No. 725,770. PATENTED APR. 21, 1903.

A. B. PROBASCO.

COMPOSITE POST.

APPLICATION FILED JULY 16, 1902.

NO MODEL.

Fig. 1.

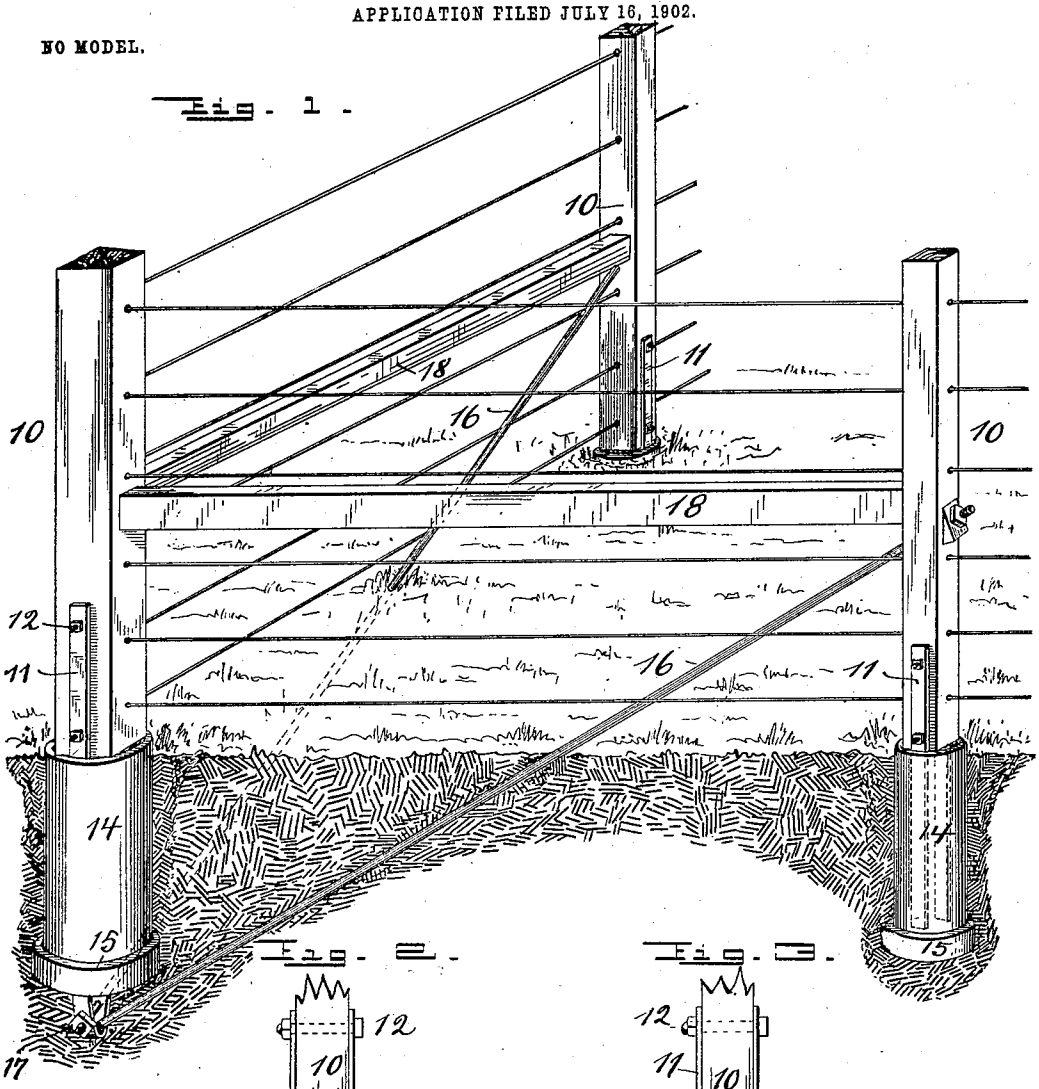


Fig. 2.

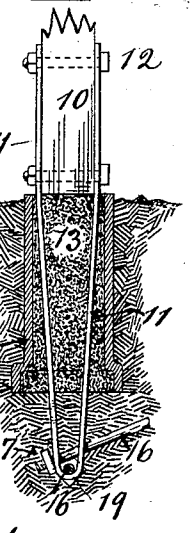


Fig. 3.

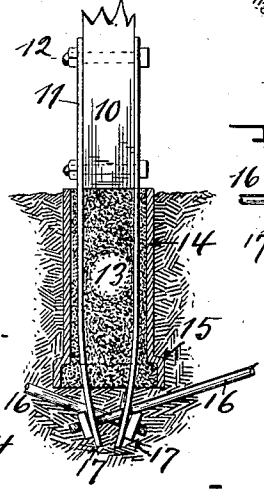


Fig. 5.

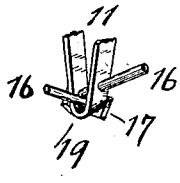


Fig. 6.

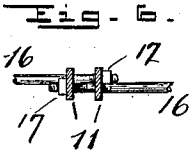
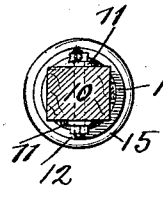


Fig. 4.



Witnesses
B. A. Litchfield
Arthur Allin

Inventor
Abraham B. Probasco
by O. Spengel atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ABRAHAM B. PROBASCO, OF WARREN COUNTY, OHIO.

COMPOSITE POST.

SPECIFICATION forming part of Letters Patent No. 725,770, dated April 21, 1903.

Application filed July 16, 1902. Serial No. 115,756. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM B. PROBASCO, a citizen of the United States, residing near Lebanon, in the county of Warren and State of Ohio, have invented a certain new and useful Composite Post; and I do declare the following to be a clear, full, and exact description thereof, attention being called to the accompanying drawings, with the reference-numerals marked thereon, which form also a part of this specification.

This invention relates to improvements in wooden posts which are held in upright position by having their lower part implanted into the ground—such as, for instance, is the case with telegraph, lamp, gate, and fence posts, &c. The inserted part of such posts usually rots very soon owing to the moisture in the ground, thereby impairing the stability of the post and rendering it prematurely useless.

One object of my invention is therefore to construct this lower part of the post in a manner which is capable of resisting these destructive influences.

Another object is to construct this lower part in a manner whereby the post is securely held against strain tending to lift or move it or cause it to lose its proper vertical position.

The invention consists of the means and their construction, as shown and described, and whereby these objects are attained, including also certain means for laterally bracing such posts where they are used in conjunction with other similar posts—as, for instance, in fences.

In the following specification and particularly pointed out in the claims is found a full description of the invention, together with its parts and construction, which latter is also illustrated in the accompanying drawings, in which—

Figure 1 shows in perspective view my composite post used in the construction of fences, a corner of the fence being shown. Figs. 2 and 3 show in vertical sections the lower part of the post, the latter figure being a modification. Fig. 4 is a top view of the post. Figs. 5 and 6 show details of construction.

To avoid the destructive influences of the ground and its moisture, I use no wood at all thereat, having only the upper part of the post—that is, that part of it which is above the ground—of wood. 10 indicates that part, and the same is held in position by two or more flat bars, forming iron straps 11, between which it is attached by suitable fastening devices, like nails, screws, or bolts 12. These straps are again held in place by a block of cement, concrete, asphaltum, or other equivalent setting material into which they are inserted while this mass is still plastic. This mass being porous, is again protected by moisture from the ground and disintegrating influences of frost by an inclosing shell 14, of vitreous material, such as is found in glazed tiling or sewer-pipe. The construction of such a post is in this way that shell 14 is first filled with the plastic mass, whatever may be used, and the metallic straps 11, with their flat sides opposite each other, are inserted, spaced properly apart, and held until the mass becomes hard. By preference they have at that time already the openings which receive the fastening devices whereby the wooden part is secured between them, or these straps may first be attached to the wooden part, and these, with this latter, are then inserted into the plastic mass. At the lower end shell 14 is enlarged, as shown at 15, thus providing more bulk and weight at this point, where it most effectively aids the post in resisting lateral or lifting strain. I recommend and contemplate to use for shell 14 the ordinary glazed tile-pipe or sewer-pipe found ready in the market and which is purchaseable in lengths and sizes filling all requirements for my purpose, so that by dispensing with the special manufacture, which this part would otherwise require, the cost of such a post is not increased thereby. On the contrary, the wood saved by the reduced length of the wooden part substantially offsets the cost of this pipe, with the straps and concrete added, which latter is practically inexpensive. Such pipe, by the flange which all lengths thereof have at one of their ends, also furnishes the increased part 15, above described. The size of the diagonal diameter of the wooden part is larger than the inner diameter of the shell, so that the corners of the former come to a seat on the end of the shell and are supported thereby, which is quite a convenience in the construction of

the post and while the filling of the shell is still plastic.

In addition to the means for resisting strains furnished by the enlarged lower end 15 other means may be used—as, for instance, tie-rods 16, suitably anchored at one of their ends, or where a number of such posts are used these tie-rods may run to and connect with the next post, as shown in Fig. 1. The lower ends of these tie-rods, where they are used, are in each case connected to the lower ends of straps 11, which for such purpose are extended downwardly, so as to project below the filling of the shell and perforated to receive these ends, as shown in Figs. 2 and 3. Beyond these perforations these ends have shoulders or heads 17, which may be nuts to prevent them from slipping through. The straps may also be formed in one piece, which is bent loop-shaped and doubled, as shown in Fig. 2. This shape is particularly suitable for use in connection for corner-posts, as shown in Fig. 1, and where the position of such posts is strengthened by a bracing-truss formed in connection with the next adjacent line-posts on each side. In such case tie-rods 16 run up to and connect to such line-posts, which latter are again braced against the corner-post by means of a brace 18, the whole forming a triangular truss. In this case the lower looped end 19 of the strap forms part of the means to hold one of the tie-rods in position, the other part being furnished by the other tie-rod passing through the straps above the tie-rod first mentioned, as shown in Figs. 1, 2, and 5. Where intermediate posts are thus braced against each other, the tie-rods would pass each other, as shown in Figs. 3 and 6.

The sewer-pipe, with the inserted straps ready to receive the wooden post, may form the subject of an independent manufacture to be sold and furnished as a base to such parties who provide the wooden part themselves.

Having described my invention, I claim as new—

1. A composite post consisting of a shell of vitrified material, a suitable hardening filling therein, metal straps embedded therein and projecting above the same and a wooden part held between the projecting ends of these straps, said straps projecting also below the shell-filling as shown and for the purpose described.

2. A series of composite posts consisting each of a shell of vitrified material, a suitable hardening filling therein, metal straps embedded therein and projecting above and below the same, a wooden part held between the upper ends of these straps, a tie-rod connecting the lower end of these straps of one post with the wooden part of an adjoining one and a brace between the wooden parts of the same posts and connected to each whereby a triangular bracing-truss is formed between the posts so connected.

3. A composite post consisting of a shell of vitrified material, a suitable hardening filling therein, a metal band bent and doubled up embedded in the filling, the open or separated ends of this band projecting above the filling and the closed or looped end projecting below the same and a wooden part held in place between the two upper ends.

In testimony whereof I hereunto set my signature in the presence of two witnesses.

ABRAHAM B. PROBASCO.

Witnesses:
C. SPENGEL,
ARTHUR KLINE.