W. H. TOPHAM.
Combined Box and Globe.

No. 201,722. Patented March 26, 1878.

Fig 1

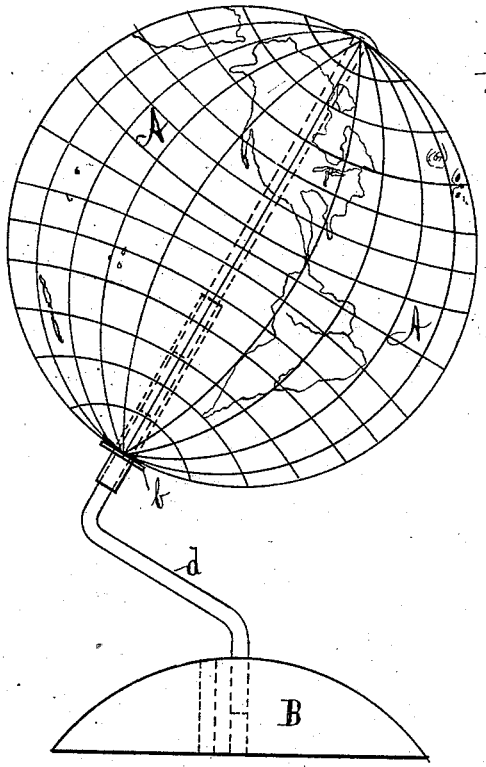
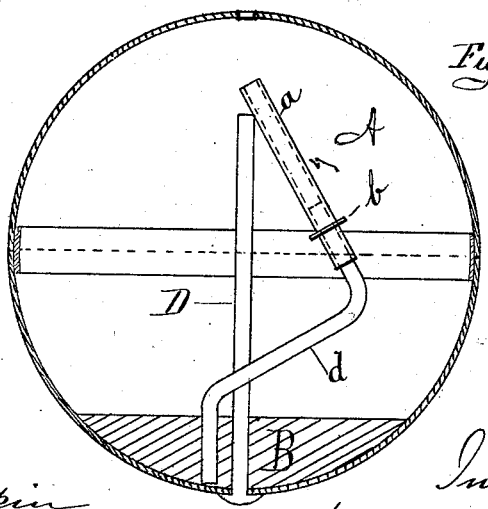


Fig 2



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UNITED STATES PATENT OFFICE.

WILLIAM H. TOPHAM, OF SPRINGFIELD, MASSACHUSETTS.

IMPROVEMENT IN COMBINED BOX AND GLOBE.

Specification forming part of Letters Patent No. **201,722**, dated March 26, 1878; application filed December 17, 1877.

To all whom it may concern:

Be it known that I, WILLIAM H. TOPHAM, of Springfield, county of Hampden, and State of Massachusetts, have invented a new and useful Combined Box for Packing Collars or other Merchandise and Student's Terrestrial Globe, which invention is fully set forth in the annexed specification and in the accompanying drawing.

The object of my invention is to provide a box for paper collars, or any other light merchandise or materials, which shall be perfectly serviceable for the purposes of packing therein and handling the said articles for mercantile and other purposes, and which shall also be quite as serviceable and convenient as a student's globe for the study of geography as though it were made expressly for the latter purpose. Thus the purchaser of a box of collars or other merchandise which may be packed for sale in my improved combined box will become the possessor of a useful article after it is no longer needed for holding the goods which were sold in it.

Referring to the drawings, in which like letters refer to like parts in the different figures, A is the box and globe. B is the foot. *d* is the angular support. *a* is the joint-tube. *b* is the collar on tube *a*. D is the center shaft, with a head on one end.

Figure 1 shows my box mounted as a globe on its obliquely-inclined center shaft, angular support, and foot. Fig. 2 shows a longitudinal section of my box, with the foot, angular support, and center shaft all so compactly arranged in the interior as to leave ample room inside the globe or box to pack the above-named merchandise.

A is the box or globe, divided transversely into two equal parts, or nearly so, one part serving as the body of the box and the other as the cover, and around the inner edge of one of said parts is attached a lip, such as is usually formed on paper boxes, for the cover to shut over, and bring the body and the cover of the box into proper relative position, one to the other.

The outer surface of the box or globe is covered with an ordinary terrestrial map. At points on the globe representing the poles perforations are made to permit of placing and revolving it upon the inclined center shaft.

B is the foot-piece for the globe, in the form of a section of a sphere. Its bottom is flat, and its upper side of such a convex form as will allow it, when inverted, to lie in and fit the concave bottom of the box, its flat side up, thus forming a level bottom to it.

The foot B has a hole through its center, in which to insert one end of the angular support *d*, and a second hole by the side of the latter, in which to place the lower end of said support *d* when the foot B, center shaft D, and support *d* are all packed together inside of the box, as shown in Fig. 2.

The angular support *d* has a joint-tube, *a*, slipped onto its upper end, and upon the lower end of said tube *a* is fixed a collar, *b*.

The above-named parts are all shown assembled in Fig. 2, center shaft D being inserted from the outside through the hole in the bottom of the box, and through the center hole in foot B, in which it fits closely, its head resting against the outer surface of the bottom, and thus holding the foot B and the parts thereto attached firmly in place inside the box.

It is obvious that the center shaft D must, with its connecting upper portion of angular support *d*, be as long as the exterior diameter of the box or globe in a line through the perforations at the points representing the poles, so that the globe may have sufficient bearing-space thereon to enable it to revolve properly; and, also, must said center shaft D be sufficiently short to permit it to be entirely inclosed inside the box, as seen in Fig. 2. To provide for these requirements I make the upper obliquely-inclined end of angular support *d* and its elongating connection center shaft D of adjustable length by the use of the joint-tube *a*, which is adjustable on support *d*, and in which center shaft D is also adjustable.

These latter-named parts may be differently constructed, and the same ends be attained so far as adjustable length is concerned—as, for instance, a collar only may be made to slide on angular support *d*, in place of collar *b* on tube *a*—and two eyes may be bent on the lower end of center shaft D, through which the upper oblique end of support *d* would slide closely;

or center shaft D may be made considerably shorter than the outside diameter of the globe, and this be compensated for by inserting an inwardly-projecting tube in the cover, in which the end of said center shaft might rest when all the parts were mounted as a globe; but I prefer to vary the length of the center shaft and its connections, for the purposes above stated, by the use of the joint-tube *a*.

To arrange the before-mentioned several parts all in proper relative position, so that they will form a useful terrestrial globe that may be revolved in the usual manner, the cover is first removed, and the foot B, and support *d*, and center shaft D are taken from the box. The cover is then replaced, the lower end of support *d* is inserted in the center hole in foot B, center shaft D is passed through one of the holes in the globe, and the end of tube *a* through the opposite one, and the end of said center shaft is pressed into the tube, the head on the opposite end of the said center shaft being outside of the globe, and tending to hold the latter in place.

By means of the adjustable length of said center shaft, heretofore mentioned, the proper bearing of the globe between collar *b* and the head on the center shaft D may be adjusted. Thus arranged, the globe will serve all the useful purposes of such an instrument.

I do not limit myself in the above-named invention to the use of a map upon the exterior surface of the mounted globe; but interesting and useful toys and games may be made by the employment of the before-described devices—as, for instance, by fixing upon the surface of the globe some plan of figures or characters, and upon the foot or support an indicating-pointer directing attention to some object on the globe, which would be thereby indicated after the globe had been rapidly revolved and had come to a full stop.

If preferred, foot B may be made of metal, or of some other heavy substance, thereby securing greater solidity and firmness, and at the same time it would serve to keep the box in an upright position.

A substitute for my angular support and adjustable center shaft may be made by running a wire vertically from the center of the foot B a short distance, bending the wire to form a lower center support for the globe, and thence bending it in the form of a half-circle around to the upper hole in it, where a second bearing to enter the latter hole might be bent on the end of the wire. This support might also be sprung into the globe when it is used as a box, but would be much more in the way than my before-described devices, which only occupy a small portion of the center of the box. Therefore I prefer to employ the latter.

What I claim as my invention is—

1. As a new article of manufacture, a combined box and globe composed of the globe A, divided transversely to form a body and a cover of a box, in combination with the foot B, angular support *d*, joint-tube *a*, and center shaft D, substantially as and for the purpose set forth.

2. A combined box and globe in which the center shaft D is adjustable to varying lengths, substantially as and for the purpose set forth.

3. The globe A, divided transversely to form the body and the cover of a box, and arranged as a receptacle both for its mountings and for articles of merchandise, combined substantially as set forth.

WM. H. TOPHAM.

Witnesses:
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WM. H. CHAPIN.