

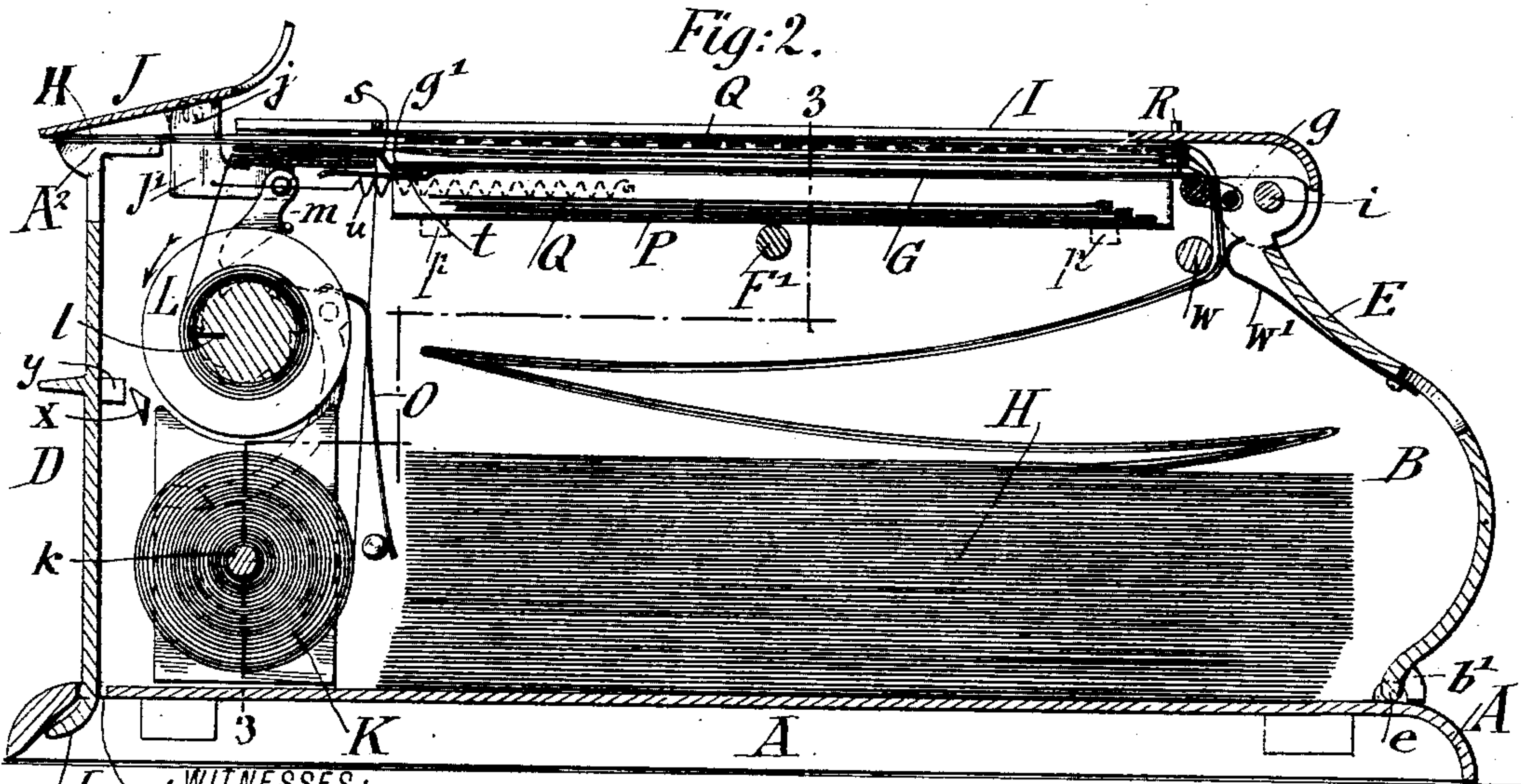
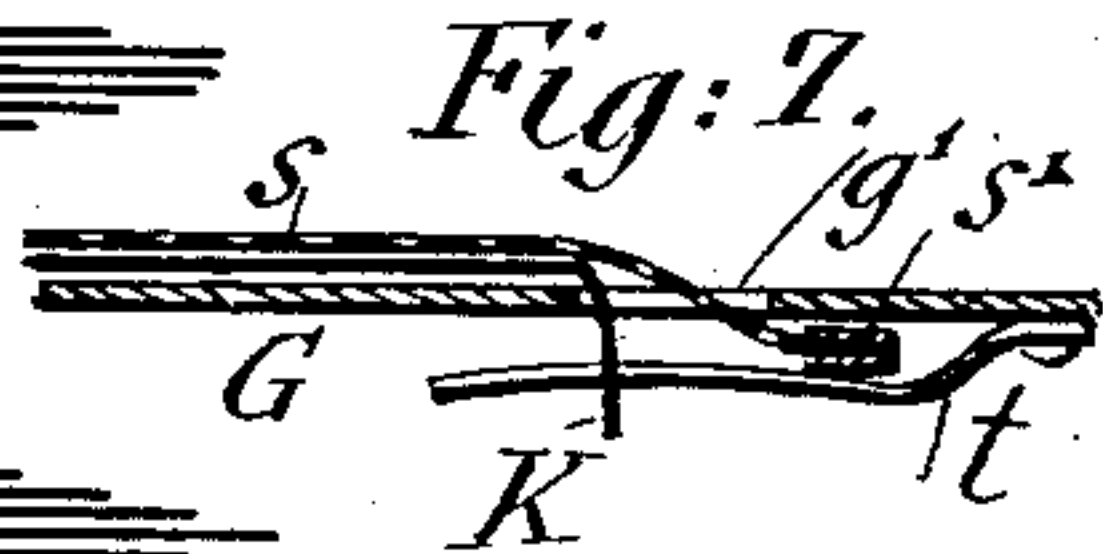
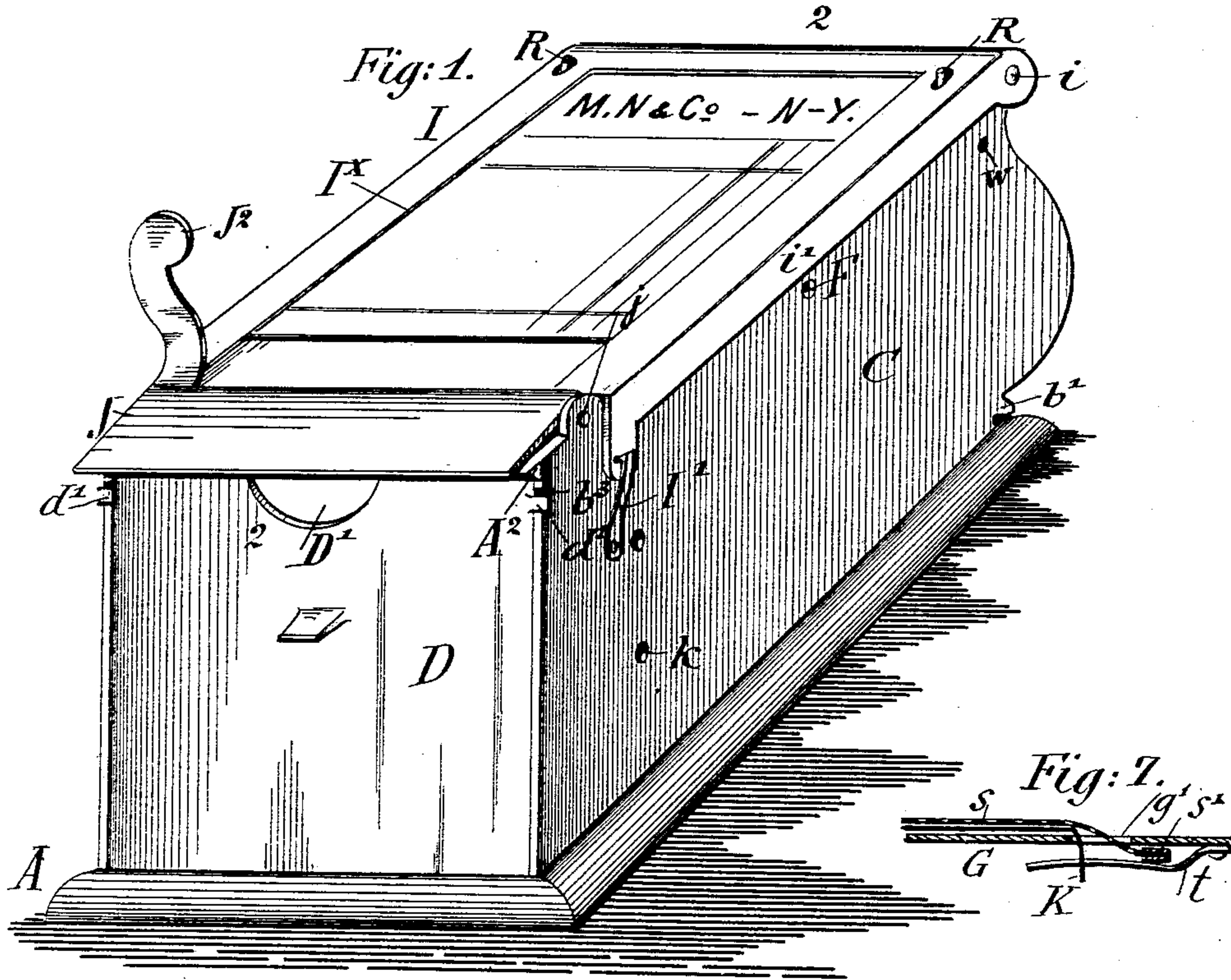
(No Model.)

2 Sheets—Sheet 1.

W. H. BREAKSPEAR, O. SPANNAUS & C. WEISBECKER.
AUTOGRAPHIC REGISTER.

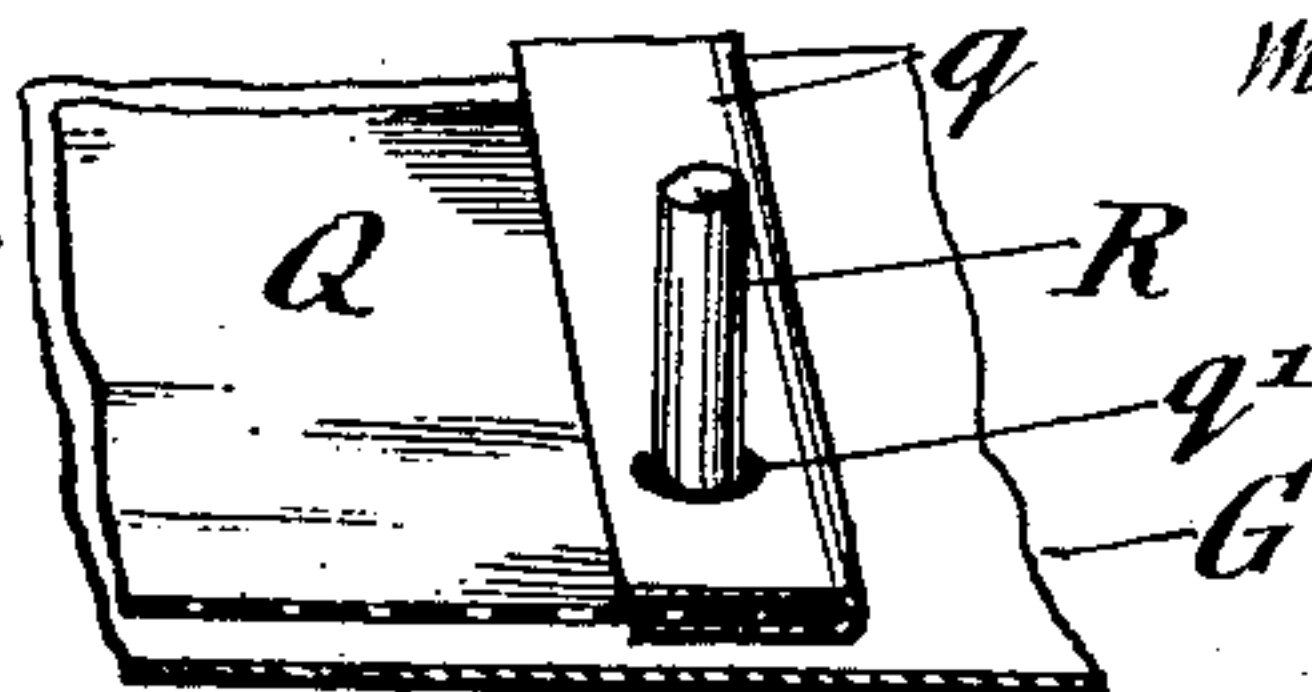
No. 587,567.

Patented Aug. 3, 1897.



WITNESSES:
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R. F. Pelouze

Fig: 6.



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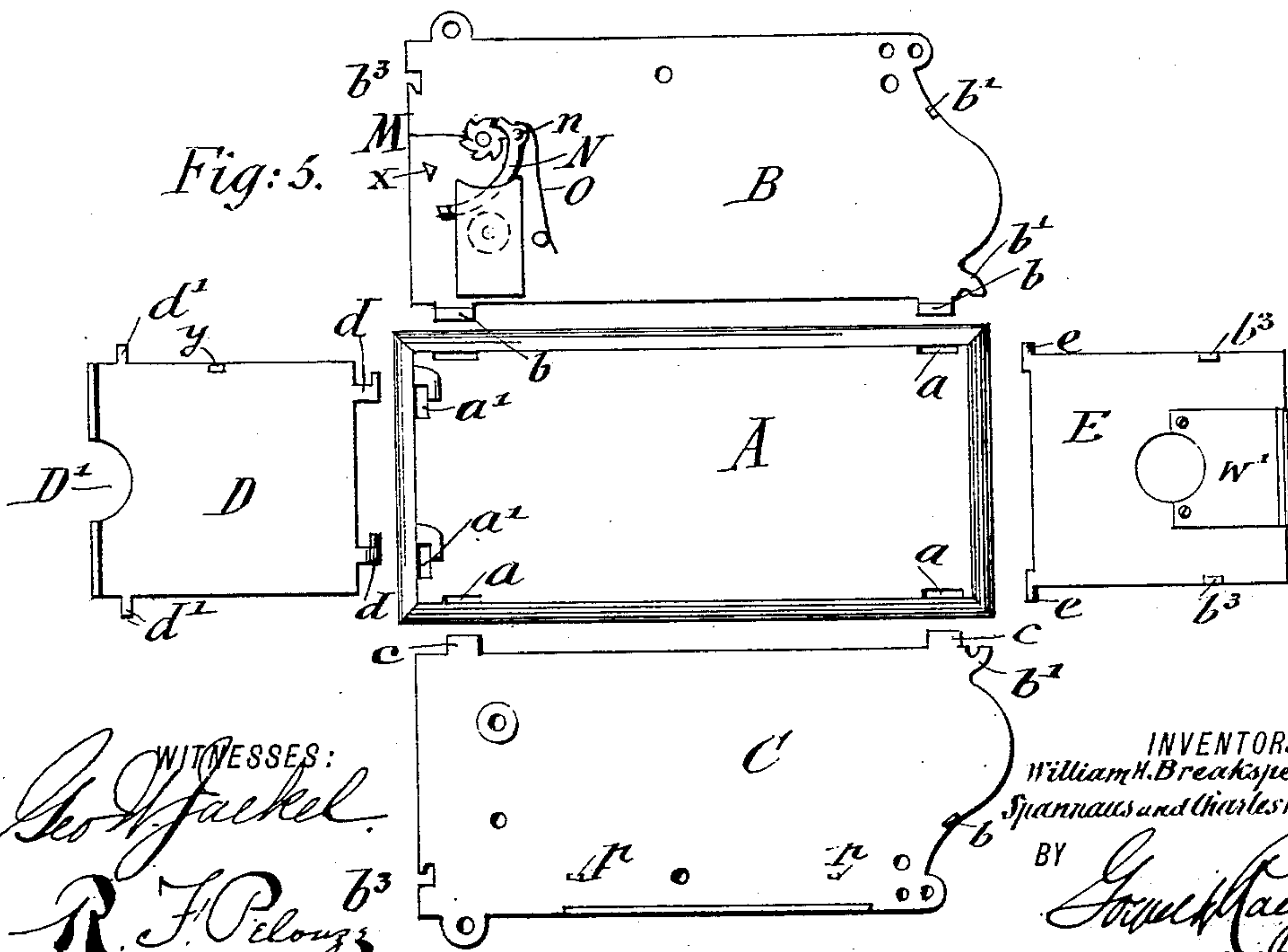
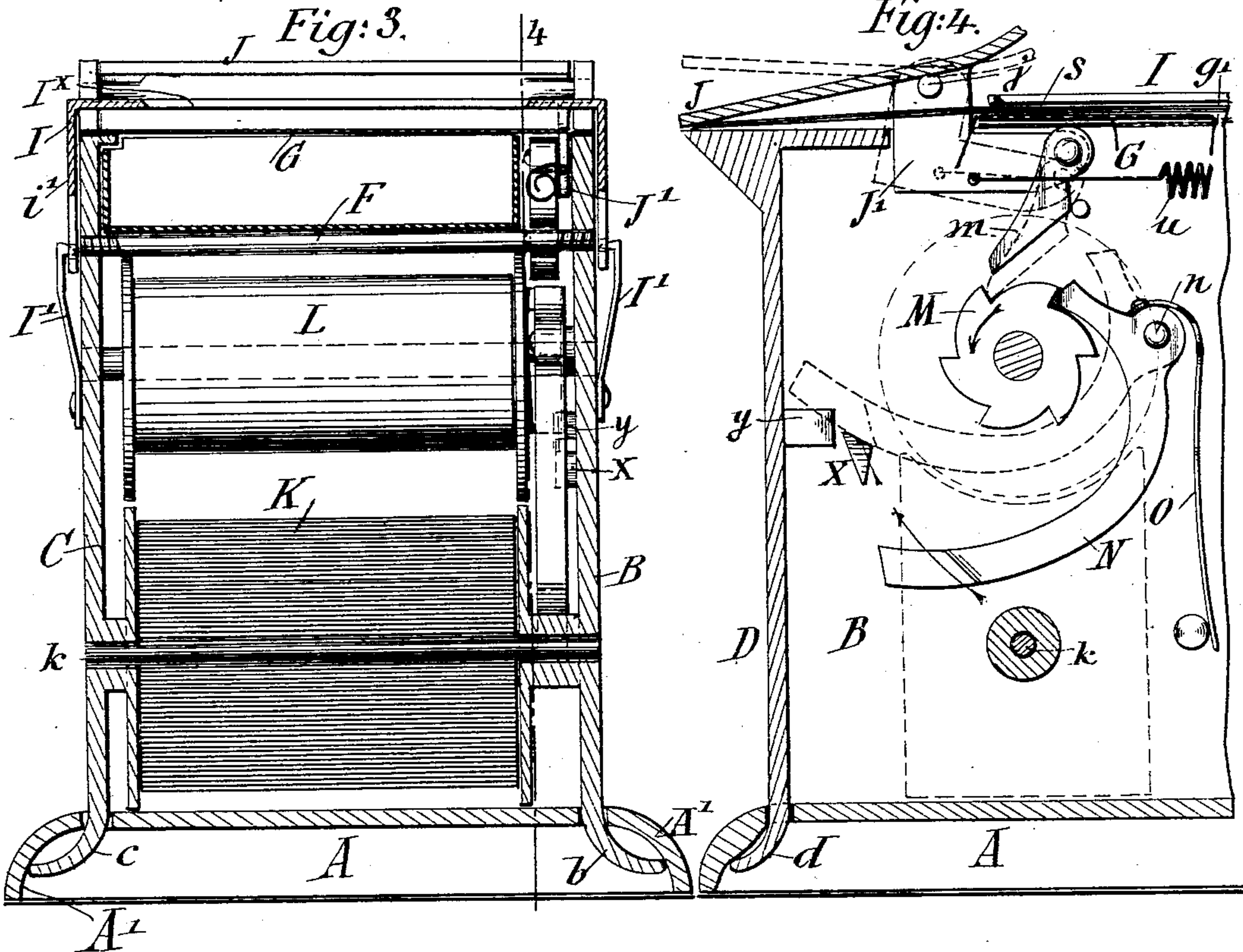
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2 Sheets—Sheet 2.

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AUTOGRAPHIC REGISTER.

No. 587,567.

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UNITED STATES PATENT OFFICE.

WILLIAM H. BREAKSPEAR, OTTO SPANNAUS, AND CHARLES WEISBECKER,
OF NEW YORK, N. Y.

AUTOGRAPHIC REGISTER.

SPECIFICATION forming part of Letters Patent No. 587,567, dated August 3, 1897.

Application filed April 24, 1896. Serial No. 588,952. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. BREAKSPEAR, OTTO SPANNAUS, and CHARLES WEISBECKER, citizens of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Autographic Registers, of which the following is a specification.

This invention relates to an autographic register of the class shown and described in our Patent No. 554,049, dated February 4, 1896. Its object is to simplify, cheapen, and render more serviceable and practicable those inventions of this class which are at present in use.

A further object of the invention is to provide a winding-up mechanism for the tally strip or web which may be so operated and manipulated that a portion or sheet of the same, at the end of each day's sales, may be torn off quite readily and the strip or web again attached to the winding-up roll.

A further object of the invention is to provide manifolding or carbon sheets with a suitable construction whereby they may be retained in the upper part of the recorder in such a manner that they will not be torn or mutilated in the act of drawing the sales-checks through or over them.

Our invention consists of certain features of construction and combinations of parts, to be fully described, and then finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of our improved manual sales-recorder. Fig. 2 is a vertical longitudinal section of the same on line 2 2, Fig. 1. Fig. 3 is an enlarged vertical transverse section of the recorder on the irregular line 3 3, Fig. 2. Fig. 4 is a vertical longitudinal section of one end of the recorder on line 4 4, Fig. 3. Fig. 5 is a plan view showing the parts of the casing spread out in the position they would occupy just before attaching them together. Fig. 6 is a broken detail view showing the reinforced end of one of the carbon-sheets received on its impaling-pin, and Fig. 7 is an enlarged detail view of parts shown in Fig. 2.

Similar letters of reference indicate corresponding parts.

Referring to the drawings and the parts of the casing of the recorder, (which are more clearly shown in Fig. 5,) A indicates the base of the casing; B, one side; C, the opposite side; D, one end, and E the other end. For the attachment of the side plates B C to the base A they are provided at their lower edges with curved lugs $b\ c$, respectively, that enter into the slots a , formed in the sides of the base A, the ends of said lugs abutting against the downwardly-extending flange A' of the base A, whereby said plates are adapted to be held in upright position against collapsing inwardly. The fixing of the side plates B C in upright position is accomplished by means of a double-ended screw-bolt F, which is provided with a right-hand screw-thread at one end and a left-hand screw-thread at the other end, adapted to screw into correspondingly-screw-threaded openings in said plates.

Before the screw connection of the plates B C is made the laterally-extending lugs e at the lower end of the end plate E are engaged in the recesses of the recessed rearwardly-extending lugs b' , whereby said end plate is hinged to the plates B C and base A, the same being adapted to be swung up in upright position and there secured by means of engaging lugs $b^2\ b^3$, respectively, on the side plate B and the said end plate.

The front end plate D of the casing is provided at its lower end with curved elbow-lugs d , which are adapted to engage in slots a' in the corresponding end of the base A, while said end plate D is adapted to be secured in upwardly-swung position by means of lugs d' , that engage in undercut notches b^3 in the corresponding front edges of the side plates B C. The construction whereby the front end plate D is connected to the casing of the recorder enables the same to be readily detached for obtaining access to the interior of the recorder, it being only necessary to raise the lugs d' out of the undercut notches b^3 , shift the same slightly laterally, and then raise the elbow-lugs d out of the slots a' in the end of the base A.

G is the top plate or surface, over which the sales-checks which go to form up the pile of sales-strips H are led, said top plate G being hinged to the rear ends of the sides of the

casing at *g*, so that it may be swung upwardly to obtain access to the interior of the casing from the top. The sales-checks are led over onto the top plate *G* through a small space which is provided between the hinged end of the top plate and the end plate *E*, the strips forming said sales-checks being arranged, preferably, in alternate folds, as shown, so as to take up a small space in the chamber provided for the pile of checks. It is evident, however, that rolls or any other suitable form of sales-checks may be provided. The outer sales-checks, which are to be torn off from the sales-strips *H*, of which there are shown three, so as to form a plurality, register with the opening *I*^x in the flanged retaining-frame *I*, which is hinged to the rear end of the casing at *i*, while the side flanges *i'* of said frame engage the sides of the casing, said frame being retained in downwardly-swung position in contact with the uppermost sales-check by means of spring-catches *I'*, secured to the side plates of the casing and engaging by their noses or teeth into corresponding perforations in the retaining-frame. The outer sales-checks being thus led between the retaining-frame *I* and the top plate *G*, which is supported in horizontal position upon the upper edges of the side plates, are led at their forward edges over the horizontal ledge *A*² at the upper edge of the front plate *A* and under a cutter *J*, which is hinged at *j* to the side plates of the casing in advance of the retaining-frame *I*.

The tally strip or web *K* is arranged in a roll at the lower part of the forward end of the casing upon a spindle *k* and is led off of the same upwardly through a transverse slot *g'* in the forward end of the top plate *G*, (see more particularly Fig. 7,) over the front end of the top plate *G*, and downwardly over a winding-up roller *L*, which is arranged above the spindle *k*. The free edge of the tally-strip *K* is inserted into a longitudinal slit *l* in the circumference of the winding-up roller *L*, so that by the turning of said roller in the proper direction the tally-strip will be wound thereupon. The rotation of the winding-up roller *L* in the direction of the arrow is accomplished through the medium of a ratchet-wheel *M*, arranged thereon, (see Fig. 4,) and a pivoted pawl *m*, arranged on an arm *J'* of the cutter *J*, so that by the proper actuation of the cutter by grasping the handle *J*² thereof the pawl *m* will engage the teeth of said ratchet-wheel.

N is a curved dog which at its upper end is pivoted at *n* adjacent to the winding-up roller *L*, whereby the toe thereof is adapted to engage the ratchet-wheel *M* as a detent and prevent retrograde rotation, the taking of the toe of said dog against the teeth of the ratchet-wheel being enforced by means of a pressure-spring *O*.

Upon the transverse rod *F*, affixed to the sides of the casing and lugs *p* projecting inwardly therefrom, is supported a tray *P* for

the storage of a supply of manifolding or carbon sheets, said tray being arranged directly under the top plate *G*. These carbon-sheets have a peculiar construction and are differently arranged than in the recorders heretofore in use. It is customary to lead the sales-checks over the supporting-surface for the same in a direction at right angles to the direction in which the carbon-sheets extend, whereby the disadvantage results that the carbon-sheets by reason of the pressure and abrading action of the sales-checks are sooner or later crumpled or torn, so that they are rendered unfit for use. As the carbon-sheets are expensive it is quite important that the same be retained in smooth and integral condition, so that the expense of the recorder is lessened and a clearer manifold copy can be obtained.

In the present invention the manifolding or carbon sheets *Q* (see Fig. 2 and enlarged detail view, Fig. 6) are strengthened at one end by means of reinforcing-strips *q*, which may be made of any suitable construction and secured thereto in any suitable manner. These carbon-sheets are of a length not quite equal to that of the sales-checks, and their reinforcing-strips *q* are provided at each end with a perforation *q'* to receive the impaling-pins *R*, that are arranged at each side of the rear end of the casing, the same projecting upwardly from the top plate *G* adjacent to its hinge connection with the casing, so that said impaling-pins may be passed into the perforations of the reinforcing-strips and the carbon-sheets thereby held. The position of the carbon-sheets thereby partakes of the direction of the line of movement of the sales-checks through the recorder, so that the strain of the pull is exerted not transversely of the carbon-sheets, as heretofore, but parallel with and in the direction of the length of said sheets. This absolutely prevents the tearing or mutilation of the carbon-sheets by the pulling of the sales-checks through the upper part of the recorder, and thereby cheapens the expense of running the recorder and preserves the carbon-sheets in smooth condition until their manifolding or carbon surface is entirely unfit for use. In the present instance as three sales-checks are arranged it is necessary to impale two carbon-sheets, and as the reinforcing-strips of said carbon-sheets are of considerable thickness they will be entirely clamped between the top plate *G* and the retaining-frame *I*, whereby the looseness of the strips is prevented. It is evident, therefore, that the impaling-pins *R* may, if desired, be dispensed with when the clamping action of the parts *G* and *I* is sufficient, but for a better security the reinforcing-strips are preferably provided with perforations to receive impaling-pins.

It is necessary that a manifolding or carbon strip be provided for obtaining a record upon the tally-strip *K*, and this is accomplished by means of the narrow carbon-sheet *S*, which at its rear edges is provided with a

reinforcing-strip S' , that is engaged in spring-fingers t , secured to the under side of the top plate G , adjacent to and behind the slot g' , said narrow carbon-sheet being passed upwardly through said slot and onto the top of the tally-strip.

Having thus described the construction of our improved manual sales-recorder, we will now describe the operation of the same. The recorder being properly supplied with the outfit which is necessary for obtaining the desired records of sales, the forward sales-checks are led through the upper part of the recorder between the top plate G , the retaining-frame I , and under the cutter J . The record is now made so that manifold copies are produced upon the underlying sales-checks as well as upon the tally-strip—that is to say, the totals only are recorded upon the tally-sheets. The cutter J is then raised, thus rotating through the medium of the actuating-pawl m the winding-up roller M , so that a portion of the tally-strip is wound upon the roller, presenting thereby a new surface for the next record. Simultaneously the inscribed sales-checks are drawn out until their rear ends are adjacent to the cutting edge of the cutter J , whereupon the cutter is lowered through the action of its spring u and the sales-checks torn off. The recorder is then in condition ready for a new record.

As the sales-checks are arranged in folds, so as to form a sort of bellows-like pile H in the interior of the casing, it is found best to provide some means for removing the creases to a certain extent. This is attained by leading the sales-checks around a transverse rod w , against which they are pressed by a pressure-spring w' , that is attached to the rear end plate E .

At the end of the day that portion of the tally-strip which has the amounts of the sales recorded thereupon and which is wound upon the winding-up roller L is torn off from the remainder of the tally-strip. The removal of the separated portion is attained by releasing the dog N from engagement with the ratchet-wheel M , the longer curved arm of said dog being raised so that its free end can be rested upon a shoulder x , projecting inwardly from the casing. As the dog is out of engagement with the ratchet-wheel the winding-up roller can be turned in backward direction, so as to unwind the inscribed portion of the tally-strip. After the removal of the same the new end of the tally-strip roll is attached to the winding-up roller L and the dog N released from said shoulder x . If perchance the dog N is still in raised position without the salesman releasing the same from the shoulder x , this releasing can be accomplished through the closing of the hinged front plate D . To

this end said plate is provided with an inwardly-projecting side throw-off y , which when the door is closed engages the long arm of the dog N at the side adjacent to the wall of the casing and presses the same off of the shoulder x sidewise, permitting the dog to fall into engagement with the ratchet-wheel under the actuation of its spring.

For enabling the grasping of the free ends of the sales-checks the upper edge of the forward end plate D is recessed, as shown at D' , to permit the fingers to pass under the sales-checks.

It is evident that slight changes can be made in the details of construction of this apparatus without departing from the spirit and scope of the invention.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. In an autographic register, a casing consisting of a base provided with slots, side plates provided with lugs received in said slots and having opposite screw-threaded openings, a transverse screw-bolt having right and left screw-threads respectively at its ends, said ends being received in the correspondingly-threaded openings of the side plates, and the end plates, substantially as set forth.

2. In an autographic register, the combination of a casing provided with a top plate, over which the sales-checks are led, a cutter, a winding-up roller for a tally-strip, mechanism actuated by the cutter for rotating said roller intermittently, a dog adapted to prevent retrograde movement of the winding-up roller, a shoulder at the interior of the casing, and a throw-off adapted to engage said dog to release the same from the shoulder, substantially as set forth.

3. In an autographic register, the combination with a casing provided with a slotted top plate over which the sales-checks are led, and spring-fingers secured to and extending substantially parallel with the under side of the top plate adjacent to and projecting with their free ends toward said slot, of a manifoldings-strip having a reinforced edge held in said spring-fingers, said strip passing up through the slot onto the top plate, substantially as set forth.

In testimony that we claim the foregoing as our invention we have signed our names in presence of two subscribing witnesses.

WILLIAM H. BREAKSPEAR.
OTTO SPANNAUS.
CHARLES WEISBECKER.

Witnesses:

PAUL GOEPEL,
GEO. S. WHELOCK.