APOLOGY OF THE PENCIL

I, PENCIL

MY FAMILY TREE UPDATED, AS TOLD TO

Antal E. Fekete

Demand for pencils in the Stone Age

I related my family tree to Leonard E. Read back in 1958 (transcript appended at the end of this update). I offer my belated apology to gold miners and the makers of their mining equipment for not mentioning them in my genealogy. I proudly acknowledge that in this genealogy, just as in that of every economic good, gold inevitably enters, directly or indirectly, through the exchange of semi-finished goods as they are being handed over by the producer of the higher to that of the lower-order goods for further processing.

There is some controversy about the question whether the gold miners and makers of their mining equipment have since dropped out of the circle of people in my genealogy after 1973, when gold was demonetized by all the governments of the world, or whether they still play a role in providing financing for the production and distribution of consumer goods. I must confess that I was fearing for my life that year. I believed that world trade would collapse in short order and civilization would be rolled back to the Stone Age where need existed neither for writing nor for pencils.

As we all know, that did not happen. Governments and bankers hijacked the gold belonging to the people, and they sequestered the social circulating capital. They took over the responsibility for financing the flow of maturing goods from the primary producer all the way to the ultimate consumer. That take-over made things worse, not better. It was the root cause of a seemingly endless series of currency crises. In spite of this, the millennium of fiat money, exiling gold from the monetary system forever, was declared and hailed.

That did not diminish my worries; it increased them. I knew that paper is paper and gold is gold. Banking without gold is like production without capital (or maintenance of capital). When the original producer's goods wear out, producing activity ceases and civilizations fall back to the Stone Age, unawares of what had hit them. This process of wearing out capital is of course not instantaneous. It could take decades. But when capital erosion is complete, collapse of civilizations occurs as surely as night follows the day. The nexus between cause and effect may well be obscured, but can never be over-ruled.

Falling interest rates, the destroyer of capital

It seems to me that the final stage of erosion of capital is occurring right now. A synopsis of what has taken place during the past four decades is as follows. First, interest rates were destabilized and rising rates destroyed the major part of productive capital of the producers as well as the financial capital of the banks. To understand this you don't have to know more than the bare fact that rising rates decimate the market value of bonds and that of all other sources of fixed income.

In 1980 the Fed reacted by pushing the rate of interest all the way down from 22 percent to virtually 0. It took three decades to accomplish this feat. In doing so the Fed destroyed the remaining capital of producers as well as that of the banks. The truth of this has not been recognized, however. In fact, the thesis that a falling interest-rate structure is lethal to the economy has been dismissed out of hand. The argument goes that if rising interest rates decimate bond values, then falling ones enhance them, thus enhancing wealth. There is no need to

argue the point that falling interest rates raise the present value of a future income stream. The trouble is that the firm must be around to benefit from it.

Most of them won't be. They will be wiped out for reasons of insufficient capital. Accounting rules do not admit the treatment of cash receivable as cash in the till. The fact is that as long as the regime of falling of interest rates was continuing, no one in his right mind would add to his investments, otherwise they were doomed by the further fall.

Most observers fail to see the danger in either the upswing or the downswing in the rate of interest and think that, in fact, the downswing is beneficial. Yet a *falling interest rate structure inevitably destroys capital*, whether seen by the observers or not.

Although we cannot be certain about it, the rate of interest has been effectively killed by "monetary policy" and is not likely to rise from the dead, ready for another run. Even if it is, and another devastating swing of the wrecker's ball is coming, that will administer the *coup de grâce* to productive and financial capital.

Real Bills Doctrine

My forgetfulness in ignoring gold miners and the makers of gold mining equipments in my family tree was due to the extremely low cost per unit of product of financing production and movement. Since I am in very high consumer demand, second only to food and clothes, my production and distribution is not financed through savings. It is financed through drawing or endorsing real bills against the shipments of my ingredients by the higher to the lower-order producer.

The difference in the method of financing is a most important distinction. My distant cousin the typewriter is not in such a high consumer demand (in fact, right now it is in danger of going the way of the dodo bird). Its production is financed through savings as real bills drawn on the typewriter and the movement of its ingredients 'could not fly'. The movement of those ingredients as they

change hands between the producers of higher and lower-order goods was financed directly by paying cash, not by drawing bills. For this reason, gold miners were much more prominently represented in the family tree of the typewriter. The contribution to the demand for gold attributable to the cost of financing production and distribution of typewriters was sizeable.

In my case, cash entered the chain of production and distribution but once: when the ultimate consumer bought his pencil from the retail merchant. All other exchanges between producers and distributors of higher and lower order goods were financed through billing or discounting real bills. The claims arising out of all these bills were settled from the cash payment for the pencil at the end of the supply chain. We may visualize this as the single gold coin released by the consumer extinguishing all claims arising during the long journey of my ingredients from the primary producer to the shelf of the retail merchant. Indeed, the bill market was the *clearing house* of the gold standard. The contribution to the demand for gold attributable to the cost of financing my production and distribution, and that of billions of my brothers, was negligible. (Of course, this is no excuse for my oversight in ignoring the gold miners in my family-tree).

"I have told you so: gold is deflationary"

I was flabbergasted at hearing the proposal, promoted by the Mises Institute, that after the present banking collapse they should introduce the so-called 100 percent gold standard. This means a gold standard *without* real bills circulation. A gold standard bereft of its clearing house, the bill market, is brain dead. It would be a walking zombie — just as it was after Britain had returned to it in 1925.

People at the Mises Institute should be careful about what they wish for, because they might just get it. If they had understood what I had to say in my genealogy published in 1958, they would have never proposed such a hare-

brained scheme as the 100-percent gold standard. As I have explained to Leonard, I am a simple and humble product, and neither myself, nor any of my ingredients represent high value. Yet there are millions of transactions whereby my ingredients are passed along the supply chain from one hand to the next. If you multiply the modest value of my ingredients with the number of transactions which is in the millions, and you have to pay gold to complete every one of those transactions, then you make such inroads into the stock of gold that trade and production will soon seize up and, to end insult to injury, you have to face the enemies of gold standard gleefully teasing you: "See, I have told you so: gold is deflationary."

The payments system would become inelastic. The peak season to buy pencils is late August and early September. It is highly questionable that the 100 percent gold standard (so-called) could meet the extra demand for purchasing media to buy school supplies, including pencils. Furthermore, such an imaginary monetary system would be a fetter upon any further refinement of division of labor, as it would require more gold, even without an increase in pencil consumption, to finance the entry of extra producers the chain of semi-finished products. The 100 percent gold standard (so called) would be the end of all further improvement of production equipments and methods.

Adam Smith was no fool

If Adam Smith has done nothing else but contributing the "invisible hand" metaphor to our language, his place in the history of economics would be secure. But Adam Smith has contributed another metaphor as well, perhaps less well-known: that of the "waggon way in the sky".

It is the mental image of financing production and distribution of consumer goods in most urgent demand through real bill circulation. This image is not fanciful. It has been tried in practice and was found to be working beautifully — long before jet cargo planes were put into service. The idea is simple: just as air transport could free up land presently used as wagon ways,

that could be put back into agricultural production, the same way real bills circulation would free up gold and make it available for long-term credit and investments that could not be financed through the bill market.

Real bills should have been allowed to make a come-back at the end of World War I. But the victors were not interested in *multilateral* trade. They felt more secure under the regime of *bilateral* trade offering, as it was, a ready shelter for the slow paper of the inefficient producers. We should remember that it took more than half a century for world trade to outstrip its own record chalked up in 1913, because the ban on real bills circulation and multilateral trade was an insurmountable setback.

Banning real bills and multilateral trade *is* coercion. What kind of free market is that which cannot stand the competition of spontaneous real bills circulation? The free market aspect of real bills should shake up politicians and economist from their lethargy. It is all very well to overthrow the tyranny of legal tender paper money that outlawed gold. But it would be preposterous to replace it with a new tyranny outlawing the circulation of real bills.

I told Leonard in 1958 that if you contemplate the miraculous nature of my existence and the fact that knowledge and know-how cannot reside in one single individual to make my creation possible, then you can help save the freedom mankind is so unhappily losing. The bill market also represents knowledge and know-how that cannot reside in one single individual for the stronger reason. Nor can it reside in a computer or a network of computers.

The bill market flows and ebbs with consumer demand under the signaling system of the discount rate, sending an urgent message to all producers about the state of mind of the sovereign consumer and his propensity to consume. The price system is far too sluggish for that purpose. Change in the taste and preferences of the consumer requires immediate action.

But there is a second reason, too, why the bill market is all-important. The retail merchant is the arbitrageur between social circulating capital and the bill

market. He keeps not only an inventory of consumer goods on his shelves; but also a portfolio of real bills drawn on other retail merchants who work with a higher productivity. If the discount rate rises, he sells out marginal merchandise without restocking and buys bills on others. That way he will participate in their earnings whenever his own business slackens. At the first sign of a reversal he will sell bills from portfolio at a profit and restock his inventory from the proceeds.

Preserving freedom, preserving free markets means, among other things, the preservation of real bills and the regime of multilateral trade that they represent. Gold is what makes the world go round — but it must be used with the greatest care, sparing it from frivolous uses by pig-headed and ham-handed "experts".

I, PENCIL

MY FAMILY TREE AS TOLD TO

Leonard E. Read ¹

I am a lead pencil—the ordinary wooden pencil familiar to all boys and girls and adults who can read and write.²

Writing is both my vocation and my avocation; that's all I do.

You may wonder why I should write a genealogy. Well, to begin with, my story is interesting. And, next, I am a mystery — more so than a tree or a sunset or even a flash of lightning. But, sadly, I am taken for granted by those who use me, as if I were a mere incident and without background. This supercilious attitude relegates me to the level of the commonplace. This is a species of the grievous error in which mankind cannot too long persist without peril. For, as a wise man observed, "We are perishing for want of wonder, not for want of wonders."

I, Pencil, simple though I appear to be, merit your wonder and awe, a claim I shall attempt to prove. In fact, if you can understand me—no, that's too much to ask of anyone — if you can become aware of the miraculousness which I symbolize, you can help save the freedom mankind is so unhappily losing. I have a profound lesson to teach. And I can teach this lesson better than can an automobile or an airplane or a mechanical dishwasher because — well, because I am seemingly so simple.

Simple? Yet, not a single person on the face of this earth knows how to make me. This sounds fantastic, doesn't it? Especially when it is realized that there are about one and one-half billion of my kind produced in the U.S.A. each year.

Pick me up and look me over. What do you see? Not much meets the eye — there's some wood, lacquer, the printed labeling, graphite lead, a bit of metal, and an eraser.

Just as you cannot trace your family tree back very far, so is it impossible for me to name and explain all my antecedents. But I would like to suggest enough of them to impress upon you the richness and complexity of my background.

My family tree begins with what in fact is a tree, a cedar of straight grain that grows in Northern California and Oregon. Now contemplate all the saws and trucks and rope and the countless other gear used in harvesting and casting the cedar logs to the railroad siding. Think of all the persons and the numberless skills that went into their fabrication: the mining of ore, the making of steel and its refinement into saws, axes, motors; the growing of hemp and bringing it through all the states to heavy and strong rope; the logging camps with their beds and mess halls, the cookery and the raising of all the foods. Why, untold thousands of persons had a hand in every cup of coffee the loggers drink!

The logs are shipped to a mill in San Leandro, California. Can you imagine the individuals who make flat cars and rails and railroad engines and who construct and install the communication systems incidental thereto? These legions are among my antecedents.

Consider the millwork in San Leandro. The cedar logs are cut into small, pencil-length slats less than one-fourth of an inch in thickness. These are kiln dried and then tinted for the same reason women put rouge on their faces. People prefer that I look pretty, not a pallid white. The slats are waxed and kiln dried again. How many skills went into the making of the tint and the kilns, into supplying the heat, the light and power, the belts, motors, and all the other things a mill requires? Sweepers in the mill among my ancestors? Yes, and included are the men who poured the concrete for the dam of a Pacific Gas & Electric Company hydro-plant which supplies the mill's power!

Don't overlook the ancestors, present and distant, who have a hand in transporting sixty carloads of slats across the nation from California to Wilkes-Barre!

Complicated Machinery

Once in the pencil factory — \$4,000,000 in machinery and building, all capital accumulated by thrifty and saving parents of mine — each slat is given eight grooves by a complex machine, after which another machine lays leads in every other slat, applies glue, and places another slat atop — a lead sandwich, so to speak. Seven brothers and I are mechanically carved from this "wood-clinched" sandwich.

My "lead" itself — it contains no lead at all — is complex. The graphite is mined in Ceylon. Consider these miners and those who make their many tools and the makers of the paper sacks in which the graphite is shipped and those who make the string that ties the sacks and those who put them aboard ships and those who make the ships. Even the lighthouse keepers along the way assisted in my birth—and the harbor pilots.

The graphite is mixed with clay from Mississippi in which ammonium hydroxide is used in the refining process. Then wetting agents are added such as sulfonated tallow — animal fats chemically reacted with sulfuric acid. After passing through numerous machines, the mixture finally appears as endless extrusions — as from a sausage grinder — cut to size, dried, and baked for several hours at 1,850 degrees Fahrenheit. To increase their strength and smoothness the leads are then treated with a hot mixture which includes candelilla wax from Mexico, paraffin wax, and hydrogenated natural fats.

My cedar receives six coats of lacquer. Do you know all of the ingredients of lacquer? Who would think that the growers of castor beans and the refiners of

castor oil are a part of it? They are. Why, even the processes by which the lacquer is made a beautiful yellow involves the skills of more persons than one can enumerate!

Observe the labeling. That's a film formed by applying heat to carbon black mixed with resins. How do you make resins and what, pray, is carbon black?

My bit of metal — the ferrule — is brass. Think of all the persons who mine zinc and copper and those who have the skills to make shiny sheet brass from these products of nature. Those black rings on my ferrule are black nickel. What is black nickel and how is it applied? The complete story of why the center of my ferrule has no black nickel on it would take pages to explain.

Then there's my crowning glory, inelegantly referred to in the trade as "the plug," the part man uses to erase the errors he makes with me. An ingredient called "factice" is what does the erasing. It is a rubber-like product made by reacting rape seed oil from the Dutch East Indies with sulfur chloride. Rubber, contrary to the common notion, is only for binding purposes. Then, too, there are numerous vulcanizing and accelerating agents. The pumice comes from Italy; and the pigment which gives "the plug" its color is cadmium sulfide.

No One Knows

Does anyone wish to challenge my earlier assertion that no single person on the face of this earth knows how to make me?

Actually, millions of human beings have had a hand in my creation, no one of whom even knows more than a very few of the others. Now, you may say that I go too far in relating the picker of a coffee berry in far off Brazil and food growers elsewhere to my creation; that this is an extreme position. I shall stand by my claim. There isn't a single person in all these millions, including the president of the pencil company, who contributes more than a tiny, infinitesimal

bit of know-how. From the standpoint of know-how the only difference between the miner of graphite in Ceylon and the logger in Oregon is in the *type* of know-how. Neither the miner nor the logger can be dispensed with, any more than can the chemist at the factory or the worker in the oil field—paraffin being a byproduct of petroleum.

Here is an astounding fact: Neither the worker in the oil field nor the chemist nor the digger of graphite or clay nor any who mans or makes the ships or trains or trucks nor the one who runs the machine that does the knurling on my bit of metal nor the president of the company performs his singular task because he wants me. Each one wants me less, perhaps, than does a child in the first grade. Indeed, there are some among this vast multitude who never saw a pencil nor would they know how to use one. Their motivation is other than me. Perhaps it is something like this: Each of these millions sees that he can thus exchange his tiny know-how for the goods and services he needs or wants. I may or may not be among these items.

No Master Mind

There is a fact still more astounding: The absence of a master mind, of anyone dictating or forcibly directing these countless actions which bring me into being. No trace of such a person can be found. Instead, we find the Invisible Hand at work. This is the mystery to which I earlier referred.

It has been said that "only God can make a tree." Why do we agree with this? Isn't it because we realize that we ourselves could not make one? Indeed, can we even describe a tree? We cannot, except in superficial terms. We can say, for instance, that a certain molecular configuration manifests itself as a tree. But what mind is there among men that could even record, let alone direct, the constant changes in molecules that transpire in the life span of a tree? Such a feat is utterly unthinkable!

I, Pencil, am a complex combination of miracles: a tree, zinc, copper, graphite, and so on. But to these miracles which manifest themselves in Nature an even more extraordinary miracle has been added: the configuration of creative human energies — millions of tiny know-hows configurating naturally and spontaneously in response to human necessity and desire and *in the absence of any human master-minding!* Since only God can make a tree, I insist that only God could make me. Man can no more direct these millions of know-hows to bring me into being than he can put molecules together to create a tree.

The above is what I meant when writing, if you can become aware of the miraculousness which I symbolize, you can help save the freedom mankind is so unhappily losing. For, if one is aware that these know-hows will naturally, yes, automatically, arrange themselves into creative and productive patterns in response to human necessity and demand — that is, in the absence of governmental or any other coercive master-minding — then one will possess an absolutely essential ingredient for freedom: *a faith in free men*. Freedom is impossible without this faith.

Once government has had a monopoly of a creative activity such, for instance, as the delivery of the mails, most individuals will believe that the mails could not be efficiently delivered by men acting freely. And here is the reason: Each one acknowledges that he himself doesn't know how to do all the things incident to mail delivery. He also recognizes that no other individual could do it. These assumptions are correct. No individual possesses enough know-how to perform a nation's mail delivery any more than any individual possesses enough know-how to make a pencil. Now, in the absence of a faith in free men — in the unawareness that millions of tiny know-hows would naturally and miraculously form and cooperate to satisfy this necessity — the individual cannot help but reach the erroneous conclusion that mail can be delivered only by governmental "master-minding."

If I, Pencil, were the only item that could offer testimony on what men can accomplish when free to try, then those with little faith would have a fair case. However, there is testimony galore; it's all about us and on every hand. Mail delivery is exceedingly simple when compared, for instance, to the making of an automobile or a calculating machine or a grain combine or a milling machine or to tens of thousands of other things. Delivery? Why, in this area where men have been left free to try, they deliver the human voice around the world in less than one second; they deliver an event visually and in motion to any person's home when it is happening; they deliver 150 passengers from Seattle to Baltimore in less than four hours; they deliver gas from Texas to one's range or furnace in New York at unbelievably low rates and without subsidy; they deliver each four pounds of oil from the Persian Gulf to our Eastern Seaboard — halfway around the world — for less money than the government charges for delivering a one-ounce letter across the street!

The lesson I have to teach is this: *Leave all creative energies uninhibited*. Merely organize society to act in harmony with this lesson. Let society's legal apparatus remove all obstacles the best it can. Permit these creative knowhows freely to flow. Have faith that free men will respond to the Invisible Hand. This faith will be confirmed. I, Pencil, seemingly simple though I am, offer the miracle of my creation as testimony that this is a practical faith, as practical as the sun, the rain, a cedar tree, the good earth.

Footnotes

¹ First appeared in the magazine *The Freeman*, December, 1958.

² My official name is "Mongol 482." My many ingredients are assembled, fabricated, and finished by Eberhard Faber Pencil Company, Wilkes-Barre, Pennsylvania.

³ G. K. Chesterton.