

MEDICINE

Search for Cortisone Substitutes Speeded

► THE SEARCH for more chemicals that could be used instead of cortisone for arthritis, which is difficult to make, will be speeded as a result of studies by Dr. Robert S. Speirs of the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, Me.

Dr. Speirs used a strain of mice specially bred for testing adrenal cortical hormones, such as cortisone. The tests previously were made by injecting the material under the skin of the mouse and noting the number of eosinophil cells in the mouse's blood from one to 20 hours afterward.

Using a cortisone ointment on the skin of the animals, Dr. Speirs found, has the same effect as injecting the drug. Large numbers of compounds can be tested safely and more quickly with this method. The new method also makes possible the use of certain fluids, in which some of these materials must be dissolved, which are harmless when put on the skin but highly dangerous when injected or given by mouth.

Details of the work, in which L. E. Wragg, J. D. Sullivan and B. Hadley assisted, are reported in the journal, *SCIENCE* (June 1).

Science News Letter, June 16, 1951

ARCHAEOLOGY

Early Man Lived Twice 8,000 Feet Up in Andes

► ANCIENT BONES discovered 8,000 feet high in the Andes show two human cultural levels once existed there.

Dr. R. A. Stirton, chairman of the University of California's paleontology department in Berkeley, Calif., was told of discovery of the human fossils by a crew of laborers working a commercial deposit of sand for cement about 20 miles outside of Bogota, Colombia.

Skeletal remains, including three good skulls, and pottery, beads, rock paintings and stone implements were unearthed at the site.

Science News Letter, June 16, 1951

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Wildcats

► THE TWO principal members of the cat family that run wild in this country are the lynx, variously known as wildcat and bobcat, and the larger animal called in various regions cougar, puma, mountain lion, panther and painter—the last name being a corruption of panther.

Up in Canada, and coming down occasionally into the northern border country, is a second species of lynx, larger and more formidable than the common wildcat. Many naturalists subdivide the lynx genus into a larger number of species.

Though smaller than the cougar, the lynxes look meaner and are meaner by

nature. Their rough fur and their suggestion of a leonine mane give them a really formidable appearance, and hunting dogs are wise when they avoid too rash an attack on a bayed lynx. For all his hard-fighting disposition, the lynx or wildcat does not raid farmyards except in wild country, when he may occasionally help himself to the poultry.

The cougar or mountain lion, however, though less courageous than the lynxes, is a much more formidable killer of domestic as well as wild animals, and is heartily hated by all western stock men and by the government rangers who have custodianship of the game herds in the national parks and forests. He has learned, too, that he is remorselessly hunted, which has made him wary about returning to a kill for a second meal, so that the cougars now left unkillled are more destructive than ever.

Cougars have an intense curiosity about man and his works. Frequently one will lie motionless on a tree or rock overhanging a road while his enemy, the hunter, passes below. The blood-curdling tales of man-killing cougars, however, have to date gone wholly without confirmation. Those who know them best state that they are, on the contrary, most arrant cowards.

Neither the cougars nor the lynxes are often seen in our great western parks, although evidences of their presence are sometimes found. While complete extermination of members of the wild cat family is not desirable, any great abundance of them should be discouraged.

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High Blood Pressure Aid

► A NEW SYNTHETIC chemical which may help some patients with high blood pressure was announced by Drs. Roy Hertz, Milton J. Allen and Wm. W. Tullner, of the U. S. National Cancer Institute, at the meeting of the Association for the Study of Internal Secretions in Atlantic City, N. J.

The chemical, called Amphenone B, acts on the pituitary gland in the head to cause an enlargement of adrenal and thyroid glands. At the same time, the amount of hormones produced by these chemically enlarged glands is reduced.

Amphenone B is the first synthetic chemical which has this effect on the adrenal glands. Its effect on the thyroid is like that of such drugs as thiouracil. Thiouracil and related chemicals are already being used to check overactive thyroids instead of removing the glands by surgical operation.

Amphenone B offers the possibility of the same kind of "medical operation" on the adrenal glands in patients whose high blood pressure is due to overactivity of these glands.

Patients with cancer of the adrenals might also be helped by Amphenone B, whereas now they must undergo surgery to have the cancer removed.

Trial of the new chemical in cases of high blood pressure is now under way but it is too early to know what the results will be. The effects on the adrenal and thyroid glands were discovered in tests with rats.

In the early stages of the research, Dr. Hertz and associates thought the new synthetic chemical might become a substitute for ACTH, the anti-arthritis chemical which now must be obtained from hog pituitary glands. But Amphenone B turned out not to be a substitute for ACTH and Dr. Hertz suspects it might injure arthritic patients because it prevents the adrenal glands from producing their anti-arthritis hormone, cortisone.

Science News Letter, June 16, 1951

Top speed for the giant *tortoises* of the Galapagos islands in the Pacific is around 360 yards an hour.