

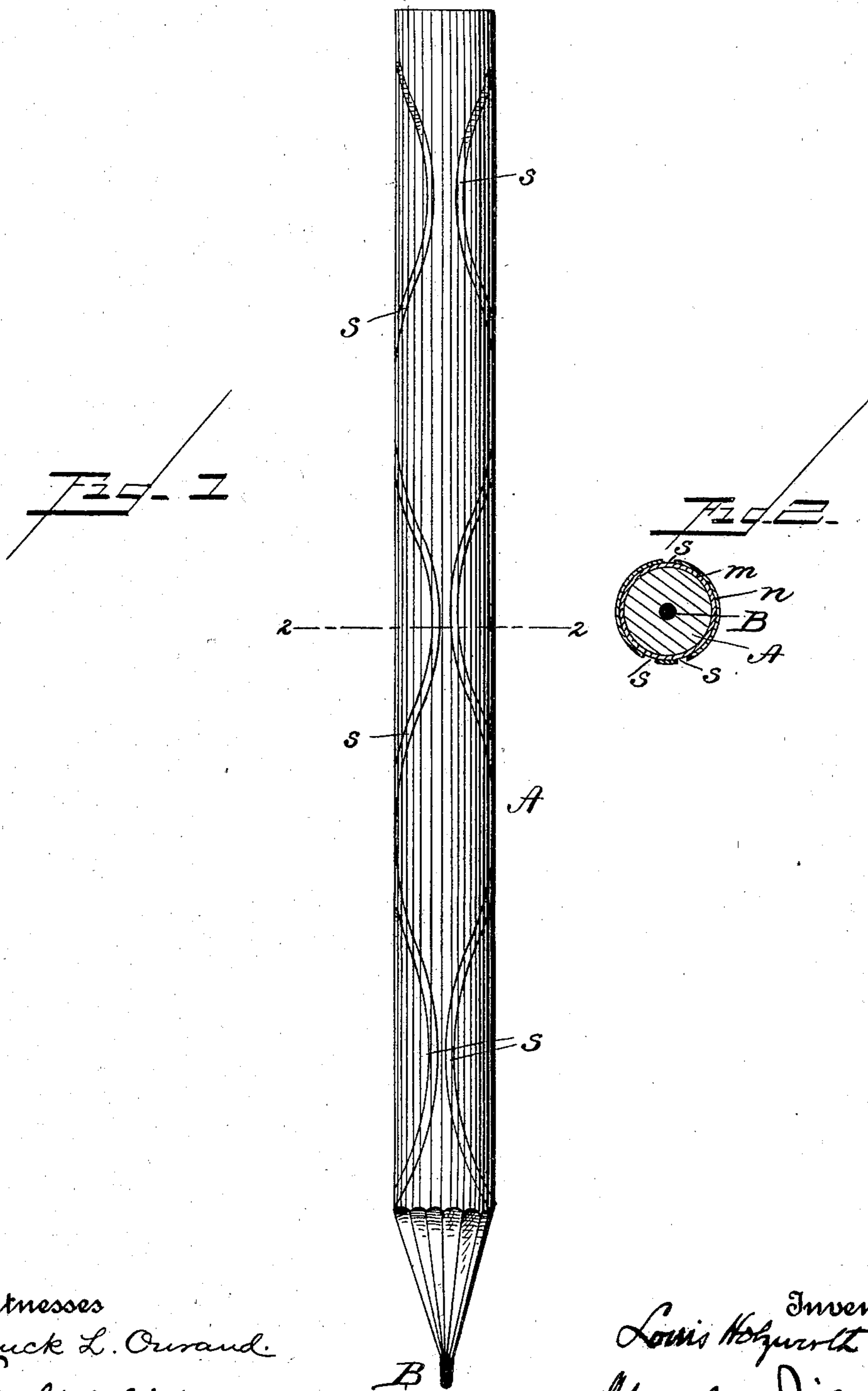
No. 708,964.

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L. HOLZWORTH.
PENCIL AND THE ART OF MAKING SAME.

(Application filed June 19, 1902.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

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PENCIL AND THE ART OF MAKING SAME.

SPECIFICATION forming part of Letters Patent No. 708,964, dated September 9, 1902.

Application filed June 19, 1902. Serial No. 112,314. (No model.)

To all whom it may concern:

Be it known that I, LOUIS HOLZWORTH, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Pencils and in the Art of Making the Same, of which the following is a specification.

My invention has reference to lead-pencils, pencil and pen holders, and the like, all of which I include under the term "pencil."

The invention relates to finishing of the pencil and providing it with a smooth durable variegated surface agreeable to the eye and touch.

What I do, in brief, is to apply to the pencil a plurality of superposed coats of colored varnish, the one coat contrasting in color with the other, and then remove portions of the outer coat or coats, so as to expose the coat immediately below, the pencil being subsequently polished or burnished, as practiced in the case of varnished pencils. The portions removed of the exterior coat or coats may follow any prescribed pattern, so as to produce in contrasting colors any design desired. In this way an entirely new effect is produced, while at the same time the surface of the pencil remains smooth, the superposed varnished coats being so thin and film-like that the removal of portions of the outer one can be effected without producing any unevenness of superficial irregularity of surface perceptible either to the eye or to the touch.

In the accompanying drawings, to which reference will now be made for a better understanding of my invention, Figure 1 is a view of a lead-pencil embodying my improvement. Fig. 2 is a cross-section of the same.

In the figures, A is the wooden sheath of the lead-pencil, B is the lead core, and *m n* are the superposed finishing coats of colored varnish. In the drawings the thickness of these coats is necessarily considerably exaggerated. In the actual pencil they are film-like and very thin.

I may employ more than two coats of varnish; but it will be found in practice that only two are really needed. The colored varnishes of which the two coats are composed are of contrasting colors—as, for example, one blue

and the other white or one red and the other light blue or one blue and the other pink, or whatever other colors will produce a pleasing contrast. The successive colored varnish coats are applied by dipping or otherwise, as practiced in the art of pencil-making, the one coat being allowed to dry before the other is applied. After the coats are thoroughly dry portions of the outer one, following any desired pattern, are removed, as indicated at *s*, so as to expose the inner contrasting colored one. The tool used for this purpose should have a smooth acting edge, and on this account a piece of broken glass will be found well adapted to do the work. The acting edge of the tool must be so manipulated or otherwise operated as to remove at the point where it contacts with the pencil only the outer coat, leaving the inner coat practically intact. A convenient mechanism for the purpose consists of holders for each end of the pencil to support it during the operation and a tool-holder traveling in a straight line lengthwise of and parallel with the pencil, the tool being so adjusted that its acting edge will remove the outer varnish coat only. By giving the pencil-holders a slow oscillatory movement on their axes during the rectilinear traverse of the tool-holder the tool will travel in an undulatory path upon the pencil, removing the outer varnish coat along this path, so that the inner varnish coat will there appear as an undulatory line of color, contrasting with that of the outer coat, as indicated in Fig. 1. After this the pencil is polished or burnished in any of the ways now practiced in the case of varnished pencils. The polishing, however, is not indispensable and may be dispensed with, if desired. The inner colored varnish coat or coat which is exposed by the removal of the outer coat is of appreciable thickness and is formed by dipping or otherwise applying the varnish several times, with a view to provide a coat sufficiently thick to prevent the scratching or cutting tool from penetrating as far as the wood or other body of the pencil. The outer colored varnish coat which is cut away by the tool, as above described, may be and preferably is so light or thin that it is quite impracticable to measure its thickness. It is, in fact, a mere surface film, and in remov-

ing portions of it by a tool it is in practice impossible to avoid removing a part of the under varnish coat as well; but as this coat, although *per se* thin and film-like, is of appreciable thickness this may be done without exposing the pencil-body beneath. In this way the ornamental effect desired can be obtained without detracting from the smooth even appearance and feeling of the varnish surface of the pencil, and this without necessitating after-polishing of the article.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The improvement in the art of making pencils, consisting in applying to the same a plurality of thin superposed coats of varnish contrasting in color with one another, and

then removing portions of the outer coat or coats to expose the coat of contrasting colored varnish immediately below, substantially as and for the purposes hereinbefore set forth. 20

2. As a new article of manufacture, a pencil having a plurality of thin superposed finishing varnish coats contrasting in color with one another, with portions of the outer coat or coats removed to expose the coat of contrasting color immediately below, as hereinbefore set forth. 25

In testimony whereof I have hereunto set my hand this 18th day of June, 1902. 30

LOUIS HOLZWORTH.

Witnesses:

SAMUEL KRAUS,
P. H. BUCKMASTER.