#### PLANT PATHOLOGY

# NATURE RAMBLINGS

By Frank Thone



#### Northern Neighbors

Many terrifying tales have come down to us about the blood-thirstiness and malice of the panther, or catamount, or mountain lion, all popularly accepted names for the puma, the largest of our native American cats. Recent investigations, however, have exploded most of these, and it now appears that under ordinary circumstances the mountain lion is an arrant coward.

Not so the smaller cats, however. They are of a different breed, being all of the genus Lynx. The smaller species is the wildcat, or bobcat; the boast that a man can "lick his weight in wildcats" is proverbial, and a deserved compliment—to the wildcat. No hunter who really values his dogs will venture them against a wildcat.

Even less so will he venture them against the big Canada lynx. This tuft-eared pussy, with harsh bristling fur and mean yellow eyes that fairly spit fight at you, is far and away the most formidable thing of its poundage in North America. Not even a grizzly bear could lick its weight in Canada lynxes.

Not only can they sell their lives dearly when brought to bay; the lynx tribe is mighty hard to bring to bay. Their keenness of sight and adroitness of action are so proverbial that the members of the oldest scientific society now in existence, the Italian Accademia dei Lincei, proudly named themselves the "Academy of Lynxes" when they were organized several centuries ago, and bear upon their insignia the figure of one of these sharp-eyed cats.

Whenever one sees a moose, whether a mounted specimen in a museum or sportsman's trophy room, or alive in his native woods of the North, it is hard to suppress a feeling that we are looking at an animal that belongs by rights to the past. He is so portentous, so monstrous, and his strangely shapen head and even more strangely shapen horns so grotesque, that we instinctively set him back among the shaggy cave bears of the (Just turn the Page)

### Indians' Religious Tortures

**ETHNOLOGY** 

By Albert B. Reagan

The author of this article is a well known authority on Indian life and customs.

The Yaqui Indians, whose surrender to the Mexican government, ending generations of relentless hostility, was announced a few days ago, are commonly thought of as utter savages, living lives of unrelieved and unredeemed paganism. This, however, is far from being the case. In the early Spanish days, when their relations with white men were better, the tribe was visited by devoted missionaries, who made a very good beginning at converting them to Christian faith and civilized ways.

But the missionaries were compelled to leave, and during the past two centuries, as the creed has been handed down from father to son, it has been greatly distorted. By easy stages it has finally slipped into three major dance ceremonies. The most elaborate of them is the "Penitente-Matachina," though only a little less interesting and weird are the dances known as "Pascola" and "Baila de Venada."

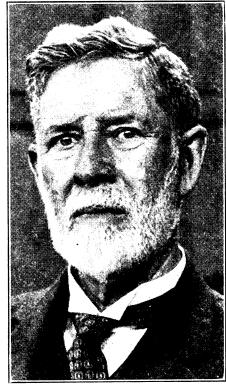
The Penitente-Matachina ceremonies are held during the month of December until Christmas time, and during the latter part of June. At this time especially in the southern part of Sonora, down near Santa Ana, many young Indian men undergo excruciating torture annually to atone for the sins of their community, volunteering their flesh for the elevation of their people.

In each community one is selected, who, garbed only in a breech-cloth, leads a procession composed of every inhabitant of the village, and he seldom returns alive.

The Indians arm themselves with cactus, and each in turn pricks the "penitente." The more cruel the torture, the more nearly have the people of the community been forgiven for their sins during the year, they believe. The suffering subject, bleeding and generally dying, is then carried back to the Yaqui church, where protracted weird ceremonies are conducted.

This human offering is followed by the "Matachina," which lasts four days and is performed in celebration of the birth of Christ. It is a dance ceremony of great joy, for it is supposed that after a young man has been thus sacrificed the Indians should be unusually happy.

In this ceremony the Yaquis line up in two rows, with the chief of (Just turn the Page)



ERWIN FRINK SMITH

### Pioneer Pathologist

What Robert Koch was to the early days of human and animal bacteriology, that and more has Dr. Smith been to the bacteriology of plant diseases, in the estimation of his colleagues. One of the pioneers in this field, he has done much to bring together into close relationship the pathology of both plants and animals. His studies on the parasitic origin of plant tumors has had a significant bearing on the scientific research on cancer in animals and man.

Born at Gilbert's Mills, N. Y., in 1854, Dr. Smith received both his undergraduate and doctor's degrees at the University of Michigan. In 1889 after finishing his graduate work he came to the U. S. Department of Agriculture as pathologist and he has been there ever since. He has published many papers both in America and in leading European journals and is a recognized authority in his field. He is now in charge of the laboratory of plant pathology at the Bureau of Plant Industry and occupies an outstanding place both here and abroad in associations devoted to cancer research.

Notwithstanding the impression he has made on the field of experimental biology he has never lost sight of the humanities, so often neglected by scientists, nor of the beautiful things of the mind and the world without.

Science News-Letter, February 5, 1927

The name dromedary means a "run-

Lumber is now being seasoned by cold air.

Houseflies have a keen sense of smell.

Almost all Indian tribes used drums and rattles.

Most of the volcanoes in the Philippines are now extinct.

Pennsylvania leads the United States in mineral production.

Meat of fat cattle keeps better than meat from thin animals.

Government scientists are studying the food value of sausage.

An alarm clock attachment for wrist watches is a recent novelty.

No iron tool was used in building the Jewish temple at Jerusalem.

A new rubber pavement is being tested in a busy street in London.

#### Are you interested in human affairs?

The world today is alive to the problems of immigration, race, population, and other aspects of its peoples viewed as groups. A workable understanding of these problems centers largely around the principles and known facts of biological inheritance. These are intelligently and authoritatively discussed in

## HEREDITY

By A. Franklin Shull
Professor of Zoology in the University of Michigan
287 pages, 6 x 9, illustrated, \$3.00

This new book by Doctor Shull is a sound and thorough treatment of the principles of biological inheritance. The whole subject is discussed in logical order, from a consideration of the earliest knowledge of heredity to a thoughtful discussion of the practical application of its principles.

#### The Plain Facts for You

The book gives a thorough explanation of biological fundamentals. It shows how inheritance factors operate in plants and animals. It then proceeds to illustrate their operation in human heredity

#### See Your Copy FREE

Let us send you a copy of this new book for 10 days' free examination. No obligation to purchase. Keep the book or send it back as you prefer. The coupon below will place a copy in your hands promptly.

Free	Examination	Coupon
------	-------------	--------

### McGRAW-HILL BOOK COMPANY, Inc. 370 Seventh Ave., New York.

		send							
Shull's	HÈI	REDIT	ſΥ,	\$3.00	, p	ostp	aid.	Ī	agree
to pay									nptly,
postpai	d. w	ithin	10	day	s (	of r	ecei	pt.	

Signed	
Address	

Official position

Company
(Books sent on approval to retail purchasers in United States and Canada only.)

SNL 2-5-27

#### Indians' Torture

(Continued from Page 87)

ceremonies between the rows, and an Indian, whose face is covered by a mask resembling the head of a donkey, does considerable writhing of his body. This movement indicates that with the birth of Christ a furious battle was waged against sin.

The dancers are attired in gaudy colors and move to the strains of a band of tom-toms and other Indian instruments, presenting a spectacular and at times grotesque appearance. They perform the curious ceremony, however, with faces of austerity.

Each dancer prances about, until from exhaustion he sinks to the ground. Another immediately takes his place; and the never varying movement, accompanied by the continuous rattle of the gourds, continues unabated through the four days.

At the conclusion of the ceremonies they heave mighty sighs of relief, for they believe they have performed their duty. They believe that they have been forgiven their transgressions and that they can begin a new year with unsullied records. The past has been entirely forgotten, and when a member of the tribe dies during the next year they believe he is punished only for the sins committed during the period following the last atonement cere-monies. They also believe that the young Indians offered for sacrifice, who escape the orgies with their lives, are awarded a place in heaven second in glory only to that of those who succumb to the cruel prickings of the

Science News-Letter, February 5, 1927

The blackness in dark smoke is chiefly tar.

Carrara marble was first known in Roman times.

#### **Nature Ramblings**

(Continued from Page 87)



ice age and the scarcely less shaggy cave men that hunted them.

In a way we are right. The moose was a more abundant animal in those past times that he is now, and his range today is in the forests of the long winter and deep snow, such as must have lain across France and southern Germany when the whole Baltic country was blocked with ice. And moose, ranging in spruce forests "down in Dixie" must have been a strange sight, had there been anyone there to see it. Furthermore, there is a very real prospect that these great beasts may soon join the fantastic company of giants that are no more, for what between repeating rifles and a mysterious disease that decimates their ranks now and again, the moose seem to be gradually vanishing. The ever-shortening days of open hunting seasons may not avail to save them.

The most recently exterminated race of moose were the animals known as the giant Irish elk (for elk and moose are synonymous words in the English speech, though not in ours), which were hunted by the kings of Erin. These were the most impressive hoofed animals that ever lived, standing almost as high as elephants, with great palmated antlers that spread eight feet wide over their shoulders.

Science News-Letter, February 5, 1927

A spider's poison supply is secreted in glands in its head.

# Special Introductory Offer --- 13 Weeks for \$1

Just clip a dollar bill to this blank, fill in your name and address and mail at our risk.

To Science Service, 21st and B. Sts., Washington, D. C.

Make me acquainted with the Science News-Letter for 13 weeks. Here is my dollar.

Name .....

Address