Sept. 21, 1954 E. C. NORMAN 2,689,404

POINTER ATTACHMENT FOR STRAIGHT EDGE AND ROLLER ASSEMBLIES

Filed July 13, 1951

Fig. 1

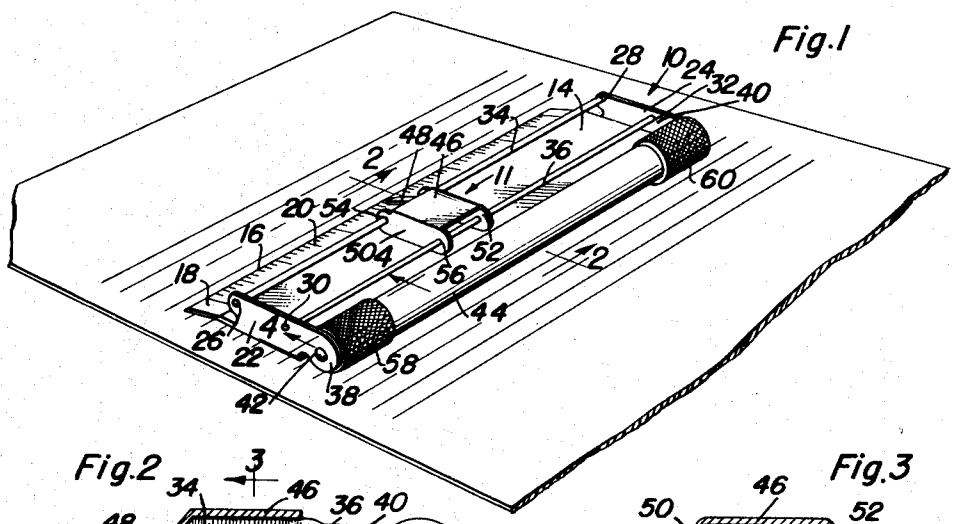


Fig. 2

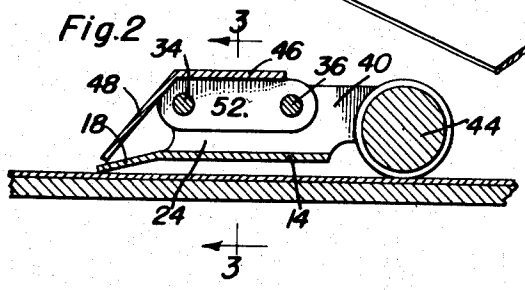


Fig. 3

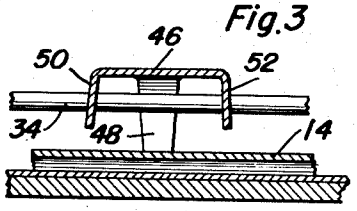


Fig. 4

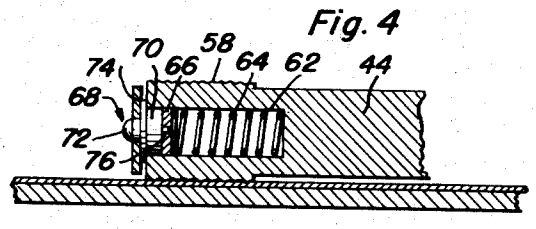


Fig. 6

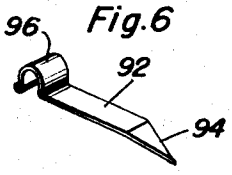
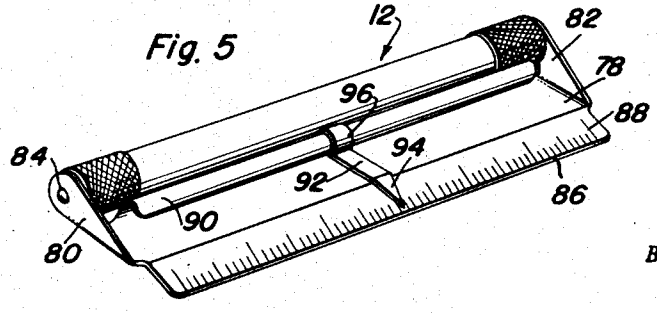


Fig. 5



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POINTER ATTACHMENT FOR STRAIGHT EDGE AND ROLLER ASSEMBLIES

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Application July 13, 1951, Serial No. 236,546

6 Claims. (Cl. 33—109)

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The present invention relates to devices of the office equipment type and more particularly to straight edge and roller assemblies and pointer attachments therefor, and constitutes an improvement on Patent No. 2,277,452.

An object of the present invention is to provide a device including a straight edge with a roller rotatably carried thereby in order that the straight edge can be freely slidable over a supporting surface, the roller supporting one longitudinal edge of the straight edge from contact with the supporting surface.

Another object of the present invention is to provide the roller of the assembly with spring urged pintles for engagement with flanges formed on the straight edge, the spring providing frictional resistance to relative rotation between the roller and pintle and between the pintle and flanges whereby the straight edge can be slidably moved and the roller rotatably moved over a supporting surface and frictionally retained in the position where released.

A further object of the present invention is to form the straight edge with means for longitudinally slidably and adjustably supporting a pointer attachment.

A still further object of the present invention is to provide a device of simple construction so that the same can be readily manufactured and assembled.

Various other objects and advantages of the present invention will become apparent in the detailed description to follow. The best forms in which I have contemplated applying my invention are clearly illustrated in the accompanying drawings wherein:

Figure 1 is a perspective view of a first form of the invention shown on a printed paper with the straight edge in parallel relation to the lines of type;

Figure 2 is a vertical transverse sectional view taken substantially along the plane of line 2—2 of Figure 1;

Figure 3 is a vertical longitudinal sectional view taken substantially along the plane of line 3—3 of Figure 2;

Figure 4 is a vertical longitudinal sectional view taken substantially along the plane of line 4—4 of Figure 1;

Figure 5 is a perspective view of a modified form; and

Figure 6 is a detail perspective view of the pointer attachment of the form shown in Figure 5.

Referring more particularly to the drawings

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wherein like numerals designate like parts throughout, the numeral 10 designates the first form and the numeral 12 designates the second form of the invention.

The first form 10 of the invention is shown in Figures 1–3 and is comprised of a flat elongated strip 14 providing a straight edge 16 at one side. An elongated portion 18 of the strip 14 is downwardly angulated and formed with suitable indicia markings 20. The ends of the strip 14 are upwardly angulated at 22 and 24 to provide a pair of flanges having aligned openings 26 and 28 and 30 and 32.

A pair of rods 34 and 36 are engaged in the openings 26, 28 and 30, 32 and fixedly maintained in parallel relation by the flanges 22 and 24. The rods 34 and 36 provide the means whereby the pointer attachment 11 can be longitudinally slidably supported on the straight edge 14.

The pointer attachment 11 is comprised of a flat plate 46 having a transversely extending reduced portion 48 terminating in a point juxtaposed to the straight edge 16 and indicia 20. The plate 46 has transverse end portions angulated at 50 and 52 and formed with aligned pairs of openings 54 and 56. The plate 46 is slidably carried by the rods 34 and 36 slidably disposed in the openings 54 and 56. As seen best in Figure 3, the flanges 50 and 52 are normally not in planes perpendicular to the plane of the plate 46 but have to be depressed in opposition to their resiliency for movement on the rods 34 and 36.

The flanges 22 and 24 are formed with rearward extensions 38 and 40 having aligned openings 42. The extensions 38 and 40 provide bearing supports for the roller 44.

The roller 44 is best disclosed in Figures 1 and 4 as comprising an elongated rod having knurled portions 58 and 60. Each end of the roller has an axial recess 62 formed therein. A coil spring 64 is positioned in each recess 62 for outwardly urging the washers 66.

Bearing pintles 68 are formed with cylindrical bearing portions 70 rotatably engaged in the recesses 62 and extensions 72 engaged in the apertures 42 for support by the flanges 22 and 24. The bearing pintles 68 are formed with annular shoulders 74 spacing the roller 44 from the rearward extensions 38 and 40. The washers 66 are centered on the bearing pintles 68 by means of the axial pins 76 formed integrally with the pintles.

The second form of the invention is best disclosed in Figures 5 and 6 and is comprised of a flat elongated strip 78 having flanges 80 and 82

formed at the ends thereof. The flanges **80** and **82** are provided with apertures **84** for supporting the bearing pintles of the invention as in the first form of the invention. The strip **78** is formed with a straight edge **86** on the longitudinally angulated portion **88**. Suitable indicia markings are inscribed on the portion **88**.

The strip **78** has the longitudinal edge portion opposite to the straight edge **86** transversely arcuated at **90**. The pointer **92** is slidably carried by the arcuated portion **90**.

Figure 6 shows the pointer **92** as being formed of a flat strap having a pointed end **99** and an arcuated resilient portion **96** for clamping engagement on the arcuated edge portion **90**.

In view of the foregoing description of the structure of the present invention, it is believed that one skilled in the art will readily understand the many uses to which the present invention can be put. The device is particularly adapted for proofreading and copy work.

Having described the invention, what is claimed as new is:

1. A straight edge and roller assembly comprising a flat elongated substantially rigid strip having upstanding flanges at its ends, said flanges being formed with aligned apertures, a roller rotatably carried by said flanges and being of a diameter to support the juxtaposed edge of the strip for movement over a supporting surface, the juxtaposed edge of said strip having an upturned portion of transversely arcuated form and overlying said juxtaposed edge of the strip, and a pointer slidably carried on the arcuated portion of the strip and slidably resting upon said strip.

2. A straight edge and roller assembly comprising a flat elongated substantially rigid strip having upstanding flanges at its ends, said flanges being formed with aligned apertures, a roller rotatably carried by said flanges and being of a diameter to support the juxtaposed edge of the strip for movement over a supporting surface, the juxtaposed edge of said strip being of transversely arcuated form and overlying said strip, and a pointer slidably carried on the arcuated edge of the strip, said pointer being a flat strap having one end formed with a point and the other end of arcuate configuration for resilient clamping and sliding engagement with the arcuated edge of the strip.

3. A straight edge and roller assembly comprising a flat, elongated, substantially rigid strip having upstanding flanges at its ends, said flanges having aligned apertures, a cylindrical roller having pintles journaled in said aligned apertures, said strip having the edge which is remote from said roller angulated away from said flanges to form an obtuse dihedral angle with the remainder of the strip, said roller being of sufficient diameter to support, with said angulated edge, the rest of said strip above and out of contact with a surface upon which said roller and angulated edge may rest, the edge of the strip which is juxtaposed to said roller being of transversely arcuated form and overlying said strip and provided a curved longitudinally extending guide bead, a pointer having a cylindrical recess slidingly engaged upon said guide bead.

4. The combination of claim 1 wherein said upturned portion is closely proximate said roller.

5. The combination of claim 1 wherein said upturned portion is closely proximate said roller, wherein the marginal longitudinal edge portion of said strip which carries said non-juxtaposed edge is inclined downwardly relative to the remainder of said strip.

6. The combination of claim 1 wherein said upturned portion is closely proximate said roller, wherein the marginal longitudinal edge portion of said strip which carries said non-juxtaposed edge is inclined downwardly relative to the remainder of said strip, said pointer slidingly resting upon said strip from its longitudinal juxtaposed edge to its longitudinal non-juxtaposed edge.

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