



Penguins

➤ THE PENGUIN is a remarkable bird. It has feathers, two legs, wings, and it lays eggs, just like other birds. But eons ago the penguin lost the art of flight and adapted itself to one of the least hospitable environments in the world.

Like the ostrich, the penguin can no longer fly, but both birds have learned how to move swiftly in an unbirdlike way. The ostrich has developed into one of the swiftest runners of all the land animals, and although its short wings are no good for flying, they do help this large and powerful bird to carry its weight more speedily.

The penguin has undergone a different kind of adaptation. Its wings, instead of becoming auxiliaries to rapid transit on land,

EUROPE ON A SHOESTRING

ON A SHOESTRING

It probably costs much less than you think to see Europe. For one thing there are many low cost tours originating in Europe, the kind that economical Europeans buy for themselves. Some are as low as \$5 a day for hotels, meals, sightseeing, etc.

The book that describes these tours and many other ways to see Europe as nearly on a shoestring as possible is the 1954 edition of Europe on a Shoestring.

Here are facts galore on—

What to see from one dof Europe to the other, including England, France, Italy, Switzerland, Austria, Scandinavla, etc.

When's it's cheaper to rent a car than take your own; how to buy and sell a car overseas.

How to get the most for your money when going via rail, bus, sightseeing coach, etc.

How to save on foreign exchange. This part of the book alone will pay for its cost many times over.

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the book alone will pay for its cost many times over.

In short, it covers everything you want to know—from what to see to how to see it, with facts, facts, facts. There's a handy guide to "How to Say It in 7 European Languages" (that section alone is also worth the price of the book). Of course, it's specific about passports, visas, customs here and in Europe, clothing to take, etc.

"No traveler can afford to go to Europe without this book," writes a travel agent. "Your book saved me enough last year to bring home lots of gifts," writes a woman. "The intelligent traveler's guide to Europe," says the French Government travel office. For two dollars, you get this money-saving book, plus 2 supplements on where to stay, eat, and shop in England and France—more help on seeing Europe comfortably and at low cost.

Tear out ad, print name and address on sheet of paper, and mail with \$2 to HARIAN PUBLICATIONS, 9 SCRANTON ST., GREEN-LAWN (LONG ISLAND), NEW YORK.

have become specialized into flippers with which a penguin can achieve swimming speeds rivalling that of seals and porpoises.

Compared to penguins, the amphibious waterfowl like ducks and geese are virtual landlubbers. A penguin swims for considerable distances underwater, coming up occasionally for short breathers. Sometimes when in a frolicsome mood, a penguin will leap clear out of the water like a porpoise, curving through the air and diving back into the water.

A penguin with a good head of steam up can leap from the water onto a ledge three or four feet high. Once arrived on land, however, penguins waddle about like creatures out of their element. They walk upright and move awkardly, although with great dignity.

There are more than a dozen species of penguins, ranging from the larger Emperor and King Penguins down to the foot high Little Penguins.

The largest is the Emperor Penguin which stands about four feet high. It is the most southerly of the family, being the famous antarctic penguin of Admiral Byrd fame. The King Penguin is found farther north in southernmost South America and occasionally in Tasmania and New Zealand. These two penguins share the peculiarity of incubating their eggs while standing up. They lay a single egg which is placed on the foot and covered with a pouch-like flap of skin on the leg.

The Jackass Penguin, so-called from the typical noise that rises from an assembly of this type, is found on the coast of South Africa. The Galapagos Penguin uses both flippers and feet to scramble over rocks.

Science News Letter, February 13, 1954

INVENTION

Patent Method of Selling Frozen Juice in Cups

➤ A WAY of packaging frozen juice concentrates in paper cups has been patented by John H. Kauffman of Eustis, Fla. Stored in stacks at below freezing temperatures, the cups are easily dispensed through coinoperated machines. All the purchaser has to do is add water and stir. The invention was given patent No. 2,667,422.

Science News Letter, February 13, 1954

ITS HEALTH, BEAUTY AND GROWTH By Herman Goodman, M.D.

A medical specialist tells you what to do to save and beautify your hair, to stimulate healthier hair growth, and deal with many problems, as dandruff—gray hair—thinning hair—care of the scalp—baldness—abnormal types of hair—excessive oiliness—brittle dryness—hair falling out—infection—parasites—hair hygiene—glands—diet—coloring and myriad other subjects concerning hair. "Discusses the many problems of hair retention, regrowth and removal." — Science News Letter. 287 Pages—PROFUSELY ILLUSTRATED Price \$2.95, Postfree. 5-day Money-Back Guarantee. EMERSON BOOKS, Inc. 251 West 19th Street.

Questions

ASTRONOMY — Why have the changes in Jupiter's brightness been studied? p. 101.

CHEMISTRY—What is the starting chemical for morphine synthesis? p. 101.

DENTISTRY—How can lost first molars be rep!aced? p. 105.

METEOROLOGY-Of what value are tornado warning radar systems? p. 106.

PHYSICAL CHEMISTRY—How was the newest man-made element produced? p. 103.

PSYCHOLOGY—What complicates diagnosis of allergic reactions? p. 104.

Photographs: Cover, Bosworth Lemere; p. 99, Lockheed Aircraft Corporation; p. 103, Bendix Aviation Corporation; p. 106, Illinois Water Survey; p. 112, Westinghouse Electric Corporation.

Sting Chemical Helps Make Arthritis Drug

➤ THE CHEMICAL that gives the sting to ants and nettles plays a key role in a new method of synthesizing the latest antiarthritis hormone, hydrocortisone, or compound F.

Announcement of the new synthesis as affording a "potentially cheap and plentiful supply" of the drug was made by Dr. Eugene P. Oliveto, Miss Corinne Gerold and Dr. E. B. Hershberg of the Schering Corporation, Bloomfield, N. J., at the meeting of the American Chemical Society's North Jersey section, Newark, N. J

The ant and nettle sting chemical, formic acid, is used in the new process to yield a formate of the steroid compound which is obtained from ox bile or, more recently, from fermentation processes. This formate goes through later steps in the synthesis of hydrocortisone without destruction of the complicated molecular structure which makes the compound active.

Science News Letter, February 13, 1954

New SUB-ZERO Evergreen

Special Strain Stands 20° Below ZERO

Enjoy the glossy, evergreen leaves of this English Ivy all winter on house-walls, chimneys, garden walls. Also beau-tiful ground cover. Strong potted plants now first time at popular prices.

3 for \$2.50; 6 for \$ 4.50
12 for \$8.50; 25 for \$15.00
(12 Ivies will cover average house.) Supply still limited, so order today or send for Free Catalog and Planting Guide describing other evergreen Ivies, Myrtle, Wintercreeper, Pachysandra, etc.

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