

(No Model.)

H. LAIRD.
Fence Post.

No. 237,393.

Patented Feb. 8, 1881.

Fig. 1.

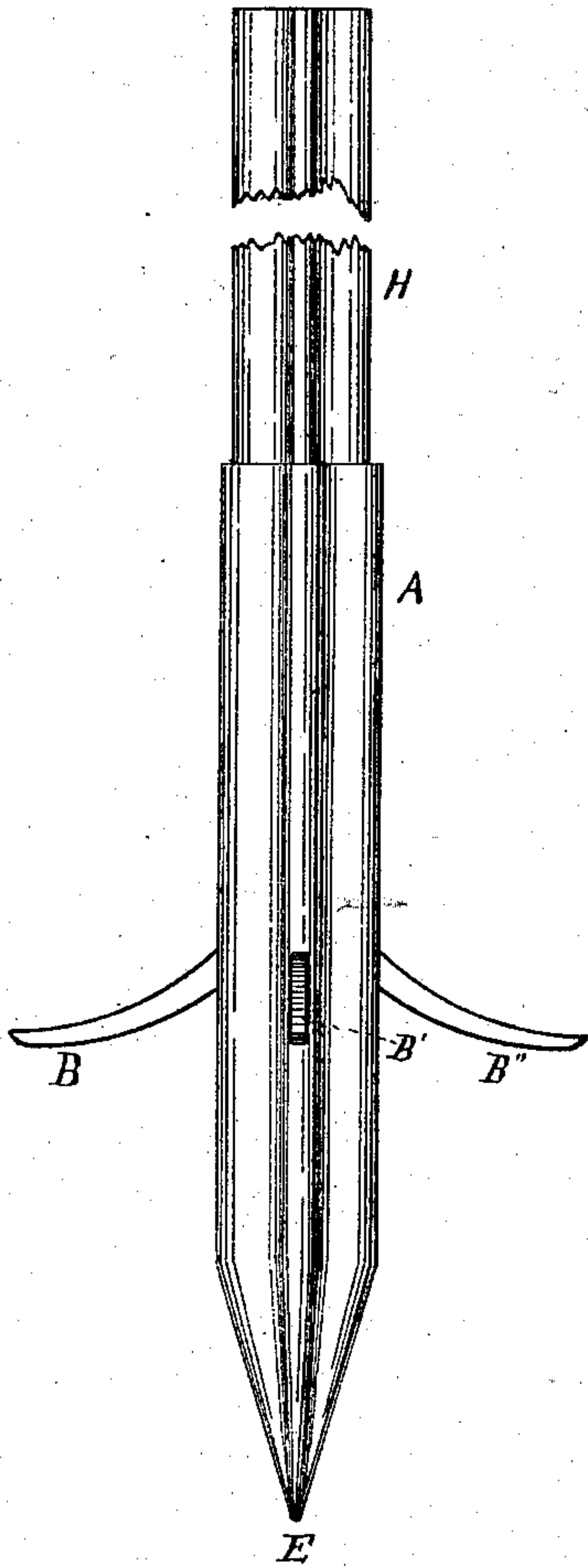


Fig. 2.

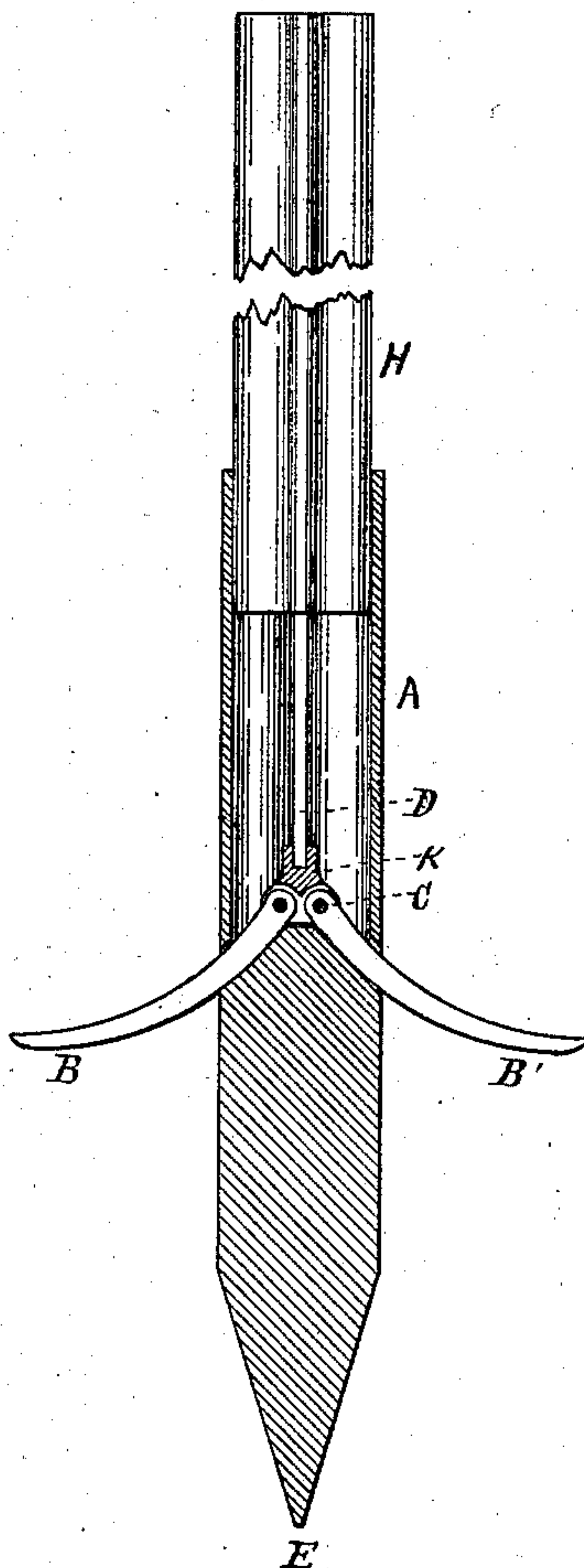


Fig. 3.

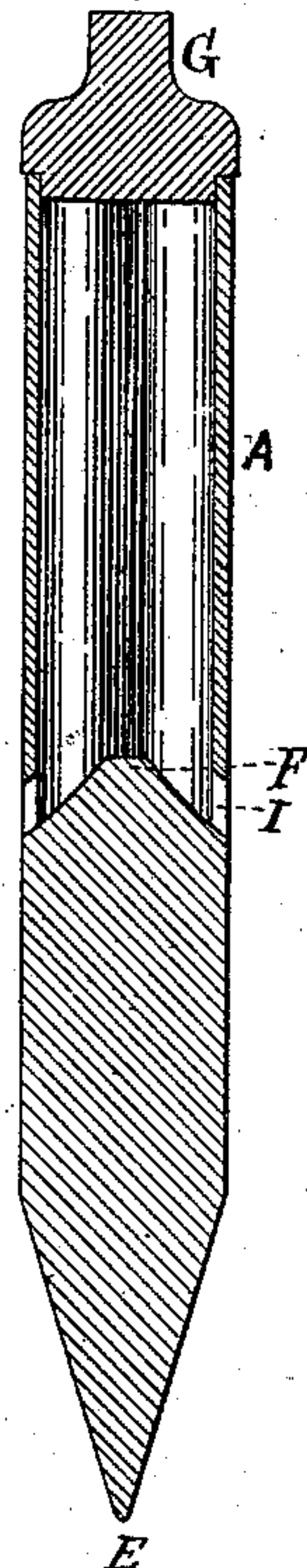


Fig. 4.

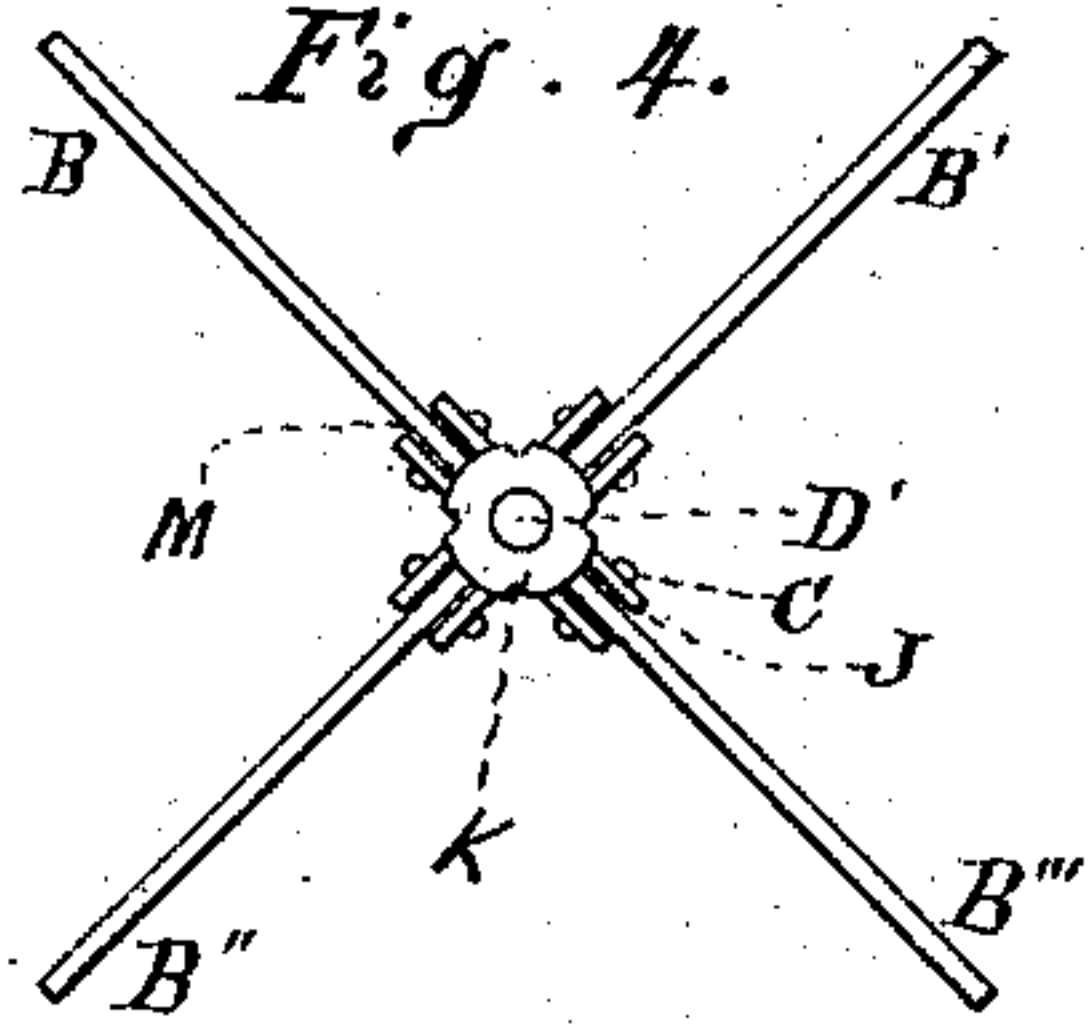


Fig. 5.

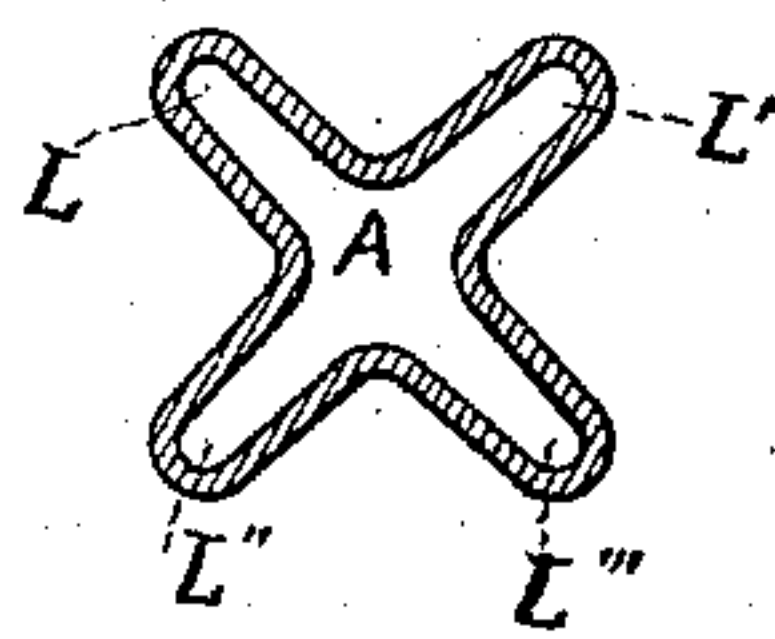


Fig. 6.

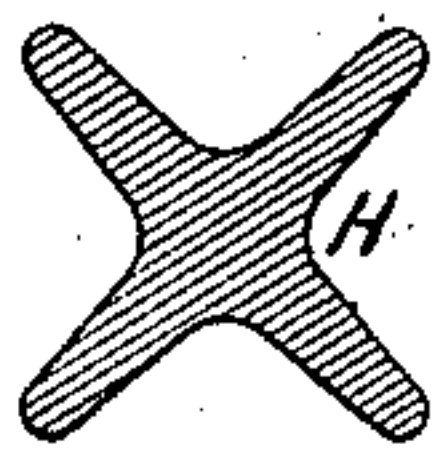
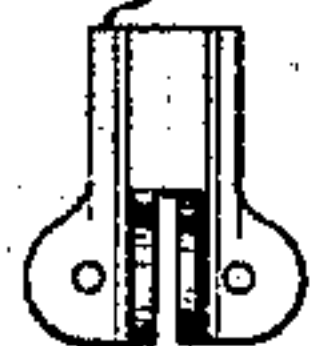


Fig. 7.



Attest:

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UNITED STATES PATENT OFFICE.

HARRY LAIRD, OF CANTON, OHIO.

FENCE-POST.

SPECIFICATION forming part of Letters Patent No. 237,393, dated February 8, 1881.

Application filed June 5, 1880. (No model.)

To all whom it may concern:

Be it known that I, HARRY LAIRD, residing at Canton, in the county of Stark and State of Ohio, and a citizen of the United States, have invented new and useful Improvements in Fence-Posts, of which the following is a full description, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of the post and its socket; Fig. 2, a vertical longitudinal section of the parts shown in Fig. 1; Fig. 3, a detail, being a vertical longitudinal section of the socket and driving-block; Fig. 4, a detail, being a top or plan view of the roots or teeth for securing the socket in position; Fig. 5, a cross-section of the post-socket; Fig. 6, a cross-section of the fence-post; Fig. 7, a detail, being an elevation of the head covering the holding arms or teeth.

The objects of the invention are to prevent the withdrawal of the post-socket after it has been driven into position, and at the same time to secure a firmer and stronger support, and one that will secure its retention in the ground in a vertical position under ordinary circumstances, and to secure a proper driving for the socket, and have the post, when inserted therein, furnish the means for projecting the socket-holding devices; and its nature consists in providing an exteriorly-flanged socket, the lower end of which is solid and sharp-pointed, and its upper end is hollow and is provided with side openings, through which the socket-retaining devices are projected; in providing curved arms or prongs, the outer ends of which are sharp-pointed, and their ends are pivoted to a movable cap or head located within the upper end of the socket, so that by depressing such cap or head the arms or prongs will be projected through the side openings of the socket; in providing a cone-shaped head formed on the inner end of the solid portion of the socket, and adapted to serve as a cam to turn the arms or prongs, and causing them to project through the side openings; and in providing a rod attached at its lower end to the head or cap carrying the arms or prongs, and extending up in the socket-opening so that the lower end of the post will come in contact therewith, and the inserting of the post into its socket will furnish the means for projecting the arms or prongs.

In the drawings, A represents the socket. B represents the arms or prongs. C represents the pin or pivot for attaching the arms or prongs to the cap or head K. D represents the rod for projecting the arms B. E represents the socket-point. F represents the cone or cam-head. G represents the driving cap or block. H represents the fence-post. I represents the holes or openings in socket A. J represents the flange or pivotal ears on head K. K represents the disk or head. L represents the grooves in the socket. M represents the slots or openings for the projection of the arms or prongs.

The socket A is made of cast-iron or other suitable material, and may be of the form shown in Figs. 1 and 5, or other forms suitable to be driven in the ground. The upper end of the socket is hollow and provided with four grooves, L, which are for the purpose of guiding the arms or prongs B to the side openings, I, and run lengthwise with the socket from the top or upper end to the holes or openings. The part of the socket A below the holes or openings I is solid, for the purpose of giving it strength to resist stones or other hard substances that it may come in contact with when being driven in the ground. The top or upper end of the solid part of the socket A is cone-shaped, the base of the cone being in line with the bottom or lower ends of the holes or openings I, and its vertex or top being in line or even with the top or upper ends of such holes or openings. This cone-shaped end or head acts as a cam, for the purpose of spreading the arms B when projected, and guiding them through the holes or openings I. The upper and lower portions of this socket may be cast in one piece, or they may be made separate and united in any suitable manner.

The arms or prongs B are made of wrought-iron or other suitable material, and are bent or curved, as shown in Figs. 1 and 2, or in some other form that will insure their projection through the holes I. The inner end of these arms or prongs has a suitable opening for the passage of the pin or pivot by means of which they are attached to the head or disk K. The rod D is made of wrought-iron, and at its lower end has attached to it the head or disk K, which disk carries the arms or prongs, and the rod D projects above the

socket, so that it will be driven down by the insertion of the post, and thus project the arms or prongs through the openings I. The disk K is provided with flanges or ears, between which the inner ends of the arms or prongs are pivoted by the pin C, the flanges J being provided with suitable holes for the passage of the pin C, which passes through the flanges J and the upper or inner ends of the arms or prongs and pivotally connects them to the disk K, so as to permit the arms or prongs to be forced through the openings I by the action of the conical-shaped end of the solid portion of the socket A through the downward motion of the rod D and disk K.

The disk K may be made of cast-iron or other suitable material, and is securely attached to the lower end of the rod D by any suitable device.

The grooves L may be cast with the socket A, or they may be formed in some other suitable and well-known manner, so long as they extend to the socket in a vertical line with the side openings, I.

The driving-block G may be made of cast-iron or other suitable material, of the form adapted to fit the socket, and is loosely placed on the top or upper end of the socket A when it is being driven in the ground, and is to be removed after the socket is driven into the ground to a sufficient depth.

The post H may be made of iron or other suitable material, and may be of the form shown in Figs. 1, 2, and 6, or of other suitable forms.

The top or upper end of the socket A is provided with a corresponding number of grooves to receive these flanges on the post H, or so formed as to admit the insertion of a post of different form than as shown in H. After the rod to which the disk K and arms B are attached is inserted into the hollow part of the socket A, the post H is driven into the socket, and its lower end will come in contact with the top or upper end of the rod D, so that when the post H is driven into the socket A

the arms or prongs will be forced through the openings I into the earth below the surface, and thereby securely hold the socket A and post H in the proper position in the ground. These arms or prongs furnish a strong and durable support for the socket A and prevent the post H from tipping or leaning.

As shown, four arms or prongs B are used, and a corresponding number of guide-grooves are formed in the opening of the post; but two, three, or more arms or prongs can be used, a corresponding number of guide-grooves being formed, thus admitting of a change in the form of the post H.

In use the socket is first driven into the ground. The arms or prongs B and the rod D are then inserted in the opening at the top of the socket and the post driven into the opening, forcing the arms or prongs into the ground.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A fence-post socket consisting of a pointed lower portion and a hollow upper portion, provided with side openings, in combination with the retaining or holding arms or prongs B, capable of being projected through the side openings, substantially as and for the purpose specified.

2. A fence-post socket having its upper end hollow and provided with the guide-grooves L and side openings, I, in combination with the arms or prongs B, pivoted to a sliding head, K, located in the opening in the socket, substantially as and for the purposes specified.

3. In a fence-post socket, the upper end provided with a vertical opening having guide-grooves L, and with lateral or side openings, I, the combination of the cam-head F, arms or prongs B, head or cap K, and rod D, for projecting the arms or prongs into the earth around the socket when driven down, substantially as and for the purpose intended.

HARRY LAIRD.

Witnesses:

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WILLIAM H. YOUNG.