

W. C. GOODMAN.
EXPRESS RECEIPT BILLING MACHINE.
APPLICATION FILED JULY 31, 1911.

1,016,823.

Patented Feb. 6, 1912.

Fig. 1.

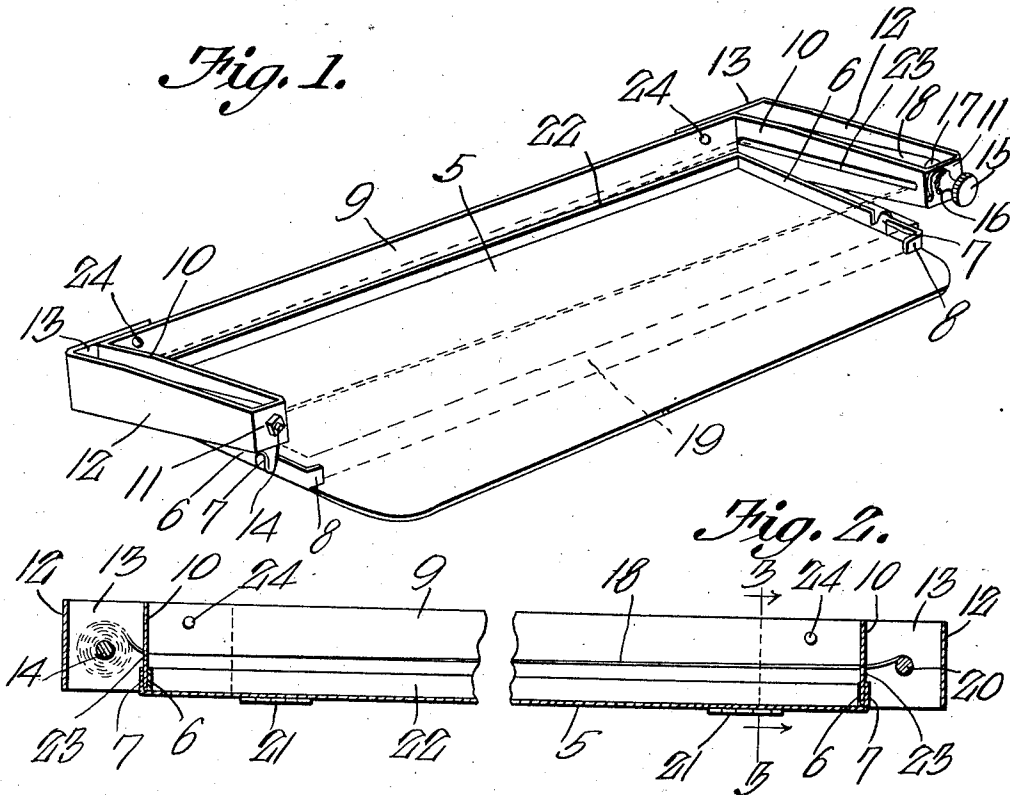


Fig. 2.

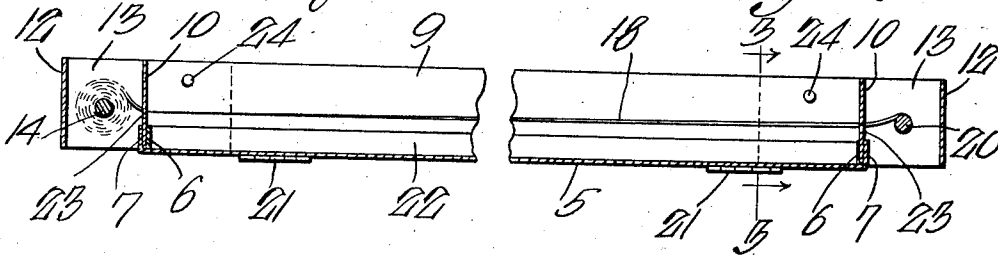


Fig. 3.

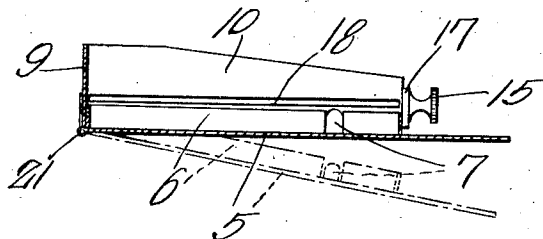
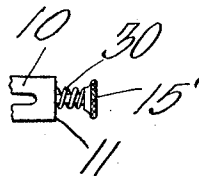


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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EXPRESS-RECEIPT-BILLING MACHINE.

1,016,823.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WARD C. GOODMAN, a citizen of the United States, residing at Walla Walla, in the county of Walla Walla and State of Washington, have invented a new and useful Express-Receipt-Billing Machine, of which the following is a specification.

This invention relates to billing machines for making a duplicate copy of orders, way-bills, and the like and is particularly adapted for use as an express receipt billing machine.

The invention has for its object to provide an improved device of this character which is cheap to manufacture, efficient and convenient in use and compact and simple in construction.

The device is embodied essentially in a base plate having means for retaining a stack or pad of blank receipt forms therein and a frame hingedly connected to said plate carrying a carbon sheet or tape of carbon paper, whereby the carbon paper can be swung to and from the blank forms on the plate for the reason to be hereinafter more fully described.

In the accompanying drawings which illustrate the invention, Figure 1 is a perspective showing the frame partly swung open. Fig. 2 is a longitudinal section. Fig. 3 is a cross section on the line 3—3 of Fig. 2, showing in dotted lines the plate partially swung open or away from the frame. Fig. 4 is an elevation of a fragmental portion embodying a modification.

Referring specifically to the drawings, the base plate 5 comprises a rectangular piece of sheet metal having the rear and side edges bent upwardly to form upstanding flanges 22 and 6 respectively, the side flanges 6 terminating short of the front edge of the plate and having the front extremities bent inward to form lips 8. A vertical ear 7 is struck out from each flange 6 near the front end thereof.

The frame comprises a strip of sheet metal 9 running along the back of the flange 22, and set on edge, and hinged to the rear edge of the plate 5 by hinges 21. The ends of this strip 9 are bent forward along the outer faces of the flanges 6 to form inside walls 10; bent outwardly at right angles to the walls 10 to form front end walls 11; then bent backward parallel to the walls

10 to form outside walls 12; and are thence bent inward as shown at 13 to form back walls and overlap the back portion 9 to be secured thereto by means of the rivets 24 as shown or in any other suitable manner. Elongated horizontal slots 23 are cut in the inside walls 10 and are normally in a plane above the upper edges of the flanges 6. These walls 10, 11, 12 and 13 form side arms of the frame which carry the tape of carbon paper.

Shafts 14 and 20 are mounted between the ends 11 and 13 in their respective side arms, the shaft 20 having a knurled knob or thumb piece 15 on one end thereof. The said knob is disposed outside of the end 11 and has a ratchet wheel 16 formed at the rear end thereof which is adapted to be engaged by a pawl or dog 17 mounted on the said end 11. The shaft 14 is adapted to hold a roll of tape or ribbon of carbon paper, which is passed through the slot 23 to be wound on the shaft 20 by a manipulation of the knob 15 which is prevented from reverse movement by the pawl and ratchet.

In use, the stack or pad of blank forms are contained within the flanges 22 and 6 as indicated in dotted lines 19 in Fig. 1 and have their faces disposed upwardly, being held within the said flanges by lips 8 and normally, when the frame is swung down, the carbon paper is arranged over same, the walls 10 resting within the outstruck ears 7 to hold the side arms in position. Then by raising the frame the carbon paper is raised from the forms and a sheet of same may be taken therefrom for the original receipt and after the frame is swung downward the said sheet is laid over the carbon paper, which has its coated surface disposed downwardly, and whatever is written or printed thereon is copied on the upper sheet of the forms below the carbon paper. When the upper sheet is filled out the same is removed and by swinging the carbon paper upward again the copy may be removed, leaving the device ready for repeated use. The forms being contained on the base plate provides for both a magazine for blank forms and a surface for writing, and the frame being unobstructed at the front renders it convenient to write on the blank placed on the carbon paper. By turning the knob 15 a new portion of the carbon paper can be

exposed as the same becomes worn out from use. It will therefore be seen that the object aimed at has been attained in a satisfactory and convenient manner and it is also understood that this device may be altered in its details of construction within the scope of the appended claims without departing from the spirit of the invention.

As shown in Fig. 4 the pawl and ratchet have been dispensed with and a coiled spring 30 is disposed between the knurled head 15 and the end 11, which provides for a frictional contact for holding the shaft 20 against unwarranted revolution. The said spring also gives an outward tension to the said shaft.

What is claimed is:—

1. A device of the character described comprising a base plate having means for holding a stack of forms thereon, and a frame formed of a strip of metal pivoted thereto having side arms for carrying carbon paper and shafts mounted in said side arms, one of said shafts being adapted to carry a roll of carbon paper and the other shaft being adapted to wind up the said carbon paper.

2. A device of the character described comprising a base plate, a frame formed of a strip of metal set on edge having the intermediate portion hinged to the rear edge

of the plate and the ends bent forwardly, then outwardly, then rearwardly, and then inwardly and secured to the said intermediate portion, the said forwardly bent portions having elongated slots therein, and shafts carried by the ends of said strip.

3. A device of the character described comprising a base plate formed from a piece of sheet metal having the rear and side edges upturned to form flanges and the front ends of said flanges intumed to form lips and having ears struck out from the said flanges near the front ends thereof, a frame formed of a strip of metal set on edge and the intermediate portion hinged to the rear edge of the plate and the ends thereof bent forwardly, then outwardly, then rearwardly, and then inwardly and secured to said intermediate portion, the said forwardly bent portion having elongated slots therein and being adapted to set within the said ears, and shafts carried by the ends of the said strip.

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

WARD C. GOODMAN.

Witnesses:

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H. S. JACKSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."