# OMAHA MAGICIAN-PHILOSOPHER INTERPRETS EINSTEIN'S THEORY

Far More Marvelous Than the Illusions of Great Tricksters is the Way Space and Time Have Been Made to Disappear!

By HOWARD ERICKSON

DROF EINSTEIN'S theory of relativity, which has stood the scientific world on its head and which he learned say will occupy more space universal history than cities

world war or the soviet revolution or both of them put together, may be a leep, dark mystery to a lot of people, but not to David P. Abbott, Omaha broker, author, magician, investigator of psychic phenomena, debunker of phoney magic, and student of science and philosophy.

"I understand Einstein's discoveries very thoroughly so far as he has made them public," said Mr. Abbott, "but 1 no not understand the mathematics he uses, for there are only 13 men in the world who understand that."

A good many people in this country inderstand the Einstein theory, though is not so well understood here as in Germany, averred Abbott, Not very many persons in Omaha understand it. but probably more than you think, he

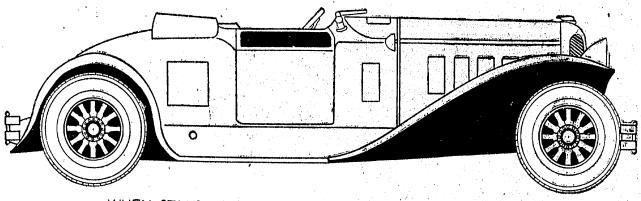
Abbott not only comprehends the theory of relativity, but believes he s able to interpret it to other people. He has written several papers on it, but so far he has not published them. hey are merely for his friends.

White-haired, pink-faced, gray-eyed, miling, Abbott, a bulky, energetic, shirtdeeved man, sat in his office recently and talked of his two great enthusi-18ms, the Einstein theory of relativity nd magic, meantime answering such mestions about himself as the intervlewer was able to get in edgewise,

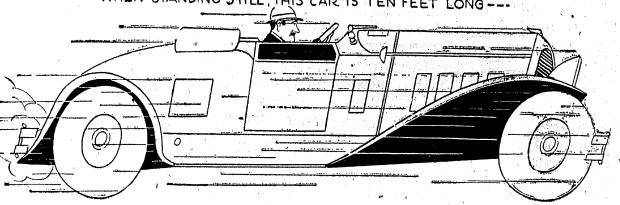
#### Master of Situation.

After attending country school three nonths a year near Falls City, Neb., ne future student of Einstein entered he high school at Falls City already talented mathematician. He had studied Ray's Third Arithmetic and Ray's Fourth Arithmetic, and had gone ar beyond his teachers. Never had he ooked inside an algebra, but Prof. Rich, father of Edson Rich, started he boy in a class which was reviewing elementary algebra. One day young Abbott was called to the board to explain a problem after all the others in te class had falled.

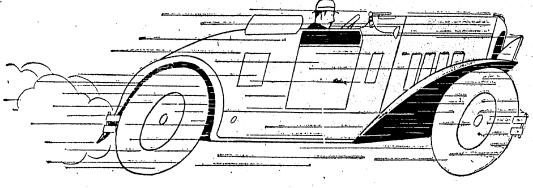
"I stepped to the board and was mas or of the situation," related Abbott. In igh school but nine months, the counboy went through elementary and gher algebra, elementary and higher geometry and completed trigonometry up to spherical trigonometry—getting o ask his professor about anything. "Prof. Rich wanted me to go on. He



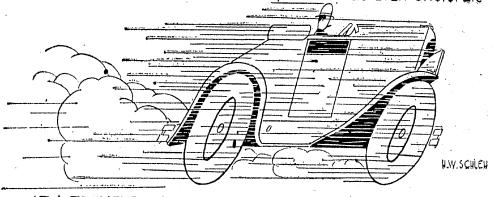
WHEN STANDING STILL, THIS CAR IS TEN FEET LONG ---



WHEN IN MOTION IT IS A LITTLE BIT SHORTER --



AS IT GAINS SPEED, IT BECOMES EVEN SHORTER ---



AT A TREMENDOUSLY HIGH SPEED IT WOULD SHRINK MORE AND MORE &UNTIL

stein, according to Abbott, has proved to be space-curvature.

"The floating ball" is a magical

experiment performed by David P. Abbott for the amusement of.

his friends. . . . He "seems to overcome gravitation," which Ein-

Prof. Albert Einstein now is in the United States to continue scientific work. . . . David P. Abbott does not claim to understand all the details of Einstein's calculations, but does think he grasps the idea.

 $\widetilde{\mathfrak{V}}_{i,n}^n - \widetilde{\mathfrak{V}}_{i,n}^r \Lambda_{i,n}^n = 0$ AT 186,300 MILES PER SECOND, IT'S LENGTH WOULD BE ZERO !

r Vorschrift, nachträglich (d. h. nach Vornal b überzugehen. Man erhält so, wenn man die lin bezeichnet, die Feldgleichungen

9" = 0

iob) liefert mit Rücksicht auf (8) und (9) zunächst

 $\{[h(\phi_t\delta_t^n-\phi_t\delta_t^n)]_{\mu}-h(\phi_t\delta_t^n-\phi_t\delta_t^n)\Lambda_{t}^n\}_{\mu}=0$ 

Wir führen nun vorübergehend zur Abkürzung die Tensordichte  $\mathfrak{W}_{ij}^n = h\left(\phi_k \delta_i^n - \phi_i \delta_i^n\right)$ 

ein. Gemäß (5) ist

 $\mathfrak{M}_{\ell y \eta_a}^a = \mathfrak{M}_{\ell y_a \mu}^a + (\mathfrak{M}_{\ell \ell}^a \Lambda_{\ell a}^i)_{\mu}$ 

so daß die auszureehnende Gleichung auch in der Form

 $(\mathfrak{W}_{toll}^{l} - \mathfrak{W}_{tl}^{l} \Lambda_{l}^{n}, -\mathfrak{W}_{tl}^{l} \Lambda_{r, l}^{n})_{la} \stackrel{\text{def}}{=} 0$ 

geschrieben werden kann, in welcher Gleichung sich die beiden letzten Glieder regheben. Durch unmittelbare Ausrechnung ergibt sieh

 $\mathfrak{W}^I_{\underline{t},\underline{s}/l} \not \Rightarrow_{\underline{s}} h \left( \phi_{\underline{t}+\underline{s}} - \phi_{\underline{s}+\underline{t}} \right).$ 

ungeformten Gleichungen (10b) lauten also  $[h(\phi_{k_1}, -\phi_{k_1})]_h = 0,$ 

Gleichungssystem zusammen mit

 $\mathfrak{V}_{k0}^{a}-\mathfrak{V}_{k1}^{i},\Lambda_{i}^{a}=0$ 

lige System der Feldgleichungen bildet statt von (10) direkt von (10a) ausgegange when. Gleichungen (11) nicht orb

für haben, daß die his will give you some idea of the mathematical processes employed Mainstein. . . . If you can figure this out, get Einstein's own book and dope out the rest of it for yourself!

m," Abbott asserted. The boy mathematician didn't do so

till in grammar and English composihever got more than 98-but peocan't shine in everything.

#### Sells Magic to Magicians.

Always he was interested in magic, ing to it as he did to mathematics. "I became interested in some apent spiritualistic miracles," he reed. "I used my magical knowledge 800 if they were trickery or genuine domena, and finding it all, or nearall, trickery I soon had a wide repere of mediumistic mysteries that I

He contributed an article on some lediumistic Phenomena" to Open Part, a scientific magazine, edited by Aul Carus. The article drew so much intion that the editor asked for aner, and another, and so on. A man New Zealand wanted Abbott to exin "Mediumistic Reading of Sealed dings." This he did. The copies of magazine were quickly exhausted. was published in pumpolet form and out. Then a reader wanted Abbatt explain "The Spirit Portrait Mys-

M I would be a great mathematic tery" of the Bang sisters of Chicago. This article in the magazine and in pamphlet form went like hot cakes.

The articles were gathered into a book. This created a sensation, said Abbott, for it was a new field of writing. Letters came from all over the, world. Abbott, set out to write a real book, "Behind the Scenes with the Mediums." Edition after edition was exhausted; the volume is in its fifth edition and still going strong.

Having exposed nearly all the mediumistic phenomena, he set out to produce some of his own and he sold feats and stunts to the magicians-feats and stunts he had put on through the years for friends at his specially-built home at 3316 Center street. Naturally, he isn't giving the secrets of any of these

### All Set for Einstein.

Among the most celebrated of these are his "Talking Kettle," which he has sold to magicians all over the world, his "Talking Skull," "Spirit Portraits"

and "Floating Ball." So it is easy to see that with all his penetration of the medium'stic phenomena, Mr. Abbott is no guilible per-

son who swallows useudo-scientific theories as sound science,

He's thoroughly up, he'll let you know, on philosophy, astronomy, geology, evolution and all such subjects. So Abbott was not caught unaware like a lot of persons by Prof. Einstein's dis-

"I didn't know there was going to be an Einstein, but I was familiar with all scientific ideas so that when Einstein came upon the scene with his discovery I was prepared to understand it," he explained.

"The reason that no one seems able to explain the Einstein theory so the average man can understand it is because the average man is not equipped to understand it. To understand anything about the Einstein theory, the mind must have some little idea of geometry. Higher mathematics can nenetrate into the realm of the unknown, just as the microscope can penetrate into the invisible realms of nature, or the telescope into the depths of the infinite.

### The Fourth Dimension.

"As many people do not have this mental equipment of geometry," the interpreter of Einstein went on, "I will refer only briefly to what I mean and omit mathematics entirely. It will thus be possible for me to indicate slightly the results that have been obtained, and I must quit entirely the means by which these facts have been ar-

Abbott takes up the three dimensions of space as taught by Euclidean geometry. Length, breadth, thickness. There is the line that has only length. There is the plane that has length and breadth but no thickness. Then there is the cube of three dimensions.

"This realm of three dimensions is the world we live in," pronounced Abbott, who proceeded:

"This brings us to the subject of the fourth dimension. It would have to be a dimension in some way at right angles to all other three dimensions or else it would have to penetrate into some other realm than the realm of physical objects."

Abbott quotes Euclidean geometry that plane surfaces are truly level. straight lines are truly straight, right angles are truly right angles and parallel lines if continued indefinitely never

"This was formerly supposed to rep resent correctly the outside or objective world," said Abbott. "Of course this geometry is a 'mental manifold' which the mind superimposes upon objective things. Other geometries can be and have been devised where straight lines are not straight, plane surfaces are not level, right angles are not true right angles and parallel lines if continued indefinitely would finally meet. These geometries would fit a world where space is 'curved' or puckered in some way. In such a world straight lines would not exist, neither would perfectly level surfaces, nor true right angles. In such a world dimensions would be finite, for straight lines would some time return into themselves, and the universe would not be infinite. So much for geometry."

### The Two Worlds.

So much indeed, but the reader will here see that Abbott is getting on to the professor's "curves."

The interpreter went on to tell of the world of phenomena in which people live and the world of reality or of the absolute outside of them.

'The outside world acts in some way on our senses and forms a mind picture which we perceive," he said. "We think we are observing the outside thing when in reality we are observing our own minds within ourselves, We live in a world of sensations and we attribute to them the objects of themselves and we think our consciousness really extends to and envelopes the outside or objective things in some way.

"Strip reality of our contribution to it and what remains?" asked Abbott. Getting no answer, the interpreter proceeded to Einstein as the man who did the stripping with his mathematics. "We are now prepared," announces Mr. Abbott, "to give the reader a slight glimpse of some of Einstein's results:

### Enter Space-Time!

"It has been found that both space and time belong to the phenomenal world or mind picture world. They are not outside entities. But there is an outside entity that by its actions on us produces the two mind pictures of space and time. This outside entity is called space-time. It exists absolutely or independently of sensations, and is four-dimensional. Its fourth dimension gives rise in our minds to the idea of time. The world of physical objects, it is true, exists in three dimensions (what we call space) but the world of events exists only in a four-

dimensional world because the events require a time element in which to happen. But for this fourth dimension nothing could ever take place. It is duration. In outside nature the duration is not separate from the space element, It is all one and it is space-time and it is four-dimensional. Space-time is curved and parallels do meet in time.

"Einstein finds that phenomenal time and space that we perceive are variable," said the interpreter. "They are not fixed. If a man be in rapid motion his time appears to a man standing still to be retarded. His space also appears to the same observer to be shortened. The faster the man in motion moves the greater these variations become. The more his time is longthened or slowed down the more his space is shortened. This shortening is in the direction of his motion.

### Time Would Be No More.

"The speed of light is approximately 186,300 miles a second, the absolute limit of velocity. Now there are material particles which we can observe that are approaching a velocity of this order. The electrons or ions from an X-ray tube are discharged at a velocity of 90 thousand miles a second. So it is possible to verify some of the Einstein discoveries by experiment. It is found that as a particle approaches the limit of all velocity, the velocity of light, that its length grows shorter and shorter until at the velocity of light the length would become zero. There would be no length and time would cease to flow.

"It is shown that the observer who thinks he is holding still is regarded by the other man as being in motion. To the second observer the first man's space is shortened and his time lengthened. Observations give space and time results which belong to the phenomenal and not to the absolute world for there is no such thing as absolute motion. Motion is only relative.

"It is found," said Mr. Abbott, "that to get it!

the millions of worlds in our universe. while having no absolute or real motions, do have movement or motions relative to each other. The space dimensions or space relations between the various worlds are continually altering. In doing this no force is exerted whatever and there is no gravitative pull as formerly supposed. It is only when one's motions are interferred with that force immediately arises. It is created. as it were. But all things moving relative to each other travel along natural paths or tracks. These paths fill upnot space-but four-dimensional spacetime. They are called geodesics. Spacetime is a fabric of these geodesics, a regular structure and not a boxlike emptiness as heretofore supposed,

## No Pull of Gravity,

"In the vicinity of bodies of matter these geodesics, this space-time fabric, is warped and puckered and the tracks turn down directly toward the body of matter. In fact 'matter is but the last degree pucker in space-time. It is not caused by the pucker but is the pucker itself. Now it is as if this puckering or warping in some way stretches the geodesics so that in space-time moving objects approaching a body of matter move with ever-increasing velocity, as if passing over a length of geodesic must be done in the same time as it would be done were the geodesic not stretched or warped. This produces the phenomena of falling bodies increasing their velocity as they approach the body, which formerly was supposed to pull them by gravitative force. Thus there is no pull of gravity. There is no such force, Bodies fall without force and force only arises when they are stopped or retarded. They are only altering their space relations relative to other objects. They are making no absolute motions, that is motions independent of all observers or other existences."

So Einstein Interpreter Abbott presents the Theory of Relativity. Now try