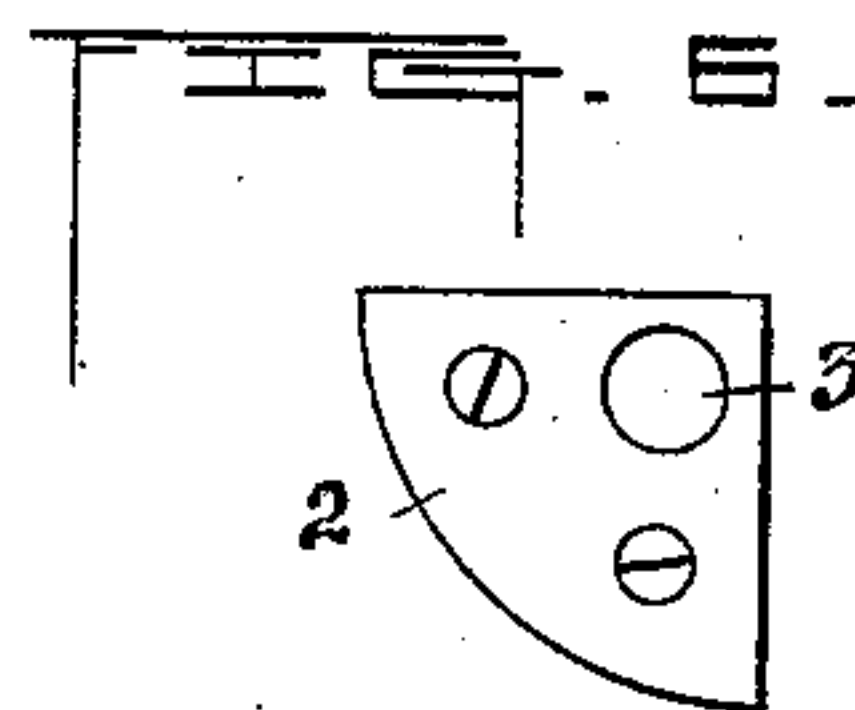
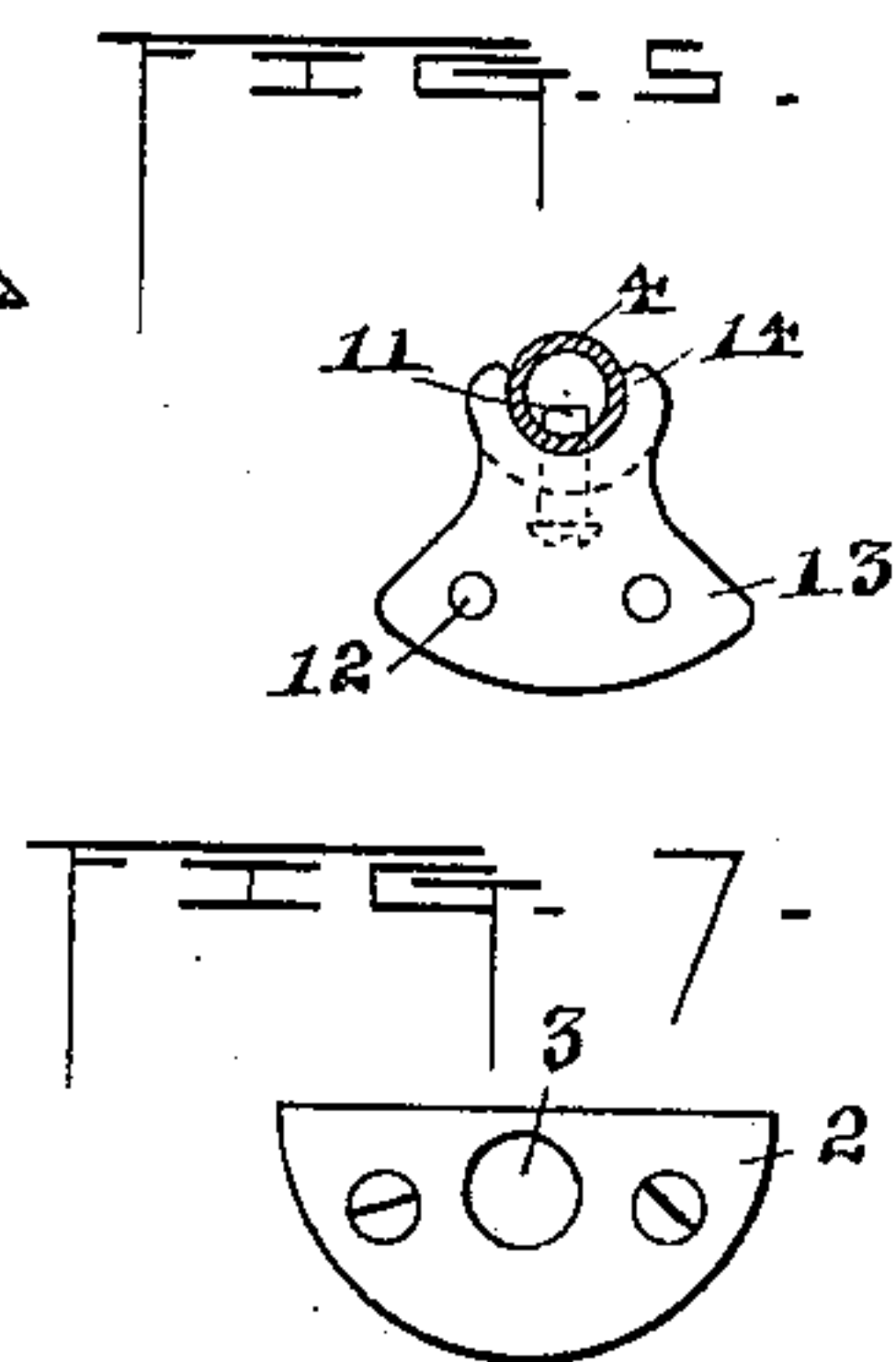
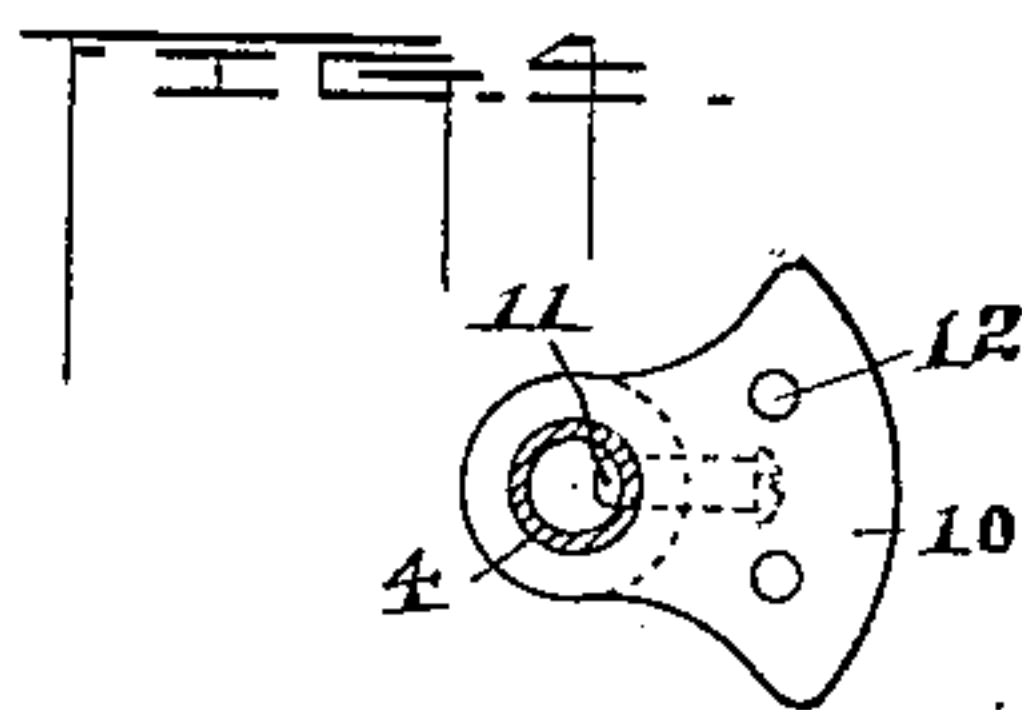
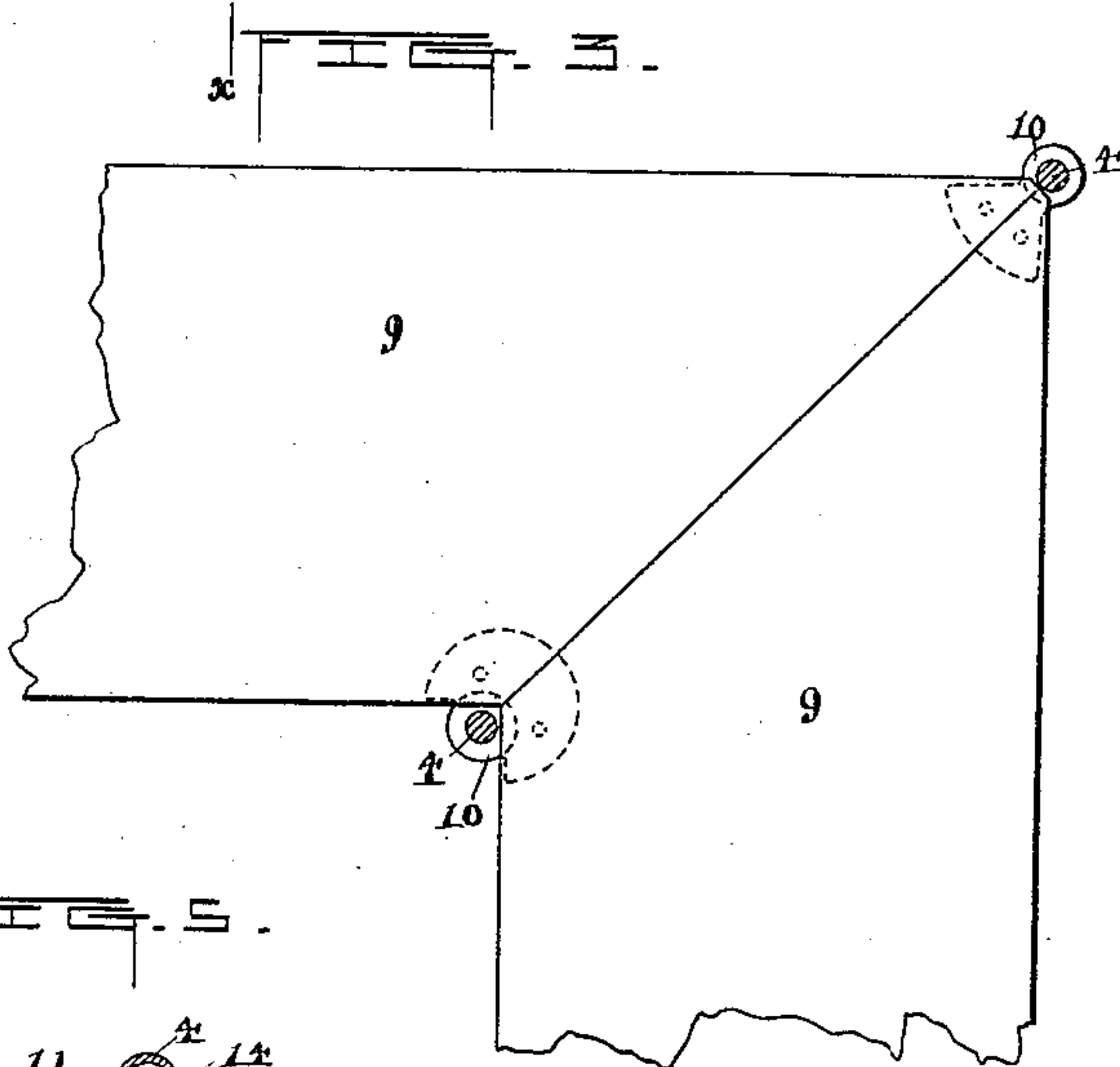
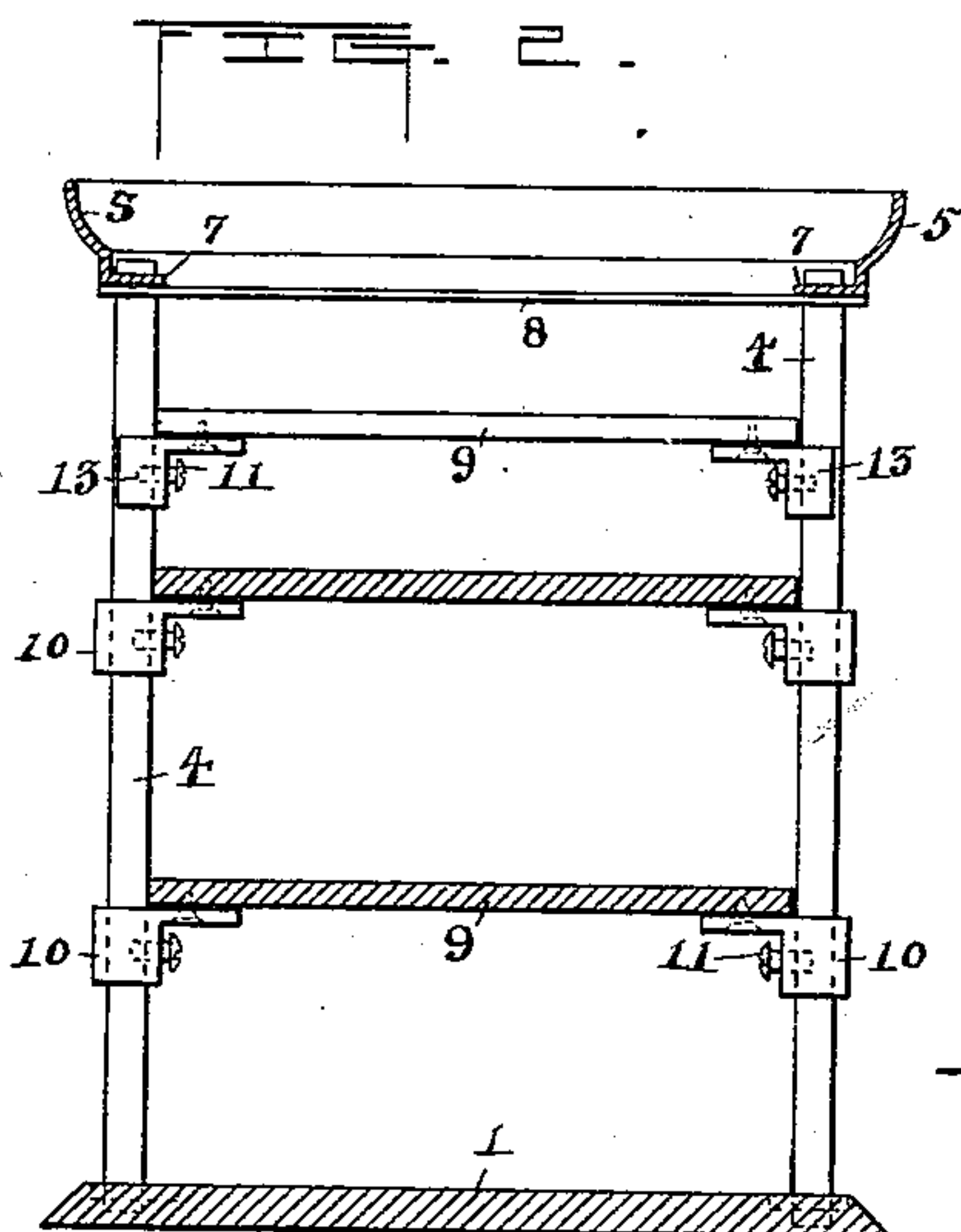
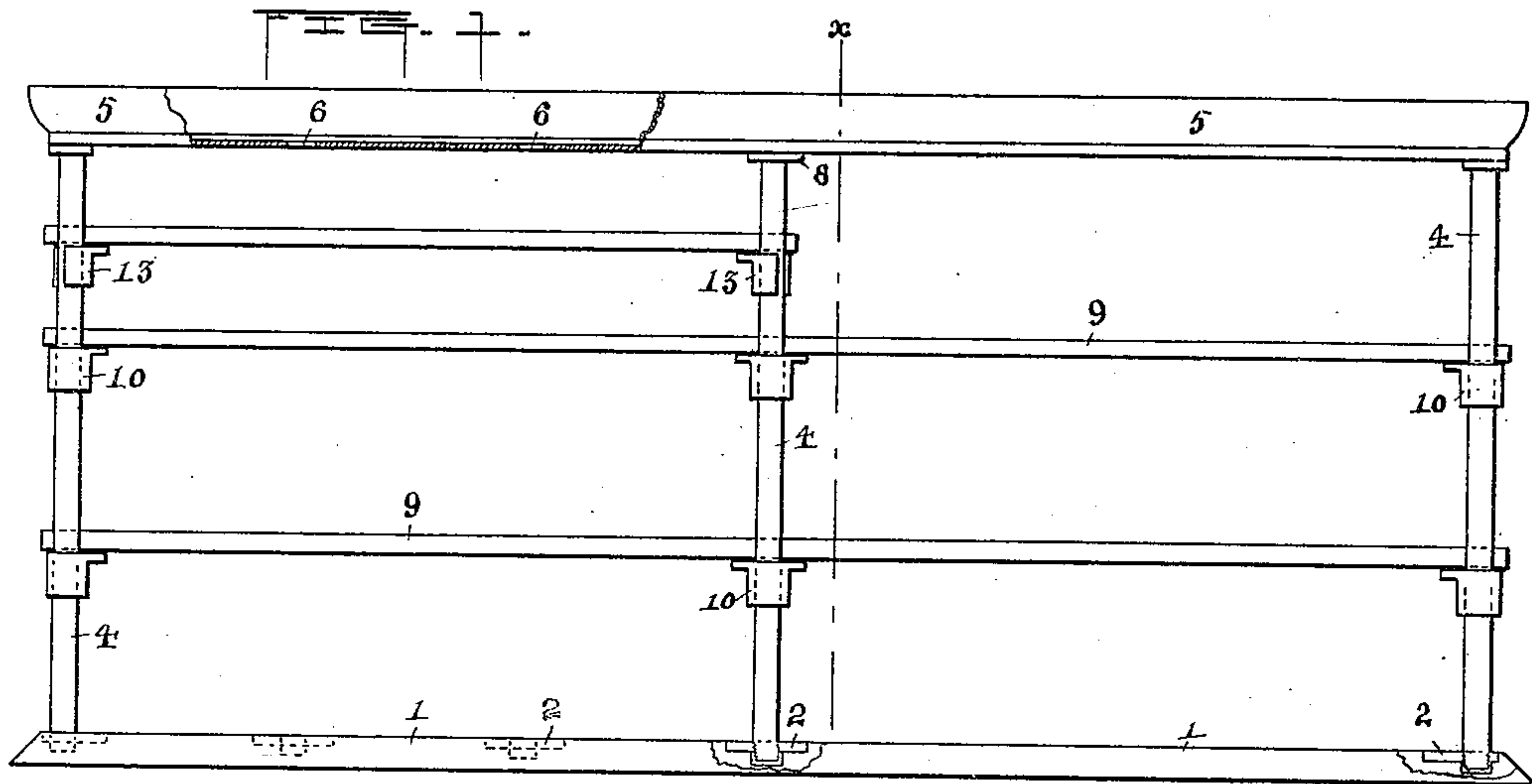


(No Model.)

J. GOTTFRIED.
SHELVING.

No. 450,289.

Patented Apr. 14, 1891.



Witnesses
Arch. M. Catlin
Henry C. Evert

Inventor
Julius Gottfried
by

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UNITED STATES PATENT OFFICE.

JULIUS GOTTFRIED, OF CHARTIERS, PENNSYLVANIA.

SHELVING.

SPECIFICATION forming part of Letters Patent No. 450,289, dated April 14, 1891.

Application filed December 5, 1890. Serial No. 373,708. (No model.)

To all whom it may concern:

Be it known that I, JULIUS GOTTFRIED, a resident of Chartiers, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Shelving; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The object of the invention is to simplify the construction of shelving and adapt it to various uses and adjustments; and it consists in the matters hereinafter described, and particularly pointed out.

In the accompanying drawings, Figure 1 is a side elevation of the improved shelving. Fig. 2 is a transverse section on line xx of Fig. 1. Fig. 3 is a sectional plan of a modified arrangement. Fig. 4 is a plan of a shelf-bracket, the upright or post to which it is fastened being shown in section. Fig. 5 is a similar view of another form of bracket. Figs. 6 and 7 are plans of plates provided with sockets for the insertion of posts. Fig. 8 is a partial plan of a tube suitable for a post, showing holes to receive screws.

Numeral 1 indicates a base provided with plates 2, having holes or sockets 3, adapted to receive the uprights 4. These are preferably made of metal tubing and screw-threaded at their lower ends and adapted to be screwed into suitable sockets on the plates secured in the base or elsewhere. This base may be the top of another article of furniture—such as a bureau or counter—if desired.

5 indicates a rectangular cap or molding, which can be made of metal and is provided with holes 6 to receive and hold the upper ends of the posts. These holes are conveniently made in a flange 7, turned inwardly at the bottom of the cap.

8 denotes a tie bar or rod adapted to stiffen the cap at a point between its ends.

The shelves 9, made of any suitable material, are supported upon brackets 10, secured upon the posts. These brackets are provided with short tubes, which can be slipped upon the posts and held thereon by screws 11. The brackets have holes 12 to receive screws, whereby they may be fastened to the shelves. The shelves may be made of a width about

equal and not greater than the distance between two adjacent posts, so that they can be readily introduced between them.

The above-described parts are assembled in an obvious manner. The socket-plates are first secured in any suitable base and the posts inserted therein. The brackets are then slipped upon the posts and adjusted to the desired height and fastened by screws, the posts being supplied on the inner sides with screw-threaded holes 15 to receive them. The cap is placed upon the top of the posts, and the shelves are then placed upon the brackets and between the posts and secured to the brackets.

In case intermediate shelves are desired brackets 13, such as represented in Fig. 5, are employed. These have semicircular sockets 14, that can be applied to the posts between the shelves or below the cap, and do not require to be passed over the tops of said posts. They provide for readily subdividing the space between two main shelves or any part thereof without removing the main shelves or the cap. These intermediate shelves can be easily introduced in any desired number, and this operation is not only provided for by the brackets 13, but by the size of each shelf, it being no greater in width than the space between adjacent posts, whereby it can be readily pushed into place. It has been customary to notch the shelves in "knockdown" shelving of this general character to receive the posts and to adapt them to fit between them around the outside thereof. Such notched shelves cannot be conveniently applied to the posts in a narrow vertical space, such as occurs where shelves are to be placed near to each other. The notches also are objectionable when it becomes desirable, as contemplated by my improvement, to move the intermediate posts toward one end of the series of shelves. Thus, for example, it may be desirable in a tier or series of shelves to provide a firmer support at or toward one end than is required at the other, in which case the intermediate posts can be moved from a central position to one nearer the end requiring greater strength, suitable holes 6 being provided in the cap. Such an adjustment in my shelving could be effected without cutting the shelves and without leaving unsightly notches at the point

from which posts have been moved. In such case the intermediate socket-plates can be moved if such were not originally supplied in the base.

5 It will be obvious that the intermediate shelves above referred to need not be longer than the distance between two lateral posts, and as this distance is adjustable, as set forth, it is practicable to adapt a tier of shelves
10 to support large and heavy objects at one end and small ones at another, both the vertical and longitudinal spaces being suitably adapted to the requirements of any particular use. It will be obvious that the shelves
15 need not be rectangular, but can be made in other forms and variously arranged. They can be adapted to corners of rooms and other positions, and such changes are contemplated, but not such as involve substantially different
20 constructions.

In Fig. 3 is shown a partial section looking down upon two shelves arranged at an angle to each other. By this construction two tiers of shelves can be arranged at an angle to each
25 other, or several tiers can be arranged around an open space, forming what may be called a "hollow square."

The above-described shelving is adapted for a great variety of uses, and can readily
30 be adapted to receive articles of various weights and sizes without the necessity of cutting or seriously marring any part thereof. It is firmly held by the base, cap, cross-bar, and main shelves, and is adapted to receive
35 intermediate shelves in close proximity to each other without the necessity of knocking down and setting up the shelves again, and it is also adapted to permit the moving of inter-

mediate posts without altering or cutting the shelves.

Having thus described my invention, what I desire to secure by Letters Patent is—

1. The shelving consisting of the base provided with sockets at each end and at the middle transverse line, the posts fitted in
45 said sockets, intermediate sockets, the brackets having tubular sleeves fitting the posts and secured thereto and to shelves, said shelves having a width not greater than the distance between said posts, and the cap hav-
50 ing the internal flange provided with holes fitting on the tops of said posts, and also with intermediate holes, and the brackets 13, having sockets semicircular in cross-section and adapted to be applied to the posts held in po-
55 sition by the base and cap, substantially as set forth, whereby shelves of various lengths can be used and whereby short intermediate shelves can be introduced.

2. The shelving consisting of the base provided with sockets, the posts fitted in said
60 sockets, the brackets having tubular sleeves fitting the posts and secured thereto and to shelves, said shelves, brackets 13, having sockets semicircular in cross-section and adapted
65 to be applied directly to opposite posts to support shelves, and one or more intermediate shelves removably supported on said brackets 13, substantially as set forth.

In testimony whereof I have signed this
70 specification in the presence of two subscribing witnesses.

JULIUS GOTTFRIED.

Witnesses:

HENRY C. EVERT,
BENJ. R. CATLIN.