

## Nicholas Prepares Food With Dryer; Agricultural Experiments Teach

A dehydrating machine for drying seeds, fruits, and vegetables was the result of experiments carried on for three successive years by John E. Nicholas, professor of agricultural engineering.

Based on tests with apples, beets, carrots, celery, potatoes, and spinach, drying lamps which use infrared energy now remove large quantities of water, thus reducing the weight and bulk of food.

Professor Nicholas, when interviewed in his laboratory equipped with several kinds of dehydrators, stated:

"Many fruits and vegetables in our daily diet are successfully grown and stored for use in individual families. Established practices in food preservation by canning or various ways of drying are generally known. The use of infrared energy offers advantages in the ease of control and probable speed of drying."

Infrared energy, according to Professor Nicholas, has certain characteristics which enables it to penetrate the materials which it dries. Therefore, it is possible for the material to dry "inside out" in a very short length of time. This type of energy was used by manufacturers during World War I on jeeps and tanks. The time of drying was reduced from 24 hours to 15 minutes.

"Seed can be dried by infrared energy to the safe storage moisture content of ten per cent or less in two to five minutes. There is no injury to the seed even when dried at 200 degrees because of this new type of radiant energy," declared

Professor Nicholas.

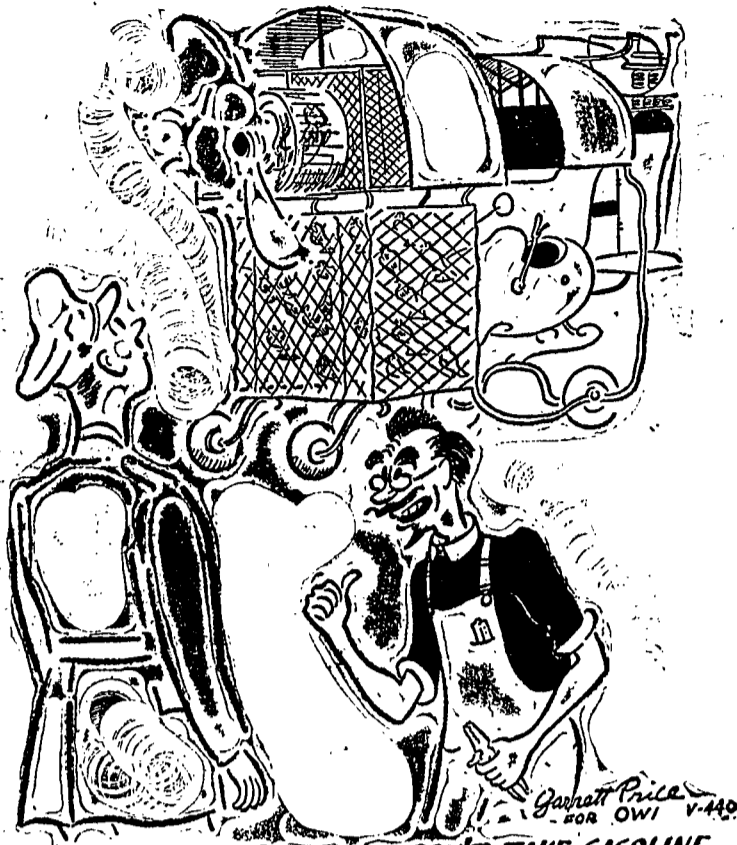
It is a well known fact that when grain is first cut, some time elapses before it is cleaned and bagged. With the use of the infrared dehydrator, however, the grain does not have a chance to lie out in the fields and dry up—it is dried immediately. Thus it has been proved by experiments that the essence of speed and the control of temperature are coordinated.

Applying this principle to fruits and vegetables, Professor Nicholas found that by shortening the time of the preservation process, the loss of the original quality is lessened. All of the original quality of the food, as well as its vitamin content, color, and flavor, is retained.

Experiments at the College also proved that infrared energy has remarkable effects on the brooding of chickens. Infrared radiation, as applied to the dehydration of seeds, fruits, and vegetables, may probably be applied to the dehydration of meats, predicted Professor Nicholas. It has also been discovered that infrared has excellent therapeutic properties.

Part of the original homemade fruit and vegetable dryer built by the professor is being used in the Home Economics building. The remaining part is still in his laboratory.

The inventor stated that the dryer has not been patented because he is willing to allow other manufacturers to use his principle and to alter it in any way they desire.



"IT'S A NEW TYPE BUS—DOESN'T TAKE GASOLINE, CRITICAL MATERIALS OR PASSENGERS."

### CLASSIFIED SECTION

LOST—Theta pin between Atherton and 729 Sunset Road. If found please call Elizabeth Merkle 2575. 1tcomp/PWV

LOST—Olive colored raincoat on second floor, Sparks. Finder call Fred, 4223. Reward. 1tpd/DIR

LOST—Pair pink shell rimmed glasses. Between Library and Atherton. Finder call Anna Thompson, Jordan Hall.

WANTED—The boy who found the gold ring at the Glenland Pool. Owner came to claim and I lost your address. Please come to Collegian Office Monday between 2-4.

### Common Sense—

(Continued from page one)

problem, the white people should learn to understand the Negroes and this understanding should be returned.

Thorlief Iolster opened his speech by relating the political background of Argentina from 1930 to the present. Before 1930, Argentina had been considered one of the most liberal countries in the world with a constitution very similar to our own here in the United States, related Iolster. But through the corruptness in the various governments that followed, liberalism grew weak and the country was ripe for a dictatorship, continued the Argentine student.

The next assembly meeting of Common Sense will be held in 10 Sparks at 6:45 p. m. Wednesday.

### Cabinet—

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8. Dick Griffith was chosen to head the Elections Committee and the following members of the new Elections Committee were approved: Charles Appleman, Woodene Bell, Christina Diehl, Elizabeth Griffith, Raymond Hensler, David Lundy, Herbert Mendt, Ruth Wilson, and Mervin Wilf.

On Dean Warnock's recommendation, Mr. Lynch appointed Jack Davenport chairman of a committee to work out the details of making the Navy ROTC personnel feel as much as possible like regular students next fall. Other members of this committee are Stanley Chadwin, Ria Hanzlik, A/S James Sheehan, Kay Ryder, and Robert Stem.

William Maginn will head a committee to see what can be done about designing a College flag to fly on one of the flag poles in front of Old Main. His co-workers are Janice Dildine, Robert McGregor and Jerry Reinhardt.

Kenneth Harshbarger and Robert Kegan will represent Cabinet at Forensic Council meetings.

Feeling the necessity of more school enthusiasm, President Lynch appointed another committee entitled the Penn State Spirit Committee. Gordan Miller will head this committee composed of Mary Gundel, Micheal Fedak, and Jeanne Weaver.

Portman Paget's name was added to the Swing Inn Committee.

### Fraternities—

(Continued from page one)

er, Maurice Hymowitz, Kenneth Jayson, Sanford Oxman, Edward Popky, Larry Preven, William Rabin, Austin Rozet, Paul Selfon, Edward Silverberg, Bernard Silverstein, Norris Stein.

Phi Sigma Kappa: George Daghis, Phillip Dewey, Robert Drick, Douglas Grier, William Lambertson, Ernest Nagy, Albert Siglow, Edward Trabold.

Pi Kappa Alpha: Edward Ed-dins, Wayne Fairbanks, Nicholas Klym, Jack O'Hara, Michael Onufita, Preston Ottsmiller, Chester Shepperly, Richard Shultz, Dewey Weeks.

Pi Kappa Phi: Harry Cornish, Richard Jung, Louis Lehm, Richard Lord, Richard Moore, John Mumma, Norman Wynn.

Sigma Phi Epsilon: Tom Anderson, Ralph Angus, Tom Botsford, John Chiquoine, B. Fahringer, Jack Hepper, Jack Holmes, James Kane, Bernard Klein, Richard Russell, William Schreyer, Frank Sipe, Gene Tupin, Robert Wink, Phillip Zoeller.

Sigma Pi: Edward Boltz Jr., James Catnes, William Free, Jr., Kenneth Faye, Raymond Polanski.

Theta Chi: Tom Buuns, William Hanley, William Long, Carl Patchin, Ray Ritz, Wallace Ruchen-burg, Jack Seymore, John Slusser, Charles Taylor, Edward Wilson.

### Actors—

(Continued from page one)

add much to the show with their smooth performances. There is Verna Sevast, well-known veteran of Players' shows, who plays helpful, understanding Aunt Martha. James McDougal, portrays Dan Proctor, Doug's brother, who, while on the road to fame as a nutrition researcher, falls prey to Evelyn's wily charms.

Mary Ann Kemper will be seen as Hilda, the maid who quits when she can no longer endure Evelyn's domineering presence in the house. The parts of Frank and Mrs. Dow will be played by Sidney Eboch and Violet Grubin.

AST's Play Duplicate Bridge Members of the AST unit played a duplicate bridge tournament in Barracks 5 Saturday. Another tournament is being planned for later in the term. The final results were: Blackall-Stern, 31; Bell-Bolick, 29½; Jacobs-Weiss, 24; Andrew-Long, 22½; Strickler-Sherman, 20; Loersch-Defore, 17.

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