M. DUDEK.

FLEXIBLE WALL CONSTRUCTION.

APPLICATION FILED JULY 28, 1920.

1,371,149. Patented Mar. 8, 1921.

FIG. 2.

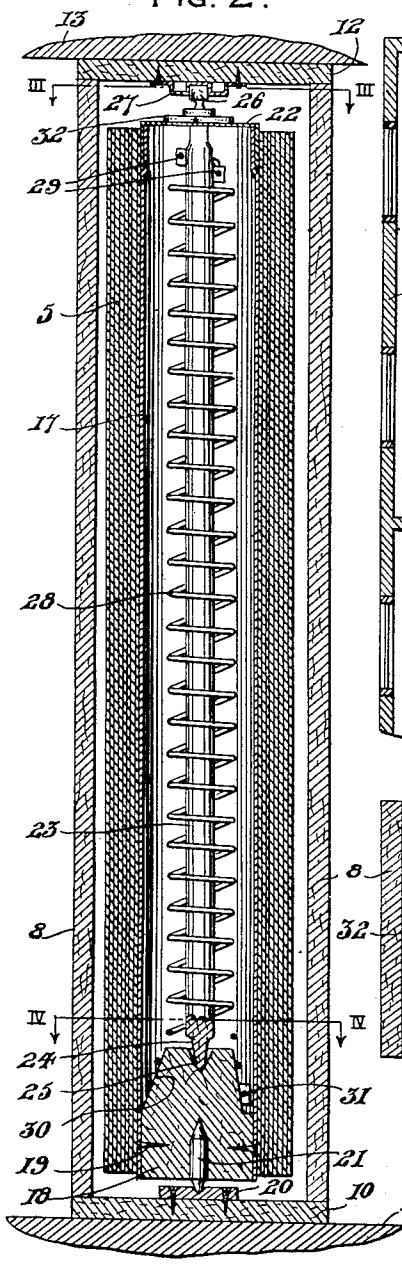


FIG. 1.

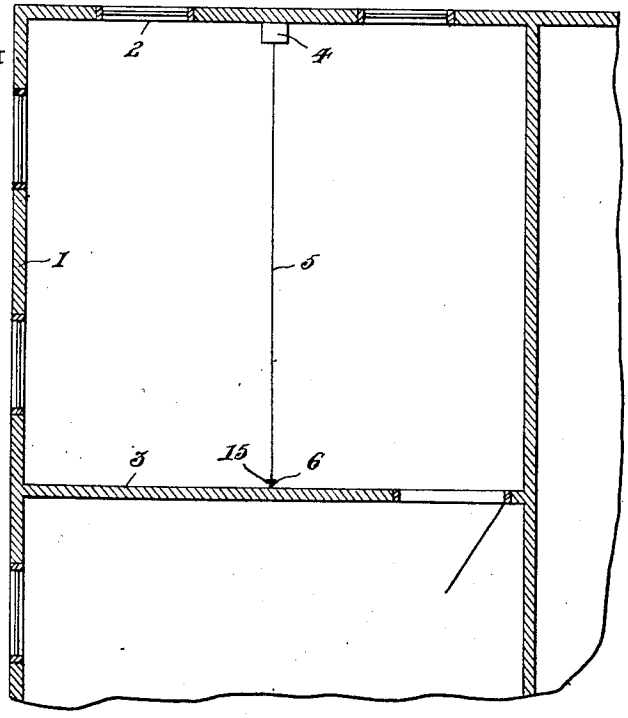


FIG. 3.

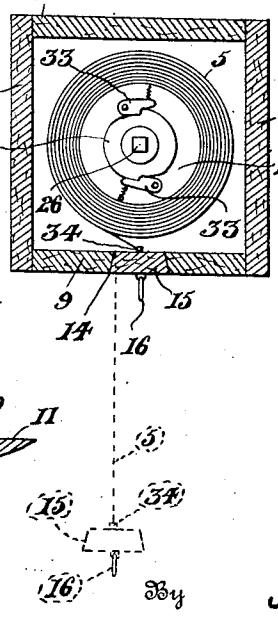
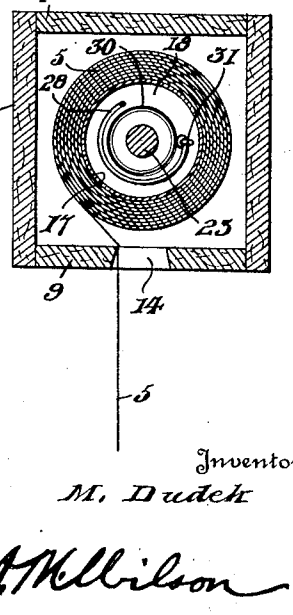


FIG. 4.



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FLEXIBLE-WALL CONSTRUCTION.

1,371,149. Specification of Letters Patent. Patented Mar. 8, 1921.

Application filed July 28, 1920. Serial No. 399,542.

To all whom it may concern:

Be it known that I, MARK DUDEK, a citizen of Poland, residing at Ralphton, in the county of Somerset and State of Pennsylvania, have invented certain new and useful Improvements in Flexible-Wall Constructions, of which the following is a specification.

This invention relates to certain new and useful improvements in flexible wall constructions and has for its primary object to provide a flexible curtain or sheathing normally contained within a casing with the casing positioned at a desired point within a room, and with the partition curtain or sheathing adapted for withdrawal from the casing to be projected in the desired direction across a room to provide a partition therein and separate the room into individual compartments.

A further object of the invention is to provide a flexible partition wound upon a tensioned drum that is vertically positioned, the drum being arranged within the casing with the flexible partition unwound therefrom and fed through a slot in one wall thereof.

With the above and other objects in view, the present invention consists in the novel form, combination and arrangement of parts hereinafter more fully described in connection with the accompanying drawings and in which like reference characters indicate similar parts throughout the several views.

In the drawings,

Figure 1 is a horizontal sectional view of a building room with a flexible partition extended across the same, there being illustrated a casing at one side of the room with the flexible partition unwound therefrom and attached to the opposite side of the room,

Fig. 2 is a vertical sectional view of a casing containing a tensioned drum with a flexible partition wall wound thereon,

Fig. 3 is a horizontal sectional view taken on line III—III of Fig. 2 showing the resiliently mounted escapement dogs for the tensioned partition winding drum, a portion of the flexible partition being shown by dotted lines as unwound from the casing, and

Fig. 4 is a horizontal sectional view taken on line IV—IV of Fig. 2.

Referring more in detail to the accompanying drawing and particularly to Fig. 1, there is illustrated a building room embodying outer walls 1, windows 2 and a rigid partition 3, a vertically disposed casing 4 rectangular in plan as illustrated being secured to one wall of the room with a flexible partition wall 5 unwound therefrom and attached as at 6 to the rigid partition 3, it being understood that the flexible partition 5 may be projected in the desired direction to provide the desired sizes of provisional compartments in the room.

The construction of the casing 4 and the manner of projecting the flexible partition 5 is shown more clearly in Figs. 2 to 4, the casing being rectangular in cross section and embodying a rear wall 7, side walls 8 and a front wall 9, the bottom wall 10 being suitably secured to the floor 11 while the top wall 12 is secured to the ceiling 13. A vertical elongated slot 14 is provided in the front wall 9 of the casing and has the side walls thereof inclined, said slot being normally closed by the strip 15 carrying at its outer side, one or more attaching hooks or rings 16.

The flexible partition drum includes a cylindrical metallic cylinder 17 vertically disposed within the casing 4 and having a cylindrical plug 18 secured in the lower end thereof by the transverse fastening devices 19. The support for the lower end of the drum 17 includes a bearing plate 20 having a central depression formed therein constituting an axial rotatable guide for the end thrust bearing pin 21 carried by the block 18 as shown in Fig. 2. The upper end of the cylinder 17 is reduced in diameter and receives a cap 22.

The drum 17 is rotatably tensioned by the shaft 23 axially disposed therein with the lower end thereof tapered as at 24 and received in the central depression 25 formed in the upper end of the block 18. The upper end of the shaft 23 passes through the cylinder cap 22 and is provided upon the upper projecting end thereof with a squared or polygonal head 26 received in a socket of like configuration in the head bearing plate 27 centrally secured to the top wall 12 of the casing. A coil spring 28 surrounds the shaft 23 and extends over the entire surface thereof, the upper end of the spring being secured as at 29 to the upper end of the shaft 23 while the lower end of the spring extends below the lower end of the

shaft and surrounds the upper conical end 30 of the block 18 and is secured thereto as at 31, shown more clearly in Figs. 2 and 4.

An ordinary type of escapement mechanism similar to that employed in a window shade roller is associated with the cylinder cap 22 and shaft 23, a ratchet disk 32 being secured to the shaft 23 and resting upon the cap 22 while tensioned dogs 33 are pivoted to the cap 22 for coöperation with the ratchet disk 32 as shown in Fig. 3.

The flexible partition 5 has one end secured to the cylinder 17 and is wound thereon under tension of the spring 28 while the outer free edge of the flexible partition is suitably secured as at 34 to the inner side of the closure strip 15 for the casing slot 14. The partition roller operating similarly to a curtain shade roller and assuming that the device is in the full line position shown in Fig. 3, the closure strip 15 of the slot 14 of the casing is moved outwardly thereof to unwind the flexible partition 5 from the tensioned drum 17 and place the drum under tension, the projected portion of the partition being retained in open position by the tensioned dogs 33 engaging the ratchet wheel 32 with the spring 28 under tension. The free end of the partition 5 may be attached to the desired part of the room to divide the room into spaces of various areas as may be desired.

While there is herein shown and described what is believed to be the preferred embodiment of the invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

What is claimed as new is:

A flexible partition for building rooms and the like comprising in combination with a casing having a vertical slot in the front wall thereof, a tubular cylinder vertically journaled within the casing, a bearing block having a cylindrical lower end secured within the lower end of the tubular cylinder, a bearing plate carried by the lower end of the casing, a center pin depending from the bearing block and engaging the bearing plate, the upper end of the bearing block tapering upwardly, said block having a tapering recess in its upper side, a shaft journaled within the cylinder and supported at its lower end within said bearing block recess with the upper end thereof keyed to the casing, a coil spring surrounding the shaft, connected at its upper end to the shaft and surrounding the upper end of the bearing block and secured at its lower end to the bearing block, a flexible partition wall wound on said cylinder adapted to be projected through the casing opening, and means associated with said cylinder and shaft to hold the shaft under tension when the flexible partition is withdrawn from the casing.

In testimony whereof I affix my signature.

MARK DUDEK.