

(No Model.)

O. MUSSINAN, Jr.

PENCIL.

No. 386,892.

Patented July 31, 1888.

Fig. 1.

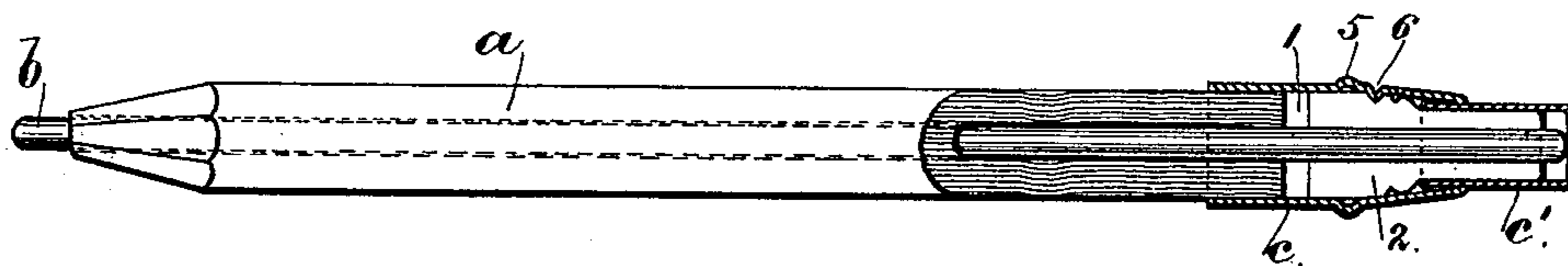


Fig. 2.

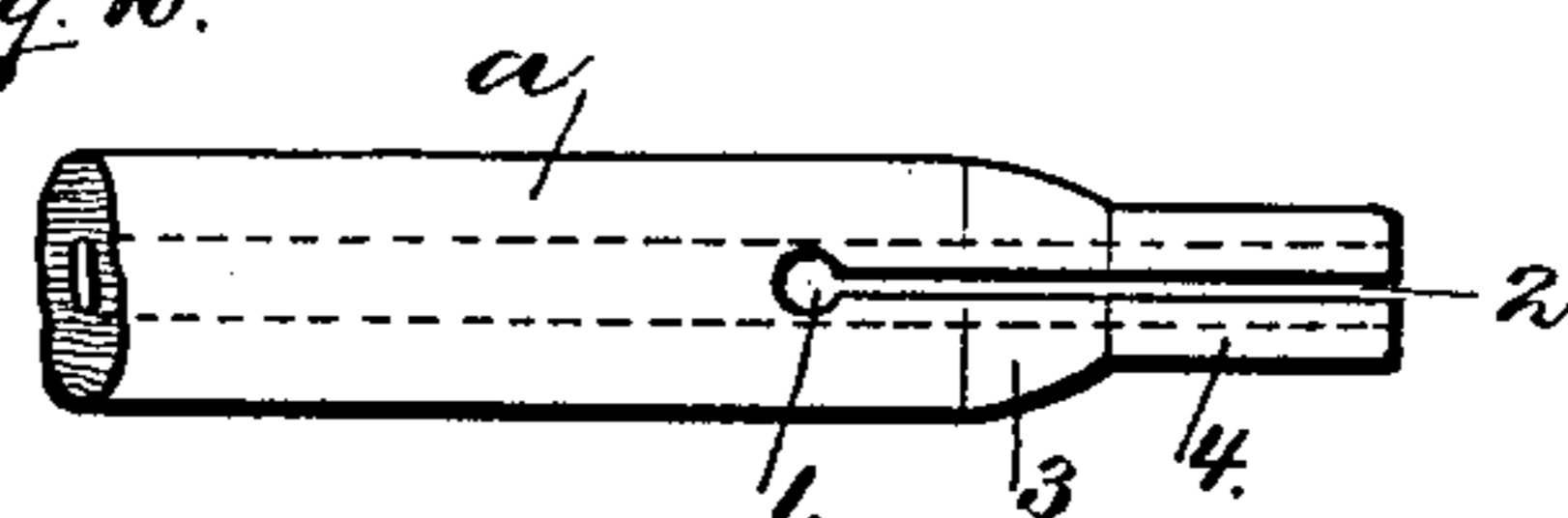


Fig. 3.

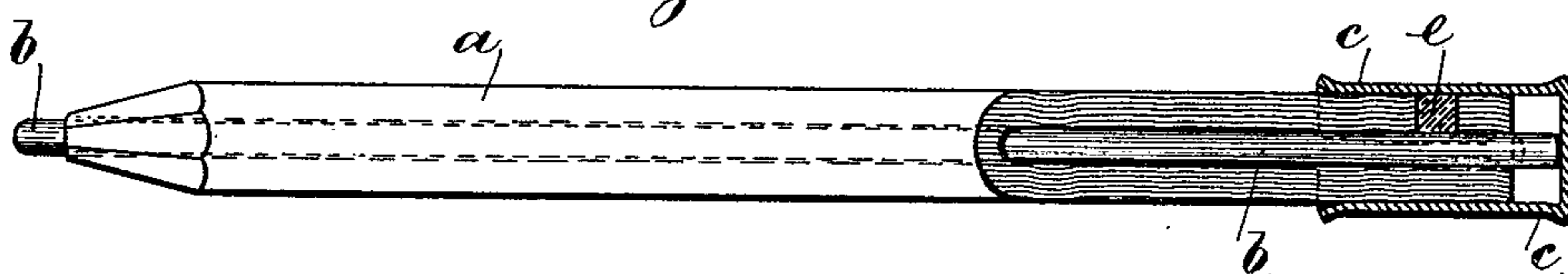


Fig. 5.

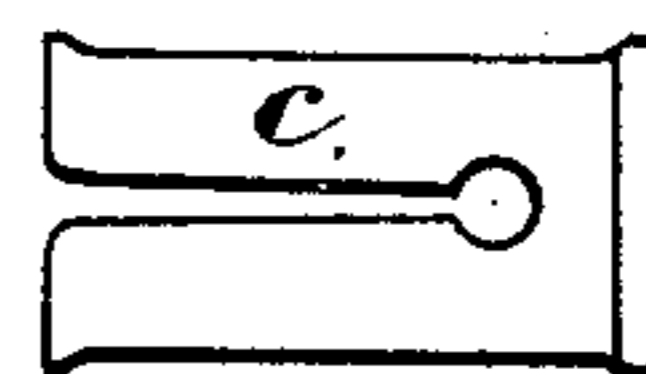
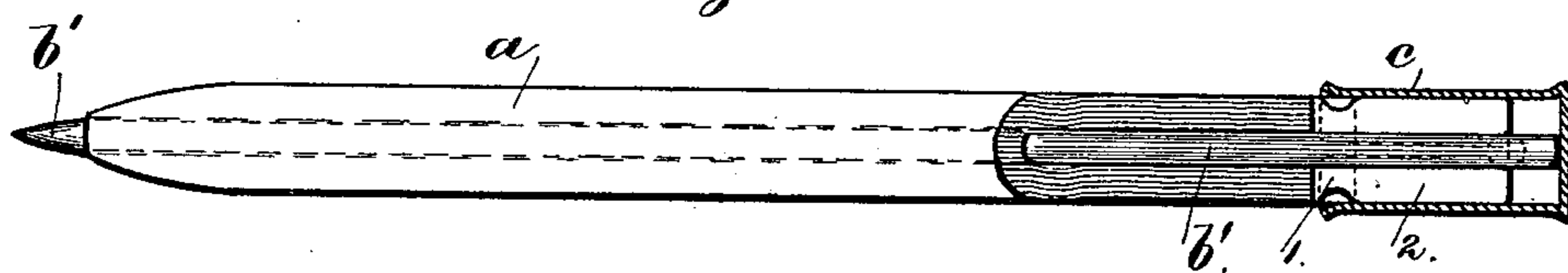


Fig. 4.



Witnesses,

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UNITED STATES PATENT OFFICE.

OSCAR MUSSINAN, JR., OF NEW YORK, N. Y., ASSIGNOR TO EBERHARD
FABER, OF SAME PLACE.

PENCIL.

SPECIFICATION forming part of Letters Patent No. 386,892, dated July 31, 1888.

Application filed March 5, 1888. Serial No. 266,201. (No model.)

To all whom it may concern:

Be it known that I, OSCAR MUSSINAN, Jr., of the city, county, and State of New York, have invented a new and useful Improvement in Pencils; and the following is declared to be a description of the same.

My invention relates to a pencil wherein a propel and repel action can be given to the lead, so that the lead or other writing-point can be projected for use or retracted when not in use.

I employ a tubular body or sheath for the movable lead or stylus, a tubular end cap of metal adapted to fit over the tubular body, and a friction device between the end cap and lead or stylus, against which device the cap, when in place upon the tubular body, exerts a compressing or squeezing pressure, which acts upon the lead or stylus to maintain it in a projected or retracted position. When the tubular body is grasped in the hand, the lead is propelled or projected by pressing the end cap against a stationary object and forcing it farther upon the sheath, or the lead or stylus is repelled by pressing its point against a stationary body.

In the drawings, Figure 1 is an elevation and partial longitudinal section of my improved pencil. Fig. 2 is an elevation of the end of the tubular body without the cap. Figs. 3 and 4 are elevations and partial longitudinal sections of modifications of my improvement, and Fig. 5 is an elevation of the end cap of Figs. 3 and 4.

a represents the tubular body or sheath, which in all cases becomes the handle of the pencil, and the same is preferably made of wood, and the point is adapted to be cut away as the lead is used up to the wood, Figs. 1 and 3; but in the modification shown in Fig. 4 the same may be made of hard rubber, celluloid, or similar material.

b represents the removable lead, as shown in Figs. 1 and 3, and *b'* the metal stylus shown in Fig. 4, such as traveling salesmen prefer to employ for writing letters, &c., with manifold paper.

The end of the tubular body or sheath *a* is bored through transversely, as at 1, and slot-

ted longitudinally from the top end to the hole 1, as at 2, (see Figs. 1, 2, and 4,) so that the divided end of the tubular body is capable of being compressed to bring its two parts toward each other. The slotted end of the tubular body, Figs. 1 and 2, is tapered on the outside at 3 to the smaller parallel-sided end 4.

In Fig. 1 the tubular end cap of metal is made preferably in two parts, *c c'*, the parallel part *c'* sliding within the tapering end of the part *c*. There is a stiffening-rib, 5, having a knurled edge formed in the tubular portion *c*, and also a section of a screw-thread at 6. The tubular portions *c c'* are passed over the end of the tubular body *a*, and the portion *c* is revolved slightly, to cause the screw-section 6 to screw upon the incline 3 and compress the parts of the slotted end toward each other and produce a friction or binding action upon the lead or stylus to hold it in place.

In Fig. 3, *e* is a small piece of rubber placed between the lead *b* and tubular metal cap *c* in an opening made in the tubular body or sheath *a*, the said cap *c* compressing the rubber when the cap is slid upon the end of the pencil, the rubber acting as a friction against the lead or stylus.

The metal cap *c* is slotted, as shown in Figs. 3, 4, and 5, so as to act as a spring when pressed over the end of the tubular body or sheath, and compress the rubber shown in Fig. 3, or compress the parts of the slotted end of the tubular body, Fig. 4, to produce a friction or binding action upon the lead or stylus.

The lead or stylus is projected by grasping the tubular body in the hand and pressing the end cap against a stationary object or against the fingers or hand, so as to move the cap and lead endwise and project such lead. By pressure against the end of the lead in a similar manner it may be moved into the case or body, the cap sliding back at the same time.

I claim as my invention—

1. The combination of the tubular body or sheath *a*, divided by a slot at one end, with a tubular metal end cap that is adapted to fit over the end of the divided portion of the

tubular body and compress the same to cause a friction on the lead or stylus, substantially as specified.

5 2. The combination, with the tubular body or sheath *a*, slotted at one end, of a tubular portion, *c*, adapted to fit over the end of the tubular body and to compress its divided end to cause a friction on the lead, and the tubular portion *c'*, sliding within the portion *c*, for

moving the lead endwise, substantially as set forth.

Signed by me this 28th day of February, A.
D. 1888.

O. MUSSINAN, JR.

Witnesses:

GEO. T. PINCKNEY,
HAROLD SERRELL.