C. F. CHRISTOPHER.

COMBINATION COMPUTING AND PAPER ROLL MACHINE.

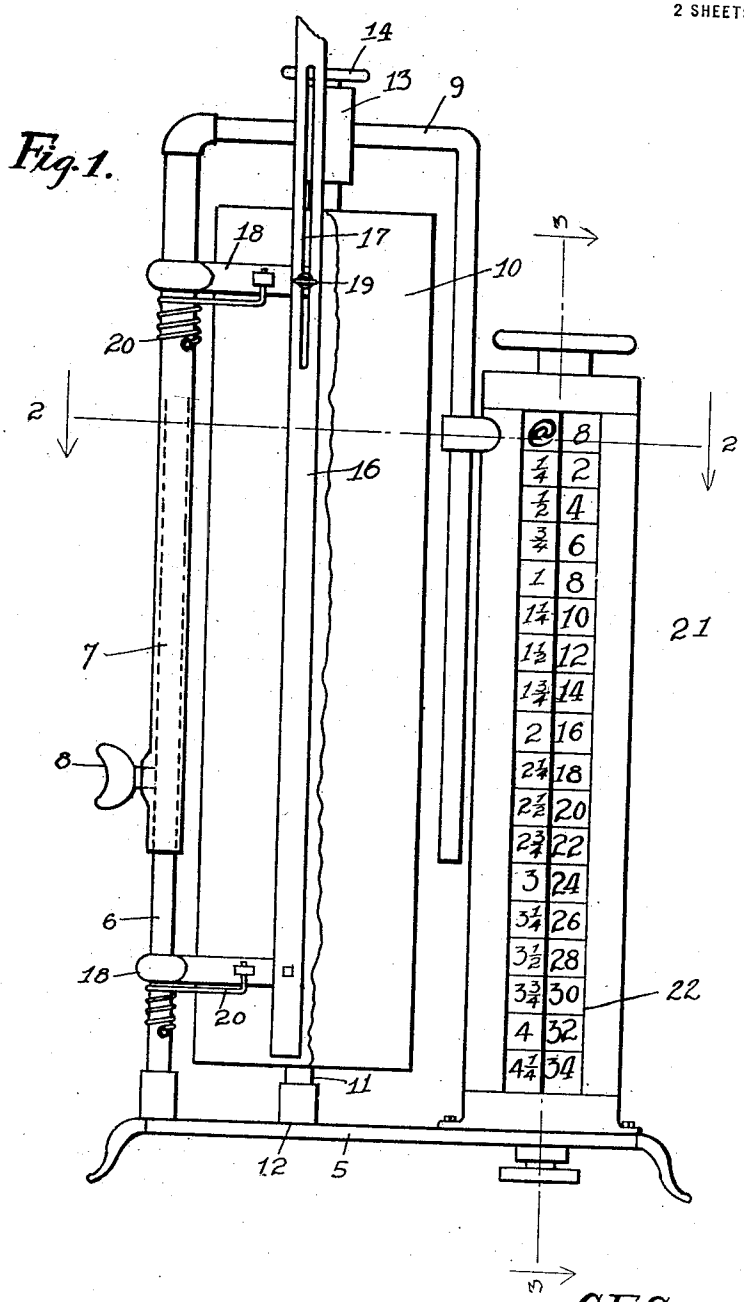
APPLICATION FILED JUNE 17, 1919.

1,381,541.

Patented June 14, 1921.

2 SHEETS—SHEET 1.

Fig. 1.



Witness

J. R. Inner

Inventor

C. F. Christopher

By C. A. Snow & Co.

Attorneys

C. F. CHRISTOPHER.

COMBINATION COMPUTING AND PAPER ROLL MACHINE.

APPLICATION FILED JUNE 17, 1919.

1,381,541.

Patented June 14, 1921.

2 SHEETS—SHEET 2.

Fig. 2.

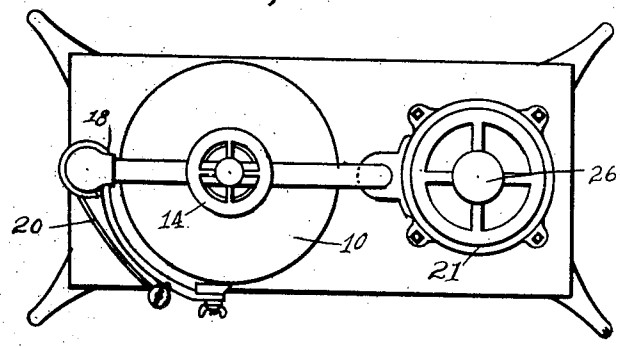
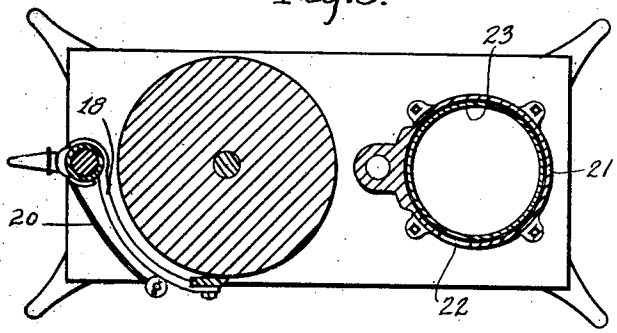


Fig. 3.



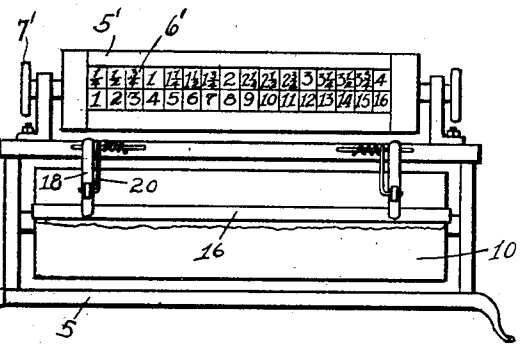


Fig. 5.

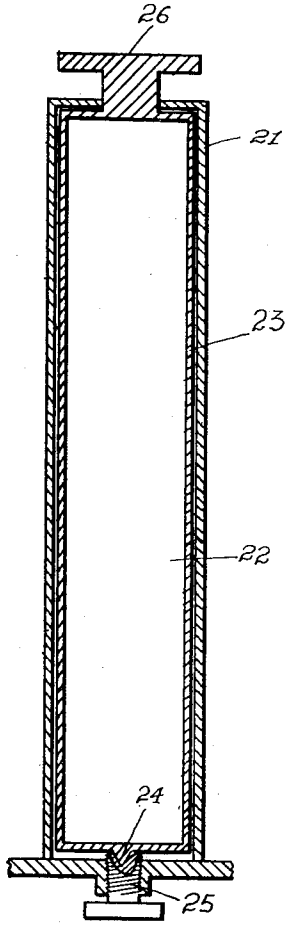


Fig. 4.

Witness

Inventor

C.F. Christopher

By C.A. Snow & Co.

Attorneys

UNITED STATES PATENT OFFICE.

CALVIN F. CHRISTOPHER, OF ASHEVILLE, NORTH CAROLINA.

COMBINATION COMPUTING AND PAPER-ROLL MACHINE.

1,381,541. Specification of Letters Patent. Patented June 14, 1921.

Application filed June 17, 1919. Serial No. 304,750.

To all whom it may concern:

Be it known that I, CALVIN F. CHRISTOPHER, a citizen of the United States, residing at Asheville, in the county of Buncombe and State of North Carolina, have invented a new and useful Combination Computing and Paper-Roll Machine, of which the following is a specification.

The present invention is a combination paper roll holder and computing machine; its principal object being to provide a paper roll holder which may be adjusted to paper rolls of different lengths and which will support the paper in a position to enable the operator to readily tear the required amount desired from the roll.

Still another object of the invention resides in the provision of a combined paper roll holder and computing machine the construction of which is compact and durable.

Another general object of the invention is to provide a computing mechanism which will enable a person to readily calculate the total cost of a given quantity of merchandise without necessitating the usual arithmetic.

An additional object of the invention is to provide a machine of this type for having the above characteristics which is simple in construction which consists of a few parts, and which may be manufactured and sold at nominal cost.

With the above and other objects in view, the invention consists of the combination of elements, constructions and arrangements, and general assemblage the details of which will be hereinafter enlarged upon in the following specification and recited in the subjoined claim.

On the drawings:—

Figure 1. is a side elevation of my improved paper roll holder and computing machine.

Fig. 2. is a plan view of the same.

Fig. 3. is a transverse sectional view taken on line 2—2 of Fig. 1.

Fig. 4. is a longitudinal sectional view of the computing mechanism taken on line 3—3 of Fig. 1.

Fig. 5. is a front elevation of a modified form of the invention.

Referring in detail to the drawings in which like characters of reference designate like parts in all the views, the numeral 5 designates a base from which extends the vertical rod 6 upon which is mounted for longitudinal adjustment, a tube 7 carrying a set screw 8, engageable with the rod 6 to retain the tube 7 in adjusted position. Connected with the upper end of the tube 7 is an inverted L shape rod 9. The paper roll is designated at 10 and is supported upon the usual shaft 11, the lower end of which is rotatable in a bearing 12 upon the base 5. The opposite end of the shaft is supported in a bearing 13 supported on the horizontal leg of the rod 9 and retained thereon by a set screw 14 which is carried by the bearing 13 and engages the rod 9.

A knife bar 16 is provided which lies against the paper roll and is formed with the longitudinal slot 17 at its upper end. The numeral 18 designates a pair of supporting arms one of which is loosely mounted on the rod 6 while the other is loosely mounted on the tube 7 adjacent the upper end thereof, the outer end of the lower arm 18 is fixed to the bar 16 while the outer end of the upper arm 18 is adjustably connected with the bar 16 through the medium of a set screw 19, carried by the arm and extending through the slot 17. Thus it will be seen that the tube 7 may be adjusted longitudinally to accommodate paper rolls of different lengths. In order to retain the cutter bar against the paper roll 10 coil springs 20 are provided one of which encircles the tube 7 and has one end engaged with the upper supporting arm 18, the remaining coil spring encircles the rod 6 and is extended laterally and engaged with the lower supporting arm 18. The computing mechanism consists of a hollow cylinder 21 supported upon base 15 and provided with a slot therein designated at 22. The outer face of the cylinder is provided with a column of figures indicating the quantity of purchase.

Rotatable in the cylinder 21 is a cylinder 23 the lower end of which is formed with a trunnion supported in an adjustable bearing 25 threaded in the base. The cylinder 23 is provided with vertical rows of figures upon the outer face which register with the respective figures on the cylinder 21, the uppermost figures indicating the price of one article or one yard or pound of an article of purchase, thus, as for example—"8" is the cost price of a whole unit, thus, 2 cents would be the cost of ¼ of a unit.

Should the quantity be "2 units" the number 16 would coincide therewith, thus indicating that the total cost of the purchase would cost sixteen cents. In order to rotate the cylinder 23 a handle or knob 26 is formed upon the upper end of the cylinder which extends through the upper cylinder 21. Extending laterally from the upper end of the cylinder 21 is an ear 21′ through which extends the vertical leg of the rod 9.

In Fig. 5 a modified form of the invention is illustrated which is mounted upon the conventional horizontal paper roll holder. Referring to Fig. 5, the paper roll holder is indicated at 5′ upon the upper cross bar of which is mounted the horizontal stationary cylinder which is identical to the embodiment of the invention first described, the only difference being the figures indicating the quantity are disposed horizontally along one edge of the slot. A rotatable cylinder 6′ is journaled in the cylinder 5′ and is provided with columns of figures that extend circumferentially of the cylinder and are adapted to coincide with the figures on the stationary cylinder. Knobs or handles 7′ extend from the ends of the rotatable cylinder whereby the latter is rotated to expose the figures contained thereon in the slot in the stationary cylinder.

The embodiments of the invention illustrated and described are examples of the invention but it will be understood that the same may be modified in many respects and that my limits of such modifications are only governed by what is claimed.

What is claimed is:—

In a paper roll holder a base, a vertical rod mounted thereon, an L shaped rod operatively connected with the first mentioned rod and capable of a vertical adjustment, a bearing mounted thereon to receive one end of a shaft, a second bearing on the base for receiving the opposite end of the shaft, a cutter bar having a longitudinal slot, a pair of spring actuated supporting arms, one of which is loosely mounted on the rod and has its outer end fixed to the lower end of the cutter bar while the other supporting arm is supported above the first mentioned supporting arm, and a set screw carried by the latter arm and extending within the slot in the cutter bar to permit the same to be adjusted longitudinally.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CALVIN F. CHRISTOPHER.

Witnesses:
BEN. LAWTON,
I. E. SIMPSON.