

SCIENTIA INTERNATIONAL

NOVAS DEL MENSE IN INTERLINGUA

➤ **Astronomia.**—Le plus grande radiotelescopio, con un diametro de circa 27 m, es in le Pais Basse. Le germanos ha un con un diametro de circa 25 m. Illo gerite per le Universitate Harvard ha un diametro de circa 20 m. Le Laboratorio Recercatori Naval del Statos Unite erige un radiotelescopio a Maryland Point, Md., con un diametro de circa 28 m. Illo essera inaugurat in le curso del menses veniente. Le installationes pro le personal es partialmente duple proque le astronomos a Maryland Point va includer un astronomia. In Anglaterra on prepara le construction de un radiotelescopio con un diametro de plus que 80 m. Illo essera preste in 1958.

➤ **Technologia.**—Un cellula de quartz, non plus grande que un arachide, promitte devenir un reimpiacemento de efficacia superior pro le diaphragmas nunc in uso in radios e grammo-phonos. Un corrente de alte voltage ionisa le aere in le cellula, rendente lo simile al ionosphaera que enveloppa le terra a un altitude de 400 km. Variationes del corrente causa expansiones e contractiones del "nube" ionisate que se manifesta in modulabilissime undas acustic. Le nove altiparlator es le creation del Corporation DuKane de St. Charles in Illinois.

➤ **Recercas de Cancere.**—Duo leucemoide typos de cancro in mures, ambes usque nunc irrelentabile per irradiation o chimiotherapia e ergo semper letal, ha essite completamente curate intra 30 dies per le injection intraperitoneal de sero ab normal porcos de India. Seros ab altere animales ha nulle effecto super le cancers mentionate, e nulle effecto es exercite per sero ab porcos de India super altere typos de cancro. Ancora plus mysteriose es le facto que le effecto in question non se monstra in vitro. Il pare que le factor active in le sero require le presentia de un altere factor que existe in le mures. Le clarification de iste enigma va representar un importante passo in avantie in le biochimia cancerose. Le cercas hic reportate esseva executate al Hospital New York.

➤ **Computatores.**—Le firma Arthur D. Little de Boston construe un computator electronic sin tubos a vacuo e sin transistores, resultante in un enorme economia de dimensiones. Le projecto es possibile gratias al invention del "cryotron" per Dr. D. A. Buck del Instituto Technologic de Massachusetts. Le cryotron es un rumpe-corrente que utiliza le principio que multe metallos perde quasi omne resistentia al corrente electric quando illos es exponite a temperaturas in le vicinitate de zero absolute e que illos reacquire lor resistentia normal in despecto del basse temperatura quando illos suffre le effecto de un campo magnetic. Assi le cryotron es simplemente un curte pecia de filo metallic circumdate per un altere conductor de forma spiral. Le filo al centro es un conductor quando il ha nulle corrente in le spiral circumdante lo. Le filo deveni un resistor quando un corrente passa per le spiral.

➤ **Inventiones.**—Un matras que se face molle o dur secundo le gusto del usator esseva inventate per senior F. D. Arpin de Orange, N. J. Le matras ha un copertura hermetic intra le qual un vacuo pote esser producite per medio de un pompa special. Allora le matras es dur. Per aperir un valvula on reduce le vacuo e rende le matras plus molle.

➤ **Physica Atomic.**—Importante desenvolvimentos occurre presentemente in le utilisation de energia atomic como propulsor naval. Le

Statos Unite possede jam duo submarinos atomic. Dece-tres alteres es planate. Le Marina Statounitese etiam ha planos pro un porta-aviones atomic de 85.000 tonnas. Multiple projectos de naves mercantil a propulsion atomic es sub consideration. Japon ha planos pro un petroliero submarin atomic de 30.000 tonnas. Russia ha sub construction un rumpe-glaicie atomic de un desplazamiento de 16.000 tonnas. Le Marina Royal Britannic ha completate le planos pro su prime submarino atomic. Inter le prospectos futur del navigation atomic on mentiona naves de pisca que es simultaneamente fabricas flotante; naves de exploration petroleo-geologic que es flottante turres de foration; e naves amphibie sur- e submarin que pote immerger se pro evitar le inclementias del tempore.

➤ **Osteologia.**—Un gruppo de scientistas de duo universitates in Colorado ha inaugurat un studio systematic del crescentia e recrescentia annual del cornos de cervos. In iste phenomeno il se tracta de un processo regeneratori de ossos que es unic in su intensitate. Si illo depende de un specific factor biochimic, on pote pensar al possibilitate de inducer, per medios chimic, processos analogemente regenerative in ossos fracturate in pacientes human.

➤ **Antibioticos.**—Studios in progresso al Instituto Recercatori Walter Reed del Armea Statounitese a Washington supporta le theoria que antibioticos inhibi le desenvolvamento de lor pariete exterior. Isto pare esser le sol conclusion que pote esser derivate ab le observation que (1) antibioticos se concentra in le pariete exterior del bacterios que illos attacca e (2) materiales normalmente usate in le desenvolvamento del pariete exterior del bacterios se concentra inusate e apparentemente inusabile a lor interior post que illos es attaccate per antibioticos. On suppone que le construction del pariete require non solmente le mentionate materiales sed etiam le action de un enzima que es destruite per le antibioticos. Le proxime problema es evidentemente le identification del enzima (providite que illo existe). Su isolation e subsecuente analyse aperira le possibilitate de synthetisar in le laboratorio substantias chimic que pote inhibir le enzima ancora plus efficacemente que le antibioticos e sin ulle effecto toxic super le organismo human.

➤ **Agricultura.**—Experimentos executate al Universitate Pennsylvania ha demonstrate que apes pote esser fortiate a abandonar omne activitate per exponer los a sonos de un frequentia de 600 cyclos per secunda e un fortia de circa 120 decibels. Le discoperta es de evidente importantia practic pro le apicultor. Nunc ille pote inspicir su apicularios sin proteger se contra su amicas mellifere per enveloppar se (e illas) in nubes de fumo de tabaco que postea debe esser eliminate per le plus meticulose ventilation. Le sonos producite per un simple vibrator es tanto efficace como le fumo traditional—e multo plus nitide.

➤ **Technologia.**—Fornos solar non es de vital importantia practic in le Statos Unite. Le pais es ancora troppo ric in altere ressources de energia thermic. Nonobstante, in le cercas del physica de alte temperaturas on se servi de plus in plus de fornos solar que produce un calor idealmente "pur," i.e. libere de omne production lateral de gases apte a complicar le labor del experimentator.

Science News Letter, February 23, 1957

GENERAL SCIENCE

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Science News Letter, February 23, 1957

SCIENCE NEWS LETTER

VOL. 71 FEBRUARY 23, 1957 NO. 8

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington 6, D. C., NORTH 7-2255. Edited by WATSON DAVIS.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

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Printed in U. S. A. Entered as second class matter at the post office at Washington, D. C., under the act of March 3, 1879. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40, P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1925, 39 U. S. Code 283) authorized February 28, 1950. Established in mimeograph form March 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index.

Member Audit Bureau of Circulation, Advertising Representatives: Howland and Howland, Inc., 1 E. 54th St., New York 22, ELdorado 5-5666, and 435 N. Michigan Ave., Chicago 11, Superior 7-6048.

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