S. WHEELER.

PAPER ROLL.

APPLICATION FILED AUG. 12, 1914.

1,170,589.

Patented Feb. 8, 1916.

Fig. 1,

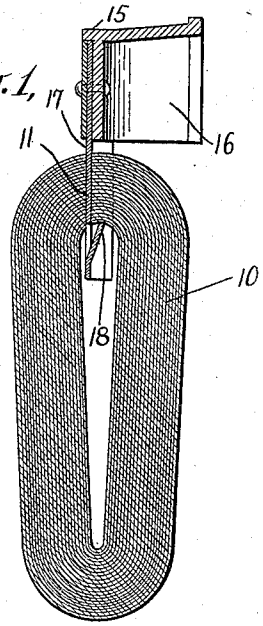


Fig. 2,

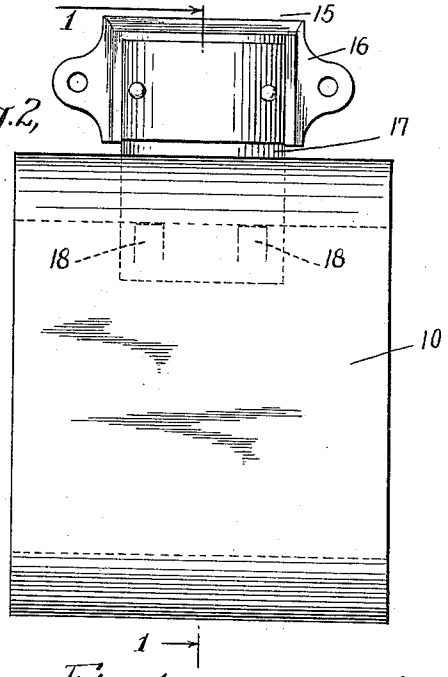


Fig. 3,

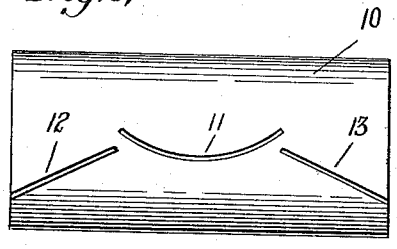


Fig. 4,

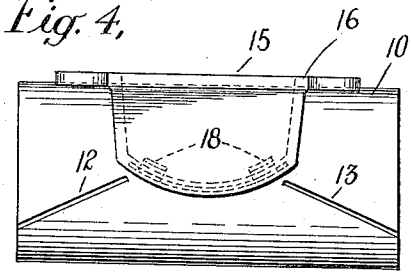


Fig. 5,

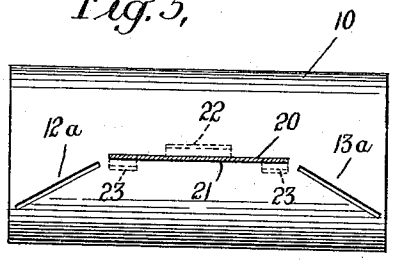


Fig. 6,

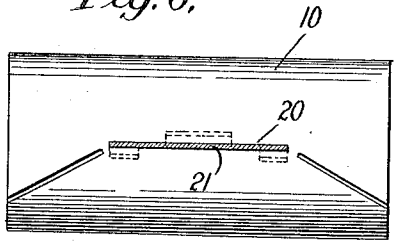
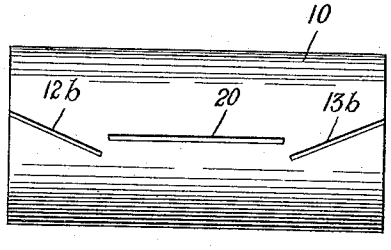


Fig. 7,



WITNESSES

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PAPER-ROLL.

1,170,589. Specification of Letters Patent. Patented Feb. 8, 1916.

Application filed August 12, 1914. Serial No. 856,337.

To all whom it may concern:

Be it known that I, SETH WHEELER, a citizen of the United States of America, and a resident of Castleton, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Paper-Rolls, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to paper rolls, and particularly to such as are intended for toilet purposes.

One object of my invention is to provide an improved paper roll of the aforesaid character having incisions arranged in a particular and desirable manner for the purpose of receiving a support and for the purpose of facilitating the removal of the paper, one sheet at a time.

Other objects and advantages of my invention will be set forth hereinafter, and in order that my invention may be fully understood, I will now proceed to describe the same in the following specification and then point out the novel features thereof in appended claims.

Referring to the drawings: Figure 1 is a sectional elevation on the line 1—1 of Fig. 2, of a paper roll arranged and constructed in accordance with my invention and a suitable holder therefor. Fig. 2 is a front elevation of the same parts. A plan view of the paper roll alone is shown in Fig. 3, and Fig. 4 is a plan view of the holder and roll shown in Figs. 1 and 2. A paper roll having a modified arrangement of incisions together with a holder are shown in Fig. 5 which corresponds to Fig. 4 except that the holder is broken away and shown in section. Still other modifications of my invention are shown in Figs. 6 and 7.

Like characters of reference designate corresponding parts in all the figures.

With special reference to Figs. 1 to 4 inclusive, 10 designates a paper roll comprising a plurality of convolutions, preferably formed by winding on a relatively large mandrel, and 15 designates a support or fixture which is adapted to coöperate with the roll. The roll is flattened into a substantially elliptical form in cross section as shown in Fig. 1, and at the top, as clearly shown in Fig. 3, it is provided with a plurality of incisions 11, 12, 13. The incision 11 is curved and may for convenience be termed a "central" incision since it is approximately midway between the ends of the roll. This central incision may be made by means of two straight lines meeting each other at an obtuse angle if desired. The incisions 12 and 13 are located one on either side of the central incision and extend obliquely through the roll at the top with their inner ends close to the ends of the central incision 11. The inclined incisions may be open at their outer ends as shown in Figs. 3 and 4, or closed and extend near to the ends of the roll as shown at 12^a and 13^a in Fig. 5. They may be inclined in opposite directions to the plane of the flattened roll as shown at 12^b and 13^b in Fig. 7.

The holder 15 comprises a solid base 16 which may be screwed or bolted to a vertical wall, and a tongue or extension 17 which is riveted or otherwise secured to the base 16 and extends through the central incision 11 of the paper roll. Near the lower end of the tongue are cut a plurality of slits which permit locking projections 18 to be extruded as shown in Fig. 1. The arrangement of parts is such that the extruded projections automatically spring back into the plane or surface of the tongue 11 while the tongue 17 is being inserted in the incision 11, but assume their normal positions as shown in Fig. 1 when the tongue has been pushed for a sufficient distance through the central incision to free the projections. The fact that the tongue 17 is curved to coöperate with a correspondingly curved central incision in the top of the roll, is of great advantage since it insures that the roll will be properly mounted on the fixture and prevents the use of rolls which are not otherwise suitable or adapted for use with the fixture.

Instead of providing a curved central incision a straight incision 20, as shown in Figs. 5, 6 and 7, may be utilized in which case the fixture or holder will be provided with a flat tongue 21. The tongue 21 has extruded projections 23 which correspond to the projections 18 of the previous figures, and in addition has an intermediate extruded projection 22 which extends outwardly in the opposite direction from the tongue.

By inclining the incisions 12 and 13 to the plane of the central incision, each successive sheet of paper is more likely to partially separate itself from the roll, its front end falling downwardly, and thereby render it

more easily accessible when wanted. This result is also partially brought about by the location of all of the incisions a little in front of the central plane of the flattened roll, as clearly shown in Fig. 1.

Structural variations may of course be effected in both the roll and the holder, and my invention is not restricted to paper rolls which are intended for any particular purpose. I therefore intend that only such limitations be imposed as are indicated in appended claims.

What I claim is:

1. A paper roll having a central incision adapted to receive a support, and a pair of inclined incisions one on each side of the central incision extending forwardly from the central incision arranged and adapted to permit the paper to be readily torn off sheet by sheet.

2. A paper roll comprising a plurality of convolutions having a relatively large mandrel opening, flattened into a narrow elliptical form, said flattened roll having a central incision extending through the top of the roll adapted to receive a support, and inclined incisions coöperating with the central incision extending forwardly from the central incision to weaken the roll and to permit the paper to be readily torn off sheet by sheet.

3. A paper roll comprising a plurality of convolutions having a relatively large mandrel opening, flattened into a narrow elliptical form, said flattened roll having a central incision extending through the top of the roll in front of the central plane of the roll, and incisions on each side of the central incision and oppositely inclined to the central plane of the roll, coöperating with the central incision to weaken the roll and to permit the paper to be readily torn off sheet by sheet.

4. A paper roll having a curved central incision adapted to receive a support of like form, and a pair of straight inclined incisions one on each side of the central incision extending forwardly from the central incision arranged and adapted to permit the paper to be readily torn off sheet by sheet.

5. A paper roll comprising a plurality of convolutions having a relatively large mandrel opening, flattened into a narrow elliptical form, said flattened roll having a central curved incision extending through the top of the roll, and a pair of incisions one on each side of the central incision, extending forwardly from said curved incision to the edges of the paper and coöperating with the central incision to weaken the roll and to permit the paper to be readily torn off sheet by sheet.

In witness whereof I have hereunto set my hand in the presence of two subscribing witnesses, this 8th day of August, 1914.

SETH WHEELER.

Witnesses:
WM. A. WHEELER,
THOMAS BOYD WHEELER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."