Atomnaja Energija, 1, fasc.2, 2-10 (1956) CARD 2 / 2 PA - 1608

Results:	experimental	theoretical
Radius of critical mass with water in the channels	60 (cm)	59
dto. without water in the channels	101	99
The maximum activity at the beginning of a working period (10"linear cm") corresponds to an activity ΔK of $(4,5\pm0,2)10^{-4}$)	$0,11\pm0,005$	0,1222
Activity control:		
a) with 1 manual control rod in the interior ring	$0,013\pm0,001$	0,12
b) with 1 manual control rod in the exterior ring	$0,007\pm0,001$	0,007
c) with 2 locking rods	$0,018\pm0,002$	0,02
The probability of escaping resonance capture $(1 - \phi)$		
The fission ratio of U^{235} in the epicadmium region	$\phi = 0,906\pm0,015$ 8,3%	- -

INSTITUTION:

LANTSOV, M.N.

21(4) PHASE I BOOK EXPLOITATION SOV/2583

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958.

Doklady sovetskikh uchenykh; yadernyye reaktory i yadernaya energetika. (Reports of Soviet Scientists; Nuclear Reactors and Nuclear Power) Moscow, Atomizdat, 1959. 707 p. (Series: Its: Trudy, vol. 2) Errata slip inserted. 8,000 copies printed.

General Eds.: N.A. Dollezhal', Corresponding Member, USSR Academy of Sciences, A.K. Krasin, Doctor of Physical and Mathematical Sciences, A.I. Leypunskiy, Member, Ukrainian SSR Academy of Sciences, I.I. Novikov, Corresponding Member, USSR Academy of Sciences, and V.S. Fursov, Doctor of Physical and Mathematical Sciences; Ed.: A.P. Alyab'yev; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This book is intended for scientists and engineers engaged in reactor designing, as well as for professors and students of higher technical schools where reactor design is taught.

COVERAGE: This is the second volume of a six-volume collection on the peaceful use of atomic energy. The six volumes contain the reports presented by Soviet scientists at the Second International Conference on Peaceful Uses of Atomic Energy, held from September 1 to 13, 1958 in Geneva. Volume 2 consists of three parts. The first is devoted to atomic power plants under construction in the Soviet Union; the second to experimental and research reactors, the experiments carried out on them, and the work to improve them; and the third, which is predominantly theoretical, to problems of nuclear reactor physics and construction engineering. Yu. I. Koryakin is the science editor of this volume. See SOV/2081 for titles of all volumes of the set. References appear at the end of the articles.

SOV/89-6-5-9/33

21(9), 5(3)

AUTHORS: Dubovskiy, B. G., Lantsov, M. N.

TITLE: On the Problem of the Use of Organic Compounds as Moderators in Nuclear Reactors (K voprosu o primenenii organicheskikh soyedineniy v kachestve zamedliteley v yadernykh reaktorakh)

PERIODICAL: Atomnaya energiya, 1959, Vol 6, Nr 5, pp 563-564 (USSR)

ABSTRACT: In a small water-moderated and water-cooled reactor various organic substances are investigated for the purpose of determining their properties when used as moderator instead of water. The fuel elements (highly enriched uranium) were placed in a triangular lattice the parameters of which are tabulated. The critical state is attained by raising the moderator level in the reactor tank. The radius of the active zone remained the same in all experiments. At the sides and at the bottom the active zone was surrounded by a reflector made from iron and from a mixture of iron+moderator. As upper reflector the ends of the fuel elements were used, which exceeded the height of the active zone in the critical arrangement by about the double. The critical mass, the rate of reactivity increase in the case of an increasing moderator level, and the Laplacian distribution κ^2 of the thermal

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On the Problem of the Use of Organic Compounds as Moderators in Nuclear Reactors

neutron were experimentally determined. The known methods were employed for the purpose of measuring the quantities mentioned. For the following moderators measuring results are tabulated: Water, $(CH_3)_2CHCH_2CH_2OH$, $CH_2(CH_2)_4CO$, $C_6H_5CH_2OH$, $CH_3C_6H_5$, 87% HCOOH, mixture of various organic compounds. The following data are given: 1) Ratio between hydrogen and U^{235}-concentration. 2) Critical mass. 3) Ratio of the critical volume of the active zone, referred to normal water. 4) K_∞. 5) τ. 6) Number of hydrogen nuclei in 1 cm^3. 7) Number of moderator nuclei in 1 cm^3. 8) Density and boiling point. The following conclusions may be drawn from measuring results: 1) If, in a water-cooled and water-moderated reactor, organic liquids are substituted for water (as moderators), this entails no essential increase of the critical volume of the reactor. The slight increase of the volume of the active zone is due only to greater neutron leakage. 2) The increase of neutron age in organic liquids develops more slowly than the decrease of hydrogen concentration in these liquids.

On the Problem of the Use of Organic Compounds as Moderators in Nuclear Reactors

3) As organic liquids contain carbon, their neutron age is considerably less than the neutron age of water (in the case of one and the same hydrogen concentration). This property of organic liquids (especially $(CH_3)_2$ $CHCH_2CH_2OH$) will probably play a more important part in future, if these liquids are intended to be used as a protective biological shield for reactors of small dimensions. 4) In order to obtain more accurate results, which are necessary for comparison, it is advisable to use fuel elements with lower uranium enrichment in reactors with organic moderators. The following persons assisted in the experimental part of this investigation: Ye. A. Plaksin, V. M. Fedorov, L. A. Geraseva and V. V. Vavilov. Professor A. K. Krasin suggested that this investigation be carried out, and he also discussed the results obtained. Ye. I. Inyutin, P. A. Palibin and V. P. Shelud'ko assisted in preparing the work of measurement. There is 1 table.

SUBMITTED: January 6, 1959

MOROZOV, I. G.; INYUTIN, Ye. I.; LANTSOV, M. N.; PLAKSIN, Ye. A.

"Experimental investigation on physical characteristics of water-water reactors for small power plants."

report submitted for 3rd Intl Conf, Peaceful Uses of Atomic Energy, Geneva, 31 Aug-9 Sep 64.

17

L 21211-65 EWT(m)/EPF(c)/EPF(n)-2/EPR Pr-4/Pa-4/Pu-4 IM

ACCESSION NR: AP5001266 S/0089/64/017/006/0448/0452

42
B

AUTHOR: Sinev, N. M.; Krasin, A. K.; Bychkov, I. F.; Blokhin, O. I.; Broder, D. L.; Gabrusev, V. N.; Dudnikov, Yu. V.; Zhil'tsov, V. A.; Koptev, M. A.; Kotov, A. P.; Lantsov, M. N.; Lisochkin, G. A.; Merzlikin, G. A.; Morozov, I. G.; Komarov, A. Ya. (deceased); Orokhov, Yu. I.; Sergeyev, Yu. A.; Slyusarev, P. N.; Ushakov, G. N.; Fedorov, N. V.; Chernyy, V. Ya.; Shmelev, V. M.

TITLE: Small-size atomic electric power installation TES-3

19

SOURCE: Atomnaya energiya, v. 17, no. 6, 1964, 448-452

TOPIC TAGS: small atomic power installation, portable atomic power installation, nuclear reactor, electric power generation/TES-3 reactor

ABSTRACT: The paper is a summary of the SSSR report #310 at the Third International Conference on Peaceful Uses of Atomic Energy in Geneva, 1964. It describes a movable small-size atomic electric power installation with the water cooled and moderated TES-3 reactor (under 10,000 kw). It consists of four

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ACCESSION NR: AP5001266

blocks each of which was assembled at the manufacturing plant, and which are placed on four self-propelled flatcars on caterpillar tracks. No housing is required for the installation; the only local preparation needed is the radiation protection. The results with a demonstration model show a satisfactory agreement between the theoretically expected and actually obtained parameters of the installation. Orig. art. has: 4 figures

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00 SUB CODE: NP

NR REF SOV: 000 OTHER: 000

Card 2/2

LANTSOV, N.I., inzh.

Laying petroleum pipelines in frozen ground. Stroi. pred. neft. prom. 3 no.3:6-10 Mr '58. (MIRA 11:6)
(Petroleum--Pipelines) (Frozen ground)

LANTSOV, V.A., inzhener.

Pamphlets of the Moscow NIS MHF. Rech.transp. 13 no.1:47-48 Ja-F '53.
(MLRA 6:11)
(Loading and unloading)

LANTSOV, Vladimir Anatol'yevich, kand. tekhn. nauk; CHISTYAKOV, A.T., inzh.; nauchnyy red.; ROTENBERG, A.S., red. idz-va; PUL'KINA, Ye.A., tekhn. red.

[Economic efficiency of comprehensive mechanization in housing construction] Ekonomicheskaia effektivnost' kompleksnoi mekhanizatsii v zhilishchnom stroitel'stve. Leningrad, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1958. 103 p. (Apartment houses) (MIRA 11:7)

LANTSOV, V.

LANTSOV, V., kand. tekhn. nauk.

Automatic paint roller. Stroitel' no.3:11 Mr '58. (MIRA 11:2)
(Painting, Industrial--Equipment and supplies)

SOV/100-58-3-5/8

AUTHOR: Lantsov, V.A., Candidate of Technical Sciences

TITLE: The Method of Defining the Efficiency of New Building Machines. (O metodike opredeleniya ekonomicheskoy effektivnosti novykh stroitel'nykh mashin.)

PERIODICAL: Mekhanizatsiya Stroitel'stva, 1958, No.3, USSR, Pp 23-26

ABSTRACT: Criticism is made of the article by S.E. Kantorer. " Method of Defining the efficiency of New Building Machines" published in Mekhanizatsiya Stroitel'stva, 1957, No. 5. The weights of various Russian cranes are illustrated diagrammatically. The author advocates revision of the GOST 7379-55 as far as building cranes are concerned. N.A. Boloban and A.A. Pichugin published relative figures evaluating cranes of various types. The author presents a formula:

$$A = F_b Q_{min} = H_{min} \left(L_{max} - \frac{c}{2} - 1 \right) Q_{min}$$

Where A is general technical efficiency
F_b is the vertical area of operation of crane
Q_{min} is minimum lifting capacity
L_{max} is highest reach of crane's arm

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The Method of Defining the Efficiency of New Building Machines.

H_{min} is the highest level of the lifting hook

c is the rail gauge

l is the distance of the crane from the building

Table 1 gives values of the lifting moments of cranes BK-5-195, BKSM-3-5-10 and SBK-2. The foremost organisation engaged in this comparitive analysis of cranes is the Nauchno-Issledovatel'skiy Institut Organizatsii Mekhanizatsii i Tekhnicheskoy Pomoshchi Stroitel'stva (Scientific and Research Institute for the Organisation Mechanisation and Technical Advice to the Building Industry.) (NIIOMPT) ASiA SSSR. There is one diagram and one table.

AVAILABLE:

Card 2/2 1. Construction equipment--Performance 2. Hoists--Design
3. Mathematics--Applications

LANTSOV, V.A., kand. tekhn. nauk.

Economical effectiveness of mechanizing large-element construction. (MIRA 11:3)
Biul. tekh. inform. 4 no.2:12-15 F '58.
(Building machinery)

LANTSOV, V.A., kand.tekhn.nauk; SHISTER, G.N., red.

[Album of hoisting, conveying, loading, and unloading machinery and equipment for making major repairs in apartment houses] Al'bom pod"emno-transportnykh i pogruzochno-razgruzochnykh mashin, mekhanizmov i prisposoblenii dlia kapital'nogo remonta zhilykh domov. Leningrad, 1959. 32 p. (MIRA 13:9)

1. Akademiya kommunal'nogo khozyaystva. Leningradskiy nauchno-issledovatel'skiy institut.
(Cranes, derricks, etc.)

VOLKOV, G.F., inzh.; LANTSOV, V.A., kand.tekhn.nauk; SHARYY, Yu.V., kand.tekhn.nauk; RAYLYAN, V.F., prof., red.; ROTENBERG, A.S., red.izd-va; PUL'KINA, Ye.A., tekhn.red.

[Comprehensive building up of city blocks with large buildings; practices in Leningrad] Kompleksnaia zastroika kvartalov krupnoelementnymi zdaniiami; iz opyta Leningrada. Leningrad, Gos.izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1959. 124 p. (MIRA 12:6)
(Leningrad--Building)

LANTSOV, V. A., kand. tekhn. nauk

Machinery for small-scale mechanization of transportation. Stroitel' no.4:22 Ap '59. (MIRA 12:6)
(Building materials--Transportation)

LANTSOV, V.A., kand.tekhn.nauk

Two sectional tower-hoist. Biul.tekh.inform.po stroi. 5 no.9:26 S '59. (MIRA 12:12)
(Hoisting machinery)

LANTSOV, V.A., kand.tekhn.nauk

Methods for working out tolerance systems. Pron.stroi. 37 no.3:49-52 Mr '59. (MIRA 12:4)
(Tolerance (Engineering))

LANTSOV, Vladimir Anatol'yevich, kand.tekhn.nauk; MARKOV, V.A., red.; ZAMYSHLYAYEVA, I.M., red.izd-va; LELYUKHIN, A.A., tekhn.red.

[Mechanization of hoisting and conveying operations in making major repairs in apartment houses] Mekhanizatsiia pod"emno-transportnykh rabot pri kapital'nom remonte zhilykh zdanii. Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1960. 113 p.
(MIRA 13:11)

(Apartment houses--Maintenance and repair)
(Hoisting machinery)

ULANOV, R.N.; LANTSOV, V.A., starshiy nauchnyy sotr.; AL'PEROVICH, A.I.; PFUL', B.Ye., inzh., red.; KODABASHEVA, R.S., inzh., red.; YEFREMENKO, V.P., inzh., red.

[Hoists used in construction] Stroitel'nye pod"emniki; sbornik opisanii ratsionalizatorskikh predlozhenii. Moskva, Gos. izd-vo litry po stroit., arkhit. i stroit. materialam, 1961. 34 p. (MIRA 14:11)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. Byuro tekhnicheskoy informatsii. 2. Glavnyy konstruktor liteyno-mekhanichskogo zavoda Leningradskogo upravleniya zhilishchnym khozyaystvom (for Ulanov). 3. Leningradskiy nauchno-issledovatel'skiy institut Akademii kommunal'nogo khozyaystva im. K.D.Pamfilova (for Lantsov). 4. Glavnyy inzhener TSentral'nogo remontno-mekhanicheskogo zavoda Ispolnitel'nogo komiteta Moskovskogo gorodskogo soveta deputatov trudyashchikhsya (for Al'perovich). (Hoisting machinery)

USPENSKIY, Viktor Vasil'yevich; LANTSOV, V.A., kand.tekhn. nauk, retsenzent; KARPOV, V.V., kand.tekhn. nauk, nauchnyy red.; ROTENBERG, A.S., red. izd-va; CHERKASSKAYA, F.T., tekhn. red.

[Growth potentials of labor productivity in housing construction; from practices used in Leningrad] Rezervy rosta proizvoditel'nosti truda v zhilishchnom stroitel'stve; iz opyta Leningrada. Leningrad, Gosstroiizdat, 1962. 139 p. (MIRA 15:7)
(Construction industry--Labor productivity)
(Leningrad--Apartment houses)

LANTSOV, Vladimir Anatol'yevich; PCHELKIN, Yu.V., red.; PRESNOVA, V.A., tekhn.red.

[Mechanization of the major repair of apartment houses] Opyt mekhanizatsii kapital'nogo remonta zhilykh domov. Leningrad, Lenizdat, 1961. 117 p. (MIRA 15:11)
(Construction equipment)
(Apartment houses--Maintenance and repair)

DONSKOY, Viktor Mikhaylovich; LANTSOV, Vladimir Anatol'yevich; LEVCHENKO, Ya.V., red.; GRACHOVSKAYA, G.V., red. izd-va; BELOGURKOVA, I.A., tekhn. red.

[Mechanization of small-volume earthwork]Mekhanizatsiia zemlianykh rabot malykh ob"emov. Leningrad, 1962. 32 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Stroitel'naia promyshlennost', no.13) (MIRA 15:11)

(Earthmoving machinery)

LANTSOV, V.A., kand.tekhn.nauk; NALBANDOV, B.A., inzh.

Using chain saws in the major repair of buildings. Stroi.i dor. mash. 7 no.10:22-23 O '62. (MIRA 15:11)
(Chain saws) (Apartment houses--Maintenance and repair)

UREVICH, Abram Bentsianovich; LANTSOV, V.A., kand. tekhn. nauk, red.; SHILLING, V.A., red. izd-va; GVIRTS, V.L., tekhn. red.

[Mechanized unit for repairing the façades of buildings] Mekhanizirovannaia ustanovka dlia remonta fasadov zdanii. Leningrad, 1962. 21 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Stroitel'naia promyshlennost', no.21) (MIRA 16:2)
(Façades--Maintenance and repair)

LANTSOV, Vladimir Anatol'yevich; ULANOV, Rem Nikolayevich; LEVCHENKO, L.V., red.; FOMICHEV, A.G., red.izd-va; BOL'SHAKOV, V.A., tekhn. red.

[Hiched construction cranes]Pritsepnye stroitel'nye krany. Leningrad, 1961. 20 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Stroitel'naia promyshlennost', no.28) (MIRA 16:3)
(Cranes, derricks, etc.)

LANTSOV, Vladimir Anatol'yevich; SEDLUKHA, Georgiy Andrianovich; LEVCHENKO, Ya.V., inzh., red.; FREGER, D.P., red.; BOL'SHAKOV, V.A., tekhn. red.

[Assembly of tower cranes in crowded conditions]Montazh bashennykh kranov v stesnennykh usloviiakh. Leningrad, 1961. 23 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Stroitel'naia promyshlennost', no.27) (MIRA 16:2)

(Cranes, derricks, etc.)

LANTSOV, V.A., kand. tekhn. nauk

Two-lever hoisting completely rotatable pulpit. Stroi. i dor. mash. 7 no.4:17-19 Ap '62. (MIRA 16:7)

(Hoisting machinery)

LANTSOV, V.A., kand.tekhn.nauk

Small self-propelled construction cars. Mekh. stroi. 20 no.6: 18-19 Je '63. (MIRA 26:5)
(Construction equipment)

DONSKOY, Viktor Mikhaylovich; LANTSOV, Vladimir Anatol'yevich; LEVCHENKO, Ya.V., red.; FREGER, D.P., red.izd-va; BELOGUROVA, I.A., tekhn. red.

[Small loading and unloading construction machinery] Malogabaritnye pogruzochno-razgruzochnye mashiny v stroitel'stve. Leningrad, 1963. 33 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Stroitel'noe proizvodstvo, no.2) (MIRA 16:10)
(Construction equipment)

MEYTUS, Mikhail Emmanuilovich; SHCHARINSKIY, Boris Yakovlevich; LANTSOV, V.A., red.; ALAMYSHEVA, N.A., red. izd-va; GVIRTS, V.L., tekhn. red.

[Sandblasting the facades of buildings] Peskostruinaia ochistka fasadov zdanii. Leningrad, 1963. 28 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Seriia: Stroitel'noe proizvodstvo, no.10) (MIRA 17:3)

LANTSOV, V.A., kand. tekhn. nauk

SP-0,6 crane-b[illegible]st for delivering loads through window openings. Stroi. i dor. mash. 9 no.5:6-9 My '64. (MIRA 17:6)

LANTSOV, V.A.

Analysis of continuous transportation of materials in the overall repair of stone residential buildings. Nauch. trudy AKKH no.31:166-171 '64. (MIRA 18:9)

LANTSOV, Vladimir Anatol'yevich, kand.tekhn.nauk; POLONSKIY, Lev Abramovich, inzh.; KARMISHENSKIY, A.N., kand. tekhn.nauk, red.

[Vacuum load-lifting devices in construction] Vakuumnye gruzozakhvatnye prisposobleniia v stroitel'stve. Leningrad, 1965. 17 p. (MIRA 18:10)

ELINKOVA, A.A.; BRESLER, S.Ye.; LANTSOV, V.N.

DNA synthesis in the process of bacterial conjugation. Genetika no.2:13-21 Ag '65. (MIRA 18:10)

1. Institute of High Molecular Compounds, Academy of Sciences of the U.S.S.R., Leningrad.

GORODNIK, A.G.; LANTSOV, V.P.

Osgood-Schlatter disease. Vestn. rent. i rad. 38 no.3:14-17 My-Je '63. (MIRA 17:7)

LANTSOV, V.P., kapitan meditsinskoy sluzhby

Setting up an X-ray section in a UST-41 tent in winter. Voen.-med. zhur. no.12:11-12 '59. (MIRA 14:1)

(MEDICINE,MILITARY—COLD WEATHER CONDITIONS)
(X RAYS—EQUIPMENT AND SUPPLIES)

TSELUYKO, N.I.; SAPELKIN, A.I.; FIL', Ye.V.; PUZYRNYY V.P.; GOLUB, S.T.; LANTSOV, V.T.

Annealing malleable cast iron without packing. Lit. proizv. no. 10:42-43 O '63. (MIRA 16:12)

LANTSOVA, A. I.

3459 LANTSOVA A. I. AND BORN V. F.

Rost proizvoditel'nosti Trudapri ob'edinennoy Roboty (Iz opyta raboty kostrom. Shveynoy arteli Krashnyy Oktayabr' predlozheniye L. I. Gorevoy i. L. V. Plotnikovoy) M., KOIZ, 1954. (4) s. 21 sm (Tsento. sovet promysl. kooperatsii SSSR Tekhn Upr. Obmen Proizvod Tekhn. Opytom. Inform listok 56). 1200 ekz. Bespl. Sost ukazany v kontse teksta (54-13915ZH) 687.12:658.5

ZHIGAYLO, Ya.V.; SHPAK, L.I.; GAYDEY, T.P.; DUCHINSKAYA, V.I.; RAKSHA, V.V.; Prinimali uchastiye: KURGANOV, A.,; LANTSOVA, M.A.

Chemical transformations and phase transitions of a zinc-chromium catalyst of methanol synthesis. Khim.prom. no.1: 29-34 Ja '63. (MIRA 16:3)

1. Institut fizicheskoy khimii imeni L.V.Pisarzhevskogo AN UkrSSR.
(Catalysts) (Methanol)

L 1589-66 EWT(m)/T

ACCESSION NR: AP5020950 UR/0073/65/031/008/0761/0767

AUTHOR: Piontkovskaya, M. A.; Neymark, I. Ye.; Tyutyunnik, R. S.; Lukash, A. Ye.; Lantsova, M. A.

TITLE: Properties of magnesium-substituted zeolite

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 31, no. 8, 1965, 761-767

TOPIC TAGS: zeolite, magnesium, adsorption, nuclear magnetic resonance

ABSTRACT: The zeolite was prepared from the molecular sieve NaA or NH_4NaA and magnesium sulfate by cation exchange under static or flow conditions at 20-60 C. The exchange amounted to about 40% for NaA and 58% for NH_4NaA. For the study of properties, the following was determined: isotherms of vapor absorption (for water, benzene and lower alcohols) in the powders under vacuum at 20C, chromatographic data for the heat of adsorption (20-300C) and content in the individual gases ($H_2 + CO + CH_4$), and nuclear magnetic resonance for elucidating the nature and character of the forces linking adsorbed water molecules in the zeolite. The compositions of the elemental cells of these zeolites, $Mg^{I}NaA$, $Mg^{II}NH_4NaA$ and $Mg^{III}NH_4NaA$ are reported. Adsorption isotherms for the Mg zeolite were

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ACCESSION NR: AP5020950

located above those for the Na form. Calculation of water vapor molecules per one zeolite cell gave 730 A^3 for pores in NaA and 958 A^3 for $Mg^{III}NH_4NaA$, that is, 30% more for the latter. Tests with alcohols, etc. showed that no molecules with diameters above 5 A were adsorbed. The NMR lines for MgNaA, CaNaA and KNaA are reported. They show that the cations have an essential influence on the magnetic resonance of proton absorption, that is, that upon filling of zeolite pores with water, the latter locates mainly at the metal cations of the individual cells. This supports the assumption of cation participation in the primary adsorption act of polarized water molecules. Adsorption heat was shown to depend upon the individual gas rather than the metal. The heat of adsorption increased by about 2 kcal/mole for each CH_2 group. The nature of the cation which compensates the charge of the alumino silicate body influenced the adsorption heat of CO molecules and hydrocarbons with unsaturated bonds. Orig. art. has: 5 figures and 3 tables.

ASSOCIATION: Institut fizicheskoy khimii im. L. V. Pisarzhevskogo AN UkrSSR (Institute of Physical Chemistry, AN UkrSSR)

SUBMITTED: 10Mar64 ENCL: 00 SUB CODE: IC

NR REF SOV: 008 OTHER: 001

Card 2/2

LANTUKH, G. D. MARUSIK, V.

Horse Breeding

Growth of horse herds in collective farms of Kulikova District, Chernigov Province.
Konevod., No. 1, 1952

9. Monthly List of Russian Accessions, Library of Congress, March 1952 xxxxx, Uncl.

LANTUKH, S.I.

Economic problems in continuous hydrogenation of fats and oils. Izv. vys. ucheb. zav.; pishch. tekh. no.1:14-18 '58. (MIRA 11:8)

1. Krasnodarskiy institut pishchevoy promyshlennosti, Kafedra ekonomiki i organizatsii proizvodstva.
(Oil industries) (Hydrogenation)

LANTUKH, V., inzh.; NEYMAN, B., inzh.; KUZ'MIN, A., inzh.

A radiometer with universal power supply. Radio no.1:44-45, 48 Ja '63. (MIRA 16:1)
(Radiometer) (Radioactivity--Safety measures)

LANTUKH-LYASHCHENKO, A.I. (Kiyev); SHOKOT'KO, S.G. (Kiyev)

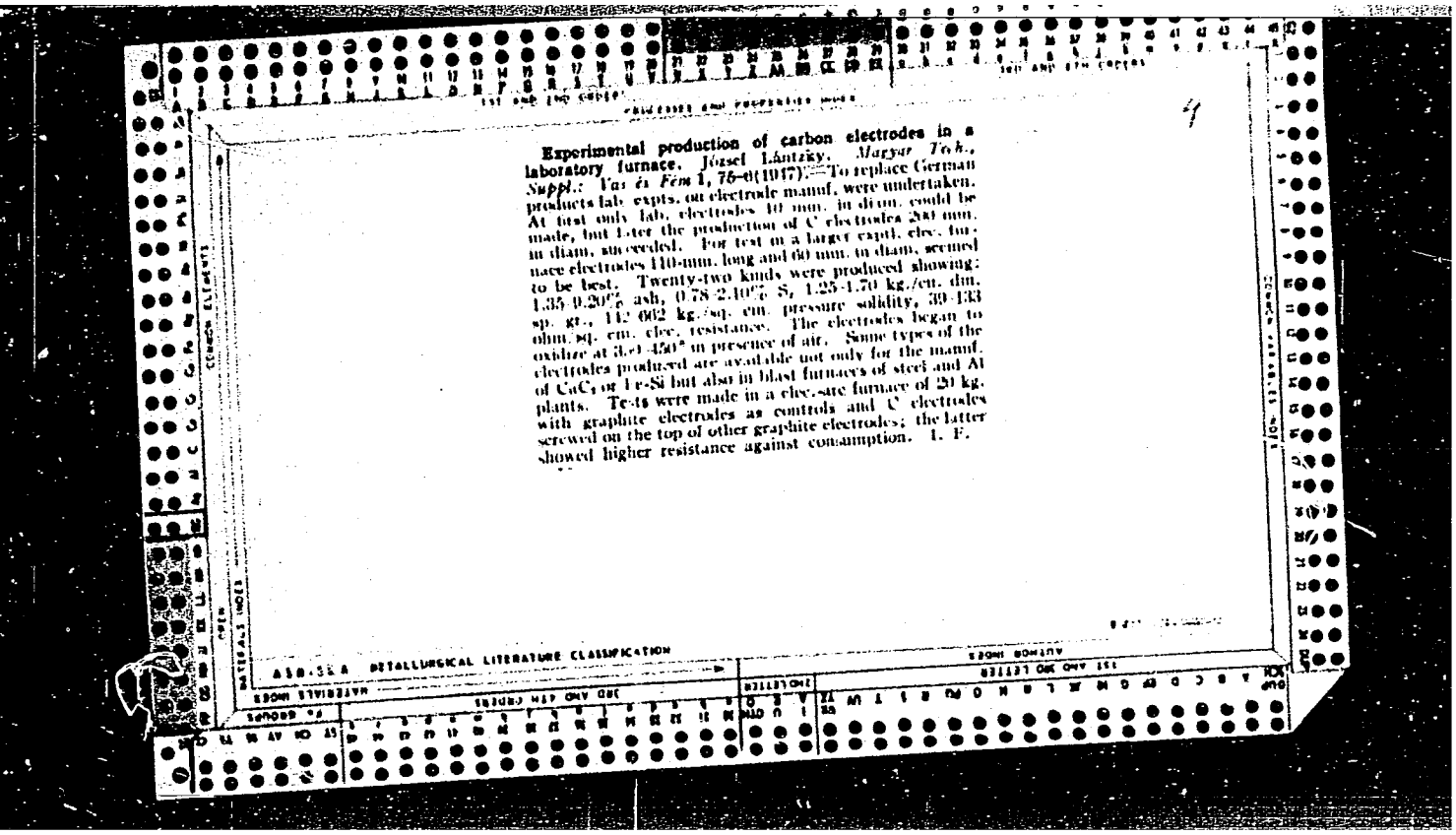
Investigating stressed state of a continuous wall girder. Prikl.mekh. 1 no.7:127-131 '65. (MIRA 18:8)

1, Kiyevskiy avtomobil'no-dorozhnyy institut i Kiyevskiy gosudarstvennyy universitet.

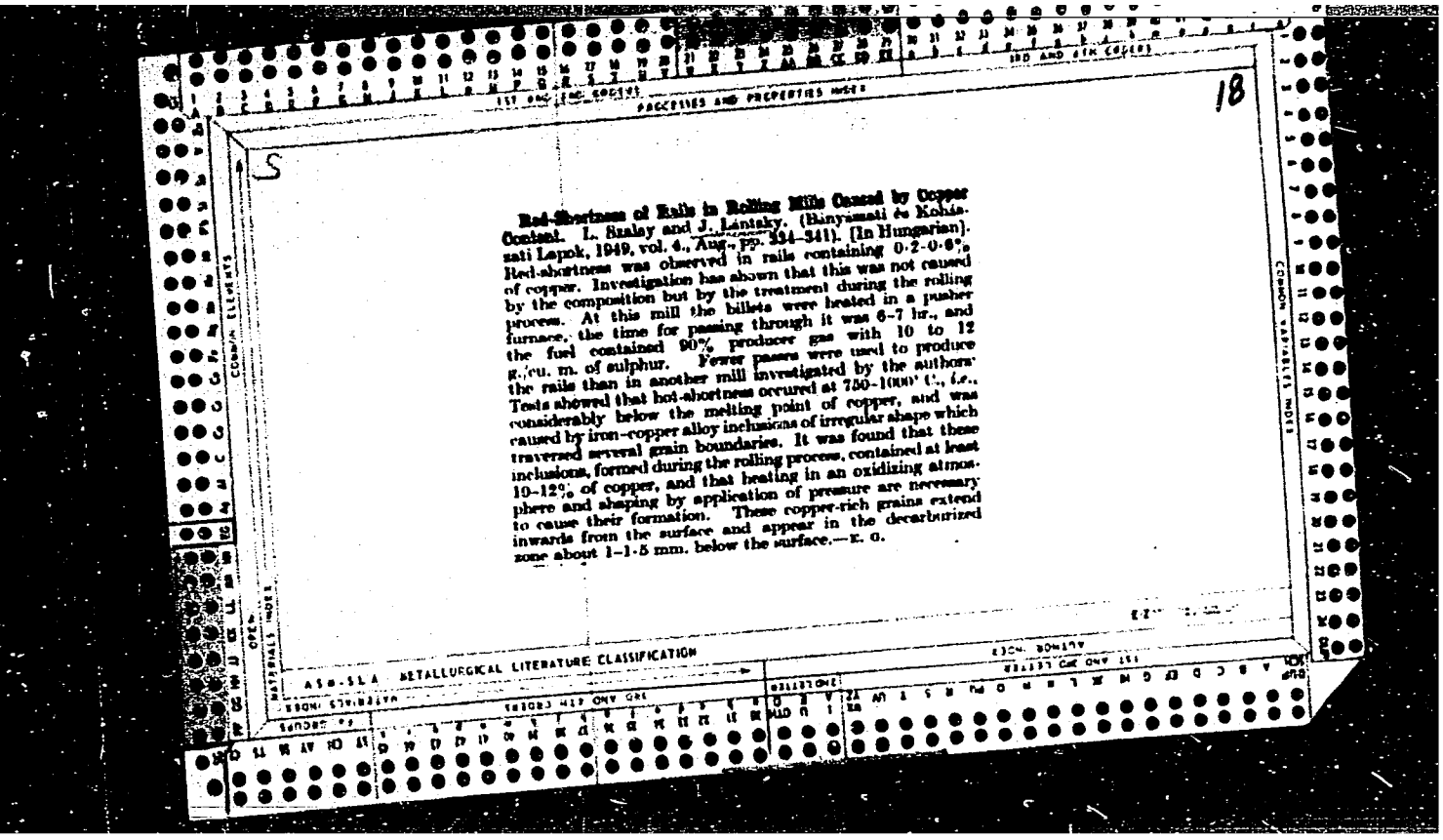
LANTUKH-LYASHCHENKO, A.I., inzh.

Calculation of continuous reinforced concrete web girders in an elastic state. Stroi.konstr. no.2:60-67 '65. (MIRA 18:12)

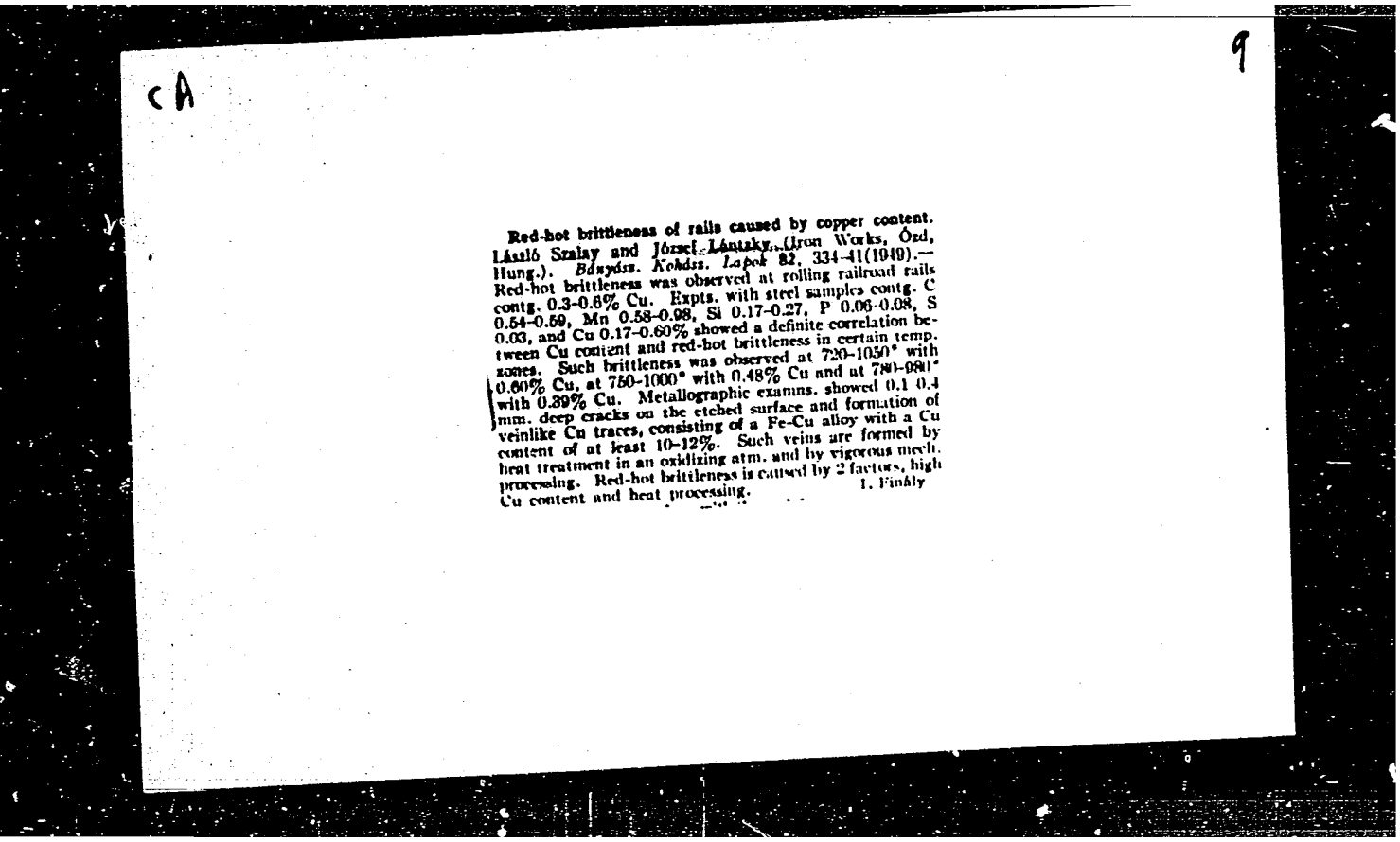
1. Kiyevskiy avtomobil'no-dorozhnyy institut.



Experimental production of carbon electrodes in a laboratory furnace. Józsel Lántzky. *Magyar Tech., Suppl.: Vas és Fém* **1**, 76–9(1917).—To replace German products lab. expts. on electrode manuf. were undertaken. At first only lab. electrodes 10 mm. in diam. could be made, but later the production of C electrodes 200 mm. in diam. succeeded. For test in a larger expt. elec. furnace electrodes 110-mm. long and 60 mm. in diam. seemed to be best. Twenty-two kinds were produced showing: 1.35–9.20% ash, 0.78–2.10% S, 1.25–1.70 kg./cu. dm. sp. gr., 14–662 kg./sq. cm. pressure solidity, 39–133 ohm.sq. cm. elec. resistance. The electrodes began to oxidize at 3.6–450° in presence of air. Some types of the electrodes produced are available not only for the manuf. of CaC_2 or Fe-Si but also in blast furnaces of steel and Al plants. Tests were made in a elec.-arc furnace of 20 kg. with graphite electrodes as controls and C electrodes screwed on the top of other graphite electrodes; the latter showed higher resistance against consumption. I. F.



Red-Shortness of Rails in Rolling Mills Caused by Copper Content. L. Szalay and J. Lántsky. (Bányaszati és Kohászati Lapok, 1949, vol. 4., Aug., pp. 334–341). [In Hungarian]. Red-shortness was observed in rails containing 0·2–0·6% of copper. Investigation has shown that this was not caused by the composition but by the treatment during the rolling process. At this mill the billets were heated in a pusher furnace, the time for passing through it was 6–7 hr., and the fuel contained 90% producer gas with 10 to 12 g./cu. m. of sulphur. Fewer passes were used to produce the rails than in another mill investigated by the authors. Tests showed that hot-shortness occured at 750–1000° C., *i.e.*, considerably below the melting point of copper, and was caused by iron–copper alloy inclusions of irregular shape which traversed several grain boundaries. It was found that these inclusions, formed during the rolling process, contained at least 10–12% of copper, and that heating in an oxidizing atmosphere and shaping by application of pressure are necessary to cause their formation. These copper-rich grains extend inwards from the surface and appear in the decarburized zone about 1–1·5 mm. below the surface.—E. G.



CA

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Red-hot brittleness of rails caused by copper content. László Szalay and József Lántsky. (Iron Works, Ózd, Hung.). *Bányász. Kohász. Lapok* 82, 334–41(1949).—Red-hot brittleness was observed at rolling railroad rails contg. 0.3–0.6% Cu. Expts. with steel samples contg. C 0.54–0.59, Mn 0.58–0.98, Si 0.17–0.27, P 0.06–0.08, S 0.03, and Cu 0.17–0.60% showed a definite correlation between Cu content and red-hot brittleness in certain temp. zones. Such brittleness was observed at 720–1050° with 0.60% Cu, at 750–1000° with 0.48% Cu and at 780–980° with 0.39% Cu. Metallographic examns. showed 0.1 0.4 mm. deep cracks on the etched surface and formation of veinlike Cu traces, consisting of a Fe-Cu alloy with a Cu content of at least 10–12%. Such veins are formed by heat treatment in an oxidizing atm. and by vigorous mech. processing. Red-hot brittleness is caused by 2 factors, high Cu content and heat processing. I. Finály

LANTZKY, Jozsef

Manufacture of rolled steel qualities and their mixing in the course of their processing. Koh lap 9 no. 10: 440-444 O '54.

LANTZKY, J.

Technical control of metallurgic works. p.44. (Kohaszati Lapok. Budapest. Vol. 11, no. 2, Feb. 1956.)

SO: Monthly List of East European Accessions (EEAL) LC., Vol. 6, no. 7, July 1957. Uncl.

LANTZKY, J.

Casting ingots free of cracks, the causes of cracks, their prevention and elimination. Pt. 2, p. 60.

KOHASZATI LAPOK. (Magyar Banyaszati es Kohaszati Egyesulet) Budapest, Hungary
Vol. 14, no. 2/3, Feb./ Mar. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959
uncla.

LANTZKY, J.

TECHNOLOGY

Periodical: KOHASZATI LAPOK Vol. 17, no. 1, 1959

LANTZKY, J. Casting ingots free of cracks; the causes of cracks, their prevention and elimination. (To be contd.) p. 13.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5, May 1959, Unclass.

LANUSH, L. B., V. M. PANSKII and B. A. PAVLOV.

Konstruktsii i raschet parovozov; spravochnik. Moskva, Mashgiz, 1950. 390 p. illus.

DLC: TJ635.12

(Designs and calculation of locomotives; handbook.)

LANUTSKAYA, V.O.

Use of phthivazid in a general combination for treating bronchopneumonia in young children. Ped., akush. i gin. 20 no.5:16-20 '58.
(MIRA 13:1)

1. Kafedra gospital'noy pediatrii pediatricheskogo fakul'teta (zav. - prof. G.S. Levi) Odesskogo meditsinskogo instituta (direktor - zasluzhennyy deyatel' nauki prof. I.Ya. Deyneka).
(ISONICOTINIC ACID) (PNEUMONIA)

LANUTSKAYA, V.O. [Lanuts'ka, V.O.], assistent

Pneumographic studies of pneumonia in young children being treated with phthivazide in combination with other methods. Ped., akush. i gin. 23 no.5:13-14 '61. (MIRA 14:12)

1. Kafedra detskikh bolezney pediatricheskogo fakul'teta (zaveduyushchiy - prof. V.I.Zuzanova) Odesskogo meditsinskogo instituta (rektor - zasluzhennyy deyatel' nauki USSR, prof. I.Ya.Deyneka).
(PNEUMONIA) (PHTHIVAZINE)

KLIMOV, B. K.
LANVIN, V. A.
GOROKHOLINSKAYA, M. S. (deceased)
EDEL' SHTEYN, N.G.

"Motor Fuels from Coals in the Baykalmov Bed Deposit in the Irkutsk Basin".
Iz. Ak. Nauk SSSR. Otdel, Tekh, Nauk. Nos. 10-11,1944

BR-52059019

S/196/62/000/013/015/018
E194/E155

AUTHOR: Lány, Jan.

TITLE: Automatic speed synchroniser for ropes

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.13, 1962, 5, abstract 13 K 24 P. (Czechoslovak Patent, class 21 c, 46/50, no.97779, 15.12.1960).

TEXT: The patent covers several variants of selsyn devices for synchronising the speeds of several suspension or traction ropes. All the ropes are connected to selsyn-transmitters except the master which is controlled by a rotating switch consisting of two contact discs mounted on rotors of two selsyn receivers. One selsyn of each switch is connected with the master selsyn transmitter and the other with the selsyn transmitter of the corresponding rope. During synchronous motion of the ropes the rotors of the selsyn receivers rotate in synchronism and the contact discs are stationary relative to one another. If one of the ropes lags the contact discs rotate and connect one of the contacts for acceleration or retardation of the corresponding rope.

Card 1/1 [Abstractor's note: Complete translation.]

S/273/63/000/002/009/010
A052/A126

AUTHOR: Lány, Jan

TITLE: An appliance for feeding internal combustion engines with superheated vapor of liquid fuels

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk, 39. Dvigateli vnutrennego sgoraniya, no. 2, 1963, 39, abstract 2.39.288 P (Czech. pat., cl. 46c^2, .68, no. 100854, September 15, 1961)

TEXT: An appliance is patented in which fuel is supplied to the cylinders of internal combustion engine in the form of superheated vapor under pressure exceeding considerably the air pressure. Liquid fuel from the tank comes into the float chamber and afterwards into a high-pressure pump; by-pass valve, controlling the amount of fuel supplied; evaporator, heated by exhaust gases or by accumulator current at the start of the engine. By means of a slide valve the fuel vapors are distributed to the cylinders at the end of the compression cycle through valves mounted in cylinder heads.

A. Zhukov

[Abstracter's note: Complete translation]

Card 1/1

LANYI, A.

Therapy of malignant cutaneous melanoma. Bratisl. lek. listy. 30 no.8-10:705-714 Aug-Oct 50. (CIML 20:4)

1. Of the Roentgenological Department of the State Regional Hospital in St. Martin.

LANYI, A.

Effect of massive application of streptomycin on development of Mycobacterium tuberculosis in vitro. Orv. hetil. 93 no. 28:814-816 13 July 1952. (CIML 23:3)

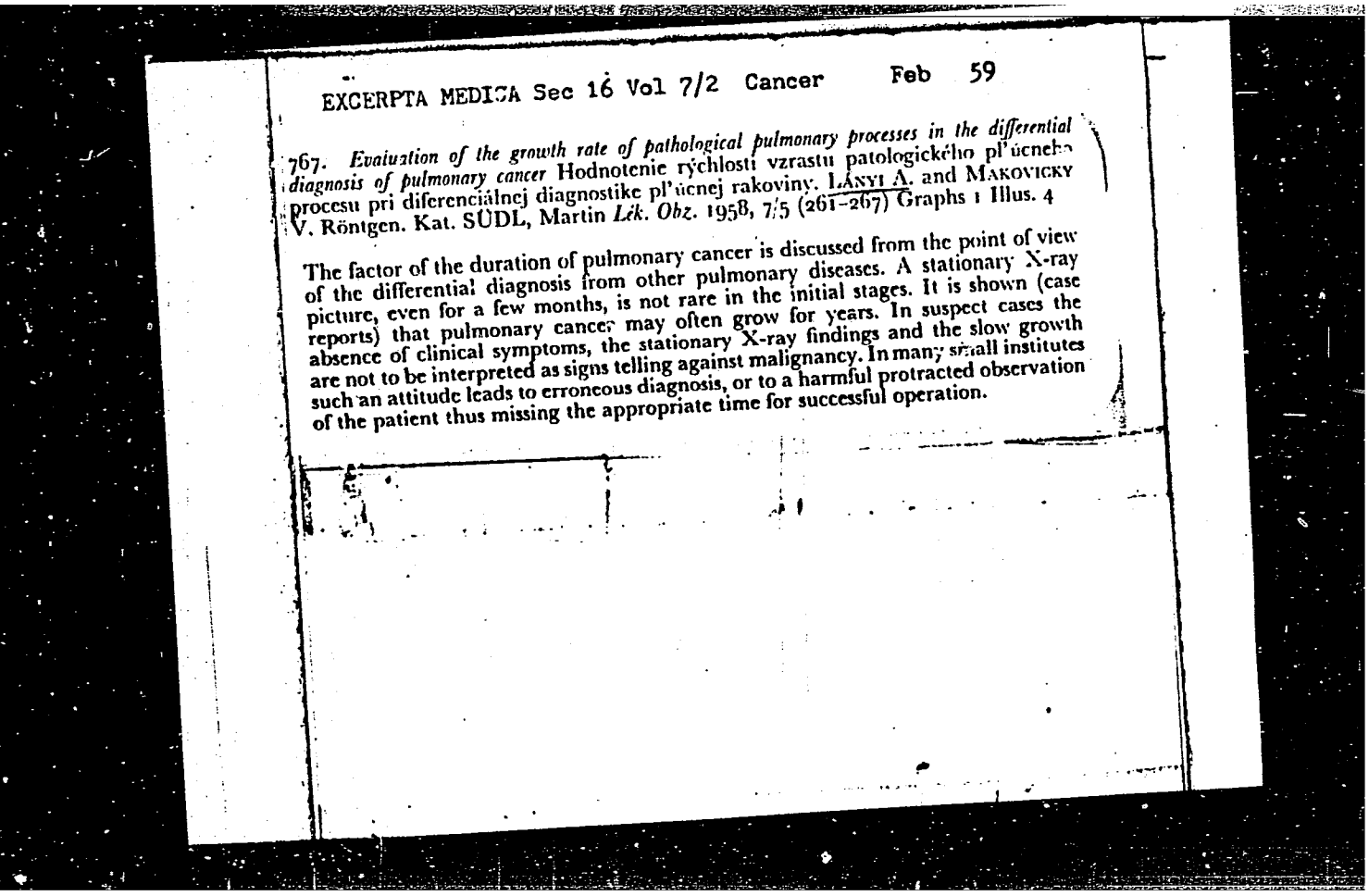
1. Doctor. 2. Matrahaza State Tuberculosis Sanatorium (Director - Head Physician — Dr. Andor Lanyi).

EXCERPTA MEDICA Sec. 6 Vol. 11/6 June 57

LÁNYI A.

3782. LÁNYI A. *Časné rtg príznaky arthrosis deformans. The early X-ray signs in arthritis deformans LEK. OBZOR 1956, 5/3 (158-163)

A description is given of the early radiological findings of arthritis deformans in respect of each joint separately, the actual changes in osseous structure being to some extent dependent on the anatomical and physiological characteristics of the implicated joint. Full radiological diagnosis implies taking into account not only the morphological changes but also functional changes, usually by means of fluoroscopy. Differential diagnostic problems are discussed. In view of the considerable incidence of arthritis deformans, prevention is important, e.g. the discovery and remedial treatment of predisposing factors such as various anatomical and functional anomalies. A valuable prophylaxis is seen in a well organized system of graduated physical culture for youth. (XIV, 6)



767. *Evaluation of the growth rate of pathological pulmonary processes in the differential diagnosis of pulmonary cancer* Hodnotenie rýchlosti vzrastu patologického pľúcneho procesu pri diferenciálnej diagnostike pľúcnej rakoviny. LÁNYI A. and MAKOVICKY V. Röntgen. Kat. SÚDL, Martin *Lék. Obz.* 1958, 7/5 (261–267) Graphs 1 Illus. 4

The factor of the duration of pulmonary cancer is discussed from the point of view of the differential diagnosis from other pulmonary diseases. A stationary X-ray picture, even for a few months, is not rare in the initial stages. It is shown (case reports) that pulmonary cancer may often grow for years. In suspect cases the absence of clinical symptoms, the stationary X-ray findings and the slow growth are not to be interpreted as signs telling against malignancy. In many small institutes such an attitude leads to erroneous diagnosis, or to a harmful protracted observation of the patient thus missing the appropriate time for successful operation.

LANYI, Arnost (Martin, Mudronova 33.)

X-ray of cervical vertebrae in seriography for functional x-ray diagnosis. Cesk. rentg. 12 no.1:7-9 Mar 58.

1. Rtg. odd. OUNZ v Martine, prednosta MUDr. Arnost Lanyi.
(SPINE, radiography
seriography of cervical spine, diag. value (Cz))

IANYI, Arnost (A.L., Mudronova 33, Martin)

Multiple pseudocystic tuberculosis of the bone. Cesk. rentg. 13 no.3: 181-183 June 59.

1. Rentgenologicka katedra Slovenskeho ustavu pra doskolovanie lekarov v Martine, prednosta dr. A. Ianyi.
(TUBERCULOSIS, OSTEOARTICULAR, in inf. & child
multiple pseudocystic (Cz))

LANYI, Arnost;ORT, Jaroslav

Protection of the gonads in children during hip radiography. Ces. rentg. 13 no.5:307-310 O '59

1. Rentgenologicke katedra SUDL v Martine, prednosta MUDr. A. Lanyi.
(GONADS, radiation eff.)
(HIP radiography)
(RADIATION PROTECTION)

LANYI, A.
SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: MD

Affiliation: Chief (veduci) Radiology Unit (röntgenologicka zakladna) Slovak Postgraduate Medical Institute (SUDL: Slovenski ustav pre doskolovanie lekarov) Martin

Source: Bratislava, Lekarski Obzor, Vol X, No 8, 1961; pp 489-490

Data: "A Study Trip to Radiologic Departments in Berlin"

LANYI, A.

Bratislava, Lekarsky Obzor, Vol 10, No 11, 1931 (contd)

8. "Congenital Developmental Anomalies in Childhood" A. [illegible], Chief (Veducí) Department of Pediatrics (Pediatrické Katedra) SUDL, Trnava; pp 653-657.

9. "Epilepsy in the Case Histories of a Neurology Unit" K. [illegible], Chief (vedúci) Department of Neurology (Neurologické Katedra) SUDL, Trnava; and A. [illegible]; pp 697-703.

10. "Appearance of Depressive Conditions During Apomorphine Treatment of Manic States" E. [illegible], Prof MD Director (Psychiatrické Katedra) Psychiatric Clinic Comenius Univ. (Psychiatrické Klinika UK) Bratislava; Paramount of Psychiatry (psychiatrické Katedra) SUDL; pp 703-706.

11. "Care of Injuries of the Chest" P. [illegible], Chief (Vedúci) Docent MD, Department of [illegible] and J. [illegible] Katedra) SUDL, Martin; [illegible] (Centralna Laboratory MD Director (Prednosta) OUNZ Martin; pp 703-712.

12. "Plasma Protein Level and Isoagram after Gynecologic Surgery" E. [illegible], Director (Prednosta) Docent, Department of [illegible] (Porodnícko-gynekologické Katedra) SUDL Trnava, and J. [illegible]; pp 712-720.

13. "Pneumonosis in Otolaryngology" J. [illegible] MD, Chief (Vedúci) Department of Otolaryngology (Otorhinolaryngologické Katedra) SUDL Bratislava; pp 722-727.

14. "Therapeutic Problems of Cancer of the Oral Cavity" [illegible], Director (Prednosta) Department of Radiology (Radiologické Katedra) SUDL Bratislava; pp 731-738.

15. "X-Ray Aspects of Periostosis Correlated with the Malignant or Benign Underlying Zone Disorder" A. [illegible] Chief (Vedúci) Department of Roentgenology (Rentgenologické Katedra) SUDL; pp 738-741.

16. "Problems of Psoriasis As Revealed by Three Years Observation Period" L. [illegible], Director (Prednosta) MD, Department of Dermatovenerology (Dermatovenerologické

— 2/3 —

LANYI, A.

Comments on roentgen diagnosis of tumors of the spinal cavity in the area of thoracolumbar transit. Cesk.rentgen.16 no.6:399-404 D '62.

1. Rontgenologicka zakladna Slovenskeho ustavu pre doskolovanie lekarov v Martine.

(SPINAL CORD NEOPLASMS)

LANYI, A.

Pseudoperiostoses in the knee area and their differential diagnostic importance. Cesk. rentgen 17 no.2:82-86 Mr '63.

1. Rontgenologicka zakladna Slovenskeho ustavu pre doskolovanie lekarov v Martine.

(KNEE) (NEOPLASMS) (RADIOGRAPHY) (RIBIA) (FIBULA) (FEMUR)

LANYI, A.

Notes on the roentgenological picture of small peripheral bronchogenic carcinoma with disintegration. Cesk. rentgen. 18 no.4:251-256 Jl'64

1. Rontgenologicka zak[illegible] Slovenskeho ustavu pre doskolovanie lekarov v Martine.

LANYI, A.; DARMO, V.

Diagnostic evaluation of symmetrical periostosis in lung cancer. Cesk. radiol. 19 no.1:54-60 Ja '65

1. Rontgenologicka katedra SUDL v Martine (veducí: doc. dr. A.Lanyi).

LÁNYI, (Mrs), nee ENGELMAYER, Agnes
SURNAME (in caps); Given Names

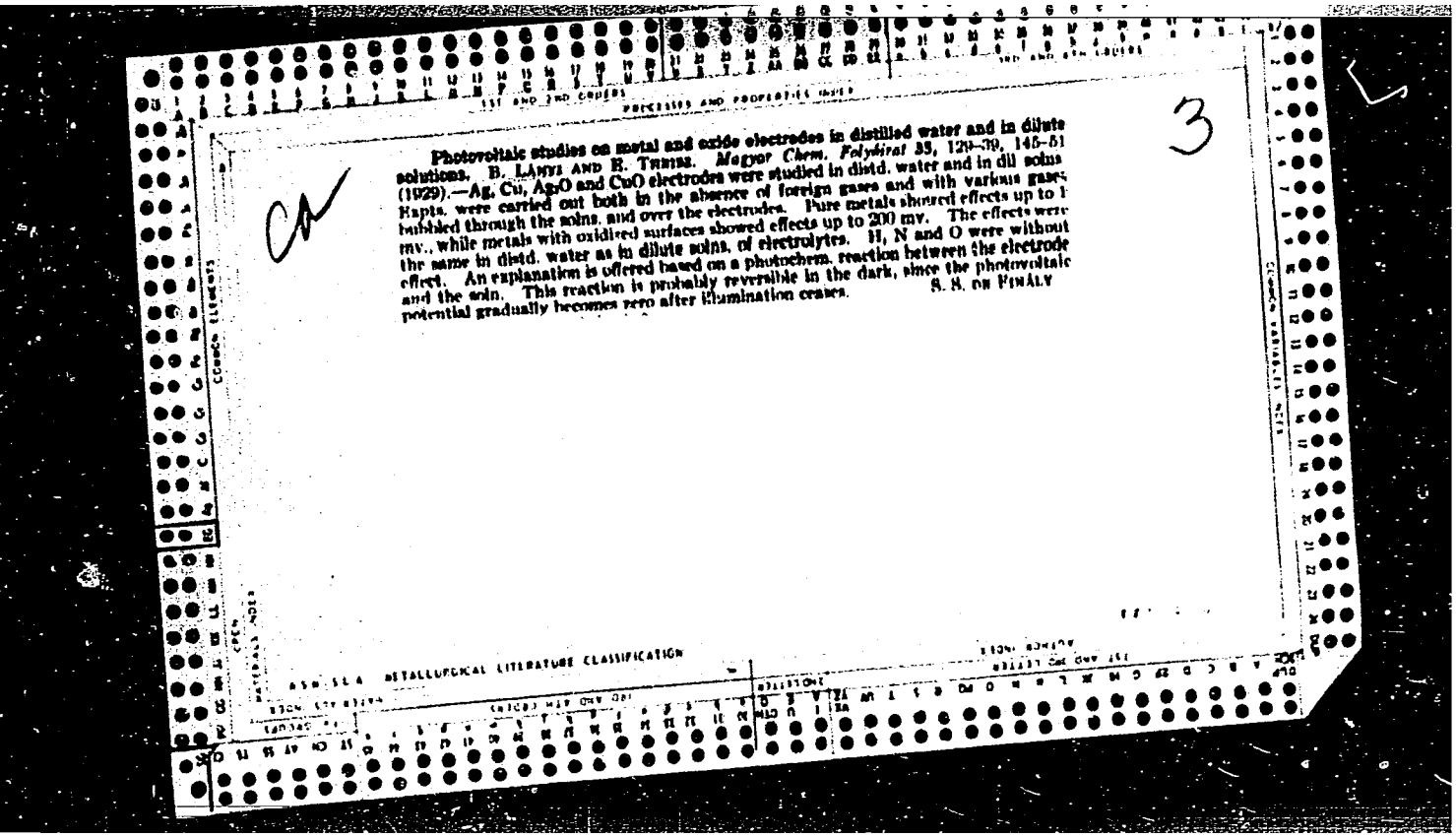
Country: Hungary

Academic Degrees: [not given]

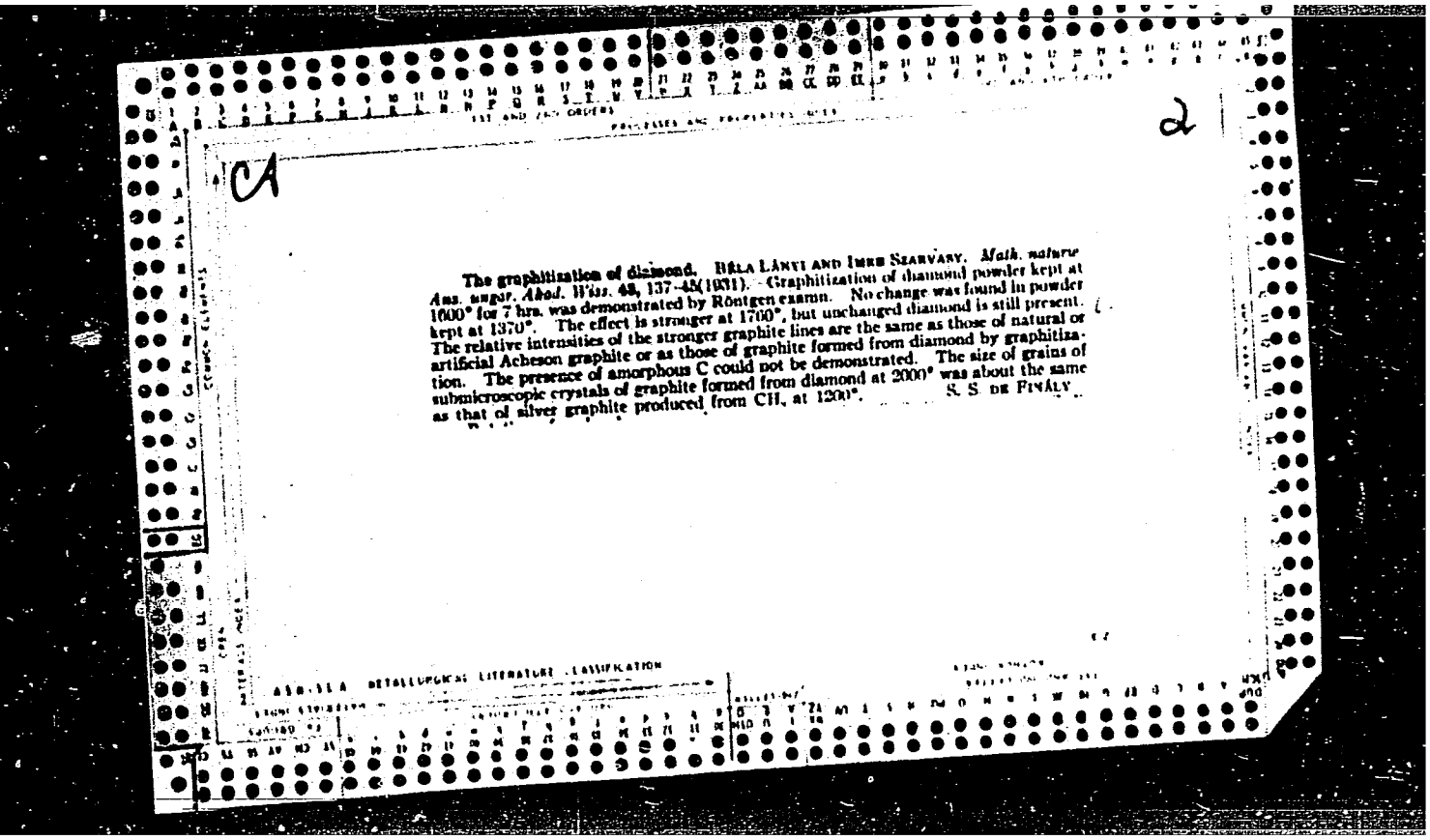
Affiliation: [not given]

Source: Budapest, Magyar Pszichológiai Szemle, Vol 18, No 3, 1961, pp 366-368.

Data: "Diagnostic Significance of the Concept of the 'Marginal Case'." based on the lecture given at the Congress for Therapeutic Pedagogy.(Gyógypedagógiai Kongresszus) 6 Oct 1959, Balatonfüred.



Photovoltaic studies on metal and oxide electrodes in distilled water and in dilute solutions. B. LÁNYI AND E. TÉLFAS. *Magyar Chem. Folyóirat* 35, 129–39, 145–51 (1929).—Ag, Cu, Ag_2O and CuO electrodes were studied in distd. water and in dil soins Kapts. were carried out both in the absence of foreign gases and with various gases bubbled through the soins. and over the electrodes. Pure metals showed effects up to 1 mv., while metals with oxidized surfaces showed effects up to 200 mv. The effects were the same in distd. water as in dilute soins. of electrolytes. H, N and O were without effect. An explanation is offered based on a photochem. reaction between the electrode and the soin. This reaction is probably reversible in the dark, since the photovoltaic potential gradually becomes zero after illumination ceases. S. S. DE FINÁLY



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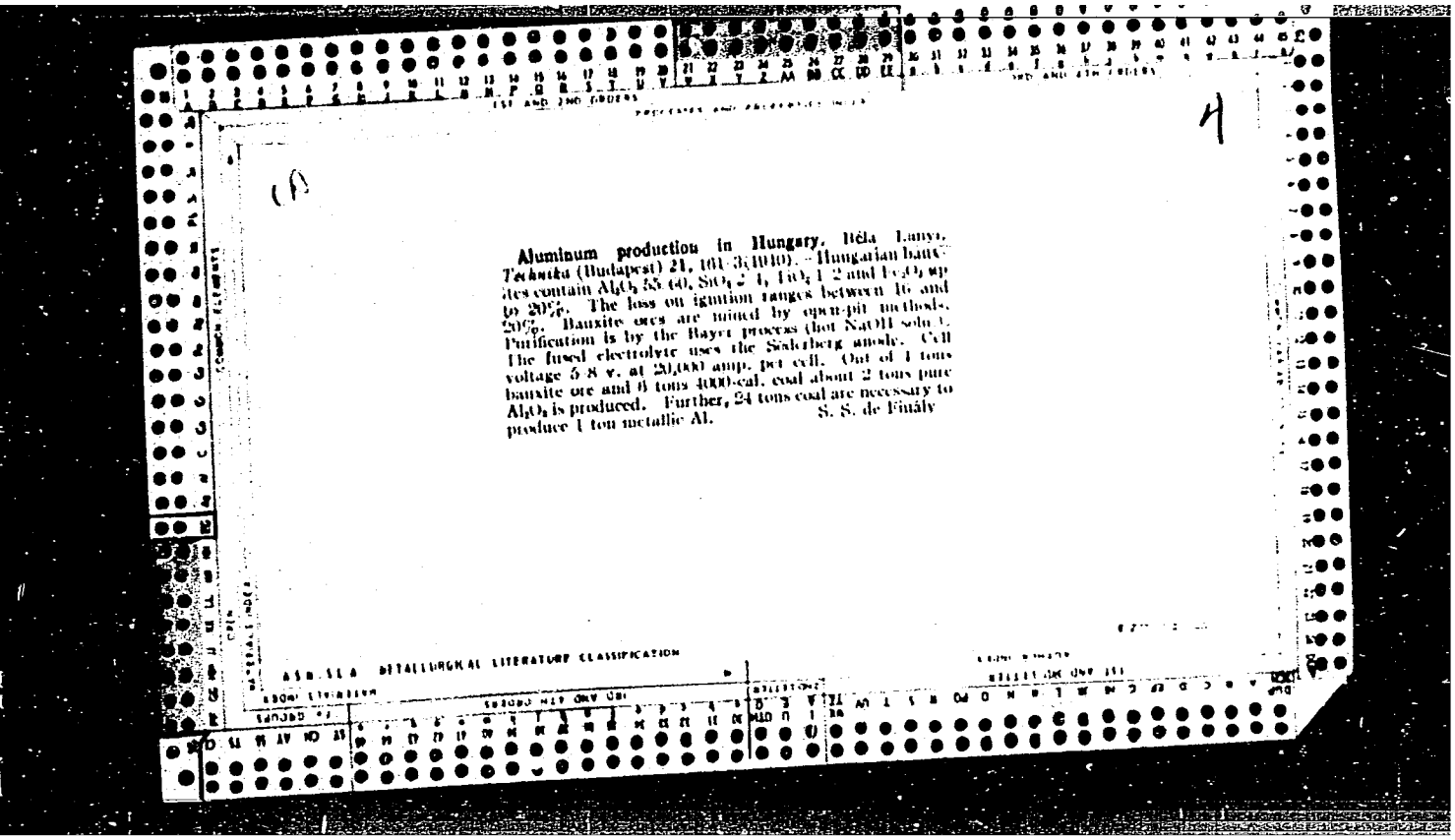
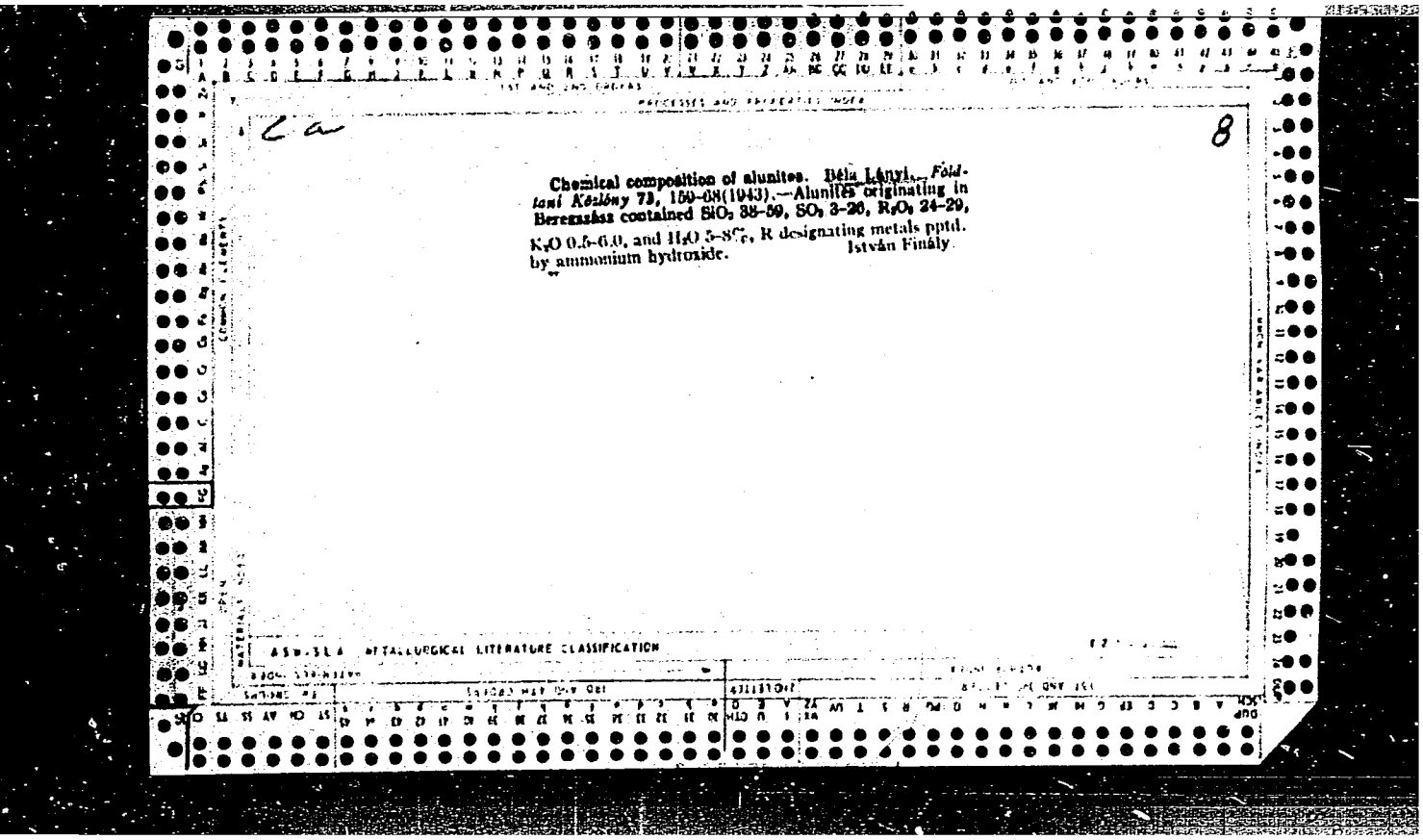
The graphitization of diamond. BÉLA LÁNYI AND IMRE SZABVÁRY. *Math. naturw. Anz. ungar. Akad. Wiss.* **48**, 137–43(1931). - Graphitization of diamond powder kept at 1600° for 7 hrs. was demonstrated by Röntgen examn. No change was found in powder kept at 1370°. The effect is stronger at 1700°, but unchanged diamond is still present. The relative intensities of the stronger graphite lines are the same as those of natural or artificial Acheson graphite or as those of graphite formed from diamond by graphitization. The presence of amorphous C could not be demonstrated. The size of grains of submicroscopic crystals of graphite formed from diamond at 2000° was about the same as that of silver graphite produced from CH_4 at 1200°. S. S. DE FINÁLY

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

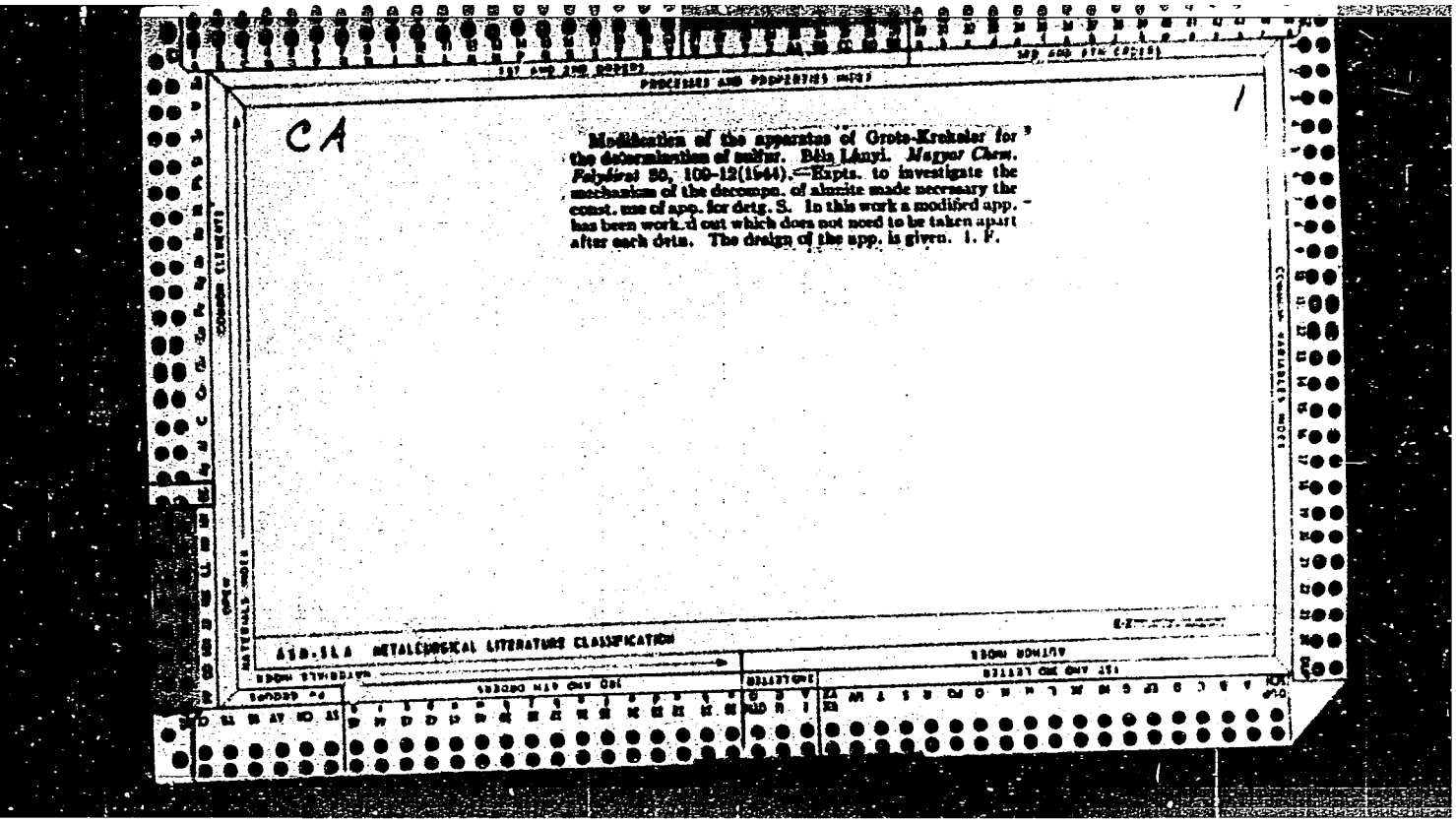


Aluminum production in Hungary. Béla Lányi. *Technika* (Budapest) 21, 101–3(1940). – Hungarian bauxites contain Al_2O_3 55–60, SiO_2 2–4, TiO_2 1–2 and Fe_2O_3 up to 20%. The loss on ignition ranges between 16 and 20%. Bauxite ores are mined by open-pit methods. Purification is by the Bayer process (hot NaOH soln.). The fused electrolyte uses the Söderberg anode. Cell voltage 5–8 v. at 20,000 amp. per cell. Out of 4 tons bauxite ore and 8 tons 4000-cal. coal about 2 tons pure Al_2O_3 is produced. Further, 24 tons coal are necessary to produce 1 ton metallic Al.

S. S. de Finály



Chemical composition of alunites. Béla Lányi. *Földtani Közlöny* 73, 150-68(1943).—Alunites originating in Berenzáska contained SiO_2 38-59, SO_3 3-20, R_2O_3 24-29, K_2O 0.5-6.0, and H_2O 5-8%, R designating metals pptd. by ammonium hydroxide. István Finály.



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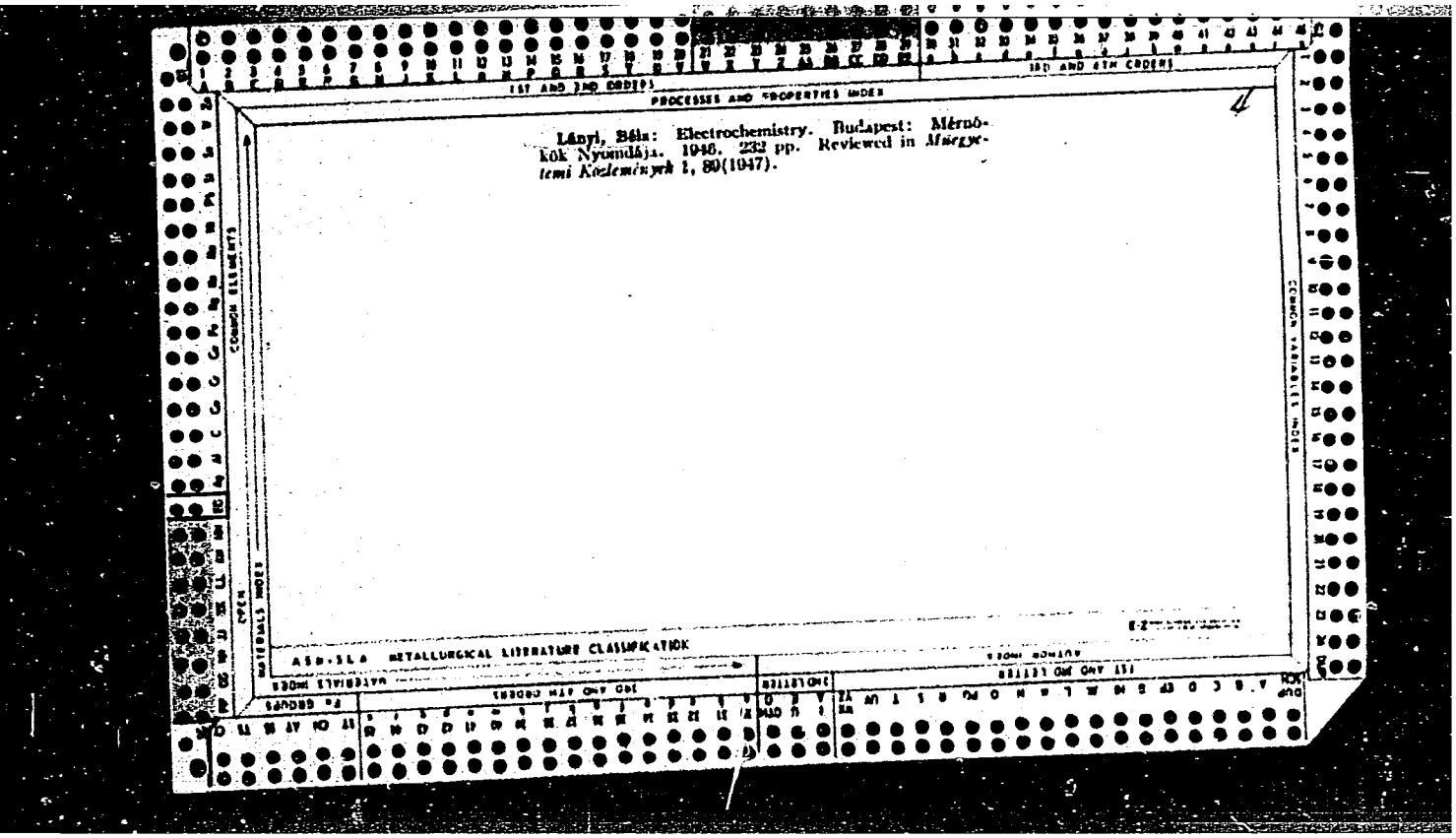
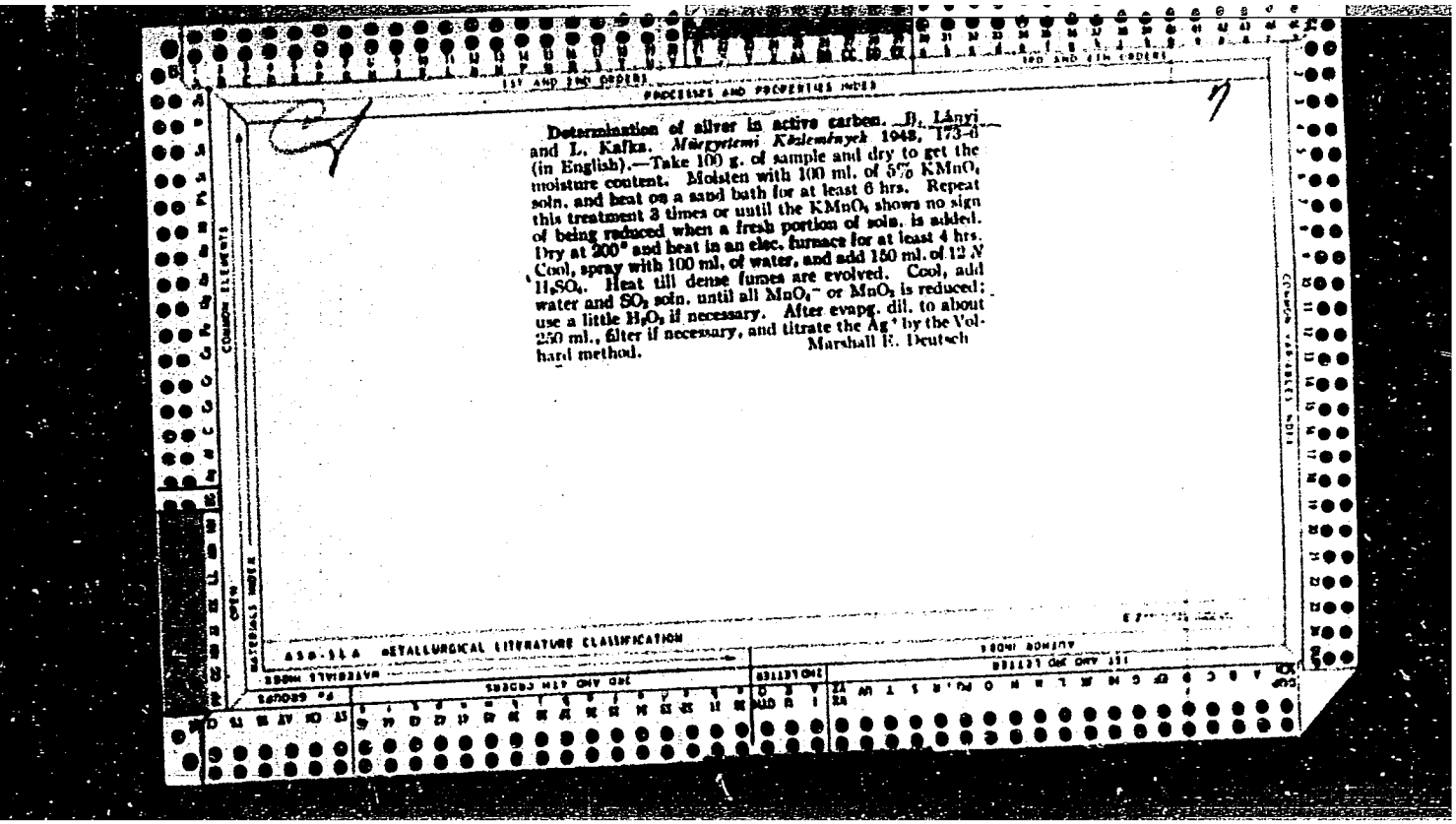
Modification of the apparatus of Grote-Krekeler for the determination of sulfur. Béla Lányi. *Magyar Chem. Folyóirat* 50, 109-12(1944).—Expts. to investigate the mechanism of the decompn. of alunite made necessary the const. use of app. for dtrg. S. In this work a modified app. has been worked out which does not need to be taken apart after each dtrn. The design of the app. is given. I. P.



Lányi, Béla: Electrochemistry. Budapest: Mérnökök Nyomdája. 1946. 232 pp. Reviewed in *Műegyetemi Közlemények* 1, 80(1947).

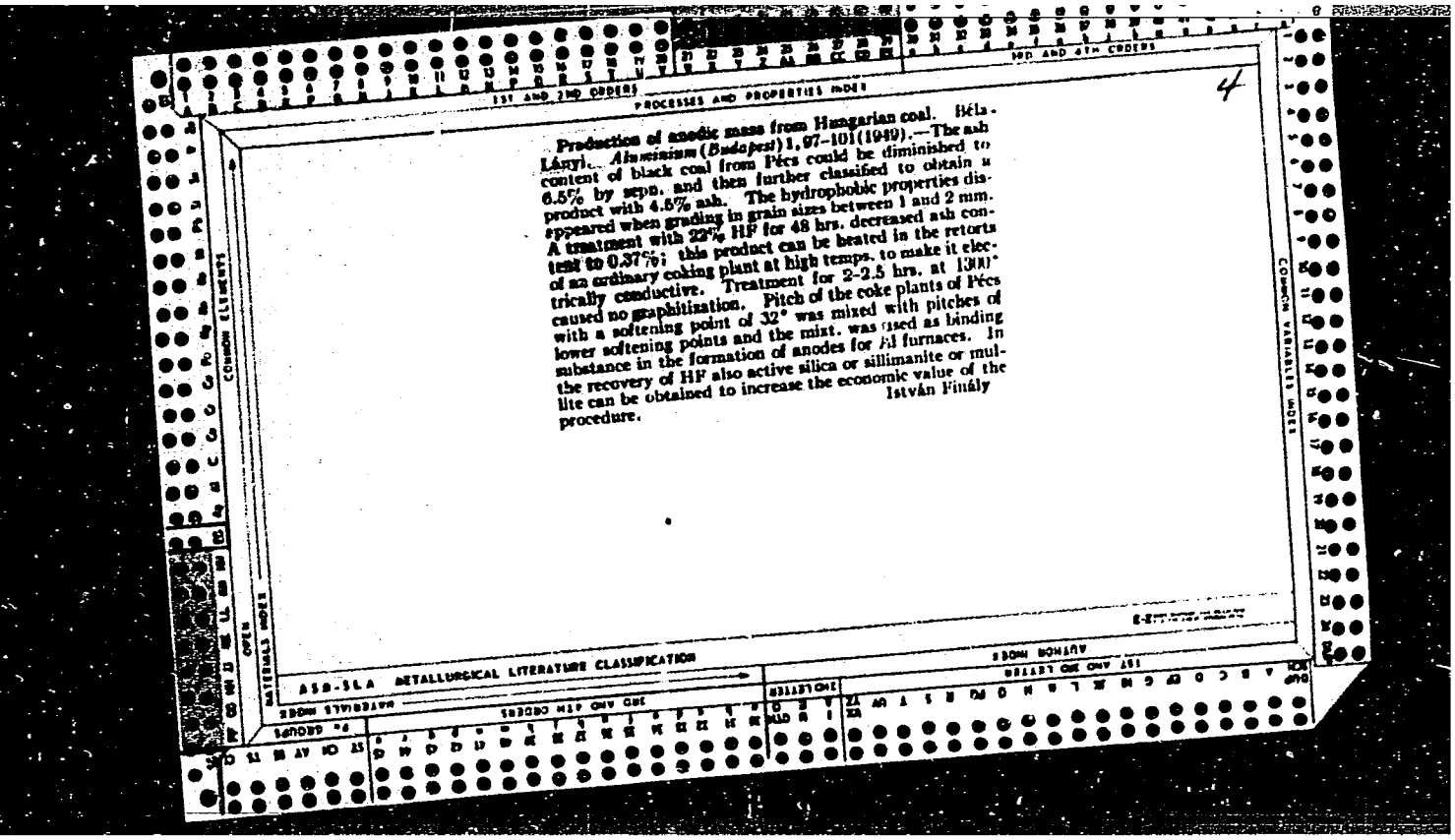


PROCESSES AND PROPERTIES INDEX

Determination of silver in active carbon. B. Lányi and L. Kafka. *Magyarorsz. Kémiai Folyóirat* 1948, 173–6 (in English).—Take 100 g. of sample and dry to get the moisture content. Moisten with 100 ml. of 5% $KMnO_4$ soln. and heat on a sand bath for at least 6 hrs. Repeat this treatment 3 times or until the $KMnO_4$ shows no sign of being reduced when a fresh portion of soln. is added. Dry at 200° and heat in an elec. furnace for at least 4 hrs. Cool, spray with 100 ml. of water, and add 150 ml. of 12 *N* H_2SO_4. Heat till dense fumes are evolved. Cool, add water and SO_2 soln. until all MnO_4^- or MnO_2 is reduced; use a little H_2O_2 if necessary. After evapg. dil. to about 250 ml., filter if necessary, and titrate the Ag^+ by the Volhard method.

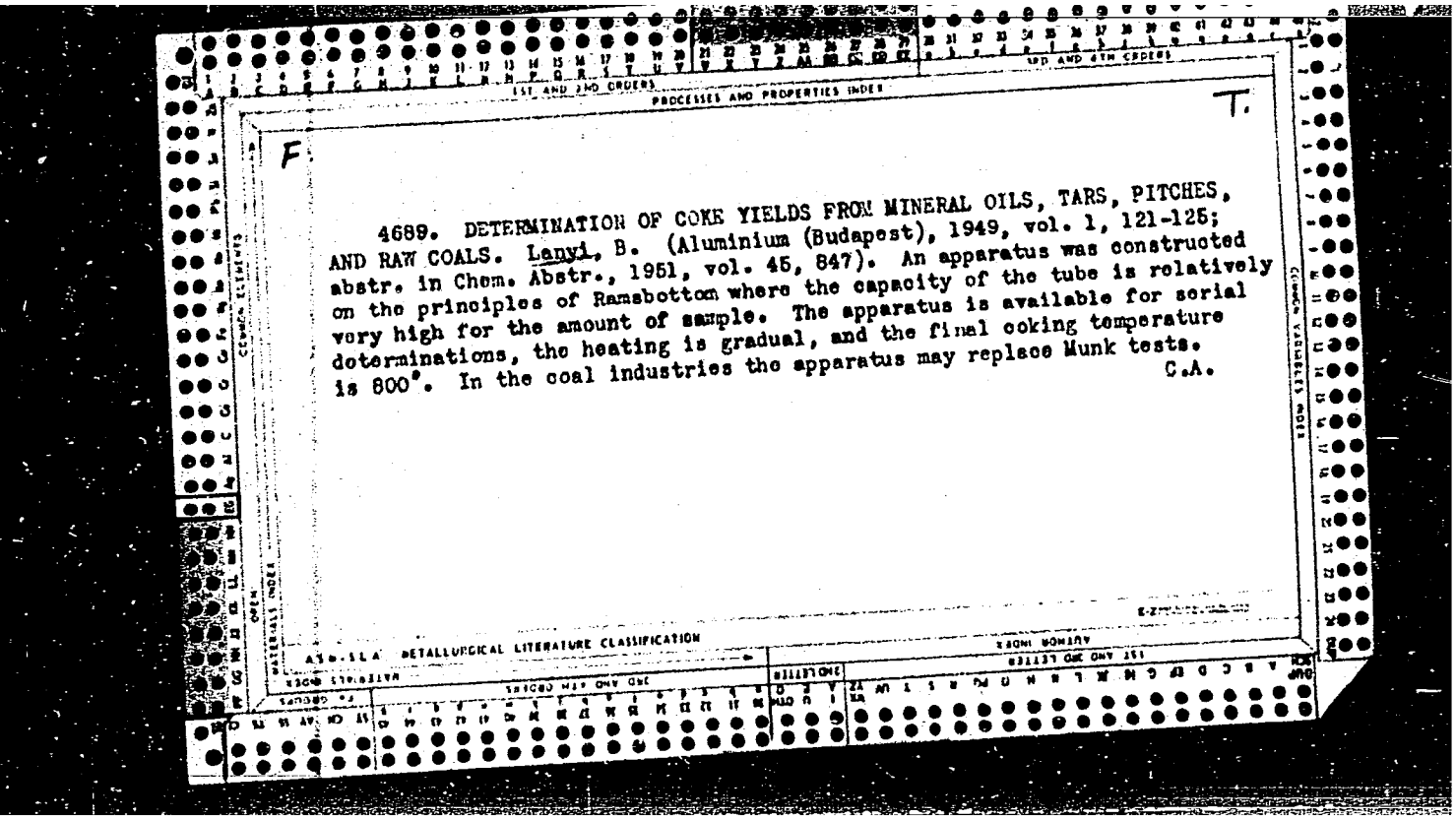
Marshall E. Deutsch

A 55-55 A METALLURGICAL LITERATURE CLASSIFICATION



Production of anodic mass from Hungarian coal. Béla Lányi. *Aluminium* (*Budapest*) 1, 97–101 (1949).—The ash content of black coal from Pécs could be diminished to 6.5% by sepn. and then further classified to obtain a product with 4.6% ash. The hydrophobic properties disappeared when grading in grain sizes between 1 and 2 mm. A treatment with 22% HF for 48 hrs. decreased ash content to 0.37%; this product can be heated in the retorts of an ordinary coking plant at high temps. to make it electrically conductive. Treatment for 2–2.5 hrs. at 1300° caused no graphitization. Pitch of the coke plants of Pécs with a softening point of 32° was mixed with pitches of lower softening points and the mixt. was used as binding substance in the formation of anodes for Al furnaces. In the recovery of HF also active silica or sillimanite or mullite can be obtained to increase the economic value of the procedure.

István Finály



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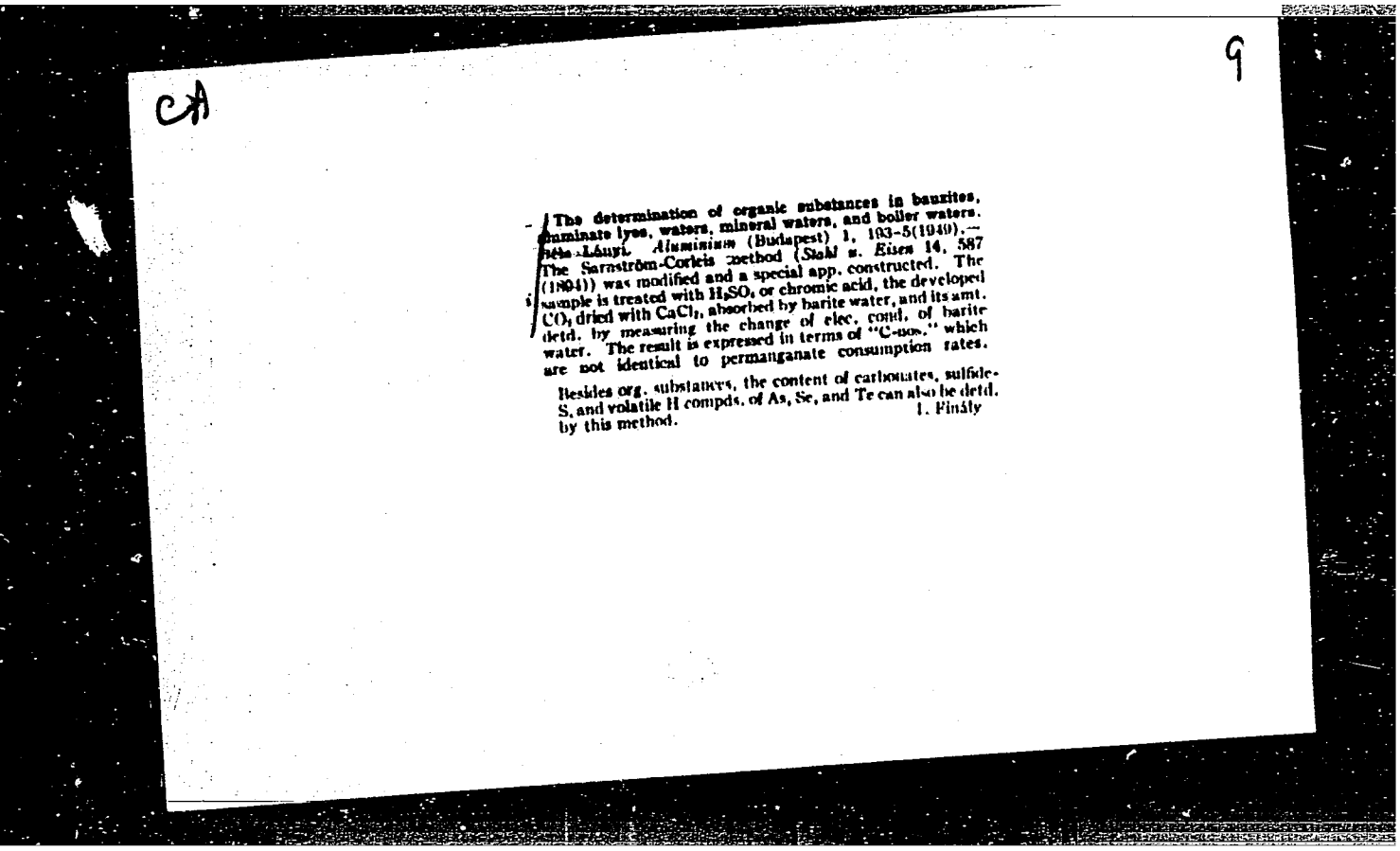
T.

4689. DETERMINATION OF COKE YIELDS FROM MINERAL OILS, TARS, PITCHES, AND RAW COALS. Lanyi, B. (Aluminium (Budapest), 1949, vol. 1, 121-125; abstr. in Chem. Abstr., 1951, vol. 45, 847). An apparatus was constructed on the principles of Ramsbottom where the capacity of the tube is relatively very high for the amount of sample. The apparatus is available for serial determinations, the heating is gradual, and the final coking temperature is 800°. In the coal industries the apparatus may replace Munk tests.

C.A.



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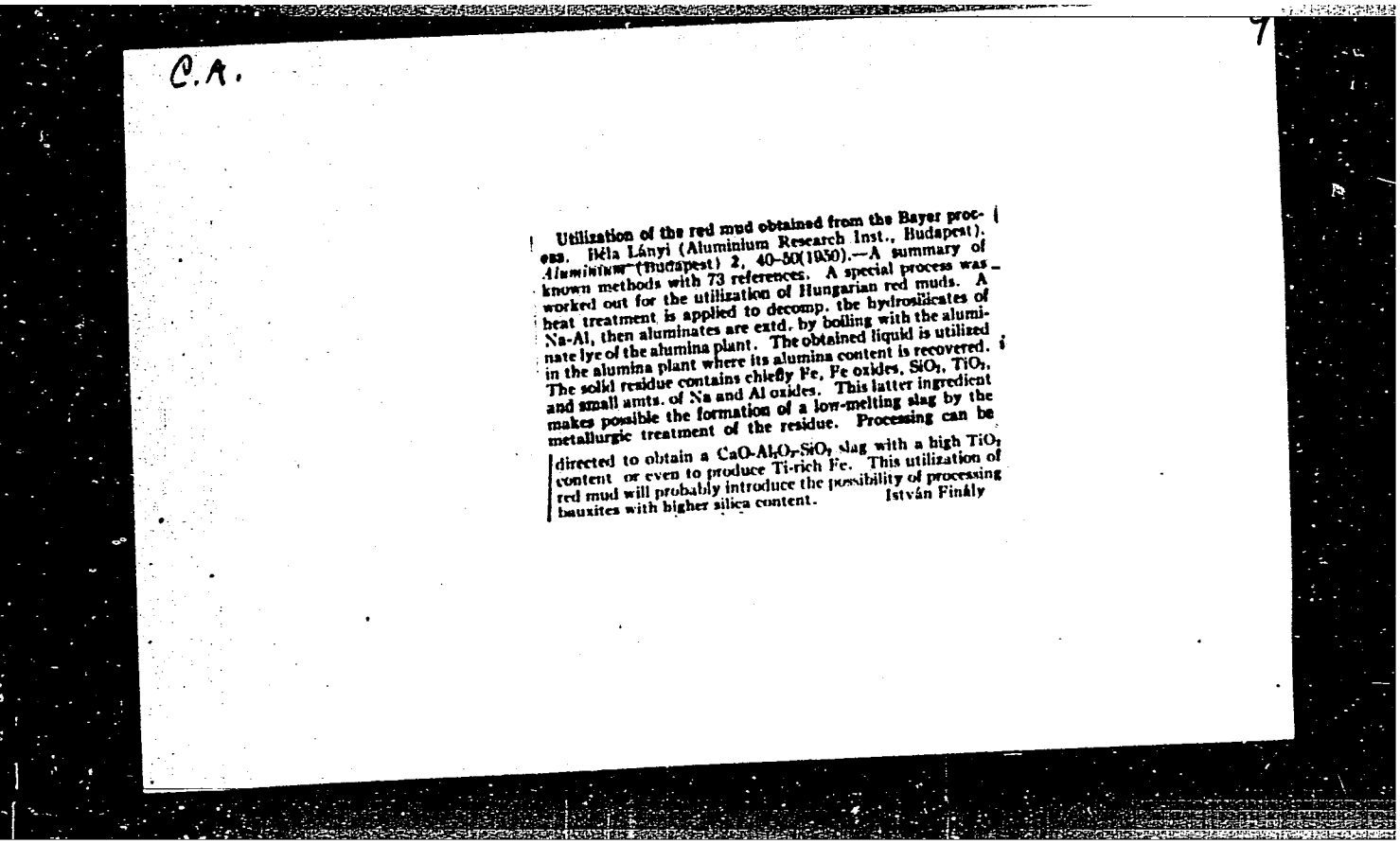
The determination of organic substances in bauxites, aluminate lyes, waters, mineral waters, and boiler waters. Béla Lányi. *Aluminium* (Budapest) 1, 103–5(1940).—The Sarnström-Corleis method (*Stahl u. Eisen* 14, 587 (1894)) was modified and a special app. constructed. The sample is treated with H_2SO_4 or chromic acid, the developed CO_2 dried with $CaCl_2$, absorbed by barite water, and its amt. detd. by measuring the change of elec. cond. of barite water. The result is expressed in terms of "C-nos." which are not identical to permanganate consumption rates. Besides org. substances, the content of carbonates, sulfide-S, and volatile H compds. of As, Se, and Te can also be detd. by this method. I. Finály



C.A.

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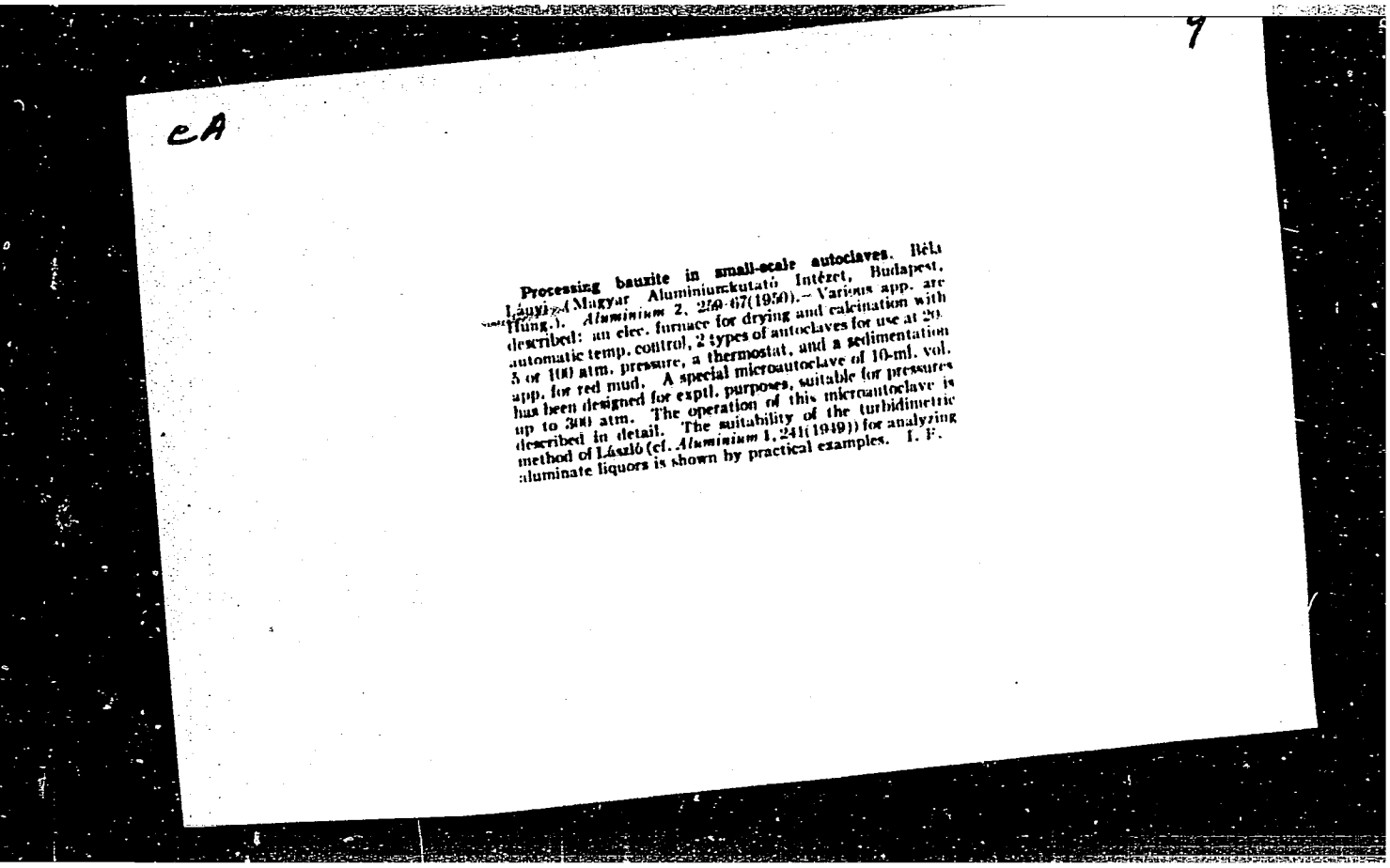
Utilization of the red mud obtained from the Bayer process. Béla Lányi (Aluminium Research Inst., Budapest). *Aluminium* (Budapest) 2, 40–50(1930).—A summary of known methods with 73 references. A special process was worked out for the utilization of Hungarian red muds. A heat treatment is applied to decomp. the hydrosilicates of Na-Al, then aluminates are extd. by boiling with the aluminate lye of the alumina plant. The obtained liquid is utilized in the alumina plant where its alumina content is recovered. The solid residue contains chiefly Fe, Fe oxides, SiO_2, TiO_2, and small amts. of Na and Al oxides. This latter ingredient makes possible the formation of a low-melting slag by the metallurgic treatment of the residue. Processing can be directed to obtain a CaO-Al_2O_3-SiO_2 slag with a high TiO_2 content or even to produce Ti-rich Fe. This utilization of red mud will probably introduce the possibility of processing bauxites with higher silica content. István Finály



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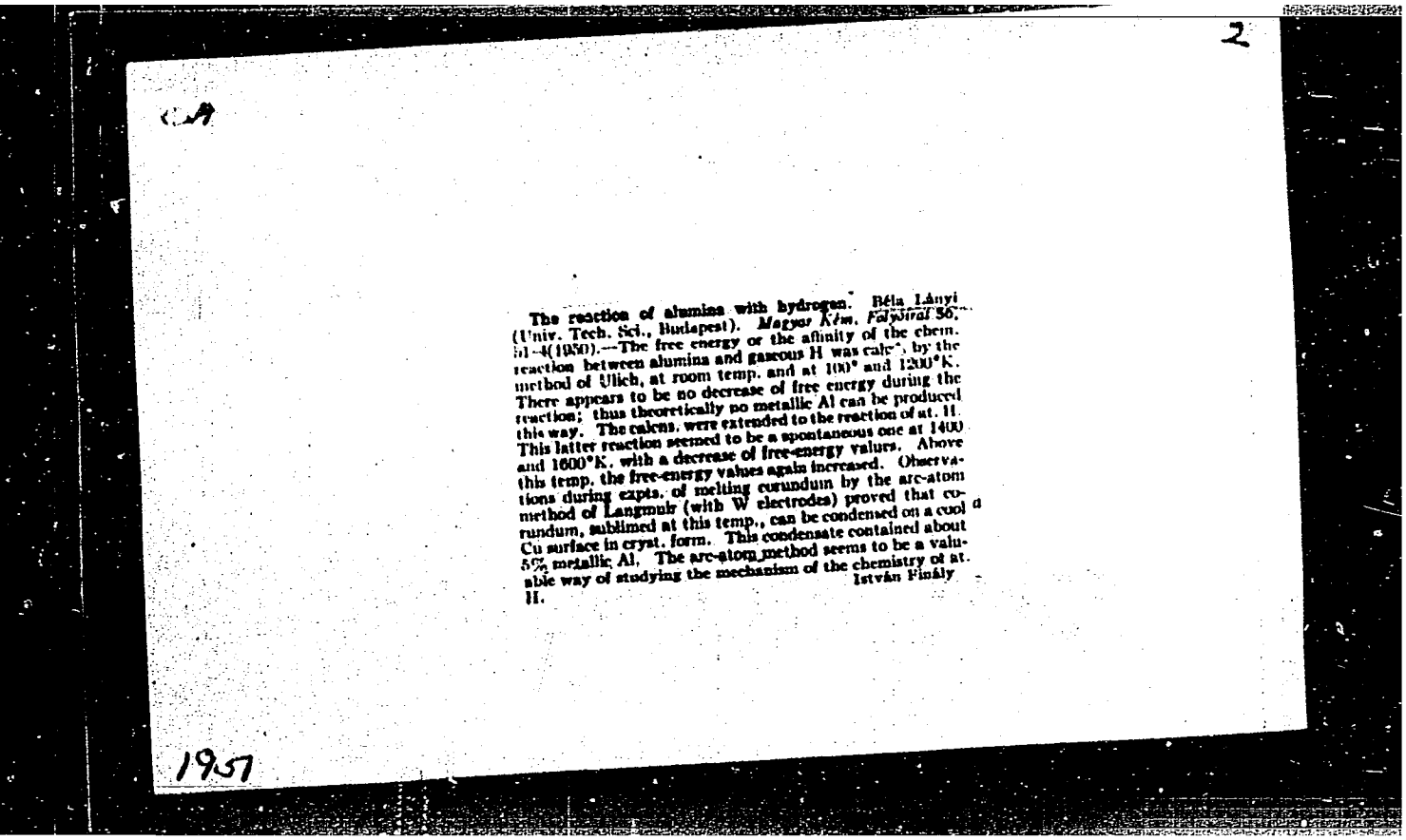
Processing bauxite in small-scale autoclaves. Béla Lányi (Magyar Aluminiumkutató Intézet, Budapest, Hung.). *Aluminium* 2, 259-67(1950).—Various app. are described: an elec. furnace for drying and calcination with automatic temp. control, 2 types of autoclaves for use at 20-5 or 100 atm. pressure, a thermostat, and a sedimentation app. for red mud. A special microautoclave of 10-ml. vol. has been designed for exptl. purposes, suitable for pressures up to 300 atm. The operation of this microautoclave is described in detail. The suitability of the turbidimetric method of László (cf. *Aluminium* 1, 241(1949)) for analyzing aluminate liquors is shown by practical examples. I. F.



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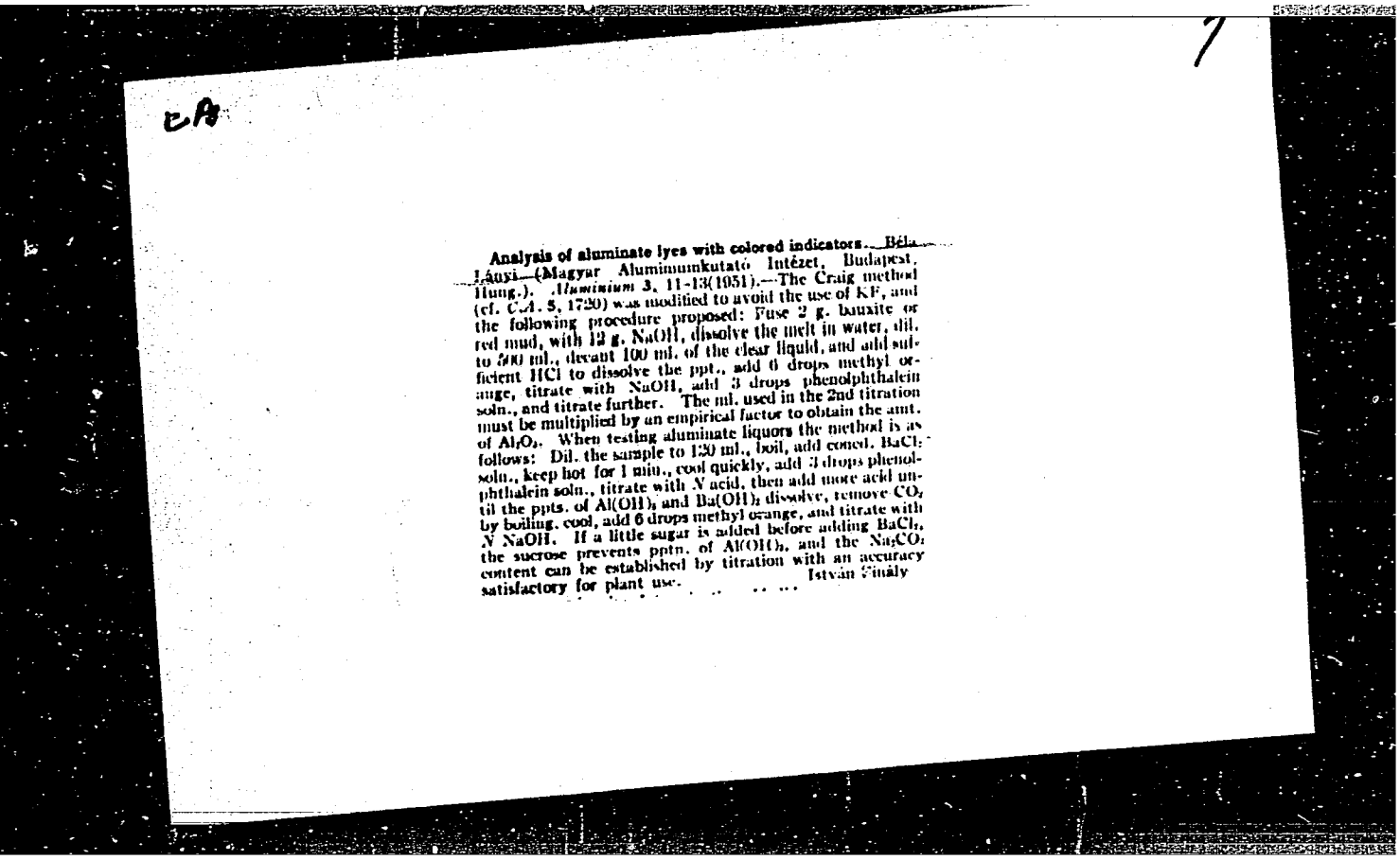
The reaction of alumina with hydrogen. Béla Lányi (Univ. Tech. Sci., Budapest). *Magyar Kém. Folyóirat* 56, 81–4(1950).—The free energy or the affinity of the chem. reaction between alumina and gaseous H was calc'd. by the method of Ulich, at room temp. and at 100° and 1200°K. There appears to be no decrease of free energy during the reaction; thus theoretically no metallic Al can be produced this way. The calcns. were extended to the reaction of at. H. This latter reaction seemed to be a spontaneous one at 1400 and 1600°K. with a decrease of free-energy values. Above this temp. the free-energy values again increased. Observations during expts. of melting corundum by the arc-atom method of Langmuir (with W electrodes) proved that corundum, sublimed at this temp., can be condensed on a cool Cu surface in cryst. form. This condensate contained about 5% metallic Al. The arc-atom method seems to be a valuable way of studying the mechanism of the chemistry of at. H.

István Fináły

1957



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Analysis of aluminate lyes with colored indicators. Béla Lányi (Magyar Aluminiumkutató Intézet, Budapest, Hung.). *Aluminium* 3, 11-13(1951).—The Craig method (cf. C.A. 5, 1720) was modified to avoid the use of KF, and the following procedure proposed: Fuse 2 g. bauxite or red mud, with 12 g. NaOH, dissolve the melt in water, dil. to 500 ml., decant 100 ml. of the clear liquid, and add sufficient HCl to dissolve the ppt., add 6 drops methyl orange, titrate with NaOH, add 3 drops phenolphthalein soln., and titrate further. The ml. used in the 2nd titration must be multiplied by an empirical factor to obtain the amt. of Al_2O_3. When testing aluminate liquors the method is as follows: Dil. the sample to 120 ml., boil, add concd. $BaCl_2$ soln., keep hot for 1 min., cool quickly, add 3 drops phenolphthalein soln., titrate with *N* acid, then add more acid until the ppts. of $Al(OH)_3$ and $Ba(OH)_2$ dissolve, remove CO_2 by boiling, cool, add 6 drops methyl orange, and titrate with *N* NaOH. If a little sugar is added before adding $BaCl_2$, the sucrose prevents pptn. of $Al(OH)_3$, and the Na_2CO_3 content can be established by titration with an accuracy satisfactory for plant use. István Finály

LANYI, B

81. Electrolytic apparatus for the examination of fused salts and of electrode substances under high gas pressure -- Elektrolizalo keszulek sooivadekoknak es az elektrod anyaganak vizsgalatara nagynyomasu gaztorekben -- by B. Lanyi and J. Jakab (Aluminium -- Vol. III, No. 2, pp. 25, 28, Feb. 1951, 4 figs.)

The cast steel jacket of this apparatus permits the execution of various electrolytical investigations under the most varied conditions up to a pressure of 100 kg/cm^2. With the aid of suitable valves an inert gas atmosphere may be maintained during the examination. In this event a special pump promotes the circulation of the inert gas. The graphite crucible of the steel jacket can be heated by alternating current, the temperature is measured by means of a platinum-platinum-rhodium thermocouple. The carbon electrodes may be set centrally or eccentrically. A special sampling device makes it possible to take electrolyte and gas samples from the high-pressure zone at any time during the course of experiments. A similar device ensures the proper conditions for adding more test samples during the process. The apparatus is suitable for the quantitative determination of the volume of Co and CO_2 developed during the electrolysis of aluminium.

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LANYI, B.

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B. T. R.
Vol. 3 No. 3
March 1954
Ceramics and
Concrete.

2936* Soviet Methods of Alumina Production. (Hungarian.) Béla Lányi. *Magyar Kémikusok Lapja*, v. 8, no. 11, Nov. 1953, p. 311-318.

Describes Shubov-Kuznetsov method based on electrical melting of bauxite with lime; Iakovkin and Lilov-Muzel process based on lime-soda sintering; Penlakov process based on sintering bauxite with Na_2SO_4 in presence of coal; production from nepheline, alunite, and potassium aluminate slag; and combinations of the above. Tables.

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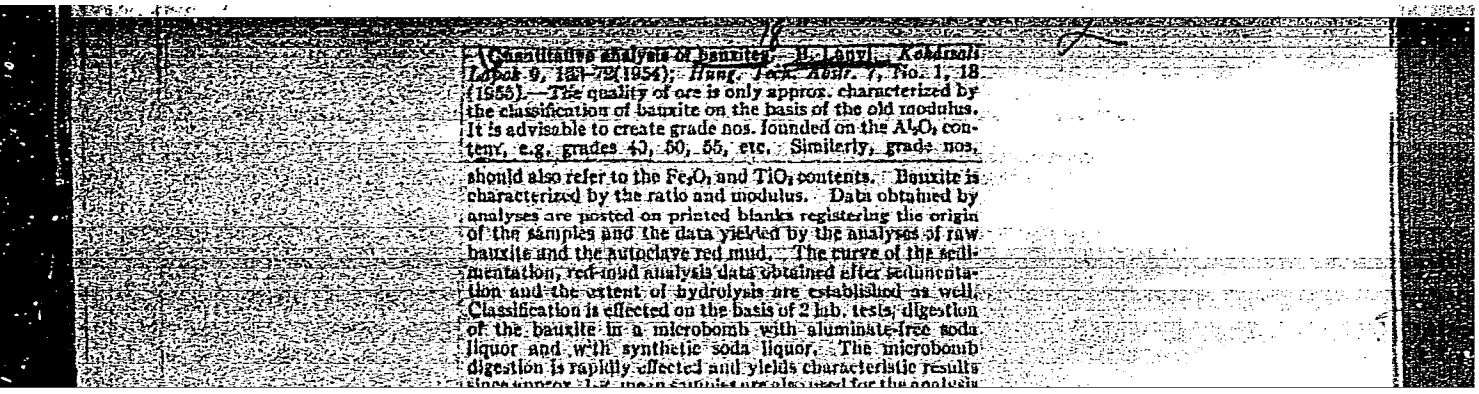
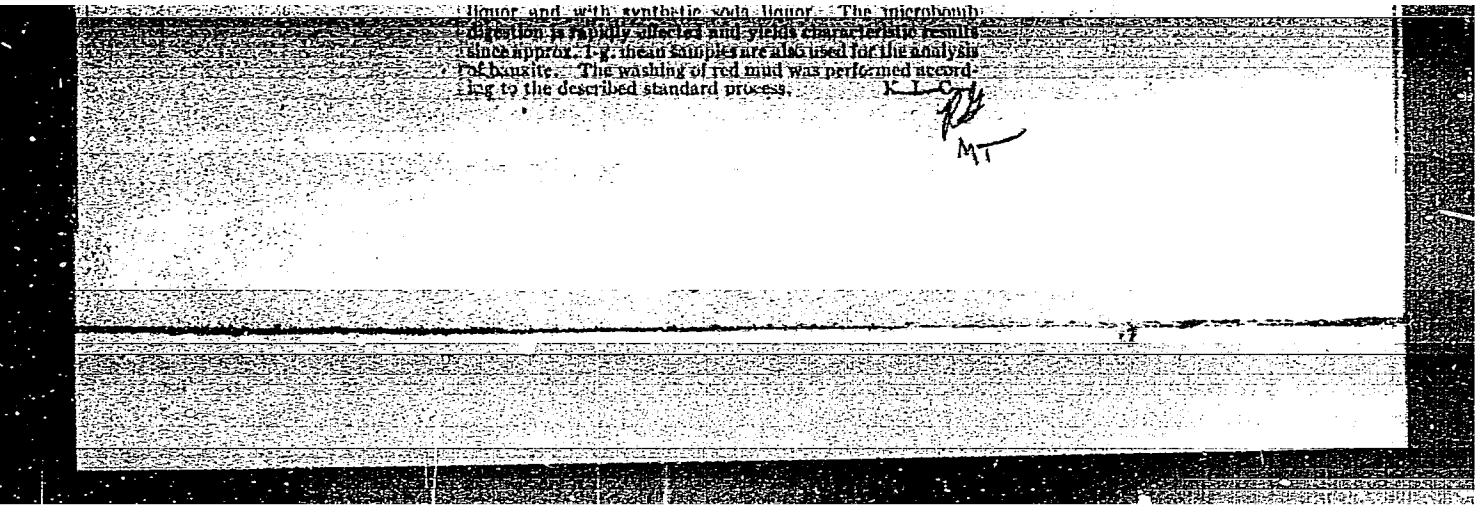


Quantitative analysis of bauxites. —H. Lányi. *Kohászati Lapok* 9, 181–7(1954); *Hung. Tech. Abstr.* 7, No. 1, 18 (1955).—The quality of ore is only approx. characterized by the classification of bauxite on the basis of the old modulus. It is advisable to create grade nos. founded on the Al_2O_3 content, e.g. grades 40, 50, 55, etc. Similarly, grade nos. should also refer to the Fe_2O_3 and TiO_2 contents. Bauxite is characterized by the ratio and modulus. Data obtained by analyses are posted on printed blanks registering the origin of the samples and the data yielded by the analyses of raw bauxite and the autoclave red mud. The curve of the sedimentation, red-mud analysis data obtained after sedimentation and the extent of hydrolysis are established as well. Classification is effected on the basis of 2 lab. tests, digestion of the bauxite in a microbomb with aluminate-free soda liquor and with synthetic soda liquor. The microbomb digestion is rapidly effected and yields characteristic results since approx. 1-2 mean samples are also used for the analysis



liquor and with synthetic soda liquor. The microbomb digestion is rapidly effected and yields characteristic results since approx. 1-g. mean samples are also used for the analysis of bauxite. The washing of red mud was performed according to the described standard process.

K. L. C.

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LANYI, B.

LANYI, B.

"Methods of Scientific Research", P. 173. (MAGYAR KEMIKUSOK LAPJA, Vol. 9, No. 6, June 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955, Uncl.

LANYI, Bela

Decomposition of aluminate lye in presence of red mud; methods of studies and factors affecting their accuracy. Koh lap 9 no. 12: 541-551 D '54.

LANYI, B.

Energetics of the Bayer process for alumina. p. 35. KOHASZATI LAPOK. (Magyar Banyaszati es Kohaszati Egyesulet) Budapest. Vol. 10, no. 1, Jan. 1955.

SOURCE: East European Accessions List (EEAL), Library of Congress
Vol. 5, no. 6, June 1956

LANYI, B.

Continuous exploitation of bauxite. p. 36. KOHASZATI LAPOK. (Magyar Banyaszati es Kohaszati Egyesulet) Budapest. Vol. 10, no. 1, Jan. 1955.

SOURCE: East European Accessions List (EEAL), Library of Congress
Vol. 5, no. 6, June 1956

LANYI, B.

Utilization of red mud in an aluminum plant. p. 39. KOHASZATI LAPOK. (Magyar Banyaszati es Kohaszati Egyesulet) Budapest. Vol. 10, no. 1, Jan. 1955.

SOURCE: East European Accessions List (EEAL), Library of Congress
Vol. 5, no. 6, June 1956

LANYI, B.

Slide rule with several slides for chemical and metallurgic operations; use in the aluminum industry. p. 410.
Vol 10, no. 9, Sept. 1955. KOHASZATI LAPOK. Budapest, Hungary.

So: Eastern European Accession. Vol 5, no. 4, April 1956