C. E. SHARLOW.

LANTERN SLIDE CARRIER.

APPLICATION FILED OCT. 6, 1913.

1,108,256.

Patented Aug. 25, 1914.

Fig. 1.

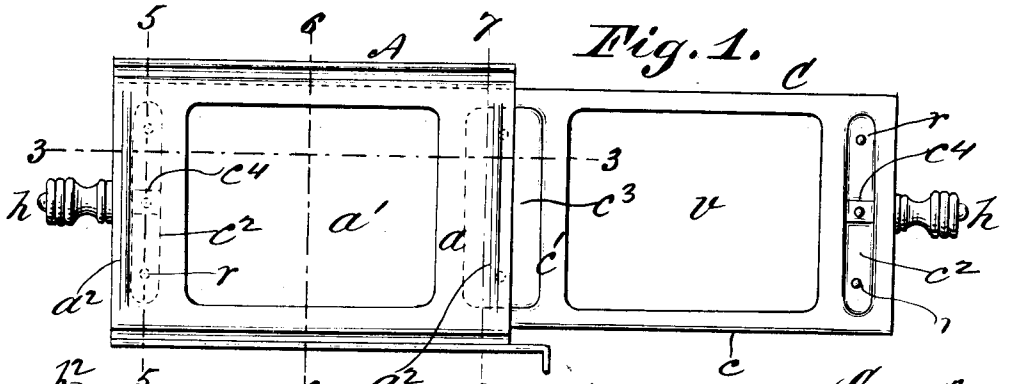


Fig. 2.

Fig. 3.

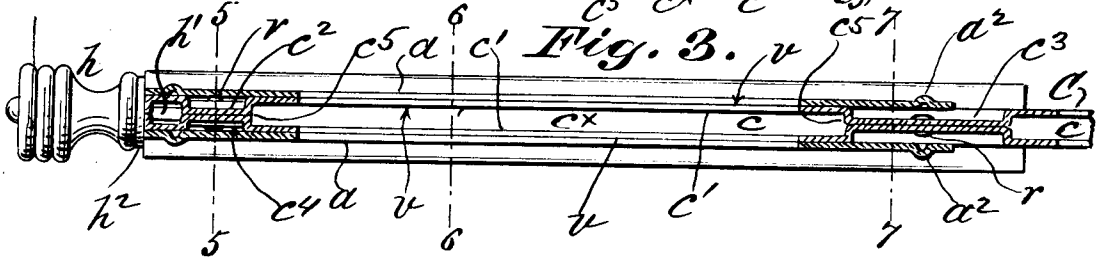


Fig. 4.

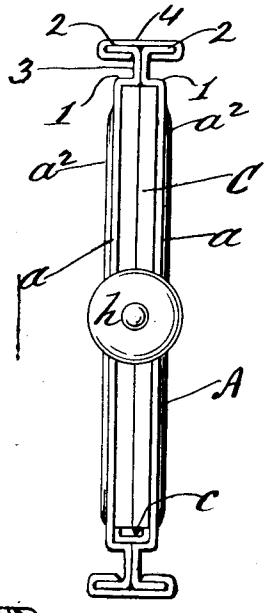


Fig. 5.

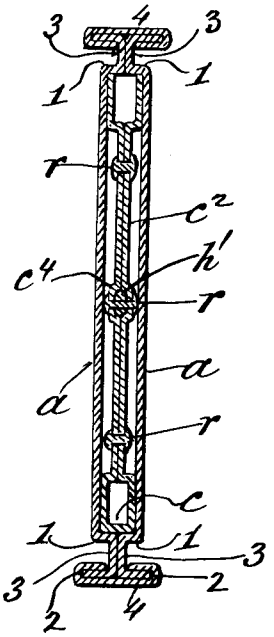


Fig. 6.

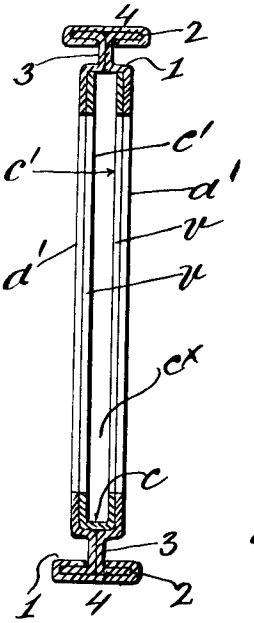
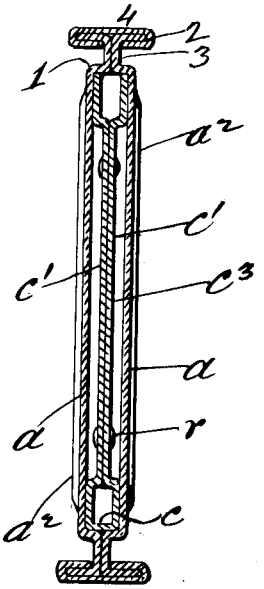


Fig. 7.



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UNITED STATES PATENT OFFICE.

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LANTERN-SLIDE CARRIER.

1,108,256. Specification of Letters Patent. Patented Aug. 25, 1914.

Application filed October 6, 1913. Serial No. 793,570.

To all whom it may concern:

Be it known that I, CHARLES E. SHARLOW, a citizen of the United States, and a resident of Union Hill, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Lantern-Slide Carriers, of which the following is a specification.

The present invention is an improvement upon the form of lantern slide carrier disclosed in Letters Patent No. 945,619, issued to Thomas Sharlow Jan. 4th, 1910, the distinctive feature of which patent is the formation of the carrier of a single piece of sheet metal folded over fillers of so called non-combustible "fibrous" material inserted and rigidly secured to and between the side walls thus formed.

The main object of the present invention is to attain a light weight, substantial, rigid, absolutely fire proof slide carrier made essentially of a single blank of sheet metal,—the non-combustible fillers heretofore used as spacers being eliminated, and the spacing being attained by upsetting or embossing the sheet metal blank so as to form depressed panels which coincide and abut against each other back to back, when the blank is folded over upon itself, all as hereinafter fully described and claimed specifically. By dispensing with the so-called "non-combustible" fibrous fillers of compressed fibrous material I render the carrier absolutely fire proof and at the same time cheapen, lighten and strengthen the structure as a whole, while increasing its rigidity and durability. Furthermore all the parts being formed solely of continuous sheet metal the expansion and contraction is uniform throughout and the diffusion of heat is facilitated and rendered uniform, which is an important factor in lantern slide holders, whereas the non-conducting fibrous fillers tend to concentrate the heat around the edges of the slide and thus endanger its integrity.

In the accompanying drawings, Figure 1, is a side elevation of my improved slide carrier and its holder; Fig. 2, a top view thereof; Fig. 3, a section taken upon plane of line 3—3 Fig. 1, scale full size; Fig. 4, is an end elevation; Fig. 5, a transverse section upon plane of line 5—5 Figs. 1 and 3; Fig. 6, a transverse section upon plane of line 6—6 Figs. 1 and 3; Fig. 7, a transverse section upon plane of line 7—7 Figs. 1 and 3.

As in the patent hereinbefore referred to the carrier C, is composed of a blank of sheet metal, preferably Russia iron, bent over upon itself to form the bottom c, and sides c', c', in which are the slide view openings v, v. Obviously the side walls c', c', must be spaced apart sufficiently to accommodate the thickness of the lantern slides to be used, and while the non-combustible fibrous fillers heretofore mentioned accomplished this effectively, it was found by experience that under certain conditions of use the fibrous fillers charred and deteriorated, while the fillers, being non-conductive, tended to retard diffusion of heat and to concentrate it around the edges of the slides, to their detriment. I obviate these difficulties by forming the sheet metal blank with end panels c^2, c^2, and an intermediate panel c^3, flanking the view openings v, v,—said panels consisting of depressions on one side of the metal plate made by stamping or embossing in such manner that when the blank is folded over upon itself the coinciding countersunk portions will abut each other, back to back, as shown particularly in Figs. 5 and 7, the parts being secured in this relationship by rivets r, r, which unite the structure integrally. By making the countersink or offset in each side wall equal to one half the thickness of the slides to be accommodated, and thus evenly distribute the embossment in and between said side walls, I attain a stiff, rigid and substantial carrier of light weight, and uniform heat conductivity throughout.

The end panels c^2, are recessed transversely, as at c^4, c^4, for the reception of the metallic shanks h', of the handles h, which are thus secured in position by the rivets r, as shown more particularly in Fig. 5. By reference to Fig. 3, it will be seen that the inner edges of the panels c^2, c^3, constitute the end walls c^5, c^5, of the slide compartments c^x, c^x, formed by said end walls c^5, c^5, and the adjacent portions of the side walls c', c', in conjunction with the bottom or floor c, formed by the bending of the blank,—the space between the upper edges of the side walls c', c', being of course left open for the reception of the lantern slides.

The frame A is composed of four blanks of sheet metal, preferably Russia iron, like the carrier. The side members, a, a, consist of blanks formed with the offsets 1, 1,

of approximately one half the thickness of the carrier C, in cross section, and with return flanges 2, 2, which when the blanks are opposed to each other with the webs 3, 3, in contact, project outward, as will be understood by reference to Figs. 4, 5, 6 and 7,—these outwardly projecting flanges 2, 2, being capped by plates 4, 4, the edges of which are bent over and finally pressed against the inner sides of the flanges 2, 2, in such manner as to secure the parts rigidly together. The central space created by the offsets 1, 1, serves as the channel for the carrier C; and the side members a, a, are formed with the view apertures a', a', coinciding in size and shape with those (v) in the carrier. The width of the flanges 2, 2, and their caps 4, 4, is equivalent to the thickness of the old form of wooden slide carrier heretofore used in conjunction with lanterns of this class, so that the frame A is adapted for use in lanterns of standard size and make.

The side members a, a, of the frame A, are formed with transverse beads or corrugations a^2, a^2, near their edges to stiffen the frame and preserve its alinement with the carrier C, which is confined to the holder A by the handle shoulders h^2, h^2, as in said previous patent. I thus attain (barring the handles h, h,) a complete metallic structure of both frame A and carrier C, which is best adapted to disseminate heat, and calculated to maintain its shape and integrity under all conditions of use.

What I claim as my invention and desire to secure by Letters Patent is,

1. As an article of manufacture, a slide carrier formed of a single piece of sheet metal folded along two parallel lines to constitute parallel side walls, said side walls being formed with coinciding view openings, the metal between the sides thus formed constituting the bottom of the carrier, said side walls being also countersunk in part to form spacing panels flanking the view openings, the coinciding countersunk portions in the opposite walls abutting back to back and being rigidly secured together for the purpose described.

2. As an article of manufacture, a slide carrier formed of a single piece of sheet metal folded along two parallel lines to constitute parallel side walls, said side walls being formed with coinciding view openings, the metal between the sides thus formed constituting the bottom of the carrier, said side walls being also countersunk in part to form spacing panels flanking the view openings, the coinciding countersunk portions in the opposite walls abutting back to back and being rigidly secured together, said flanking partitions being arranged to cause the slides to register with said view openings substantially in the manner set forth.

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