

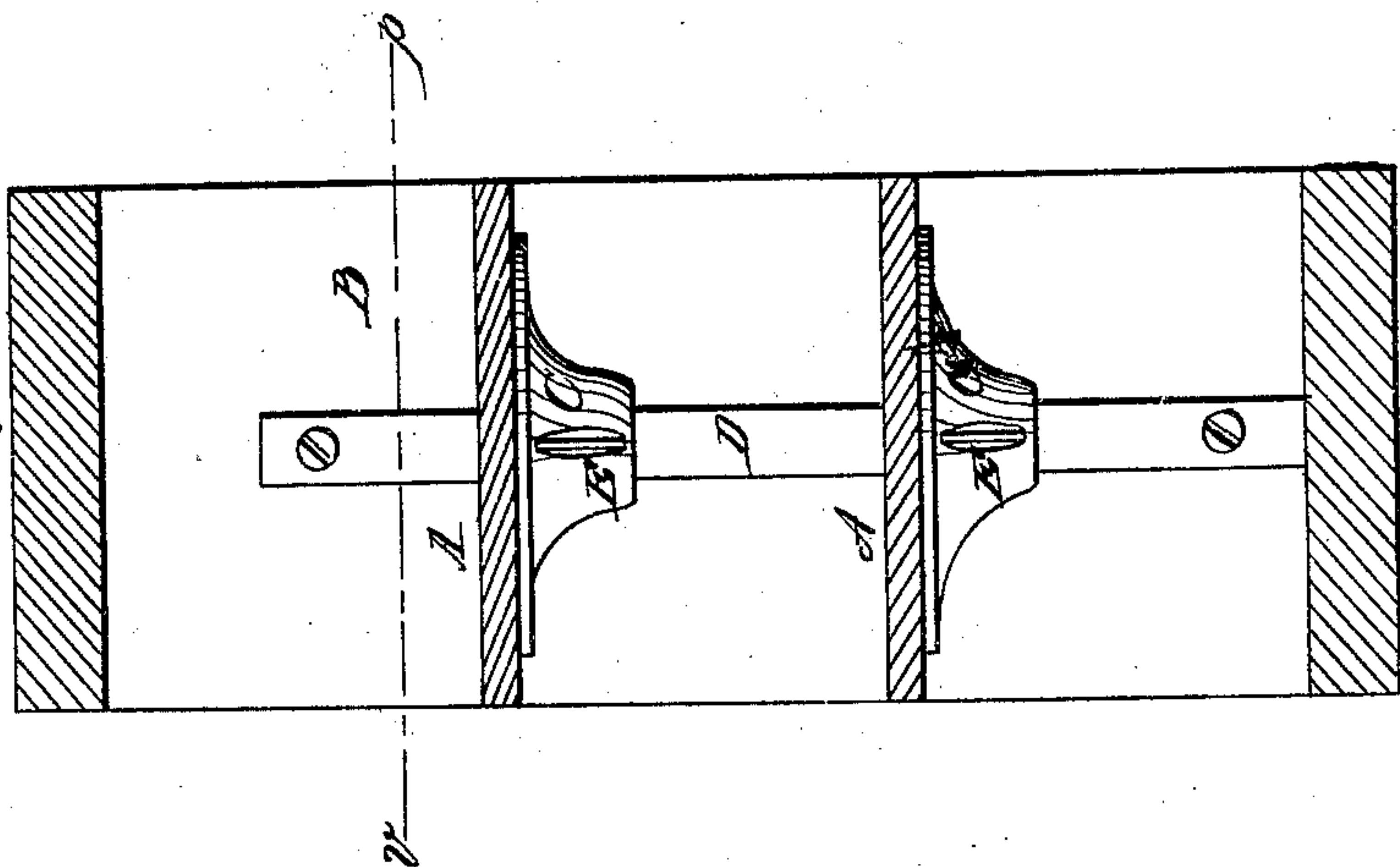
*S. L. Latta*

*Adjusting Store-Shelves.*

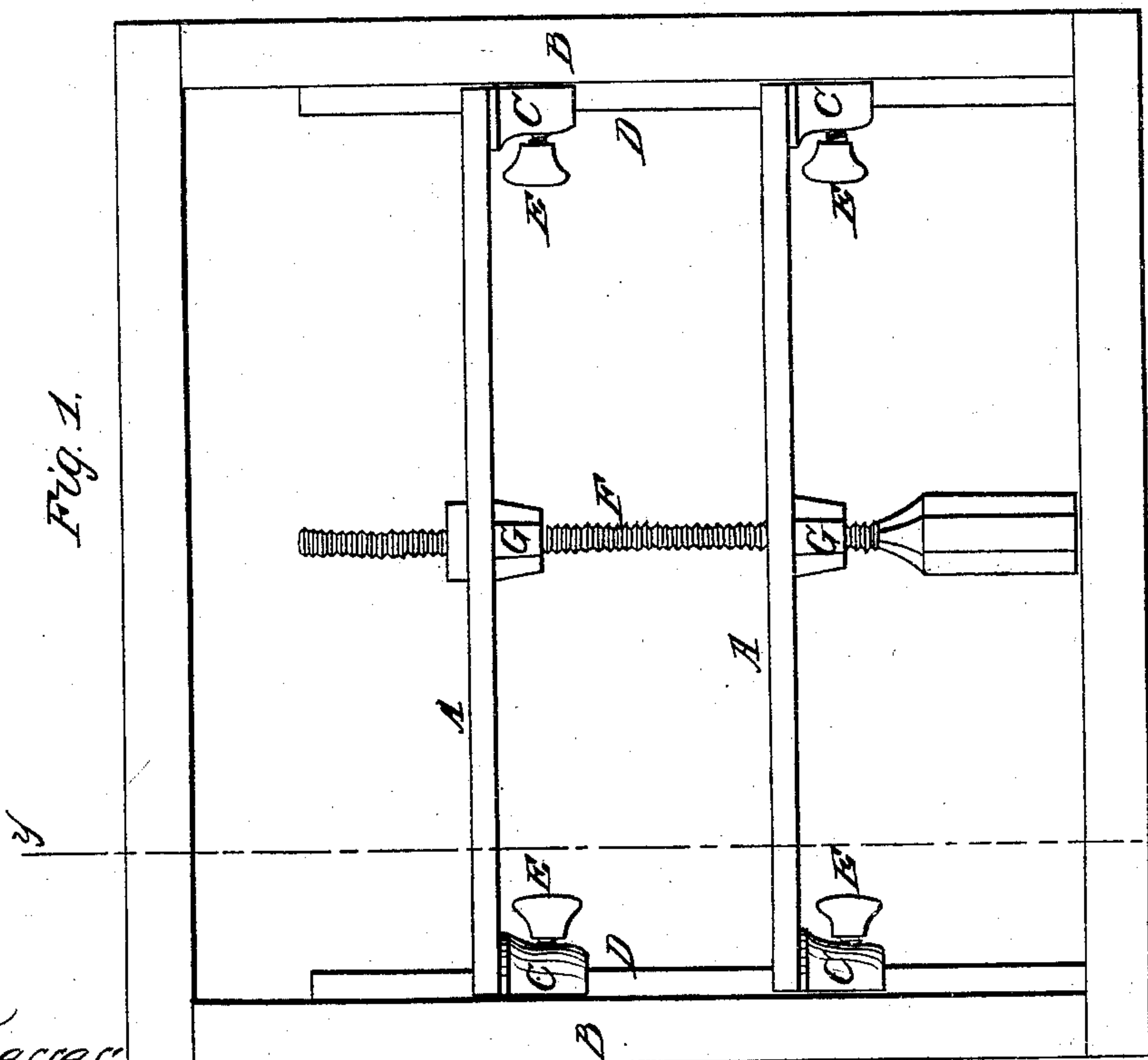
*N<sup>o</sup> 56,422.*

*Patented July 17, 1866.*

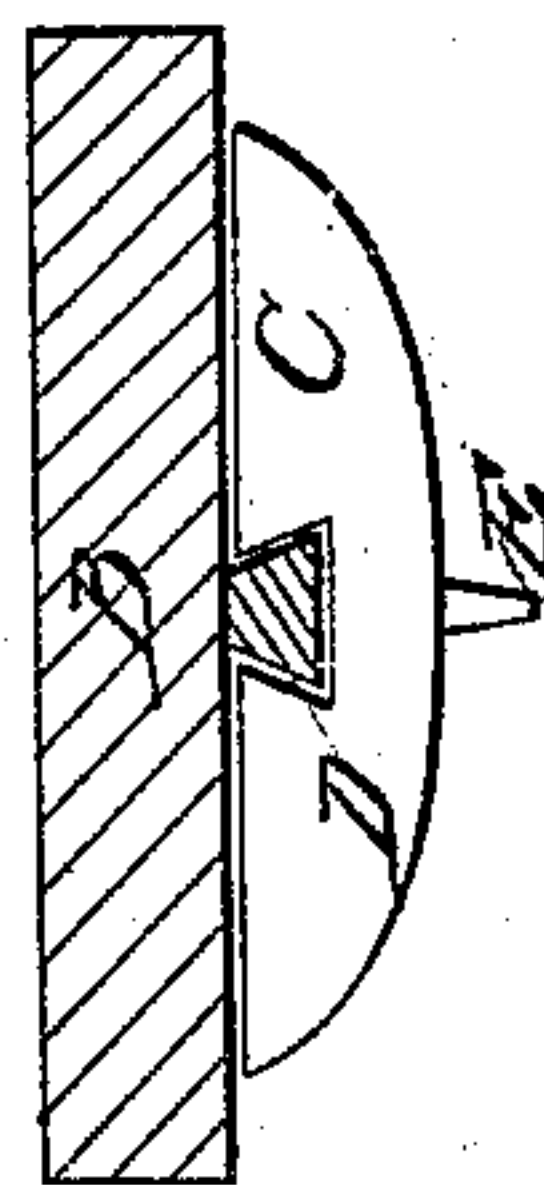
*Fig. 2.*



*Fig. 1.*



*Fig. 3.*



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# UNITED STATES PATENT OFFICE.

SAMUEL L. LATTA, OF LIGONIER, INDIANA.

## IMPROVED ADJUSTABLE STORE-SHELVES.

Specification forming part of Letters Patent No. 56,422, dated July 17, 1866.

*To all whom it may concern:*

Be it known that I, SAMUEL L. LATTA, of Ligonier, Noble county, State of Indiana, have invented a new, novel, and useful Mode of Regulating and Adjusting Shelves in Stores, Book-Cases, Secretaries, &c.; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The nature of my invention and improvements consists in the adjustable arrangement of store-shelves by means of adjustable screw-cleats at each end thereof operating on guides attached to the uprights for supporting the shelves, and a screw-lever rod with screw-nuts thereon to raise and lower them in their adjustment.

Reference is had to the following figures in the drawings as a full explanation of my invention, and to the description of its construction and operation subsequent thereto.

Figure 1 is a front view of the adjustable arrangement of the shelves; Fig. 2, vertical transverse section of the same, as indicated by the line *x y* in Fig. 1; Fig. 3, transverse section of shelf upright and guide, as indicated by the line *v p* in Fig. 2, showing the manner of securing the adjustable cleats to the guides.

Similar letters in the figures of the drawings indicate similar parts.

A A are the shelves; B B, the uprights for supporting the shelves; C, adjustable cleats, on which the shelves rest, and by which they are raised and lowered. They are secured to guides or strips D, of a suitable size, screwed onto the uprights in the center thereof.

The guides are beveled inwardly to the uprights, and the cleats are cut out on their back edges in the center, and likewise beveled inward, so as to fit around the guides and against the uprights, (see Fig. 3,) and be sufficiently loose to enable them to be moved easily up and down on the guides, and yet tight enough thereon as not to slip off when the same are

tightly clamped to the guides by the small thumb-screw rods E, which pass through them and bear on the guides. In other words, the cleats and guides in their connection are dovetailed together, so that the cleats in their fastenings are made perfectly secure when clamped by the screw-rods.

The guides are attached to the uprights first and the cleats slipped on afterward, the guides terminating in their lengths a distance from the top of shelf-framing sufficiently to admit of its being done. (See Figs. 1 and 2.)

The shelves are notched out in the center of their ends, so as to fit around the guides loose enough between the uprights to permit of their being easily raised and lowered.

To prevent the shelves sagging down in the center, caused by weight of goods when placed thereon, and at the same time raise and lower the shelves without removing the goods therefrom, a screw-lever rod, F, is passed up through the center of the shelves, having a suitable size base resting on the floor or other place, which rod has suitably-constructed screw-nuts G fitting thereon under each shelf, which, as above stated, keep the shelves perfectly straight and raise and lower them when desired.

The material used in the construction of the guides and cleats may be of some suitable hard wood or metal.

The advantages of this arrangement are, that it adds greatly to the convenience of placing goods upon the shelves, as the shelves can be moved to accommodate them, which is absolutely necessary where they cannot be diminished in height—as, for instance, glass-ware of all kinds, especially drug-store furniture, clocks, and boxes in which goods need to be kept for preservation, hardware of many kinds, and, above all, books, which cannot be properly arranged without this arrangement. Many other articles might be specified, but these are enough to show its utility; and, moreover, at least one-fifth more goods can be exhibited in the same room and the room have a much better appearance than by the old way of shelving, which advantage, of



itself, is worth all the extra expense of the adjusting machinery.

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

1. The adjustable cleats C and thumb-screw rods E, operating on beveled guides D, for the adjustment of the shelves A A, substantially in the manner and for the purpose as herein specified.

2. The screw-lever rod F and screw-nuts G, as arranged in connection with the shelves, and operating in the manner and for the purpose substantially as herein specified.

SAMUEL L. LATTA.

Witnesses:

AUGUSTUS M. LATTA,  
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