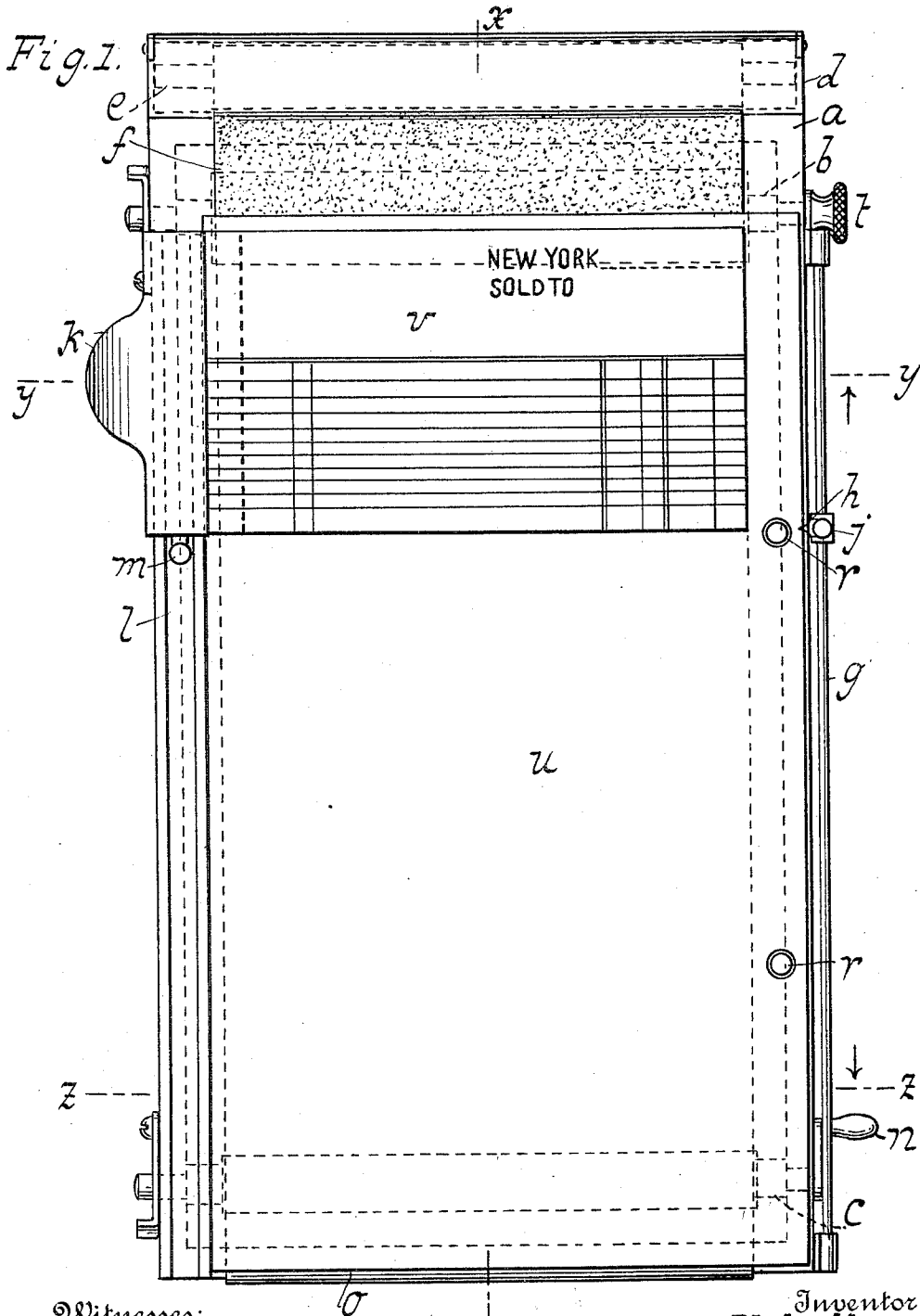


P. HANO.
 MANIFOLD BILLING DEVICE.
 APPLICATION FILED MAR. 30, 1912.

1,044,649.

Patented Nov. 19, 1912.

2 SHEETS—SHEET 1.



Witnesses:
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 Chas. J. Christaedt

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 Philip Hano
 By his Attorneys
 Hauff & Barlow

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2 SHEETS—SHEET 2.

Fig. 2.

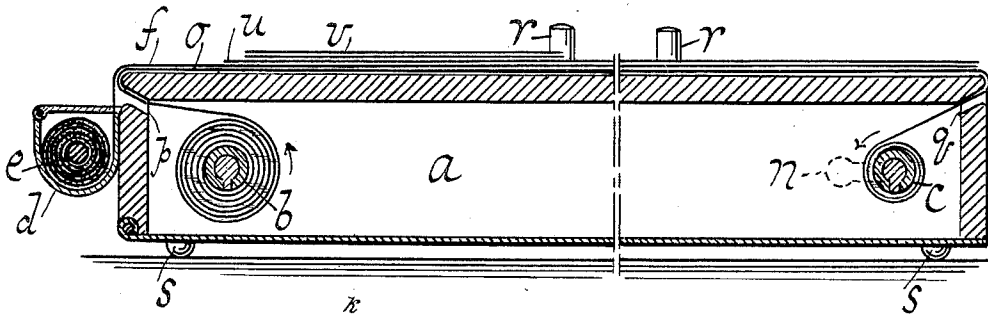


Fig. 6.

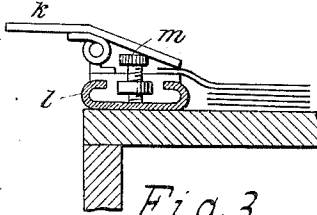


Fig. 3.

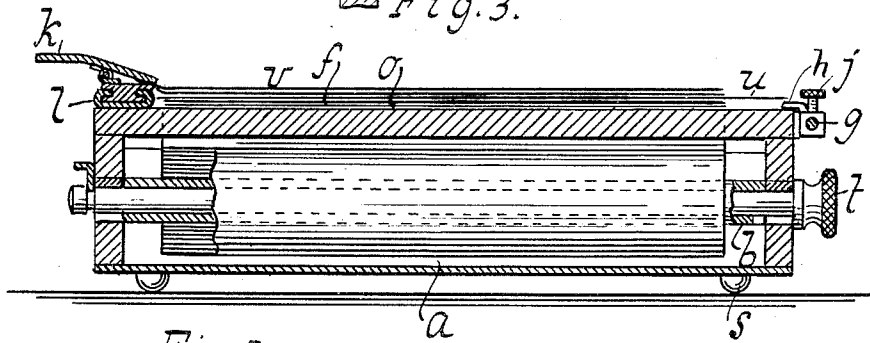


Fig. 5.

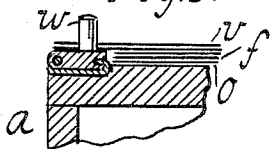
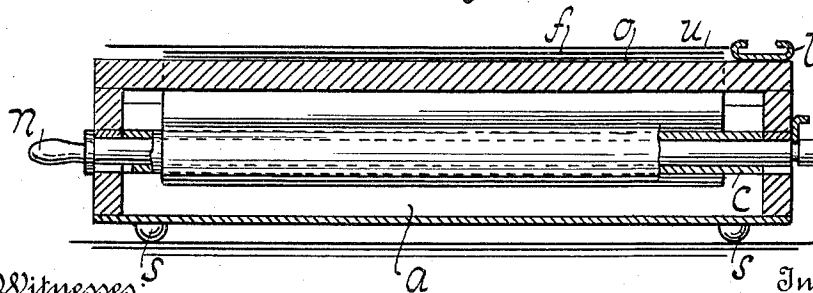


Fig. 4.



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UNITED STATES PATENT OFFICE.

PHILIP HANO, OF NEW YORK, N. Y.

MANIFOLD BILLING DEVICE.

1,044,649.

Specification of Letters Patent.

Patented Nov. 19, 1912.

Application filed March 30, 1912. Serial No. 687,418.

To all whom it may concern:

Be it known that I, PHILIP HANO, a citizen of the United States, residing at New York, county of New York, and State of New York, have invented new and useful Improvements in Manifold Billing Devices, of which the following is a specification.

This invention relates to a manifolding register in which a supply roller and a rewinding roller are rotatably mounted in a casing while the web from the supply roller passes over the top of the casing and is connected to the rewinding roller. One or any number of loose sheets with carbon paper between them can be arranged on top of the record web so that when one of the top sheets is written the impressions will be transferred by means of the carbon paper to the record web. An unwritten part of the web can then be conveniently unrolled from the supply roller by the operation of winding the written portion of the web on the rewinding roller. The unwinding of the record web from the supply roller is thus controlled by the winding roller, and the invention is designed to retain the carbon copy on the rewinding roller within the casing.

My invention is particularly applicable to the work of large shipping houses where it is desirable to make and at the same time retain one or more copies of a bill, order, form of receipt, drivers' delivery slips, etc.

In the accompanying drawings, Figure 1 is a top or plan view of my device. Fig. 2 is a longitudinal section along the line $x-x$ of Fig. 1. Fig. 3 is a cross section taken on the line $y-y$ of Fig. 1. Fig. 4 is a cross section taken on line $z-z$ of Fig. 1. Fig. 5 is a modification of a clasp or holder. Fig. 6 is a detail view partly in section illustrating the slidable clasp and the manner in which the part thereof which moves in the runway is held in various positions of adjustment.

The device consists essentially of a casing a preferably rectangular in form; in this casing at each end are rollers designated b and c . At the head of the box is a metal receptacle or trough d in which is arranged a roller e on which is wound a roll of carbon paper f . At the right hand side of the frame a is a rod g on which is slidingly mounted a pointer h which may be secured in any desired position by a set screw j . On the left hand side of the frame a and on top

thereof is a spring clip or clasp k of usual construction. This clasp k travels in a grooved runway l mounted on top of the left hand side of the frame and the clasp k may be secured and held in any desired position by a thumb screw m . The thumb screw is threaded in a projecting lower portion of the clasp (see Fig. 6) and when tightened the stem of the screw will engage the runway l thus preventing sliding movement of the clasp.

Instead of the clasp or holder k I may use the holder shown in Fig. 5 which consists of a flat metal holder traveling in guides and having posts w , and the bill head on which the writing is to be done will have two or more holes cut through it corresponding to the number of posts on the holder. The roller c has a crank handle n arranged at the side of the casing. The supply roller b is provided with a roll of paper o which passes through an aperture p in the front of the casing a and is carried along the top of the casing a its full length to the rear end where it passes through another opening q and is secured to the rear rewinding roller c . The apertures p and q are not quite as wide as the top of the frame a , the length of these apertures being about the same as the inside dimensions of the casing a . On the right hand side of the casing are secured two posts r .

If desired the apparatus may be mounted on either metal or rubber feet s . The frame a may also be made with a hinged bottom as shown in Figs. 2 and 4 which can be locked if desired. The supply roller b has a knob or knurled head t to facilitate rolling.

The operation of the device is as follows: A roll of paper o is arranged on the supply roller b , the end passed out through the aperture p and carried along the top of the casing a until it reaches the aperture q at the lower end of the casing where it is inserted and fastened to the winding roller c . Over this web of paper o is placed a sheet of carbon paper f ; over this sheet of carbon paper if desired may be placed a large sheet of paper u nearly the size of the top of the casing a . This large sheet of paper has holes punched through it corresponding to the posts r shown in Fig. 1, and this sheet of paper is placed over the posts r to hold it in place. Above the sheet of paper may be placed another small sheet of carbon paper (not shown) under a bill head v . The oper-

ator then writes whatever may be desired on the bill head. This is of course duplicated by means of the carbon to the sheet of paper *u* and also by means of the carbon sheet *f* to the web of paper *o*. The roller *c* is then turned and the writing is wound on to the roller *c* and at the same time a loose copy is taken on the sheet *u*. Of course if desired there may be any number of carbon sheets and any number of sheets corresponding to the sheet so that the operator may take as many loose copies as desired and at the same time have a permanent record which is retained on the rewinding roller. The pointer *h* may be moved along to indicate where the last bill was written and the clasp *k* can be moved up or down the casing to any desired position.

It will thus be seen that I am enabled to use in my apparatus flat sheets of writing paper, flat sheets of carbon paper and at the same time rolls of writing paper or I may use in my apparatus flat sheets of writing paper rolls of carbon paper and rolls of writing paper.

I claim:

1. In a manifolding device, the combination with a suitably supported paper supply roller and a rewinding roller, of an interposed writing surface so that a web of paper, the movement of which is controlled by the rewinding roller, may be caused to periodically rest upon said writing surface, and a slidably mounted clasp arranged to move lengthwise of the writing surface for

holding a sheet of paper with carbon paper interposed between said sheet of paper and web of paper.

2. In a manifolding device, the combination with a suitably supported paper supply roller and a rewinding roller, of an interposed writing surface so that a web of paper, the movement of which is controlled by the rewinding roller, may be caused to periodically rest upon said writing surface, means for positioning a sheet of paper upon said writing surface, and a slidably mounted clasp arranged to move the length of the writing surface for holding a sheet of paper in definite relation to the first mentioned sheet of paper at the will of the operator.

3. In a manifold billing device, the combination with a casing, of a paper supply roller and a rewinding roller rotatively journaled in the casing, one end of the web from the supply roller being connected to the rewinding roller and adapted to pass over the top of the casing, a clamp to slidably move along the length of the casing for holding a sheet of paper with carbon paper interposed between the same and said web, and a sliding pointer to move along the longitudinal edge of the sheet.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

PHILIP HANO.

Witnesses:

PHILIP L. HANO,
EDWARD HANO.