(No Model.) 2 Sheets—Sheet 1.

F. P. ROSBACK & H. F. BAND.

FENCE.

No. 511,063. Patented Dec. 19, 1893.

Fig. 1.

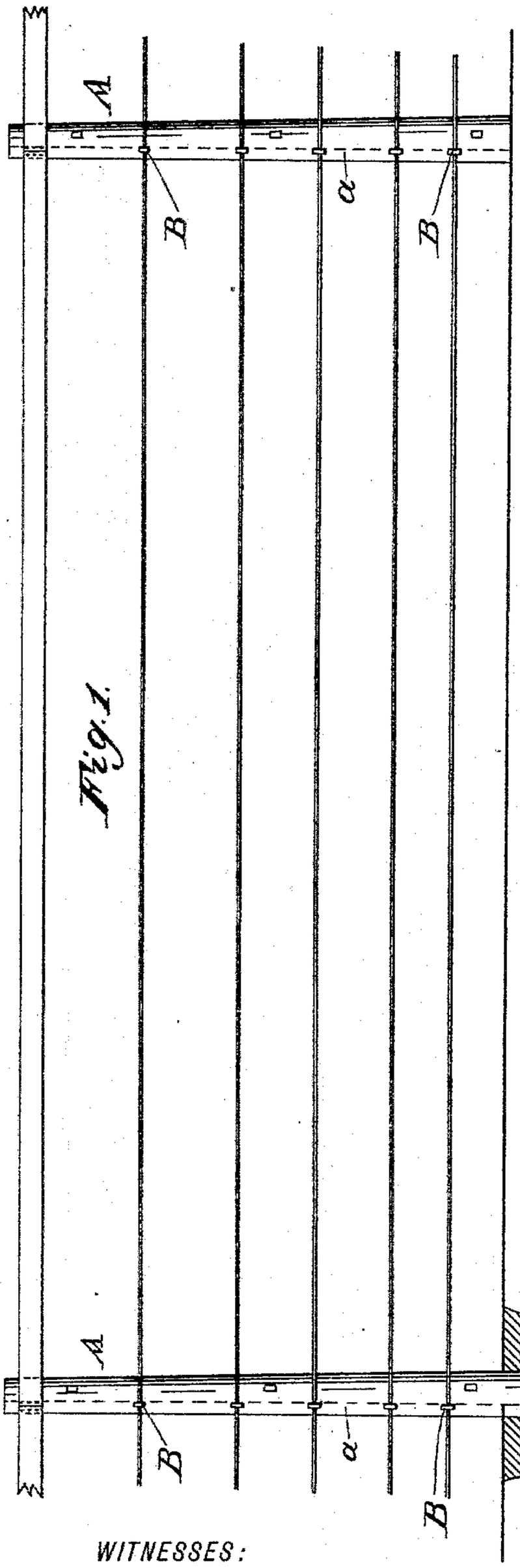
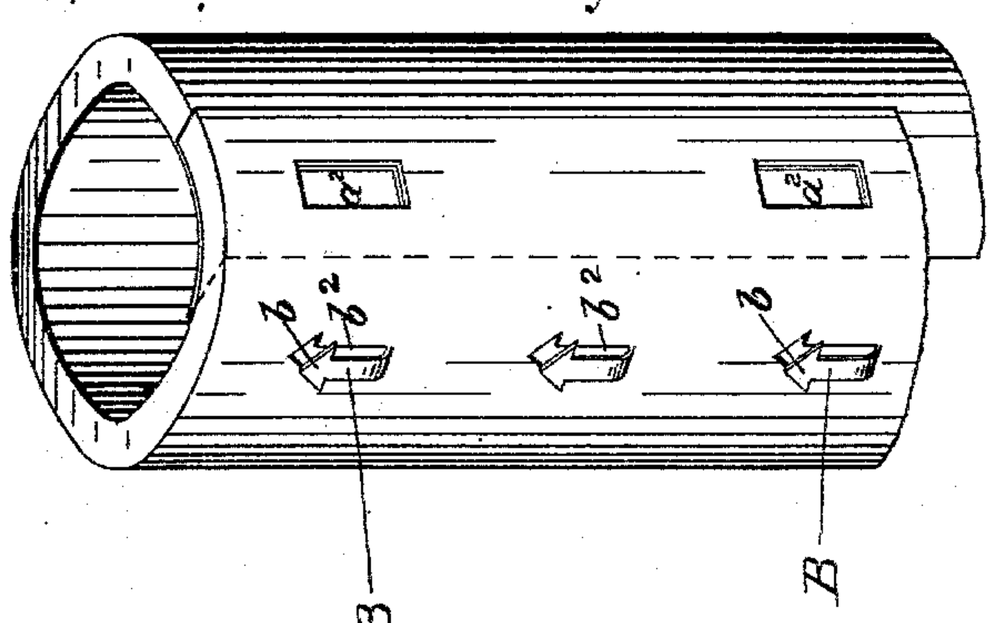


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

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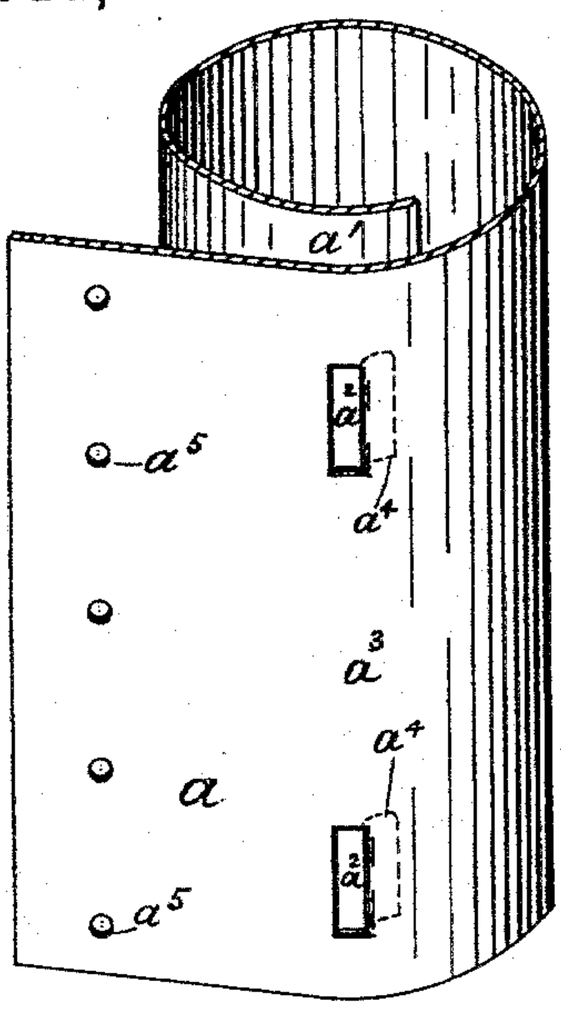

Fig. 3.

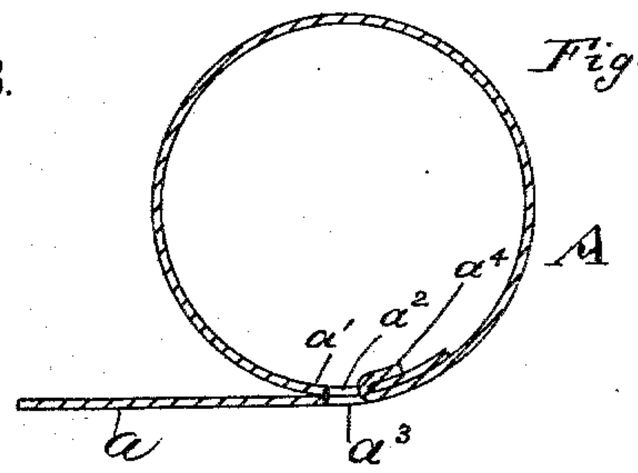

Fig. 4

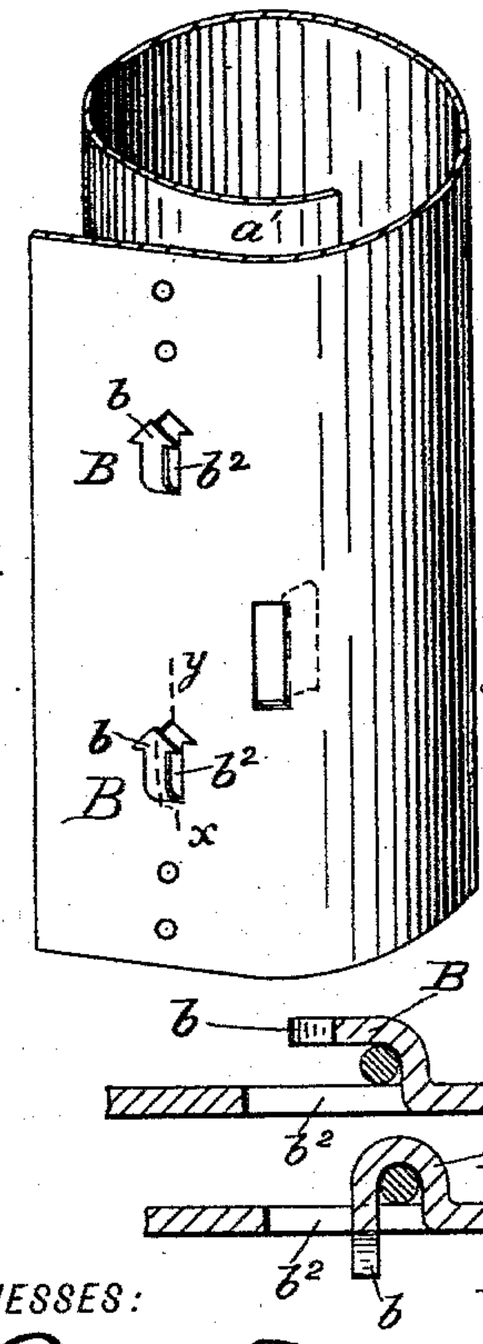

Fig. 5.

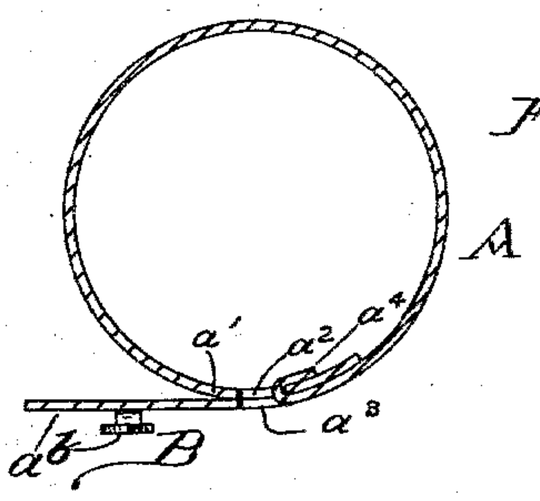

Fig. 6.

Fig. 8

Fig. 7

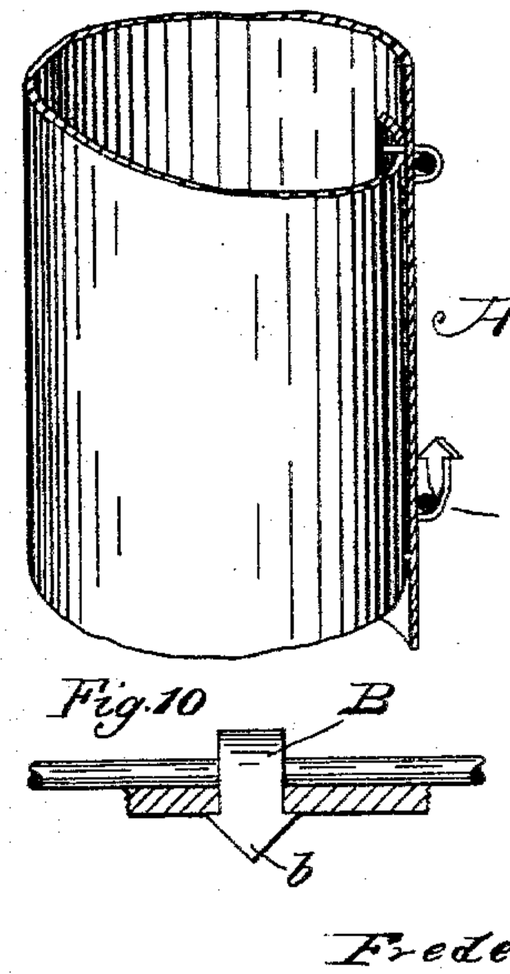

Fig. 9

Fig. 10

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UNITED STATES PATENT OFFICE.

FREDERICK P. ROSBACK AND HENRY F. BAND, OF CHICAGO, ILLINOIS, ASSIGNORS TO THE INTERNATIONAL STEEL POST COMPANY, OF SAME PLACE.

FENCE.

SPECIFICATION forming part of Letters Patent No. 511,063, dated December 19, 1893.

Application filed July 21, 1892. Serial No. 440,844. (No model.)

To all whom it may concern:

Be it known that we, FREDERICK P. ROSBACK and HENRY F. BAND, both citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Fences, of which the following is a specification.

The objects of our invention are to provide a simple and efficient construction of tubular sheet metal fence post which when driven into the ground will stand therein with great firmness; to adapt the same for the convenient application of both wire and board rails; to provide simple and effective means for securing together the lapping portions of the metal sheet when rolled into tubular form; to provide simple and effective wire holders for securely holding the fence-wires, and to provide the post with a novel and improved construction of upper end.

In carrying out our invention we provide an oblong piece of sheet metal of suitable length and width and roll a portion only of the width thereof into tapered tubular form, so as to leave the finished post with a tapered tubular body having a tangentially formed wing or flange tapering in width the reverse of the direction of taper on the part of the rolled post body as a result of the unrolled portion of the metal sheet. This construction assists in steadying the post, particularly in soft ground, and serves therefore to cause the post to have a permanent set, and to avoid sagging by lapse of time or the force of heavy winds, but at the same time permits the larger base end of the tubular portion of the post to be readily driven into the ground, it being here observed that these posts find their principal use in fencing along railroads and that to render their use a practical and economical matter they are driven into the ground to the required depth. The wing portion of the post above the ground when the post is set therein permits the ready and convenient attachment of both board and wire rails.

As a matter of further improvement we punch or strike out a set of tongues or tangs along one lapping portion of the post and provide eyes along the other lapping portion of the post, which said tongues or tangs and eyes can be economically formed before rolling the metal sheet. When however the metal sheet is rolled, the lips or tangs will be caused to enter the eyes, and the former can then be bent back so as to form hooks which engage and clamp one of the lapping portions of the post. These tangs or tongues may therefore be considered as hooks in the first instance, the same being bent and clinched upon the metal sheet after their engagement in the eyes. These fastening devices thus struck or punched out from the metal sheet can be used in tubular sheet metal posts either with or without the wings hereinbefore referred to. We also provide the post with barbed tongues for holding the wires, and by bending the barbed ends of such tongues back through the post, they can be caused to interlock therewith, as hereinafter more fully set forth. These wire-holding devices can be arranged either upon the tubular portion of a post or upon the wing hereinbefore described, and if desired they could of course be arranged upon one of the lapping portions of the post. We also propose flanging the upper end of the post so as to dispense with the usual cap.

In the accompanying drawings,—Figure 1 represents in elevation a couple of posts embodying our invention, with both rails and wires secured thereto. Fig. 2 represents the upper flanged end of a tubular post in accordance with our invention. Fig. 3 shows a part of the upper portion of the post. Fig. 4 is a section taken transversely through Fig. 3. Fig. 5 shows a part of the upper portion of the post provided with wire-holding devices. Fig. 6 is a section taken transversely through Fig. 5. Fig. 7 shows on a larger scale a section taken through a portion of the post on line *x*—*y* Fig. 5 with a wire in place and with the barbed tongue in the position it occupies prior to causing it to interlock with the post. Fig. 8 is a like view showing the barb-tongue interlocking with the post. Fig. 9 shows in perspective a portion of the post and illustrates one of the barbed tongues twisted preparatory to bending its barbed end back through the post. Fig. 10 is a section taken horizontally through a portion of

the post on a plane just above one of the barbed wire holding tongues, which said tongue is shown interlocking with the post.

The construction of post illustrated by Figs. 1, 3 and 4, involves a piece of sheet-metal of suitable length and width, which is bent or rolled for a portion of its width so as to form the tubular post portion A having a tangentially extending flange or wing-portion *a* provided by the unrolled or unbent longitudinal edge portion of the sheet metal. As one of several ways in which the material can be secured together so as to insure a proper maintenance of shape, the lapping portions of the sheet metal are respectively provided with fastening devices consisting of hooks and eyes. While the outer fold or lapping portion of the metal sheet could be provided with hooks arranged to engage in eyes in the inner lapping portion or fold of the metal sheet, I prefer to provide the inner lapping edge-portion *a'* of the sheet with a line of apertures or eyes a^2, and to provide the outer lapping portion a^3 of the metal sheet with a line of hooks a^4 which engage in said eyes as best illustrated in Fig. 4. These hooks or catches are struck up from the metal sheet in a way to permit them to enter the eyes, and after such entrance, they are bent back into hook form so as to clamp the inner fold along the edge portions of its eyes or apertures. By such arrangement the outer side of the post is left smooth, and hence no obstruction is offered to the driving or forcing of the post into the ground. The flat wing portion *a* of the post can be provided with any desired construction and arrangement of devices for holding the fence-wires, and it can also be provided with any suitable means for holding board rails, a simple and desirable arrangement being to provide it with a line of openings a^5 either for bolts or nails employed to hold the board rails, or for any suitable construction of wire holding devices, or for both of such purposes, it being observed however that these apertures are of particular service for the reception of bolts or rails, which latter can be placed flatwise against the wing *a* of tne post.

In Figs. 5 and 6, the portion of the post therein shown is constructed like the post of preceding figures and is shown secured together by a single hook and eye, which of course can be multiplied as may be desired. As a means however for attaching fence-wires, we provide the wing portion *a* of the post with hooks or wire-holding devices B struck out from the metal sheet and arranged so that after receiving the wires, they can be bent inwardly through the wing and twisted so as to cause them to interlock therewith. In forming these wire-holding devices, portions of the metal sheet are punched or struck out therefrom as in Figs. 5 and 7, each portion being formed with a hook or arrow-shaped end *b*.

A wire to be attached to the post thus constructed and provided with wire-holders can be placed between one of said wire-holders and the outer side of the wing *a* as illustrated in Fig. 7, and by then giving the tongue or wire-holder B a partial twist as at *b'*, Fig. 9, the hook or arrow-shaped end of the tongue or holder can be passed back through the slot or oblong opening b^2 previously formed by punching or striking out the holder from the metal sheet. The holder can then be untwisted so as to bring the plane of its end *b* at right angles to the length of the slot or opening b^2, as in Figs. 8, 9 and 10, and in this way the end of the holder will interlock with the sheet metal and hence prevent accidental disengagement of the wire.

The barbed wire holders B can be formed along any desired portion of the post, and if arranged along the outer lapping portion of a tubular sheet metal post, the inner lapping portion of the metal sheet can of course be provided with eyes for their reception.

The post whether provided with the wing *a*, or whether made without such wing as in Fig. 2, can be flanged along its upper edge, and in this way a cap can be dispensed with. Where the flange portions meet, they can lap, and in this way the metal sheet can be flanged preparatory to or during the act of rolling it into tubular form.

Broadly considered, we may provide the post with suitable openings for fastening or holding devices for either wire or board rails, or both, and may hook or barb such holding devices in any suitable way and either make them separate from or integral with the post, the primary feature involved being a hooked or barbed holder which after being introduced through an opening or openings in the post cannot be withdrawn since it will interlock with the post.

The feature of barbing a tongue such as hereinbefore set forth and first twisting the same so as to permit it to be introduced through a slot in the post and then untwisting the tongue so as to cause it to interlock with the post constitutes a matter of further improvement. By such arrangement the tongue cannot be untwisted without the use of a strong and specially prepared instrument and hence it cannot be unlocked by unauthorized persons. It will also be seen that when the tongue is bent about a wire rail, its barbed end while capable of introduction through the slot in the post, cannot reach the opening formed by punching out the said barbed end, for the reason that the thickness of the wire, in effect shortens up the tongue.

The foregoing described barbed holders can be adapted for either wire or board rails, or both, it being only necessary to increase the length of the tongue for a board rail.

What we claim as our invention is—

1. A tubular sheet metal post tapering upwardly from its base end and having a longitudinally arranged flange which decreases in width downwardly from the upper portion of the post, substantially as described.

2. A tubular sheet-metal post having lapping edge portions secured together by hooks on one lapping edge portion engaging in eyes in the other lapping edge portion, substantially as described.

3. A tubular sheet-metal post having lapping edge portions secured together by hooks punched from one lapping edge portion and engaging the other lapping edge portion, substantially as described.

4. The combination with a sheet-metal post of a rail or wire holder having a barbed portion which is introduced through an opening in the post and interlocked with the latter substantially as set forth.

5. A sheet metal post provided with barbed tongues B punched or struck out from the post and arranged for holding the rails or wires or board rails and for interlocking with the post substantially as described.

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