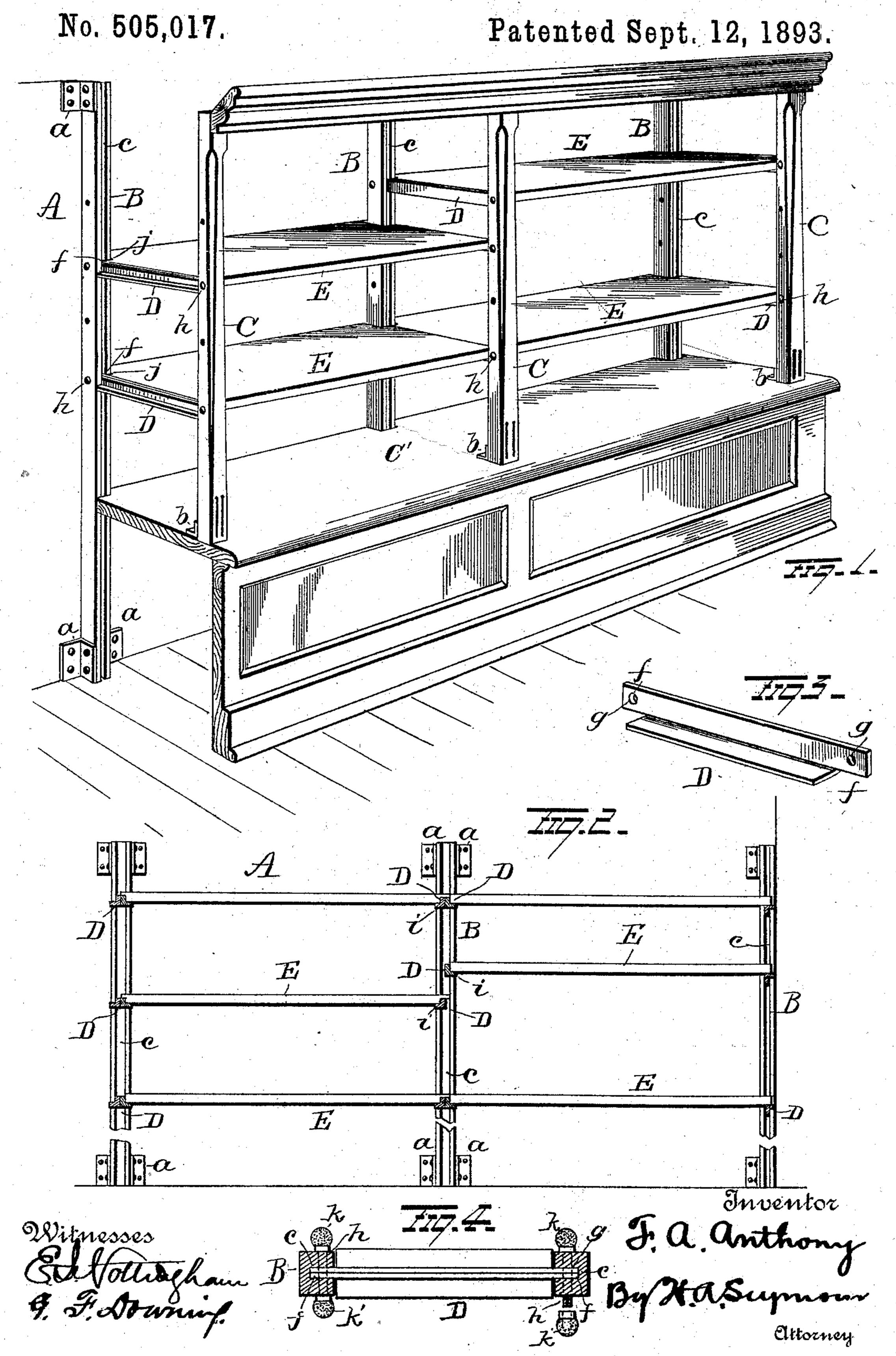
F. A. ANTHONY.
STORE SHELVING.



## United States Patent Office.

FREDERICK AGUSTUS ANTHONY, OF LIVERMORE, CALIFORNIA.

## STORE-SHELVING.

SPECIFICATION forming part of Letters Patent No. 505,017, dated September 12, 1893.

Application filed December 3, 1892. Serial No. 453, 942. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK AGUSTUS ANTHONY, are sident of Livermore, in the county of Alameda and State of California, have invented certain new and useful Improvements in Store-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 appertains to make and use the same.

My invention relates to an improvement in shelving,—the object of the invention being to provide simple and efficient devices whereby store shelves can be readily and quickly adjusted so as to accommodate articles of various heights.

A further object is to so construct the devices for supporting the shelves that one shelf may be changed or adjusted relatively to adjacent shelves, without affecting the adjustment of other shelves.

A further object is to produce adjustable store shelving which shall be ornamental in appearance and to so construct the supporting devices that they shall be effectual in the performance of their functions.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts as hereinafter set forth and pointed out in the claims.

In the accompanying drawings: Figure 1 is a view in perspective illustrating my improvements. Fig. 2 is a sectional view. Fig. 35 3 is a detail view of one of the supporting bars. Fig. 4 is an enlarged horizontal section through a pair of uprights showing the supporting bars and their retaining pins.

A represents the wall of a store room, to which a series of uprights B are secured, by means of angle brackets a.

In the drawings I have illustrated two tiers of shelves, but it is evident that any desired number of tiers may be employed.

Located in front of each upright B is an upright C secured to the floor or preferably to a base or platform shelf C' by means of angle brackets b. All the uprights B, C, are provided with vertical grooves c, for the reception of lugs or ears f projecting from the ends of bars D, said lugs or ears having perforations

q adapted to align with perforations in the uprights,-through which perforations, retaining pins h are passed, for supporting said bars. The uprights will preferably be pro- 55 vided with a number of perforations so that the bars D can be adjusted as desired. Each bar D is preferably made angular in cross section and the bars supported by the end uprights will preferably be so disposed that the 60 angle will be uppermost. The supporting bars connected to the central uprights will be preferably disposed in the reverse position, and two sets of said bars will be supported by said central uprights, the ledges i of one set pro- 65 jecting in one direction and adapted to support one end of the shelves of one tier of shelves and the ledges i of the other set projecting in the reverse direction and adapted to support one end of the shelves of another 70 tier. Shelves E will be placed on the supporting bars D as shown in Fig. 1, said shelves being notched as at j for the accommodation of the uprights B. Now by providing two sets of bars D between two tiers of shelves instead 75 of one set each having a double ledge, is as follows: By providing two sets of bars between two tiers of shelves, the bars of one set being adjustable independently of the bars of the other set, a shelf of one tier can be readily 80 adjusted,—viz., raised or lowered,—without disturbing any shelf of the adjacent tier or tiers of shelves. If the central supporting bars were made with two integral ledges, this result could not be accomplished, but when 85 a shelf of one tier is adjusted the corresponding shelf of the next tier will also have to be adjusted. I prefer to make the pinsh which support the bars Dornamental in appearance and to do this, I provide their ends with or- 90 namental knobs k, k',—the knobs being secured to one end of the pins and the knobs k' screwed or otherwise removably attached to their other ends. The uprights B may be made of wood or other suitable material, but 95 I prefer to construct the bars D of metal, preferably of steel.

By constructing and arranging store shelving as above described, the shelves can be adjusted as desired to accommodate articles of roo various sizes.

The devices are very simple in construc-

tion, cheap to manufacture, easy to place in position, can be readily transported and are effectual in the performance of their functions.

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

Patent, is—

1. The combination with a series of uprights having grooves therein, of bars adapted at their ends to entersaid grooves, pins adapted ed to adjustably secure said bars to the uprights, ornamental heads fixed to one end of said pins and ornamental heads or knobs removably secured to their other ends, substantially as set forth.

2. The combination with several pairs of

uprights having vertical grooves, of bars adapted at their ends to enter the grooves in the uprights of the two end pairs, pins for adjustably securing said bars to said uprights, and two sets of bars adapted at their ends to enter the grooves in the central pair of uprights and pins for securing both sets of bars to the central uprights, substantially as set forth.

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

FREDERICK AGUSTUS ANTHONY.

Witnesses:

GEO. BECK,

G. E. KENNEDY.