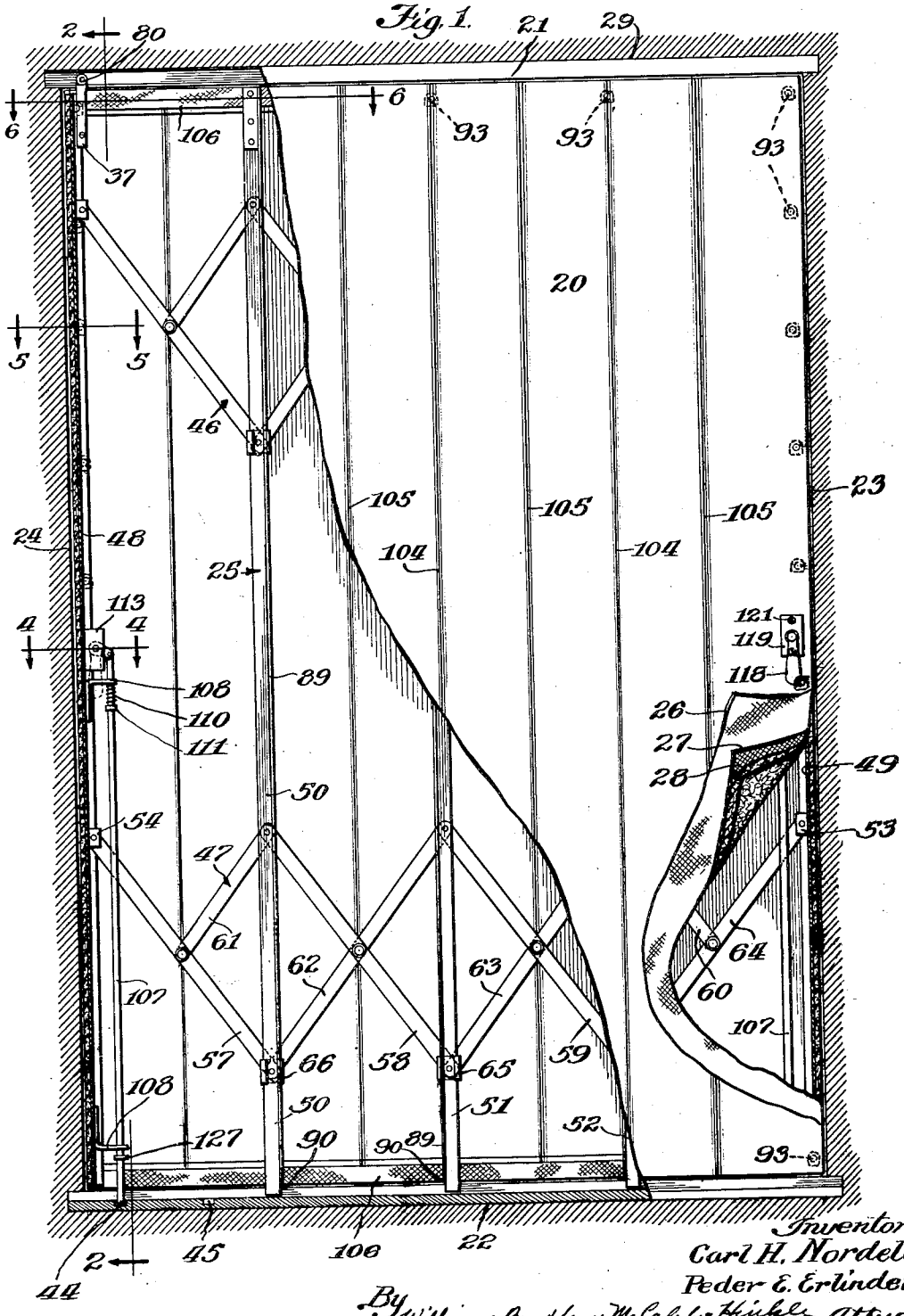
June 16, 1931. C. H. NORDELL ET AL 1,810,847

FOLDABLE CURTAIN

Filed Aug. 23, 1928 4 Sheets-Sheet 1

Fig. 1.

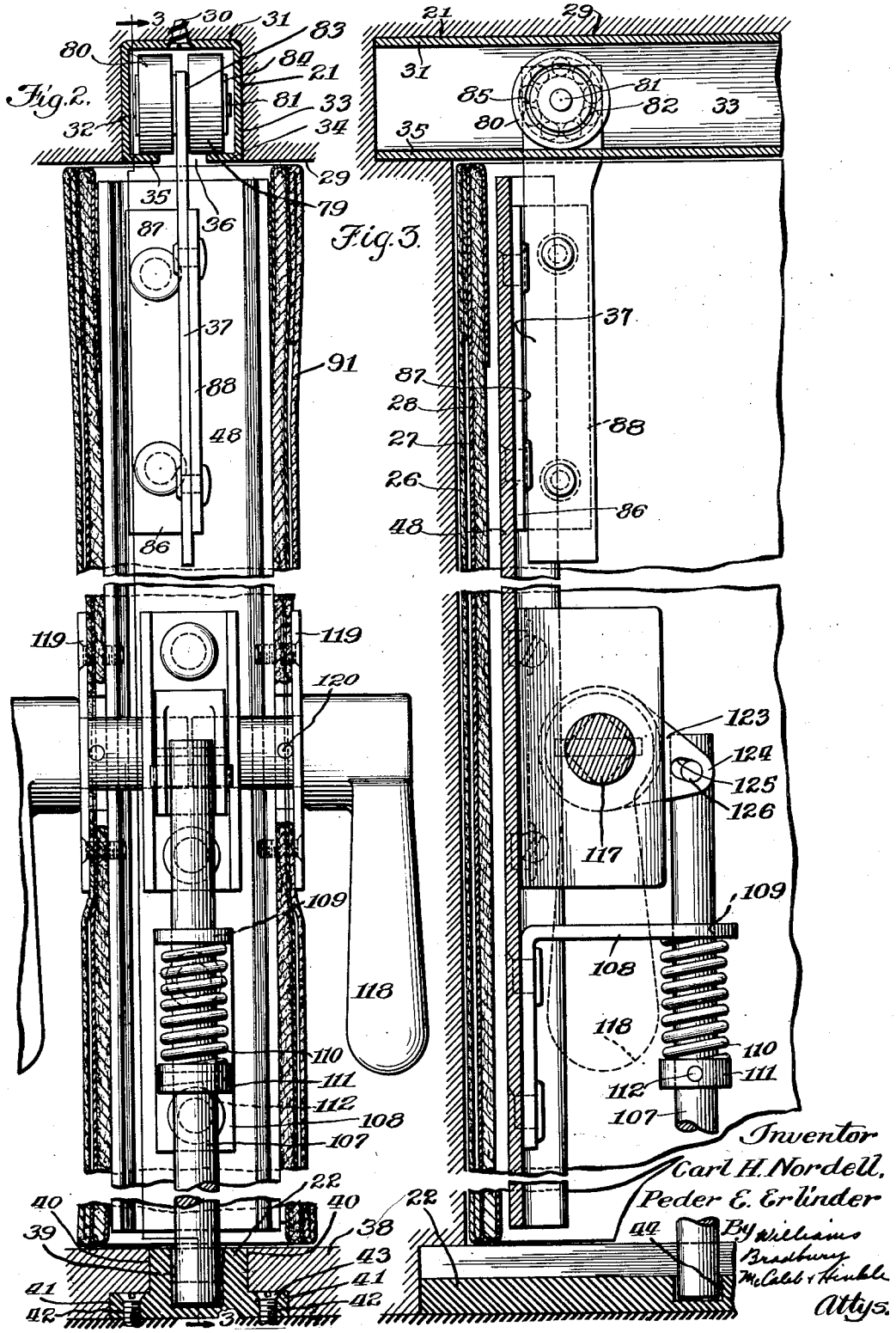


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FOLDABLE CURTAIN

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FOLDABLE CURTAIN

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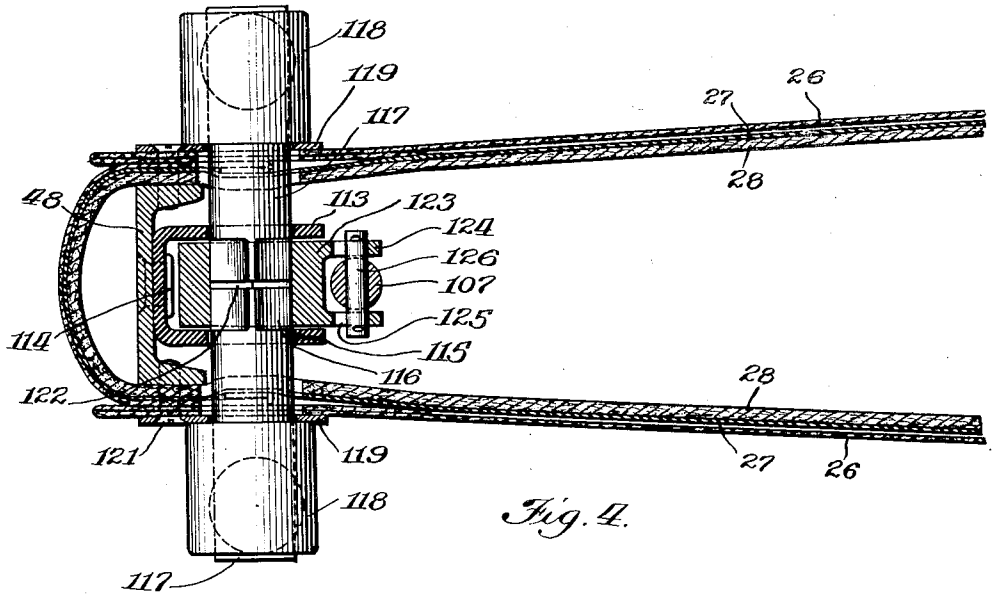


Fig. 4.

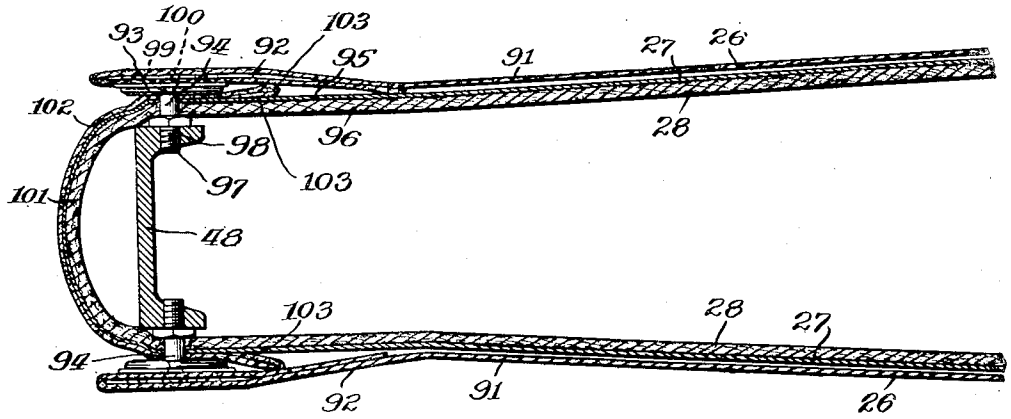


Fig. 5.

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FOLDABLE CURTAIN

Filed Aug. 23, 1928 4 Sheets-Sheet 4

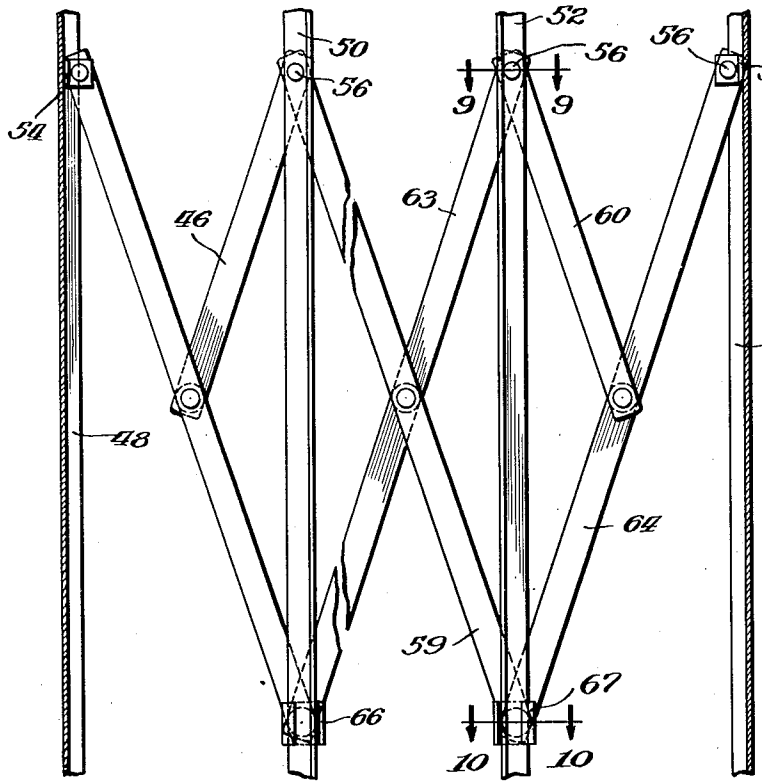


Fig. 7.

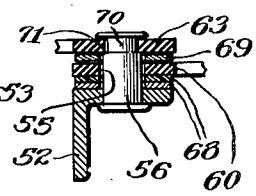


Fig. 9.

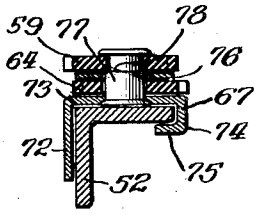


Fig. 10.

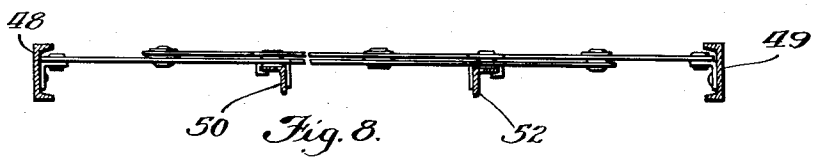


Fig. 8.

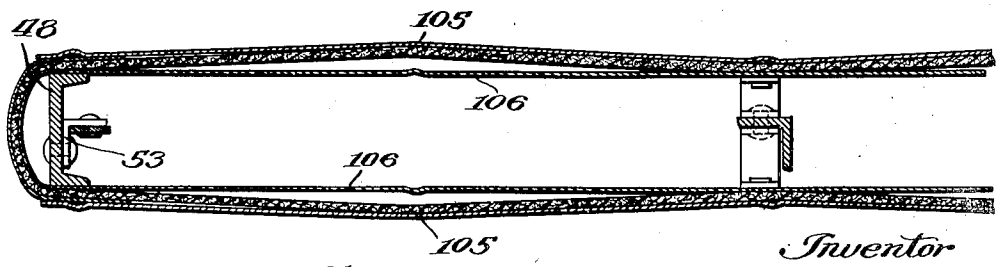


Fig. 6.

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FOLDABLE CURTAIN

Application filed August 23, 1928. Serial No. 301,528.

The present invention relates to foldable curtains, and is particularly concerned with the provision of foldable curtains adapted to be used as closures or as partitions for separating a room into two or more smaller rooms.

The invention is of particular importance for use in hotels, auditoriums, funeral parlors, broadcasting studios, apartments, salesrooms, or the like, where it is frequently desirable to divide a large room into smaller ones for the purpose of accommodating a smaller assemblage of people without utilizing the whole room space, or whenever it is desired to provide an ornamental curtain or partition, which is readily folded into a very small space, and which also has sound absorbing and insulating qualities.

One of the objects of the invention is the provision of a soundproof foldable curtain, having an ornamental exterior layer without any visible securing devices, and which may be readily removed for the substitution of another covering when it is desired to change the decorative scheme.

Another object of the invention is the provision of a foldable curtain, which is provided with a novel mode of support for the foldable envelope covering the same, whereby the curtain tends to fold along predetermined lines of flexure.

Another object is to provide a mode of support for the foldable envelope without the use of exterior attaching devices which detract from the appearance of the curtain.

Another object is the provision of a novel guide for foldable curtains of the class described, which cannot be forced together by the swelling of the flooring to pinch the sliders used upon the curtain, and which is capable of being adapted to curved curtains or curtains of any shape without necessitating special machinery or dies.

Another object is the provision of a novel foldable curtain assembly which may be folded at either side of a room or opening, and which may be moved into folded or extended position and secured with a minimum of effort.

Another object is the provision of a sound insulating and sound absorbing curtain adapted to separate a large room into smaller soundproof chambers, and which may be covered with an ornamental layer of fabric, such as velour, tapestry, leather, imitation leather, or other material used for upholstering and draping, thereby eliminating the unsightly and bulky folding doors used in the prior art.

Another object is the provision of a foldable curtain having a flexible envelope, which is fireproof, and which is, therefore, capable of satisfying the legal requirements regarding fireproofing wherever the curtains are to be used.

Other objects and advantages of the invention will be apparent from the following description and from the accompanying drawings, in which similar characters of reference indicate similar parts throughout the several views.

Referring to the drawings, of which there are four sheets,

Fig. 1 is a side elevational view of one embodiment of the folding curtain, with the exterior covering broken away to show the mechanism;

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1 looking in the direction of the arrows;

Fig. 3 is a sectional view taken on the line 3—3 of Fig. 2;

Fig. 4 is a sectional view through the latching mechanism taken on the line 4—4 of Fig. 1, looking in the direction of the arrows;

Fig. 5 is a sectional view taken on the line 5—5 of Fig. 1, looking in the direction of the arrows;

Fig. 6 is a sectional view taken on the line 6—6 of Fig. 1;

Fig. 7 is an elevational view of one of the extensible members;

Fig. 8 is a sectional view of the same taken from the top;

Fig. 9 is a detailed sectional view of one of the pivot points of the extensible frame taken on the line 9—9 of Fig. 7;

Fig. 10 is a similar view taken on the line 10—10 of Fig. 7.

Referring to Fig. 1, 20 indicates in its entirety one embodiment of the foldable cur-

tain, which is shown in conjunction with upper and lower guides 21 and 22 respectively and side walls 23 and 24 of a room or door opening.

The foldable curtain 20 comprises an extensible frame work 25 adapted to be supported and guided by the guides 21 and 22, and a flexible, foldable covering or envelope for said framework 25, which may consist of one or more layers 26, 27, and 28, of flexible material, to be described in detail hereinafter.

In the present embodiment the weight of the curtain is supported by means of the upper guide 21 and the lower guide 22 acts merely as a guide and as a means for securing the curtain in extended or folded position. We desire it to be understood, however, that these functions may be reversed if desired by reversing the structure carried by the curtain for performing the functions of support and guidance.

The upper guide 21 preferably consists of a channeled sheet metal member, which is supported flush with the surface of the ceiling 29 by means of a plurality of screws 30, or other convenient fastening means. The channeled member 21 may be substantially rectangular in cross section having an upper flange 31, two side flanges 32 and 33 at substantially right angles to the upper flange 31, and inwardly turned bottom flanges 34 and 35 substantially parallel to said top flange but relatively narrow in their width, leaving an elongated slot 36 adapted to receive a guide rod 37 carried by the curtain.

The lower guide 22 is preferably of substantially the shape shown in Fig. 2, and this guide is peculiarly adapted to withstand the forces exerted upon it due to the swelling of the flooring 38; thereby, preventing the pinching of the guides within the slot 39. In order to accomplish this result, the lower guide 22 is preferably formed of a relatively thick bar of steel stock, the slot 39 being formed by ordinary cutting machinery and the opposite upper corners of the bar being cut away as at 40 by the same method, leaving attaching flanges 41. The attaching flanges 41 are provided with appropriate apertures 42, whereby the guide 22 may be secured to the joists or lower flooring by means of screws 43, and the guide 22 may thus be arranged flush with the upper surface of the flooring 38. The guides 21 and 22 are preferably constructed of brass, or steel treated to withstand corrosion by means of plating the exterior of the guides. The lower guide 22 is also provided at each end with a pair of latching recesses 44 and 45 for securing the curtain in extended or folded position, as will be described in greater detail hereinafter.

The extensible framework 25 preferably consists of at least two uniformly extensible members indicated in their entirety at 46 and 47. The extensible members 46 and 47 are joined at their ends to end frame members 48 and 49, and they are also pivotally secured at intermediate points to a plurality of stiles 50, 51, 52, etc. Any number of stiles and extensible members may be employed in order to make the curtain of the required size.

Referring to Fig. 7, one of the extensible members 46 is here shown in detail together with portions of the end frame members 48 and 49, and a pair of stiles 50 and 52. The end frame members 48 and 49 are each provided with right angle brackets 53 and 54 riveted thereto and provided with apertures 55 for receiving rivets 56. The end frame members 48 and 49 comprise substantially U-shaped metal channels, preferably arranged with their flanges turned toward the inside of the door, the brackets 53 being secured between said flanges.

The extensible members 46 and 47 may consist of a plurality of parallel links, pivotally secured together at their ends and mid-points, and as each of these extensible members may be identical in construction, the description of one of them will suffice for both.

The extensible member 47 may thus consist of the parallel links 57, 58, 59 and 60 extending in the same direction, and the parallel links 61, 62, 63 and 64 extending transversely to the afore-mentioned links. Each of these links is secured to one link at each end and to another link at its mid-point. That is to say, the link 57 is pivotally secured to the end frame member 48 at the bracket 54 and at its opposite end it is pivotally secured to the lower end of the link 62 and to a slider 66. The upper end of the link 62 is pivotally secured to the upper end of the link 59 and to the stile 51, and the lower end of the link 59 is pivotally secured to the lower end of the link 64 and to a slider 67.

The upper end of the link 64 is pivotally secured to the bracket 53 carried by the end frame member 49. The links 60 and 61 are half the length of the remaining links extending as they do from the mid-point of the links to which they are attached to their lower ends. Thus the link 47 is pivotally attached to the mid-point of the link 57, and at its upper end it is pivotally attached to the link 58 and to the stile 50. The link 58 is pivotally attached at its lower end to the link 63, and to the slider 65, and the upper end of the link 63 is pivotally attached to the upper end of the link 60 and to the stile 52. The lower end of the link 60 is attached to the mid-point of the link 64.

It will thus be observed that the extensible members 46 and 47 are pivotally secured to the end frame members and stiles at a number of similarly located upper pivotal points, while the lower pivotal points of the extensible members 46 and 47 are secured to the sliders 65, 66 and 67.

Referring to Fig. 9, one of the upper pivotal points of the extensible members is here shown in detail, the rivet 56 passing through the stile 52, a pair of washers 68, the link 60, an intermediate washer 69, and the link 63. If desired, the end of the rivet passing through the end of the link 63 may be reduced as at 70, forming a shoulder 71, whereby the rivet 56 may be firmly riveted to one of the parts, such as the link 63 without binding the other part pivotally supported on said rivet.

Referring to Fig. 10, one of the sliders 67 is here shown in detail. The stiles 50, 51 and 52 are preferably angle iron members, and consequently the sliders of which 67 is an example, consist of a flat flange 72 adapted to engage one side of the stile 52, a second flange 73 at right angles to the first mentioned flange 72, a third flange 74 extending across the edge of one of the flanges of the angle iron 52, and a fourth flange 75 bent inside the angle iron 52 and adapted to retain the slider upon the angle iron. The slider 67 is secured to the link 64 and the link 59 with a washer 76 between them, and by means of a rivet 77, having substantially the same shouldered construction at 78 as has been previously described for the rivets at the upper pivotal points. It will thus be observed that as the extensible members 46 and 47 are extended, their upper pivotal points are fixedly secured to the stiles and end frame members, while the lower pivotal points are adapted to slide along the stiles by means of the sliders 67. As the upper and lower pivotal points of the extensible members are uniformly extended, the sliders 67 assure the uniform extension of the stiles in a vertical position, whether one or more than one extensible member is employed.

In order to support the curtain from the guide 21, the end frame members 48 and 49, and as many intermediate frame members or stiles as are desired, are provided with guides 37, each carrying a pair of rollers 79 and 80. The guide 37 comprises a strip of metal provided at its upper end with an aperture adapted to receive the stub shaft 81. The rollers 79 and 80 comprise small metal wheels, each having a raceway 82 formed in its interior, the raceway is completed by the collar 83 and the washer 84, carried by the shaft 81, thereby confining a plurality of ball bearings 85 within the rollers 79 and 80. The guide 37 is adapted to project downward through the slot 36 while the rollers 79 and 80 are supported on the flanges 34 and 35. Where guide members 37 are employed upon stiles 50 to 52, the guides 37 may be riveted directly to that flange of the stile which extends parallel to the curtain inside the angle iron. At the points of attachment of guides 37 to the end frame members 48 and 49, there is preferably provided an angle iron bracket 86, having an attaching flange 87 and a flange 88 at right angles thereto. The flanges 87 and 88 may be riveted or otherwise secured to the end frame members, and to the guide 37 respectively, the brackets 86 thereby providing a means for centrally supporting the guides 37 on the end frame members 48 and 49.

The foldable curtain is also provided with guides adapted to be slidably received in the lower guide member 22, and for this purpose, the flange 89 of each of the stiles 50, 51 and 52 may be cut away as at 90, leaving the other flange of the stiles projecting below the curtain in the slot 39 of the guide 22. It will thus be observed that the curtain is adapted to be slidably supported between the upper and lower guides, the weight of the curtain being carried by a plurality of rollers 79 and 80 carried by the end frame members and the intermediate stiles, but the guides for the curtain are disposed flush with the ceiling and floor and present no obstruction whatever, leaving the floor with a smooth surface so that the lower guides may be installed anywhere without preventing the use of the floor for dancing, etc.

The extensible frame work 25 is preferably provided with a flexible, foldable envelope, which in the majority of cases will cover both sides of the frame work, but as the invention is capable of use where only one side of the frame work is covered we do not desire to be limited to a covering for both sides of the frame work. One example of such use might be where a curtain is employed as a foldable sound insulating and absorbing covering for the walls of a broadcasting studio. By means of the curtain, an ordinary room having a plurality of windows and doors may be quickly transformed into a soundproof chamber, perfectly adapted for the broadcasting of radio programs.

The covering for the extensible frame work 25 preferably consists of a plurality of layers of flexible material as follows. The exterior layer 91 may consist of an ornamental covering of velour, tapestry, leather, imitation leather, silk, or other ornamental material used for upholstering or draping, the upper and lower edges of the material being folded under as at 92, and provided on its back with a plurality of quickly detachable fasteners 93 located at the upper corners and intermediate points adjacent the stiles 50, 51 and 52. The outer layer 91 is also provided with a similar row of fasteners 93, extending along the lateral edges of the outer covering 91 and adapted to cooperate with the fastener studs 94, carried by the end frame members 48 and 49.

As the fastener studs 94 and detachable fasteners 93 form no part of the present invention and may be purchased upon the open market, we shall not describe them in detail,

but it is desirable that fasteners be selected having the characteristics which are disclosed hereinafter.

The fastener studs 94 are preferably of sufficient length to pass through eyelets or apertures carried by one or more inner layers 95 and 96, of flexible material, and the studs are preferably threaded as at 97 to be secured in complementary apertures 98 in the frame members and stiles. The fastener 93 is provided with an aperture 99 adapted to receive the head 100 of a fastener stud 94 and contains a spring device for engaging beneath said head, the fastener 93 being riveted, clinched, or otherwise secured to the backwardly folded portion 92 of the outside ornamental layer. The backwardly folded edge 92 may be provided with a plurality of lines of stitching to secure it in place.

The inner layer 96 comprises a relatively thick flexible layer of wool or cotton felt, and as this material does not generally possess the property of forming a strong sheet, the felt is preferably provided with a backing 95 of a stronger fabric to which it is secured by cement or other convenient means. The layer 96 may also be constructed of fibers of asbestos secured to a backing of imitation leather or the wool felt may be impregnated with fireproof minerals, thereby providing an inside layer which is constructed of fireproof material.

The layers 95 and 96 are provided with a plurality of apertures, preferably protected by eyelets or buttonholes and located to register with the detachable fasteners 93 of the outer layer and with the fastener studs 94. It will thus be observed that the inner layers may be passed over the fastener studs after which the outer layers may be secured by means of the fasteners 93 upon the heads 100 of the studs, thereby securely fastening both layers by confining the inner layer beneath the outer layer.

In order to provide resilient sealing means for the edges of the foldable curtain, the envelope is preferably bowed outwardly about the end frame members 48 and 49 as at 101, thereby forming a curved flexible surface, which is adapted to engage the adjacent walls or sides of an opening, and which may be slightly compressed to completely seal the joint against transmission of sound. The inner layers 95 and 96 may be provided with joints at the ends of the curtain or at intermediate points where both ends of the layer may be secured to the same fastener studs 94, but the outer layer 91 is preferably formed with the ends of the fabric arranged as follows. Each of the frame members 48 and 49 is provided with a relatively short strip 102 of the outer ornamental fabric, having its ends turned under and stitched as at 103, and provided with a pair of rows of eyelets located to receive the studs 94 on each side of the frame member. The main portions of the ornamental layer 91 of the flexible envelope may be folded over as at 92, and provided with detachable fasteners 93, covering the edges of the strip 102 and engaging the fastener studs 94; thereby presenting a finished appearance for the edge of the curtain.

In order that the curtain may be provided with a plurality of predetermined lines of flexure without the necessity for providing securing means along said lines of flexure, the flexible envelope is of such a size relative to the frame work 25 and the fasteners 93 are so disposed that the curtain is tensioned from top to bottom between the studs 94 carried by the top and bottom of the frame work 25. Thus sufficient tension exists in the curtain on the lines 104 (Fig. 1), so that there is a tendency for the curtain to fold at these points. The manufacture of the curtain is also greatly simplified by this constuction as the number of fasteners is greatly reduced and the enormous amount of labor involved in tacking the curtain to the transverse frame members is eliminated.

In order to assure the outward folding of the envelope at the points intermediate the fasteners along the lines 105, the frame work is also preferably provided with tension means at its top and bottom, limiting the extension of the frame work to substantially the position shown in Fig. 6, with the outer layers slightly bowed outwardly at the points 105. This tension means may take the form of a pair of strips of strong fabric or tape 106 of slightly less length than the perimeter of the curtain and secured at the top and bottom of the frame work by having a plurality of eyelets which are passed over the studs 94 of the detachable fasteners. The tape 106 is placed upon the frame work first in order that all of the layers may fold outward outside of the tape, as shown in Fig. 6.

The curtain constructed according to the present invention need not be permanently secured to either of the walls 23 or 24, nor to the sides of the door opening where the curtain is used as a closure for a door opening. As both ends of the curtain are finished, the curtain may be folded either to the left or right in Fig. 1, and it is preferably provided with latching means, both for securing the curtain in folded position at either side of Fig. 1 or in extended position as shown.

This latching means is identical at each end of the curtain and consequently a description of one of the devices will suffice. The latch may consist of a rod 107 slidably supported by one of the end frame members 48 by means of a pair of right angle brackets 108, each having an aperture 109 for receiving the rod 107. The rod 107 is adapted to project below the lower edge of the curtain and to engage in recesses 44 or 45 drilled in the guide 22 within the groove 39. The brackets 108 may

be riveted or otherwise secured to the end frame member 48 and the rod may be provided with a helical spring 110 tensioned between the upper bracket 108 and a collar 111 secured by a pin 112 upon the rod 107, the spring 110 biases the rod 107 into latching position.

Each latching bar 107 is also provided with means for actuating the latching bar which may consist of the following mechanism. The end frame member 48 may be provided with a substantially U-shaped sheet metal bracket 113, secured at its yoke to the frame member 48 by a plurality of rivets 114. The U-shaped bracket 113 is provided with a pair of registering apertures 115 of sufficient size to receive the non-circular ends 116 of the shafts 117 carried by handles 118. The shafts 117 are rotatably supported by the ornamental cover plates 119, the shaft being retained in the cover plate by means of transverse pins 120, and the plates being secured to the end frame member 48 by a plurality of screw bolts 121. It will thus be observed that although the shafts 117 are separate and provided with a joint at 122, they are retained in the position shown in Fig. 4 by means of the pins 120, which rotate between the cover plates 119.

The shafts 117 support, by means of their non-circular ends 116, a cam-shaped member 123 adapted to be received between the legs of the U-shaped bracket 113, and having an aperture complementary to the non-circular ends 116 of the shafts. The cam-shaped member 123 is provided with a pair of projecting flanges 124, having elongated apertures 125 adapted to receive a pin 126 carried by the rod 107, and the rod 107 is adapted to be lifted by rotating the handle 118.

In order that the curtain may be unlatched and folded by single motion, the handle 118 is preferably so constructed that it extends downward when the parts are in the position of Figs. 1 and 2, and it will thus be observed that by pulling upon the handle 118, the cam-shaped member 123 will be rotated in a counterclockwise direction leaving the pin 126 and rod 107 so as to unlatch the rod 107 from the aperture 44. The mechanism may be provided with a stop such as the pin 127 carried by the rod 107 below one of the brackets 108, and a further pull upon the handle 118 will cause the pin 127 to engage the bracket 108, preventing further movement of the latching bar 107, after which the lateral pull upon the handle 118 will cause the curtain to be folded.

The curtain and lower guide is provided with a similar structure at the opposite end so that the latching devices are adapted to maintain the curtain in extended relation, or the curtain may be folded until the two latching devices are engaged in recesses 44 and 45 for securing the curtain in folded position.

It will thus be observed that we have invented a foldable curtain provided with a sound insulating and sound absorbing layer, which may be fireproofed and with an ornamental exterior layer secured in place by means of concealed detachable fasteners, so that the exterior layer may be removed at any time in order to change the scheme of decoration.

In some of the more simple embodiments of our invention, the soundproof layer of felt or asbestos may be omitted, and a layer of decorative fabric may be secured directly to the framework. This type of curtain is of particular importance for use in apartments or the like.

Our curtain is also provided with a securing means, forming a plurality of lines of tension, along which the curtains will naturally fold, and it is also provided with means for assuring the outward folding of intermediate portions of the curtain between said lines of tension.

Our curtain may be folded and secured at either side of an opening or room, and the lower guide is adapted to prevent pinching of the curtain due to swelling of the flooring. The curtain may also be unlatched and folded with a small amount of effort and it may be folded in an extremely small space.

While we have illustrated a preferred embodiment of our invention, many modifications may be made without departing from the spirit of the invention, and we do not wish to be limited to the precise details of construction set forth, but desire to avail ourselves of all changes within the scope of the appended claims.

Having thus described our invention, what we claim is new and desire to secure by Letters Patent of the United States, is:

1. In a foldable curtain, the combination of an extensible supporting means with a foldable flexible layer carried by one side of said framework, said flexible layer being attached to said supporting means at two spaced points and tensioned between said points to cause said layer to fold along a line between said points.

2. In a foldable curtain, the combination of an extensible supporting means having a transverse end frame member, with a flexible covering secured to said frame member, said flexible covering being bowed out beyond said frame member to effect flexible sealing contact with an adjacent member.

3. In a foldable curtain, the combination of an extensible framework with a foldable flexible covering for said framework, and tension means connected between successive movable parts of said extensible framework to limit the extension thereof to give said covering a predetermined folding tendency when in extended position.

4. In a foldable curtain, the combination of an extensible framework with a foldable

flexible covering for said framework, and tension means connected between successive movable parts of said extensible framework to limit the extension thereof to give said covering a predetermined folding tendency when in extended position, said flexible covering having a plurality of spaced points of support on said framework and being tensioned between certain of said points to provide a predetermined line of flexure between said latter points.

5. In a foldable curtain, the combination of an extensible framework with a layer of sound insulating material carried by said framework and a layer of ornamental covering detachably carried by said framework over said sound insulating material, said ornamental material being spaced from said sound insulating material and separately removable from said framework.

6. In a foldable curtain, the combination of a pair of extensible members with a plurality of stiles carried thereby, and a foldable flexible covering secured to the ends of said stiles and tensioned between the points of attachment to form predetermined lines of flexure.

7. In a foldable curtain, the combination of a pair of extensible members with a plurality of stiles carried thereby, a foldable flexible covering secured to the ends of said stiles and tensioned between the points of attachment to form predetermined lines of flexure, and a plurality of detachable fasteners carried by the inside of said curtain for securing the same to said stiles.

8. In a foldable curtain, the combination of a pair of extensible members with a plurality of stiles carried thereby, a foldable flexible covering secured to the ends of said stiles and tensioned between the points of attachment to form predetermined lines of flexure, a plurality of detachable fasteners carried by the inside of said curtain for securing the same to said stiles, and a layer of sound insulating material carried between said covering and said stiles.

9. In a foldable curtain, the combination of a pair of extensible members with a plurality of stiles carried thereby, a foldable flexible covering secured to the ends of said stiles and tensioned between the points of attachment to form predetermined lines of flexure, a plurality of detachable fasteners carried by the inside of said curtain for securing the same to said stiles, and a layer of sound insulating material carried between said covering and said stiles, said covering being bowed out beyond the end stiles of said curtain to effect resilient sealing contact with adjacent parts.

10. In a foldable curtain, the combination of a pair of extensible members with a plurality of stiles carried thereby, a foldable flexible covering secured to the ends of said stiles and tensioned between the points of attachment to form predetermined lines of flexure, a plurality of detachable fasteners carried by the inside of said curtain for securing the same to said stiles, a layer of sound insulating material carried between said covering and said stiles, said covering being bowed out beyond the end stiles of said curtain to effect resilient sealing contact with adjacent parts, guides for said curtain, and latching means for securing each end of said curtain.

11. In a foldable curtain, the combination of an extensible supporting means with a foldable flexible layer covering said extensible supporting means, said flexible layer being attached to said supporting means at a plurality of spaced points and tensioned between said points to cause said layer to fold along lines between said points.

12. In a foldable curtain, the combination of an extensible framework with a foldable flexible covering for said framework, adapted to be carried by said framework to be extended and folded thereby, said covering comprising a thin outer covering layer of decorative material, and a relatively thicker and stiffer layer of material between said outer layer and said framework, said thick layer being adapted to determine the shape of fold of said outer layer, and one of said layers being tensioned along the line of fold.

13. In a foldable curtain, the combination of an extensible framework with a foldable flexible layer covering one side of said framework, said flexible layer being attached to said extensible framework at a plurality of spaced points and tensioned between said points to cause said layer to fold along lines of tension between said points, and securing means adapted to sustain tension along the line of fold, and being quickly detachable by application of force in a different direction.

14. In a foldable curtain, the combination of an extensible framework, with a foldable flexible layer covering said framework, said layer extending along both sides of said framework, and about one end thereof, and being bowed outward beyond the end of said framework, and said flexible layer being secured to said framework adjacent the outer extensible members of said framework and tensioned between the points of securement to effect folding at predetermined points.

15. In an extensible curtain, the combination of a pair of side frame members of predetermined length, with a pair of extensible frame members, said extensible frame members having their ends secured to said side frame members, forming an extensible framework having a substantially polygonal outline, with a flexible covering for the side of said framework, and adapted to cover the same and to be folded or extended thereby, said flexible covering being secured to said

framework at a multiplicity of spaced points, and said covering being tensioned between respective points of securement transversely to the extensible members from points adjacent one extensible frame member to corresponding opposite points adjacent the other extensible frame member to form lines of fold corresponding to the lines of tension in said flexible covering.

16. In an extensible curtain, the combination of a pair of side frame members of predetermined length, with a pair of extensible frame members, said extensible frame members having their ends secured to said side frame members, forming an extensible framework having a substantially polygonal outline, said extensible members each comprising a plurality of series of links, the links of each series being pivoted end to end to form the series, and the corresponding links of two different series being pivoted to each other to cause a substantially uniform extension of said extensible members, with a flexible covering for the side of said framework, said flexible covering being secured to said framework at a multiplicity of spaced points adjacent the borders of said flexible covering, and said covering being tensioned between said spaced points to form lines of fold corresponding to the lines of tension in said covering.

17. In an extensible curtain, the combination of a pair of side frame members of predetermined length, with a pair of extensible frame members, said extensible frame members having their ends secured to said side frame members, forming an extensible framework having a substantially polygonal outline, said extensible members each comprising a plurality of series of links, the links of each series being pivoted end to end to form the series, and the corresponding links of two different series being pivoted to each other to cause a substantially uniform extension of said extensible members, with a flexible covering for the side of said framework, said flexible covering being secured to said framework at a multiplicity of spaced points adjacent the borders of said flexible covering, and said covering being tensioned between said spaced points to form lines of fold corresponding to the lines of tension in said covering, the points of attachment of said flexible covering to said framework and the lines of fold formed by said tension being located in substantial alignment with corresponding pivots of said extensible members, whereby uniform extension or folding of the framework produces a like extension or folding of the covering.

18. In a foldable curtain, the combination of an extensible framework comprising end stiles and a pair of extensible linkages connecting said end stiles to form a rectangular frame, with a flexible covering extending over both sides of said framework, said flexible covering being secured to said extensible framework at points located adjacent the outer border of said rectangular frame, and tensioned transversely to said extensible linkages from one side of the frame to the other, to produce predetermined lines of fold in said covering.

In witness whereof, we hereunto subscribe our names this 10th day of August, 1928.

CARL H. NORDELL.
PEDER E. ERLINDER.