(No Model.)

S. N. BLAKE.

ELECTRIC DOOR BELL PULL.

No. 296,812. Patented Apr. 15, 1884.

Fig. 1.

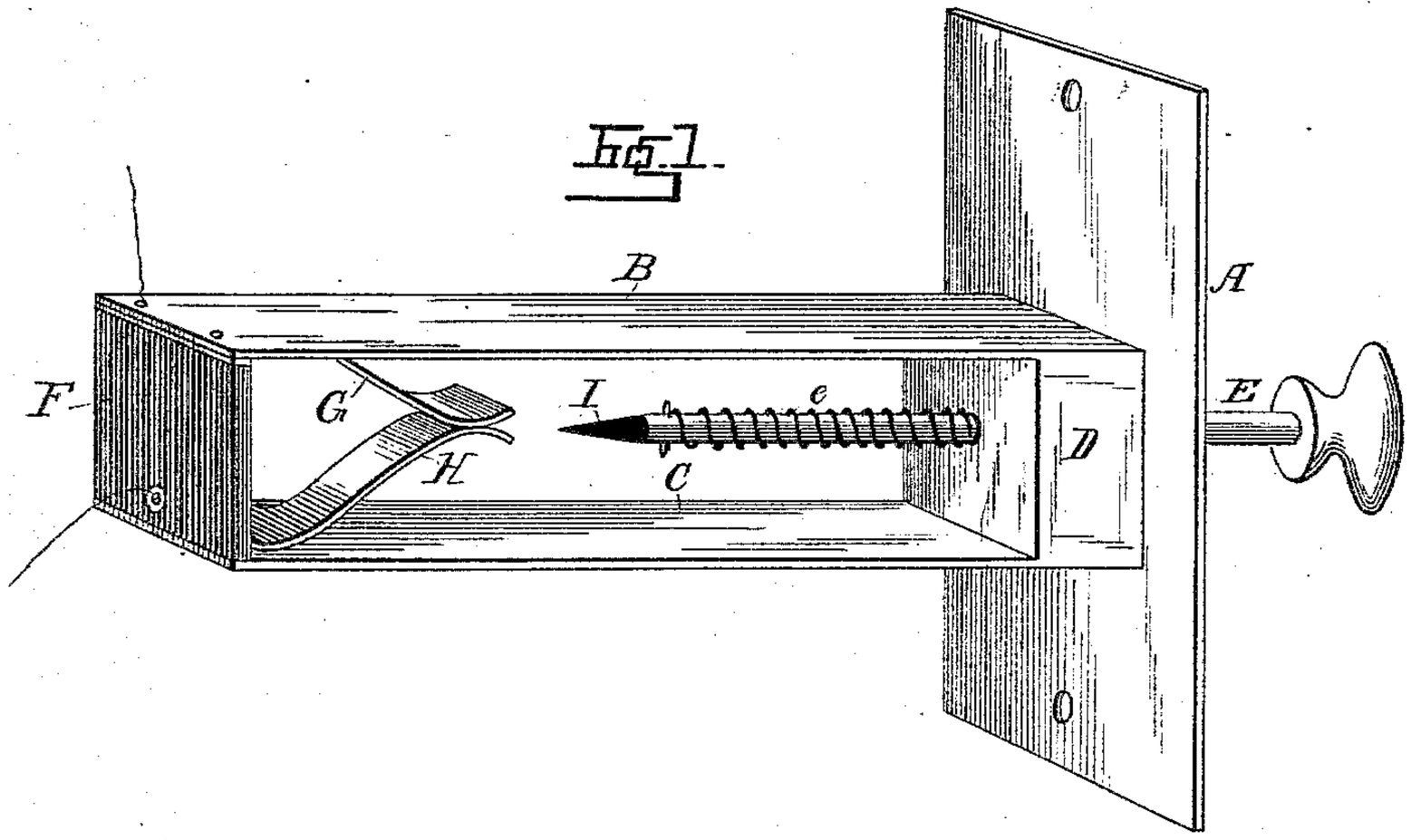
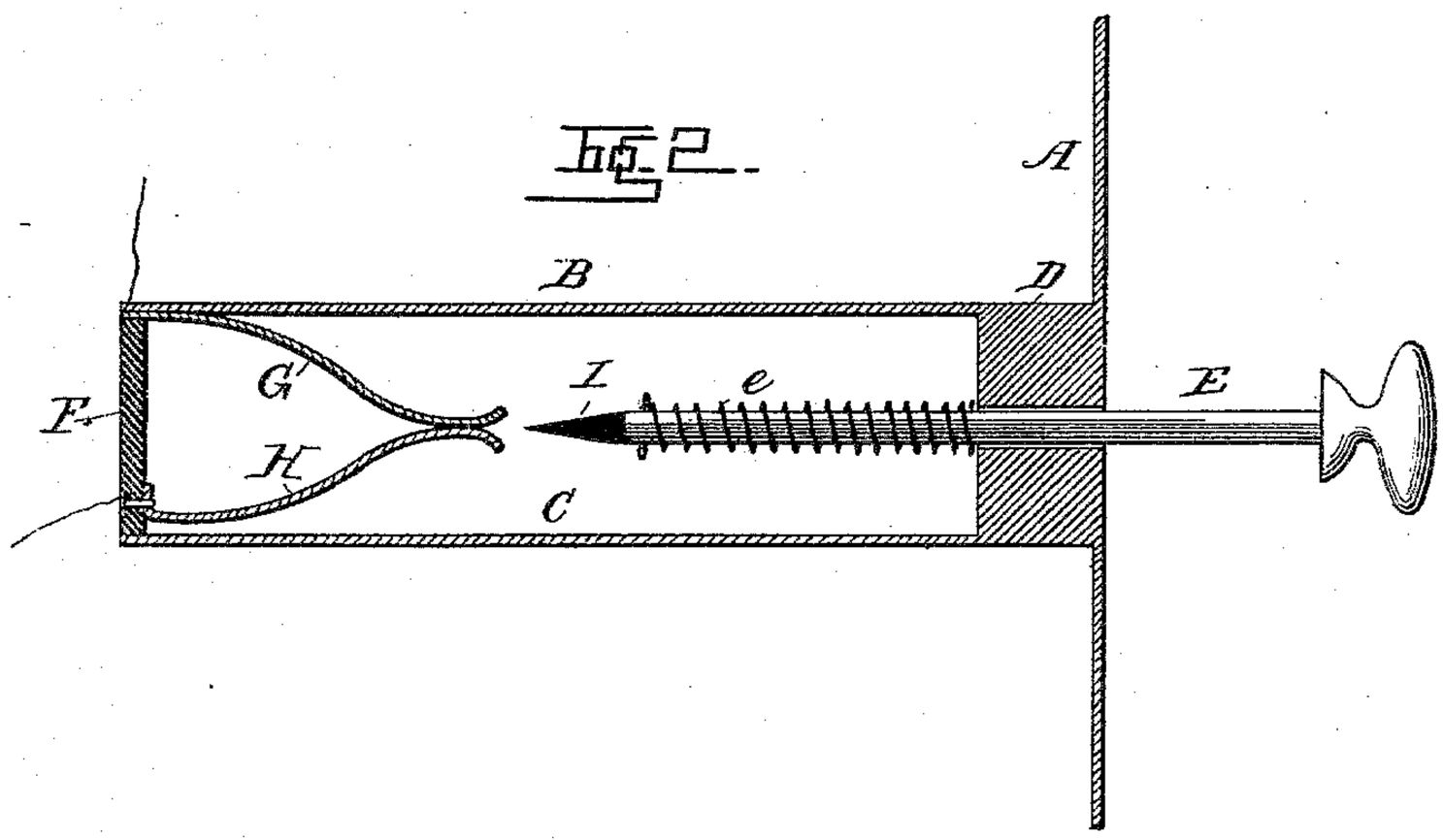


Fig. 2.



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UNITED STATES PATENT OFFICE.

SELWYN NIVISON BLAKE, OF ELMIRA, NEW YORK.

ELECTRIC DOOR-BELL PULL.

SPECIFICATION forming part of Letters Patent No. 296,812, dated April 15, 1884.

Application filed February 11, 1884. (No model.)

To all whom it may concern:

Be it known that I, SELWYN N. BLAKE, a citizen of the United States, residing at Elmira, in the county of Chemung and State of New York, have invented certain new and useful Improvements on Electric Door-Bell Pulls, of which the following is a specification.

My invention relates to electric door-pulls, and it has for its object to construct a simple, cheap, and durable door-pull that may be readily attached to any door-case, and that is not liable to be deranged or short-circuited by hard usage; and to this end it consists in an escutcheon having plates attached to its rear side, between which are arranged the contact-pieces connected to the electric circuit, and having a suitable spring-actuated knob or pull passing through the escutcheon, and provided with an insulating-piece adapted to break the electric circuit at the contact-springs. The escutcheon-plate may be of any suitable size or shape and ornamented in any desired manner, and to the back of the plate may be secured, or formed in one piece therewith, two thin metal plates extending at right angles to the face of the escutcheon-plate. Where these plates are connected to the escutcheon they are preferably formed into a thick block, which is perforated to allow the passage of the spindle or stem of the handle or pull-knob, and furnishes a proper bearing for the same; or, if desired, the plates may be made separate and the block inserted and secured between them in any suitable manner. The inner ends of the plates may be joined by a block of rubber or other non-conducting material, and one of the contact-plates, consisting of a piece of spring metal properly bent or curved, may be attached to one of the metal plates and the other to the rubber block; or, if preferred, the ends of the plates may be united by metal and one of the contact-plates be properly insulated therefrom in any well-known manner. The spindle or shaft of the knob is provided with a tapering end of some non-conducting material, and is actuated by a spring, which normally holds it in such a position that the non-conducting material on its end will be between the contact-plates and break the electric circuit, and when the knob is pulled the stem is withdrawn, allowing the contact-springs to close and complete the electric circuit until the recoil of the spring forces the end of the spindle or stem between them and again breaks the circuit. The movement of the stem upon the contact-springs tends to keep them bright and clean, so that good electric contact will be made when they come together.

In order to more particularly describe the invention, reference is made to the accompanying drawings, in which—

Figure 1 is a perspective view illustrating the improved door-pull, and Fig. 2 is a section thereof.

The escutcheon A is of any desired shape and ornamentation to adapt it for the use intended, and to the rear side thereof are secured or formed therewith two pieces, B C, preferably of brass, and between their ends, or formed thereon, is a block, D, through which and the escutcheon A passes the knob-shaft E. A spiral spring, *e*, surrounds the shaft and tends to hold the shaft in its rearward-extended position. A block of rubber, F, or other non-conductor is secured between the ends of the plates B C, and one contact-plate, G, is secured to the plate B, and the other contact-plate, H, is secured to the non-conductor F, and the circuit-wires are suitably connected to the contact-plates. The knob shaft or spindle E is provided with a projecting end, I, of some non-conducting material, and the normal position of the device is with the end I between the contact-springs G H, breaking the circuit, and when the knob is pulled the projecting end I of the shaft is withdrawn from the springs G and H, allowing them to make contact and close the electric circuit through the bell, (not shown in the drawings,) and when the knob is released the spring *e* forces the shaft E back, and causes the projecting end I to separate the contact-springs G H, and breaks the circuit.

It is evident the whole of the knob-shaft may be of non-conducting material, and that various other modifications in the construction may be adopted without departing from the spirit of my invention.

What I claim is—

1. An electric door-pull consisting of an es-

cutcheon to which are attached plates supporting contact-pieces between them, and spring-actuated knob-shaft adapted to make and break the circuit, as set forth.

2. An electric door-pull consisting of an escutcheon to which are attached plates supporting contact-pieces connected with the electric circuit, and a spring-actuated knob-shaft having a tip of non-conducting material, adapted to make and break the circuit.

3. An electric door-pull consisting of an escutcheon, A, plates B C, attached thereto, block F, of non-conducting material, contact-pieces G H, and spring-actuated knob-shaft having non-conductor I, the whole being adapted to be fitted to the jamb of any ordinary door, as set forth.

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

SELWYN NIVISON BLAKE.

Witnesses:

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