No. 762,571. PATENTED JUNE 14, 1904.

J. ALEXANDER.

SWITCH PLATE.

APPLICATION FILED OCT. 29, 1903.

NO MODEL.

Fig. 1

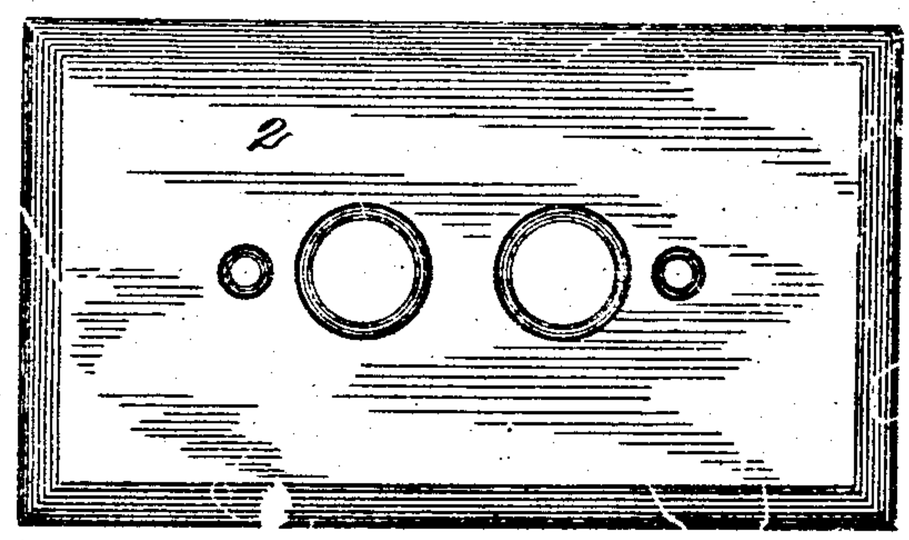
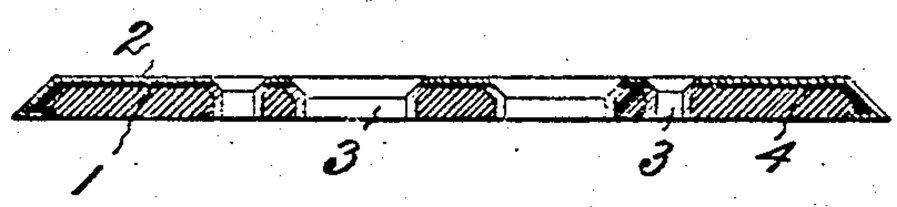


Fig. 2



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No. 762,571. Patented June 14, 1904.

UNITED STATES PATENT OFFICE.

JOHN ALEXANDER, OF HARTFORD, CONNECTICUT.

SWITCH-PLATE.

SPECIFICATION forming part of Letters Patent No. 762,571, dated June 14, 1904.

Application filed October 29, 1903. Serial No. 178,984. (No model.)

To all whom it may concern:

Be it known that I, JOHN ALEXANDER, a citizen of the United States, residing at Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Switch-Plates, of which the following is a specification.

This invention relates to the manufacture of the plates which are used for covering the mechanisms of push-button electric switches.

The object of the invention is to provide a plate which is very cheap to make and which has a hard-metal front face capable of taking a high finish and which has a back of cheaper material that is a poorer conductor of electricity.

Figure 1 of the accompanying drawings shows a plan of one of these plates, and Fig. 2 shows a central section of the plate.

In the manufacture of this plate a pattern of wax or similar material that is easily rendered liquid is made to conform exactly in size and shape to an original blank. The front face of this pattern of wax or similar material is given a coating of plumbago, preferably by rubbing the plumbago on the surface of the wax until it has the desired thickness, which may be one-sixteenth of an inch. The plumbago is then hardened by heat or any other suitable means and the wax is melted out. The plumbago shell 1 is then placed in an electroplating-bath containing sulfate of copper or similar substance, and copper is deposited upon it, so as to form a hard copper shell 2 of the same size and shape as the outer face of the finished plate. After sufficient copper has been deposited to form a strong shell bushings 3 of the correct shape and size to receive the push-buttons and the holding-screws are secured to the shell in the proper position. The interior of the shell is then filled with composition to form a solid back 4. This composition may be soft metal—such as tin, bismuth, antimony, and lead—or insulating material, such as hard rubber or rubber and mica compositions or earthy compositions which may be hardened by heat and pressure. The front face may be plated and finished as usual.

This plate is very cheap to make and while susceptible of being finished on the exterior the same as the common solid plate it has a backing of a cheap material which may be a poor conductor or non-conductor of electricity, so that the switch to which this plate is applied will be more thoroughly insulated than it would be with the plate in common use.

This plate does not have to be blanked, trimmed, ground, and polished as the ordinary plate, it does not weigh as much as the ordinary plate, nor does it contain as much expensive material.

The invention claimed is—

As a new article of manufacture, a push-button switch-plate having push-button perforations, holding-screw perforations and beveled edges, consisting of an electrodeposited metallic shell covering the front and beveled edges, hard-metal bushings surrounding the openings through the shell, and composition which is a poorer conductor of electricity than the shell, filling the shell about the bushings and making the plate of uniform thickness, substantially as specified.

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