BIOGRAPHY

Eminent French Scientist Present at Own Centenary

Dr. Gueniot's Father, in 1832, Worried About State Of World and Prophesied Short Life for His Son

CELEBRATING the centenary of an eminent scientist is not unusual. The French Academy of Medicine, however, has just had the unique opportunity of celebrating the centenary of one of its living members, Dr. Alexandre Guéniot, eminent obstetrician, surgeon and author, and former president of the Academy.

Dr. Guéniot was an erect, alert figure, smiling attentively at the kindly speeches which one distinguished orator after another delivered. They all read their carefully prepared addresses. But when it came turn for Dr. Guéniot to reply, he jumped up lightly from his chair, and delivered the opening sentences of his speech without any reference to his manuscript. Afterwards he sat down and read a short paper, the whimsical wit of which made this assembly of the most eminent savants of France rock with laughter.

In the course of a presentation of a medal of the town of Paris by the Chairman of the Municipal Council, it was pointed out that a facsimile had been presented to a really old man of 117 years at the inauguration of the statue of Louis XIV in the Place des Victoires. In allusions to the centenarian's comparative youthfulness, he was reminded that Hippocrates had reached the age of 109, and that in 1809 Napoleon had received in audience a doctor born in 1690.

The day after Alexandre Guéniot was born, his father wrote to an intimate friend:

"I do not know whether to be happy or sorry over the birth of a son to which I have contributed only a modest share. The poor infant enters the world in very troubled times. Hardly 17 years have passed since peace was restored to Europe, and we still suffer cruelly from the effects of the war. Who knows if my son will not one day be forced to become the citizen of a republic? It makes one shudder. The conditions of life are daily becoming more difficult. Nanette, our servant, has paid 23 sous for half a kilo of butter, and 2 sous for each fresh egg! It is absurd and exorbitant!

"I would like to see my son embracing the noble career of medicine, but I see quite well that he cannot; one of the Heads of the Faculty has confided to me that this profession is literally invaded. And then, this madness of speed is wearing out men. Only yesterday I saw a post chaise tearing along. It makes one giddy! The horses were galloping at more than 5 leagues an hour. And everyone wants his carriage! The streets of Paris are so congested that you must wait a long time if you wish to cross them. Madness of the century, my dear friend, for which men will pay in the brevity of their days.

"My son, like his contemporaries, will not live to be old. We know not what the future has in store for him, but we can bet with certainty on his not becoming a centenarian."

Science News Letter, December 10, 1932

PRESENT AT OWN CENTENARY

The unique celebration of the centenary of a living scientist, Dr. Alexandre Guéniot, has just been held at the French Academy of Medicine.

PSYCHOLOGY

More Drivers Obey Laws At Light-Controlled Corners

AT LIGHT-CONTROLLED corners 85 per cent. of drivers obey the laws, but at corners where arterial stop signs are placed practically half the drivers violate traffic rules. These facts were among those reported by William A. Van Duzer, director of vehicles and traffic in the District of Columbia.

Mr. Van Duzer had stationed observers to watch the behavior of motorists at many typical intersections in the city of Washington, D. C., with a view to finding out which traffic laws and regulations were commonly disregarded and which were perhaps unreasonable. The speed of motorists was measured with the aid of an ingenious L-shaped box containing a mirror. When a motorist passes the box, a flicker in the mirror is seen by the observer stationed at a definite distance away. The observer can then time with a stop watch the car's progress from the box to the observer.

On arterial streets where the speed limit is 22 miles per hour, from 70 to 94 per cent. of the drivers were driving above the limit. On one of these streets, 94 per cent. drove above the limit, more than half between 20 and 30 miles per hour, but only 15 per cent. above 35 miles per hour.

Mr. Van Duzer pointed out that a reasonable rate which most drivers would be willing to observe on this street is near the 30-mile limit. Traffic officers cannot enforce a speed regulation disregarded by 94 per cent. of the drivers, he said.

The observation of stop signs was also recorded. Less than half those passing stop signs actually made a complete stop. A partial stop under control was made by 32 per cent., and 24 per cent. entered without stopping.

"Isn't it possible that STOP signs on arterial highways and streets should be replaced with signs such as CAUTION—THROUGH TRAFFIC?" suggested Mr. Van Duzer. "When 56 per cent. of the drivers disobey a STOP sign, is such a sign desirable? The 44 per cent. of the drivers who made a complete stop would obey a CAUTION sign. The 32 per cent. who made a partial stop would continue so with a CAUTION sign and would not be breaking the law as they now are."

Science News Letter, December 10, 1932

ENGINEERING

Jolts on the Highway Measured by "Roughometer"

THE JOLTS you receive as you drive over rough pavement can now be recorded automatically by a new type of "roughometer" devised by Homer J. Dana, assistant director of the Engineering Experiment Station of the State College of Washington. The riding qualities of various types of surfaces have been compared in preliminary tests conducted by Mr. Dana to test this automatic device developed at the State College of Washington. Very little difference was found between cement and oil surfaces, but a great deal of difference between new and old pavements. The smoothest road included in the test was a stretch of new concrete; the roughest was old concrete. A brick road was a close second for roughness.

Science News Letter, December 10, 1932

ZOOLOGY

Calves Retain Part Of Wild Things' Charm

See Front Cover

COWS are prosaic. Like all the rest of us that have grown into maturity and (alas!) responsibility, they have their workaday jobs in a workaday world, seeing to it that we get butter and, eventually, beefsteaks. But calves still have something reminiscent of the long-lost wild freedom of the ancestors of even the mildest-eyed of their mothers; they are still something akin to fawns. Even the thoroughly stabled calf that Cornelia Clarke photographed for the cover of this issue of the SCIENCE NEWS LETTER still gives one the "feel" of a soft, brown head suddenly poked at you out of a thicket a thousand miles from the nearest barn.

Science News Letter, December 10, 1932

PHYSICS

New Machine Measures Strength of Ultraviolet

Photocells Sensitive to Different Wave-Lengths of Light Enable Physicist to Make Quantitative Analyses

A NEW machine for measuring ultraviolet light accurately has just been developed by Ernest Victoreen, working under the direction of Dr. Hugo Fricke who is head of the department of biophysics of the Biological Laboratory at Cold Spring Harbor, N. Y. The machine makes use of the principle of the photoelectric cell, Mr. Victoreen explained in describing it to his associates at the laboratory. It is expected to be useful in measuring ultraviolet light from artificial sources when used in the treatment of rickets and tuberculosis, and also for determining exactly the amount of ultraviolet light from sunlight available in various localities for treatment and for building up general bodily resistance.

"Methods of measuring ultraviolet light in general use depend on chemical or biological effects, such as the oxidation of oxalic acid, blackening of sulfides, bleaching of dyes, effect on photographic paper, reddening effect on the skin, and bacteriological effect," Mr. Victoreen pointed out.

"Most of these methods in actual use are of poor accuracy, time consuming and inconvenient. Furthermore, no consideration is given to the difference in wavelength dependence of the effect used for recording and that for biological effect.

"The photoelectric method is free from these objections. The intensity is recorded directly, and the method is simple, speedy and convenient."

The photoelectric cell which Mr. Victoreen showed consisted of a glass bulb with a metallic cathode deposited on the inside surface and in the center a metal ring acting as anode.

"A definite electric potential is induced between the two electrodes, which potential is gradually neutralized by the electron emission from the cathode due to the ultraviolet light," he explained. "The rate of neutralization is a measure of the intensity of the radiation."

The action of the photoelectric cell depends largely on the nature of the metal used as cathode and the absorption of the envelope. With different metals and different glasses of suitable thickness, Mr. Victoreen stated that a cell could be produced having its maximum sensitivity at any desired wavelength.

Science News Letter, December 10, 1932

ANTHROPOLOGY

Science Seeks to Interpret Irish Nation

A FIVE-YEAR study of Irish civilization is being made by anthropologists of Harvard University, with the aim of producing a scientific interpretation of the Irish nation.

The social life of an Irish county, County Clare, is now being studied, and two years will be required to complete this part of the five-year program, says a progress report of the project, sent to *Science*. County Clare was chosen as the place to study the Irish marketing system, political institutions, land tenure, the family, and other sociological matters, because this county blends typically the old and new strata of Irish Gaelic culture.

Archaeological researches, to shed light on Ireland's ancient history, were also begun this year by Harvard scientists, working under the auspices of the National Museum of the Irish Free State. A lake dwelling of the tenth century A. D. has been excavated at Ballinderry, in County Westmeath. At Knockast, a huge cairn or stone grave was explored and 43 burials of the Irish Bronze Age were found.

Physical characteristics of the Irish people will be studied by Dr. E. A. Hooton, professor of anthropology at Harvard, who is in general charge of the entire Irish project.

The Harvard program has been accorded the official approval of the President of the Irish Free State, the progress report states.

Science News Letter, December 10, 1932