

### DR. JONES LECTURES ON "A STUDY ON VIBRATIONS"

#### Redpath Lecturer is Making Tour of Country to Emphasize Importance of Research

"A Study of Vibrations" was the subject of a scientific lecture given by Dr. Ira Jones, Head of the Department of Chemistry of the Oklahoma State College as the third number of the Y. M. C. A. combined musical and entertainment course in the Auditorium last Saturday evening. While Dr. Jones' lecture was mainly taken up with a number of entertaining illustrations to illustrate some of the fundamental laws by which the physical world is governed, he nevertheless emphasized the point that his work on the lecture platform was to bring the people of the United States into a clearer realization of the importance of research work, rather than to entertain them by a repertoire of tricks.

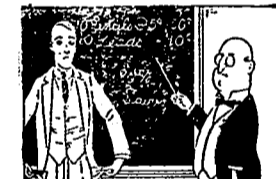
The speaker opened his lecture with an explanation of the subject which he intended to cover in his talk and explained a graph of vibrations, which was painted on the front of his demonstration table. Then, starting with the subject of sound vibrations, Dr. Jones led his audience through light waves, electric and wireless discharges, and finally to a proof of the assertion that even a mental exercise, such as thought, is only a matter of vibrations whose frequency is governed by the same physical laws as those of the other examples.

In connection with the early part of his lecture the speaker suggested a number of ways in which the present knowledge of scientific research could, and probably will, be expanded in the future. Under this head, Dr. Jones stated that it was not out of the question to have trains and machinery operated by thought waves sometime in the future, or be able to realize the dreams of the medieval alchemists of producing the rarer metals from lead, or aluminum, or copper.

Dr. Jones is traveling under the management of the Redpath Agency for the purpose of showing the people of the United States the importance of scientific research to the progress of the world. In closing, he summed up his lecture by showing that throughout the whole gamut of vibrations, there runs one and only one immutable law that governs everything, and that there is in our world, one force, through the manifestations of which are many forces and many laws brought into being.

### AMHERST AND TUFTS ENTER 40 MEN IN DUAL TRACK MEET

Some time ago Amherst defeated Tufts in a track meet in which 170 men from each college competed, and which required two weeks to run off. The results of the events at each college were compared by telephone. The meet was part of the regular gymnasium work, and did not include any men of picked athletic ability.



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### BISHOP HUGHES DELIVERS FORCEFUL CHAPEL SERMON

Chapel services on last Sunday were featured by Bishop Edwin H. Hughes, of Malden, Mass., who spoke at both the morning and evening services.

Bishop Hughes is a very interesting and forceful speaker, and had no trouble in holding the close interest of all present. He spoke on a man's personal attitude towards life, and on various uses and interpretations of the Scriptures. He especially spoke in very plain terms of the man who would magnify and distort a Bible verse, so as to set forth some ideas of his own.

Bishop Hughes has appeared before Penn State audiences on at least two former occasions, and thus is not entirely unknown here. He has written several widely read books, and is at present connected with the Methodist Episcopal Church of Malden, Massachusetts.

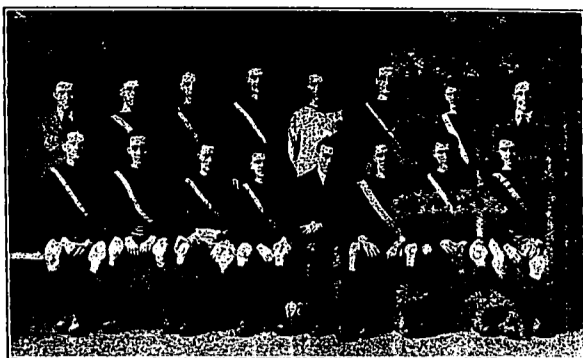
### INTER-UNIT BASKETBALL SCHEDULE BEING MADE

#### Managers and Referees Will Meet Thursday—Old Main and Two Year Aged to Have Teams

The winter schedule of the inter-unit basketball games will be decided on in the near future. All teams that have handed in their names at the Athletic office and are represented by managers whose names are filed with C. M. Osborne '24, Athletic Manager of the Penn State Club, will be represented on this schedule. The schedule will be published in the COLLEGIAN and posted at the basket window in the gymnasium.

Besides the regular sectional units, one team from Old Main, and teams representing the first and second year two year Agricultural students will be regarded as units. Old Main will be classed as unit 24, first year ags, unit 25, and second year ags, unit 26. The Physical Education Department

### Championship Contenders



PENN STATE'S VARSITY SOCCER SQUAD

working in conjunction with the Penn State Club has decided that one gym attendance a week will be required of all men signed up on inter-unit teams. This is to require men to keep in condition for the many strenuous games that will take place this season. Any absences from this gym work will be regarded as regular gym cuts by the Physical Education Department. Arrangements for the gym period should be made with "Chief" Meyers.

An important meeting of all inter-unit managers and men desiring to act as referees will be held in Mr. Meyers' office on this Tuesday evening at seven o'clock. All progress and information relative to schedules, playing floors, and other matters relative to the games which take place immediately after the Christmas vacation, will be taken up at this meeting.

### BACTERIOLOGISTS MAKE LEGUME INOCULATIONS

Numerous requests for bacterial inoculation for various legume crops have been received at the office of the Division of Bacteriology during the current

### ANNUAL SENIOR DANCE DECLARED SUCCESS

The senior dance, held last Friday evening in the Armory, was a pronounced success. There were about one hundred and eighty couples on the floor dancing to the splendid music provided by the "Ten Virginians."

The hall was decorated with various colored streamers and lanterns, while greens added a finished and artistic touch to the scene. The floor was in fine condition for this, the first formal dance of the year.

The "Ten Virginians", who played here last year and won the approval of students of Penn State, upheld their reputation of being the best dance orchestra ever heard at State College. During the entire evening they provided, not only wonderful dance music, but amusing entertainment through their various antics.

### SOPHS DEFEAT FROSH IN LACROSSE SCRAP

#### Lack of Experience Reflects on Playing of Yearling Team—Numerals to be Awarded

The sophomores succeeded in decisively defeating the freshmen in the annual soph-frosh lacrosse scrap which was closely contested on last Saturday afternoon. When the final whistle blew, the scorekeeper's tally counted up to six for the sophs and three for the frosh.

The freshmen were outclassed primarily from lack of experience, and could not withstand the more even teamwork of the sophomore team. The match was an important one, in that all men playing the whole game will be awarded their class numerals.

"Prexy" Says: "The good name and honor of Penn State is at stake. We need more campaigners—no one is quitting."

### AG STUDENTS TO BRING BACK GRAIN FOR SHOW

The School of Agriculture desires to remind its students of the grain show to be staged the first week after Christmas vacation; and that all who can should bring specimens for competition from their home farms. New Jersey is holding a contest at the same time along lines similar to the grain show in connection with the International Livestock Show at Chicago. The hope of Penn State is to expand her show so as to make it state wide and eventually national.

At the beginning of the second period, the freshman team started play with a vim and managed to cage three goals during the period which ended with a final score of 6-3.

Considering the newness of the freshmen at the game, they did very well, indeed, under the coaching of M. H. Gatchell '23. The sophomores were under the care of "Hap" Coulter '23. Captain Flohr and Clouser did the best work for the sophs, though no one man stood out prominently on the yearling team.

### LOUISIANA STATE GRIDMEN MUST WIN BEFORE SHAVING

Made desperate by their ill success, members of the Louisiana State University football team have planned to refrain from shaving until they win a game. They are determined to make the fight of their lives in order to obtain a shave.

### You Cannot Think of Two Things at the Same Time

Your think-box is large enough to record enough thoughts which if placed on Victor records would reach around the world. The faculty of the human mind by which it comprehends the ideas communicated to it by the five senses is limited by the impressions made. Seeing makes the deepest impression, so it very important that one should see clearly, distinctly, and accurately.

If in Doubt about Your Vision Consult our Sight Specialist.  
Dr. Eva L. Roan, E. College Ave.

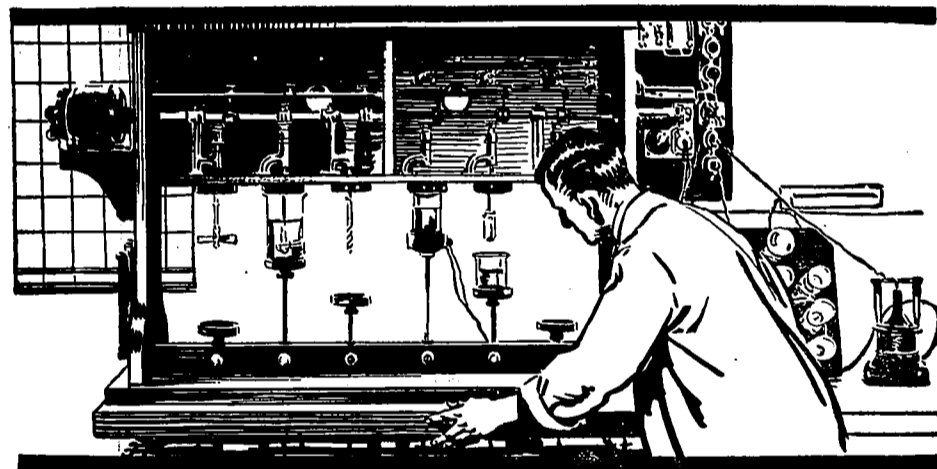
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### Blazing Trails for Progress

Curiosity may have killed the well-known cat, but it has been underneath most of the hard-won developments that lastingly benefit mankind. Once in a great while, perhaps, accident has been the spark that has lighted the torch of achievement; but much more frequently—always, nearly—accomplishment, especially in the field of science and invention, has grown out of the insatiable curiosity that seems to be the heritage of us all. Mankind wants to know—and is slowly finding out. Curiosity, the complement of imagination, knows no appeasement.

This is, however, no essay on the vague subject of idle curiosity. There is a vast difference between that and the organized, untiring, well-planned activity which, as an integral part of Westinghouse organization, searches continually for the answers to problems which intelligent speculation sets up. This, if you please, is curiosity in its highest and most intensified form; and it is a fundamental thing in the Westinghouse operations.

Research, as we know it, is the guiding hand upon the purely creative activities of business. Constantly it brings to light new aspects of known laws, new visions of laws yet to be uncovered. But the search for these is not haphazard nor whimsical; it is organized and planned as carefully and thoroughly as any other business activity. Whether chemical, electrical, or physical, it is engineering; and it follows engineering methods and tradition.

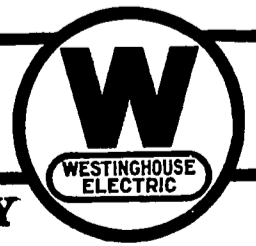
Many great engineers have been wholly at a loss in this specialized activity. For research, in a sense, reverses the usual order. Its endeavor is to discover unknown laws in the known facts—a thing which is quite at variance with ordinary engineering practice. Yet there is a fine type of engineering mind which finds its great opportunity in this kind of work. And to that type of mind, and that type of man, research beckons with an unmistakable hand. It is engineering pioneering, it blazes trails for progress, to new triumphs, in a wilderness into whose outskirts man has scarcely penetrated.

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