A. J. PHILIP.

SHELVING.

APPLICATION FILED NOV. 23, 1915.

1,265,373.

Patented May 7, 1918.

Fig. 1.

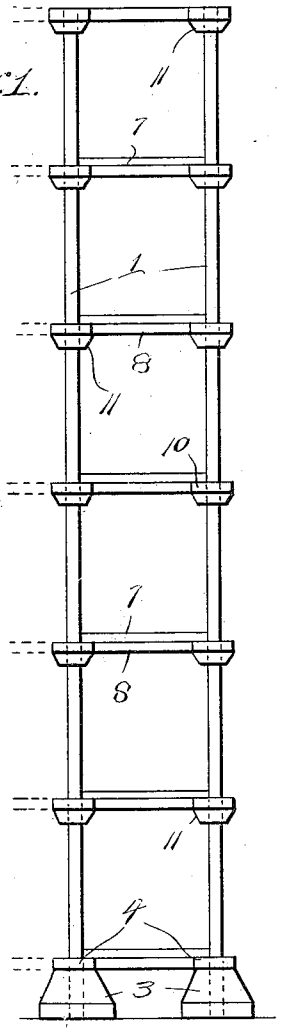


Fig. 3.

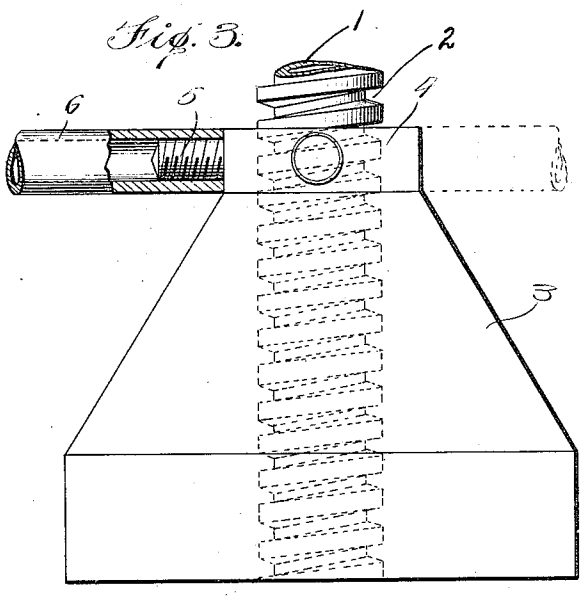


Fig. 4.

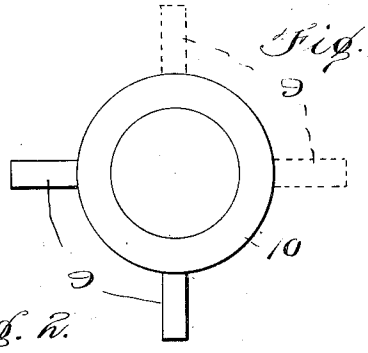
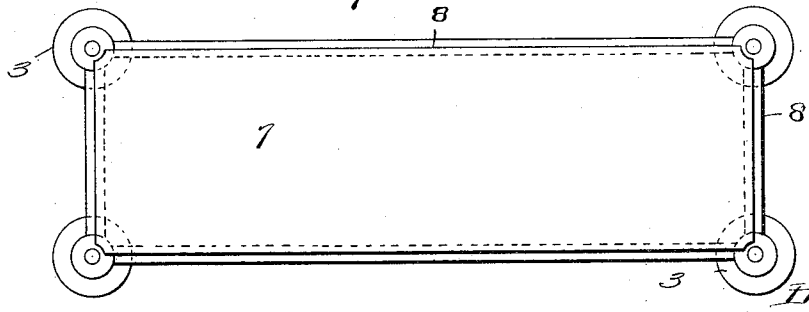


Fig. 2.



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UNITED STATES PATENT OFFICE.

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SHELVING.

1,265,373. Specification of Letters Patent. Patented May 7, 1918.

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To all whom it may concern:

Be it known that I, ALEXANDER JOHN PHILIP, a subject of His Majesty the King of Great Britain, and a resident of Gravesend, in the county of Kent, England, have invented certain new and useful Improvements in Shelving, of which the following is a specification.

This invention relates to improvements in and connected with shelving, and has for its object to provide a system of shelving for use in libraries and other places, which, while possessing great rigidity and strength, shall be simple and inexpensive of construction and convenient and effective in use.

Among other special advantages possessed by my invention may be mentioned the facility for accurate adjustment, the absence of springs, capacity for expansion and adaptability to the stack system, while furthermore the shelving is extremely hygienic and its decorative effects can be increased as desired from its simplest form which consists of a very simple and neat basic structure. The invention broadly consists in providing a shelving, the supporting structure of which comprises vertical supporting members of suitable material detachably built up and secured together with shelf-supporting members readily adjustable upon the vertical supports.

In the accompanying drawings Figure 1 is an end elevation Fig. 2 is a sectional plan view thereof; Fig. 3 is an elevational view showing the construction of one form of vertical support with its associated fittings, and Fig. 4 is a detailed view showing in plan certain of the fittings illustrated in Fig. 3.

Referring to the drawings the numeral 1 designates the vertical supports of steel or other tubing of uniform thickness but of greater or less weight according to the use to which the shelving is to be put, and the weight it is required to support. For library purposes for which my invention is mainly designed, the tubes would be comparatively light, but if shelving were required for storing metal ingots in foundries, for instance, the tubes would be appreciably heavier. According to one embodiment of my invention the outside surfaces of these cylindrical members of whatever form or substance are screw threaded or provided with a worm groove of suitable form, as indicated by the numeral 2. The vertical supports or columns are each provided with a suitable foot 3 and have at or near their upper and lower ends collars 4 furnished with threaded lugs 5 to which horizontal bracing members 6 are screwed. It will readily be understood that I may provide opposing lugs 5 with right and left handed threads, whereby the screwing on of a member 6 would draw the vertical columns together.

The supporting rail for the shelves 7 may consist of tubular members 8 carried on lugs 9 protruding from collars 10 which are loose upon the columns 1 and rest upon nuts 11 whereby they may be accurately positioned so as to afford uniform support to the shelves.

It will be seen that by providing the collars 4 and 10 each with two additional lugs, as indicated by dotted lines in Fig. 4 that it is possible with the addition of further columns and braces to extend the press indefinitely in a horizontal direction. Furthermore I may provide for extension in a vertical direction by superimposing upon each column 1 a second and similar column and uniting the two by a suitable union or equivalent device.

It will be seen that I have by my invention provided a system of shelving the basis of which is a perfectly rigid skeleton structure upon which the shelf supports proper can be adjusted in any position and which possesses moreover many advantages over shelving as at present in general use. Furthermore I can in accordance with my invention provide floors or platforms in any convenient situation without in any way supporting them from the walls of the containing building and may at any time readily alter the disposition of such floors or the means of access thereto without affecting any extraneous parts of the structure.

What I claim and desire to secure by Letters Patent is:—

A shelf supporting structure comprising a plurality of vertical supports, collars adapted to embrace and be adjustable along said vertical supports, said collars being provided with screwthreaded cylindrical lugs projecting radially therefrom, said lugs being adapted to receive the screw threaded ends of tubular bracing members.

In testimony whereof I affix my signature.

ALEXANDER JOHN PHILIP.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."