

R. H. STONE.
 CHART EXHIBITOR.
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1,036,926.

Patented Aug. 27, 1912.

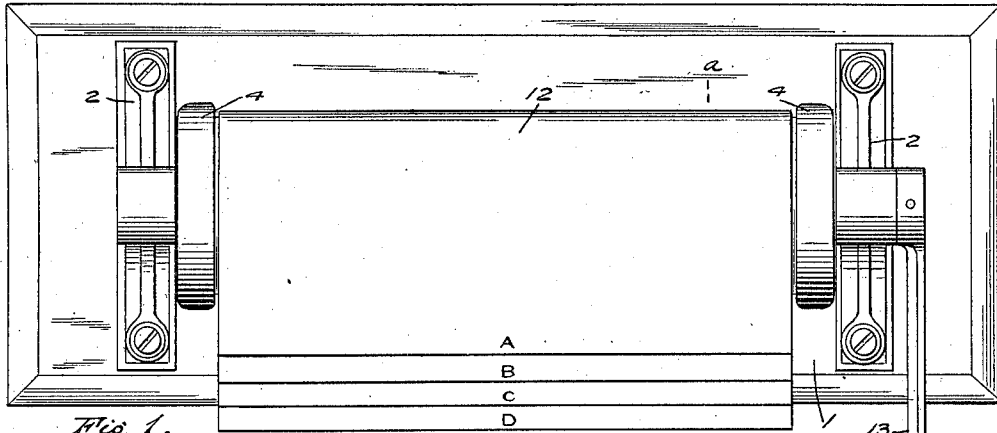


Fig. 1.

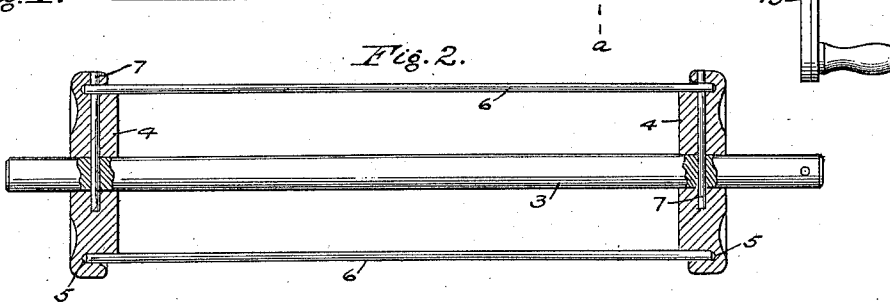


Fig. 2.

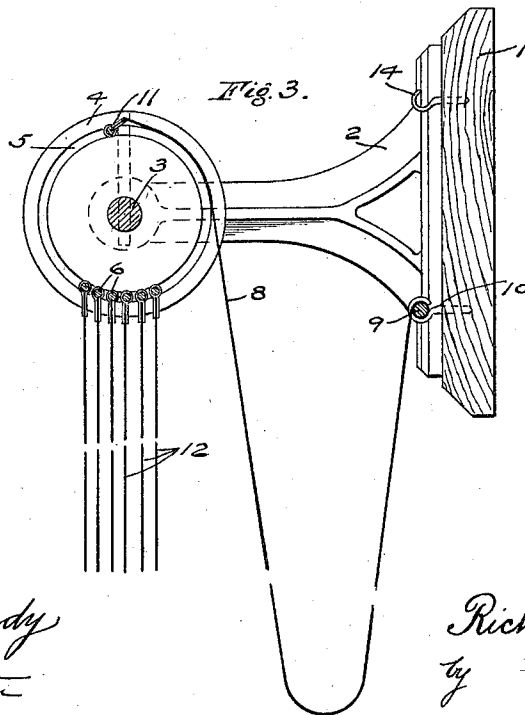


Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

RICHARD H. STONE, OF WILKINSBURG, PENNSYLVANIA, ASSIGNOR TO THE WESTINGHOUSE AIR BRAKE COMPANY, OF PITTSBURGH, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

CHART-EXHIBITOR.

1,036,926.

Specification of Letters Patent.

Patented Aug. 27, 1912.

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To all whom it may concern:

Be it known that I, RICHARD H. STONE, a citizen of the United States, residing at Wilksburg, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Chart-Exhibitors, of which the following is a specification.

This invention relates to racks adapted for exhibiting charts, maps, diagrams, or similar devices and the principal object of my invention is to provide an improved device of the above character adapted to be easily manipulated and which is compact, of simple construction, and inexpensive to manufacture.

Referring to the accompanying drawing, Figure 1 is a front or face view of a rack embodying my improvement; Fig. 2 a central sectional view of the reel portion thereof; and Fig. 3 a transverse section taken on the line *a-a* of Fig. 1.

According to the preferred construction, as shown in the drawing, a base board 1 may be provided, upon which are secured brackets or standards 2 having bearings for a reel shaft 3. On the shaft 3 within and adjacent to the brackets 2 are plates 4 having inwardly facing annular grooves or recesses 5, said plates being secured to the shaft 3 by pins 7, preferably extending out so as to intersect the grooves 5. The charts 12 are secured to rods 6, which are made flexible and have projecting ends, so that by springing or flexing the rods, the projecting ends may be inserted within the grooves 5 and the charts thereby suspended on the reel.

For the purpose of protecting the charts when not in use, a covering is preferably provided, consisting of a curtain 8 having a rod 9 fastened thereto along one edge, said rod being mounted in screw eyes 10 secured to the base board 1. The opposite edge of the curtain is provided with a rod 11 which is similar to the rods 6 and is adapted to be inserted within the grooves 5.

The charts being mounted on the reel tend to gravitate to the lowermost position in the grooves 5, as shown in Fig. 3 and the curtain rod 11 being inserted in the grooves in front of the pins 7, by rotating in a counter clockwise direction, an operating handle 13 secured to one end of the reel shaft 3, the curtain 8 may be wound on the reel by the engagement of rod 11 with the pins 7 and

the rod 11 engaging the outermost rod 6, the charts are carried rearwardly and wound up with the curtain 8. A compact roll is thus formed with the curtain constituting an outer covering for the charts.

If it is desired to use the charts, the handle 13 is rotated in a clockwise direction, thereby unrolling the charts and the curtain. Preferably the curtain 8 is disengaged from the reel when using the charts, screw eyes 14 being secured to the base board 1 for hanging up the rod 11 of the curtain when the curtain is not in use.

In order to exhibit a particular chart, the rotation of the reel is continued in a clockwise direction until the charts are partly wound up as shown in Fig. 1, from which it will be noted that the lower edge of each chart is exposed, so that, by placing suitable designations on said edges, a certain desired chart may be located while the reel is in the above position. The reel is then further rotated, at the same time holding the chart selected against the reel, and the charts above are thereby caused to flop over to the rearward side of the reel. The reel is now allowed to rotate in the opposite or counter-clockwise direction, the weight of the charts being sufficient to turn the reel so that the charts will hang substantially in a vertical plane with the selected chart exposed. Any other chart may be brought into position for exhibiting by repeating the above operation, as will be apparent.

When through using the charts, the handle 13 is rotated in a counter-clockwise direction, the curtain rod 11 having been sprung into position in the grooves 5, and the charts are thereby wound into a roll with the curtain covering the same.

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

1. In a chart exhibitor, the combination with a reel having members provided with grooves, of flexible rods adapted to be inserted in said grooves and having charts secured thereto, and a stop device for limiting the travel of said rods in the grooves.

2. In a chart exhibitor, the combination with a reel comprising a shaft, an operating handle on said shaft, and members secured to said shaft and provided with annular grooves, of flexible rods having charts secured thereto and provided with projecting

ends adapted to be sprung into said grooves to thereby mount the charts upon the reel, and fixed pins in said grooves for limiting the travel of the rods in the grooves.

- 5 3. A chart exhibitor comprising a reel, charts mounted on said reel, and a curtain detachably secured at one end to the reel and at the other end to a stationary support and adapted when wound on said reel with the

charts to form a complete protective covering for the charts.

In testimony whereof I have hereunto set my hand.

RICHARD H. STONE.

Witnesses:

W. W. MARTIN,
A. M. CLEMENTS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."