MEDICINE

## **Asthma Drugs Promising**

Two new drugs that can be taken by mouth to relieve asthma will soon be tested on patients. Three new drugs hold promise of relieving palsy in old people.

TWO new anti-asthma drugs are very soon going out to doctors for experimental testing on patients. If successful, they will be the first drugs that can be given by mouth to dilate the bronchial tubes and thus give relief to asthma sufferers.

The drugs are so new they do not even have names yet. Their existence was revealed when Dr. Edwin J. Fellows, head of the pharmacology section of Smith, Kline and French Laboratories in Philadelphia, showed doctors attending an SKF-sponsored medical research conference on old age how the drugs are being tested on guinea pigs.

The drugs belong to the chemical group known as alkyl aryl amines. Guinea pigs in the test are first given two chemicals, histamine and one with acetylcholine-like action, to induce in the pigs the kind of breathing difficulty asthma patients have. Dr. Fellows emphasized that his group is not looking for a drug with anti-histamine action only. A number of such drugs, for example benadryl and pyribenzamine, have been developed, but have not been entirely successful in asthma, though useful in other conditions.

The pigs are timed in the morning to see how long it takes for them to develop breathing difficulty under the histamine and acetylcholine-like chemicals. In the afternoon they are given pretreatment with one of the new anti-asthma chemicals. Then they are again clocked to see how long it takes before the histamine and acetylcholine-like chemicals bring on breathing trouble. These last two chemicals are sprayed into the pigs' cages through a very fine atomizer.

Results so far have made Dr. Fellows quite enthusiastic about the new anti-asthma drugs.

The promise of relieving paralysis agitans, the distressing palsy of old people, shown by three new drugs gives hope that other drugs can be developed to relieve other characteristic infirmities of age, Dr. Chauncey D. Leake, of the University of Texas medical branch at Galveston, declared at the meeting.

The three drugs are: 1. myanesin, or tolserol; 2. parpanit; 3. phenothiazine compounds. Still another group of chemicals, called benzimidzols, have also been proposed for this condition. In mentioning these chemicals, Dr. Leake cited reports from several scientists other than himself.

"There is strong possibility that cancer may be prevented or cured," Dr. Leake said in discussing drugs needed for the chief diseases of old age.

"There does not seem to be the possibility of maintaining the heart, blood vessels and kidneys in effective functioning condition indefinitely. And besides, do any of us want to?" he asked, pointing out that "death is a part of life and for new life to be possible it is necessary at some time or other to get rid of the encumbrances of old life."

Dr. Leake believes it will be possible to develop drugs which will make old people more comfortable, relieve muscle tension without inducing incoordination or drunkenness, stimulate brain activity without inducing nervousness and keep the digestive system in good order so as to promote the enjoyment of eating.

A four-point program for old age beginning in high school was another of his suggestions for meeting the situation where for the first time in history we have more people over age 35 than under it.

Science News Letter, March 26, 1949

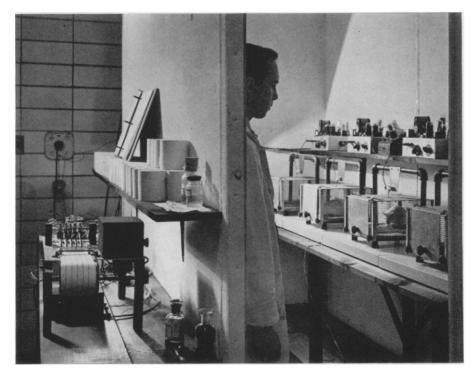
PSYCHIATRY

## **Emotions Affect Eyesight**

➤ EYE disease affecting vision can now be added to stomach ulcers, colitis, asthma and other ailments brought on by emotional disturbances.

"We have numerous case histories of definite organic disease of the eyes and brain which are either caused or complicated by ocular psycho-neurosis," Dr. Henry L. Birge of Hartford, Conn., declared at the fortieth anniversary conference of the National Society for the Prevention of Blindness in New York. One such case was that of a night watchman who developed glaucoma immediately after the nervous shock of being struck in the face with flame and smoke from a fire he had discovered. Glaucoma can cause blindness, although early, adequate treatment will save the eyesight in many cases.

Close cooperation is needed between general practitioners, eye specialists and psychiatrists, Dr. Birge emphasized, in order properly to diagnose and treat defective eyesight which may be induced by emotional



DRUG'S EFFECTS CHARTED—A new electronic apparatus for determining the effects of new drugs on the central nervous system is shown being operated here. The recording of the animals' responses is made on the chart at the left. The device was developed by R. A. McLean of Smith, Kline & French Laboratories.