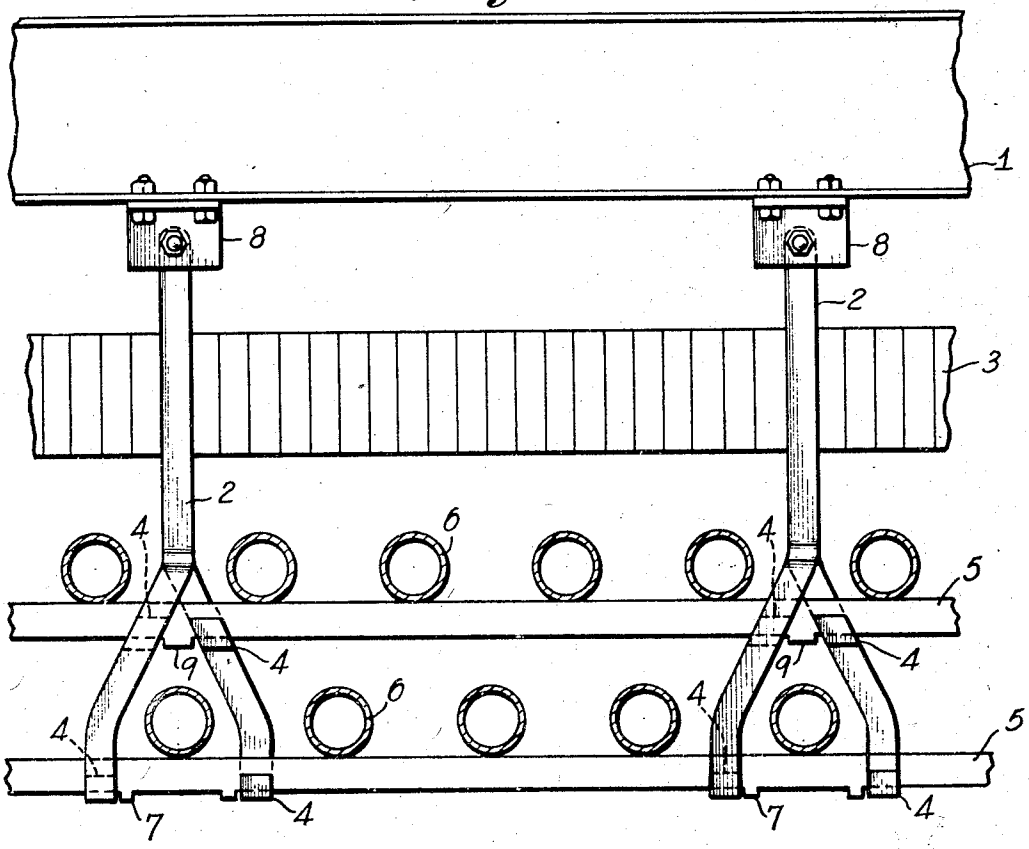
Sept. 13, 1932. S. B. DE BENCE 1,877,391

TUBE HANGER

Filed April 18, 1932

Fig. 1.



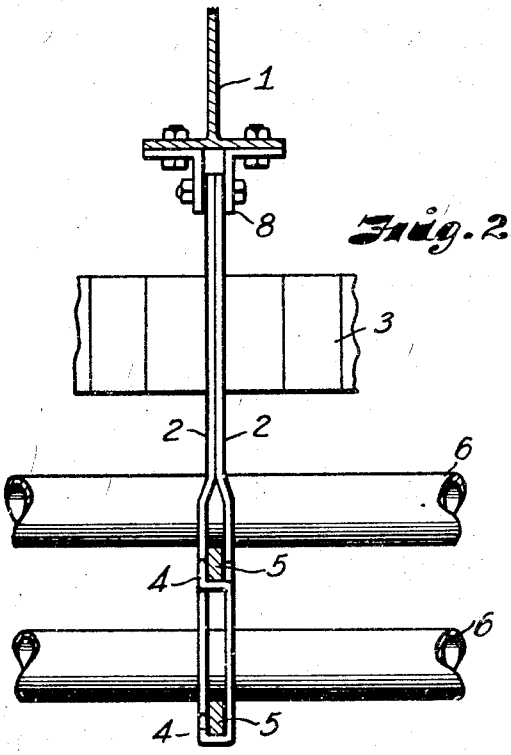


Fig. 2.

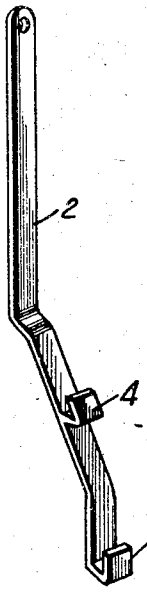


Fig. 3.

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Patented Sept. 13, 1932 1,877,391

UNITED STATES PATENT OFFICE

STEPHEN B. DE BENCE, OF NEW YORK, N. Y., ASSIGNOR TO ALCO PRODUCTS, INCORPORATED, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK

TUBE HANGER

Application filed April 18, 1932. Serial No. 605,905.

My invention relates to a tube hanger, and more particularly to a tube support for the tubes of a tube still boiler or other type of furnace where tubular heating elements are used.

One object of my invention is to provide a tube hanger in which no bolts, nuts, or keys are required to fix the supporting bars within the heating zone.

Another object of my invention is to provide a device the parts of which are interchangeable with other parts, in event of breakage without interfering with the tubes.

In the accompanying drawing which forms part of the instant specification and is to be read in conjunction therewith and in which like reference numerals are used to indicate like parts in the various views—

Figure 1 is a fragmentary sectional view through a tube still showing the tubes thereof supported by tube hangers of my invention.

Figure 2 is a sectional view showing a side view of my tube hanger.

Figure 3 is a perspective view of one of the elements of my tube hanger.

Referring now to the drawing; affixed to an I beam or other suitable supporting means 1 in any suitable manner are supported a pair of hanger elements 2 extending through the furnace arch 3. The hanger elements 2 are provided with integral hook members 4 adapted to support tube supporting bars 5 upon which tubes 6 rest. The tube supporting bars 5 are provided with lugs 7 and 9 respectively for engagement with the hook members to prevent lateral motion. Each hanger consists of a pair of hanger members 2 disposed in adjoining relation and having their respective hook parts 4 facing each other, as can be seen by reference to Figure 2. The tube supporting bars 5 rest in the hook members 4 and hold the members 2 in abutting relationship at the lower ends. The supporting means 8 hold the hanger members in abutting relationship at their upper ends.

It will be apparent from the drawing that the hanger elements 2, with the complementary supporting bars 5 form an interlocking arrangement which firmly supports the tubes 6 without the use of nuts, bolts or keys. The lugs 7 and 9 prevent any lateral movement of the supporting bars. The assembly is at once sturdy and admits of ready replacement of any of the individual hanger members or tube supporting bars in the event of breakage or burning out. It is to be understood that the parts of my hanger may be made of any suitable materials and in any suitable manner, not only by casting but also by forging out or welding bar stock or any other rigid material.

It will be understood that certain features and subcombinations are of utility and may be employed without reference to other features and sub-combinations. This is contemplated by and is within the scope of my claims. It is further obvious that various changes may be made in details within the scope of my claims without departing from the spirit of my invention. It is, therefore, to be understood that my invention is not to be limited to the specific details shown and described.

Having thus described my invention, what I claim is:

1. A tube supporting assembly comprising in combination a pair of hanging members disposed in abutting position, one of said members overlapping the other for a portion of its length, one of said members having a diverging portion forming an angle with the axis of said overlapping portion, the other of said members having a diverging portion forming an oppositely directed angle with said axis, hook-like members carried by said diverging portions and a tube-supporting member supported by said hook-like members extending substantially at right angles to said axis.

2. A tube supporting assembly comprising

in combination a pair of hanging members disposed in abutting position, oppositely extending hook-like members carried by the hanging members, and a tube supporting bar extending substantially at right angles to said hanging members sustained by the hook-like members and adapted to bear the tubes.

3. A tube supporting assembly comprising in combination a pair of hanging members disposed in abutting position, oppositely extending hook-like members carried by the hanging members, a tube supporting bar extending substantially at right angles to said hanging members sustained by the hook-like members, and means integral with said bar adapted to engage said hook-like members to prevent lateral motion thereof.

In testimony whereof I affix my signature.

STEPHEN B. DE BENCE.