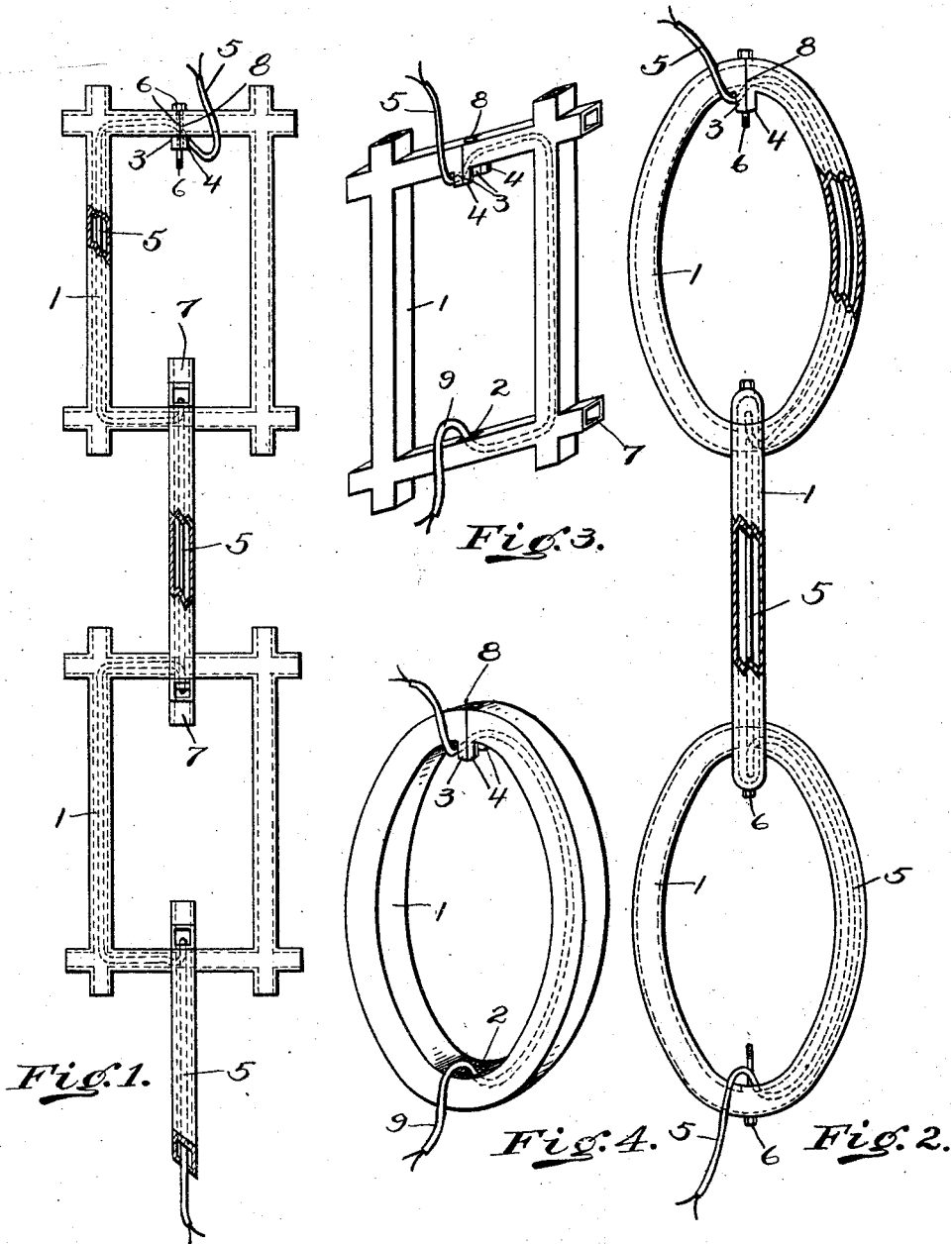


W. H. RIESS.
ELECTRIC CHAIN.

APPLICATION FILED JULY 22, 1909. RENEWED MAY 11, 1912.

1,047,568.

Patented Dec. 17, 1912.



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ELECTRIC CHAIN.

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To all whom it may concern:

Be it known that I, WILLIAM H. RIESS, a citizen of the United States, residing at the city of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Electric Chains, of which the following is a specification.

My invention belongs to that class of chains which hold concealed electric wires, known as art chains or electric chains.

It is often desirable, in order to produce a fanciful fixture for electric or gas lighting to make or form the suspension device for holding the lamp, lantern, light or light fixture, of a unique design, the contour whereof is both ornamental and useful and pleasing to the eye and architecturally designed to match contour and form, at the same time such a construction must be produced which will hide or conceal the electric wires, so that the appearance of the suspension device will not be marred. To attain these ends electric chains have been produced formed of a series of ornamental links interwoven to conceal the wires, but they are complicated, marred by interruptions in their contour to allow means for placing the wires in and out of the chain, and to interweave or bind them together; they also being costly to manufacture and flimsy in combination, inasmuch as lateral and up and down strains are not taken care of in their construction and manipulation.

The object of my invention is to overcome those objections and produce a concealed electric wire holding chain, which shall be as strong as a welded chain, cheap of manufacture, simple in construction, efficient in use and unique in appearance and pleasing to the eye.

The various features and advantages will readily become apparent from the following specification.

In the accompanying drawing forming part of this specification, Figure 1 is a view of the chain suspended with the electric wires passing through the links, broken away at certain points to illustrate construction, the links being rectangular in form with crossed corners. Fig. 2 is a similar view as that shown in Fig. 1, the links however being rounded and oval in form, and Figs. 3 and 4 are isometric views of single links, of different designs, showing a temporary wire passing through them.

The chain links are marked 1, they may be of any size, shape, contour or construction. In the lower end of the link on the inside, I form a recess or opening 2 (see particularly Figs. 3 and 4), and at the diametrically opposite end of the link, I provide a lug, lip, or projection, formed of two ears or points 3, 4, which are present on each side of the link thus making two ears 3 and two ears 4 on each link, (see particularly Figs. 3 and 4), which ears fit into the recess 2 in the lower part of the link 1. The recess 2 may be of any size and shape as may also the lugs formed of ears 3 and 4. The wires 5 pass through between the ears 3 and 4 into the link 1 and then down one side of the link and then through the ears 3 and 4 of the next adjacent link 1, then through recess 2 of said link down through one side thereof, repeating this line or path through the series of ears and recesses and links until the wires have passed through the entire chain. These wires may be placed in the links in any convenient or desirable manner. The dotted lines and broken away parts in the links in Figs. 1 and 2, illustrate the course of the wires. If desired, the wires may pass down both sides of the links.

To lock the links 1 into position and prevent lateral and up and down displacement, I provide a small splint, clamp, or bolt and nut connection as 6 which holds the links in normal position at all times. This nut and bolt connection passes through the links at the point where the ears 3 and 4 pass into the recess 2 at the meeting point of the links. This connection may be made in any other desirable manner and of an ornamental and peculiar construction and contour so as to add to the unique appearance of the chain, and lock the links together and make the chain as strong as a welded chain.

While the links are joined together so as to resist all strains and jars, they are still allowed to turn slightly, thus no interference is present with the regular action of the chain, yet the links are retained in a normal position and are prevented from unlocking, that is to say: The lips or lugs will not leave the recess into which they fit and the part or point of division always held together in the recess, preventing pulling apart.

The links in Figs. 1 and 3 showing open ends 7 are very desirable as the wire can be reached through them if desirable. At the

upper end each link is split or divided at point 8, this point of division also passing through the lug or lip and forming by this division the ears 3 and 4. The division of the link at this point is an important feature of my invention, as it enables me to slightly pull or spring apart the links and insert the next adjoining link in place to couple the links to form the chain, the link after being pulled apart will spring back into position or can be forced back and when the lugs, composed of ears 3 and 4 drop into the recess 2, the divided parts will be joined together and displacement of the links prevented. If the link is made solid instead of hollow I can bore a recess as 2 and the lugs will be solid, the point of division 8 will be the same passing through the link and lug as in the hollow link and the workings as to fitting the links together will be similar.

In casting the hollow links I may cast them with a temporary wire as 9 in the core, so that after the sand has been shaken out, the wire 9 will remain and the regular electric wire 5 can be connected to said temporary wire 9 and pulled through the link, a very satisfactory and economic operation.

Of course I do not limit myself to the specific construction herein shown and described, but may deviate therefrom and modify the same, and the links may be made of any shape or contour and from any material and they may be made of one, two or more parts and connected together. The links may be cast, stamped or wrought into any form or shape.

By casting the links with the temporary wire they may be shipped to any point and be placed into operating position by those unskilled in the art. It will be readily observed that by bolting, clamping or otherwise connecting together the links where they are joined together, my chain will be

as strong as the ordinary welded chain, and resist lateral and other strains and keep the links in a normal position, also preventing the chain from becoming disjointed.

What I claim as new and of my invention and desire to secure by Letters Patent is:—

1. A chain, composed of a number of links connected together, each link provided at one end with a recess and at its opposite end with a lug to fit the recess in the adjoining link, the link and lug being divided so that the link can be pulled apart to receive its adjoining link, wires passing through said links, as set forth.

2. A chain composed of a number of links connected together, each link provided at one end with a recess and at the opposite end with a lug to fit the recess in the adjoining link, the link and lug being divided so that the link can be pulled apart to receive the adjoining link, wires passing through said links, and means for holding the links in a normal position and preventing displacements of the lugs from the recesses.

3. A chain composed of a number of links joined together, wires passing through said links, the lower part of the links provided with a recess, the upper part of the links provided with divided lugs, the lugs fitting the recesses, as set forth.

4. A chain, composed of a number of links joined together, wires passing through said links, the lower part of the links provided with a recess, the upper part of the links provided with divided lugs, the lugs fitting into the recesses, and bolt and nut connection passing through the links at the point where the lugs pass into the recesses, to keep the lugs in alinement and prevent displacement.

WILLIAM H. RIESS.

In the presence of—
H. E. CARSTENS,
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