

(No Model.)

H. E. HAYES.
ADJUSTABLE MAP OR CHART STAND.

No. 461,755.

Patented Oct. 20, 1891.

Fig. 1.

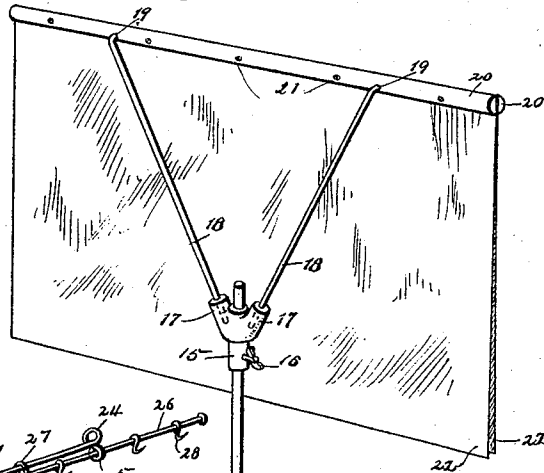


Fig. 4.

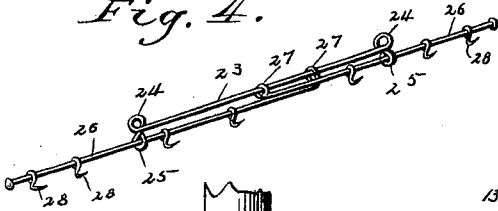


Fig. 2.

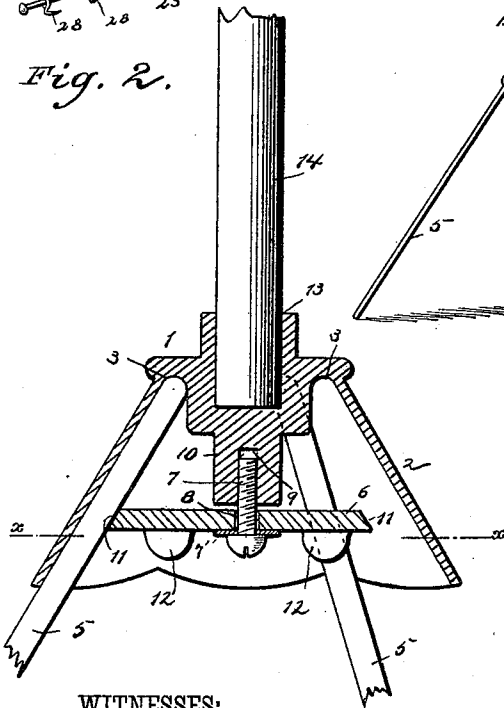
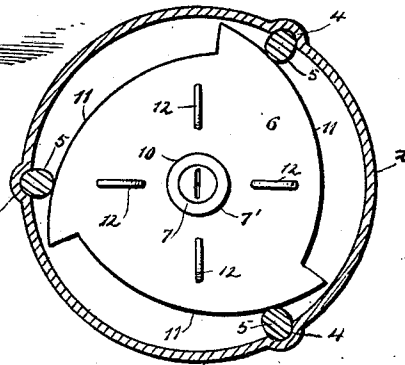


Fig. 3.



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ADJUSTABLE MAP OR CHART STAND.

SPECIFICATION forming part of Letters Patent No. 461,755, dated October 20, 1891.

Application filed April 19, 1889. Renewed April 8, 1891. Serial No. 388,194. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. HAYES, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Adjustable Map or Chart Stand, of which the following is a full, clear, and exact description.

This invention relates to stands for supporting maps or charts, and has for its object to provide an effective chart-stand which may be easily and readily adjusted to display maps, charts, and other articles.

The invention consists in a chart-stand constructed as hereinafter described and claimed.

In carrying out this invention the chart-stand is constructed in several parts which may be readily put together and taken apart and packed for storage or transportation.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a perspective rear view of the chart-stand in use. Fig. 2 is a detail, in vertical section, of the base-block with supporting-legs and vertical supporting-rod broken away; and Fig. 3 is a horizontal section on the line *xx* of Fig. 2. Fig. 4 is a modification of a map-supporting bar.

1 indicates a base-block cast with a downwardly-inclined outwardly-flaring flange 2 and internal sockets 3, with grooves 4 leading downwardly therefrom, in which rest the upper ends of the supporting-legs 5. The latter are held in place by a plate 6, attached to base-block 1 by means of a screw 7, passing through a washer 7' and hole 8 in plate 6 and screwing into a threaded socket 9 in a lug 10 on base-block 1. The edge of plate 6 is formed with cam-shaped surfaces 11, which bear against the legs 5 and wedge against and tighten the latter in the grooves 4. The plate 6 is operated by means of lugs 12, whereby it can be turned to fasten or release the legs. The upper part of base-block 1 is formed with a socket 13, in which rests a vertical rod 14, of a suitable height to permit a frame for supporting charts to be adjusted to elevated position thereon, and on the rod 14 is placed a sleeve 15, vertically adjustable thereon, and held in adjusted position by means of a set-

screw 16. The sleeve 15 is formed with inclined socket projections 17, in which rest the lower ends of rods 18, their upper ends being bent at an angle, as shown at 19, and projecting through holes in bars 20, held together by screws 21 and clamping between them a series of charts or maps 22. By raising and lowering the sleeve 15 and turning it on rod 14 the charts or maps suspended from bars 20 may be elevated to any desired position and moved to face and be disclosed in any desired direction.

By means of the cam-plate 6 the legs 5 will be securely held in position and may be readily detached. The stand may be easily and quickly taken apart and folded up compactly by detaching legs 5 and rod 14 from base-block 1, sleeve 15 from rod 14, rods 18 from sleeve 15, and bars 20 from rods 18.

In Fig. 4 is shown a modified form of map-supporting rod formed of three pieces of wire, which consists of a central rod 23, having its ends bent to form loops 24 to engage the ends of rods 18 and loops 25, through which slide the end rods 26, connected to rod 23 by their looped ends 27, which are adapted to slide on rod 23, and thereby adjust the length of the map-supporting rod. Sliding hooks 28 are mounted on rods 26, from which to suspend maps of different widths.

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

1. An adjustable chart-stand consisting of a base-block formed with a socketed top and a downwardly-inclined outwardly-flaring flange, detachable legs having their upper ends resting against the base-block within the flaring flange, a rotary plate mounted on the base-block within the flaring flange and having cam-shaped surfaces on its edge, bearing against the legs, a vertical rod mounted in the base-block, a sleeve having inclined sockets and provided with a set-screw and movable on the vertical rod, rods mounted in the inclined sockets, and means for supporting a chart or map-file from said rods, substantially as shown and described.

2. In a chart-stand, the combination of a base-block formed with a socketed top to receive a vertical rod, a downwardly-flaring flange and internal recesses for the upper ends

of supporting-legs, and a rotary plate with cam-shaped edges mounted on the base-block within the flaring flange, substantially as shown and described.

- 5 3. The combination, with a base formed with a socketed top, a downwardly-projecting outwardly-flaring flange and internal recesses for the upper ends of supporting-legs, and a rotary plate mounted on the base-block within
10 the flaring flange, having cam-shaped edges and handle-lugs, of a vertical rod, and a sleeve having inclined socketed projections, movable on said rod and held by a set-screw, substantially as shown and described.

4. In a chart-stand, a base-block 1, formed 15 with a socket 13 in its top to receive a vertical rod, a downwardly and outwardly flaring flange 2, internal sockets 3, with grooves 4 in flange 2, legs 5, resting in sockets 3 and grooves 4, and a rotary plate 6, with lugs 12 and cam- 20 shaped edges 11, bearing against legs 5 and mounted on base-block 1, substantially as shown and described.

HENRY E. HAYES.

Witnesses:

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