'U' Scientists

Goal This Time

its development, Prof. James M.

Cork of the physics department,

Professors G. C. Brown, Clarence

been a center for atomic develop-

ment. Such noted scientists as En-

rico Fermi, J. Robert Oppenheim-

er and Ernest O. Lawrence of cy-

clotron fame have lectured here

in 1935 and is now constructing a

them, Professors David M. Denni-

son and H. R. Crane of th Phy-

tempting to break down atomic

The proximity fuse, developed

here by Prof. H. R. Crane and a

crew of 25 picked scientists played

a big part in the victory in Eur-

ope. More than three years of ex-

periment brought the fuse, which

is exploded by radio waves at a

pre-determined distance from its

target, into production by Janu-

Working at MIT, University professors S. A. Gouldsmit, G. E.

Uhlenbeck and Dean B. McLaugh-

struction of three "Tubas", giant

SN 7618, a white drug which

one fourth the time needed by

ne new drug were

nuclei to get cosmic rays.

Atomic Center

nuclear physics

Alumni Aid Expected for Phoenix Plan

Club Leaders Indicate Support

Although plans for alumni participation in the Phoenix Project have not yet been settled, statements from two prominent alumni representatives indicate that country-wide support for the memorial will build up quickly after the announcement.

T. Hawley Tapping, General through the use of radioactive ma-Secretary of the Alumni Association, the largest group of its kind in the country, is one of the most | Commission at Oak Ridge, radioenergetic supporters of the pro- isotopes such as radioactive cobalt

"Michigan's alumni have been Atomic Tracers thinking in terms of a war memorial ever since the end of the Today's announcement by the War Memorial Committee has been eagerly awaited."

"Last fall the Directors of the Alumni Association voiced high approval of the work of the Committee, one member of which is a past president of the Association.

"At the next session of the Alumni Association June 10 the Directors will have the opportunity to speak for Michigan men and women in approval of this magnificent project and to set the stage for alumni participation." Michigan Alumnus

azine, would be boosting the pro- indicates that it will be wise to ships and locomotives. ject in its next issue, May 22.

Christian F. Matthews, Mt. Cle- power such as coal, oil or natural mens, Mich., attorney, was the gas. Expert opinion believes that production and industrial research program, is more food for the alumni representative on the Me- a workable demonstration plant morial Committee. He said the producing atomic power will be in Committee had spent approxi- operation within a decade, but ple, solved a perplexing problem and improved use of fertilizer. mately a year working with suggestions for a memorial which would be a real tribute to the country's war dead.

"We hope that this project will be appreciably cheaper than conour most enthusiastic support.

The following is the text of a resolution passed by the Alumni French Began Association when the Memorial Committee was first organized:

RESOLUTION: It is resolved that the University of Michigan Alumni Association whole-heart- 50 Years Ago edly support and assist the Committee appointed by the Board of Regents to study the advisability of adopting a War Memorial Program and recommends that such exposed to the Atomic Age, but it a Memorial incorporate the philosophy that it is better to com- Atomic Era was born. memorate the memory of those who have made the supreme sac- ered the radioactivity of uranium. rifice by attempting to develop a This was the first step in the long project that will aid all mankind development of atomic energy. It in living in a war-free world was followed two years later by the rather than to attempt to build a Curies' history-making separation mound of stone the purpose of of radium from pitchblende, after which might soon be forgotten.

Key Roles for 'U' Alumni, Students Seen

Will Direct Project With Experts, Faculty

financing of the University's War tron and high voltage atom

A Board of Directors will be set up to supervise the entire pro- radioactivity by Irene Curie and placed on campus. ject. It will be composed of rep- F. Joliet. resentatives of the student body,

and the Project Chairman who Szilard take steps to inform Presiwill be concerned with operation dent Roosevelt of the possibility

ject Phoenix, its memorial rotunda, laboratories, etc.

the overall progress.

The Administrator, whose name | bomb laboratory. will be announced within a few weeks, will have charge of the diffusion plant at Oak Ridge bemammoth fund raising drive to gun. be innaugerated next fall, tenta- 1943-One thousand kw. pile tively during the Annual Home- constructed at Oak Ridge for pro-

coming Weekend. to hold a series of prize contests for the production of plutonium to draw publicity to the Phoenix designed. Project. Competition would be

The Student Chairman will have gordo, N. Mex. a committee of fraternity, sorority supervision, and in this way the shima, Japan.

NO ATOM AUTOS YET:

Some encouraging results in di-

rect treatment have also been

noted. For this purpose, the most

spectacular results have been ob-

tained by exposing diseased parts

of the body to the radiations of

Until now this method has been

effective, though not miraculous,

in treating thyroid cancer, poly-

cythemia vera (an ailment of the

radioactive isotopes.

Power Use Uncertain

lag several years behind.

Atom Studies

in 1945 that Ann Arbor was first

was some 50 years earlier that the

In 1896 Henri Becquerel discov-

almost endless time and effort.

development of nuclear energy:

alence of mass and energy.

pha particle.

nuclear atom.

smashers.

Here is a brief history of the

1904-Rutherford discovers Al-

1905-Einstein announces equiv-

1912-13-Bohr states theory of

1919-Aston develops mass spec-

1930-Compton measures cos-

1939-40-Discovery of artificial

1939-Discovery of uranium fis-

1939, March-Navy department

1939, July-Einstein, Wigner and

1942 — Construction begun at

1942, Fall-Design of large-scale

1945, July 16-First experiment-

tograph for isotope separation.

Present Studies Make Some Headway



-Engraving Courtesy The Detroit News RAW MATERIAL-Henry Gomberg, University of Michigan graduate student unpacks a radio-iodine shipment sent from government controlled atomic energy centers. Starting with this and other isotopes as "raw materials" the Phoenix Project will probe medical and scientific fields in an attempt to use the atom for the benefit of humanity.

ing energy for homes and indus- | Oil geologists use radioactive stick to conventional sources of Industrial Uses

Tapping said that the Michigan | For would-be neophyte indus- trial users will eventually convert, tracers to seek the richer oil strata Alumnus, bimonthly alumni mag- trialists, the best advice up to now followed by naval vessels, other and probe the limits of the old Coming, but too late to help the

Use of radioactive material in United States in its foreign relief is already underway in some fields. world through the atomic control Radioactive sulphur, for exam- df diseases of plants and livestock commercial plants will probably for the rayon industry. Just plain Research in fluorocarbons, nec-

old ordinary sulphur used in the essary for the manufacture of Most scientists, however, doubt process of manufacture must be atom bombs, has already produced that commercial atomic power will removed. When a pinch of radio a lubricating oil that will not burn.

sulphur is tossed in, it gives off rays that can be detected by a of these prospects are realized, but Still, it is considered likely that Geiger until all the sulphur is the Phoenix Project will speed

Phoenix Myth The choice of the phoenix bird to represent the Univer-

The most popular account of the bird appears in the Physiologus, a collection of Christian allegories much read in the middle ages:

"The bird flies to Heliopolis, enters the temple, and is burned to ashes on the altar. Next day the young phoenix is already feathered, and on the third his pinions are full grown and he flies away.'

And so, out of the ashes and destruction of a war climaxed by the use of atomic energy, the University's war memorial will arise, dedicated to the "rebirth of beauty and life."

1932—First transformation of Site Undecided

Although architects are already and the humanities. at work on possible plans for the 1932-35-Development of cyclo-

Unrestricted For Research

Nucleus of the Phoenix Project should be the "free,unhampered thinking of brilliant and nimble Jenner Hodges.

(Dr. Hodges, nationally-known University radiologist, has been 125 ton land-based radar jammers doing research in radioactivity used to protect American planes ever since the physics department over Europe and the Medical School began their spadework in nuclear phys- can stop an attack of malaria in ics here back in 1931.)

He adds that "almost by defini- older methods was another Unition, there can't be any fences versity project. Michigan was one around the Phoenix Project, be- of the seven experiment stations cause their are no fences around where science or the human mind."

He adds that-by the same tokeventually, of the social sciences thesis of the wonder drug.

War Memorial Rotunda and the knowledge will, in itself, be a real hind it, the University stands ing his lifelong friendship with other Phoenix Project buildings, memorial for the whole University, ready to launch a peacetime Dean Erich Walter. It was through begin. Utilizing already produced no official decision has yet been because it will include every phase atomic development program Walter that he learned of the War isotopes as "raw materials" the made about where they will be of University life," Dr. Hodges which will dwarf its wartime pro- Memorial Committee's search for project will probe all fields of

Thinking Basis

lin helped perfect still-secret radar devices. Instruments to "jam" enemy radar stations were developed by Prof. W. G. Dow of the engineering school, at Harvard. according to Dr. Fred Radar Jammers Prof. Dow supervised the con-

ahead on their own, Dr. Hodges

With this vast reservoir of sci-"Cutting across every field of tific and research experience be- Michigan in 1924-26, establishgram.

Dr. R. J. Porter.



FRED SMITH

destruction. The results were outstanding. 'U' professors and staff Criticism of ranging from the atom bomb to Country Starts While the atom bomb was born Phoenix Idea

Smith Finds Failure

A. Siebert and E. M. Baker of the engineering school worked on various phases of the bomb. Last year. Dean Ralph A, Sawyer of the graduate school served as technical advisor of the Bikini

Since 1929, the University has Smith, a tall, greying, 39-year-old ment of the University, New York publishing executive, All Forms of Research got his dander up over a statement by a high placed official in the Phoenix Project plans to provide ute to University war dead. French Government.

trying to iron out the problems of that while Americans devoted all The University built a cyclotron atom bomb to win the war, they through this tremendous discovsics Department have been at-

When he learned of the Universearch center.

The committee picked it up from there, but Smith continued to play a vital role in developing the project to its present stage. It was Smith who suggested the center be titled the Phoenix Project, embodying the idea of a new enlightenment from flame and ashes.

He attended the University of and other scientific research. a suitable tribute.

Project To Include

To Coordinate Efforts

This is the story of the man who It's about Fred Smith, one-time

French Charge

Smith set out to prove that this French official was wrong. But atomic energy.' after extensive research Smith discovered that actually no concerted effort had yet been made by Americans to harness this power for humanity Sporadic Efforts

True, there were scattered, sporadic, research efforts. But nowhere was there anything on the scope of the Manhattan Project which bent the full resources of the nation to exploring the destructive attributes of atomic en-

sity War Memorial Committee's Phoenix Plans war dead he suggested this re-

This is not the first time that this man has dropped private inmade. Dr. L. T. Goggeshall, of the reer carries notations like "Asst. Once the men for the project public health school, headed the to Secretary of the U. S. Treashave been selected, they should go project. When Dr. Coggeshall en- ury, Asst. to President, Bretton tered the navy in 1944, the antimalaria work was continued by member National Labor-Management Conference." His private in-'U' staff members also worked terests have been varied. He has en-although the Phoenix Project on penicillin. Prof. Werner E. held numerous executive positions will focus on atomic energy, it will Bachmann and Prof. Emeritus and is currently consultant to come to include in ever-widening Harrison M. Randall of the phys- Book-of-the Month Club and Asarcs all branches of science, and ics department aided in the syn- sociate Editor the United Nations World.

Humanistic Aspect Sawyer Predicts Study of Atomic Impact on Culture, Civilization

The Phoenix Project will be of tremendous importance not only in the technological but in the sociological and humanistic fields, according to Dean Ralph A. Sawyer of the Graduate School.

Dean Sawyer, who was the civilian technical director of the atomic bomb test at Bikini Atoll and who assisted in obtaining Atomic Energy Commission approval of the War Memorial Project predicted that the Project would "study all of the phases of the mpacts of atomic energy on civilization and culture.

"Current events bear out the fact that the implications of atomic energy are being felt in every phase of our national life," he

continued. "The fields of economics, philosophy, political science medicine and law these of physics Phoenix Based affected as well as those of physics

cepts have arisen in every field For Memorial because of the discovery of atomic energy-and one of the tasks of the Phoenix Project will be to study and evaluate them."

Dean Sawyer revealed that the conceived the idea of a peacetime War Memorial Project would use atomic energy research center in existing facilities on the campus until funds are provided for a Memorial building and equipment. University student and an Ameri- But he emphasized that the Pro- 1946. can ever sensitive to foreign ject's work would in no way intercriticism of this country's efforts, fere with the work of any depart-

funds to support other depart- Joined Forces ments in work which is connected The French official charged with any form of atomic research."

"It is hoped, too," he added, "that the Project will support research professorships and fellowhad done nothing to aid humanity ships to permit investigators to present Student Legislature has devote full time and energy to greeted the announcement of problems connected with peacetime uses and implications of

According to Dean Sawyer, the Phoenix Project is conceived on a broader basis than any existing institution for the investigation of atomic energy

"We all hope," Dean Sawyer stated, "that it will not only have profound influence on all parts of the University but also, through the results of its study, will exert a widespread influence for good throughout the entire nation."

To Supplement Current Study

atomic research are being carried in Stalemate

The Phoenix Project will not

on where it stops. The categories include: 1. Generation of power from

atomic fission. 2. Atomic powered aircraft.

3. Production of rare metals down of negotiations to bridle the and rare earths. 4. Study of experimental work

in radiation. 5. Production and distribution

It is where this fifth category ends that the Phoenix Project will science and medicine.

biggest single job," Rude declared.

veteran of four years in the Navy.

He first became interested in a

War Memorial as a member of the

1947 J-Hop Committee, which con-

sidered a J-Hop raffle to begin a

drive for funds.

later set up.

if the students get behind it."

"So it can be seen," Dean Saw-yer said, "that whole new con-cepts have arisen in the con-

Functional Project To Honor 'U' War Dead

The newly announced Phoenix Project springs from a Student Legislature proposal made Dec. 18,

At a regular meeting of the student governing body the legislators made the first campus suggestion that a functional war "On the contrary," he said, "the memorial be established as a trib-

> They later joined forces with the student - faculty - alumni War Memorial Committee in a search for a suitable tribute.

Dave Dutcher, president of the Phoenix with promises that the Legislature "will do everything within our power to bring this project into a functional reality. Commends Plan

In a statement to The Daily, Dutcher also declared that "Never has a more commendable plan of action being proposed to our University." and pointed out that besides the economic and medical advancement in peacetime uses of atomic energy made possible through the project, it will indicate to the world our desire for

Adding that the Phoenix Project makes all of us aware of the great role we can play in our own future, Dutcher suggested that each student direct a letter to the editor of his hometown newspaper and do a real "selling job to materially put across the new plan.

UN Plans End

Follows Two-Year Atom Bridle Debate

The establishment of the University's center for directing atomic energy applications to peace comes on the heels of the break-

atom's war-making potential.

Two years of debate within the United Nations ended in impasse last week. The Soviet Union of radioactive isotopes for medical would not accept the essentials of a majority plan for an international atomic devtlopment authority. Seven members of the eleven - nation Atomic Energy Commission decided that further talking was futile unless Russia changes her mind.

Atomic control had been put on the list of questions that would wait for an answer until the East-West split heals.

The move to end the life of the Commission had been brewing for weeks. The writing on the wall was the suspension a month ago of the commission's two major committees - the Committee on Phoenix Project - that is their Control and the Working Com-

Initiative for the break came "By our own enthusiasm we must in a three-power resolution from stir enthusiasm in others. The the United States, France and project is something that will put Britain, chief advocates of the Michigan on the map of the world Baruch plan for international control and inspection of atomic en-Arthur Derderian, third student ergy's development. "It's apparmember of the committee is a senior in the literary college and nations said, "that this deadlock cannot be broken on the commis-

(Continued from Page 2) ed in a possible War Memorial and | Wassell, Frank L., Jr.; Westport, Conn.

an official request was filed with the Regents, according to Derder-Waterman, Richard T.: Albany, N.Y. ian. Because of his interest in the Webster, Thomas J.; North Homell

"If the students get a spirit on Wienner, Robert N.; Detroit, Mich. Wilcox, Albert P.; San Bruno, Calif.

campus of what the Phoenix Project can someday mean to mankind, it will be felt throughout
Wilking, Donald F.; Fairport, N.Y.
Williams, Donald F.; Fairport, N.Y.
Williams, Ralph H.; Bloomington, III the entire world," he declared. The Project is flexible enough to in- Williams, Woodson J.; Richland, Mich Wilson, Robert C.; Address Unknown what he wants for a peaceful Winkler, Richard S.; Camarillo, Calif. Wolaver, David A.; Ann Arbor, Mich. Wolcott, George G.; Ann Arbor, Mich. Derderian, in answer to "what Wolfstein, James S.; Shaker Heights

the faculty, the administration sion by Hahn and Strassman in 'ACTIVE SAY ON DECISIONS':

Role of Three 'U' Vets in Project Emphasized

Three student veterans - two of the Memorial and the Admin- of military utilization of atomic men and a woman — played an active part in the selection and 1940-42 - Gaseous - diffusion development of the Phoenix Promethod of separating uranium iso- ject as members of the University's War Memorial Committee.

1941-Exchange of American Since security restrictions imand British scientists in a cooper- posed on the Committee prevented an all campus selection of dele-1941 — Preliminary studies of gates, Chairman Erich Walter inatomic bomb begun at the Uni- vited Virginia Smith, Arthur Rude versity of Wisconsin. Work con- and Arthur Derderian to act as tinued by Oppenheimer at Uni- representatives of the students in the choosing of their War Mem-1942-First atomic pile built at orial.

> Backed Center According to Dean Walter, "The student members were the ones who kept constantly insisting and

Smith's idea was the one we ought to explore and develop if possible. Miss Smith, a sophomore in the literary college, is a graduate nurse from New York City. She was selected as a member of the Committee when it convened in Sepa half years service overseas in the

reiterating the notion that Mr.

"The student members on the 1945, August 6-First military

ETO as a Lieutenant in the Army

1948-May 17-Phoenix Project Asked Suggestions

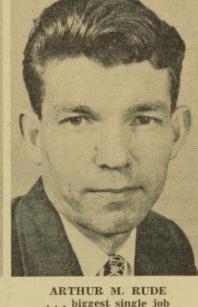
scientists throughout the nation, low students as possible. "There America and the world."



... enthusiasm is vital

was general agreement that the Established Scholarships tember because of her three and Memorial should be more than a Rude, a law student, graduated chance of succeeding," he said. pile of stone and should be di- from the literary school in 1942. Praised Smith ther war," she reported.

be worthy of the University," she discharge.



. . . biggest single job



. . . a peaceful future

established the Bomber Scholar- nator of the idea for the Phoenix clude every man's own idea of Wilton, James B., Jr.; Peoria, "The Phoenix Project gets big- ships for needy students which Project as an "outstandingly suctive say in all the decisions, we it combines dynamic moral aspect spent the latter part of his four common sense." He revealed that

cations we didn't think it had a

rected at the prevention of fur- Before enlisting in the army he Rude praised Fred Smith, origi-

Committee were given a very ac- ger the more you think about it- once totaled over \$30,000. He cessful publicity man with good future." a committee of fraterity, sorority and independent leaders under his supervision, and in this way the shima, Japan.

1945, Adgust 6—First limitary were in no way figureheads," she and also a dignity of commemo- years in the Army in the Pacific ted to the name "Phoenix" for its that by the time actual construction and is important enough to and was a first lieutenant upon ted to the name "Phoenix" for its that by the time actual construction. symbolism and the appeal it would tion is begun, half of the students wyse, Arthur B.; Wooster, Ohio. to the campaign.

The Special Gifts Chairman will announced as vast research centor The Special Gifts Chairman will announced as vast research centor The Atom suggestion came up have as against a name like the now on campus will be alumnited by the said. "I don't see how students announced as vast research centor The Atom suggestion came up have as against a name like the now on campus will be alumnited by the said. "I don't see how students announced as vast research centor The Special Gifts Chairman will be alumnited by the said. "I don't see how students announced as vast research centor The Special Gifts Chairman will be alumnited by the said. "I don't see how students and the said." The Atom suggestion came up have as against a name like the campaign.

Or The Special Gifts Chairman will be alumnited by the said. "I don't see how students are carry to be carry to be a said." The Atom suggestion came up have as against a name like the campaign.

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Or The Atom suggestion came up have as against a name like the campaign.

Or The Atom suggestion came up have as against a name like the campaign.

Or The Atom suggestion came up have as against a name like the said. "I don't see how students are carry to be carr

alumni all over the country in

Other students became interest-

project Dean Walter asked him to Westhelmer, Ferdinand L.; Cincinnati, join the Committee the Regents Ohio. White, William E.; Marion, N.Y.

entire student body will be brought into the campaign. coordinate the work of faculty kind. The project will act as co- tee all solicited proposals for a they think it out, and their en- which were held bi-weekly over other suggested titles. members and all special cam- ordinating agency for individual members and all special cam- ordinating agency for individual but there were so many compli- be the publicity agents for the but there were so many compli- be the publicity agents for the but there were so many compli- be the publicity agents for the but there were so many compli- be the publicity agents for the but there were so many compli- be the publicity agents for the but there were so many compli- be the publicity agents for the but there were so many compli- be the publicity agents for the but there were so many compli- be the publicity agents for the but there were so many compli- but the solution and the solution compli- but the solution comple solution can be solved to the solution comple solution can be solved to the solved to t

be of benefit for everybody, and ventional power. not only our own people," he said. "I think we have finally found public utility power plants produc- removed. a wonderful project, worthy of

mic ray intensities. The tentative organizational lithium nuclei by artificially acset-up of Project Phoenix indicelerated protons. cates key roles for both students and alumni in the workings and

and the alumni plus several tech- Germany. Extensive research carnical experts. ried on in the United States. Project Chairman Under the Board of Directors advised of possibility of fission. will be the Building Chairman,

istrator, who supervise the raising energy The Building Chairman will have charge of planning and contopes developed. structing the physical part of Pro-

Actual Planning To the Project Chairman and his group will fall the planning of the actual atomic applications research work of the Memorial. versity of California. They will select the various projects to be undertaken, subdivide the work to individual scientists University of Chicago. and then supervise and coordinate Los Alamos, N. Mex., of atomic

duction of plutonium. Plans are also being considered 1943-Plant at Hanford, Wash.,

1943-Large - scale mass - specheld in four fields: poster, speak- tograph separation plant at Oak ing, essay and architectural with Ridge designed and built. prizes to be offered. al bomb detonated near Alamo-Student Group

paign groups.

sity's war memorial injects a new and vital meaning into an ancient, sacred symbol of re-According to legends dating as far back as 450 B.C., this fabulous bird mysteriously flew out of Arabia every 500 years and regenerated itself in a fiery