(No Model.) 2 Sheets—Sheet 1.

E. G. COOK & H. H. EYMAN.

BOOK RACK.

No. 479,788. Patented Aug. 2, 1892.

Fig. 1.

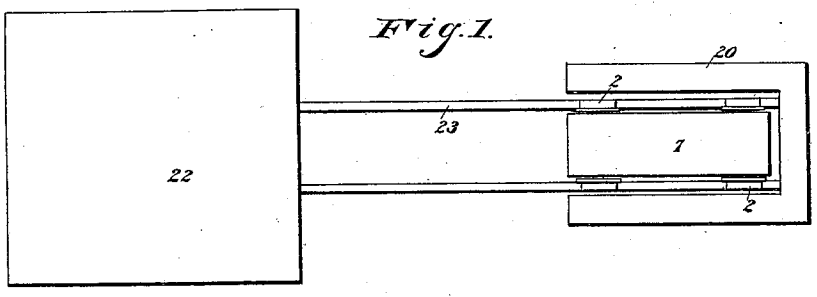
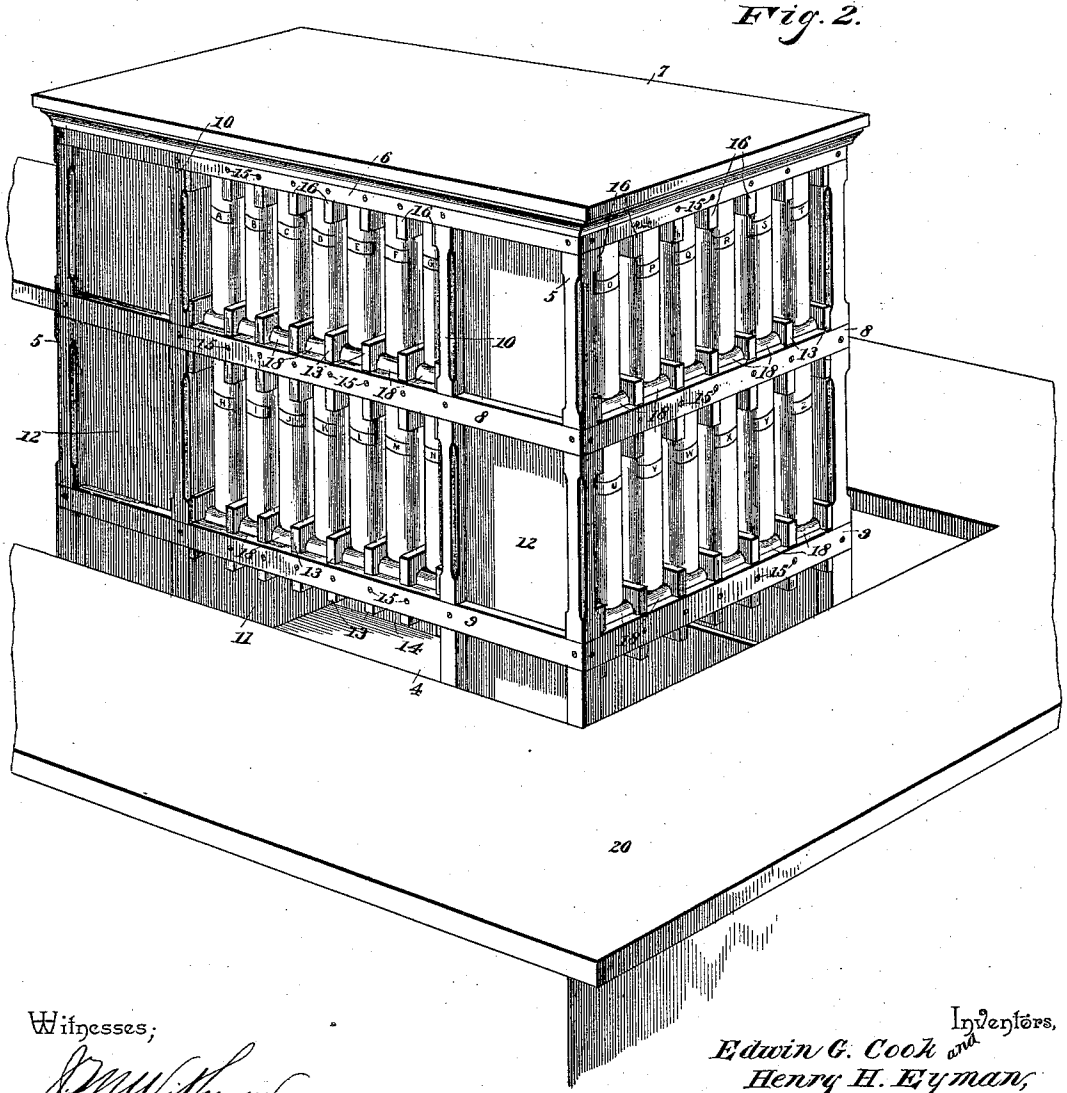


Fig. 2.



Witnesses;

J. M. Wilkerson.

W. S. Duvall.

Inventors,

Edwin G. Cook and

Henry H. Eyman,

By their Attorneys,

C. A. Snow & Co.

(No Model.) 2 Sheets—Sheet 2.

E. G. COOK & H. H. EYMAN.

BOOK RACK.

No. 479,788. Patented Aug. 2, 1892.

Fig. 3.

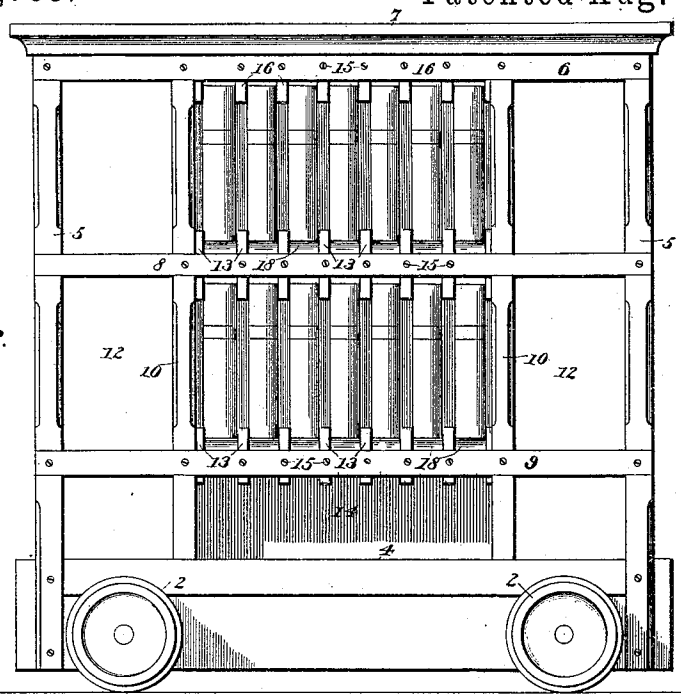


Fig. 4.

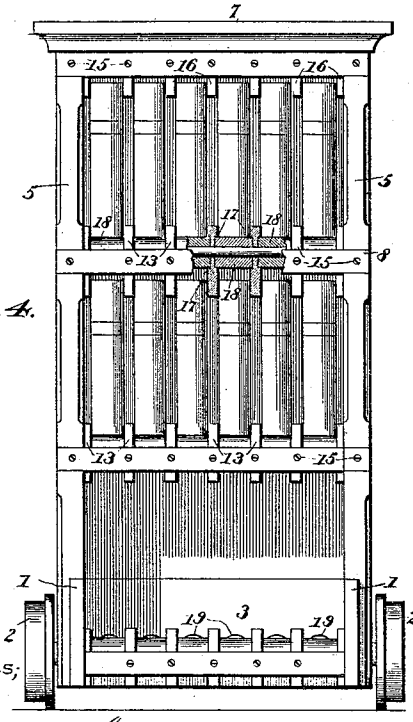
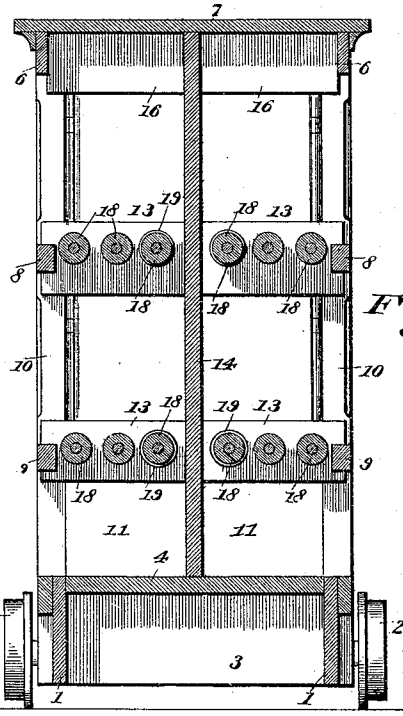


Fig. 5.



Witnesses,

J. W. Thomas

W. S. Duvall

Inventors,

Edwin G. Cook and
Henry H. Eyman,

By their Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

EDWIN G. COOK AND HENRY H. EYMAN, OF FULLERTON, NEBRASKA.

BOOK-RACK.

SPECIFICATION forming part of Letters Patent No. 479,788, dated August 2, 1892.

Application filed December 4, 1891. Serial No. 414,025. (No model.)

To all whom it may concern:

Be it known that we, EDWIN G. COOK and HENRY H. EYMAN, citizens of the United States, residing at Fullerton, in the county of Nance and State of Nebraska, have invented a new and useful Book-Rack, of which the following is a specification.

This invention relates to improvements in book cases or racks, and to that particular class thereof designed for the storage of public books or records that are constantly handled during the day and must be carefully stored in a safe place at night.

The objects of our invention are to provide a rack so constructed as to be portable to and from the vault or storage-place, and to provide a convenient counter, into which the rack may thus be run and over which persons may reach for the purpose of withdrawing books for examining the same upon the counter; and, furthermore, to so construct the rack as to economize space and to obviate in a great measure the wear and tear to which the books are usually exposed in withdrawing and replacing the same from and into the rack.

With the above objects in view the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a diagrammatic view of a rack, the same being in position in the counter. Fig. 2 is a perspective of the rack and counter. Fig. 3 is a front elevation of the rack. Fig. 4 is an end view. Fig. 5 is a vertical cross-section.

Like numerals of reference indicate like parts in all the figures of the drawings.

In constructing the rack or case we employ opposite side sills 1, and upon stub-shafts secured to the opposite sides of the same near its ends mount wheels 2, the peripheries of which are preferably L-shaped or flanged and adapted to move over a track. The side sills 1 are connected by transverse sills 3, and upon the four sills rests a bottom 4. From the ends of the side sills rise vertical posts 5, which support upper bars 6, upon which is mounted the roof 7. Intermediate bars 8 and 9 also connect the posts at the sides and ends thereof, and intermediate vertical bars 10 connect the horizontal side and end bars 8 and 9 between the posts 5. The transversely-opposite intermediate vertical bars 10 are connected by transverse partitions 11, which extend from the sills 1 to the roof 7, and each of the bars 10 is connected to its adjacent post 5 by a side wall 12. Cleats 13 have their front edges notched to receive the bars 8 and 9 at the sides and ends of the frames thus constructed, and those at the sides of the rack have their inner ends connected with a longitudinal central partition 14, which extends from the cross-sills 3 to the roof and from the transverse partition at one side to that at the other. The end series of cleats 13 also have their outer ends notched, while their inner ends are secured to the transverse partitions 11. These cleats are secured in position preferably by screws 15, passed through the horizontal bars 8 and 9, and are located a distance apart slightly greater than the width of the books, between which cleats said books are to slide. The roof is provided upon its under side with corresponding though slightly narrower cleats 16. Through each series of cleats there are passed in this instance three transversely-disposed metal shafts, and in the faces of the cleats concentric with the shafts countersunk annular recesses 17 are formed. Between the cleats upon the shaft loose rollers 18 are mounted, the ends of the rollers taking in the recesses of the cleats. The rollers are all plain or cylindrical, with the exception of those at the rear of the cleats, each of these being provided at its center with an annular enlargement 19.

20 designates a counter or stand somewhat of U shape—that is, consisting of opposite longitudinal sides and a connecting cross-section at one end, the remaining end being open, as shown. The top of the counter is about even with the lower transverse bars 9, so that the rack, being located within and embraced by the counter, which is proportioned with relation to the rack, will give ready access to its contents, and the books may be drawn down from their respective positions and examined upon the counter and replaced. By reason of the loose rollers it will be seen that the friction and rubbing that usually take place between the edges of the books and the shelves are almost entirely overcome, and in this manner the records can be all the better

preserved and the cost of maintaining them in condition greatly reduced. The counter is preferably located at some point near a convenient vault or storage-chamber, where it is the custom to deposit the books during the night. Such vault we have indicated by the numeral 22, and from the vault to a point within the counter runs the track 23. By this arrangement we avoid the necessity of removing all the books from the rack or their depositories during the day and placing them in the vault or storage-chamber, and, furthermore, we avoid the necessity of removing the books from the storage-chamber in the morning and replacing them upon the rack, whereby an assistant for this purpose is obviated. By our invention in the morning the rack is run out from the vault upon the track and between or within the counter, the same being accomplished readily by one man, and the books all simultaneously moved without any wear whatever. When in position in the counter, the rack resembles a huge case surrounded and formed in part with the counter. At night, when it is necessary to replace the books, the rack is simply pushed from its position in the counter over the track and back to the vault.

By increasing the diameter of the rear rollers 18, as indicated at 19, the same are made to take between the backs of the books and support the edges of the leaves. Such support adds greatly to the durability of the books, as the tendency the heavy leaves have to sagging after long standing of the books is well known and quite objectionable.

Having described our invention, what we claim is—

1. The combination, with the counter having the opening, the vault or storage-chamber, and the track leading from the vault to the opening in the counter, of the book-rack mounted upon wheels fitting the track, the width of said rack approximating that of the opening in the counter, substantially as specified.

2. In a book-rack, the combination, with the opposite sides, a front horizontal connecting-bar, and an inner partition, of a series of cleats connected at their ends to the cross-bar and partition and arranged parallel to each other, a series of shafts extending through the partition, and series of loose rolls mounted on the shafts between the partitions, the inner or rear series of rolls being provided with convexed bosses at their centers, substantially as specified.

3. In a book-rack, the combination, with the opposite sills, the transverse connecting-sills located some distance from the ends of the first sills, the pair of vertical transverse partitions, the four posts rising from the ends of the first sills, and the intermediate posts located at the edges of the partitions and rising from the first-mentioned sills, of the series of horizontal post-connecting strips, the top, the central longitudinal partition connecting the transverse partitions, the series of cleats having their outer ends recessed to receive the cross-bars and their inner ends connected to the partitions and extending above and below the cross-bars, the series of loose rolls mounted between the cleats, and the upper series of cleats depending from the roof and corresponding with those heretofore described, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

EDWIN G. COOK.
HENRY H. EYMAN.

Witnesses:
CLARENCE E. BRADY,
CYRUS H. GILMORE.