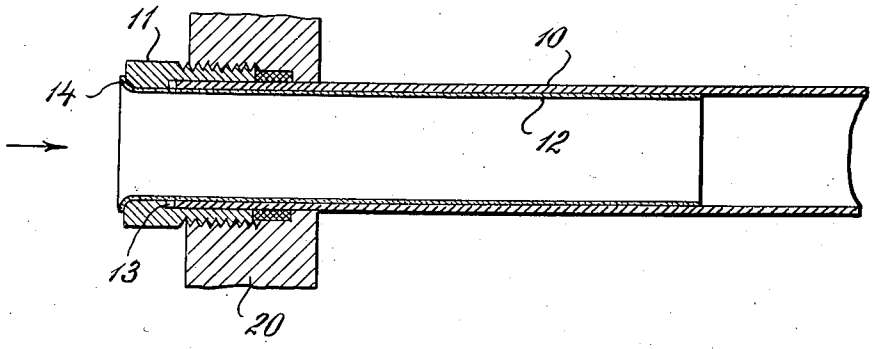
Dec. 5, 1933. L. H. SPANYOL 1,937,600

CONDENSER TUBE

Filed March 31, 1932



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Patented Dec. 5, 1933 1,937,600

UNITED STATES PATENT OFFICE

1,937,600

CONDENSER TUBE

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Application March 31, 1932. Serial No. 602,156

1 Claim. (Cl. 285—46)

This invention relates to improvements in condenser tubes.

Its object is to provide a simple and inexpensive construction for prolonging the life of such tubes and increasing their effectiveness. To that end its object is to provide a metallic tube constructed with a lining at one of its ends to prevent corrosion and/or erosion. More specifically, it comprises a condenser tube and its ferrule with a cylindrical liner sleeve at its intake end which covers expansion space between the tube and ferrule and presents an unbroken smooth surface for incoming fluids, of a material which is not chemically affected by the fluids.

It has been found that the breakdown of condenser tubes occurs almost exclusively within the first few inches of their intake end. I have discovered that this difficulty can be overcome by the simple expedient of putting a comparatively short liner sleeve of celluloid in this end of the tube. I prefer to have this sleeve extend through the tube ferrule, to cover the expansion space between the tube and the ferrule and to provide an outwardly extending flange on the outer end of the sleeve.

The drawing is a sectional elevation of a part of a condenser tube and associated parts which embodies this invention.

10 designates the condenser tube and 11 one of its end ferrules, which is screwed into a header or tube sheet 20. These parts are metal and of usual construction.

12 is a liner sleeve of celluloid which extends into the tube and covers the joint or expansion space 13 between the tube and the ferrule. Its outer end is flanged, as at 14, preferably on a curve as shown, to overlap the chamfered edge of the ferrule. This flange facilitates the insertion of the liner sleeve and presents a smooth surface instead of a sharp edge over which the incoming fluid passes.

It has been found that this simple arrangement greatly lengthens the life of the tube. One of its advantages is that the sleeves may be readily inserted in existing structures without altering them.

What I claim is:—

Means for preventing corrosion and electrolytic action in the end of a condenser tube having a ferrule thereon forming an expansion space with the end of the tube comprising a sleeve of celluloid passing through the ferrule and extending across said expansion space and a substantial distance into the tube and having an annular flange curved outwardly from the outer end of the sleeve, said sleeve preventing contact between the liquid passing through the tube and the inner surface of ferrule and portion of the tube connected thereto.

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