



NEW AUSTRIAN RAIL BUS

This new railroad bus is the latest creation of the Daimler Motor Works in Vienna, Austria. Equipped with rubber tires for easy riding over steel rails, the streamlined, 73 feet long vehicle has a top speed of 93 miles an hour. Its wheels have steel flanges to keep on the track but the whole weight is supported by ordinary pneumatic rubber tires which absorb shocks.

PSYCHOLOGY

Adopts Alice-in-Wonderland World to Test Vision Theory

SPECTACLES with inverting lenses that would turn everything seen upside down and produce right-left reversal were worn continuously for two weeks by Dr. Joseph Peterson, psychologist of George Peabody College for Teachers, in an effort to test out why we see things as we do.

He wanted to know whether his eyes would become accustomed to such an Alice-in-Wonderland world so that objects would appear to him as right side up again, or whether he would have to go through the process of learning how to handle objects and how to move about so as to miss obstacles and touch desired things. Manipulation or other direct contact with objects in the optically artificially environment was found to be necessary as a basis for recognition of the objects.

In normal vision, the images of objects about us are turned upside down on the retina of the eye just as they are on the focusing glass and on the negative of a photographic camera. But we really see

in the brain rather than in the eye. How these images are set right side up again by the perception is something which has long been a puzzle to scientists. Some contend that the organism after practice will correct for this inverted vision. Others have thought that we learn by handling objects which way they are standing and come to interpret our vision in such a way that it fits in with the experience of our other senses.

Dr. Peterson's experiment seems to confirm the latter theory.

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PLANT PHYSIOLOGY

Blanching Celery, Apples Give Off Ethylene Gas

ETHYLENE gas, widely used to blanch celery, bring the glow of ripe color to the skins of fruit, and otherwise hasten the maturing of garden products, is actually generated by plants in the natural process of maturing for the market.

Such are the indications of researches conducted at the Minnesota Agricultural Experiment Station by R. C. Nelson and R. B. Harvey, and independently at the Low Temperature Research Station at Cambridge University, England.

In their experiments, Nelson and Harvey used young tomato plants as "indicators" for the gas. The response of a tomato plant to ethylene is characteristic. It arches its leaves downward.

These "indicator" tomato plants were put into closed glass vessels. Into similar vessels quantities of a self-blanching variety of celery were introduced. After two hours, the gases from the celery vessels were drawn into the glass prisons of the tomato plants. The leaf-stems of the latter curved downward strongly, showing that a compound with the physiological effects of ethylene was produced by the celery.

In a parallel test, using a non-blanching celery variety, the tomato plants did not respond: no ethylene was being produced.

Similar results were obtained in the Cambridge University experiments, in which the ethylene gas was produced by ripening apples.

Nelson and Harvey call attention to a practical significance of this discovery. When ethylene, best known as a constituent of illuminating gas, first began to be widely used for the treatment of fruits and vegetables, the question was raised whether it might not possibly have harmful effects.

Now, they state, "Since it has been shown to be produced by blanching celery under natural conditions, any fear of artificially using this gas should be removed from the minds of the public."

Science News Letter, June 8, 1935

GENETICS

Brown Eye Color Found To be Linked With Sex

INHERITANCE of brown eyes is connected with sex, but yellow-eyed persons get their eye color by an entirely different hereditary mechanism, it is indicated by a study of more than 5,000 persons whose eyes were examined by Prof. G. P. Frets, of Rotterdam, Holland.

Brown eyes are much more frequent among women than among men, Prof. Frets reported. (*Eugenical News*, Jan-Feb.). Of the 5,334 persons examined, 514 had plain brown eyes. And 329 of these were women as against 185 brown-eyed men.

The blue-eyed group, those with blue