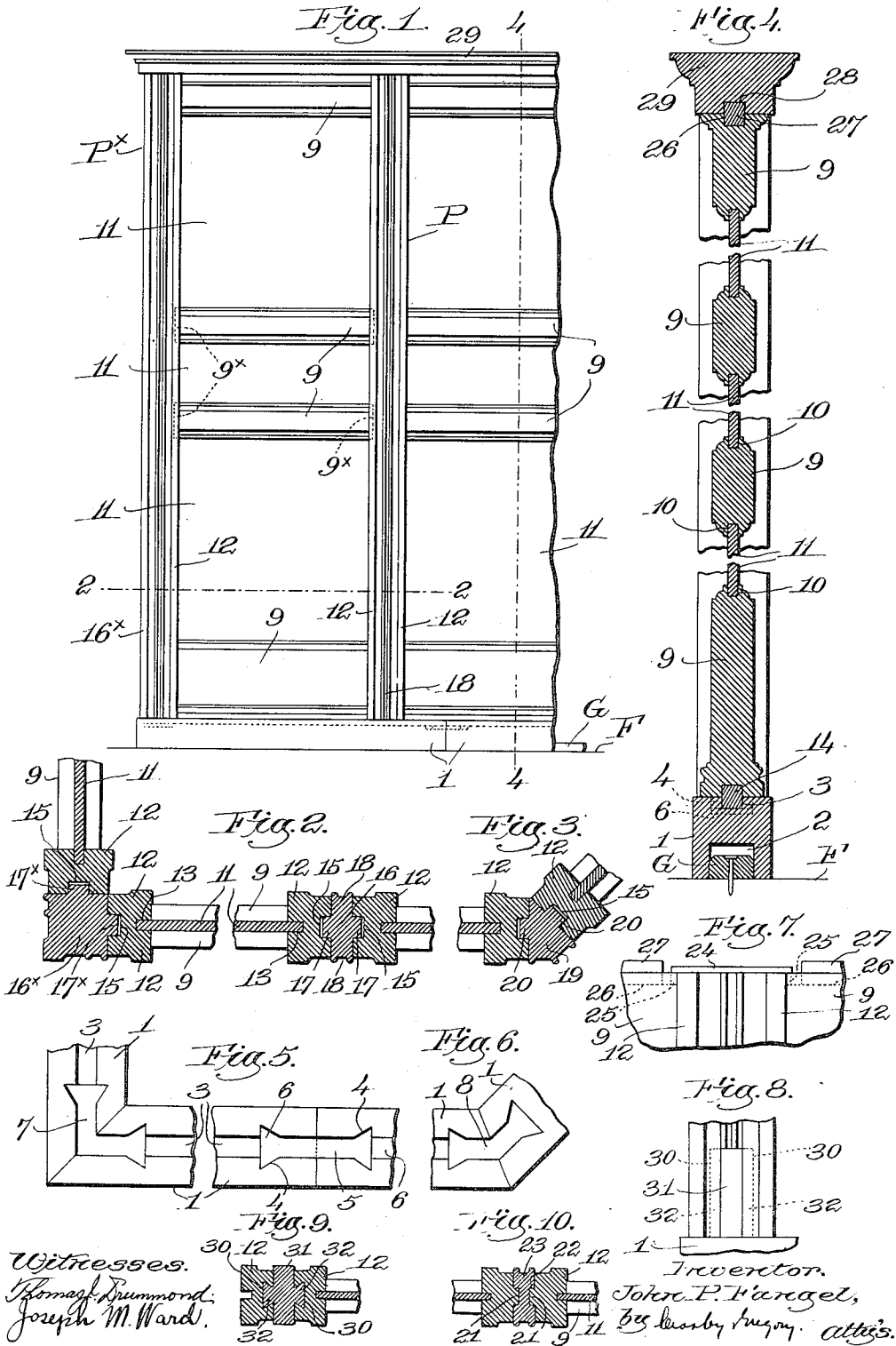


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SECTIONAL PARTITION.
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1,154,622.

Patented Sept. 28, 1915.



UNITED STATES PATENT OFFICE

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SECTIONAL PARTITION.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN P. FANGEL, a citizen of the United States, and resident of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Sectional Partitions, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention has for its object the production of a sectional partition for use in office and other buildings where it is desired to sub-divide the rooms according to the requirements of the users, the construction and arrangement of my novel partition being such that it can be erected quickly in any desired location, and taken down without damage and used again in a different location.

In constructing the ordinary partition a paneled frame of suitable dimensions is built up at the desired location, the frame being carefully cut to size and finished, after which pilasters are attached by glue and nails, either or both, and horizontal moldings are attached, and after the partition is set up base and cap moldings are fitted and nailed on. Such partitions not only require the services of a skilled carpenter to build and set up, but when once in place they become practically a permanent part of the building, inasmuch as they cannot be taken down and set up in another location because they are so fitted and nailed together that the dismantling is destructive, and prohibitive of further use. Thus the partition is of no value if a change in location is desired, and the material and labor necessary to erect it cannot be utilized a second time. So, too, when the partition is thus built up to fit a certain space it cannot be utilized in a different location, for even if it could be taken down without damage it could not be fitted to the new space without destroying its original character.

In accordance with my present invention I make the partition in sections of convenient size, each section complete in itself, and comprising a panel portion, with permanently attached pilaster-members at its ends. By means of a suitable coupling member the pilaster-members of adjacent sections are detachably but firmly interlocked and connected, as many sections being used as are

required by the dimensions of the space to be partitioned off. The bottoms of the coupled sections have a detachable connection with a base, preferably made in sections locked together end to end, the bottom of the base being longitudinally grooved to receive a guide strip which is secured to the floor by nails or screws. A suitable cap or crown molding surmounts the partition detachably connected with the tops of the coupled sections. The partition thus constructed is firm and secure, presents an ornamental appearance, and can be easily taken down without damage and set up again in a different location when desired.

The various novel features of my invention will be fully described in the subjoined specification and particularly pointed out in the following claims.

Figure 1 is a front elevation of a portion of a sectional partition embodying my invention, showing the connection between two adjacent sections, and at the left the coupling member is shown as also forming a corner post for the partition; Fig. 2 is a horizontal sectional view, on the line 2—2, Fig. 1, with the panel portion broken out to save space; Fig. 3 is a sectional detail similar to Fig. 2, but showing the construction of the coupling member when used at a corner greater than a right angle; Fig. 4 is an enlarged vertical section, broken out between the cross-rails, taken on the line 4—4, Fig. 1; Fig. 5 is a top plan view of a portion of the sectional base, showing the means for locking the sections together end to end; Fig. 6 is a similar view showing two sections of the base locked together at an obtuse-angled corner; Fig. 7 is a detail in elevation showing a clamp for positively clamping together the upper ends of two adjacent pilaster-members, to be referred to; Figs. 8 and 9 are a front elevation and cross section, respectively, of the lower ends of two adjacent pilaster-members, to illustrate a form of lock used therewith to prevent separation thereof in the direction of the width of the sections of the partition; Fig. 10 is a cross sectional detail of a different form of coupling member from that illustrated in Fig. 2.

Referring to Figs. 1 and 4, F indicates the floor of the room in which the partition is to be located, and upon the floor is secured a straight guide strip G, of wood or metal, attached by nails or other suitable fastenings

and extending in the direction in which the partition is to be set. The partition base comprises a plurality of sections 1, made of wood and of suitable dimensions to afford a strong and firm support for the main part of the partition, the bottom face of the base being longitudinally grooved at 2, Fig. 4, to fit snugly over the guide strip G, the base resting upon the floor and being maintained in position by said strip, as will be apparent. The different sections of the base are abutted at their ends and in their upper faces have a longitudinal groove 3, which is cut out laterally near the ends of the sections, as at 4, Fig. 5, to form dove-tail recesses for the reception of locking means which lock the sections of the base together. Herein the locking means is shown as an elongated flat shank 5 having laterally enlarged ends 6, Fig. 5, the shank fitting in the groove 3 while the ends 6 fit into the lateral cut-out portions 4, and preferably the groove 3 is deepened slightly, as shown by dotted lines, Fig. 4, to receive the locking device so that its upper surface will lie flush with the bottom of the main portion of the groove 3. The locking devices are conveniently cut or stamped out of plate metal, and they are inserted into the places provided when the sections of the base are being assembled. At the left, Fig. 5, a square corner is shown, the abutting ends of the sections 1 being mitered, and at such a corner the shank 7 of the locking device will be L-shaped in plan, as shown, while for other corner angles the shank will be shaped accordingly.

In Fig. 6 I have shown an obtuse-angled corner formed by the base sections, and the shank 8 of the locking device is correspondingly shaped in plan. When taking down a sectional partition made in accordance with my invention the base sections can be unlocked by lifting out of their seats the locking devices. Upon the base is supported the main or wall portion of the partition, now to be described, said wall portion comprising a plurality of detachable and interchangeable sections and interposed coupling members which interlock therewith.

Having reference now to Figs. 1, 2 and 4, each section consists of a panel portion made up of suitable horizontal rails 9, longitudinally grooved at their upper and lower edges, at 10, Fig. 4; thin panels 11 fitting loosely in the grooves of successive rails; and pilaster-members 12 permanently attached to the opposite ends of the panel portion. In practice the opposite ends of the rails 9 have tenons to fit into a groove 13 in the side of and running the length of each pilaster-member 12, the projecting edges of the panels 11 between the rails also entering the grooves 13, but the tenons 9*, Fig. 1, are glued into the grooves 13 while

the panel ends loosely enter such grooves. The bottoms of the two pilaster-members are flush with the bottom of the lowermost rail 9 connecting them, and a tongue 14, Fig. 4, is provided along the bottom of the section to fit into the groove 3 in the base, before referred to. A firm and permanent connection is provided between the two pilaster-members and the intervening panel portion, by virtue of the attachment between the cross-rails 9 and members 12, these sections being in practice built in standard sizes and kept in stock. The front and back faces of the members 12 are in practice molded as desired to present an ornamental or pilaster effect, said members being made considerably thicker than the rails or any molding thereon, and serve as posts to stiffen and strengthen the section. Adjacent panels are detachably connected by a coupling member interposed between the opposed faces of contiguous pilaster-members, and an interlocking connection is provided by a tongue and groove joint.

In Fig. 2 the outer side or face of each pilaster-member 12 is provided with a longitudinal groove 15, and the coupling member is made as a wooden strip 16 equal in length to the members 12 and having on opposite sides longitudinal tongues 17 which fit snugly into the grooves 15, the grooved sides of members 12 abutting against the tongued sides of the interposed coupling member 16. If desired the front and back of the coupling member is molded, as at 18, so that when two sections are assembled with the coupling member a complete pilaster will be presented at both back and front of the partition, indicated as a whole at P, Fig. 1. The coupling member serves also to complete a corner post or column, as shown at 16*, Fig. 2, and in such case the tongues, as 17*, are formed on the two sides at right angles to each other, the other two sides of the member 16* being molded to complete the pilaster at the front of each wall of the partition.

In Fig. 1 the corner coupling member and pilaster is indicated as a whole at P*. Manifestly the exposed faces of the coupling members can be treated ornamentally in any desired way to match with the pilaster-members of the sections. By reference to Figs. 2 and 10 it will be seen that the front and back of the coupling member extended slightly beyond the front and back of the coupled pilaster-members, and if it is desired to set up a cross partition the groove 15 of the pilaster-member thereof will embrace the extended part of the coupling member, so that the cross partition will be held in position by the coupling member. As all corners are not right angles the coupling members for such purposes may be made generally wedge-shaped in cross-section.

tion, such a coupling member being shown at 19, Fig. 3, the tongues 20 on the converging faces entering the grooves 15 in the pilaster-members 12, as shown. The sections of the partition are duplicates of each other and hence interchangeable, and they may be made to present the same appearance back and front, or the pilaster-members may be made more ornamental at the back than at the front, or vice versa, as desired. The coupling member interlocks with the adjacent sections by the detachable tongue and groove connection, so that the several sections will be held in alinement when set up with the bottom tongue 14 seated in the base groove 3, as shown in Fig. 4.

A reversal of the tongue and groove arrangement is shown in Fig. 10, wherein the pilaster-members 12 have longitudinal tongues 21 to enter grooves 22 formed in the opposite sides of the coupling member 23, but the detachable interlocking connection is maintained as before. When the several sections are set up on the base, with the coupling members interposed between the pilaster-members of adjacent sections I prefer to clamp adjacent sections together, by suitable flat metal clamps 24, Fig. 7, which rest upon the tops of the adjacent pilaster-members 12 and the interposed coupling member 16, the opposite ends 25 of the clamp being downturned to fit tightly over and embrace the lateral faces of the members 12. These clamps positively prevent any separation of the partition sections in the direction of the length of the partition, the downturned ends 25 of the clamps entering longitudinal grooves 26 formed in the upper edges of the top rails 9. Tongues 27 are fitted into these grooves, and stopping short of the pilaster-members, as shown in Fig. 7, the exposed parts of the tongues being adapted to fit into a groove 28, Fig. 4, in the top or crown molding 29. After the several sections have been set up, coupled and clamped, as described, with doorways or other openings in proper places, the top or crown molding is put in position, and in practice the latter is cut to the length required for the partition, it binding or connecting the tops of the various sections from end to end of the partition.

When setting up a partition from one to the other wall of a room it will generally be found desirable to attach to the wall an upright wall-strip or board, which in practice will be cut out to fit the base-board in usual manner. Such wall-strip fills up the small vertical space between the wall and the end of the partition. If desired the cap or crown molding may be fastened to the wall by screws or nails, but it is not necessary except in the case of very long partitions. If for any reason it should be necessary to use a partition section of less than

standard width this can be readily arranged, for the panel portion of one of the sections can be sawed through from top to bottom, of the requisite width, and the sawed ends of the horizontal rails 9 can be tenoned and refitted to the pilaster-member at that side, without any disturbance of the general design or construction of the section. In some cases it will be found desirable to lock or clamp the lower ends of the pilaster-members of adjacent sections, and in Figs. 8 and 9 I have shown a convenient form of locking means. The plain longitudinal groove in the pilaster-member is made as a dove-tail groove at its lower end, as at 30, for a short distance, say four to six inches, and the coupling member 16 is cut off so that it extends down only to the top of the dove-tail. Before a section is set up on the base the locking member 31 is slipped into place, its dove-tail tongue 32 entering the groove 30 from the lower end, and the section is set upright on the base, after which the coupling member 16 is positioned, with its lower end resting on the locking device 31. The next section is now lifted high enough to permit the exposed tongue 32 to slide into the groove 30 at the bottom of its pilaster-member, and when the section is lowered into position on the base the locking member 31 acts to lock the two adjacent sections together at their lower ends. By similar manipulation the succeeding sections are set up and locked together at their lower ends, the locking member being inserted at the bottom of the outermost pilaster-member before the section is set up and locked to the preceding section.

From the foregoing description it will be manifest that the partition construction embodying my invention enables a partition to be built up of any desired length by the use of the requisite number of separable sections, and without the use of nails or screws to connect the sections. When a partition is to be changed in location, or it is desired to remove it from one building to another, it can be taken down part by part, and set up again in the manner herein described, in no case forming a permanent fixture in the building.

Various changes or modifications in details of construction and arrangement may be made by those skilled in the art without departing from the spirit and scope of my invention as set forth in the claims annexed hereto.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a sectional partition, a plurality of detachable and interchangeable sections, each comprising a panel portion having a permanently-attached pilaster-member at each end thereof, and a coupling member

interposed between and having a detachable tongue and groove connection with the opposed faces of the pilaster-members of adjacent sections, combined with a sectional base, a detachable connection between the sectional base and the bottoms of the coupled sections of the partition, and means, concealed by the superposed sections of the partition, to lock together the sections of the base.

2. In a sectional partition, a plurality of detachable and interchangeable sections each comprising a panel portion having a permanently-attached pilaster-member at each end thereof, and a coupling member interposed between and having a detachable tongue and groove connection with the opposed faces of the pilaster-members of adjacent sections, combined with a sectional base, means to lock the sections thereof together, and a detachable tongue and groove connection between the said base and the coupled sections of the partition.

3. In a sectional partition, a plurality of detachable and interchangeable sections each comprising a panel portion having a permanently-attached pilaster-member at each end thereof, and a coupling member interposed between and having a detachable tongue and groove connection with the opposed faces of the pilaster-members of adjacent sections, combined with a base having a detachable tongue and groove connection with the bottoms of the coupled sections of the partition, said base having a longitudinal groove in its bottom face, and a guide strip adapted to be secured to the floor and fitting into said bottom groove to position and retain the base in place.

4. In a sectional partition, a plurality of detachable, reversible and interchangeable sections each comprising a panel portion having permanently attached and similar posts at each end thereof, the inner and outer faces of the posts forming like pilaster-members, a coupling member of cruciform cross-section filling the space between and having a detachable tongue and grooved connection with the opposed faces of the end posts of adjacent sections, the opposite faces of said coupling member which abut against the posts being alike, the inner and outer faces of the coupling member exposed between the coupling posts forming a continuation of the inner and outer faces of said posts, and making thereby a complete pilaster at the back and front of the partition, and means for holding the coupling member and adjacent section together.

5. In a sectional partition, a plurality of detachable and interchangeable sections each comprising a panel portion having a permanently-attached pilaster-member at each end thereof, and a coupling member inter-

posed between and having a detachable interlocking connection with the opposed faces of the pilaster-members of adjacent sections, combined with a detachable clamp to engage and clamp together the upper ends of a pair of pilaster-members and the interposed coupling member.

6. In a sectional partition, a plurality of detachable and interchangeable sections each comprising a panel portion having a permanently-attached pilaster-member at each end thereof, and a coupling member interposed between and having a detachable interlocking connection with the pilaster-members of adjacent sections, said coupling member completing the pilaster at the back and front of the partition, combined with a detachable cap for the partition, a base having a detachable connection with the bottoms of the coupled sections, said base having a longitudinal groove in its bottom face, and a guide strip fastened to the floor and fitting said groove, to position and retain in place the assembled partition.

7. In a sectional partition, a plurality of detachable and interchangeable sections each comprising a panel portion having a permanently-attached pilaster-member at each end thereof, and a coupling member interposed between and having a detachable interlocking connection with the pilaster-members of adjacent sections, said coupling member completing the pilaster at the back and front of the partition, combined with a detachable cap for the partition, a sectional base having a detachable connection with the bottoms of the coupled sections, means to lock together the sections of the base, and a permanently fixed guide strip to engage the bottom of and position the base.

8. In a sectional partition, a plurality of detachable and interchangeable sections each comprising a panel portion having a permanently-attached pilaster-member at each end thereof, and a coupling member interposed between and having a detachable tongue and groove connection with the opposed faces of the pilaster-members of adjacent sections, combined with a clamping device for the upper ends of an adjacent pair of pilaster-members, and a separate device to positively engage and lock the lower ends of said members from separation thereat in the direction of the width of the corresponding sections.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

JOHN P. FANGEL.

Witnesses:

BESSIE G. MORRIS,

THOMAS J. DRUMMOND.