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Applicant (Assignee of Actual Inventors)

Actual Inventors

Application and Complete Specification

Application and Complete Specification Accepted
21st Mar., 1927

RYLANDS BROTHERS (AUSTRALIA) LIMITED.

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Class 81.8.

Drawing attached.

COMPLETE SPECIFICATION.

"Improvements in steel posts and droppers for wire fences."

We, RYLANDS BROTHERS (AUSTRALIA) LIMITED, a company registered in the State of New South Wales, carrying on business as Manufacturers, at Port Waratah, Newcastle, New South Wales, Australia, hereby declare this invention and the manner in which it is to be performed to be fully described and ascertained in and by the following statement:—

10 It is common practice to construct posts and droppers for wire fences in sectional steel. Angle sections, U-sections, Tee sections, and Zed sections, have been used for these fence elements with mouthings, notches, 15 slits or holes cut in one or more of the members of these sections to carry and embrace the fence wires. And in the case of posts, ground plates have been used with the post feet embraced to them to ensure vertical 20 stability and to diminish cost in sinking and footing the posts in the ground.

The object of the present invention is to provide posts and droppers in a novel section which may be rolled with facility and which 25 will offer certain advantages which are not attainable in like degree with posts or droppers having any of the sections heretofore used. Prominent among these advantages are the following named, viz.: Great 30 transverse stability which is not materially diminished by slits, slots, or punctures made

through one of the section members to carry the fence wires; maximum strength for a given weight of metal resulting from which a larger number of posts or standards of given length and stiffness can be obtained 5 from a unit weight of metal; neat appearance; and equality of transverse stiffness in every direction.

Various known designs are subject, inter alia, to the following criticisms. 10

Angle sections: The holding, notching, or slitting of one member of the angle destroys or materially reduces the stiffness in the direction of the plane of that member.

U-sections: The transverse stiffness in all 15 directions is materially reduced by notching or slitting the sections either across the lips or across the fold.

Tee and Zed sections: As in the case of angle sections, stiffness is sacrificed to a ma- 20 terial extent when the continuity of any of the three members is interrupted by slits, holes, or slots.

In all these cases, the cross sectional area of the metal used, and consequently the 25 weight must be augmented to set off the loss in rigidity which results from the breaching of the continuity of the section to accommodate the fence wires which must be passed 30 through it.

The objects of the present invention are attained in a deformed Tee section. The flange members of the Tee are bent outwardly so that the three members of the section set
5 about 120° apart and the section is thus modified to a three pointed star section. The web member of this section may be thicker or thinner than the outbent flange members. In practice, the section is rolled and is not
10 produced by deforming a Tee section. The fence wire holes, slots or notchings may be formed in the web member, or alternatively in the edges of the outbent flange members.

Owing to the angular relation of the two
15 flange members they are endowed with transverse stability in all directions and not merely in their plane, as in the case of Tee sections. The stability in all directions and particularly in the plane of the web member
20 is thus so augmented that interruptions in the continuity of any of the members by wiring holes, slots, or notchings is unimportant.

In the case of posts, the bottom end should
25 be finished to a point to facilitate driving into the ground.

The ground anchor for the posts consists of a flat plate T-slitted midway at top and bottom edge, with the lips of the slits outbent to form tongues adapted to embrace
30 the flange members of the post. In erecting fences, the ground plates are slipped over the posts; the posts are driven into the ground, and finally the ground plates are
35 driven down, so that they form spread footings across the direction of the fence line.

In the accompanying drawing:—

Fig. 1 is a cross-section through a post according to the present invention—in this
40 case all three members of the "star" are identical in section;

Fig. 2 is a similar view in which the web member is thinner than the flange members;

Fig. 3 is a side elevational view of a post;

Fig. 4 is a side elevational view of a ground plate; and

Fig. 5 is a sectional plan showing a "star" post embraced in a ground plate.

A and B are the flange members of the section and C the web member. D are fence wire holes punched at appropriate spaced
10 positions through the web members C. E is a ground plate, F the slitted lip tongues in the top and bottom edges of the plate E, which embrace the flange members of the
15 post.

The dropper differs from the post only in that it is not pointed (G) at the bottom end and is shorter and of lighter section.

Having now fully described and ascertained our said invention and the manner in
20 which it is to be performed, we declare that what we claim is:—

1. Rolled steel posts and droppers for wire fences having a web member and two flange members disposed approximately equiangu-
25 larly and all substantially identical in section shape and dimensions.

2. Rolled steel posts and droppers according to Claim 1, having the web member thicker or thinner in section than the flange
30 members and the flange members of approximately equal thickness.

Dated this 29th day of September, A.D. 1926.

RYLANDS BROTHERS (AUSTRALIA) LIMITED. 35

By its Patent Attorneys,

SPRUSON & FERGUSON.

Witness—M. Murray.

RYLANDS BROTHERS (AUSTRALIA) LIMITED. Posts and Droppers for Wire Fences.

