(No Model.) 3 Sheets—Sheet 1.

# C. E. BECHTEL.

## AUTOGRAPHIC REGISTER.

No. 590,638. Patented Sept. 28, 1897.

Fig. 1.

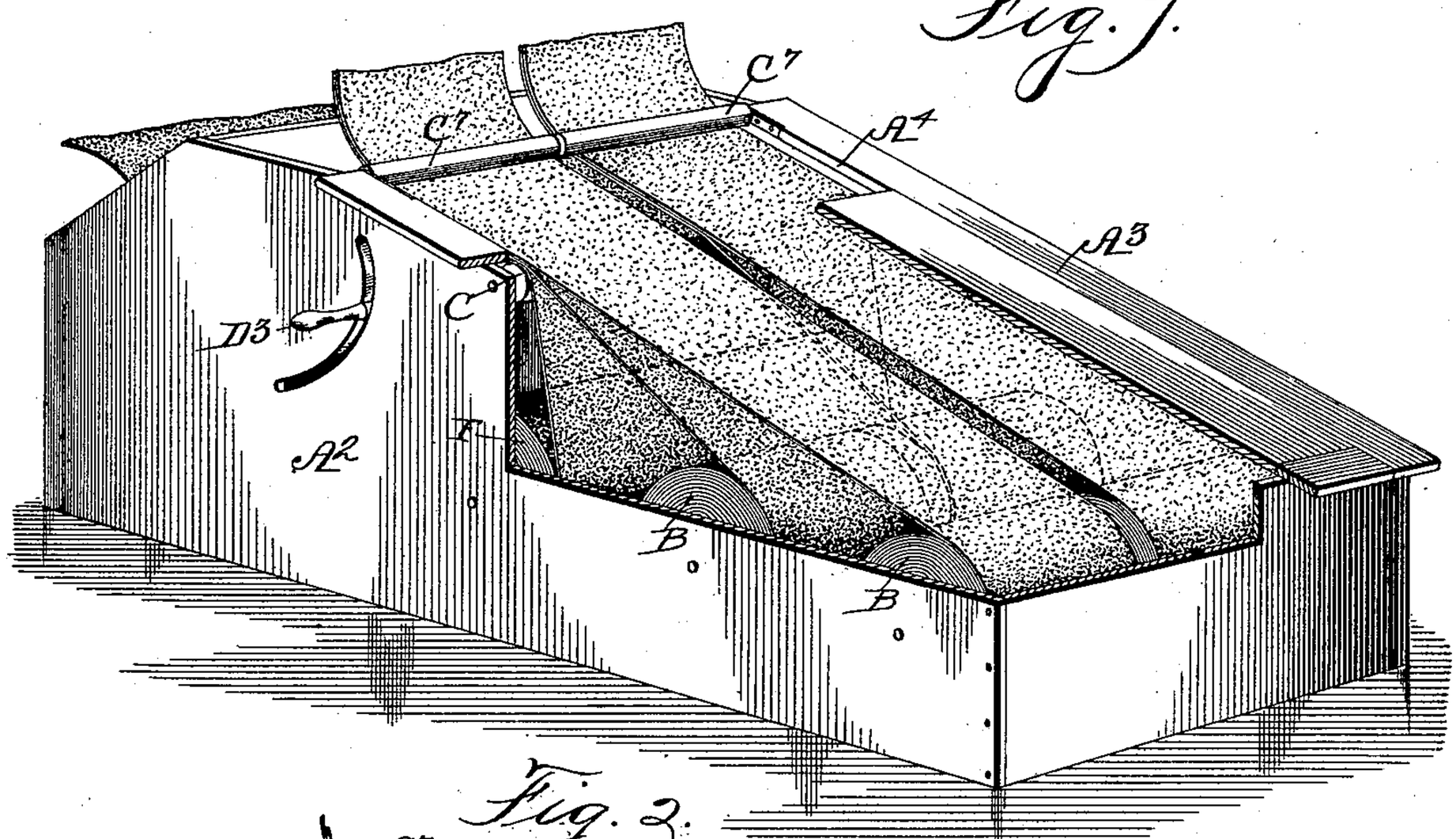


Fig. 2.




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(No Model.) 3 Sheets—Sheet 2.

# C. E. BECHTEL.

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No. 590,638. Patented Sept. 28, 1897.

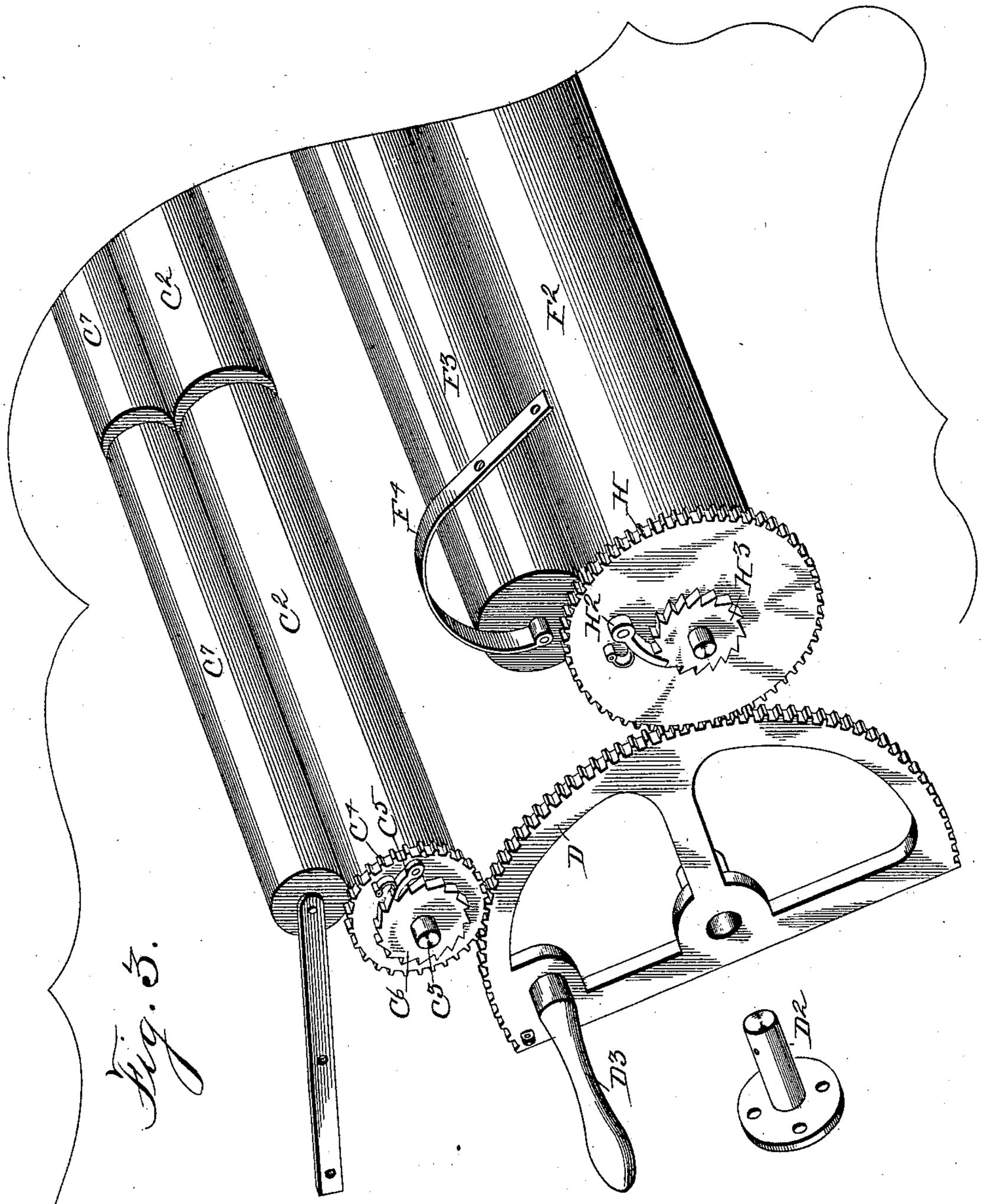


Fig. 5.

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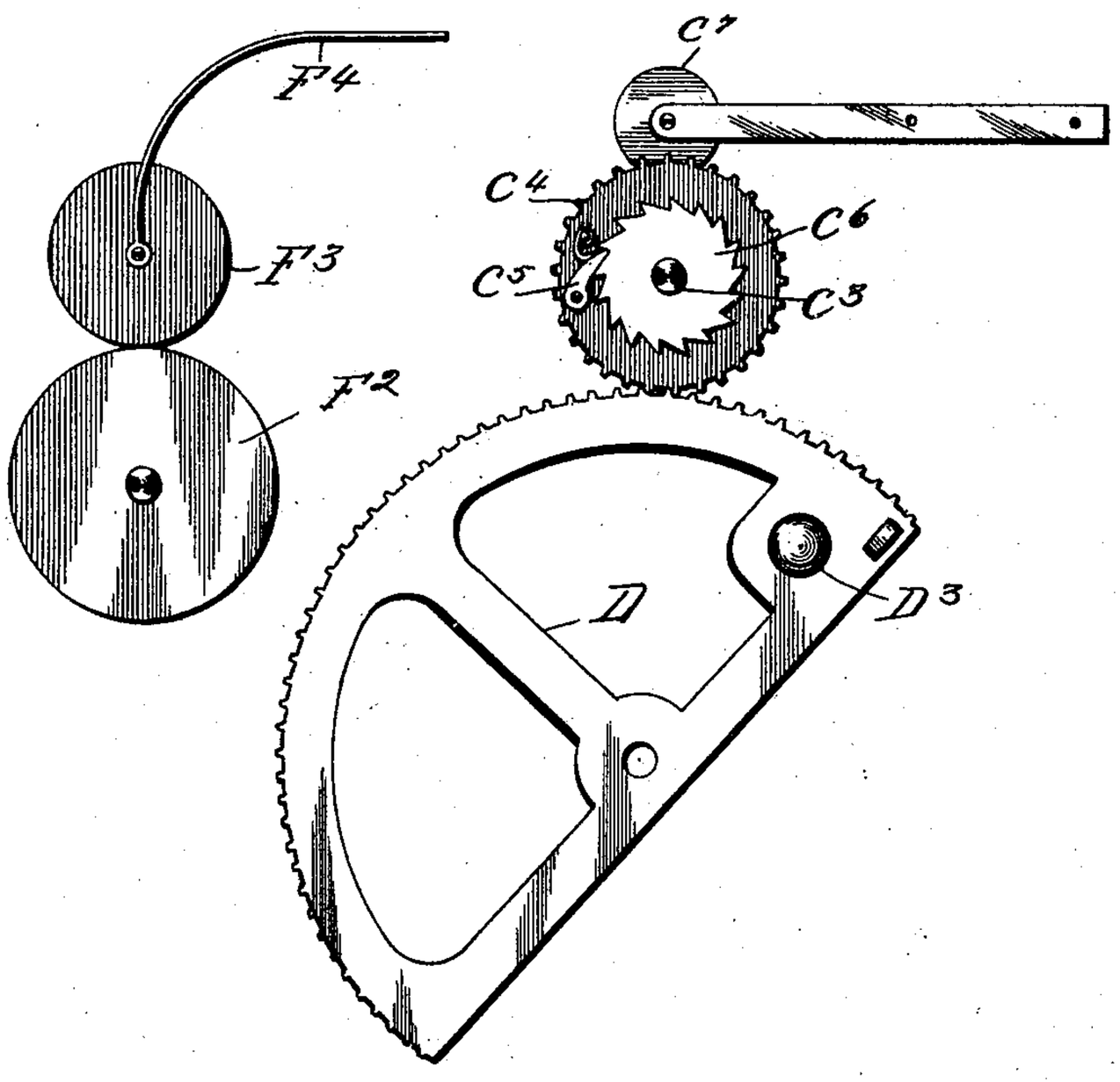
(No Model.) 3 Sheets—Sheet 3.

# C. E. BECHTEL.

## AUTOGRAPHIC REGISTER.

No. 590,638. Patented Sept. 28, 1897.

Fig. 4.

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# UNITED STATES PATENT OFFICE.

CARL E. BECHTEL, OF DES MOINES, IOWA.

## AUTOGRAPHIC REGISTER.

SPECIFICATION forming part of Letters Patent No. 590,638, dated September 28, 1897.

Application filed December 26, 1896. Serial No. 617,136. (No model.)

*To all whom it may concern:*

Be it known that I, CARL E. BECHTEL, a citizen of the United States of America, residing at Des Moines, in the county of Polk and State of Iowa, have invented a new and useful Manifold Autographic Register, of which the following is a specification.

The object of this invention is to provide a machine in which two or more series of narrow strips of paper are placed side by side, with carbon-paper between the strips in each series and a wide sheet of paper placed beneath said narrow strips, with a sheet of carbon above it, and means for independently advancing each series of narrow strips and for advancing the last narrow strip on the right-hand side and the wide strip together, so that copies of the matter written on the various narrow strips will appear side by side upon the wide strip, which latter may be cut to suitable lengths and preserved in book form.

My invention consists in certain details in the construction, arrangement, and combination of the various parts of the device, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the complete device with part of the casing removed. Fig. 2 is a vertical longitudinal sectional view of the same. Fig. 3 shows the mechanism for advancing the last narrow strip and the wide strip in unison. Fig. 4 is a side elevation showing the ends of the rollers and the gearing devices thereon to illustrate their relative positions. This view shows the opposite ends of the rollers from those shown in Fig. 3.

Referring to the accompanying drawings, the inclosing casing is seen to be composed of a base A, side pieces $A^2$, and a suitable inclined top piece $A^3$, having an opening at $A^4$, and a platform $A^5$ a slight distance beneath the opening.

B indicates narrow rolls of paper rotatably mounted on suitable axles in the machine-frame and prevented from rotating too freely by means of the springs $B^2$, engaging the rolls. In the present instance each series is composed of two rolls in alinement and having the strips of paper therefrom passed over the platform $A^5$, and two series are shown. It will be obvious, however, that more rolls may be placed in each series or more series employed without departing from the spirit of my invention.

C indicates a roller at the forward end of the platform $A^5$ to direct the strips of paper over the said platform.

$C^2$ $C^2$ indicate two rollers, each rotatably mounted upon a shaft $C^3$, which is fixed in the side pieces of the machine-frame near the upper end of the platform $A^5$ and so arranged that one of the said series of strips of paper will pass over each of said rollers. Each of said rollers has a cog-wheel $C^4$ fixed to its outer end, a spring-actuated pawl $C^5$ pivoted on the outer face of the cog-wheel, and a ratchet-wheel $C^6$ fixed to the outer surface of the cog-wheel to be engaged by said spring-actuated pawl $C^5$. Two rollers $C^7$ are mounted on a shaft supported above the rollers $C^2$.

D indicates a segment of a cog-wheel mounted on a journal $D^2$, that is fixed to the side of the machine-frame to engage said cog-wheel $C^4$. This segment is provided with a handle $D^3$, extended outwardly through a slot in the side of the machine-frame and is so proportioned and arranged that a complete movement of the said handle will rotate the rollers $C^2$ sufficiently to bring a new portion of the strip of paper over the platform $A^5$.

$D^4$ is a coil-spring secured to said segment and to part of the machine-frame, so as to return the segment to its normal position when released. The ratchet device connected with the roller permits the segment to return without operating the roller. A similar device is located on each side of the machine-frame.

The segment on one side of the machine is designed to engage the cog-wheel of the roller $C^2$ and also the cog-wheel of the roller $F^2$, while that on the other side of the machine is designed to engage only the cog-wheel of the roller $C^2$.

F indicates a roll of paper of a width as great as the combined widths of the narrow strips and mounted in suitable bearings in the machine-frame, with the paper passed over the roller C and under the rollers $C^2$ $C^2$.

$F^2$ indicates a roller extended across the machine-frame beyond the rear end of and

beneath the platform $A^5$ and a second roller $F^3$ held in engagement therewith by means of the spring-bearers $F^4$.

H indicates a loose gear-wheel on one end of the shaft of said roller $F^3$, carrying a spring-actuated pawl $H^2$ and in mesh with the segment D, that is on the same side of the frame as the gear-wheel H, and $H^3$ indicates a ratchet-wheel fixed to said shaft and engaged by said pawl.

In practical use strips of carbon-paper are placed between the layers of paper and a bill or the like written on the first narrow strip to the left. This, it will be seen, will produce two copies on the narrow strip and one on the broad sheet. The handle of the segment D on the left-hand side is then operated and the series of narrow strips on said side advanced and extended through a slot in the machine-frame and torn off. The next bill is written on the narrow strip to the right, and a copy is made on each narrow strip in said series and also on the broad strip at the side of the bill last made. Then as the segment D at the right-hand side is moved both the narrow strip to the right and the broad strip will be advanced. When a sufficient number of bills have been written on the wide sheet, the strip may be cut off at suitable lengths and bound in book form in a much more convenient shape than narrow strips.

I claim as my invention—

1. An improved manifold autographic register, comprising a suitable frame having an opening in its top, a platform beneath said opening, axles to hold two or more series of narrow strips of paper mounted in said frame, an axle to hold a wide roll of paper mounted in the frame, two independent sets of rollers to receive said series of narrow strips between them, mechanism for operating the rollers on one side to advance the series of narrow strips on said side, two rollers to admit said broad strip between them and mechanism for advancing the series of narrow strips on the opposite side and also said broad strip synchronously, for the purposes stated.

2. An improved manifold autographic register, comprising a suitable frame having an opening in its top, a platform beneath said opening, axles for supporting two series of narrow strips of paper mounted in said frame, an axle for supporting a wide roll of paper mounted in the frame, two independent sets of rollers at the rear end of the said platform adapted to admit said narrow strips, a cog-wheel loosely mounted on the outer ends of each under roller, a spring-actuated pawl thereon, a ratchet-wheel engaged by said pawl and fixed to the end of the roller, two rollers beyond said rollers to admit the broad strip between them, a loose cog-wheel bearing a spring-actuated pawl on one end of the under roller and a ratchet fixed to the axle thereof, a segmental cog-wheel mounted in the frame at one side, in mesh with the cog-wheel on the under roller of one of the narrow sets of rollers and having an outwardly-projecting handle, a spring for normally returning said segmental cog-wheel, a like segmental cog-wheel on the opposite side of the machine-frame in mesh with the cog-wheel on the remaining narrow rollers and the cog-wheel on the broad roller and a spring for normally holding it elevated, for the purposes stated.

CARL E. BECHTEL.

Witnesses:
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