

## BOTANY

**Seek Rubber Plants**

Backed by Thomas Edison, a quiet two-man rubber exploration of the semi-arid lands in southwestern Texas and the adjacent territory in Mexico has been carried on during the past few weeks. Dr. J. N. Rose, of the U. S. National Herbarium and Paul J. Russell of the U. S. Department of Agriculture, were the personnel of the expedition, and they have brought back to Washington a number of specimens of plants suspected of rubber-yielding possibilities.

"The plants I paid most attention to were those belonging to the milkweed and euphorbia or spurge families," said Dr. Rose. "The milkweeds have long been known to have rubber in their milky juice, but so far it has not been found in paying quantities. The euphorbias include such familiar plants as the Christmas thorn and the poinsettia, and are somewhat more distantly related to the Hevea, or Para rubber tree, now the chief source of our rubber.

"The most promising species I found was one member of the euphorbia group. A rough analysis of its latex, made by a local chemist, indicated a rubber content of 9 per cent. Whether this will be confirmed by more careful examinations in specially equipped laboratories I have, of course, no way of knowing just yet.

"Of course, sensational promises of great rubber plantations in Texas would be nothing but pipe dreams. Mr. Edison has made it quite plain, I believe, that what he has in mind in his present program is the development of a potential emergency supply, which could be drawn upon if a war or other calamity should cut us off from the cheaper rubber of the tropics."

The Mexican part of Dr. Rose's expedition took him south along the Gulf coast for about a hundred miles beyond the border. This was during the time of the recent abortive revolution; but Dr. Rose reports that this part of Mexico was not affected by the uprising, and that in any case most of the region was uninhabited.

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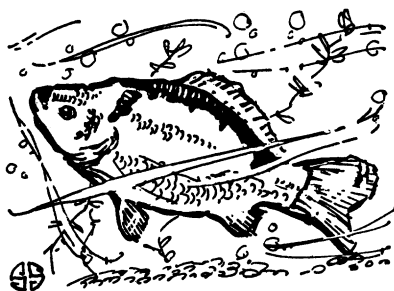
Forty-five trees planted at Mount Vernon by Washington are still standing.

Some kinds of ducks can be distinguished by the sound of their wings in flight.

## BIOLOGY

**NATURE RAMBLINGS**

By FRANK THONE

**Goldfish**

With the vanishing of many of our summertime friends from the forests and fields, we try to make up for their absence by paying more attention to pets and houseplants. Among pets goldfish are very good things for busy people, or for inhabitants of crowded city quarters where the more free-ranging cats and housedogs are troublesome and often forbidden by hard-hearted landlords. They take up little room, they make no noise or muss, they can not run away, and they do not complain nor even suffer if they miss a meal or two.

As a matter of fact, goldfish are more apt to suffer from being fed too often. Used as we are to three square meals a day ourselves, and to feeding our warm-blooded pets at least twice a day, we are apt to force their wafer-like food upon goldfish as often, to the detriment of their health. They simply won't eat that much, and the material floats about until it becomes soaked, and then disintegrates, fouling the water and making it very bad for breathing for the poor little creatures' gills.

A good feeding about twice a week is enough for goldfish. One should give them all they will eat in a reasonable time—say thirty minutes or perhaps an hour—and then give them fresh water. Goldfish kept in a large enough aquarium with plenty of green "moss" will not need to be fed even as often as that. Indeed, they may be able to get along without any outside food at all. In any case, their appetites, rather than a regular schedule, should be the real index for the goldfishes' dietary. And invariably they should have their water changed after they have had their fill.

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A tablet has been placed in the Hudson River Valley at the spot where the first Jonathan apple tree stood in the early part of the nineteenth century.

## PSYCHOLOGY

**Automatic Driving**

Traffic signs and signals should be made so simple and so uniform that guiding an automobile would become as automatic as walking. This is the difficult goal for traffic engineers set before the Highway Research Board in a report by Dr. Knight Dunlap, professor of psychology at Johns Hopkins University.

"Drivers will never be trained to the point of an automatic, unreflecting 'stop' on the red light so long as other uses of red in signals are retained," Dr. Dunlap said. "Fatal accidents have occurred from use of red lanterns on road obstructions. But the more important factor in such cases is that the misuses of signals prevent the proper training of the motorist and are therefore conducive to accidents at other points. It is entirely feasible to do away with the use of red for all traffic signs not meaning 'stop'."

Many types of road signs lead to bad habits on the part of drivers, the psychologist pointed out. Frequent use of "dangerous curve" markers at gentle curves, for example, cause motorists to ignore such signs at points where the warning is needed.

Drivers hunting parking space in busy streets often put themselves and other people in danger because of the complex process involved in finding out where and how long they can park in a given street, he said. A recent detailed examination of the parking signs about Washington streets was cited by Dr. Dunlap as showing how colors and shapes are used indiscriminately, so that they mean nothing definite, and how the words on signs are not standardized enough so that the motorist can grasp the idea with a minimum of reading.

By a system established in Baltimore the driver can see nearly a block away from a given place whether he can park there or not, and if so how long, and this system is proving itself sufficiently satisfactory to serve as a model in other cities, he said.

"Standardization is urgently needed in traffic signs and signals to increase safety," Dr. Dunlap stated. "But bad standardization is worse than none. Before standards are established there should be experiments and investigations to establish facts about matters which have been too much subject to theory and guess."

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