

I sent you yesterday a copy of The Iron Age, containing description of boiler recently patented by myself in the principal countries of the world.

The boiler is especially intended for marine purposes. The boilers now in use on steamers require very extensive and costly repairs almost every voyage, and generally delay the steamers on account of the time necessary to complete these repairs.

The present boilers also require some six or seven hours in which to obtain working steam pressure from cold water; they also weigh about 65 lbs. per square foot Heating Surface, and cannot be built to carry with safety more than 175 lbs. steam pressure.

In my boiler I have endeavored to overcome many of these difficulties. In the first place the boiler is sectional and local defects can be removed by replacing only one small part.

This sectional feature also enables the boiler to carry any desired pressure with safety. The boiler also weighs only 25 lbs. per square foot Heating Surface, which is almost  $\frac{2}{3}$  less than the type in use at present. This feature of course enables ordinary steamers to carry perhaps several hundred tons more freight each voyage.

My boiler is also much more accessible for cleaning than the ordinary boilers which are very troublesome when the inside surfaces become coated with salt deposit.

I also sent you cut of Separator which is used for extracting water and oil from steam or ammonia gas. This is accomplished by the well-known principle of centrifugal action, in which the heavier particles are thrown towards the outside of the current, when said current is caused to revolve in transit.

After leaving Wolfville I worked under instructions in some of the most prominent machine shops and engine building establishments in Canada and the United States; after which I attended the Rhode Island Technical School. I then worked in the drafting department of several prominent machine shops in the United States, and was about four years in the drafting and sales department in New York of the largest boiler building concern in the world, where I gained considerable experience in all types of water tube boilers.

I am at present New England Manager of The Hawley Down Draft Furnace Company of Boston.

I have always had most pleasant memories of yourself and Wolfville, and will surely call and see you if I should be in that vicinity any time.

Thanking you for remembering me and for your kind interest in my welfare, I remain

Yours very sincerely,  
Richard Hutchison.