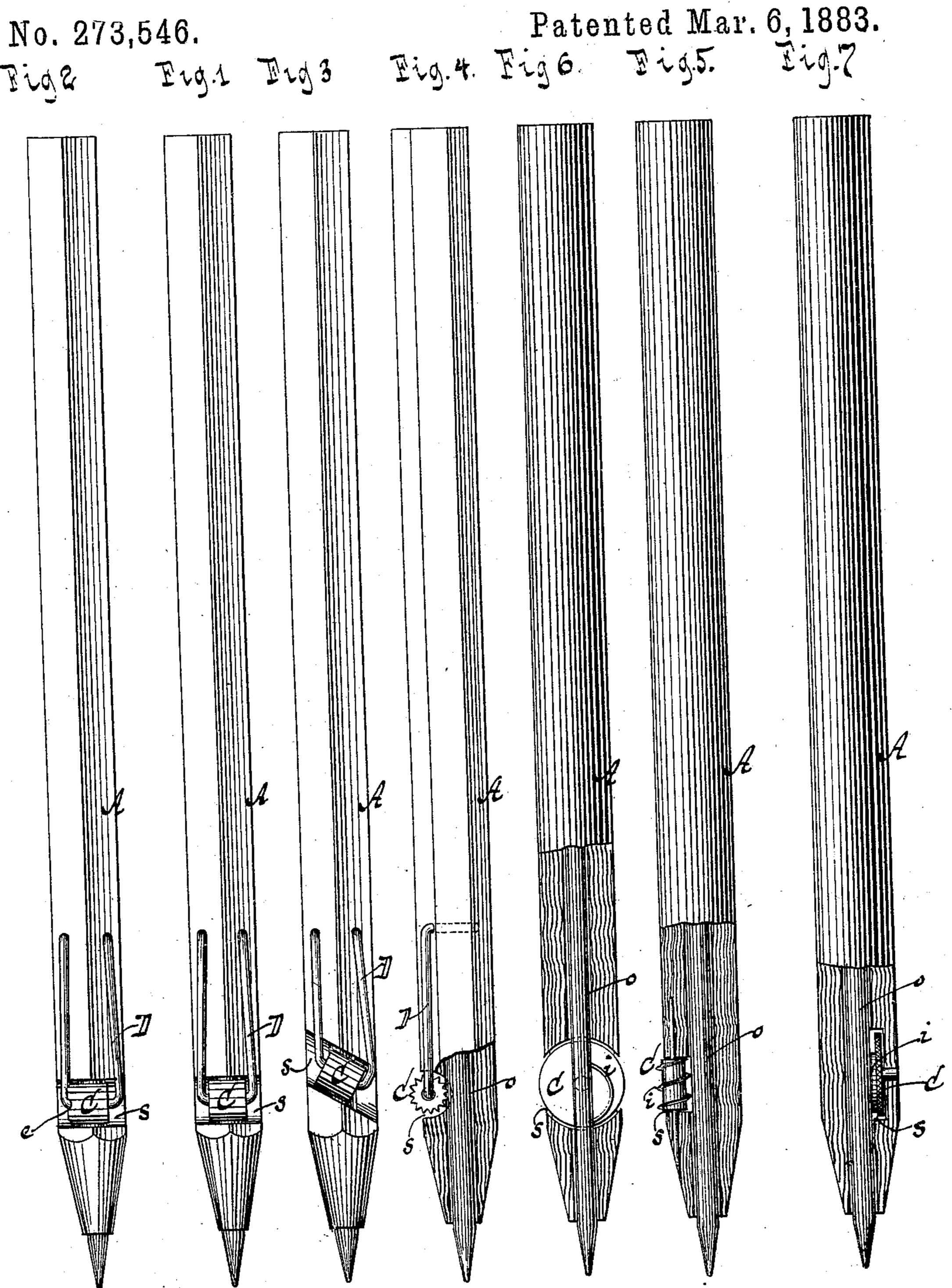
G. L. JAEGER.

## LEAD OR CRAYON HOLDER.



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## LEAD OR CRAYON HOLDER.

SPECIFICATION forming part of Letters Patent No. 273,546, dated March 6, 1883.

Application filed November 18, 1882. (No model.)

To all whom it may concern:

Be it known that I, Gustav L. Jaeger, a citizen of the United States, residing at New York, in the county and State of New York, 5 have invented new and useful Improvements in Lead or Crayon Holders, of which the following is a specification.

This invention relates to the means for retaining in position in the lead-receptacle of to the handle the movable lead or crayon; and it consists in a rotating friction-wheel arranged in the recess in the side of the handle, near its lower end or tip, to impinge against the lead contained in the receptacle, so that motion 15 may be imparted to the friction-wheel by the finger and the lead either ejected or retracted by that means, while, when the wheel is at rest, it prevents endwise movement of the lead.

It also consists in a spring carrying the friction-wheel, whereby the wheel is caused to exert an elastic pressure on the lead.

This invention is illustrated in the accompanying drawings, in which Figures 1, 2, and 25 3 represent side views. Fig. 4 is a similar view, looking in an opposite direction to said figures and partly in section. Figs. 5, 6, 7 show modifications.

Similar letters indicate corresponding parts. The letter A designates the handle, having a bore or tube in the center, forming the leadreceptacle o, and having a recess, s, near the lower end or tip, containing the friction-wheel C. In the example shown in Figs. 1, 2, 3, and 35 4, the axis of the wheel C is at a right angle or oblique angle to the lead-receptacle o, and the wheel is serrated or roughened in order to more efficiently act on the lead or crayon

to adjust the same. 40 The rotary friction-wheel is arranged on a support which is attached to the handle A in some suitable manner, so as to maintain the friction - wheel in contact with the lead or crayon. As shown in Figs. 1, 2, 3, and 4, the 45 wheel-support is composed of a piece of wire

bent to a yoke shape, and attached at its ends to the handle, its trausverse portion constituting the shaft or pivot of the wheel. This wire forms a yielding or spring support,

50 D, for the wheel, and the tendency of the

spring is to force the wheel against the lead. or crayon.

As shown in Fig. 5, the wheel-support is composed of a pin arranged parallel to the lead or crayon receptacle, and having its ends 55 arranged in openings in the handle, the pin being fixed and the wheel adapted to rotate thereon.

As shown in Figs. 6 and 7, the support for the wheel is composed of a pin arranged in 60 an opening in the handle at right angles to the lead-receptacle.

In the example shown in Figs. 5, 6, and 7, the friction-wheel is provided with a screwthread or scroll, i, which operates on the lead 65 or crayon to adjust it.

The wheel C can be readily turned by the finger, due to the position of the recess s, and when it is turned in one or the other direction the lead contained in the receptacle o is eject- 70 ed or retracted, as the case may be, by the frictional contact therewith of the periphery of the wheel, while in like manner the lead is firmly held against endwise movement when the wheel is at rest. By the spring D the 75 wheel is adapted to yield to the lead, and the advantage thereby gained is, that the lead may be brought to an inner or retracted position by bringing it in contact with a hard surface and forcing the handle down upon it. 80

It will be seen that the devices herein described are simple in construction, thus allowing the pencil to be manufactured at low cost, and are not liable to get out of order.

If desired, the wheel shown in Figs. 1, 2, 3, 85 and 4 may be provided with end notches, e, Fig. 2, to engage the side of the spring for locking the wheel.

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

90 1. The combination, substantially as hereinbefore described, with the handle having the central lead-receptacle and the recess near the lower end or tip, of the rotating friction. wheel arranged in said recess to act on the 93 lead contained in the receptacle, and a support connected with the handle, on which the said wheel is mounted, for the purpose specified.

2. The combination, substantially as here- 100

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in set forth, with the handle having the central lead-receptacle and the recess near the lower end or tip, of the rotating friction-wheel arranged in said recess to act on the lead contained in the receptacle, and the attached spring, carrying said wheel, for the purpose specified.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

GUSTAV L. JAEGER. [L. s.]

Witnesses:

CHAS. WAHLERS, E. F. KASTENHUBER.