The fundamental resources of the world in which we live will be explored in extensive conferences during A.A.A.S. meetings the last week in December at Indianapolis. Agriculture, minerals, forests, power, capital, man power and its use, scientific methods in business, research laboratories and economic development factors will be covered by special papers by experts.

Subsequent semi-annual conferences will be devoted to standards of living as affected by science, the economic system in relation to economic progress, government policies and science, and finally, science and human beings. Dr. Harold G. Moulton, president of the Brookings Institution, Washington, is organizing the inquiry and will deliver the opening address.

Science News Letter, December 4, 1937



Botanist-Missionary Returns; Navigated Difficult Strait

Plants, Insects, Minerals and Ancient Weapons Are Among the Treasures Brought Back From Arctic Trip

B ACK again from the far Canadian Arctic, the missionary-botanist Père Arthéme Dutilly is sorting specimens in the laboratories of the Catholic University of America. He has brought 1200 sheets of pressed plants, 1000 insects, several scores of soil and mineral samples, and a large number of old-time weapons and tools of the Eskimos.

The Eskimo people, Père Dutilly reports, are changing fast, abandoning and even making fun of the finely wrought ivory harpoons, bone needles, etc., they formerly used, and substituting steel and other metals wherever they can. So it is easy to get excellent old implements for museum purposes.

In their clothing as well the Eskimos are rapidly becoming "westernized." Older members of the family may stick to the traditional fur parka, but the younger generation must have sweaters and even rubber-soled sneakers, at least for summer wear. Even in five years the amount of changes has been notable, among the Eskimos near trading posts.

Père Dutilly's farthest north this year was only about 70 degrees north latitude, at a small island just off the coast of Baffin Land, called Iglulik. This is a settlement of about 270 persons —a veritable metropolis, as Ēskimo

To get to Iglulik it was necessary to pass through a long reach of water noted on the maps as Frozen Strait, supposedly a very difficult thing to do. Père Dutilly gives great credit to the commander of the Oblate Missionaries' 120-ton motor vessel "Thérése," Capt. Joseph Levesque, for the easy and safe pas-

During the entire voyage, constant radio communication with trading posts, other vessels, and civilization far to the south was maintained, as well as daily broadcasts from the "Thérése." Père Dutilly was radio operator as well as botanist. In addition, he played the part of Daniel Boone afloat, killing a huge polar bear overtaken by the boat, with a single well-placed shot.

Science News Letter, December 4, 1937

Greenland Relics Show How **Eskimos Conquered Vikings**

AR IN THE North, long before the days of Columbus, waged in the ice and snow of America's Arctic between white invading Norsemen and native Eskimos, is now being discovered by

To the Smithsonian Institution, a modern Norseman, Dr. Therkel Mathiassen of the Danish National Museum, reports that Greenland's Arctic earth is relinquishing tragic trophies of Norsemen massacred when the white pioneers of about 1350 attempted to get a foothold in the New World. These could not be peaceful gifts, Dr. Mathiassen reasons. Norse colonists would never have given natives their churchbells to turn into hammers or eardrops, for example.

Dr. Mathiassen, who has spent nine summers exploring the Canadian Arctic and Greenland for clues to the Eskimos' prehistory, found the Eskimo village containing these Norse relics at a



JEUNESSE EXOTIQUE

Mother, in parka, remains old-fashioned, but the younger set affect London modes -via Hudson Bay Company.

little island called Inugsuk, off northwest Greenland.

This Eskimo story, so far pieced together, shows Eskimo migrations in a rough way for the past thousand years. A village site in the Canadian Arctic, unearthed by a Danish expedition in 1922, revealed ancient Eskimos there who had been whale and seal hunters and who used materials obtained from these sea creatures in their houses, clothes, and utensils. These Eskimos had probably come originally eastward from Alaska or Siberia. Some reached Greenland and became its first Eskimo inhabitants.

The site at Inugsuk, Greenland, containing Norse relics, shows these Eskimos at a later time, when they had acquired new inventions, and even seem to have borrowed ideas from medieval Norsemen, who were five or six hundred miles away to the south. Linking these Eskimos with the Norse settlers enables archaeologists to date this state of Eskimo culture definitely in the thirteenth and fourteenth centuries.

This was the era when Eskimos and Norsemen fought it out. The Eskimos won. Like Indians in the United States, the Eskimos did not start fighting white men in earnest for some time after their arrival. Eric the Red had discovered Greenland in 985, and Norse colonies were soon planted, but it was not until about 1200 that Norsemen in Greenland saw their first Eskimos. Dr. Mathiassen explains that this was because the Eskimos clung to northern latitudes, suitable for dog sledges and their ice hunting, but later the Eskimos spread southward and in the fourteenth century they were attacking Norse settlements, burning Norse houses, after blocking the doors, taking savage vengeance on captives, and plundering the smoking

ruins for any valuables after a massacre.

Norse in Greenland were by this time a degenerate, pitiful set of colonists, as archaeologists have shown by finding the skeletons marked by signs of malnutrition and sickness. By the time Columbus arrived in the New World, the Greenland wars were won—by the Eskimos.

Science News Letter, December 4, 1937

MEDICINE

"Aluminum-Rubber-Lung" Less Expensive Than Iron One

RELATIVELY low-cost "rubber aluminum-lung" for keeping alive patients whose breathing apparatus is paralyzed by infantile paralysis, will shortly be offered commercially. Of Swedish origin, this respirator is intended to perform the same function as more costly "iron lungs" now in use.

Based on principles first worked out by Dr. Bo Sahlin, assistant professor at the Physiological Institute, Lund, Sweden, the new Stille-Scanlon respirator utilizes a plate of aluminum which is made to fit closely the patient's body by rubber fittings. Differences in air pressure within this apparatus raise and lower the patient's breathing muscles, replacing the damaged natural function of the lung action. An advantage of the new respirator is that it covers only the thorax and the abdomen.

Science News Letter, December 4, 1937

MEDICINE

Viruses Do Not Always Cause Disease Symptoms

OST people think of viruses as the invisible cause of certain diseases. Infantile paralysis, influenza and the common cold, smallpox and various other

ARTIFICIAL LUNG

human ails are virus-caused. Domestic animals are affected by virus-caused diseases such as hoof and mouth disease, and plants are attacked by still other viruses.

Tobacco mosaic is a well-known virusdisease of plants. Viruses can even attack bacteria, the micro-organisms commonly called germs. Bacteriophage, used to fight certain kinds of disease, is a virus that attacks bacteria.

There are viruses, however, which can exist in the body without producing any signs of illness. Besides being so small as to be invisible—no microscope is powerful enough to make them visible—viruses can also be "inapparent."

This adjective is applied by Dr. E. V. Cowdry, professor of cytology at Washington University School of Medicine, in a report to the Scientific Monthly.

Even the dread infantile paralysis virus is inapparent much of the time, Dr. Cowdry points out. It is estimated that many children and at least four-fifths of the adults living in cities have mild, undetected attacks of infantile paralysis which gives them immunity or protection against further attack. Otherwise, during epidemics of infantile paralysis, many more persons would be sick than actually are.

Many of the inapparent viruses, however, are unknown, or known only to scientists working in this particular field. Some of them became known by accident. These viruses produce changes in some of the cells of the body, but the changes are not great enough to cause illness. If tissues containing these inapparent viruses are ground up, dissolved and injected into other animals, and the process repeated through several transfers, the virus may finally become apparent and cause signs of disease.

Science News Letter, December 4, 1937

ASTRONOM

Prominent Star Gradually Decreases in Brightness

AMMA Cassiopeiae, one of the sky's prominent but variable stars, has decreased in brightness in recent months. Dr. C. M. Huffer of Washburn Observatory has informed Harvard College Observatory that this star has changed from magnitude 1.75 on May 7 to 2.46 at the beginning of this month. Members of the American Association of Variable Star Observers confirmed this stellar change and found the most pronounced change occurred in October.

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