

## LETTERS FROM GRANDPA # 9

Dearest Grandchild,

Today's letter will deal with the concept of "perpetual motion". I'm sure this will be boring to some of you, but please indulge this old man who loves you very much. The Wikipedia Encyclopedia states under the heading "Perpetual Motion Machines". *"The history of perpetual motion machines dates back to the Middle Ages. For millennia, it was not clear whether perpetual motion devices were possible or not, but the development of modern theories of thermodynamics has shown that they are impossible. Despite this, many attempts have been made to construct such machines, continuing into modern times. Modern designers and proponents often use other terms, such as "overunity", to describe their inventions."*

Please note the underlined sentence in the encyclopedia stating that "the development of modern theories of thermodynamics has shown that they are impossible".

Another encyclopedia, The Encyclopedia Britannica correctly refers to the "laws" of thermodynamic, not "theories". Note! *"Perpetual motion, the action of a device that, once set in motion, would continue in motion forever, with no additional energy required to maintain it. Such devices are impossible on grounds stated by the first and second laws of thermodynamics."*

A scientific "law", as you know, differs from a "theory". Laws are discovered by experiments that are demonstrable and repeatable. So the "laws of thermodynamics" are in a different category from the "theory" of evolution. The word "thermodynamics" literally means "heat power". The laws of thermodynamics were discovered during the days of the Industrial Revolution when men experimenting with machines. These researchers discovered that no machine is 100% efficient. Every observable and repeatable experiment confirms this fact. Hence the "laws" of thermodynamics force us to conclude that perpetual motion is scientifically impossible.

- The first law of thermodynamics is: *"Energy can be changed from one form to another, but it cannot be created or destroyed. The total amount of energy and matter in the Universe remains constant, merely changing from one form to another. The First Law of Thermodynamics (Conservation) states that energy is always conserved. It can be converted from one form to another, but it cannot be created or destroyed."*
- The second law of thermodynamics is: *"in all energy exchanges, if no energy enters or leaves the system, the potential energy of the state will always be less than that of the initial state. This is also commonly referred to as entropy. A watch spring-driven watch will run until the potential energy in the spring is converted, and not again until energy is reapplied to the spring to rewind it."*

Among other things, these laws prove that the earth cannot be infinitely old. Since there is no such thing as perpetual motion we must conclude that our earth is not in an eternal orbit. Neither

is any other motion in our universe eternal. Science forces us to conclude that the universe had a beginning, and will also have an ending. I believe that in the beginning God created the heavens and the earth, and that like a gigantic watch the universe is now running down and wearing out. The Sydney Morning Herald noted on Sept. 26, 2013: *“Don't forget to set your clocks ahead two thousandths of a second before you go to sleep tonight. Same thing goes for bedtime tomorrow. And every day after that, because that is how much slower the Earth turns on its axis each day now than it did a century ago.”* While scientific estimates may vary on the rate of entropy, it is a scientific fact that the earth is slowing down. The earth is not in an eternal orbit about the sun. Just as man made satellites have a finite life span, so does the earth.

The space age began on October 4, 1957 with the launch of the first artificial satellite, Sputnik 1. This tiny spacecraft lasted only three months in orbit. Finally, even the small amount of friction in space was enough to bring the satellite back to the atmosphere of earth where it burned into ashes. While other satellites may last longer, not one of them will last forever. It is scientifically impossible.

While the “laws of thermodynamics” are in conflict with the “theory of evolution” they are not in conflict with the Bible. The fact that we have matter in the universe, and that matter is not now being created or destroyed, argues for a “beginning” when matter was created. Creation, of course, is clearly taught in the Bible. The second law is also consistent with the Scriptures. Our whole universe is groaning and travailing (Rom. 8:22). It is not speeding up and getting better, it is running down and wearing out.

The word “entropy” literally means to “turn in”. As we have already mentioned, satellites eventually “turn in” and burn up. Evolution, by comparison, comes from the Latin “evolvere” and literally means to “unroll”. Scientific “laws” indicate “turning in” while the “theory” of evolution postulates “rolling out”. The “theory” of evolution is therefore diametrically opposed to the “law” of entropy. Instead of the universe turning in, running down, and wearing out like science teaches, this “theory” proposes just the opposite. You can easily observe that order does not come from chaos by accident. New cars wear out, new clothes wear out, new computers wear out, and we will wear out too. In fact, the whole of creation is wearing out. The house where Granny and I live is over 100 years old. We have painted and repaired for many years, but it is a losing battle. The same is true of our earthly bodies. We have both had major surgeries but this too is a losing battle. Some day we will all die and our bodies will return to dust. This is why I want you to look beyond the temporal nature of earthly things to our eternal home in heaven. While the body returns to dust, the spirit returns to God (Ecclesiastes 12:7).

God not only created the heavens and the earth, He created you! As I have said before, God loves you even more than I do. He wants you to be in heaven with Him forever. So do I! In my last letter I referenced these verses, but since you might have been too busy to look them up, here they are for your prayerful consideration. King David wrote by inspiration:

**“I praise you because I am fearfully and wonderfully made; your works are wonderful,**

**I know that full well. My frame was not hidden from you when I was made in the secret place. When I was woven together in the depths of the earth, your eyes saw my unformed body. All the days ordained for me were written in your book before one of them came to be.” (Ps 139:14-16)**

Many years ago a preacher named Alexander Campbell debated an unbeliever named Robert Owen. Owen bragged that he had no fear of death. Campbell asked if he had any hope in death. When Owen said “no,” Campbell pointed to an ox and reminded the unbeliever that he had reduced himself to the level of an animal. The ox had no fear of death either, but neither did he have any hope. Grandpa has lots of hopes and dreams for you.

While the world is wearing out, the church of Jesus Christ is not! The reason, of course, is that God is investing new energy in the church every day. Like a little stone quarried without the use of human hands, the church is growing into a huge mountain that will fill the earth (Daniel 2:35). The Gospel is described as the “power of God unto salvation” (Romans 1:16). This Bible word for “power” is “dunamis” from which we get our English words “dynamite” and “dynamo”. The Holy Spirit is like a perpetual “river” that energizes believers (John 7:37 - 39).

The history of man involves a search for power. We progressed from using a lever and crude machines to harnessing animals. Then we discovered water wheels and sails to harness the power of nature. Next we harnessed steam and developed gasoline engines and jet turbines. From an earthly point of view, harnessing nuclear energy is the ultimate source of energy.

But we are not limited to an “earthly point of view”. The power of God is greater than the combined power of all the atoms in the universe. The Scriptures teach that Christ not only created all things, but “**in Him all things hold together**” (Colossians 1:17). When I was a boy we would put a fire cracker called a cherry bomb under a tin can and blow it to pieces. The shrapnel resulted from the simple fact that the power of the cherry bomb was greater than the strength of the can. There is a reason the powerful atoms in our universe are not exploding and blowing us to pieces. Our all powerful God is holding all of this energy together.

As you search for power, do not forget about God. He is all powerful. Please ponder these words from the prayers of the Apostle Paul: **“For this reason I kneel before the Father, from whom his whole family in heaven and on earth derives its name. I pray that out of his glorious riches he may strengthen you with power through his Spirit in your inner being, so that Christ may dwell in your hearts through faith. And I pray that you, being rooted and established in love, may have power, together with all the saints, to grasp how wide and long and high and deep is the love of Christ, and to know this love that surpasses knowledge — that you may be filled to the measure of all the fullness of God. Now to him who is able to do immeasurably more than all we ask or imagine, according to his power that is at work within us, to him be glory in the church and in Christ Jesus throughout all generations, for ever and ever! Amen.”** (Eph 3:14-21)

Archimedes' work with levers caused him to remark: "Give me a place to stand on, and I will move the Earth." Even his dream of such a long lever, however, is primitive by comparison with the power of God. God is a very present help in time of trouble (Psalm 46:1), please never be so absorbed in the things of earth that you forget about the power of God.

I love you,

Grandpa Boyce