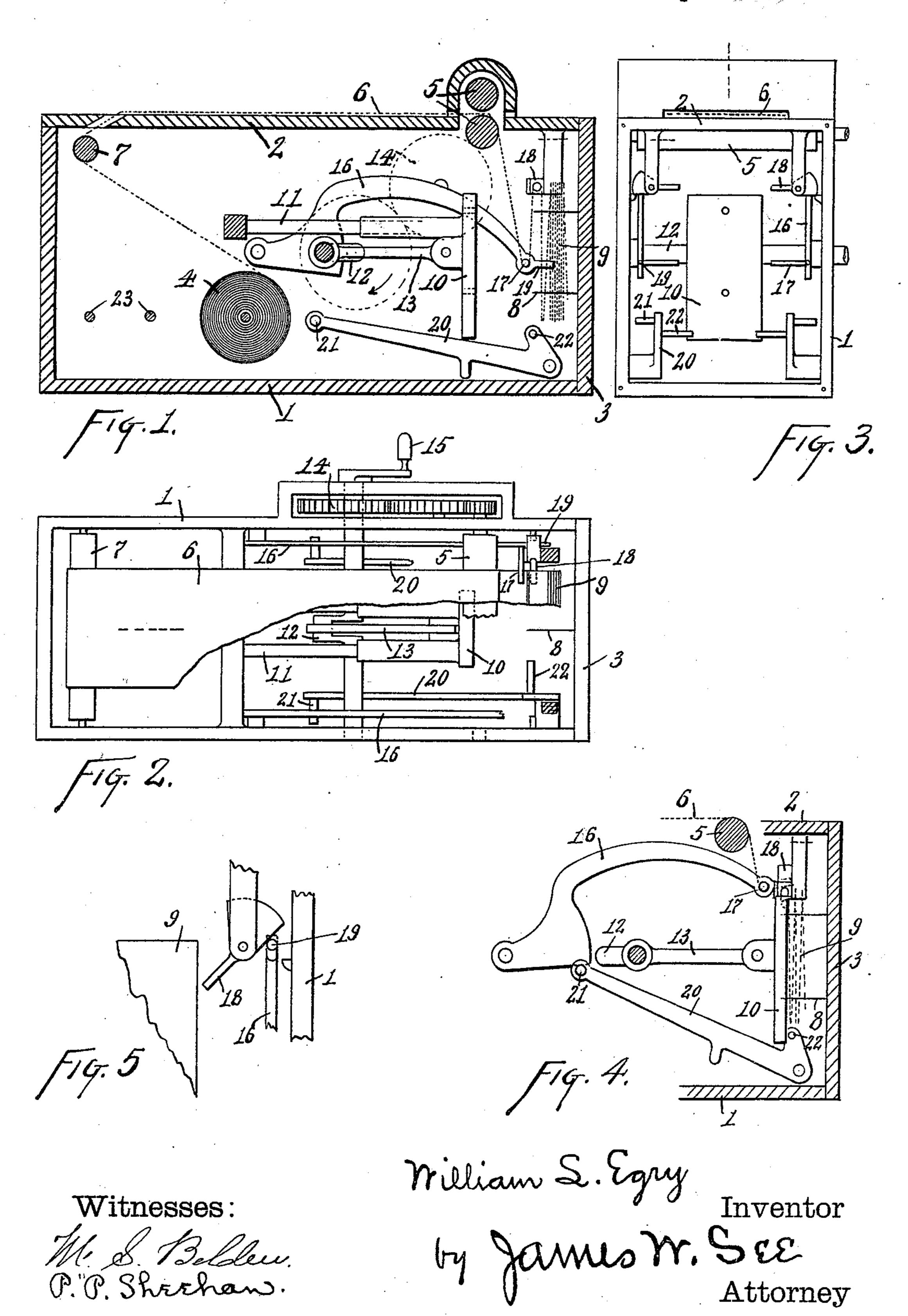
W. L. EGRY. AUTOGRAPHIC REGISTER.

No. 518,230.

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THE NATIONAL LITHOGRAPHING COMPANY, WASHINGTON, D. C.

United States Patent Office.

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AUTOGRAPHIC REGISTER.

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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 follow-

ing is a specification.

This invention pertains to that class of registering devices designed for receiving in strip form written memorandums. Registers of ro 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 pass-15 ing 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 20 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 rile of folds.

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 pass- 55 ing 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 6c 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 65 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 70 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 75 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 crankshaft 12 and the feed-rolls so that all turn to-80 gether, 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 85 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 90 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 95 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 stabbing-plate 10, these pins, as their arms rise and fall, moving up and down a distance reco 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

2 518,230

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 downwardly and outwardly as will be understood from Fig. 5, the pins 18 being forwardly beyond the plane swept by pins 17: 19, extensions on ro arms 16 adapted, when the arms rise, to engage 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 stab-plate 10 and adapted, as the stabbing 20 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 mounted additional rolls of paper if the register is 25 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 of the machine beyond the feed-rolls to be 30 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 to 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 two layers of paper into the stab-wires, at the 50 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 19 engaged under the outer portions of pivot 55 pins 18 and tipped those pins thus withdrawing them from under the bend of the paper, as seen in Fig. 5, and the advance of the stabplate therefore pushed this bend of paper forwardly beyond the plane of pins 18. When 60 the crank is further turned the stab-plate begins 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

horizontal position, engaging under the paper

65 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, substantially 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 adapted 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 outwardly 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 feedrolls 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, substantially as set forth, with a casing, paper feeding rolls, stab-wires, and a hand-crank, of a perforated stabbing-plate reciprocated by the movement of the hand-crank, inwardly projecting 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, arranged to lift the first mentioned arms and be operated by the forward movement of the stab plate.

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Witnesses:

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