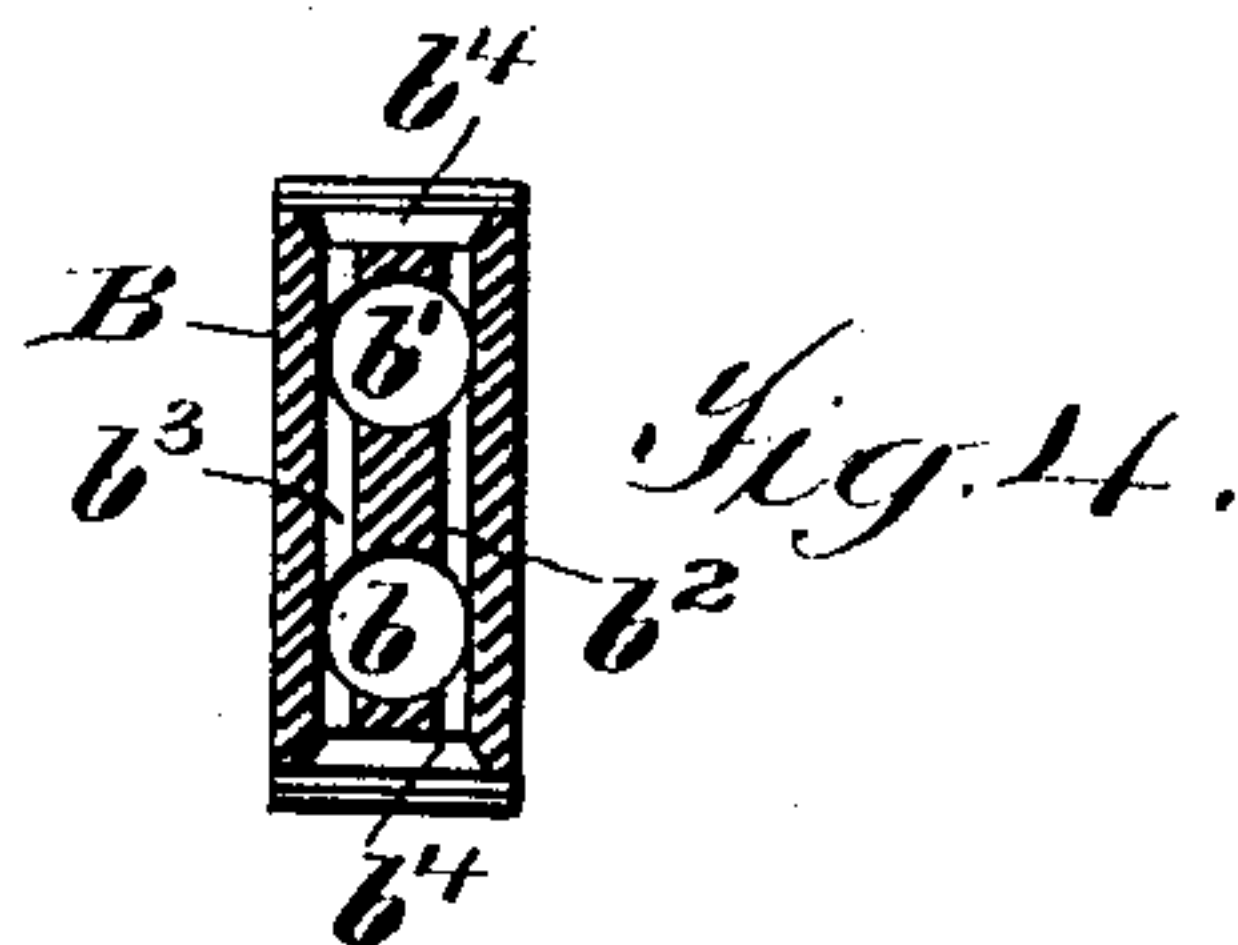
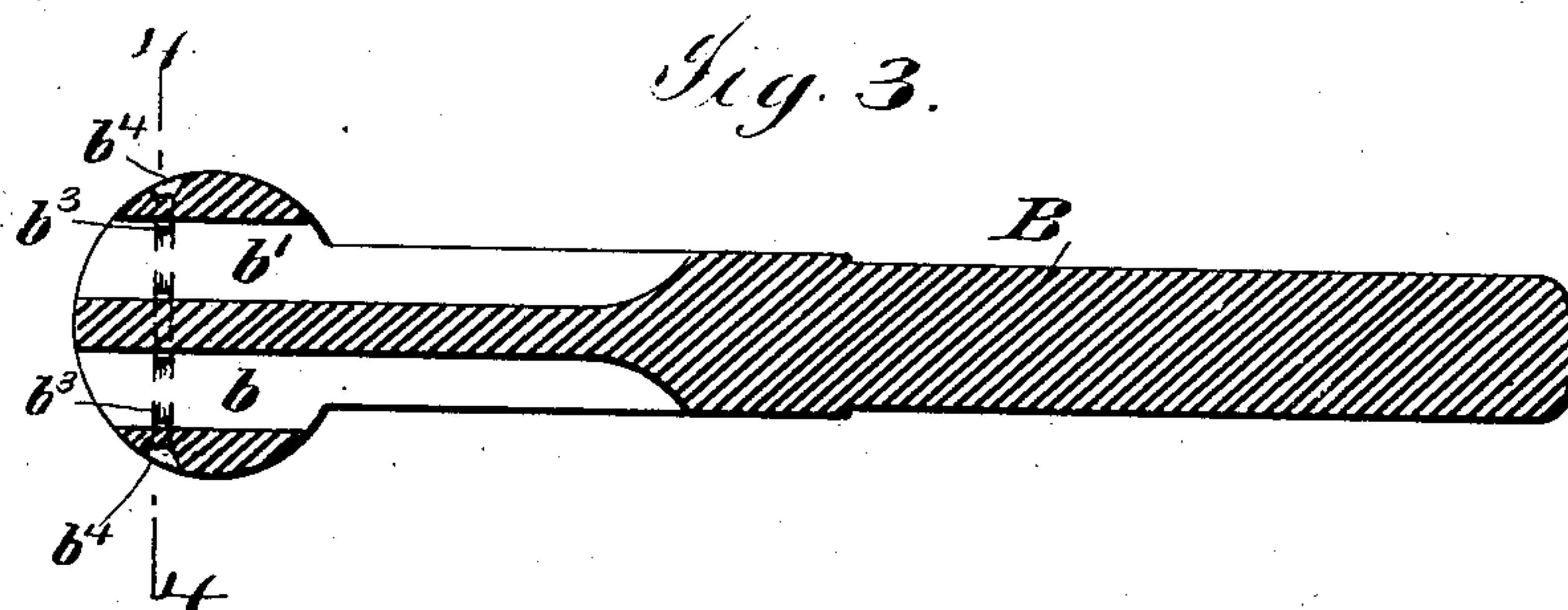
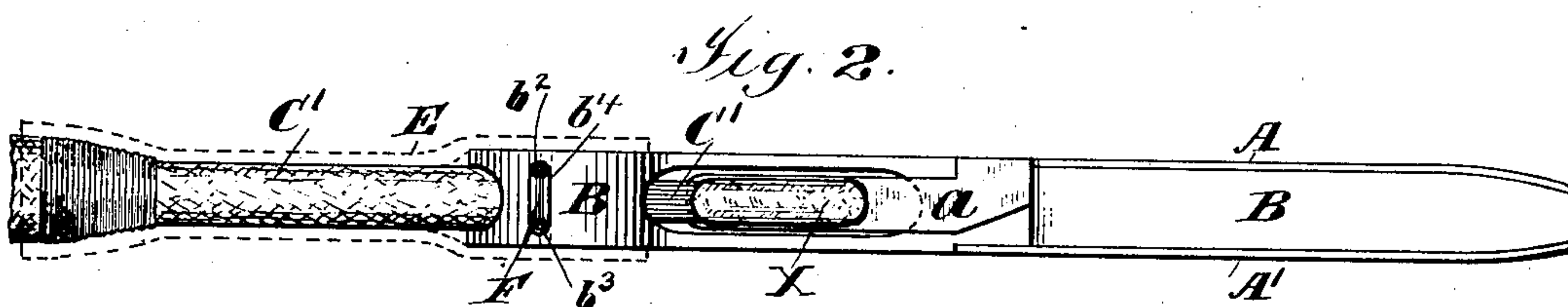
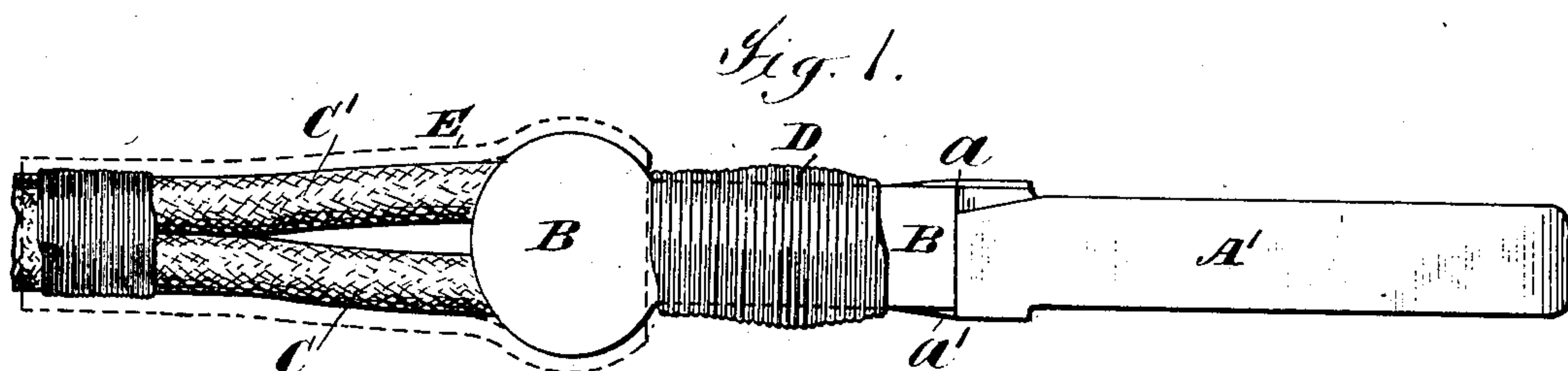


No. 810,596.

PATENTED JAN. 23, 1906.

G. A. ZUNDEL.  
SPRING JACK WEDGE.  
APPLICATION FILED NOV. 17, 1904.



Witnesses  
Geo H. Bytts.  
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# UNITED STATES PATENT OFFICE.

GUSTAVE A. ZUNDEL, OF NEW YORK, N. Y., ASSIGNOR TO J. H. BUNNELL AND COMPANY, A CORPORATION OF NEW YORK.

## SPRING-JACK WEDGE.

No. 810,596.

Specification of Letters Patent.

Patented Jan. 23, 1906.

Application filed November 17, 1904. Serial No. 233,070.

*To all whom it may concern:*

Be it known that I, GUSTAVE A. ZUNDEL, a citizen of the United States, and a resident of New York city, county and State of New York, have invented Improvements in Spring-Jack Wedges, of which the following is a specification.

This invention relates to spring-jack wedges or like electrical contact plugs used for switch-boards, &c., and has for its object to so construct such a wedge that the usual strain on the flexible conducting-wires in the manipulation of the wedge will not be transmitted to the points of soldering to or other electrical connection with the metallic contact-strips of the wedge.

In the accompanying drawings, Figure 1 is a plan view of a spring-jack wedge of a usual form, to which my improvements may be applied drawn on a large scale for clear showing. Fig. 2 is a side or edge view of the wedge shown in Fig. 1, which view illustrates one form of my improvements. Fig. 3 is a central sectional plan of the insulating piece or handle of the wedge shown in Figs. 1 and 2, and Fig. 4 is a sectional view taken on line 4 4 of Fig. 3.

In the construction shown in the drawings the two flat metal contact-strips A A', Figs. 1 and 2, are suitably secured to and insulated from each other by the insulating piece or handle B, which here forms the body portion of the wedge. The strips A A' have bent-over portions a a' lying in the recesses in the sides of the insulating piece or body B, and the ends of the conducting-wires C C' pass through perforations b b', Figs. 3 and 4, in the handle end of the insulating piece or body B and are soldered or otherwise electrically connected to the bent-over portions a a' of the contact-strips A A', as at X, Fig. 2. This portion of the wedge where the soldering is made is usually covered, as by winding cord D around the device, and a rubber tubing, such as shown at E, in dotted lines in Figs. 1 and 2, may be placed over the handle and parts of the conducting-wires adjacent thereto.

The wedge so far described is a usual form; but there is a defect in this construction, inasmuch as the constant pull on the wires C C' in removing the wedge from the spring-jacks

tends to break the connection between the wires and the contact-strips A a A' a'. By my present invention I provide for firmly holding the wires in the wedge at a point or points beyond the soldering, whereby strain on the wires outside the wedge cannot be transmitted to the points of electrical connection. Various ways may be employed for accomplishing my object; but the preferred form is shown in the drawings and consists in providing perforations, such as b<sup>2</sup> b<sup>3</sup>, in the body or insulating piece B in a transverse direction to the perforations, b b', Figs. 2, 3, and 4, whereby the conducting-wires C C' may be sewed to the piece B. The perforations b<sup>2</sup> b<sup>3</sup> are preferably made through the body B at opposite walls of the perforations b b', Figs. 3 and 4, that the sewing-threads F, Fig. 2, may pass through the covering of the wires C C'. Also depressions or grooves b<sup>4</sup> b<sup>4</sup> are preferably made in the body B at the ends of the perforations b<sup>2</sup> b<sup>3</sup>, whereby the threads may be fastened and covered or cemented within the contour of the handle.

I do not limit my invention to the particular form of contact wedge or plug shown nor to the particular manner of securing the conducting-wires to prevent strain reaching the points of connection with the contact-strips.

I claim—

1. In a spring-jack wedge or the like, the combination of metallic strips and an insulating-body separating them, with conducting-wires electrically connected to the said strips and sewed to said body.

2. In a spring-jack wedge or the like, the combination of metallic strips, and an insulating-body separating said strips and provided with two sets of perforations, with covered conducting-wires passing through one set of perforations in said body and electrically connected to said strips, and binding-threads passing through the second set of perforations and through the covers of the wires to secure the wires to the body.

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

GUSTAVE A. ZUNDEL.

Witnesses:

EDITH J. GRISWOLD;

EDITH C. SARLES.