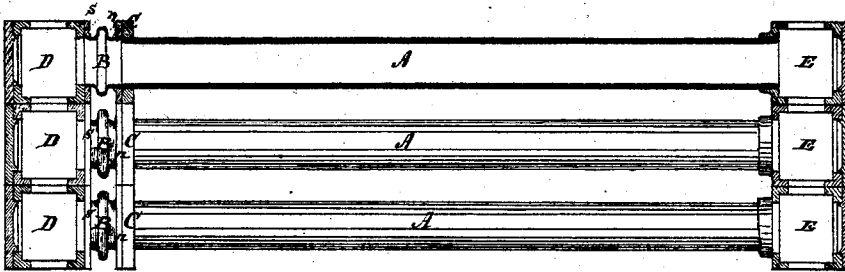


WILLIAM P. SKIFFINGTON.

Improvement in Boilers.

No. 116,104.

Patented June 20, 1871.



Witnesses

Henry D. Roeder
Joseph S. DeBarry

Inventor.

William P. Skiffington.

UNITED STATES PATENT OFFICE.

WILLIAM P. SKIFFINGTON, OF NEW YORK, N. Y.

IMPROVEMENT IN BOILERS.

Specification forming part of Letters Patent No. 116,104, dated June 20, 1871.

To all whom it may concern:

Be it known that I, WILLIAM P. SKIFFINGTON, of New York, in the county and State of New York, have invented certain Improvements in Steam-Boilers, of which the following is a specification:

The nature of my invention consists in the arrangement of an expansion joint at the end of each boiler-tube, to counteract the uneven expansion of the several tubes, particularly detrimental in sectional boilers.

In the accompanying drawing, E and D represent sections, to which the tubes are attached. A are the tubes, fastened into square flanges C at their after ends, and fastened at their forward ends into the front sections E in the usual manner. Between the square flanges C and the after sections D expansion joints B are securely fastened by means of flanges s and

n, or in any other suitable manner. These expansion joints B allow either of the pipes to expand independent of the other pipes, and without throwing any undue strain upon the end sections. The flanges C are made square and of such a size as to touch each other and form a protection-wall for the expansion joints B against the extreme heat of the fire.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of expansion joints B and square flanges C, arranged on the ends of boiler-tubes A, substantially as and for the purpose hereinbefore set forth.

WILLIAM P. SKIFFINGTON.

Witnesses:

HENRY E. ROEDER,
JOSEPH S. DE BARRY.