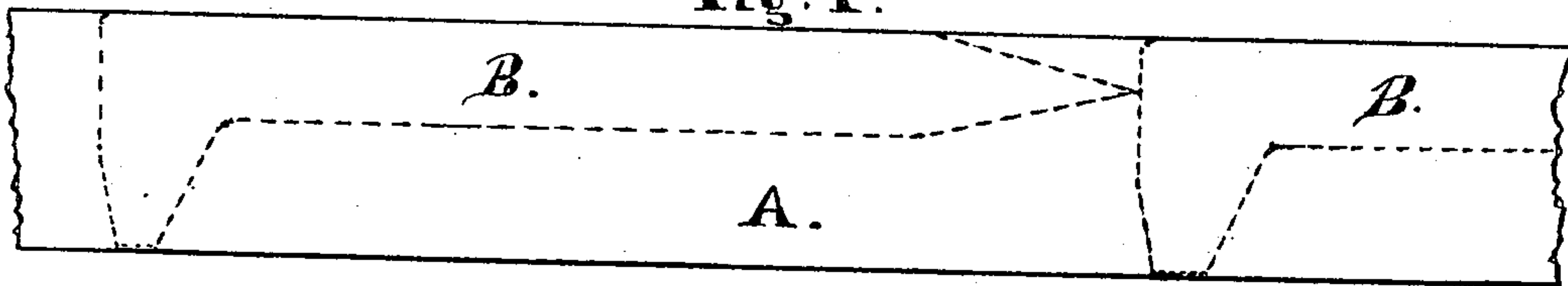


Fig. 2.

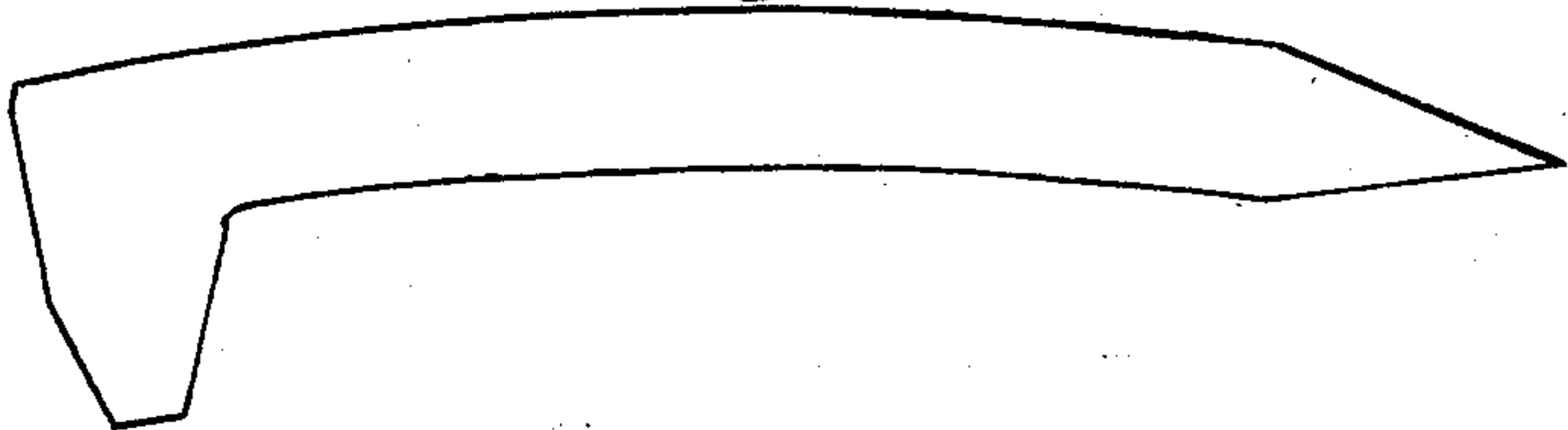
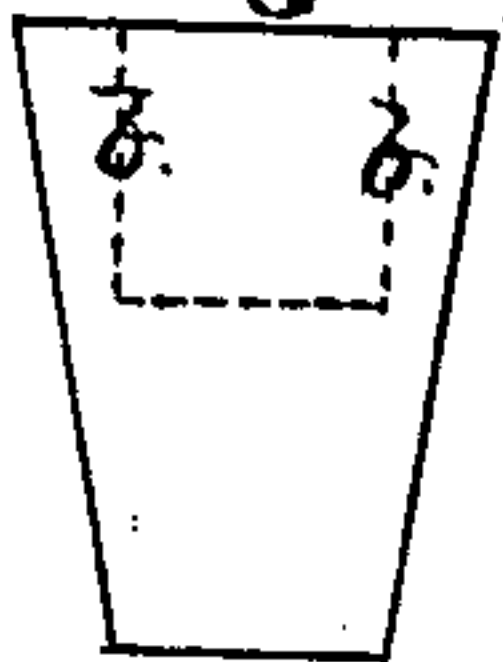


Fig. 3.



Witnesses.

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HERVEY W. FOWLER, OF CHICAGO, ILLINOIS.

SPIKE.

SPECIFICATION forming part of Letters Patent No. 272,676, dated February 20, 1883.

Application filed March 7, 1881. (No model.)

To all whom it may concern:

Be it known that I, HERVEY W. FOWLER, a citizen of the United States, residing at Chicago, in the county of Cook, State of Illinois, have invented a new and original Design and Form for Spikes, of which the following is a specification, reference being had to the accompanying drawings, forming a part of thereof.

My invention relates to the "form of spikes" for railway and other purposes, preferably made on rollers at one motion and in one pass, and in the form and manner set forth, (and described in the specification attached to my former application for Letters Patent for an improvement in spike and bolt machines, filed on the 18th day of February, 1881, Serial No. 26,611,) and from a cross-section of metal equal to the greatest width of the head of the spike, by which process I reduce the body of the spike by great compression of the metal from a large to a small cross-section, thereby greatly increasing the strength and stiffness of the body of the spike, which result is impossible to secure under the ordinary process of manufacturing spikes, where the head of the same is formed by "upsetting" the metal, and by my process the head of the spike is made of the same sectional area vertically as that of the bar from which the spikes are formed or rolled.

My invention consists of a spike curved at its back and front from the outer and lower edges of its head to the point, whereby in driving it is caused to move longitudinally in the arc of a circle, and to readily hug at its front against the flange of a rail and to pass its point into a sleeper or tie beneath the rail, and thereby effect a more perfect and firmer union of rail and tie than can be obtained with a straight spike.

I am aware that substantially straight spikes have heretofore been made with slightly concave and convex longitudinal surfaces at both the front and rear sides of the shank for obtaining a firm hold in a tie; but it is obvious that such a spike can only be driven in a straight line, while mine is driven in a curved line, as above set forth.

Another portion of my invention consists of a rail-spike curved as described, and provided with a flanged head, which is wider at its rear edge than at the front, where it bears upon a rail-flange. Heads having a somewhat similar form have been heretofore developed upon straight spikes; but they have special value on my curved spikes, because the driving-blow is necessarily delivered upon the back edge of the head, and the greatest bulk of the metal is there located to properly receive the force of the sledge used for driving.

In illustration of my invention, reference is made to the accompanying drawings, forming part of the same, in which—

Figure 1 is a lateral or horizontal section of the bar of metal from which the spike is rolled, showing the dimensions of the same as related to the spike, and in which A is a bar of metal, and in which is shown by dotted lines the spike B as reduced down by its passage through the rolls. Fig. 2 is a horizontal section or side view of the spike, "curved" in the manner and for the purpose set forth in the foregoing specification. Fig. 3 is a vertical section of the head, showing the peculiar shape of the same, as above set forth and described, and in which the dotted lines *b b* show the cross-section of the body of the spike.

Having thus fully described and set forth in the foregoing specification the nature and object of my invention, what I desire to claim and secure by Letters Patent is—

1. The improved rail-spike having a shank curved at its back and front sides from the head of the spike to the point, substantially as described.

2. The rail-spike having a head widest at its back edge, and a shank curved at its back and front sides from head to point, substantially as described.

HERVEY W. FOWLER.

Witnesses:

RICHARD LONG,
HERBERT ROYSTON.