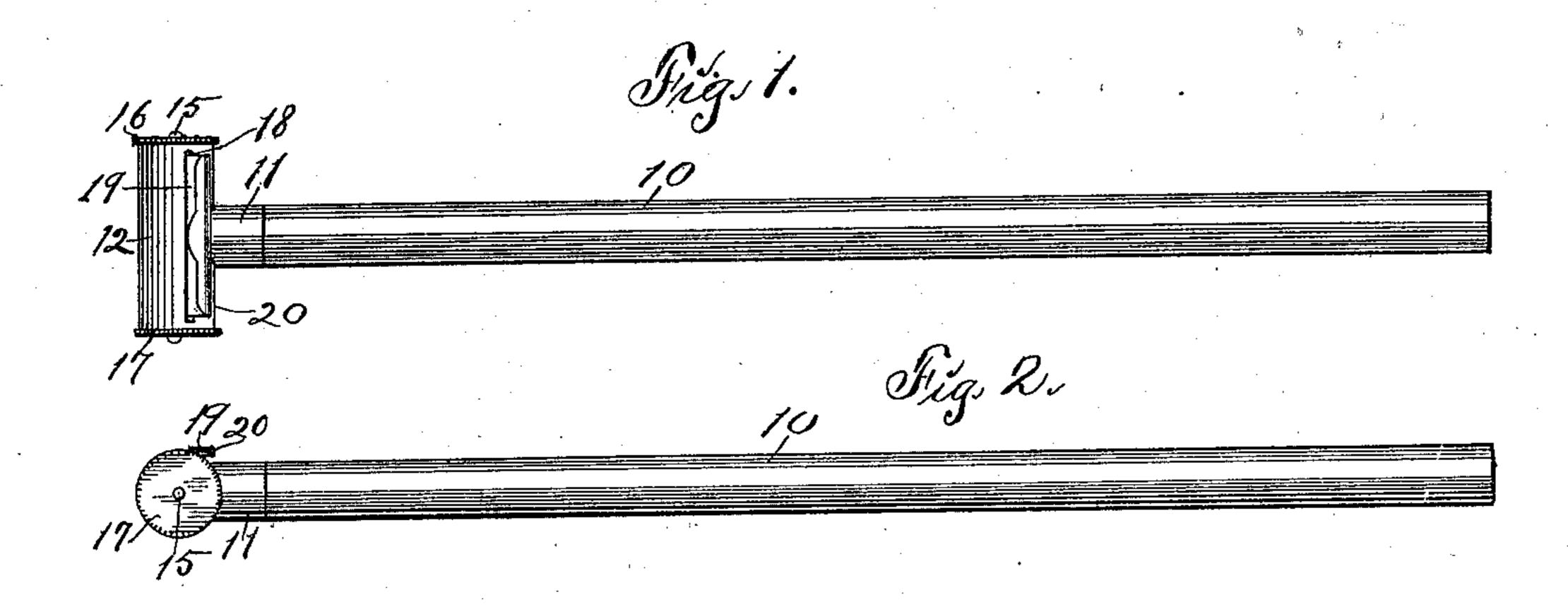
No. 725,383

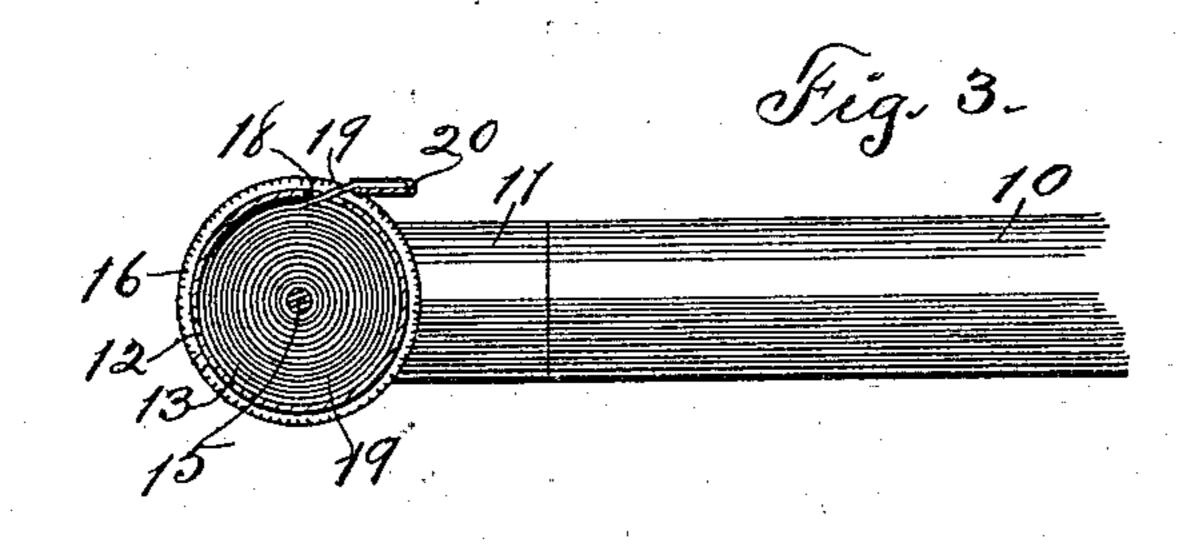
B. B. WARING.

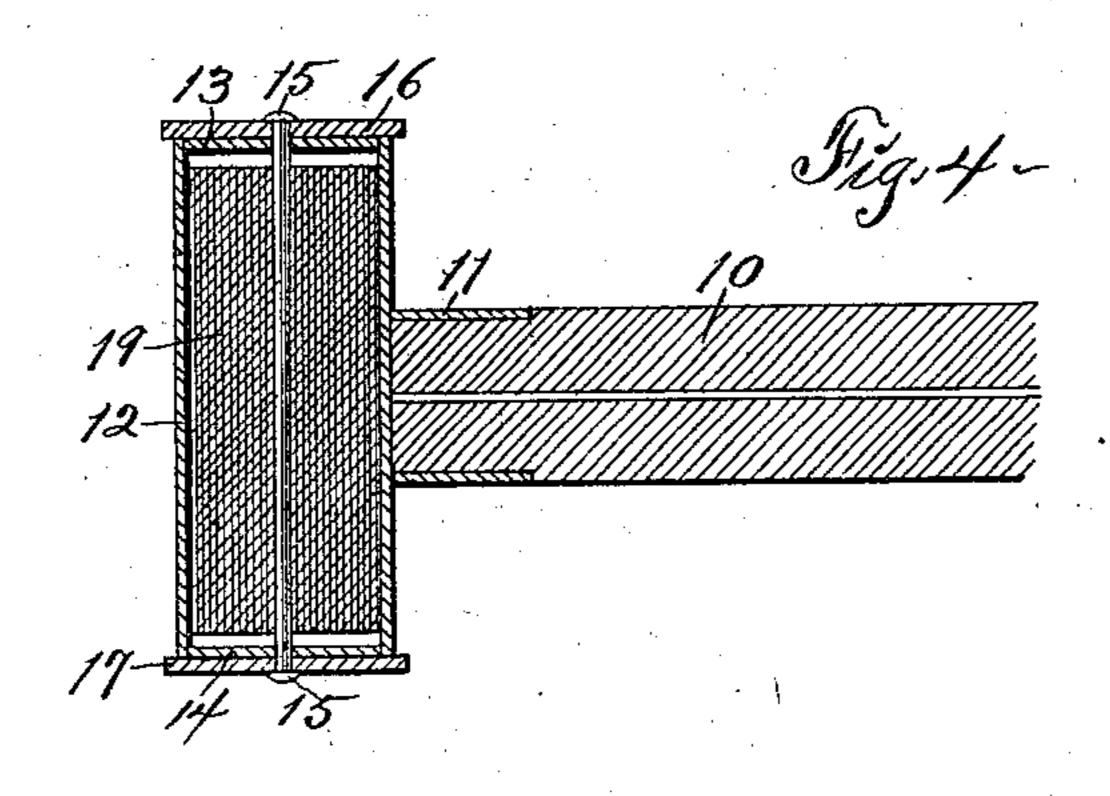
TAPE HOLDING ATTACHMENT FOR LEAD PENCILS.

APPLICATION FILED OCT. 23, 1902.

NO MODEL.







Attest: MHBishop. Geo. F. White Inventor: Bert-B. Waring By fleswork Atty 296

United States Patent Office.

BERT B. WARING, OF ALBION, IOWA, ASSIGNOR OF TWO-THIRDS TO P. F. ARNEY, OF ALBION, IOWA.

TAPE-HOLDING ATTACHMENT FOR LEAD-PENCILS.

SPECIFICATION forming part of Letters Patent No. 725,383, dated April 14, 1903.

Application filed October 23, 1902. Serial No. 128,516. (No model.)

To all whom it may concern:

Be it known that I, BERT B. WARING, a citizen of the United States of America, and a resident of Albion, Marshall county, Iowa, have invented a new and useful Tape-Holding Attachment for Lead-Pencils, of which the following is a specification.

The object of this invention is to provide means for mounting a table tape or ribbon on a lead-pencil or similar support in such a manner that the tape or ribbon may be inclosed and concealed when not in use and be withdrawn manually for inspection.

My invention consists of the construction and arrangement of elements, as hereinafter set forth, pointed out in my claims, and illus trated by the accompanying drawings, in which—

Figure 1 is a side view of the complete device. Fig. 2 is an end view of the tape-holder as the same appears mounted on a pencil. Fig. 3 is a cross-section of the tape-holder mounted on a pencil, on an enlarged scale. Fig. 4 is a longitudinal section of the tape-25 holder mounted on a pencil, on the same scale as Fig. 3.

In the construction of the device, as shown, the numeral 10 designates a lead-pencil. I employ and illustrate a pencil 10, for the reason that it is convenient and desirable to use my tape and holder in conjunction with and as an aid to work usually performed with a pencil; but any other rod, stem, or handle may be substituted for the pencil without desarting from the spirit of my invention.

A ferrule 11 is mounted on one end of the pencil 10, and a tubular casing or shell 12 is formed on or fixed to said ferrule. Heads 13 14 are mounted in the end portion of the cas-40 ing or shell 12 and are centrally apertured. A drum-shaft 15 is mounted for rotation in the central apertures of the heads 13 14 and extends longitudinally through the center of the casing or shell 12. Disks 1617 are mount-45 ed rigidly on end portions of the drum-shaft 15, parallel with and outside of the heads 13 14 of the casing or shell, and the extremities of said shaft are riveted on the outer faces of the disks. The disks 16 17 are of a diameter 50 slightly greater than the shell or casing 12 and the peripheries thereof are milled or ser-

rated. A slot 18 is formed in and longitudinally of the shell or casing 12. A tape or ribbon 19 is fixed at one end to and arranged to be wound on the drum-shaft 15. The free 55 end portion of the tape or ribbon 19 projects through the slot 18 and is provided with a metal tip or end piece 20 outside the casing. The metal tip 20 is of a thickness greater than the width of the slot 18 and prevents the en- 60 tire disappearance of the tape or ribbon within the casing or shell. The tape or ribbon 19 is formed or imprinted on either side with indices of linear measure, either English or metric, and the tables of weights, measures, 65 multiplication, interest, or formula, or such other information as may be deemed desirable to promulgate or useful in the study or work of the user.

The tape or ribbon 19 may be withdrawn 70 from the casing through the slot 18 by draft manually applied to the tip or end piece 20 and when so withdrawn, either partially or to the limit of its movement, may be inspected for the information it contains or used as a 75 linear measure. The tape or ribbon may be replaced in the casing by rolling the disks, with their milled peripheries, on and contacting with a desk or other suitable surface, thus rotating the drum-shaft 15 and winding 80 the tape thereon. In the operation of winding, unwinding, or inspecting the tape the pencil 10 serves the useful purpose of a handle for the casing, as well as being closely allied in use and function to the uses and 85 functions of the tape.

I claim as my invention—

1. The article of manufacture, comprising the pencil, the casing mounted thereon and formed with a slot transversely of the trend 90 of the pencil, a drum-shaft axially of the casing and extending through the ends thereof parallel with said slot, disks mounted on the ends of the drum-shaft rigidly, said disks outside the casing, and a tape fixed at one 95 end to the drum-shaft within the casing and extending through said slot.

2. The article of manufacture, comprising the pencil, the ferrule thereon, the casing on said ferrule, and formed with a slot, heads in said casing and formed with central apertures, a drum-shaft mounted for rotation in

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the apertures of said heads, disks rigidly mounted on the end portions of the drumshaft outside the casing and a tape or ribbon fixed at one end to the drumshaft within the casing and extending through said slot.

3. The article of manufacture, comprising the pencil, the ferrule thereon, the casing on said ferrule, and formed with a slot, heads in said casing and formed with central apertures, a drum-shaft mounted for rotation in the apertures of said heads, disks rigidly mounted on the end portions of the drum-

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shaft outside the casing and of larger diameter than the casing and a tape or ribbon fixed at one end to the drum-shaft and extending through said slot, together with a tip on the outer end of the tape.

Signed by me at Des Moines, Iowa, this 8th

day of October, 1901.

BERT B. WARING.

Witnesses:

S. C. SWEET, E. L. PALMER.