To all whom it may concern:

Be it known that I, Georg Jachmann, a citizen of the German Republic, residing at Berlin-Friedenau, Isoldestrasse 6, Prussia, and Germany, have invented certain new and useful Improvements in an Electric Rotary Switch, of which the following is a specification.

This invention has reference to rotary electric switching means and it is intended to facilitate the operation and to generally improve the constructions of devices of this kind. In particular, the invention refers to an electric rotary switch with corrugated or undulatory slideway for the contact bridge. In accordance with my invention the shaft of the rotary handle of the device is provided with a sleeve operatively connected therewith and with the base bridge, loosely and independently rotatably mounted thereon by means of a stud or the like attached to the shaft of the handle and adapted to carry the sleeve along in its movement with play, the said sleeve being, moreover, longitudinally displaceable against the action of a spring, and with relation to the shaft and the contact bridge.

By reason of this construction of rotary switch the object is accomplished among other advantages that the movement of the contact bridge from the summits to the depressions of the undulatory slideway by the influence of the spring is effected in an entirely automatic manner and independently of the rotary handle, so that by its movement the handle is prevented from producing any unpleasant jerking movement, otherwise caused by the action of the spring upon the hand of the operator. Furthermore, there is the advantage that this automatic movement of the contact bridge is very rapidly effected, so as to produce a most favorable condition for the establishing of the contact. These advantages are realized both for the left hand movement as well as in the right hand movement of the switch, and I am thereby enabled to produce a switch of great reliability of operation, and easily and smoothly operable in both directions. Then, insomuch as the new rotary switch is made up of only a few simple parts, it may be easily manufactured and readily assembled, and possesses great durability.

My invention will be more fully described with reference to the accompanying draw-
tact establishing position. The rotary handle $a$, however, does not share in this vigorous spring movement, inasmuch as the sleeve $s$ is displaced with relation to the pin $d$ for half the width of the recess $l$. The jerk accompanying the throwing forward of the contact bridge $e$ is therefore not felt by the hand of the operator taking hold of the handle $a$. The pin $d$ is now again lodged at the deepest point $k$ of the inclined recess or slot $l$, so that upon continuing the rotation of the switch the entire cycle of operations is repeated.

While the invention has been shown as a preferred embodiment of exemplification of the principles thereof, it should be understood that it is susceptible of modifications and changes within the meaning of the claims hereunto appended and without deviating from the spirit of my invention.

I claim:

1. In an electric rotary switch in combination, an undulatory slideway, contact pieces on said slideway, a contact bridge movable into and out of engagement with the slideway, an axially displaceable sleeve engageable with said contact bridge, a spring connection between said sleeve and said bridge, a rotary handle, engageable with said sleeve, and means to mount said sleeve on the handle for independent axial movement relatively thereto.

2. In an electric rotary switch in combination, an undulatory slideway, contact pieces on said slideway, a contact bridge movable into and out of engagement with said slideway, a rotary operating handle, a spring actuated sleeve loosely surrounding said handle, and mounted thereon for independent axial movement relatively thereto, interengaging, substantially inclined guiding means on said sleeve and said handle, and means on said sleeve engageable with said contact bridge.

3. In an electric rotary switch in combination, an undulatory slideway, contact pieces on said slideway, a contact bridge movable into and out of engagement with said slideway, a rotary operating handle, a spring actuated sleeve loosely surrounding said handle and mounted thereon for independent axial movement, relatively thereto, substantially V-shaped guiding means on said sleeve, and means on said handle engaging said guiding means, and means on said sleeve engageable with said contact bridge.

4. In an electric rotary switch in combination, an undulatory slideway, contact pieces in the depression of said slideway, a contact bridge movable into and out of engagement with said slideway, a rotary operating member, a spring actuated member mounted on said operating member and adapted for axial movement thereon, substantially V-shaped guiding means on one of said members, and projections on the other member engageable therewith, and means on the axially movable member engageable with said contact bridge.

In testimony whereof, I affix my signature.

GEORG JACHMANN.