

### SCIENCE PUTS END TO BRICK TROUBLE BY SIMPLE TRICK

Research Professor Finally Solves 30-Year Puzzle—Many Costly Difficulties Overcome By Discovery.

COLUMBUS (UP)—A simple solution to the 30-year puzzle of the strange, destructive behavior of refractory, or heat-resisting, brick when made from certain types of flinty clay found in Ohio and adjoining states, has been discovered by Prof. J. O. Everhart, member of the research staff at Ohio State University's engineering experiment station.

For three decades or more research workers and manufacturers have had an almost continual headache over the mysterious, and costly, actions of the brick during its manufacture from this clay and have pondered solutions as to why. Blast furnace operators have placed a brick floor in the bottom of the stack, later to discover the brick floating on top of the mass of molten metal.

Incinerators have been put out of commission because brick popped out of the sides almost as rapidly as they were put to use.

Vary in Size  
Brick made in the top of the kiln were as much as one-eighth inch longer than those at the bottom, although they were all intended to be the same size.

Everhart's solution to these problems is merely to grind the clay into finer particles. This short solution to such a weighty problem is important to concerns in Ohio, and other states which use millions of dollars worth of this kind of brick each year, as well as to the manufacturers. Eighty percent of fire-clay products have as their major constituent this flinty clay, found in the coal regions.

In his research work, Everhart found this clay has a normal shrinkage up to a certain temperature during the firing stage of manufacturing. After that temperature—about 2,100 degrees Fahrenheit—is reached, the clay shows an abnormal expansion. Past the 2,500 degree mark normal shrinkage again occurs. But it is between 2,100 and 2,500 degrees that many desirable qualities are obtained in refractory brick.

Carbon Retained  
In the raw clay, Everhart observed laminations or layers—sometimes as many as 30 to an inch. When a chunk of this clay was heated to 2,100 degrees, spaces were noticeable between the layers. The research man then made a microscopic study of clay as it is ground under present practices. He found the larger and more dense grains retained the carbon-saturated layers which caused bloating at certain high temperatures. A series of parallel cracks developing at these layers in the grain expanded rapidly as the temperature increased. This phenomenon caused what the industry called "secondary expansion."

By grinding the clay more finely so that these layers are broken and the original lamination eliminated, Everhart has made a brick which performs under fire as good brick should. He believes that through use of his theory manufacturers will do away with "floating bricks," broken incinerators and bricks that do not shrink uniformly.

Under the state law a portion of the privilege tax on alcoholic beverages other than hard liquors reverts to the cities and counties.

Phone 542 We'll haul away your refuse City Sanitary Service.

### COMMUNIST CANDIDATE ARRESTED



Earl Browder (center), presidential candidate of the Communist party, and two companions, Seymour Waldman (right) and Waldo Frank (left), are pictured as they were arrested on charges of vagrancy as they left the train at Terre Haute, Ind., where Browder was scheduled to make an address. (Associated Press Photo)

### FOOD PRICE BOOSTS BRING NAZI ACTION

BERLIN, Oct. 8.—(AP)—Wholesale confinement of meat, the closing of a butcher shop and the arrest of its owner for price increases, was announced today by Count Wolf Heinrich von Helldorf, Berlin's police president, to counteract what was described as the increasing danger of devaluation because of decline in purchasing power.

Security of meats and fruits again is apparent in German markets and has become the subject of unpleasant discussion.

### Beer, Wine Taxes Boon For Cities

SALEM, Oct. 8.—(AP)—Counties and cities of Oregon shared in \$45,304.94 of the quarterly tax received by the state on beers and wines, the secretary of state announced today, the distribution being made on the basis of population.

Under the state law a portion of the privilege tax on alcoholic beverages other than hard liquors reverts to the cities and counties.

Phone 542 We'll haul away your refuse City Sanitary Service.

### SWISS ERASE TARIFF ON PEARS, APPLES

WASHINGTON, Oct. 8.—(AP) The commerce department announced today the Swiss government had abolished or reduced import duties on 18 classes of foodstuffs, a number of which the United States produces.

The Swiss action in liberalizing trade restrictions followed similar measures adopted last week by France.

The Swiss decree of most interest to American producers, commerce department officials said, was the abolition of the tariff on apples, pears and prunes, and a 75 percent reduction in the duty on dried apricots.

### BANNISTER EXTORTERS GIVEN PEN SENTENCES

NEW YORK, Oct. 8.—(AP)—Two men convicted of extorting \$1,800 from Harry Bannister, former husband of the motion picture actress, Ann Harding, were sentenced today in court of general sessions.

Jerome A. Jacobs drew a sentence of four to eight years and Raymond DeJonghe of two to five years.

### COMPANY CHANGE AT CCC CAMP PRESCOTT IS SET FOR FRIDAY

Company 1632, CCC, which has occupied Camp Prescott for the past year, will be demobilized Friday, October 9, and the men will leave for the sixth corps area. On the same day, company 3864 will arrive here from Bastrop, Texas, to occupy the camp.

The Prescott men will leave on a special train at 4 o'clock Friday afternoon, along with the men from company 1642, Camp South Fork, and 1634, Camp Annie Springs. In the group also will be men from company 164, McKinley, and 162, Sitkum, who are going home to be discharged. The men of the latter hanged camps who are to re-enroll will leave later on another train as they are being held here on account of the fires on the coast.

About 420 men will make up the special pulling out of here Friday. Capt. R. R. Gobell will be in command, with Capt. L. B. Hanson as train surgeon and First Lieut. G. E. Wood as mess officer. Capt. Gobell and Lieut. Wood are sixth corps area officers and will not return here. Capt. Hanson, assistant district surgeon, will return to Medford.

Capt. William B. Clegg of the Prescott company and Capt. Harold Capers and Lieut. Robert H. Colwell of Annie Springs are planning to drive east with their families. Capt. Preston E. Rohner of South Fork and Lieut. Robert W. King of Prescott will be transferred to other camps in this district. They are ninth corps area officers.

### DEER SPOTTERS FINED \$50 EACH

ROSEBURG, Ore., Oct. 8.—(AP)—Pleading guilty to charges of spotlighting deer, Elmo Locker, Clyde Larson, Orville Weaver and Harold Edes of Myrtle Creek were fined \$50 each in the justice court here today.

They escaped from State Police-man Fred L. Perry of the game law enforcement division Monday night as they sped away in their car, refusing to obey his order as he attempted to halt them on their return from a night hunting excursion, the office reported.

They were apprehended last night, however, and were taken into court this morning. Weaver and Edes are paying their fines and Locker and Larson were committed to the county jail.

Auto Hits Child  
ROSEBURG, Ore., Oct. 8.—(AP)—Florence Charlotte Batterlee, 8-year-old daughter of Mr. and Mrs. E. G.

### Batterlee of Winston, suffered a fractured leg today when struck by an automobile driven by D. S. O'Brien of Bend. According to O'Brien's report to the state police, the child darted out from behind a parked truck.

### TAX RELIEF PERMITTED FOR BANDON CITIZENS

BANDON, Oct. 8.—(AP)—Special relief from taxes will be enjoyed by hard-hit citizens of this fire-raged city. The county has decided not to collect its share of revenue from improvements estimated at \$21,000. Taxation on lots and acreage, however, has not been dropped.

WINDOW GLASS—We sell window glass and will replace your broken windows reasonably. Trowbridge, Cabinet Works.

### SGT. ELLENBURG GIVES VIVID STORY OF FIRE AT LIONS LUNCH CLUB

Sgt. William H. Ellenburg of the Oregon State police was the main speaker Wednesday before the Medford Lions club in their regular weekly luncheon meeting at Valentine's cafe. He has just returned from special duty at Bandon, destroyed by flames a week ago Sunday.

The officer told the Lions that, aside from the human element in the tragedy, that loss having been emphasized time and again, the loss to animal life was very great. The bodies of eight deer charred in the flames were found in the city limits of the destroyed city, he said, and police and others on special duty had been forced to kill several others grazed by the flames. Circling fires had caught wild animals of all sorts and destroyed them, he said.

### Manila Authorities Find Dynamite Plot

MANILA, Oct. 8.—(AP)—The Manila Bulletin said today that authorities had disclosed the discovery of an elaborate plot by subversive elements to dynamite and fire buildings occupied by foreign residents, in an effort to cause foreign powers to intervene in the Philippines.

The native Sakdal radicals, said the newspaper, joined with communists to carry out the plot reputedly uncovered as officials investigated Saturday's bombings and fires which caused \$500,000 damage.

### COATS YOU WOULD WANT TO WEAR \$19.95 - \$29.75 ETHELWYN B. HOFFMANN

Use Mail Tribune want ads.

A NATIONAL DISTILLERS PRODUCT

They all look alike... but one is a WINNER!

JUDGE a whiskey—as well as a horse—on PERFORMANCE! Windsor, by its outstanding performance, is a champion among popular-priced, straight bourbon whiskeys. It won, and is holding, its championship by better taste. Rich, round-bodied, delightfully smooth, Windsor gets its taste leadership from expert distilling and careful ageing. Try a bottle. You'll like the price, too.

NOW 18 MONTHS OLD!

Champion in its Class!

**Windsor**  
93 PROOF—STRAIGHT BOURBON WHISKEY

NATIONAL DISTILLERS PRODUCTS CORPORATION • Executive Offices: New York City

### COMMUNISTS IRKED BY DEMONSTRATION BAN

PARIS, Oct. 8.—(AP)—Dissension among government supporters sprang today from an official ban on political demonstrations.

Chafing communists asked socialists to join with them "in defense of the freedom of assembly" after Premier Leon Blum's approval of an order prohibiting partisan meetings susceptible of provoking hostile action and reaction and causing new agitation of public opinion.

Be correctly covered in an Artist Model by Ethelwyn B. Hoffmann

### Nationally Famous for COMFORT and GOOD FOOD

You'll enjoy your Portland visit to the extreme, here at the center of the city's life. ... Pleasant, outside rooms. Beautiful Dining Room and smart Coffee Shop. Delicious food at popular prices.

Only three to four blocks from leading banks and stores. Garage opposite.

SUPPER CLUB Dining and dancing nightly (9 to 1) except Sunday and Monday. ... Famous orchestras.



See your FAVORITE TEAM in Action this Week-end!

STANFORD\* vs OREGON  
CALIFORNIA vs OREGON STATE\*  
U.C.L.A.\* vs WASHINGTON  
WASHINGTON STATE vs IDAHO\*  
MONTANA\* vs IDAHO (Southern Branch)

OTHER OUTSTANDING GAMES

Albany\* vs Oregon Tech. (Friday Night)  
Ashland\* vs Oregon Frosh (Fri. Night)  
Bellingham\* vs Gonzaga Frosh (Saturday Night)  
Montana State\* vs Colorado College  
Pacific Lutheran\* vs Ellensburg  
Pacific U.\* vs Linfield (Friday)  
Puger Sound\* vs Portland (Sat. Night)  
Whitman\* vs Whitworth  
Willamette\* vs Nevada (Friday Night)

\* Home game. All schedules secured direct from universities and colleges listed. For other games this season, see 1936 Richfield Schedule Chart.

ENJOY all the thrills and "color" of America's most spectacular pastime by attending the coming game in person. Make your plans now to go out and root for your team. Before you start, drive into your neighborhood Richfield station for complete car service. And when you fill your tank with Hi-Octane, be sure to secure your free copy of the 1936 Richfield Football Chart, the handiest and most complete schedule available on the Coast.

There is no substitute for **RICHFIELD Hi-OCTANE**