

THE EVOLUTION OF THE FIXED GLOBE LANTERN

by Tom Walsh

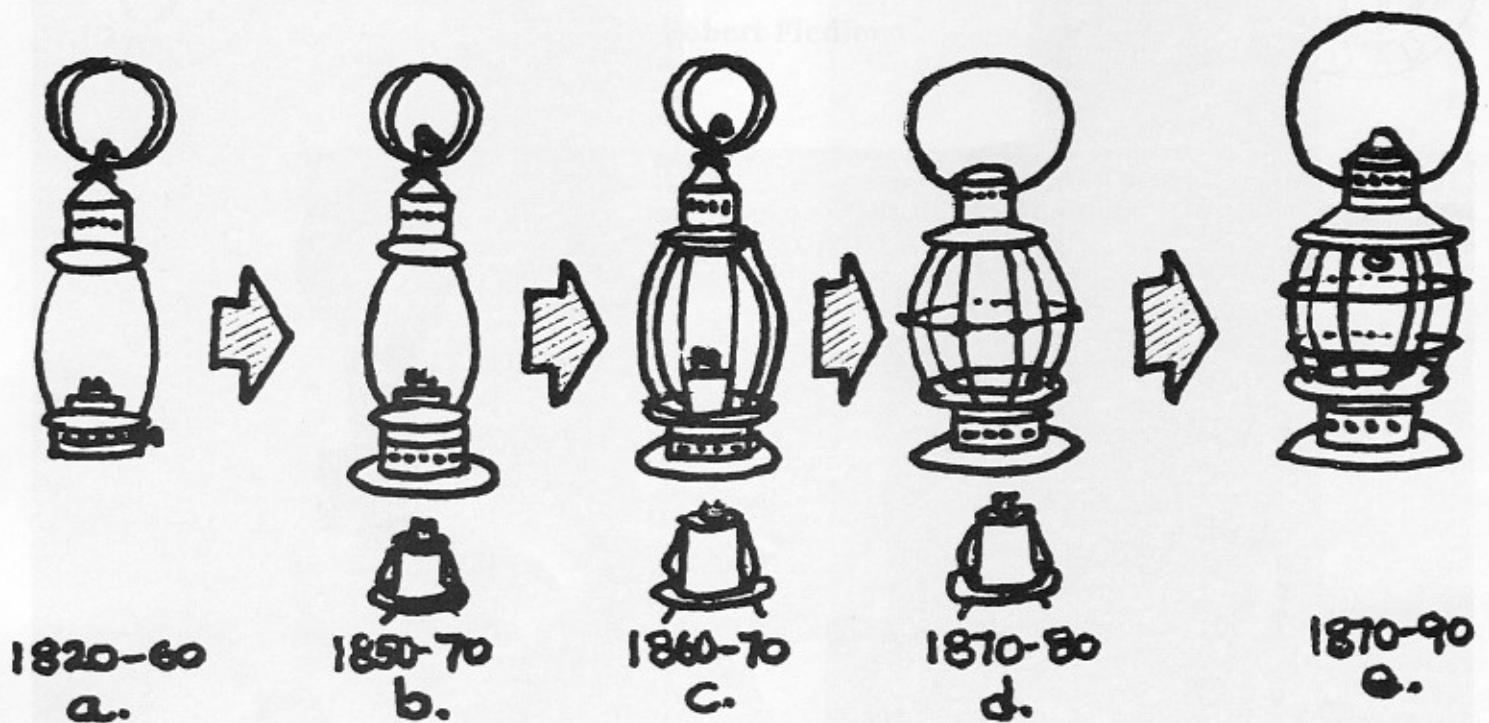


Fig. 1.

No clear cut dates can be assigned to developments in lantern technology for a variety of reasons. First, early improvements were rarely patented. Second, when a change took place it did not usually make previous types immediately obsolete. Also, some lantern types had a longevity of forty or more years making exact dating difficult. Furthermore, some improvements were adopted on a regional basis making lanterns from different areas look dissimilar, even during the same time period. Figure #1 can show us some general evolutionary trends which may be useful in dating a lantern.

Lantern 'a' represents some of the earliest railroad marked lanterns known to exist. Lantern 'a' is characterized by a bracelet bail attached to a cone or curved cone top. It has a fixed globe about seven inches tall, although this may vary greatly. The globe may be free-blown or blown in a mold and

will usually have reinforcing rings (beads) at the top and bottom. Free-blown examples are far more common than mold-blown ones. Vent holes are usually stars and diamonds, but not always. Cup bottoms (no bell) with bayonet mounts may be only an inch high in early examples. There may be a bayonet lock on one post dated 1851. Original founts are almost always round, octagonal or decagonal and made out of glass. If you find one with a tin fount, chances are it is a replacement. Early examples will have pewter collars and burners in various states of corrosion. Super early ones will have cork-gasketed drop burners. All will have single (rarely) or twin-tube whale oil burners.

Lantern 'b' shows some improvements over lantern 'a'. Most notable is the addition of a bell bottom with a larger cup height. Founts are still glass but are almost always round. Globes are

both free and mold-blown. After 1851, Hugh Sangster's patented spring pots are sometimes used in place of bayonet mounted bells. Collars and burners may be pewter or brass.

Lantern 'c' differs from lantern 'b' only by the addition of a small metal ring at the bottom of the chimney and another ring ("petticoat") at the top of the bottom section. Vertical guard wires are then inserted through holes in these top and bottom rings, and soldered in. Some early lanterns may have guard wires attached without the benefit of these two rings, but this method is extremely weak and subject to breaking. In early examples, these wires have forged heads at the top and only the bottoms are soldered in place (See Fig. 2). Sometimes, the top ring will have little dimples in the metal where the wires meet the top rings. The resulting "solder pool" which forms in the dimple strengthens

the connection and eliminates the unsightly wire protruding from the ring. Other lanterns of this type had the wire sticking through the hole covered with a brass domed "cap" which was soldered in place. Almost always, the bottom connections were just soldered and the wires were allowed to stick down a quarter of an inch or so.

Lantern 'd' is basically the same as lantern 'c' with three exceptions. The bracelet bail is replaced with a wire chimney mounted one. A horizontal wire has been added to increase the degree of protection to the globe. Early wire junctions were merely soldered which was very weak. Next, wire ties were used at the junctions in addition to the solder. Later on, a variety of metal clip attachment joiners were patented which bonded the wires more strongly than the wire ties could. An early example of a bonding clip is shown in Fig. 3. This type of joiner was not common to New England but rather to the N.Y., Pennsylvania and Ohio areas. By the 1870's, the more familiar clip and solder joiner became the norm. This clip is shown in Fig. 4 (previous to being bent over on the wires and soldered).

Lantern 'e' shows the final stage of development. The lantern now has a 6-inch removable globe with beads at the top and bottom. The use of twin horizontal guards is now more common than in earlier days. Bails will be found mounted on the chimney as well as on bail ears attached to the top wire or bar. Brass (tops) domes are now the norm until they were dropped altogether in the late 1890's.

Many developments in lantern technology were still to be made over the next 60 years. Chimney bails, petticoats and even bell bottoms would fall by the wayside. The development of smaller, kerosene burning lanterns would be the main thrust later on. But, that's another story.....



fig. 2

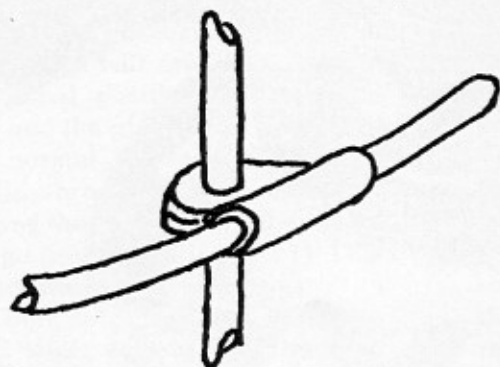


fig. 3

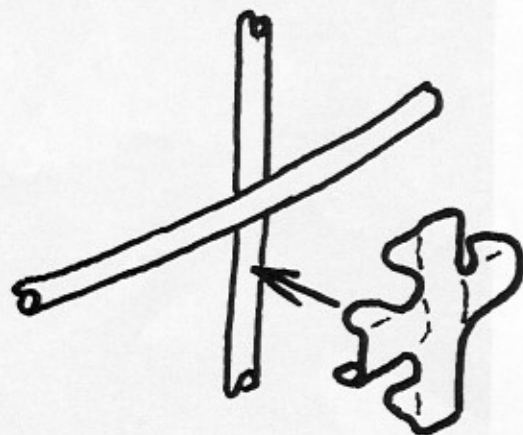


fig. 4.

