

A NEW AUTOMOBILE AND AEROPLANE DISEASE

THE aeroplane and automobile have caused a new disease. English physicians found it first while looking into the deaths of airmen and chauffeurs. Such fatalities, for a time, were attributed to heart failure. But somehow this reason seemed trite and unconvincing. So they looked deeper, and now offer an explanation and a remedy. The preventative is almost as odd as the cause is unusual.

The new disease has nothing to do with "automobile fracture," that other evil of the gasoline engine which has just taken its place in the medical books. Automobile fracture is a breaking of the lower outer tip of a wrist bone caused by the recoil, or "back kick" of an automobile crank. Splints, massage, and later a stiff wristlet, will usually cure it in two or three weeks.

The new disease is a poisoning of the system through the lungs. It is caused by repressed breathing while moving rapidly through the air. At first it seems to be a sort of smothering. But the disease is more than that.

Air once taken into the lungs practically becomes carbonic acid gas—a deadly poison. When expelled at once, of course, no damage is done. But when men pass rapidly through the air, the pressure on the face from the fast driving prevents the expulsion of the poisoned air from the lungs. The carbonic

acid gas is forced back into the body. Only a little of it can get away, because of the air pressing on the face. The gas is rebreathed and poisons the system.

The ill-effects are gradual. People do not suffer the first time they speed in airship or motor cars. But they may know of the progress of the malady by a narcotic sleep caused by the gas poisoning. It is this which makes chauffeurs run their cars beyond their destinations without realizing it. The danger from the disease is especially great in Winter, too, when the respiratory organs prevent a rush of cold air into the lungs and the breathing capacity is restricted.

The English theory was referred to Dr. S. A. Knopf of this city, an authority on diseases of respiratory organs. The malady, he said, had not been recognized yet by American physicians.

"To find out about such a disease," he said, "it would be needful to have a chauffeur drive an automobile very swiftly with his face unprotected. To experiment on a man—no, that would be too dangerous. But we could find out if we strapped a monkey to an automobile and drove the machine at sixty, or, say, seventy miles an hour.

"Men do not drive aeroplanes or motor cars so fast without face protection. They

usually have glass screens on their cars. Or, like the racers, they wear protectors over their mouths. It's the same way with locomotive engineers going at such a very high rate of speed. They have the glass screens of their cabs to protect them. Traveling at a lesser speed—say, the usual fifteen or twenty miles an hour—would not, I think, make such an experiment conclusive.

"As a rule, though, I advise people with lung trouble against driving motor cars. There is no danger from the fumes of the gasoline. They are dissipated in the air. But there is danger from the nervous tension of managing a car and the fine dust of automobile roads which penetrates the lungs and irritates them. All such irritants aggravate disease. A man who drives a motor car, too, is likely to become overheated while repairing. A possible break then be chilled by rapid driving afterward."

The remedy for the new disease suggested in England, and a preventative of similar ills is a mouthpiece to be strapped to the face with tubes extending from it on either side to the back of the head in the shape of the letter U. With the ends behind the ears and pointing backward, the wind pressure on the breath would be relieved and the poisonous carbonic acid gas could escape to the rear.