A. P. F. PICO.

ROLL SUPPORT.

APPLICATION FILED FEB. 1, 1915.

1,207,323. Patented Dec. 5, 1916.

Fig. I

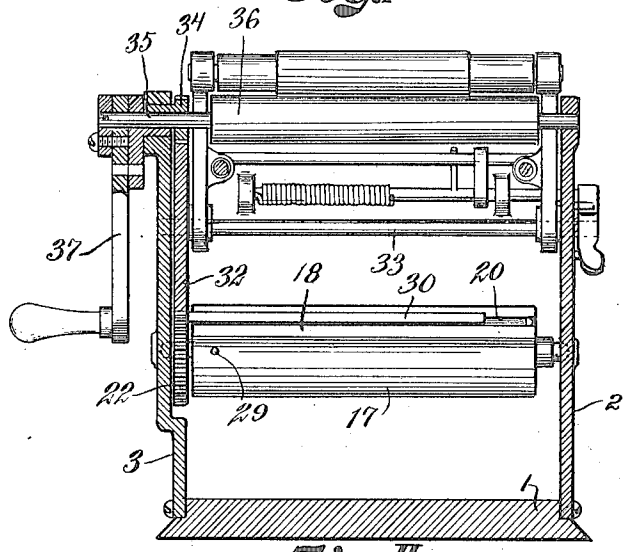


Fig. II.

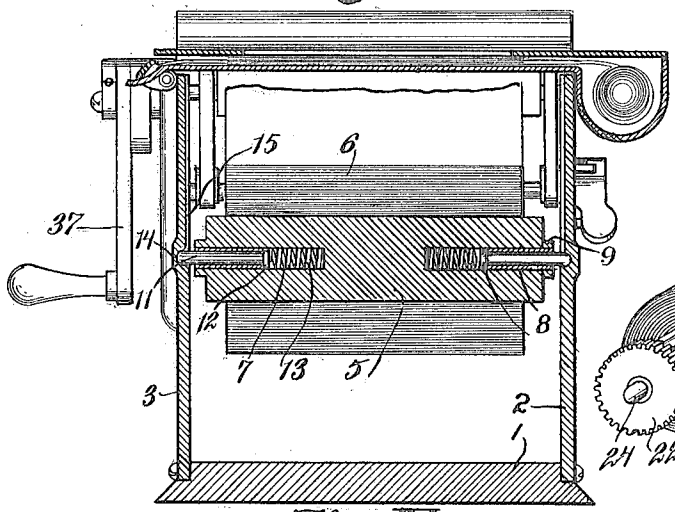


Fig. III.

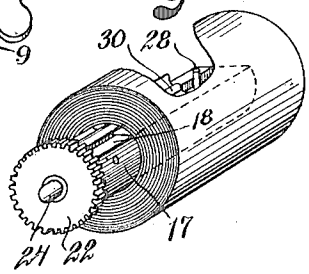
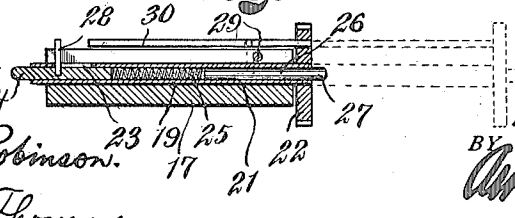


Fig. IV



WITNESSES.

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ROLL-SUPPORT.

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Application filed February 1, 1915. Serial No. 5,556.

To all whom it may concern:

Be it known that I, ALBERT P. F. PICO, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Roll-Supports; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to a removable web holder for registers or the like, and has for its principal object to provide means upon which a web may be wound as it is fed from the register or other machine with which it is used, and from which the web may be removed as a roll.

In accomplishing this object I have provided improved details of structure, the preferred forms of which are illustrated in the accompanying drawings, wherein:

Figure I is a vertical section of a register with which my improved roll holder may be used, particularly illustrating the mounting of the holder between the side frames of the register. Fig. II is a vertical section through one of the web supporting cores, showing the yieldable means for supporting the same. Fig. III is a detail perspective view of one of the web cores, showing the web partially removed and broken away to illustrate the anchoring device. Fig. IV is a longitudinal section of the core, showing the pull-out extended, in dotted lines.

Referring more in detail to the drawings, 1 designates the base and 2—3 the side frames of a register or like machine, which may be of any suitable construction, wherein a record web or strip is run from one reel or core to another, the use of the strip or the manner of supporting the same in the machine being immaterial in so far as the present invention is concerned.

The initial reel core, that is, the one from which the web is unwound, may also be of any suitable construction but is here shown to comprise a solid core 5 (Fig. II), of wood or other suitable material, upon which the web or strip 6 is wound and which is preferably provided with the end sockets 7, each containing a sleeve 8, having an end flange 9, by which the sleeve is permanently fixed to the core.

Slidably mounted in each of the sleeves is a trunnion 11 having a head 12 located within the core socket and adapted for abutment against the ends of the collar and for engagement by a spring 13 that is located within the socket, in order to yieldingly project the trunnion from the end of the collar so that it may seat within a bearing 14 in the side of the machine, each of the side frames being preferably provided with a vertical groove 15 in its inner face that leads to a relative bearing and moves to guide the trunnion on the end of the core to its seat. It is apparent that with this construction, the trunnions may be forced back into their sockets so that they may be seated in the grooves 15 in the side members 2—3, and that when the cores have reached their ultimate position the springs will force the trunnions out into the sockets 14 where they may be revolved and carry the strip so that they have free revoluble movement.

While the unwinding core may be mounted as described, as the strip is unwound until the core is exposed, the take-up core must be of a different character in order that when the strip is completely wound on its core, the core may be removed so that the strip may be preserved and the core reused.

In order to facilitate the application of the record strip to its core and the removal of the same therefrom, I preferably provide a winding core comprising a body 17 of wood or the like, having a flattened face 18, a central bore 19, and a groove 20 leading from the bore to the flattened face.

Mounted for longitudinal, sliding movement in the bore 19 is a sleeve 21 having an exposed gear wheel 22 at one end, and having a laterally opening slot 23 adjacent the opposite end.

Slidably mounted in the slotted end of the sleeve is a trunnion 24 which is adapted for seating in a trunnion socket 14 in the side frame and bears against a spring 25 that is located within the sleeve and bears against the inner end of a fixed trunnion 26, the free end 27 of which projects against the inner end of the gear wheel and is adapted for seating in one of the trunnion sockets in the side frame.

The sliding trunnion carries a pin 28 which projects through the slot and is adapted for engaging a stop 29 that projects across the groove 20 adjacent the gear end of the core, in order to limit the outward movement of the sleeve and prevent its removal from the core.

Fixed to the gear wheel 22 is a rod 30 which is adapted to lie partly within the core groove 20, so that when the end of a web is laid over the flattened face of the core, the rod may be positioned over the top of the web to anchor the end thereof to the core.

The gear wheel 22 is adapted, when the parts are in operative relation, for meshing with an idle gear wheel 32, which is revolubly mounted on a shaft 33 that is journaled in the sides of the machine frame, and which, in turn, meshes with a pinion 34 on the shaft 35, which carries a forwarding roller 36, over which the strip may travel. The shaft 35 is adapted for carrying a crank handle 37, which may be removable, and other mechanism for guiding and cutting the web may be provided, although they are not described nor illustrated in detail as they form no part of the present invention.

In using the device the primary reel or core, carrying the strip is lowered to position by passing the trunnions 11 through the frame grooves until the trunnions seat in the bearing sockets 14. The strip is then run through the machine and anchored to the take-up reel or core by laying the end of the strip on the flat face of the core and projecting the rod 30 thereover. The core is then inserted into the machine and, when it reaches its functional position, the gear wheel 22 meshes with the gear wheel on the crank shaft. When the shaft is operated the take-up core is rotated and the strip rolled on the core, being anchored thereto by the rod 30. When the strip has been completely rolled on its core, the core and strip may be removed from the machine and the core removed from the rolled strip by grasping the gear wheel 22 and drawing the sleeve 21 from within the wooden core until the pin 28 engages the stop 29, in which position the rod 30 will have been drawn from the strip. Further pulling on the sleeve will cause the pin 28 to pull against the stop 29 so that the entire core may be withdrawn from the roll, and the roll freed from the core to be filed or disposed of. The core may then be used again in like manner to take up another roll.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters-Patent, is:

1. The combination of a core comprising a channeled body member, having a slot opening from the channel through the side of the body, a sleeve slidably mounted in the channeled body, a stop in said slot, a pin carried by the sleeve and adapted for engaging the slot, and a rod connected with the sleeve and adapted for lying in said slot, for the purpose set forth.

2. A core comprising a body member, and a slide adapted for travel in the body member and for projection longitudinally therefrom; said body member having a recessed portion, and the slide having a keeper adapted for anchoring a record strip in the recessed portion of the body.

3. A core comprising a body member, a slide adapted for travel in the body member and for projection longitudinally therefrom; said body member having a recessed portion, and the slide having a keeper adapted for anchoring a record strip in the recessed portion of the body, and stop members on the body and slide for limiting the travel of the parts relative to each other.

4. A core comprising a body member, a slide adapted for travel in the body member and for projection longitudinally therefrom; said body member having a recessed portion, and the slide having a keeper adapted for anchoring a record strip in the recessed portion of the body, and means on the slide for revolving the core.

5. A core comprising a channeled body member having a flattened face and a slot opening from the slotted face to the channel, a slotted sleeve adapted for travel in the channel, a rod connected with the sleeve and adapted for travel in the slot, a trunnion slidably mounted in the sleeve, and having a stop member projected through the sleeve slot, a spring for urging the trunnion to projected position, and a stop on the core body, for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ALBERT P. F. PICO.

Witnesses:
LYNN A. ROBINSON,
LETA E. COATS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."