

CHEMISTRY—GEOLOGY

Canadian Scientist Finds Evidence of "Lost" Elements

From Stone Doorstep and From Bathing Beaches Are Gathered the Signs of Elements No Longer on Earth

IN A CHIP chiseled from the front doorstep of his college; in the sands of Nova Scotia's famed bathing beaches, and in specimens of biotite mica from the Orient, Dr. George H. Henderson, of King's College, Dalhousie University, Halifax, has found evidence of what may prove to be unknown chemical elements no longer existent on the earth's surface.

In an interview at the meeting of the Royal Society of Canada, Dr. Henderson said he had recently discovered at least three new types of pleochroic haloes which have so far been inexplicable as due to already known elements. The time required for their formation, possibly only a few hours or days, although perhaps as great as one hundred years, is much too short to be compatible with geological evidence.

"A pleochroic halo, one of the most striking manifestations of radioactivity," Dr. Henderson said, "might be compared to a photographic negative. It is caused by alpha rays emitted by members of the uranium family of elements as each disintegrates to form the next in the atomic scale. The rays emitted during this disintegration of the uranium crystal act upon mica and certain other minerals in a similar manner to that in which light affects the silver salts of a photographic film."

Measured By Photometer

A dark spot is produced in the mica around the uranium particle. This is surrounded by a series of six concentric dark rings, whose diameter is measured with a halo photometer designed by Dr. Henderson, which allows more accurate determinations than are possible with a microscope.

"The sizes of these halo rings made millions of years ago corresponded exactly with recent laboratory observations on radioactive elements," Dr. Henderson said. "This proves conclusively that the laws of physics as we know them today held good even at the time of formation of the earth's crust. The largest outer ring is no greater in size than a human hair in diameter.

As these haloes disappear at tempera-

tures around 900 degrees Fahrenheit, Dr. Henderson infers that the precambrian rocks from which much of the mica was obtained cannot have reached that degree of heat since they were formed.

Science News Letter, June 8, 1935

ARCHAEOLOGY

Document Shedding Light On Bible Characters Read

A PRICELESS old document that may shed new light on John the Baptist and the Apostle Paul has been salvaged from the limbo where forgotten manuscripts lie, and translated laboriously.

No exaggeration in that word "laboriously."

A scholar of Hebrew has spent 18 years reading the manuscript, and there are just nine pages of it. While the

World War banged around him, this American worked peacefully in Berlin. Three of his 18 years he did practically nothing else but study those badly written, mutilated sheets of precious parchment. And at that, he was hammering at writing that had already been translated—though he disagreed strongly with many points.

How he has discovered that this extraordinary manuscript has "even greater significance" than Semitic authorities gave it, is told by the patient translator, Rev. Jacob Quiring, formerly professor at Bluffton College in Ohio. In a new volume of scientific studies titled "From the Pyramids to Paul," contributed by various scholars, he announces that the "nine priceless sheets of parchment" reveal a vivid and unforgettable picture of Jews in 172 B.C., trying to keep their faith and standards when Greek paganism swept over Palestine. Historically, this is near the close of Old Testament time.

Written with flaming pen, this tract was intended for circulation among synagogues of faithful Jews. Beware, it warned them, the Syrian tyrant Antiochus and his hireling Jeshua, who are leading the people into pagan wickedness. The writer was one of the loyal Jews who had fled to the region of Damascus.



"CANDLING" OSTRICH EGGS

Soviet Russia, where planned production of all kinds has become almost a national religion, has an "Ostrich Plan," too. In the Ukraine, southern member of the U.S.S.R., the climate permits the practicable raising of ostriches as it does in California and Florida in the United States. Some of the hatching is done in special incubators. The young Soviet workers are "candling" a tray of the huge eggs, to see whether any of them have spoiled. The Plan: first raise enough ostriches to stock all the zoological gardens in U.S.S.R. cities, then start production for the great State farms on the steppes.