LOOK FOR THE THRILL IN YOUR JOB, SAYS STEINMETZ

Romance Is Not Dead in This Century of Mechanical Achievement, and Success, Prosperity and Contentment Lie in Your Own Soul

DR. CHARLES P. STEINMETZ

The Parable of the Raindrop

ON a warm summer afternoon four drops of water lay in the bay. Responding to the blazing rays of the sun, these drops of water evaporated and ascended heavenward, where they helped to form a cloud, and then, directed by the Invisible Hand, this cloud coursed northward. One drop of water fell in a garden and helped furnish man with food. Another drop of water fell in a field of cotton and helped to give man clothing. The third drop fell in a forest and helped nourish a tree, and so helped to provide man with shelter. But the fourth drop of rain was not destined to furnish man with food, clothing and shelter but to give him heat, light and power.

So on and on it went, further northward until it dropped in the form of snow on a barren mountain peak. There it waited many months until the earth had gone half way around that same sun; and one warm day in May the sun's rays brought the message that its long stay in the mountains was at an end. Throwing off its winter clothing it again assumed the form of a raindrop and crept down the edge of the vast ice floe. Then it joined some brothers in a tiny rivulet, then tumbled into a mountain brook and soon, in a raging torrent, it sped down to the lake. There its progress was checked by a dam, but not for long. For soon, racing down the penstock, it dashed itself against the steel blades of the turbine in the power house. In that brief instant it fulfilled its destiny, for it helped to create light, heat and power.

For ages and ages this great cycle has been going: on, water, mist, clouds, rain, snow, ice, water again; up and down from arctic to tropic lands and back again—countless billions of miles. Our forefathers for thousands of years stood beside the great mountain cataracts, unable to use the priceless energy which was wasting itself in roar and mist; for, there was missing that vital link, electricity!—*From Charles M. Ripley's "Romance of a Great Factory," which Doctor Steinmetz refers to as an example of the "poetry in industry" to be found in this romantic age.*

BY CHARLES W. DUKE.

"DO WE really lack romance in this scientific and engineering 20th century? Is there not poetry in this world of ours? Or is it not rather that the ignorance of the average literary man disables him to see the romance of our age?"

Charles P. Steinmetz, the wizard of Schenectady, the electrical genius whose achievements in the realm of American industry have made him known in every corner of the world, propounded the questions. My attention had just been called to them. They appeared in the course of a preface that Doctor Steinmetz had written to a book entitled "Romance in a Great Factory," by Charles M. Ripley, picturing graphically and romantically life in the huge plant of the General Electric company at Schenectady. Dr. Steinmetz is chief consulting engineer of the company.

"To we lack romance in this age of science and super-engineering skill?" The thought struck my fancy and I determined to get a full and free answer from this great electric genius. Also, as a "writing man," my curiosity was stimulated by his statement anent "the ignorance of the average literary man that disables him to see the romance of our age." So I wanted to know further what was in the back of the Steinmetz mind on this subject.

But before tracking Dr. Steinmetz to his laboratories in the hustling city of Schenectady I finished rather avidly that book preface with its lines on romance in modern industry. Could it be that Steinmetz of Schenectady had come to the conclusion that technical skill had robbed the industrial world of romance?

Was it, indeed, possible that "before the shriek of the locomotive the wood nymphs have fled and the factory whistle has driven away the romance of the old times?"

Was it true, as some of the mournful cynics had intimated and many of the malcontents emphasized, that art and poetry no longer flourish in our cold engineering age?

Thank goodness, no, so far as Dr. Steinmetz is concerned. Here is a miracle man, with a small misshapen body but a marvelous mind, who beholds romance in the very things that touch our everyday life today and prophesies marvelous new things born out of the romantic age of industry just at hand. Here was his formal answer as I read it in that preface:

"There is more poetry, more romance in the advances which we have seen in our lifetime than ever Homer described. We navigate not only the surface of the Mediterranean but its very depths by submarine. We fly to the higher altitudes of the skies by airplane. We fling the human voice over thousands of miles across continents and oceans by telephone. Still unborn generations will hear the living voices of our musicians, bequeathed to them by the phonograph. Our great-great-great-grandchildren will seen in action our prominent men of today—recorded and everlastingly perpetuated by the cinematoscope—that new historian of these great times.

"There is romance in the life of the vigilant mariner who listens to the wireless messages from distant shores. There is tragedy in the fate of the giant battle cruiser, military engineering's greatest advance; and with more effective power than all the war engines of former ages. Manned by thousands of men, guarded by heavy steel walls, running through the storm-tossed ocean with the speed of the hurricane, she goes to meet the enemy in the nation's defense; and six minutes afterward her shattered bulk sinks beneath the waves.

"There is romance in the mighty spinning top, the steam turbine fed by the stored sunlight of prehistoric ages—ages when ferns were giant trees and our ancestors were crawling things in the slime on the shores of the lagoon—not very long ago, as time is counted in the universe. Turning at a speed which would carry it across the continent in a few hours were it not imprisoned in the power plant, some single turbines furnish mankind with electricity equaling the power of 60,000 horses. They turn night into day and propel the electric train with the speed of the gale. They actuate mines and factories and make possible wonderful materials unknown to former generations.

"In the modern factory there is far more romance and poetry than there has ever been in the history of the past; but we must be living with it to see and understand it. That is, we must be living with the men of our century and not sheltered in the dust of past ages."

Bully for Steinmetz! As one who could always get a thrill out of the steady "choo! choo!" of a locomotive and the relentless turning of her driving rods, I was keen to grasp his hand after reading those lines and say "good for you; if we had a few more like you there would be less of discontent and more of love of work these days."

Found him at last in his home on the outskirts of Schenectady; nestled down behind a bower of foliage that from the street quite obscures the combination home and workshop where the famous engineer lives. Along a shaded walk, with a bewildering array of floral beauty on every side. By the side of the house toward the rear. In sharply at a door marked "Entrance to Laboratories." Now the hum of a motor; the blue flame of a gas jet; rack on rack of test tubes. But no Steinmetz.

Now out through a side door into the yard on the other side of the house whence we had entered the premises.

"Hello, Doctor!"

Came an answering "hello" from the greenhouse that flanks the western side of this marvelous home.

And there, among the specimens of cacti, ferns and flowers imported from the jungles of Africa, the wastes of the Sahara and other remote corners of the earth, we find the great engineer. Crouched over a miniature pond, hanging on to the stem of a monster water lily, while he adjusted in place a copper wire that would support some one of his valued tropical specimens.

"Romance? Yes, I find it at every turn in life," he was saying a few minutes later, after he had climbed back on the "duck board" aisle that led through the conservatory and we had retired to a convenient bench in the corner.

Tenderly, affectionately, he fondled the leaf of a giant cactus that had come from a far desert.

"You see this cactus," he began passionately. "Back of that plant is a romantic story that should stir the imagination of every man and woman. Think of a living green thing standing out! How is it kept alive? We do not know what it was in the long ago before the deserts became arid spaces. Very likely it was some beautiful plant. And now see what has happened to it in the process of evolution! See its odd-shaped leaves and its brambles!

"Does the average person know why its 'ears' are long and thick? Does he know that this leaf was once a huge branch and that in the make-over to suit the changing conditions of climate nature made these heavy ears to carry water? Thus, while the sun scorches the sands of the desert and the traveler amid the barren waste of the desert, succumbs to the terrors of thirst, the cactus stands self-preserved by the water stored within its ugly body. Its long roots reach far into the earth like the palm tree and touch the hidden springs of cool water."

The engineer's eyes were winking fast and he was drawing hard on a cheroot.

"Do you know why the cactus has thorns?" he continued. "They were once the leaves of the plant. Through the ages they were dwarfed into thorns. Nature thus endowed plant life with the means for self-defense. The thorn repels animal life that might go ruthlessly through the forest trampling and destroying plant life. Everywhere there is evident the instinct to live; not solely among humans, as we see, but among the animals and the plants. See this."

Dr. Steinmetz snapped a twig from a tropical plant just over his head and held the severed portion up to our gaze. A milky substance poured from the end of the stem.

"Feel it," he suggested.

It was sticky, like the paste put on a torn automobile tube.

"No animal would eat of that plant," continued the scientist. "Too gummy and, furthermore, terrible to taste. Poison. Another safeguard by nature to prevent the destruction of plant life. So it goes through the whole forest or jungle.

"You see, there is a wonderful story in everything that touches our life," continued Dr. Steinmetz. "Everywhere we turn there is romance to be found. Too many of us wander along failing to see the riches of life that abound on every hand. No, there is no lack of romance in the world today; there is, very often, however, a lack of the vision necessary to behold the wonders of the age in which we are living. The wireless telephone, that projects the voice around the world; the submarine, that dives far under the sea, and the airplane, that flies miles over our heads—these things are some of the marvels of the time that attest the romantic age in which we live. The things that once were dreamed of are here. We have come to them slowly by process of evolution, hardly realizing just what we do have. If we lack romance it is because we lack the imagination to see these things; many men are too engaged in material pursuits to behold the beauty and splendor of the things that engage our life."

Doctor Steinmetz paused a moment in retrospective mood.

"And yet many of these marvelous new things have been with us for a long time," he continued. "They were here for some time before man utilized them. You know, the war produced nothing new. A good many people think the war was responsible for a lot of new marvels, of things unheard of before the war. And yet the war produced no new thing scientifically. Science has known of these things for some time; the war only revealed them to the world. There is no such thing as expediency in science. These things come gradually through long years of scientific development. There are fixed laws of nature that are invariable. So it develops that when man wants something in particular he fits science to the need in hand. Just by way of illustration: It was found early in the war that hydrogen could not be used for balloon inflation because of its inflammability. Something else had to be used. Engineers turned to helium, a non-inflamable gas. It was not necessary to 'discover' helium, for it was there all the time."

"But there are new things being developed all the time?" was asked.

"Developed, yes," answered the scientist. "Expedient man is always combining to make something new. Society's needs are constantly being supplied out of the realms of scientific research. Think of our forefathers and then of today. How many of us remember the first automobile, the first electric light, the first telephone, the first talking machine and only recently the first submarine and the first airplane?"

"Have we reached, then, the limit? How far can we go in scientific development?" I interrupted.

"By no means the limit," was his quiet answer. "We are even yet on the borderland of wonderful new things yet to come. The limit? Has there ever been any limit? It is all a matter of speculation, this question of what new things will be developed for the future. Shall we communicate with the planets? A wireless message can be flashed to Mars in four seconds, but I shall not say whether we will ever communicate with other planets, for that implies that the planets are inhabited. And are we sure they are inhabited? I am content to take things as they come and to view the wonders of the present rather than speculate on the probabilities of the future. Only we shall go forward. Progress! It is the way of the world."

After a moment—

"And why not dwell more on the glories of the present age? In the world's work of today there is more romance and poetry than ever before. He who sees only the monotony of the daily grind is looking down instead of up. Many men who work say they have not the opportunity to see it; and yet a man must be living right with his work to get the romance of it.

"Many who have the education, leisure and inclination can go back through the pages of history and regale themselves with the old romance of the world. But to the majority of working Americans their world is bound around by the things they are doing every day. They are seeing only the locomotive, the steamship, the mill or factory, the electric light, the telegraph or the automobile. But what a chance for all these working classes to delve deep into the romance of the very thing right at hand!

"Unfortunately, many do not have the vision to comprehend the realities, the beauties, the romantic side of their every-day work. They need someone to show them, to lead them."

That suggested a digression concerning Doctor Steinmetz's questions regarding the literary men of the day and their disability as regards beholding the real romance of the age.

"Yes, the writers of the day have much to do—ever so much—toward showing the workingman the romantic side of life. If the workingman fails to see the romance of industry certainly the majority of our writing men do. Why do so many of our literary lights put out the so-called 'best sellers' of modern fiction? You know the type of book I mean—the book that is forgotten as soon as it is read. Over and over again they repeat the same old story of erotic sentimentalism, running up and down the scale from hysteria to pathological degeneration. Hopelessly out of touch with the world of today, they see nothing in it except sensual erotics of the more hysterical types; and it is characteristic that even in Faust, the world's greatest drama, our literary generation dwells chiefly on the merely incidental love episode of Marguerite."

Doctor Steinmetz thinks writers today are for the most part way off the key of human endeavor. A few critics, he maintains, make the style of popular fiction, and the people clamor for it, thinking it is "the proper thing" just because so-and-so says so. He is immensely pleased with the attitude of some magazines in introducing and developing the typical American business story of commerce and industry. The average American is more interested in the things he is doing, says the scientist, than any other subject, and needs only to have it presented in attractive style for it to take precedence over any other type of literature.

"In the Iliad and the Odyssey Homer told us of the adventures of his particular age, the conquest of Troy, the wanderings of the navigator through the terrors of the ocean at the dawn of history," he explained. "Three thousand years later in his autobiography, Faust, Goethe tells us the adventures and aspirations of his particular age; from the youthful efforts to conceive the absolute—groping after the ideal of the true and beautiful—up to the satisfaction of sedate manhood, helping mankind to conquer nature and make the earth a better place in which to live.

"The great writers of the past wrote of the age in which they lived, but the writers of today are out of touch with the 20th century. There are a few exceptions; but only rarely does a Mark Twain discover a romance in a 'Tom Sawyer' or a 'Huckleberry Finn'; seldom does a Jack London give us a 'Buck' or a 'White Fang'; there has been but one poet of the engineer—Kipling—with his 'Day's Work' and 'McAndrew's Hymn.'

"That's why I welcome a book like the one my friend Ripley has written concerning our works here entitled 'Romance of a Great Factory.' The engineer-author lives with us. We are doing the world's work of today. He understands it and sees the poetry in it. He describes the adventures of the thousands of us who have gathered here in an organization mightier than any age has seen; who have contributed to the conquest of nature and by our work have helped to make the world a better place in which to live."

"And suppose we have more of the romance in industry literature—the ronance in industry literature—the business story."

"You will find men more interested in their work. They are prouder to be a part of the great scheme of life as they become more familiar with its romantic details. What is stronger than the power of thought? What can be accomplished by linking up imagination with fact! Bring out the curious, the spectacular, the sentimental and you stir up a deeper interest. Make the job more attractive and you contribute more to the production of the world's work. All this can be done by bringing out the romantic side of industrial life. And who can say in this remarkable age that the business and industry of the world are beyond the pale of romance?"

AMERICA DECLARED SAVIOR OF STRICKEN EUROPEAN NATIONS

United States Not Only Feeding Peoples of Many War-Torn Countries, but Imparting Stimulus to Help Themselves.

AMERICA is feeding the world today. Not only is she tiding England, France, Belgium, Italy and, in a measure, Germany and Austria, over the critical after-war period, but in the Balkans, through the American Red Cross and the American food commission, she has saved Macedonia, Greece, Serbia, Albania, Montenegro, Bosnia, Herzegovina and, neediest of all, Roumania.

It is a fact that the American Red Cross and the American food commission have saved hundreds of thousands of lives in the Balkans and that American doctors and nurses have arrested the progress of the typhus plague in the near east. In all but one of the Balkan countries, Roumania, the Red Cross virtually has concluded its fight against starvation and disease.

Conditions in all the Balkan states have been much improved within the last six months, according to Lieutenant-Colonel Henry W. Anderson of Richmond, Va., who is directing the work of the American Red Cross in the Balkans. This improvement has been brought about largely by the efforts of the Americans.

Moral Stimulus Imparted.

"The famine, suffering and misery brought upon this part of Europe by the war," says Colonel Anderson, "have been mitigated in a wonderful degree by the help of the American people through the Red Cross and the United States food administration.

"Not only have the Americans brought material assistance to these afflicted people, but by their presence they have given them a moral stimulus that will enable them to begin life anew and to provide means in the future for helping themselves.

"King Ferdinand of Roumania told us that but for the help received from the United States Roumania would have starved. Everybody in Europe will tell you the same thing. A picture of the situation in the Balkans today affords a striking contrast to what it was six months ago. I need cite only the case of Roumania.

Extreme Destitution Found.

"When we came there we found women and children in the streets crying for bread; patients in the hospitals praying to die. There were villages where the sole subsistence of the population consisted of cabbage roots, beets and grass. In the mountain regions many were dying of starvation. Children walked the streets naked. There was scarcely any clothing in the country. The Germans and Austrians had carried off everything.

"In the hospitals patients were crowded four and five in a bed, wrapped in bits of carpet. In the villages people dying of typhus had to sleep on hard boards. There were no beds or blankets. Many of the hospitals were without food, medicines or linen. Patients were brought in to live or die, as fate might dictate.

"Throughout the country there were serious outbreaks of smallpox, typhus and pellagra. Of every 100 infants that came into the world more than fifty died.

Situation Now Changed.

"Today this is changed. The poor are eating bread made from American flour. The babies are getting American condensed milk. The sick are being cared for. Every destitute person in the country knows that when he is hungry he can come to one of the many Red Cross canteens and get a full meal.

"Hundreds of thousands of articles of clothing have been distributed. The hospitals have been helped. Orphanages have been established. Dispensaries where the poor may receive free treatment have been opened. The spread of typhus and smallpox has been checked.

"In Greece the work of the Red Cross under the direction of Colonel Edward Capps of Princeton, N. J., has been devoted largely to the care of the people in the devastated areas of eastern and western Macedonia, the refugees in Macedonia and the Greek islands; in assisting civil and military hospitals and in combating typhus and other diseases.

Work in Greece Finished.

"The relief work in Greece is now completed. The refugees have returned to their homes, and the government is in a position to deal with their further necessities. Health conditions are good. A large part of the personnel of the Red Cross has been withdrawn, but it has been recommended that certain constructive features of the work, such as the care of orphans, nurses' training schools, child welfare, etc., be continued for the present.

"In Serbia the work has been under the direct control of Colonel Thomas W. Farnam, of New Haven, Conn., as commissioner, with offices at Belgrade, and Major John P. Carey, deputy commissioner at Salonica. Here all work has been attended by extreme difficulty owing to the fact that the entire transport system of the country had been destroyed, and the people were in a state of unusual destitution and depression.

"It is difficult to measure the effect of this work, carried on with such interest and devotion by the American people. While present conditions in Serbia are greatly improved, much remains to be done. With the harvesting of the present crops, the ordinary food supply of the country probably will be adequate. Means of distribution, however, are lacking, and there is and will continue to be a serious lack of supplementary foods for the sick and undernourished population."

Big Indian Battle in France.

"Girard's Talk of the Day" in Philadelphia Press.

The Argonne was the greatest Indian battle ever fought.

It seems that 17,000 Indians put on khaki to fight the Hun. Of course, not all of them were at the Argonne, but a great many were.

In no battle which the redskin ever waged in America to defend what he deemed his own country did he muster more than a third the number of warriors that went to fight under Pershing.

Here is the strange part of it. Our beneficent laws deny to many Indians even the right of citizenship. Thus the Indians fought for Old Glory but not for their country, because they haven't any.

There were fine young fellows—graduates of Carlisle—who lost their lives in France, to whom the allknowing white fathers in congress had not thought it worth while to grant the right to vote.

Mexican Soldiers Get Uniforms.

JUAREZ, Mex.—Every enlisted soldier and officer in the Juarez garrison is wearing a new uniform as the gift of the Mexican government in appreciation of the defense male of the town June 14-15 when Villa's men attacked.

Some of the ice fields of Greenland are half a mile in thickness.