W. G. HAY.

PARTITION CONNECTION.

APPLICATION FILED DEC. 15, 1920.

1,418,257.

Patented May 30, 1922.

3 SHEETS—SHEET 1.

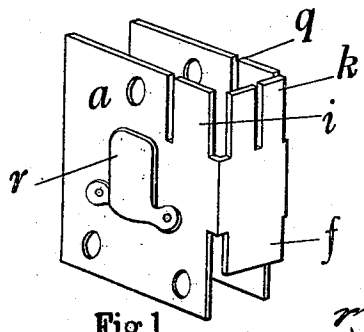

Fig.1

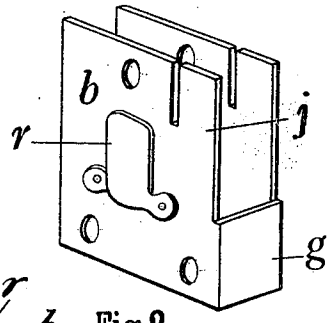

Fig.2

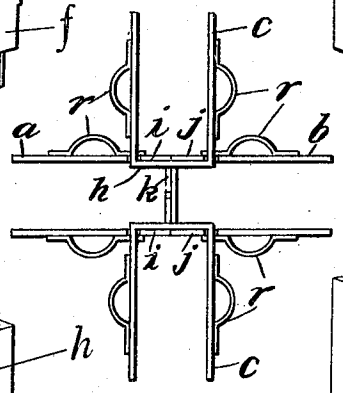

Fig. 15.

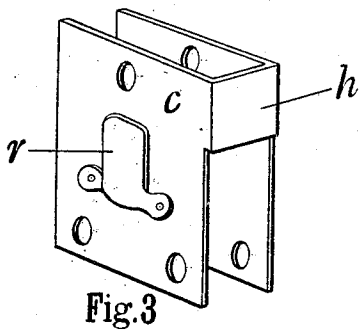

Fig.3

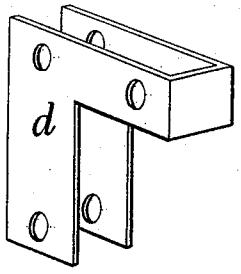

Fig.4

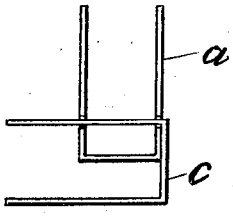

Fig.16.

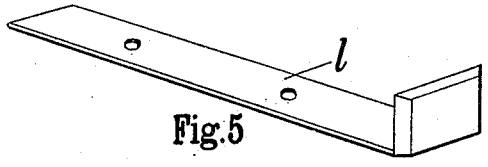

Fig.5

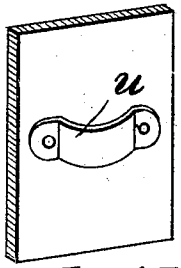

Fig.17.

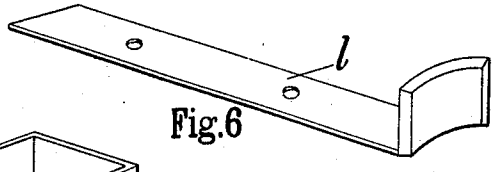

Fig.6

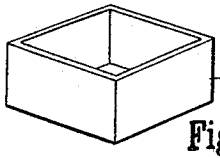

Fig.7

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3 SHEETS—SHEET 2.

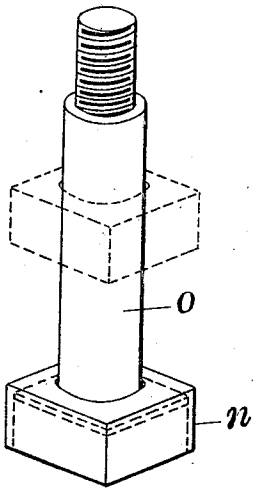


Fig.8

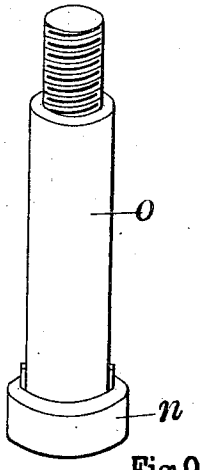
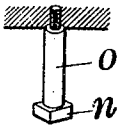


Fig.9



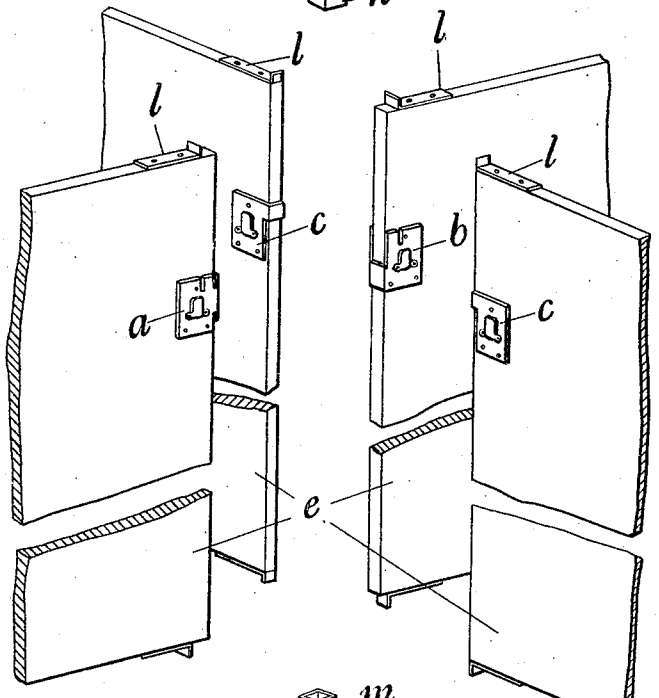


Fig.10.

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APPLICATION FILED DEC. 15, 1920.

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3 SHEETS—SHEET 3.

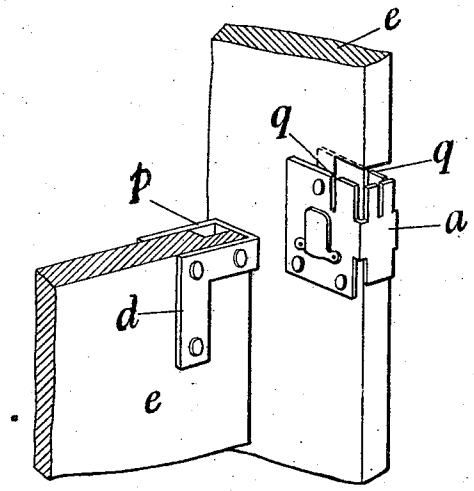

Fig.11.

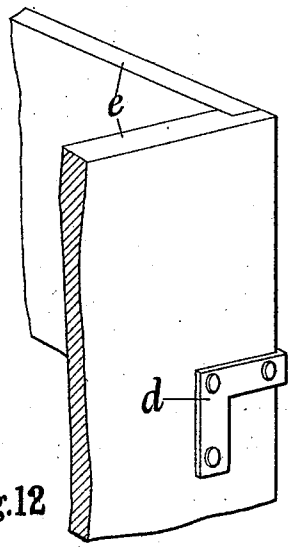

Fig.12

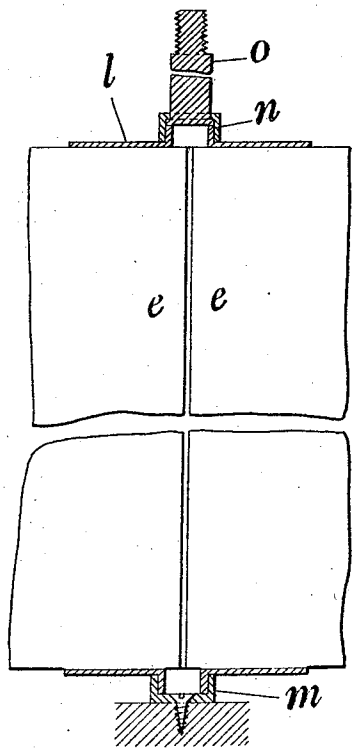

Fig.13

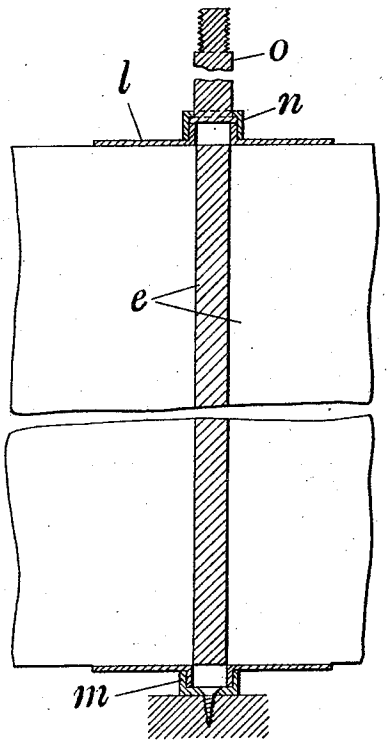

Fig.14

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UNITED STATES PATENT OFFICE.

WILLIAM GEORGE HAY, OF LIVERPOOL, ENGLAND.

PARTITION CONNECTION.

1,418,257. Specification of Letters Patent. **Patented May 30, 1922.**

Application filed December 15, 1920. Serial No. 430,956.

To all whom it may concern:

Be it known that I, WILLIAM GEORGE HAY, residing at Ailsa Craig, Coronation Drive, Great Crosby, Liverpool, England, a subject of the King of Great Britain and Ireland, have invented certain new and useful Improvements Relating to Partition Connections, of which the following is a specification.

The object of the present invention is to provide improved fittings for securing portable bulkheads or partitions for ships, huts and the like.

In the three accompanying sheets of explanatory drawings:—

Figures 1 to 4 are perspective views of the fittings for connecting together the abutting edges of the bulkheads or partitions.

Figure 5 shows one form of angle piece secured at both the upper edge and the lower edge of each bulkhead for connection to the floor and ceiling or deck fittings.

Figure 6 shows an alternative form of angle piece.

Figure 7 represents the floor or under deck fitting and Figure 8 the fitting secured to the ceiling or overhead deck.

Figure 9 shows an alternative overhead deck fitting.

Figure 10 shows the manner of connecting the adjacent edges of four bulkheads, while Figures 11 and 12 show the manner of connecting the adjacent edges of two bulkheads arranged at right angles.

Figure 13 is a sectional elevation showing the connection of four bulkheads to the floor and ceiling fittings and Figure 14 is a like view taken at right angles to the former.

Figure 15 is a plan showing the interconnection of the edge fittings of four adjacent bulkheads and Figure 16 the interconnection of the two edge fittings of two adjacent bulkheads arranged at right angles.

Figure 17 shows a fitting used for attaching a movable bulkhead to a fixed bulkhead.

For connecting the edges of the bulkheads together four different fittings as shown in Figures 1 to 4 are used. These are designated *a*, *b*, *c*, *d*. The shapes of the fittings are clearly shown in the drawings and require no detailed description. To connect four bulkheads *e* meeting at right angles as shown in Figure 10, two of the fittings *a* are provided on one of the bulkheads (near the upper and lower ends respectively), fittings *b* are provided in corresponding positions on the bulkhead which is in alignment with the first, and fittings *c* are provided on the other two bulkheads. All the bulkheads are appropriately cut away where necessary adjacent to the said fittings to permit the desired interengagement. In assembling the bulkheads the lower tongue *f* of *a* is inserted behind the cross piece *g* of *b*. The cross piece *h* of *c* is inserted behind the parts *i* and *j* of *a* and *b*, and the slotted tongue piece *k* extends behind the side parts below *i* and *j* of the fittings *a* and *b*. The relative positions of these fittings when interconnected is shown in Figure 15.

To the upper edge of each bulkhead an angle piece *l* (Figure 5) is secured, the vertical edges of the projecting part being preferably chamfered or mitred so that the projecting parts of the adjacent angle pieces on the four bulkheads can fit closely together. The projecting parts of the angle pieces on the bulkheads carrying the fittings *c* are flush with the vertical edges of the bulkheads, but the corresponding parts of the angle pieces on the bulkheads carrying the fittings *a* and *b* are set back from the vertical edges of their bulkheads to a distance equal to one half the thickness of the bulkheads as shown in Figure 10. Likewise similar angle pieces are secured to the lower edges of the bulkheads. The projecting parts of the lower angle pieces engage a quadrilateral socket *m* secured to the floor or under deck, and the projecting parts of the upper angle pieces are engaged by a quadrilateral socket *n* arranged to slide on a stem *o* secured to the ceiling or upper deck, as shown in Figures 13 and 14. After the vertical edges of the bulkheads have been connected, the bulkheads are lifted to engage the lower angle pieces with the lower socket, the upper socket being meanwhile raised clear, and finally the upper socket is lowered into position to engage the upper angle pieces.

Instead of rectangular or quadrilateral sockets, cylindrical or circular sockets may be used. A cylindrical socket for the upper deck fitting is shown in Figure 9. The lower socket is similar to that shown in Figure 7 excepting that it is of circular form. When cylindrical sockets are used the projecting parts of the angle pieces are shaped as shown in Figure 6. In both the fittings shown in Figures 8 and 9 a plate or collar is provided at the lower end of the stem to

prevent the slidable socket from falling off. To enable the cylindrical socket sliding on the stem to be held up in the out of service position while the bulkheads are being assembled, a short key (or a pair of keys) is provided on the stem passing through a key way in one end of the socket. On raising the socket it can be caused to rest on the upper end of the key. With the square socket, this can be supported in the elevated position on the above mentioned flange.

To connect two bulkheads at right angles the edge of one is provided with the fitting *d* (Figure 4) and is formed with a longitudinal groove equal in width to the other bulkhead and of a depth equal to one half the thickness of the bulkhead, as shown in Figure 11, so that it can overlap the other bulkhead as shown in Figure 12. The vertical edge of the other bulkhead is provided with the fitting *a* and is gapped adjacent to the upper part of each of such fittings as shown in Figure 11. The parts are connected by engaging the portion *p* of the fitting *d* with the notches *q* in the fitting *a*, so that the two fittings lie together as shown in the plan view at Figure 16. The upper and lower edges of these bulkheads are provided with angle pieces *l* and are engaged by floor and ceiling sockets as hereinbefore described.

In some cases it is necessary to attach one edge of a movable bulkhead to a face of a fixed bulkhead, in which case I attach to the latter a fitting *u* as shown in Figure 17, and arrange this to be engaged by one of the tongue pieces on the end of the fitting which is shown in Figure 1 and is attached to one end of the movable bulkhead.

In all cases the various fittings (excepting the stem *l* of the ceiling socket) are preferably made by pressing or stamping operations on metal sheets or strips, and are thus capable of being manufactured accurately at relatively low cost. Also the fittings can be applied with but little cutting away of the bulkheads and without the necessity for mitering the abutting edges of the bulkheads. Further the fittings enable the bulkheads to be very expeditiously assembled, and afford all the required security and rigidity in use. For some purposes the use of partitions or bulkheads forming closed compartments or berths is undesirable. In this case end stanchions or supports only are used for carrying the berths. My invention is equally applicable for connecting the abutting edges of members used in the construction of these stanchions. Instead of attaching the fittings to partitions as above described they are then attached to relatively narrow upright members provided with means for carrying the berths the connection of adjacent edges of the stanchion pieces being effected in the same manner as bulkheads.

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

1. In a partition connection, the combination comprising angle pieces for attaching to the upper and lower edges of the partitions, upper and lower sockets for engaging the angle pieces, the lower socket being fixed, and a stem on which the upper socket can slide, substantially as described.

2. In a partition connection, the combination comprising angle pieces for attaching to the upper and lower edges of the partitions, upper and lower sockets for engaging the angle pieces, the lower socket being fixed, a stem on which the upper socket can slide, and interengageable fittings for attaching to the edges of the partitions, substantially as described.

In testimony whereof I have signed my name to this specification.

WILLIAM GEORGE HAY.