(No Model.) 2 Sheets—Sheet 1.

G. W. SPRAGUE & J. STUDER.

WRAPPING PAPER HOLDER, PRINTER, AND CUTTER.

No. 421,776. Patented Feb. 18, 1890.

Fig. 1.

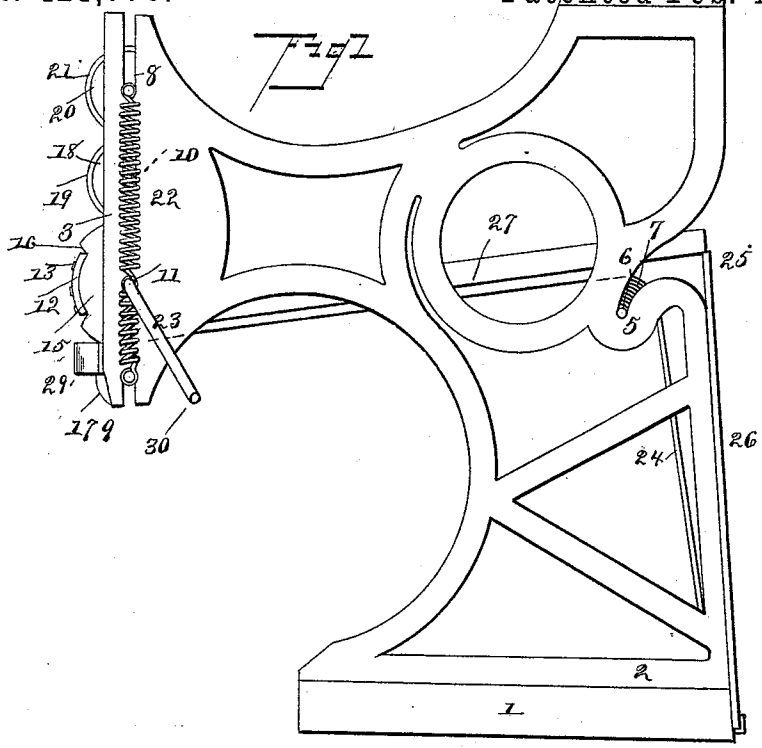
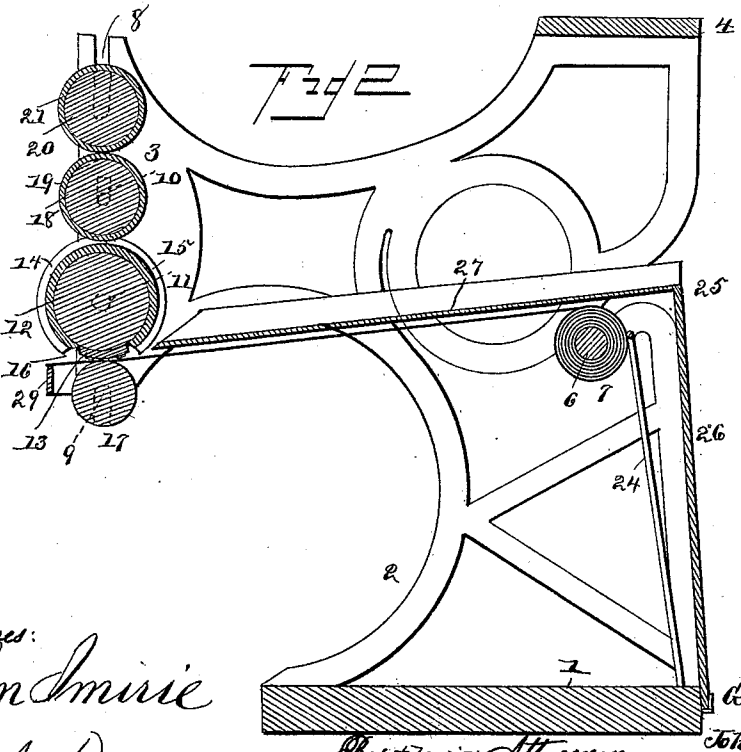


Fig. 2.



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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

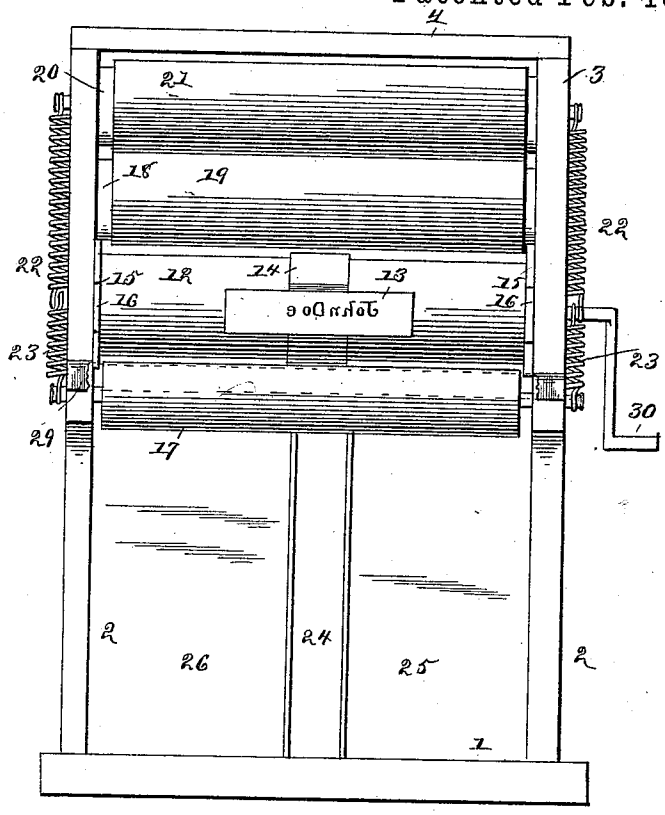
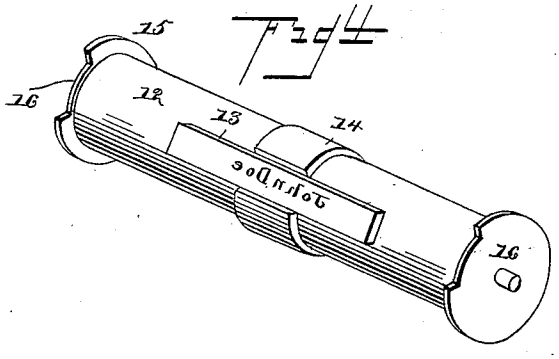


Fig. 4.



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UNITED STATES PATENT OFFICE.

GEORGE W. SPRAGUE AND JOHN STUDER, OF COLUMBUS, OHIO.

WRAPPING-PAPER HOLDER, PRINTER, AND CUTTER.

SPECIFICATION forming part of Letters Patent No. 421,776, dated February 18, 1890.

Application filed April 23, 1889. Serial No. 308,247. (No model.)

To all whom it may concern:

Be it known that we, GEORGE W. SPRAGUE and JOHN STUDER, citizens of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Wrapping-Paper Holder, Printer, and Cutter, of which the following is a specification.

This invention has relation to wrapping-paper holders, printers, and cutters for service in stores; and among the objects in view are to provide a cheap and serviceable device adapted to hold a roll of paper and deliver the same over a fixed blade, whereby it may be cut by hand into sheets of desired length, and also to provide an automatic means for printing the paper at intervals, and means for elevating the printing surface or roll from contact with the paper between the series of impressions, whereby smearing of the paper is avoided.

A further object of the invention is to provide the device with a table adapted for supporting paper bags and other loose sheets, and for delivering the same between the printing-roll and the platen-roll.

Numerous other advantages and objects of the invention will hereinafter appear, and the novel features will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 represents a side elevation of a paper-holder constructed in accordance with my invention; Fig. 2, a longitudinal vertical section of the same; Fig. 3, a front elevation, and Fig. 4 a detail in perspective of the printing-roll.

Like numerals of reference indicate like parts in all the figures of the drawings.

At each side of a suitable base 1 are mounted standards 2, preferably of cast metal and of suitable scroll design to lend ornamentality to the device. The standards 2 are provided with a forwardly-projecting roll supporting arms 3, arranged opposite each other, and are connected at their top and at their rear end by a suitable cross-plate 4, and at their rear ends is also provided a bearing 5, in this instance formed as a part of the scroll-work and open at their upper ends for the ready reception and removal of the shaft 6 of a paper-roll 7.

The upper and lower ends of the forwardly-projecting arms 3 of the frames 2 are provided with vertical slots 8 and 9, respectively, and with an intermediate slot 10 and a bearing 11. In the bearing 11 is mounted a printing-roll 12, having a printing-surface 13, which may consist of any suitable die—as, for instance, a rubber pad, as herein shown—and with a friction-strip 14, occupying the remainder of the circumference of the printing-roll. At each side of the roll 12 are mounted cams 15, having a portion of their face cut away, as at 16, said portions registering with the printing-plate 13. Below the roll 12, and mounted in the vertical slots 9, is a platen-roll 17, preferably formed with a hard surface and yieldingly supported within the slot 9, as will be hereinafter described.

Mounted in the slotted bearings 10 is an inking-roller 18, the surface of which is provided with an inking-pad 19, and over said roller, in the vertical slots 8, is mounted an ink-distributing roller 20, having an ink-absorbing pad 21 encircling the same. From each of the shafts of the roll 20, which will be understood as projecting beyond the side frames 2, there depend coiled springs 22, which are removably connected with similar coiled springs 23, connected to the ends of the platen-roll 17, whereby it is apparent that the latter roll is suspended within its slotted bearings 9, and the roll 20 and the platen-roll are yieldingly held in position. A spring-tongue 24 projects upwardly from the base 1, or it may be from any other portion of the frame-work, and presses lightly against the paper-roll 7 and gives to the latter the necessary tension.

25 represents an inverted-L-shaped table, the rear wall 26 of which forms a back for the device as a whole, and the upper wall 27 forms a slanting table, located between the two side frames 2, and terminates at about the point of contact between the roll 12 and the platen 17. Opposite this point of contact, referred to above, and secured to the opposite end of the forwardly-projecting arms 3, we mount a fixed knife or blade 29. Upon the shaft of the roll 12 we mount an ordinary crank-handle 30.

The operation of our invention is as follows:

By drawing the leading end of the paper between the rolls 12 and 17, or by accomplishing the same by revolving the crank 30, the friction-strip 14 acts to feed the paper over the fixed knife 29. The outer peripheral edges of the cams 15 are in contact with the roll 18, except at the time when the printing-surface is adjacent to the same, when the recesses 16 in the cams permit of contact between the printing-surface and the ink-roller, and the operation of drawing the paper is progressed with until the printing-surface 13 is brought about in line with the roll 17. At this point it will be noticed the printing-surface takes the place of the friction-strip 14 and is brought in contact with the moving paper, whereby an impression of the surface is given to the paper. By further drawing the paper until a suitable quantity is secured the same may be severed against the fixed knife 29 and used for wrapping purposes and bearing the address of the shop-keeper or other advertisement. After the printing-surface has been passed the friction-strip 14 again comes in contact with the paper, and so the operation is continuous. It will be noticed that by reason of the cams 15 the ink-roll 18 and its pad 19 will be prevented from coming in contact with any other portion of the roll 12 other than the printing-surface, as the cams will come in contact with the roll 18 and elevate the same in the slot 10, and when the cutaway portions of the cams are in line with the roll 18 the spring 22 serves to draw the roll 20 upon the roll 18 and force the latter in contact with the printing-surface.

It will be understood that the ink is fed to the pad 21 and the roll 20 and evenly distributed over the inking-pad 19 on the roll 18, and thence to the printing medium.

By the provision of the table 25 loose bags and other sheets of paper may be fed through the printing mechanism, in which case the leading end of the paper web had best be withdrawn from between the rolls 12 and 17. When the web alone is used, the operating-crank 30 is unnecessary, and is especially designed for use where independent sheets or bags are fed under the printing medium.

Having thus described our invention, what we claim is—

1. The combination, with the inking-roller and the platen-roller, the former being yieldingly mounted, of the interposed printing-roller provided at opposite ends with peripheral flanges having opposite recesses, said flanges being interposed between the printing-roller and ink-roller and outside of the ends of the platen-roller, a printing-surface mounted upon the periphery of the printing-roller opposite the recesses, and a friction-strip occupying the remaining portion of the periphery of said roller and maintained out of contact with the inking-roller and adapted for contact with the platen-roller when the same is not in contact with the printing-surface, substantially as specified.

2. The combination, with the base 1, having the sides 2, provided with bearings 5, and forwardly-projecting arms 3, provided with the bearings 11 and slotted bearings 8 and 9 and intermediate bearing 10, of the paper-shaft 6, mounted in bearings 5 and carrying the paper-roll 7, a spring-tongue 24, for giving tension to the roll, the printing-roll 16, mounted in bearing 11, and having the printing-surface 13, the friction-strip 14, the end cams 16, and the crank 30, the platen-rolls 17, mounted in the bearings 9 and having the springs 23, the ink-roll 18, mounted in the bearing 10 and resting on the printing-roll, and the distributing-roll 20, mounted in the bearing 8 and provided with spring 22, connecting with the springs 23, all operating as and for the purpose set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

GEORGE W. SPRAGUE.
JOHN STUDER.

Witnesses:
T. W. HAMPTON,
JOHN WALSH.