W. P. QUENTELL.

PRINTING PRESS.

APPLICATION FILED FEB. 5, 1908.

901,186.

Patented Oct. 13, 1908.

4 SHEETS—SHEET 1.

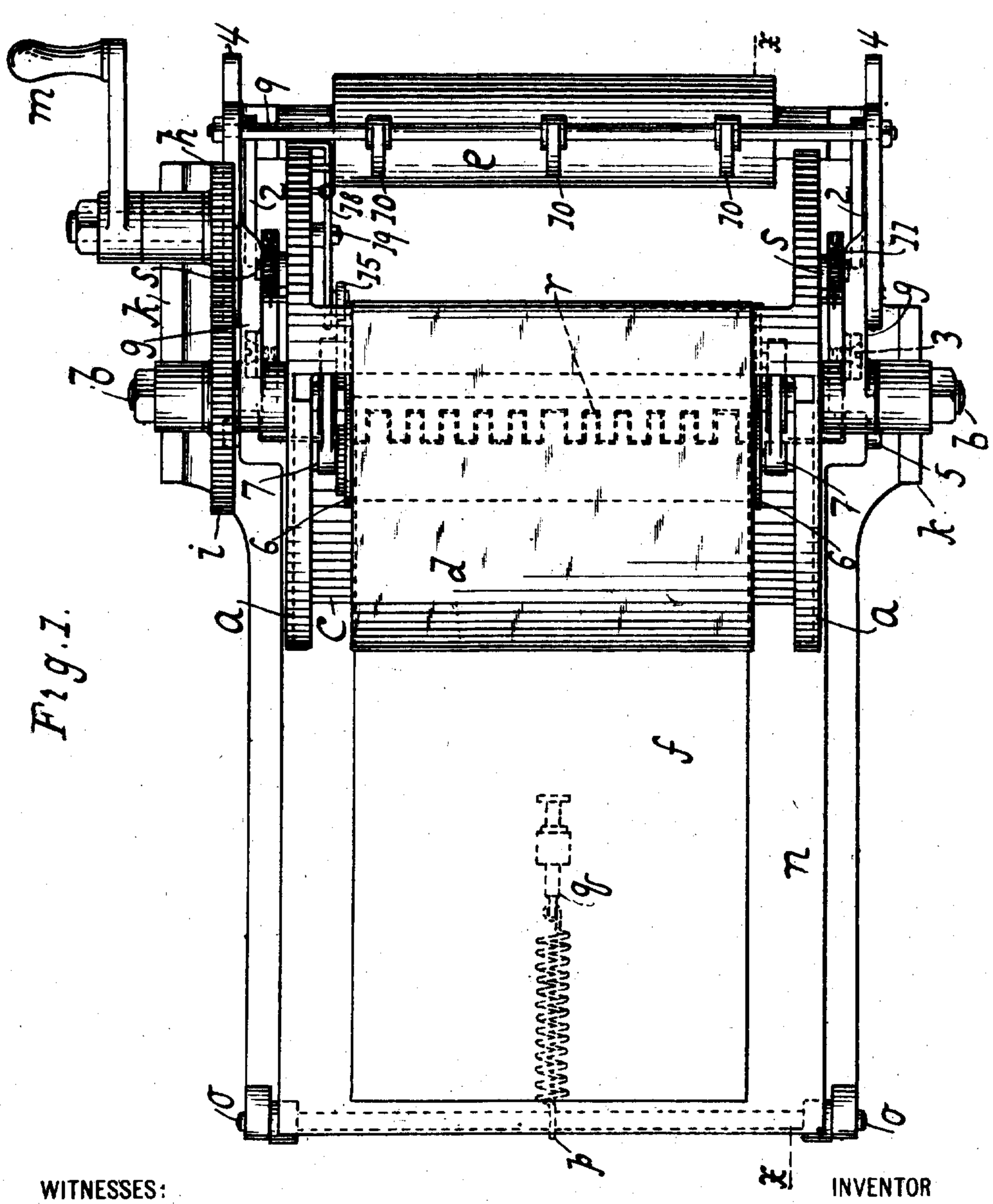

Fig. 1.

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4 SHEETS—SHEET 2.

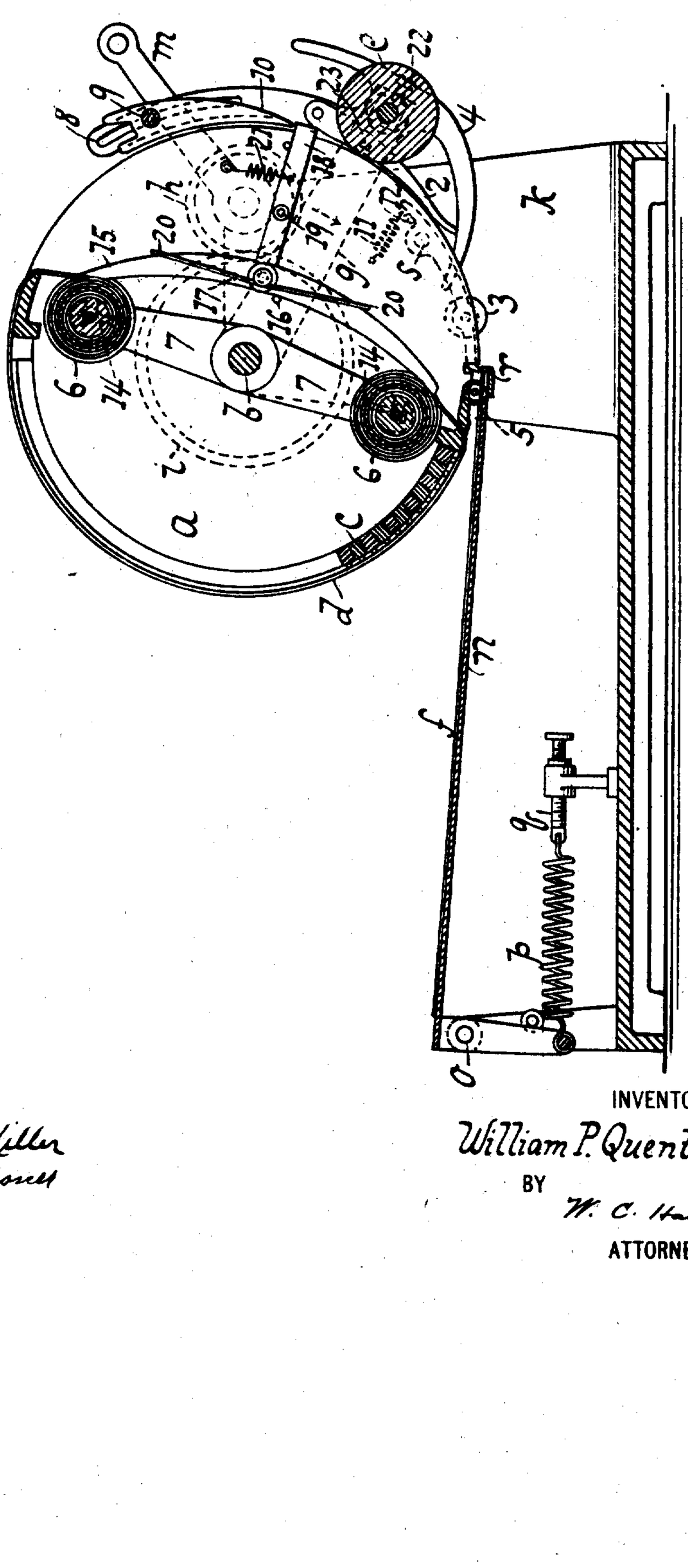

Fig. 2.

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4 SHEETS—SHEET 3.

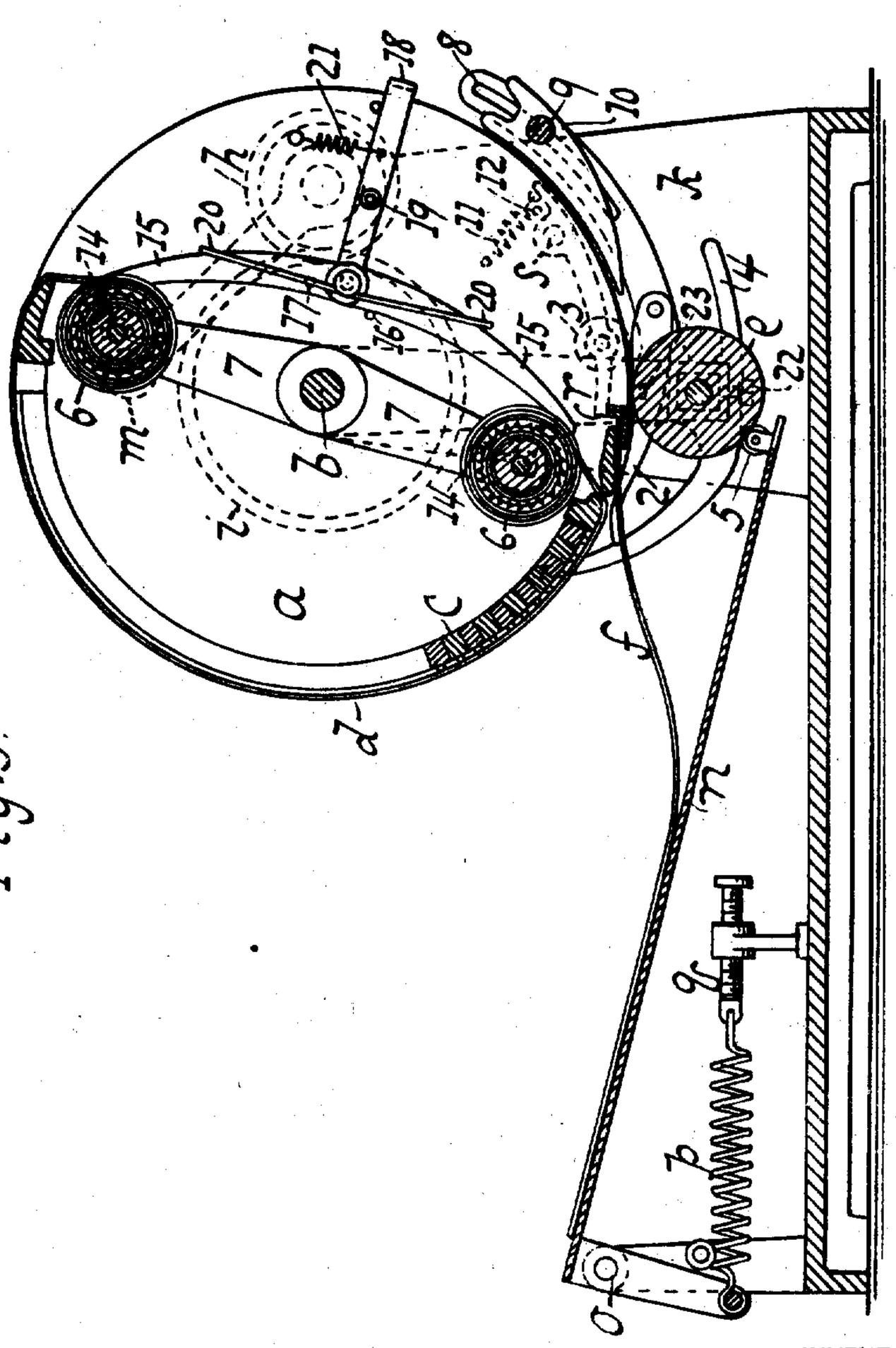

Fig. 3.

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4 SHEETS—SHEET 4.

Fig. 4.

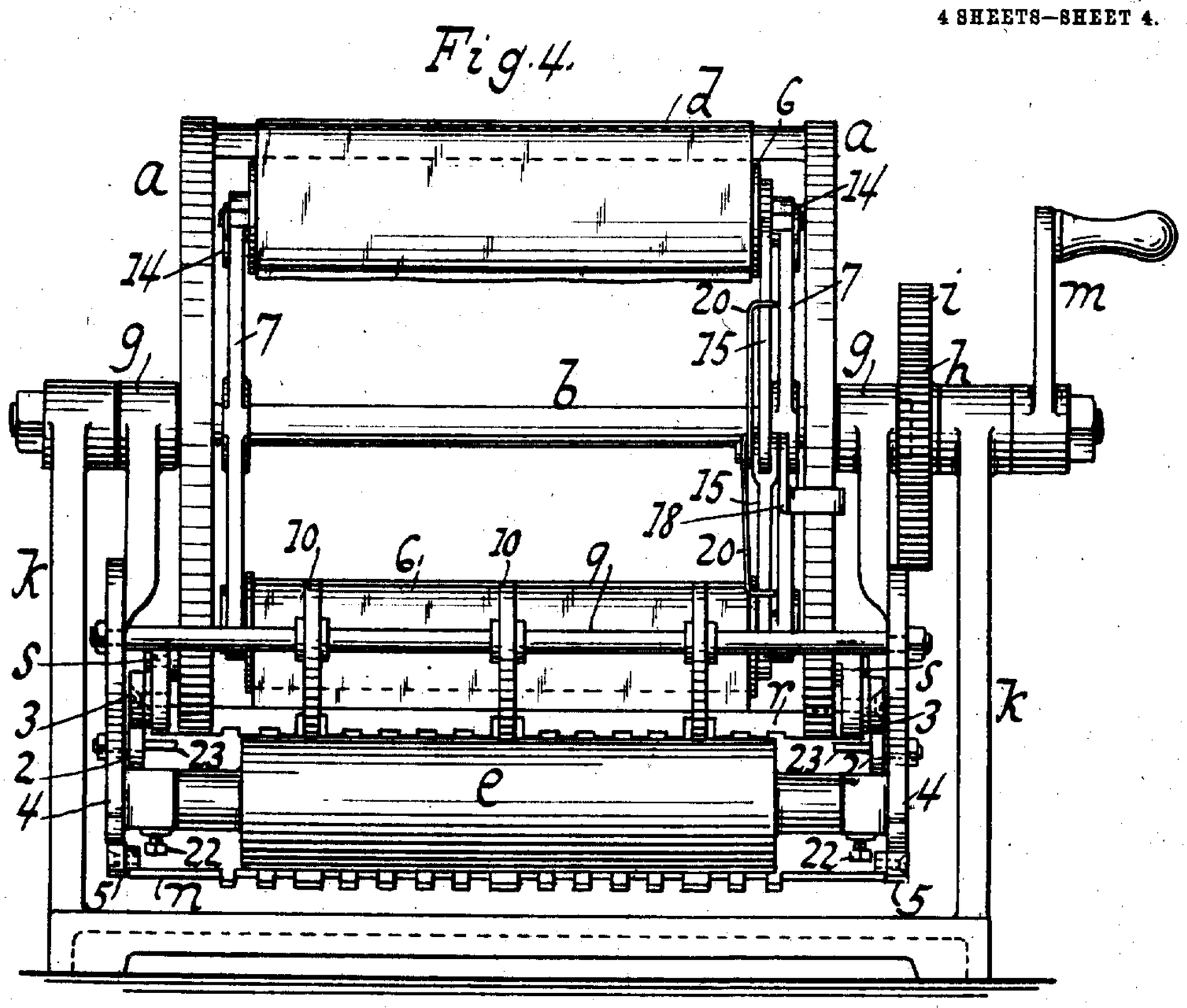
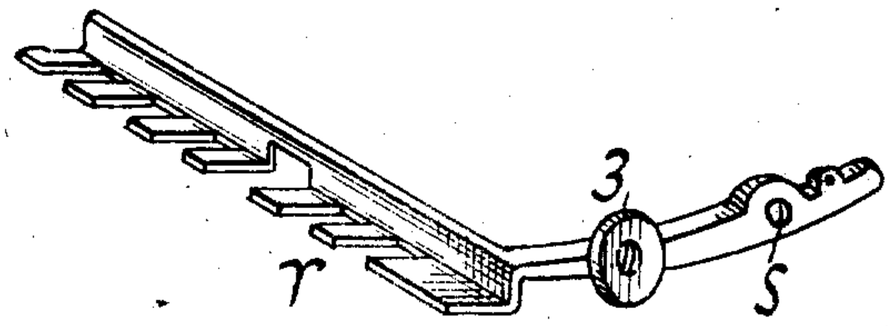


Fig. 5.



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UNITED STATES PATENT OFFICE.

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

PRINTING-PRESS.

No. 901,186. Specification of Letters Patent. Patented Oct. 13, 1908.

Application filed February 5, 1908. Serial No. 414,369.

To all whom it may concern:

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

This invention relates to a printing press adapted for printing through a ribbon and the invention consists in the novel features of construction set forth in the following specification and claims and illustrated in the annexed drawing in which

Figure 1 is a plan view of a printing press embodying this invention. Fig. 2 is a section along line *x x* Fig. 1. Fig. 3 shows a view like Fig. 2 with parts in a different position. Fig. 4 is a rear view of Fig. 3. Fig. 5 is a detail perspective view of a paper stop.

In this drawing is shown a type holder composed of a frame or disks *a* which are fixed or stationary on a stationary shaft *b* and are adapted to receive type or type bars *c*. A ribbon or ink tape *d* lies over the type and when the platen *e* presses a sheet *f* to the ribbon on the type an impression appears on the sheet.

The platen *e* is carried by frame *g* rotating on a stationary shaft *b*. This platen frame is provided with a gear *i* engaged by gear *h* mounted on an arm or frame *k* and actuated by suitable means such as a crank *m*. The rotation of the gears will cause the platen to move about the type.

The shaft *b* need not pass entirely through the type holder *a* from side to side but might be made integral with or secured to each disk and protrude from the outside of each disk and form the means by which the disk is mounted and fastened to the supporting frames. These protruding parts would serve as the axis of the platen frame *g*.

The paper is fed sheet by sheet onto a guide *n* pivoted at *o* and having its free end held toward the type holder by a spring *p* which can have its tension regulated as indicated by screw *q*. The leading edge of the paper sheet as it is slipped onto the guide *n* is arrested by coming against a stop *r* pivoted at *s*.

The free or adjacent end portions of guide *n* and stop *r* are comb shaped or serrated and arranged so that these serrations or teeth can pass between one another.

When a sheet has been placed on guide *n* against stop *r* such stop is swung so as to press or clamp an edge of the sheet against the type holder. This movement of the stop is given by a pressing member or actuator 2 secured to the outside of the platen frame which as the frame moves about the shaft *b* will engage a friction roller 3 on the stop and swing the latter to the type holder.

A depressing member 4 carried about with the platen engages a friction roller 5 in the sheet guide to move the latter away from the type. The stop thus clamping one edge of the sheet to the type holder and the sheet guide being held or swung away from the type holder the platen *e* can pass along between the stop and guide to and over the type and press the sheet thereto.

The ink ribbon is shown wound on spools 6 in stationary arms 7 and the ribbon can be wound and unwound reciprocally about the spools as required.

By having the type holder stationary the moving of heavy parts can be avoided while the actuation of such parts as the platen being lighter is not so ponderous. The moving of heavy parts is thus not only avoided but the moving of entire groups of parts which have to perform movements of their own such as the ribbon spool mechanism and the paper gripping mechanism is avoided.

In a slotted arm or extension 8 of the platen carrier *g* is a bar 9 having fingers 10. The bar can be adjusted in the slot to set the fingers as required. These fingers after the platen has started printing and after the stop *r* has freed or unclamped the paper come between the latter and the type carrier and strip or move the paper from the type. The stop *r* has cuts or passages for the stripper fingers to travel through.

The stop *r* can be allowed to drop clear by its own weight to free the sheet or a spring 11 suitably applied tends to move or swing the stop from the type holder. A stop pin 12 can limit the swing of the stop.

The ribbon spools or bobbins 6 as stated

are mounted on arms 7 and one of the bobbins or if desired both can be releasably held in place by a catch or hook 14 which being released will allow the spool and ribbon to be lifted out of place. These spools can be suitably actuated to wind and unwind the ribbon. Into suitable ratchets on the spools engage the pawls 15 either one of which can be held out of action by pin 16 placed into one or another of the holes 17. The arm 18 is fulcrumed at 19 and on this arm the pawls are pivoted. A spring or springs 20 tends to hold the pawl which is not out of action in engagement. As the platen moves or swings past the lever 18 it actuates the same and as the platen or a trip 23 thereon passes on beyond the lever arm 18 the returning spring 21 moves the lever back again. These steps give the required propelling action to rotate one spool or another.

Ball bearings can be applied to make various parts of the machine run smoothly but no invention is involved in such feature.

The pressure of the platen against the type can be regulated by a screw 22. The arms 7 forming a bearing for the ribbon spools can be supported or mounted on the hubs or shaft *b*.

I claim:—

1. A printing press comprising a central shaft with a stationary circular type holder, a platen having its axis of rotation at a practically fixed distance from the center of said type holder, and a rotary frame for maintaining said platen at said fixed distance.

2. A printing press comprising a central shaft with a circular type holder, a rotary frame non-shiftably mounted on the shaft, and a platen having its axis of rotation in the frame at a practically fixed distance from the shaft so that the platen can remain in contact with the circular type holder during its entire rotation, the exterior of the type holder being left free or unobstructed.

3. A stationary type holder with stationary central shaft for such holder, radially extended arms fixed on the shaft and made to form a ribbon holder, and a rotary platen made to travel about the type holder.

4. A printing press comprising a cylindrical type holder, ink ribbon spools for holding a ribbon about the type on the type holder, a stop for clamping a sheet to the holder, a guide for feeding the sheet to the stop, and a platen with means for actuating the stop and guide.

5. A printing press comprising a cylindrical type holder, ink ribbon spools for holding a ribbon about the type on the holder, a stop for clamping a sheet to the holder, a guide for feeding the sheet to the stop, and a platen with means for actuating the stop and guide, the stop and guide having comb like portions to allow of passing one another.

6. A stationary type holder with supporting shaft a platen rotative about said type holder, cam pieces carried by the platen and a sheet stop and sheet guide actuated by said cam pieces so as to cause the sheet guide to move away from the type holder for the platen to pass and for causing the stop to move to the type holder and hold the sheet thereto.

7. A stationary type holder with supporting shaft, a platen rotative about said type holder, cam pieces carried by the platen and a sheet stop and sheet guide actuated by said cam pieces to move the stop to the type holder to clamp a sheet and to move the guide away for the passage of the platen.

8. A stationary type holder with supporting shaft, a platen rotative about said type holder, cam pieces carried by the platen and a sheet stop and sheet guide actuated by said cam pieces to move the stop to the type holder to clamp a sheet and to move the guide away for the passage of the platen, said stop and guide having friction rollers for the engagement of the cam pieces.

9. A stationary type holder with supporting shaft, a platen rotative about said type holder, a sheet stop for holding a sheet to the holder, a guide for feeding a sheet to the stop and a stripper for removing the sheet when freed by the stop.

10. A stationary type holder with supporting shaft, a platen rotative about said type holder, a sheet stop for holding a sheet to the holder, a guide for feeding a sheet to the stop and fingers adjustable on the platen for stripping a sheet from the type holder.

11. A printing press comprising a cylindrical type holder, a platen made to rotate about said holder and a paper stop and stripper for respectively gripping a sheet to the type holder and for freeing the sheet.

12. A printing press comprising a cylindrical type holder, a platen rotative about said holder, a paper stop for holding a sheet to the holder, a slotted arm carried by the platen, and a bar with a stripper adjustably mounted in the slotted arms.

13. A printing press comprising a stationary type holder and a paper stop, stationary arms, ribbon spools mounted on the arms, actuating pawls and lever for the spools and a rotary platen frame for actuating the lever said paper stop being made movable to and from the type holder so as to clamp a sheet of paper to such type holder at suitable intervals.

14. A printing press comprising a stationary type holder with rotary platen

frame, a sheet stop, ribbon spools, actuating paw's for the spools, a lever for actuating the pawls, a stop pin for holding one pawl or another out of action, and a trip on the platen frame for actuating the lever to move the pawl and spools.

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

WILLIAM P. QUENTELL.

Witnesses:
JENNIE WERSTEIN,
EDWARD WIESNER.