Dec. 20, 1949 R. T. WING 2,491,699

TOUCH INDICATOR

Filed March 18, 1946

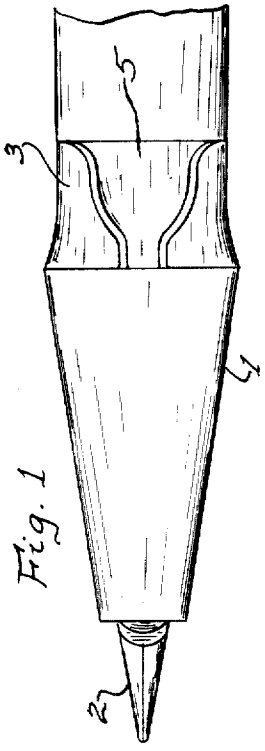


Fig. 1

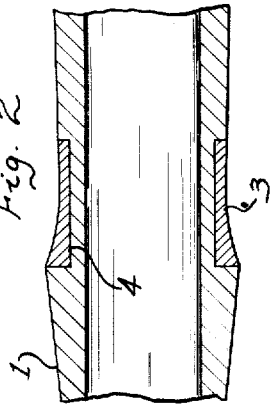


Fig. 2

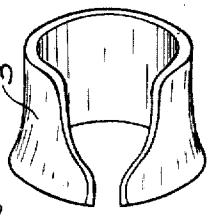


Fig. 3

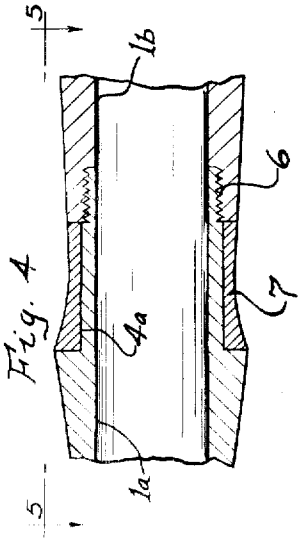


Fig. 4

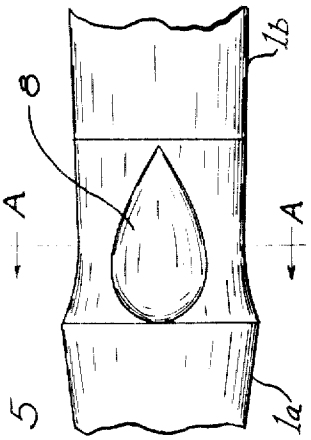


Fig. 5

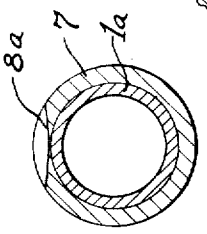


Fig. 6

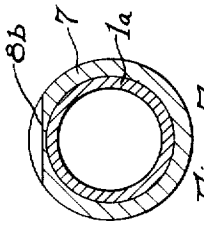


Fig. 7

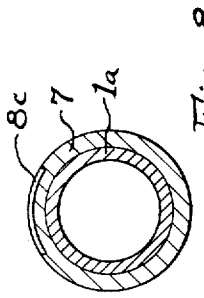


Fig. 8

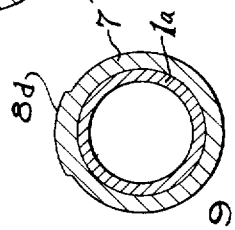


Fig. 9

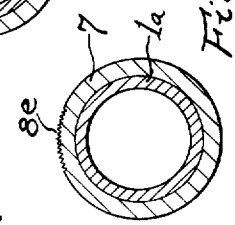


Fig. 10

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Patented Dec. 20, 1949 2,491,699

UNITED STATES PATENT OFFICE

2,491,699

TOUCH INDICATOR

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Application March 18, 1946, Serial No. 655,079

6 Claims. (Cl. 120—103)

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This invention relates to writing instruments such, for example, as fountain pens, and has to do with an attachment, which I call a "touch indicator," by means of which such an instrument can quickly and accurately be oriented by the user through the sense of touch. Such a device has been found especially advantageous in conjunction with fountain pens designed for use as ruling pens, but it also is very convenient as an adjunct to any fountain pen or to any writing instrument where the rotational orientation of the writing point or nib about the longitudinal axis of the instrument is more or less critical.

The primary object of my invention is to provide means which the user of a writing instrument can quickly adjust to his own individual satisfaction, and which enables him promptly to orient the instrument in his hand each time he picks it up, so that the writing point is invariably positioned to the best advantage with respect to the surface of the writing paper.

In carrying out my invention I apply to the body or barrel of the writing instrument, near the writing end thereof, a ring-like member which encircles the said body or barrel and is manually rotatable thereon and grippingly engaged therewith so that it will retain any position of rotation to which it may be set until readjusted; and said member is provided, in one way or another, with an exterior surface of restricted area which is so characterized that it can be identified at once by the sense of touch. The area referred to is quite small so that when it comes into contact with the end of the user's index finger, or, for that matter, any finger, the user can be assured that the writing point is positioned in a certain intended manner—that is to say, the writing point is positioned to the best advantage in accordance with the particular user's individual notions as to how it should be positioned.

In the drawing which accompanies this specification, I have illustrated a number of practical forms which my invention may assume, but these are shown solely by way of example and are not intended to portray all possible embodiments.

Referring to the drawing:

Figure 1 is a plan view of the front end of a fountain pen provided with a "touch indicator" device in accordance with this invention;

Fig. 2 is a fragmentary longitudinal sectional view of the pen structure of Fig. 1, and looking in the same direction as that in which Fig. 1 is viewed;

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Fig. 3 is a perspective view of the touch indicator of Fig. 1;

Fig. 4 is a longitudinal sectional view similar to Fig. 2 but illustrating a modification;

Fig. 5 is a fragmentary plan view taken along the line 5—5 of Fig. 4; and

Figs. 6 to 10 inclusive are sectional views each taken along line A—A of Fig. 5 and illustrating a number of variant forms which the touch spot on the indicator may assume.

In Fig. 1 there is shown, on a greatly enlarged scale, the front end portion of a fountain pen as viewed looking downwardly on the top surface of the nib. The pen shown comprises a barrel 1 from the front end of which projects a writing nib 2. Situated near the front or writing end of the pen and carried by the barrel 1 is a ring-like member 3 which is shown separately in perspective in Fig. 3. Member 3 is in this particular instance a split ring and it may be made of any suitable resilient material such, for example, as metal or plastic. Said member is seated in a groove 4 which encircles the barrel 1 and is formed in the periphery thereof as shown in the longitudinal sectional view, Fig. 2. The two ends of member 3 are preferably formed as shown to provide a notch 5 for reception of the end of the user's index finger. By rotating the barrel until his index finger seats in the notch 5, the user of the pen is enabled quickly to so orient the pen that the nib 2 is in its optimum rotational posture for writing or other use. Member 3 must, of course, be sufficiently resilient so that it will open wide enough to engage the barrel and it must also be capable of gripping the bottom surface of groove 4 so as to effect such a considerable frictional engagement with the barrel that it will remain in any position of rotation at which it may be set, while at the same time being free enough so that it can be rotated manually around the barrel.

Inasmuch as people are not all alike as respects the manner in which they grasp a fountain pen or other writing instruments, it is important that the positon of notch 5 be adjustable rotationally about the barrel; and by virtue of the provision which this invention makes for varying the position of said notch, each individual user is able to adjust it to suit his own peculiarities.

In Fig. 4 I have shown a longitudinal sectional view of a pen barrel formed in two parts and interconnected, end to end, by means of a threaded joint at 6. By uncoupling said joint and thus disconnecting the two parts 1*a* and 1*b* of the barrel, it is possible to mount in the barrel groove a

solid ring 7 in place of the split ring 3. The groove 4a of Fig. 4 may be identical with groove 4 of Fig. 2.

In place of the notch 5 the ring 7 may have an external peripheral spot 8 of small area, as shown in Fig. 5, which is so characterized that it may readily be identified by the sense of touch. The spot 8 may be a concave surface as indicated at 8a in Fig. 6, or it may be a flat surface as indicated at 8b in Fig. 7, or it may have still other configurations as indicated at 8c in Fig. 8, or at 8d in Fig. 9, or it may be a knurled surface as indicated at 8e in Fig. 10. In fact any irregularity on the outer surface of member 7 which can readily be recognized by the sense of touch, and which is sufficiently localized, will serve the same purpose as the notch 5 of member 3 which was previously described.

The ring 7 can conveniently be made to frictionally grip the groove 4a by slightly distorting it so that its bore is a trifle out of round before it is put in place. This will cause the ring to sufficiently grip the groove surface, while at the same time not making it difficult to put the ring in place.

I claim:

1. The combination with a writing instrument having an elongated body provided with an external circumferential groove, of a touch indicator comprising an annular member having a finger-engaging deformation, said member being mounted in said groove and rotatably adjustable therein but frictionally held in any predetermined position to which adjusted in said groove whereby when a user, preparatory to writing, grasps the instrument with a finger contacting said finger-engaging portion, the user is ensured that the writing end of the instrument will be in proper position for writing.

2. The combination with a fountain pen comprising a barrel having a pen section secured to one end thereof, of a sleeve-like member adjustably seated in an annular recess provided at the juncture between the barrel and pen section, the periphery of said sleeve-like member being substantially flush with the periphery of the adjacent portions of said barrel and said pen section, and said sleeve-like member having a finger-engaging deformation on its exterior surface which, when located in a predetermined position relative to the pen point, and a user grasps the pen preparatory to writing with a finger contacting said finger-engaging portion, will ensure the user that the fountain pen is properly grasped for writing.

3. The combination with a fountain pen comprising a barrel having a pen section detachably secured to one end thereof and provided with a reduced cylindrical portion forming with said barrel an annular recess, when the pen section is secured to the barrel, of an annular sleeve-like member fitted onto said reduced cylindrical portion and restrained against free rotation thereon when the pen section is secured to the barrel, and said sleeve-like member having a finger-engaging deformation which may be so positioned with respect to the pen point by relative rotation of the member in said recess, that when a user, preparatory to writing, grasps the pen with a finger contacting said finger-engaging portion, the user is ensured the fountain pen is properly grasped for writing.

4. The combination with a pen having an annular peripheral recess therein at the portion grasped by the fingers of the user when the pen is used in writing, of a touch indicator comprising an annular body carried on said pen and disposed in said recess for rotational adjustment about said pen but restrained frictionally against rotation and positively against longitudinal displacement on said pen, said body having a dished depression in a portion only of its periphery and positioned to be engaged by a finger of the user when the body is in a predetermined position of adjustment on the pen to indicate to the user the proper writing position of the pen.

5. The combination with a pen having an annular peripheral recess therein at the portion grasped by the fingers of the user when the pen is used in writing, of a touch indicator comprising an annular body carried on said pen and disposed in said recess for rotational adjustment about said pen but restrained frictionally against rotation and positively against longitudinal displacement on said pen, said body having a flattened surface formed in a portion only of its periphery and positioned to be engaged by a finger of the user when the body is in a predetermined position of adjustment on the pen to indicate to the user the proper writing position of the pen.

6. The combination with a pen having an annular peripheral recess therein at the portion grasped by the fingers of the user when the pen is used in writing, of a touch indicator comprising an annular body carried on said pen and disposed in said recess for rotational adjustment about said pen but restrained frictionally against rotation and positively against longitudinal displacement on said pen, said body having a knurled surface extending over a portion only of its periphery and positioned to be engaged by a finger of the user when the body is in a predetermined position of adjustment on the pen to indicate to the user the proper writing position of the pen.

RUSSELL T. WING.

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