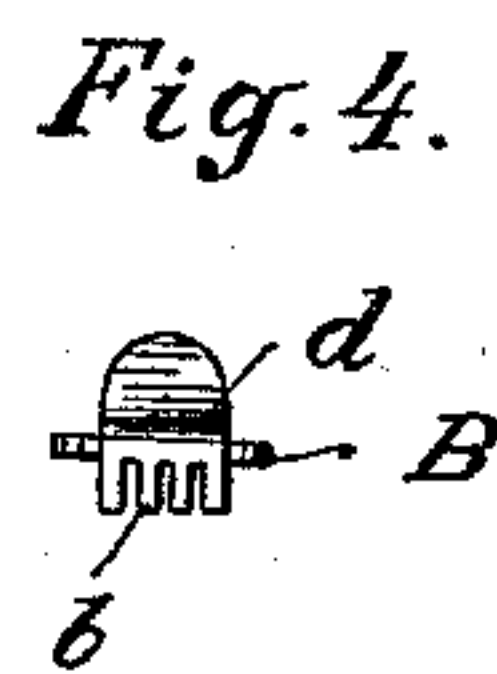
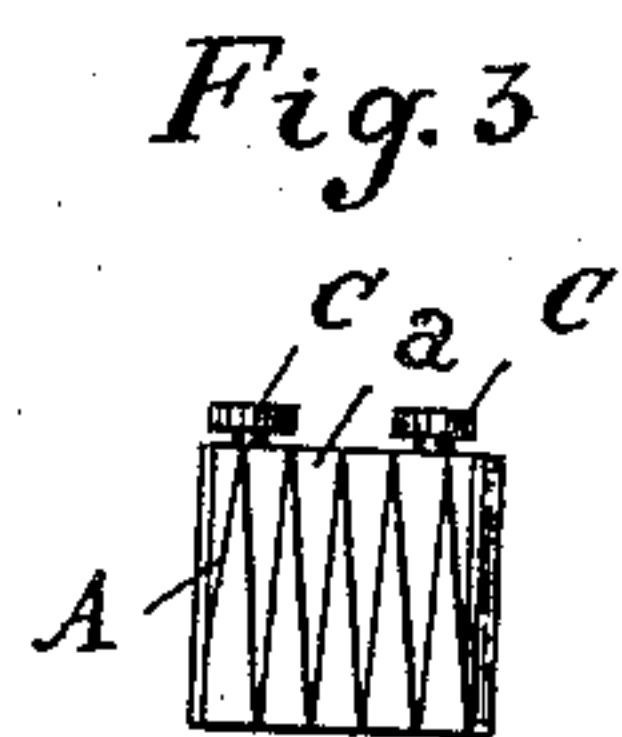
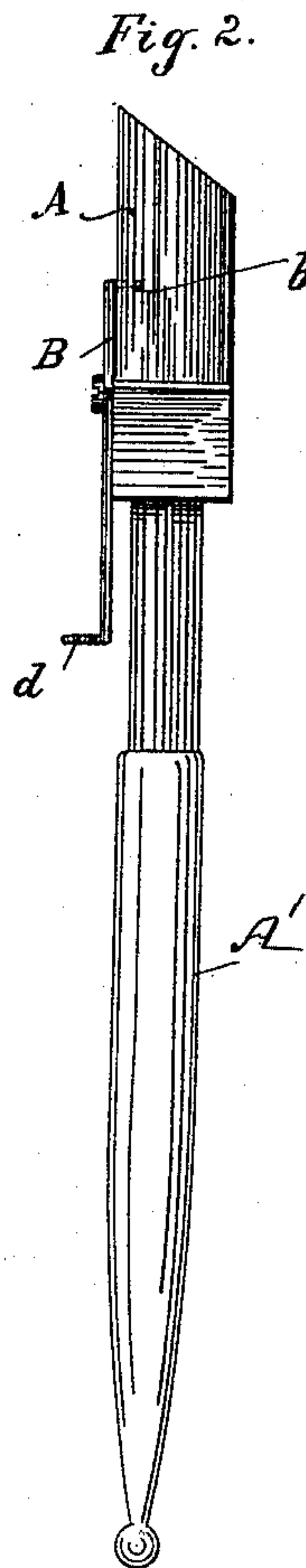


(No Model.)

R. HÄNDEL.
RULING PEN.

No. 417,024.

Patented Dec. 10, 1889.



Witnesses
S. Sedgwick
J. M. Ritter

Inventor
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by Munn & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

REINHOLD HÄNDEL, OF LEIPSIC, SAXONY, GERMANY.

RULING-PEN.

SPECIFICATION forming part of Letters Patent No. 417,024, dated December 10, 1889.

Application filed July 23, 1889. Serial No. 318,470. (No model.) Patented in Germany July 18, 1888, No. 46,103.

To all whom it may concern:

Be it known that I, REINHOLD HÄNDEL, of Leipsic, in the Kingdom of Saxony and German Empire, have invented a new and useful Drawing-Pen, (for which German Letters Patent No. 46,103, dated July 18, 1888, have been granted,) of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to an adjustable ruling-pen more particularly adapted for ruling the stave-lines for writing music, but applicable for other similar purposes. The essential feature of this ruling-pen is that the distance between the several lines drawn by it
15 can be readily varied and adjusted. To this end, teeth or points are inserted between every pen in the entire instrument and the one next to it, the said teeth or points being all connected with a slide, so that by moving the
20 slide the teeth or points are adjusted so as to determine the width between the separate pens.

25 Figure 1 is a rear view of the invention in elevation. Fig. 2 is a side view. Fig. 3 is a plan view of the top of the invention with the slide removed; and Fig. 4 is a plan view of the slide detached, looking at its upper end.

30 A' indicates a drawing-pen having the head A, with the separated elastic pens *a*.

Upon the rear of the upper portion of the pen A' is located a slide B, which holds the pens *a* in place and is held and movable between the screws *c*, and has at its upper end
35 laterally-projecting teeth or points *b*, extending between the pens *a*. Each tooth *b* is wider than the space between two pens *a*, so that if

the slide B is drawn rearward or toward the handle of the pen the teeth *b* will be forced into the space between the pens *a* and separate the latter, and if the slide is moved forward or toward the points of the pens *a* the latter will, by reason of their inherent elasticity, move nearer to one another. The slide B is formed with a laterally-bent projection
45 *d* at its rear end, by means of which it may be operated.

The adjustment of the pens *a* is, as will be seen, readily effected by adjusting the slide in accordance with the required width. 50

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. A ruling-pen constructed with separated elastic teeth and a slide having lateral
55 projections located and movable between the teeth to adjust the distance between the points of the teeth, substantially as shown and described.

2. The ruling-pen A', having the head A, 60 with screws *c*, the slide B, mounted in the screws *c* and having lateral projections *b* at its outer end, and the separated elastic pens *a*, mounted in head A, held in place by slide B, and having the projections *b* extending
65 between them, substantially as shown and described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

REINHOLD HÄNDEL.

Witnesses:

B. ROI,

WILHELM ATALY.