

(No Model.)

R. M. WILSON.  
RANGE BOILER.

No. 573,746.

Patented Dec. 22, 1896.

FIG-1-

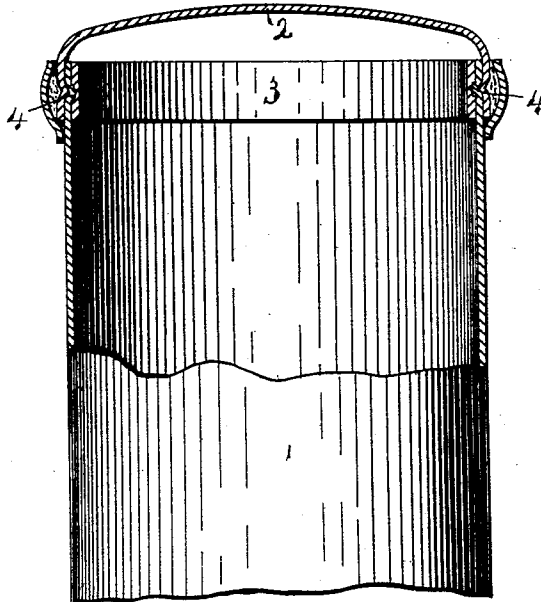


FIG-II-

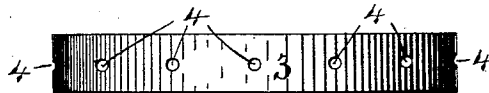
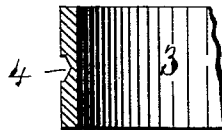


FIG-III-



WITNESSES:  
*S. Schorweck*  
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INVENTOR.  
*Robert M. Wilson*  
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ATTORNEY.

# UNITED STATES PATENT OFFICE.

ROBERT M. WILSON, OF ROME, NEW YORK.

## RANGE-BOILER.

SPECIFICATION forming part of Letters Patent No. 573,746, dated December 22, 1896.

Application filed April 1, 1896. Serial No. 585,757. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT M. WILSON, a citizen of the United States, residing at Rome, in the county of Oneida and State of New York, have invented a new and useful Range-Boiler; and I do hereby declare that the following, in connection with the accompanying drawings, is a full, clear, and exact description of the invention.

What I have invented is a new and improved range-boiler the top and bottom of which are securely attached to the body or cylindrical shell. It consists of said body, the top and bottom heads, inner bands fitted to the interior of the body near its ends, countersunk cavities or depressions in the outer face of said bands, and an exterior band arranged over the joint and held firmly in place by solder which is run into the cavity on its inner side.

My invention will be better understood by reference to the accompanying drawings, in which the same figures refer to the same parts in all the views.

Figure I is a vertical section of a boiler, showing my invention. Fig. II is an elevation of the interior band. Fig. III is a corresponding section of a portion of the same through one of the cavities.

1 indicates the body or cylindrical shell of the boiler; 2, the head fitted over the same; 3, the strong and solid inner band fitted snugly within the end of the body and having on its exterior face at suitable intervals the depressions 4 4 4. These may be holes drilled through the band and of any desired form, but preferably, as here shown, penetrating the material only part way. These parts being assembled in the proper position, as shown in Fig. I, the metal of the head and body over each one of said depressions is driven inwardly, by which means the head is locked securely to the body and the inner reinforcing-band held in position. The surfaces of said body, head, and inner band in contact are preferably tinned, so that when forced into contact they become united. I preferably finish the joint by arranging around it the exterior metal band, which may be made of some simple ornamental form, solder being run in to fill the

space in the interior of said band. By this means I attach the heads firmly to the shell and produce a joint which is strong, secure, and absolutely tight, and is also cheap, simple, and neat in appearance.

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

1. In a range-boiler, the combination with the cylindrical shell and the head, of an inner ring having apertures or cavities; portions of the metal of the head and shell extending into said apertures or cavities to lock the parts in position, substantially as described and shown.

2. In a range-boiler, in combination with the cylindrical shell and the top and bottom heads, of rings having cavities in their outer faces arranged within the shell at both ends; portions of the metal of the shell and heads extending into said cavities and filling them, substantially as described and shown.

3. In a range-boiler, the combination with the cylindrical shell and top and bottom heads; of inner rings arranged within the shell at both ends and having apertures or cavities; a portion of the metal of heads and shell extending into said apertures or cavities; and exterior metal rings covering the joints between the heads and shell, substantially as described and shown.

4. In a range-boiler, the combination with the cylindrical shell and top and bottom heads; of inner metal rings set within the ends of the shell having cavities in their outer faces; a portion of the metal of heads and shell extending into said cavities to lock the parts together; exterior metal rings covering the joints and solder run in to fill the space around the heads and shell within said exterior rings, substantially as described and shown.

In witness whereof I have hereunto set my hand, in the presence of two attesting witnesses, at Rome, in the county of Oneida, in the State of New York, this 20th day of March, 1896.

ROBERT M. WILSON.

Witnesses:

E. J. TYLER,  
L. G. MOORE.