

After a suitable time interval, a small surgical incision is made into her flank, and an instrument inserted into the tube containing the ova to extract them. The fertilized ova, picked out under a low-power microscope, are then implanted into the bodies of the cows that are to become foster-mothers.

Final success with this method will not only produce high-quality calves from scrub cows, but will make it possible to make every calving a twin birth, thus boosting quantity as well as quality of offspring.

Neither the pedigreed donor cows nor the scrub foster-mothers are harmed by the operation. The donors can be drawn upon for fresh supplies of high-grade ova about every 35 days.

As in every scientific advance, the new method is founded largely upon earlier work done elsewhere by other researchers. Mr. Umbaugh acknowledged indebtedness to a number of precursors who had varying degrees of success in transplanting the ova of various animals, notably rabbits, and in eventually obtaining live offspring. He was encouraged to attempt the much more difficult problems presented by larger domestic animals by the pure-science results thus obtained.

Science News Letter, April 2, 1949

MEDICINE

Acute Gouty Arthritic Attacks Caused by Glands

➤ TWO glands, the pituitary at the base of the brain and the adrenals just above the kidneys, are declared responsible for onsets of acute gouty arthritis that often follow chilling, operations, X-radiation and other kinds of shock, by Dr. Leon Hellman of the Sloan-Kettering Institute for Cancer Research, and formerly of Montefiore Hospital, New York.

Immediate cause of the attacks, he states in the journal, *SCIENCE* (March 18), is much-increased activity of the cortex or outer

part of the adrenal glands. The adrenals are stimulated into this activity by a hormone produced in the pituitary under shock conditions. This hormone, which has been isolated and identified, is known by the long name of adrenocorticotropin—doctors call it ACTH for short.

Dr. Hellman demonstrated the connection of ACTH with the attacks by injecting it into the tissues of human volunteers—patients who were known to be subject to the disease. In a high proportion of such tests, attacks of acute gouty arthritis were provoked.

Science News Letter, April 2, 1949

PHARMACOLOGY

Drink-Limiting Drug Is Tested in this Country

➤ A DANISH drug which will limit you to just one drink has given "promising results" in tests in this country.

Called Antabuse, the drug can be taken in tablet form in daily doses. It has no effect after only one alcoholic drink. But a second drink, if you've been taking Antabuse, will make you blush, increase your heart rate with palpitations and give you an uneasy feeling of apprehension.

Dr. Theodore G. Klumpp, president of the American Pharmaceutical Manufacturers Association and of Winthrop-Stearns, Inc., described Antabuse as a guest of Watson Davis, director of Science Service, on Adventures in Science, over the Columbia network.

The drug is not yet on the American market, Dr. Klumpp said. It has been tested on 83 chronic alcoholics, with promising results in 74.

"It is reasonable to suppose that some such treatment as this may be helpful when other approaches fail," Dr. Klumpp concluded.

Science News Letter, April 2, 1949

GENERAL SCIENCE

Offer China Sea Specimens For Science Exchange

➤ OUT of the China Sea, specimens of plants and animals will be collected by the Oceanographic Institute of Nha Trang for any American museum or laboratory that will exchange them for publications and scientific equipment. UNESCO's field cooperation office in China has relayed this barter request in view of Chinese conditions. Nha Trang is on the southeast coast of French Indochina.

Science News Letter, April 2, 1949

SCIENCE NEWS LETTER

VOL. 55 APRIL 2, 1949 No. 14

48,300 copies of this issue printed

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N. W., Washington 6, D. C., North 2255. Edited by WATSON DAVIS.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change, please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright, 1949, by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicate services issued by Science Service. Science Service also publishes CHEMISTRY (monthly) and THINGS of Science (monthly).

Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C. under the act of March 3, 1879. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and the Engineering Index.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., Pennsylvania 6-5566 and 360 N. Michigan Ave., Chicago, STAt 4439.

SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: Edwin G. Conklin, Princeton University; Karl Lark-Horowitz, Purdue University; Kirtley F. Mather, Harvard University. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; Warren H. Lewis, Wistar Institute; R. A. Millikan, California Institute of Technology. Nominated by the National Research Council: Hugh S. Taylor, Princeton University; Ross G. Harrison, Yale University; Alexander Wetmore, Secretary, Smithsonian Institution. Nominated by the Journalistic Profession: A. H. Kirchhofer, Buffalo Evening News; Neil H. Swanson, Baltimore Sun Papers; O. W. Riegel, Washington and Lee School of Journalism. Nominated by the E. W. Scripps Estate; H. L. Smithon, E. W. Scripps Trust; Frank R. Ford, Evansville Press; Charles E. Scripps, Scripps Howard Newspapers.

Officers—President: Harlow Shapley, Vice President and chairman of Executive Committee: Alexander Wetmore, Treasurer: O. W. Riegel, Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Frank Thone, Jane Stafford, A. C. Monahan, Marjorie Van de Water, Martha G. Morrow, Ron Ross, Lydia Schweiger. Science Clubs of America: Joseph H. Kraus, Margaret E. Patterson. Photography: Fremont Davis. Sales and Advertising: Hallie Jenkins. Production: Priscilla Howe. In London: J. G. Feinberg.

Question Box

BIOLOGY

How can scrub cows produce pedigreed calves? p. 211.

CHEMISTRY

What chemical can now be used safely commercially? p. 214.

CHEMISTRY-MEDICINE

What antibiotic has been synthesized on a practical basis? p. 213.

What new drug may check TB? p. 211.

Photographs: Cover, Robert J. Anderson, Detroit, Mich.; p. 211, Foundation of Applied Research, San Antonio, Texas; p. 214, General Aniline and Film Corporation of New York; p. 219, U. S. Department of Agriculture.

CHEMISTRY-NUTRITION

How are new candies created? p. 219.

ENGINEERING

How is coal converted to oil? p. 223.

PSYCHOLOGY

Is man or woman the better judge of character? p. 220.

What is the chief war threat? p. 210.

SOIOLOGY-AGRICULTURE

What is "the way out"? p. 215.