(No Model.)

G. B. BERGEN.

PENCIL.

No. 498,001. Patented May 23, 1893.

Fig. 1.

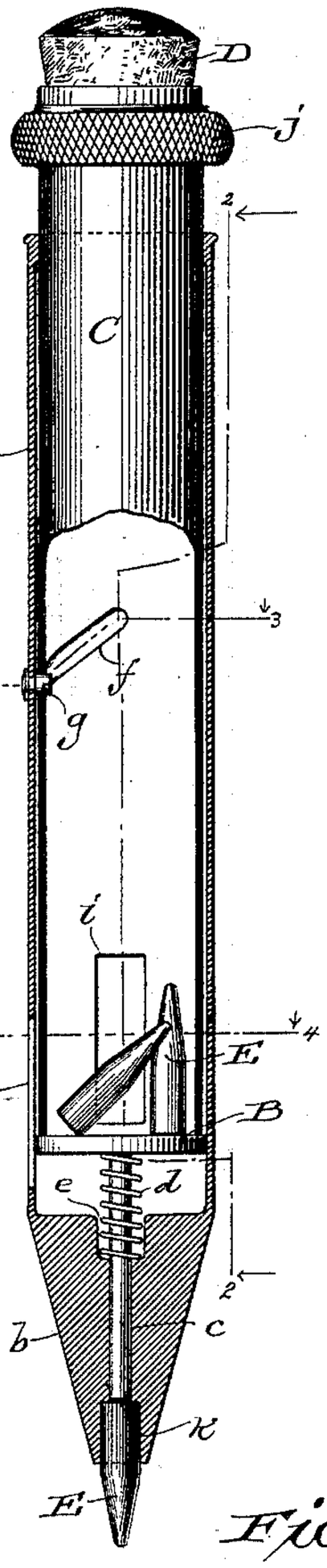


Fig. 2.

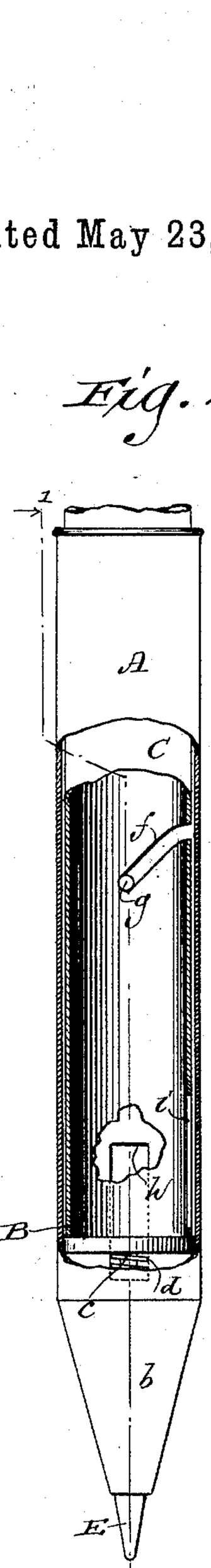


Fig. 3.

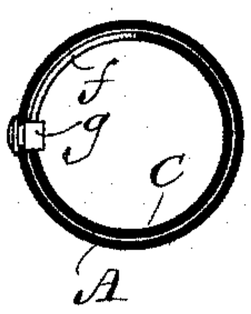
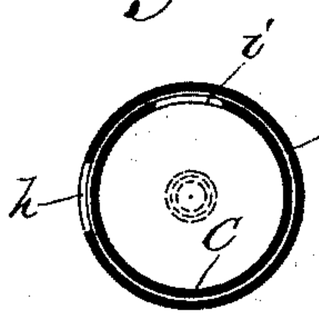


Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE B. BERGEN, OF ELGIN, ILLINOIS.

PENCIL.

SPECIFICATION forming part of Letters Patent No. 498,001, dated May 23, 1893.

Application filed February 1, 1893. Serial No. 460,575. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. BERGEN, a citizen of the United States, and a resident of Elgin, in the county of Kane, and in the State of Illinois, have invented certain new and useful Improvements in Pencils; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide a simple and economical lead-pencil of the ever-point variety; and it consists in certain peculiarities of construction and combination of parts hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings: Figure 1 represents my improved pencil on an enlarged scale partly in elevation, and partly in section on line 1—1 of the succeeding figure; Fig. 2, a like view on line 2—2 of the preceding figure, and Figs. 3 and 4, horizontal sections respectively taken on lines 3—3 and 4—4 of Fig. 1.

Referring by letter to the drawings, A represents a casing of metal, hard rubber or other suitable material terminated at the lower end in a tapered body *b* having a central bore countersunk at each end. Free in the bore of this otherwise solid and tapered end *b* of the casing is a stem *c* depending from a disk B that loosely engages said casing. A spiral-spring *d* surrounds the stem *c* adjacent to the disk and rests in the countersink *e* at the upper end of the bore in the tapered end of the casing above specified.

Loose in the casing A is a shell C provided with an oblique bayonet-slot *f* that engages a suitable projection *g* extended laterally from the interior of said casing, the latter being also provided with a vertical slot *h* with which a similar slot *i* in the lower end of the shell may be brought into register for the purpose hereinafter set forth. The upper end of the shell C has a closure of any suitable construction, but I prefer that the latter be a plug D of eraser-rubber, and, as shown, I also prefer to provide said shell with an ornamental collar *j*, it being obvious, however that this collar and the rubber plug may be embodied in a cap for the aforesaid shell. The lower countersink *k* of the bore in the tapered end *b* of the casing A serves as a socket for a point E of graphite or other analogous material, and it is intended that a number of such points shall be carried in the shell C as shown in Fig. 1. Each point E has its upper end of such diameter as to fit snugly in the socket formed in the lower extension *b* of the shell A, and it requires that the stem *c* be run down in the bore of said shell-extension in order to dislodge said point from its working position in case it becomes broken or two much worn for service.

The necessary action of the stem *c* for the purpose of dislodging a point E from working position is effected by a vertical pressure of the shell C against the spring-resisted disk B, and incidental to the bayonet-joint between the casing A and said shell the latter has a rotation simultaneous with its vertical movement in a downward direction to bring the slot *i* into register with the one *h* whereby a new point may be taken from the aforesaid shell. The shell being released from pressure the expansion of the spiral-spring *d* exerted against the disk returns the stem *c* and said shell to their normal positions, the casing slot *h* being closed by this reverse action of the movable parts.

By means of the construction and arrangement of parts herein specified I am enabled to use short leads and avoid sharpening at frequent intervals, one point being substituted for another without material loss of time, and there is less liability of a point breaking off than with pencils having long leads, especially those in which the lead is contained in a wooden casing of the same length.

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

1. A pencil-case comprising a casing integral with a point receiver, a loose spring-controlled ejector opposed to a point in the receiver, and a vertically reciprocative device loose in the casing in opposition to the ejector, substantially as set forth.

2. A pencil-case comprising a slotted casing terminated at one end in a point-holder, a spring-controlled point-ejector loosely engaging the point-holder, and a slotted shell having a vertical reciprocation simultaneous with a rotation in the casing in opposition to the point-ejector, substantially as set forth.

3. A pencil-case comprising a slotted casing terminated at one end in a point-holder, a spring-controlled point-ejector loosely engaging the point-holder, and a shell that has a bayonet-joint with the casing and opposes the point-ejector, substantially as set forth.

4. A pencil-case comprising a casing terminated at one end in a point-holder, a spring-controlled point-ejector loosely engaging the point-holder, and a vertically reciprocating rubber-tipped device loose in the casing in opposition to the point-ejector, substantially as set forth.

5. A pencil-case comprising a casing terminated at one end in a body having a central bore countersunk at both ends, a stem loosely engaging this bore, a spiral spring seated in the upper one of the countersinks to surround the stem, and a vertically reciprocative device opposed to said spring and stem, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Elgin, in the county of Kane and State of Illinois, in the presence of two witnesses.

GEORGE B. BERGEN.

Witnesses:
J. H. BECKER,
GUSTAV BIRN.