

future of stratosphere flying was made by D. W. Tomlinson, vice president in charge of engineering, of Transcontinental and Western Air, Inc.

"The era of high altitude flying is definitely here," Mr. Tomlinson declared. "It brings us greater safety and greater comfort. Except for the unfortunate world conditions now existing, this development would without a doubt bring all nations much closer together by increasing the speed and comfort of transoceanic flying over greater distances."

At altitudes of 16,000 to 20,000 feet planes fly 95% under clear skies, Mr. Tomlinson reported.

Protection against lack of oxygen at these altitudes is accomplished by supercharging which keeps atmospheric conditions in the cabins of stratoliners flying at 15,000 feet the same as they would be at the 8,000 feet altitudes of ordinary flying. Above 15,000 feet, and even at 20,000 feet altitude, the cabin altitude is kept to about 12,000 feet by supercharging.

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#### MEDICINE

### Avoid Operations in Spring Is Advice to Surgeons

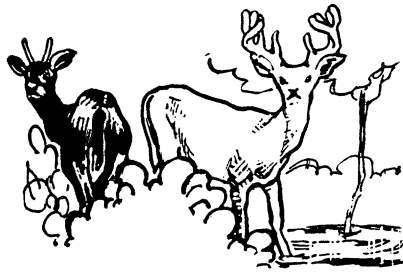
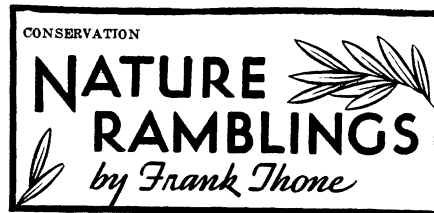
**A**VOID surgical operations in late winter and spring, if possible, Prof. William F. Petersen, of the University of Illinois College of Medicine, warned members of the American College of Surgeons.

The patient's resistance varies with the season, Prof. Petersen explained.

"If you will examine your hospital records," he said, "you will find that post-operative complications—shock, vascular accidents, infection—occur more often in the late winter and spring. It is at this season that we are more often called upon to operate upon patients, because individuals are more often acutely ill. Avoiding unnecessary or interval operative intervention during this precarious season will help in lowering postoperative infection."

Chilling is also a danger, even if apparently insignificant, Prof. Petersen also warned, because it lowers the resistance to the passage of germs present on mucous membranes. The anesthetic itself entails heat loss from the body, he pointed out. A patient whose skin is covered with moist perspiration when exposed to even a minor draft is subject to undue heat loss.

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#### War and Wildlife

**W**AR is having its effects on wildlife in Switzerland, sometimes in curiously roundabout and indirect ways.

Deer, for example, have been growing too numerous, especially in the Canton of Grisons. They had been receiving the benefit of special protection and a restricted season before the beginning of hostilities, so that their number was already on the increase. Falling off in the number of hunters from foreign lands gave them further opportunities to build up their numbers, until now they are approaching nuisance proportions. They have been raiding farmers' grain fields, and the bucks are injuring young trees by rubbing their antlers against them, to get rid of the "velvet."

It is rather generally agreed that the number of deer should be reduced, but thus far no clear course of action, safe for the longtime wildlife interests of the country, has suggested itself.

Shortening of the hunting season for chamoix, reduction in number of hunters, and bad weather during the days when hunting was permitted, cut last year's kill of these interesting animals to about a fourth of the average of the past few years. Since there are probably not more than 13,000 chamoix surviving in all Switzerland, this respite is welcomed by conservationists.

There has also been a great reduction in the kill of small game, like rabbits, marmots and foxes, as well as in that of ducks and other wildfowl.

This combination of war and natural causes may be building up an unreckoned food reserve for Switzerland. In Germany, during the first World War, the killing of game ceased to be a sport and became instead a seriously scheduled part of the meat supply program. Even

if Switzerland does not become involved in hostilities, difficulty in importing supplies may make something of the kind desirable there.

*Science News Letter, November 2, 1940*

#### MEDICINE

### Hearts That Beat as One May Stop the Same Way

**"T**WO hearts that beat as one" may be only a poet's fancy, but a scientist has just discovered that if the two hearts belonged to husband and wife, even though they do not really beat as one, they are likely to stop beating at the same age and even from the same cause.

Husbands and wives tend to have the same length of life or vitality and when one of them dies of cancer, heart disease, tuberculosis, influenza or pneumonia, the other is more likely to die of the same disease than could be accounted for by mere chance, Dr. Antonio Ciocco, of the U. S. National Institute of Health, reports to the National Academy of Sciences.

Death records of 2,571 married couples who died in Washington County, Maryland, between 1898 and 1938 revealed these surprising findings.

Tendency for both mates to die from the same cause when one of them dies from influenza and pneumonia, cancer or heart disease has apparently never before been recognized.

Being subjected to the same environment and living conditions and a tendency to select a husband or wife of the same constitutional type as oneself may be the reason or reasons why husbands and wives live about the same life span and die from the same one of five diseases which kills one of the couple. Tendency of both husband and wife to die from cancer cannot be explained on the basis of contagion, which might conceivably explain why both would die of tuberculosis, influenza and pneumonia if one of them died of such a germ-caused disease. Marital contagion might even be a factor in the case of heart disease if rheumatic heart disease is definitely shown to be infectious, Dr. Ciocco points out.

Search for the reason for such similarity in length of life and cause of death in married couples may shed new light on the action of environment and heredity on conditions such as heart disease and cancer about the causes of which so little is yet known.

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