a Steam. That is precisely what I maintain, & is why a Reflection assumption that does not take place when Expansion takes place. That is what I have been saying over and over again all along. I maintain that the $\frac{T-t}{T}$ rule only applies in a very limited way which I have strictly defined in one of my letters to a Steam Engineer, that it can only be applied with which Combustion to a Steam Engine. all along this seems to me that we are perfectly agreed, and just remains open. Is there some indicated test proper Measure of the Efficiency of a Steam Engine? I say and have

I have sent you a long letter from Switzerland during which I have written about $\frac{T-t}{T}$ & it is all about $\frac{T-t}{T}$

16/16

Oct 14th 89

My dear Sir,

I am glad to find that your health is better, your letters of the 11th explain me for keeping so-, assure me very much. The various assistance which you insist on the accuracy of views which I have defended is charming. Of course there is no cycle that is sent that I have invented me. It is absolutely true that there is a cycle of

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repeatedly said

That in a commercial sense and for commercial purposes it is, but that for scientific purposes it is not, and I do not care a straw whether it has invariably been called for 50 years or not. For scientific purposes the proper standard is the amount of work done by the steam in the engine. Not the amount of indicated horse power.

For example I happen to have something to do with a turbine steam engine, owing to a defect in design that engine has a back pressure in the low pressure cylinder, 7 lbs above

the condenser pressure. Thus my load is 2 lbs and the cylinder pressure should not be more than 9 lbs. The wasted 3 lbs represents a loss of 40 I.H.P. Now I know that is then be added to the actual indicated horse power the steam is really working very efficacy. The cylinder condensation and loss by radiation &c are very small and there is little or no room for improvement, but by I estimate the performance of the engine on the indicated horse power when the steam is apparently working to a considerable disadvantage.

Only the other day I was speaking on this very point to a proprietor of engineering in a midland city, and he said, "When you are estimating the economical efficiency of a

is the heat named — heat
rejected and Brosius Coefficient
for commercial purposes as
I have said the only standard
by efficiency is indicated horse
power. For scientific purposes
such as Examples as Kennedy
upon on Meters. The true
Standard is based on the
total work done in the
cylinder by each pound of
steam. I do not care whether
others hold this view or not
I shall try and teach them
to hold it before I have
done

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John Fitzgerald

16/16

Steam Engine You should carry
the diagram down to the
line of no pressure, If you
don't you can't get the true
work of the steam" That is
exactly my view, and I
have no doubt it will be
seen if you think the
matter out,

In any engine we have
two things to consider, first
the efficiency of the steam
Secondly the percentage of
power, (efficiency) which we get in
useful work. Unless you
know both you cannot know
many other things, The only
true standard of efficiency is