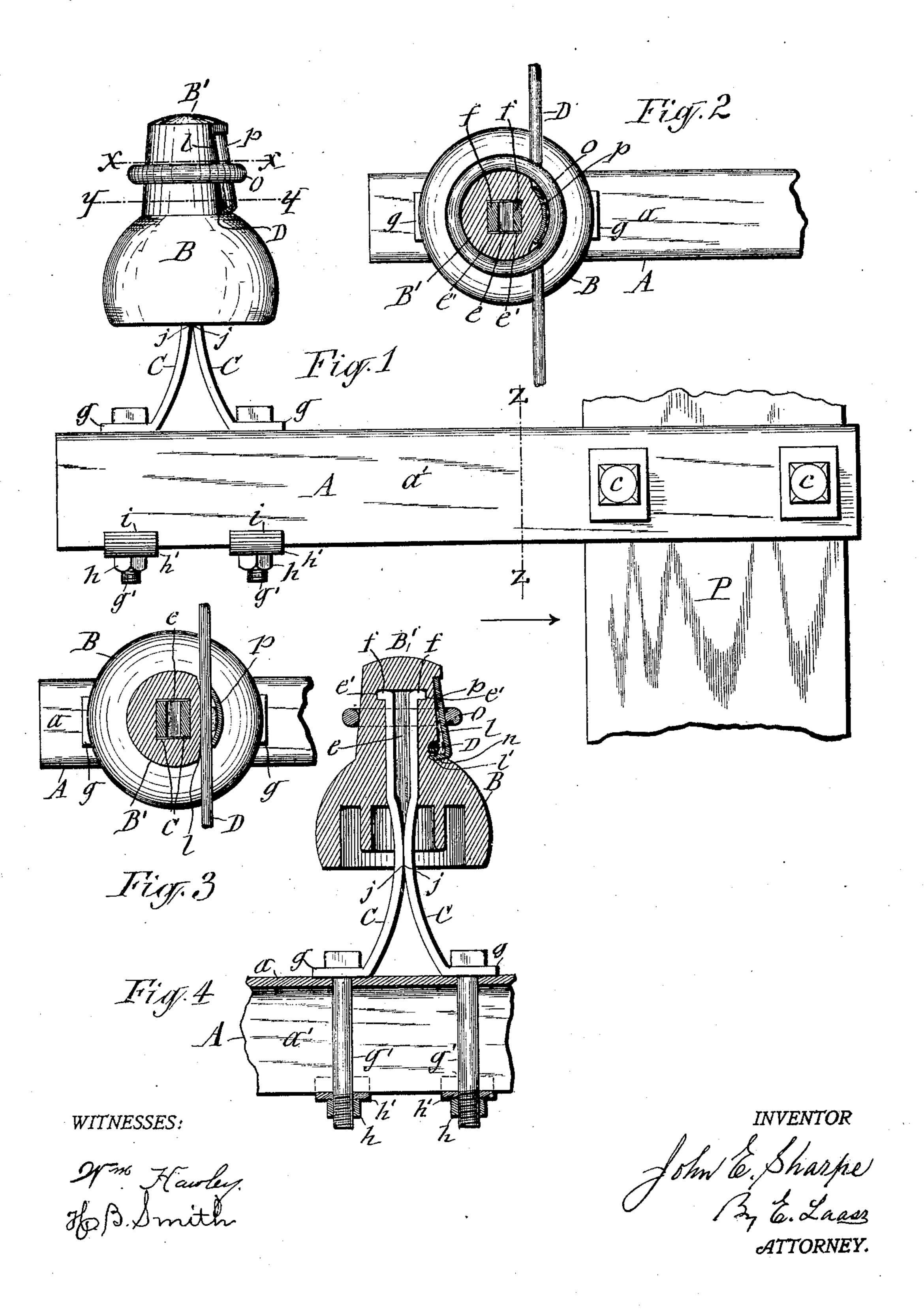
J. E. SHARPE.

INSULATOR FOR ELECTRIC WIRES.

(Application filed May 17, 1901.)

(No Model.)



United States Patent Office.

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INSULATOR FOR ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 679,544, dated July 30, 1901.

Application filed May 17, 1901. Serial No. 60,625. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. SHARPE, a citizen of the United States, and a resident of Oneida, in the county of Madison, in the State 5 of New York, have invented new and useful Improvements in Insulators for Electric Wires, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to the class of insulators which are employed for supporting electric wires at intervals between stations.

The object of the invention is to provide simple, strong, reliable, and durable means 15 for supporting the electric wires as aforesaid; and to that end the invention consists in an improved construction of the insulator proper and means for securing the wire thereto, as hereinafter described, and set forth in the 20 claims.

The invention is fully illustrated in the an-

nexed drawings, in which-

Figure 1 is a side view of my improved insulator and its supporting-arm. Figs. 2 and 25 3 are transverse sections, respectively, on lines XX and YY in Fig. 1. Fig. 4 is a vertical transverse section taken in a plane passing longitudinally through the center of the supporting-arm.

Similar letters of reference indicate corre-

sponding parts.

A represents the supporting-arm of the insulator.

B represents the body of the insulator 35 proper, which is formed of glass or vitrified clayor any suitable and well-known material. This insulator-body is provided with an axial channel e, which extends from the bottom of said body part way toward the top thereof 40 and is terminated with notches e' e' in the sides of the channel, as illustrated in Fig. 4 of the drawings.

C C are two standards, by means of which the insulator is secured to the arm A. These 45 standards are formed separate from each other of metal and with straight upper end portions suitable to enter the channel e and $\overline{ ext{terminated}}$ with lateral projections ff for engaging the notches e'e'. The lower end por-50 tions of the standards are spread apart to

brace them and are terminated with perfo-

rated feet g g, by which they rest upon the straight top portion a of the supporting-arm A and to which they are fastened by means of bolts g' g', passing through said feet and 55 through the said arm. The lower ends of the bolts extend beneath the bottom of the supporting-arm A and are provided with nuts h h for tightening said bolts. Between these nuts and bottom of the arm A are interposed 60 washers h'h', which are preferably bent upon the sides a' of the arm, as shown at i in Fig. 1 of the drawings. The standards are bent intermediate their ends, so as to form on their adjacent sides fulcrums j j, by which they 65 abut against each other, and by moving the lower or outer ends of the standard toward each other the projections ff are forced into engagement with the notches e'e'.

D denotes the electric wire, which I fasten 70 to the insulator by forming the top of the insulator-body B with an upward-projecting stud B', the side of which is provided with a recess l, formed at its bottom with a transverse groove l'. The wire D passes through 75 the recess ladjacent to the aforesaid groove and is clamped therein by means of a plate p, seated in the recess l and provided with a transverse tongue or lip n, which engages the groove l', so as to prevent the plate from 80 slipping upward on the stud B'. The plate p bears on the interposed wire D and is caused to grip the wire between the plate and stud by means of a clamp o, preferably of the form of a stout ring formed of metal, which 85 ring embraces the stud B' and plate p.

What I claim as my invention is—

1. An insulator-body provided with a plate disposed to receive between it and said body the wire to be fastened thereto, and a clamp 90 embracing said body and plate and compressing said parts upon the interposed wire as set forth.

2. An insulator-body provided with a transverse groove in its exterior in combination 95 with a plate provided with a tongue engaging said groove, and a clamp compressing said plate upon the wire interposed between the plate and body as set forth.

3. An insulator-body formed with a stud 100 projecting from said body and provided with a recess in the side of said stud and with a

transverse groove in said recess, in combination with a plate seated in said recess and receiving the wire between it and the stud, and provided with a tongue engaging the 5 aforesaid groove, and a ring embracing the stud and plate and clamping the wire be-

tween said parts as set forth.

4. An insulator-body formed with a stud projecting upward from the top of said body ro and with a recess in the side of said stud and a transverse groove in the face of said recess adjacent to the base thereof, a plate seated in said recess and provided with a tongue engaging the aforesaid groove, and a ring em-15 bracing said stud and plate and compressing said parts to clamp the wire inserted between

them as set forth and shown.

5. An insulator-body provided with an axial channel extending from the base part way 20 toward the top and terminated with notches in the sides of the channel, in combination with attaching-standards formed separate from each other at both ends and inserted

into the aforesaid channel and terminated with lateral projections engaging the notches 25 and fulcrumed intermediate their ends to force said projections into engagement by lateral movement of the outer ends of the

standards as set forth.

6. An insulator-body provided with an ax- 30 ial channel extending from the base part way toward the top of said body and terminated with notches in the sides of the channel, in combination with two attaching-standards inserted into the aforesaid channel and ter- 35 minated with lateral projections engaging the notches and formed intermediate their ends with abutting fulcrums on their adjacent sides, the outer ends of said standards being spread apart to allow them to be compressed 40 and force the inner ends thereof into engagement with the notches as set forth and shown.

JOHN E. SHARPE. [L. s.]

Witnesses:

M. J. KINNEY, N. D. BARTLE.