

MEDICINE

Drug May Show Cause Of High Blood Pressure

► THE RIDDLE of why some people get high blood pressure while others do not may be solved with the help of the new diuretic drug chlorothiazide.

The promising aspect of the drug is not so much that it lowers blood pressure, but that it may help explain what caused the pressure to climb in the first place, Dr. Robert W. Wilkins, Massachusetts Memorial Hospital, Boston, told SCIENCE SERVICE.

The drug's successful use in 51 patients with stubborn hypertension, or high blood pressure, is reported by Dr. Wilkins and an associate, Dr. William Hollander, in the *Boston Medical Quarterly* (Sept.).

The heart patients had all been treated with other blood pressure lowering drugs or surgery without too much improvement. Chlorothiazide caused a definite drop in the pressure when used either by itself or in combination with other standard drugs.

It is most effective, however, when used to "potentiate" or strengthen the action of existing anti-hypertensive agents.

The standard drugs now used will lower blood pressure in both normal persons and hypertensive ones, but chlorothiazide reduces the pressure only in hypertensives.

This is the exciting property of the new drug, Dr. Wilkins explained.

Chlorothiazide is a synthetic chemical designed to work as a diuretic, a drug that removes water and salt from the tissues. Its blood pressure-lowering ability was an unexpected find.

Science News Letter, November 2, 1957

BIOLOGY

Scurvy Cases Show Holes in Blood Cells

► RED BLOOD cells with holes punched in them have been discovered in animals suffering from scurvy, Drs. Bruno Kisch, American College of Cardiology, New York, and Gustav J. Martin, National Drug Company, Philadelphia, report in *Nature* (Oct. 19).

Electron microscope studies show the cells had well-defined cavities in them containing various types of cell debris. The cavities increase in size until they burst through the cell walls and finally empty into the blood stream.

Scurvy is caused by eating a diet which contains too little vitamin C, and in severe human cases it is complicated by anemia 70% of the time.

Anemia results from blood being deficient in either quantity or quality, and causes the body cells to waste away when they receive too little oxygen or food.

Guinea pigs were fed a vitamin C-free diet for 30 days and then samples of their blood were examined. Only a small number of cells were found to have the punched out appearance, but these cells were never found in blood from normal animals.

Science News Letter, November 2, 1957



SAFE CAR—Rear-hinged double doors on the Cornell-Liberty Safety Car swing outward similar to the doors on a telephone booth. The lower edges of the doors are supported by rollers moving in a track. They are securely closed by three bolt-bars designed to keep the doors closed in a collision, thus maintaining the full structural support of the car body. The driver, although positioned in the center of the car, can close either door without leaving his seat by means of an especially designed mechanism.

PUBLIC SAFETY

Safety Automobile Built

► A SAFETY CAR, complete with a lever-control instead of a steering wheel and a bucket seat for the driver, has been built.

Described as the world's first automobile to be built with the safety of the occupants the sole objective, the Cornell-Liberty Safety Car, as it is called, literally "packages" the passengers.

From the outside, the safety vehicle resembles many of those American cars now on the highway. But once the door, which itself has been specially designed, is opened, the conventional automobile is a thing of the past.

The car, which will be exhibited nationally, is not designed for production, but to illustrate the most up-to-date safety features that can be incorporated in a life-saving vehicle without sacrificing comfort and good looks. An earlier report described the car as it looked on the drawing board.

The result of five years research by the Cornell Aeronautical Laboratory, Inc., and the Liberty Mutual Insurance Company, the car has the following safety features:

1. The steering wheel has been scrapped in favor of a lever-controlled hydraulic system. Two steering control handles are provided which the driver manipulates as though steering a sled. These steering handles move only six inches in turning the car from full right to full left.

2. The driver's seat, bucket type, is in the center of the car and is flanked by two other bucket seats, one on either side, but three inches to the rear and three inches lower. A rear-facing seat has been tacked onto the back of the driver's seat, facing individual seats located farther back.

3. Front seat passengers are restrained in their seats by U-shaped webbing yokes supported on movable and adjustable panels.

Rear seat passengers are protected by seat belts that reel up when released.

4. The horn button is mounted under the right steering handle and the light beam elevation button under the left handle.

5. The windshield allows almost 180 degrees vision for the driver and does not distort the view on either side. Five wipers clean the front window and three the back.

6. Each door is in two sections hinged at the center and opens and closes like those of a telephone booth.

7. Front and rear bumpers are wrap-around.

8. A ventilating scoop in the roof provides fresh air.

Science News Letter, November 2, 1957

PUBLIC HEALTH

Asian Flu Spreads But Remains Mild**See Front Cover**

► MORE THAN 2,000,000 cases of Asian flu have been reported in the United States since the first case was confirmed last summer. The U. S. Public Health Service reports that epidemics appear to be growing both less extensive and less intensive in some of the southern states but more so in many of the northern states. (See SNL, Aug. 10, p. 83 and Oct. 5, p. 213.)

The photograph on the cover of this week's SCIENCE NEWS LETTER showing the Asian influenza virus magnified about 200,000 times was taken at the Lederle Laboratories, Pearl River, N. Y.

Vaccine supplies are still short and will reach many areas too late, but the disease appears to be remaining relatively mild.

Science News Letter, November 2, 1957