Heat losses during explosions...

to T_b. The value of T_b is calculated from the heat balance $\sum m_i \Delta E_{T_0} = \sum m_e (E_{T_{ex}} - E_{T_0}) + \sum \Delta m (E_{T_b} - E_{T_0})$, where m_i is the number of reacting moles, m_e is the number of moles formed after the explosion, Δm is the number of moles of unburnt mixture, and T_{ex} is the equilibrium temperature of explosion. To check the reaction experimentally, $H_2 + O_2 + N_2$ or $H_2 + O_2 + N_2 + H_2O$, or $H_2 + O_2 + CO + N_2$ of different compositions were used in a 10 liter bomb of Monel metal (methods described in Zh. fiz. khimii, 33, 58, 1959). Results: (1) For the 10 l bomb, c_c was 750 atm·cm^2/deg·mole, this has to be determined for each size of bomb, although an approximate calculation is possible from $c_{o,1}/c_{o,2} = r_2/r_1$ (r = bomb radius). The difference was only ~59 cal/mole calculated for a 20 l bomb. (3) The maximum difference in the heat balance does not exceed 170 cal/mole. Thus the suggested method of calculating the equilibrium temperature of the explosion makes it possible to determine accurately the specific heat and thermochemical

Card 2/3

data for gases. There are 2 tables. The most important English-language reference is: E. A. Mason, S. C. Saxena, Phys. Fluids, 1, 361, 1958.

ASSOCIATION: Akademiya nauk SSSR, Institut goryuchikh iskopayemykh (Academy of Sciences USSR, Institute of Mineral Fuels)

SUBMITTED: August 15, 1960

4

39238

S/076/62/036/007/001/010
B101/B138

11.5100

AUTHOR: Baybuz, V. F. (Moscow)

TITLE: Calculation of equilibrium gas compositions for high temperatures

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 7, 1962, 1401-1409

TEXT: The calculation of equilibrium gas compositions is simplified by calculating the so-called "limiting temperature" for each chemical compound contained in the mixture; this is the temperature, at which the partial pressure of the nondissociated compound drops below a certain value g and can be neglected. The temperature at which the partial pressure of the nondissociated compound reaches a maximum is first calculated at constant total pressure of the mixture. It is shown that stoichiometric composition of the mixture is a necessary and sufficient condition for the existence of this temperature. 0.01 or 0.1 atm is proposed for g, depending on the degree of accuracy required. These values are sufficient for estimating the thermodynamic stability of a compound up to a total pressure $P = 1000$ atm. $g = 10^{-4}P$ is recommended for higher pressures. The follow-

Card 1/3

Calculation of equilibrium ...

ing limiting temperatures (°K) were calculated:

	ε=0.01	ε=0.1		ε=0.01	ε=0.1		ε=0.01	ε=0.1
O_2	>6000	>6000	HI	>6000	>6000	P_4O_{10}	3800	3500
F_2	>6000	4800	BF_3	4300	3700	SO_2	>6000	>6000
F_2O	2000	-	CO	>6000	>6000	SF_2	4800	4100
Cl_2	>6000	>6000	CO_2	>6000	>6000	SF_4	3200	3000
H_2	>6000	>6000	COF_2	4900	4500	SF_6	3200	3000
H_2O	>6000	>6000	$COCl_2$	3200	2400	CH_4	5000	4000
HF	>6000	>6000	C_2H_2	>6000	>6000	CH_3Br	1800	>1000
HCl	>6000	>6000	N_2	>6000	>6000	CF_4	5000	4500
HBr	>6000	>6000	NH_3	4200	1800	CCl_4	3200	2800

There are 2 tables.

Card 2/3

Calculation of equilibrium ...

ASSOCIATION: Akademiya nauk SSSR, Institut goryuchikh iskopayemykh (Academy of Sciences USSR, Institute of Mineral Fuels)

SUBMITTED: June 11, 1959

X

Card 3/3

ACCESSION NR: AR4036315 S/0081/64/000/004/B049/B049

SOURCE: Referativny*y zhurnal. Khimiya, Abs. 4B363

AUTHOR: Baybuz, V. F.; Medvedev, V. A.

TITLE: Determination of the heat of formation of certain fluorochloro derivatives of methane by the method of explosion in a spherical bomb

CITED SOURCE: Sb. tr. Gos. in-ta prikl. khimii, vy*p. 49, 1962, 84-112

TOPIC TAGS: methane, halomethane, fluorochloromethane, carbon tetrachloride, carbon tetrafluoride, physical chemistry, calorimetry, bomb calorimeter

TRANSLATION: A mechanism for the loss of energy during explosions in a spherical bomb with central ignition is suggested and proven experimentally. A method is suggested for calculating the explosion temperature while taking the loss of energy into consideration. The results of explosions of mixtures of H_2, CO, O_2, H_2O and N_2 carried out in a wide range of concentrations show that the suggested method for calculating the explosion temperature makes it possible to determine the heat capacity and the thermochemical values for gases by the method of explosion in a spherical bomb with great accuracy.

Card 1/2

ACCESSION NR: AR4036315

Addition of small amounts of steam does not decrease the loss of energy during explosions of hydrogen with oxygen. The heats of formation of gaseous CF_4, CF_3Cl, $CFCl_3$, and CCl_4, respectively, were: -220.1±1.3; -166.2±2.2; -66.4±2.1; and -24.6±1.9 kkal/mole. Authors' summary

DATE ACQ: 10Apr64 SUB CODE: OC ENCL: 00

Card 2/2

L 12633-65 EWT(1)/EPF(c)/EPF(n)-2/T/EPR/EPA(bb)-2/EWA(1) Pr-4/Ps-4 Pu-4 WW

ACCESSION NR: AR4044047 S/0058/63/000/011/E004/E004

SOURCE: Ref. zh. Fizika, Abs. 11E24

B

AUTHOR: Baybus, V. F.

TITLE: Critical constants of substances with high boiling points

CITED SOURCE: (Sb. tr.) Gos. in-ta prikl. khimii, vy*p. 49, 1962, 113-119

TOPIC TAGS: critical constant, boiling point, high boiling point

TRANSLATION: Examines various methods of estimating critical constants for substances with high boiling points. On the basis of an empirical equation for the dependence of the heat of sublimation on temperature, and tables for saturation pressure, there is proposed a new method for estimating the critical constants. There are calculated the values of the critical constants for a number of substances with high boiling points.

SUB CODE: GC ENCL: 00

Card 1/1

BAYBUZ, V.F.

Heat losses in explosions in a spherical bomb. Zhur. fiz. khim. 36 no.6:1280-1286 Je'62 (MIRA 17:7)

1. Institut goryuchikh iskopayemykh AN SSSR.

BAYBUZ, V.F.

Molecular interaction and thermodynamic properties of gases at high temperatures. Teplofiz. vys.temp. 1 no.2:161-166 S-O '63. (MIRA 17:5)

1. Nauchno-issledovatel'skiy institut vysokikh temperatur.

BAYBUZ, V.F.

Conference of the Institute of High Temperature Research.
Teplofiz. vys. temp. 2 no.4:655-656 Jl-Ag '64.
(MIRA 17:9)

GIPP, B.A.; GONIKBERG, Yu.M.; KAPLUN, M.M.; LEVENSON, Ye.M.; MARKOV, N.N.; POLYANSKIY, P.M.; SHLEZINGER, G.S.; LEVENSON, Ye.M., nauchnyy red.; BAYBUROV, B.S., red.; KOCHENOV, M.I., red.; MALYY, D.D., red.; PROKOF'YEVA, L.G., red.izd-va; TIKHANOV, A.Ya., tekhn.red.

[Checking devices] Kontrol'nye prisposobleniia. Pod red. B.S. Baiburova, M.I.Kochenova i D.D.Malogo. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1960. 338 p. (MIRA 13:12)

(Measuring instruments)

L 32894-65 EWT(d)/TDB(jj)/BXT/EWP(1)/EED-2 Pc-4/Pq-4/Pg-4/Pk-4 IJP(c) BB/GS/GG
ACCESSION NR: AT5004150 S/0000/64/000/000/0157/0167

AUTHOR: Baych, L. M.

TITLE: A logical system for finding a frame of a microfilm of systematized information by sequential reading of the code

SOURCE: AN SSSR. Institut nauchnoy informatsii. Informatsionnyye sistemy (Information systems). Moscow, 1964, 157-167

TOPIC TAGS: information retrieval, sequential coding, microfilm search, sequential retrieval, tape storage, microfilm storage, microfilm scanner, photocode

ABSTRACT: Two basic types of information storage are distinguished by way of introduction: systems with arbitrary retrieval and systems with sequential retrieval. Card files provide for arbitrary retrieval by the interrogation of any information-storing cell. In storage units with sequential retrieval, on the other hand, the required cell can be found only after interrogation of the preceding cells; for example, systems employing cassettes of magnetic tape or rolls of microfilm. Such microfilm rolls, in which the index code is photographically printed together with the microphotograph of the original document of interest, provide a solution to the recording of information of high density. In this arti-

Card 1/3

L 32894-65
ACCESSION NR: AT5004130

cle, the author proposes a logical arrangement designed to search out the original of an article on microfilms of periodical publications according to the decimal number which accompanies the brief reports published in the abstract journals and "express-information" series of VINITI. A detailed technical description of this system and its components is given. A mean linear speed of 1 m/sec was selected for the microfilm. On a 300-meter roll of film as many as 19,000 printed pages of text can be accomodated, with an automatic viewing time of about 5 minutes per roll. This results in a viewing rate of 3800 pages/minute, which is 10-20 times better than the rate attainable with manual frame hunting. Unperforated (to reduce wear) 35-mm film is used. A 300-meter roll of this film has a diameter of 250 mm and occupies a volume of 1.7 cubic decimeters, with a roll providing a storage capacity for 62 books of average size (300 pages on the average for each book). The author reasons that, in order to code a single 300-page book, 4.4 million binary symbols are required. One 300-meter roll of microfilm can thus be considered an external, long-term, permanent memory for an electronic computer with a volume of 272.8 million binary symbols. The low repetition rate of the photo-pulses initially selected to carry out the purely mechanical operations of stopping the system can easily be increased by increasing the speed of movement of the carrier of the recording (i.e., the film). The purpose of this automatic

Card 2/3

L 32894-65
ACCESSION NR: AT5004150

microfilm frame-hunting device is to seek out, on the basis of a given decimal number, the required half-frame for the information stored on the film. When the required half-frame is presented, a command to stop the tape-advance mechanism is provided automatically. As the logical element, the device uses a three-cycle ferrite-diode cell, developed in the Laboratoriya elektromodelirovaniya (Electro-simulation Laboratory) of VINITI and produced by the Astrakhan Plant. This cell can be used for precession pulse repetition rates up to 50 cycles. The system incorporates the use of a photocode represented by eleven decimal places. Working diagrams and schematics are included in the article, along with complete technical descriptions of the principal units of the system, which are: diode encoder units, parallel-to-sequential code conversion unit, photocode register, synchropulse counting unit, local program unit, information block code comparison circuit, etc. Separate sections of the article deal with the different time relations which occur in the logical circuit and the degree of accuracy (and the factors affecting it) with which the system "stops" at the required half-frame. The author claims that an experimental verification of the individual functional assemblies of the logical arrangement, as well as their operational interaction, has completely confirmed the ability of the system to fulfill its assigned functions. Orig. art. has: 6 figures.

ASSOCIATION: None
SUBMITTED: 08Oct64 ENCL: 00 SUB CODE: DP
NO REF SOV: 000 OTHER: 000

Card 3/3

BAYCHENKO, A.A.

Pilyasov, and M. B. Iofa (Polytech. Inst., Tomsk).

MELIK-GAYKAZYAN, V.I.; BAYCHENKO, A.A.; PILYASOV, P.L.; IOFA, M.B.

Using an aqueous emulsion of sulfonated kerosene for flotation of coal smalls. Koks i khim.no.8:19-20 '56. (MLRA 10:1)

1. Tomskiy politekhnicheskiy institut (for Melik-Gaykazyan and Baychenko). 2.Gorlovskiy koksokhimicheskiy zavod (for Pilyasov and Iofa). (Kerosene) (Flotation) (Coal preparation)

BAYCHENKO, A.A ; [illegible], V. T.; [illegible], A. I. ; [illegible], A. I.

BAYCHENKO, A.A.

68-6-4/19

AUTHOR: Melik-Gaykazyan, V.I., Baychenko, A.A., Pilyasov, F.L., and Moroz, A.P.

TITLE: A Pulpmeter (Pulpomer)

PERIODICAL: Koks i Khimiya, 1957, No.6, pp. 12 - 13 (USSR)

ABSTRACT: A description of a continuous pulpmeter indicating the throughput of pulp in m^3/h, based on the indication of the level of the pulp flowing through a narrow trough is given. There are 1 figure and 2 Slavic references.

ASSOCIATION: Tomsk Polytechnical Institute (Tomskiy Politekhnicheskiy Institut)
Gorlovsk Coke Oven Works (Gorlovskiy Koksokhimicheskiy Zavod)

AVAILABLE: Library of Congress

Card 1/1

Baychenko, A.A.

68-8-5/23

AUTHORS: Melik-Gaykazyan, V.I., Baychenko, A.A., Pilyasov, F.L., and Moroz, A.P.

TITLE: Emulsification and Fine Feeding of Reagents Used in the Industrial Flotation of Coal. (Emul'sirovaniye i drobnaya podacha reagentov, ispol'zuyemykh pri promyshlennoy flotatsii uglya).

PERIODICAL: Koks i Khimiya, 1957, No.8, pp. 14-17 (USSR)

ABSTRACT: Results, obtained on the washing plant of the Gorlovka Coke Oven Works, on feeding flotation with water emulsions of sulphonated kerosene and absorption oil, (which were fed into thepulp at five points, i.e., in small quantities) as well as a description of the emulsifying apparatus used are given. The scheme of flotation and feeding points for the reagents are shown in figure 1 and the emulsifying apparatus in figure 2. Experimental results of flotation of coal fines with emulsified and non-emulsified reagents are given in tables 1 (at 20° C) and 2 (at 7° C). With emulsified reagents an improvement in the efficiency of flotation was obtained. There are 2 tables, 3 figures and 12 references, all of which are Slavic.

Card 1/2

68-8-5/23

Emulsification and Fine Feeding of Reagents Used in the Industrial Flotation of Coal. (Emul'sirovaniye i drobnaya podacha reagentov, ispol'zuyemykh pri promyshlennoy flotatsii uglya).

ASSOCIATIONS: Tomsk Polytechnical Institute (Tomskiy Politekhnicheskiy Institut) and Gorlovka Coke Oven Works (Gorlovskiy Koksokhimicheskiy Zavod).

AVAILABLE: Library of Congress

Card 2/2

MELIK-GAYKAZYAN, V.I.; VINTMAN, Ye.Ya.; LIVSHITS, G.L.; BAYCHENKO, A.A.

Flotation pulp consumption meter. Ugol' 32 no.7:43-44 Jl '57. (MIRA 10:7)

1. Tomskiy politekhnicheskiy institut (for Melik-Gaykazyan and Baychenko). 2. Nikitovskaya TSentral'naya obogatitel'naya fabrika (for Vintman and Livshits).
(Flotation) (Measuring instruments)

BAYCHENKO, A. A.

68-1-3/22

AUTHORS: Melik-Gaykazyan, V.I., Baychenko, A.A., and Pilyasov, F.L.

TITLE: On the Problem of Choosing a Rational Scheme of Froth Extinguishing for the Separation of Flotation Products in Coal Washeries (K voprosu o vybore ratsional'noy skhemy penogasheniya dlya flotoотdeleniy ugleobogatitel'nykh fabrik)

PERIODICAL: Koks i Khimiya, 1958, No.1, pp. 12 - 15 (USSR).

ABSTRACT: Three types of de-frothing installations (mechanical, gravitational and vacuo) used in Soviet coal washeries are outlined and the capital costs of installation of the latter two types of equipment (Figs. 1 and 2, respectively) are compared. On the basis of this comparison, the application of the vacuo scheme of froth extinguishing not only in new, but also in already operating washeries is recommended.
There are 3 figures, 1 table and 4 Slavic references.

ASSOCIATIONS: Tomsk Polytechnical Institute (Tomskiy politekhnicheskiy institut)
Gorlovka Coke Oven Works (Gorlovskiy koksokhimicheskiy zavod)

AVAILABLE: Library of Congress

Card 1/1

SOV/68-58-11-5/25

AUTHORS: Melik-Gaykazyan V.I., Baychenko A.A. and Mamleyev K.A.

TITLE: A Density Meter for the Flotation Pulp (Plotnostemer dlya flotatsionnoy pul'py)

PERIODICAL: Koks i Khimiya, 1958, Nr 11, pp 14-16 (USSR)

ABSTRACT: An apparatus for continuous measuring of the density of the flotation pulp is described. It consists of a bent tube, placed on supports around which it can rotate (see Fig). The pulp flowing through this tube is being weighed. The apparatus was tested on an installation simulating operational conditions of a flotation plant. The sensitivity of the apparatus in density units amounted to 0.0015g/cm^3 within the range of 1.056 - 1.080 g/cm^3. There is 1 figure, and 6 references, all Soviet.

ASSOCIATION: Tomskiy Politekhnicheskiy Institut (Tomsk Polytechnical Institute)

Card 1/1

GEHLER, Innokentiy Vasil'yevich, prof.; BAYCHENKO, Arnol'd Alekseyevich, inzh.; BALIBALOV, I.A., red.; RUDINA, G.V., tekhn.red.

[Special methods of coal preparation] Spetsial'nye metody obogashcheniia uglei. Kemerovo, Kemerovskoe knizhnoe izd-vo, 1959. 151 p. (MIRA 14:1)

(Coal preparation)

14(5) SOV/20-126-2-32/64

AUTHORS: Melik-Gaykazyan, V. I., Baychenko, A. A., Rabotkin, V. L., Gorban', A. N.

TITLE: Investigation of the Mechanism of the Action of Non-Polar Reagents in the Flotation of Coal (Issledovaniye mekhanizma deystviya nepolyarnykh reagentov pri flotatsii uglya)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 2, pp 341 - 343 (USSR)

ABSTRACT: One must not generalize the methods which serve for the estimation of the reagents distribution on the surface of mineral particles. There are two possibilities: a) The reagents chemically interact with the surfaces and are absorbed as single molecules, b) the reagents are deposited as drops - this happens on coal particles. The rules pertaining to case a) must not be applied to case b). This is explained by the fact that the drops of non-polar flotation reagents are less firmly fixed on the surface of non-polar particles. For many reasons the tests of other researchers (Refs 1-5), are not very convincing in their applicability to small coal. Therefore the authors have agreed to use the luminescent pro-

Card 1/2

perties of petroleum to estimate the distribution of the reagent on coal-particles. Figure 1 shows micro-pictures of particles, which lie 3-5 mm under the water-surface. By contrasting the micro-pictures a and b (Fig 1) it becomes obvious that petroleum in strong concentrations is in visual light practically undetectable under water (Fig 2). The formation mechanism of a "hem" around a particle is explained. Figure 1 b-d shows pictures taken with ultra-violet light with and without a small infusion of visual light (Fig 1 g). From the results obtained, the authors conclude that by the use of luminescence a few details on the distribution of a non-polar reagent on the surface of coal particles, under the reaction of outside influences may relatively simply be observed. Moreover the conditions governing this case have a very close connection to those met with in flotation. There are 2 figures and 7 references, 6 of which are Soviet.

ASSOCIATION: Tomskiy politekhnicheskiy institut (Tomsk Polytechnic Institute)
PRESENTED: February 2, 1959, by P. A. Rebinder, Academician
SUBMITTED: January 29, 1959

MELIK-GAYKAZYAN, V.I.; BAYCHENKO, A.A.

Mechanism underlying the strengthening effort of an apolar reagent on the contact between a bubble and a carbon particle. Dokl. AN SSSR 136 no.6:1403-1406 F '61. (MIRA 14:3)

1. Tomskiy politekhnicheskiy institut im. S. M. Kirova. Predstavleno akademikom P. A. Rebinderom.
(Flotation)

MELIK-GAYKAZYAN, V.I.; BAYCHENKO, A.A.; VORONCHIKHINA, V.V.

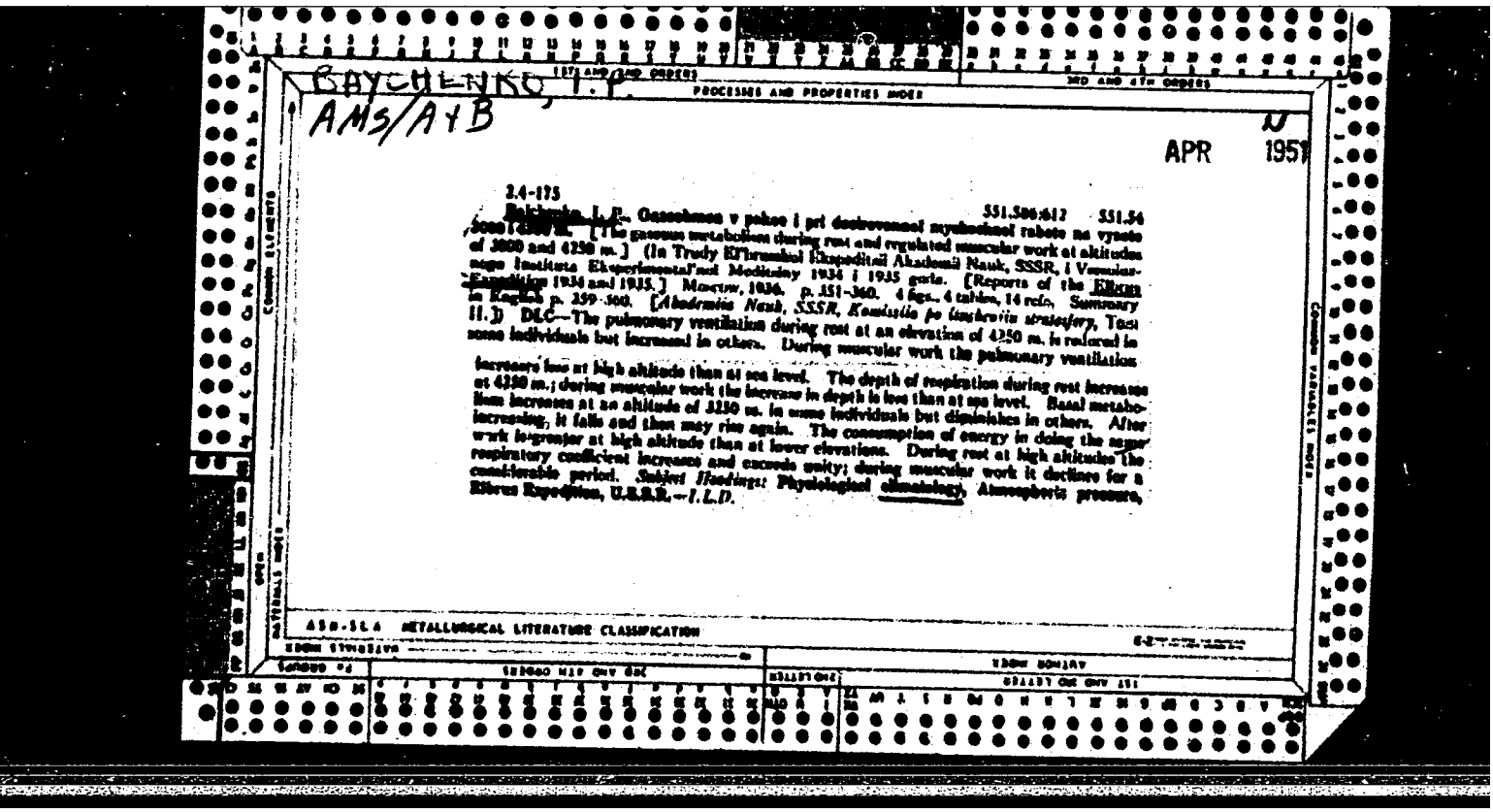
Determining the parameters which characterize the flotation activity of oil reagents. Koks i khim. no.8:13-16 '62. (MIRA 17:2)

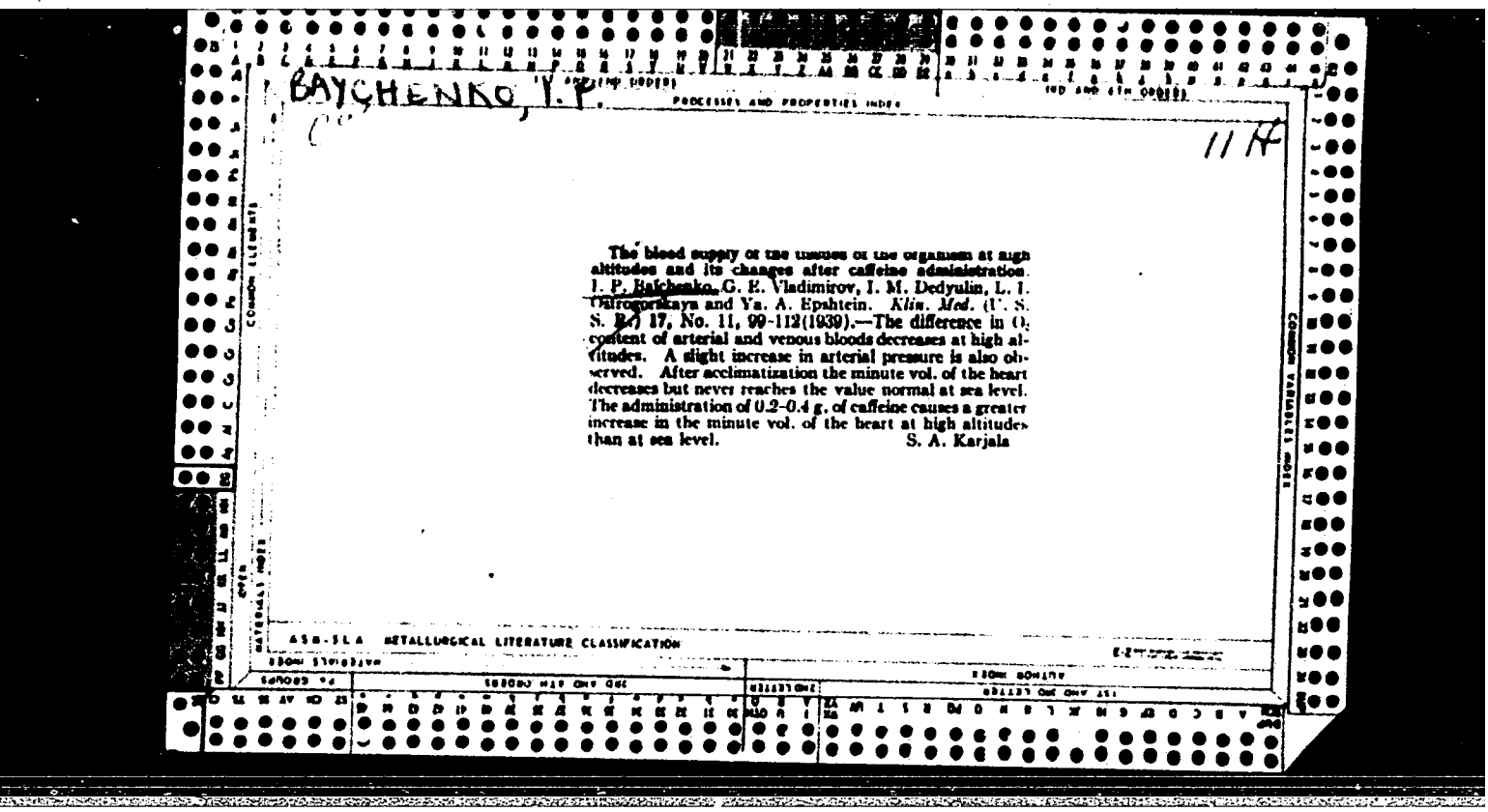
1. Tomskiy politekhnicheskiy institut.

MELIK-GAYKAZYAN, V.I.; BAYCHENKO, A.A.; VORONCHIKHINA, V.V.; LIVSHITS, G.L.; SOROKA, V.I.; RAYVICH, I.D.; KHARKHARDIN, P.P.

Emulsification of flotation oil reagents under industrial conditions and evaluation of the dispersion properties of the obtained emulsions. Koks i khim. no.3:9-13 '64. (MIRA 17:4)

1. Tomskiy politekhnicheskiy institut (for Voronchikhina).
2. Nikitovskaya ugleobogatitel'naya fabrika (for Rayvich).
3. Gorlovskiy koksokhimicheskiy zavod (for Kharkhardin).


BAYCHENKO, I. P.
AMS/AYB
PROCESSES AND PROPERTIES INDEX
APR 1951
2.4-175
Baichenko, I. P. Gaseobmen v pokoe i pri dozirovannoi myshechnoi rabote na vysote of 3800 and 4250 m.] (In Trudy Ellbrusskoi Ekspeditsii Akademii Nauk, SSSR, i Vysokogornogo Instituta Eksperimental'noi Meditsiny 1934 i 1935 gods. [Reports of the Elbrus Expedition 1934 and 1935.] Moscow, 1936. p. 351-360. 4 figs., 4 tables, 14 refs. Summary in English p. 359-360. [Akademiia Nauk, SSSR, Komissiia po izucheniiu vysotnykh, Trudy II.] DLC—The pulmonary ventilation during rest at an elevation of 4250 m. is reduced in some individuals but increased in others. During muscular work the pulmonary ventilation increases less at high altitude than at sea level. The depth of respiration during rest increases at 4250 m.; during muscular work the increase in depth is less than at sea level. Basal metabolism increases at an altitude of 3250 m. in some individuals but diminishes in others. After increasing, it falls and then may rise again. The consumption of energy in doing the same work is greater at high altitude than at lower elevations. During rest at high altitudes the respiratory coefficient increases and exceeds unity; during muscular work it declines for a considerable period. Subject Headings: Physiological climatology, Atmospheric pressure, Elbrus Expedition, U.S.S.R.—I. L. D.
551.506:612 551.54
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



BAYCHENKO, I. P.

11 AF

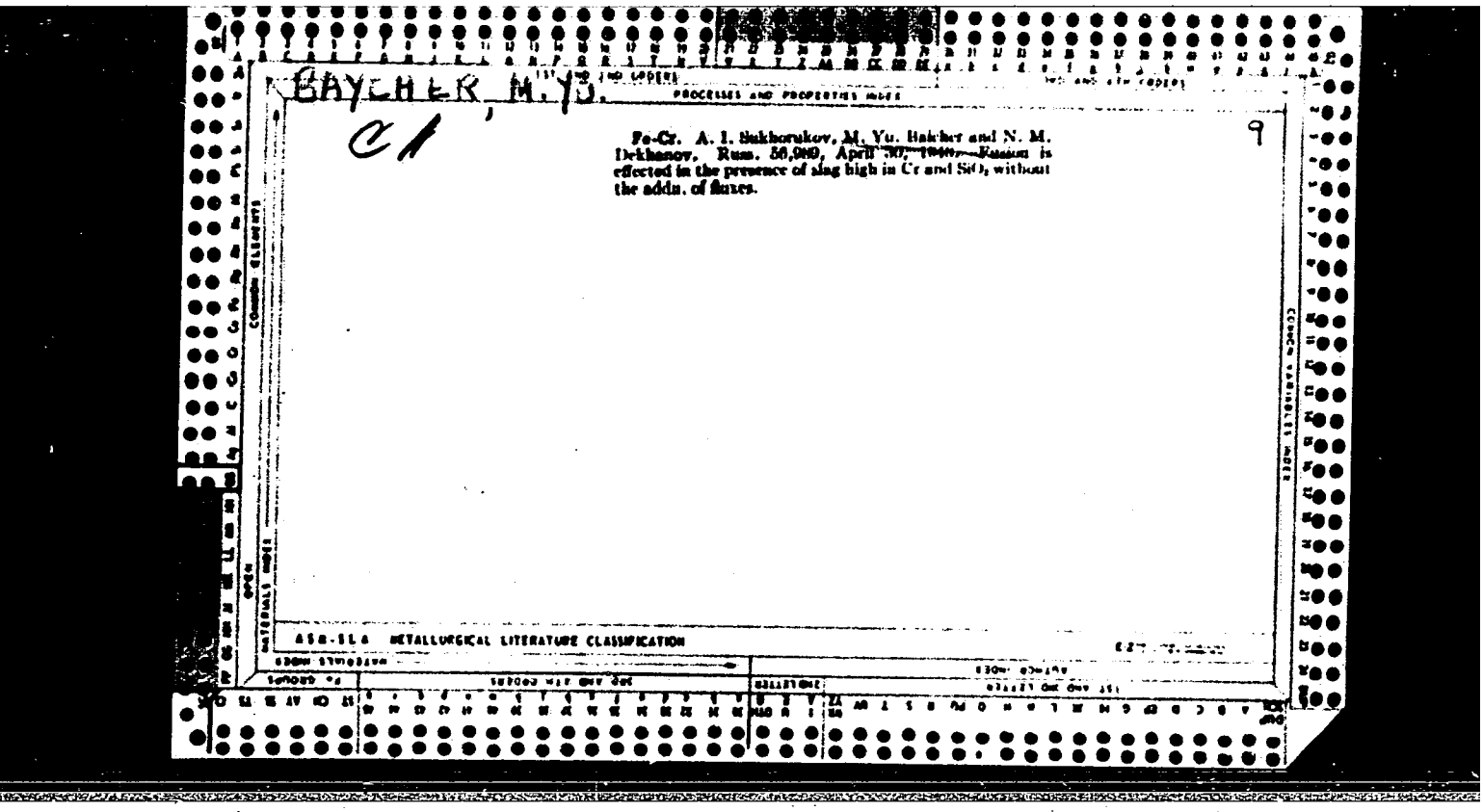
The blood supply of the tissues of the organism at high altitudes and its changes after caffeine administration. I. P. Baichenko, G. E. Vladimirov, I. M. Dedyulin, L. I. Ostroumskaya and Ya. A. Epshtein. *Klin. Med.* (U. S. S. R.) 17, No. 11, 99-112(1939).—The difference in O_2 content of arterial and venous bloods decreases at high altitudes. A slight increase in arterial pressure is also observed. After acclimatization the minute vol. of the heart decreases but never reaches the value normal at sea level. The administration of 0.2–0.4 g. of caffeine causes a greater increase in the minute vol. of the heart at high altitudes than at sea level. S. A. Karjala

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

RAYCHENKO, I.P.; GRACHEVA, R.P.

Physiological indexes of the degree of training of the neuromuscular apparatus. Trudy Vses. ob-va fiziol., biokhim. i farm. 3:75-76 '56
(MLRA 10:4)

1. Kafedra fiziologii Instituta fizicheskoy kul'tury im. Lesgafta; zaveduyushchiy kafedroy professor A.N. Krestovnikov.
(NERVES) (MUSCLES)



MIKELADZE, G.Sh.; NADIRADZE, Ye.M.; PKHAKADZE, Sh.S.; GOGORISHVILI, B.P.; DGEBAUDZE, G.A.; SOLOSHENKO, P.S.; SEMENOV, V.Ye.; BARASHKIN, I.I.; SHIRYAYEV, Yu.S.; POSPELOV, Yu.P.; KATSEVICH, L.S.; ROZENBERG, V.L.; Prinimali uchastiye: LORDKIPANIDZE, I.S.; TSKHVEDIANI, R.N.; DZODZUASHVILI, A.G.; DUNIAVA, A.G.; PEKARSKIY, L.F.; GRITSENYUK, Yu.V.; ZHELTOV, D.D.; LUZANOV, I.I.; GLADKOVSKIY, V.P.; PODMOGIL'NYY, V.P.; VOROPAYEV, I.P.; BRIKOVA, O.V.; VRUBLEVSKIY, Yu.P.; KLYUYEV, V.I.; BAYCHER, M.Yu.; LOGINOV, G.A.; SHILIN, V.K.; POPOV, A.I.; ZASLONKO, S.I.

Industrial experiments in the smelting of 45 o/o ferrosilicon in a heavy-duty closed electric furnace. Stal' 25 no.5:426-429 My '65. (MIRA 18:6)

1. Gruzinskiy institut metallurgii (for Lordkipanidze, TSkhvediani, Dzodzuashvili, Guniava). 2. Nauchno-issledovatel'skiy i proyektnyy institut metallurgicheskoy promyshlennosti (for Brikova, Vrublevskiy, Klyuyev). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrotermicheskogo oborudovaniya (for Baycher, Loginov, Shilin, Popov, Zaslonko).

ACC NR: AP7008868 SOURCE CODE: UR/0105/66/000/008/0095/0095

AUTHOR: Abelishvili, L. G.; Al'tgauzen, A. P.; Baycher, M. Yu.; Gabashvili, N. V.; Dididze, M. S.; Yefroymovich, Yu. Ye.; Kotiya, A. K.; Kupradze, G. D.; Kurdiani, I. S.; Netushil, A. V.; Nikol'skiy, L. Ye.; Razmadze, Sh. M.; Svenchanskiy, A. D.; Smelyanskiy, M. Ya.; Tkeshelashvili, G. K.
ORG: none

TITLE: Professor Grigoriy Artemyevich Sisoyan (on his 70th birthday)

SOURCE: Elektrichestvo, no. 8, 1966, 95

TOPIC TAGS: electric engineering personnel, electric furnace, academic personnel

SUB CODE: 09

ABSTRACT: G. A. Sisoyan graduated from the Moscow Power Engineering Institute in 1931. In 1932 he went to work at the Georgian Polytechnical Institute in the theoretical and general electrical engineering department. Sisoyan has worked and published many works in the area of electric furnaces. He has also worked in the area of investigation of electric spark action. He has published over 50 scientific works. He has also been active in university level teaching. Orig. art. has: 1 figure. [JPRS: 38,330]

Card 1/1 UDC: 621.36

BAYCHEV, IV.

Concerning the Necessity of Producing Explosive-Proof Electric Motors and Equipment (in our Country) and of Constructing Test Stations to Test them. Minno Delo (Mining), #12:6: Dec 54

BAYCHEV, IV.

Engineer G. KONYAROV, Deserving Worker in our Mining Industry. Minno Delo (Mining), #1:106:Jan 55

BAYCHEV, IV.

The SVOGE (Bulgaria) Anthracite and its Importance in the Coal Balancing Economy of Our Country. Minno Delo (Mining), #2:16:Feb 55

BAYCHEV, IV.

Concerning the Introduction of Broadwall Working in the "Cherne More" Mine. Minno Delo (Mining), #5:31: Sept-Oct 55

BAYCHEV, T.,

BAYCHEV, I., inzhener.

New techniques in the Bulgarian coal industry. Mast.ugl. 6 no.9:29-31 S '57. (MIRA 10:11)

1. Nachal'nik proizvodstvenno-tekhnicheskogo otdela Ministerstva tyazheloy promyshlennosti Narodnoy Respubliki Bolgarii.
(Bulgaria--Coal mines and mining)

BAYCHEV, Iv. Bulgaria

"Ventilation in Coal Mines", Mining, No. 4, April 1954, p 31.

Ventilirane na kamenov'glenite mini.

SO: [redacted] Bibliographic files, 18 July 1955, Uncl.

BAYCHEV, Iv. Bulgaria

"Ventilation of Coal Mines", Mining, No. 5, May 1954, p 31.

Ventilirane na kamenov'glenite mini

SO: [redacted] Bibliographic files 18 July 1955, Uncl.

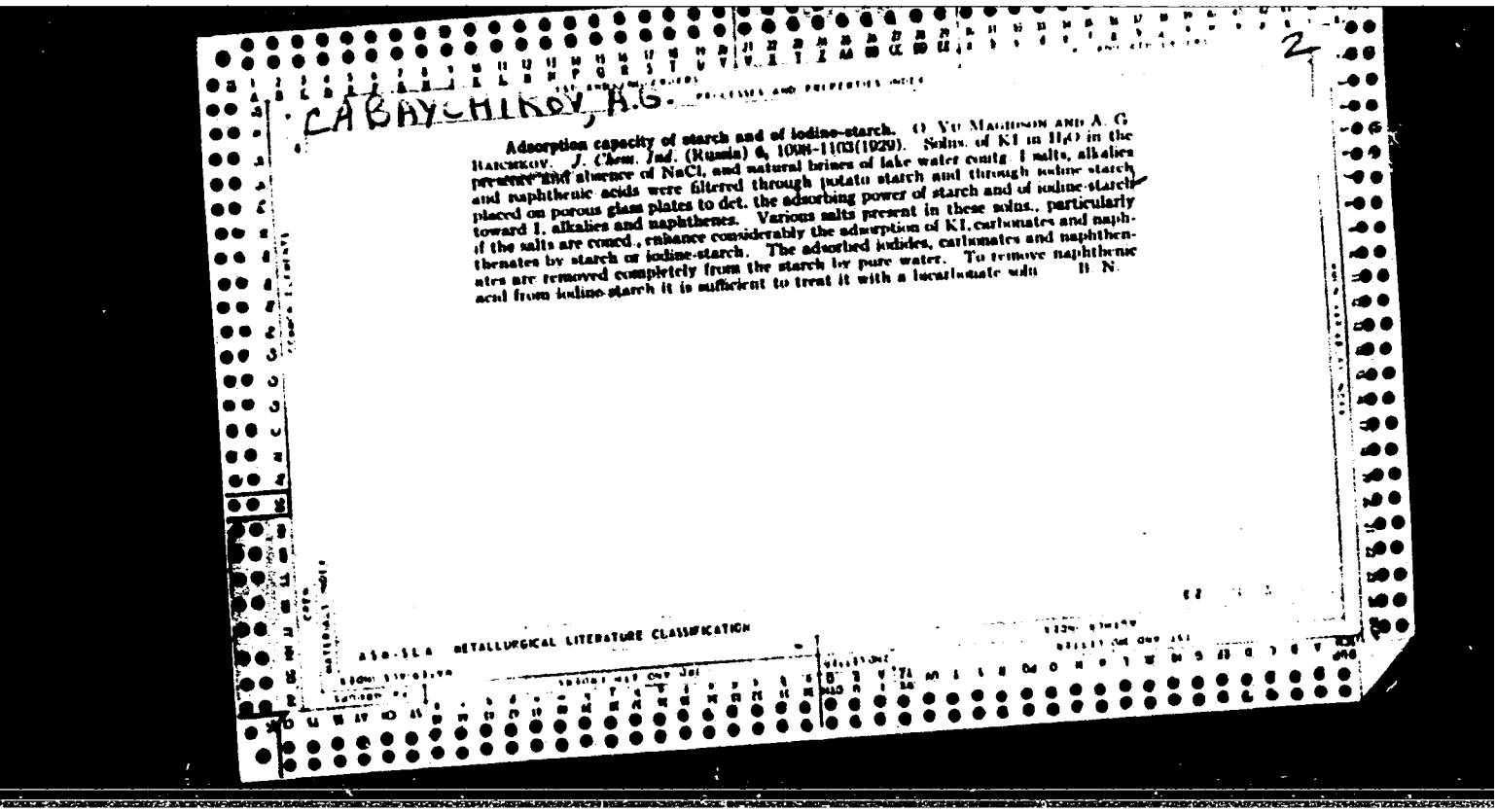
Bulgaria

BAYCHEV, Iv.

"Ventilation in the Coal Mines", Mining, No. 6, June 1954, p 30.

Ventilirane na kamenov'glenite mini

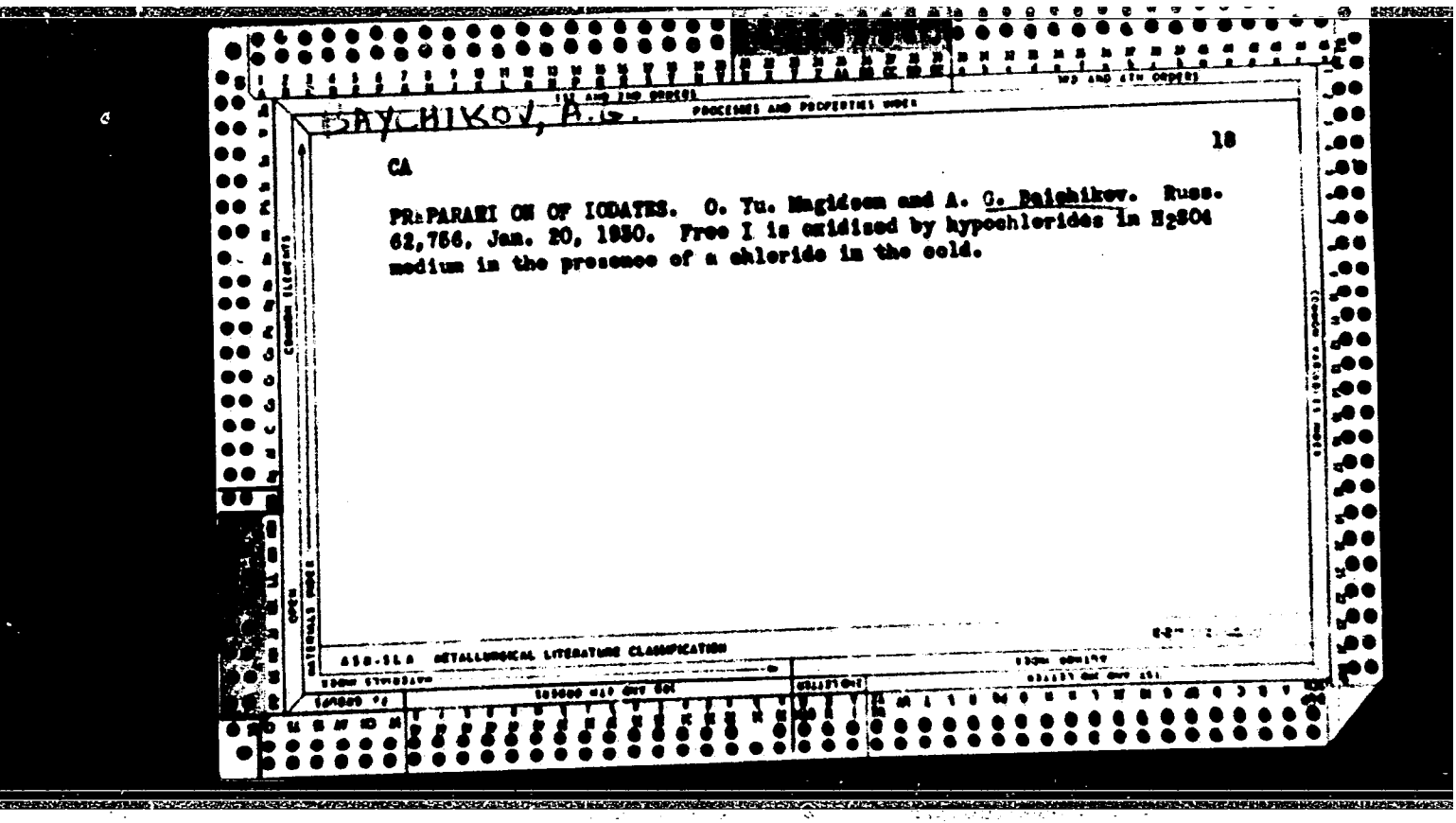
SO: [redacted] Bibliographic files 18 July 1955, Uncl.



CABAYCHIKOV, A.G.

Adsorption capacity of starch and of iodine-starch. O. Yu. Magidson and A. G. Babaichkov. *J. Chem. Ind.* (Russia) 6, 1098-1103(1929). Solns. of KI in H_2O in the presence and absence of NaCl, and natural brines of lake water contg. I salts, alkalies and naphthenic acids were filtered through potato starch and through iodine-starch placed on porous glass plates to det. the adsorbing power of starch and of iodine-starch toward I, alkalies and naphthenes. Various salts present in these solns., particularly if the salts are concd., enhance considerably the adsorption of KI, carbonates and naphthenates by starch or iodine-starch. The adsorbed iodides, carbonates and naphthenates are removed completely from the starch by pure water. To remove naphthenic acid from iodine-starch it is sufficient to treat it with a bicarbonate soln. B. N.

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION

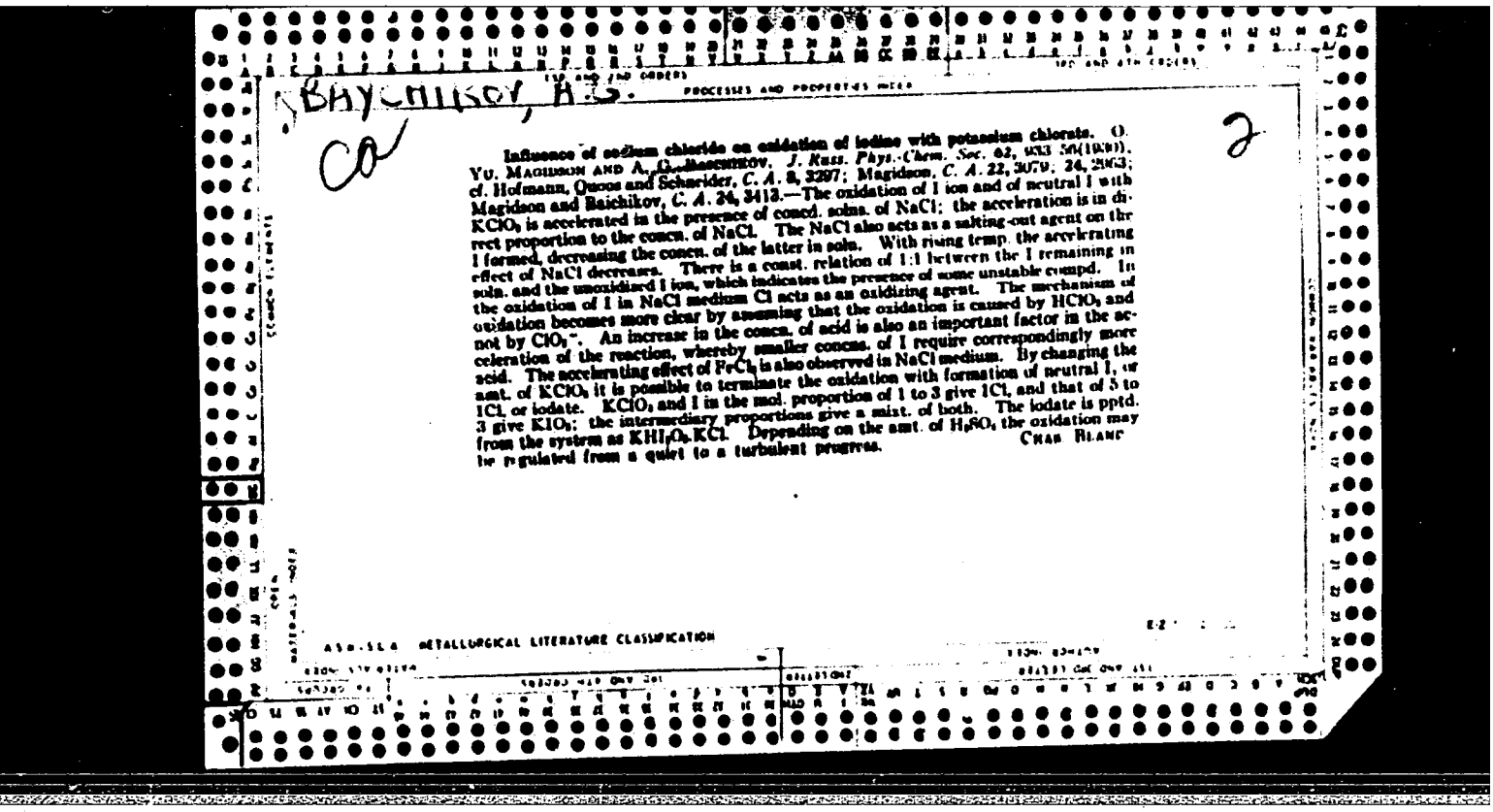


BAYCHIKOV, A. G.

18

CA

PREPARATION OF IODATES. O. Yu. Magidson and A. G. Baichikov. Russ. 62,756, Jan. 20, 1950. Free I is oxidized by hypochlorides in H_2SO_4 medium in the presence of a chloride in the cold.



BAYCHILOV, N.S.

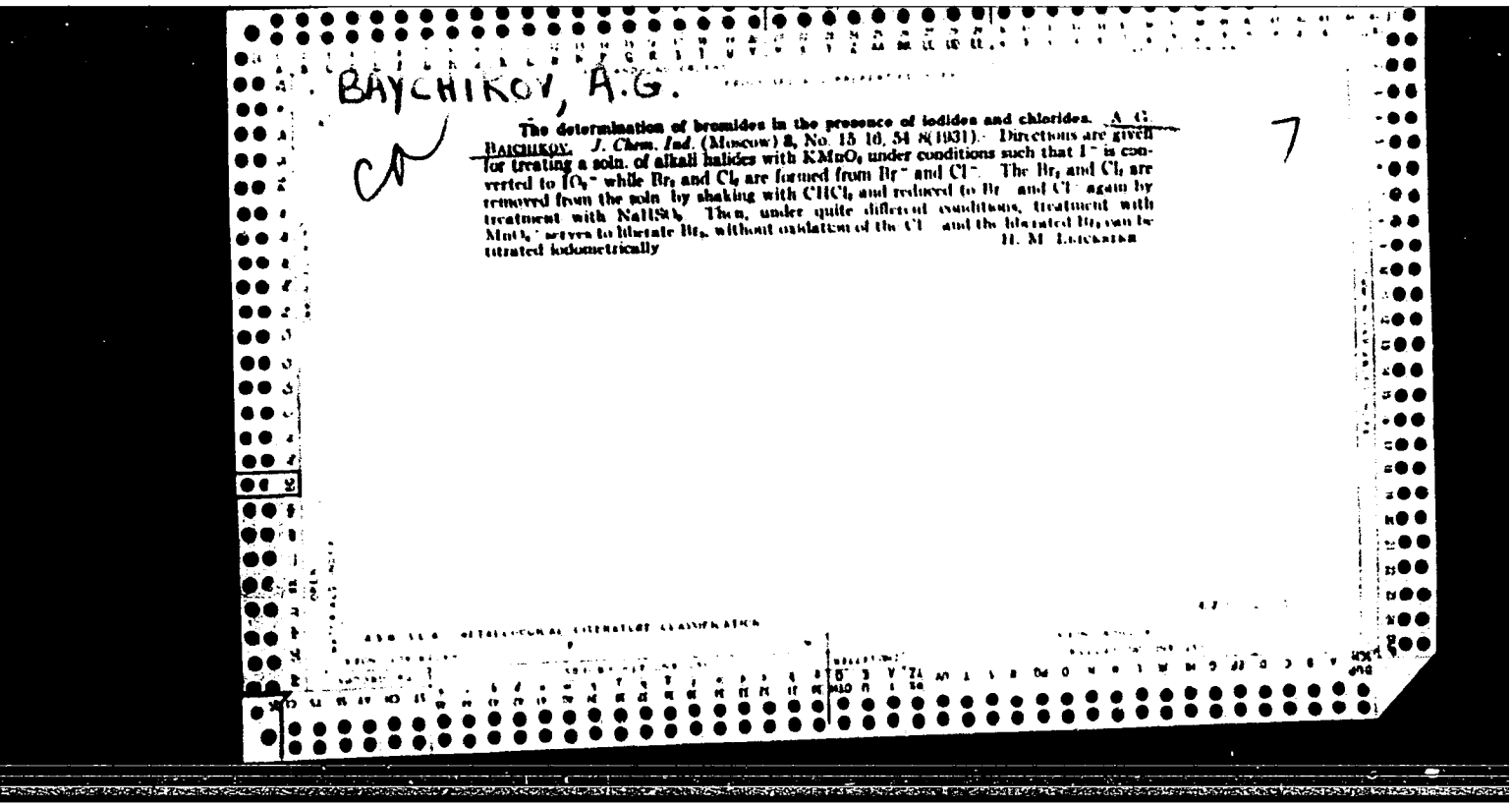
Ca

2

Influence of sodium chloride on oxidation of iodine with potassium chlorate. O. Yu. Magidson and A. G. Baichikov. *J. Russ. Phys.-Chem. Soc.* 62, 933-50(1930). cf. Hofmann, Quoos and Schneider, *C. A.* 8, 3297; Magidson, *C. A.* 22, 3079; 24, 2963; Magidson and Baichikov, *C. A.* 24, 3413.—The oxidation of I ion and of neutral I with $KClO_3$ is accelerated in the presence of concd. solns. of NaCl; the acceleration is in direct proportion to the concn. of NaCl. The NaCl also acts as a salting-out agent on the I formed, decreasing the concn. of the latter in soln. With rising temp. the accelerating effect of NaCl decreases. There is a const. relation of 1:1 between the I remaining in soln. and the unoxidized I ion, which indicates the presence of some unstable compd. In the oxidation of I in NaCl medium Cl acts as an oxidizing agent. The mechanism of oxidation becomes more clear by assuming that the oxidation is caused by $HClO_3$ and not by ClO_3^-. An increase in the concn. of acid is also an important factor in the acceleration of the reaction, whereby smaller concns. of I require correspondingly more acid. The accelerating effect of $FeCl_3$ is also observed in NaCl medium. By changing the amt. of $KClO_3$ it is possible to terminate the oxidation with formation of neutral I, or ICl or iodate. $KClO_3$ and I in the mol. proportion of 1 to 3 give ICl, and that of 5 to 3 give KIO_3; the intermediary proportions give a mixt. of both. The iodate is ppted. from the system as $KHI_2O_6.KCl$. Depending on the amt. of H_2SO_4, the oxidation may be regulated from a quiet to a turbulent progress.

CHAS BLANC

A50-SL4 METALLURGICAL LITERATURE CLASSIFICATION

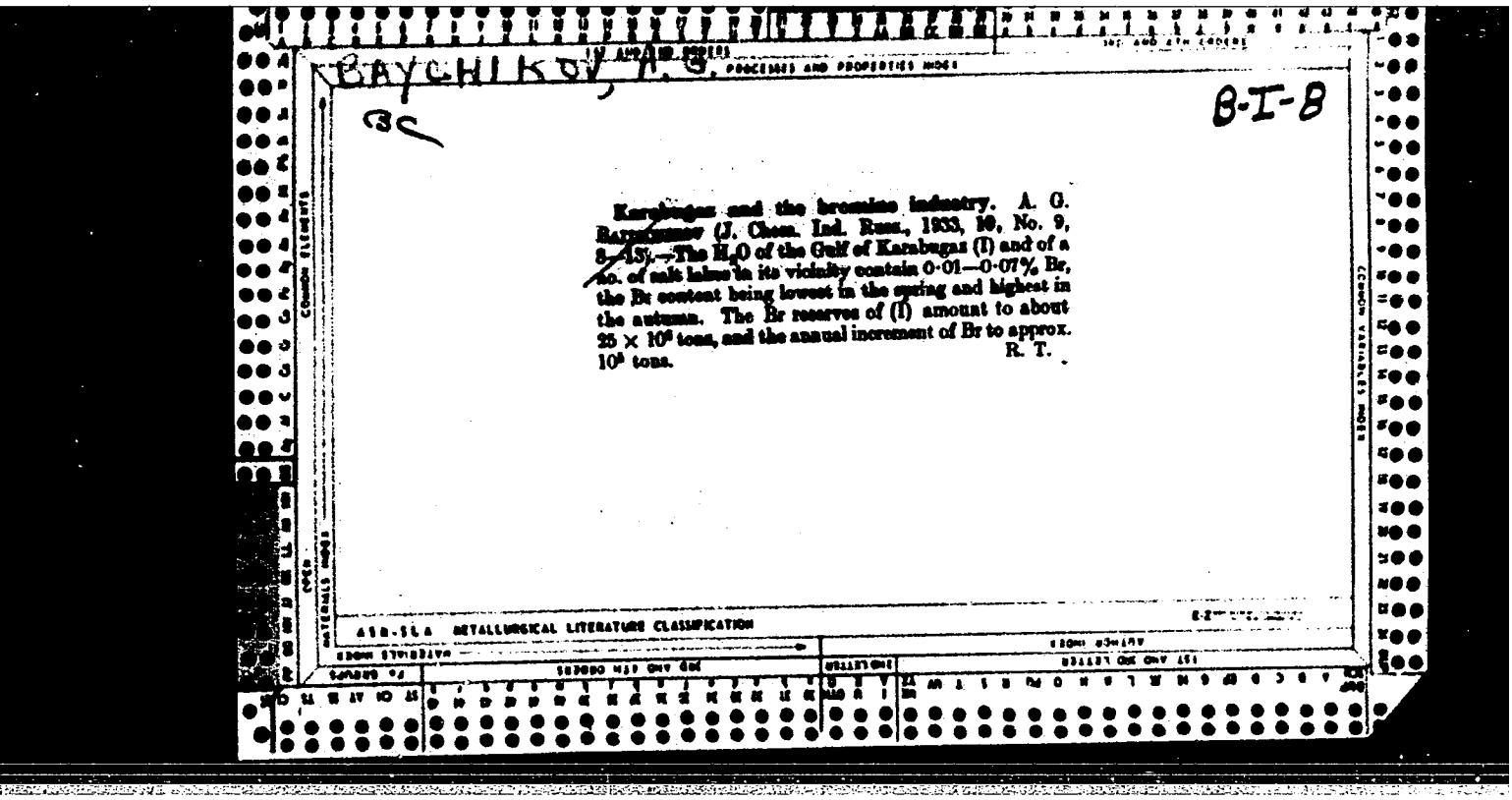


BAYCHIKOV, A.G.

CA 7

The determination of bromides in the presence of iodides and chlorides. A. G. BAICHIKOV. *J. Chem. Ind.* (Moscow) 8, No. 15 16, 54 8(1931). Directions are given for treating a soln. of alkali halides with $KMnO_4$ under conditions such that I^- is converted to IO_3^- while Br_2 and Cl_2 are formed from Br^- and Cl^-. The Br_2 and Cl_2 are removed from the soln. by shaking with $CHCl_3$ and reduced to Br^- and Cl^- again by treatment with $NaHSO_3$. Then, under quite different conditions, treatment with MnO_4^- serves to liberate Br_2 without oxidation of the Cl^- and the liberated Br_2 can be titrated iodometrically.

H. M. Leicester

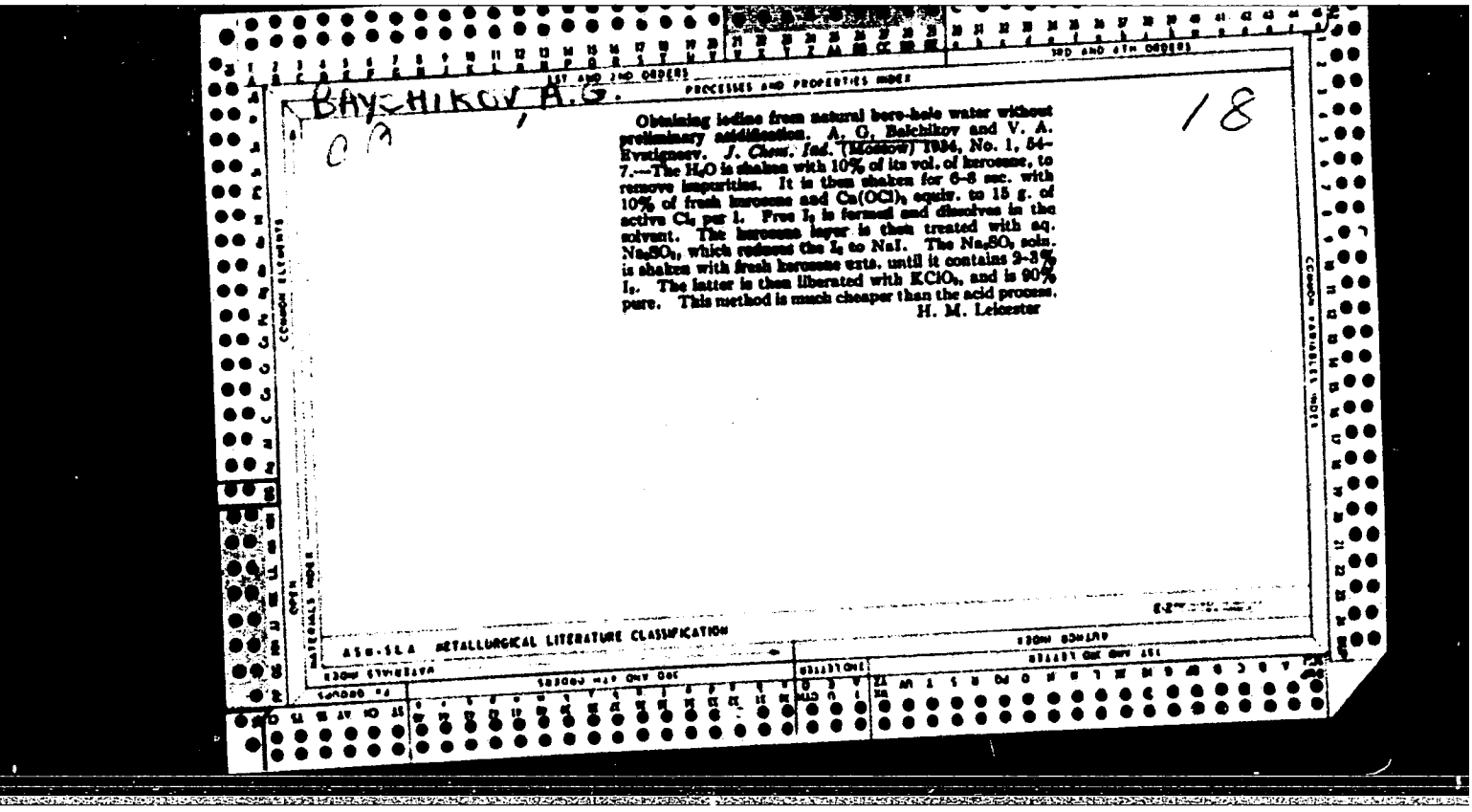


BAYCHIKOV, A. G.

B-I-B

Karabugas and the bromine industry. A. G. Baychikov (J. Chem. Ind. Russ., 1933, 10, No. 9, 8–15).—The H_2O of the Gulf of Karabugas (I) and of a no. of salt lakes in its vicinity contain 0·01—0·07% Br, the Br content being lowest in the spring and highest in the autumn. The Br reserves of (I) amount to about 25×10^6 tons, and the annual increment of Br to approx. 10^5 tons. R. T.

A10-51A METALLURGICAL LITERATURE CLASSIFICATION



BAYCHIKOV, A.G.

CA

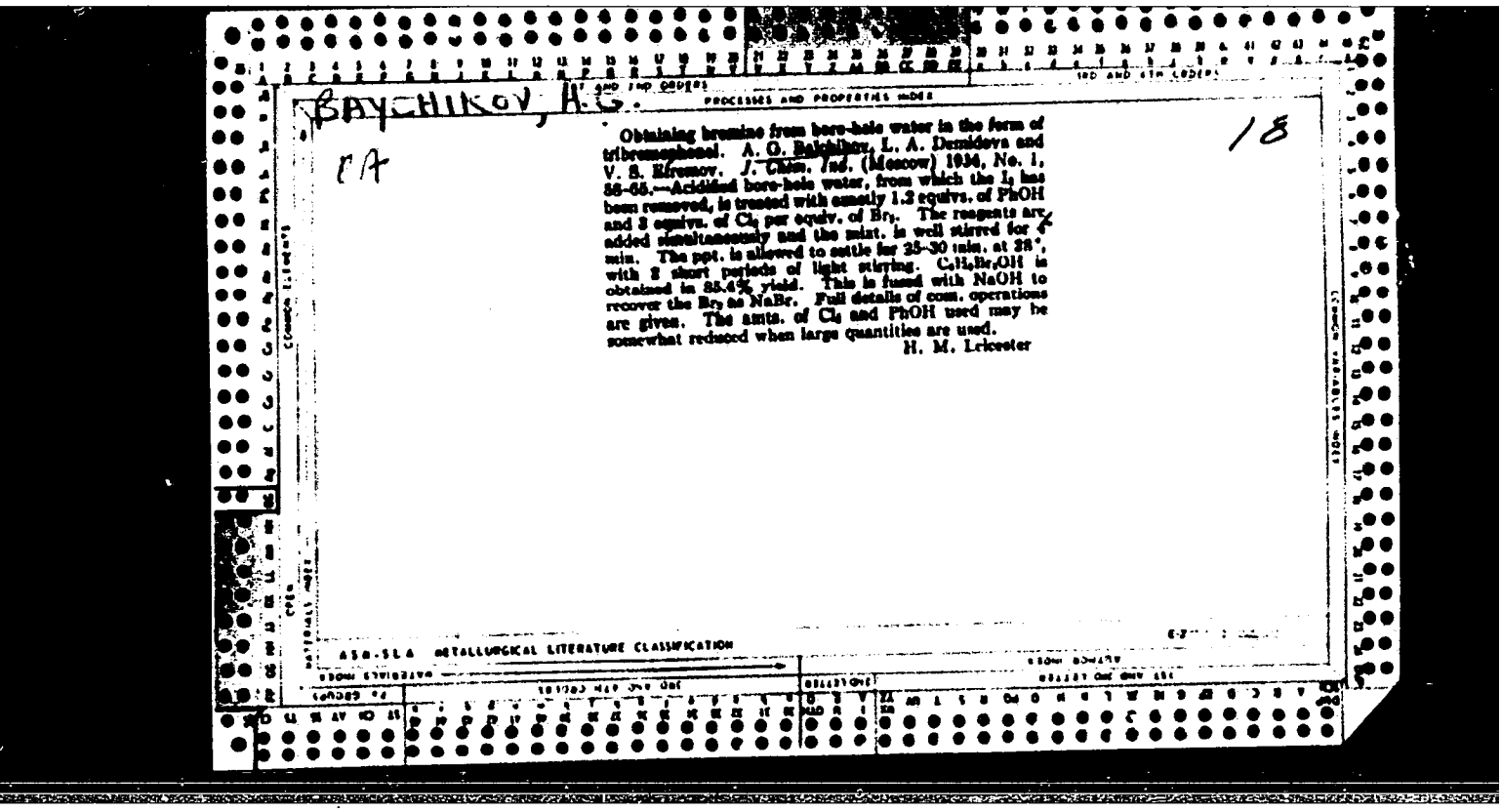
18

PROCESSES AND PROPERTIES INDEX

Obtaining iodine from natural bore-hole water without preliminary acidification. A. G. Baichikov and V. A. Rvaigorov. *J. Chem. Ind.* (Moscow) 1934, No. 1, 54-7.—The H_2O is shaken with 10% of its vol. of kerosene, to remove impurities. It is then shaken for 6-8 sec. with 10% of fresh kerosene and $Ca(OCl)_2$ equiv. to 15 g. of active Cl_2 per l. Free I_2 is formed and dissolves in the solvent. The kerosene layer is then treated with aq. Na_2SO_3, which reduces the I_2 to NaI. The Na_2SO_3 soln. is shaken with fresh kerosene extn. until it contains 2-3% I_2. The latter is then liberated with $KClO_3$, and is 90% pure. This method is much cheaper than the acid process.

H. M. Leicester

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



BRYCHIKOV, A. G.

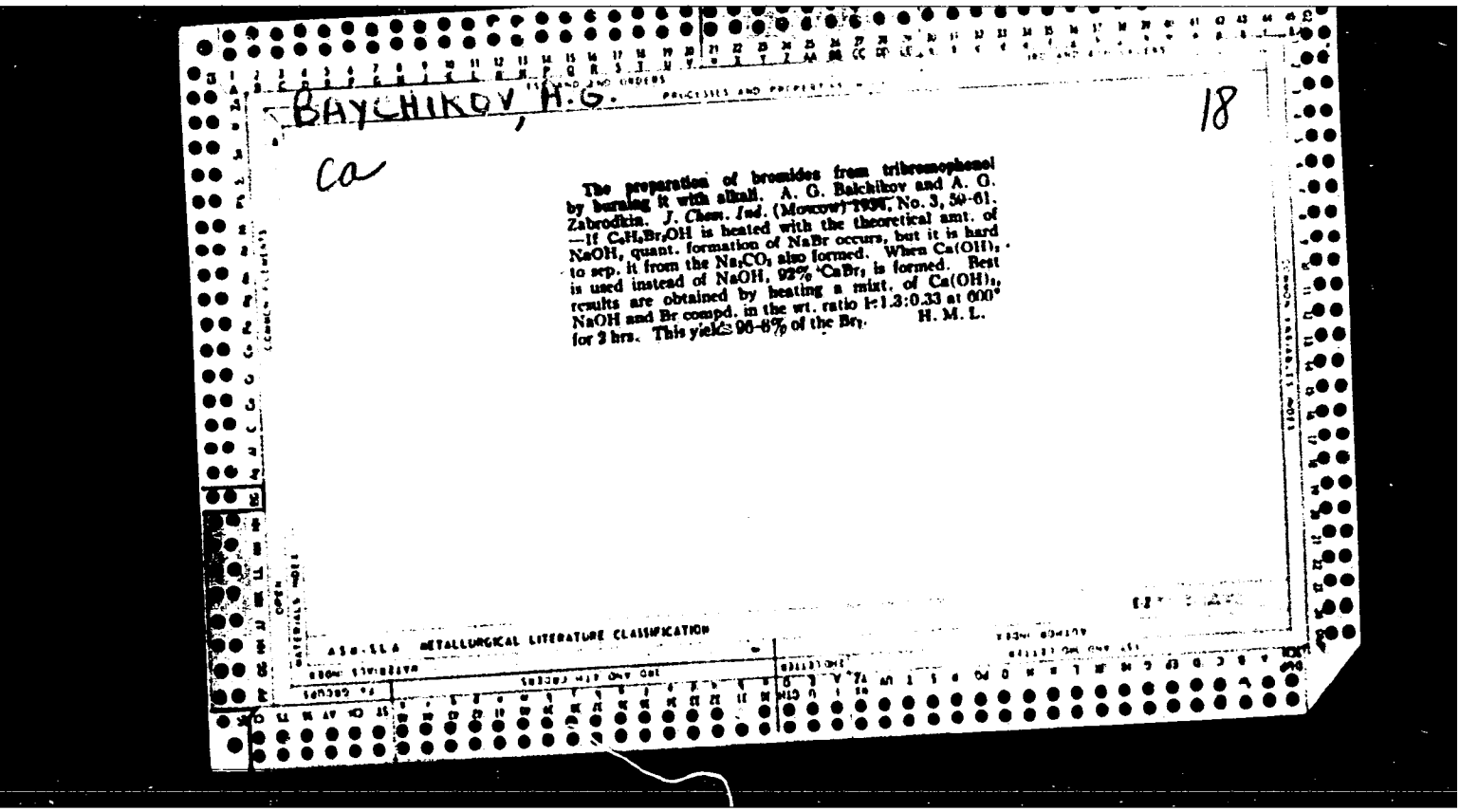
PROCESSES AND PROPERTIES INDEX

Obtaining bromine from bore-hole water in the form of tribromophenol. A. G. Bakhilov, L. A. Demidova and V. S. Efremov. *J. Chim. Ind.* (Moscow) 1934, No. 1, 58-65.—Acidified bore-hole water, from which the I_2 has been removed, is treated with exactly 1.2 equivs. of PhOH and 3 equivs. of Cl_2 per equiv. of Br_2. The reagents are added simultaneously and the mixt. is well stirred for 5 min. The ppt. is allowed to settle for 25-30 min. at 28°, with 2 short periods of light stirring. $C_6H_2Br_3OH$ is obtained in 85.4% yield. This is fused with NaOH to recover the Br_2 as NaBr. Full details of com. operations are given. The amts. of Cl_2 and PhOH used may be somewhat reduced when large quantities are used.

H. M. Leicester

18

A58-SL4 METALLURGICAL LITERATURE CLASSIFICATION



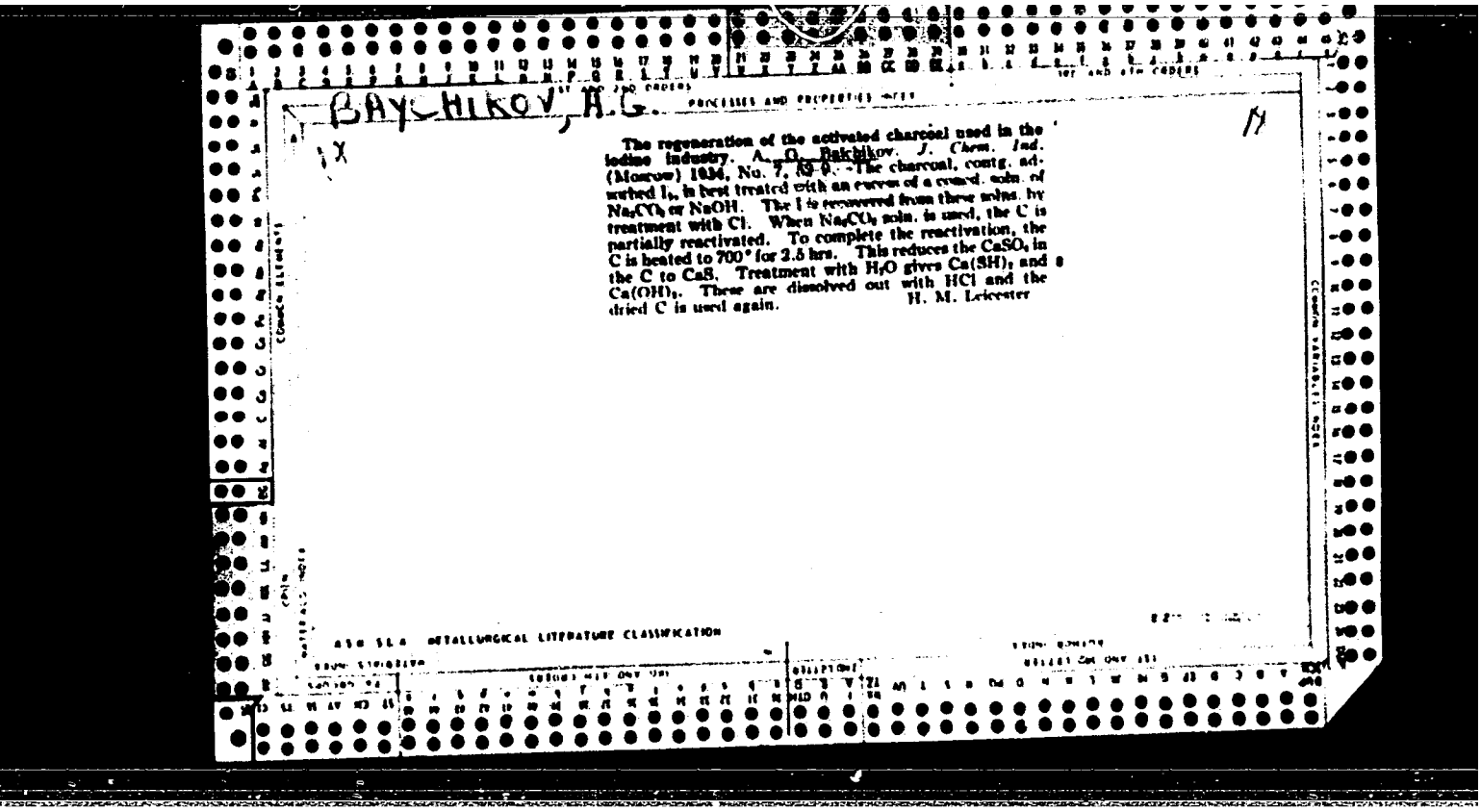
BAYCHIKOV, H.G.

18

Ca

The preparation of bromides from tribromophenol by burning it with alkali. A. G. Baichikov and A. G. Zabrodkin. *J. Chem. Ind.* (Moscow) 1930, No. 3, 59-61.—If $C_6H_2Br_3OH$ is heated with the theoretical amt. of NaOH, quant. formation of NaBr occurs, but it is hard to sep. it from the Na_2CO_3 also formed. When $Ca(OH)_2$ is used instead of NaOH, 92% $CaBr_2$ is formed. Best results are obtained by heating a mixt. of $Ca(OH)_2$, NaOH and Br compd. in the wt. ratio 1:1.3:0.33 at 600° for 3 hrs. This yields 96-8% of the Br. H. M. L.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

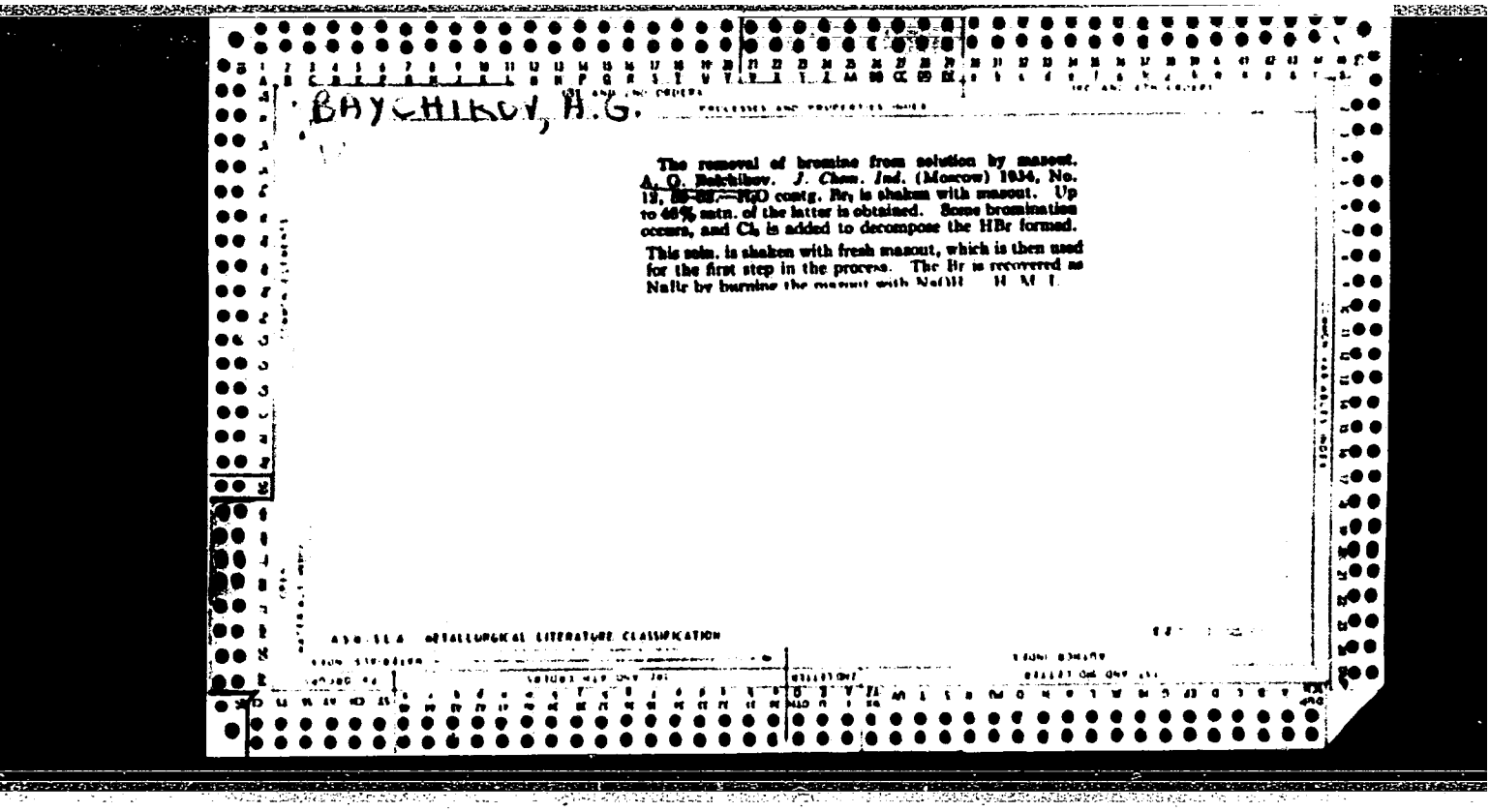


BAYCHIKOV, A.G.

The regeneration of the activated charcoal used in the iodine industry. A. G. Baichikov. *J. Chem. Ind.* (Moscow) 1934, No. 7, 48-9.—The charcoal, contg. adsorbed I_2, is best treated with an excess of a cold. soln. of Na_2CO_3 or NaOH. The I is recovered from these solns. by treatment with Cl. When Na_2CO_3 soln. is used, the C is partially reactivated. To complete the reactivation, the C is heated to 700° for 2.5 hrs. This reduces the $CaSO_4$ in the C to CaS. Treatment with H_2O gives $Ca(SH)_2$ and $Ca(OH)_2$. These are dissolved out with HCl and the dried C is used again.

H. M. Leicester

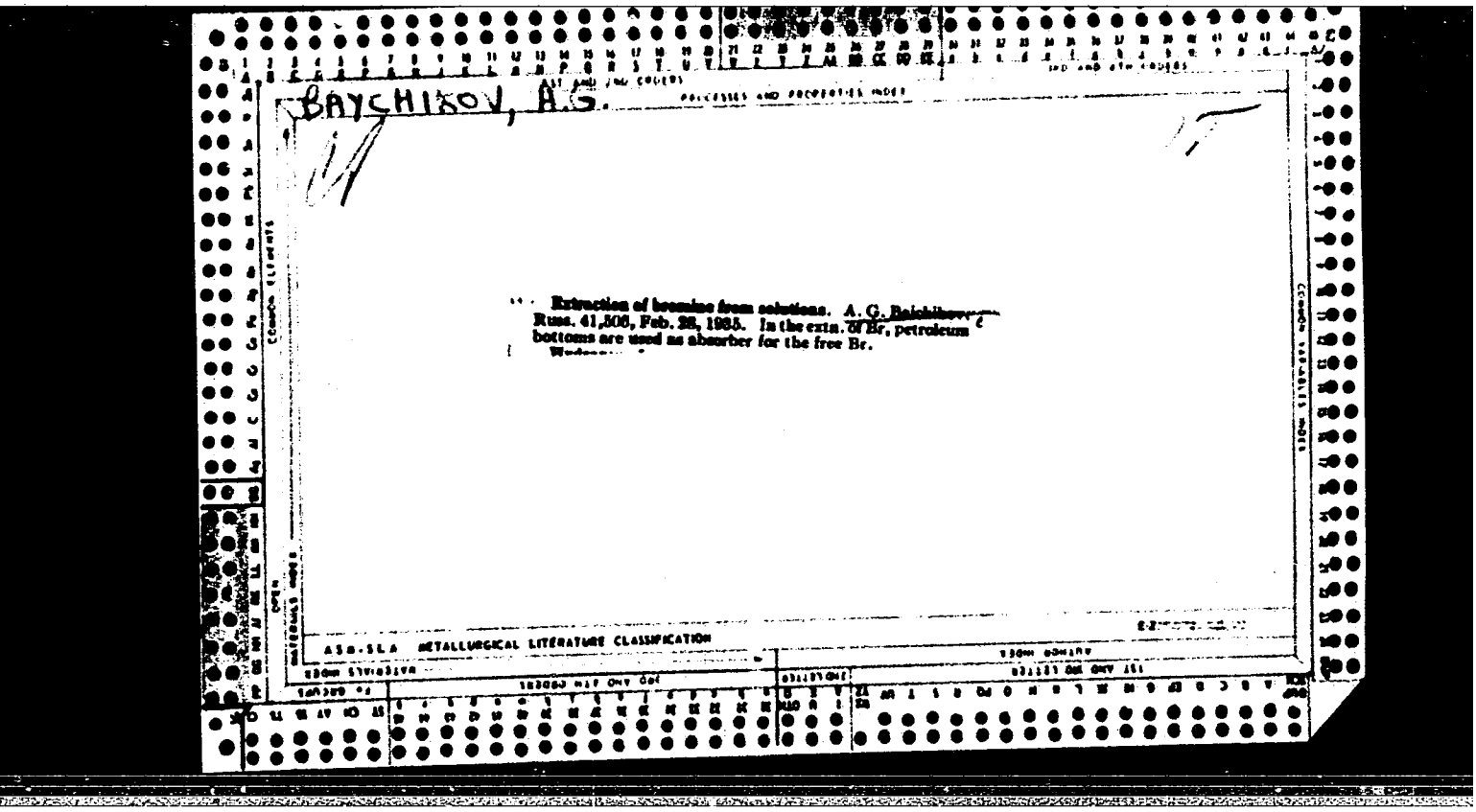
A54 SL4 METALLURGICAL LITERATURE CLASSIFICATION



BAYCHILOV, A.G.

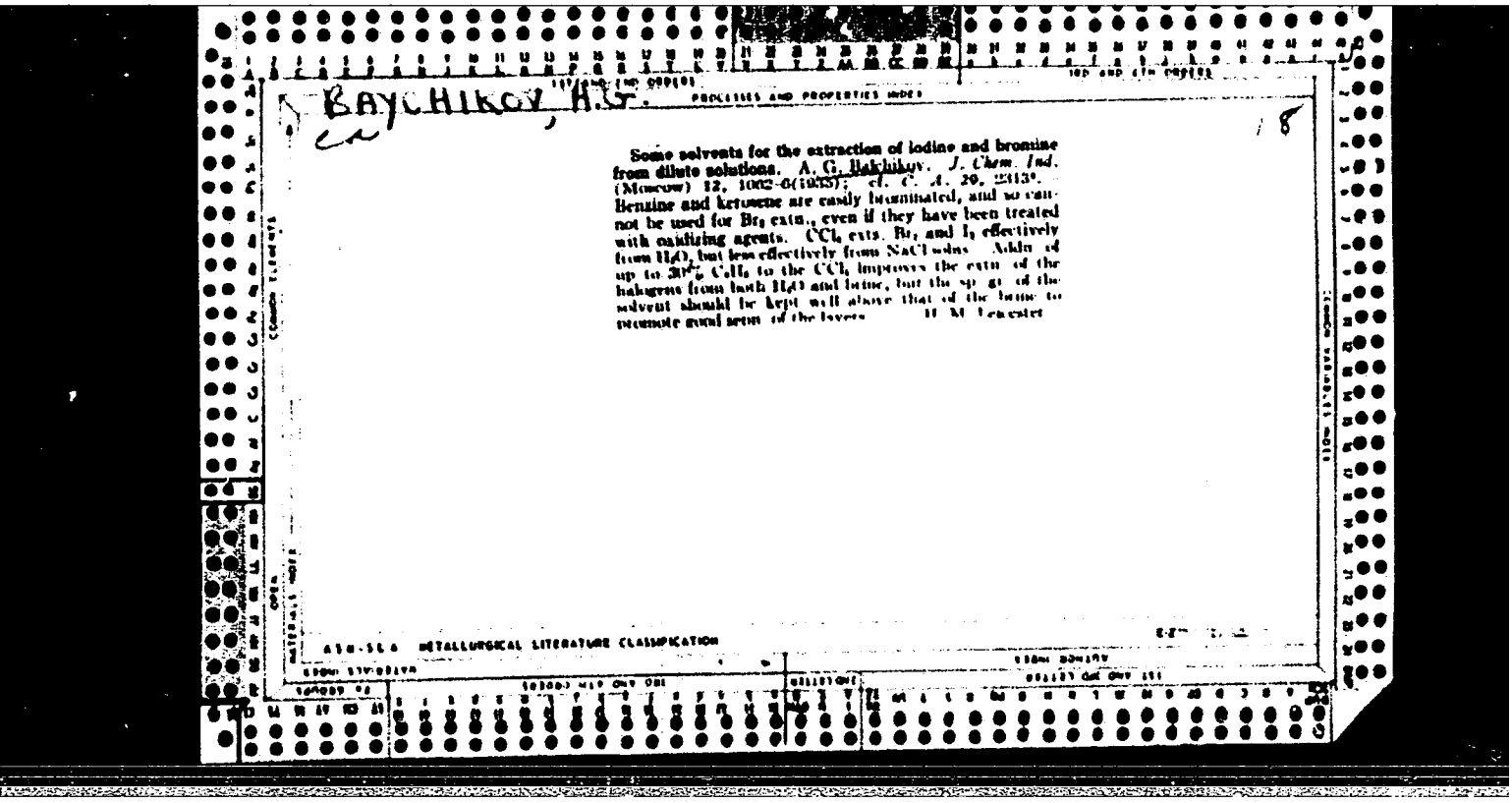
The removal of bromine from solution by masout. A. G. Baichilov. *J. Chem. Ind.* (Moscow) 1934, No. 12, [illegible]—NaOD contg. Br_2 is shaken with masout. Up to 66% extn. of the latter is obtained. Some bromination occurs, and Cl_2 is added to decompose the HBr formed. This soln. is shaken with fresh masout, which is then used for the first step in the process. The Br is recovered as NaBr by burning the masout with NaOH [illegible]

A.S.M. METALLURGICAL LITERATURE CLASSIFICATION


BAYCHIKOV, A.G.

Extraction of bromine from solutions. A. G. Baichikov. Russ. 41,506, Feb. 28, 1935. In the extn. of Br, petroleum bottoms are used as absorber for the free Br.

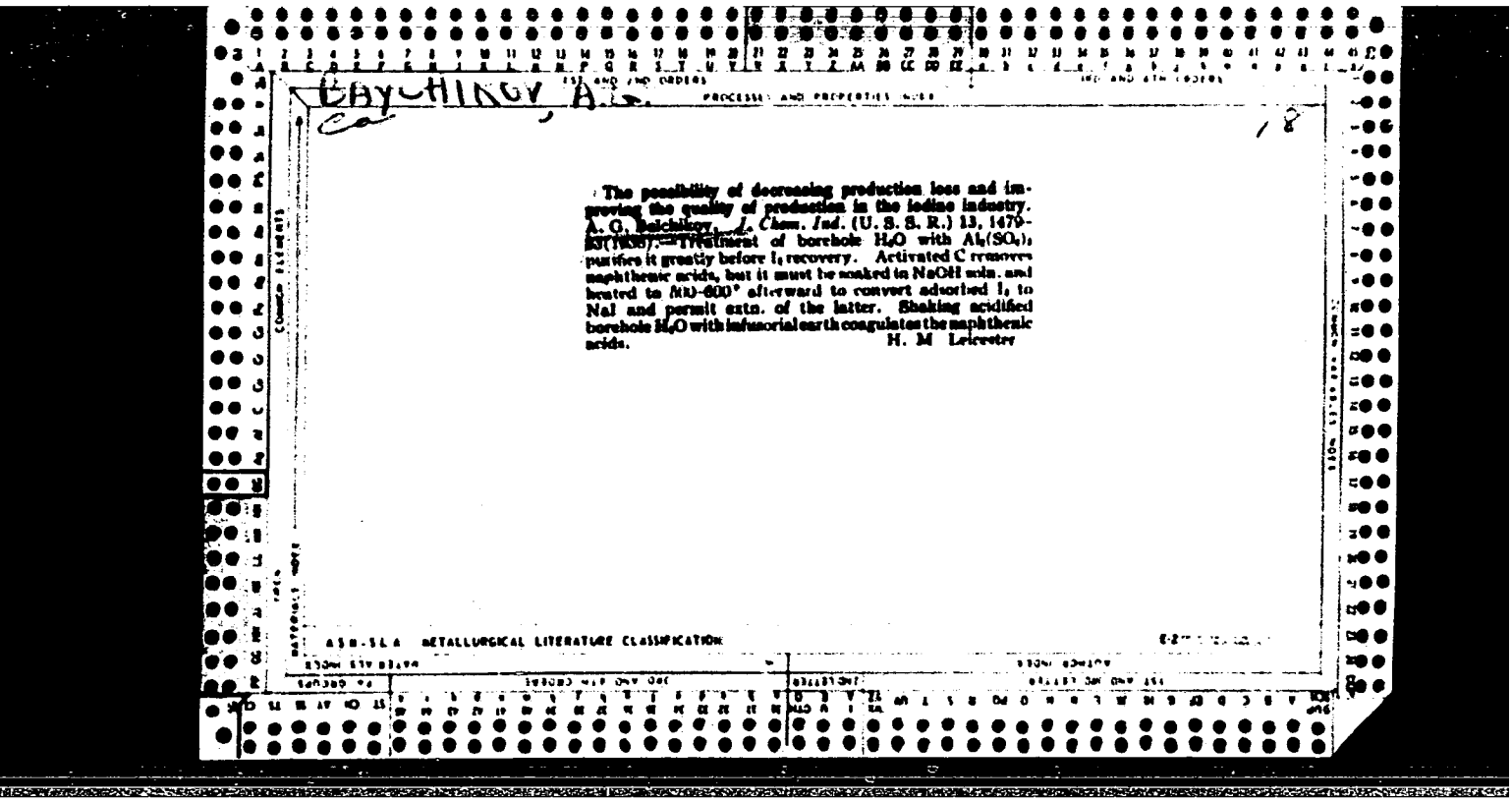
A58-5LA METALLURGICAL LITERATURE CLASSIFICATION



BAYCHIKOV, A.G.

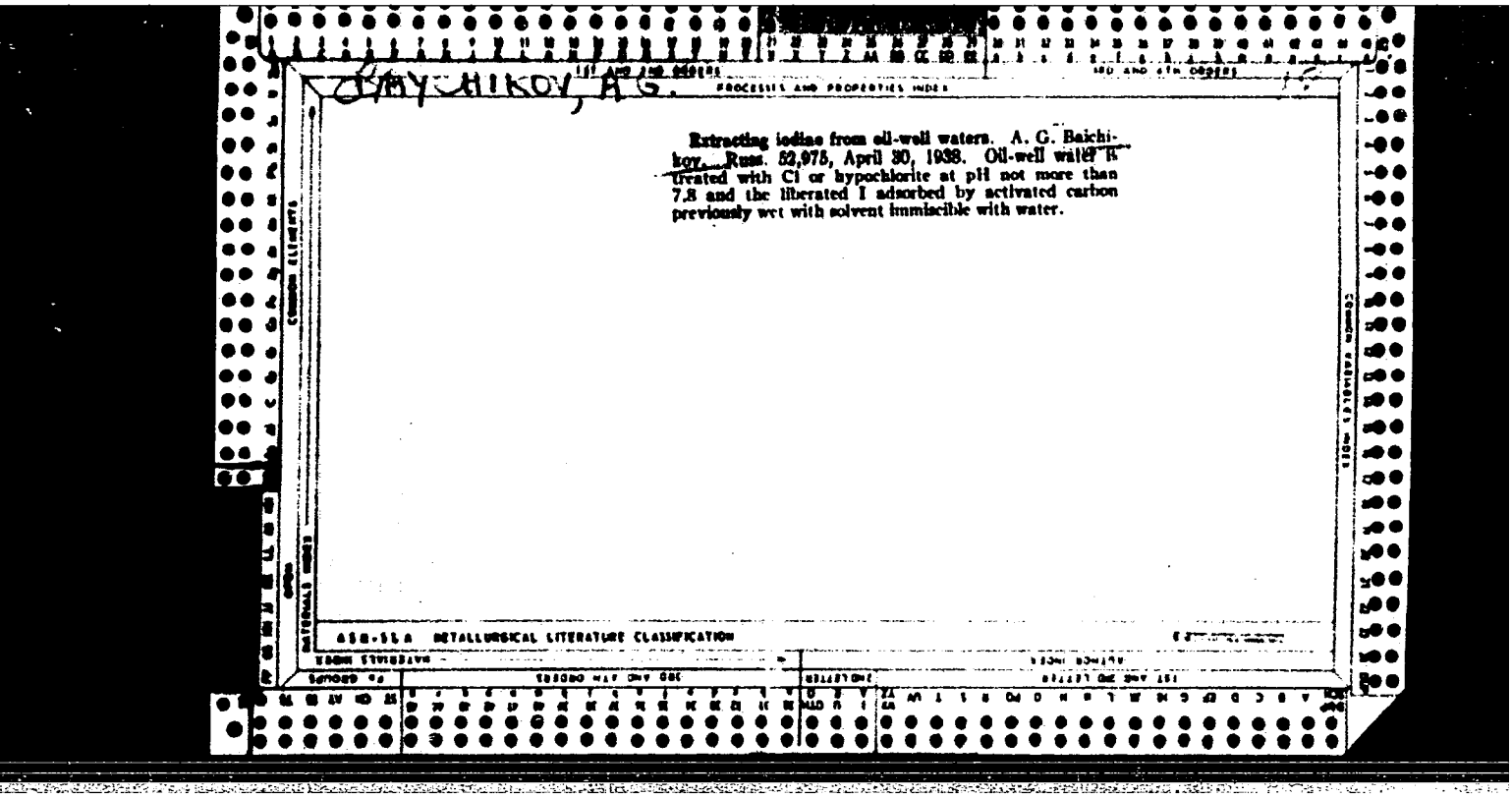
Some solvents for the extraction of iodine and bromine from dilute solutions. A. G. Baikhikov. *J. Chem. Ind.* (Moscow) 12, 1002-6(1935); cf. *C. A.* 29, 2313⁹. Benzine and kerosene are easily inaminated, and so cannot be used for Br_2 extn., even if they have been treated with oxidizing agents. CCl_4 exts. Br_2 and I_2 effectively from H_2O, but less effectively from NaCl soln. Addn. of up to 30% C_6H_6 to the CCl_4 improves the extn. of the halogens from both H_2O and brine, but the sp. gr. of the solvent should be kept well above that of the brine to promote quick sepn. of the layers. H. M. Leicester

A58-55A METALLURGICAL LITERATURE CLASSIFICATION



The possibility of decreasing production loss and improving the quality of production in the iodine industry. A. G. Balchikov. *J. Chem. Ind.* (U. S. S. R.) 13, 1479-87(1936).—Treatment of borehole H_2O with $Al_2(SO_4)_3$ purifies it greatly before I_2 recovery. Activated C removes naphthenic acids, but it must be soaked in NaOH soln. and heated to 600-800° afterward to convert adsorbed I_2 to NaI and permit extn. of the latter. Shaking acidified borehole H_2O with infusorial earth coagulates the naphthenic acids. H. M Leicester

A58-SLA METALLURGICAL LITERATURE CLASSIFICATION

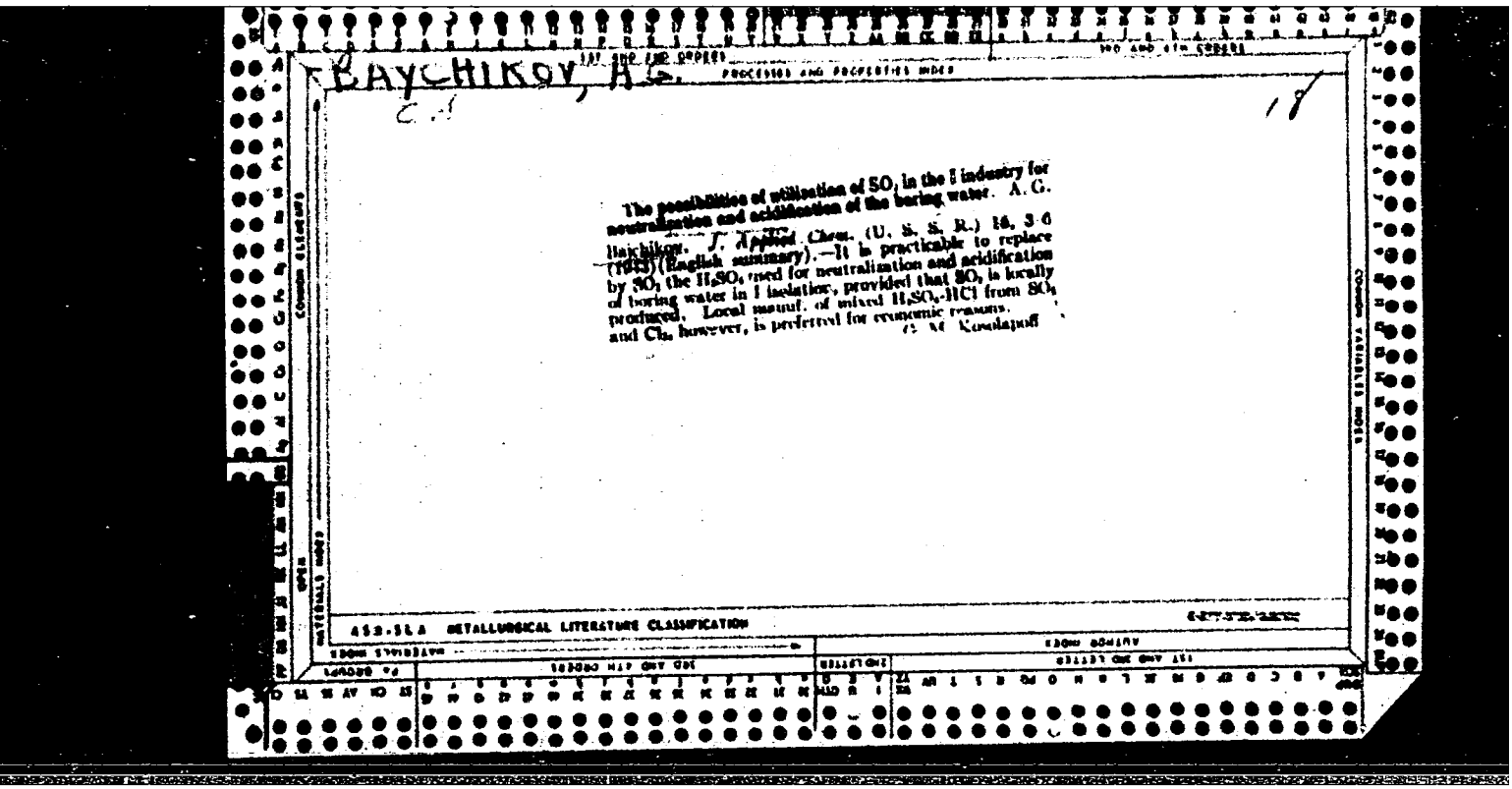


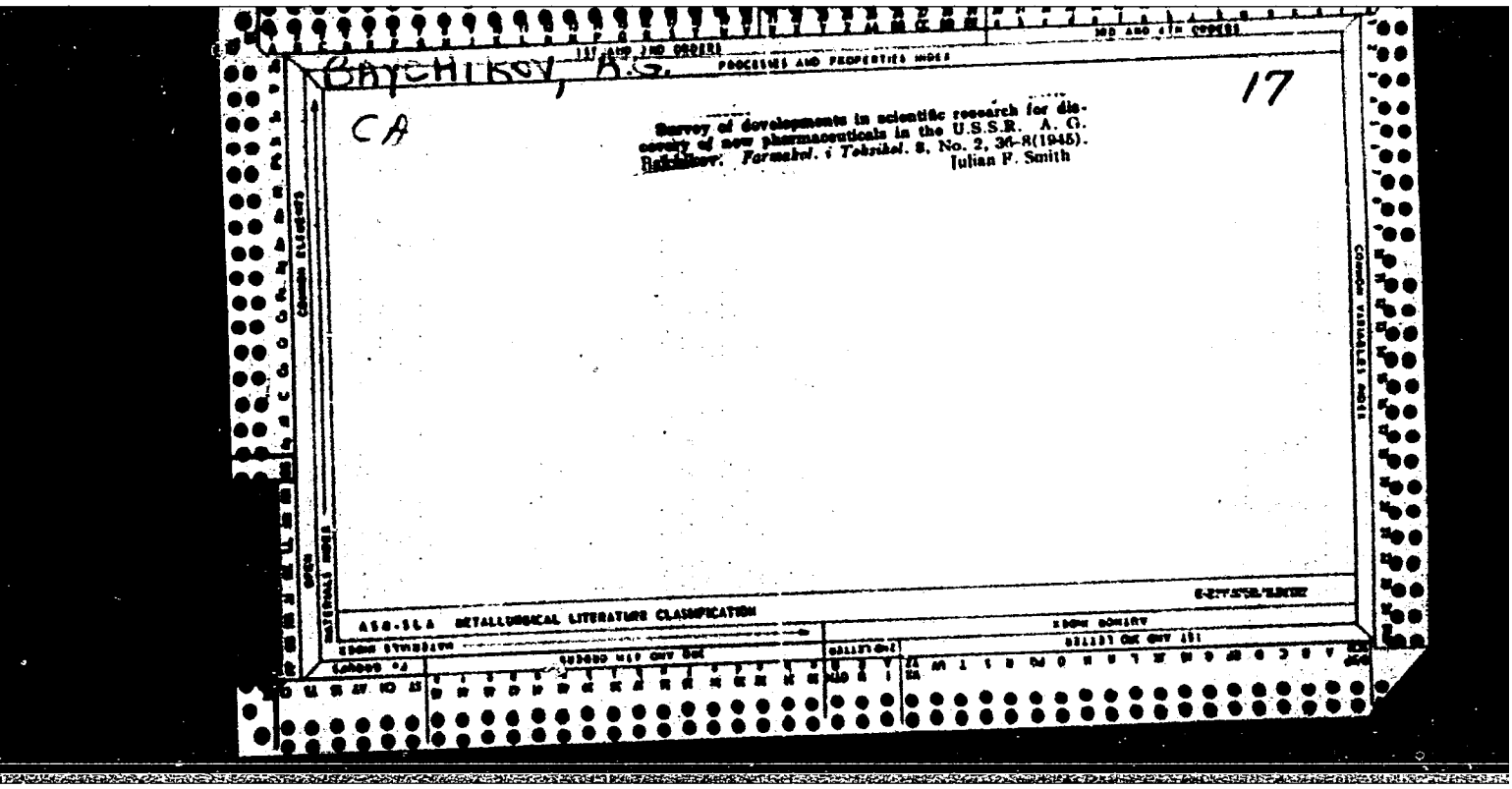
BAICHIKOV, A.G.

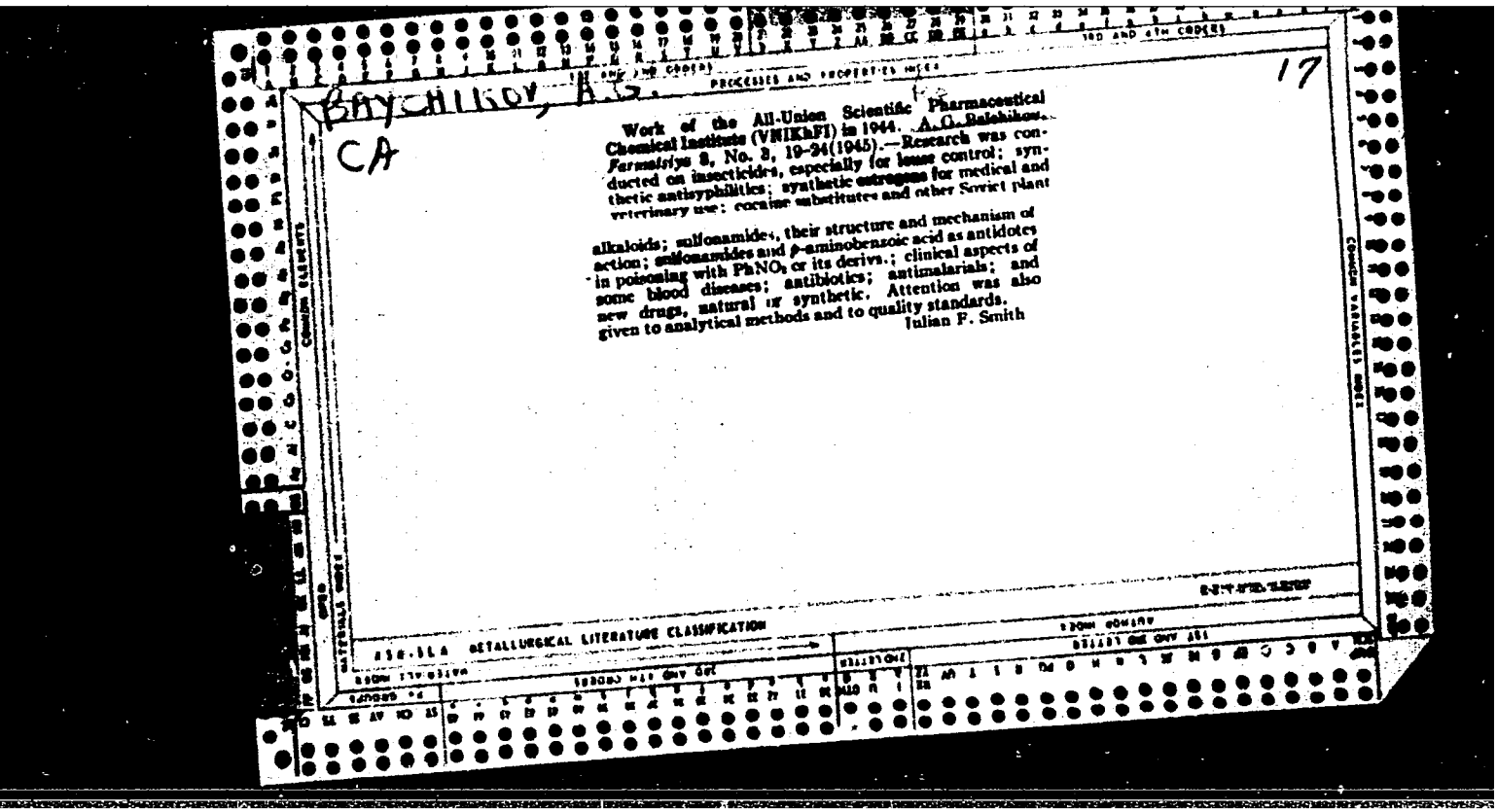
PROCESSES AND PROPERTIES INDEX

Extracting iodine from oil-well waters. A. G. Baichikov. Russ. 52,975, April 30, 1938. Oil-well water is treated with Cl or hypochlorite at pH not more than 7.8 and the liberated I adsorbed by activated carbon previously wet with solvent immiscible with water.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION







BAYCHIKOV, A., G., Pa. 173T62

USSR/Medicine - Inhalation, Apparatus Sep 50
Penicillin

"Treatment by an Aerosol of Penicillin," I. I. Yelkin, S. I. Zydel'shteyn, M. A. Sukhotinskaya, L. K. Rubtsova, Dept Exptl Therapy, All-Union Sci Res Inst of Penicillin

"Sov Med" No 9, pp 23-26

Describes inhalator and tests of use in administering penicillin in form of aerosol. Finds very effective for treating diseases of upper respiratory tract and lungs caused by micoorganisms sensitive to penicillin. Other antibiotics can be similarly administered in penicillin resistant infections. Inhalation of penicillin serosol 20-30 min creates therapeutic concn in blood of children for 8 hr and of adults for 24 hr. Dir, All-Union Sci Res Inst of Penicillin: A. G. Baychikov,

Pa. 173T62

RUBTSOV, M.V., prof., otv. red.; PERSHIN, G.N., prof., zam. otv. red.; MAGIDSON, O.Yu., prof., red.; MASHKOVSKIY, M.D., prof., red.; UTKIN, L.M., prof., red.; RUZHENTSEVA, A.K., prof., red.; SHCHUKINA, M.N., prof., red.; BAYCHIKOV, A.G., kand. tekhn. nauk, red.; MIKHALEV, V.A., kand. khim. nauk, red.; RYAZANTSEV, M.D., kand. tekhn. nauk, red.; SUVOROV, N.N., kand. khim. nauk, red.; PLYASHKEVICH, A.M., st. nauchnyy sotr., red.

[Basic trends in the work of the S.Ordzhonikidze All-Union Chemico-pharmaceutical Scientific Research Institute; survey of its activity from 1920 to 1957] Osnovnye napravleniia rabot VNIKhFI; obzor deiatel'nosti za 1920-1957 gg. Moskva, 1959. 649 p. (MIRA 15:5)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut.
(CHEMISTRY, MEDICAL AND PHARMACEUTICAL)

BAYCHIKOV, A.G.; BARMENKOV, A.S.; YEROSHIN, V.K.

Biosynthesis of steroids by microorganisms. Med.prom. 13 no.6:15-31 Je '59. (MIRA 12:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S.Ordzhonikidze.
(STEROIDS)

BAYCHIKOV, A.G.; MIKHEL'SON, L.A.

Foreign pharmaceutical research. Med.prom. 13 no.9:60-64 S '59.
(MIRA 13:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.
(UNITED STATES--DRUG INDUSTRY)

BAYCHIKOV, A.G.; MIKHEL'SON, L.A.

Foreign pharmaceutical research. Med.prom. 13 no.10:60-64 O '59.
(MIRA 13:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy khimiko-farmatsevticheskiy institut imeni S. Ordzhonikidze.
(EUROPE, WESTERN--DURG INDUSTRY)

BAYCHIKOV, A.G.; MIKHEL'SON, A. [deceased]

Foreign pharmaceutical research. Med.prom. 14 no.1:55-57 Ja '60.
(MIRA 13:5)

(ANTIBIOTICS)

BAYCHIKOV, A.G.; MIKHEL'SON, L.A. [deceased]

Research in the field of medicinal substances abroad. Med.prom. 14 no.2:55-57 F '60. (MIRA 13:5)
(STEROIDS)

BAYCHIKOV, A.G.; MIKHEL'SON, L.A. [deceased]

Foreign pharmaceutical research. Med.prom. 14 no.3:54-56 Mr '60.
(MIRA 13:6)

(CYTOTOXIC DRUGS)

BAYCHIKOV, A.G.; MIKHEL'SON, L.A. [deceased]

Drug research abroad. Med.prom. 14 no.4:58-62 Ap '60. (MIRA 13:6)

(SULFONAMIDES)

RAYCHIKOV, A.G.

Drug research abroad. Med.prom. 14 no.6:54-59 Je '60.
(MIRA 13:6)

(TRANQUILIZING DRUGS)

BAYCHIKOV, A.G.; MIKHEL'SON, L.A. [deceased]

Drug research in foreign countries. Med. prom. 14 no.8:53-55 Ag '60.
(MIRA 13:8)
(PHARMACEUTICAL RESEARCH)

BAYCHIKOV, A.G.

Drug research abroad. Med. prom. 14 no. 10:50-57 O '60.
(MIRA 13:10)

(PHARMACEUTICAL RESEARCH)

BAYCHIKOV, A.G.

Some problems in developing the production of synthetic steroid hormones and their analogues. Med. prom. 15 no.2:6-12 F '61. (MIRA 14:3)

(STEROIDS)

BAYCHIKOV, A.G.; INGERMAN, V.P.

Drug research in foreign countries. Med. prom. 15 no.7:59-64 Jl '61. (MIRA 15:6)
(DRUGS)

NATRADZE, A.G.; BAYCHIKOV, A.G.

For a higher level of research. Med.prom. 15 no.9:12-16 S '61.
(MIRA 14:9)

(PHARMACEUTICAL RESEARCH)

BALCHOROV, H. Ya.

Hydraulics

Mathematical Reviews
Vol. 15, No. 1
Jan. 1954
Mechanics

Balčorov, H. Ya. Plane parallel flow of an ideal incompressible liquid about a porous circular cylinder with linear and quadratic law of filtration. Vestnik Moskov. Univ. Ser. Fiz.-Mat. Estest. Nauk 1952, no. 8, 73–87 (1952). (Russian)

A cylindrical shell of uniform thickness and porosity, radius a, is placed with its axis perpendicular to the flow of an ideal liquid whose velocity at infinity is constant. The author seeks the steady-state flow of liquid outside the cylinder. The solution is first written in terms of the unknown $(\partial\phi/\partial\theta)_{r=a}$, where ϕ is the velocity potential. From the relation $\int_{-\pi}^{\pi}(\partial\phi/\partial r)_{r=a}d\theta=0$, and a previous result of the same author [same Vestnik 1951, no. 10 (unavailable)] relating $(\partial\phi/\partial r)_{r=a}$ and $(\partial\phi/\partial\theta)_{r=a}$, he derives an integral equation of the form

$$Z(\theta)=\int_{-\pi}^{\pi}f(\xi, Z)\operatorname{ctg}[(\xi-\theta)/2]d\xi$$

for $Z(\theta)=(\partial\phi/\partial\theta)_{r=a}+2aV_\infty\sin\vartheta$. The work is carried through for linear and quadratic laws of filtration; numerical examples are worked out for these cases, with approximate solutions of the nonlinear integral equation obtained by iteration. *R. E. Gaskell* (Seattle, Wash.).

BAYCHOROV, Kh. Ya.

Aug 52

USSR/Physics - Hydrodynamics

"The Circulation Around a Circular Cylinder by a Plane-Parallel Flow of an Ideal Incompressible Liquid for the Linear and Quadratic Law of Filtration," Kh. Ya. Baychorov, Chair of Hydromechanics

Vest Mos Univ, Ser Fizikomat i Yest Nauk, No 5, pp 73-87

States that the ordinary law of filtration (i.e. the linear dependence between pressure drop and filtration velocity) holds only for very small velocities, and that the quadratic law holds for

272295

filtration through thin coverings, these two cases being the most interesting. Here specializes his method of solving problems for any law of filtration (ibid. No 10, 1951).

KASHTANOV, L.I.; PATUSHINSKAYA, A.A.; BAYCHOROVA, R.Ya.

Ancient bronzes of China. Khim.nauka i prom. 2 no.4:529-530 '57
(MIRA 10:11)

1. Kafedra khimii Vsesoyuznogo zaochnogo mashinostroitel'nogo instituta.

(China--Bronze)

BAYCHTOK, L. L.

36973. Sluchay Epitemy Dar'ye, Lechennoy Ekstraktom Aloye. Uchen. Zapiski (L'vovsk. Nauch.-issled. Kozhno-venerol. In-t), t. II, 1949, c. 104-06

SO: Letopis' Zhurnal'nykh Statey, Vol 50, Moskva, 1949

BAYDA, A.I.

The resolutions of the twenty-second Congress of the CPSU will be fulfilled. Transp. stroi. 12 no.4:7-9 Ap '62. (MIRA 15:5)

1. Nachal'nik tresta Yugozaptransstroy.
(Construction industry)

BAYDA, A.I.

Improve the industrialization of construction. Transp. stroi. 15 no.7: 6-7 Jl '65. (MIRA 18:7)

BAYDA, E. N.

BAYDA, E. N. --"Determination of Stresses and Displacements in Anisotropic Bodies with the Aid of Three Functions." * (Dissertations for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions) Leningrad Order of Labor Red Banner Engineering Construction Inst, Leningrad, 1955

SO: Knizhnaya Letopis', No. 25, 18 Jun 55

* For Degree of Candidate in Technical Sciences

16(1),16(2) - 16.7300

67065

SOV/44-59-9-9154

Translation from: Referativnyy zhurnal.Matematika,1959,Nr 9,p 102 (USSR)

AUTHOR: Bayda,E.N.

TITLE: On the Method of the Three Functions of the Anisotropic Body

PERIODICAL: Sb.nauchn.tr.Leningr.inzh.-stroit.in-ta 1958,vyp 29,12-45

ABSTRACT: The author considers the elastic equilibrium of a homogeneous body with a rectilinear anisotropy of most general kind (21 elastic constants). It is shown that the projections of the shifts and the components of the tensions can be expressed by three functions $\phi_i(x,y,z)$ $(i=1,2,3)$ each of which satisfies the same differential equation of sixth order (this equation is linear, has constant coefficients and contains only the sixth derivative beside of the free term and the function term). The author establishes formulas which combine shifts and tensions with the three functions ϕ_i; in the special case of an isotropic body these formulas are changed into the well-known formulas of B.G.Galerkin. In the case of an orthotropic body the general representation of the shifts and tensions with the aid of three functions in general coincides with the representationproposed by S.Kossakovskaya (Byul.Pol'skoy A.N.,1955,otd.4,3,Nr 1,3-6). Furthermore two special problems are considered: The bending of an

Card 1/2

16(1),16(2)

67065

SOV/44-59-9-9154

On the Method of the Three Functions of the Anisotropic Body

orthotropic thick plate with supported sides by an arbitrary normal load in two cases: a) the plan of the plate is a rectangle, b) the plan of the plate is an isosceles right triangle. The solution for a rectangular plate is carried out with the aid of the functions

$$\phi_1 = \phi_2 = 0, \quad \phi_3 = \sum_{k=1}^{\infty} \sum_{n=1}^{\infty} f_{kn}(z) \sin \frac{k\pi x}{a} \sin \frac{n\pi y}{b}$$

which satisfy the conditions at the boundary of the plate. Every f_{kn} is determined out of the equation for ϕ_3 and contains 6 free constants which are obtained from the conditions at the boundary of the loaded and the unloaded plate. The author gives the results of the calculation for a plate with given elastic constants which is bended by a sinusoidally distributed load. The results are compared with the results obtained with the aid of the approximate bending theory for plates.
In the case of a triangular plate it holds $\phi_1 = \phi_2 = 0$ and ϕ_3 is a double series similar to the series for the rectangular plate.
Bibliography with 27 titles.

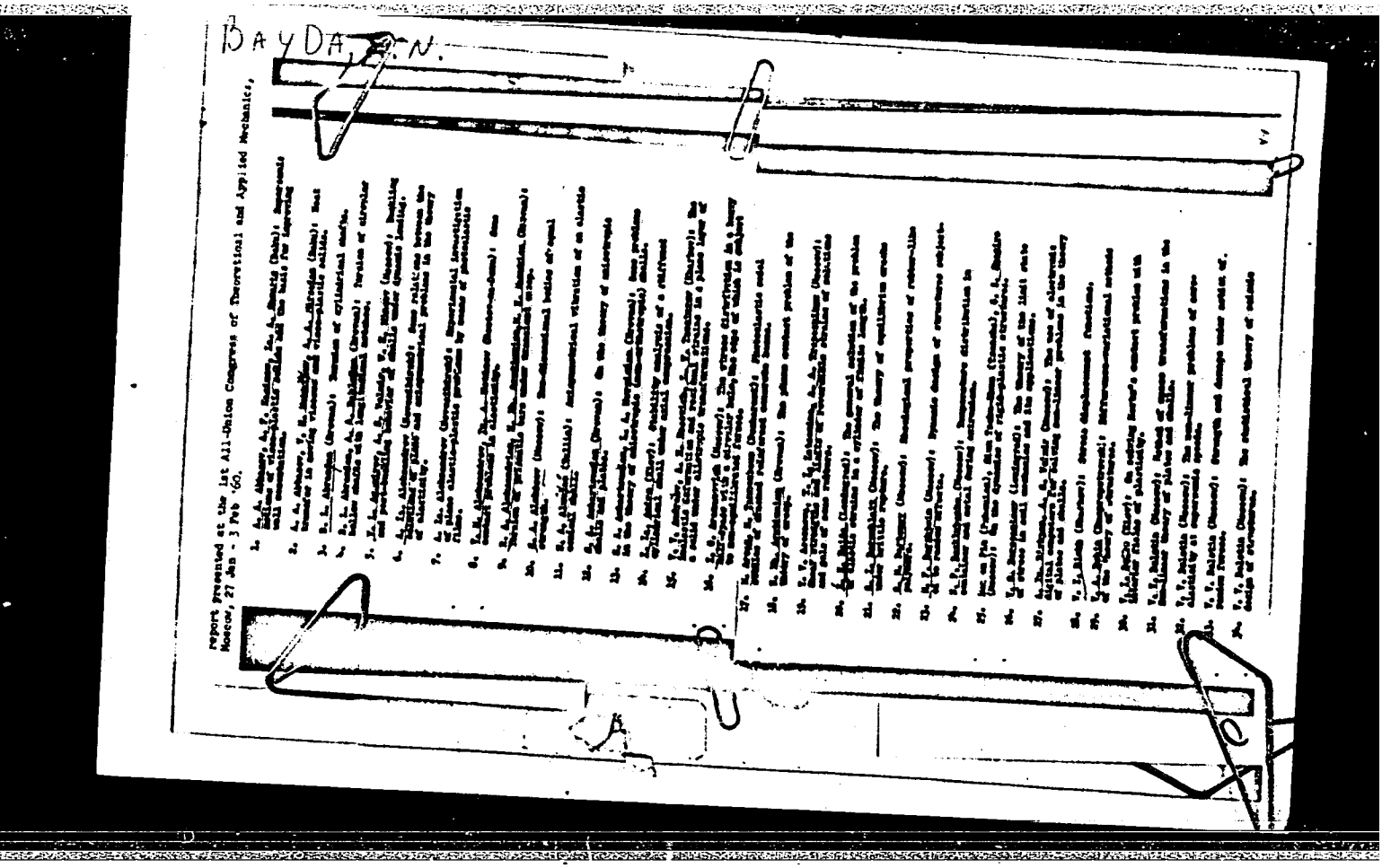
Card 2/2

S.G.Lekhnitskiy

BAYDA, E.N.

General solution of the problem of the elastic deformed condition of solid and slanting cylinders. Nauch.dokl.vys.shkoly; stroi. no.2:37-41 '59. (MIRA 13:4)

1. Rekomendovana kafedroy soprotivleniya materialov Leningradskogo inshenerno-stroitel'nogo instituta.
(Elastic plates and shells)



S/124/62/000/001/035/046
D237/D304

24.4200

AUTHOR: Bayda, E. N.

TITLE: Investigating the formal solution of the problem on the elastically deformed state of a cylinder

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 1, 1962, 2, abstract 1V8 (V sb. XVIII Nauchn. konferentsiya prof.-prepodavat. sostava Leningr. inzh.-stroit. in-ta s uchastiyem predstavit. stroit. organizatsiy, predpriyatiy i nauchno-tekhn. o-v. Dokl. sektsiy soprotivl. materialov matem. i teor. mekhan., fiz., khimii i elektrotekhn., L., 1960, 5-10)

TEXT: In the author's former article (Nauchn. dokl. vyssh. shkoly. Stroitel'stvo, 1959, no. 2, 37-41-RZhMekh, 1961, 1V7), solution of the problem on the elastically deformed state of a solid cylinder is reduced to solving an infinite system of linear

Card 1/2

equations. In the present work, the problem of existence of a solution to that infinite system of equations is considered. It is shown that the sum of the moduli of the coefficients of the infinite system is less than unity for each row of the system; i.e., the system is regular. The author asserts that this system has a unique finite solution if its free terms are bounded. (Reviewer's note: While proving that the sum of moduli of the coefficients of an infinite system is less than unity for each row, the author deduces that this system is fully regular. This is not true and should be considered as a mistake, as such a system is only regular. The condition that free terms of the system are bounded is not sufficient for the solution of a regular infinite system of linear equations. It is also necessary that free terms of the system tend to zero as $m \to \infty$.) [Abstracter's note: Complete translation.]

Card 2/2

BAYDA, Eduard Nikolayevich; GASTEV, V.A., doktor tekhn. nauk, prof., red.; ROTENBERG, A.S., red. izd-va; VORONETSKAYA, L.V., tekhn. red.

[General solutions in the theory of elasticity and problems on the parallelepiped and cylinder]Obshchie resheniia teorii upругosti i zadachi o parallelepipede i tsilindre. Pod red. V.A.Gasteva. Leningrad, Gosstroiizdat, 1962. 61 p. (MIRA15:8)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Gastev).

(Elasticity) (Elastic solids)

BAYDA, G.I.

BAYDA, G.I. [Baida, H.I.], geroy sotsialisticheoi pratsi, kombayner.

For village workers. Mekh. sil'. hosp. 9 no.1:9 Ja '58. (MIRA 11:2)

1. Novomoskovs'ka mashinno-traktorna stantsiia Dnipropetrovs'koi oblasti.

(Agricultural machinery)

PINSKIY, A.Ye. [Pins'kyi, O.IE.]; BAYDA, G.Ya. [Baida, H.IA.]

Folding machine for wadding manufactured on AChV-5h carding-and knitting systems. Leh.prom. no.1:31-32 Ja-Mr '64. (MIRA 19:1)

BAYDA, Kh.S.; SUVOROV, N.I.

General biological importance of astrobotanic investigations.
Trudy Sekt.astrobot. AN Kazakh.SSR. 1:18-24 '53. (MLRA 10:2)

(Life on other planets)

BAYDA, L.I.

Elektronnye usiliteli postoiannogo toka
(Electron amplifiers for direct current). Moskva,
Gosenergoizdat, 1953. 192 p.

SO: Monthly List of Russian Accessions, Vol. 7, No. 5, August 1954

BOGORODITSKIY, N.P., professor; VASIL'YEV, D.V., professor; BAYDA, I.I., dotsent; ODINTSOV, G.V., dotsent; SEMENKOVICH, A.A., dotsent; FATEYEV, A.V., dotsent; YURGENSON, R.I., dotsent; ARANOVICH, B.I., starshiy prepodavatel'; GEKTOR, D.S. starshiy prepodavatel'; POVOLOTSKIY, Ya.A., prepodavatel'.

Development of automatic control and telemechanics in the fifth five-year plan. Avtom. i telem. 14 no.2 238-240 Mr-Ap '53. (MLRA 10:3)

1. Leningradskiy elektrotekhnicheskiy institut im. V.I.Ul'yanova (Lenina)

(Automatic control) (Remote control)

BAYDA, Leonid Il'ich; DOBROTVORSKIY, Nikolay Stepanovich; ORSHANSKIY, Dmitriy L'vovich; PCHELINSKAYA, Sof'ya Nikodimovna; RAZUMOVSKIY, Nikolay Nikolayevich; SVIRSKIY, Yevgeniy Antonovich, [deceased]; FREMKE, Andrey Vladimirovich, professor, doktor tekhnicheskikh nauk; KAZARNOVSKIY, D.M., redaktor; ZABRODINA, A.A., tekhnicheskiy redaktor.

[Electric measurements; general course] Elektricheskie izmereniia; obshchii kurs. Izd. 2-e, perer. Moskva, Gos. energeticheskoe izd-vo, 1954. 496 p. (MLRA 7:12)
(Electric measurements)

RAYDA, L.I., ZAKHAROV, V.K.

Electronic low a.c. voltage regulator. Priborostroenie no.11:13-14 N '56. (MIRA 10:1)
(Electronic instruments) (Voltage regulators)

AUTHOR: BAYDA,L.I., ZAKHAROV,V.K. (Leningrad) 103-8-4/8

TITLE: Predetermination of the Operating Regime and Calculation of Electronic Voltage Stabilizers. (Vybor reshima i raschet elektronnykh stabilizatorov napryazheniya, Russian)

PERIODICAL: Avtomatika i Telemekhanika, 1957, Vol 18, Nr 8, pp 724-739 (U.S.S.R.)

ABSTRACT: Systems of electronic voltage stabilizers of the compensation type are investigated. A method of calculation is given, with the help of which sufficiently rational modes of operation for the assembly groups of the device can be selected and the corresponding parameters of the stabilizer can be calculated. By this means the experimental examination as well as tuning of the devices is considerably simplified. Small series (of 5-10 each) of some types of electronic voltage stabilizers were developed and built in the Laboratory for Automation and Remote Control of the Leningrad Electrotechnic Institute. Two of them are investigated in short and the schemes and parameters are described. (With 12 Illustrations and 2 Slavic References).

ASSOCIATION: Not given

PRESENTED BY:

SUBMITTED: 10.5.1956

AVAILABLE: Library of Congress

Card 1/1

BAYDA, L.I., kand.tekhn.nauk; RYBAK, S.S., inzh.

Contact transformer changing d.c. to a.c. and having a sparkless commutation. Vest.elektroprom. 28 no.8:53-57 Ag '57. (MIRA 10:10)

1.Leningradskiy elektrotekhnicheskiy institut.
(Electric transformers)

BAYDA, Leonid Il'ich; DOBROTVORSKIY, Nikolay Stepanovich; DUSHIN, Yevgeniy Mikhaylovich; MOKIYENKO, Dobroslava Nikolayevna; PREOBRAZHENSKIY Aleksey Alekseyevich; PCHELINSKAYA, Sof'ya Nikodimovna; STAROSEL'TSEVA, Yelena Aleksandrovna; FREMKE, Andrey Vladimirovich, doktor tekhn. nauk, prof.; ORSHANSKIY, D.L.; PREOBRAZHENSKIY, A.A., red.; SOBOLEVA, Ye.M., tekhn.red.

[Electrical measurements; a general course] Elektricheskie izmereniia; obshchii kurs. Izd.3., perer. i dop. [By] L.I. Baida i dr. Moskva, Gosenergoizdat, 1963. 428 p. (MIRA 17:3)