(No Model.)

F. P. CLARK.

PENCIL TIP AND ERASER.

No. 540,635. Patented June 11, 1895.

Fig. 1

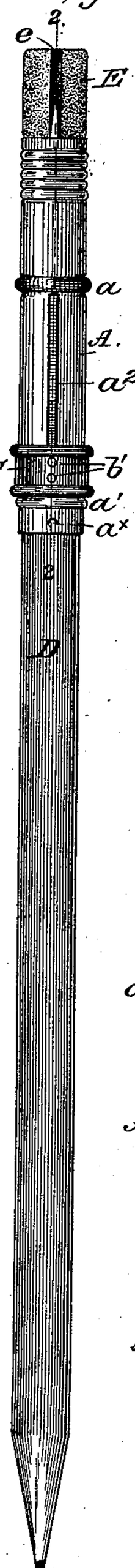

Fig. 2.

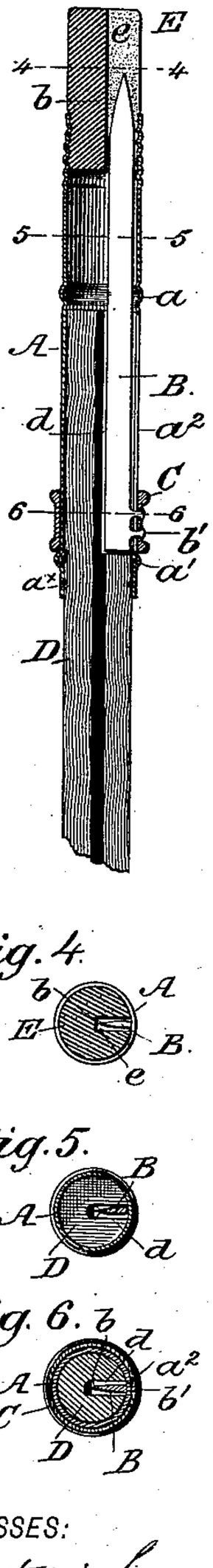

Fig. 3.

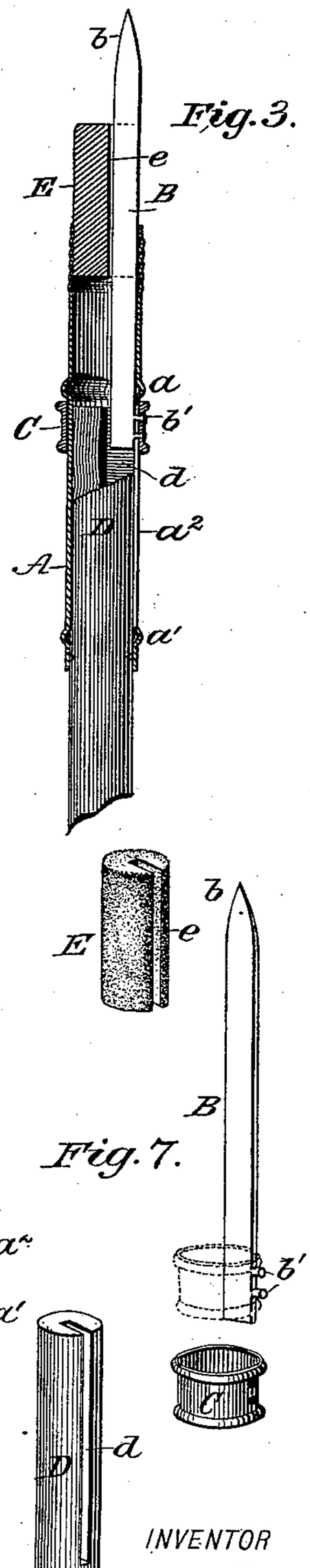

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

WITNESSES:

A. E. Dieterich

Jas L. Crawford.

INVENTOR

F. P. Clark

BY

John U. Dineara

ATTORNEY.

UNITED STATES PATENT OFFICE.

FRANK P. CLARK, OF NORTH BALTIMORE, OHIO.

PENCIL-TIP AND ERASER.

SPECIFICATION forming part of Letters Patent No. 540,635, dated June 11, 1895.

Application filed October 9, 1894. Serial No. 525,415. (No model.)

To all whom it may concern:

Be it known that I, FRANK P. CLARK, residing at North Baltimore, in the county of Wood and State of Ohio, have invented a new and Improved Pencil-Tip and Eraser, of which the following is a specification.

My invention relates to that class of pencil tips in the form of metallic sleeves having a rubber erasing plug in the end, and provided with blades or other erasing means, and such invention primarily has for its object to provide a simple and inexpensive construction in which the tip, when the blade is not adjusted to an operative position, will have the usual or ordinary appearance.

Furthermore, it has for its object to provide a blade eraser, which can be fitted to slide in the ordinary tip, without necessitating any change therein further than forming it with a longitudinal slot or way.

It also has for its object to provide a tip having a sliding eraser blade, which can be secured on the pencil, and in which the blade is adapted to be slid beyond the outer end, through a slot or way provided therefor in the rubber plug or tip.

A still further object of the invention, is to provide an eraser, capable of being slid out beyond the end of the rubber tip without necessitating its removal, and held with its cutting edge facing the base of the slit in the said rubber tip whereby, when the blade is drawn in, its cutting edge is protected, such rubber also serving as a lateral yielding bearing for the blade when extended, whereby to render its scraping or erasing qualities the more effective.

With other objects in view, which hereinafter will be referred to, the invention consists in such novel features of construction and peculiar combination of parts as will be first described in detail, and then be pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation of a pencil equipped with my improvements, the eraser-blade being drawn in. Fig. 2 is a longitudinal section taken on the line 2 2, Fig. 1. Fig. 3 is a similar view, the blade being adjusted to its outermost or operative position. Figs. 4, 5, and 6 are transverse sections taken on the lines 4 4, 5 5, 6 6, respectively, on Fig. 2; and Fig. 7 is a view illustrating in perspective the several parts of my improved tip detached.

Referring to the accompanying drawings, A indicates a metallic sleeve which with the exception of a longitudinal slot a^2 cut in one side thereof is of the ordinary tubular shape, its bead portions $a\ a'$ being at the extremities of the slot a^2 and serving as stop members for a purpose presently described. This tube instead of being loosely fitted upon the end of the pencil as is ordinarily done, is fixedly fitted thereon in any suitable manner preferably by indenting the lower end as shown at $a^\times$, which indentations form barbs to enter the pencil D; and the upper end of such tubular sleeve has the usual corrugations, to form a gripping portion for the rubber tip E which is detachably fitted in the end of such sleeve, as shown.

So far as described, it will be noticed the sleeve and the tip are fitted on the pencil, and with the exception of the slot a^2 have the appearance of the ordinary pencil tip and attaching sleeve, there being no exterior guides or fastenings for the eraser blade presently referred to. This arrangement, it will be obviously understood avoids the danger of the pencil tip tearing or catching in the lining of the pocket in which it may be carried.

B indicates an eraser in the nature of a knife blade, which at its lower end has outwardly projecting nibs $b'\ b'$ which pass through the slot a^2, form guides for the blade and means for securing it to a sliding or cuff member C, fitted upon the sleeve A to slide thereon between the bead or stop members $a\ a'$, such cuff member forming a finger portion whereby the blade can be adjusted to its inner or outer positions.

It will be noticed by reference to Figs. 2 and 3, the pencil stock fits up into the sleeve A to a point nearly in line with the bead a and such inserted portion is slitted as at D, to form a recess or seat for the lower end of the blade B where it is slid to its innermost position as shown in Fig. 2, such seat also forming a lateral brace or guide for the lower end of such blade when it is slid to its outermost position as shown in Fig. 3.

It will be noticed by reference to Figs. 2, 4 and 7, the cutting edge of the blade faces inward, and the upper end or pointed end seats,

normally, (that is, when the blade is at its innermost position) in a slot or way *e* in the rubber tip E. By arranging the blade with its cutting edge facing inward, and providing a seat or way for such blade in the rubber tip, it will be impossible to become accidentally cut by the edge of the blade, or by the point, such arrangement of parts also protecting the edge and end of the blade from becoming dulled and broken. It will also be manifest that when the blade is slid out to the position shown in Fig. 3, when it can be used as an eraser, the rubber tip forms a lateral guide, it being manifestly clear that as the upper guide is in the nature of a yielding body, the blade will be rendered the more effective for erasing purposes, as it will when manipulated sidewise yield slightly and not have a tendency to dig into the paper on which it operates as would be the case were the blade practically rigidly connected to the sleeve or held from such lateral movement.

I am aware that eraser blades have been attached rigidly to the pencil tip sleeve, at the end opposite the rubber tip, which blade is fitted in a slot or seat in the pencil stock when not in use. In such construction the tip sleeve must be removed from the pencil stock before the blade can be used. This is very objectionable, as the sleeve and pencil soon become separated and either the sleeve or the pencil lost. In my construction the sleeve always remains on the pencil stock and the blade projects out from the tip end when in use.

I am also aware that blades have been attached to the sleeve which slide outward and project from the tip end, but in such constructions so far as I know, the blades slide in sockets or bearings formed on the outer face of the sleeve, so that the blade passes out at one side of the rubber tip and not through the same as it does in my improvement.

I therefore do not broadly claim a pencil tip attachment having an eraser blade attached to or slidable thereon, but

What I do claim, and desire to secure by Letters Patent, is—

1. An attachment for lead pencils comprising a tubular sleeve, adapted to be fitted on the pencil, a rubber tip in the upper end thereof having a longitudinal slot or way and a blade held within the sleeve, and the slot in the rubber tip and means for sliding the blade substantially in the manner shown, and for the purpose described.

2. An improved pencil tip and eraser comprising a tubular sleeve, a blade movable longitudinally in the interior thereof, said blade having a slide collar held to travel on the exterior of the sleeve connected therewith, and a rubber tip slitted longitudinally, and forming a guide for the upper end of the blade, said tip being detachably fitted in the sleeve, all arranged substantially as shown and for the purposes described.

3. In a device as described, the combination with the sleeve having slot a^2 and the rubber tip having slit *e*, fitted in the upper end of the sleeve, of the blade B movable within the sleeve, having members b' projected through the slot a^2, and the cuff C connected to the members b', said blade having its upper end held and guided within the slit *e* of the tip, as set forth.

4. In a device as described, the combination with the pencil D, having a seat *d*, in its upper end, the sleeve A fitted thereon, having a slot a^2, and the rubber tip E having a slot *e*, of the blade B, having guides b', a collar C secured thereto fitted to slide on the sleeve, said blade normally sliding in the seat *d*, and having its upper end held and guided in the slit *e* of the tip E, all arranged substantially as shown and described.

5. A tip and eraser attachment for pencils, comprising a sleeve adapted to be fitted on the pencil, a blade held to slide within the sleeve and having its lower end connected with a collar held to slide on such sleeve, and a guide member in the upper end of the sleeve for such blade, formed of yielding material, all arranged substantially as shown and for the purposes described.

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

FRANK P. CLARK.

Witnesses:
GEORGE W. EWING,
G. A. SAVIDGE.