

(No Model.)

A. C. LEWIS.

INSULATOR FOR ELECTRICAL CONDUCTORS.

No. 255,800.

Patented Apr. 4, 1882.

Fig. 1.

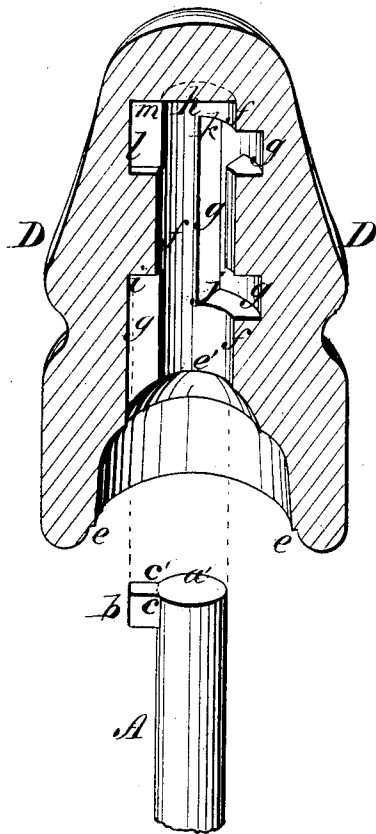


Fig. 2.

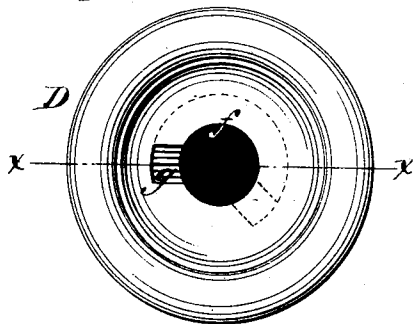


Fig. 4.

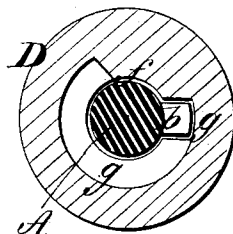


Fig. 3.

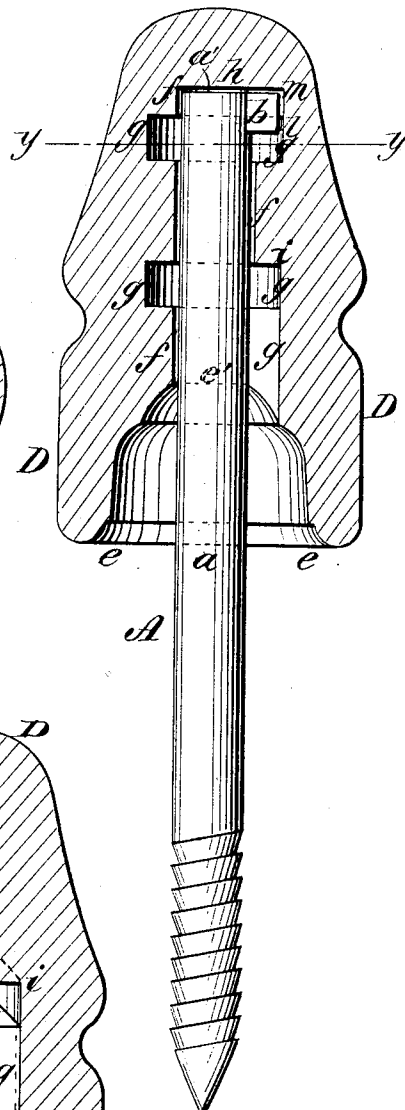
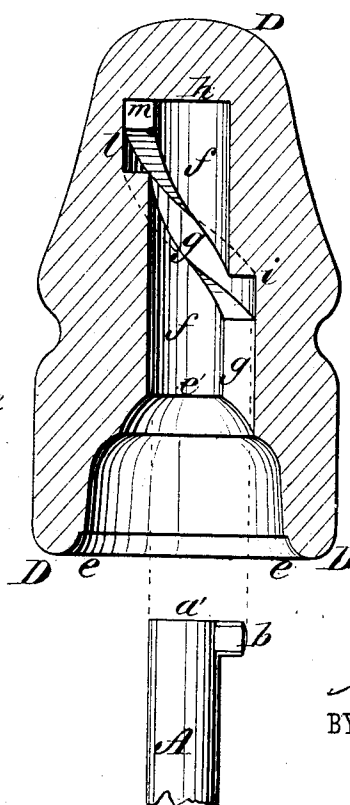


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ALBERT C. LEWIS, OF BROOKLYN, NEW YORK.

INSULATOR FOR ELECTRICAL CONDUCTORS.

SPECIFICATION forming part of Letters Patent No. 255,800, dated April 4, 1882.

Application filed July 2, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALBERT C. LEWIS, a citizen of the United States, residing in Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Insulators for Conductors of Electricity; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

The object of my invention is to construct the head and shank of a spike, screw, nail, or bolt made of any metal capable of being forced into stone or brick work or wood, as a support, and an insulating-cap therefor, so that after such support shall have been driven or forced into its place the insulating-cap may be readily placed upon the support by hand and secured thereto by means of the openings and grooves or slots inside of the cap being so arranged as to receive such head and shank in a way that when the cap has been properly adjusted thereon it cannot be removed without breaking, except by reversing the movements by which it was so adjusted. I obtain this object by means of the novel construction and adaptation of parts of the support to the interior construction of the insulating-cap.

Figure 1 represents that portion of the support upon which the insulating-cap is to be placed in proximity to a sectional perspective view of the insulating-cap. Fig. 2 represents a reverse plan view of the insulating-cap. Fig. 3 represents a sectional view of the insulating-cap, on the line xx of Fig. 2, when placed upon the support and adjusted ready for use. Fig. 4 is a section of the line yy of Fig. 3. Fig. 5 is a sectional view of a modification of the insulating-cap.

Similar letters refer to similar parts throughout the several views.

The cylinder A and the arm b represent the support for the insulating-cap. So much of this support as it is desired to force into the object to which it is sought to attach the insulator may be made of any suitable metal and form, as the inventor does not seek to cover such part by Letters Patent; but all that part of the support which is to be received within the insulating-cap, as from a to a' , should be cylindrical in form, with the exception of the arm

b , which projects outward from an arc, $c c'$, of a segment of the circle of a cylinder at its head or outer end.

The arm b may be of greater or less length, breadth, and thickness, according to the size of the insulating-cap with which it is to be used; but both the cylinder and cap should be of sufficient size to afford the strength necessary for the purpose for which they are to be used.

The insulating-cap DD may be made of any suitable insulating material, and of such external form as may be desired, as the inventor does not seek to cover such parts by Letters Patent; but the interior base of the insulating-cap from e to e' should be dome or bell like in form, that being recognized as the best form for the base of insulating-caps, especially where the support is not itself a non-conductor of electricity.

A cylindrical opening, f , and a slot, g , is cut through the top of the dome at e' into the body of the cap. The cylindrical opening f is continued in a perpendicular line to the point h . The slot g is continued in a perpendicular line at the side of and connected with the cylindrical opening f to the point i , where, in the form of construction represented in Figs. 1 and 3, the slot g is carried horizontally and at right angles a greater or less distance, as may be desired, around the cylindrical opening—say to the point j , where it passes upward and in a line with the cylindrical opening f to the point k , where it again is carried around the cylindrical opening f and parallel with the horizontal slot above described, a greater or less distance, to the point l , where it again passes upward in a line with the cylindrical opening f to the point m .

The slot g may be made to pass spirally partially around the cylindrical opening f from the point i to l , as shown in Fig. 5. This modification of the direction of the slot is in the interest of economy in manufacture.

Allowance must be made for the expansion and contraction of the metals composing the parts.

What I claim, and desire to secure by Letters Patent of the United States, is—

The combination, in an insulator of conductors of electricity, of a metal support capable

of being forced into stone or brick work or wood, having that part of the shank next to the head, as from *a* to *a'*, cylindrical in form, the head being formed by the end of the cylinder *a'*, and an arm *b*, projecting outward therefrom, with a movable or independent insulating-cap, *D D*, having internally an open dome-like base, *e e'*, and a cylindrical opening, *f*, and slot *g*, extending from *e'* to *h* and *m*, to receive the shank and arm of the support, all substantially as set forth. 10

ALBERT C. LEWIS.

Witnesses:

WALTER S. COWLES,
FRANK A. RANSOM.