

SCIENTISTS DISCOVER 'CEMENT' OF UNIVERSE

Washington, Dec. 13.—(A. P.)—The Carnegie institution of Washington began work Tuesday with a 5-million-volt atom smasher in a new effort to find out what makes the universe tick.

The huge electrical generator whirls particles of atoms at a target at terrific speeds. It will explore the smallest regions of space into which man never will see.

Its powerful radiations will show what goes on within the nucleus of atoms where one-millionth of an inch between two particles is relatively comparable to the distance between the sun and the earth in astronomical measurements.

Two years ago Dr. Merle Tuve, Dr. L. R. Hafstad and Dr. N. P. Heydenburg, who have conducted most of the research in a smaller atomic observatory of the institution, announced the discovery of a new force of attraction within the nucleus of the atom. This explained how the atom is bound together to form the basis of all elements of matter.

This force, which begins to operate when protons, neutrons and other particles of the atom get within about one million-millionth of an inch of each other, pulls the particles together.

Under the known laws of electricity such positive and negatively charged particles would repel each other. At such infinitely tiny distances, however, electricity seems to work in reverse and pull oppositely-charged particles together.

This force, the Carnegie scientists have concluded, is the primary "cement" which holds the universe together and is fully as important as gravity, which holds larger bodies

to the earth and keeps the stars and planets in their orbits.

The new atomic observatory, which is a steel shell insulated with compressed air inside another steel cylinder fifty-five feet high and thirty-seven feet in diameter, will enable them to carry on measurements even closer within the nucleus of the atom than has been possible before.

The new instrument generates particles of atoms and carries them on swiftly-moving belts down a cascade tube in a cloud of hydrogen gas where the recoil or attraction of the particles can be measured.

Because of the intense radiation developed, observers are protected by walls of concrete, earth and water in a special chamber away from the tube.

WE EXPOSE ourselves with every word we utter. Even your slightest comment on the weather will reveal your character as surely as a police file, tell the world whether you're a fighter or a coward, a positive or a negative character.

And words not only reveal you but they work for you. A word is an active force. It creates that which you desire. Secretly, insidiously, slowly but surely, the thing you say builds the thing you wish. You can talk yourself into heaven or whine yourself into hell—it's up to you.

Do you wish a rich and abundant life—a life filled with challenge, change and opportunity?

Then keep saying it!

Affirm your desire. Affirm your faith in yourself. Affirm your willingness to take chances. Say it over and over and over. Say it to everyone who will listen. And, if there is no one who will listen, say it in an empty room.

—o—o—

REMEMBER the fairy tale of the poor man who rubbed a bottle and a genie appeared? That story filled you with brave excitement as a child. You sneer at it now—but your childish impression was right. You CAN summon a genie. You CAN do it with words.

Keep saying it, and the power in those words will go to work for you. It will enter into the minds of those who listen to you and shape their opinion. It will enter into your own mind—and mold your attitude. It will break down the prejudices of others and the fear that is in yourself.

And some day the thing you affirmed will come true. Then people will say it is a miracle. But it won't be a miracle. It will be a natural and inevitable consequence. You will have **THOUGHT** good fortune, and **TALKED** good fortune, and **BELIEVED** good fortune, and good fortune will answer your call.

There is no such thing as "good luck." There is a reason for everything, and "good luck" is simply the consequence of good wishing, good willing, good talking, good risking.

Do you want to be happy? Keep saying it! Do you want to be popular? Keep saying it! Do you want to be brave? Keep saying it! Do you want to be well? Keep saying it!

The answer may not come tomorrow. It may never come in the shape you expected. But it will always come in some shape. "Ask... and it shall be answered. Seek... and ye shall find."

MUSINGS OF A TRAVELING MAN

A Prayer For Peace

In an Episcopal church at Cumberland, Md., the rector has caused to be erected a cross before which men may kneel asking the Supreme Ruler such favors as their enlightenment may prompt.

Some months back, Frank Robinson, who advertises himself as a great psychologist, sent out literature advising people to ask God to stop Hitler.

It is our understanding that God is a positive force working for the advancement of all that is good. There is an opposing force which works through a similar channel for the accomplishment of the desires of men whose diety is greed, avarice and if need be, confiscation and destruction.

Prayers which ask the Supreme Ruler of the universe to destroy the forces of evil can be of little purpose. The Christ did not ask that his enemies be destroyed, but that they be enlightened to the destruction they were bringing upon themselves. No destructive force has ever won. It never can win—it is always the loser.

We are in the midst of a great world hysteria. Hysteria is a destructive force which has nothing to tie to—it is emotionalism running rampant—a human ship without a rudder, without a chart, it knows no course of action. There is no objective, no efforts concentrated for a definite purpose and no concentration of forces or consecration to an ideal.

Man must realize that of himself he can do nothing. The worst man who ever inhaled the breath of life, knew deep down within himself that without "luck" or by what ever name he chose to refer to it, he was licked. When luck failed him he was hopelessly lost.

The greatest comfort that can come to any man is his consciousness of a hook-up with a mind that is stronger than his own. Every man observes his moments of meditation. Whether he recognizes the inflowing of knowledge as coming from a higher source than himself is for him to decide. But to deny that within him is ever dwelling, a greater mind than his own is to become a Hitler, a Mussolini or a egoist of a similar breed.

In recognizing and acknowledging this indwelling super mind, man establishes a contact with a partnership which sustains his mental balance and poise in moments of perplexity. He communes with this inner super mind and draws from it strength, courage and wisdom which help him meet the almost insurmountable difficulties he encounters.

Why not then, in our petitions and meditations, ask that we may be used as instruments to enlighten men as to their wrong impressions. That instead of being incubators of hate, we become transformed, so to speak, and make of ourselves suitable vehicles for the gaining of knowledge which will defeat the purpose of those who worship at the shrine of false gods. Not neglecting to remember however, that Christianity is militant in its defense of principle and is ever alert to the fifth column of hypocrisy continually clamoring for an upper hand in its midst. That in being harmless as doves we should be wise as serpents preventing rather than warring against demon inspired destruction.

OLD JOE.

Words as an Active Force In Daily Life

"You Can Talk Yourself Into Heaven, or Whine Yourself Into Hell."

By Elsie Robinson

DO YOU want to BE something... DO something... CURE something? Then put it into words and keep saying it! The greatest medicine on earth, the most vital go-getter and potent force is—a word.

There is an incredible force in words. They are not merely noisy air. They are the most important thing in our lives. No charge of dynamite, no surgeon's knife, can alter life more deeply and drastically, for weal or woe, than words.

And this isn't a rare occurrence. EVERY word is important. EVERY word does something to you, for you or against you. Our lives are built on words—made or marred by words.

We spend years and fortunes in acquiring educations. We spend tremendous sums to "make a good impression." We fuss continually over grooming, charm, the proper mannerisms. But in the end we are judged, not by what we know or what we wear or how we act—but by what we say.