R. G. HUTCHINS.

TRUNKING.

APPLICATION FILED JULY 26, 1915.

1,197,739.

Patented Sept. 12, 1916.

2 SHEETS—SHEET 1.

Fig. 1.

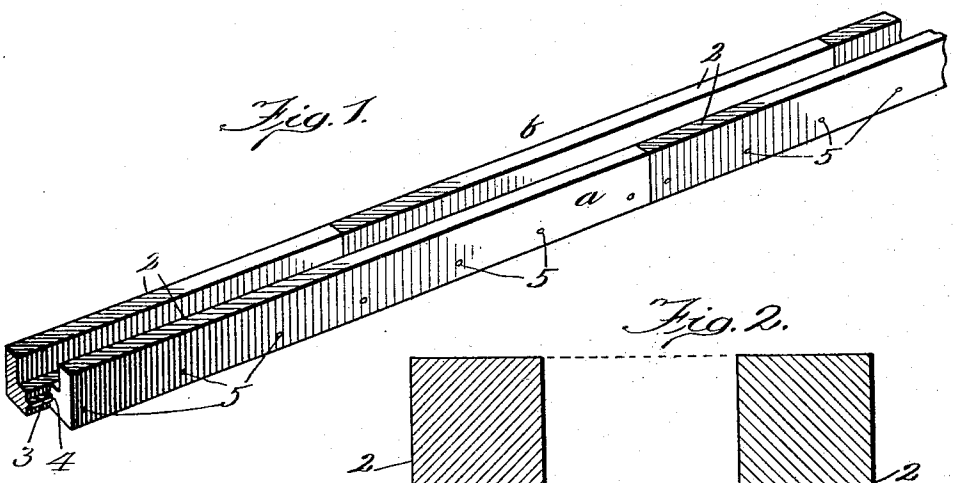


Fig. 2.

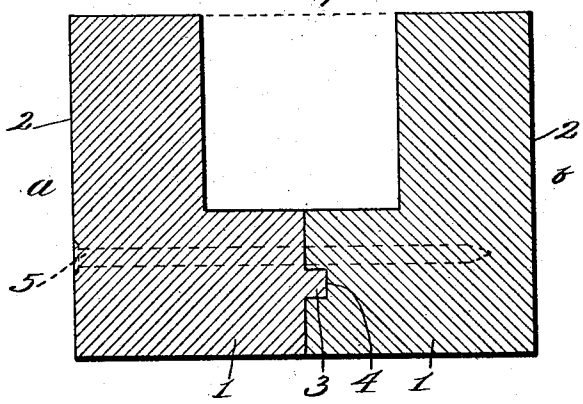
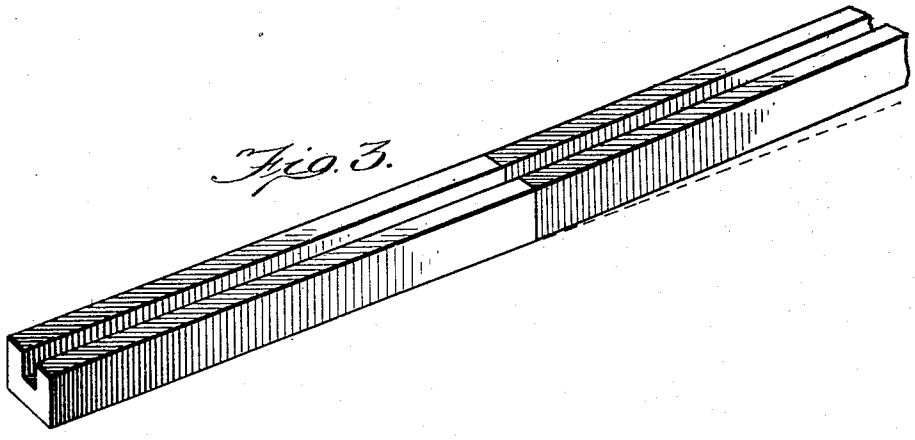


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

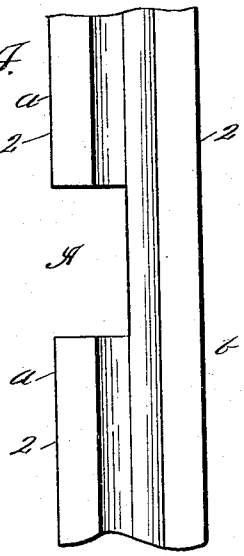


Fig. 5.

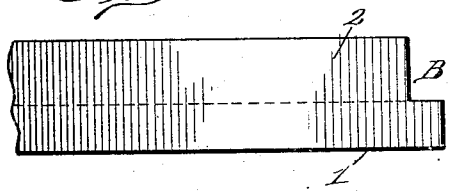
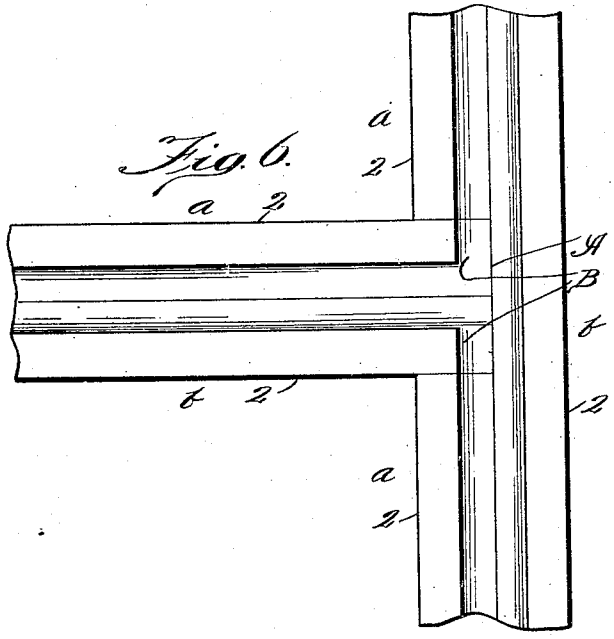


Fig. 6.



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UNITED STATES PATENT OFFICE.

RALPH G. HUTCHINS, OF CHICAGO, ILLINOIS.

TRUNKING.

1,197,739. Specification of Letters Patent. Patented Sept. 12, 1916.

Application filed July 26, 1915. Serial No. 42,085.

To all whom it may concern:

Be it known that I, RALPH G. HUTCHINS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Trunking, of which the following is a specification.

My invention relates to trunking or conduit employed more particularly in connection with steam railways for containing leads of wires used for signal and other purposes.

It will be understood by those familiar with the art that it is common practice in railway work to operate switches and signals electrically, from a controlled tower which is frequently at a considerable distance from the switch or signal, and the electric conductors employed are inclosed in a form of conduit usually termed "trunking." This trunking is frequently partly embedded in the ballast at the side of the track and usually consists of a channel formed from a single piece of wood overlaid by a suitable cover. This old form of trunking is shown in Figure 3 of the drawings, and the disadvantages thereof are numerous and are recognized by those of experience. The standard requirements call for a conduit four inches wide and three inches high, outside measurements, excluding the cover. The lengths vary from eight to sixteen feet. In forming this solid, one piece conduit, the center core is milled out or otherwise removed, but in any event the operation results in the destruction of that portion which is removed. This, then, results in a loss of a strip approximately an inch and one half wide and an inch and one half deep. Another disadvantage is that exposure to the weather causes the conduit to check and split, especially at the central portion of the base, which weakens the structure and tends to cause the side walls to partially collapse. Another disadvantage is that as the end of one length merely abuts the end of the adjacent length the proximate ends are liable to get out of register unless special precautions are taken to prevent it. As the amount of new trunking laid in this country alone, in normal times, amounts to several million feet a year, the expense of such extra precautions in the aggregate renders them impracticable from a financial standpoint, if for no other reason. Again, the lengths have a tendency to get out of alinement.

The object of my invention is to produce trunking which will avoid the disadvantage mentioned.

Another disadvantage in the old type comes into evidence when it becomes necessary to "trunk in." It will be understood that it frequently becomes necessary in railroad work to run branch leads from the main lead, and in such case a length of the side wall must be removed to permit the entrance of the branch conductors to the center duct of the main conduit. To do this with the old type requires an operation which is difficult and inconvenient under the conditions which obtain in practical railroading, and it is one of the objects of my invention to provide a construction such as to facilitate this operation of "trunking in." This will be explained more in detail as the description proceeds.

I accomplish my objects by the construction shown in the accompanying drawings, in which,

Fig. 1 is a perspective view of a conduit embodying my invention. Fig. 2 is a cross-section. Fig. 3 is a perspective of the old form of conduit, the disadvantages whereof it is my purpose to eliminate. Figs. 4, 5 and 6 are details showing the manner in which my new conduit lends itself to the operation of "trunking in."

Similar reference characters refer to similar parts throughout the several views.

Referring first more particularly to Figs. 1 and 2, I construct two L shaped members *a* and *b*, each of these having a base 1 and side walls 2. These members are similar in cross-section except that the member *a* has a tongue 3 extending lengthwise along the end of the base, and fitting into the corresponding groove 4 in the base of the member *b*. These members *a* and *b* are formed by ordinary sawing with a circular saw and as a result I am able to remove from each piece in its entirety a strip rectangular in cross-section, approximately an inch and one half high and three fourths of an inch thick. Strips of this size have substantial commercial value and the result is that my construction results in an important saving in raw material.

In laying the trunking the members are assembled in such a manner that the end of

one member comes between the ends of its mate. This overlapping or breaking of the joints results in at least two very important advantages. First, the ends cannot get out of register for there are, practically speaking, no ends to get out of register, the conduit being continuous from end to end. This results also in tending to preserve the alinement for the overlapping member acts as a brace for the other two. After the elements are assembled they are held together by transverse fastening means as exemplified by the nails 5. These fastening means preferably pass transversely through or part way through the bases and their number and construction may be varied to suit conditions. This construction is much more rigid and durable than if the entire conduit consisted of a single piece at any point in its cross-section, as will be understood by those familiar with the action of wood when exposed to the effects of the weather. In my construction the individual elements have only half the cross-sectional area which is present in the old construction, with corresponding reduction in the tendency to crack and check.

I will now refer to Figs. 4, 5 and 6 which illustrate some of the advantages of my construction when it comes to the operation known as "trunking in". When the artisan has selected the point at which this operation is to occur, he makes a cut through the nearest element, as shown at A, Fig. 4. This cut will be wide enough to receive the end of the entering branch, that is, under standard conditions four inches. Or, if the work is entirely new construction and the point of "trunking in" has been previously determined, it is not necessary for the artisan to saw a piece out of any individual element, for he may simply bring the ends of the adjacent pieces into contact with the sides of the entering conduits. In any event vertical sawing is all that is necessary even when the main trunk is already in place, and this avoids much difficulty over the old construction, where in "trunking in" it was necessary under any circumstances to work with a chisel or similar cutting tool. With my construction, after the space A is formed, either by simple sawing or by lengthwise adjustment of the parts of the main trunk, the artisan makes a cut in the entering elements as indicated at B, Fig. 5. This of course can be done before the entering trunk is in place, and hence the operation can be readily accomplished. When the ends of the entering trunk are thus prepared they are inserted into the opening A of the main trunk, whereupon the parts assume the relative positions shown in Fig. 6.

From the foregoing it will be manifest that a conduit of my construction results in a saving of material by rendering it possible and practicable to save the material removed to form the central duct. It will also be evident that a conduit of my construction has great durability in that it tends to preserve its alinement and prevent checking or cracking and prevent the offsets which are liable to occur in conduits having ordinary butt joints. Furthermore, as a result of my construction the operation of "trunking in" is greatly simplified and enables the artisan to accomplish the result in a more workmanlike manner and with greater comfort, especially when working under adverse weather conditions.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. Trunking consisting of two L shaped members and means for holding said members together with the projecting feet of their bases in contact and in register with each other.

2. Trunking consisting of two L shaped pieces, one of which has a tongue extending longitudinally along the projecting portion of the base and the other piece is correspondingly grooved for receiving said tongue.

3. A conduit consisting of a plurality of lengths of L shaped members jointed together with the projections of their bases in contact with each other, and said members breaking joints, whereby the abutting ends of the members on one side of the contact come opposite a continuous portion of the member on the opposite side.

4. A conduit consisting of wooden members having an L shaped cross-section and joined together with the projecting ends of their bases in contact with each other, a member on one side overlapping the ends of the members on the other side, a tongue and groove connection between the bases of the members, and fastening means for holding the members together, said fastening means running transversely to the length of the conduit and being embedded in the bases, substantially as described.

5. Trunking having a flat base of substantially the full width of the trunking whereby the trunking may seat firmly upon a flat supporting surface, said trunking having integral walls rising from the two marginal edges, and thereby forming a channel open at the top, the base being formed in two parts separated by a plane of cleavage running longitudinally and located between said walls, the plane of cleavage being perpendicular to the plane of the base, and a tongue and groove connection between the parts forming the base.

6. Trunking having a flat base with integral walls rising from the marginal edges, the base having a flat under-surface and the

walls having flat outer-surfaces parallel to each other and rising perpendicularly from the base whereby the external lines of the cross section form three sides of a rectangle, the walls being remote from each other and thereby forming a channel, open at the top, the base being formed in two parts separated by a plane of separation or parting surface arranged perpendicularly to the plane of the base, between the upright walls, and running longitudinally, there being a groove formed in the parting surface in one part of the base and a tongue projecting from the parting surface of the other part of the base, said tongue and groove running longitudinally and the tongue fitting the groove, said tongue and groove being distant both from the bottom of the base and from the bottom of the channel.

In witness whereof, I have hereunto subscribed my name.

RALPH G. HUTCHINS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."