C. KAISER.

LEAD PENCIL.

APPLICATION FILED MAR. 23, 1911.

995,068.

Patented June 13, 1911.

2 SHEETS—SHEET 1.

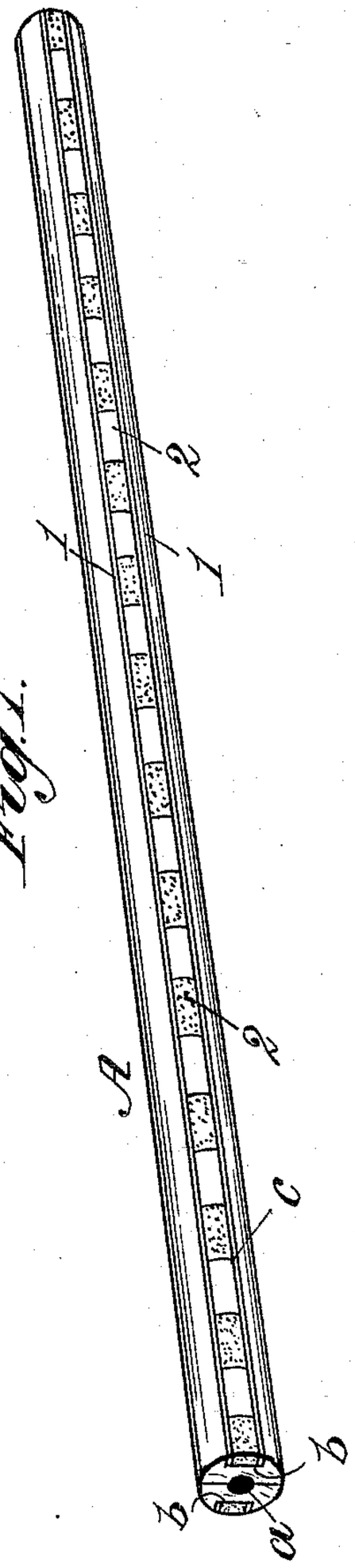

Fig. 1.

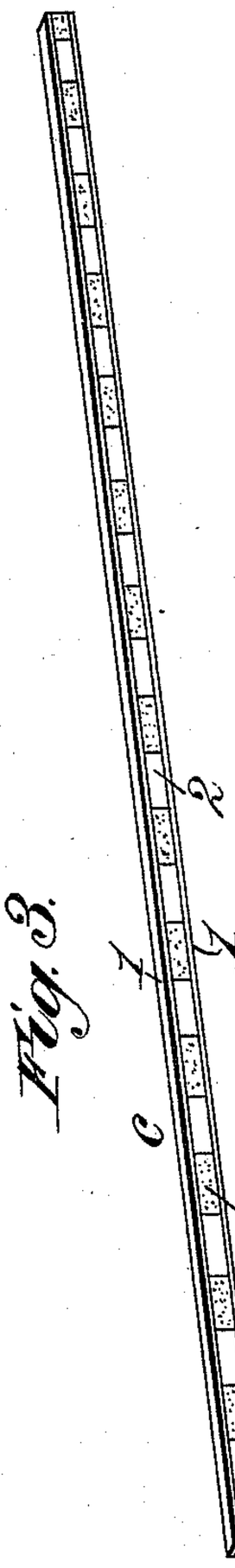

Fig. 3.

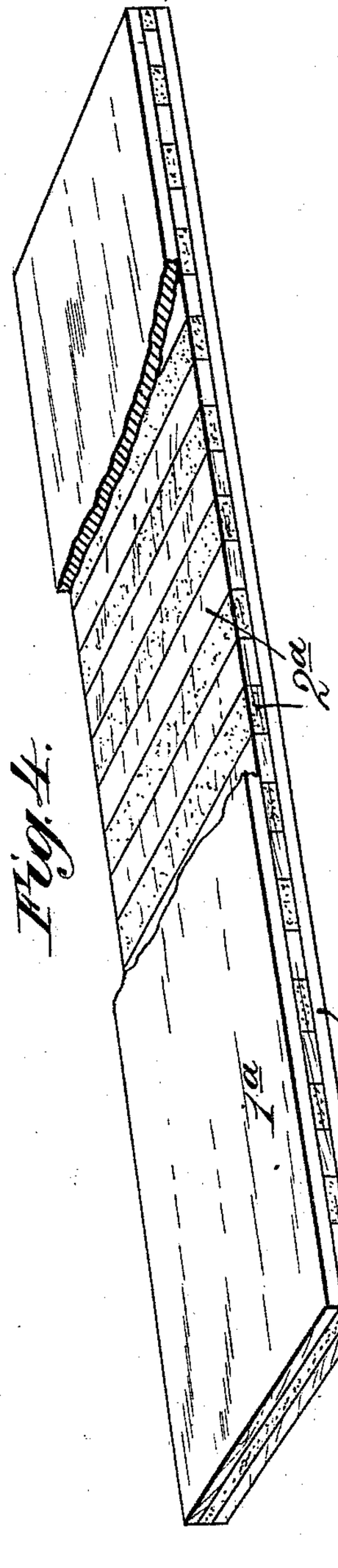

Fig. 4.

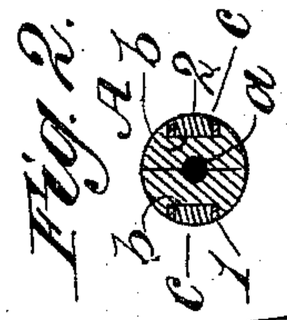

Fig. 2.

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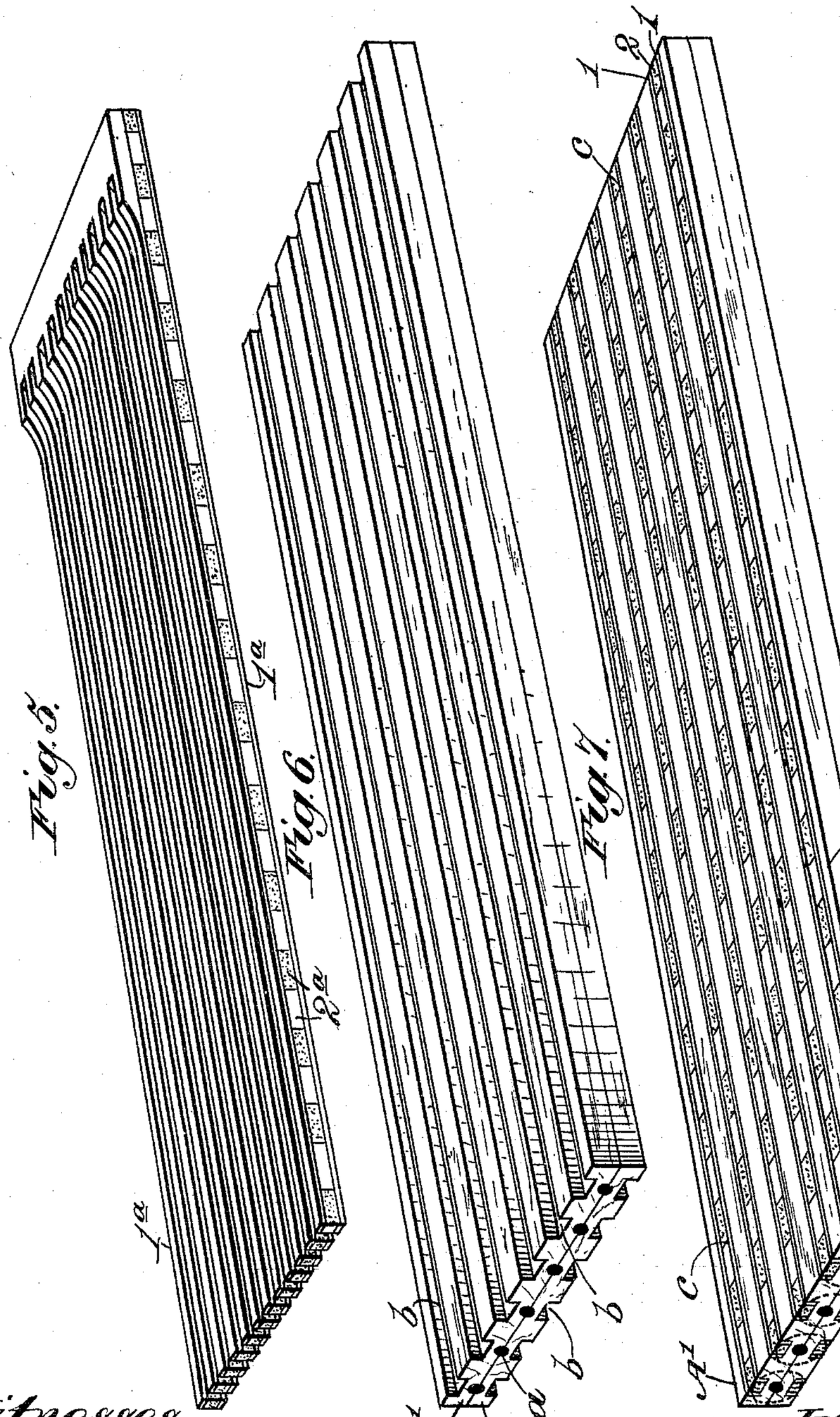
2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

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LEAD-PENCIL.

995,068. Specification of Letters Patent. **Patented June 13, 1911.**

Application filed March 23, 1911. Serial No. 616,356.

To all whom it may concern:

Be it known that I, CHARLES KAISER, a citizen of the United States, residing at Greenpoint, Brooklyn, New York State, have invented a new and useful Improvement in Lead-Pencils, of which the following is a specification.

My invention relates to that kind of a pencil in which the lead core is contained in a wooden sheath; and it has reference more particularly to that kind of such pencil, in which woods of various colors are employed to produce an inlaid tessellated effect in the sheath, for purposes of ornamentation. In my Patent No. 972,624 of Oct. 11, 1910, is disclosed a pencil in which this effect is produced by a veneer composed of narrow wooden strips of alternately different colors, laid between the two wooden sections which compose the sheath—the checkered inlaid effect due to the composite veneer, being at the joint between the two sections of the pencil sheath.

Under my present invention the tessellated inlaid effect is produced, by longitudinally veneering or grooving the exterior of the pencil sheath, in a plane substantially at right angles with the plane of joint between the two sections of the pencil sheath, thus locating the grooves in the solid portions of said sections, and then filling said grooves (of which there may be one or more) with composite strips composed of small blocks laid together to produce the desired tessellated or other ornamental effect, and thin continuous veneers between which the blocks are firmly held, the composite tessellated or mosaic strip thus formed being fitted and glued or otherwise suitably secured in the groove formed for it in the pencil sheath, and being externally shaped and finished with said sheath. The grain of the blocks of the mosaic strip runs lengthwise of the strip and of the wooden sheath in which it is inlaid and of which it forms a part, so that the pencil can be cut and sharpened with just as much ease as an ordinary lead pencil.

In the accompanying drawing to which reference will now be made for a better understanding of my invention—Figure 1 is a perspective view of a lead pencil embodying my invention. Fig. 2 is a cross section of the same. Fig. 3 is a perspective view of one of the tessellated strips used to produce the inlaid effect. Fig. 4 is a composite blank from which the tessellated strips are produced—a portion of the top board of the same being broken away to expose the cross strips of different colored wood which intervene between the top and bottom boards of the blank. Fig. 5 represents the same after having been divided up into thin tessellated strips, such as represented in Fig. 3—the blank being shown as not entirely divided at one of its ends, the strips being still held assembled together. Fig. 6 represents a blank of the shape and size from which six pencils are usually made, differing in no respect from the ordinary blank used for that purpose except in the fact that it has on its exterior longitudinal grooves to receive the tessellated strips. Fig. 7 represents the same pencil blank after the grooves have been filled by the tessellated strips.

Referring to Figs. 1, 2, 3, A is the wooden sheath of the pencil, consisting as usual of two sections, glued together and having formed in their meeting faces the grooves in which the lead *a* is contained and held. In the exterior of the sheath are formed two longitudinal grooves *b* in a plane at right angles to the plane of the joint between the two sections; and fitting snugly in these grooves are tessellated strips *c*, which are glued or otherwise secured in place, their outer faces being flush with the body of the sheath. Each strip *c* is composed of two wooden veneers, 1, of paper-like thinness, forming the sides of the strip; and blocks, 2, of different colored woods, interposed and held between the veneers 1—all of them being glued together to form in effect a homogeneous strip. The grain of the wood in both the blocks 2 and the veneers 1 is lengthwise of the strip *c;* and the continuous veneers 1 are provided in order to give the strip sufficient strength and stability to permit it to be handled without danger of breaking—as it might if the blocks 2 were not thus reinforced. I usually make the veneers not only thin, but of the same wood as the body of the pencil, so that when the strip *c* is in place, the veneers, to the ordinary observer, will not be distinguishable from the body of the pencil. In the drawings, for the purpose of explanation, they appear on a more exaggerated scale, than they do in practice. In order to produce

and apply these tessellated strips economically and with ease and rapidity, I proceed as follows:

The strips are produced from a blank such as shown in Fig. 4. It consists of two fairly thin wooden "boards" 1^a of about the same dimensions, except as to thickness, as the two "boards" of an ordinary pencil sheath blank adapted for six pencils—these boards being usually of the same wood as that of the body of the pencil sheath. Between the boards 1^a are laid cross strips 2^a of wood of contrasting color—in this instance of alternately light and dark color—of the same length as the width of the boards, the grain of these cross strips running lengthwise of the blank. The boards 1^a and interposed cross strips 2^a are by suitable means glued and pressed together to form a solid blank such as shown in Fig. 4. This blank is then by a suitable planing and dividing machine, divided lengthwise into a number of narrow strips, the boards 1^a being at the same time, and during the same operation, planed down to thin veneers, each one of the strips receiving in this operation the dimensions required for the use to which it is to be put. The blank thus divided, except at one extremity, into tessellated strips such as illustrated in Fig. 3, is shown in Fig. 5. The top and bottom of each tessellated strip consist of the exposed faces of the alternately different colored blocks 2^a, Fig. 5; and these blocks are confined between the thin continuous wooden veneers 1^a Fig. 5, which form the sides of the strip and as before said, give strength and stability to the strip as a whole.

One blank, such as shown in Fig. 4, will produce from twelve to eighteen tessellated strips *c*, depending of course upon the dimensions of the strip. These tessellated strips are applied as follows: Fig. 6 represents a blank of the shape and size from which usually six lead pencils are produced. The two "boards" which compose the body of the blank are A^1, A^1; and between their grooved meeting faces are the leads *a*—the blank thus far in no respect differing from the ordinary blank. In the exterior opposite faces of this blank are longitudinal grooves *b*, six in number on each face corresponding to the number of leads *a*, each opposed pair of grooves being in a plane passing through the lead intervening between them, and at right angles to the plane of union of the two "boards" A^1, A^1 which make up the body of the blank. These grooves *b* are filled by the tessellated strips *c*, which of course have been made of dimensions corresponding to the groove. Each strip *c* is placed in its groove with one of its tessellated faces outermost, and is there secured tightly in place by glue and pressure, as customary in work of this character. The finished blank, with its grooves *b* filled by the tessellated strips *c*, is shown in Fig. 7. This blank is then, by suitable shaping and dividing machinery such as usually employed for the purpose, divided into six pencils, indicated by the dotted circles on the end of the blank in Fig. 7. And these pencils are finished and polished in the usual way—the inlaid tessellated strips *c*, being finished and polished with the rest of the sheath of which they in effect form part.

Owing to the thin continuous veneers which form the side edges of the tessellated strips, the strips can be easily and safely handled and applied to the grooves *b*, without danger of breakage. The number of mosaic or tessellated strips applied to the pencil, and the pattern of said strips, can be varied in accordance with the ornamental inlaid effect desired.

Having described my invention and the best way now known to me of carrying the same into practical effect, what I claim herein as new and desire to secure by Letters Patent is as follows:

A lead pencil the wooden sheath of which is longitudinally grooved upon its exterior, and a mosaic or tessellated composite strip inlaid in and filling the groove consisting of continuous thin wooden veneers extending the length of, and forming the sides of, the strip, and wooden blocks of different colored woods embraced between and united with said veneers and with one another, the grain of the different woods which compose the tessellated strip running lengthwise of the pencil sheath, substantially as hereinbefore set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES KAISER.

Witnesses:
EDWIN M. BEROLZHEIMER,
LEON C. FELSER.