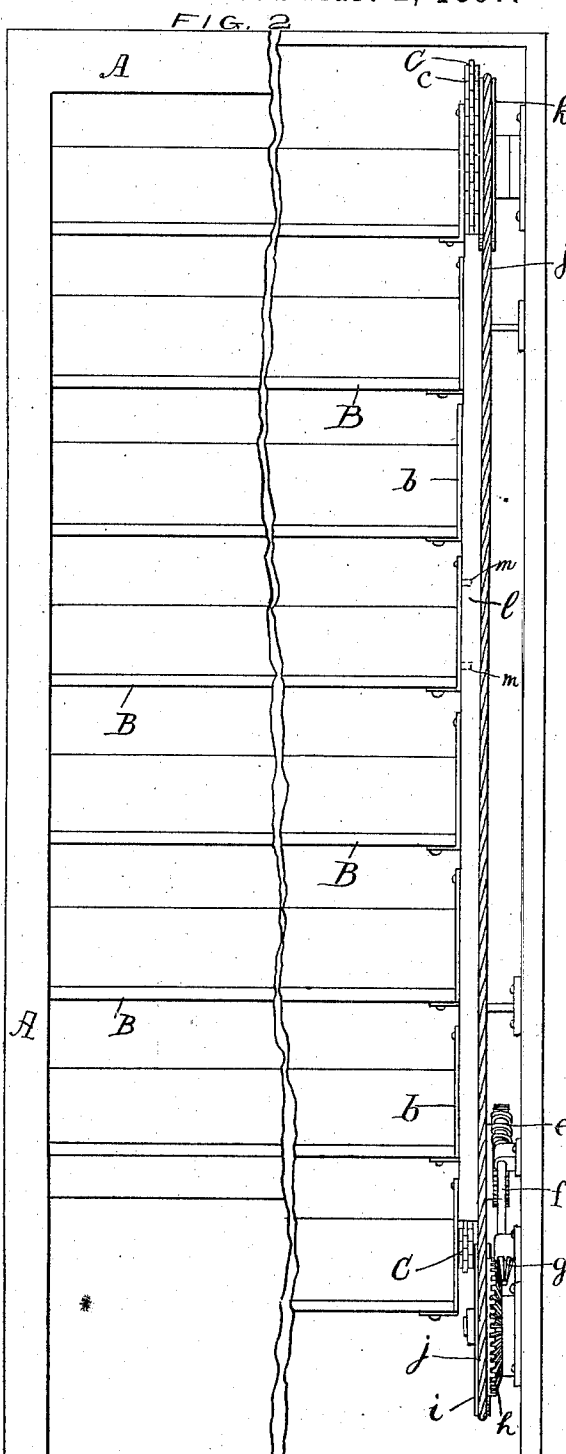
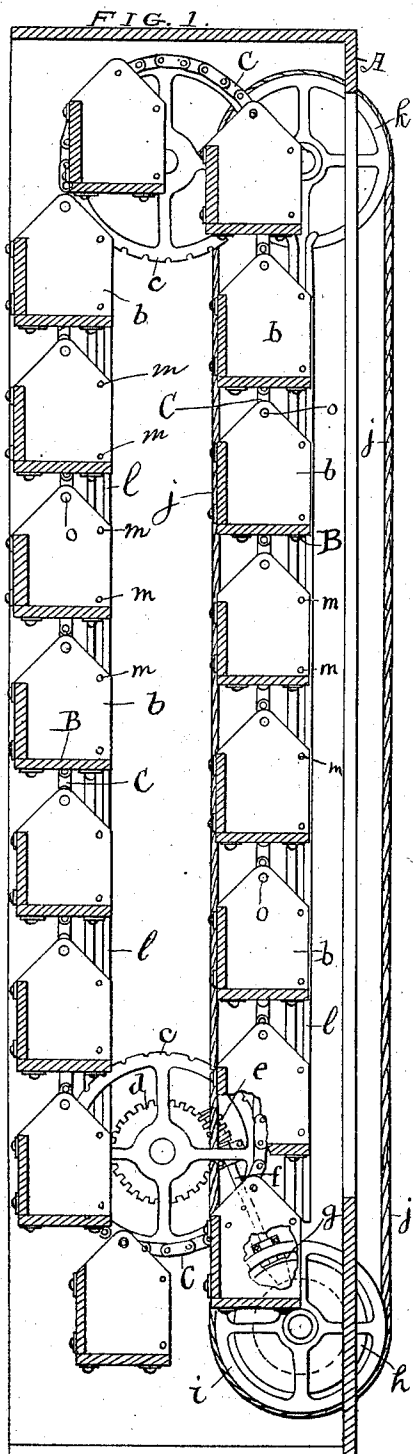


(No Model.)

C. A. TUCKER.
CASE FOR BOOKS, &c.

No. 577,890.

Patented Mar. 2, 1897.



Witnesses
James E. McDowell
Arch. H. Smith

Inventor
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by Lrr. Bates
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UNITED STATES PATENT OFFICE.

CHARLES A. TUCKER, OF PORTLAND, MAINE.

CASE FOR BOOKS, &c.

SPECIFICATION forming part of Letters Patent No. 577,890, dated March 2, 1897.

Application filed July 29, 1896. Serial No. 600,926. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. TUCKER, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Cases for Books or other Articles; 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 a case for books or other articles which are usually kept or stored on shelves; and the object of the invention is to so construct a case of shelves that the wall, space will be utilized to the greatest possible extent, and so that the contents of each shelf can be brought within easy reach without the use of ladders or chairs or other means of climbing.

According to my present invention I secure a series of shelves to a pair of endless chains, mounting the same in a suitable case and providing means by which the shelves may be rotated and brought to any desired position. With shelves arranged in this manner double the number can be accommodated in a given area of wall-surface, and any shelf of the series may be brought down to the level of the operator, so that it can be easily reached.

I illustrate my invention by means of the accompanying drawings, in which—

Figure 1 represents a central vertical section from front to rear, and Fig. 2 is part front elevation and part section.

A represents a suitable case within which the shelves B are mounted. The shelves B are mounted within the case A in the form of an endless belt or conveyer arranged to rotate vertically, so that any shelf may be brought to the desired level, where its contents will be within easy reach. As herein shown, each shelf is pivoted by its ends to the joints of a pair of endless sprocket-chains C, which run over suitable sprocket-wheels c, one at the top and the other at the bottom of the case A. The shelves proper are supported at each end by hangers b, which are hung by pivots o to the joints of the sprocket-chain. Means are provided for keeping the shelves always in a horizontal position. In the example here shown I make use of vertical

guides l, provided with a groove in which run the pins m, which project out from the sides of the hangers b. In practice I make use of two projecting pins m in each hanger, the pins being vertically in a line. Means are provided for rotating the sprocket-wheels and the endless series of shelves, so that they may be moved to any desired position. As herein shown, I provide an endless hand-rope or cable j, running over the pulleys i and k at the bottom and top of the case, respectively. Power is transferred from the lower pulley i to the lower sprocket-wheel c by means of a shaft f, on one end of which is a pinion g, engaging a gear h, mounted on the same shaft with the pulley i, the opposite end of the shaft f having a worm e, which engages the gear d, mounted on the same shaft with the sprocket-wheel c. The rotation of the pulley i thus causes the rotation of the sprocket-wheel c and enables the operator by using the hand-rope j to revolve the entire series of shelves.

The use of the worm e produces so much friction with the gear d that the shelves are held in any desired position by simply the friction of the worm.

The use of the device is obvious from its construction. It is designed to be used in libraries, stores, and other like places where it is desired to utilize the wall-surface to the greatest possible extent. It will be seen that for any given area of wall-surface double the number of shelves can be used in my device over the ordinary bookcase. The articles, whether books, boots and shoes, dry goods, or any other commodities, are placed on the shelves, which may be extended to any desired height, and by simply moving the hand-rope j the contents of any shelf may be brought within easy reach.

I claim—

1. The herein-described case for books or other articles consisting of a pair of endless chains, a series of shelves pivoted thereto, sprocket-wheels for said chains, guides for keeping said shelves horizontal, an endless hand-rope, guide-pulleys for the same, a gear connected with one of the said pulleys, a gear connected with one of said sprocket-wheels, and a shaft having on one end a pinion connecting with said first-mentioned gear and a

worm connected with the other gear, whereby the sprocket-wheels are operated by said hand-rope.

2. The herein-described case for books and other articles consisting of a pair of endless chains, sprocket-wheels for said chains, a series of shelves and hangers for supporting the ends of said shelves, said hangers being pivoted by their upper ends to said chains, 5
10 grooved vertical guides and pins projecting from the said sprockets below the level of the supporting-pivot and adapted to travel in the

grooves of said guides for maintaining said shelves in a horizontal position, a gear connected with one of said sprocket-wheels, a 15 worm-gear adapted to engage said gear and means for actuating said worm-gear.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES A. TUCKER.

Witnesses:

GEO. B. HILLIARD,

CHAS. O. BARROWS.