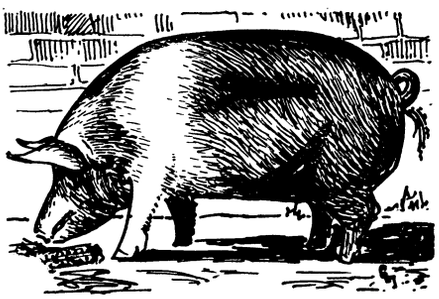
ZOOLOGY

NATURE RAMBLINGS

by Frank Thone



St. Patrick's Pets

➤ PREPARATIONS for St. Patrick's Day festivities almost inevitably feature, amid the verdant shamrocks, a plump pink pig, perhaps with a green ribbon tied around his neck. But if mention is made of this incredibly well-scrubbed little porker he is usually referred to as "Paddy's Pig," the implication being that he is the property of some later, humbler namesake of the great saint, as if it were somehow improper to associate swine with the austere, white-bearded bishop that is the usual picture of St. Patrick.

We should remember, however, that there was a time in Patrick's life when he wore neither beard nor mitre—though he may have had to live austerely enough even then. And in those days, if the story of his early life as commonly told has any truth in it, he had a good deal to do with pigs. The tale that as a lad he was kidnaped by pirates and sold into bondage in Ireland, serving some years as a swineherd, is at least as credible as any other part of the Patrician legend.

It may even help explain the near-miraculous strength and energy which he brought to his incessant travels and hard labors throughout a long life. For herding swine in the Irish woods a millennium and a half years ago was no job for a milksop. The pigs of Patrick's day were slab-sided, fleet-footed, thoroughly "ornery" creatures, more like our Arkansas razorbacks than the tame, sleek, slow-moving porkers of present-day pigpens. Keeping them from straying was a job for a young athlete. If the younger Patrick really ever was a swineherd he got the full benefits of rugged outdoor living and plenty of hard exercise.

Not that St. Patrick would disapprove the kind of pigs they raise in Ireland nowadays, if he should chance to stroll through a county fair in his beloved island. For like most saints (especially those burdened with bishoprics), Patrick was a practical man, desiring to see his people prosperous as well as virtuous; and the modern pig, yielding fuller-fleshed hams and longer rashers of meatier bacon, would undoubtedly please his judicious eye.

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CHEMICAL ENGINEERING

Silica-Magnesia Catalyst

➤ HIGHER gasoline yields, lower butane and gas yields, and somewhat lower gasoline octane numbers have been obtained during a six-months period with a silica-magnesia cracking catalyst as compared with the older silica-alumina material, the American Institute of Chemical Engineers, meeting in Los Angeles, was told by A. L. Conn, W. F. Meehan and R. E. Shanklin, all of the Indiana Standard Oil Company, Whiting, Ind.

The continuing and successful operation with the silica-magnesia catalyst has been characterized by an unusually low rate of activity decline, and by immunity to sulfur poisoning, they stated. It was also found that intentional buildup of carbon on the catalyst is very effective in controlling the activity in the cracking step without the adverse effects of high catalyst losses, flue gas after-burning, and uncontrolled coke buildups experienced with other commerical catalysts.

As the catalyst aged, there was indication of a trend toward lower carbon burning rates. It appears, they declared, that silica-magnesia will have a definite place in the catalytic cracking picture, although conclusions regarding its long range position must await commercial operation over a more extended period.

With more fluid catalytic cracking plants going into operation, the effect of reactor temperature on product distribution and product quality is becoming increasingly important in the refinery process, the chemists were told at the same meeting by C. R. Olsen and M. J. Sterba of the Universal Oil Products Company, Chicago.

Tests at various temperatures were described by them. The general effect of increasing reactor temperature at a given conversion, they stated, is to produce less catalyst deposit and greater quantities of light hydrocarbon fractions having higher olefin contents. The liquid products contain higher concentrations of unsaturated components, and the clear octane number of the gasoline is increased.

Science News Letter, March 12, 1949

CHEMISTRY

Cancer-Causing Chemical Available in Tracer Form

➤ ONE of the most potent of cancer-causing chemicals is now available in radioactive tracer form, for research purposes. Synthesis of 2-acetylaminofluorene, in which one of the carbon atoms is the radioactive C-14 isotope, is announced in the journal, SCIENCE (Feb. 25), by Drs. Francis E. Ray and C. Robert Geiser of the University of Cincinnati's laboratory of radiochemistry.

Science News Letter, March 12, 1949

Words in Science—TRANSDUCER

➤ INSPECTION of metal castings or parts by high frequency sound waves is made possible by a transducer, pronounced "trans-doos-er," with the stress on "doos."

The transducer is a device for converting electrical energy into pressure waves, such as sound waves, and for converting the returned sound waves into electricity. The method works like radar, sending back echoes from any flaw in the metal being tested, the sound waves being then turned back into electric energy and recorded.

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