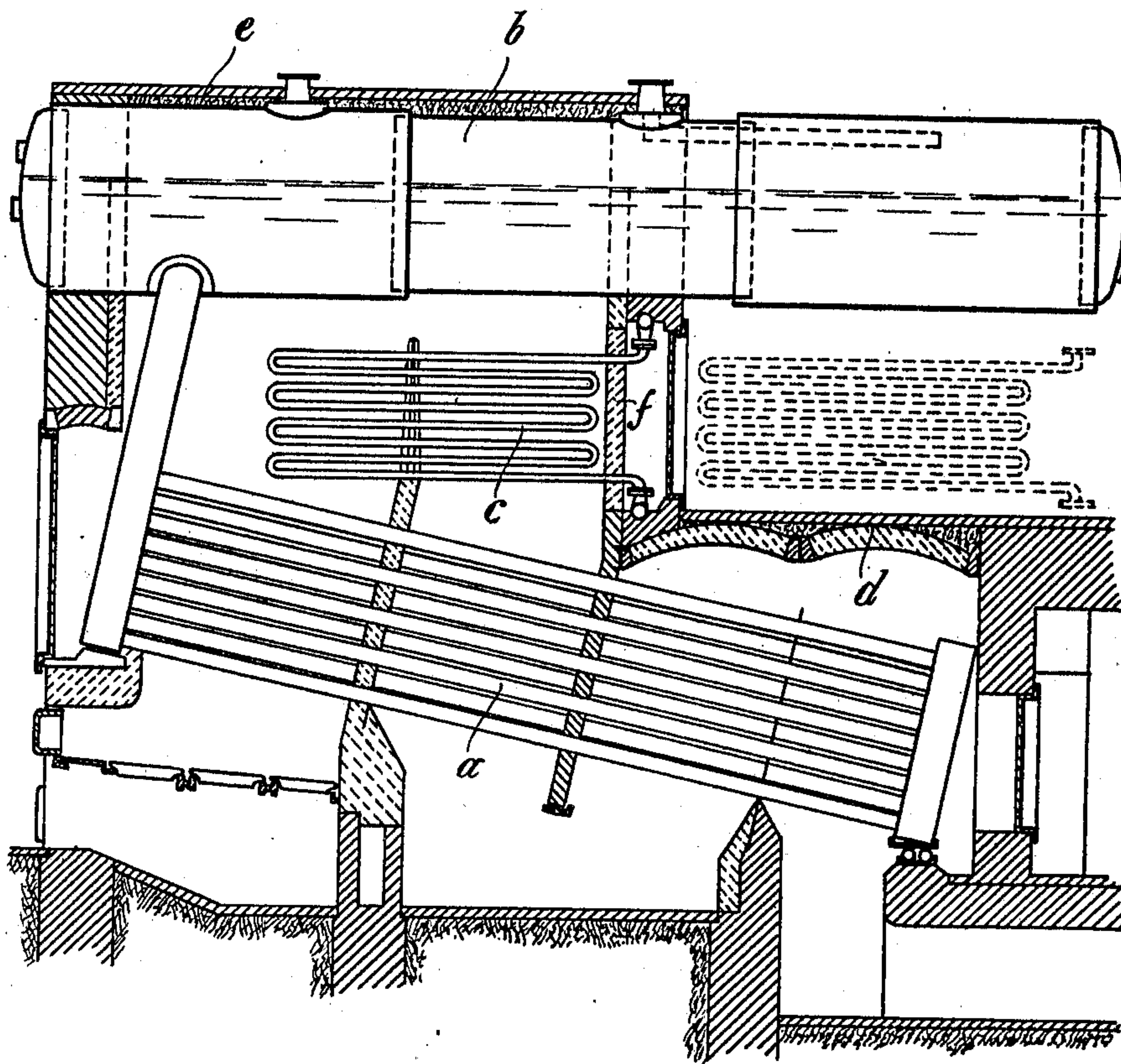


J. SUCK.  
 CASING FOR WATER TUBE BOILERS.  
 APPLICATION FILED APR. 11, 1908.

945.203.

Patented Jan. 4, 1910.



Witnesses  
 C. Heymann.  
 C. Schallinger.

Inventor  
 Josef Suck  
 by B. Singer Atty



# UNITED STATES PATENT OFFICE.

JOSEF SUCK, OF KAROLINENTHAL, NEAR PRAGUE, AUSTRIA-HUNGARY.

CASING FOR WATER-TUBE BOILERS.

945,203.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed April 11, 1908. Serial No. 426,520

*To all whom it may concern:*

Be it known that I, JOSEF SUCK, a subject of the Emperor of Austria-Hungary, and residing at Karolinenthal, near Prague, have  
5 invented a new and useful Improvement in Casings for Water-Tube Boilers, of which the following is a specification.

This invention relates to the brickwork or case for inclosing that type of water tube  
10 boilers which consists of boiler tubes arranged inclined to the horizontal and of one or several longitudinal upper boilers arranged above these tubes. The free space remaining between the boiler tubes and the  
15 upper boiler or boilers is preferably used in this type of boilers, for arranging a superheater, as thus the free space caused by this particular kind of construction may be utilized and the superheater can be arranged  
20 in the first flues of the gases of combustion, it being all the same whether the flues are transverse flues or longitudinal flues.

In order to be able to inspect clean or repair or to exchange the whole of the super-  
25 heater or parts thereof, it is necessary that the whole superheater or parts thereof are adapted to be taken out from the whole of the boiler plant. This however occasions great difficulties in the old types of brick-  
30 work cases for water tube boilers, as the question of space is of the greatest importance when erecting water tube boilers; very seldom is there sufficient room for enabling the superheater to be pulled out of the whole  
35 boiler plant at the sides or at the rear throughout its whole length.

The subject of this invention is formed by a case or brickwork for inclosing a water tube boiler of the above described type,  
40 which allows of pulling the superheater out of the whole of the boiler plant throughout its whole length, without exceeding the cross-sectional area necessary for erecting the boiler.

45 In the accompanying drawing the case or brickwork forming the subject of this invention is illustrated as applied to a water tube boiler by way of example.

The superheater arranged in the first flues of the gases of combustion is inserted be- 50  
tween the boiler tubes, *a*, and the upper boiler, *b*. The boiler is walled in according to this invention in such a manner, that the rear-wall of the case is stepped, thus two boiler platforms, *d* and *e*, are formed, the 55  
rear and lower platform, *d*, of which covers over the rear ends of the boiler tubes and is connected with the higher platform, *e* by a perpendicular wall, *f*. In order to make the superheater accessible an opening which 60  
may be closed is provided in the wall, *f*, so that after unclosing this opening the superheater, *c*, may be pulled out of the boiler plant in a horizontal direction on to the lower platform without exceeding the cross- 65  
sectional area necessary for erecting the boiler. For this reason the free passage at the sides and at the back of the boiler plant may be decreased as desired or be dispensed with altogether, so that a considerable sav- 70  
ing as regards space is effected, providing at the same time for the laying free of the superheater.

Having thus described my invention, what I claim as new and desire to secure by Let- 75  
ters Patent is:—

A water tube boiler comprising in combination, main boiler tubes extending longitudinally of the boiler, a grate beneath said tubes, super-heating tubes above said 80  
main tubes and overhanging a portion of the grate, a supporting partition wall supporting said main and super-heating tubes, a vertical rear wall portion having an open- 85  
ing for withdrawing said superheating tubes, and a horizontal wall portion extending rearwardly from said vertical portion for supporting the super-heating tubes when withdrawn.

In testimony whereof I affix my signature 90  
in presence of two witnesses.

JOSEF SUCK.

Witnesses:

WILLIHOLD SEITS,  
MAXIMILIAN ROHATYN.