Society Notes

Engineers' Council

Since the last issue of the *Ohio State Engineer,* the Engineers' Council has been very busy making arrangements for the Engineers' Dance and the intramural debates.

The Chemical Engineers won the first debate from the Mining Engineers on April 11. The Civils won on a forfeit from the Mechanicals. All debates are held on Fridays at 4 P. M. in room 100, Chemistry building. If any of the students are interested in the Tennessee Valley Authority, they are urged to attend.

The date of the Engineers' Dance has been set for May 25 and the price of admission will be 50c. During the dance, Texnikoi will hold its "Linking Ceremonies." The Debate Cup will be awarded to the Engineering Society winning the debate league. The dance is always a high spot of the Spring Quarter for Engineers. Set that date aside for a good time.

—*John Boylan, Sec'y.*

Eta Kappa Nu

Eta Kappa Nu held a dinner meeting at the Dutch Tavern, Tuesday, April 16. Professor Luxon of the journalism department talked about the mechanical side of newspaper publication. Plans were discussed for the awarding of a handbook to the sophomore in electrical engineering with the highest point average.

A. I. E. E.

On Thursday, April 11, the student branch of A.I.E.E. held a dinner meeting at Pomerene Refectory. Professor Hazen, of the Department of Electrical Engineering, addressed the group about calculating machines.

S. S. I. E.

The Industrial and Civil Engineers held a dance at the Phi Kappa Sigma house, Friday, April 12. More than 55 couples were present.

Architectural Engineering

Mr. Carl Bentz and Mr. Will Essley, graduates in Architectural Engineering last June, have been selected as the Department's representatives in the Lake Forest Foundation Competition for the Ryerson Traveling Fellowship. Winners of this contest will be awarded the opportunity to continue their study of architecture through travel abroad.

C. Merril Barber, '29, B. Arch., B. Arch. E., is working with the firm of Hayes and Simpson, Architects, Cleveland, Ohio, as their architectural engineer. Hayes and Simpson has recently been awarded the First Grand Prize in the General Electric House Contest.

Mr. Frank Dickerson, '27, B. Arch., has recently accepted a position as Structural Engineer for the H. J. Heinz Co. of Pittsburgh, Pa.

S. A. E.

Mr. Hoover of the Ohio Bell Telephone Co. gave an interesting account of the world telephone operations on April 5. The title was "Copper Strands of Commerce." Two sound pictures accompanied the lecture. On April 12, Mr. Jay M. Roth, an Ohio State graduate and now an engineer on the power plant testing staff for the army, gave an illustrated lecture on results obtained from tests of aircraft engines. Mr. Roth is stationed at Wright Field, Dayton, Ohio.

A. I. Ch. E.

The Student Branch, American Institute of Chemical Engineers, heard two professors from Purdue University on March 29. Professor Bray of the Metallurgy Department spoke on the "Mineral Resources of the United States," emphasizing our dependence on the rest of the world for some of the most important minerals such as tin, nickel, platinum, asbestos, mercury, and antimony. None of these is obtained in the United States from mines or other native source.

Professor R. Norris Shreve of the Department of Chemical Engineering spoke on the development of Rostone, a Purdue-developed building material. This Rostone is made from shale, slaked lime, quarry waste, and water, subjected to a pressure of 2500 pounds per square inch. The material may be molded to any size desired. Fly ash may be substituted for the shale and the quarry waste, and the resulting gray brick has much the same qualities as the ordinary red clay brick. It is very heat, acid, and wear resistant; it will withstand 16,000 pounds per sq. in. compression; it does not shrink when being molded; its cost is about the same as the clay brick.

On April 5 a voluntary forum was held to discuss the "Engineers Registration Bill" passed by the Ohio Legislature. These forums will be held every Friday to discuss topics of present-day engineering interest.

On April 16 the election of officers for next year was held. John Haugton (3) of Oberlin was elected President; Byron Nelson (3) of Jamestown, Vice President; Joe Mravec (3) of Rocky River, Secretary; Fred Pullen (3) of Columbus, Treasurer; Bob Savage (2) of Paulding, Council Representative.

Tau Beta Pi

In a recent meeting, Tau Beta Pi members elected officers for the coming year. The men elected were: President, Lawrence Prehm; Vice President, Howard Crusey; Recording Secretary, James Thurston; Corresponding Secretary, William Stowe; Faculty Advisor, Clyde T. Morris; Cataloger, Richard Snouffer.

Plans for a Spring Dance were discussed and a committee consisting of Charles Griffith, Norbert Voss, and William Stowe was appointed to make the necessary arrangements for the dance.

Another committee was appointed to arrange for a picnic which will be held Memorial Day. This committee is composed of William Stowe, Cameron Hope, and Raymond Biehler.

A Hot River

In the same way that water is boiled on an electric range, preparations are now being made to heat electrically the waters of the Mississippi—or at least that part of the river found at Canton, Missouri. The heating will be done next winter and spring as part of the government flood control program, and its aim will be to facilitate the movement of ice and water through the dam.

The government is building a new type of dam at Canton, patterned after those used in the Scandinavian countries. It will consist of huge rollers or drums, some of which will be 109 feet long and 20 feet in diameter, placed horizontally across the stream. The ends of the drums will rest in sills cut in concrete piers, and so arranged that the entire drum can be partially rotated and raised to vary the flow of water or permit ice to pass during the spring thaw.

To permit year-round operation it is necessary that the ends of the drums be kept free from ice. General Electric engineers will install giant heating units in the drum ends and pier sills to prevent freezing. Despite the huge size of the units the power rating for one end of a roller is only 18 kilowatts. Some of the heating units, which employ the calrod principle, are as much as 27 feet in length. The first one has already been shipped.

A New Use for Magnet Wire

One of the large oil companies in Texas has discovered a unique use for magnet wire. The geophysical department handles very high explosives in its field work, and it is imperative that each individual keep in constant communication with his base. Several men report to the same base, and the cost of stringing regular overhead telephone wire would, of course, be prohibitive.

Each man as he starts out from the base simply straps a five-pound spool of single cotton enameled bonded magnet wire on his back so that it unwinds as he walks along. When he reaches his destination he cuts the wire, fastens it to his hand telephone, and is in immediate touch with his base.

The wire must be strong in order to withstand the strain; and it must be perfectly insulated to prevent grounding when dragged through mud and water. When the job is finished, each man disconnects his telephone and leaves the wire. The total cost of the communication system is negligible.

Electricity in the Jungles

The customs and habits of four isolated tribal groups of American Indian aborigines in the remote Rupununi district of British Guiana will be permanently recorded by an expedition headed by Capt. R. Stuart Murray which will leave New York next month for this South American country. Captain Murray is making this trip under the auspices of the Museum of the American Indian, New York, and is doing so at this time before impending colonization of this region by the British government forever destroys these primitive cultures.

Captain Murray, who has had considerable experience in explorations of this type, will also seek to excavate some of the archaeological sites of long extinct civilizations, will collect specimens of geological and ethnological nature, and will make a series of photomicrographs of the "unseen" life of the tropical jungle. He also plans to conduct a unique experiment in determining the effect of regulated diet, or "white man's" foods, on the physical development of the primitive Indians.

Although this expedition will lay camp about 350 miles inland, far removed from civilization, Captain Murray will enjoy some of the comforts of home through the medium of a small electric power plant he is taking with him. This outfit, operating from a gasoline engine, will generate sufficient electricity not only to operate his radio transmitter which will keep him in touch with the outside world, but will supply current for an electric refrigerator and electric fans.

"We will have plenty of wire, connecting these lamps to our power circuit, and with our cameras set up in advance in secluded places, we can operate at remote distances and hope to get pictures of birds, animals and of the natives such as never taken before," Captain Murray explained. "The electric refrigerator will serve more useful purposes than just supplying us with ice cubes for cool drinks. We will be able to preserve specimens and cultures, which would otherwise be impossible. Of course, the fans are for comfort and not until you have been in those South American jungles do you realize the advantages of a breeze, particularly when you are trying to sleep at night.