W. N. FRIEND.

PAPER DISPENSER.

APPLICATION FILED MAR. 8, 1920.

1,379,756.

Patented May 31, 1921.

2 SHEETS—SHEET 1.

Fig. 1.

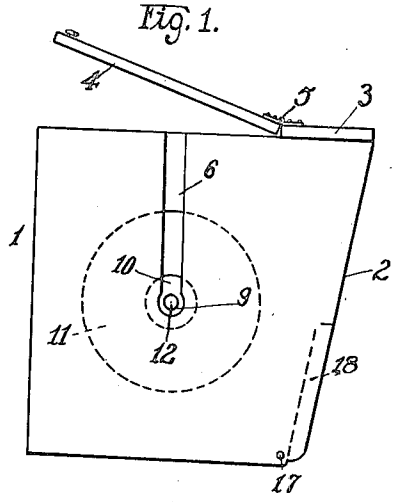


Fig. 2.

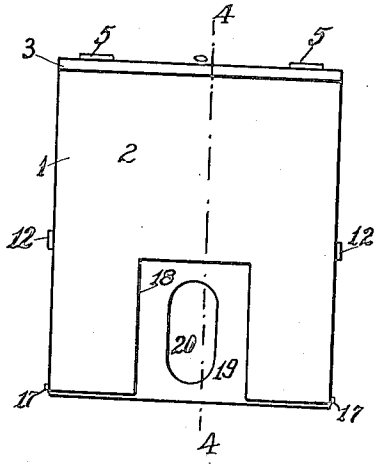


Fig. 3.

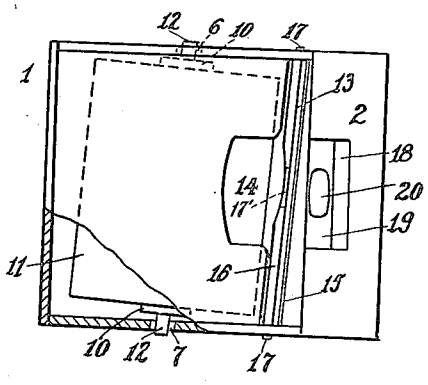


Fig. 4.

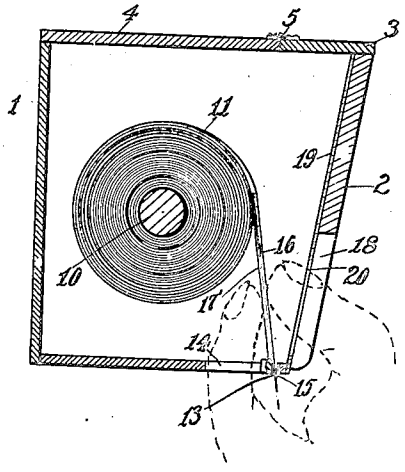
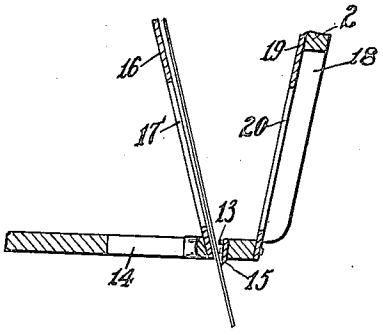


Fig. 5.



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2 SHEETS—SHEET 2.

Fig. 6.

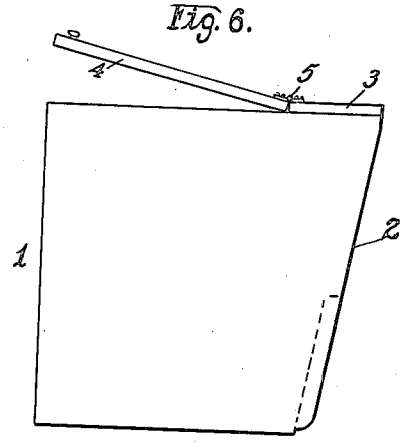


Fig. 7.

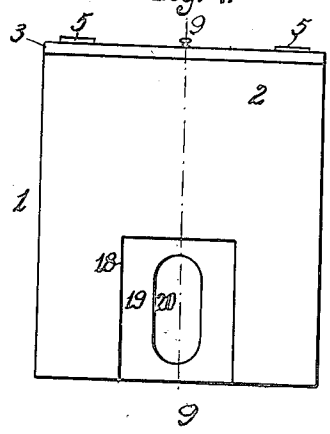


Fig. 8.

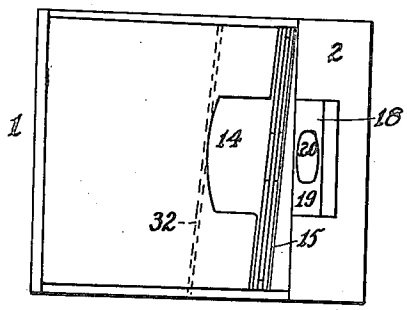


Fig. 9.

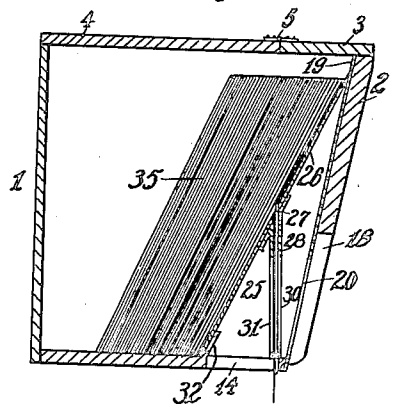
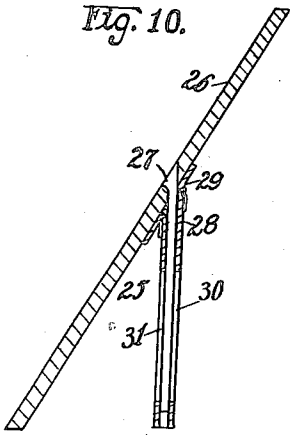


Fig. 10.



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UNITED STATES PATENT OFFICE.

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PAPER-DISPENSER.

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Application filed March 8, 1920. Serial No. 363,996.

To all whom it may concern:

Be it known that I, WILLIAM N. FRIEND, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Paper-Dispensers, of which the following is a specification.

My invention is an improved paper towel or toilet paper dispenser. My dispenser includes means to enable one to start the paper so that the edge thereof may be gripped and to cut the paper any desired length. My dispenser is simple and efficient in operation and may be manufactured cheaply. It may be made of wood and card board.

Referring to the annexed drawings which form a part of this specification:

Figure 1 is a side view of one form of my invention.

Fig. 2 is a front view of my invention as shown in Fig. 1.

Fig. 3 is a bottom view of my dispenser as shown in Figs. 1 and 2.

Fig. 4 is a transverse vertical section of my dispenser taken on line 4—4 of Fig. 2.

Fig. 5 is an enlarged fragmentary cross section of the lower part of my dispenser as shown in the above described figures.

Fig. 6 is a side view of another form of my invention.

Fig. 7 is a front view of the form of my dispenser as shown in Fig. 6.

Fig. 8 is a bottom view of the form of my invention shown in Figs. 6 and 7.

Fig. 9 is a transverse vertical section of my dispenser taken on line 9—9 of Fig. 7.

Fig. 10 is an enlarged cross section of the paper holder and guide employed in the form of my invention shown in Figs. 6 to 9 inclusive.

In the drawings 1 indicates a box of cubic formation except that its front wall inclines inwardly in a downward direction. The top of the box is closed by an upper wall 3, extending a short distance from the upper edge of the front wall 2, and a door 4, hinged by hinges 5 to the rear edge of wall 3. Extending vertically in the left and right side walls of the box 1 from their upper edges are slots 6 and 7 respectively in the lower end of which are formed bearings 9, the slot 6 being located slightly forwardly of the slot 7. On a spindle 10 is wound a roll of paper 11. Journals 12 extend from the ends of the spindle 10 which are introduced through the slots 6 and 7 into bearings 9, to journal the spindle and roll of paper in the box, or said journals may be removed from said bearings through said slots to remove the spindle from the box when the paper has been used therefrom in order to place a new roll of paper in the box. In the bottom wall of the box near the forward lower edge thereof is formed a slot 13 extending at an angle inwardly with relation to the forward lower edge of the box from the left to the right side thereof. Said slot is formed with an enlargement 14 extending rearwardly midway between the side walls of the box. To the forward side of slot 13 is secured a knife 15, the edge of which extends along and just below the lower forward edge of said slot. A paper guide 16 is pivoted at its lower end in slot 13 at the same angle as the slot by pivots 17 extending through the side walls of the box near the lower edge of said walls into the side edges of the guide near its lower end. The upper edge of the guide 16 engages the forward surface of the paper roll 11 under the outermost coil of the paper and guides said coil downwardly over its forward face through the slot 13 between its lower edge and the lower edge of knife 15. The guide 16 is formed with a vertical slot 17′ midway between its side edges. The front wall 2 of the box is formed with a notch 18 extending upwardly from the lower edge of the wall midway between its side edges. A thin wall 19, preferably of card board is secured to the rear side of the front wall of the box and to the lower forward edge of the bottom wall of the box, which wall is provided with a vertical central slot 20 which rests within the notch 18 in alinement with the slot 17′ in guide 16.

The relation of the bearings 9 to each other inclines the spindle 10 and the paper roll thereon at an angle corresponding to the angle of the slot 13 and knife 15.

In order to start the paper, one inserts his thumb through the upper end of slot 20 and his forefinger through slot enlargement 14 and the upper end of slot 17′, grips the paper between his thumb and forefinger and pulls it downwardly which unwinds the roll 11 and projects the forward edge of the paper through slot 13. The lower edge of the paper may then be gripped below the bottom of the box and pulled downwardly. The downward and inward inclination of the front wall of the box has a tendency to cause

one to pull the paper downwardly in an inward direction until his hand strikes the wall to which the box is secured, thus limiting the unwinding of the paper and tending to prevent waste of the paper. When the paper is drawn out the proper length it may be cut off such length by pulling the paper forwardly and to the left against the edge of the blade 15. The guide 16 swings on its pivot against the roll as the paper unwinds therefrom and always remains in guiding position.

The form of my invention disclosed in Figs. 6 to 10 inclusive is designed for the use of a flat continuous pack of paper. The guide 16 is eliminated and a holder and guide 25 is substituted therefor. The holder and guide 25 includes a plate 26 formed with a slot 27 extending transversely thereof and a flat tubular guide member 28 hinged by hinges 29 to the under side of said plate at its upper end which end communicates with said slot. The front and rear walls of guide member 28 are provided with slots 30 and 31. The holder and guide 25 are placed at an angle in the forward part of box 1 with its lower edge resting against an upturned lip 32 at the rear edge of slot enlargement 14 and its upper edge is resting against the front wall 2 in the corner between said wall and the upper wall of the box. A flat continuous pack of paper 35 is placed in the box against the wall 26 with its forward portion threaded through slot 27 and guide member 28. The paper may be gripped by inserting the thumb through slots 20 and 31 and the finger through slot enlargement 14 and slot 31 and pulling downwardly to start the paper.

Having described my invention, I claim:

A paper dispenser, a box for containing the paper, the bottom of the box being provided with a slot in its lower wall through which the forward end of the paper extends, a guide for guiding the paper through said slot, the forward wall of the box being provided with a slot, the guide being provided with a slot in alinement with the slot in said forward wall, the slot in the lower wall of the box being provided with a rear enlargement in alinement with said other slots, and a knife edge at the lower edge of the slot in said lower wall.

In testimony whereof I affix my signature.

WILLIAM N. FRIEND.