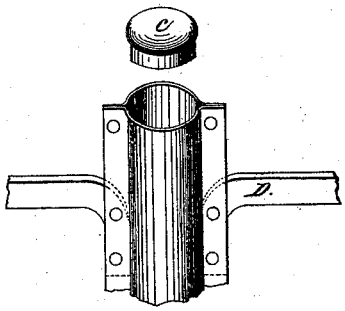
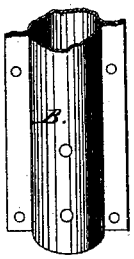
W. J. Fryer Jr,

Fence Post,

No. 54,712. Patented May 15, 1866.





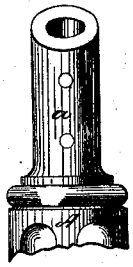


Fig. 3.

Fig. 1.

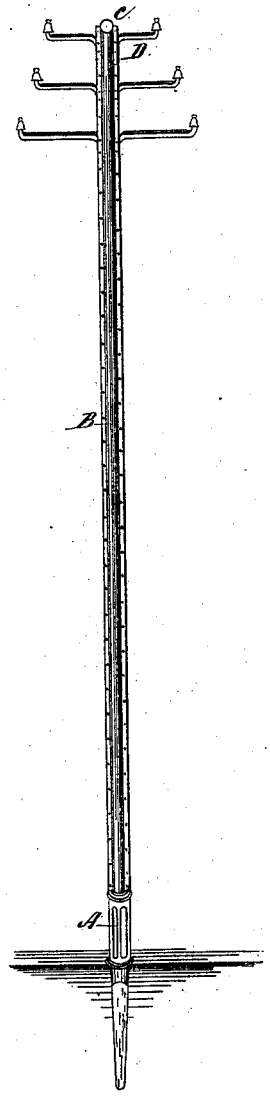
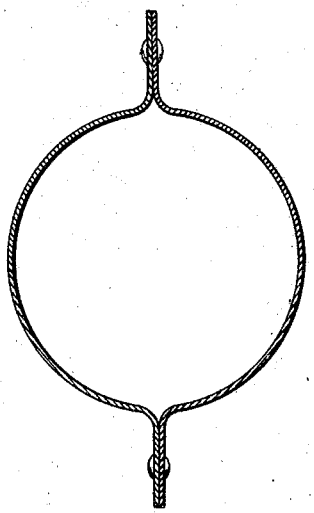


Fig. 2.



Witnesses:
J. McArtuann
John A Brady

Inventor:
Wm J Fryer Jr

UNITED STATES PATENT OFFICE.

WILLIAM J. FRYER, JR., OF NEW YORK, N. Y.

IMPROVEMENT IN TELEGRAPH-POSTS.

Specification forming part of Letters Patent No. **54,712**, dated May 15, 1866; antedated May 1, 1866.

To all whom it may concern:

Be it known that I, WILLIAM J. FRYER, Jr., of the city, county, and State of New York, have invented a new and useful Improvement in Telegraph-Posts; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view; Fig. 2, a section (full size) of the corrugated iron; and Fig. 3, details comprising a part of the base and a part of the shaft, also the cap fitting on the top of the shaft.

Similar letters of reference in the several figures indicate similar parts.

The nature of my invention consists in constructing telegraph-posts of corrugated sheet-iron, galvanized or painted for protection against corrosion, standing upon a cast or wrought iron base driven or set into the ground, thus making a telegraph-post light, strong, cheap, and durable, presenting a neat and finished appearance, and capable of being very quickly erected, as well as handled and transported with facility.

To enable others skilled in the art to make and use my invention, I will proceed to describe it.

A is a cast-iron base, pointed on its lower end to enable its being driven into the ground, the upper part forming a spindle, *a*, over which the shaft fits. Screw-holes gaged to correspond with similar holes in the shaft are provided for screwing the shaft to the spindle. Provision is also made by a proper recess to let the shaft sink into the molding at the bottom of the spindle, so as to prevent the shaft from being turned, thus making the screws which bind the shaft to the spindle only serve a purpose in preventing the shaft from being bodily lifted off.

B is the shaft, made of two strips (more or less) of corrugated sheet-iron—say No. 17—riveted together with, say, three-and-one-half-pound rivets—*i. e.*, one thousand rivets in three and one-half pounds—placed six inches (more or less) apart. The shaft may be made either of two strips extending its entire length, rolled for this purpose, or short pieces of the usual merchantable length of six or nine feet may be employed. In the latter case the lengths would break joints with each other, with light battens on the inside where the joints occur to bring them flush. This latter mode of construction would be fully equal in strength to one unbroken stretch. To make the shaft still more rigid, a strip of sheet iron extending the entire length of the shaft may be placed in the seam where the flanges come together, the rivets in that case clinching the three thicknesses.

To add to the beauty of the vertical line of the shaft, as well as to give additional strength, the shaft may be made with a slight taper toward the upper end.

C is the cap fitting upon the top of the shaft, to prevent rain-water running down on the inside.

D is the arms, made of, say, one by one-quarter inch iron, one end brought by a curve to right angles with its length and inserted in or on the outside of, the flanges of the shaft where they come together, and riveted or bolted fast, the other end of the arm being arranged for the reception of the non-conducting glass tips, through or around which the wire winds, thereby preventing the current of electricity from passing down the post into the ground. If desirable, each set of arms—that is, the one extending to the right and the one extending to the left—can be made in one piece, bending at its center to assume the shape of the shaft, and riveted with two rivets, (one on each side.) Malleable iron would be highly adapted to this purpose, and this material and this plan would probably be preferable to the one first described.

In practice, though of course not absolutely requisite, it would be expedient, before the shaft is erected, to punch holes, properly distanced, in the flanges of the shaft, for additional arms. These arms, punched with corresponding holes, could then be readily attached when new stretches of wire were required.

As a means of preservation against corrosion the shaft and arms, and even the base, may be galvanized. This process would most effectually prevent rust or the ordinary destruction of the material of which it is constructed. Galvanized sheet-iron is always to be procured in market, and the shaft may be made direct from this material. Tinned rivets are also a common article, and always to be procured, for riveting the galvanized iron together.

Painting the sheet-iron on the inside, or at least where the flanges come together, and also entirely painted on the outside, answers a good purpose and is conducive to long preservation. Even when galvanized iron is used a coat of paint on the outside is an additional safeguard against corrosion.

It will be observed that the shaft can be varied in its form by either constructing it of a single sheet or of a number of sheets, the flanges riveted together or else pressed out of the sheet-iron direct. In section it can be made cylindrical, or triangular, or square, or some similar regular figure; and instead of each piece having but one channel, any number of waves may be formed in the sheet-iron; but it is not considered that the advantages gained are commensurate with the additional labor involved by the adoption of these modes, except in the case of an extreme high post being required. The base can also be modified to suit different views, or as the nature of the ground in which it is to be set may demand. In soft and spongy soil, to get a good foothold, the lower part of the base may require to be made flaring downwardly. Bases of stone or wood may be employed, on which to set the shaft in certain cases where extreme cheapness is desirable.

Another feature connected with the base is that it can be made, between the spindle and the ground line, to form a frame in which to insert advertising-cards for business purposes generally, at the same time making the base ornamental as well as applying it to a practical purpose. In this way a yearly revenue would be received that in a short time would entirely pay the original cost of the post, and would be a clear source of revenue thereafter. This matter will form the subject of another patent, and at the proper time will then be treated of more fully in detail.

Different modes of fastening the shaft to the spindle of the base readily suggest themselves to any mechanical mind. Any common device that will bind the two firmly together will answer for this purpose.

In constructing my telegraph-post as aforesaid, I have endeavored to adopt the simplest and most economical, yet effective, of the modes commonly used by and well known to workers in sheet metal.

The construction of these telegraph-posts is also applicable to flag-staffs.

Although my telegraph-post is very light—a shaft thirty feet high only weighing in the neighborhood of sixty-five pounds—it will be found of ample strength for every purpose, either of putting a ladder against it for a workman to mount to any desired height, or for carrying any practical number of wires.

For climbing purposes toe-pieces may also be riveted on the shaft; but this would not always be desirable, for the obvious reason that it would offer a constant temptation for boys and evil-disposed persons to climb to the wires. They could be made, however, to start—say nine feet from the ground, using a short ladder to reach the lower one. These toe-pieces, if applied, would be inserted, at proper distances apart, right in the seam of the shaft, or else on the outside of the flanges, similar to the mode of fastening the arms before described, the rivet binding the flanges together also performing the duty of holding the toe-piece; or, what is still simpler, holes could be punched at certain distances apart, so that a climber could insert spurs in the same, the spurs being attached to the climber's boots.

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

The flanged tubular telegraph-post made of corrugated sheet-iron, B, resting upon a base, A, the radiating arms D and the cap C, all constructed substantially in the manner and for the purpose herein specified.

WM. J. FRYER, JR.

Witnesses:
I. M. AXTMANN,
JOHN A. BRADY.