

No. 684,044.

Patented Oct. 8, 1901.

F. W. COMMONS.

COMPOSITE TELEGRAPH OR OTHER POLE OR POST.

(Application filed Feb. 19, 1901.)

(No Model.)

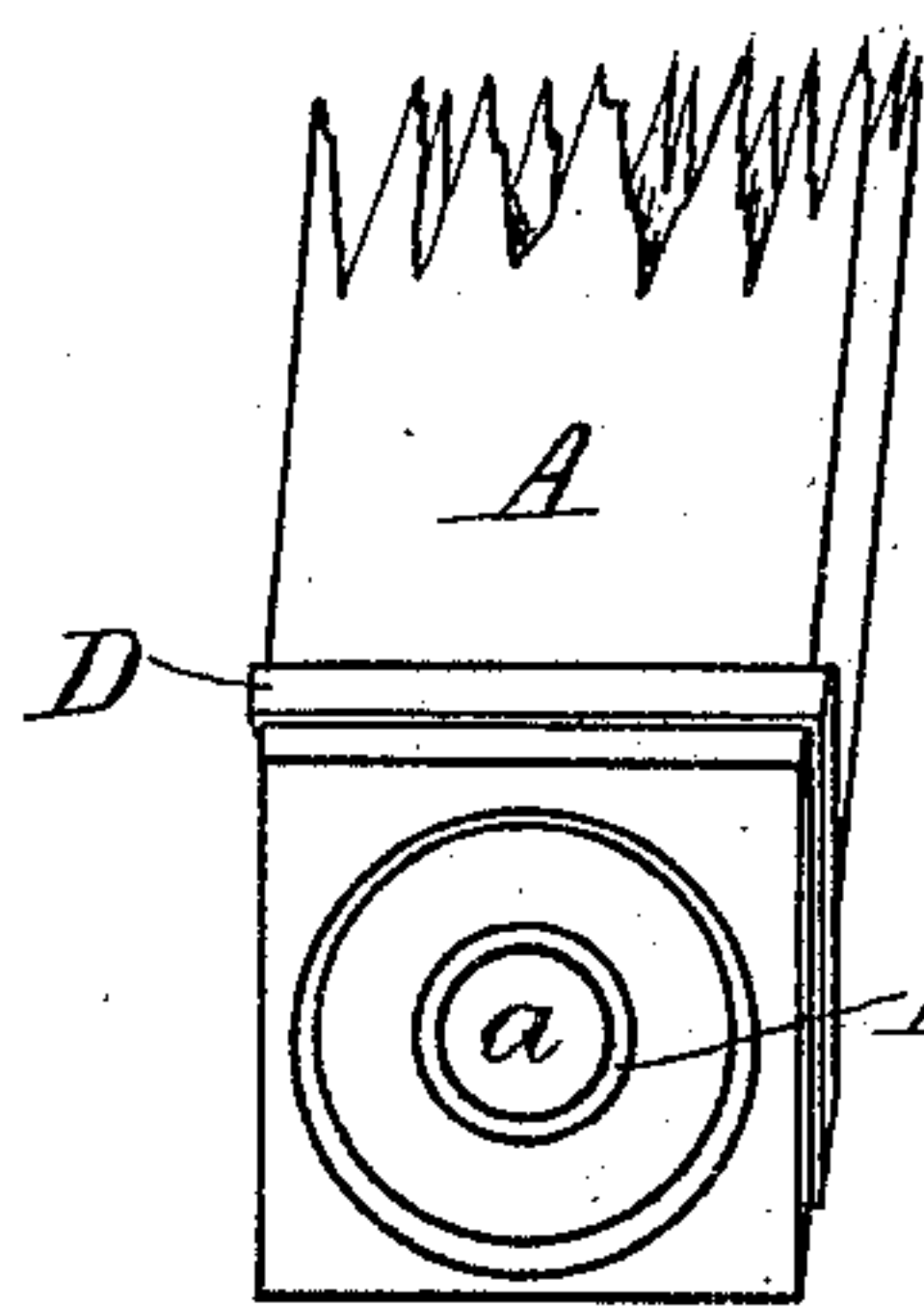


Fig. 3.

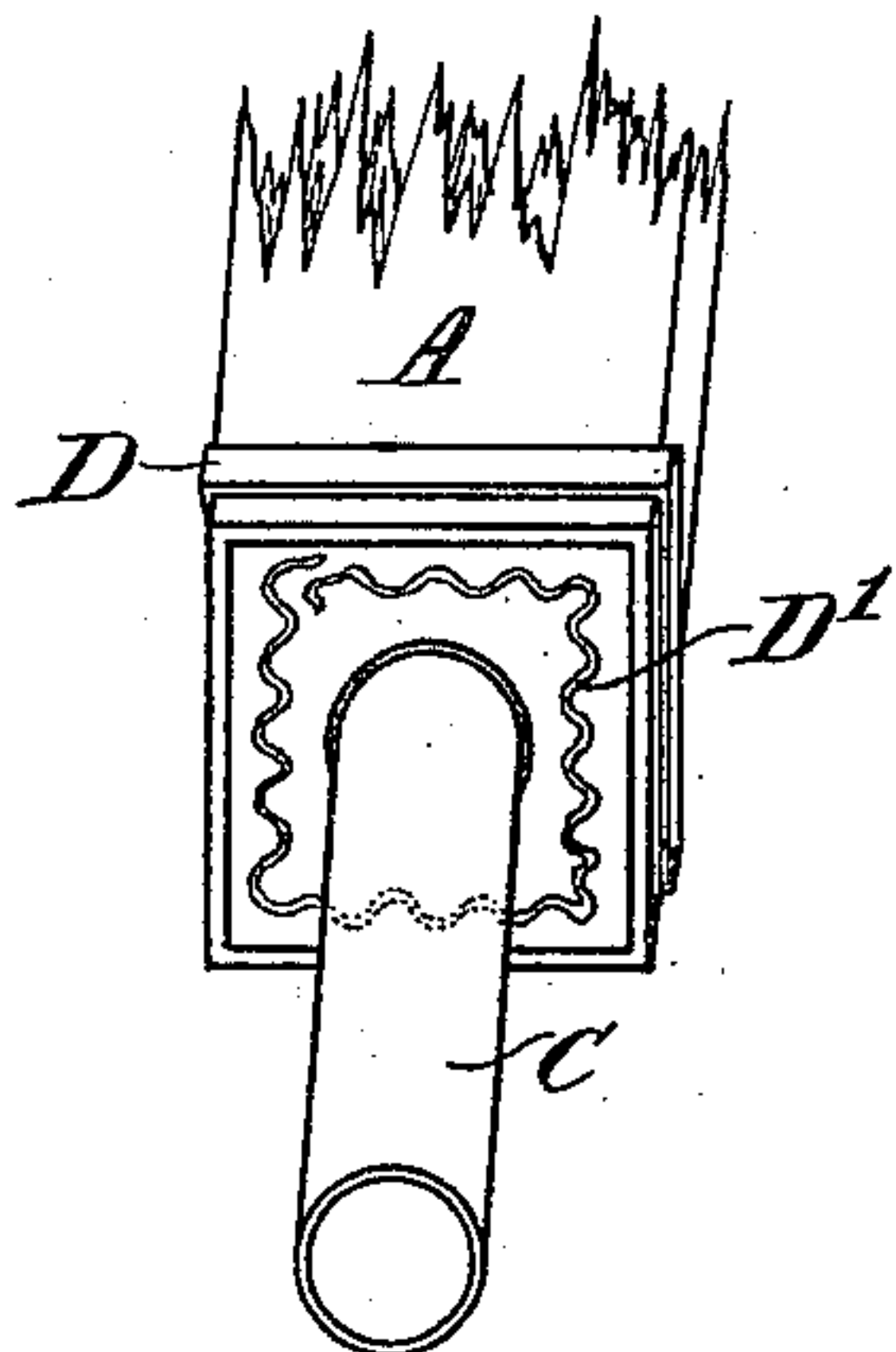


Fig. 4.

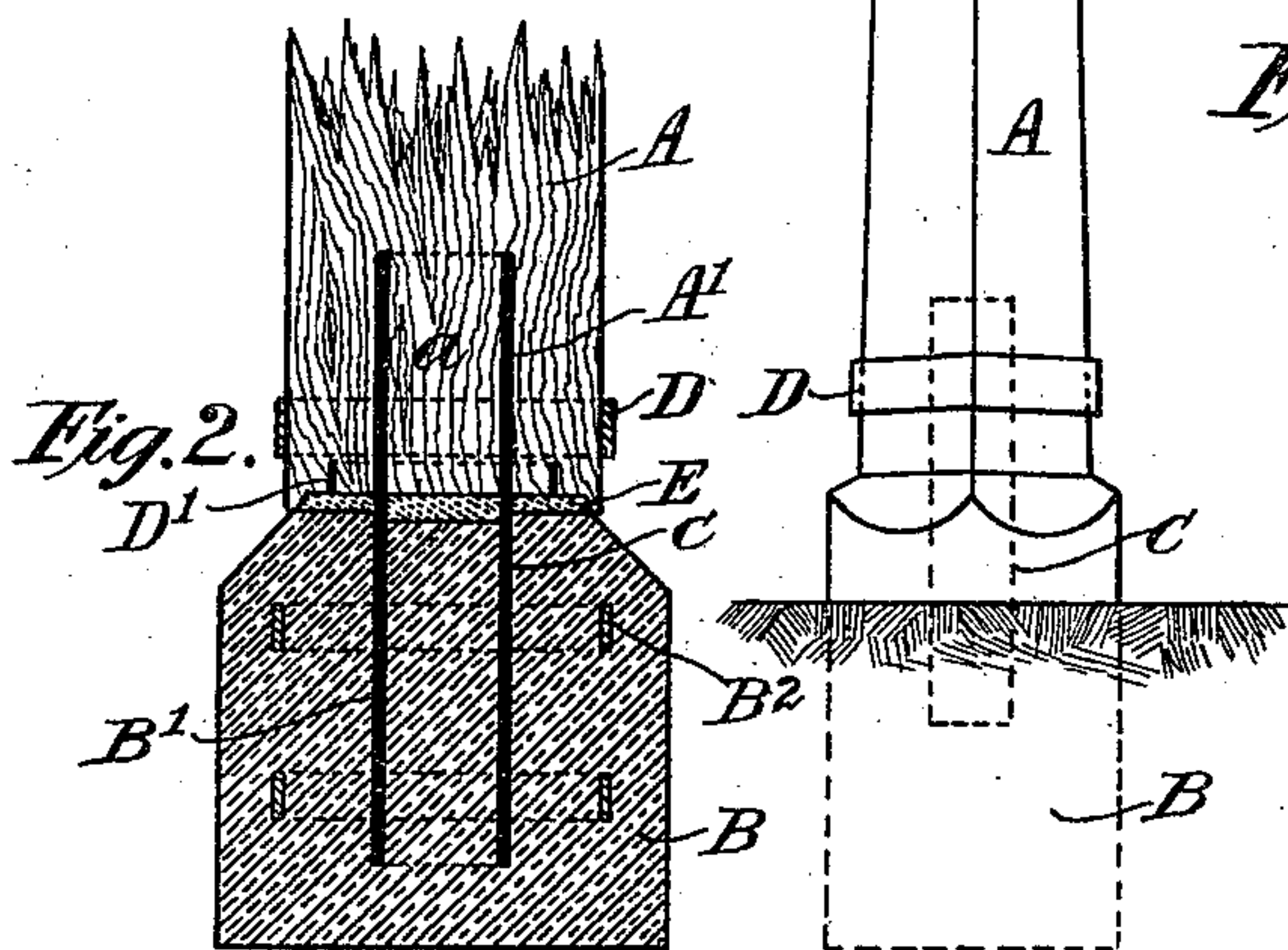


Fig. 2.

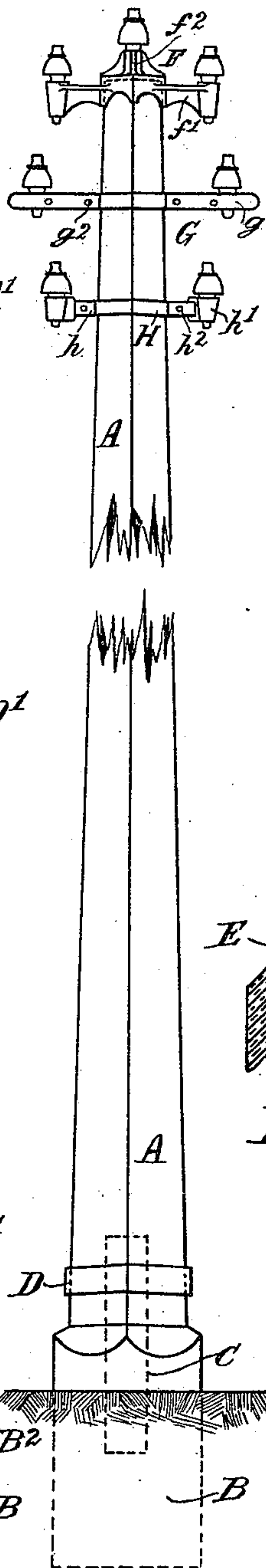


Fig. 1.

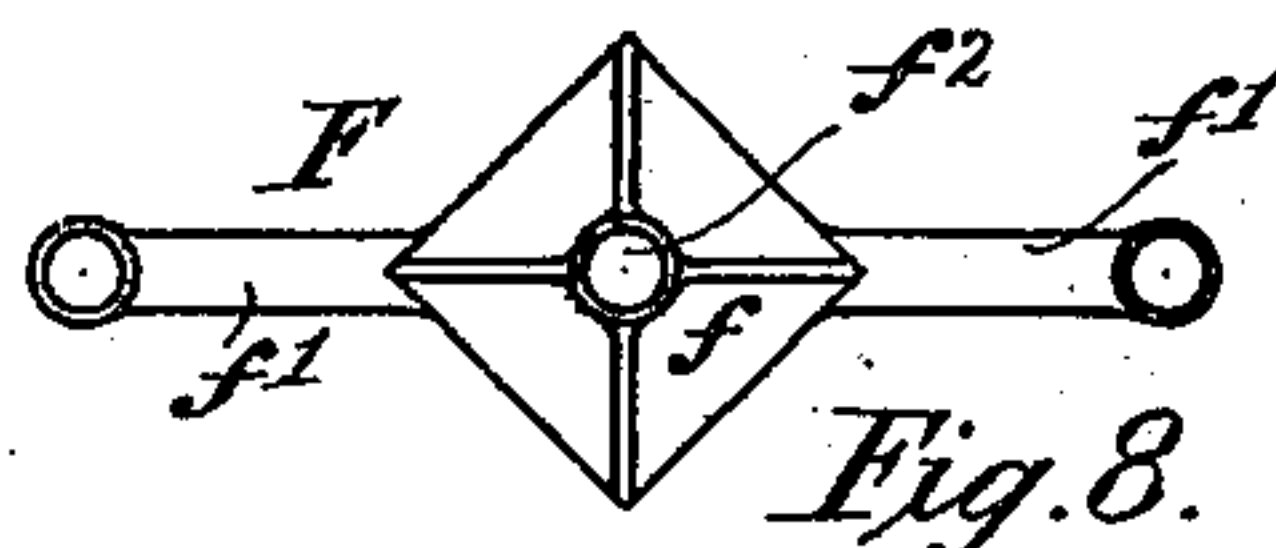


Fig. 8.

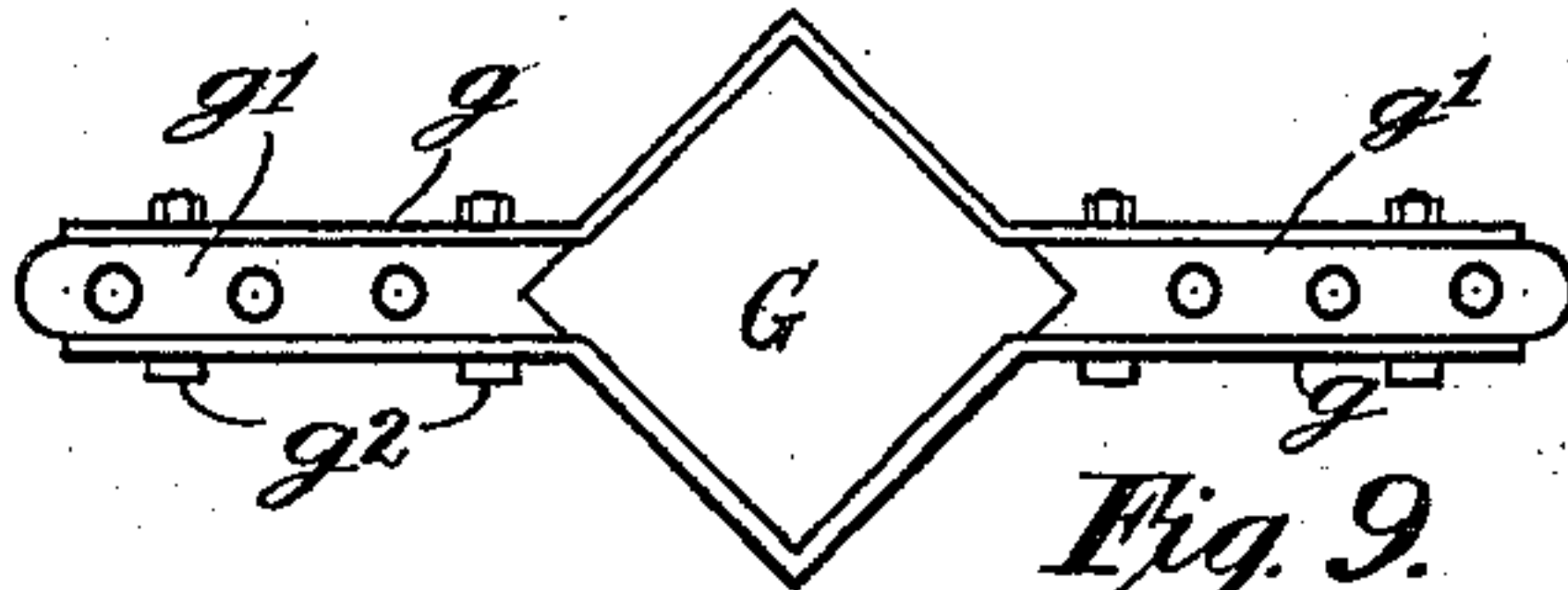


Fig. 9.

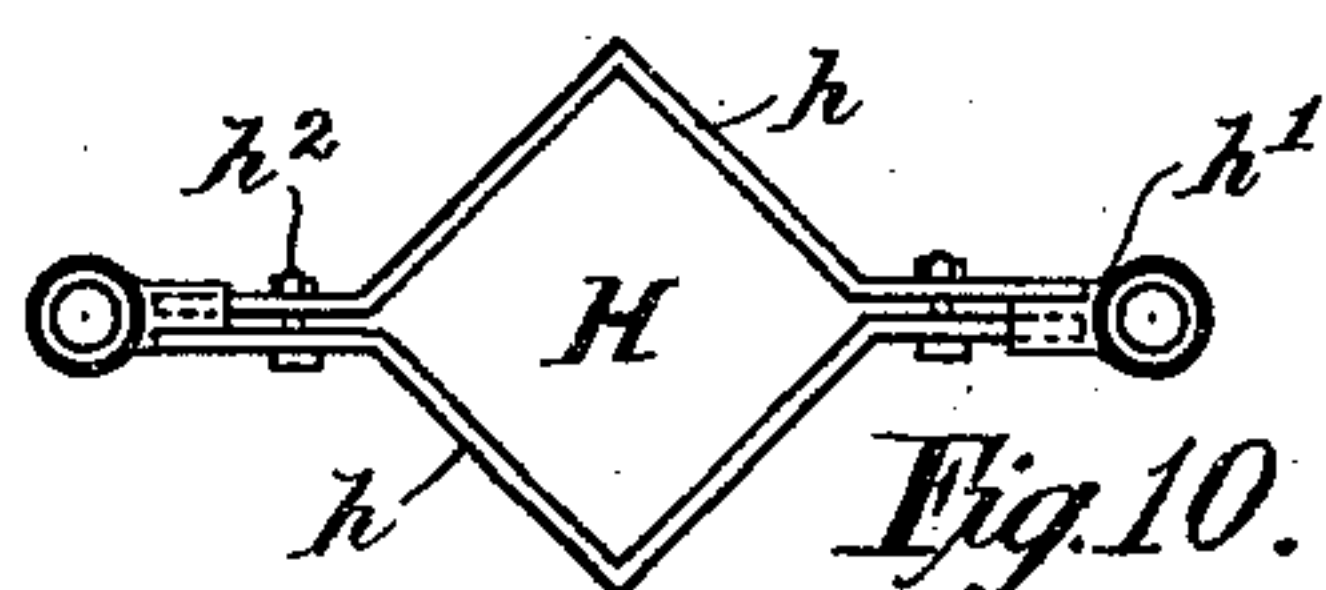


Fig. 10.

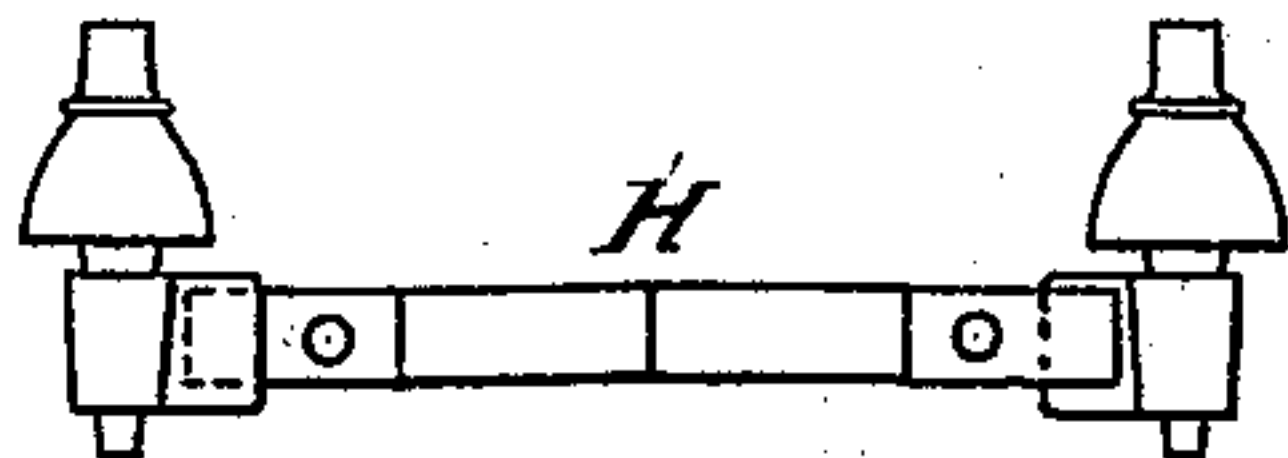


Fig. 11.

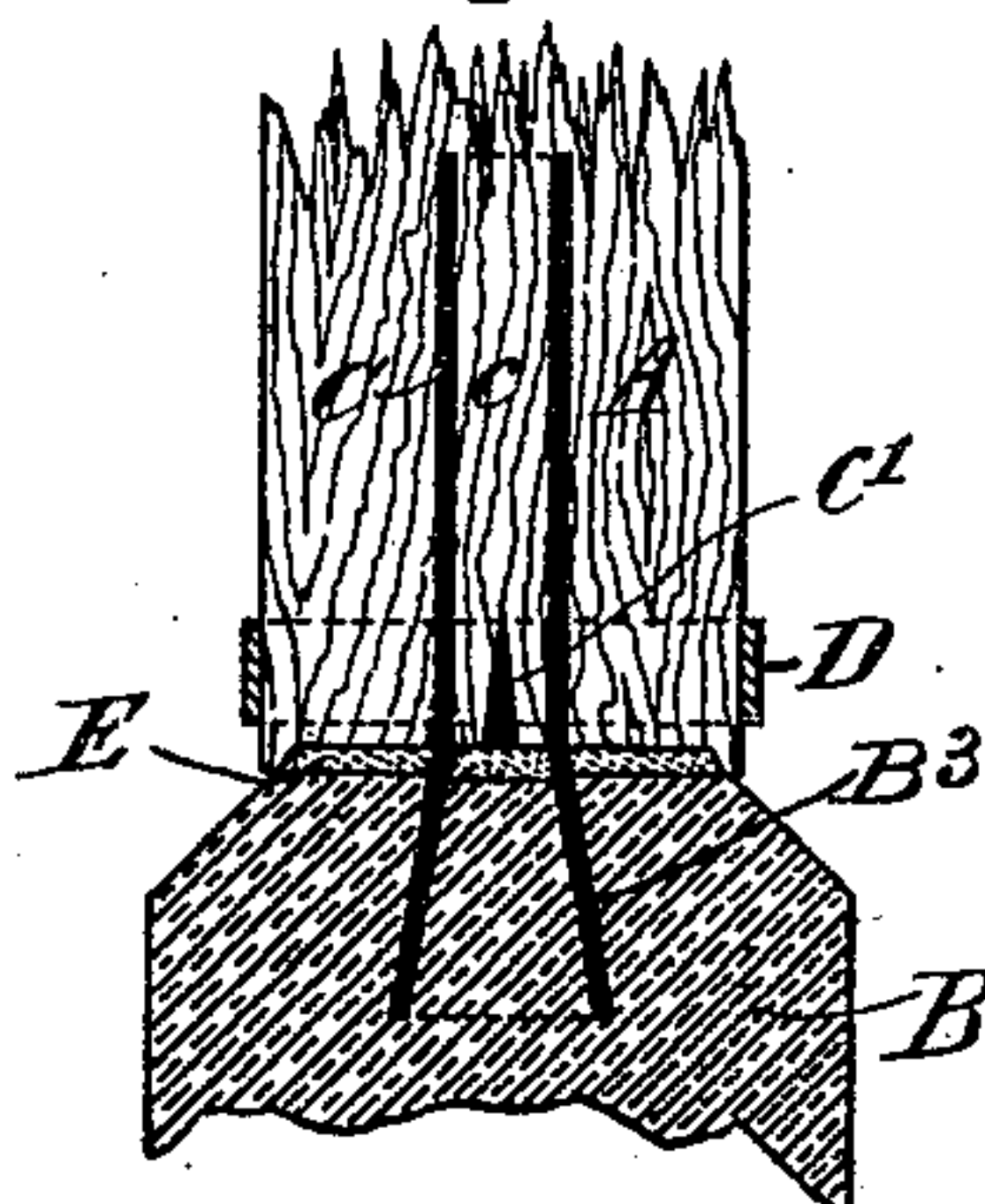


Fig. 6.

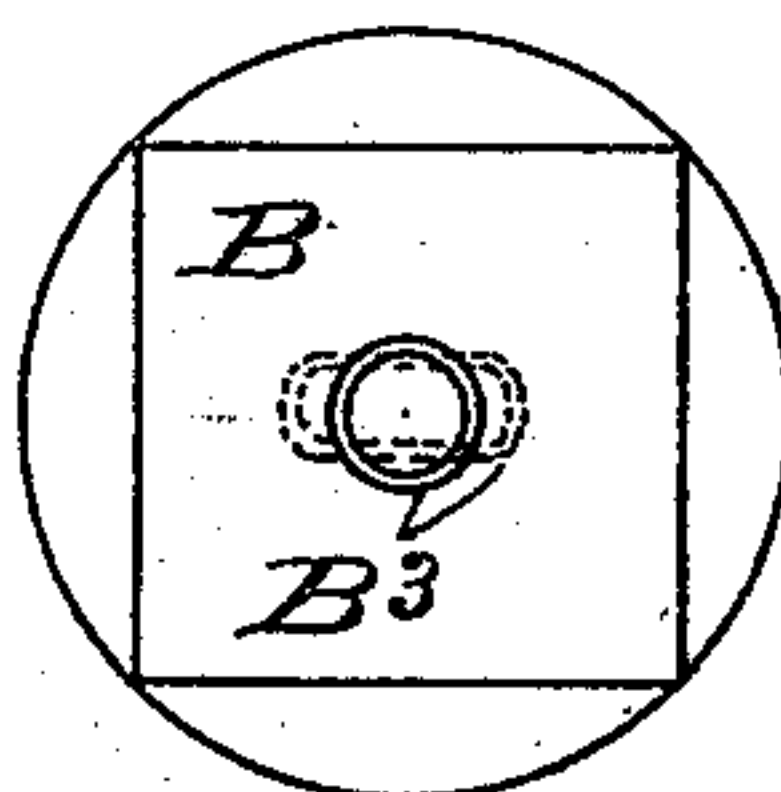


Fig. 7.

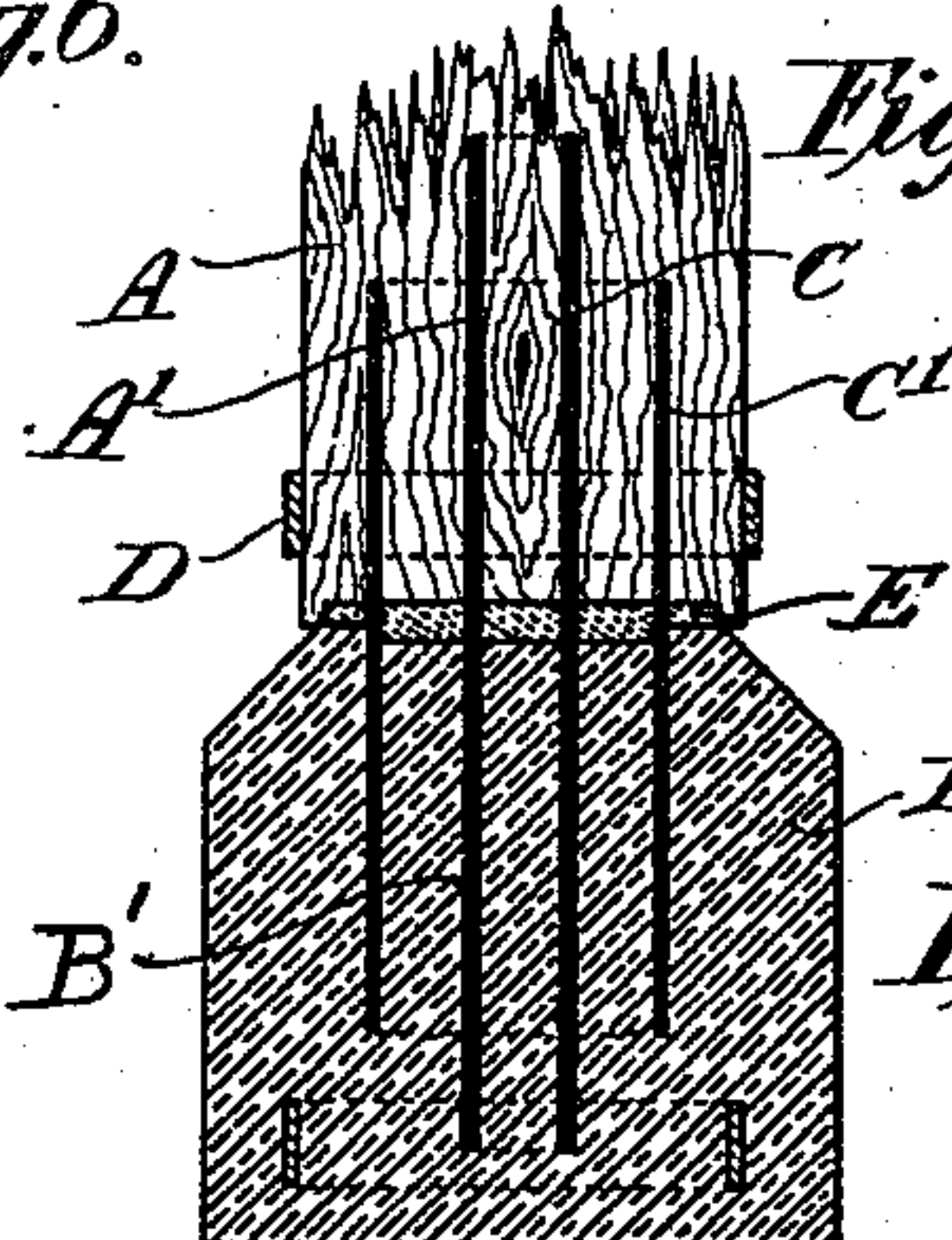


Fig. 5.

Witnesses:

J. B. Bolton
O. W. Mum

Inventor:
Frederick William Commons

By Richard H. [Signature]
his Attorneys.

UNITED STATES PATENT OFFICE.

FREDERICK WILLIAM COMMONS, OF BALLARAT, VICTORIA.

COMPOSITE TELEGRAPH OR OTHER POLE OR POST.

SPECIFICATION forming part of Letters Patent No. 684,044, dated October 8, 1901.

Application filed February 19, 1901. Serial No. 47,950. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK WILLIAM COMMONS, monumental sculptor, a subject of the Queen of Great Britain and Ireland, residing at No. 1 Webster street, Ballarat, in the Colony of Victoria, have invented a certain new and useful Composite Telegraph or other Pole or Post, of which the following is a specification.

10 This invention of a composite telegraph or other pole or post relates mainly to an improved means of securing or jointing the lower end of said pole or post to a concrete, stone, or metal base, although two pieces of
15 timber may be joined and secured together in a like manner.

The object of the invention is to provide telegraph and other posts or pillars with a base formed of material which will not decay
20 quickly or become affected by moisture by being buried in the earth. The said two materials forming the pole or post are secured together by aid of a metal tube or tubes of the requisite length and strength, neatly fitted or embedded in an annular recess in the
25 meeting parts of the materials which are to be secured together, the parts forming the joint being bound and secured, as herein-after described, and illustrated on the accompanying drawings, whereon, by way of ex-
30 ample, I have shown my invention in the form of a composite telegraph-pole and which I have provided with the necessary arms and fittings for carrying the wires.

35 Figure 1 is a view of a composite telegraph-pole shown to a smaller scale than the other figures; Fig. 2, a central section showing the joint between the wood pillar and its base. Figs. 3 and 4 are perspective end views of the
40 bottom of the wood pillar, the former showing the end of the tube annular recess and the latter showing the tube in position; Fig. 5, a central section of the joint between the wood pillar and its base when two tubes are used in place
45 of one, as shown in Fig. 2; Fig. 6, a section of the joint as devised for securing a wood pillar on a stone or metal base; Fig. 7, a plan of the base; Fig. 8, a top plan of the cap arm-piece of the telegraph-pole; and Fig. 9, a
50 plan of its intermediate clamp arm-piece, while Fig. 10 is a plan, and Fig. 11 a side view, of the lower clamp arm-piece.

In Figs. 1 to 4, A is the wood post or pillar; B the base, of concrete or other material, and C the short metal tubular joint-piece, one-
55 half or thereabout of which is arranged in an annular recess A', formed in the lower end of the wood post A, while the other part of the metal tube is arranged to be embedded in a tubular recess B' in the base B. In the case of the
60 wood pillar the tubular recess A' is cut out to neatly receive tube C, the core α within the tube being left intact as part of the pillar—that is to say, it is not cut away. Tube C is
65 then placed in the annular recess A', and when therein hot bitumen or other suitable cement is run into the annular recess to completely fill up the space and keep out water. D is a metal band which is shrunk on the lower
70 end of the pillar, and D' a corrugated or waved strip or band of hoop-iron which is driven into the butt-end of the wood post to prevent sun-cracks. In affixing the tube C in a concrete
75 base the concrete is usually molded about the tube, and a band or bands, as B², may be set in the concrete in order to bind or
80 strengthen it. When the base C is stone, the tubular recess B' is cut in it and the tube cemented therein. The end of pillar A is preferably undercut and filled in with such as
85 asphalt or cement, which forms a damp-course E.

In Fig. 5 I show the joint made up with two tubes C and C', both arranged and secured concentrically in annular channels or recesses
85 in the lower end of the pillar and its base in the manner before described, the outer tube C' acting as a reinforcing-joint tube. The other parts marked in this and the other figures with corresponding letters denote parts
90 similar to those already described.

In Figs. 6 and 7 the tube C is shown as it may be secured upon a stone or metal base in a slightly-modified way, the recess B³ in the
95 base being in this instance circular at its top or outside end and from thence gradually worked inward until at its bottom it takes the form of an oval or ellipse, as shown. The tube when it is to be affixed in this form of
100 channel or recess is first heated and then driven in, when it will expand and conform to the shape of the channel or recess B', when afterward the joint is treated as before described. In Fig. 6 a wedge c' is shown, which

may be driven into the core *c* to cause it to fit tightly within the tube.

In Figs. 1 and 8 to 11 the telegraph-post mountings are shown, *F* being the cap arm-piece, made in the form of a box or cap *f*, which completely covers and fits tightly upon the top end of post *A*, *f'* being the socket-arms, and *f''* the crown socket-piece, all cast in one piece. *G* is the intermediate clamp arm-piece, made of two metal clamp-bars *g* and two wood filling-pieces *g'*, in which are holes to carry the insulator-supports for the wires, said parts being clamped together about the post by the bolts *g''*. II represents the lower and alternative forms of clamp arm-pieces, made of two metal clamp-bars *h*, having cast-metal sockets *h'* formed at one end of each to receive the insulator-supports for wires and said clamp-bars being secured together about the post by bolts *h''*.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a telegraph or other pole or post the combination of pillar *A* and base *B* with the tubular joint-piece *C* and the band *D*, said

tube being located and secured in recesses in the butt-end of pillar and in the base substantially as described and shown.

2. In a telegraph or other pole or post the combination of pillar *A*, base *B*, tubular joint-piece *C*, band *D*, waved hoop-iron *D'*, ring or rings *B''*, and damp-course *E*, all substantially as described and shown.

3. In a telegraph or other pole or post the combination of pillar *A*, base *B*, tubular joint-piece *C*, reinforcing-tube *C'*, band *D*, and damp-course *E*, substantially as described and shown.

4. In a telegraph or other pole or post the combination of pillar *A*, base *B*, tubular joint-piece *C*, fitted in a tubular recess in pillar *A* and in the elliptic-ended recess *B''* in the base, the band *D* and damp-course *E* substantially as herein described and shown.

In witness whereof I have hereunto set my hand in presence of two witnesses.

FREDERICK WILLIAM COMMONS.

Witnesses:

BEDLINGTON BODYCOMB,
W. G. S. THOMPSON.