(No Model.)

W. ASSHETON.

AUTOGRAPHIC REGISTER.

No. 374,231. Patented Dec. 6, 1887.

Fig. 1.

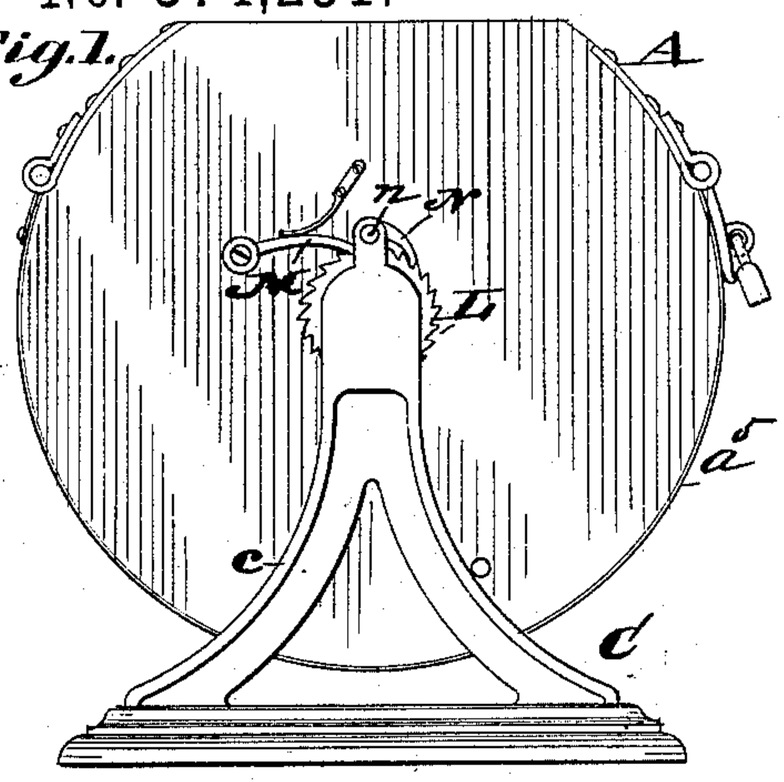


Fig. 2.

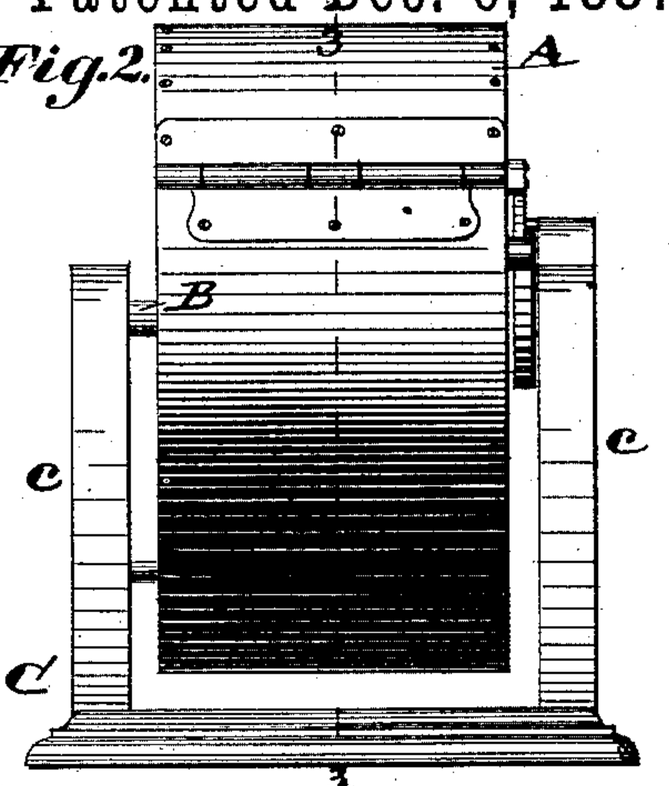


Fig. 3.

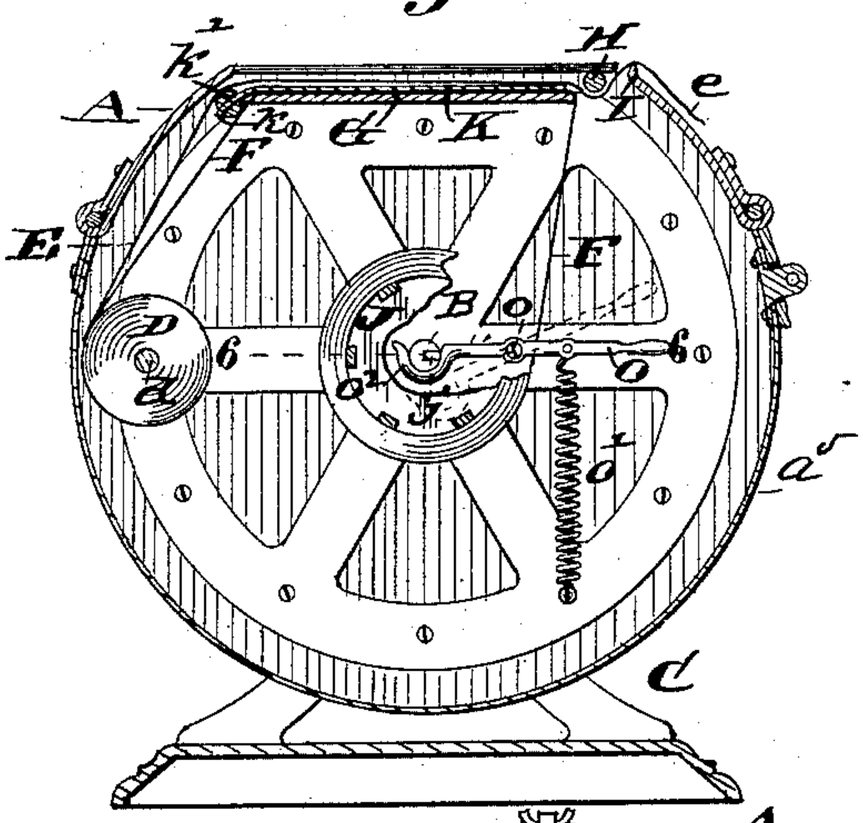


Fig. 4.

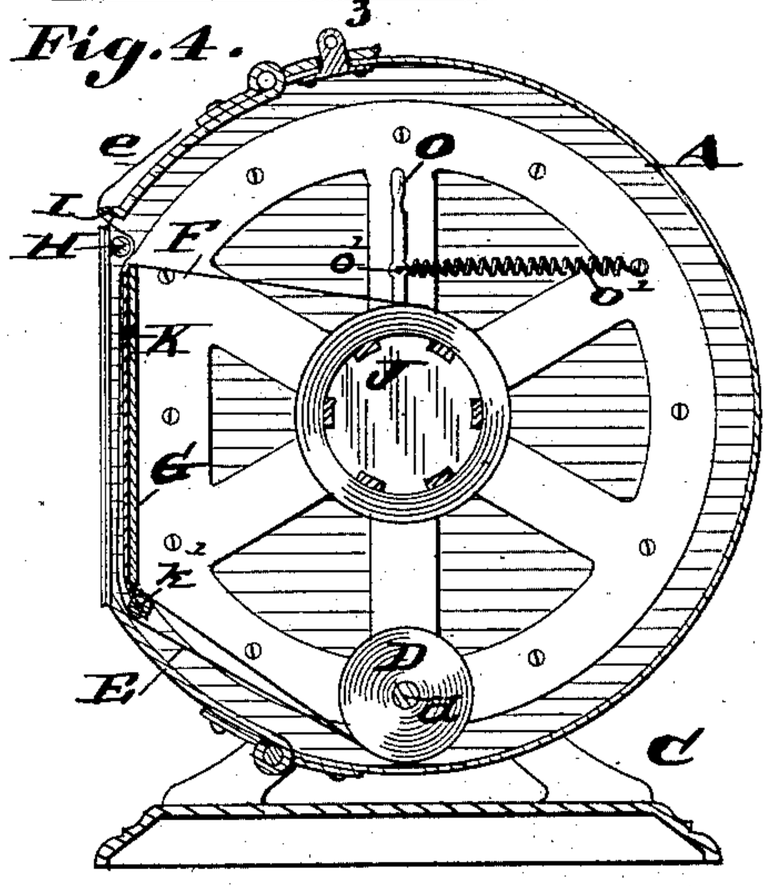


Fig. 5.

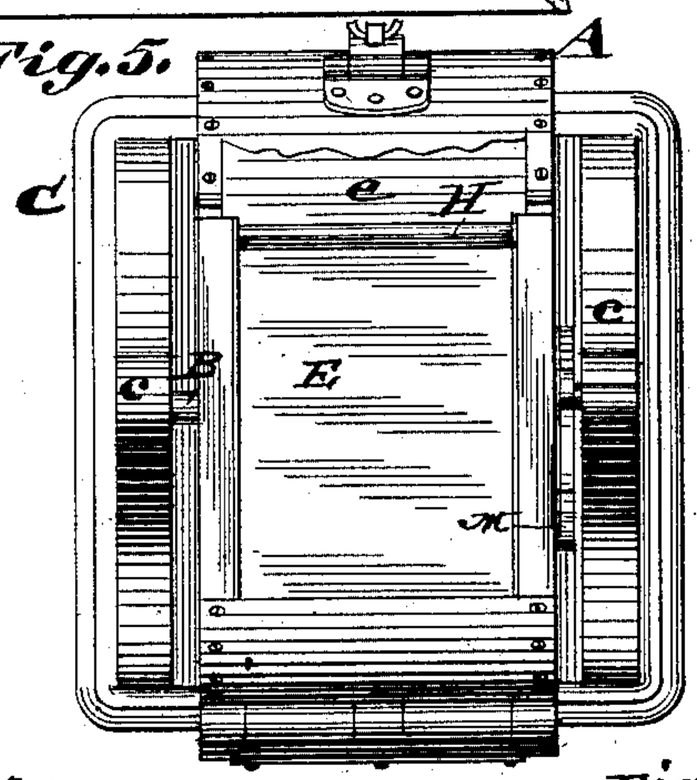


Fig. 7

Fig. 6.

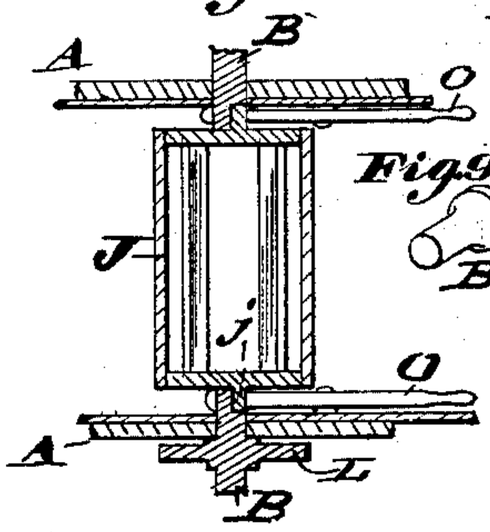


Fig. 8.

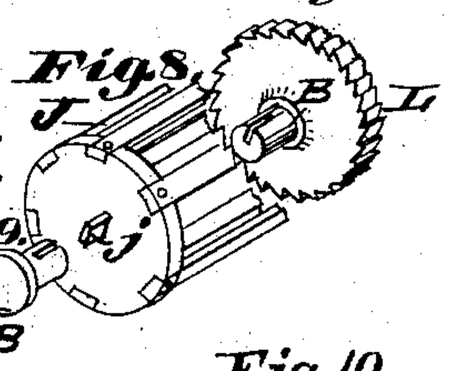
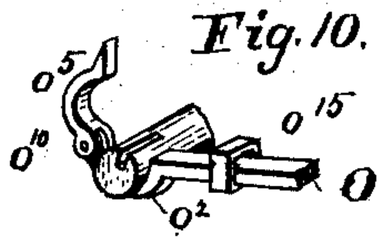
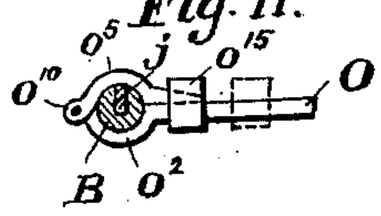


Fig. 10.



Witnesses:
J. W. Hoke.
S. B. Houts

Fig. 11.



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by C. D. Moody
atty

UNITED STATES PATENT OFFICE.

WILLIAM ASSHETON, OF ST. LOUIS, MISSOURI.

AUTOGRAPHIC REGISTER.

SPECIFICATION forming part of Letters Patent No. 374,231, dated December 6, 1887.

Application filed August 16, 1886. Serial No. 211,076. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ASSHETON, of St. Louis, Missouri, have made a new and useful Improvement in Autographic Registers, of which the following is a full, clear, and exact description.

The improvement relates to that class of registers in which two webs of paper and an interposed manifolding sheet are used, the upper web, after passing the point where the impression is made, separating from the lower web and passing to without the register-case, where that portion of it which has been written upon is separated from the remaining portion of the web, while the other or lower web moves farther around within the case and is wound upon a receiving-reel, ultimately to be removed in one body from the case.

It consists, mainly, in the means for effecting the movement of the webs.

In the annexed drawings, making part of this specification and exhibiting what seems to be the most desirable mode of carrying out the improvement, Figure 1 is a side elevation of the improved register. Fig. 2 is an end elevation of the register. Fig. 3 is a vertical longitudinal section on the line 3 3 of Fig. 2. Fig. 4 is a section similar to that of Fig. 3, but showing the case turned into a different position, as in drawing the webs off the delivery-reel. Fig. 5 is a plan of the register. Fig. 6 is a section on the line 6 6 of Fig. 3; and Figs. 7, 8, 9 are details, being views in perspective, respectively, of parts immediately connected with the winding or receiving reel. Figs. 10 and 11 are details showing how the reel-bearings are constructed.

The same letters of reference denote the same parts.

A represents the case of the register. It is constructed and supported so that an oscillating motion can be imparted to it; to which end the case is hung upon the journals B, Figs. 2, 3, 5, 6, 7, 9, which in turn are held in the uprights *c c* of the support C. The case by this means can be oscillated to and fro, as illustrated by its two positions. (Shown respectively in Figs. 3, 4.)

D represents the delivery-reel, from off of which the two webs E and F are wound. The reel D is journaled at *d* within the case, and the webs pass thence upward and over and along the bearing G, used to support the webs while being written upon, after which the upper web, E, passes under the roller H and to without the cylinder, and so that the free end *e* of the web can be drawn across the knife I, and thereby severed from the main portion of the web, and the lower web, F, passes toward the center of the case and is wound upon the receiving-reel J, Figs. 3, 4, 6, 8.

K represents the carbon-paper used in the manifolding. It is arranged between the webs above the bearing G, and it is conveniently held in place by clamping the end *k* in a holder, *k'*, and then dropping the holder into any suitable receptacle (not shown) in the frame-work of the casing, but so that the upper web can pass over the holder, as over a bearing, and afterward lie flat upon the carbon-paper, which in turn lies flat upon the lower web.

The movement of the lower web, owing to the contact of the two webs beyond the carbon-paper, causes the upper web to be drawn along with it past the bearing G, and the carbon-paper in consequence is drawn by friction flatwise between the two webs.

The movement of the lower web is effected as follows: The receiving-reel J, by means of the ratchet L and the pawl N, Fig. 1, is prevented from turning with the case A when the case is oscillated from the position of Fig. 3 into that of Fig. 4. This causes the lower web, when the case is thus oscillated, to be drawn from off the delivery-reel D and wound upon the non-stationary receiving-reel, and when the case is oscillated backward again into the position of Fig. 3 the receiving-reel, by means of the pawl M, whose point engages in the ratchet L, oscillates with the case, and hence the lower web is prevented from becoming slack between the bearing G and the receiving-reel and is wound upon the receiving-reel.

The operation of the register is thus as follows: The case being in its upright position, (shown in Figs. 1, 2, 3, 5,) the upper web is written upon in the ordinary manner, producing the usual duplicate upon the lower web. The case is then oscillated into the position of Fig. 4, which movement causes the two webs to be drawn along, and respectively in the di-

rections described, and so that the portion of the upper web written upon shall pass out from the case, as indicated in Fig. 4, when it can be separated from the web, leaving the new end of the web in position to be written upon. The lower web accumulates upon the receiving-reel, and when it is desired to remove that web from the case a portion, a^5, of the case, which is made to open or to be removed from the fixed part of the case, is turned back so as to provide access to the receiving-reel. The levers O, which are pivoted at *o*, and by reason of the action of the springs *o'* are drawn so that the hook-shaped end o^2 of the lever shall embrace the journal B at the point where the lug *j* of the receiving-reel enters a slot in the journal, and thereby holds the reel secured to the journals B, are then turned upon the pivots *o*, as indicated by the broken lines, Fig. 3. This leaves the reel free to be lifted from its bearings in the journals and removed from the case, to be replaced when the web has been taken off it and the register is to be again used.

Any suitable means may be used to secure the roll-shaft on the bearings. In the drawings such construction is illustrated in Figs. 10 and 11, in which the hook O has a holder, o^5, hinged to the hook at o^{10} and adapted to be turned down over the reel-shaft and be secured by the slip-band o^{15}; but in the mere details of this construction any desired mechanical change can of course be made.

I claim—

1. The combination of the oscillating case, the delivery-reel, the bearing for supporting the paper while written upon, and the receiving-reel, substantially as described.

2. The combination of the rotating case, the uprights, the journals, the ratchet, and the two pawls pivoted, respectively, to the case and upright, as described.

3. The combination of the journals provided with notches, the receiving-reels provided with lugs adapted to enter said notches, the hook-shaped pivoted levers, and the springs, substantially as shown and described.

Witness my hand.

WILLIAM ASSHETON.

Witnesses:

C. D. MOODY,

A. M. EVERIST.