(No Model.)

E. E. SENTMAN.

ROLL PAPER HOLDER AND CUTTER.

No. 477,580. Patented June 21, 1892.

Fig 1

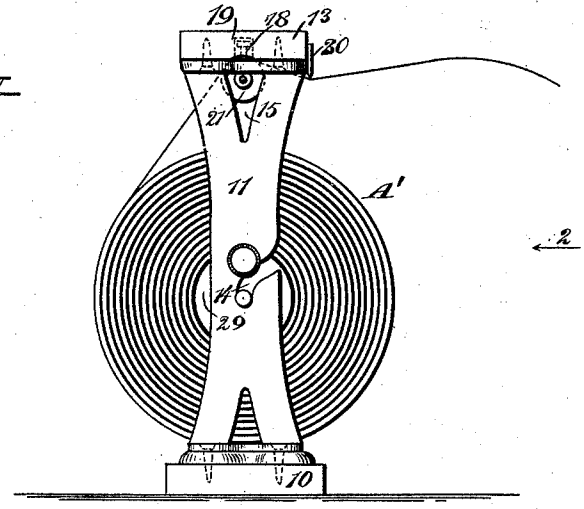


Fig 2

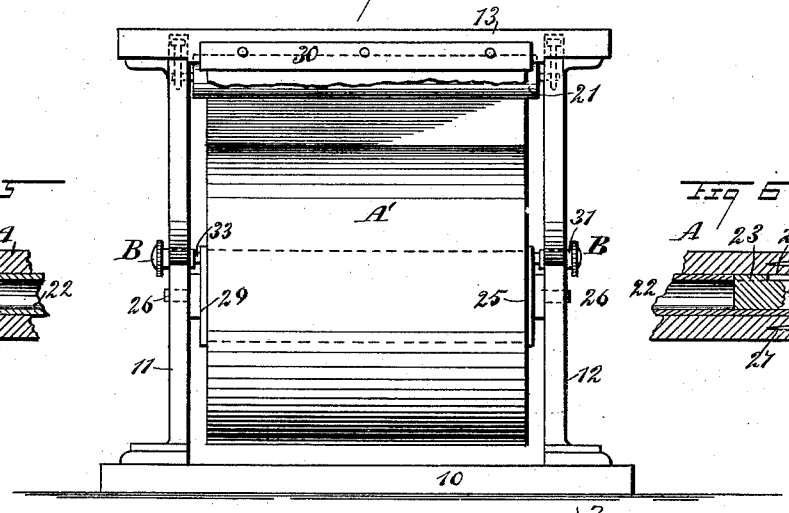


Fig 5

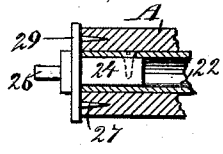
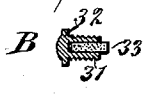


Fig 6

Fig 8



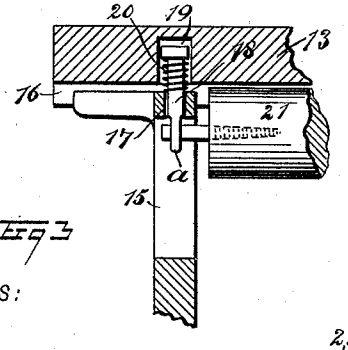


Fig 3

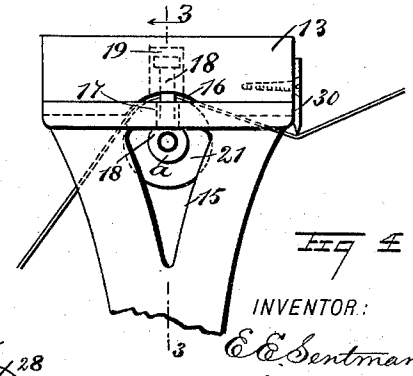


Fig 4

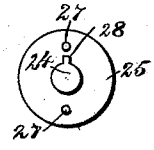


Fig 7

WITNESSES:

H. Walker

C. Sedgewick

INVENTOR:

E. E. Sentman

BY Munn & Co

ATTORNEYS

UNITED STATES PATENT OFFICE.

EDWIN E. SENTMAN, OF PHILADELPHIA, PENNSYLVANIA.

ROLL-PAPER HOLDER AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 477,580, dated June 21, 1892.

Application filed April 18, 1891. Serial No. 389,412. (No model.)

To all whom it may concern:

Be it known that I, EDWIN E. SENTMAN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Roll-Paper Holders and Cutters, of which the following is a full, clear, and exact description.

My invention relates to an improved roll-paper holder and cutter, and has for its object to provide a holder adapted to contain wrapping-paper in rolls or toilet-paper, and to so construct the holder that the loose end of the paper will be at all times held in a position to render it readily accessible, and also whereby the paper may be expeditiously and conveniently cut in desired lengths.

Another object of the invention is to provide a means whereby a roll of paper may be readily placed in the holder and the reel removed from the holder, and a further object of the invention is to provide tension devices of simple construction, whereby the roll of paper may be more or less tightly held in the holder, so as turn more or less freely.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the holder, illustrating a roll of paper in position therein. Fig. 2 is a front elevation looking in the direction of the arrow 2 in Fig. 1. Fig. 3 is a vertical section taken through one of the sides and top bar of the frame, the section being practically indicated by the line 3 3 of Fig. 4. Fig. 4 is an enlarged view of the upper portion of one of the sides of the holder. Figs. 5 and 6 are sectional views of the extremities of the reel-shaft, also illustrating the manner of fixing the reel upon the shaft. Fig. 7 is an inner face view of one of the binding or clamping plates, and Fig. 8 is a detail sectional view of one of the tension devices.

The main body of the frame usually consists of a base-plate 10, standards 11 and 12, projected upward from the base, one near each end, and a top plate 13, secured to the standards in any suitable or approved manner. The standards at or near their central portions are provided with a downwardly-curved recess 14, produced in their forward edges, and near the top of each standard an opening 15 is preferably produced. The under face of the top plate or board 13 is provided with a longitudinal preferably central channel or groove 16 semicircular in cross-section, and in the upper wall of the opening 15 in each standard a vertical aperture 17 is made, through which the body of a bolt 18 is projected upward within recesses 19 in the under surface of the top plate or board, the said recesses 19 being made in the central portion of the channel 16, as illustrated in Fig. 3. The lower end of each bolt 18 is preferably formed with an eye *a*, and the upper portion of each bolt is surrounded by a spring 20, having a bearing upon the top of the standards and against heads produced upon the bolts, as is likewise best shown in Fig. 3. The eyes *a* of the bolts are adapted to form bearings for the trunnions of a roller 21, the said roller being held by the springs 20 normally in engagement with the wall of the groove or channel 16, in which groove or channel the roller neatly fits.

The reel A, upon which the paper A′ is wound, is loosely mounted upon a shaft 22, which shaft is preferably tubular and provided at one end with a key-slot 23. The slotted end of the shaft is adapted to receive a stud 24, which is produced upon the inner face of a clamping-plate 25. Upon the outer face of the plate a trunnion 26 is formed, and the inner face of the plate is provided with a series of pins or spurs 27. The stud 24 of the clamping-plate is provided with a key 28, which key enters the slot 23 in the reel-shaft when the stud is located within the shaft, as is best illustrated in Fig. 6. A second clamping-plate 29 is located at the opposite end of the shaft. The stud 24 of this latter clamping-plate enters the shaft and is attached thereto by means of a screw or equivalent fastening device, as illustrated in Fig. 5, and the plate 29 is provided, also, with a trunnion 26 and spurs or pins 27. It is evident that the clamping-plate 25 may be readily removed

from engagement with the reel-shaft and is removed to place the reel upon the shaft. When the reel is in position upon the shaft, it is penetrated at one end by the spurs 27 of the plate 29, and when the plate 25 is placed in position its spurs enter the opposite end of the reel. Thus the reel is firmly connected with the plates and the plates with the shaft, and when the trunnions of the plates are entered into the recesses 14 in the frame the roll of paper may be readily turned upon the trunnions. The free end of the paper is passed between the upper surface of the roll 21 and the groove or channel 16, and said free end of the paper is pressed downward, enabling it to be readily grasped, when required, by means of the roller 21 crowding it in the channel 16, which result is accomplished through the medium of the springs 20.

A knife 30, of any approved construction, is located upon the frame at any point where the paper may be conveniently carried to be separated into lengths. In the drawings the knife is illustrated as being attached to the front face of the top plate or board 13. The roll of paper may be made to turn more or less freely through the medium of tension devices B. (Illustrated in Fig. 8.) The tension devices each consist of a plug 31, exteriorly threaded and provided at its outer end with a suitable cap or knob 32. The plug is hollow, and into the hollow portion thereof a block or pencil 33, of rubber or a like material, is entered and secured, the said block or pencil being adapted to extend beyond the inner end of the plug.

Above the recess 14 in the side pieces of the frame threaded apertures are produced, and the plugs are screwed into said apertures in such manner that the projecting ends of the elastic material may engage with the outer faces of the clamping-plates, as shown in Fig. 2. The roll of paper may be freely moved when the tension devices are out of engagement with the clamping-plates, and the roll may be made to turn more or less hard by causing the tension devices to bear to a greater or less degree against the clamping-plates of the reel.

I desire it to be understood that the knife and the roller 21 may be located at the bottom of the frame when occasion may demand, the location of the roller 21 being regulated by the position that the frame is adapted to occupy.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the roll-paper holder having standards provided with slots 15 and apertures 17, of the cross-piece 13, grooved on its under side and provided with sockets 19, the bolts 18, extending through apertures 17 up into sockets 19 and having eyes on their lower ends within slots 15 and heads on their upper ends, the springs 20 on the bolts between their heads and the upper surfaces of the standards, and the roller 21, extending along the groove and journaled at its ends in the bolt-eyes, substantially as set forth.

2. In a roll-paper holder and cutter, the combination, with standards containing bearings, of a shaft adapted to pass through the reel and provided at its ends with plates, both plates being provided upon their outer faces with trunnions and upon their inner faces with spurs and a central stud, the stud of one plate being rigidly secured to the shaft and the stud of the opposite plate provided with a key adapted to enter a slot in the shaft, and tension devices located in the standards and adapted to engage with the plates, the said tension devices being provided with a flexible inner surface, as and for the purpose specified.

3. The combination, with the reel-shaft having a slot at its ends, of the plate 28, of greater diameter than the shaft and having a stud 24 on its inner side to enter the end of the reel-shaft and provided with a tongue engaging said slot, parallel penetrating-pins also on the inner face of the plate beyond the reel-shaft, and the trunnion on the outer face of the plate, substantially as set forth.

EDWIN E. SENTMAN.

Witnesses:
J. M. ROBERTS,
W. T. HARDESTY.