Dec. 23, 1952 W. BENKE 2,622,814

PAPER ROLL HOLDING DEVICE

Filed Aug. 30, 1950

Fig. 1.

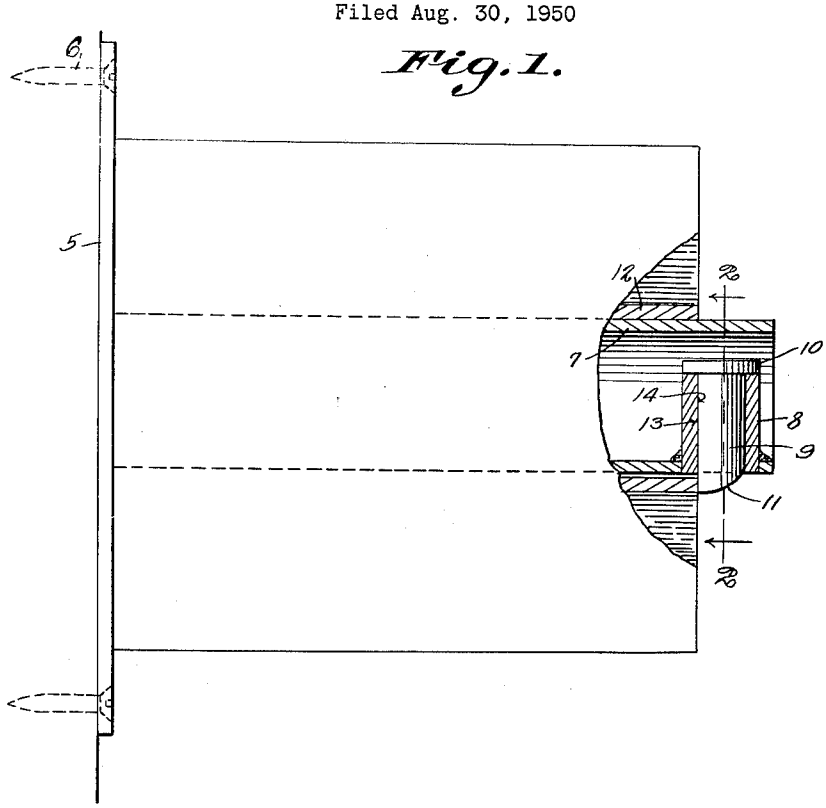


Fig. 2.

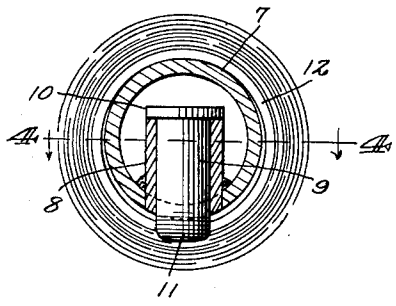


Fig. 3.

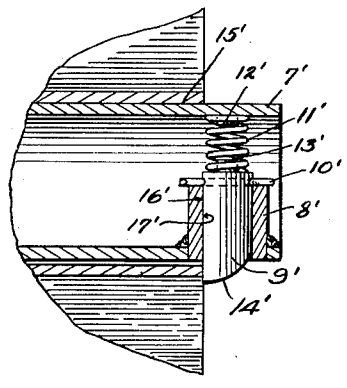
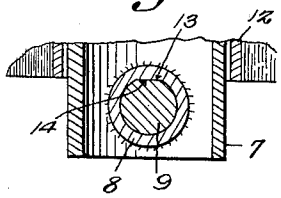


Fig. 4.



W. Benke

INVENTOR

BY C. A. Snow & Co.

ATTORNEYS.

Patented Dec. 23, 1952

2,622,814

UNITED STATES PATENT OFFICE

2,622,814

PAPER ROLL HOLDING DEVICE

William Benke, San Antonio, Tex., assignor of ninety per cent to Martin A. Bauml, San Antonio, Tex.

Application August 30, 1950, Serial No. 182,320

1 Claim. (Cl. 242—55.2)

1

This invention relates to paper roll holding devices, the primary object of the invention being to provide a paper roll holder wherein the paper roll may be readily and easily placed on the holder by merely positioning one end of the roll to be supported on the holder, over one end of the holder and forcing the roll of paper longitudinally of the holder, eliminating the necessity of using both hands in positioning the roll, thereby simplifying the positioning and handling of the roll.

An important object of the invention is to provide a device of this character including a vertically movable pin adapted to extend to a position to engage the outer end of the paper roll to prevent accidental displacement thereof while in use.

Still another object of the invention is to provide means for frictionally engaging one end of the paper roll supported on the holder to prevent overrunning of the roll when the paper is pulled therefrom, thereby reducing waste of the paper, to a minimum.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts, hereinafter more fully described and pointed out in the claim it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

Referring to the drawing:

Figure 1 is an elevational view of a roll holder constructed in accordance with the invention, illustrating a paper roll as mounted thereon.

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is a fragmental sectional view of a modified form of paper roll holder.

Fig. 4 is a sectional view taken on line 4—4 of Fig. 2.

Referring to the drawing in detail, the holder comprises a plate 5 which is formed with openings to receive the screws 6, whereby the plate 5 may be securely fastened to a supporting surface.

Extending from the plate 5 and disposed in a horizontal position, is the hollow supporting arm 7, which is of a length slightly greater than the length of the paper roll supported thereon, the hollow supporting arm being provided with the tubular guide 8 that extends inwardly from the wall thereof, the tubular guide having one of its ends flush with the outer wall of the supporting arm as shown by Fig. 1 of the drawing.

2

Mounted for vertical sliding movement in the tubular guide 8, is the pin 9, which has the head 10 at its inner end, the head 10 resting against the inner end of the tubular guide 8 to restrict outward movement of the pin. As clearly shown by Fig. 1 of the drawing, the pin is of a length slightly greater than the length of the tubular guide 8, the free end of the pin being beveled at 11 providing a cam surface to be engaged by the tubular core of the roll, indicated at 12, so that when one end of the tubular core is positioned against the beveled end 11 and the paper roll forced inwardly towards the plate 5, the pin 9 will be forced inwardly permitting the paper roll to be properly positioned. It is obvious that when the roll has been positioned on the arm 7, as shown by Fig. 1 of the drawing, the pin will drop down over the outer end of the tubular core 12 and restrict outward movement of the paper roll. It is further pointed out that the frictional contact between the pin 9 and core 12 will retard rotary movement of the paper roll to such an extent as to prevent overrunning of the roll to unwind an excess amount of paper from the roll.

In order that the pin 9 will be prevented from rotating within the supporting arm 7, the pin 9 is formed with a flattened portion 13 that rides over the flattened portion 14 formed on the inner surface of the tubular guide 8.

In the form of the invention as shown by Fig. 3 of the drawing, the supporting arm is indicated by the reference character 7' and is provided with the tubular guide 8' in which the pin 9' moves, the pin 9' being provided with an opening through which the pin 10' extends, the pin providing a stop for engaging the inner end of the tubular guide 8 to restrict outward movement of the pin 9'. The reference character 11' indicates a coiled spring which has one of its ends positioned over the lug 12' formed within the hollow supporting arm 7', while the opposite end of the spring engages over the lug 13' formed on the inner end of the pin 9'. The action of this spring is to normally urge the pin 9' outwardly or to the position as shown by Fig. 3.

The outer end of the pin 9' is beveled at 14' so that the core 15' of the roll when positioned against the beveled end, will cause the pin to slide inwardly as the paper roll moves beyond the pin 9', the pin will snap outwardly to the position shown by Fig. 3, securely holding the paper roll on the hollow supporting arm.

The pin 9' is also formed with a flat portion 16'

that engages the flat portion 17' formed on the inner surface of the tubular guide 8', to prevent rotation of the pin 9'.

From the foregoing it will be seen that when it is desired to support a paper roll on the device, it is only necessary to force one end of the roll over the beveled end of the pin, which forces the pin inwardly, the pin being moved to its securing position, when the outer end of the paper roll clears the pin.

Having thus described the invention, what is claimed is:

In a roll holder, a supporting plate, a hollow horizontal supporting arm secured to the plate and extending therefrom, a vertical tubular guide member mounted within the supporting arm adjacent to the free end thereof, said tubular guide extending transversely through the wall of the supporting arm, a vertically sliding pin mounted within said guide, means for preventing rotation of the pin within said guide, said pin extending beyond the wall of the tubular guide providing a

stop for engagement with a roll positioned over the supporting arm, holding said roll on the arm, a coiled spring mounted within the hollow supporting arm between the inner end of the pin and wall of said tubular guide normally urging said pin through the guide, said pin having a beveled edge engaged by the roll positioned over the supporting arm and adapted to cam the pin inwardly when the roll is pushed towards the supporting plate.

WILLIAM BENKE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,179,924	Howell	Apr. 18, 1916
1,379,408	Holden	May 24, 1921
1,684,190	Moser	Sept. 11, 1928
2,171,648	Ennis et al.	Sept. 5, 1939