(No Model.) 2 Sheets—Sheet 1.

H. STUDTE.

ELECTRIC CONNECTOR.

No. 431,412. Patented July 1, 1890.

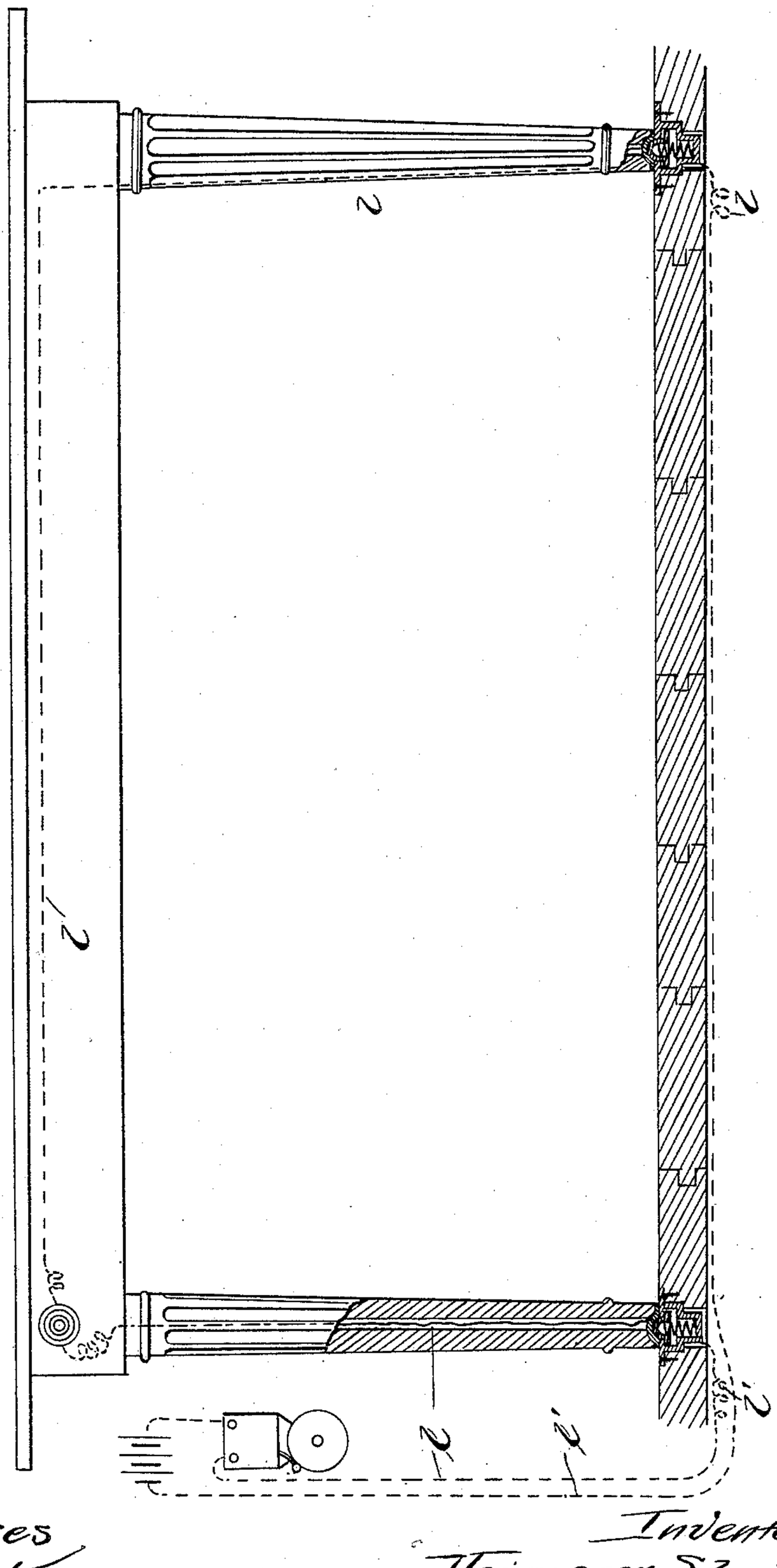

Fig. 2.

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(No Model.) 2 Sheets—Sheet 2.

H. STUDTE.

ELECTRIC CONNECTOR.

No. 431,412. Patented July 1, 1890.

Fig. 2.

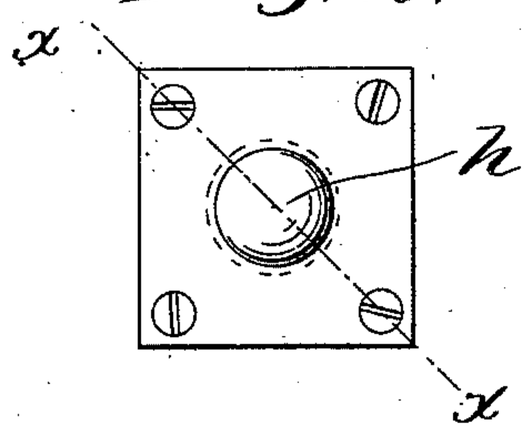


Fig. 3.

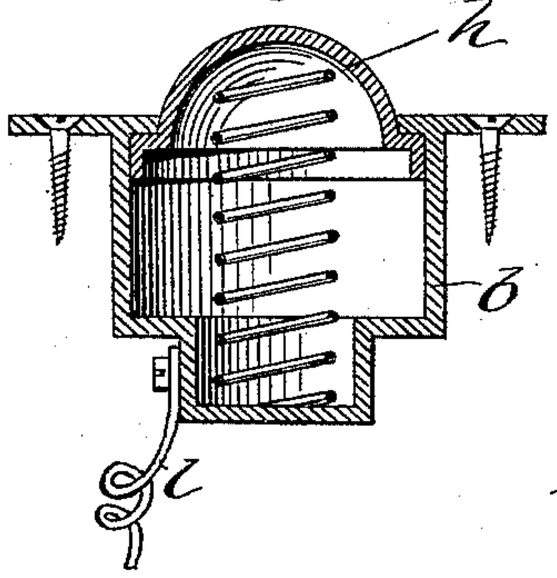


Fig. 4.

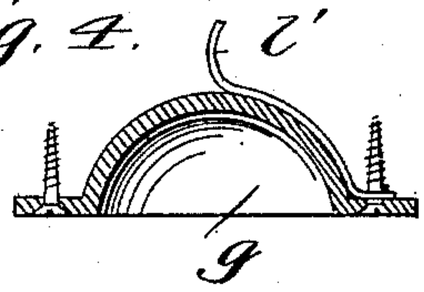


Fig. 5

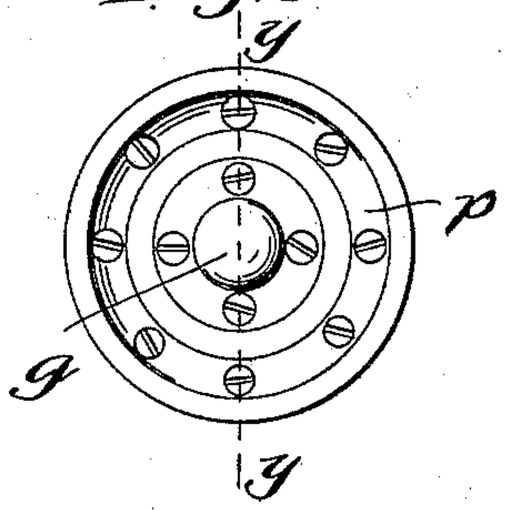


Fig. 6.

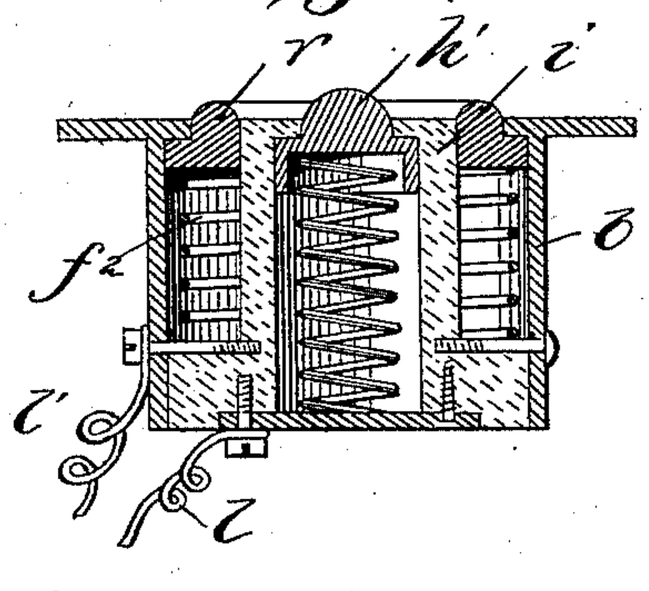
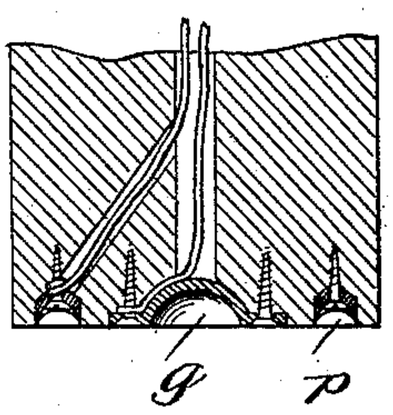


Fig. 7.



Witnesses—
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H. L. Donaldson

Inventor.
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by Ellis Spear Atty.

UNITED STATES PATENT OFFICE.

HERMANN STUDTE, OF DOM KRUK, NEAR INOWRACLAW, PRUSSIA, GERMANY.

ELECTRIC CONNECTOR.

SPECIFICATION forming part of Letters Patent No. 431,412, dated July 1, 1890.

Application filed November 29, 1889. Serial No. 332,065. (No model.)

To all whom it may concern:

Be it known that I, HERMANN STUDTE, student, of Dom Kruk, near Inowraclaw, in the Kingdom of Prussia and German Empire, have invented a new and useful Concealed Electrical Contact, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a conductor-contact for house-telegraphs and other electric conductors, by means of which dining and work tables and the like can be placed in connection with the house-telegraph conductor or other electric apparatus in an easy and convenient manner.

This invention possesses the advantages that it is not in the way, does not project from the floor or the table, and always insures a good electric contact.

The invention is shown in the accompanying drawings, and is hereinafter described with reference thereto.

Figures 1 to 4 show a contact appliance according to my present invention for one conductor-wire. Fig. 1 shows the new contact appliance applied to a table. Fig. 2 gives a view of the bottom of the contact from above; Fig. 3, a longitudinal section along the line *x x*, Fig. 2, of the bottom. Fig. 4 shows a longitudinal section through the top of the contact. Figs. 5 to 7 show a contact appliance which forms the contact of both conducting-wires with the table. Fig. 5 is a view from above; Fig. 6, a longitudinal section along the line *y y*, Fig. 5; and Fig. 7, the upper part thereof in longitudinal section.

The conductor-contact for one wire, according to Figs. 1 to 4, is arranged as follows: In a brass or other suitable metal cap or capsule *b*, which is connected with a conducting-wire *l*, a cap *h*, resting on a spring *f*, is inserted in such a way that it can be pressed entirely into the cap or capsule *b*. To the top of the cap *h* a bell *g* is fitted as the closing-piece and is connected with the conducting-wire *l'*. Two of these capsules *b* are screwed into the floor of the room and connected with the conductor *l*, lying under the boards. In each of two feet of a table, &c., one closing-bell *g* is screwed, Fig. 4, and then the table is placed with these feet upon the contact caps or capsules *b*, let into the floor. (See Fig. 1.) The caps *h* lay themselves inside the closing-bells *g*, and thus conduct the electrical current to the press-knob or to the lamp, &c., along the wire at the foot or carried up through the foot.

Figs. 5 to 7 show a conducting-contact for the two wires. In the cap or capsule *b*, Fig. 6, an insulating-cylinder is placed, into the interior of which the cap *h'*, resting on a spring *f*, is pushed. Around the insulating-cylinder *i*, of ebonite or other suitable material, a brass ring *r* is placed, which rests on the spring *f'*. One of the conducting-wires *l* leads the current into the bottom plate of the insulating-cylinder through the spring *f* into the cap *h'*, while the other conducting-wire *l'* leads the current through the metal screw into the spring *f'*, and through the latter into the ring *r*. The closing-piece in the foot of the table, Fig. 7, consists of the bell *g'*, which is connected with the wire *l* and the also inserted concave ring *p*, which is in connection with the wire *l'*.

The conducting-wires are either carried up in grooves or perforations in the legs of the table or as desired.

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

In combination with a spring-mounted contact-cap, a spring-mounted ring surrounding the said cap, and a corresponding cap and ring adapted to cover the first cap and ring, substantially as described.

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

HERMANN STUDTE.

Witnesses:
W. BINDEWALD,
PAUL FISCHER.