

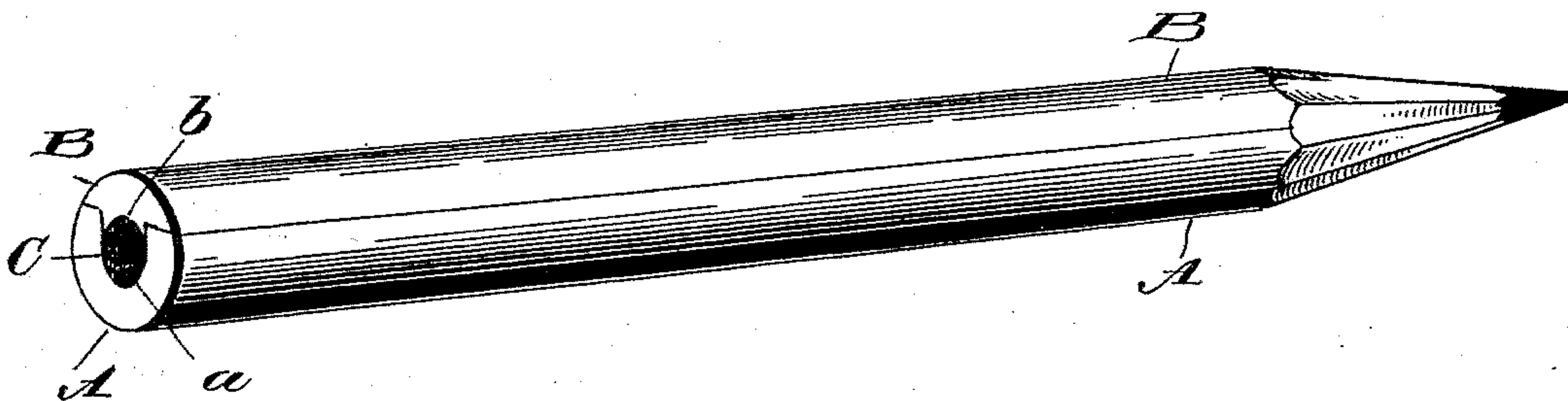
(No Model.)

A. KAISER.  
LEAD PENCIL.

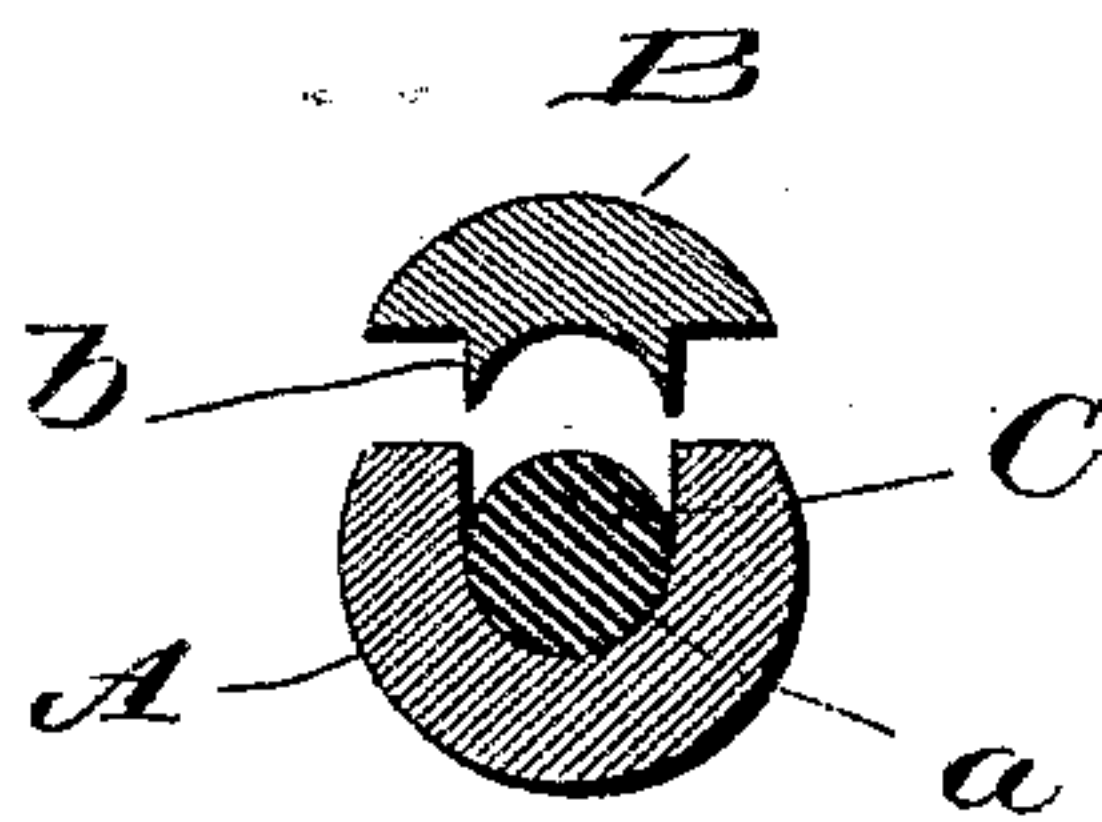
No. 551,288.

Patented Dec. 10, 1895.

*Fig. 1.*



*Fig. 2.*



*Witnesses:*  
*L. C. Hills.*  
*J. B. Keefe.*

*Inventor:*  
*August Kaiser;*  
*by Emanuel Sailer*  
*his Atty.*



# UNITED STATES PATENT OFFICE.

AUGUST KAISER, OF NEW YORK, N. Y., ASSIGNOR TO THE EAGLE PENCIL COMPANY, OF SAME PLACE.

## LEAD-PENCIL.

SPECIFICATION forming part of Letters Patent No. 551,288, dated December 10, 1895.

Application filed October 5, 1895. Serial No. 564,748. (No model.)

*To all whom it may concern:*

Be it known that I, AUGUST KAISER, of the city, county, and State of New York, have invented a new and useful Improvement in

5 Lead-Pencils, of which the following is a specification.

My invention has relation to that class of pencils in which the lead stick is inclosed in a wooden sheath. This sheath is made in

10 two parts grooved on their meeting faces to receive the lead—the two after the lead has been laid between them being glued together.  
In pencils of this kind where “waxed leads” are used—such as red, blue, and green

15 leads, and in fact all colored leads, including black leads which have been subjected to the waxing process—the leads not unfrequently become loose in their sheaths after the pencils are finished, so that they will slip

20 back therein upon pressure being applied to their points. This is due principally to the fact that the glue which binds the two parts of the sheath together will not take hold of a greasy surface such as waxed leads necessarily have. Beyond this there is unavoidably a slight variation in the size of leads, so that some will not be squeezed so tight as others in the half-round grooves in the meeting faces of the two parts of the sheath; and

25 even the grooves themselves will vary slightly as the cutters, during the course of the work, vary in sharpness. The result as above said is that with sheaths thus constructed some waxed leads at times will be so loose in the finished pencils that they will slip back there-  
30 in when pressure—such as is used in writing with them—is applied to their points.  
To remedy this defect is the object of my invention, and to this end I groove only one

40 part of the sheath, making this groove of a depth to receive the whole lead; and I form on the other part a longitudinal projecting rib or tenon which is adapted to fit and be jammed into the groove in the other part and

45 to bear down upon the lead therein—its face for this purpose being slightly concave so as to fit upon the lead. In this way I find that I can with entire certainty exert sufficient pressure upon the lead to hold it most firmly

50 in place, without relying upon glue at all—although glue of course is still used as before to bind together the two parts of the sheath.

The nature of my improvement will be readily understood by reference to the accompanying drawings, in which—

Figure 1 represents a perspective view of a pencil embodying my invention. Fig. 2 is a view of the two parts of the sheath de-

60 tached.  
The two parts of the wooden sheath are lettered A B, respectively. The larger part A contains the longitudinal groove *a*, which is large and deep enough to receive the whole of the lead stick C—the latter being of slightly

65 less thickness than the depth of the groove. The groove itself has a bottom rounded or concave in cross-section to fit the lead and its sides above the concave bottom are parallel with each other. The smaller part B of

70 the sheath has upon it a longitudinal rib *b*, which is of a width to fit snugly into the groove *a* and between the sides thereof, and which projects beyond the flat inner face of the part B sufficiently to enter the groove

75 deep enough to meet and bear upon the lead C therein. The face of the rib is concave, so as to fit closely upon and around the lead upon which it bears. Thus the lead is held under pressure tightly in its groove by a tenon

80 or rib which has a concave face to fit accurately upon the lead, and sides which enter and fit closely between the sides of the groove. Experience has demonstrated that in this way the slipping of leads in their sheaths can

85 be effectually prevented without depending upon glue.  
Having described my improvement, what I claim, and desire to secure by Letters Patent, is as follows:

90 A lead pencil having a two part sheath the one part formed with a lead containing groove of shape and dimensions to snugly fit the lead placed therein, and the other part provided with a longitudinal rib of size and shape

95 to enter and fit closely in said groove and to fit and bear with pressure upon the lead therein, as herein shown and described.  
In testimony whereof I have hereunto set my hand this 4th day of October, 1895.

AUGUST KAISER.

Witnesses:

SAMUEL KRAUS,  
OTTO GUGENHEIM.