July 5, 1932. S. LOWY 1,865,868

PARTITION

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Fig. 1

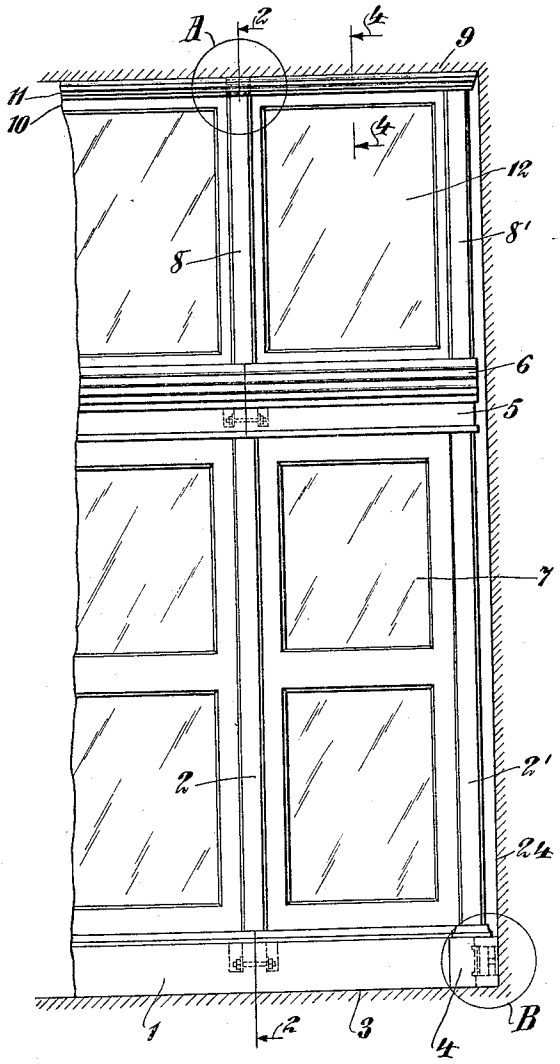
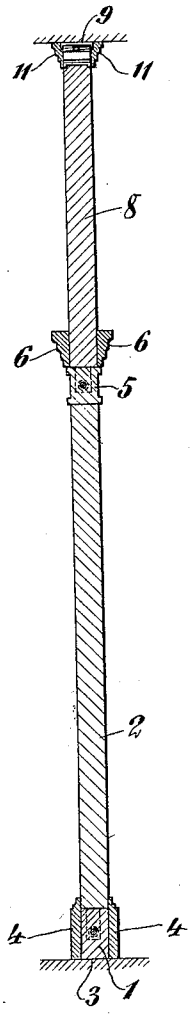


Fig. 2



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Fig. 3

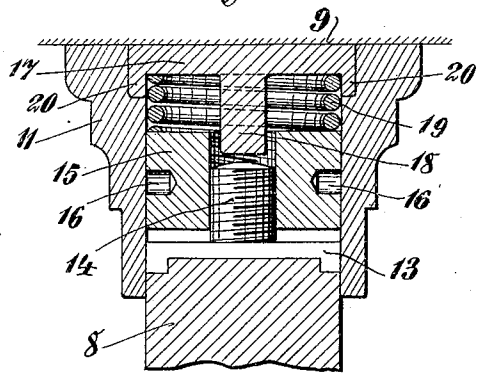


Fig. 4

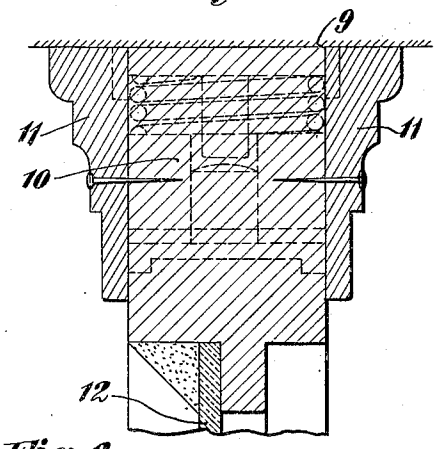


Fig. 5

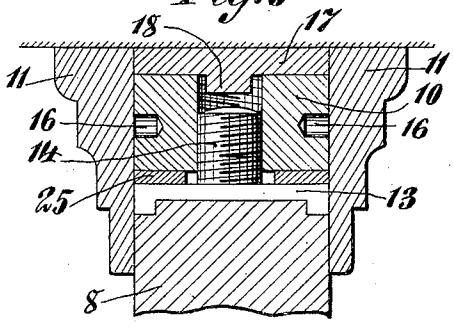


Fig. 6

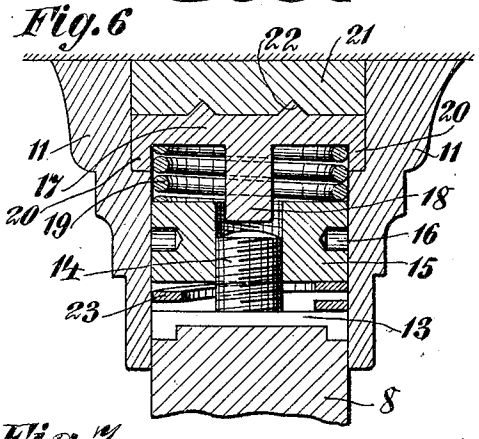


Fig. 7

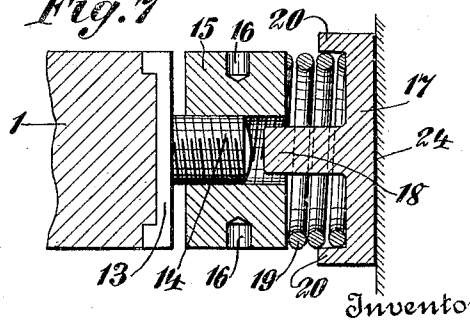
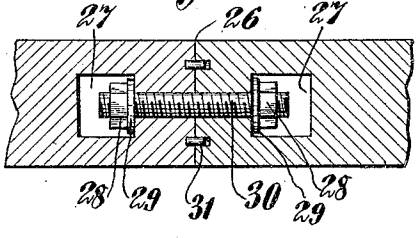


Fig. 8



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Patented July 5, 1932 1,865,868

UNITED STATES PATENT OFFICE

SAMUEL LOWY, OF NEW YORK, N. Y.

PARTITION

Application filed May 27, 1926. Serial No. 111,958.

My invention relates to partitions, such as are set up in offices, stores or lofts, both of the extensible and of the non-extensible type.

The purpose of the invention is to enable one to put up such a partition without nailing it to either the floor or ceiling, so that the usual damage to the walls, floor and ceiling is done away with. My partition may be built in the shop, in complete units, ready to be assembled in the space for which it is intended. The structure is such that the assembly may be effected very rapidly and with extremely little labor. It may be dismantled with equal ease and rapidity. The assembly and the dismantling may be proceeded with without interference with whatever work may be going on in the room or office, noiselessly, avoiding the discomfort and upheaval accompanying such an operation in the present type of partition. My partition may be moved to another position in the same room or to another room in the same or in another building, without leaving any marks disfiguring the space. This means, among other advantages, that the owner of the partition may not be estopped from removing it on the ground that such removal would damage the building. The invention is equally applicable to wood and metal partitions.

To accomplish my purpose, I construct my partition in sections comprising vertical posts and panels between them, and I secure the partition in place by causing the posts to exert pressure on the floor and ceiling, the panels being connected to the posts in the manner well known in the art.

In my copending applications, Serial Nos. 13,711, 35,575 and 37,665, dated respectively March 7, June 8 and June 17, all of 1925, I have applied this principle to the extensible type of partition. In the present invention, the same principle is applied to a non-extensible partition, although some features described below apply equally well to the extensible type, as will be pointed out when these particular features are discussed. In the aforesaid copending applications, wherein the partition is held in place by the pressure of the pilasters on the floor and ceiling, it was necessary to extend at least some of these pilasters, if not all of them, all the way to the ceiling. In the application of my present invention, I utilize the principle of pressure also in the case where the partition extends only part way to the ceiling, i. e. where the vertical posts do not extend beyond the partition itself which may be open either at the top or both, at top and bottom, by causing pressure to be exerted against the walls of the room, instead of the floor and ceiling. Where especial security is desired, I may arrange my structure so that pressure is exerted both against the walls and against the floor and ceiling.

In the drawings, Figure 1 is a partial front view of my partition; Figure 2 is a vertical cross section along the line 2—2 of Figure 1; Figures 3 to 8 inclusive are enlarged details of my invention.

Referring to Figures 1 and 2, 1 is the base of the partition made up in sections, as shown; 2 and 2′ are solid posts set on the base 1 and made to appear as if they actually were set on the floor, 3, by the facings 4. The facing 4 has been removed from under the post 2 in order to show the manner in which the sections of the base 1 are connected to one another. On top of the posts 2, 2′, is the capping 5, also made up in sections, as shown, and covered with the molding 6. Between the posts 2 and 2′ are panels 7. On the capping 5 rests the superstructure of the partition comprising posts 8, 8′, and panels 12. On each post 8, 8′, adjacent the ceiling 9, is a press, which will be presently described in detail, the one over the post 8 lying within the space indicated on the drawings by the circle A. Cross rails 10, between the posts 8, 8′, under the ceiling 9, are covered by the molding 11, which may be nailed or secured by screws thereto. The panels 12, usually of glass, are set between the posts 8, 8′, capping 5, and cross rails 10, in the usual manner. In the circle indicated by the letter B is shown a device similar to the one in the circle A, acting on the base 1 in the same manner as this device, in the circle A, acts on the post 8.

This device will now be described, with reference to Figures 3 to 7 inclusive.

In Figure 3, the post 8 is covered with a metal shoe 13 which forms the base for the threaded pin 14. The nut 15 is caused to rise on the threaded pin 14 by inserting a lever into the holes 16 and turning the nut therewith. A plate 17, adapted to come in contact with the ceiling 9, has a central projecting lug 18 which fits loosely into the threaded hole of the nut 15. A short, heavy spring 19 around the lug 18, rests between the nut 15 and the plate 17. The plate 17 is provided with flanges 20 to hold the spring 19 in place. The device shown in Figure 3 may be seen at the top of Figure 2 and is the one referred to as being within the circle A.

Figure 4 is an enlarged cross section of Figure 1 along the line 4—4 and shows how the upper panels are connected to the cross rail 10 and how the latter is held in place by the molding 11 nailed thereto. In Figure 5 is shown a device differing from the one illustrated in Figure 3 only in that the spring 19 is omitted. Another modification of the device is shown in Figure 6, wherein a ceiling strip 21 is interposed between the ceiling 9 and the plate 17, the latter being provided with spikes 22 which bite into the ceiling strip 21 and thus keep the strip and plate in fixed position relatively to one another. The ceiling strip, of wood, is intended for the protection of the ceiling from contact with the metal plate 17. Another modification shown in Figure 6 consists in the addition of the split washer 23 between the nut 15 and the shoe 13. The washer 23 adds to the resiliency of the device and at the same time acts to prevent any tendency of the nut to become loose. In lieu of the washer, I may simply insert a shim or wedge 25 in its place, as shown in Figure 5, although I prefer to hold the nut in locked position by causing one of its faces to register with the face of the molding 11 which will then prevent the nut from turning. This can always be easily done by selecting a proper pitch for the thread on the pin 14.

The device shown in Figure 7 is identical with that shown in Figure 3, except that it is turned by 90 degrees so that the pressure is exerted on the wall 24 instead of the ceiling 9, the device in this position being the one within the circle indicated by the letter B in Figure 1. Of course, the molding is omitted in this case.

Figure 8 is an enlarged top view of a portion of either the base 1 or the capping 5 of Figure 1. Near the joint 26 of two consecutive sections of the base 1 or capping 5, each section has a hole 27 large enough to permit the insertion and manipulation of the nut 28 and washer 29 on the screw bolt 30 passing from one section to the other through a hole bored therein for the purpose. The relative displacement of the sections is prevented by the dowel pins 31. By tightening the nuts 28 on the bolt 30, the two sections of the base 1 or capping 5 are pressed together. When the base or capping is held in position by pressure on the walls, as with the device shown in Figure 7, within the space indicated by the circle B, the sections are pressed together without the use of the device shown in Figure 8, which may be omitted in this case, but when the pressure device at the end of the base or capping is omitted, it is necessary to hold the several sections together by such a device as shown in Figure 8.

In setting up a partition reaching all the way to the ceiling, the nuts 15, in the space indicated, for example by the circle A, are tightened until sufficient pressure is exerted on the floor and ceiling to hold the posts firmly in position. The purpose of the spring 19 is to take care of possible vibratory movements of either the ceiling or the floor, which are absorbed by the springs, and to provide for such other small variations in the distance between floor and ceiling as may occur, for instance, if the floor sags, or the wood in the posts shrinks. The addition of the springs or equivalent resilient elements permits the device to adjust itself automatically to the variations in pressure which may occur as a result of the above indicated small changes in the distance between floor and ceiling. Where there is no danger of such changes, the spring 19 may be omitted, in which case the form of the device shown in Figure 5 is adopted.

The device illustrated in Figures 3 to 7 inclusive may, of course, be used in connection with the extensible type of partition as well as in the case where the partition is not vertically extensible. Particularly, I may use the resilient form of pressure embodied in my present invention for the type of extensible pilasters disclosed in my above mentioned applications Serial Nos. 13,711, 35,575 and 37,665. Likewise, I may use the principle of side pressure utilized in the present invention, Figure 7, in the aforesaid embodiments of my invention for an extensible partition. Generally, when the partition extends all the way to the ceiling, or where the pilasters extend to the ceiling, even though the panels do not, pressure exerted by the pilasters on floor and ceiling is sufficient to hold the partition in place, but I may, in cases where additional security is desired, combine the pressure of the pilasters with the pressure of the cross members applied either to the base or some intermediate cross rail, or to both. When it is desired to put up a partition which does not extend all the way to the ceiling and whose pilasters do not extend beyond the body of the partition, I use the device illustrated in Figure 7, applied to both the base and the capping. In a partition that

is open both on top and at bottom, the pressure is introduced in the upper and lower cross rails.

A partition which sets on the floor and extends only part way to the ceiling is represented by Figures 1 and 2, in which the superstructure, i. e. the posts 8, 8′, with the panels connected thereto, is omitted. The resulting structure being clear from these two figures, it was deemed unnecessary to make additional drawings for this form of partition. Usually, such a partition extends seven feet up. If it is intended to contain a door, unless this door opens above the base 1, it is necessary to secure the door jambs to the floor in order to take up the pressure of the device indicated in the circle B.

In the partitions as usually built today, there is no base, such as base 1 in the present invention, nor a continuous capping, such as the capping 5 of Figure 1, the pilasters going through from floor to ceiling. Of course, I may apply my device, as illustrated in Figures 3 to 7, to such a form of construction as well as to the one shown in Figures 1 and 2. Having conceived the idea of making a continuous base and a continuous capping, the conception of the sectional base and capping followed in order to permit the building of the partition in interchangeable units. Other modifications will naturally present themselves in the general application of my invention and may be made without affecting the spirit and scope thereof.

Having fully described my invention, I claim:

1. A room partition comprising a sectional base, vertical posts resting on said base, a sectional capping on said posts, extension posts on said capping, cross rails between said extension posts at the upper end thereof, panels between said base, posts and capping, panels between said cross rails, extension posts and capping, a molding connecting said cross rails to one another and to said extension posts, and means for holding said partition in place by causing said extension posts to exert pressure on said capping and on the ceiling of said room.

2. In a room partition, a lower section resting on the floor, a capping therefor, means for holding said lower section in position by pressure on the walls of said room, an upper section comprising posts resting on said capping, and means cooperating with said first mentioned means for holding said partition in place by causing said posts to exert pressure on said capping and on the ceiling.

3. In a room partition, comprising vertical posts and horizontal cross members, means for holding said partition in place by causing said posts to exert pressure on the floor and ceiling, and said cross members to exert pressure on the walls of said room.

4. In a partition between two surfaces, a beam abutting on said surfaces, means for holding said partition in place by causing said beam to exert pressure on said surfaces, and means for causing said pressure to automatically adjust itself when the distance between said surfaces is subjected to slight changes.

5. In a space between two parallel surfaces subject to vibrations, a beam abutting one of said surfaces, a press at the other end of said beam, means for holding said beam in place by causing said press to engage the other one of said parallel surfaces, and a resilient member cooperating with said press and adapted to absorb said vibrations.

6. In a space between two walls, a partition comprising a plurality of posts abutting on said walls, means for holding said partition in place by causing said posts to exert pressure on said walls, and means automatically compensating for slight variations in the distance between said walls.

7. In a partition between two surfaces, a beam abutting one of said surfaces, a press at the other end of said beam, means for holding said partition in place by causing said press to resiliently engage the other one of said surfaces, and means for locking said beam under pressure.

8. In a room partition, a plurality of vertical posts held in place by resilient pressure on the floor and ceiling, cross rails between said posts, a cross member connecting said cross rails to one another and to said posts, and means cooperating with said cross member for locking said posts under said resilient pressure.

9. A room partition comprising a sectional base, vertical posts set upon said base, a sectional capping on said posts, extension posts on said capping, cross rails between said extension posts at the upper end thereof, panels between said base, posts and capping, panels between said cross rails, extension posts and capping, a molding connecting said cross rails to one another and to said extension posts, and means for holding said partition in place by causing said extension posts to exert pressure on said capping and on the ceiling of said room, and causing said base and said capping to exert pressure on the walls of said room on which they abut.

10. In a partition, a base extending the entire length thereof, vertical posts resting on said base, and a capping resting on said posts and extending the entire length of said partition, said base and said capping being made up of sections held together by pressure therebetween.

11. In a partition between two surfaces, a beam abutting one of said surfaces, a press at the other end of said beam, and means for holding said partition in place by causing

said press to resiliently engage the other one of said surfaces.

12. In a room partition, a vertical post abutting the floor of said room, a press at the other end of said post, and means for holding said partition in place by causing said press to resiliently engage the ceiling of said room.

13. In a partition, a sectional cross member extending from end to end thereof, a coupling between each pair of consecutive sections of said cross member permitting a limited longitudinal movement of said sections, and means for holding said cross member in place by pressure at said ends.

14. In a partition, a sectional cross member extending from end to end thereof, dowel pins at one end of each section of said cross member, the adjacent end of the next section being provided with holes for receiving said dowel pins, and means for holding said cross member in place by pressure at said ends.

SAMUEL LOWY.