

What Life Means to Einstein

An Interview by George Sylvester Viereck

RELATIVITY! What word is more symbolic of the age? We have ceased to be positive of anything. We look upon all things in the light of relativity. Relativity has become the plaything of the parlor philosopher.

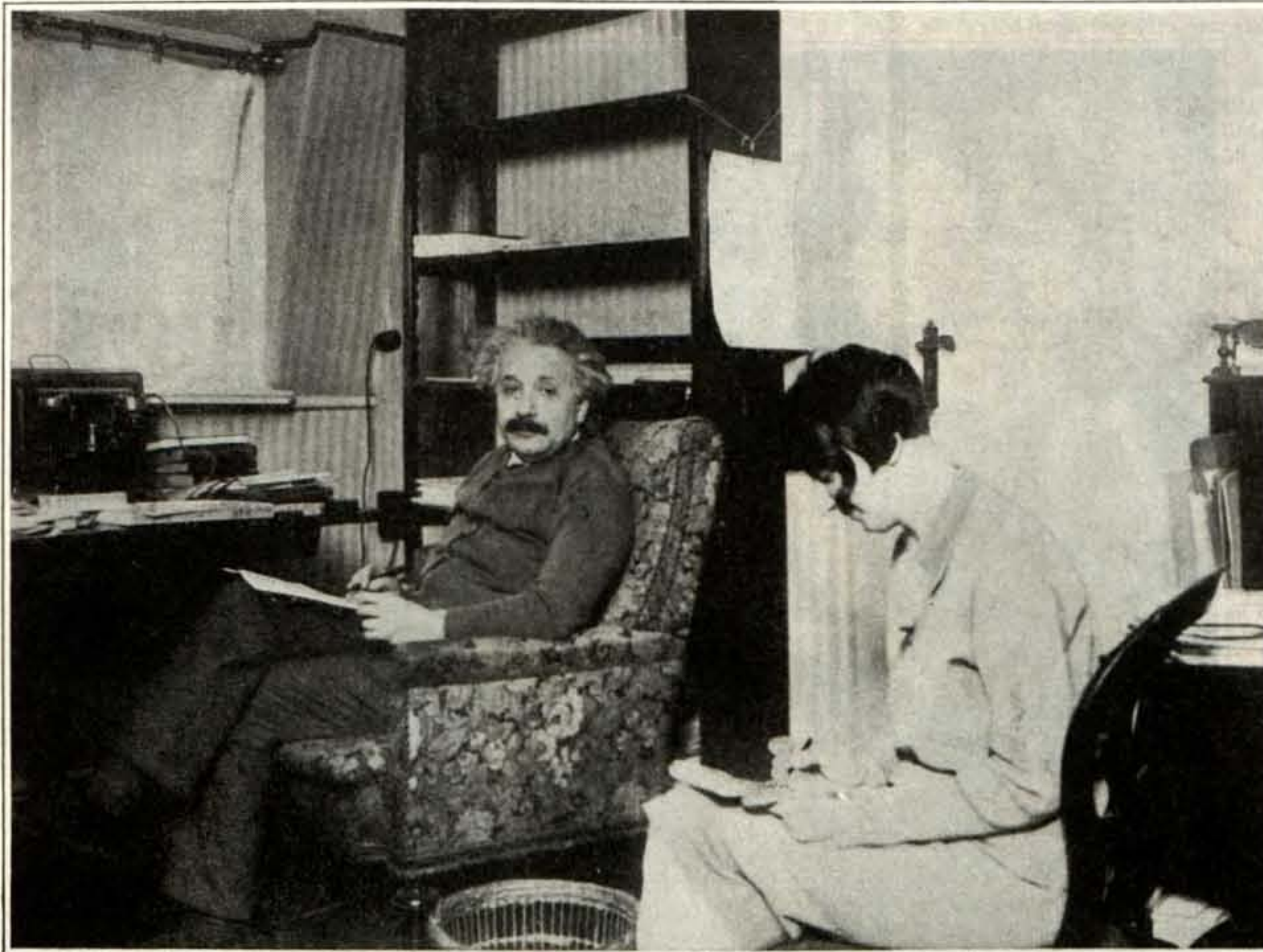
Is there any standard that has not been challenged in this our post-war world? Is there any absolute system of ethics, of economics or of law, whose stability or permanence is not assailed somewhere? Can there be any permanent value or any absolute truth in a world in which the three angles of the triangle have ceased to be equal to two right angles—in a world in which time itself has lost its meaning, in which infinity becomes finite, and the finite is lost in the infinite?

Einstein refuses to sponsor newfangled theories which draw their justification from his own assault upon the certainties of mathematics. His voice was bell-like and gentle, but his words were decisive when he smashed with one sentence the rash application of the term "relativity" to philosophy and to life.

"The meaning of relativity," he said, "has been widely misunderstood. Philosophers play with the word, like a child with a doll. Relativity, as I see it, merely denotes that certain physical and mechanical facts, which have been regarded as positive and permanent, are relative with regard to certain other facts in the sphere of physics and mechanics. It does not mean that everything in life is relative and that we have the right to turn the whole world mischievously topsy-turvy." I now remembered that some years ago, when I first met Einstein in New York, he had emphatically resisted the suggestion that he was a philosopher. "I am," he said, "solely a physicist." In spite of these denials, Einstein stands in a symbolic relation to our age—an age characterized by a revolt against the absolute in every sphere of science and of thought. He is a child of his age even if he eschews metaphysics.

A Born Teacher

LIKE Napoleon, like Mussolini, Albert Einstein has the distinction of having become an almost legendary figure in his own lifetime. No man since Copernicus, Galileo and Newton has wrought more fundamental changes in our attitude toward the universe. Einstein's universe is finite. Seen through Einstein's eyes, space and time are almost interchangeable terms. Time appears caparisoned as a fourth dimension. Space, once undefinable, has assumed the shape of a sphere. Einstein taught us that light travels in curves. All these facts are deduced from the theory of relativity advanced by Einstein in 1915.



The World-Famous Physicist and Mathematician Explaining a Problem to His Secretary While Dictating to Her

With the advent of Einstein, mathematics ceased to be an exact science in the fashion of Euclid. The new mathematics appeared in the midst of the World War. It is not impossible that in the evolution of human thought Einstein's discovery may play a greater part than the Great War. His fame may outlive Foch and Ludendorff, Wilson and Clemenceau.

Einstein, in the words of his favorite colleague, Erwin Schrödinger, explains the fundamental laws of mechanics as geometrical proportions of space and time.

I shall not attempt to expound this statement. It is said that only ten men understand Einstein's theory of relativity.

involved the subject in his mind. He studied the camera, he made various calculations, and before the evening was over, he had evolved a new method of color photography.

It is difficult for him to explain his theories when he writes an article for lay consumption. But when the inquiring layman exposes the abysses of his ignorance face to face with Einstein, the great mathematician usually succeeds in bridging the gulf with an apt illustration. Talking to him, I saw in a flash not only a fourth dimension but numerous others. Glowing with pride in my achievement, I scribbled down a sentence here and there, but afterward my notes were as difficult to interpret as the fantastic network of a dream.

"How can I form at least a dim idea of the fourth dimension?"

"Imagine," Einstein replied, slightly inclining his head with the crown of curly white hair, "a scene in two-dimensional space—for instance, the painting of a man reclining on a bench. A tree stands beside the bench. Then imagine that the man walks from the bench to a rock on the other side of the tree. He cannot reach the rock except by walking either in front of or behind the tree. This is impossible in two-dimensional space. He can reach the rock only by an excursion into the third dimension.

"Now imagine another man sitting on the bench. How did he get there? Since two bodies cannot occupy the same place at the same time, he can have got there only before or after the first man moved. He must have moved in time. Time is the fourth dimension. In a similar manner it is possible to explain five, six and more dimensions. Many problems of mathematics are simplified by assuming the existence of more dimensions."



PHOTOS FROM KEYSTONE VIEW COMPANY, INC.

Doctor Einstein Accompanying Mrs. Einstein's Piano Song With His Violin

(Continued on Page 110)

LOOK AT THE MARK

IN YOUR UNDERWEAR
—CHANCES ARE
IT'S HANES



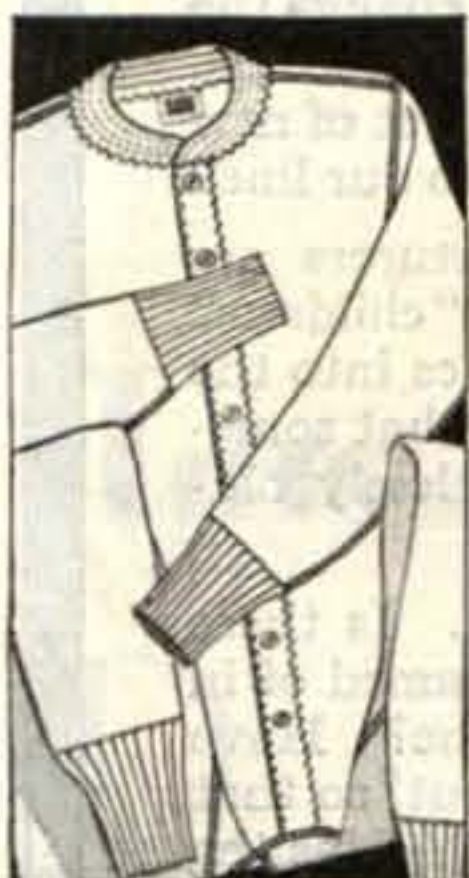
Hanes Samsonak Athletic Union Suit of madras and broadcloth with patented belt. Only \$3.



Men's Gold Label Elastic-knit Lightweights. Short sleeves, three-quarter or ankle length. Remarkable value at \$1.50. Red Label Lightweights, \$1.00.



Hanes Shirts and Shorts in smart, new styles and colors. 50c, 75c, \$1. Wide choice, real comfort.



Red Label Elastic-knit Heavyweights, \$1.25 to \$1.50. Shirts and drawers, 75c to \$1.



Merrichild Waist Suits for boys and girls, age 2 to 12, 85c. Boys', age 2 to 16, "heavies," 75c to \$1.

MILLIONS of HANES garments are demanded every year. You may never have bought a suit of underwear in your life because of a trademark. But you probably go to the store where you always get proper fit, complete comfort, long service. And very likely you get HANES.

But why take chances? Demand all that good underwear can give. Pay less than you would gladly pay for such quality. Simply make it a habit to look for the HANES trademark. It is a guarantee of constant satisfaction. It represents more than twenty-five years of experience in the manufacture of men's and boys' underwear, and an okehed product

of one of the most up-to-date groups of mills in the whole country.

The HANES Gold Label Elastic-knit Lightweight, illustrated in the center panel, is really luxurious and ideal for work or play. Like the Red Label Heavyweights and Lightweights, it is knitted, not cut, to size—and never bunches or binds.

HANES quality is not confined to men who wear one particular type of underwear. For HANES makes garments for every need and season. And every one of them is the biggest value you can buy. If your regular dealer hasn't the complete line, write direct to P. H. Hanes Knitting Co., Winston-Salem, N. C.

appropriated from the open cases a supply for future use.

Now, in the snug uniforms worn by the Waldorf-Astoria bellhop of the period, there was scant room to hide a quart of champagne. Certainly a tight-fitting blouse could not conceal an increment of such size. But those lads were resourceful, and they had known from experience that the trousers leg had possibilities beyond the average imagination. It proved easy to frisk out a bottle from a case, raise the side of one's blouse, and slide the bottle down inside the waistband. Thus laden, all that was now necessary, these youths evidently concluded, was the cultivation of a convincing air of unconcern.

However, one of the assistant managers of the establishment, who had kept a check upon bottles as they were brought into the ballroom, decided to inspect the cases in the pantry, and discovered that these had been disgorging their contents at a speed little short of amazing. He lined up for inspection the whole force of forty bellhops on duty.

On such an occasion, each lad was required to stand with eyes front, hands at side, and heels close together.

The formality proceeded without interruption until the inquisitors, narrowly examining eyes for signs of guilt and uniforms for unnatural bulges, reached the middle of the long line. Here the boy under scrutiny suddenly gave signs of concern. He had reason. Something cold was working its way down his leg. He gasped, and paled. Immediately a quart bottle of champagne crashed on the hard floor at his feet and the

wine spattered and spread in every direction. The manager started to grab the culprit, but was halted by a second crash, coming from one end of the line. Another bottle had slipped from a mooring waistband and slid down a trousers leg to destruction. A third followed suit from a boy at the end already inspected. Before the inspection was over, ten bottles in the same fashion had splashed their costly contents upon an unappreciative floor.

Of course the performance of the bell boys is not, *per se*, as the lawyers might say, evidence that people used to drink more before prohibition than now. It was just an example of what might happen when booze flowed so nearly freely in what are often called the good old days. But what I have narrated ought to prove that, whatever a comparison would determine, in some spots a good deal of liquor used to be drunk before prohibition. And certainly, no matter how many people used to take liquor into the Waldorf during its last ten years, it was small in quantity by comparison with what was consumed on the spot during and before the war. But I did not set out to make comparisons. It just makes me a bit tired when somebody tries to convince us that little drinking was done before prohibition. I am not saying a lot is not done now. What I do assert, in the light of what I have read in the records before me, is that people used to eat more before the war than they do now, and that in some places, such as the Waldorf—and there were other spots favored by the constitutional imbiber—there was a tremendous lot of drinking done, and there was real variety about it.

WHAT LIFE MEANS TO EINSTEIN

(Continued from Page 17)

I tried to secure an explanation of the fifth dimension. I regret to say that I do not remember the answer clearly. Einstein said something about a ball being thrown, which could disappear in one of two holes. One of these holes was the fifth, the other the sixth dimension.

I find it easier to understand Einstein's discovery, promulgated in 1929, which explains the universe in terms of electromagnetism. But, unfortunately, Einstein has not yet completely succeeded in convincing himself. He does not look upon the six pages that startled the world, pages immediately transmitted in facsimile across the ether, as a final conclusion.

To reach his conclusion, it was necessary for Einstein to express gravity in terms of electricity. The formula needed for this purpose is so complex, that in order to explain its meaning he was compelled to create a new system of advanced mathematics.

Einstein's new system reconciles Euclid with Riemann. It restores parallel lines, which Riemann abolished.

According to Riemann, there can be no parallel lines in a curved universe. Einstein rediscovered parallel lines with the aid of the fourth dimension. Don't ask me to explain the process in detail. It is a thing that can be told in a series of intricate equations which no human being, not even Einstein himself, can visualize.

"No man," as Einstein said to me, sitting comfortably on the couch of the sitting room of his Berlin home, "can visualize four dimensions, except mathematically. We cannot visualize even three dimensions." "But don't you," I said, "think in four dimensions?"

"I think in four dimensions," he replied, "but only abstractly. The human mind can picture these dimensions no more than it can envisage electricity. Nevertheless, they are no less real than electro-magnetism, the force which controls our universe, within, and by which we have our being."

"I am particularly interested in your new theory which proves that gravity and electricity are one. Surely no six pages ever written by the hand of any scholar have so revolutionized human thought?"

"Unfortunately," Einstein remarked, with a smile, which gave a touch of impishness to his face, "my last theory is only a hypothesis which remains to be proved. It is different with my theory of relativity, which has been confirmed by many independent investigators and may now be regarded as definitely established."

Again a smile played about his face, creeping from his eyes toward his cheeks and disappearing in his mustache, slightly darker in color than the tangled mass of hair on his head.

Mrs. Einstein, his wife and cousin, as well as his helpmate, filled our glasses with strawberry juice and heaped more fruit salad upon our plates. Einstein never takes alcohol in any form, but he cannot resist the temptation of tobacco. He smokes more cigarettes than he should, with the guilty enjoyment of a schoolboy sporting his first cigar. It thrilled me to share strawberry juice and fruit salad with the man whose name is on every lip and whose thoughts hardly anyone understands.

The close relationship between Einstein and his spouse expresses itself in the similarity of their foreheads. Their fathers were brothers and their mothers were sisters. "I am," Mrs. Einstein said quietly, "almost everything to my husband that it is possible to be." Mrs. Einstein resembles a portrait of her sister, Mrs. Gumpertz, painted some years ago by Sir John Lavery, called The Lady with the Sables.

Einstein grew up with his cousin. They were friends from the very beginning. When fate separated them early in life, Einstein married a brilliant woman mathematician, a native of Serbia. Einstein has two children by his first wife. His childhood companion, the present Mrs. Einstein, also married and became the mother of a family. Her husband died after a few years of marriage. Then some force, stronger than those which Professor Einstein imprisons in his dynamic equations, drew the two cousins together. Albert Einstein secured a divorce from his mathematical wife and married his widowed cousin. Perhaps it is a mistake for a physicist to marry a mathematician. There is,

(Continued on Page 113)

HANES UNDERWEAR

FOR MEN AND BOYS

FOR EVERY SEASON



(Continued from Page 110)

James Huneker once remarked to me, no room in one family for two prima donnas.

The storm and stress of this period has graven its mark on Einstein's features and in his heart. Einstein's relations with his former wife are still friendly. He is deeply interested in the children of his first marriage, and he has adopted as his own the children sprung from his cousin's first union.

One of his commentators, Alexander Moskowsky, calls Einstein a masculine sphinx. When Einstein speaks, his animated face reminds one somewhat of Briand, except that his features are more refined and more intellectual. If Briand espouses Pan-Europe, Einstein's vision embraces the world.

Einstein's struggles with fate have left no bitterness on his tongue. Every line of his face expresses kindness. It also bespeaks indomitable pride. Some friends and admirers learned that he had decided to build a summer house with his hard-earned savings. They offered him a princely gift of land. But Einstein shook his head. "No," he said; "I could accept a gift from a community. I cannot accept such a gift from an individual. Every gift we accept is a tie. Sometimes," he added with Talmudic wisdom, "one pays most for the things one gets for nothing."

His Attic Retreat

Although the most-talked-about scientist of the world, Einstein absolutely refuses to capitalize his reputation. He laughed when he was asked to indorse an American cigarette. The money offered for his name would have paid the expense of his summer house. Knowing that fame has set him apart from other men, he feels that he must preserve at all cost the integrity of his soul. He escapes the interviewer by every possible device. His shyness dictates and his wife abets his seclusion. Unable to check the avalanche of offers and requests which overwhelm him, he leaves most letters, even from celebrities, unanswered. But he never ignores even the smallest note from a friend. He turned down princely offers to exploit his theories and his life in a book for popular consumption. "I refuse," he said again and again, "to make money out of my science. My laurel is not for sale like so many bales of cotton."

It is not generally known that Professor Einstein is not merely an expert in the upper regions of higher mathematics but that he takes a special delight in the practical solution of technical problems, such as confront the builder of machines and the electrician. His mind almost instinctively comes to conclusions which escape the ordinary engineer. He owes his training in this practical work to the fact that he was for several years an adviser to the Swiss patent office. It is through work of this type that Einstein has built up a modest fortune which enables him to build a house for himself without relying upon the munificence of the city of Berlin.

Einstein solves the mathematical and technical problems which are submitted to him in the solitude of his attic on the top floor of the apartment house in the Haberlandstrasse, where he lives. He furnished the little attic exclusively with the rather primitive furniture which he bought many years ago with his first savings.

I expected to see queer utensils and rare tomes in Einstein's secret retreat. I should not have been surprised if his den had resembled the laboratory of a medieval magician. I was doomed to disappointment. Einstein does not emulate Doctor Faust. There are a few books, also a few pictures. Faraday, Maxwell, Newton. I saw neither circles nor triangles. Einstein's only instrument is the head. He needs no books. His brain is his library.

From his desk Einstein sees only roofs—an ocean of roofs—and the sky. Here he is alone with his speculations. Here, Pallas-like, leaped from his head the theories which have revolutionized modern science. Here no human interference impedes the

flight of his thoughts. Even his wife does not enter this holy of holies without trepidation.

Albert Einstein does not bury himself in his studies uninterruptedly. He is not a mollycoddle physically. He loves aquatic sports. His favorite toy is a sailboat with all modern technical improvements, in which he enjoys himself on the lakes and the rivers near his country place, Caputh. A towel wrapped fantastically around his head, he looks more like a pirate than like a professor of a great university. Battling with the wind, he forgets relativity and the fourth dimension. When the spray glistens in the silver of his hair and the sun strokes his cherublike features, his thoughts are far from curved time space.

Our Intellectual Democracy

A speculative thinker, a practical engineer, a sportsman and an artist, Einstein comes close to the Greek ideal of harmonious development. When he neither sails his boat nor permits his mind to meander through fourth-dimensional space, Einstein enjoys himself with his violin. While I waited at the door of his apartment, it seemed to me that I heard strains of elfin music. Perhaps it was Einstein playing. When I entered, he was wrapping up his violin for the night like a mother putting her child to bed.

Professor Einstein looks more like a musician than like a mathematician. "If," he confessed to me, with a smile that was half wistful, half apologetic, "I were not a physicist, I would probably be a musician. I often think in music. I live my daydreams in music. I see my life in terms of music."

"Perhaps," I remarked, "if you had chosen to become a musician you would outshine Richard Strauss and Schönberg. Perhaps you would have given us the music of the spheres or a fourth-dimensional music."

Einstein gazed dreamily—was it into the far corners of the room, or was it into space—that space which his investigations have robbed of infinity?

"I cannot tell," he replied, "if I would have done any creative work of importance in music, but I do know that I get most joy in life out of my violin." As a matter of fact, Einstein's taste in music is severely classical. Even Wagner is to him no unalloyed feast of the ears. He adores Mozart and Bach. He even prefers their work to the architectural music of Beethoven.



PHOTO BY J. H. COQUILLE
A Sunset Scene on the Mississippi Gulf Coast

President Hindenburg hardly ever appears in public, because he is immediately recognized wherever he goes. For the same reason, Professor Einstein refuses all invitations to the more popular restaurants. Although his world fame compels him to seek isolation, he is a sociable being. He loves quiet chats over his own dinner table with such friends as Gerhart Hauptmann and Professor Schrödinger. He reads only little. Modern fiction does not seduce him. Even in science he limits himself largely to his special field. "Reading after a certain age diverts the mind too much from its creative pursuits. Any man who reads too much and uses his own brain too little falls into lazy habits of thinking, just as the man who spends too much time in the theater is tempted to be content with living vicariously instead of living his own life."

In his own field of thought Einstein follows every development with keen interest. He has the gift of reading at a glance a whole page of equations. Einstein can master a whole new system of mathematics in half an hour.

"Who," I asked him, "are your greatest contemporaries?"

"I cannot reply to this question," Einstein answered, his eyes twinkling humorously, "without compiling an encyclopedia. I cannot even discuss intelligently the men who labor in my own field without writing a book."

"Our time," he added, "is Gothic in its spirit. Unlike the Renaissance, it is not dominated by a few outstanding personalities. The twentieth century has established the democracy of the intellect. In the republic of art and science there are many men who take an equally important part in the intellectual movements of our age. It is the epoch rather than the individual that is important. There is no one dominant personality like Galileo or Newton. Even in the nineteenth century there were still a few giants who outtopped all others. Today the general level is much higher than ever before in the history of the world, but there are few men whose stature immediately sets them apart from all others."

"Whom do you consider the most conspicuous worker in your own field?"

The Contemporary Great

"It is not fair," Einstein replied, "to single out individuals. In Germany, I consider Schrödinger and Heisenberg as being of special importance."

"Schrödinger?" I said. "What has he done?"

"Schrödinger has discovered the mathematical formula for the fact that all life moves in waves."

"And Heisenberg?"

"Heisenberg is a sovereign mathematician who has formulated a new definition of mathematical magnitudes. Then there is, of course, Planck, the exponent of the quantum theory."

I did not ask Einstein to explain the quantum theory. I know that it is even more difficult to grasp than relativity.

"Would you say that Eddington is your most brilliant interpreter?"

"Eddington," Einstein replied, "is a great mathematician, but his supreme achievement is his discovery of the physical constitution of the stars."

"Is there," I asked modestly, "anyone in America whose importance is commensurable with that of the men you have just discussed?"

"In America," Einstein replied quietly, "more than anywhere else, the individual is lost in the achievements of the many. America is beginning to be the world leader in scientific investigation. American scholarship is both patient and inspiring. The Americans show an unselfish devotion to science, which is the very opposite of the conventional European view of your countrymen. Too many of us look upon Americans as dollar chasers. This is a cruel libel, even if it is reiterated thoughtlessly by the Americans themselves. It is not true that

CANARY BOOK SENT FREE



Your canary will thank you with a song if you keep him healthy and happy with FRENCH'S Bird Seed.

Fine, selected seed blended especially for canary feeding—air-washed to free it from dust and chaff and laboratory tested. And in each package a FRENCH'S Bird Biscuit FREE.

Write for copy of our 42 page book—illustrated in colors—"The Canary—Its Care and Treatment." A helpful and authoritative guide for both the amateur canary lover and canary fancier. Sent FREE.

Your dealer has FRENCH'S Bird Seed, or can easily get it.

THE R. T. FRENCH COMPANY
18-95 Mustard St., Rochester, N. Y.

FRENCH'S BIRD SEED



Hotel Knickerbocker
CHICAGO
One of Chicago's Outstanding Hotels

Wonderful Rooms with bath \$3.00

As you step in

You'll sense the Will-to-Serve... the warm friendliness... the personal effort to make you comfortable at Hotel Knickerbocker.

Our finer accommodations are just a matter of having built larger rooms, designing them to be more cheerful... furnishing them smartly, and installing the most luxuriously comfortable beds that money could buy. Our lower rates were just a matter of fairness to the traveling public and a determination to offer a bigger hotel value. Our location was "made-to-order" for accessibility plus peace and quiet. And to all that we've added a human equation in service to make you feel content and perfectly at home here. You'll enjoy stopping at Chicago's Hotel Knickerbocker. When are you coming to Chicago?

At your service!
J. I. McDONELL, Manager

Write for illustrated literature
163 E. Walton Place
Adjoining Palmolive Bldg.

THIS YEAR . . . more cars than ever before will be equipped with the world's finest motor car heaters



An electric blower is the "heart" of the re-circulating system; delivers instant heat, regardless of radiator shutters.



The three-way switch controls the speed of the blower, thus regulating the temperature of the car.



The artistic, polished aluminum registers (for front or rear compartments) have independent shutter controls.

The Metalcraft Heater Corporation, through the acquisition and the improvement of two famous heaters (the Kelch heater and the Bovey heater), now offers a series of custom-built heaters which definitely establish new standards of heating efficiency.

Metalcraft Heaters are designed in coöperation with the same engineers who designed your car (see list below) and offer the following outstanding advantages: (1) instant heat, regardless of operating conditions or temperature; (2) circulation of clean, warm air by means of an electric blower; (3) control of the volume of heat through a 3-way electric switch on instrument board; (4) front and rear registers of artistic design. Only Metalcraft Heaters give you all these desirable features.

You'll need a heater this winter. Insist on a Metalcraft—the world's finest motor car heater—the heater that is designed especially for your car!

Metalcraft Heaters are now available through the following motor car manufacturers and their authorized distributors: Auburn—Buick—Cadillac—Chrysler—De Soto—Dodge—Franklin—Graham-Paige—La Salle—Marmon—Oldsmobile—Packard—Plymouth—Reo



METALCRAFT HEATER CORP.
GRAND RAPIDS, MICHIGAN

CANADIAN
METALCRAFT CORP., LTD.
WINDSOR, ONTARIO

Subsidiaries of
Grand Rapids Metalcraft Corp.

METALCRAFT HEATERS

THE WORLD'S
FINEST
MOTOR
CAR

the dollar is an American fetish. The American student is not interested in dollars, not even in success as such, but in his task, the object of the search. It is his painstaking application to the study of the infinitely little and the infinitely large which accounts for his success in astronomy."

"What," I asked, "have been our most outstanding accomplishments in your field?"

"America," Einstein replied, "has been especially successful in increasing our knowledge of the fixed stars. But in Holland and elsewhere there are men who have done remarkable work."

"The Americans," Einstein continued, "are idealists. Wilson, notwithstanding the collapse of his Fourteen Points, was inspired by high ideals. America entered the war for idealistic reasons, in spite of the fact that material interests were exerting the utmost pressure in the same direction."

"We are inclined"—Einstein inclined his head lightly to one side like a bird—"to overemphasize the material influences in history. The Russians especially make this mistake. Intellectual values and ethnic influences, tradition and emotional factors are equally important. If this were not the case, Europe would be today a federated state, not a madhouse of nationalism."

Born in Ulm, Germany, in 1879, educated partly there, partly in Italy and partly in Switzerland, a Swiss as well as a German citizen, Einstein regards international jealousies with the serenity with which a teacher looks upon quarreling schoolboys. In politics he leans to Socialism. He looks upon pacifism as the ultimate ideal. Poor, a Jew, a Socialist and a pacifist, Einstein carried four handicaps like millstones around the neck. Einstein conquers all obstacles, including his own shyness, by the sheer force of his cerebration. He does not reject any form of government except absolutism. He is tolerant, but by no means uncritical, in his attitude toward Russia.

"What," I inquired, "is your attitude toward Bolshevism?"

"Bolshevism is an extraordinary experiment. It is not impossible that the drift of social evolution henceforward may be in the direction of communism. The Bolshevik experiment may be worth trying. But I think that Russia errs badly in the execution of her ideal. The Russians make the mistake of putting party faith above efficiency. They replace efficient men by politicians. Their test stone of public service is not the accomplishment but devotion to a rigid creed."

"Do you believe in the German Republic?"

"Undoubtedly. The people have the right to rule themselves. Now, at least, our mistakes are our own."

We Can Do What We Wish, But —

"Do you blame the Kaiser for the downfall of Germany?"

"The Kaiser," Einstein replied, "meant well. He often had the right instincts. His intuitions were frequently more inspired than the labored reasons of his Foreign Office. Unfortunately, the Kaiser was always surrounded by poor advisers."

"It seems to me," I interjected, "that there are two parties in Germany. One blames the Kaiser for the German debacle, the other attempts to saddle the responsibility upon the Jews."

"Both," Einstein remarked, "are largely guiltless. The German debacle was due to the fact that the German people, especially the upper classes, failed to produce men of character, strong enough to take hold of the reins of government and to tell the truth to the Kaiser."

"It was partly," Einstein added somewhat hesitatingly, "the fault of Bismarck. Bismarck's philosophy of government was wrong. Besides, there was no one to succeed to the giant. Like many men of genius, he was too jealous to permit any other man to walk in his footsteps. In fact, it is doubtful if any other man could

have followed the tortuous path of Bismarckian politics.

"In a sense," he added, "we can hold no one responsible. I am a determinist. As such, I do not believe in free will. The Jews believe in free will. They believe that man shapes his own life. I reject that doctrine philosophically. In that respect I am not a Jew."

"Don't you believe that man is a free agent at least in a limited sense?"

Einstein smiled ingratiatingly. "I believe with Schopenhauer: We can do what we wish, but we can only wish what we must. Practically, I am, nevertheless, compelled to act as if freedom of the will existed. If I wish to live in a civilized community, I must act as if man is a responsible being."

"I know that philosophically a murderer is not responsible for his crime; nevertheless, I must protect myself from unpleasant contacts. I may consider him guiltless, but I prefer not to take tea with him."

"Do you mean to say that you did not choose your own career, but that your actions were predetermined by some power outside of yourself?"

The Danger of Too Much Analysis

"My own career was undoubtedly determined, not by my own will but by various factors over which I have no control—primarily those mysterious glands in which Nature prepares the very essence of life, our internal secretions."

"It may interest you," I interjected, "that Henry Ford once told me that he, too, did not carve out his own life, but that all his actions were determined by an inner voice."

"Ford," Einstein replied, "may call it his inner voice. Socrates referred to it as his *daimon*. We moderns prefer to speak of our glands of internal secretion. Each explains in his own way the undeniable fact that the human will is not free."

"Don't you deliberately ignore all psychic factors in human development? What, for instance," I asked, "is your attitude toward the subconscious? According to Freud, psychic events registered indelibly in our nether mind make and mar our lives."

"Whereas materialistic historians and philosophers neglect psychic realities, Freud is inclined to overstress their importance. I am not a psychologist, but it seems to me fairly evident that physiological factors, especially our endocrines, control our destiny."

"Then you do not believe in psychoanalysis?"

"I am not," Einstein modestly replied, "able to venture a judgment on so important a phase of modern thought. However, it seems to me that psychoanalysis is not always salutary. It may not always be helpful to delve into the subconscious. The machinery of our legs is controlled by a hundred different muscles. Do you think it would help us to walk if we analyzed our legs and knew exactly which one of the little muscles must be employed in locomotion and the order in which they work?"

"Perhaps," he added with the whimsical smile that sometimes lights up the somber pools of his eyes like a will-o'-the-wisp, "you remember the story of the toad and the centipede? The centipede was very proud of having one hundred legs. His neighbor, the toad, was very much depressed because he had only four. One day a diabolic inspiration prompted the toad to write a letter to the centipede as follows:

"Honored Sir: Can you tell me which one of your hundred legs you move first, when you transfer your distinguished body from one place to another, and in what order you move the other ninety-nine legs?"

"When the centipede received this letter he began to think. He tried first one leg, then the other. Finally he discovered to his consternation that he was unable to move a single leg. He could no longer

(Continued on Page 117)

(Continued from Page 114)

walk at all! He was paralyzed! It is possible that analysis may paralyze our mental and emotional processes in a similar manner."

"Are you then an opponent of Freud?"

"By no means. I am not prepared to accept all his conclusions, but I consider his work an immensely valuable contribution to the science of human behavior. I think he is even greater as a writer than as a psychologist. Freud's brilliant style is unsurpassed by anyone since Schopenhauer."

There was a pause, filled by more fruit salad and strawberry juice.

"Is there," I resumed the conversation, "such a thing as progress in the story of human effort?"

"The only progress I can see is progress in organization. The ordinary human being does not live long enough to draw any substantial benefit from his own experience. And no one, it seems, can benefit by the experiences of others. Being both a father and teacher, I know we can teach our children nothing. We can transmit to them neither our knowledge of life nor of mathematics. Each must learn its lesson anew."

"But," I interjected, "nature crystallizes our experiences. The experiences of one generation are the instincts of the next."

"Ah," Einstein remarked, "that is true. But it takes Nature ten thousand or ten millions of years to transmit inherited experiences or characteristics. It must have taken the bees and the ants eons before they learned to adapt themselves so marvelously to their environments. Human beings, alas, seem to learn more slowly than insects."

"Do you think that mankind will eventually evolve the superman?"

"If so," Einstein replied, "it will be a matter of millions of years."

"You don't agree with Nietzsche's sister that Mussolini is the superman prophesied by her brother?"

Again a smile illuminated Einstein's features, but it was not so jovial as before. A pacifist and internationalist, Einstein is the very antithesis of the dictator.

Although he denies the freedom of the will philosophically, Einstein resents any attempt to circumscribe still further the limited sphere within which the human will may exert itself with the illusion of freedom.

"If we owe so little to the experience of others, how do you account for sudden leaps forward in the sphere of science? Do you ascribe your own discoveries to intuition or inspiration?"

The Measles of Mankind

"I believe in intuitions and inspirations. I sometimes feel that I am right. I do not know that I am. When two expeditions of scientists, financed by the Royal Academy, went forth to test my theory of relativity, I was convinced that their conclusions would tally with my hypothesis. I was not surprised when the eclipse of May 29, 1919, confirmed my intuitions. I would have been surprised if I had been wrong."

"Then you trust more to your imagination than to your knowledge?"

"I am enough of the artist to draw freely upon my imagination. Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world."

"To what extent are you influenced by Christianity?"

"As a child, I received instruction both in the Bible and in the Talmud. I am a Jew, but I am enthralled by the luminous figure of the Nazarene."

"Have you read Emil Ludwig's book on Jesus?"

"Emil Ludwig's Jesus," Einstein replied, "is shallow. Jesus is too colossal for the pen of phrasemongers, however artful. No man can dispose of Christianity with a *bon mot*."

"You accept the historical existence of Jesus?"

"Unquestionably. No one can read the Gospels without feeling the actual presence

of Jesus. His personality pulsates in every word. No myth is filled with such life. How different, for instance, is the impression which we receive from an account of legendary heroes of antiquity like Theseus. Theseus and other heroes of his type lack the authentic vitality of Jesus."

"Ludwig Lewisohn, in one of his recent books, claims that many of the sayings of Jesus paraphrase the sayings of other prophets."

"No man," Einstein replied, "can deny the fact that Jesus existed, nor that his sayings are beautiful. Even if some of them have been said before, no one has expressed them so divinely as he."

"Gilbert Chesterton told me that, according to a Catholic writer in a Dublin Review, your theory of relativity merely confirms the cosmology of Thomas Aquinas."

"I have not," Einstein replied, "read all the works of Thomas Aquinas, but I am delighted if I have reached the same conclusions as the comprehensive mind of that great Catholic scholar."

"Do you look upon yourself as a German or as a Jew?"

"It is quite possible," Einstein replied, "to be both. I look upon myself as a man. Nationalism is an infantile disease. It is the measles of mankind."

The Standardization Peril

"How then," I said, "do you justify Jewish nationalism?"

"I support Zionism," Professor Einstein replied, "in spite of the fact that it is a national experiment, because it gives us Jews a common interest. This nationalism is no menace to other peoples. Zion is too small to develop imperialistic designs."

"Then you do not believe in assimilation?"

"We Jews," Einstein replied, "have been too adaptable. We have been too eager to sacrifice our idiosyncrasies for the sake of social conformity."

"Perhaps assimilation makes for greater happiness."

"I do not think so," Einstein replied. "Even in modern civilization, the Jew is most happy if he remains a Jew."

"Do you believe in race as a substitute for nationalism?"

"Race, at least, constitutes a larger unit. Nevertheless, I do not believe in race as such. Race is a fraud. All modern people are the conglomeration of so many ethnic mixtures that no pure race remains."

"Do you," I remarked, "look upon religion as the tie which holds the children of Israel together?"

"I do not think," Einstein replied thoughtfully, "that religion is the most important element. We are held together rather by a body of tradition, handed down from father to son, which the child imbibes with his mother's milk. The atmosphere of our infancy predetermines our idiosyncrasies and predilections. When I met you, I knew I could talk to you freely without the inhibitions which make the contact with others so difficult. I looked upon you not as a German nor as an American but as a Jew."

"I have written the autobiography of the Wandering Jew with Paul Eldridge," I told him. "Nevertheless, it so happens that I am not a Jew. My parents and my progenitors are Nordics from Protestant Germany."

"It is impossible," Professor Einstein observed, "for any individual to trace every drop of blood in his constitution. Ancestors multiply like the famous seed of corn on the chessboard which embarrassed the sultan. After we go back a few generations, our ancestors increase so prodigiously that it is practically impossible to determine exactly the various elements which constitute our being. You have the psychic adaptability of the Jew. There is something in your psychology which makes it possible for me to talk to you without barrier."

"Why should quickness of mind be only a Jewish characteristic? Is it not also possessed by the Irish and to a large extent by the Americans?"

"Americans undoubtedly owe much to the melting pot. It is possible that this mixture of races makes their nationalism less objectionable than the nationalism of Europe. Nationalism in the United States does not assume such disagreeable forms as in Europe. This may be due partly to the fact that your country is so immense, that you do not think in terms of narrow borders. It may be due to the fact that you do not suffer from the heritage of hatred or fear which poisons the relations of the nations of Europe."

"But to return to the Jewish question. Other groups and nations cultivate their individual traditions. There is no reason why we should sacrifice ours. Standardization robs life of its spice. To deprive every ethnic group of its special traditions is to convert the world into a huge Ford plant. I believe in standardizing automobiles. I do not believe in standardizing human beings. Standardization is a great peril which threatens American culture."

"Do you consider Ford, then, a menace?"

"Ford is undoubtedly a man of genius. No man can create what Ford has created, unless the life force has provided him with conspicuous gifts. Nevertheless, I am sometimes sorry for men like Ford. Everybody who comes to them wants something from them. Such men do not always realize that the adoration which they receive is not a tribute to their personality but to their power or their pocketbook. Great captains of industry and great kings fall into the same error. An invisible wall impedes their vision."

"I am happy because I want nothing from anyone. I do not care for money. Decorations, titles or distinctions mean nothing to me. I do not crave praise. The only thing that gives me pleasure, apart from my work, my violin and my sailboat, is the appreciation of my fellow workers."

"Your modesty," I remarked, "does you credit?"

"No," Einstein replied with a shrug of his shoulders. "I claim credit for nothing. Everything is determined, the beginning as well as the end, by forces over which we have no control. It is determined for the insect as well as for the star. Human beings, vegetables or cosmic dust, we all dance to a mysterious tune, intoned in the distance by an invisible player."

Mrs. Einstein on Guard

Einstein rose and excused himself. It was nearly midnight. We had been talking for nearly three hours.

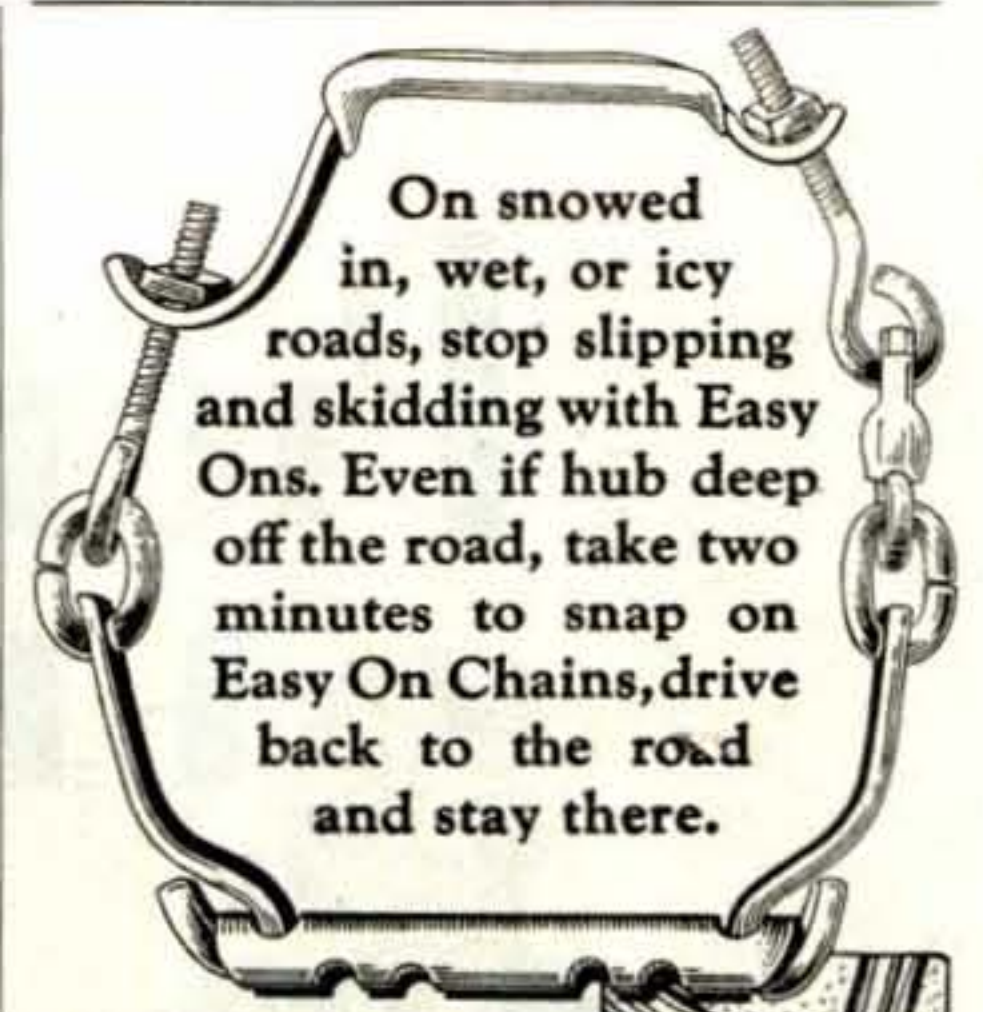
"My husband," Mrs. Einstein remarked, "must attend to important work. But there is no reason why you should go. Will you not stay here and talk to me?"

We talked and talked. A little while later I saw the figure of Einstein, wrapped in a bathrobe, on his way to his daily ablution.

He smiled at me with the same droll smile which had captivated me from the beginning. It is something to have seen the sage in his bathrobe! The touch of common humanity in no way detracted from his dignity.

Mrs. Einstein's eyes followed her husband adoringly when he vanished, and again when he reappeared from his bath. She adjusts herself to her husband with a tact that is rare in wives of great men.

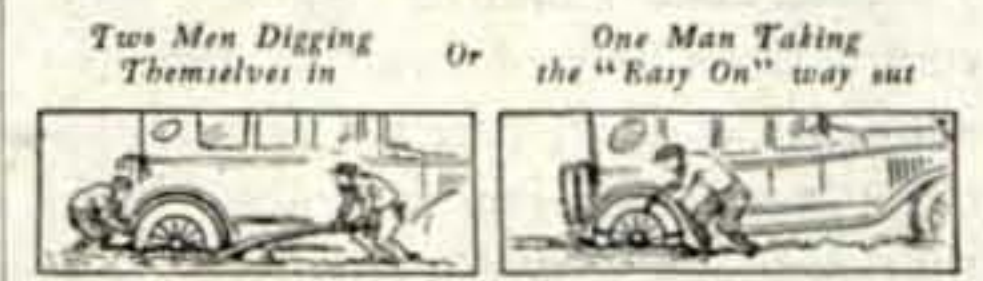
When he ascends to his attic, she does not cling to his coat tails. When he wishes to be alone, she completely eliminates herself from his life. She spares him disharmonious contacts and protects the serenity of his mind with the devotion of a vestal virgin guarding the sacred fire. It is by no means impossible that with a less-sacrificing mate, Einstein would not have made the discoveries which link his name with the immortals. Thus love, that moves the sun and all the stars, sustains in its lonely path the genius of Albert Einstein.



On snowed in, wet, or icy roads, stop slipping and skidding with Easy Ons. Even if hub deep off the road, take two minutes to snap on Easy On Chains, drive back to the road and stay there.

EASY On Chains are patented because they do for you what no chains without these patented features can do. Keep a set with your car and be prepared for any roads all year. On or off in a moment, even when stuck in the mud. Easy Ons are single chains snapped around the tire and rim between the spokes, leather covered so as not to mar the paint. The Easy On Patented Tread Member which rides flat on the tire on pavements without bumping, tips on edge and mud hooks into sand, mud, snow and ice, giving your car a quick, strong road grip. For day after day, year around protection, the extra service features of Easy On Chains will surprise you. With Easy Ons you can slow up or turn on slippery streets, or descend icy hills by keeping the power on to turn the wheels; if necessary using low gear for very slow going. For sale by Auto Dealers and Kresge Stores; W. T. Grant Co.; McLellans; Newberry; McCroly; Neisner Bros.; Metropolitan; Murphy; Tottle; Montgomery Ward; Sears Roebuck; M. W. Savage; T. Eaton Co.; Alling Rubber Co. Better get six or more now. If your dealer has not yet stocked them, we will ship Post Paid at these prices— For tires 3 1/2 to 4.50 and Ford Wire Wheels, 35c ea. 4 1/2 in. High Pressure 4.75 to 5.25 Balloons, 40c ea. 5 in. High Pressure 5.50 to 6.50 Balloons, 45c ea. 6.60 to 7.30 Balloons, 50c ea. To use on Disc Wheels, drill 1 inch holes, 1 1/2 inches from rim.

MILLIONS OF All Year "Easy On's" NOW IN USE



WOODWORTH SPECIALTIES CO. Binghamton, N. Y. Established 1905



BREATH-TAKING Beauty! Decorated folding Bridge Set in rich Oriental colors—a delight to the heart of every hostess. Upholstered seats, decorated leatherette top and two insertable ash trays for corner legs. Write today for beautiful folder.

LOUIS RASTETTER & SONS 1355 Wall St. Fort Wayne, Ind.

ACCOUNTING

How to learn Accounting THOUSANDS of ambitious men are earning more money today because they know Accounting. Send for our book, "How to Learn Accounting," and the first lesson. Both will be sent free. International Accountants Society, Inc. A Division of the ALEXANDER HAMILTON INSTITUTE Dept. 86, 3411 So. Michigan Ave., Chicago, Ill.

PATENTS BOOKLET FREE HIGHEST REFERENCES BEST RESULTS PROMPTNESS ASSURED Watson E. Coleman, Patent Lawyer, 724-9th St., Washington, D.C.