

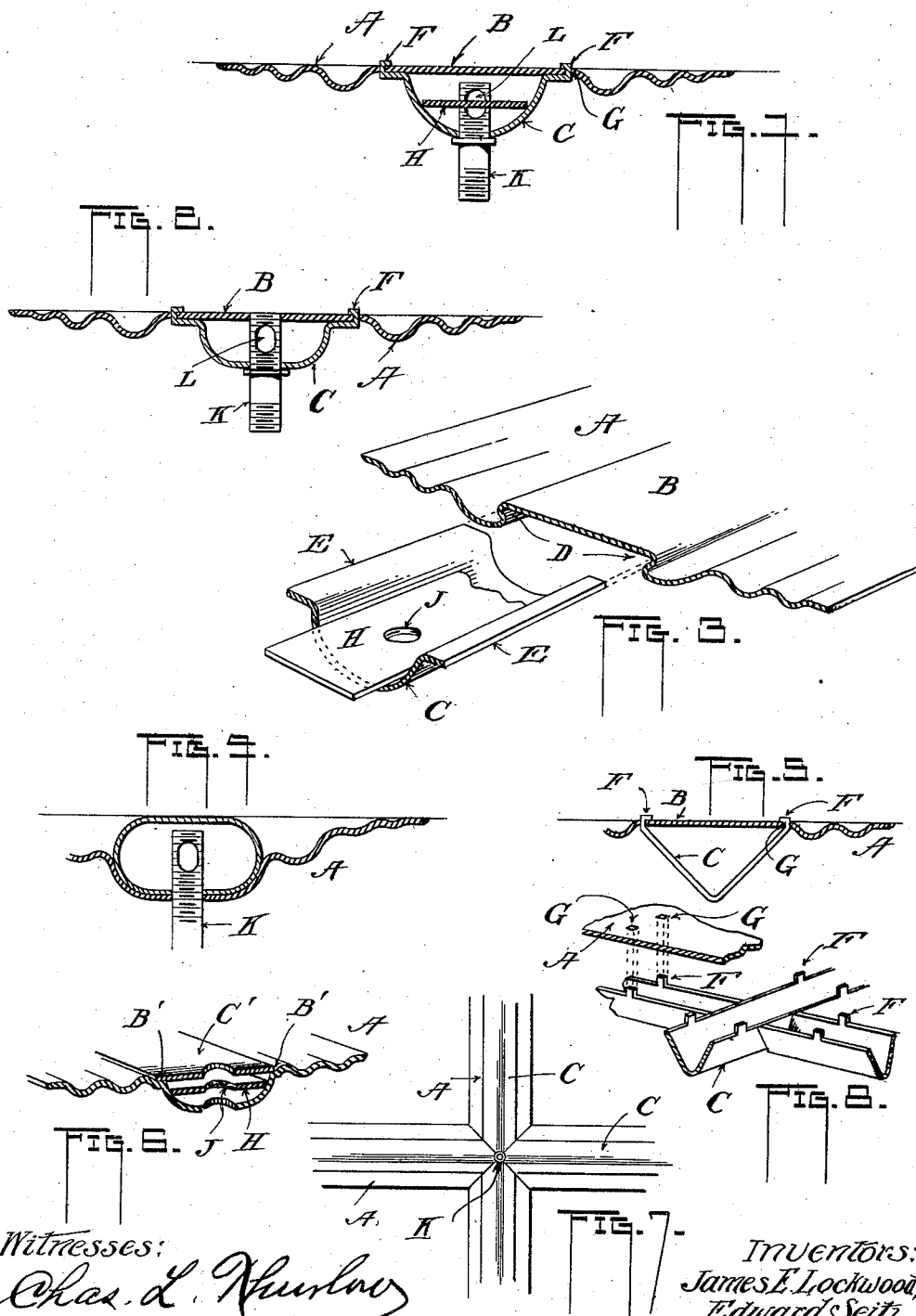
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VAPOR CONDUIT.

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UNITED STATES PATENT OFFICE.

JAMES E. LOCKWOOD AND EDWARD SEITZ, OF PEORIA, ILLINOIS.

VAPOR-CONDUIT.

986,476.

Specification of Letters Patent. Patented Mar. 14, 1911.

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To all whom it may concern:

Be it known that we, JAMES E. LOCKWOOD and EDWARD SEITZ, citizens of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Vapor-Conduits; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention pertains to a new form of conduit for carrying combustible vapors or gases and relates more particularly to a conduit for conveying combustible vapors or gases to vapor lamps and lamp systems although applicable as well to other purposes.

An object of the invention is to provide a conduit made up of sheet metal sections to be assembled when needed at the place or places where lighting systems are to be installed and which in this form has the advantage that the parts may be shipped to a distance, like parts being readily "nested" so as to ship without damage so that but little shipping space is necessary.

Another object is to provide a conduit in separate sections or portions whereby like portions may be nested so that large quantities of stock can be stored in a comparatively small space.

Another and important object is to construct a vapor conduit in separate parts that can be readily assembled and to provide a conduit that will be low in cost of manufacture.

Another object is to provide a conduit whose parts can be stamped or rolled into the desired form in any small shop where ordinary piping could not be made.

Another object is to provide an ornamental conduit particularly adapted, by reason of its ornamentation, for installing vapor lighting systems in buildings and wherein the usual disfiguring appearance will be absent.

A further object is to provide an ornamental conduit for ceilings so constructed and arranged that the ceiling may be divided into panels which will give the appearance of ornamentation rather than utility.

To the end that our invention may be understood the accompanying drawing has been provided in which;—

Figure 1 is a transverse section of one

form of a conduit shown in position against a ceiling. Fig. 2 is a transverse section of a slightly different form. Fig. 3 is a perspective view of parts used in constructing another form of conduit. Fig. 4 is a transverse section of an ornamental covering for a conduit. Fig. 5 is a transverse section of a modified form of conduit. Fig. 6 is a perspective view of another form, Fig. 7 is a plan of a portion of a conduit shown against a ceiling with intersecting false conduits associated therewith for dividing the ceiling into panels. Fig. 8 is a perspective view of one of the forms of conduit showing the manner of adjoining false portions with the conduit.

We are aware that conduit sections have been rolled from sheet metal and used for holding and concealing electric wires but these are, for the most part, quite conspicuous and in fact are not vapor tight and in fact are not fitted for that purpose since there is no provision for the accommodation of pipes leading directly to and for supplying the lamps.

Our structure is novel in that the parts of the conduit can be made from sheet metal and assembled at the place of installation and piping leading to the lamps can be attached without necessarily using solder or at least the pipe need not be soldered to the conduit as is usually done with sheet metal tubing.

In the several figures A indicates a strip preferably rolled from sheet metal and having any desired form of ornamentation such, for instance, as a series of longitudinal beads as shown in Figs. 3 and 6 gradually diminishing in size toward the outer edges but any other form of ornament may be adopted. This strip may have a central flat portion B as shown in some of the figures either formed therewith or secured thereto. This forms the foundation of the conduit and is secured to the ceiling in any good manner but the means therefor is not shown. We have shown in Figs. 1, 2, 3, 5 and 6 some of the different forms that may be used but there are many other forms that could also be used. We next provide a portion C which may be smooth or corrugated, or provided with ornamentation to suit the fancy, and this is suitably secured to the part B by any suitable method as for instance by soldering or swaging or other means whereby

tight joints are assured. We have shown in Fig. 3, for instance, a convenient method of connecting or joining the parts. The portion A therein is provided with bends to form the oppositely disposed recesses D to receive the projecting edges E of the part C the latter being inserted into and pushed along the recesses, the metal being afterward clenched upon the said edges by pressure. As another means for fastening we have shown for instance in Figs. 1, 2 and 8 a series of projections indicated at F on the part C to extend through apertures G of the part A which are turned over as shown after which soldering may be resorted to to obtain a tight joint.

There are several different ways by which we may connect the lamp or other fixture with the conduit and we have shown several in the drawing. One manner in which this may be done is shown in Figs. 1 and 3 in which we provide a plate H which may be either secured to the part C or merely rest therein and provided with a threaded hole J, Fig. 3, into which a nipple or pipe K may be screwed. The latter has an aperture L at diametrically opposite sides, but one of which is shown, into which the vapor from the conduit may enter to pass to the lamp which said pipe carries but not shown. In Fig. 2 we show a second method in which said nipple is screwed into the part A thereby dispensing with the plate G but other methods may be employed.

Fig. 6 shows a modification of the conduit in which the part A is provided with a shoulder B' at two places upon which rests a plate C' which may be soldered or otherwise secured in place to form a tight joint.

Fig. 7 indicates the manner in which the ceiling when provided with the vapor conduit may be divided into panels. The conduit portion C which corresponds with that form shown in Fig. 8 extends entirely across the ceiling to convey vapor, while M indicates two false portions to correspond therewith whose ends abut thereagainst and fitted in such a way as to form a mitered joint. This method serves as an ornament for the ceiling without betraying the purpose for which it is intended.

Our structure provides for a covering for the conduit of which it is itself a part as has already been explained with regard to Fig. 6 or it may be used to cover a separate conduit Fig. 4 thereby obtaining the ornamental effect on the ceiling; in either case it being our purpose as herein stated to provide an ornamental portion by which a conduit is disguised and made to appear as being merely an ornament and apparently having no utility.

It is noted that the metal of the part C which is comparatively thin would not be sufficiently strong, perhaps to support a lamp

or at least would not be thick enough to receive more than a thread or two so that we provide the plate H which is thick enough for all purposes and merely let this rest upon the said part C, without the necessity of perforating the latter in order to aid in supporting said plate.

It is our preference in making the conduit to rather broaden and flatten it so that it will depend from the ceiling but a short distance so as to present as neat an appearance as possible, being broadened in order to maintain the needed carrying capacity.

The advantages of our form of conduit are several: First, it can be manufactured at a much lower cost than tubing or piping since it requires no special machinery but merely light rolls of a form that will impart the desired shape; second, that in shipping the parts can be nested so as to occupy little space making the freight charges less and requiring less handling and that when shipped to the place of installation the parts can be readily and quickly assembled and put in position for use.

Having thus described our invention, we claim:—

1. A vapor conduit comprising in its construction a base portion and a covering portion to interlock therewith, there being a space between them for vapor, a member lying freely within the space and upon the covering member and a suspended pipe extending through the covering and engaging the said member.

2. A conduit for a combustible vapor comprising a trough-shaped portion, a base to which it is secured in a vapor-tight manner, said base being substantially flat in general form, its edges extending an appreciable distance each side of the said portion, there being a threaded aperture in said portion, a threaded pipe to engage the threads of said aperture and a member within and lying freely upon the portion and having the said pipe in engagement therewith.

3. A vapor conduit comprising a trough-shaped portion of rolled sheet metal, a substantially flat base also of rolled sheet metal to which the portion is secured in a vapor-tight manner, there being a threaded aperture in the said portion, a threaded pipe to engage the aperture and suspended from the conduit and having communication with its interior, and a member within and lying freely upon the portion and having the pipe in engagement therewith held at its upper end within said conduit.

4. A vapor conduit comprising a base substantially flat in form, a trough-shaped portion secured to the base vapor tight, said portion being provided with an aperture, a pipe extending through said aperture into the conduit, a member within and lying freely upon the portion and provided with an aperture

to coincide with that of the said portion and having the upper portion of the pipe in threaded engagement therewith.

5 5. A vapor conduit consisting of a longitudinal substantially flat base provided between its longitudinal edges with two oppositely positioned longitudinal recesses to form receiving guides, a portion adapted to enter said recesses, there being a recess provided between the base and said portion, there also being an aperture in said portion, a member lying within the last named recess, and a pipe extending through said aperture and in engagement with the member.

10 6. A vapor conduit comprising a substantially flat base having a central raised part, there being a longitudinal recess in each margin of said raised part, a member having a depending portion to form a recess for vapor and adapted to enter and lie in the recesses, there being an aperture in the depending portion of said member, a second member lying freely upon the first within
20 the vapor recess, and a pipe to engage the said second member and communicating with the said vapor process.

25 7. In a vapor conduit of the character described, the combination of a substantially flat portion constituting a base for attachment to and to extend along and beneath a

ceiling, a separate portion having attachment therewith, the parts adapted for forming a closed conduit, and a pipe hung from the second described portion from which to suspend a lamp and through which to supply vapor to said lamp, said pipe extending through the wall of said portion and communicating with such conduit, and means within and resting upon said second portion and having engagement with the pipe for suspending the same.

8. In a vapor conduit of the character described, the combination of a substantially flat portion constituting a base for attachment to and to extend along and beneath a ceiling, a separate portion having attachment therewith, the parts adapted for forming a closed conduit, a pipe hung from the second described portion and communicating with the conduit, a lamp suspended from said pipe, and means within and resting upon the said second portion and having engagement with the pipe for suspending the same.

In testimony whereof we affix our signatures, in presence of two witnesses.

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