

No. 719,921.

PATENTED FEB. 3, 1903.

H. WEBSTER.  
STEAM SUPERHEATER.  
APPLICATION FILED JAN. 11, 1902.

NO MODEL.

Fig. 1.

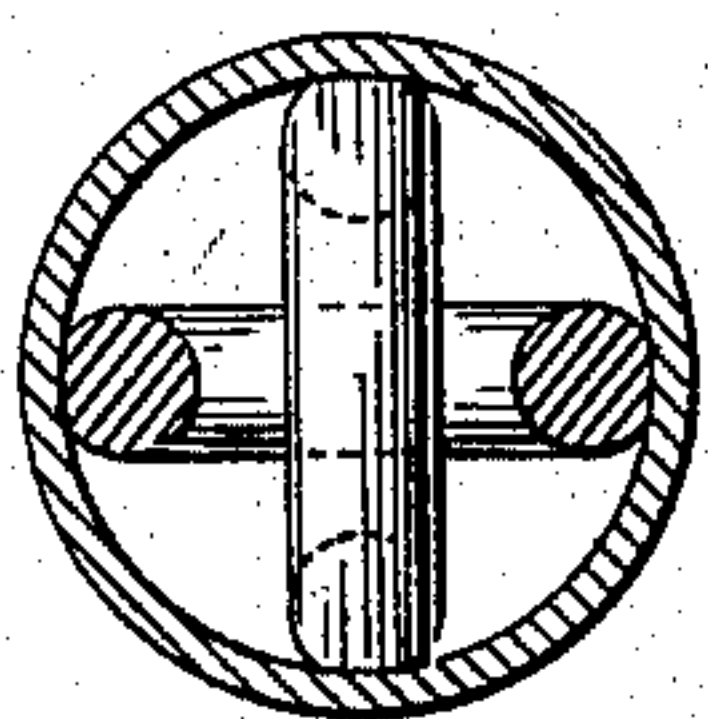
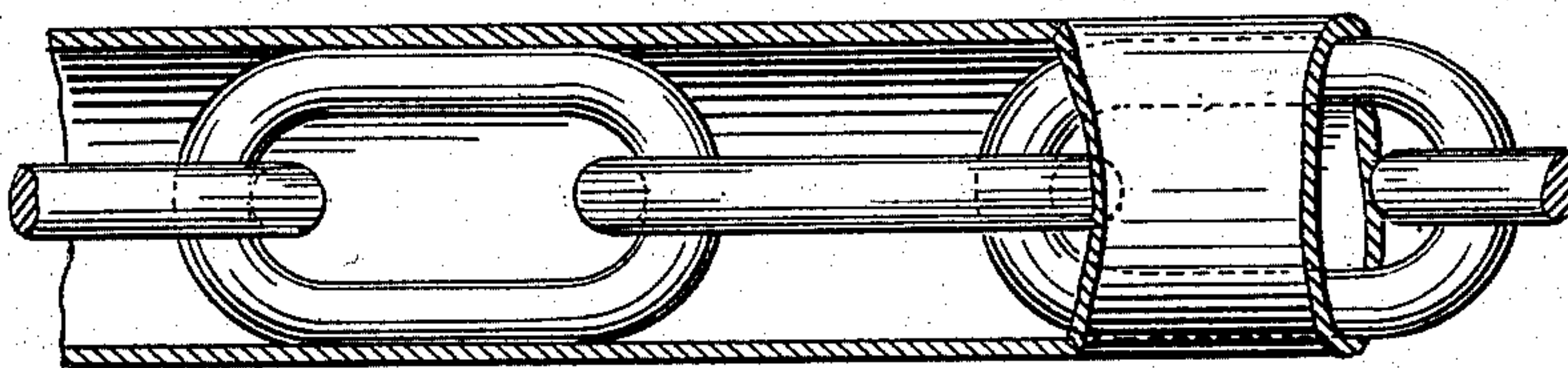


Fig. 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

HOSEA WEBSTER, OF MONTCLAIR, NEW JERSEY.

## STEAM-SUPERHEATER.

SPECIFICATION forming part of Letters Patent No. 719,921, dated February 3, 1903.

Application filed January 11, 1902. Serial No. 89,256. (No model.)

*To all whom it may concern:*

Be it known that I, HOSEA WEBSTER, a citizen of the United States, residing at Montclair, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Steam-Superheaters, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to apparatus for superheating steam; and it consists in a tube or chamber into or through which steam is passed, provided in its interior space with a heat-conducting device that contacts with the inner wall of the tube or chamber and formed to expose extended heat-conducting surfaces longitudinally and serially across the interior space.

The ordinary method of superheating steam is to pass common steam through a series of pipes exposed exteriorly to a heating medium. In view of the known fact that steam is a poor conductor of heat the core or central portion of the steam contained in the tubes is not superheated to any practical extent, and to remedy this various forms of baffles have been placed within the tubes designed to deflect the steam in the passage to contact with the inner surfaces of the tubes.

30 The present invention is designed to convey the heat from the wall of the tube or chamber along the interior space of the tube and at intervals across its central space, so that an extension heat-conducting surface is

exposed in direct contact with the whole body 35 of the steam.

In the accompanying drawings, Figures 1 and 2 show, respectively, a cross-sectional and longitudinal view of a superheating-tube embodying my invention. 40

The tube is provided within the interior with a series of links formed into a chain, whereby its insertion and removal may be readily effected. The links are made of sufficient width to contact with the opposite walls of the tube, of such length as to obtain an extended longitudinal contact with the wall of the tube, and of such size to expose to the steam all the heat-conducting surface practically possible. 45 50

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

A tube or chamber for superheating steam, provided in its interior space with a chain 55 composed of a series of interlocked elongated links, each link contacting with the opposite sides of the interior wall of said tube or chamber and successively presenting a heat-conducting surface to the steam longitudinally 60 and at intervals across the interior space of the tube or chamber, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HOSEA WEBSTER.

Witnesses:

K. A. VAN VALKENBURG,  
E. BLAINE WILSON.