

WILDLIFE
NATURE RAMBLINGS



Porcupine

► THE Achilles' heel of the porcupine is its soft underbelly. A deft predator that has learned to respect the formidable armament of the porcupine can flip the prickly creature onto its back and quickly kill it.

But the hunter whose training in woodland tactics is deficient on this particular point is in for a lesson it will not soon forget. However big or ferocious it be, whether bear or mountain lion, wolf or fox, lynx or coyote, it makes no difference. To attack a porcupine from the prickly side is at least sharply painful, and at worst deadly fatal. And, the belly excepted, all sides are prickly.

Unmolested, porcupines are docile, harmless creatures. They waddle along the ground or climb slowly in trees, preoccupied with the search for bark, mistletoe, and other vegetative delicacies. They are not meat eaters. But if an enemy appears before the safety of den or tree can be reached, the porcupine bristles. The long, strong, sharp quills which cover its body from head to tail, stand out from the body, like pins in a pin-cushion with the pointed ends out.

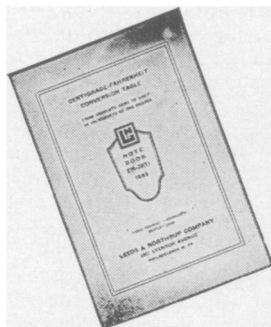
The porcupine takes a position with its tail to its foe, and as the puzzled would-be attacker circles looking for some place to catch hold of its prey, the porcupine shuffles around to keep its tail pointed to the intruder. If the latter is foolish enough to

lunge to the attack, the porcupine delivers a powerful upward blow with its tail, driving quills into the attacker's chin and throat, and at the same time guiding the attacker's mouth and face into the thicket of quills on its back.

The quills are as much as five inches long and barbed. It takes a man with pliers to pull one out. An animal cannot remove them unaided. They work their way in deeper and deeper. Experts disagree on how serious these quill wounds are. Some believe they can lead to death, either from starvation resulting from quills in the mouth, making eating impossible, or else from the eventual penetration of a quill to some vital part. Others think the quills are absorbed eventually by the body tissues, causing pain but no serious harm.

It is popularly thought that porcupines throw their quills like darts in self-defense. Zoologists who have studied the matter think that strictly speaking this is not so. Quills are constantly growing, being lost, and growing in again. The older quills are quite loose. It sometimes happens that a disturbed porcupine will flip up its tail and a loose quill will fly off. The odds against such a flying quill hitting a target, to say nothing of sticking into it, are very slim.

Science News Letter, April 1, 1950



**Quick-Reading
Temperature-Conversion Tables**

For speed, when you're converting degrees F to C, and vice versa, you can now use a simple, compact "Sauveur-type" table all the way from absolute zero to 3350 C and 6062 F, in increments of one degree.

For quantities, there's a slight charge: ten copies for 75¢; 50 for \$3.25; 100 for \$6.00. To minimize book-keeping, kindly order from our Advertising Dept., and include check for exact amount . . . but please note that a single copy will be sent free on request. Better get one! Ask for Note Book EN-33(1).



Jrl. Ad. EN-33(1a)

SCIENTIFIC AMERICAN THIS MONTH

EINSTEIN
explains his new
GENERALIZED THEORY OF GRAVITATION
in an historic article written expressly for the interested layman

FIFTY CENTS
April 1950

For the readers of SCIENTIFIC AMERICAN Albert Einstein has written an explanation of his new Generalized Theory of Gravitation. In this "account for a wider group interested in science," Professor Einstein sets forth the meaning of the Theory in the lucid style which distinguishes him as one of the great interpreters of modern science.

The Editors are privileged to announce the publication of this important article in the April issue of SCIENTIFIC AMERICAN—the Second Anniversary Issue of the new magazine of science now published under the century-old name.

FREE Take advantage of the Second Anniversary Offer below, enclosing cash, and the April issue will be added free to your subscription.

More than 100,000 new subscribers have discovered the new SCIENTIFIC AMERICAN. Addressed to the interested layman, articles in SCIENTIFIC AMERICAN are written by foremost scientists and engineers. Soundly edited, richly illustrated and printed, this remarkable new magazine fills urgent need for an authoritative and readable account of progress in all departments of science.

Accept this Anniversary Offer—nine months of the new SCIENTIFIC AMERICAN for only \$3.00, saving you \$1.50 from the single copy price (10 months for cash with order). The April issue will be sent to you at once.

MAIL THIS COUPON
SAVE MONEY—9 MONTHS FOR \$3.00 STARTING WITH THE APRIL ISSUE
The New SCIENTIFIC AMERICAN
24 West 40th St., New York 18, N.Y.
Please enter my Anniversary subscription at the special rate of 9 months for \$3.00, starting with the April issue.
 Payment enclosed* Bill me later
NAME.....
ADDRESS.....
CITY.....ZONE...STATE...
*Save us billing cost by sending payment now, and April issue will be added FREE to your subscription.

ELECTRO MAGNET

110 volts AC or DC. Will separate ferrous from non-ferrous metal. Will lift 30 to 40 lb. load flat surface. Will also magnetize screw driver, hammer or other tools. Made of highest quality Government surplus parts. Satisfaction guaranteed, or money \$3.95 refunded if returned within 1 week.

Send check or money order Post-paid
MACKLEY TRADING CO.
25-R PARK PLACE, N. Y. 7, N. Y.

