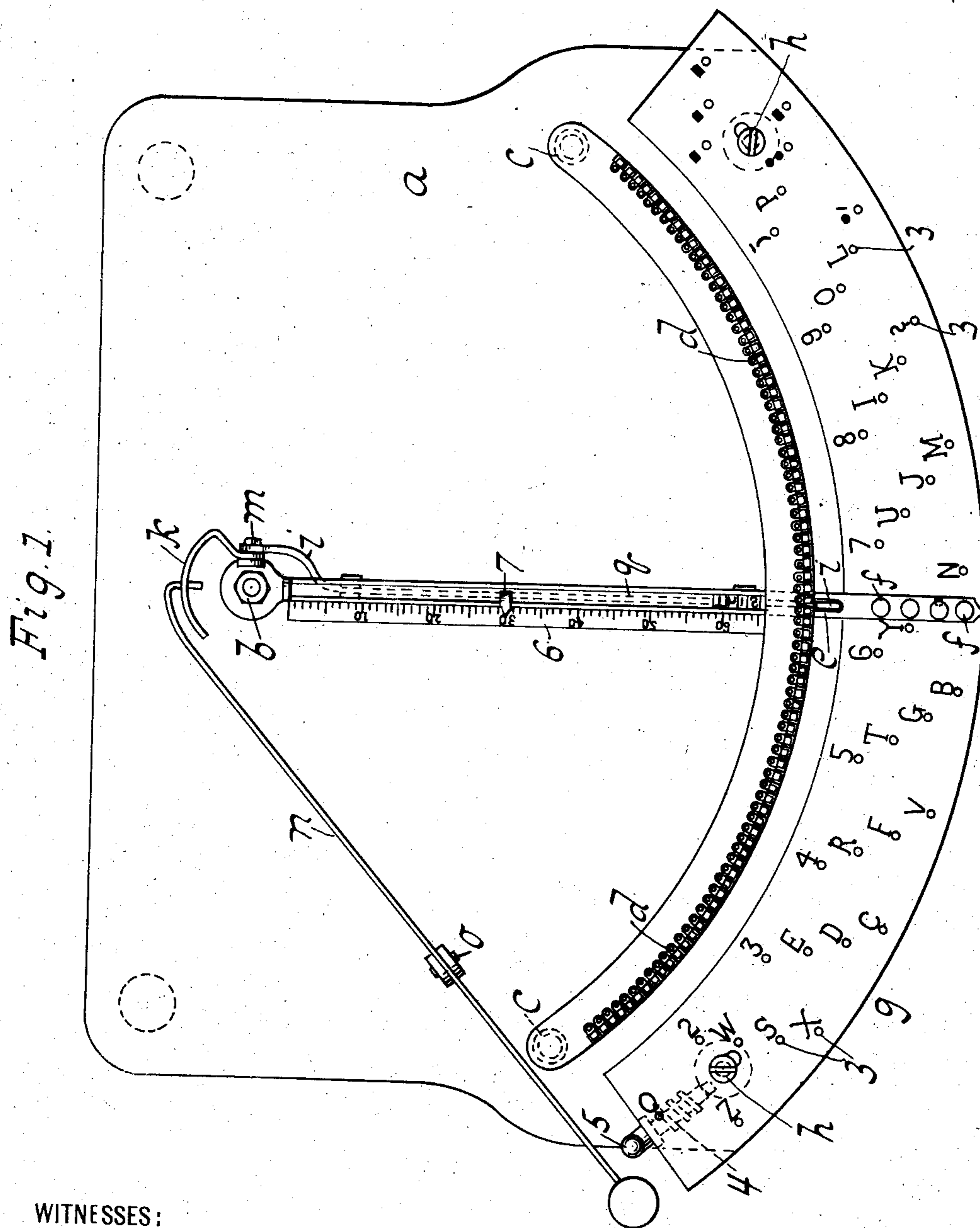


No. 834,164.

PATENTED OCT. 23, 1906.

W. P. QUENTELL.
TYPE SETTING MACHINE.
APPLICATION FILED MAR. 29, 1906.

2 SHEETS—SHEET 1.



WITNESSES:

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2 SHEETS—SHEET 2.

Fig. 2.

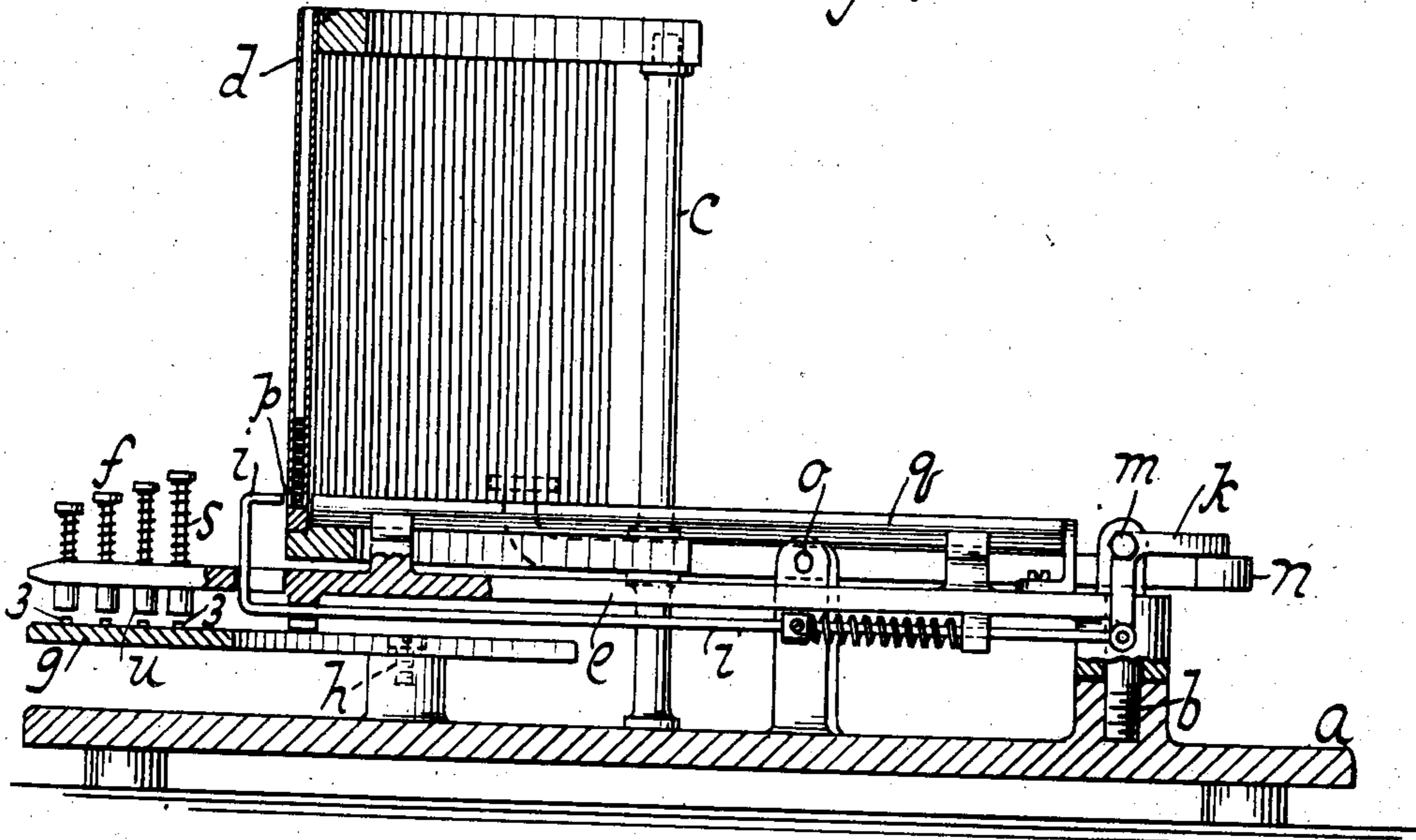


Fig. 3.

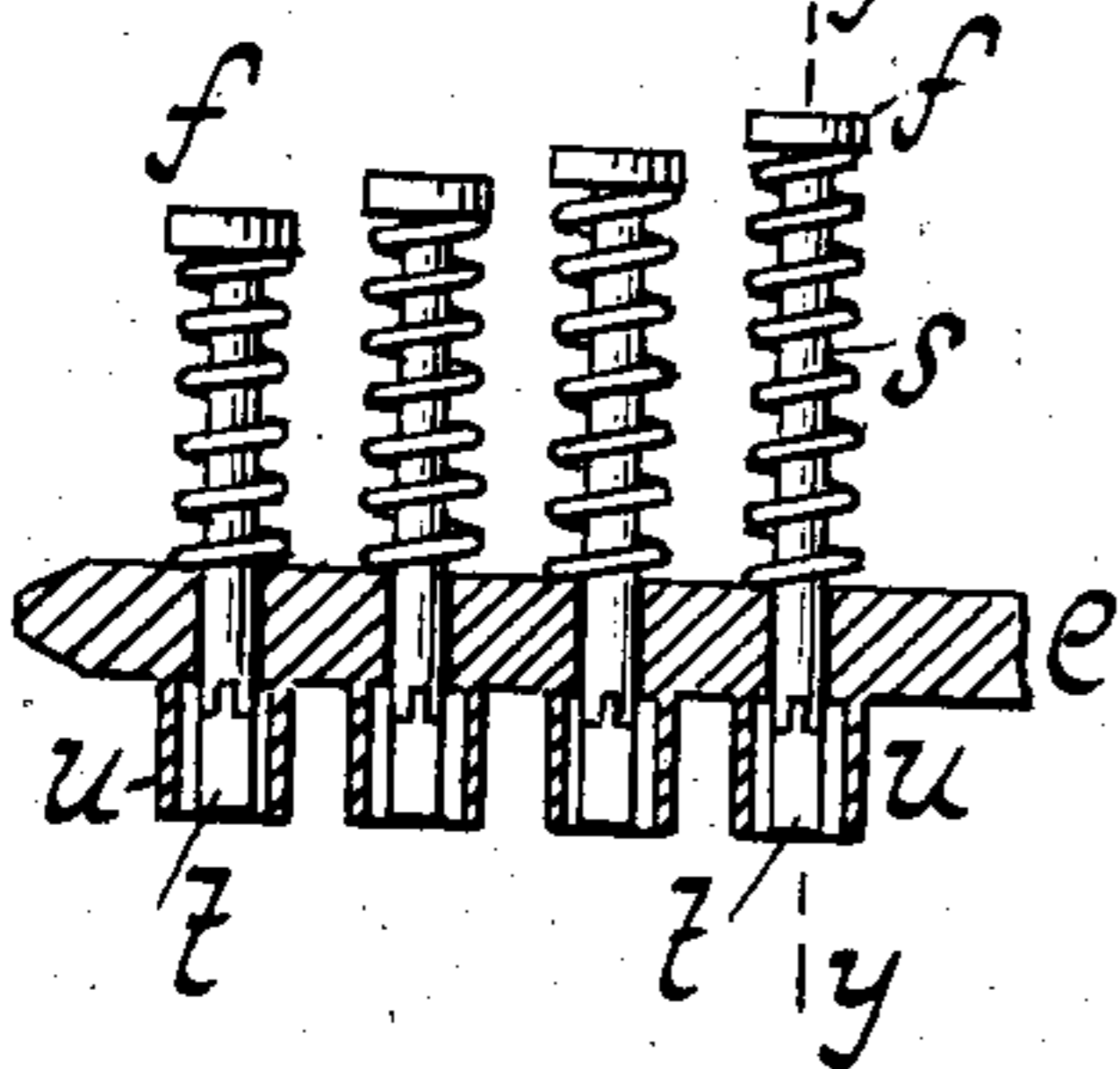


Fig. 4.

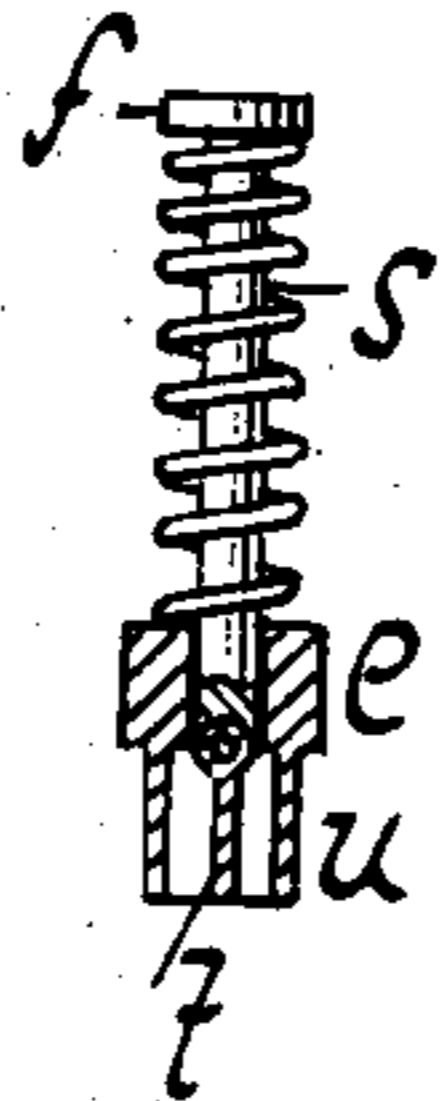


Fig. 5.

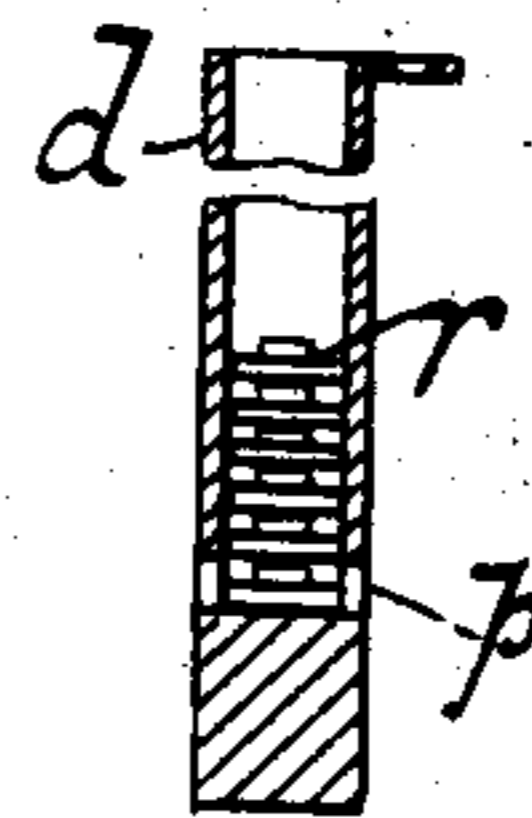


Fig. 6.

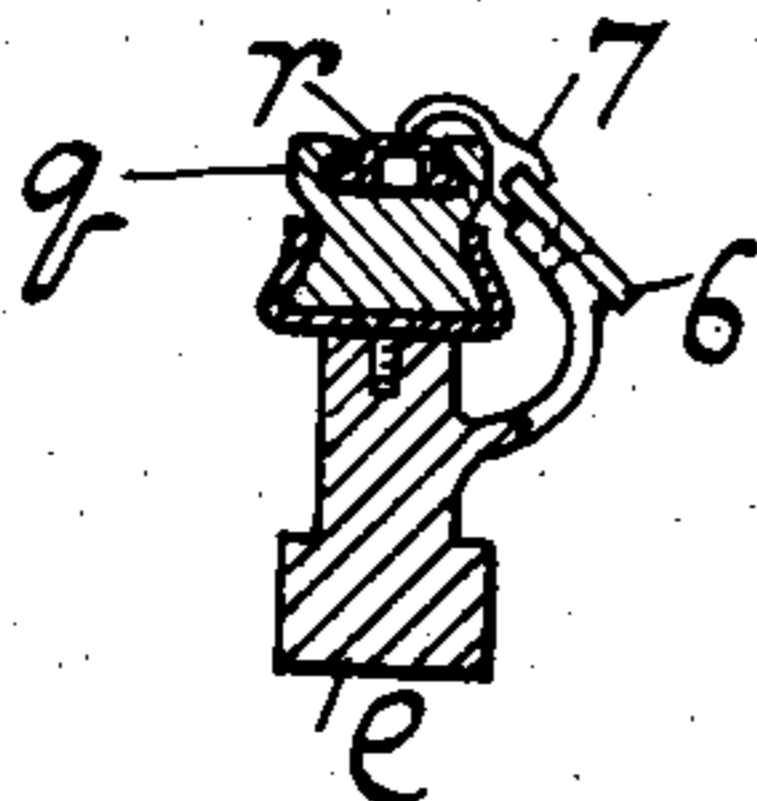


Fig. 7.

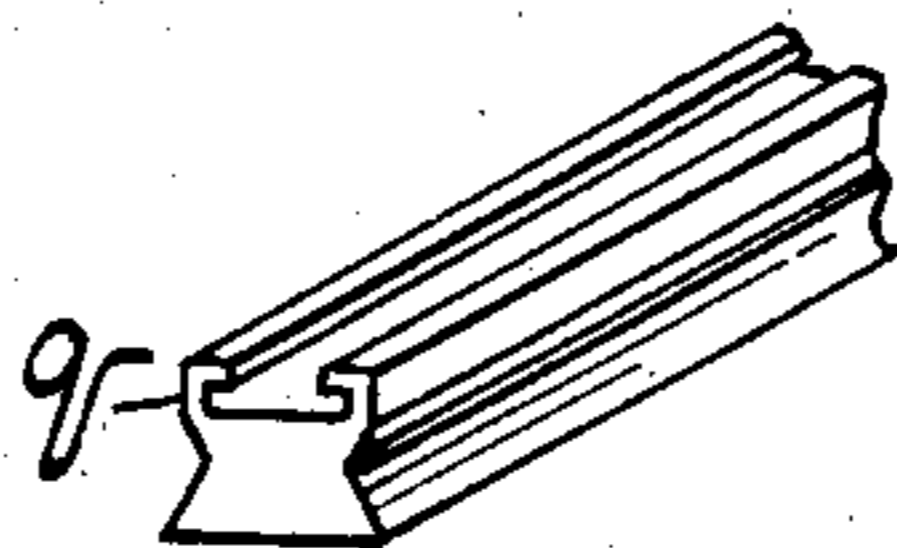


Fig. 8.

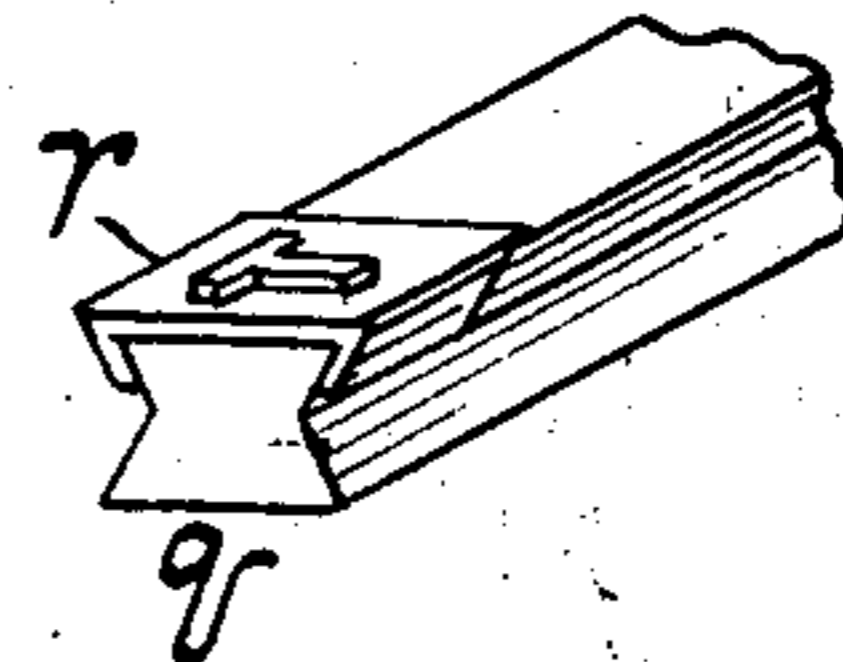
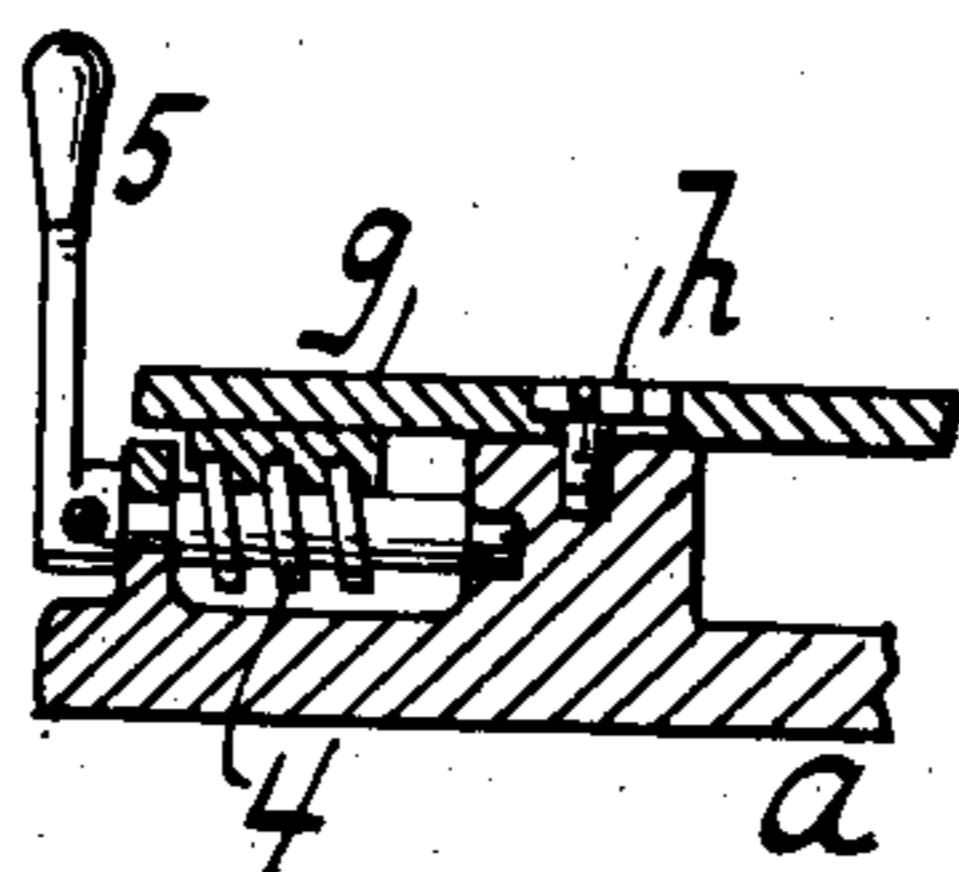


Fig. 9.



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UNITED STATES PATENT OFFICE.

WILLIAM P. QUENTELL, OF NEW YORK, N. Y.

TYPE-SETTING MACHINE.

No. 834,164.

Specification of Letters Patent.

Patented Oct. 23, 1906.

Application filed March 29, 1906. Serial No. 308,752.

To all whom it may concern:

Be it known that I, WILLIAM P. QUENTELL, a citizen of the United States, residing at Manhattan borough, in the county of New York and State of New York, have invented new and useful Improvements in Type-Setting Machines, of which the following is a specification.

This invention relates to a device by which type can be readily assembled or set onto a type-rod or the like to be used in a printing-press of suitable kind—for example, flat or rotary.

This invention resides in the features of construction set forth in the following specification and claims and illustrated in the annexed drawings, in which—

Figure 1 is a plan view of a type-setting machine embodying this invention. Fig. 2 is a sectional side view of Fig. 1. Fig. 3 shows stop-plungers. Fig. 4 is a section along *y y*, Fig. 3. Fig. 5 shows part of a type-magazine. Fig. 6 shows an arm with type-bar and type. Fig. 7 is a perspective view of a type-rod. Fig. 8 shows a modified form of type-rod. Fig. 9 shows an arrangement for case-shifting.

In the drawings is shown a base *a* with a post or pivot portion *b* and with posts *c*, which support a type magazine or font *d* adapted to contain type.

The magazine shown comprises a set of chambers or reservoirs, each chamber intended to carry a supply of respective letter or type, so that in one chamber are contained the type carrying small "a," in another all type of capital "D," and so on.

An arm or support *e* swinging about center *b* can be grasped by button *f* or by one of said buttons and swing to correspond or register with a desired type, as indicated on the letter-board *g*, which is placed in proper position on supports and held by pins or screws *h*.

The movable or selecting arm *e* carries a pusher or ejector *i*, pivoted to a lever *k*, fulcrumed at *m*. A finger-lever *n*, fulcrumed at *o*, serves to actuate the bell-crank lever *k* and slide the ejector *i*, so that its free or forward end passes through the respective type-supply in magazine *d*. The lever *n* is shown extended forwardly to the front of the machine to be within easy reach of or handy for the operator working at the keyboard. Each such type column or tube in the magazine having lateral passages or outlet *p*, as indicated in

Fig. 5, the ejector running its free end through such type-column, will eject a type. The type can be made to successively settle toward the exit in the magazine by their weight or could be pressed by suitable means as a spring-plunger.

A type ejected from the magazine is moved onto a type-receiving rod *q*, as indicated by a type *r*, Figs. 6 and 8.

The type-rod *q* and type *r* can be of various shapes. The type can be formed of thin or sheet metal, but the choice of suitable material is no part of the invention.

In Fig. 7 the rod *q* is shown channeled or gutter-shaped, and the corresponding type, Fig. 6, are shown with edges or lips adapted to slip into the rod.

In Fig. 8 the rod is shown with a flat top and clasped by a type with depending or downwardly-bent edge portions.

The buttons *f* have plungers *s*, whose terminals or stop portions *t* are movable or hinged to yield to a certain degree. The play of the terminals *t* is limited by stops or tubes *u*, fixed to the under side of arm *e*. The letter-board *g* has fixed or rigid studs or stop parts *3*. The button-shanks or plungers *s* are normally held up or out of action by springs coiled or seated about the shanks.

When the selecting-arm *e* is brought to proximity with a selected letter or character on the board and the button *f* with shank *s* and stop *t* is depressed to come against stud *3*, the stop *t* coming to rest against stop *u* on one side or another, the ejector *i* is in line to select a corresponding type from the magazine.

Four buttons *f* are shown corresponding to the arrangement of four rows of studs on the keyboard, which arrangement enables a compact structure to be obtained or avoids lengthening the keyboard to an excessive extent.

The device can be adapted for "case-shifting," so called. The board or plate *g* has a certain play by reason of slot connections at *h*, and a shifter, such as a worm 4 with handle 5, can shift the board with stops *3* to arrest or set the plunger *i* opposite a small or large or other type or character.

In each tube of the magazine, respectively, are contained type all bearing one letter or character, so that the plunger when correspondingly set and actuated will always eject such a type as answers to the character

on the keyboard at which the arm *e* has been arrested.

The magazine is of course divided into compartments sufficient for the required assortment of type with small and large or other characters.

The type is shown with flanges or engaging parts, and the type-rod *g* is likewise shaped so that as the type are moved onto the rod they engage and will be movably held or are not liable to accidentally fall off. The type will not come off the rod except by sliding off the end.

A scale 6 can be applied at the arm *e*. A slide or pointer 7 can be set along the scale. A measured or uniform length of line can thus be provided for in continuous work. The pointer 7 can be made to act as a stop. The pointer 7 can be made to straddle or clamp the scale so as to slide, but be frictionally prevented from accidentally moving.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A type-magazine, an arm pivoted at one side of the magazine and provided with a pusher or ejector at the other side of the same, a lever for moving the ejector and an actuating button or arm for the lever.

2. A magazine having different fonts or sets of type, means for selecting the type, a letter or index board, and a setting device or case-shift for the letter or index board.

3. A type-setting machine comprising a magazine, an ejector, a setting-arm for the ejector, a series of stops for the setting-arm, a support or letter-board for the stops and a shift or worm gear for the support.

4. A type magazine or supply, a movable selecting-arm means for transferring type from the magazine to the arm, a letter-board with stops, and yielding or swinging stops to

coact with the stops on the board and allow the selecting-arm to register with the type.

5. A type-supply, a selecting-arm with stop-plungers having movable terminals, stops on the swinging arm for limiting the play of the terminals, and a letter-board with stops for engagement of the movable terminals.

6. A magazine having fonts or sets of type, means for selecting type from the magazine, means for holding the selected types, a letter or index board, and means for shifting said board.

7. A circularly or arc shaped type-magazine, an arm pivoted in the circumference of said arc, a type-rod carried by the arm within the circumference, stops on the arm, a keyboard, studs on the keyboard for arresting the stops, an ejector carried by the arm, a lever fulcrumed on the arm and connected to the ejector, and a finger-lever engaging the ejector-lever.

8. A type-supply, a selecting arm or support with a stop-plunger, a letter-board with stops for engagement with the plunger, and means for moving type from the supply to the arm.

9. A type-supply, a type-rod for receiving type from the supply, a selecting arm or support for the rod, a plunger on said support, a letter-board with stops for engagement with the plunger, and means for moving type from the supply to the rod.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM P. QUENTELL.

Witnesses:

GEORGE HULSBERG,
EDWARD WIESNER.