

VETERINARY MEDICINE

Viruses Fight Cattle Ill

► DEADLY disease viruses growing in tanks on living bits of skin from the tongues of cows have given scientists a new weapon in the international battle against foot-and-mouth disease.

While American cattlemen watch infected Mexican herds apprehensively, waiting to see the outcome of a three-year battle against the disease below the Rio Grande, a world-wide foot-and-mouth conference in Paris made the fight a global war.

The official report on the meeting, submitted to top administrators of the United Nations Food and Agricultural Organization, revealed:

1. Whenever a new outbreak of the virulent animal disease crops up, anywhere in the world, cable and airmail warnings will be sent to all countries in the world by the International Office of Epizootics, which sponsored the international meeting with FAO member countries.

2. Research facilities of the British government at Pirbright, England, have been designated as an international center for identification of new strains of the extremely contagious disease. A long and complicated process—it costs about \$50,000 to type one strain. Three varieties of the foot-and-mouth virus are now known. Two new strains have recently appeared in Africa.

3. A long step toward improvement of vaccines has already been made. Artificial cultivation of the disease virus by a Dutch-developed method was reported to the conference by Dr. H. S. Frenkel, director of the veterinary research laboratory of the Netherlands.

Up to the present the deadly viruses needed for vaccines have been grown in live animals—an inefficient method, to say nothing of the animal's discomfort and eventual death.

Dr. Frenkel has begun growing the disease virus in stainless steel tanks, nurtured by thin slices of skin from cattle tongues obtained from a slaughterhouse next door.

The tongue tissue is kept alive and growing in the tanks. When it becomes sufficiently infected with foot-and-mouth virus, the tissue is used to make the vaccines, which are desperately needed in many parts of the world.

Delegates from 32 nations, from Australia to Yugoslavia, attended the conference in Paris May 15-20. Not present were countries behind the Iron Curtain—Russia, Poland, Czechoslovakia—although cattle herds in those countries are known to be infected by foot-and-mouth disease.

Only large areas of the world free from foot-and-mouth disease are the United States, Canada, Australia and New Zealand. Below the Rio Grande, a joint U. S.-Mexican commission has been fighting foot-and-mouth disease for more than three years, hoping to stamp it out completely on the North American continent.

A world completely free from the foot-and-mouth disease is not a dream, the report on the Paris conference pointed out. With scientific means now at hand, said the delegates, it is possible to protect countries now free from any infection, stamp out sporadic outbreaks, and even eradicate the disease in areas where it now assumes endemic proportions.

Science News Letter, June 17, 1950

CHEMISTRY

New Form of Carbon Hard Enough to Scratch Glass

► SCIENTISTS in Britain have developed a new form of carbon hard enough to scratch glass. The new carbon is of primary value in fields of chemistry, electricity and engineering.

"Delanium" is the name given to the new product and it is already in commercial production. Details of the manufacturing process are not revealed, but it is made directly from coal without primary carboni-

Science News Letter, June 17, 1950

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