

(No Model.)

2 Sheets—Sheet 1.

J. W. DICK.
AUTOGRAPHIC REGISTER.

No. 525,449.

Patented Sept. 4, 1894.

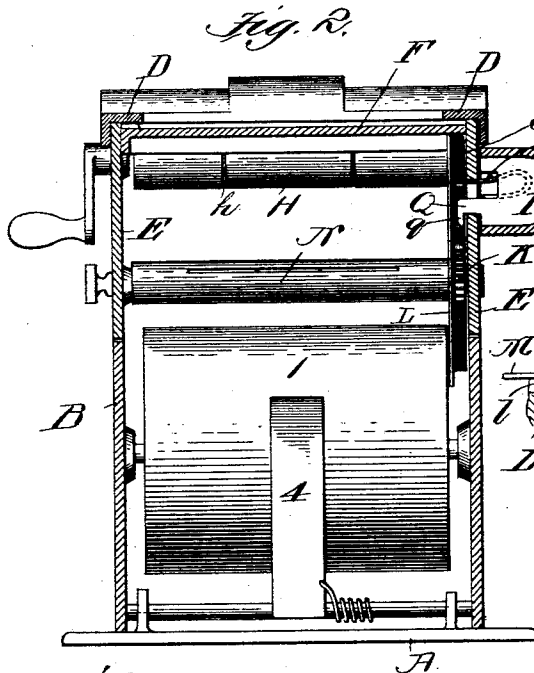
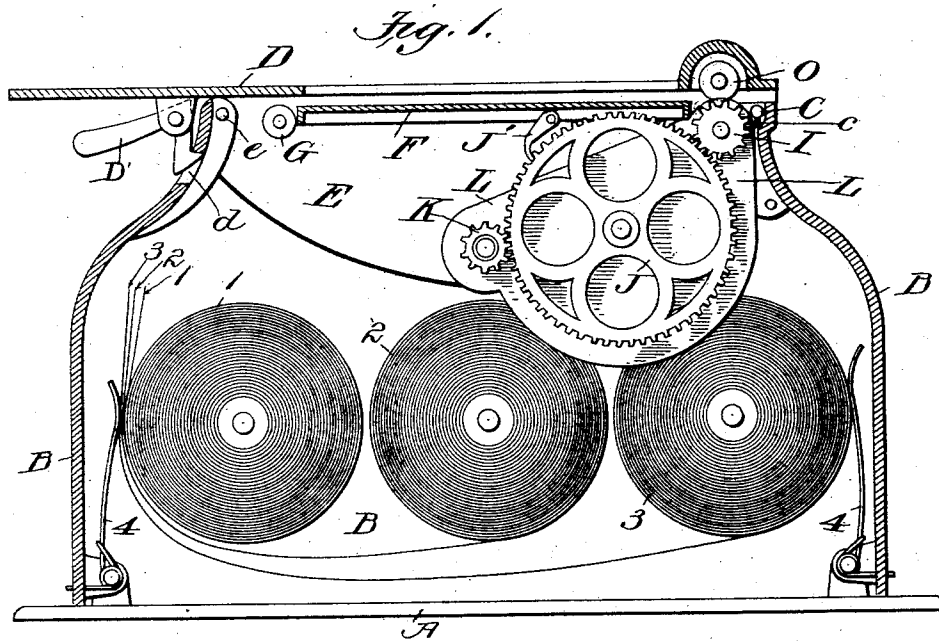


Fig. 3.

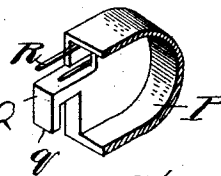
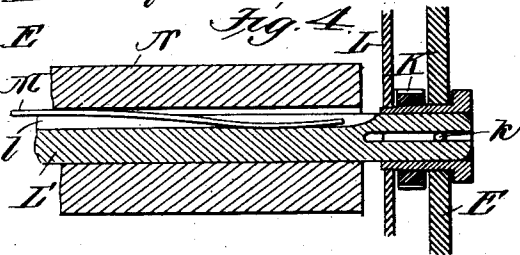


Fig. 4.



Witnesses;
F. R. Cornwall
Hugh K. Wagner.

Inventor
John W. Dick
By Oare Bakewell
his atty.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 5.

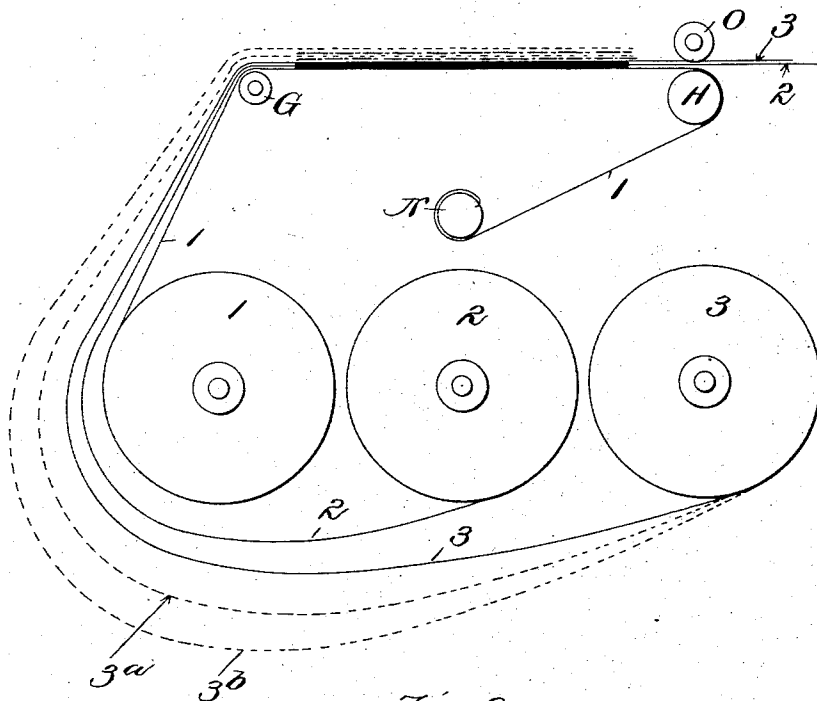
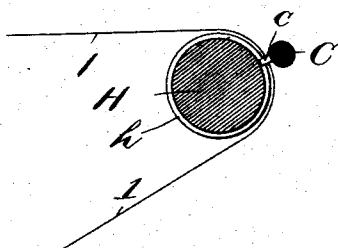


Fig. 6.



Witnesses:
F. R. Cornwall
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By *Paul Bakewell*

His atty

UNITED STATES PATENT OFFICE.

JOHN W. DICK, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE WESTERN
AUTOGRAPHIC REGISTER COMPANY, OF SAME PLACE.

AUTOGRAPHIC REGISTER.

SPECIFICATION forming part of Letters Patent No. 525,449, dated September 4, 1894.

Application filed May 1, 1894. Serial No. 509,630. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. DICK, a citizen of the United States, residing at the city of St. Louis, State of Missouri, have invented
5 a certain new and useful Improvement in Autographic Registers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, wherein—
10 Figure 1 is an elevational view, one of the side panels being removed. Fig. 2 is a cross-sectional view. Fig. 3 is a detail view of one of the ends of the carbon holder. Fig. 4 is a sectional view of one end of the receiving cylinder. Fig. 5 is a diagrammatic view and Fig.
15 6 is a detail of one of the rollers.

My invention relates to a new and useful improvement in autographic registers and consists, generally stated, in the peculiar arrangement, construction, and combination of
20 the several parts composing the same, all of which will hereinafter be described and afterward pointed out in the claims.

In the drawings, A indicates a suitable base-plate, to which are secured the side and end
25 panels B. Pivoted to the end panel by a rod C, is a tablet D, which is formed with an opening to expose that portion of the upper strip which is to be written upon. The pivot rod C
30 is provided with spurs or projections c, whose function will be hereinafter described. Pivoted in the other end plate, upon a pivot bolt e which has a bearing in lugs or projections extending from the end plate, is a swinging
35 frame E, upon which is mounted the operating mechanism for the several strips. The tablet D is adapted to fit over and upon the swinging frame E and be locked in position by a suitable catch D', as shown in Fig. 1
40 which catch D' engages a slot d in the end plate near the upper edge thereof. Extending across the upper portion of the side pieces of the swinging frame E, is a table F, over
45 upon which, between the strips of paper, the carbon or transfer paper is located.

G indicates an idler arranged at the rear end of the table or slab F for well-understood purposes. Mounted in the forward end of
50 this swinging frame, is a roller H, which is preferably provided with annular grooves h,

as shown. A suitable operating handle or crank is attached to the shaft of the roller H, but said crank may be, if desired, mounted upon some other shaft, which will be herein-
55 after mentioned. On the opposite end of this roller H is a pinion I, which engages the transmitting gear J, which imparts a motion to the receiving cylinder through a pinion K, mounted in one of the side frame-pieces E.
60 A shield L is arranged on the inner side of the shafts of these several gear-wheels, and in which their inner ends are journaled. This shield extends down below the teeth of the several gear-wheels, so as to prevent interrup-
65 tion of their movement by contact with the several rolls of paper mounted in the lower portion of the frame.

The spindle L' of the receiving roller is removably mounted in the frame E and pinion
70 K and is provided with a longitudinal groove l, in which operates a spring-rod M. The receiving roll N is in the form of a spool, as shown in Fig. 4, through which the spindle L passes and the spring M being compressed
75 will force said spool to one side, as shown in Fig. 4, and create a friction, which has a tendency to wind the record strip at all times, but should said record strip be fed to the receiv-
80 ing spool in an amount less than is sufficient to permit said spool to revolve positively with its operating pinion K, the spool will slip on the spindle, and take up only so much of the record strip as is fed thereto. The end of
85 the spindle L, which engages the pinion K, is bifurcated, as is shown in Fig. 4, which bifurcation co-operates with a cross-pin k mounted in the pinion opening, which permits the spindle to be withdrawn or inserted at will to permit the removal or replacement of the re-
90 ceiving spool.

The diameters of the pinions I and K are different the former being the larger. By the difference in diameters of these two pinions, when the former is rotated and imparts
95 movement to the spur-wheel J, and so rotates pinion K, pinion K will be rotated at a greater speed than the pinion I, the advantage of this being that the receiving spool is rotated at all times, notwithstanding the diameter of
100 its carried recording-strip, faster than the roller H. It will thus be seen that the re-

ceiving spool is constantly slipping on its spindle but ready at all times to take up the slack in the recording-strip. A pawl J' co-operates with the teeth of wheel J to prevent a back movement of the parts. A suitable roller O is mounted in a housing in the tablet D which roller co-operates with the roller H, by bearing upon the strips as they are fed out, to feed the issue strips.

Mounted in suitable bearings in the side panels are rolls of paper 1, 2, and 3, but it is obvious that there may be as many as desired. On rolls 1 and 3, tension plates 4 are adapted to bear so as to create a friction on the strips to prevent the slack between the rolls and the feeding rollers O and H.

Mounted at the side of one of the frame-pieces E, is a carbon holder P, which is adapted to receive a roll or rolls of carbon paper, the ends of said paper being extended across the machine and between the strips of paper over the tablet F. This carbon paper remains stationary across the tablet and is clamped in position by the side flanges of the swinging frame B. To secure the carbon holder in position, I insert one end in a suitable lug or ear, not shown, and provide the other end with a lug Q, which has a projection *q*, while mounted above said lug is a spring R, received into the end of the carbon holder. The projecting end of the spring R and the lug Q are inserted in a slot formed in the side frame E until the projection *q* falls on the inside of the side frame, when the spring holds the parts in position.

The operation is as follows: The strip from roll 1 is led over roller G, slab F, roller H, and suitably secured to the spool N. A piece of carbon paper is laid across the slab F over the record strip 1. The strip from roll 2 is carried over roller G, and laid upon roller H. If it is desired to issue but one original, the strip from roller 3 is undisturbed; but if it is desired to issue one original and one carbon, the strip from roller 3 is passed under rollers 1 and 2 and over roller G, and between rollers H and O, the second piece of carbon paper is introduced between strips 2 and 3. The strips being arranged as shown in Fig. 5 and a record made, the carbons will make the impression on strips 1 and 2. The handle being operated, will rotate the roller H and feed strips 2 and 3, a carbon and an original, out of the front end of the machine. Pinion I will rotate pinion K through the medium of the interposed wheel J and strip 1 will be wound round on the receiving spool to make a record. Should it be necessary at any time to raise the table B, the pivot bolt C will be turned and the projection *c* entering the groove *h* will perforate the paper at that point, thus mark-

ing the place on the record sheet when the machine has been tampered with.

In Fig. 5, I have shown wound on roll 3, three strips of paper in dotted lines, numbered, respectively, 3^a and 3^b, thus increasing the capacity of the machine to five strips. The original, in this instance, would be on sheet 3^b, while sheets 3^a, 3, and 2, would be issued as carbons, and 1 would be wound as the record strip.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an autographic register, the combination of a pivoted table, having a roller O mounted therein and adapted to co-operate with the issuing roll, of an issuing roll mounted in the end of a swinging frame and formed with circumferential grooves, a pivot rod for the pivoted table, provided with projections which enter the grooves in the issuing roll when the table is turned back, thereby puncturing the record strip, and mechanism which is operated upon the actuation of the issuing roll to wind up the record strip, substantially as described.

2. In an autographic register, the combination with a suitable housing in which the rolls of paper are mounted, of a swinging frame pivoted to said housing, an issuing roller, and a receiving spool for the record strip, which roller and spool are mounted in said frame and geared together, and a shield mounted upon said frame and extending between the rolls and strips of paper with the moving gear, substantially as described.

3. In an autographic register, the combination with a sleeve upon which is formed a pinion, a cross-pin in the sleeve, a spindle having a bifurcation which is adapted to co-operate with the cross-pin, a spring operating in a groove formed longitudinally the spindle, and a receiving spool which is slipped over said spindle and rotated by frictional contact with the spring, substantially as described.

4. The combination with the framing of an autographic register, of a carbon holder which is removably mounted thereon, said carbon holder being formed with a key and a projecting spring which co-operate with the slot in the casing to form the connection, substantially as described.

In testimony whereof I hereunto affix my signature, in presence of two witnesses, this 25th day of April, 1894.

JOHN W. DICK.

Witnesses:

F. R. CORNWALL,
HUGH K. WAGNER.