

# SCIENTIA INTERNATIONAL

## NOVAS DEL MENSE IN INTERLINGUA

➤ **Agronomia.**—Le periculo de strontium-90, un del radioactive productos secundari de explosiones atomic, resulta del facto que iste elemento tende a reimplaciar calcium primo in le economia de plantas e subsequentemente de animales e humanos. Pro reducer le periculo, le agricultura de países ingagiata in un guerra atomic deberea abandonar le cultura de plantas con radices superficial e con alte requirimentos de calcium. Patatas devenirea alora un privilegiate producto agricultural.

➤ **Agronomia.**—Un vacca del racia Holstein, elevate per le statunitense Departamento de Agricultura in un de su stationes experimental, ha establite le nove record de un production annual de 10,791 kg de lacte (con un contento de grassia de butyro de 4½ pro cento).

➤ **Antibioticos.**—Un del major fabricas pharmaceutical del Statos Unite va lancar al mercato un antibiotico destinate al uso in imbalsamar cadaveres human. Le objectivo es eliminar le periculo de contagiones accidental in autopsias.

➤ **Chirurgia.**—Al hospital ophthalmologic Henry Holland de Shikarpur in Pakistan Occidental, operationes pro glaucoma, cataractas, e altere disordines ocular es executate in massas sub le plus primitive conditiones: sin aqua corrente e sin le majoritate del facilitates que hospitales "civilisate" considera como indispensable. Nonobstante, le proportion de successos e malsuccessos a Shikarpur non es minus favorable que a New York, Paris, o Stockholm. Le experientias e le methodos del chirurgos de Shikarpur es obviamente de interesse particular pro chirurgos militar.

➤ **Chirurgia.**—Le chirurgo japonese Dr. Kazumi Taguchi, qui travalia currentemente al Universitate Minnesota, reporta successo in operationes cardiac effectuate sub le conditiones de un nove typo de hypothermia. Le temperatura del circulation general remane intacte (pro eliminar le periculo de fibrillation cardiac quando le corde es re-activate) e solmente le sanguine que circula in le cerebro es frigidate a 18 C per medio de un ducto extracorporee attachate al arteria carotic commun. Assi le requirimentos oxygenic del cerebro es reduce efficacissime. Operationes con arrestos cardiac de un duration de usque a 14 minutas ha essite effectuate per iste methodo sin ulla consequente insulto cerebral.

➤ **Illumination.**—Ingenieros del compania Westinghouse experimenta con le uso de un phosphoro que essera luminescente in le presentia de electricitate sed transparente e invisibile quando le corrente es interrompita. Per medio de iste invention, vitros de fenestra pote esser fabricate que functiona durante le nocte como lampas electric sed que presenta nulle obstaculo al lumine solar durante le die. On crede poter perfectionar le invention in le proxime futuro e lancar le fenestra-lampa al mercato in 1960.

➤ **Electricitate.**—Dr. G. K. Lewis del Universitate Illinois ha constatate in un studio special que alcoholicos es plus sensibile al effectos de un choc electric que personas normal, que corrente alternante es plus periculose que corrente directe, que basse voltages seque le curso del minimo de resistencia durante que alte voltages seque le curso le plus directe, e que un corrente que passa per un organo vital—per exemplo le corde—es frequentemente plus a timer que un plus forte corrente que passa per un organo minus delicate.

➤ **Electricitate.**—Le ressources hydroelectric de Nove Zelanda es limitate, sed le pais possede extense reservoirs de energia in le forma de

geysers e subterrane vapor aquose que pote esser utilisate in le alimentation de turbinas. Installationes pro iste objectivo es sub construction, e intra un anno Nove Zelanda va obtener 69,000 kilowatts ab su caldieras natural.

➤ **Automobiles.**—Aluminium in omne colores del iride va esser usate in le ornamentos del automobiles de 1958. Le coloration del metallo es permanente. Illo es effectuate per un processo de anodisation que aper le poros e permette le penetration del pigmento.

➤ **Medicina.**—Le causas de mongolismo e de leucemia es incognoscite. Pro ambe conditiones, il es ver, on ha stipulate (independemente) le possibilitate hypothetic que illos resulta de prenatal stresses chimic, physic, o infectiose. Un recentemente reportate studio statistic revela que le occurrentia cominate de leucemia e de mongolismo in le mesme individuo es tres vices plus frequente que lo que essera explicabile como coincidentia accidental. Le supposition de un "denominator commun" in le etiologia del duo morbos pare multo plausibile.

➤ **Recercas Radiational.**—Post exponer amebas a duplemente letal doses de irradiation, investigadores al statunitense Laboratorio National Argonne ha succedite a salvar le vita de lor animalculos experimental in 91 pro cento del casos per simplemente transfunder in illos protoplasma ab amebas non-irradiate. Le existentia de un specific factor de protection antiradiational in le protoplasma esseva demonstrate per experimentos de centrifugation: le factor migrava con le componentes le plus pesante. Illo ha non ancora essite isolate.

➤ **Ingenieria.**—Le ponte Jacques Cartier super le riviera Sancte Laurentio in Canada debe esser elevate per circa 20 m pro permettre le passage de naves transoceanic. Le labor consumera duo annos sed essera completate sin interruption del traffico transpental. Le arcs individual del ponte ha un longor de usque a 80 m. Illos es elevate hydraulicamente passo per passo in unitates de non plus que 10 cm. Post omne quatro elevationes, i.e. pro omne 40 cm de altor, le pilares es extendite per le addition de capites de cemento armate.

➤ **Hematologia Bovin.**—Laboratorios in varie países, incluse plures functionante a stationes experimental del statunitense Departamento de Agricultura, collabora pro clarificar le relation inter le gruppos de sanguine de vaccas e varie factores genealogic. Le problema pare esser de interesse practic ab le puncto de vista del bovicultura scientific. On ha constatate que le gruppos de sanguine in vaccas es multo plus complexe que in humanos. Circa 50 factores antigenic es a considerar, de maniera que le typo de sanguine de un vacca individual es quasi invariabilemente unic.

➤ **Recercas de Cancere.**—Un studio statistic ha monstrate que cancere mammari es significativamente minus frequente in feminas qui ha portate e nutrite un o plure infantes que in feminas sterile. Infelicemente, le pluralitate de infantes non solmente reduce le probabilitate de cancere mammari; illo etiam augmenta le probabilitate de cancere del cervice uterin.

➤ **Phytopathologia.**—Post inocular fabas con virus de mosaico de tabaco, un gruppo de medicos del arcea statunitense ha succedite a proteger le plantas contra le eruption del morbo mesme per immerger los in un extracto de ris. Usque nunc iste methodo de "vaccinar" plantas es un manovra purmente laboratorial.

Science News Letter, September 28, 1957

### GENERAL SCIENCE

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Science News Letter, September 28, 1957

### SURGERY

## Mass Surgery Good Even In Primitive Setting

➤ MASS SURGERY done "in the rough" under primitive conditions in West Pakistan has proved to be as good as that done in any of today's fully equipped hospitals.

The mass surgery is being performed on diseased eyes at the Henry Holland Mission Eye Hospital in Shikarpur, West Pakistan, and the good results are of considerable interest in case of mass casualties from an atomic war, Dr. Roland I. Pritikin, Rockford Memorial Hospital, Rockford, Ill., reported to the International College of Surgeons meeting in Chicago.

The hospital has electricity but no other utilities. Water is pumped by hand, toilets are outside the buildings and in the operating room an aide holds an electric light over the patient.

The visiting Hindus cook their own food outside on the hospital grounds, using dried cow-dung charcoal for fuel.

The hospital is located in an area considered to be the world center of eye diseases because of nutritional deficiencies, and its surgical team operates for cataracts, glaucoma and other eye ailments. This year, it treated about 3,000 patients from Pakistan and Afghanistan.

The success of the hospital's surgery is especially important to military surgeons. In spite of the tremendous volume of patients handled under primitive conditions, the number of cases that are unsuccessful is no greater than those cared for under the most ideal conditions, Dr. Pritikin said.

Science News Letter, September 28, 1957

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