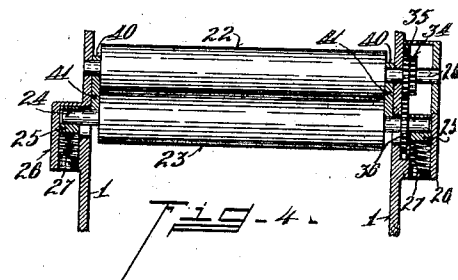
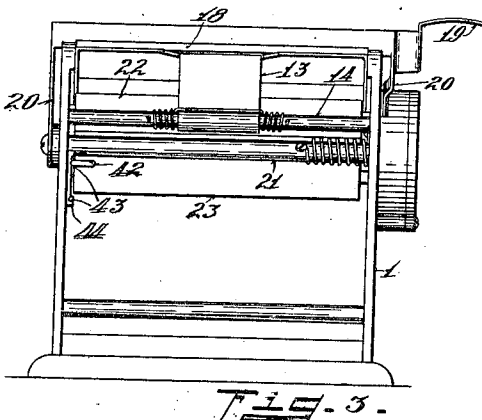
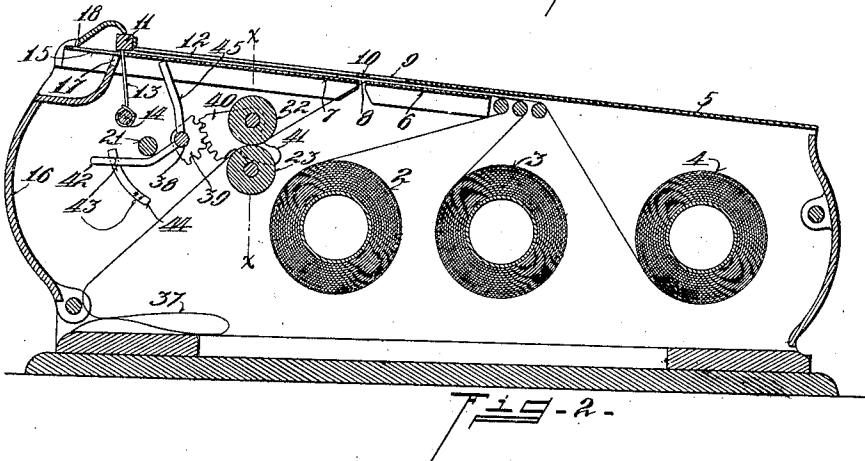
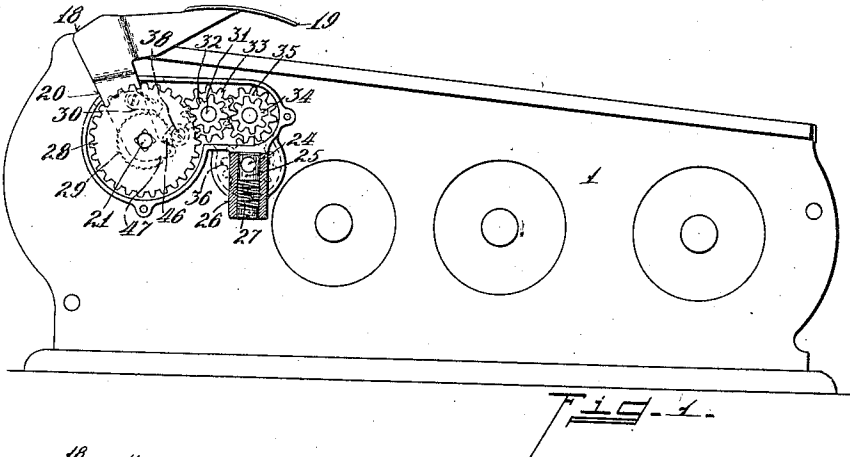


A. KRAUTH.
 AUTOGRAPHIC REGISTER.
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1,045,986.

Patented Dec. 3, 1912.



Witnesses

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ALBERT KRAUTH, OF HAMILTON, OHIO.

AUTOGRAPHIC REGISTER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALBERT KRAUTH, a citizen of the United States, residing at Hamilton, in the county of Butler and State of Ohio, have invented certain new and useful Improvements in Autographic Registers, of which the following is a specification.

My invention relates to an improvement in autographic registers of the summary type. In this class of registers means are provided for depositing for record a total indicating slip of less length than the itemized strip which is delivered to the purchaser. In machines of this type heretofore the relative lengths of the delivered and retained strips were invariable.

It is one of the objects of my present invention to provide means for storing a predetermined length of record strip at each operation of the machine, said feed mechanism being operated independently of the strips drawn off and detached by the tearing-blade.

Another object of the invention is to provide simple means for throwing the operative parts of the feed, tearing and tension mechanisms from their closed to their open position to facilitate the recharging of the machine.

The features of the invention are more fully set forth in the description of the accompanying drawings, forming a part of this specification, in which:—

Figure 1 is a side elevation of the device with the gear cover removed to show the gear mechanism. Fig. 2 is a section showing the release mechanism. Fig. 3 is a front end elevation. Fig. 4 is a front elevation of the feed rolls, showing the casing in section.

1 represents the casing in which are journaled the paper rolls 2, 3, 4, from front to rear respectively.

5 is a cover plate.

6, 7, represent writing-tablet plates, separated to form a slot 8.

The cover plate 5 is of the margin-frame type, that is, a portion of the body is cut away over the tablet to expose the paper for writing. In this margin-frame, 9 represents the aperture over the tablet 6; 10 represents a cross-bar bridging the slot 8, 11 represents a rigid cross-bar in front of the margin-frame, and 12 represents the

writing aperture above the tablet 7 upon which tablet the items are entered, the total being entered upon the paper exposed through the aperture 9.

13 represents a tension finger on shaft 14, projecting upwardly at a slight angle to the vertical through a slot 15 in the front end of the tablet 7 and engaging normally against the under surface of the cross bar 11. The front member 16 of the casing has at its upper edge the cut-out portion 17, adjacent the upper end of the tension finger 13, permitting the latter to be moved away from the cross-bar 11 for recharging the register.

18 represents the tearing-blade extending across the front of the machine. It has the rearwardly extending arm 19 for operating the same, and it has the downwardly extended arms 20 at each end pivoted to the shaft 21.

22, 23, represent the recording feed rolls, located within the interior of the machine in front of the tablet plate 6. The axle ends 24, of the roll 23, are journaled in blocks 25, slidably mounted in sleeves 26, and held normally upward by springs 27, to yieldingly force roll 22 against roll 23.

28 represents a spur gear on shaft 21.

29 represents a ratchet wheel fixed to gear 28.

30 represents a pawl on one of the arms 20 for engaging the ratchet wheel 29.

31 represents a stud shaft. 32 represents a gear thereon meshing with gear 28.

33 represents a gear fixed to gear 32, and intermeshing with a gear 34, on the end of roll 22.

35 represents a gear fixed to gear 34, and intermeshing with a gear 36 on the end of roll 22.

From this organization, it is evident that the rolls 22, 23, are partially rotated each time the tearing-blade is rocked and always in the same direction of rotation toward the front of the machine. The two strips of paper to be severed and delivered, that is, 3 and 4, pass over both tablets 6, 7, and outwardly between the tension finger 13 and cross-bar 11, being accessibly exposed. The strip to be recorded, that is, 2, passes over the tablet 6, thence through slot 8 between rolls 22, 23, by which it is fed forwardly

and downwardly in alternate loops on the floor of the interior of the casing, as indicated by the numeral 37, Fig. 2.

It will be seen that the aperture 9 is just of sufficient area to permit a total to be written on tablet 6, and the gearing mechanism described is given such a ratio that at each operation of the tearing-blade a length of the record strip just equal to the space required for entering the total, will be fed forward and recorded.

I preferably employ the following devices to be utilized in reloading the machine:— 38 represents a rock shaft journaled in the side walls of the casing and provided with a segmental gear 39, meshing with a segmental gear 40, on the shaft of roll 22. The gear 40, has an arm 41, engaging against the shaft of roller 23. On shaft 38, is a rock arm 42, adapted to engage with either of the notches 43, in the rib 44, projecting from the casing to retain said arm in either of its two positions. It is evident that by this means the shaft 38 may be rocked, which will cause the arm 41, to force the roller 23 downwardly, out of contact with the roll 22, allowing the operator to pass a strip of paper between these rolls. 45 represents another rock arm upwardly and forwardly extended from rock shaft 38. When the shaft 38 is rocked to separate the rolls 22, 23, the arm 45 will engage the tension finger 13, and move it forwardly out of contact with the cross-bar 11, so that the strips 3, 4, can be readily threaded between said tension finger cross-bar. The rock shaft 38 is also provided with a cam lug 46, engaging against a cam lug 47, on the arm 20. By this means, when the shaft 38 is rocked to separate the feed rolls and to separate the tension finger from the cross-bar, the action of the lugs 46, 47, will rock the tearing-blade rearwardly, raising its cutting edge to the face of the tablet, so that the papers can be freely adjusted on the face of the tablet.

In this machine, the length of the strip to be detached will be proportionate to the number of items, and hence will be variable, while the length of the record strip fed for-

ward will be invariable, and utilize just the length of paper necessary for entering the total.

Having described my invention, I claim:—

1. In an autographic register, a casing, a writing tablet, a rocking tearing blade at one end of the tablet movable to and from the same, a pair of feed rolls within the casing, means for yieldingly supporting one of said rolls relatively with respect to the other, a cross bar and tension finger engaging said cross bar, means for simultaneously releasing one of said rolls, the tearing blade and the tension finger from their normal operative positions, intermeshing pinions rotative with the feed rolls, a train of gearing between the axis of the tearing blade and one of the pinions of the feed rolls, and a pawl and ratchet mechanism interposed between the tearing blade and first gear of the train, to rotate the feed rolls upon each release movement of the tearing blade, to feed a strip of paper between said rolls a predetermined length.

2. In an autographic register, a casing, a writing tablet, a tearing blade at one end of the tablet movable to and from the same, a cross bar adjacent to the tearing blade, and a tension finger engaging said cross bar with the paper to be delivered passing respectively between the cross bar and tension finger and the tablet and the tearing blade, a pair of separable feed rolls, the paper to be recorded passing over the tablet and between the feed rolls, a rock shaft having connection with the movable feed roll, the tension finger and the tearing blade, whereby the rock shaft may be operated to simultaneously adjust the said connected elements to open positions relative to their abutting elements, providing free access for the insertion of papers.

In testimony whereof, I have hereunto set my hand.

ALBERT KRAUTH.

Witnesses:

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EMMA SPENCE.