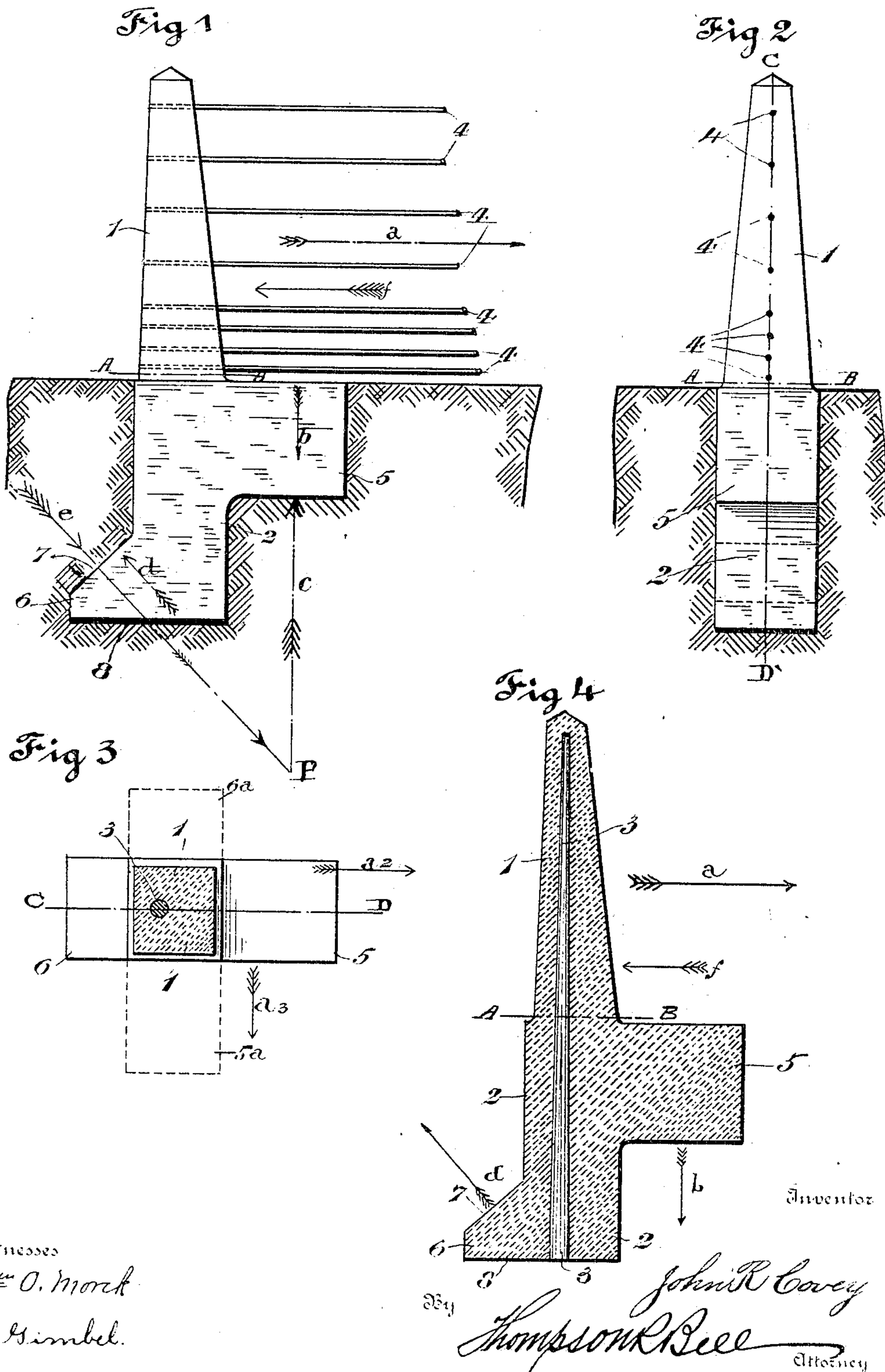


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PATENTED APR. 25, 1905.

J. R. COVEY.
FENCE POST.

APPLICATION FILED FEB. 20, 1905.



UNITED STATES PATENT OFFICE.

JOHN R. COVEY, OF LIZTON, INDIANA.

FENCE-POST.

SPECIFICATION forming part of Letters Patent No. 788,024, dated April 25, 1905.

Application filed February 20, 1905. Serial No. 246,579.

To all whom it may concern:

Be it known that I, JOHN R. COVEY, a citizen of the United States, residing at Lizton, in the county of Hendricks and State of Indiana, have invented certain new and useful Improvements in Fence-Posts, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in terminal or end and corner fence-posts constructed of cement, concrete, or other plastic self hardening or solidifying material, the main features of which will be hereinafter fully described, and particularly pointed out in the claims.

The object of this invention is to construct a self-contained or self-supporting "terminal" or end or a corner post having an integral base or foot portion of such form of construction as will the most effectually resist the resultant stress or pull of the fence-wires, which strain or pull tends to draw such a post (corner or terminal) upwardly out of the ground and draw the same out of alinement or out of perpendicular, also to provide said base of said fence-post with an upper projecting portion or spur and an opposing lower or base portion or spur, which spurs take up the component resolved forces of the resultant forces of the fence-wires applied to the post-base to be resisted by the earth beneath and above the spurs, respectively. I attain these objects by means of the form of construction of the base or foundation of fence-post illustrated in the accompanying drawings, in which similar numerals of reference designate like parts throughout the several views.

Figure 1 is a side elevational view showing my construction of a cement fence-post and the integral base or foundation thereof. Fig. 2 is an end elevational view of the same looking in the direction of the arrow *f*. (See Figs. 1 and 4.) Fig. 3 is a sectional plan view of the same, taken through the line A B. (See Figs. 1, 2, and 4.) Fig. 4 is a sectional elevational view of the same, taken through the line C D. (See Figs. 2 and 3.)

This invention relates particularly to fence-posts constructed of cement or concrete, and the main feature thereof consists in the form

and construction of the integral base or foundation thereof, and which latter is peculiarly constructed and adapted to resist the combined stresses or pull of the wires and be maintained in its perpendicular position relatively to the level of the ground without the intervention of bracing.

The end or terminal post 1 is of concrete or cement, preferably formed with one vertical side somewhat more inclined than the other—that is, the side of the post subjected to compression due to the combined pull of the fence-wires.

The base portion 2 of the post 1 is embedded in the ground, and a core-rod 3, preferably of metal tapering from its base or bottom toward its top end, extends centrally along and within the center of the post 1 to form a stiffening-core therefor. The core-rod 3 is preferably tapered, so as to provide a cross-section corresponding with the internal stresses of the cement post, which is also tapered and inclined for the same purpose.

The fence-wires 4 may be of any type of fence-wire and of any number secured at their ends in any suitable manner to the post 1.

Referring to Fig. 1, it will be observed that the resultant forces of all the fence-wires 4 will be equivalent to a concentrated force applied to the post at a point intermediate its ends approximately in the vicinity of the arrow *a* and be applied in the direction of the latter. This force will therefore tend to pull the top post in the direction of said arrow *a* and will gradually operate to draw the post out of the ground, and this imperfection in the construction of fence-posts can be partially remedied by constructing the post with an exceedingly long base to be deeply embedded in the ground and providing a diagonal strut or brace for counteracting the pull of the wires. This manner of construction, however, is not only expensive, but also unsightly. In order that this imperfection be wholly overcome, I provide new means to the base of the fence-post whereby the resultant force of the entire pull of the fence-wires applied to the terminal fence-post 1 is decomposed into two other elementary forces, one in the direction of the arrow *b*, the other in

the direction of the arrow d , applied to the base directly beneath the surface of the ground (see particularly Fig. 1) and which act and are applied at points distant from the vertical axis of the base or bottom portion of the post beneath the surface of the ground, and said decomposed elementary forces are resisted or counteracted by the earth adjacent and surrounding the base of the post. With this object in view I construct the base 2 of said post 1 with an upper projecting portion or spur 5, which is formed integral on the fence-wire connecting side of the post 1 and formed thereon to project at right angles therewith and situated on said post so that its top or horizontal surface will be level with the surface of the ground when the base of the post is embedded therein. To this spur 5 is applied the component force, which acts in the direction of the arrow b , which force is resisted by the surface of the earth covered by the bottom horizontal surface thereof, as represented by the arrow c .

At the opposite side of the base 2 of the post 1—that is, the side opposite that whereon the top spur 5 is formed—is the foot or base spur 6, the top side or surface 7 of which is inclined with the horizon, while the bottom side 8 thereof is horizontal to form an extended supporting-base for the bottom end or foundation of the post 1. To the inclined top side or surface 7 of the spur 6 is applied the other elementary component upwardly and outwardly directed force, which force acts in the direction of the arrow d , as previously described. This latter component is effectually resisted by the counter-resistance of the earth, which acts in the direction of the arrow e , which, as will be seen, acts at right angles to the inclined surface 7 of the spur 6. This principle of foundation-securing means may be extended, as shown in dotted lines in the plan view Fig. 3, to apply to corner fence-posts, which are subjected to a compound stress—that is, when two series of fence-wires pull at right angles to each other, as shown by the arrows a^2 and a^3 —which forces are effectually resisted by the disposition of the spurs 5^a and 6^a.

Having thus fully described this my invention, what I claim as new and useful, and desire to cover by Letters Patent of the United States therefor, is—

1. A one-piece fence-post comprising an upper vertically-extending post portion and a lower downwardly-extending integral foundation or base portion, of an integral projecting or spur portion situated at and extending from one side of the top of the base on the strained or wire side of the post and having its under flat side extending at a right angle with the vertical center of said post.

2. A one-piece fence-post comprising an upper vertically-extending portion and a lower

downwardly-extending integral foundation or base portion, said upper vertically-extending portion expanding or tapering toward its base on the fence-wire side thereof, of an integral projecting or spur portion situated at and extending from one side of the top of the base on the fence-wire side thereof to have its top surface on a plane with the level of the ground and projecting at right angles with the vertical center of the post.

3. A one-piece fence-post comprising an upper vertically-extending portion and a lower downwardly-extending integral foundation or base portion, said upper vertically-extending portion expanding or tapering toward its base on the fence-wire side thereof, of an integral projecting or spur portion situated at and extending from one side of the top of the base portion on the fence-wire side thereof to have its top surface on a plane with the level of the ground and projecting at right angles with the vertical center of the post, and an opposing base-projecting portion or spur situated on the bottom end of the opposite side of said base.

4. A one-piece fence-post comprising an upper vertically-extending portion and a lower downwardly-extending integral foundation or base portion, said upper vertically-extending portion expanding or tapering toward its base on the fence-wire side of said base, of an integral projecting or spur portion situated at and extending from one side of the top of the base portion on the fence-wire side thereof to have its top surface on a plane with the level of the ground and projecting at right angles with the vertical center of the post, and an opposing base-projecting portion situated on the bottom end of the opposite side of said base and having an inclined upper bearing-surface and a lower flat base-surface.

5. A one-piece fence-post comprising an upper vertically-extending portion and a lower downwardly-extending integral foundation or base portion, said upper vertically-extending portion expanding or tapering toward its base on the fence-wire side of said base, of an integral projecting or spur portion situated at and extending from one side of the top of the base portion on the fence-wire side thereof to have its top surface on a plane with the level of the ground and projecting at right angles with the vertical center of the post, and an opposing base-projecting portion situated on the bottom end of the opposite side of said base and having an inclined upper bearing-surface and a lower flat base-surface on a level with the bottom end of the base of the post.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN R. COVEY.

Witnesses:

ROBERT N. DICKSON,
HOTHER GROOVER.