

(No Model.)

W. L. EGRY.
AUTOGRAPHIC REGISTER.

No. 518,230.

Patented Apr. 17, 1894.

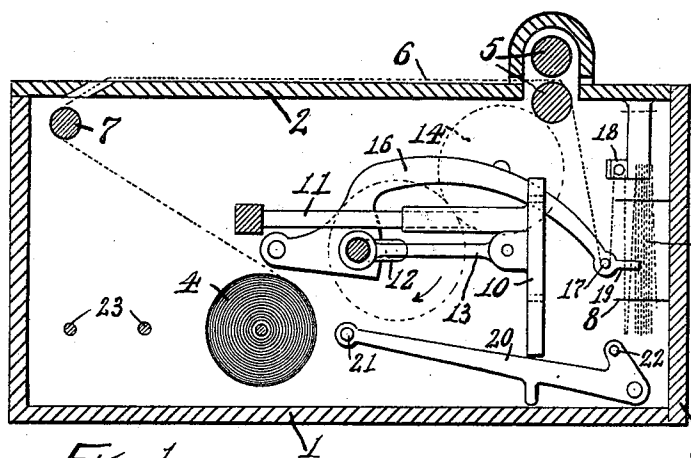


Fig. 1.

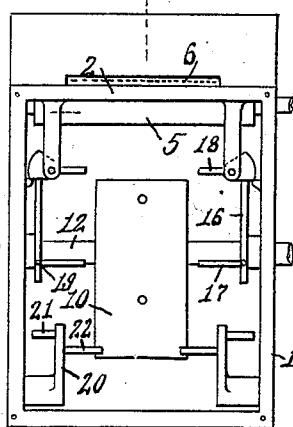


Fig. 3.

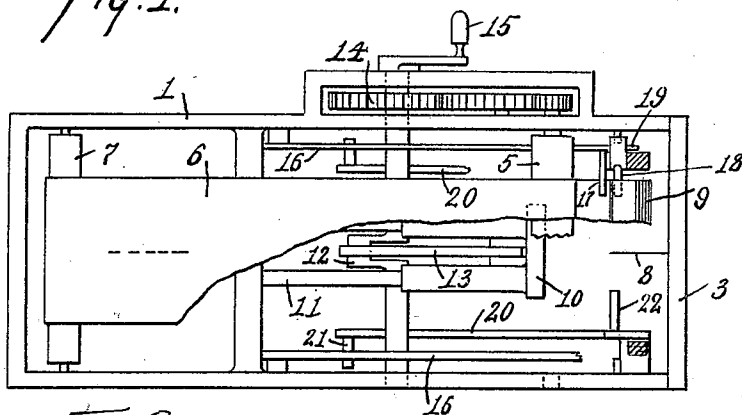


Fig. 2.

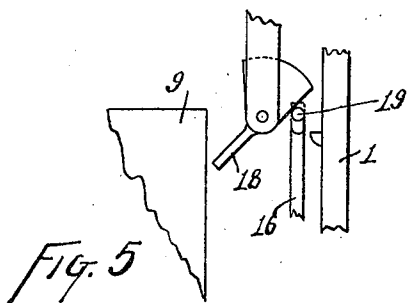


Fig. 5.

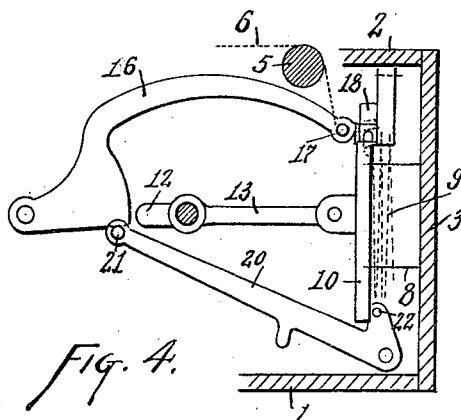


Fig. 4.

Witnesses:

W. S. Bollen.
P. P. Sherman.

William S. Egrý

Inventor

by James M. See

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM L. EGRY, OF DAYTON, OHIO.

AUTOGRAPHIC REGISTER.

SPECIFICATION forming part of Letters Patent No. 518,230, dated April 17, 1894.

Application filed August 2, 1893. Serial No. 482,211. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM L. EGRY, of Dayton, Montgomery county, Ohio, have invented certain new and useful Improvements in Autographic Registers, of which the following is a specification.

This invention pertains to that class of registering devices designed for receiving in strip form written memorandums. Registers of the class referred to are often used in commercial houses in checking cash sales, such registers may be briefly described as a casing containing a ribbon of paper on which the memorandum is to be made, the paper passing out from the casing over a tablet so writing may be done upon it and then again into the casing for storage of the successive written memorandums. In some cases several layers of paper are dealt with, with transfer paper between so that several copies of the memorandum may be made, one copy only going into the casing for storage.

My invention relates to a peculiar system of storage, the system consisting in giving to the strip of paper a succession of reversed folds and sticking the same upon stab wires. Heretofore the storage has been either by rolling up the strip, or by cutting off the separate memorandums and storing them loose or on stab wires, or by giving the strip reversed folds to be stored in a pile of folds.

My improvements will be readily understood from the following description taken in connection with the accompanying drawings, in which—

Figure 1, is a vertical longitudinal section of a register exemplifying my improvements; Fig. 2, a plan of the same with the top removed; Fig. 3, an end view of the same (right hand end of Fig. 1) with the end cover removed; Fig. 4, a vertical longitudinal section of a portion of the device, duplicating Fig. 1 but showing the parts in a different position of movement; and Fig. 5, an enlarged end elevation of parts appearing in Fig. 3.

In the drawings:—1, indicates the casing adapted to contain the mechanism and the supply of paper and the stored paper: 2, the top of the casing, over which the paper runs, forming the writing tablet: 3, the removable end cover of the casing, closing the front of the storage chamber: 4, the roll of paper for

use in making the memorandums which are to be stored: 5, feed rolls for drawing the paper forward from the supply roll 4 and passing it onward into the storage portion of the casing: 6, the paper from the supply roll to the feed rolls and lighting on the top 2 where it may be written on: 7, guide-roll for the paper as it passes from the supply roll up out of the top of the casing: 8, stab wires projecting inwardly from end cover 3, two of these wires being shown as a preferred number: 9, the stored paper in reversed folds stuck upon these stab wires after passing from feed-rolls 5: 10, a plate arranged to reciprocate to and from the end cover 3 and perforated for the stab wires so that as the plate reaches the ends of the stab-wires it will force the unstabbed folds of paper into the wires and push the lot of stabbed folds toward the end cover as the folds accumulate, the plate being considerably narrower than the paper: 11, stem and socket guides for plate 10: 12, a crank-shaft extending across the casing: 13, a link connecting the crank with the plate 10 so that at each rotation of the crank the plate is pushed forward into the stab-wires: 14, gearing connecting crank-shaft 12 and the feed-rolls so that all turn together, the gearing being so proportioned, with reference to the circumference of the feed-rolls, that one turn of the crank corresponds with such degree of rotation of the feed-rolls as will advance the paper twice the length of a single fold, that is to say, twice the length of the folds of paper as stored upon a stab-wire: 15, hand-crank for turning crank 12 and the feed-rolls and giving motion to all of the mechanism: 16, a pair of arms pivoted to the casing at each side thereof, their front ends extending forward to near the ends of the stab-wires but at the sides of the casing clear of the edges of the paper: 17, pins projecting inwardly from the forward ends of arms 16, the pins projecting inwardly far enough to pass the edges of the paper but not far enough to reach the edges of stab-plate 10, these pins, as their arms rise and fall, moving up and down a distance equal at least to the length of the folds of paper: 18, similar inwardly projecting pins mounted on pivots supported by the casing at the level of the upper portion of the stabbed

folds of paper, these pins projecting inwardly
 like pins 17, and having their outer ends
 weighted and resting on fixed studs so that
 the tendency of the pins is to occupy their
 5 inwardly projecting positions, the pivoting of
 these pins permitting them to be tipped down-
 wardly and outwardly as will be understood
 from Fig. 5, the pins 18 being forwardly beyond
 the plane swept by pins 17: 19, extensions on
 10 arms 16 adapted, when the arms rise, to en-
 gage under the outer ends of pivoted pins 18
 and tip pins 18 on their pivots as shown in
 Fig. 5: 20, a pair of arms pivoted in the base
 of the casing, one at each side of the casing:
 15 21, pins projecting from arms 20 under arms
 16 and adapted, as arms 20 rise, to engage
 under arms 16 and raise the latter arms: 22,
 pins projecting from arms 20 in front of the
 20 stab-plate 10 and adapted, as the stabbing
 plate is approaching its forward limit of
 stroke, to be engaged by the stabbing plate,
 whereby pins 20 are caused to rise and raise
 arms 16: and 23, rods on which may be mount-
 25 ed additional rolls of paper if the register is
 to be used in the ordinary way for duplicating
 purposes, the paper from such additional
 rolls going as usual over and along with paper
 6 and through the feed-rolls but passing out
 30 of the machine beyond the feed-rolls to be
 turned off as used, while the storage paper
 goes on within the casing.

Fig. 1 shows the paper as passing from the
 feed-rolls down under pins 17 then up over
 pins 18 and then in folds on the stab-wires,
 35 the stab-plate being at the rear extremity of
 its stroke. As, now, crank 12 is turned the
 stab-plate moves toward the stab-wires and
 at the same time the feed-rolls are yielding
 more paper and as the paper passes in pins
 40 17 descend and carry the lower bend of the
 paper down to the level of the lower end of
 the stabbed folds. Plate 10, when it nearly
 reaches the stab-wires, engaging pins 22 and
 the effect is to quickly raise arms 20, bring-
 45 ing their pins 21 in engagement with arms 16
 thus rapidly lifting arms 16 and their pins 17
 to their top limits of stroke, as indicated in
 Fig. 4. The stabbing-plate then stabs the
 50 two layers of paper into the stab-wires, at the
 same time pushing upward on the stab-wires
 such folds as may have been previously stuck
 upon the wires. When arms 16 thus rise to
 their upper limits of stroke their extensions
 55 19 engaged under the outer portions of pivot
 pins 18 and tipped those pins thus withdraw-
 ing them from under the bend of the paper,
 as seen in Fig. 5, and the advance of the stab-
 plate therefore pushed this bend of paper for-
 60 wardly beyond the plane of pins 18. When
 the crank is further turned the stab-plate be-
 gins to retreat and the feed-rolls begin to
 yield more paper, and the instant arm 16 be-
 gins to descend pins 18 assume their normal
 65 horizontal position, engaging under the paper
 and forming the top bend for the next fold

while pins 17 descend and carry down the
 lower bend of the paper as before described.

By removing end cover 3 the stabbed pile
 of paper comes with it and, if desired, the
 paper may be cut off from the general strip 70
 and the pile removed from the stab-wires for
 such use as desired. Or, the end cover may
 be removed some distance from the casing
 without cutting the paper and the successive
 folds may be inspected either in place or by 75
 removing them from the stab-wires, and the
 whole may be restored when the inspection
 is over.

I claim as my invention—

1. In a register, the combination, substan- 80
 tially as set forth, of stab-wires, a perforated
 stab-plate adapted to reciprocate to and from
 the ends of the stab-wires, and mechanism,
 substantially as set forth, for laying a strip of
 paper in successive folds between the stab- 85
 plate and the ends of the stab-wires.

2. In a register, the combination, substan-
 tially as set forth, of a casing, an end cover
 therefor provided with inwardly projecting
 stab-wires, feed-rolls for feeding paper to- 90
 ward the stab-wires, a perforated plate adapt-
 ed for reciprocation to and from the ends of
 the stab-wires, and having a width less than
 that of the strip of paper to be dealt with,
 movable pins projecting inwardly beyond the 95
 plane of the edges of the intended paper and
 at the level of the top of the intended folds
 of paper and arranged for movement out-
 wardly beyond the planes of the edges of the
 paper, pins arranged for movement in a plane 100
 substantially parallel with the stabbing-plate
 and rearward of said first-mentioned pins and
 projecting inwardly beyond the plane of the
 edges of the intended paper but not to the
 edges of the stab-plate, and mechanism, sub- 105
 stantially as described, for turning the feed-
 rolls and reciprocating the stab-plate and
 moving the first-mentioned pins to one side
 and the other of the planes of the edges of
 the intended paper and moving the last men- 110
 tioned pins in a plane substantially parallel
 with the stab-plate.

3. In a register, the combination, substan-
 tially as set forth, with a casing, paper feed-
 ing rolls, stab-wires, and a hand-crank, of a 115
 perforated stabbing-plate reciprocated by the
 movement of the hand-crank, inwardly pro-
 jecting pivoted pins at the top of the intended
 folds of paper, pivoted arms, as 16, pins 17
 projecting inwardly therefrom, extensions, as 120
 19, from the arms, adapted to engage and tip
 the pivoted pins, and pivoted arms, as 20, ar-
 ranged to lift the first mentioned arms and
 be operated by the forward movement of the
 stab-plate.

WILLIAM L. EGRY.

Witnesses:

JOSEPH A. WORTMAN,
 PAUL J. WORTMAN.