PHASE I BOOK EXPLOITATION SOV/5290

Soveshchaniye po prikladnoy gazovoy dinamike. Alma-Ata, 1956

Trudy Soveshchaniya po prikladnoy gazovoy dinamike, g. Alma-Ata, 25-26 oktyabrya 1956 g. (Transactions of the Conference on Applied Gas Dynamics, Held in Alma-Ata, 25-26 October 1956) Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1959. 233 p. Errata slip inserted. 900 copies printed.

Sponsoring Agency: Akademiya nauk Kazakhskoy SSR. Kazakhskiy gosudarstvennyy universitet imeni S.M. Kirova.

Editorial Board: Resp. Ed.: L.A. Vulis; V.P. Kashkarov; T.P. Leont'yeva and B.P. Ustimenko. Ed.: V.V. Aleksandriyskiy. Tech. Ed.: Z.P. Rorokina.

PURPOSE: This book is intended for personnel of scientific research institutes and industrial engineers in the field of applied fluid mechanics, and may be of interest to students of advanced courses in the field.

Transactions of the Conference (Cont.) SOV/5290

COVERAGE: The book consists of the transcriptions of 31 papers read at the conference on gas dynamics which was convened under the initiative of the Kazakhskiy gosudarstvennyy universitet imeni S.M. Kirova (Kazakh State University imeni S.M. Kirov) and the Institut energetiki Akademii nauk Kazakhskoy SSR Institute of Power Engineering of the Academy of Sciences Kazakhskaya SSR) and held October 25-26, 1956. Three branches of applied gas dynamics were discussed, namely: jet flow of liquids and gases, aerodynamics of furnace processes, and the outflow of liquids. The practical significance of the "Transactions" of the conference consists in the adaptation of theory to methods of technical computation and measuring methods related to industrial furnaces and other industrial processes in which aerodynamic phenomena play a predominant role. Eight papers read at the Conference are not included in this collection for various reasons. The authors of the missing papers are: L.D. L'vov (Thermal and Aerodynamic Characteristics of Pulverized Coal Flame Burners) and A.A. Goleyevskiy (Outlines and Physical Models of the Jet Motion Mechanics of Fluids), N.I. Akatnov, Ye. P. Bogdanov, S.V. Bukhman, T.K. Mironenko, A.B. Reznyakov, and G.V. Yakubov. L.G. Loytsyanskiy is mentioned as being in charge of a department of the Kazakh State University, and I.D. Malyukov, Candidate of Physical and Mathematical Sciences, Docent, as a member of the same university. References are found at the end of

Transactions of the Conference (Cont.) SOV/5290

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BESPALOVA, V. G.

A Contribution the Mechanics of Turbulent Liquid and Gas Jets p. 125

TRANSACTIONS OF THE 2ND REPUBLICAN CONFERENCE ON MATHEMATICS AND MECHANICS
(TRUDY VTOROY RESPUBLIKANSKOY KONFERENTSII PO MATEMATIKE I MEKHANIKE), 104
pages, published by the Publishing House of the AS KAZAKH SSR, ALMA-ATA, KAZSSR, 1962

BALAKLO, V.P., agronom-semenovod; BESPALOVA, V.I.

Our experiments on a state farm. Zhivotnovodstvo 24 no.6: 85-86 Je '62. (MIRA 17:3)

1. Chistyun'skiy sovkhoz, Novosibirsk. 2. Glavnyy zootekhnik Chistyun'skogo sovkhoza, Novosibirsk.

DOBRONRAVOV, F.N.; BESPALOVA, V.S.

Experience in the receiving, storage, and processing of sugar beets harvested with the continuous method in Kirghizistan. Sakh.prom. 37 no.9:46-48 S '63. (MIRA 16:9)

1. Novo-Troitskiy sakharnyy zavod.
(Kirghizistan—Sugar beets)

[illegible], Yuriy Vladimirovich; BESHALOVA, Ye.[illegible], red.; [illegible],
[illegible], mladsh. red.

[Distant roads..] Dorogi dal'nie... Moskva, Mysl', 19[illegible].
[illegible] p. ([illegible])

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120001-0"

38338 BESPALOVA, YU. G.

K voprosy ob otdalennykh rezul'tatakh operativnogo lecheniya privychnogo vyvikha plecha. Vestnik khirurgii im. Grekova, 1949, No 5, s. 57-58

BESPALOVA, Yug. G., kand. med. nauk.

Clinical picture and treatment of primary dislocation of the shoulder joint. Ortop. travm. protez., Moskva 19 no.6:13-18 N-D '58.
(MIRA 12:1)
1. Iz Leningradskogo instituta travmatologii i ortopedii (dir. - prof. V.S. Balakina).
(SHOULDER, disloc.
primary, clin. picture & ther. (Rus))

MARTYNOV, V.F., [illegible] Kh.D.; TITOV, M.I.

Synthesis of protected hexapeptide carbobenzoxy-L-phenylalanyl-L-leucyl-L-leucyl-L-phenylalanyl-L-leucyl-L-leucyl methyl ester. Vest. LGU 20 no.10:159-161 '65. (MIRA 18:7)

BESPALOVA, Z.G.

Biology of the propagation of Artemisia salina Kell. s.l., Artemisia taurica Willd.and the lavender Limonium Meyeri (Boiss.) Ktze, in the Nogaysk Steppe. Bot.zhur.41 no.11:1623-1629 N '56.
(MLRA 10:1)

1. Botanicheskiy institut imeni V.L. Komarova Akademii nauk SSSR, Leningrad.
(Nogaysk--Desert flora) (Roots (Botany))

BESPALOVA, Z.G.

Biology of Halocnemum strobilaceum (Pall.) Bot. zhur. 44 no.1:92-101 Ja '59. (MIRA 12:1)

1. Botanicheskiy institut imeni V.L. Komareva AN SSSR, Leningrad.
(Halocnemum)

BEYDEMAN, Irina Nikolayevna; BESPALOVA, Zoya Georgiyevna; RAKHMANINA, Aleksandra Timofeyevna; YUNATOV, A.A., doktor biolog.nauk, otv.red.; VIKHREV, S.D., red.izd-va; KRUGLIKOVA, N.A., tekhn.red.

[Studies on ecology, geobotany, agriculture, and drainage in the Kura-Aras Lowland of Transcaucasia; natural and anthropogenic changes of plant communities, water conditions and root systems of plants] Ekologo-geobotanicheskie i agromeliorativnye issledovaniia v Kura-Araksinskoi nizmennosti Zakavkaz'ia; estestvennye i antropogennye smeny rastitel'nykh soobshchestv, vodnyi rezhim i kornevye sistemy rastenii. Moskva, Izd-vo Akad.nauk SSSR, 1962. 464 p.
(MIRA 15:2)

(Kura Lowland--Botany)

BESPALOVA, Z.G.

Ecologic and biologic characteristics of flowering and dissemination of some species of feather grass in central Kazakhstan. Probl. bot. 6:325-335 '62. (MIRA 16:5)
(Kazakhstan—Feather grass) (Plants, Flowering of)

BESPALOVA, Z.G.; BORISOVA, I.V.

Phenological observations in steppe communities with the consideration of the morphology and biology of plants. Bot. zhur. 48 no.9:1271-1281 S '63. (MIRA 16:11)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

ARYASOV, I. (Saratovskaya obl.); BESPALOVA, Z. (Saratovskaya obl.)

Controlling the shield bug Eurygaster intergriceps. Zashch. rast. ot vred. i bol. 9 no. 4:10 '64. (MIRA 17:5)

BESPALOVA, Z.G.

Flowering and fruiting of some wormwoods of central Kazakhstan.
Bot. zhur. 49 no.2:223-229 F '64. (MIRA 17:6)

1. Botanicheskiy institut imeni V.L. Komarova Akademii nauk SSSR, Leningrad.

BESPALOVA, Z.G.

Flowering of Eurotia ceratoides (L.) C.A.M., Suaeda physofora Pall. and Petrosimonia brachyphylla (BGE.) Iljin. Bot. zhur. 49 no.12:1800-1804 D '64 (MIRA 18:2)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

BESPALOVA, Z.G.

Activity of the Scientific Council for the Problem 'Biological Basis for the Effective Use, Transformation, and Conservation of the Plant World." Rast. res. 1 no.1:161-163 '65.
(MIRA 18:6)

1. Botanicheskiy institut im. V.L. Komarova AN SSSR, Leningrad.

BESTALOVA, Z.G., kand.biolog.nauk

Problems facing Soviet botanists; session in Leningrad. Vest.AN SSSR 35 no.8:102 Ag '65. (MIRA 18:8)

BESPALOVA, [illegible]

Diurnal rhythmics of flowering and fruiting of some plants in central Kazakhstan. Biul. MOIP. Otd. biol. 70 no.3:47-60 My-Je '65. (MIRA 18:10)

BESPALOVA, Z.G.

Information on the current work of the Scientific Council on the problem "Biological foundations of the rational exploitation, transformation and protection of the plant world." Bot.zhur. 50 no.10:1503-1504 O '65.

(MIRA 18:12)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.

BESPAL'SHIY, Vladimir Fedorovich [Bezpal'shyi, V.F.]; KHUDUSHINA, F. [Khudushyna, F.], kand. filos. nauk, red.; LOVKAYA, L., red.; TSURKAN, P., tekhn. red.

[Communist labor; what the elimination of distinction between intellectual and manual labor means] Komunistychna pratsia; shcho znachit' likviduvaty istotni vidminnosti mizh rozumovoiu i fizychnoiu pratsei. Kyiv, Derzh. vyd-vo polit. lit-ry URSR, 1960. 74 p. (MIRA 14:12)
(Efficiency, Industrial) (Work)

BESPAL'TSEV, I.I., dotsent; DUZNETSOVA, L.A., red.; VOZNESENSKIY, A.D., tekhn. red.

[Systematic textbook on the theory of mechanisms and machinery] Uchebno-metodicheskoe posobie po teorii mekhanizmov i mashin. Moskva, Vses. sel'khoz.in-t zaochnogo obrazovaniia, 1961. 191 p. (MIRA 15:12)

1. Volgogradskiy sel'skokhozyaystvennyy institut (for Bespal'tsev).
(Mechanical engineering--Study and teaching)

BESPAL'TSEV, I.I., kand. tekhn. nauk

Scientific technical seminar on the improvement of technology in the manufacture of gear transmissions. Standartizatsiia 28 no.8: 47-48 Ag '64. (MIRA 17:11)

L 20979-65

ACCESSION NR: AP5003786 S/0028/64/000/008/0047/0048

AUTHOR: Bespal'tsev, I. I. (Candidate of technical sciences) B

TITLE: Scientific-technical seminar on perfecting the technology of the production of geared transmissions

SOURCE: Standartizatsiya, no. 8, 1964, 47-48

TOPIC TAGS: mechanical power transmission equipm, mechanical engineering conference

Abstract: This seminar was held by the Volgograd Oblast Board of the Scientific-Technical Society Mashprom, and the Lower Volga Sovnarkhoz. It was attended by representatives from 20 machine-building plants of the Sovnarkhoz, and representatives of scientific-research, planning and educational institutions in Volgograd.

The seminar made these recommendations in the interest of improving the technology of the production of geared transmissions: (1) extensive introduction of longitudinal and cross-sectional modifications in gears; (2) increased accuracy of basic surfaces, particularly wheels with grooved unions; (3) the use of adjustable appliances with release elements in processing the teeth of fine wheels; (4) devising instructions for improved centering chucks to guarantee minimal runout and skewing of the base end with respect to the spindle of the lathe, and also the

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ACCESSION NR: AP5003786

introduction of orifice honing; (5) to investigate the possibilities of compensating, during processing, for tooth deformation; and (6) in the case of mass production, the introduction of prophylactic technological and damage control, the use of mechanization and automated control.

The seminar called the attention of the Lower Volga Sovnarkhoz to the necessity for organizing geared transmission laboratories at important plants, at the All-Union Scientific Research Institute of Machine-Building, and at various educational institutes.

ASSOCIATION: none

SUBMITTED: 00	ENCL: 00	SUB CODE: IE, GO
NO REF SOV: 000	OTHER: 000	JPRS

Card 2/2

BESPAL'TSEV, I. N.

25(1) PHASE I BOOK EXPLOITATION SOV/1745

Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti. Kiyevskoye oblastnoye upravleniye

Peredovaya tekhnologiya liteynogo proizvodstva (Advanced Technology of Casting Production) Kiyev, Mashgiz, 1958. 152 p. 6,000 copies printed.

Ed.: V. K. Serdyuk; Tech. Ed.: Ye. V. Rudenskiy; Editorial Board: A. Ya. Artamonov, K. I. Vashchenko (Resp.Ed.), S. Sh. Zaslavskiy, and B. V. Polyak; Chief Ed. (Southern Division, Mashgiz): V. K. Serdyuk, Engineer.

PURPOSE: This book is intended for engineering personnel of foundries, and workers of scientific research institutions.

COVERAGE: This book is a collection of articles and papers given by representatives of plants, scientific-research institutes, and vuzes on problems of advanced methods of production and mechanization of the foundry industry at a conference organized by the Kiyev oblast Board of NTO (Scientific Engineering Section) of the machine-building industry and the Institute of Mechanical Engineering of the Academy of Science, Ukrainian SSR. Experience gained in centrifugal pipe precision investment casting, shell-and metal-mold casting, use of materials preventing scorening, quick drying mold mixtures [blends], and problems of mechanization and automation of foundry processes are covered in this book. An article by D.Kh. Ivanov, deals with a new cast iron welding method developed by the author with the assistance of electrowelder G. A. Piroshenko, and called "cold electrowelding of cast iron by means of a metal electrode with an indirect arc action." As the title indicates, the arc acts only indirectly on the welded metal passing between the electrode and the build-up metal. Such welding insures shallow fusion of the cast iron. The formation of a cementite surface layer is either absent or limited to a very thin layer of not more than 0.2 mm., making for easy mechanical working. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Advanced Technology of Casting Production (Cont.) SOV/1745

AVAILABLE: Library of Congress

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6-22-59

Card 6/6

Bespalykh, I. Ye.

[illegible], I. Ye.

[illegible]

1. [illegible] Grodnenskoy oblasti.

(White Russia--Sugar beets)

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205120001-0"

KRETOV, A.Ye.; BESPALYY, A.S.

Methylation of dicyandiamide. Zhur.prikl.khim. 34 no.3:621-625 Mr '61. (MIRA 14:5)

(Guanidine)

KRETOV, A. Ye.; BESPALYY, A. S.

Derivatives of benzothiazolidine. Zhur. ob. khim. 33 no.1: 213-217 '63. (MIRA 16:1)

1. Dneprepetrovskiy khimiko-tekhnologicheskiy institut.

(Thiazolidine)

KRETOV, A.Ye.; RESPALYY, A.S.

Derivatives of thiazolidine. Zhur.ob.khim. 33 no.6:1878-1882 Je '63. (MIRA 16:7)
(Thiazolidine)

KRETOV, A.Ye.; BESPALYY, A.S.

Derivatives of thiazolidine. Part 2. Zhur.ob.khim. 33 no.10: 3323-3325 O '63. (MIRA 16:11)

1. Dneprepetrovskiy khimiko-tekhnologicheskiy institut imeni F.E.Dzerzhinskogo.

KRETOV, A.Ye.; BESPALYY, A.S.

Derivatives of naphthothiazinidine. Zhur. ob. khim. 34 no. 3: 999-1001 Mr '64. (MIRA 17:6)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.

KRETOV, A. Ye.; BESPALYY, A. S.; POLITUN, N. N.

Thiophenolsulfonic acids and their derivatives. Zhur. ob. Khim. 34 no.6:2066-2068 Je '64. (MIRA 17:7)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.

KRETOV, A.Ye.; NESMEYANOV, A.S.; POLITOV, N.N.

Synthesis of thiazolidine-5-acetic acid derivatives. Zhur. ob. khim. 34 no.9:3063-3066 S '64. (MIRA 17:11)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.

KRETOV, A.Ye.; BESPALYY, A.S.

Thiazolidine derivatives. Part 3. Zhur. ob. khim. 34 no.10:3365-3367 O '64. (MIRA 17:11)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut imeni F.E. Dzerzhinskogo.

BESPALYY, A.T.

AUTHORS: Margulis, V.F., and Bespalyy, A.T., Engineers 128-58-4-4/18

TITLE: Modernization of Molding Machines with Top Press Plate for Double-Sided Forming (Modernizatsiya formovochnykh mashin s verkhney pressovoy plitoy dlya dvustoronney formovki)

PERIODICAL: Liteynoye Proizvodstvo, 1958, No. 4, pp 10-11 (USSR)

ABSTRACT: The described modernization of molding machines with top press plate has been done at the Kiyev plant (combinat) "Promstroydetal'". The plant's foundry uses molding machines "261" and "271" for molding water and steam fitting parts produced by the plant in large lots. As a means of modernization, a new design of top press plate enabling the use of a second molding board was introduced. The second molding board can be attached at the top of the press plate, and imprints in the mold box can be produced simultaneously on two sides - bottom and top. The arrangement provides guide pins which assure an accurate fit of the two molding boards. By means of this set-up the productivity of molding machines can be governed by simply increasing or reducing the number of mold boxes used. The mold boxes are piled up for simultaneous pouring. Since the mold boxes are piled up in the same posi-

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128-58-4-4/18

Modernization of Molding Machines with Top Plate for Double-Sided Forming

tion in which they were formed, i.e. without tilting, the pouring channels can be readily located. There are no fins on the splits which are usually characteristic for such pouring.

There are 2 drawings.

AVAILABLE: Library of Congress

Card 2/2 1. Molding machine-Development

BESPALYY, I.D.

Results of observing apartment houses built on sagging soil in Kherson. Osn., fund. i mekh.grun. 8 no.1:22-24 '66. (MIRA 19:1)

BESPALYY, I.G.[Bespalyi, I.H.] [deceased]

Coccidiosis in carp on pond farms of the Ukrainian S.S.R. Pratsi Inst.zool.AN URSR 15:38-42 '59. (MIRA 13:7)

(Ukraine--Coccidiosis) (Carp--Diseases and pests)

ACC NR: AP6029617 (N) SOURCE CODE: UR/0114/66/000/008/0005/0008

AUTHOR: Bespalyy, I. T. (Engineer); Khakhin, V. I. (Engineer)

ORG: none

TITLE: Criteria of optimum regime for starting a steam turbine

SOURCE: Energomashinostroyeniye, no. 8, 1966, 5-8

TOPIC TAGS: steam turbine, turbine, ~~steam turbine starting~~ TURBINE ENGINE, ENGINE STARTER SYSTEM

ABSTRACT: The article presents recommendations for determining the optimum regimes for starting steam turbines. Orig. art. has: 5 figures and 8 formulas.

SUB CODE: 21/ SUBM DATE: none/ ORIG REF: 009/

Card 1/1 UDC: 62-57.621.165.001.5

BESPALYY, V.

Aspects of the relief of the Krivoy Rog Basin related to human activity. Biul.SNO LGU no.1:78-81 '58. (MIRA 13:6)
(Krivoy Rog Basin--Physical geography)

BELYALYY, N. I.

"Highly Precise Surveying in Cutting by Counter Faces of a Vertical Mine Shaft." Cand Tech Sci, Donets Order of Labor Red Banner Industrial Inst N. S. Khrushchev, Min Higher Education USSR, Stalino, 1955. (KL, No 11, Mar 55)

SO: Sum. No. 670, 29 Sep 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher educational Institutions (15)

SOV-127-58-9-12/20

AUTHORS: Ogloblin, D.N., Professor, Bespalyy, N.P., Candidate of Technical Sciences and Dobrovol'skiy, A.A., Engineer

TITLE: Surveying High Precision Works During the Sinking of Vertical Shafts by Counter Faces (Marksheyderskiye raboty vysokoy tochnosti pri prokhodke vstrechnymi zaboyami vertikal'nogo stvola)

PERIODICAL: Gornyy zhurnal, 1958, Nr 9, pp 65-69 (USSR)

ABSTRACT: The authors describe complicated (both surface and underground) surveying operations during the opening of lower levels in the Tyrny-Auz deposits. It was decided to open up three galleries, at 2,609 m, 2,312 m, and 2,004 m, all three connected by a vertical dead end shaft sunk simultaneously from all three levels. To avoid deviations in the direction of the counter faces, a triangulation net was built up on the surface and polygones were established underground in accordance with polygonometry. Taking into consideration possible triangulation and polygonometry errors, it was found that the possible maximal deviation of the counter faces could be 213 mm. However, when the counter faces of the 2,004 and 2,312 m levels met, the error was 310 mm. The difference between the 213 and 310 mm was caused by a deviation of the plumb under the

Surveying High Precision Works During the Sinking of Vertical Shafts by Counter Faces

influence of gravity attraction of the mountain massif and by an error in determining the center of the vertical shaft. A detailed description of the method of calculations is given. There are 3 diagrams and 2 Soviet references.

ASSOCIATION: Donetskiy industrial'nyy institut (The Donets Industrial Institute)
Tyrny-Auzskiy kombinat (The Tyrny-Auz Combine)

1. Mining engineering--USSR 2. Mines--Construction--Analysis

BESPALYY, N.P., kand.tekhn.nauk; Prinimal uchastiye: AVDEYENKO, G. Ye., student

Investigation of the accuracy of the functioning of the compensator on the NSM level. Izv. vys. ucheb. zav.; gor. zhur. no.9:64-67 '59. (MIRA 14:6)

1. Donetskiy industrial'nyy institut imeni N. S. Khrushcheva. Rekomendovana kafedroy geodezii.
(Surveying instruments)

BESPALYY, N.P., kand.tekhn.nauk

"Mine triangulation" by S.P.Kuz'minskii, V.G.Shubin. Reviewed by N.P.Bespalyi. Ugol' 36 no.12:57-58 D '61. (MIRA 14:12)
(Mine surveying)
(Kuz'minskii, S.P.)
(Shubin, V.G.)

L 06375-67 EWT(1) GW

ACC NR: AR6014590 SOURCE CODE: UR/0270/65/000/012/0012/0012

AUTHOR: Bespalyy, N. P.

33
B

TITLE: The experience of geodetic leveling in high mountains

SOURCE: Ref. zh. Geodeziya, Abs. 12.52.107

REF SOURCE: Sb. Razrabotka mestorozhd. polezn. iskopayemykh. Vyp. 3, Kiyev, Tekhnika, 1965, 33-39

TOPIC TAGS: ground survey, geodetic survey, geodesy, mean square error

ABSTRACT: Results of work on constructing a geodetic base for topographic surveys at the scales of 1 : 2000 and 1 : 5000 in two mountain regions of the Armenian SSR are presented. The base was constructed by plotting a grid of high accuracy and by applying trigonometric leveling. A total of 16 benchmarks with absolute elevations between 2000 and 2800 m was located in the first region with an area of 3.2 km^2, while 56 benchmarks with a range of elevations from 1200 to 2200 m were located on the second region with an area of 24 km^2. The sides of the grid network normally did not exceed 1 km in length, but a maximum length was 3.7 km. Horizontal and vertical angles were measured with a large Wilde transit by taking four readings. The results of error equalizing produced: mean square error of angle $\pm 3.4''$ in the first region, and $\pm 2.8''$ in the second; the relative error in the least correct side was 1 : 34 000

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ACC NR: AP6014590 O

on the first region and 1 : 50 000 in the second; mean square error of a benchmark altitude in relation to the surrounding benchmarks not larger than ± 0.011 m in the first region and 0.019 in the second; mean square error of a benchmark altitude, common for the whole region, is respectively 0.005 and 0.007 m; mean square error of the benchmark absolute altitude (calculated from the difference of 10 altitudes obtained by geodetic and geometric leveling) is ±3.3 cm. It is asserted that, at small lengths of the sides in the analytic gridwork for mountain regions, the elevations of the benchmarks may be determined by trigonometric leveling with an accuracy proper for fourth class leveling, and that 3—5 basic points are sufficient in this work. Z. Khaimov [Translation of abstract]

SUB CODE: 08, 12

Card 2/2

BESPALYY, P.S.

Field neutron hygrometers and gamma-gamma densitometers. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 18 no.1:33-36 Ja '65. (MIRA 18:4)

BESPAMYATNIKH, N.D.

Bespamyatnyh, N. D. On the theory of negative numbers in Lobačevskiĭ's work. Trudy Sem. MGU Istor. Mat. Istor.-Mat. Issledov. no. 3, 154–170 (1950). (Russian)

Source: Mathematical Reviews, Vol 13 No. 1

BESPALYY, V.G.

Quaternary transgressions of the sea in the regions of Sakhalin and the Kurile chain. Dokl. po geomorf. i paleogeog. Dal'n. Vost. no.1:56-66 '64.

(MIRA 19:1)

SOV/111-58-3-22/29

AUTHOR: Bespamyatnov, A.V., Engineer, Director of the Voronezh Radio Center

TITLE: The Step-By-Step Switching On of Power Tube Heaters (Stupenchatoye vklyucheniye nakala moshchnykh radiolamp)

PERIODICAL: Vestnik svyazi, 1958, Nr 3, pp 29 - 30 (USSR)

ABSTRACT: When switching on the power tube heaters of high-powered transmitters, the initial current must not exceed a certain limit depending on the type of tube. There are several systems available for a gradual switching on of power tubes, which in most cases require complicated or expensive equipment, such as regulating transformers or multi-stage switches. The author recommends a two-stage switching system, which according to his calculations is adequate in all cases. He gives, as an example, the calculations for a power tube of type "G-452" with a tungsten cathode having a nominal heater voltage of 22v and a current of 102 amps. The volt-ampere characteristic is shown by a graph. The switching system

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suggested by the author was tested in actual operation, when the transmitter of the Voronezh radio center was reconstructed. There is one graph.

ASSOCIATION: Voronezhskiy radiotsentr (Voronezh Radio Center)

S/653/61/000/000/010/051
I060/I260

AUTHORS: Martynov, V.D., and Bespamyatnov, V.P.

TITLE: Investigation of application of woodplastics in agricultural machinery in machine building plants of the Rostov Sovnarkhoz

SOURCE: Plastmassy v mashinostroyenii i priborostroyenii. Pervaya respublikanskaya nauchno-tekhnicheskaya konferentsiya po voprosam primeneniya plastmass v mashinostroyenii i priborostroyenii, Kiev, 1959. Kiev, Gostekhizdat, 1961, 95-104

TEXT: Research dealt with the following subjects: 1. Preparation of a list of metal and wooden parts of agricultural machines which can be replaced by plastics with a resulting economic advantage. 2. Development of a method of estimating economic efficiency of plastic parts. 3. Changes of design of parts, so as to facilitate their fabrication from plastic materials. 4. Laboratory investigation

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I060/I260

Investigation of application of woodplastics...

of powders and selection of compositions possessing the required physical and mechanical properties. 5. Introduction of component parts of plastic materials into combines. It has been found that for the combine CK-3(SK-3) 60 parts with a total weight of 162.5 kgs. can be replaced by plastics. The capital investment for fabrication of these parts will be recouped in less than 6 months. The design of many metal and wooden parts will have to be changed if they have to be replaced by plastics. The powders manufactured by the ROSTEL-MASh plant are simple in compounding, cheap and satisfy physical and mechanical requirments. Eight metal parts of the combine SK-3 can be replaced by plastics with a resulting 80% reduction of weight, and 50% reduction of cost of these parts. There are 3 figures and 1 table.

Card 2/2

ACC NR: AP7001413 (A) SOURCE CODE: UR/0413/66/000/021/0125/0125

INVENTORS: Bespamyatnov, V. V.; Ivanov, S. I.; Anshukov, V. I.

ORG: none

TITLE: A method for recording the excitation instant of seismic signals. Class 42, 188049

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 125

TOPIC TAGS: seismic prospecting, seismograph, seismography, seismologic instrument, seismology

ABSTRACT: This Author Certificate presents a method for recording the excitation instant of seismic signals. To increase the probability of obtaining information from the instant of excitation, a continuously marking scriber is started at the moment of explosion. The periodic sequence of the delivered impulses is recorded on the seismogram and delivers the information on the time elapsed since the excitation moment throughout the entire period of recording the signals by the seismic wave receivers.

SUB CODE: 08/ SUBM DATE: 18Feb65

Card 1/1 UDC: 550.834

ACC NR: AP6025632 SOURCE CODE: UR/0413/66/000/013/0084/0084

INVENTOR: Bespamyatnov, V. V.; Ivanov, S. I.; Anshukov, V. I.

ORG: None

TITLE: A device for obtaining information on the moment of excitation of seismic waves. Class 42, No. 183413

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 84

TOPIC TAGS: seismic wave, electronic equipment

ABSTRACT: This Author's Certificate introduces a device for obtaining information on the moment of excitation of seismic oscillations. The installation contains a master oscillator, input keying unit and output unit. To improve reliability in obtaining information on the moment of excitation, a time vernier computer and a unit for shaping output signals represented by the number of code pulse sets are connected in series between the keying and output units.

SUB CODE: 09, 08/ SUBM DATE: 11Jan65

Card 1/1

UDC: 550.340.84

BESPAMYATNYKH, N.D.

An arithmetic theorem. Uch. zap. Kar. ped. inst. 14:46-48 '63.

Mathematics in the Vilnius university, 1803-1832. Ibid.:49-69

Description of a calculating instrument in the Petrozavodsk Museum of local lore. Ibid.:70-72 (MIRA 17:3)

RYBALKO, F.P.; FIRSTOV, V.A.; BESPAMYATNYKH, S.G.

Effect of discontinuities on the statistics of distribution of plastic deformation. Fiz. tver. tela 6 no.8:2333-2336 Ag '64. (MIRA 17:11)

1. Ural'skiy gosudarstvennyy universitet imeni Gor'kogo, Sverdlovsk.

ZHIRONKIN, V.; BESKORSYY, A.; BESPARTOCHNYY, A.; brigadir kamenshchikov; ZOLOTOV, V.

Large-scale chemistry takes great steps. Sov. profsoiuzy 17 no. 5:10-11 Mr '61. (MIRA 14:2)

1. Reydovaya brigada zhurnala "Sovetskiye profsoyuza." 2. Nachal'nik shtaba stroyki Lisichanskogo khimicheskogo kombinata (for Zhironkin). 3. Proizvoditel' rabot, rukovoditel' kontrol'nogo posta na uchastke mocheviny Lisichanskogo khimicheskogo kombinata (for Beskorsyy). 4. Predsedatel' komiteta profsoyuza 2-go stroyupravleniya Lisichanskogo khimicheskogo kombinata (for Bespartochnyy). 5. Korrespondent zhurnala "Sovetskiye profsoyuzy" (for Zolotov).

(Lisichansk--Construction industry)
(Socialist competition)

SHNAYDER, M.S.; BESPAYEV, Kh.A.

Types of ores and mineral paragenesis in the Tishinskoye deposit of the Rudnyy Altai. Trudy Alt.GMNII AN Kazakh.SSR 16:120-131 '63. (MIRA 17:10)

LITVINOVICH, A.N.; BESPAYEV, Kh.A.; MAN'KOV, B.V.; SITNIKOV, K.P.

Distribution of rare and dispersed elements in the ores of the Tishinka deposit. Vest. AN Kazakh. SSR 20 no.10:56-63 O '64.
(MIRA 17:11)

BESPAYEV, S.B.

Germination force of Acanthophyllum gypsophiloides seeds under laboratory conditions. Izv. AN Kazakh. SSR. Ser. biol. nauk 3 no.1:71-78 Ja-F '65. (MIRA 18:5)

BESPAYEV, S.B.

Natural reproduction of Acanthophyllum gypsophiloides Rgl.
Trudy Alma-At.bot.sada 5:161-163 '60. (MIRA 13:6)
(Kazakhstan--Soaproot)

BESPAYEV, S.B.

Germination of the seeds of Acanthophyllum gypsophiloides under field conditions. Trudy Alma-At. bot. sada 7:108-120 '63.
(MIRA 16:10)

FURSOV, V.I.; BESPAYEV, S.B.

Some cytoembryological data on Acanthophyllum gypsophiloides Rgl. Trudy Alma-At. bot. sada 7:121-124 '63. (MIRA 16:10)

BESPAYEV, Kh.A., kand. geologo-mineralog. nauk; SHNAYDER, M.S.

Supergene pyrite in ores of the Tishinka deposit. Vest. AN Kazakh. SSR 21 no.9:81-83 S '65. (MIRA 18:9)

BESPAYEV, S.B.

Morphological characteristics of the root system of Acantophylum.
Izv. AN Kazakh. SSR Ser. biol. nauk 2 no.2:61-68 Mr-Ap '64
(MIRA 18:2)

BESPAYEV, S.B.

Viability of the pollen and stigma of Acanthophyllum gypsophiloides. Biul.Glav.bot.sada. no.58:85-88 '65.
(MIRA 18:12)

1. Botanicheskiy sad AN Kazakhskoy SSR, Alma-Ata.

BESPAYEV, S.B.

Introduction into cultivation of Acanthophyllum gypsophiloides in the Alma-Ata Botanical Garden. Trudy Inst. bot. AN Kazakh. SSR 21:136-167 '65. (MIRA 18:12)

L 15623-66
ACC NR: AP6004286 SOURCE CODE: UR/0404/65/000/001/0071/0078

AUTHOR: Bespayev, S. B.

ORG: none

TITLE: Laboratory germination of *Acanthophyllum gypsophiloides* seeds

SOURCE: AN KazSSR. Izvestiya. Seriya biologicheskikh nauk, no. 1, 1965, 71-78

TOPIC TAGS: botany, plant metabolism, plant physiology

ABSTRACT: Properties of gypsophilalike carline thistle (*Acanthophyllum gypsophiloides*) seeds and the storage of these seeds are discussed. The plant, which is exported, is described as the sole source of saponin in the nation. The seeds swell readily, increasing 20% over their original weight an hour after they are moistened. A variable temperature regime (12-35°) is particularly conducive to germination. The amount of light is not a factor. Stratification results in germination of 90% of the seeds as compared with 64% of the seeds kept under other conditions. Bringing the moisture content of the seeds up to 20-40% and maintaining them at a near-

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L 15623-66
ACC NR: AP6004286

zero temperature for 2½ months are desirable for effective stratification. The seeds are best stored at 16-20° with good aeration. Two years of storage are optimum. Freezing air-dried seeds also increases the germination rate. Gibberellin and, especially, thiourea stimulate germination, but not to the same degree as stratification. Orig. art. has: 3 figures, 6 tables.

SUB CODE: 06/ SUBM DATE: 00/ ORIG REF: 000/ OTH REF: 000

TS

Card 2/2

L 26457-65 EWT(1)/EWA(h) Peb GW
ACCESSION NR: AR5003628 S/0169/64/000/011/D017/D018

SOURCE: Ref. zh. Geofizika, Abs. 11D114

AUTHORS: Bespaytov, B. I.

TITLE: Optimal explosion conditions

CITED SOURCE: Tr. Nizhnevolzhsk. n.-i. in-ta geol. i geofiz., vyp. 1, 1964, 109-115

TOPIC TAGS: geophysical prospecting, seismic prospecting

TRANSLATION: The purpose of the work, performed in 1958--1962 in 40 different areas of the Volga region, near Saratov and Volgograd, was to study the character of the variation of the wave composition of the seismic vibrations under different exploding conditions. A PMZ station was employed in the investigations. The explosions were made in native rock (plastic clays) and water-bearing strata. As a result of the investigations, two types of dominating noise waves were investigated, and laws were established for the variation of the noise/signal ratio. The first type of the noise waves was arbitrarily called the waveguide type. It

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ACCESSION NR: AR5003628

0

is most frequent and is characteristic of sandy depositions on the upper part of native rocks. The second type of noise pertains to low-frequency Rayleigh waves and is registered when the explosions are produced near the outer surface. It is characteristic of clay deposits in the upper part of the section and low thickness of the ZMS layer. The interference waves of the first type differ essentially from the second. Seismic records of the noise of the first type have interference characteristics, and the noise waves of the second type are characterized by phase multiplicity and phase dispersion. The greatest differences between the disclosed types of noise waves occur in their frequency composition and in the character of variation of the intensity with varying depth of explosion. The waveguide noise waves greatly exceed in intensity the surface waves if the center of explosion is sufficiently far from the outer surface. According to microseismic logging data, two types of connection were established between the intensity of the noise wave and the velocity characteristic of the section. In the first type of connection, the geological section is subdivided into layers with increased (antiwaveguide) and reduced (waveguide) elastic-oscillation propagation, as compared with the surrounding deposits. The presence of clearly pronounced waveguides and antiwaveguides in the section leads to the following distribution of the noise level for explosions made in different depths. When the explosions are produced in anti-

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ACCESSION NR: AR5003628

waveguides, the seismograms show clearly separated reflected waves, and a weak noise background is observed. When explosions are produced in a waveguide, there are no reflected waves on the seismograms, and the interference waves are clearly separated. The speed of propagation of the longitudinal waves is 1500--3500 and 500--1300 m/sec in the antiwaveguides and waveguides, respectively. In the second type of connection, one or several layers having elastic-oscillation propagation velocities characteristic of both the ZMS layer and of native rocks are separated in the cross section through the explosion well. If the ZMS layer is a single layer, the roof of the native rocks exhibits a sharp change in velocity, and the signal/noise ratio has the lowest value 10--12 m from the bottom of the ZMS layer. The optimal explosion conditions are claimed for the antiwaveguides and for layers located 8--10 m under the ZMS layer. In regions with low quality of material, it is recommended that group explosions from antiwaveguides be produced. To observe waveguides and antiwaveguides it is necessary to study the velocity characteristics of the section by the method of seismic logging of the explosion wells, with intervals of 3--5 m between the points of observation. T. Polyakova.

SUB CODE: ES ENCL: 00

Card 3/3

BESPECHANSKIY, K. S.

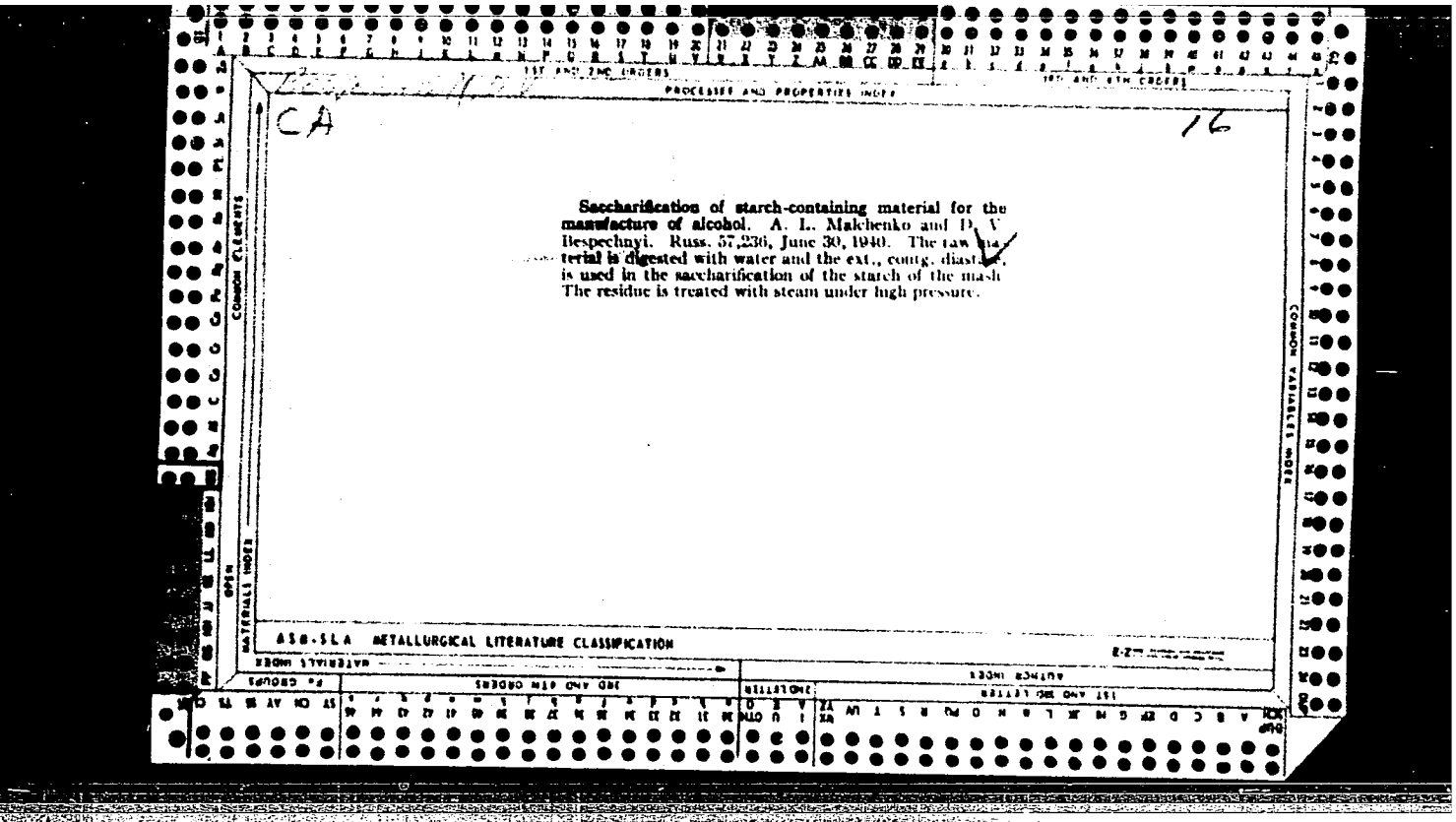
BERNADSKIY, I. F., SUSHKOV, V. T., BESPECHANSKIY, K. S., STARCHENKO, V. S., NOTKIN, B. A., VREDENSKIY, V. V., and BESCHINSKIY, L. I., Induction-Motor Set for Testing Internal Combustion Engines (Stend dlya Ispytaniya Dvigateley Vnutrennego Sgoraniya s Asinkhronnoy Mashinoy), pp. 9-11

An induction-motor arrangement for testing internal combustion motors leading to a considerable energy savings is suggested. This suggestion won a fifth prize at the Seventh All-Union Contest on Power Economizing. (Drawing, graph, diagram and table).

SO: PROMYSHLENNAYA ENERGETIKA, No. 10, Oct. 1952, Moscow (1502270)

BESPECHNIY, M. P. and GOGOBERIDZE, D. B.

"The oscillating sclerometer and its application," Journal of Tech. Physics, Vo. 20, No. 11, 1950.



CA

16

Saccharification of starch-containing material for the manufacture of alcohol. A. L. Malchenko and D. V. Bespechnyi. Russ. 57,236, June 30, 1940. The raw material is digested with water and the ext., contg. diastase, is used in the saccharification of the starch of the mash. The residue is treated with steam under high pressure.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

BESPECHNYY, D.V.

Fermentation of low-acidity grain mashes. Spirt. prom. 23 no.5:40-41 '57. (MLRA 10:8)

1. Dal'nevostochnyy spirtovoy trest.
(Mashes) (Fermentation)

SVOBODA, Milan; BESPERAT, Vladislav.

Construction of a new Potter-Bucky screen. Cesk. rentg. 12 no.1:48-50 Mar 58.

1. Ustav hematologie a krevni transfuse v Praze, reditel Dr. J. Kidery. Chirana, n. p., Praha, Zavod 03, red. J. Jozifek, konstrukcni oddeleni, vedouci inz. F. Kvita. M. S., Praha 1, U zelez, lavky 6.
(ROENTGENOGRAPHY, appar. & instruments
new Potter-Bucky screen, construction (Cz))

PROCESSES AND PROPERTIES INDEX

Anthracene from oil tar. I. [illegible]. (Azerbeid. Neft. Chos., [illegible], No. 5, 72—78).—The pitch (b.p. above 360°) was distilled and the crystalline distillate repeatedly fractionated; 0·6% of anthracene was obtained from a tar (*d* 1·062) of which 30·8% boils below 300° and 60·2% above 300°. The purity of the anthracene, recrystallised from the xylene fraction of a light oil, was 80%. CHEMICAL ABSTRACTS.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

Ca

72

Composition of cracked gasoline from Vickers cracking plants in Baku and Grozny. I. K. Barsolov.—*Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1930, No. 6-7, 79-91.—Gasoline from Vickers plants cracking mazout from Surakhany is characterized by a low initial b. p. The curve is affected by the H_2SO_4 treatment because of the removal of unsatd. compds., especially from the low-boiling fractions. The presence of considerable amts. of aromatic and unsatd. hydrocarbons indicates good antiknocking qualities in the cracked product. V. Kalichevsky.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

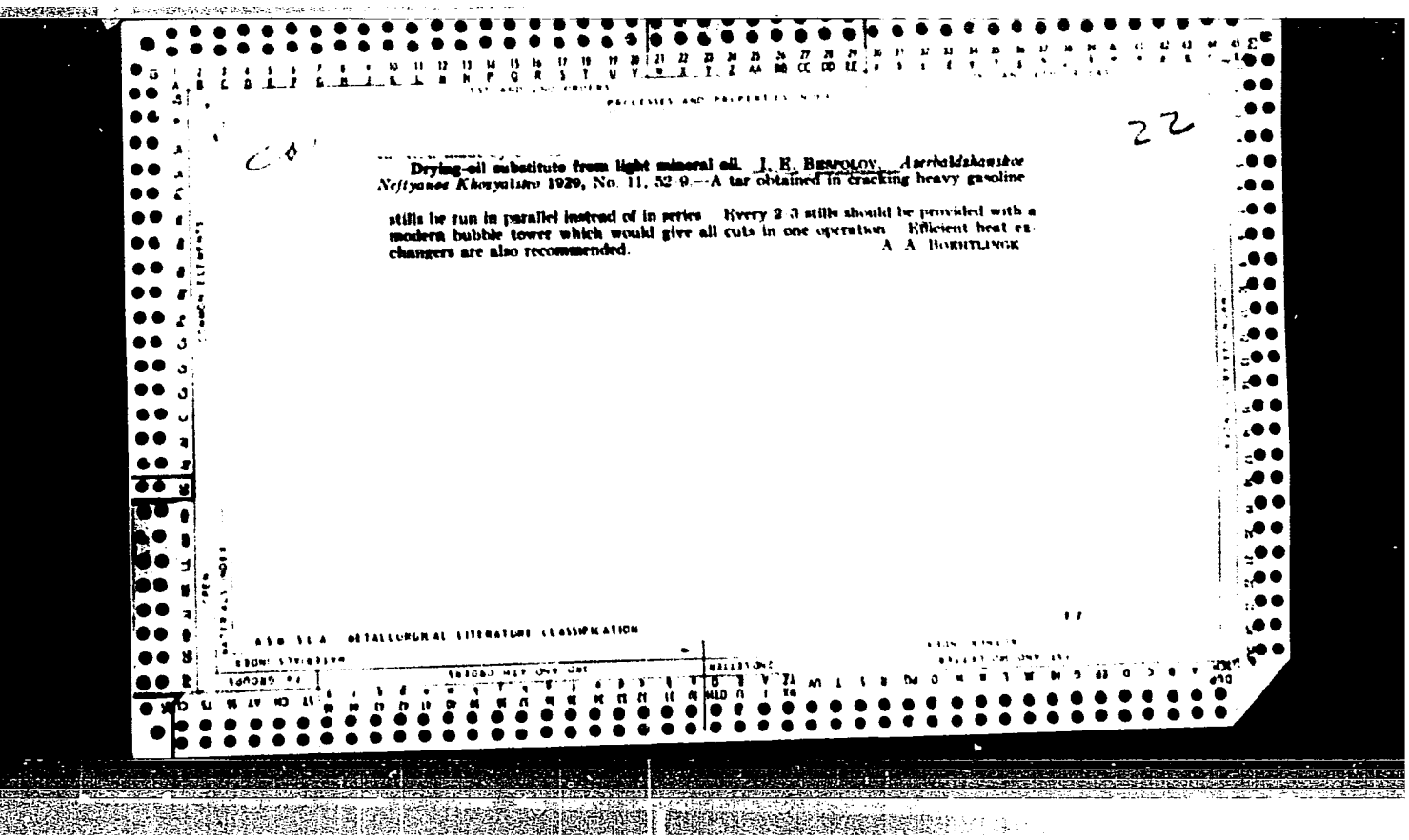
CA

72

Composition of cracked gas oil. I. K. Bespalov. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* **1929**, No. 10, 57-71.—Three gas oil fractions from the Vickers cracking coil and three straight-run gas oil fractions were found to be of very similar compn. The uniformity of the cracked kerosene fraction makes it a good fuel for tractors. The residuum obtained through cracking Surakhanui paraffin-base fuel oil can be added advantageously to the latter because it lowers the pour point of the fuel oil considerably.

A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Drying-oil substitute from light mineral oil. I. E. Bagrotov. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1929, No. 11, 52-9.—A tar obtained in cracking heavy gasoline stills be run in parallel instead of in series. Every 2-3 stills should be provided with a modern bubble tower which would give all cuts in one operation. Efficient heat exchangers are also recommended.
A. A. Boichenko

PROCESSES AND PROPERTIES INDEX

Technical xylene from distillation residues of light oils. I. K. Bestolov. *Neftyanoe Khozyaistvo* **16**, 385-6(1929).—Expts. were made with the residue from the distn. of light oils having a sp. gr. of 0.8704, initial b. p. 100°, 98.8% over at 175°, 31% of residue and distn. loss of 0.2%. Pure xylene cannot be obtained because of difficulties encountered in refining with H_2SO_4 and in sepg. it from other hydrocarbons. A 13% yield of tech. C_8H_{10} was obtained; it had the following characteristics: sp. gr. 0.849, initial b. p. 139°, 95% over at 142.5°, 80% sulfonatable material, and color stable after a year of exposure to light. Sepn. of C_6H_6 derivs. higher than xylenes is as yet commercially impossible.

V. KALICHEVSKY

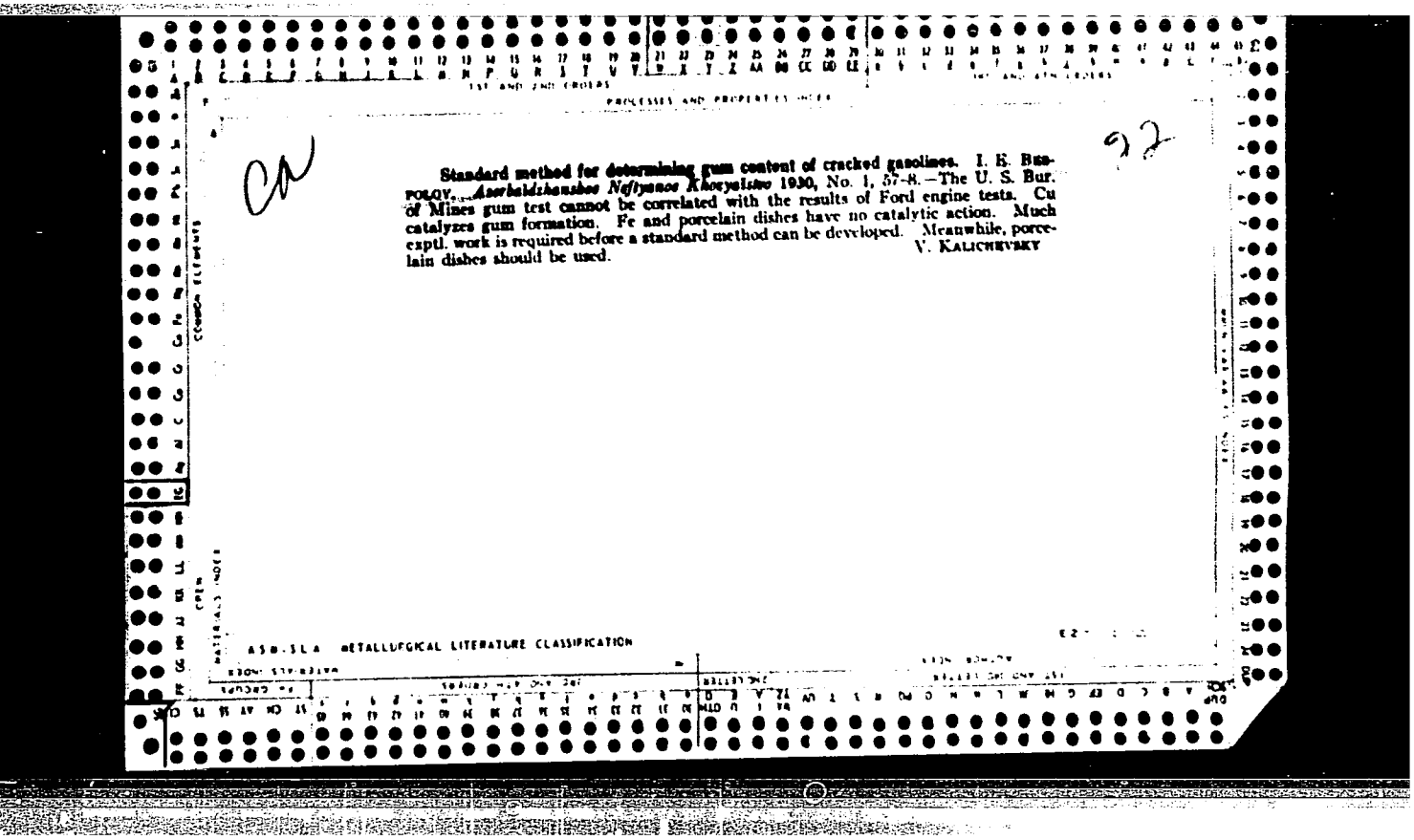
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

Purifying naphthalene. I. E. Bessolov. *Neftyanoe Khozyaistvo* 17, 737 8 (1929). $C_{10}H_8$, m. 78.8°, was distd. through a column filled with porcelain chips, whereby the first 10% off had a dark color after a H_2SO_4 test, while the next 80% also produced a dark red color. $C_{10}H_8$ vapors treated with fullers' earth gave much better results, but the product was still below standard. The conclusion is drawn that the oil should be removed first from the $C_{10}H_8$ by centrifugation, this to be followed by a distn.

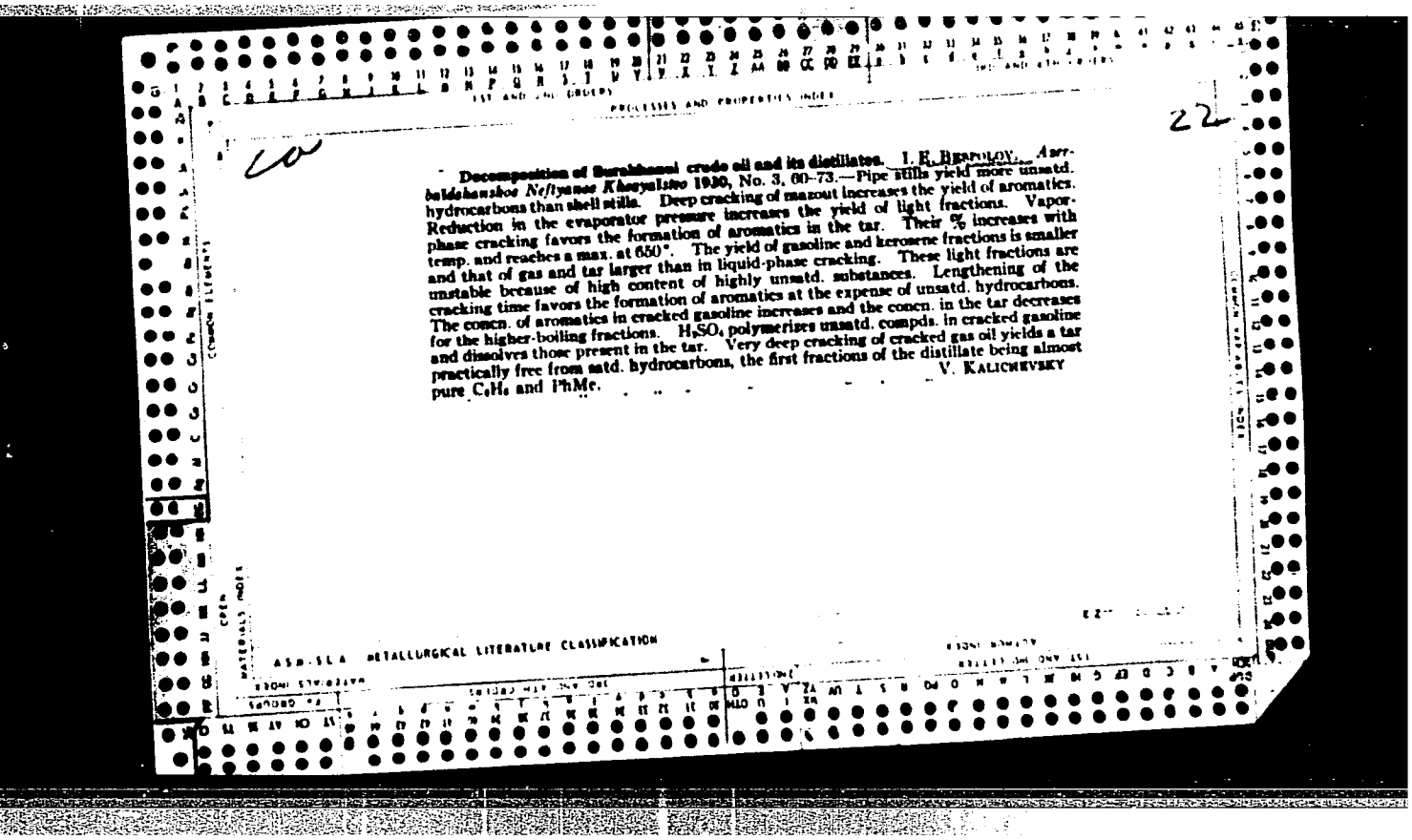
A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



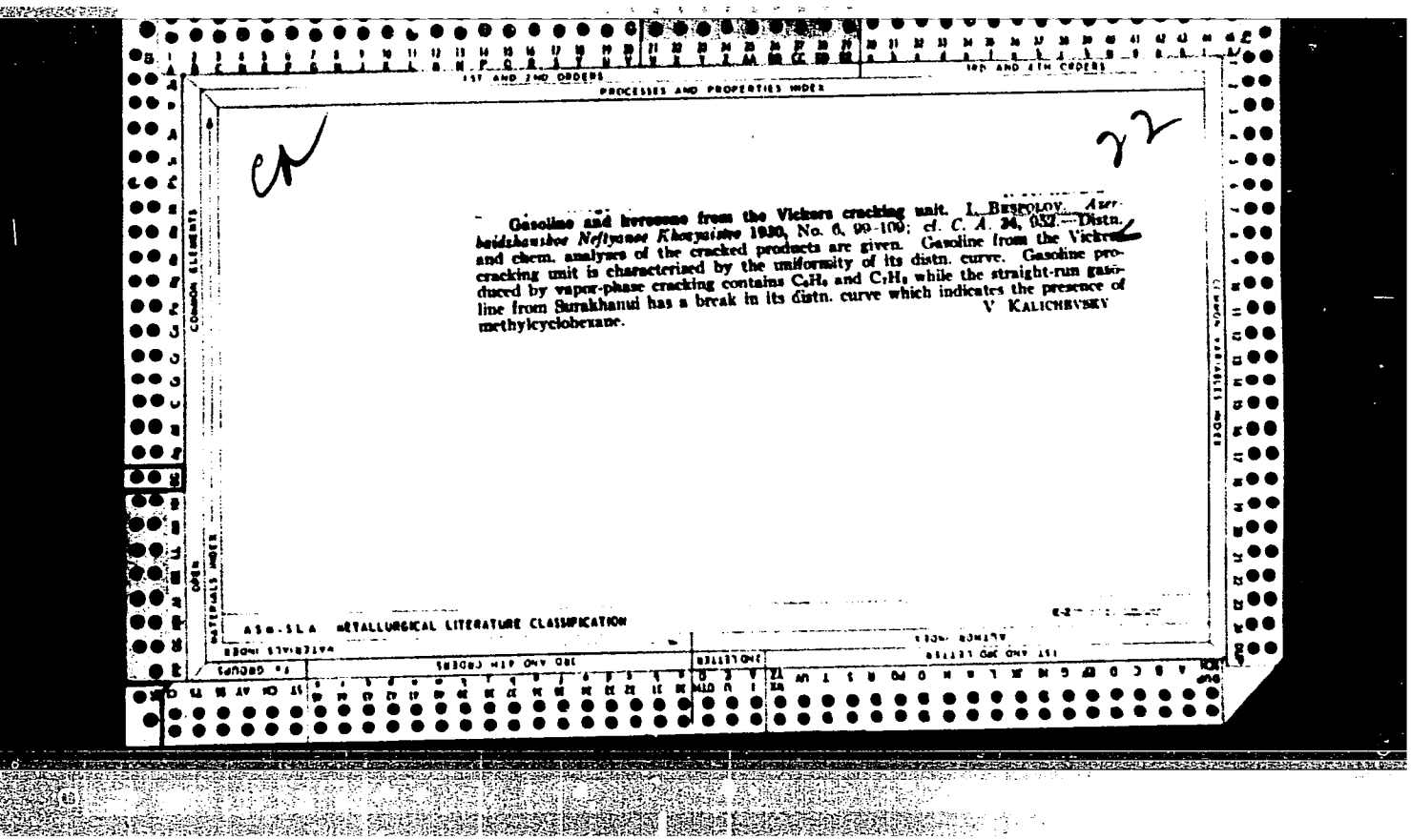
Standard method for determining gum content of cracked gasolines. I. E. Bue-
POLOV. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1930, No. 1, 57–8.—The U. S. Bur.
of Mines gum test cannot be correlated with the results of Ford engine tests. Cu
catalyzes gum formation. Fe and porcelain dishes have no catalytic action. Much
exptl. work is required before a standard method can be developed. Meanwhile, porce-
lain dishes should be used.
V. KALICHEVSKY

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



Decomposition of Surakhanni crude oil and its distillates. I. E. BRADILOV. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1930, No. 3, 60–73.—Pipe stills yield more unsatd. hydrocarbons than shell stills. Deep cracking of mazout increases the yield of aromatics. Reduction in the evaporator pressure increases the yield of light fractions. Vapor-phase cracking favors the formation of aromatics in the tar. Their % increases with temp. and reaches a max. at 650°. The yield of gasoline and kerosene fractions is smaller and that of gas and tar larger than in liquid-phase cracking. These light fractions are unstable because of high content of highly unsatd. substances. Lengthening of the cracking time favors the formation of aromatics at the expense of unsatd. hydrocarbons. The concn. of aromatics in cracked gasoline increases and the concn. in the tar decreases for the higher-boiling fractions. H_2SO_4 polymerizes unsatd. compds. in cracked gasoline and dissolves those present in the tar. Very deep cracking of cracked gas oil yields a tar practically free from satd. hydrocarbons, the first fractions of the distillate being almost pure C_6H_6 and $PhMe$.

V. KALICHEVSKY



PROCESSES AND PROPERTIES INDEX

Gasoline and kerosene from the Vickers cracking unit. L. Bashlov. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1930, No. 6, 99-100; cf. *C. A.* 24, 932.—Distn. and chem. analyses of the cracked products are given. Gasoline from the Vickers cracking unit is characterised by the uniformity of its distn. curve. Gasoline produced by vapor-phase cracking contains C_6H_6 and C_7H_8 while the straight-run gasoline from Surakhani has a break in its distn. curve which indicates the presence of methylcyclohexane. V. Kalichevsky

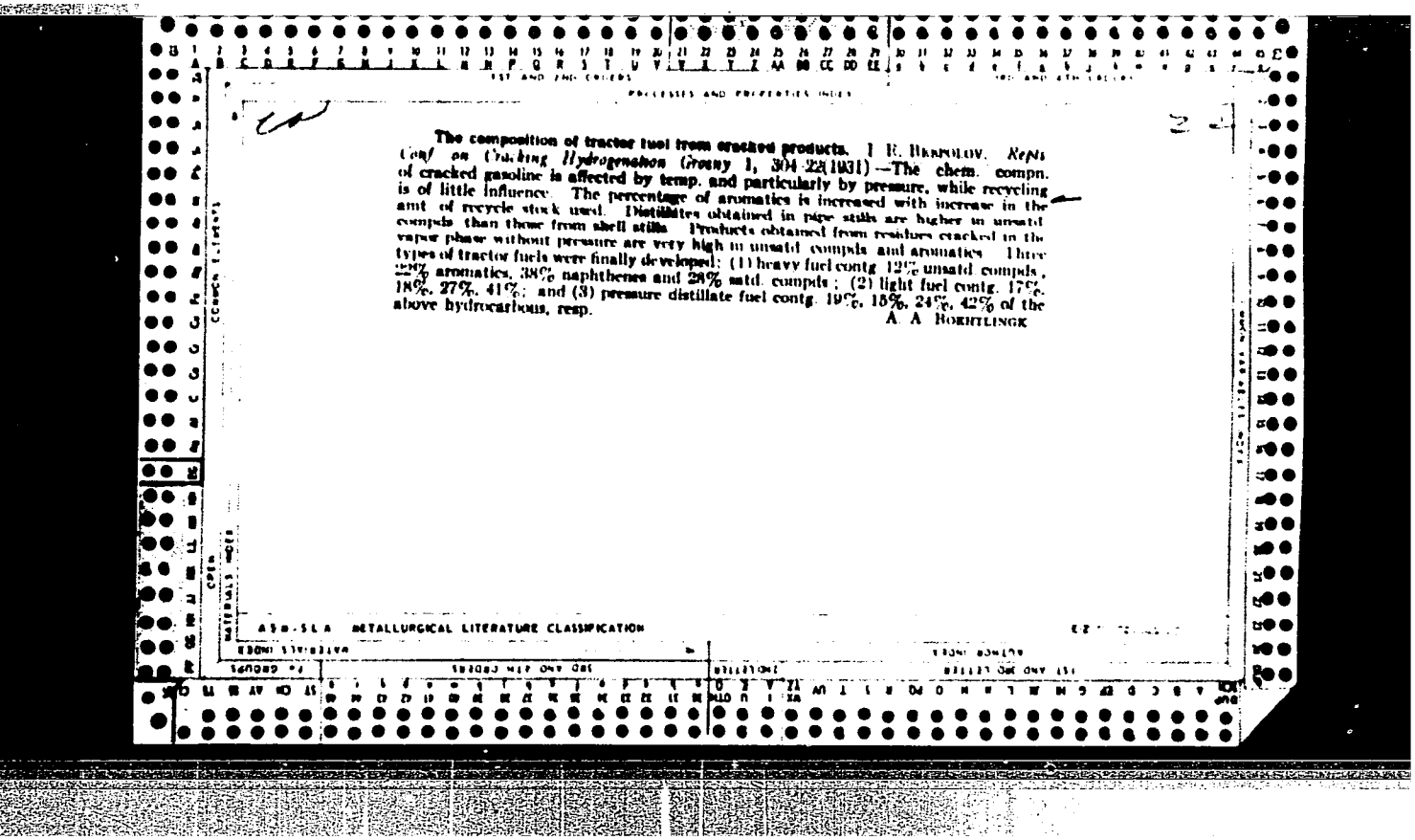
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

Composition of gasoline and kerosene from Vickers cracking plant. I. Bespolov,
A. Makhnova and A. Dudenko. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1930, No. 9, 104-7; cf. *C. A.* 22, 1730, 3105; 24, 952.—Temp. and pressure have more influence on the compn. of cracked gasoline than the recycling ratio. Increase in recycling ratio increases the aromatic content of the kerosene distillate but leaves the chem. compn. of the gasoline practically unaltered.

V. Kalichevsky

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



The composition of tractor fuel from cracked products. I. R. Bekkolov. *Repts Conf. on Cracking Hydrogenation (Grozny)* 1, 304-28(1931).—The chem. compn. of cracked gasoline is affected by temp. and particularly by pressure, while recycling is of little influence. The percentage of aromatics is increased with increase in the amt. of recycle stock used. Distillates obtained in pipe stills are higher in unsatd. compds. than those from shell stills. Products obtained from residues cracked in the vapor phase without pressure are very high in unsatd. compds. and aromatics. Three types of tractor fuels were finally developed: (1) heavy fuel contg. 12% unsatd. compds., 22% aromatics, 38% naphthenes and 28% satd. compds.; (2) light fuel contg. 17%, 18%, 27%, 41%; and (3) pressure distillate fuel contg. 19%, 15%, 24%, 42% of the above hydrocarbons, resp.

A. A. Boehtlingk

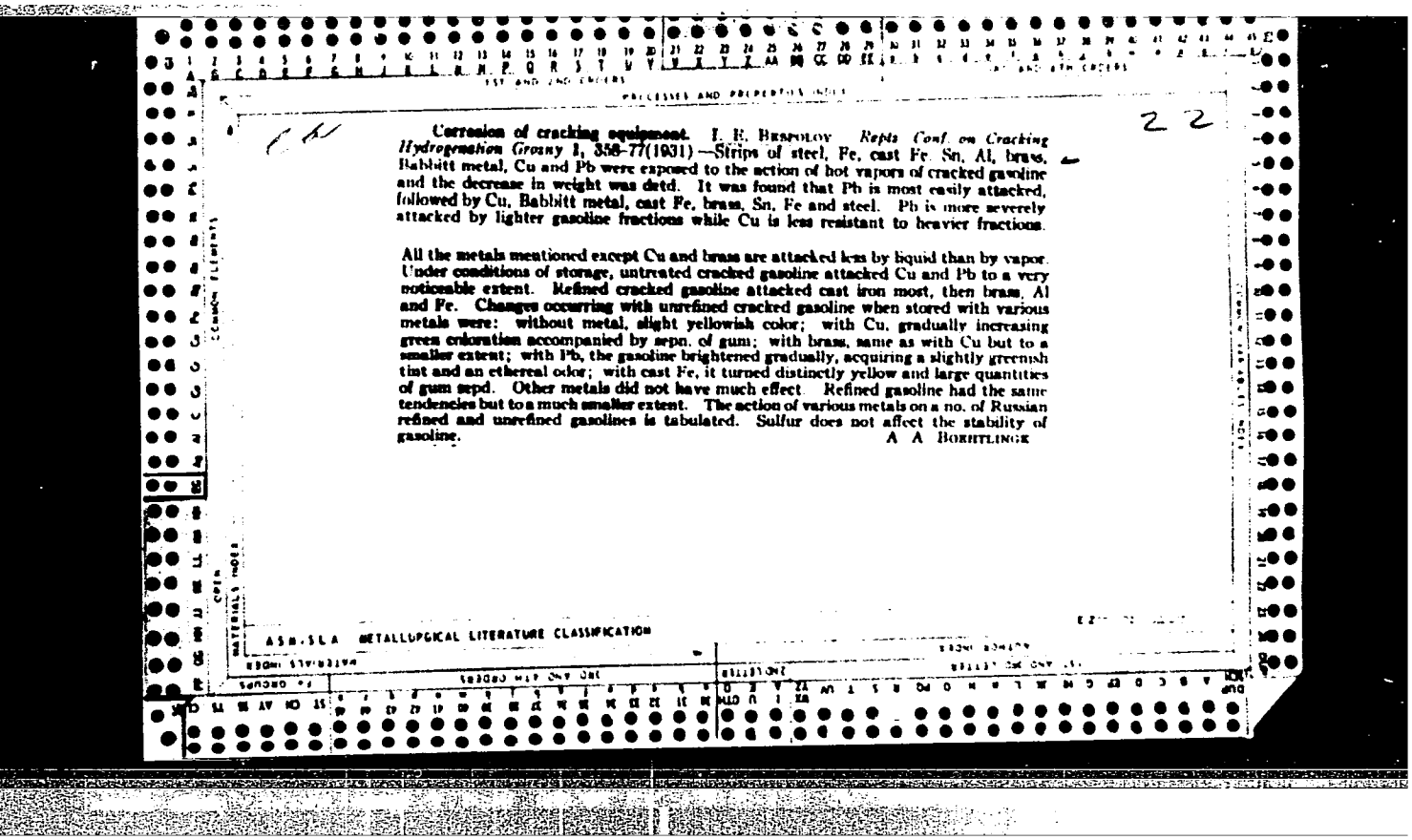
Distribution of groups of hydrocarbons in cracked gasoline cuts. I. F. Bugarov. *Repts. Conference on Cracking Hydrogenation Grozny* 1, 321-34(1931).—Cracked gasoline was distd. with great care, specially constructed dephlegmators being used to fractionate the distillate into very narrow cuts. Plots showing the sp. gr. and aniline points of these narrow cuts are constructed. A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

Action of sulfuric acid on fractions of cracked gasoline. I. K. [illegible] *Nefti Conference on Cracking Hydrogenation Groszy* 1, 333-58(1931).—Cracked gasoline was fractionated into narrow cuts that were treated individually with H_2SO_4. Two types of compds. were formed: compds. remaining in the gasoline and compds. which were transferred into the acid sludge. Fractions of the higher-boiling ranges contain smaller quantities of condensation products in the gasoline. The highest amt. of condensation products is formed when treated with a 90% H_2SO_4. When both the condensation and sulfonated products are considered, the former prevail after treatment with 80% H_2SO_4. Treatment with 80% H_2SO_4 gives the highest yield of condensation products when working with gasoline cracked in the vapor phase. This is probably due to the condensation of unsatd. compds. with aromatic compds. A smaller quantity of condensation products is formed at higher treating temps. and the chem. compn. of the fraction is affected to a smaller extent. A repeated acid treatment has greater advantages and the products so obtained are mainly sulfonation products. Sludge acid is more active than fresh acid, providing they are of the same concn. A. A. B.

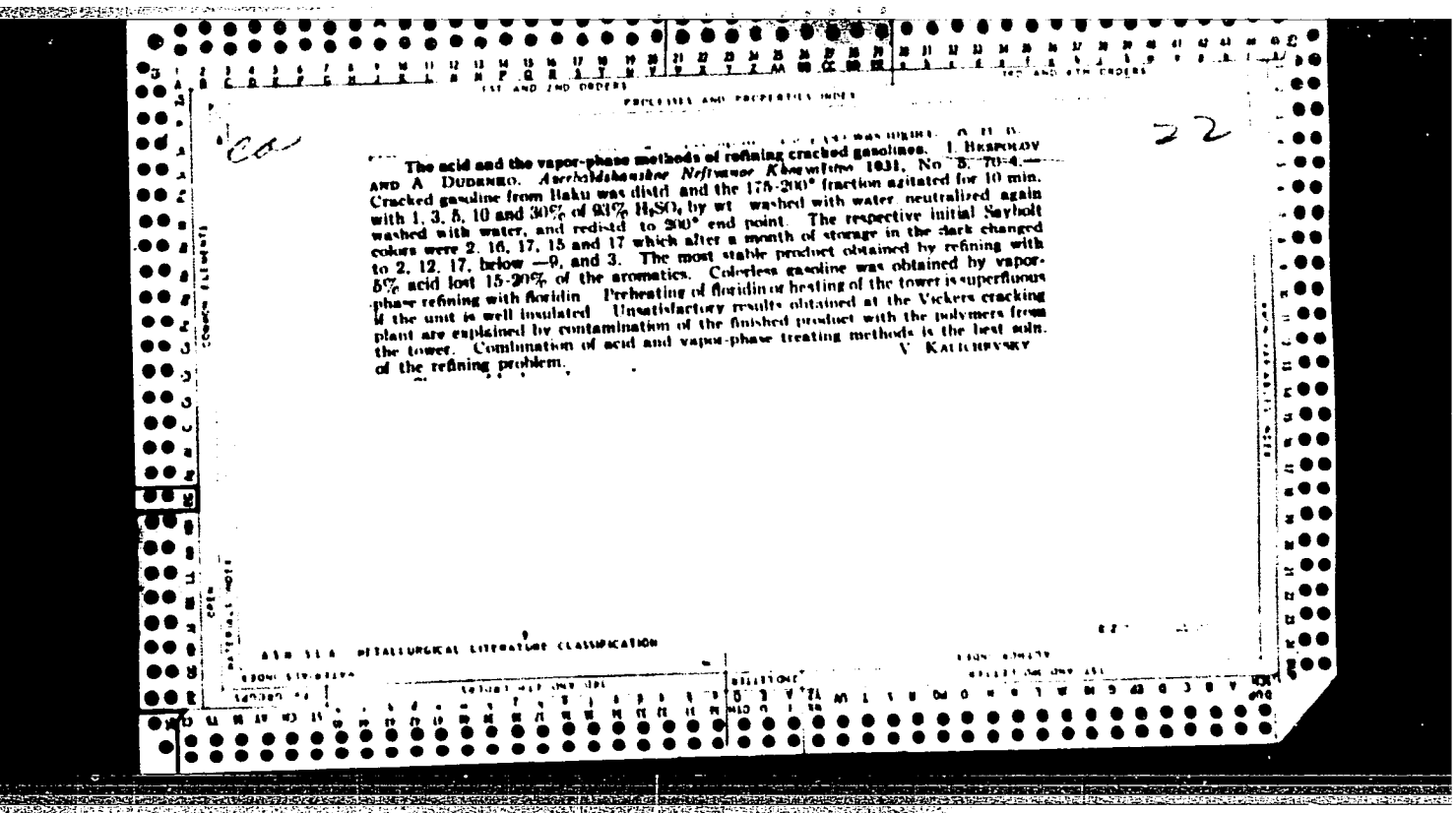
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Corrosion of cracking equipment. I. E. Bassolov. *Repts Conf. on Cracking Hydrogenation Grozny* 1, 358–77(1931).—Strips of steel, Fe, cast Fe, Sn, Al, brass, Babbitt metal, Cu and Pb were exposed to the action of hot vapors of cracked gasoline and the decrease in weight was detd. It was found that Pb is most easily attacked, followed by Cu, Babbitt metal, cast Fe, brass, Sn, Fe and steel. Pb is more severely attacked by lighter gasoline fractions while Cu is less resistant to heavier fractions.

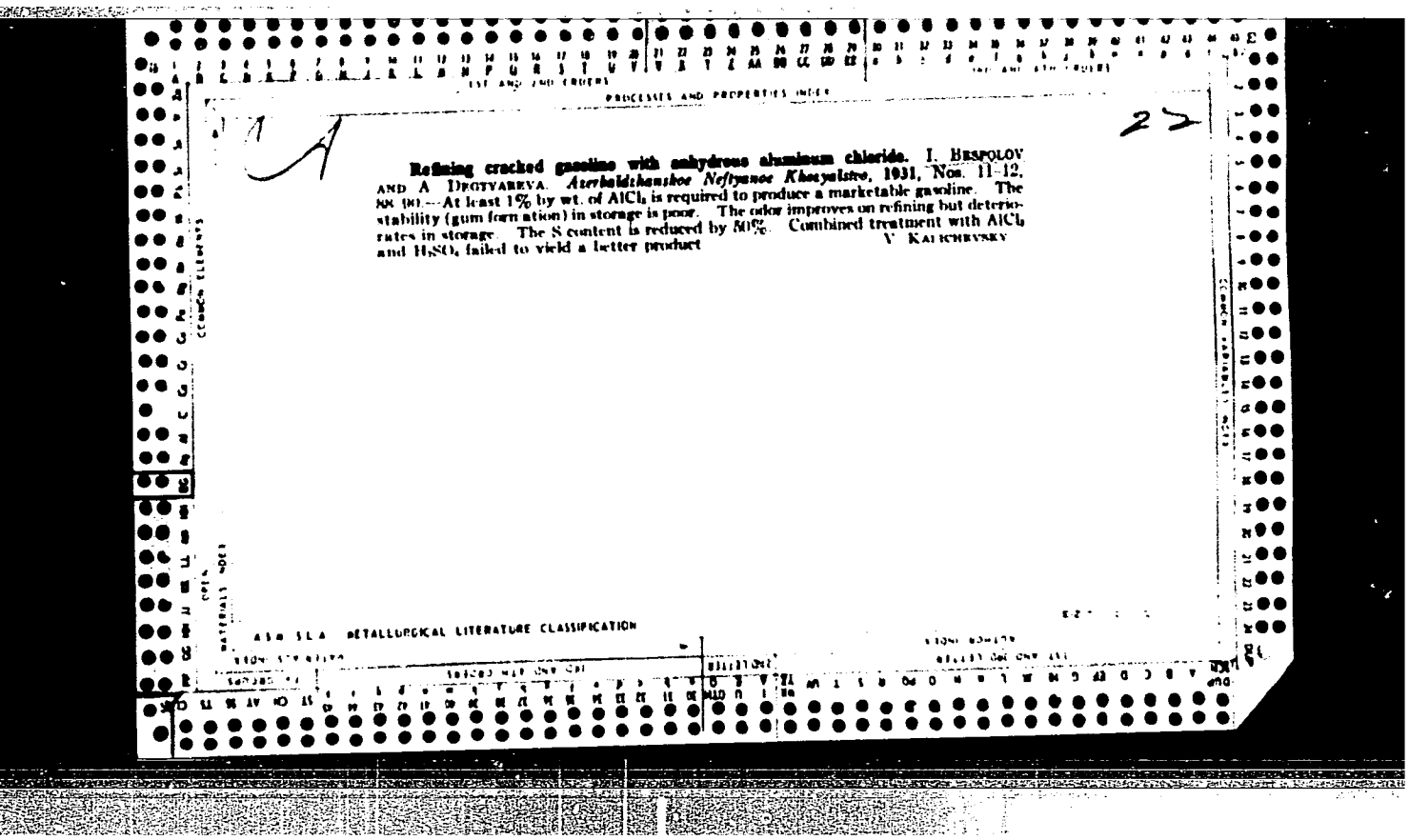
All the metals mentioned except Cu and brass are attacked less by liquid than by vapor. Under conditions of storage, untreated cracked gasoline attacked Cu and Pb to a very noticeable extent. Refined cracked gasoline attacked cast iron most, then brass, Al and Fe. Changes occurring with unrefined cracked gasoline when stored with various metals were: without metal, slight yellowish color; with Cu, gradually increasing green coloration accompanied by sepn. of gum; with brass, same as with Cu but to a smaller extent; with Pb, the gasoline brightened gradually, acquiring a slightly greenish tint and an ethereal odor; with cast Fe, it turned distinctly yellow and large quantities of gum sepd. Other metals did not have much effect. Refined gasoline had the same tendencies but to a much smaller extent. The action of various metals on a no. of Russian refined and unrefined gasolines is tabulated. Sulfur does not affect the stability of gasoline.

A. A. Boehtlingk

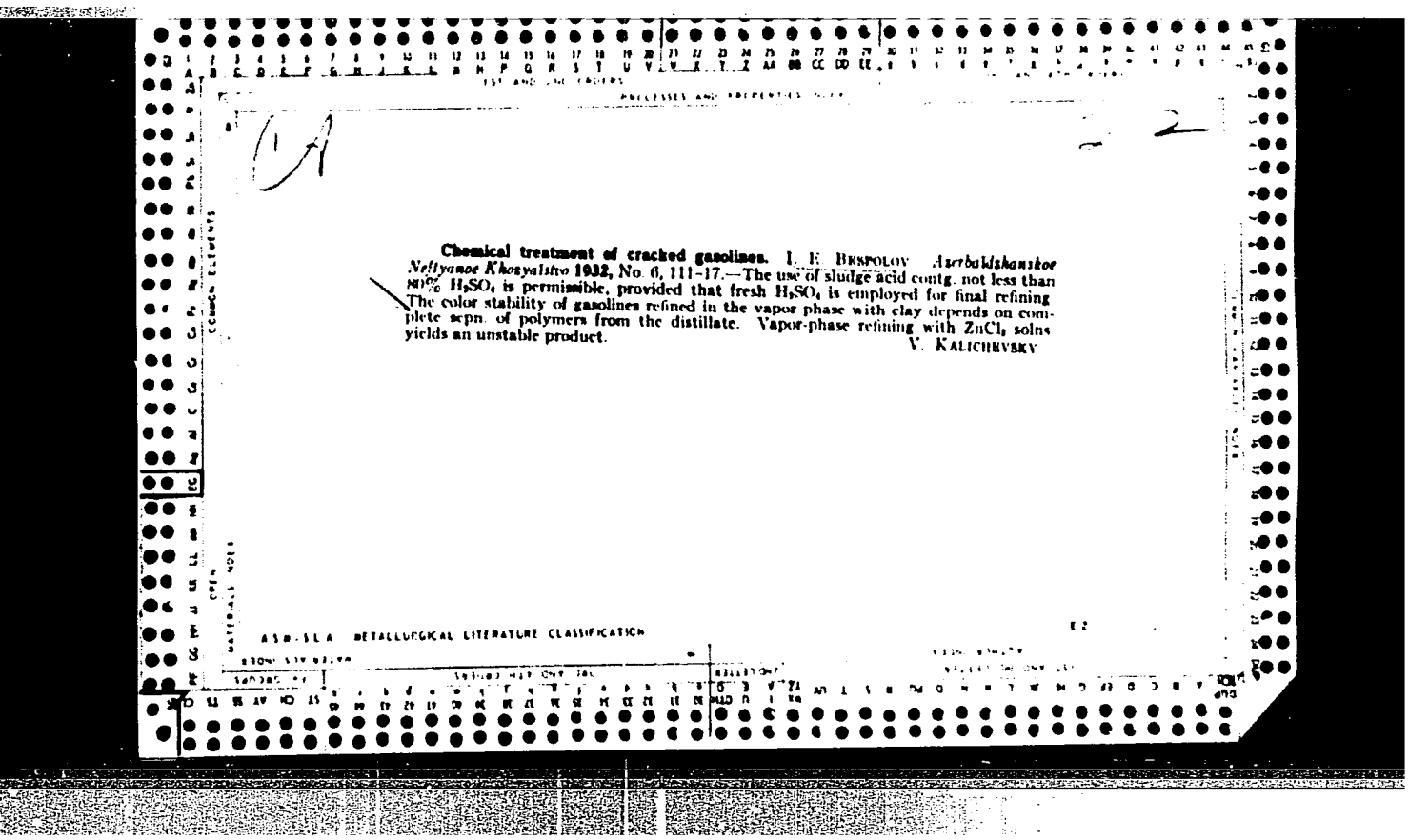


The acid and the vapor-phase methods of refining cracked gasolines. I. Beardov and A. Dudarko. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* 1931, No. 5, 70-4.—Cracked gasoline from Baku was distd and the 175-200° fraction agitated for 10 min. with 1, 3, 5, 10 and 30% of 93% H_2SO_4 by wt, washed with water, neutralized again washed with water, and redistd to 200° end point. The respective initial Saybolt colors were 2, 16, 17, 15 and 17 which after a month of storage in the dark changed to 2, 12, 17, below —9, and 3. The most stable product obtained by refining with 5% acid lost 15-20% of the aromatics. Colorless gasoline was obtained by vapor-phase refining with floridin. Preheating of floridin or heating of the tower is superfluous if the unit is well insulated. Unsatisfactory results obtained at the Vickers cracking plant are explained by contamination of the finished product with the polymers from the tower. Combination of acid and vapor-phase treating methods is the best soln. of the refining problem.

V. Kalichevsky



Refining cracked gasoline with anhydrous aluminum chloride. I. BESPOLOV AND A DEGTYAREVA. *Azerbaidzhanskoe Neftyanoe Khozyaistvo*, 1931, Nos. 11–12, 88–90.—At least 1% by wt. of $AlCl_3$ is required to produce a marketable gasoline. The stability (gum formation) in storage is poor. The color improves on refining but deteriorates in storage. The S content is reduced by 50%. Combined treatment with $AlCl_3$ and H_2SO_4 failed to yield a better product. V KALICHEVSKY



Chemical treatment of cracked gasolines. I. E. Bespolov. *Azerbaidzhanskoe Neftyanoe Khozyaistvo* **1932**, No. 6, 111–17.—The use of sludge acid contg. not less than 80% H_2SO_4 is permissible, provided that fresh H_2SO_4 is employed for final refining. The color stability of gasolines refined in the vapor phase with clay depends on complete sepn. of polymers from the distillate. Vapor-phase refining with $ZnCl_2$ solns yields an unstable product.

V. Kalichevsky

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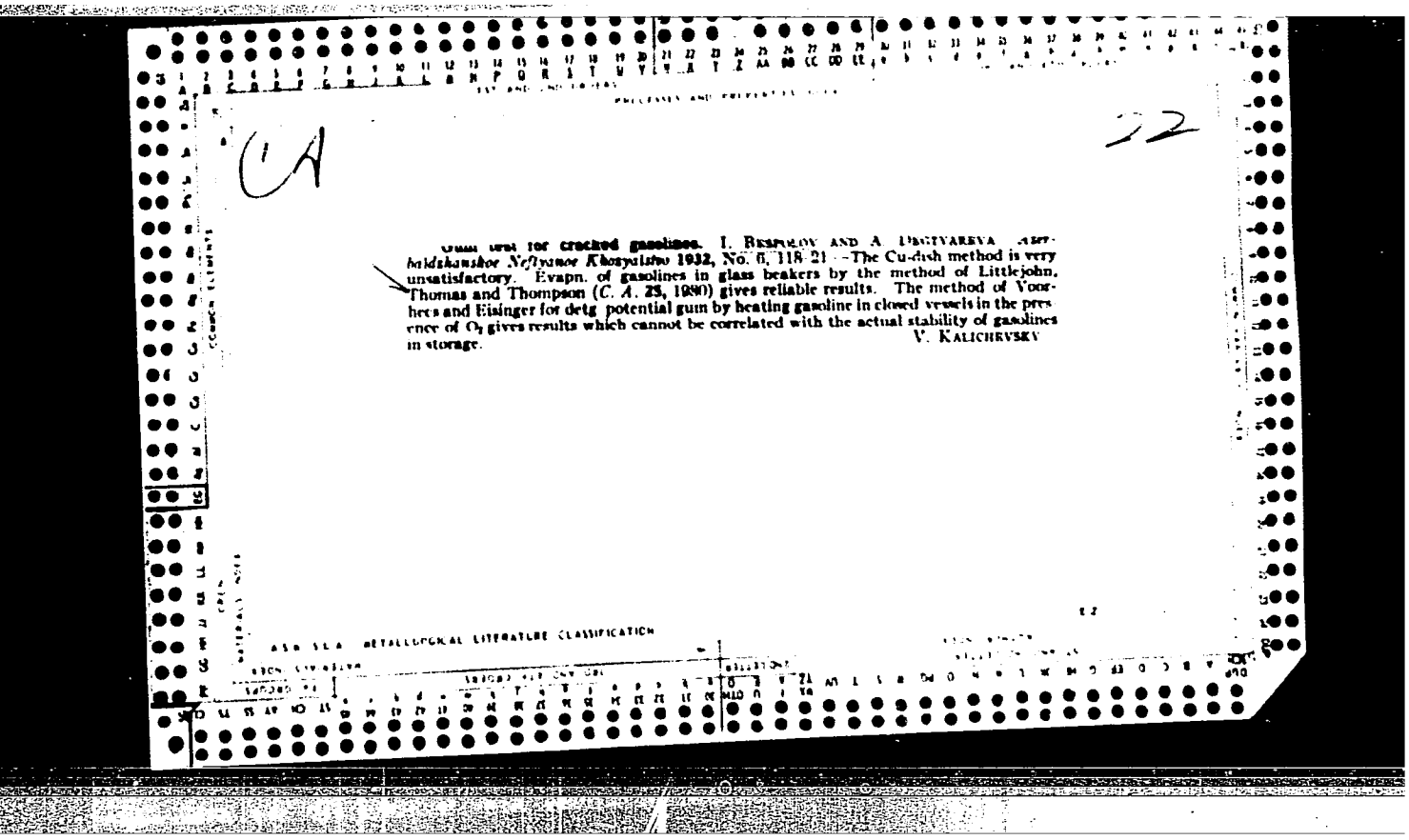

CA

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Gum test for cracked gasolines. I. BESPALOV AND A. DMITRIEVA. *Neftyanoe Khozyaistvo* 1932, No. 6, 118-21.—The Cu-dish method is very unsatisfactory. Evapn. of gasolines in glass beakers by the method of Littlejohn, Thomas and Thompson (*C. A.* **25**, 1980) gives reliable results. The method of Voorhees and Eisinger for detg. potential gum by heating gasoline in closed vessels in the presence of O_2 gives results which cannot be correlated with the actual stability of gasolines in storage.

V. KALICHEVSKY

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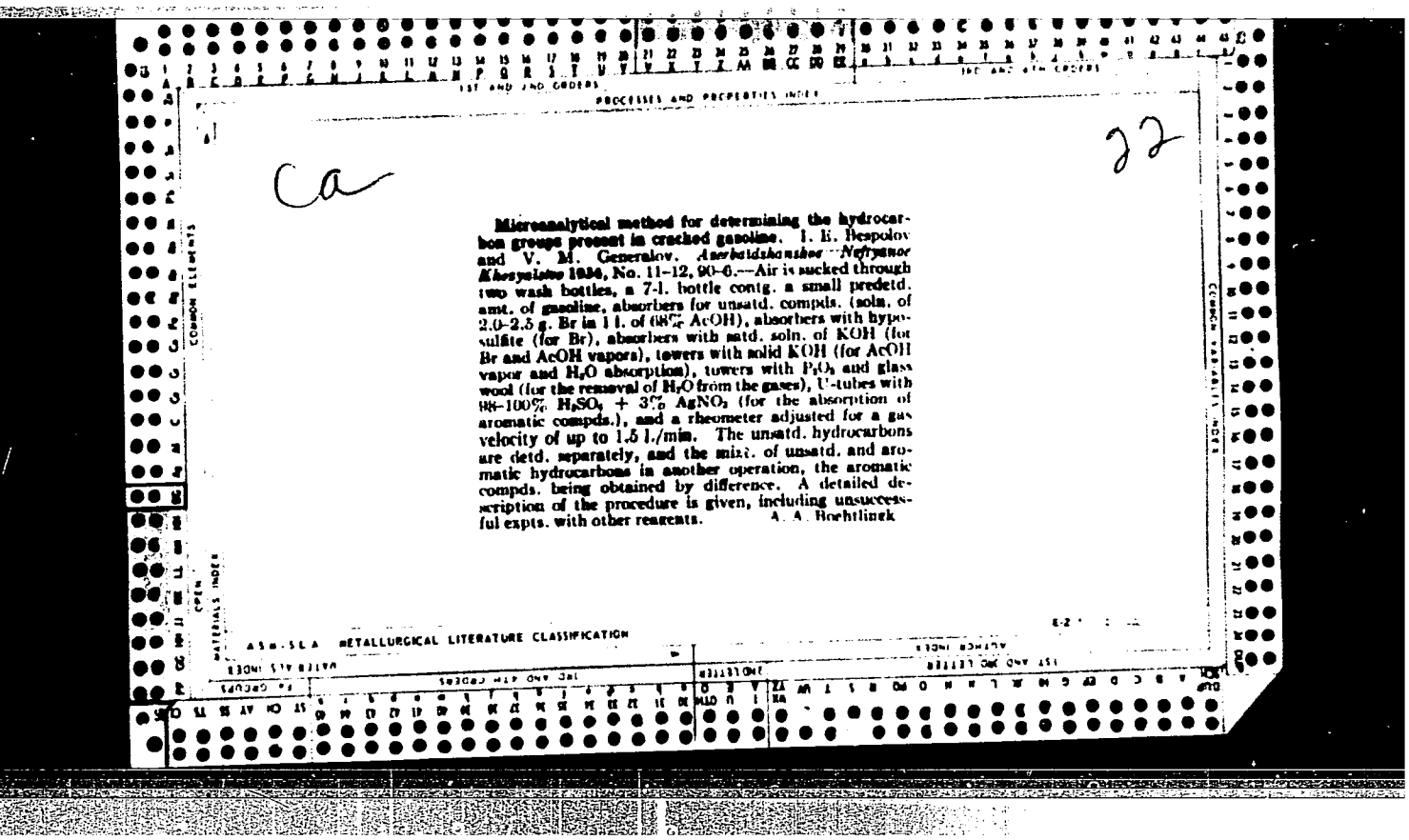

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Microanalytical method for determining the hydrocarbon groups present in cracked gasoline. I. E. Bespolov and V. M. Generalov. *Zavodskaya Laboratoriya Neftyanoe Khozyaistvo* **1936**, No. 11–12, 90–6.—Air is sucked through two wash bottles, a 7-l. bottle contg. a small predetd. amt. of gasoline, absorbers for unsatd. compds. (soln. of 2.0–2.5 g. Br in 1 l. of 68% AcOH), absorbers with hyposulfite (for Br), absorbers with satd. soln. of KOH (for Br and AcOH vapors), towers with solid KOH (for AcOH vapor and H_2O absorption), towers with P_2O_5 and glass wool (for the removal of H_2O from the gases), U-tubes with 98–100% H_2SO_4 + 3% $AgNO_3$ (for the absorption of aromatic compds.), and a rheometer adjusted for a gas velocity of up to 1.5 l./min. The unsatd. hydrocarbons are detd. separately, and the mixt. of unsatd. and aromatic hydrocarbons in another operation, the aromatic compds. being obtained by difference. A detailed description of the procedure is given, including unsuccessful expts. with other reagents. A. A. Boehtlingk