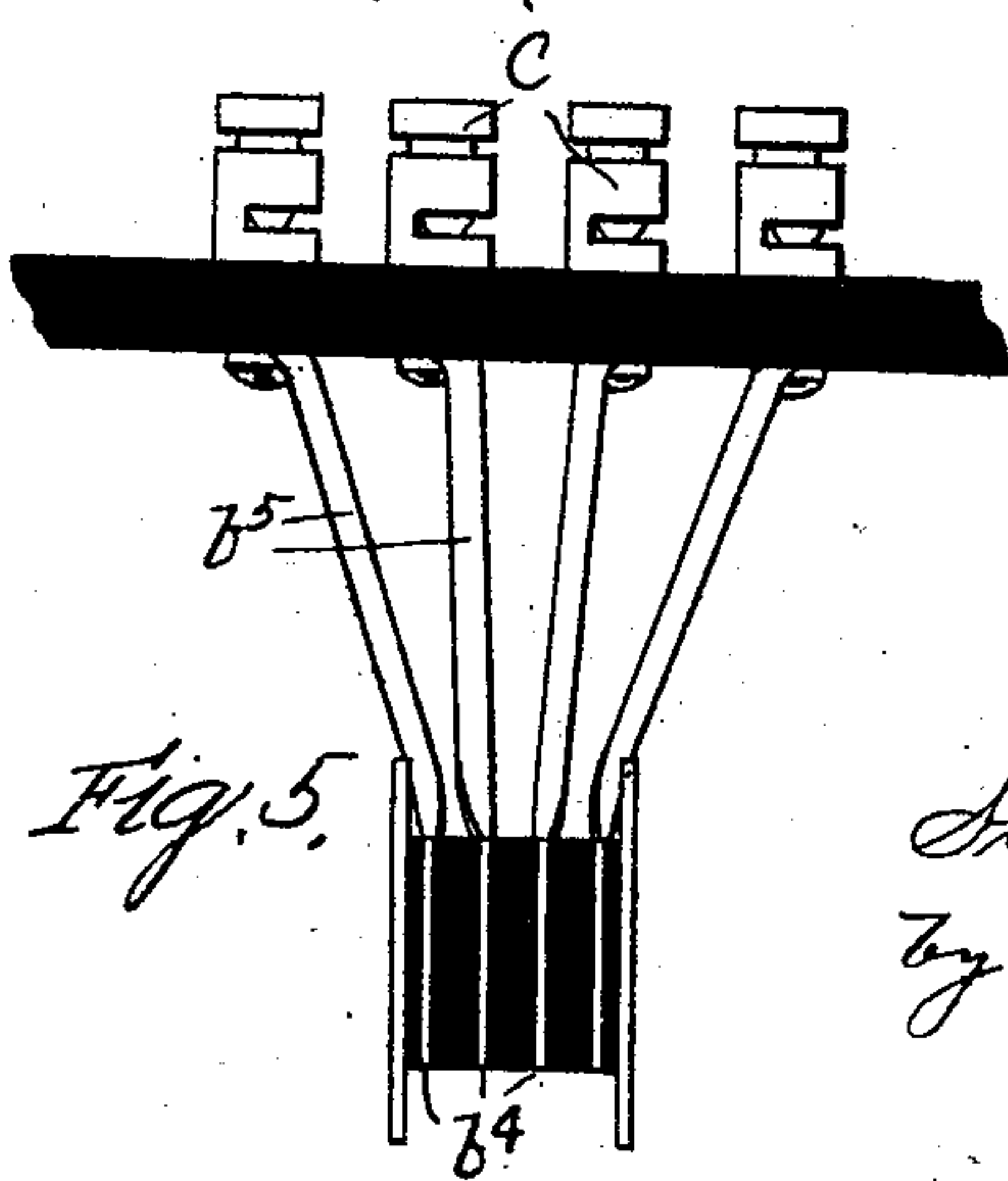
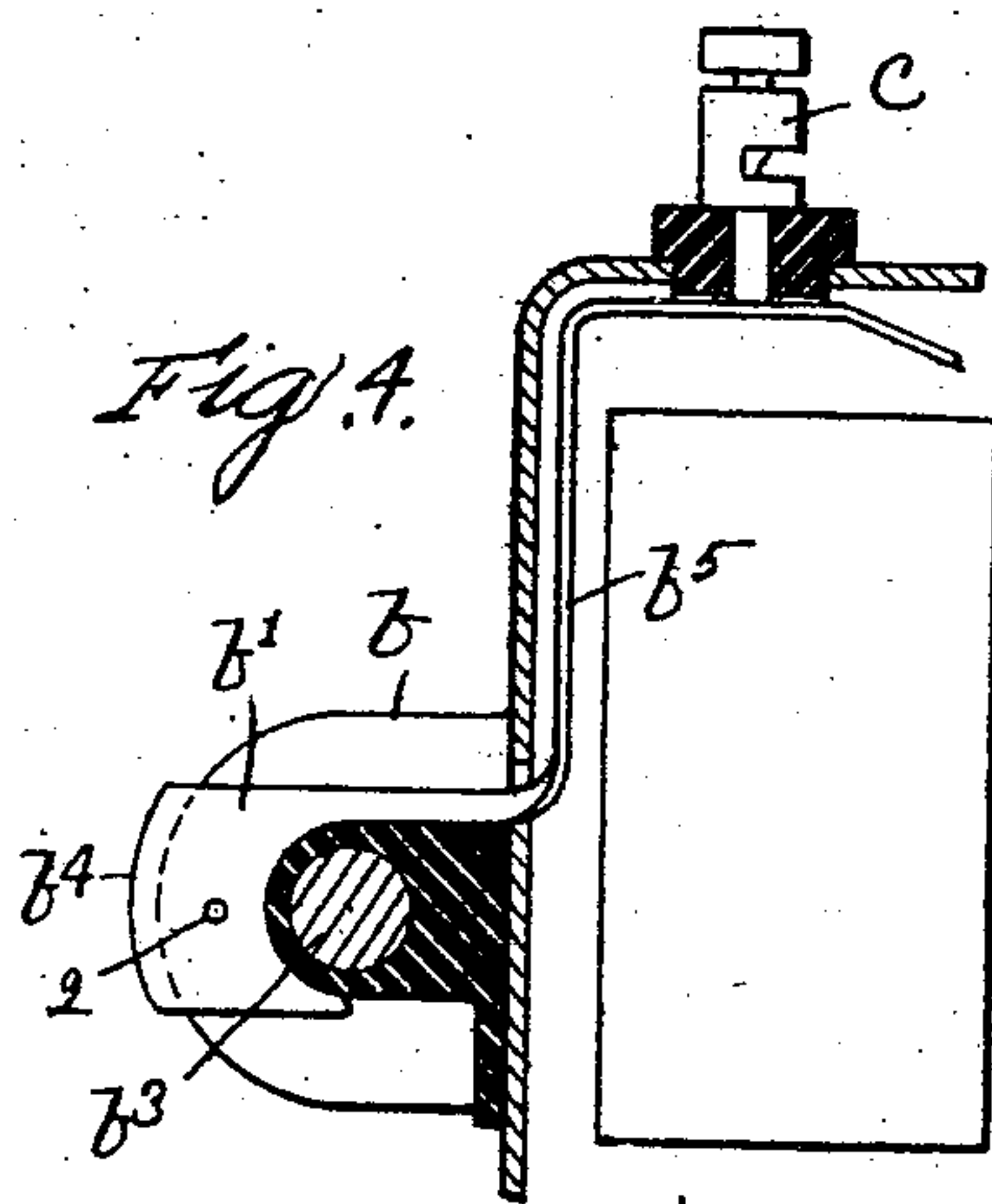
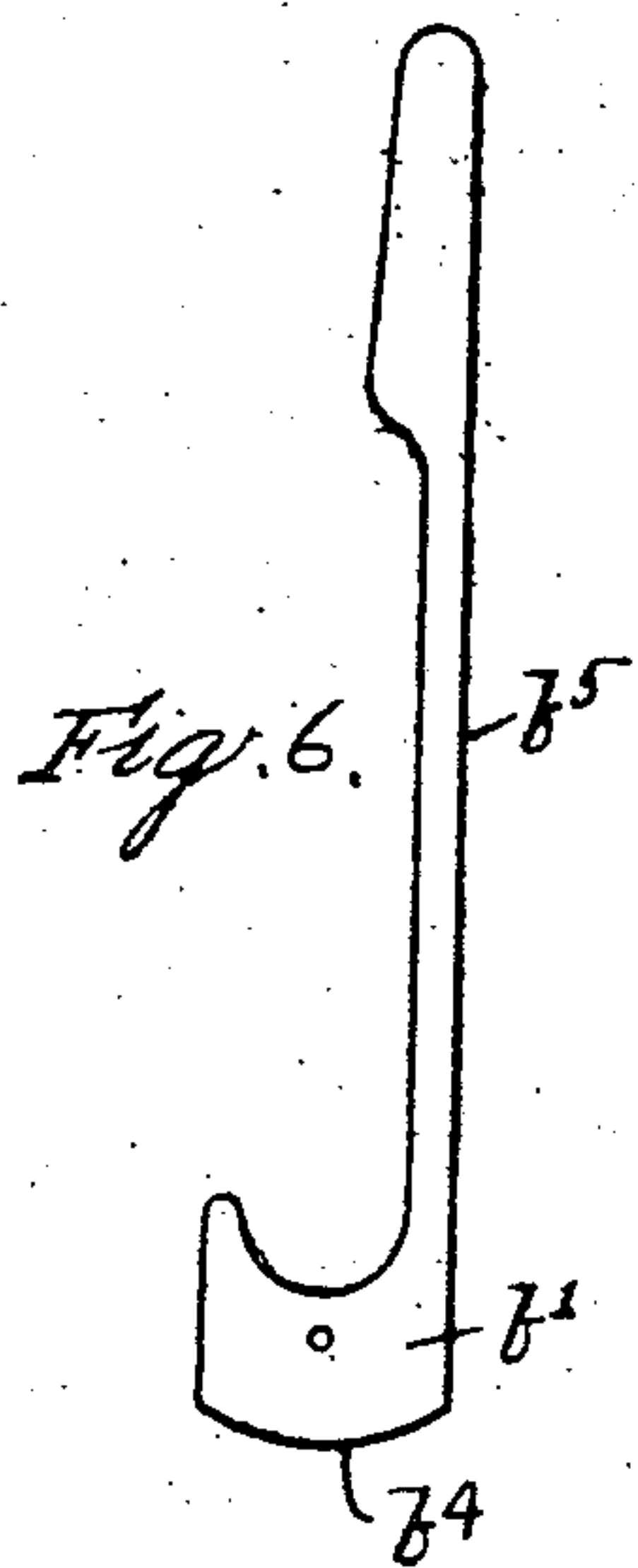
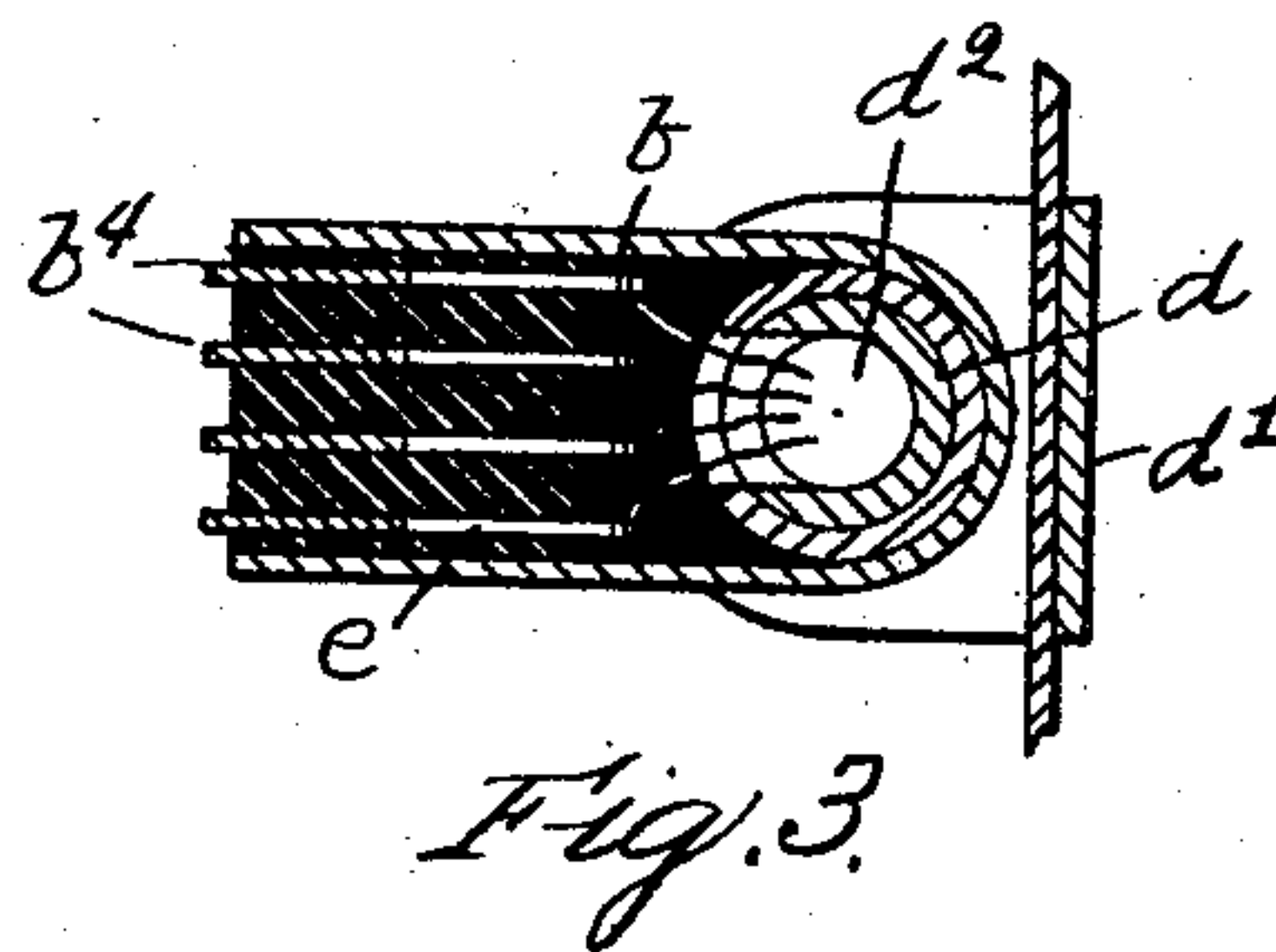
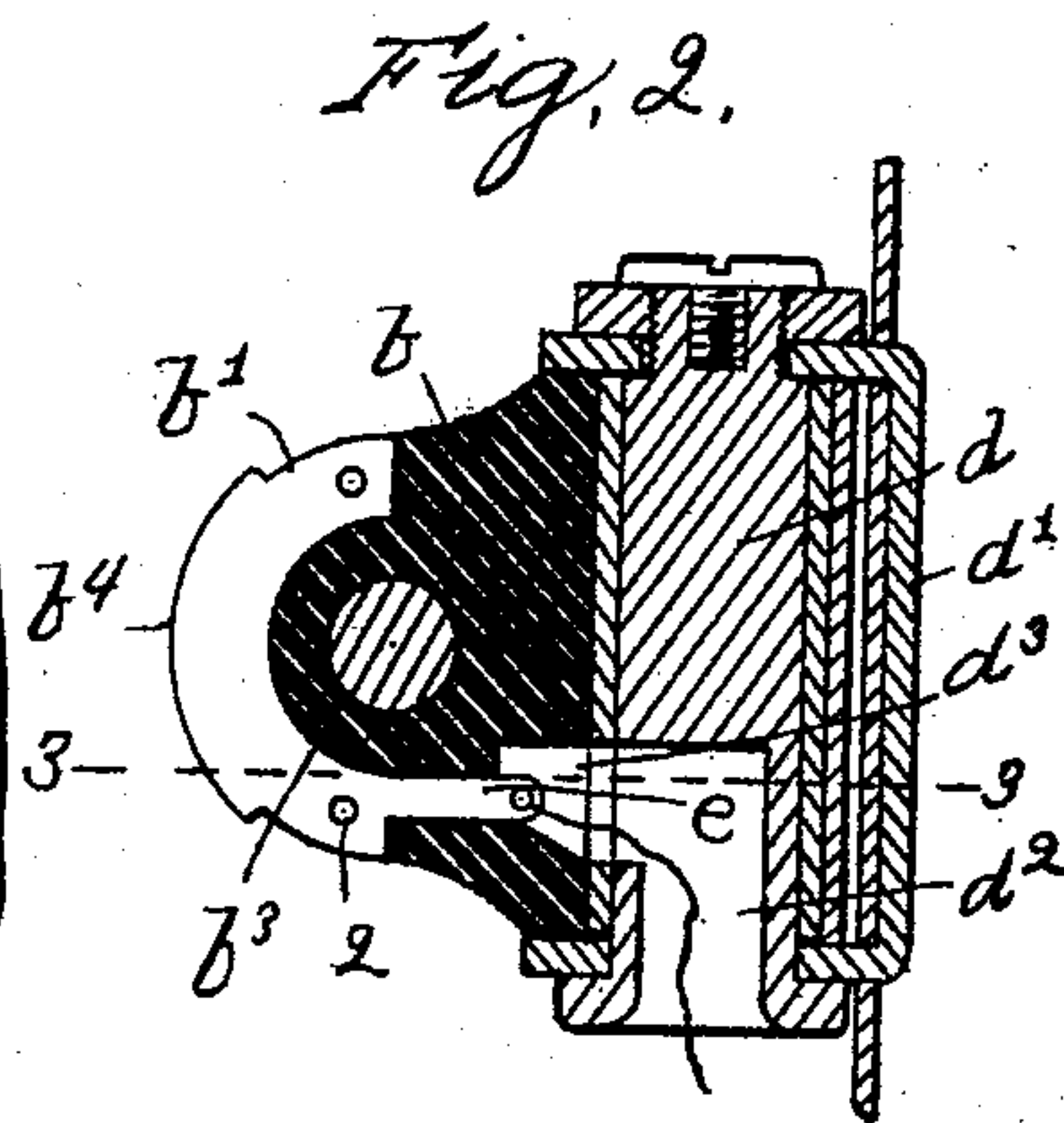
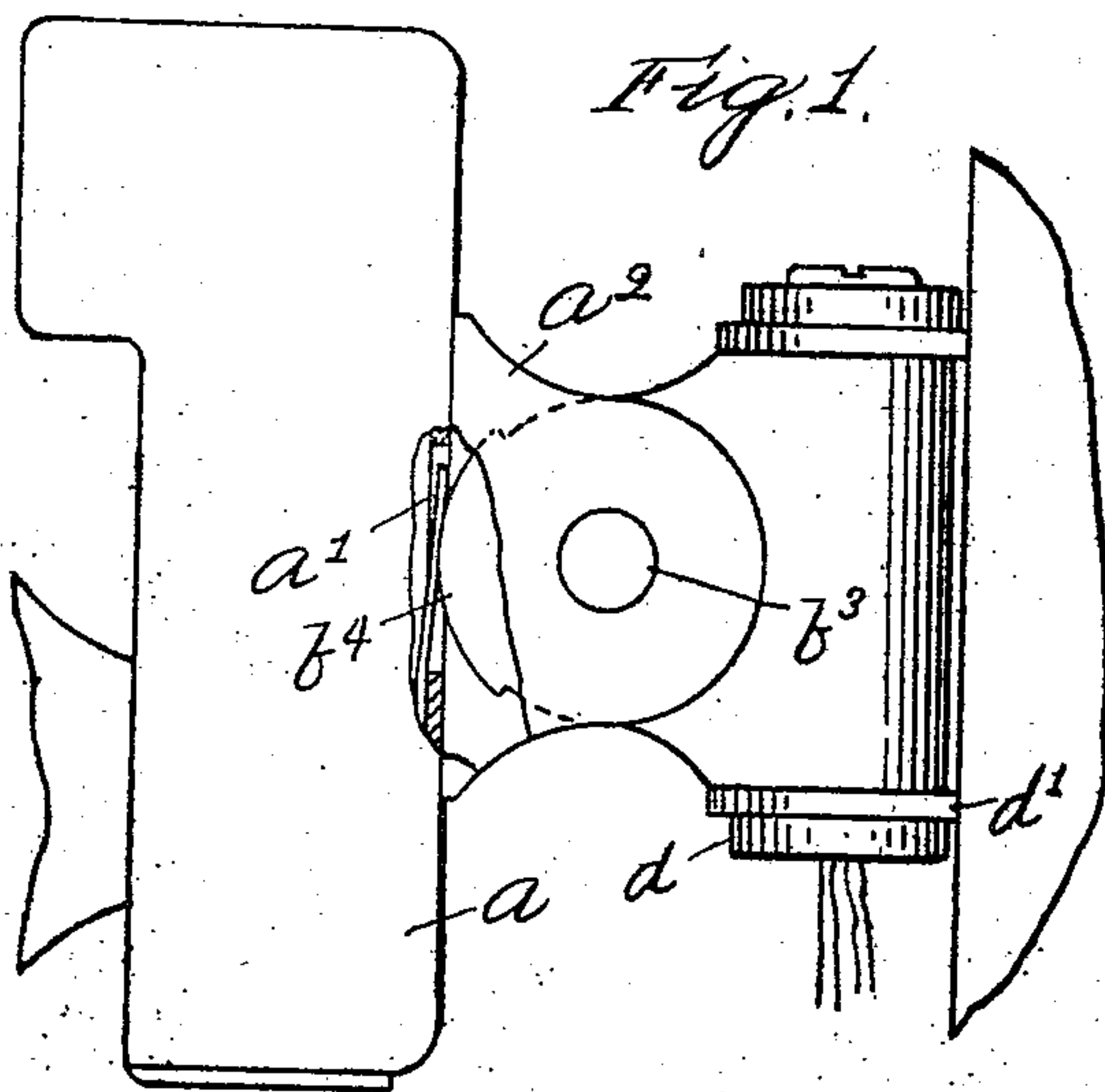


No. 859,221.

PATENTED JULY 9, 1907.

S. C. HOUGHTON.
TELEPHONE SUPPORT.
APPLICATION FILED JULY 10, 1906.



Witnesses:
H. B. Davis.
Cynthia Doyle

Inventor:
Stephen C. Houghton.
by Hayes & Harriman
Attys.

UNITED STATES PATENT OFFICE.

STEPHEN C. HOUGHTON, OF ROME, NEW YORK.

TELEPHONE-SUPPORT.

No. 859,221.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed July 10, 1906. Serial No. 325,487.

To all whom it may concern:

Be it known that I, STEPHEN C. HOUGHTON, of Rome, county of Oneida, State of New York, have invented an Improvement in Telephone-Supports, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts.

In Letters Patent No. 827,692, dated July 31, 1906, a telephone support is shown wherein a switch-box containing switches for the local circuits is pivotally connected to a support, and said support is provided with a plurality of terminal plates connected with the circuit wires which are continuously engaged by yielding fingers connected with the switches which are contained in the switch-box so that the continuity of the circuit or circuits between the switches contained in the switch-box and the circuit wires in the support will be at all times maintained as the switch-box is moved relative to its support.

This invention has for its object to improve and simplify the construction of the terminal plates which are held by the support and which are engaged by the yielding fingers; also to provide said terminal plates with integral metallic connections leading to the binding posts, whereby the necessity of employing wires for this purpose is obviated, and the troubles incident to the employment of said wires, as for instance in making the electric connections and keeping the same in perfect condition, are removed. In some instances the support to which the switch-box is pivoted will be made stationary, and in other instances movable.

Figure 1 shows in side elevation a telephone support embodying this invention. Fig. 2 is a vertical section of the support shown in Fig. 1. Fig. 3 is a transverse section of the support shown in Fig. 2, taken on the dotted line 3—3. Fig. 4 is a vertical section of a modified form of support to be referred to. Fig. 5 is a side view of the support shown in Fig. 4. Fig. 6 is a detail of one of the terminal plates shown in Fig. 4, before it is connected with the support.

The switch-box *a* contains the switches for the local circuits, and through a hole in the rear wall of said box, fingers *a'* project, which are connected with the switches which are contained in the box, said fingers preferably being more or less yielding. The telephone transmitter and receiver are designed to be attached to and supported by the switch-box, but as said transmitter and receiver are both of usual construction, and shown in patents previously granted to me, it is not deemed necessary to herein illustrate them. The switch-box has projecting from its rear wall a pair of ears *a²* adapted to receive between them the support to which the box is pivoted, and the yielding fingers *a'* are located between said ears.

The support for the switch-box consists of a semicircularly formed boss which is shown in Fig. 4 as sta-

tionarily supported upon the front wall of the bell-box, and in Fig. 1 as pivotally supported thereon. The support is composed essentially of insulating material *b*, having a plurality of terminal-plates *b'* embedded in it, which are vertically disposed, in parallelism, being separated a short distance apart by the insulating material in which they are embedded. The support has a hole extended through it, transversely, which is adapted to receive a pivot-pin *b³*, which also passes through holes in the ears *a²* on the switch-box, thereby pivotally connecting the switch-box to the support. The terminal-plates *b'* have semicircularly formed portions embedded in the support which are shaped to conform to the contour of the support, being concentric to the pivot *b³*, and said semicircularly formed portions project beyond the insulating material, as at *b⁴*. The projecting portions *b⁴* have curved engaging faces or edges, made concentric to the pivot, and the yielding fingers which project from the rear wall of the switch-box engage said projections or projecting portions of the terminal plates and maintain the continuity of the circuits as the switch-box is moved relative to its support.

To firmly secure the terminal-plates in position, pins 2 of insulating material may be driven through the support transversely, which pass through said plates. The terminal plates shown in Fig. 4 also have long slender portions *b⁵* integral with the semicircularly formed portions, which are adapted to be bent in diverse ways, as for instance, at right angles to said semicircular portions, and to extend up along the inside of the front wall of the bell-box and then again bent at right angles and to extend along the under side of the top of the bell-box, and the extremities of said portions *b⁵* are broadened and are attached to the lower ends of any usual or suitable binding posts *c* which are provided at the top of the bell-box, and to which the circuit-wires are connected. The long slender portions serve as metallic connections leading to the binding-posts and obviate the use of wires and the troubles incident to their employment. As herein shown, four terminal-plates are provided, but any other number may be employed as required. The support thus constructed is compact and efficient.

Referring to Fig. 2, the support is circularly formed, but instead of being stationarily supported is mounted on a vertical pivot-post *d*, set in a bracket *d'* fastened to the wall of the bell-box. The bracket *d'* consists of a plate, the upper and lower ends of which are bent at right angles and extend through holes in the wall of the box, and engage the pivot-post *d* at its opposite ends. The pivot-post *d* has at its lower end a passage *d²* for the wires which extends vertically in the direction of its axis, and has also a passage *d³* leading from the passage *d²* at right angles, through the side of the post, and the terminal-plates comprising the semicircular

portion b' , having engaging portions b^4 , are formed with rearwardly extended portions e , which terminate in the passage d^3 , and the circuit wires are attached to said portions e . The support thus constructed may
5 be swung on its vertical axis, pulling but slightly upon the wires.

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

- 10 1. In a telephone support, the combination with a switch-box adapted to contain switches for the local circuits, having rearwardly extended fingers connected with said switches, of a support to which said switch-box is pivoted having a plurality of terminal-plates embedded in insulating material, each terminal plate comprising a
15 semicircularly formed portion having a finger engaging portion, the engaging-face of which is arranged concentric to the pivot, and a long slender portion leading from said semicircular portion to a binding-post, substantially as described.
- 20 2. In a telephone support, the combination with a switch-box adapted to contain switches for the local circuits, having rearwardly extended fingers connected with

said switches, of a support to which said switch-box is pivoted having a plurality of terminal plates insulated from each other, each terminal plate comprising a finger-
25 engaging portion, having its engaging-face arranged concentric to said pivot, and a long slender portion integral therewith which extends from said finger-engaging portion, substantially as described.

3. In a telephone support, the combination with a
30 switch-box adapted to contain switches for the local circuits, having rearwardly extended fingers connected with said switches, of a support to which said switch-box is pivoted and a plurality of terminal plates insulated from
35 each other, each terminal plate comprising a finger-engaging portion having its engaging-face arranged concentric to said pivot, and a long slender portion leading from said finger engaging portion to a binding-post, substantially as described.

In testimony whereof, I have signed my name to this
40 specification, in the presence of two subscribing witnesses.

STEPHEN C. HOUGHTON.

Witnesses:

F. M. POTTER, Jr.,
C. R. KEENEY.