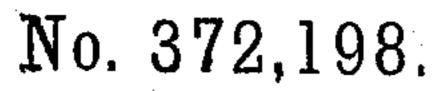
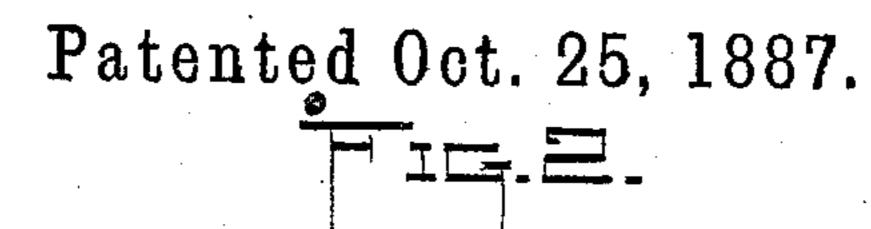
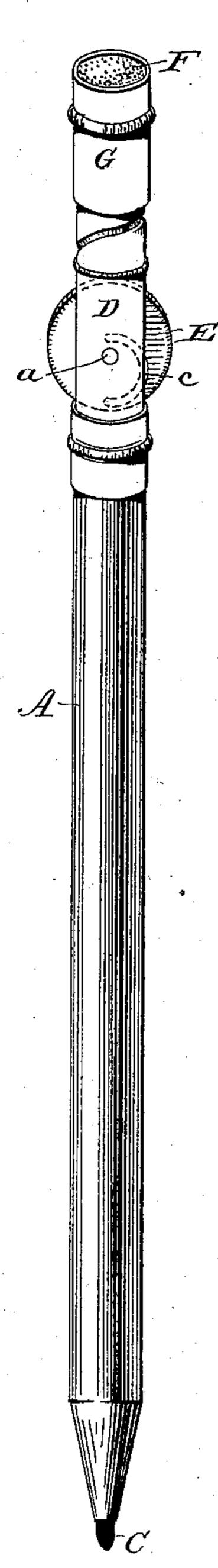
C. W. BOMAN.

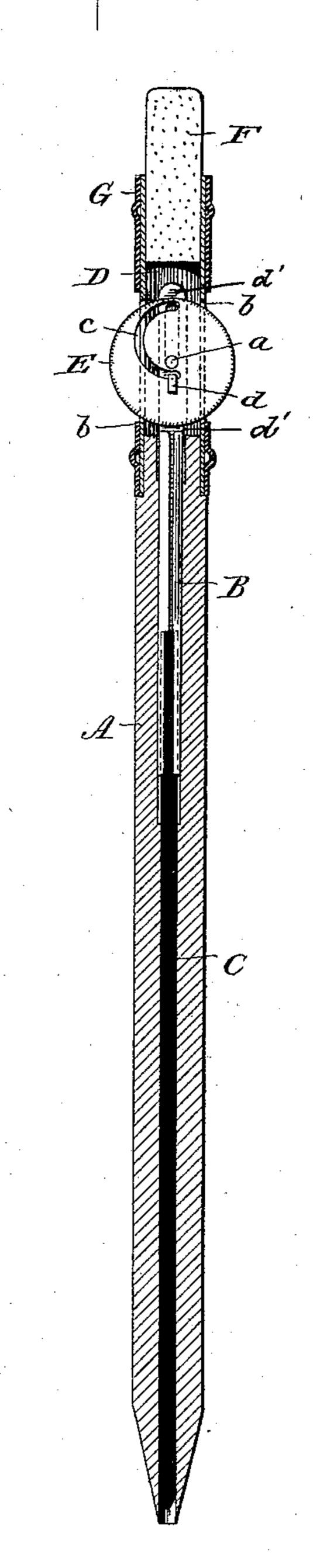
LEAD OR CRAYON HOLDER.











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by manullus Bailey
his attorney

United States Patent Office.

CLAES WM. BOMAN, OF NEW YORK, N. Y., ASSIGNOR TO THE EAGLE PENCIL COMPANY, OF SAME PLACE.

LEAD OR CRAYON HOLDER.

SPECIFICATION forming part of Letters Patent No. 372,198, dated October 25, 1887.

Application filed August 20, 1887. Serial No. 247,472. (No model.)

To all whom it may concern:

Be it known that I, CLAES WM. BOMAN, of the city, county, and State of New York, have invented a new and useful Improvement in Lead and Crayon Holders, of which the follow-

ing is a specification.

My invention has relation to that kind of lead and crayon holder in which the lead is contained within a sheath or handle and is movable therein, so that it may be projected or retracted as required; and it consists of a novel combination and arrangement of mechanical devices for effecting and controlling this movement of the lead, as will hereinafter be clearly and definitely pointed out.

In the drawings accompanying this specification, Figure 1 is a perspective view of a lead and crayon holder embodying my invention. Fig. 2 is a longitudinal central section of the same in the plane of the cam-slotted disk by which the movement of the lead car-

rier or receiver is controlled.

The invention is applicable to all classes of lead and crayon holders in which the lead receiver or carrier is longitudinally movable within a sheath or handle. I have in this instance illustrated it in connection with a sheath or handle which is made of a material—such as wood—which can be readily cut away as the lead wears.

The sheath A has a longitudinal axial hole through it of suitable size at its rear end to receive and permit the necessary longitudinal movement of the lead receiver or carrier B, and from that point forward to receive and fit the lead C, which is held by said carrier. The carrier is a tube slit at its front end to form an elastic socket, in which the lead at its rear end is inserted and held so that it will move with the carrier.

Upon the rear end of the sheath is fixed a metal tube or cylinder, D, forming a prolongation of said sheath, and in this cylinder is pivoted, upon an axis, a, at right angles to the longitudinal axis of the cylinder, a rotating disk, E, of such size that its periphery will project through longitudinal slits b, formed for this purpose in the cylinder. The periphery of this disk is milled, so that its projecting edge can be more readily manipu-

lated. In the disk is formed a cam or eccentric slot, c, and a finger or projection, d, on the rear portion or head, d', of the lead-carrier engages this slot. The result of this arrangement is that when the cam-slotted disk 55 is partially rotated (as it can readily be by bearing on its projecting edge with the thumb or finger) the lead-carrier will be moved backward or forward, and the lead will be correspondingly retracted or projected, according 60 to the direction of rotation of the disk. The arrangement is such that the lead will be held most firmly in either position.

The sheath, of course, can be cut away as the

lead wears down.

I prefer to provide the holder with a rubber tip, which can readily be done by prolonging the cylinder D rearwardly and fitting in it a rubber tip, F, which can be covered and uncovered, in the usual way, by a sleeve, G, which 70 screws on the tip, as customary in eraser or rubber-tip attachments for pencils.

In conclusion, I remark that manifestly the position of the parts by which the carrier is operated when the disk is rotated can be reversed—that is to say, a cam slot or opening of proper form can be made in the head d' of the carrier, and the pin or finger to work there can be placed eccentrically on the disk, and I desire to be understood as including any such 80 modification in my claims.

I am aware that a lead and crayon holder in which the sheath and a longitudinally-movable lead-receiver contained therein have been combined with a cam or eccentric connected with 85 the receiver and mounted in the sheath or a prolongation thereof, and provided with a handle for operating it from the exterior of the sheath, has before been devised, and this I do not claim; but

What I do claim herein as new and of my own invention is—

1. In a lead and crayon holder, the combination, with the sheath or handle and a lead carrier or receiver longitudinally movable within 95 said handle, of the rotating disk mounted in the handle upon an axis at right angles to the longitudinal axis of the handle, with its periphery projecting through slits formed in the handle, and formed with a cam slot which is engaged 100

purposes hereinbefore set forth.

2. The wooden sheath A and metallic tubular prolongation D, fixed thereto, in combina-5 tion with the rotary cam-slotted disk E, pivoted in said part D upon the axis a, and having its periphery projecting laterally through slits or openings b, and lead-carrier B, longitudinally movable in the sheath and engaging the cam-

by the lead carrier or receiver, as and for the | slot in the disk E, as hereinbefore shown and so $\operatorname{\mathbf{described}}_{r}$ in the constraint of the constraint r

In testimony whereof I have hereunto set my hand this 16th day of August, A. D. 1887.

CLAES WM. BOMAN.

Samuel Kraus, Ed Thiemann.