

WR.050208

THERMODYNAMICS of AMMONIA ENGINES

Kim, I have a wonderful old book given to me by my teenage years friend from across the street.

He was a geologist and the book he gave me (since I was a fanatically devoted science experimenter) is called "APPLIED THERMODYNAMICS" by Virgil Moring Faires, printed by the Macmillan Company, New York, 1948, Revised Edition!!!

Virgil was a professor of M.E. at T A&M.

Kim, It is a "MUST READ" for you, loaded with old drawings and photographs and well thought out mathematical analysis of all known heat engines of that day.

In it is a full color example of the "PLATEN-MUNTERS SYSTEM OF REFRIGERATION". This is a "12" stage gas absorption refrigerator, with "NO" moving parts or compressors! All it uses is a water boiler tube.

It boils Ammonia out of water. This sends the Ammonia into the upper chambers and condenses it in a hydrogen rich environment.

The Ammonia then evaporates in the cooling shelves of the refrigerator and is sent back to a "COLD WATER" chamber to be "ABSORBED" back into the water. This liberates heat! (AN IMPORTANT CLUE MY FRIEND!)

This refrigerator has so many stages (each with a specific purpose of strong and weak solution management) it looks like a chemistry lab nightmare. IT IS COMPLEX!

The old cliché applies here, "THEY DON'T BUILD THEM THIS WAY ANYMORE!"

Kim, consider the following. (Bill Nye the science guy phrase)

If we drive by mechanical force a lightweight gas into a heavy oil, The gas "MUST" liberate heat! (In the text book above, absorbing ammonia in water gives off heat!, It is the reverse of evaporation....)

This effect has no known coefficient of performance! This is do to little work being done by the ammonia re-absorption process.

Kim, what that tells me is that the Clem engine works on the same principal as the ammonia & water (hydrogen too) gas absorption refrigerator.

If this is true, then as the air is re-absorbed by the cooking oil it "WILL" liberate excess heat!

This heat can be taken away by our radiator as in the known Clem engine facts.

Once the air and oil mixture is separated in the expansion chamber, heat is absorbed from the environment, the same way as in our gas absorption refrigerator above.

Kim "ALSO" consider that "VIBRATION" from the road itself (caused by passing vehicle suction, wind and traffic noise) may be disturbing our oil and air separation chamber and causing additional separation of gas from the oil suspension. WOW....what a sneaky way to generate power (shaken pop bottle effect)

Kim, this engine has the ability to utilize extremely low level thermal reservoirs, The ground is cold and the hood of our vehicle is hot from solar energy.

The oil and air mixture is low density and can "RISE UP" inside a pipe to a higher level. This is a common method for pumping water by air bubbles in a fish tank filter attached to the side of the tank or aquarium.

Once the "AGITATED" centrifugal mixture of oil and air separates, the "CRISCO OIL" is now "HIGH DENSITY" and can flow by gravity back to the turbine chamber!

Kim, "ANYTIME" you "FORCE" air into a high density liquid, it will be able to give off heat in an otherwise inaccessible environment.

I will restate! Anytime you force heated air by its association with a dense liquid into a location its own natural convection current would keep it from entering. YOU HAVE NOW ACCESSED A COLDER RESERVOIR!

Yes, Kim it is the "BULLY" principal of a light weight gas versus a heavy falling liquid.

We are making the warm air go where it otherwise do to gravity would not enter.

Kim , all this means just one thing to me, the Clem engine uses an oil and air mixture to generate power very efficiently.

Yes Kim, I know that Mr.Clem said nothing about mixing oil and air together.

He also mentioned a 7 stage pressurizing system before re-entering his "CONVERTER".

We "CAN NOT" depend on his poor daughter (in fear of her life) giving us anymore "FREE INFORMATION".

We "MUST" test this now....I will do the work for you. You could demo it at a free energy conference under the title "MODEL CLEM ENGINE".

Kim, his daughter told Jerry Decker, she had a man in mind to reproduce the Clem engine for her. She also indicated some criminals bought the patent and are in jail for fraud.

That says just one thing to me. DO NOT WAIT, LETS GET A MODEL CLEM ENGINE FABRICATED RIGHT AWAY!!!

Let them fight it out in court. WE DO NOT HAVE TO SAY THIS IS A CLEM ENGINE TO PUT THE MODEL ON THE INTERNET OR AT A CONFERENCE!!!!!!!!!!

Kim, you are "BUSY" with your compressed air generator prototype.

I am not asking for any help from you on my Clem engine at this time.

I JUST WANT YOU TO KEEP IT IN THE BACK OF YOUR MIND....DO NOT DISMISS MY LATEST COOKING OIL ENGINE FINDINGS LIGHTLY!

I will build you a small demo unit from easily available parts.

STILL NEED CONVINCING????

Kim, get a large clear plastic screw cap bottle and fill it with tap water and some air at the top. SHAKE IT UP!!!

What do you see? The air bubbles rapidly rise to the top and return to the air space and are gone almost instantly!

NOW KIM, SHAKE UP THE SAME BOTTLE WITH CRISCO OIL OR ANY OTHER DENSE CLEAR COOKING OIL YOU HAVE IN THE KITCHEN AND YOU WILL FIND MILLIONS OF TINY BUBBLES STUCK IN THE OIL AFTER SHAKING.....

This demonstrates that cooking oil and air mix for a much longer "DURATION", then water and air.

That duration allows the air bubbles to give off heat in a unique way, no I am not referring to the luminescence effect of sound wave induced air bubbles in water imploding(cold fusion technique).

I am simply saying that if you use "WATER" instead of Crisco oil to trap these tiny air bubbles as your working fluid. There will be a far shorter period for the air bubbles to give off heat and be transported to our separation chamber for re-pressurization!

Kim , using the cooking oil as our gas dynamic matrix is the key, I am certain of that now.

I hope of all people I do not have to prove this simple fact to you, it should be obvious....PLEASE, SHAKE UP A CLEAR PLASTIC BOTTLE OF AIR AND COOKING OIL AND TIME THE DURATION OF ALL THOSE MICRO BUBBLES, IN COMPARISON TO SHAKING WATER AND AIR UP IN THE SAME SCREW CAP CLEAR PLASTIC BOTTLE.....

Kim, its like running your automobile off of a giant bottle of soda pop!

Obviously there is no value in running a car off of carbonated water (costly and energy consuming to produce at a bottling plant).

And as my thermodynamics text states in big bold words "YOU CAN NOT USE AN ARTIFICIAL METHOD OF REFRIGERATION TO COOL A HEAT ENGINE, ONLY THE NATURAL TEMPERATURE OF A LOCAL WATER OR AIR SOURCE".

Kim, "OUR" giant shaken up Pop bottle, Clem concept derived cooking oil based car engine, "MUST" be able to re-supply the turbine chamber without using artificial refrigeration (Ice for example). It must use the air and oil mixture over and over again without evaporation loss of the cooking oil or combusting it in any way. This is a closed system, just as the gas absorption refrigerator. No one wants ammonia leaking in their kitchen....By the same token, we cannot afford to re-fill our Clem engine with 8 gallons of fresh cooking oil every 5 miles! It must be re-cycled almost indefinitely in a sealed,closed loop system.

Kim, just keep this idea in the back of your head. One day you might just be driving a car down the road with nothing more then a mixture of cooking oil and air bubbles!!! Only needing a refill of its 8 gallon reservoir every 150,000 miles....Now that's fuel economy!

As to your dream of a steam powered Repulsine, well Kim, look up that patent I mentioned in my letter from Ed Wahl III. You can see I am thinking about it too.

Kim , also remember "ANYTIME" you implode warm air between two parallel plates you generate pressure, in the same way you would if you heated air or steam in the Repulsine.

In fact Kim, if the plates are flexible and "EXPAND" during heating of water vapor or air trapped between them, that can actually "REDUCE" your rim pressure!

Kim, trust me on this, as I told you originally, the Repulsine is a paradox where pressure is derived from implosion of a warm gas between two parallel plates and not by conventional heating of steam as we see in the ancient technology referred to as Hero's wind ball or aeliopile.....

Still, you never know, perhaps even somno-luminescence is at work in the Clem engine's oil and air matrix or steam is involved in the Repulsine jet nozzles at its rim.....WE MUST KEEP THEORIZING AND TESTING THESE CONCEPTS!

Im glad you are so close to testing your compressed air prototype. Joule did some closed system, valve connected, pressure and vacuum bottle experiments at 22 atmospheres. He found absolutely "NO" change in temperature of the water bath the bottles were in , after he opened the valve and allowed the bottles to reach 11 atmospheres together at equilibrium.

Kim, you must understand that a "CLOSED SYSTEM" exhibits dramatically different characteristics to the cooling effect of allowing a pressure bottle to vent into the atmosphere.

I simply do not know, you are removing work from you compressed air system, so it is "DIFFERENT" from Joule's original classic compressed air and vacuum bottle flow transfer experiment, that yielded no change in temperature of the surrounding water bath.

Kim , I "ALSO" make the claim that the "CLOSED SYSTEM" Clem cooking oil engine I have designed, generates power without being connected to the external environment (only a P.T.O. shaft as illustrated).Yes, it must absorb and give off external heat of course. I refer once more to the gas absorption closed cycle refrigerator (it must be sealed, ammonia is toxic!)..

Therefore Kim, 'WE ARE BOTH UP AGAINST IT, UNTIL WE CONCLUSIVELY PROVE OUR WORKING PROTOTYPES!!!

The "REPULSINE" is open system, as well as my pyromagnetic convection flow engine. My Bessler wheel also uses an open system approach.

Kim when "I" refer to a closed system, I do not mean a thermally Isolated one. I "ONLY" mean that the system has no way to leak into the surrounding environment or intake external gases or liquids...It is Permanently "SEALED"....until maintenance is required.

A final warning we must "BOTH" be acutely aware of.

Kim, if I have a 1,500 foot penstock carrying water to a turbine house from a reservoir high in the mountains and I allow the water jet to spin a Pelton wheel. I could power a small town!!!

BUT KIM, IF I FOOLISHLY ATTEMPT TO PUMP THE WASTE WATER OF MY 1,500 FOOT PENSTOCK PIPE BACK UP TO ITS ORIGINAL RESERVOIR HIGH IN THE MOUNTAIN, THE POWER OUTPUT WILL BE "ZERO!"

Therefore a closed loop system, whether it uses compressed air or compressed air in water or oil is worthless, without a careful understanding of the thermal energy transfer in the closed loop!

The Quasi-turbine uses warm water to pre heat the compressed air before it enters the Quasi-Turbine. If not the turbine will "FREEZE UP"!!!

But Kim, this is an "OPEN" externally exhausted compressed air power generation system!

Joule found "NO" change in heat of the external water bath as the 22 atmosphere gas vented into the vacuum bottle.

Kim, you asked me one other thing, what can we do with the cold air from a compressed air system like the one you are using. We can use a simple displacement type Stirling engine. That is well documented and operates off of low heat differentials. We can also use my air bubble and oil absorption Clem engine, in the waste cold cycle of your machine.

I still do not fully understand your compressed air technology, I am rooting for you just the same.

We must break the strangle hold of fossil fuels like "BIG OIL" and radioactive wastes of "BIG NUCLEAR" in this country, before they pollute and destroy everything our democracy has built over the last 200 years!!!

Let us pray a higher power also has this goal in mind and will help us finish our work.GOOD LUCK ON THE PROTOTYPE!!!

P.S. Kim, another idea you have not considered is placing a cistern on your roof and allowing rain water to fall into a large tank. As the water falls into the tank, a large submerged dome inside it collects compressed air from the water bubbles driven into it by the water stream. Kim consider carefully, If the rain water drives the bubbles into the submerged dome "COLD" and the next day the dome is heated in the sunlight, the compressed air delivered from the dome is even greater!!! THINK ABOUT IT....rain water can make free compressed air, the Pharaoh's pump people confirmed this simple fact years ago, from water fall experiments. Mr.Bailey