

THE STICKNEY SAFETY STEAM GENERATOR. FOR AUTOMOBILES.



THE ONLY AUTOMOBILE BOILER THAT WILL PASS THE U. S.
GOVERNMENT INSPECTION FOR STEAM VESSELS.

Can be run dry without injury, and will give a greater mileage per gallon of gasoline and water than any other. We guarantee the above and that it is superior to any. We will fit up your White or any other make steamer, and guarantee superiority and satisfaction, or no pay.

PORTLAND GARAGE,

A. G. FROST, Manager,

47-51 CROSS ST., PORTLAND, ME.

We operate the first Automobile Repair Shop in this city. With five years' experience and a full line of machinery adapted to the work, we feel that we can give you the best satisfaction, and solicit your patronage.

AUTOMOBILES BOUGHT, SOLD AND REPAIRED.

GOOD TESTIMONIALS FROM GOOD PEOPLE.

MR. HENRY R. STICKNEY, BRUNSWICK, ME., October 28, 1904.
Portland, Maine.

Dear Sir:—

I was sorry not to have seen you to-day, but in place of it, however, I had quite a surprise. Mr. Frost wished to take me out in a car fitted with your new steam boiler. Now, if I were you, I would make some move to do something with this at once. It is a very valuable thing and you ought to make a good strike with it. It is so easy to demonstrate the superiority of what you have that you will be able to find some one who will be interested in it.

My advice to you, by all means, is not to delay. I was never in a machine which took the hills so easily, and which carried so high steam pressure in going over them. I believe you have a great chance to do something with this boiler. There is nothing like it in the steam boiler line for automobiles that I know about.

Yours truly,

H. C. BAXTER.

MR. HENRY R. STICKNEY,
Portland, Me.

Oct. 17, 1904.

My dear Mr. Stickney:—

After running the "Stickney Safety Steam Generator," recently installed by you in my steam Stanhope, for three hundred miles, and finding it eminently satisfactory for automobile purposes, I desire to express to you personally my entire appreciation of its merits, and to give you a few facts such as I have been able to observe during the comparatively short time I have tested it.

It takes about ten minutes from the time the match is lighted to generate 300 lbs. of steam; this is a few minutes longer than it took with the old generator, but when one considers that up to the water level the new generator holds four gallons of water, and that at 300 lbs. the car is ready with maximum power for any speed or power requirements, while with the old generator it took a mile of sluggish running on the road in a warming up process (and if one wished to start away on an up grade the hand pump had to be resorted to quite frequently for that mile) before power was developed, one can readily see that power is developed more quickly with your generator than with the old. Personally, I get away as quickly with the new generator as with the old, for I first start the pilot light and then open my main fire, go about filling water tank, oil cups, &c., oil up my engine, and when this is accomplished I find my pressure up to the point where the fire is cut out by the diaphragm. A word as to the fire: I run on a gasoline pressure of 25 lbs., and my main fire valve is never open more than 1-16 of a turn, being simply off the seat. With the old generator the fire would frequently "pop" back in the mixing tube and ignite inside the burner, giving rise to great annoyance. I never understood the cause of this, but am now convinced that it was on account of the bottom coils getting red hot, as with the new generator and with the same burner I have not experienced this annoyance.

The generator has stood a severe test in regard to its running dry; it has repeatedly been blown off, expelling all of the water, and with the fire burning, cold water has been pumped into it with absolutely no injury.

CONSTRUCTION.

The Stickney Safety Steam Generator was designed by a man well known in the east as a builder of light marine engines and fast launches driven by steam and gas motor. He was in the best position to solve the problem for a simple, safe and efficient steam generator for automobile use, and this one has been a success from its introduction, three years ago.

It gives as great efficiency and as dry steam as the flash boiler when working at its best, but it is impossible to over superheat, thereby burning the cylinder oil and packing and injuring the engine, as is often the case with the flash boiler. It also has the reserve force to negotiate any hill without recourse to hand pumping. It has the advantage over the fire tube in giving superheated steam, and not being liable to injury by burning on account of low or no water.

The constructional idea is to get the greatest length to each individual coil practical with good steaming, thereby reducing to the fewest pieces in construction and the fewest joints.

The central drum is of heavy material and the heads are flanged and riveted, and all the material and work done to conform to the United States Government requirements in the construction of boilers for marine work. Surrounding the central drum, and leading from its top, is a down-flow superheating coil leading to the engine. Around this and connecting at top and bottom of central drum is the first generating coil. This coil is composed of one or more strands according to size of generator, the length of each strand determined by experience. Around this are identical coils, each having practically the same length strands, their multiple number increasing for each coil as the diameter increases.

We will place them in any steamer on a guarantee to increase mileage on water and gasoline. In every case this is left to the automobile owner after trial whether he accepts and pays for same or has the old plant reinstalled free. Without exception every one placed to date has been accepted, and our testimonials from well-known business men show the satisfaction given.

We have in stock three sizes, and prices are as follows: 14-inch, \$100; 16-inch, \$150; 18-inch, \$200. The first size comes all fitted to locomobile or any small runabout; second size for Prescott or Loco surrey and last size for White stanhope or small touring car. Sizes, 20-inch, 22-inch, and 24-inch, built to order.

The terms of shipment are 25% of price with order and balance subject to sight draft attached to bill of lading.

The superheating coil furnishes steam as hot as practicable to operate a slide valve engine; the exhaust does not show, even on a cool day, and yet the cylinder oil does not burn but gives perfect lubrication. I appreciate this immensely, as my engine does not consume 1-5 of the cylinder oil that it did with the old generator, and the comfort of being able to run without one's mind being constantly on cut cylinders can only be appreciated by one who has had an experience similar to my own.

On hills the power developed is steady and constant. I have tried all the bad hills in this city, and can run them all as fast as I care to ride, with the steam always up to within 25 lbs. of the point where the fire is cut out automatically, and I find that whenever the throttle is shut down the fire is cut out; this shows how rapidly the generator makes steam.

I can give as yet no definite statement relative to gasoline and water consumption but on runs I have made many times with the old generator. I find that the new uses about the same amount of gasoline, and, if anything, less water.

One of the most pleasing things to me is that hand pumping is entirely eliminated, and I can sit back and ride without "working my passage" on hills or whenever I stop for a few moments to chat or to do an errand, with the assurance that I always have a large reserve of power to overcome any condition of grade or road surface.

As you know, I'm not exactly a novice with the old generator, as I've used it three seasons, and during that time I've driven my car some ten thousand miles, and also you must know that I am competent to judge of the merits of your generator, for the fact that I've the ordinary amount of motor common sense is vouched for by the condition of my car, and especially the engine, and my very moderate repair bills.

Hoping that this new type of generator meets with the greatest success, as it surely deserves, and that the few facts that I have mentioned may prove of some interest to you, I am,

Very truly yours,

GEORGE BURNHAM.

PORTLAND GARAGE,
City.

PORTLAND, ME., Nov. 2, 1904.

Gentlemen:—

From what I have seen of your Stickney Safety Steam Generator I have no hesitation in recommending it.

It surely is able to generate ample steam under all circumstances and to take our worst hills without loss of steam pressure, and without the usual hand pumping.

Yours truly,

HOWARD WINBLOW,
Secretary Automobile Club.

MR. H. R. STICKNEY.

PORTLAND, ME., May 3, 1904.

Dear Sir:—

Having used one of your boilers (in fact, the first one you made) for nearly a year, I think it my duty to tell you that it is all you claim for it (and much more), as it will steam easier and on less fuel than any I know of. I can run a third further on a tank of water than with the old style, and it is a very rapid steamer. Take it all in all, it is worth double the old style, besides creating a feeling of safety about burning. I have had mine completely dry, with a fire under it, but it didn't damage it in the least. They are all right.

Any time I can be of service to you I shall be very glad to do so.

Yours very truly,

F. O. ROGERS.

A. G. FROST.

PORTLAND, ME., October 21, 1904.

Dear Sir:—

Since our machine has come from your place in August, it has set in our stable. But I will say that, although I haven't used it but two or three times, it has proved to be a quick steamer and has plenty of it.

Yours truly,

HAROLD T. LIBBY.

PORTLAND GARAGE, Portland, Me.

Nov. 8, 1904.

Gentlemen:—

I am pleased to say that the working of the Stickney Boiler has proved a surprise to me by the excellency of its steaming power, and would recommend it to anyone wanting a boiler that will furnish power when wanted.

Yours truly,

H. M. JONES.

PORTLAND GARAGE,

Portland, Me.

PORTLAND, ME., Oct. 29, 1904.

Gentlemen:—Having purchased one of your Stickney Safety Steam Generators about a year ago and run it continuously since, I think it proper to let you know the success I have had with it.

It will run on less water and gasoline than the old one, and I am never troubled with lack of steam.

I have repeatedly run it dry from carelessness, and have pumped it right up with cold water and have never injured it in the least. It certainly is the only generator to use in any steam car, and I will gladly recommend it to anyone who has steam troubles.

Wishing you success in this line, as you certainly deserve, I am,

Very truly yours,

FRED W. GOWEN.

PORTLAND GARAGE, City.

PORTLAND, ME., Nov. 2, 1904.

Gentlemen:—In answer to yours of even date, will say I can recommend your Stickney Safety Steam Generator, as I consider it the safest and best boiler for automobile work.

As an old steamboat engineer I appreciate the fact that the heads on central drum are flanged and riveted, and other work done to conform to the U. S. Government rules regarding the construction of boilers for marine purposes. I know of no other automobile boiler that will pass the U. S. Government inspection. There is always ample steam pressure for all purposes, and it is never necessary to hand pump on hills.

Yours truly,

CAPT. C. L. GOODRIDGE,

Mgr. Songo River Line Stea.

PERFORMANCE OF LOCO MAY 30, 1904.

With five passengers, weighing 487 lbs. total. 22 3-8 miles on 18 gallons of water; 40 1-8 miles on 4 7-10 gallons of gasoline; 8 1-2 miles per gallon gasoline. Time to Bar Mills, 17 3-4 miles in 1 hour and 20 minutes; time return, 17 3-4 miles in 1 hour and 15 minutes; 14 2-10 miles per hour. This test was with new Stickney Steam Generator.

PERFORMANCE OF SAME LOCO IN 1903.

With old boiler of fire tube pattern, furnished with loco. 16 miles on 18 gallons of water; 36 miles on 5 gallons of gasoline; 7 2-10 miles per gallon gasoline. 59 miles on 8 gallons of gasoline; 7.37-100 miles per gallon gasoline. This was done with five passengers, weighing 440 lbs. total. Time to Bar Mills, 1 hour and 45 minutes, 17 3-4 miles.

W. H. CHAPMAN.

THIS TEST WAS MADE OVER MAINE'S WORST ROADS.