

No. 735,473.

PATENTED AUG. 4, 1903.

S. W. DAVIS.
BOILER SETTING.

APPLICATION FILED OCT. 20, 1902.

NO MODEL.

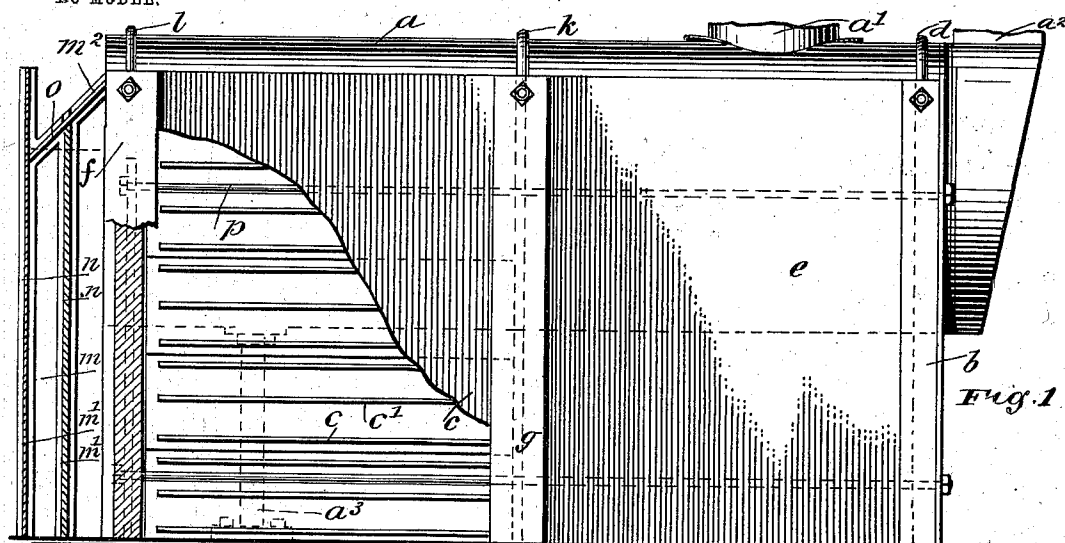


Fig. 1

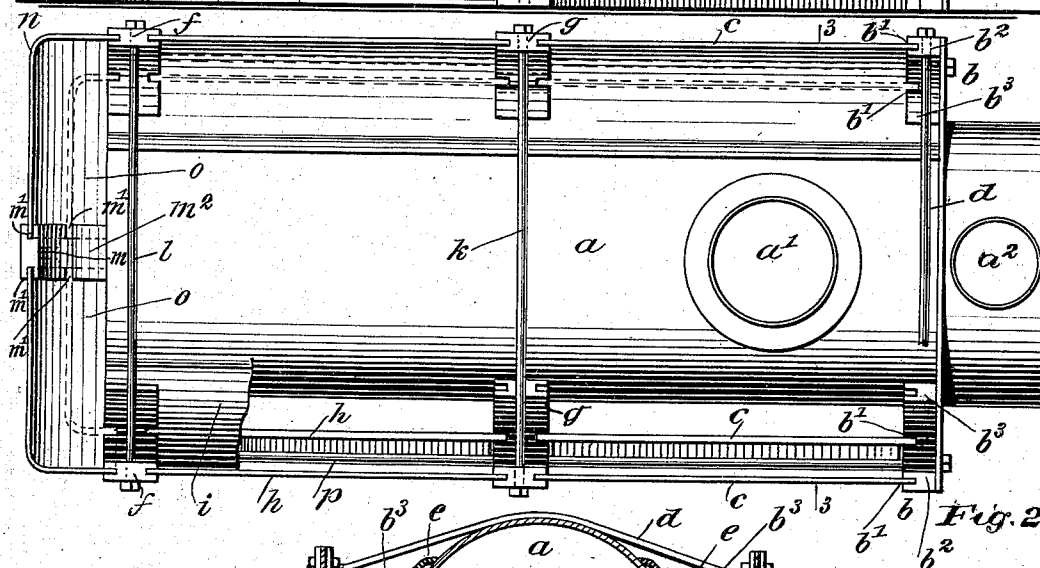


Fig. 2

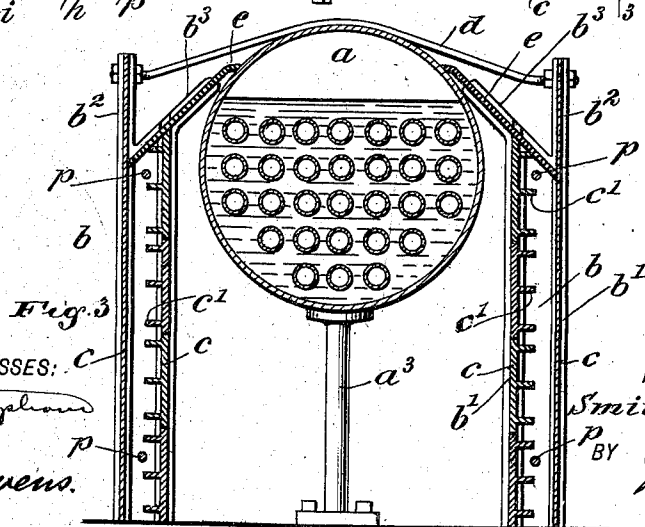


Fig. 3

WITNESSES:

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SMITH W. DAVIS, OF PICKENS, WEST VIRGINIA.

BOILER-SETTING.

SPECIFICATION forming part of Letters Patent No. 735,473, dated August 4, 1903.

Application filed October 20, 1902. Serial No. 127,982. (No model.)

To all whom it may concern:

Be it known that I, SMITH W. DAVIS, a citizen of the United States, and a resident of Pickens, in the county of Randolph and State of West Virginia, have invented a new and Improved Boiler-Setting, of which the following is a full, clear, and exact description.

This invention relates to a manner of constructing walls adapted especially for covering or setting boilers, although it is applicable to various other purposes, as will suggest themselves to skilled mechanics.

This specification is an exact description of one example of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side view of the invention with parts broken away. Fig. 2 is a plan view also with parts broken away, and Fig. 3 is a vertical cross-section of the invention on the line 3 3 of Fig. 2.

a indicates the boiler, a' the steam-dome, a^2 the smoke-stack, and a^3 indicates a pillar or pillars or any other suitable means for sustaining the boiler.

The wall may be constructed of cast-iron or other metal, or of fire-clay, or of any combination of refractory or heat-resisting materials, as may be desired. At the front of the boiler, at each side thereof, is arranged a corner post or stanchion b , provided with two vertical grooves b' therein, in which are set respectively the vertical side plates c . Each corner-post b is formed, as best shown in Fig. 3, with an upward extension b^2 , and these extensions are connected by a tie-rod d , which passes over the top of the boiler and joins the corner-posts b together, as shown. The inner plates c are provided with ribs c' on their outer faces, as best shown in Fig. 3, these ribs preventing said plates from warping under the action of heat beneath the boiler. At the top of the inner plates c and extending inward and upward from the outer plates are top plates e , which are fitted in grooves formed in inwardly and upwardly disposed extensions b^3 of the posts b . The upper edges of the plates e snugly engage the sides of the boiler, so as to effect tight connection therewith. Corner-

posts f , similar in every respect to the corner-posts b , are arranged at the rear end of the boiler, at each side thereof, and intermediate posts g are arranged at each side of the boiler, intermediate the length thereof. The plates c and e extend to the intermediate posts g , and from these posts g plates h , similar to the plates c , and plates i , similar to the plates e , extend to the respective posts f . Between the two posts g transverse tie-rods k extend, and similar rods l extend between the posts f . The number of posts and side plates depends upon the length of the boiler or other structure to be covered.

At the back of the boiler is arranged a post m , similar to the posts b , f , and g , and in the grooves m' of this post m are arranged parallel vertical plates n in the same manner that the plates c and h are arranged. There are two pairs of these plates n , and said pairs extend, respectively, toward opposite sides of the boiler, and thence are bent forwardly to engage with the corresponding grooves in the rear corner-posts f . The post m has an upward and inward extension m^2 , and with this extension are engaged upwardly and inwardly extending top plates o , similar to the plates e and i , before described, these top plates o projecting into engagement with the rear end of the boiler and effecting a snug connection therewith. (See Fig. 1.) In addition to the tie-rods d , k , and l longitudinal tie-rods p are arranged, two at each side of the boiler, said tie-rods extending from the front corner-posts b to the rear corner-posts f , between the plates c and h .

With reference to this construction it will be observed that dead-air spaces are formed between the pairs of plates c , h , and m . This effectually protects the boiler and prevents loss of heat. If desired, these spaces may be filled in with a non-conducting substance; but this is thought to be necessary only in exceptional instances.

The invention is here shown and described as a boiler covering or setting, but it is clear that it could be used for other purposes without departing from the principle of my invention—for example, it could be used in wall construction in the art of house-building—and I desire it to be understood that I am not limited to its use as a boiler-setting.

Various changes in the form, proportions, and minor details of my invention may be resorted to at will without departing from the spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie within the intent of my claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A boiler-setting, comprising parallel side plates spaced from each other, and a top plate extending across the upper edges of the side plates inward into engagement with the boiler.

2. A boiler-setting, comprising parallel side plates spaced from each other for the purpose specified, the inner plate having ribs formed on its outer side to prevent warping of the plate, and a top plate extending across the upper edges of the side plates inward into engagement with the boiler.

3. A boiler-setting, comprising posts arranged at each side of the boiler, cross tie-rods extending between said posts over the boiler, and side plates supported by the posts at the sides of the boiler.

4. A boiler-setting, comprising posts arranged at each side of the boiler, cross tie-rods extending between said posts over the boiler, and side plates supported by the posts at the sides of the boiler, said plates being two at each side of the boiler and arranged side by side with a space between them, for the purpose specified.

5. A boiler-setting, comprising posts arranged at each side of the boiler, cross tie-rods extending between said posts over the boiler,

side plates supported by the posts at the sides of the boiler, said plates being two at each side of the boiler and arranged side by side with a space between them for the purpose specified, and top plates extending over the upper edges of said side plates inward into engagement with the sides of the boiler.

6. A boiler-setting, comprising posts each having an upward extension and an inwardly and upwardly projected extension, said posts being arranged one at each side of the boiler, cross tie-rods extending between the upward projections of the posts over the top of the boiler, side plates held by the main portions of the posts, and top plates engaged with the said inward and upward extensions of the posts and extending inwardly into engagement with the sides of the boiler.

7. A boiler-setting, comprising corner-posts arranged at each side of the boiler, intermediate posts arranged between the corner-posts, longitudinal tie-rods extending between the posts at each side of the boiler, a rear post, plates extending between the rear posts and the rear corner-posts and covering the rear end of the boiler, and cross tie-rods extending over the top of the boiler between the corner and intermediate posts.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SMITH W. DAVIS.

Witnesses:

J. C. MCWHORTER,

W. H. YOUNG.