"One of these peoples, the Hurri, appears to have spread over Syria and Palestine, where the mingled with Semites to form the Hebrew people. It seems that they gave to the Jews their characteristic features. Another dialect, the Azarva, spoken over western Asia Minor, is revealed to us. It included the Lycian city of Myra, mentioned in Acts, 27:5 from which St. Paul took ship to Rome."

MOSAIC DISEASE-GERMS FOUND IN TOMATO PLANT

The mosaic disease of tomatoes, and probably of other plants as well, which annually causes damage aggregating tens of millions of dollars, is caused not by an ultramicroscopic organism, too small to be seen with the most powerful of optical aids, as has hitherto been supposed, but by a germ which though exceedingly tiny can yet be seen if the right technique is used.

This discovery, made by Dr. Sophia Eckerson of the Boyce Thompson Institute for Plant Research, is described in a recent issue of the Botanical Gazette. In the same journal is a discussion of the efforts of Helen A. Purdy, an associate of Dr. Eckerson, to cultivate the organism outside the plant tissues, which failed to sustain the claims made by an earlier worker that this virus could be grown in a test tube.

Dr. Eckerson found in the tissues of diseased tomato leaves swarming little organisms near the lower limit of visibility for even a high-power microscope. Their diameters ranged from two to four twenty-five thousandths of an inch. Later on, larger organisms, about twice the size of those that appeared first, were detected. These creatures were always found in the diseased areas of the leaves, and most of them possessed the power of rapid motion, swimming through the sap with rapid lashes of a whip-like "tail".

Mosaic diseases afflict a wide variety of plants and cause very serious economic losses. They are so called because leaves of the diseased plants lose their green color in angular patches, giving the tissue a pattern suggestive of a mosaic pavement. Many workers have spent years searching for the cause or causes of the disease, as a first step in the development of means for prevention or cure.

STUDIES UNEXPLORED REGION OF SPECTRUM

One of the least known sections of the spectrum has been investigated by Prof. K. T. Compton, well known physicist, and C. H. Thomas of Princeton University.

In a talk before the American Philosophical Society Prof. Compton described the methods they have used to make more accurate measurements of the spectral region that lies between ordinary X-rays and the extreme ultra-violet than have hitherto been possible. Except for a small region between radio and heat waves this is the only part of the spectrum that has not been capable of receiving close and accurate study. Prof. Compton and Mr. Thomas have shown that in this region of very soft X-rays

iron,cobalt, nickel, carbon, copper, and tungsten give out numerous characteristic radiations.

In the other regions of the spectrum, such as the ultra-violet section measured by Prof. R. A. Millikan, the radiations themselves can be more or less directly studied, but these very soft X-rays are so strongly absorbed and so little reflected that workers must resort to very indirect methods for their detection, such as the photo-electric methods described by Prof. Compton.

INTERIOR OF STARS STUDIES

Recent advances in atomic physics have led to a great increase in the unde - standing of internal conditions in the stars, Dr. Henry Norris Russell, of Princeton, told the National Academy of Sciences at its recent meeting.

"The outstanding problem is to find out where the heat radiated by the stars comes from and in what manner heat is liberated inside the stars," said Dr. Russell. "We know know that inside a star the atoms have their outer parts knocked off, but retain their individuality. And it is possible to calculate at what rate heat should escape from the interior to the surface, and therefore how bright the stars should be, if we know how large and massive a star is and how much denser it is in the interior than at the surface."

Existing evidence, indicates that heat is probably produced by a slow transformation of matter into energy, after the manner first suggested by Einstein, Dr. Russell declared. If all stars were composed of exactly the same material, stars of the same mass would be similar, not only in brightness, but also in size, color, and temperature. This is not a fact, and it follows that some stars must contain more than others of the "active material" which is the source of heat.

"The life history of a star depends upon the proportion of active material in its composition," said Dr. Russell. "If, as seems probable, this originally forms the larger part of the star's mass, a star of large mass will start as a red giant, gradually become hotter and whiter, and finally cool down and end as a faint dwarf. Stars of smaller mass may begin their careers as dwarf stars without ever passing through the giant stage."

The presence of a great ice cap lowers the temperature of a region about 50 degrees.

A recent invention is a rubber frame to protect baby's milk bottle from breaking if it falls.
