

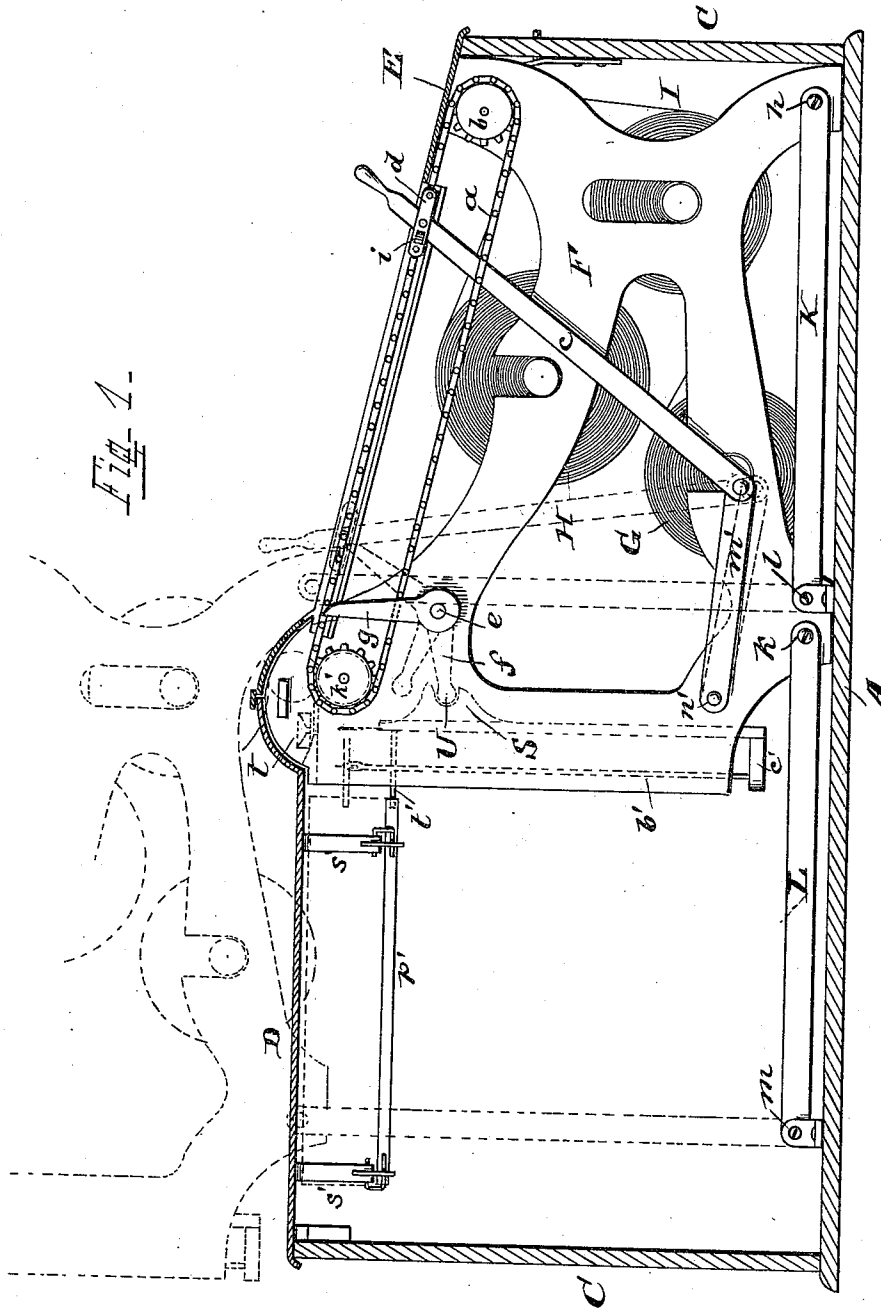
(No Model.)

3 Sheets—Sheet 1.

J. B. THIES.
AUTOGRAPHIC REGISTER.

No. 465,502.

Patented Dec. 22, 1891.



Attest
Robert J. Hindell.
George Hudman

Inventor
John B. Thies

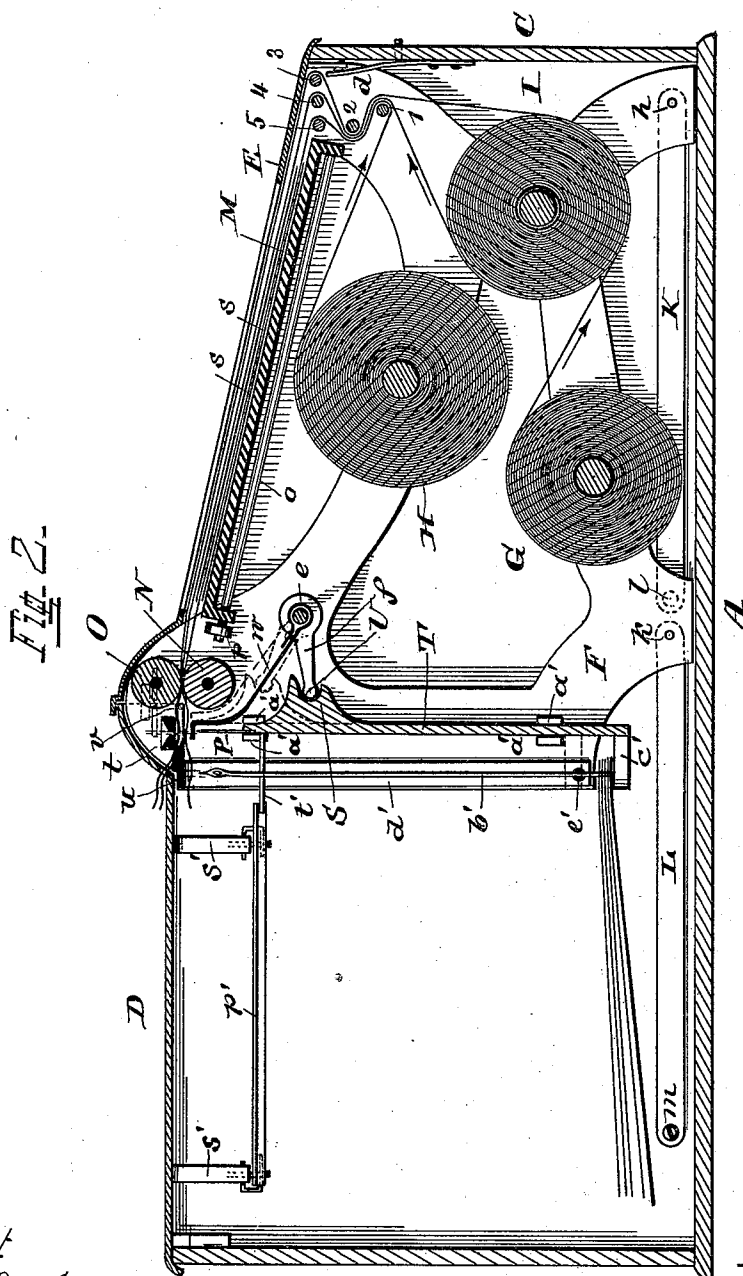
(No Model.)

3 Sheets—Sheet 2.

J. B. THIES.
AUTOGRAPHIC REGISTER.

No. 465,502.

Patented Dec. 22, 1891.



Attest
Robert J. Brindell
George Heidman

Inventor
John B. Thies

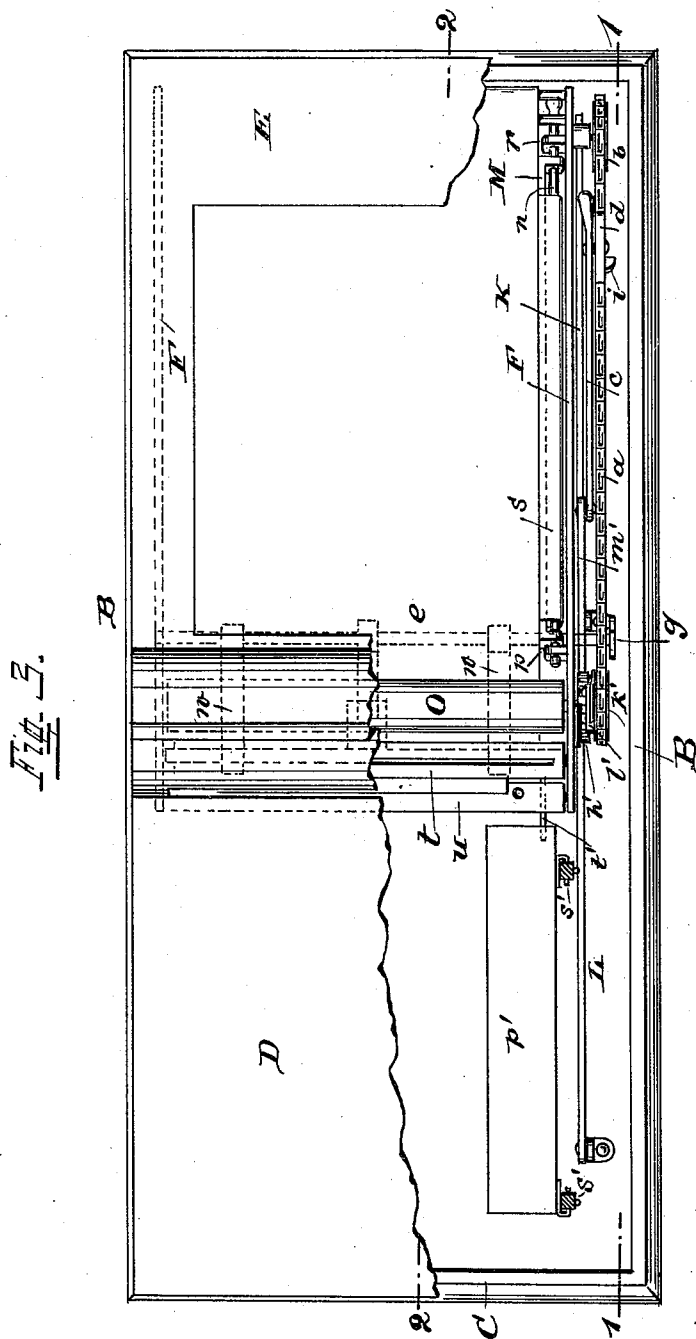
(No Model.)

3. Sheets—Sheet 3.

J. B. THIES.
AUTOGRAPHIC REGISTER.

No. 465,502.

Patented Dec. 22, 1891.



Attest
Robert J. Arndell
George Friedman

Inventor
John B Thies

UNITED STATES PATENT OFFICE.

JOHN B. THIES, OF DAYTON, OHIO.

AUTOGRAPHIC REGISTER.

SPECIFICATION forming part of Letters Patent No. 465,502, dated December 22, 1891.

Application filed February 15, 1890. Serial No. 340,577. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. THIES, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements 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.

My invention relates to improvements in apparatus for registering autographic writing, the original of which is to be used by the writer, while duplicates thereof are automatically filed away and preserved.

The first part of my improvements relates to the means of arranging the frame-work which supports the paper-rolls and working parts, so that the whole can be hung to the case or box holding the apparatus and all the working parts swung up out of the case when it is desired to renew the paper-rolls or for any other purpose.

My improvements further consist in arranging the feeding, cutting, and filing mechanisms, so that all the parts may be operated by one lever, the forward movement of which operates the feeding mechanism by which the paper sheets are fed from the rolls, while the return of the lever to its original position operates the cutting and filing mechanisms to sever the sheets and file the duplicate, the improvements consisting of a certain novel arrangement of parts to be hereinafter more particularly pointed out and claimed.

In the accompanying drawings, Figure 1 is a longitudinal section of the apparatus, taken just within the front side of the case. Fig. 2 is a longitudinal section through the center of the apparatus. Fig. 3 is a top plan view with portions of the cover removed.

The apparatus is inclosed in the usual box or casing, consisting of bottom A, sides B B, and ends C C, with horizontal top D and inclined top E cut away to allow for the writing on the writing-tablet M. These top covers are removable to allow access to the two compartments formed by the cutting and filing appliances which occupy the central portion of the case, each top being supplied with an independent lock, so that access may be had to each department inde-

pendent of the other. The paper-rolls and working parts are supported in a metallic frame-work of the usual kind, consisting of sides or standards F F, braced and held firm by the usual bottom pieces. In slots cut in this frame the paper-rolls G H I are journaled. To the outside of this frame-work F F are pivoted the arms or bars K K and L L, one end of each bar being pivoted to the frame-work at *h h* and *k k*, respectively, and the other ends of the bars pivoted to lugs attached to the case at *l l* and *m m*, respectively. In this way hinges are formed by the bars K K and L L, and whenever it is desired, the top covers being first removed, the frame and all the working parts supported therein can be swung up out of the case into the position shown by the dotted lines in Fig. 1, and thus complete access had to all the working parts.

The paper upon which the writings are to be made is supplied by the rolls G, H, and I, the paper from the three rolls passing up around the guide-rods 1, 2, 3, 4, and 5, as shown in Fig. 2, and over the writing-tablet M. This tablet is supported by the rods *n* and *o*, the rod *o* being arranged so that it can be detached from the tablet and raised up independently thereof. The other rod *n* passes loosely through ears *p* and *r* on the frame, which thus forms a hinge, upon which the tablet can be raised up and swung to the side of the apparatus. The transfer-paper *s s* is rolled on the rods *n* and *o* and wound from side to side, as occasion may require, by turning the rods. The paper from roll H is passed over the face of the tablet M and the transfer-paper brought down over it. The paper from roll I is passed in the same way between the two sheets of transfer-paper, and the paper from roll G is passed over the top of the second sheet of transfer-paper. In this way any writing made on the top sheet would be transferred to the other two and duplicates thus made. N and O are the gripping-rolls, between which the paper is passed and fed, one sheet into the filing-compartment and the others out through a slot in cover D on top of the register, as shown in Fig. 2.

Immediately in front of the delivery of the feeding-rolls is placed the bar *t*, extending horizontally from side to side and supported

on the frame F F. This bar *t* is slotted longitudinally to receive the cutting-knife. This cutting-knife P is a thin steel knife-blade raised at the center to give a shearing cut and is securely riveted to a carrier-frame T, consisting of the rectangular plate, which slides up and down between the guides *a' a'* in the supporting frame. At the central part of the upper part of this frame T at the back is the projection or arm S, which is hollowed out to form a tooth or cog U. To the rear of the carrier-frame, in a horizontal line with this cog U, is located a shaft *e*, journaled in suitable bearings in the frame-work. At the central part of this shaft an arm or fixed pawl *f* is rigidly attached, which pawl engages with the tooth U, so that when the shaft is revolved, so as to raise the arm *f*, the carrier-frame and knife will also be raised. Integral with the base of the carrier-frame T and extending out at right angles thereto are the projections or arms *c' c'*, on which are rigidly attached in an upright position the filing pins or needles *b' b'*, which are thus raised or lowered simultaneously with the knife. These needles have eyes and carry a piece of twine therein extending from one needle to the other, with which twine when the files are removed they may be tied up or bound.

In front of the delivery of the feeding-rollers is the triangularly-shaped bar *u*, extending horizontally from side to side and carrying a rod *v*, which extends along directly in front of the delivery of the gripping-rollers. This rod and bar *u* separate the sheets, delivering two of them up out of the case and the other into the filing-compartment.

Frictionally attached to the shaft *e* are the fingers *w w*, which extend out over the edge of the cutting-knife P to prevent the duplicate sheet being filed from coming in contact with the knife. When the shaft *e* is revolved, these fingers *w w* are at once thrown out of the way to allow the knife to operate, being attached frictionally to the shaft *e*. When they come in contact with the lower gripping-roller, they stop there and allow the shaft *e* to be further rotated. The bar *u*, with its dividing-rod *v*, is supported by the arms *d' d'*, which are pivoted to the lower portion of the frame-work at *e'*, and in this way the bar *u* can be swung down into the bottom of the filing-compartment when it is desired to remove the paper files. The shaft *e* extends out through the metallic frame-work F a short distance, and on the end of this shaft *e* is rigidly attached another arm *g*. On the lower gripping-roller shaft, immediately outside of the metallic frame, is rigidly attached a ratchet-wheel *h'*, and on the same shaft is loosely attached a sprocket-wheel *k'*. A dog *l'*, attached to this sprocket-wheel, engages with the teeth on the ratchet-wheel *h'*. A similar sprocket-wheel *b* is journaled in a suitable bearing attached to the other end of the metallic frame-work on the outside, and a sprock-

et-chain *a* connects the two wheels. Through one link *d* in this sprocket-chain or attached thereto is a lever *c*. The lower end of this lever *c* is pivoted to an arm *m'*, which is in turn pivoted to the metallic frame at *n'*. A catch or lug *i* extends outwardly from this link *d*, and the operation of these parts is as follows: When the lever *c* is pushed forward, it carries the sprocket-chain with it, thus turning the sprocket-wheel *k'*, and the dog *l'* engaging with the ratchet-wheel *h* on the gripping-roller the rollers are turned and the paper fed off of the rolls. The arm *g*, coming in contact with the lug *i*, springs aside and allows the lug to pass it. On the return of the lever *c* to its original position the lug *i* engages with the arm *g* on the shaft *e*, and thus the shaft is rotated and the cutting-knife and filing-pins operated to sever the sheets and file the duplicate. During this return operation the sprocket-wheel *k'* turns loosely on the gripping-roller shaft and the gripping-rollers remain dormant. When the cutting-knife and filing-pins have been raised so as to enter the slotted knife-bar and dividing-bar, respectively, the arm *g* is dropped by the link *d* and the weight of the carrier-frame returns it to its original position. The lever *c* is pivoted to the intermediate bar *m'* instead of directly to the frame, so that the lever will always extend the same distance out of the case during its movements. The position of the various parts is shown in the dotted lines in Figs. 1 and 2. By this arrangement of parts it will be seen the forward movement of the lever *c* feeds two of the written sheets out on top of the register and the other into the filing-compartment, while the return movement of the lever operates the cutting and filing mechanism to sever the sheets and file the duplicate away.

At the base of the filing-pins I place a sheet of card-board, so that when the filing-compartment is full the sheets may be drawn off and tied securely to the card-board, and thus filed away.

Along the sides of the upper portion of the filing-compartment are hung the shelves *p' p'*. These shelves are swung on brackets or supports *s' s'*, so as to hang in a horizontal position. Pins *l' l'*, attached to the carrier-frame T, extend out horizontally therefrom, so as to come under the edge of these shelves *p'*, and as the carrier-frame T is raised to sever the sheets and file them the shelves *p'* are also raised to a vertical position. These shelves while the sheets are being fed into the compartment separate the same and prevent them from curling up out of shape; but as the sheet is filed the shelves are raised to allow the sheet to fall into the compartment.

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

1. In an autographic register provided with a series of paper-rolls and feeding mechanism

for drawing out the paper from the rolls, the combination, with the case, of a frame supporting the paper-rolls, and arms pivoted thereto and to the case, so that the frame carrying the rolls can be swung up out of the case, substantially as shown and described.

2. In an autographic register, the combination, with the feeding mechanism operated by a hand-lever, of cutting-knife and movable filing-pins arranged to be operated thereby, so that by the movement of the hand-lever the paper is alternately fed forward, severed from the rolls, and filed upon the pins, substantially as shown and described.

3. In an autographic register, the combination, with the feeding mechanism operated by a hand-lever, of a reciprocating knife-carrier and double-armed rock-shaft, one arm of which engages with and operates said knife-carrier and the other is operated upon and rocked by the backward movement of said hand-lever, so that the paper is alternately

fed and cut from the rolls, substantially as shown and described.

4. In an autographic register, the combination, with the feeding-rollers, sprocket-wheel, with dog and ratchet to operate the same, and sprocket-chain operated by a hand-lever, of a rock-shaft journaled in the frame, and arms integral therewith, one arm of which engages with the sprocket-chain during its backward movement and thus rocks the shaft, while the other operates the knife-carrier, substantially as shown and described.

5. In an autographic register, the combination of shaft *e*, having arms *f* and *g*, knife-carrier *T*, sprocket-wheels *b* and *k'*, sprocket-chain *a*, and hand-lever *c* to operate the same, substantially as shown and described.

JOHN B. THIES.

Witnesses:

BARRY S. MURPHY,
J. C. PATTERSON.