MAKAREVICH, T.N.; YEFIMOVA, Z.A.

Characteristics of fall-winter ice conditions on the Danube River.
Trudy GGI no.80:126-171 '62. (MIRA 16:12)

YEFIMOVA, Z.N.

Bacterial carrier state in dysentery. Sov. med. 25 no.11:87-90 N '61. (MIRA 15:5)

1. Iz kafedry (ispolnyayushchiy obyazannosti zaveduyushchego - doktor med.nauk B.L.Ittsikson) infektsionnykh bolezney I Leningradskogo meditsinskogo instituta.

(DYSENTERY)

VERTYSHEVA, N.S.; LATKIN, V.F.; PROKHOROVA, A.A.; YEFIMOVA-SYAKINA, E.M.; PARASHCHENKO, S.F., kand.istor.nauk, red.; TRUBITSYNA, A.N., kand.istor.nauk, red.; PLOTNIKOV, A.M., red.; KHLOBOCHDOV, V.I., tekhn.red.

[Collectivization of agriculture on the Kuban; collection of documents and materials] Kollektivizatsiia sel'skogo khoziaistva na Kubani; sbornik dokumentov i materialov. Krasnodar, Krasnodarskoe knizhnoe izd-vo. Vol.1. 1918-1927 gg. 1959. 201 p. (MIRA 13:3)

1. Kommunisticheskaya partiya Sovetskogo Soyuza. Krasnodarskiy krayevoy komitet. Partiynyy arkhiv.
(Kuban--Agriculture, Cooperative)

YEFIMOVICH, A.

Pole antenna. Radio no.6:36 Je '60. (MIRA 13:7)
(Radio--Antennas)

YEFIMOVICH, A.I.

25(1) PHASE I BOOK EXPLOITATION SOV/2928

Andozhskiy, Vsevolod Dmitriyevich, Aleksandr Ivanovich Belyanin, Vladimir L'vovich Veyts, Yevgeniy Grigor'yevich Ginzburg, Aleksey Illarionovich Yefimovich, Igor' Semenovich Krivenko, Vladimir Mikhaylovich Shandrov, and Izrail' Nakhmanovich Frenkel'

Zubchatyye i chervyachnyye peredachi; nekotoryye voprosy teorii, rascheta i proizvodstva (Spur Gear and Worm Gear Drives; Some Problems in Theory, Design, and Manufacture) Moscow, Mashgiz, 1959. 219 p. Errata slip inserted. 9,000 copies printed.

Ed. (Title page): N. I. Kolchin, Doctor of Technical Sciences, Professor; Reviewer: A. N. Grubin, Doctor of Technical Sciences, Professor; Ed. (Inside book): N. F. Golovanov, Candidate of Technical Sciences; Ed. of Publishing House: N. Z. Simonovskiy; Tech. Ed.: R. G. Pol'skaya; Managing Ed. for Literature on the Design and Operation of Machinery (Leningrad Division, Mashgiz): F. I. Fetisov, Engineer.

PURPOSE: This book is intended for technical personnel and scientific workers interested in the theory of gears and gear drives.

COVERAGE: This book deals with the calculation, design, and practical application of gears and gear drives. The first three chapters are devoted to new types of gears and gear drives and to the manufacture of gears with advanced geometry of engagement. The last four chapters describe theoretical and practical methods of gear calculation. A description is given of planetary gear drives with various types of engagement, with emphasis on the design of planetary reducing gear drives for use in electric motors. Recent achievements in the Soviet gear-cutting industry and theoretical work on gear design and calculations of stresses in gear trains are discussed. No personalities are mentioned. There are 97 references: 82 Soviet, 10 German, 4 English, and 1 French.

Card 2/6

YEFIMOVICH, L. [IAfimovich, L.]

Her mother has nothing to worry about. Rab.i sial. 36 no.9:6-7 S '60. (MIRA 13:10)

1. Sovkhoz "Varonina" Bykhovskogo rayona.
(Bykhov District--Dairying)

YEFIMOVICH, N. G., Cand Med Sci -- (diss) "Dynamics of easily hydrolyzed phosphorous of adenosine triphosphoric acid and inorganic phosphorus in the blood during medical insulin hypoglycemia," Leningrad, 1960, 20 pp (Leningrad Pediatrics Medical Institute) (KL, 35-60, 126)

YEFIMOVICH, N.G.

Changes in the content of the formal elements of blood and hemoglobin during the course of therapeutic insulin hypoglycemia. Vop. psikh. nevr. no.10:353-365 '64.
(MIRA 18:12)

1. Kafedra psikhiatrii (zav. kafedroy - prof. D.S.Ozeretskovskiy) 1-go Leningradskogo meditsinskogo instituta imeni akademika I.P. Pavlova (direktor - A.I.Ivanov).

YEFIMOVICH, N.G.

Significance of some biochemical studies in insulin shock therapy of schizophrenia and other psychoses. Vop.psikh.i nerv. 8:329-332 '62. (MIRA 17:4)

1. Iz kafedry psikhiatrii 1-go Leningradskogo meditsinskogo instituta imeni akademika I.P.Pavlova i II-y Leningradskoy psikhonevrologicheskoy bol'nitsy.

YEFIMOVICH, V. A.

21 Mar 53

USSR/Mathematics - Spaces

"New Definition of Uniform Spaces. Metrization of Spaces of Proximity," V. A. Yefimovich and A. S. Shvarts

DAN SSSR, Vol 89, No 3, pp 393-396

Discuss 3 possible ways to axiomatize the concept of uniform continuity: (1) through relation of infinite closeness of two sets ($A\,B = \rho(A,B) = 0$ in metric space) a development of the viewpoint of P. Aleksandrov and K. Kuratovskiy; (2) through uniform systems of neighborhoods (axiomatization of a system of epsilon-neighborhoods in metric space), a development of

272T56

F. Hausdorff's viewpoint; (3) through relation of equivalences of generalized sequences $x_a \sim y_b$ (generalization of converging sequences in metric space, with $x_n \sim y_n$ meaning $\rho(x_n, y_n \to 0)$, a development of M. Frechet's viewpoint. Presented by Acad A. N. Kolmogorov 24 Jan 53.

ABRAMOVICH, YA.M.

I ivnenkovskii sveklosovkhoz (Pivnenkovskii State Beet Farm). Moskva, Pishchepromizdat, 1954.

SO: Monthly List of Russian Accessions, Vol 7, No 9, Dec 1954

YEFIMOVICH, Yo.I.; TSIRKIN, R.S.

Methodology for the preparation of slides for electron microscopy. Vop. virus. 9 no.6:725-727 N-D '64.

1. Meditsinskiy institut imeni M.I.Kalinina, Omsk. (MIRA 18:11)

YFFIMOVICH, Ye.I.

Tungsten diaphragms for apertures and condensers in electron microscopy. Lab. delo no.8:511-512 '65. (MIRA 18:9)

1. Kafedra mikrobiologii (zav.- dotsent A.M. Khovanova) Omskogo meditsinskogo instituta.

L 10043-67 EWT(1) JK
ACC NR: AT6029007 (N) SOURCE CODE: UR/0399/66/000/006/0069/0071

AUTHOR: Dalmatov, D. M.; Iyamova, Z. S.; Yofimovich, Yo. I. 30

ORG: Department of Infectious Diseases and Microbiology, Omsk Medical Institute (Kafedra infektsionnykh bolezney i mikrobiologii Omskogo meditsinskogo instituta)

TITLE: Role of microbiologic studies in the evaluation of results of treatment of typhoid and paratyphoid bacterial carriers

SOURCE: Sovetskaya meditsina, no. 6, 1966, 69-71

TOPIC TAGS: man, electron microscopy, bacterial disease, disease control, disease therapeutics, morphology

ABSTRACT: Electron-microscope studies were conducted of changes in properties of the carriers pertaining to their morphology, cultivation and biochemistry. The studies were made during treatment of 100 bacterial carriers, 80 of abdominal and 20 of paratyphus A and B, until bacterial excretion had stopped. Thirty microphotographs were taken of each culture from the bile of the carriers and the following features were studied: monomorphism, loss of flagellae (negative agglutination reaction with H-antigen), increase of cell membranes lacking protoplasm (upon antibiotic therapy), and increase of all bacteriophagic stages (under the effect of daily therapy with abdominal typhus bacteriophage introduced by the duodenal tube). Hemocultures from

Card 1/2 UDC: 616.927+616.927.77-008.97

L 10043-67

ACC NR: AP6029007 O

acute cases served as controls. Treatment with oxytetracycline and bacteriophage every day or every other day for 3 weeks resulted in morphologic changes from S- to O-forms, curliques and R-forms, changes in or absence of cultivability on the usual media, and progressive changes of color on bismuth-sulfite medium. These changes afford evaluation of the effect of treatment. Orig. art. has: 1 figure.

SUB CODE: 06 / SUBM DATE: none/ ORIG REF: 004

YEFIMOVICH, Ye.K.; NESTEROV, V.V.; TYUTYUNNIKOV, N.F.; SHINKARSKIY, D.G.; ZABRODA, Yu.F.; KONDRAT'YEV, O.K.; GORODNICHENKO, A.I.

Automatic level control of flotation concentrate in vacuum filter baths. Avtom.i prib. no.3:21-23 Jl-S '62. (MIRA 16:2)

1. Institut avtomatiki Gosplana UkrSSR (for Yefimovich, Nesterov, Tyutyunnikov, Shinkarskiy, Zabroda, Kondrat'yev).
2. Dneprodzerzhinskiy koksokhimicheskiy zavod imeni Ordzhonikidze (for Gorodnichenko).

(Flotation)
(Liquid level indicators)

L 2619-66 EWT(m)/EPF(c)/EWP(i)/EWP(t)/EWP(b) IJP(c) JD/WB

ACCESSION NR: AP5011369 UR/0365/65/001/002/0239/0241

620.193.2

55
52
B

AUTHOR: Roykh, I. L.; Yefimovich, Ye. V.; Bolotich, I. P.

TITLE: On atmospheric corrosion of vacuum condensates of aluminum

SOURCE: Zashchita metallov, v. 1, no. 2, 1965, 239-241

TOPIC TAGS: metal vapor deposition, vapor plating, corrosion resistance

ABSTRACT: Atmospheric corrosion of vacuum condensates of aluminum was studied to examine the corrosion resistance of aluminum platings prepared by vacuum condensation, a technique widely used on a commercial scale. The samples, 500-5000 Å in thickness, were prepared by vacuum spraying of aluminum onto a glass gase. The extent of corrosion was measured by photographic and optical polarization techniques. The samples were oxidized for 10 min in air at 20 ± 2°C and at relative humidity of 50 ± 5%. In order to enhance the optical density, the aluminum films stretched on plates were immersed in a 4% Na_2CO_3 solution, and, then, immersed for 1 min in a 50% solution of ethyl alcohol and dried for 10 min at 100°C. The dependence of the number of evolved H_2O_2 molecules upon corrosion duration is shown

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L 2619-66

ACCESSION NR: AP5011369

in fig. 1 of the Enclosure. The dependence of thickness of aluminum oxide layer (in Å) upon corrosion duration is shown in fig. 2 of the Enclosure. The dependence of the number of evolved H_2O_2 molecules upon the quantity of Al_2O_3 molecules formed is shown in fig. 3 of the Enclosure. The dependence of the number of evolved H_2O_2 molecules on the logarithm of corrosion time is shown in fig. 4 of the Enclosure. The correlation between the number of evolved H_2O_2 molecules and the number of Al_2O_3 molecules formed is: $n_{Al_2O_3} = 12 \cdot n_{H_2O_2}$. The linear dependence of the number of evolved H_2O_2 molecules upon the logarithm of corrosion duration is in agreement with data in the literature. Orig. art. has: 3 figures.

ASSOCIATION: Odesskiy tekhnologicheskiy institut (Odessa Institute of Technology)

SUBMITTED: 14Nov64 ENCL: 02 SUB CODE: MM, GC

NO REF SOV: 003 OTHER: 003

Card 2/4

L 2619-66

ACCESSION NR: AP5011369 ENCLOSURE: 01

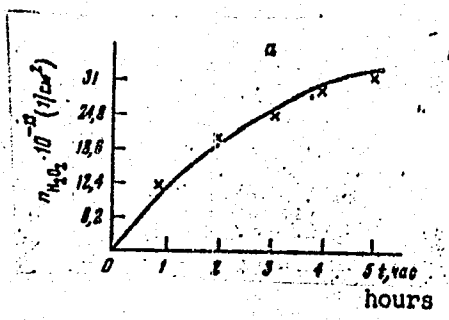

Fig. 1.

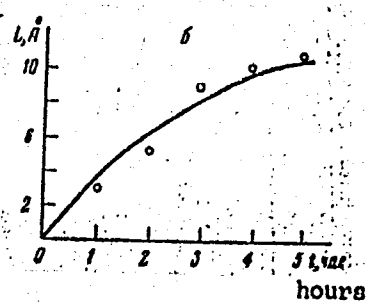

Fig. 2.

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L 2619-66

ACCESSION NR: AP5011369 ENCLOSURE: 02

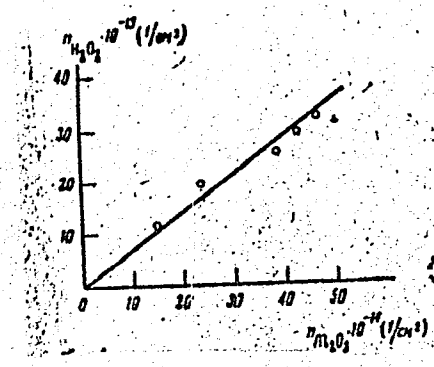

Fig. 3.

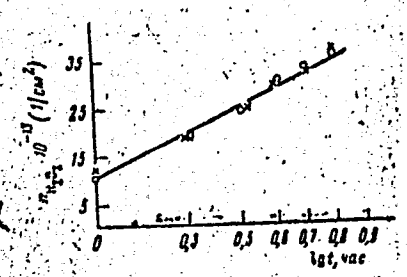

Fig. 4. O--aluminum vacuum condensate; +--massive aluminum samples.

Card 4/4

YEVDOKIMOV, A.; YEFIMOVSKIY, V.; MIKHAYEVICH, N.A., redaktor; SHEVCHENKO, M.G., tekhnicheskiy redaktor

[Economics of a diversified collective farm] Ekonomika mnogootraslevogo kolkhoza. [Khar'kov] Khar'kovskoe obl.izd-vo, 1955. 81 p.
(Collective farms) (MLRA 10:1)

YEFIMTSEV, B. M.

Yefimtsev, B. M. and Finkel'Shteyn, M. M. "Progress in the rolling of tractor and reviting steel," Trudy Stalinskogo obl. otd-niya VNITOM, no 1, 1949, p. 79-81

SO: U-5241, 17 December 1953, (Letopis 'Zhurnal 'nykh Statey, No. 26, 1949)

YEFIMTSEV, M. I.

Dissertation: "Phosphorobacterin as a Fertilizer in Black Earth." Cand Agr Sci, Voronezh Agricultural Inst, Voronezh, 1953. (Referativnyy Zhurnal--Khimiya, Moscow, No 4, Feb 54)

SO: SUM 243, 19 Oct 54

YEFIMTSEV, M.I.

Rotary fertilizer spreader. Zemledelie 26 no.7:96 Jl '64. (MIRA 18:7)

YEFIMTSEV, M.I., kand. sel'skokhoz. nauk

Placement of fertilizers for corn before sowing. Zemledelie 27 no.5:76-77 My '65. (MIRA 18:6)

1. Luganskiy sel'skokhozyaystvennyy institut.

AUTHOR: Yefimtsev, N.A. SOV-5-50-2-21/43

TITLE: Ancient Glaciation of West Tuva (Drevneye oledeneniye zapadnoy Tuvy)

PERIODICAL: Byulleten' Moskovskogo obshchestva ispytateley prirody - Otdel geologicheskiy, 1958, Nr 2, pp 142-147 (USSR)

ABSTRACT: The author states that a determination of ancient glaciation in the Altay-Sayan mountains is very difficult because of the stratigraphical separation of the Quaternary deposits. He mentions three types of end moraines and describes them in detail. The lack of any traces of glaciation which are not linked with the glacial water system and glacial feeding centers, as well as the peculiarities in the distribution of the Upper Tertiary deposits, lead to the conclusion that the relief of this region has almost the same system and character today as it did at the beginning of the glaciation. The glaciation age can be determined by findings in synchronous glaciation deposits of fauna representatives of the Upper Paleolithic complex which, according to V.I. Gromov's

Card 1/2

system (1956), is not older then the Pleistocene Glacial epoch.

1. Geology 2. Geological time---Determination 3. Glaciers 4. Geophysics

AUTHOR: Yefimtsev, N.A. SOV-11-58-9-5/14

TITLE: Quaternary Glaciation in Western Tuva and the Eastern Part of Gornyy Altay (O chetvërtichnom oledenenii Zapadnoy Tuvy i vostochnoy chasti Gornogo Altaya)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, 1958, Nr 9, pp 62-83 (USSR)

ABSTRACT: The tectonic relief of West Tuva and the eastern part of Gornyy Altay was formed in the Eopleistocene epoch. The different heights of the mountain ranges occurred after the formation of carboniferous sedimentary deposits, identified by numerous flora-fossils as belonging to the Miocene epoch. The traces of glaciation showed that it occurred in the second part of the Middle-Pleistocene epoch and that no substantial changes occurred during this period of glaciation. During the dissipation of the ice sheet, large glaciers were formed in many places and this explains the formation of numerous kames, osar and moraines. The author believes that only one glaciation period occurred in the region. Various terrace formations of boulders and rock waste found in the region were caused by the action of numerous streams and rivers formed by the melting glaciers and cannot be considered as remains of earlier glaciations.

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Quaternary Glaciation in Western Tuva and the Eastern Part of Gornyy Altay

In this the author disagrees with almost all other geologists who worked in the region,of whom he mentions: O.A. Rakovets, I.I. Belostotskiy, I.F. Pozharisskiy, V.Ye. Gendler, G.A. Shmidt, Ye.V. Devyatkin, S.R. Mayzelis, T.V. Belyayeva from the Vsesoyuznyy airogeologicheskiy trest - VAGT (The All-Union Aero-Geological Trust - VAGT), P.M. Tatarinov, V.A. Kuznetsov, K.S. Filatov, K.I. Postoyev, Z.A. Lebedeva, L.D. Shorygina, I.G. Nordeg, V.Ye. Kudryavtsev, B.F. Sel'vesyuk, G.I. Ivanova, G.G. Bel'skiy, I.S. Gudilin, Ye.N. Shchukina, C. Crane, S.N. Naumova, O.V. Matveyeva, G.F. Lungersgauzen, V.I. Gromov, A.L. Dodin, V.P. Nekhoroshev, L.I. Semikhatova, V.N. Goncharov, Ye.V. Shantser, P.A. Shumskiy and N.P. Ladokhin.
There are 2 maps, 3 tables, 2 photos, 4 diagrams and 33 references, 32 of which are Soviet and 1 English.

SOV-11-58-9-5/14

Quaternary Glaciation in Western Tuva and the Eastern Part of Gornyy Altay

ASSOCIATION: Geologicheskiy institut AN SSSR, Moskva (The Geological Institute of the AS USSR, Moscow)

SUBMITTED: November 20, 1957

1. Glaciers--USSR 2. Geological time--Determination

Card 3/3

YEFIMTSEV, N.A.

Lower boundary of the Quaternary system in the Altai-Sayan mountainous region. Trudy GIN no.32 138-142 '59. (MIRA 13:12)
(Altai Mountains--Geology, Stratigraphic)
(Sayan Mountains--Geology, Stratigraphic)

YEFIMTSEV, Nikolay Andrianovich; GROMOV, V.I., doktor geol.-mineral.nauk, otv.red.; FIN'KO, V.I., red.izd-va; LAUT, V.G., tekhn.red.

[Quaternary glaciation in western Tuva and the eastern part of the Gornyy Altai] Chetverichnoe oledenine Zapadnoi Tuvy i vostochnoi chasti Gornogo Altai. Moskva, Izd-vo Akad.nauk SSSR, 1961. 163 p. (Akademiia nauk SSSR. Geologicheskii institut. Trudy, no.61). (MIRA 14:12)

(Altai Mountains--Glacial epoch)
(Tuva Autonomous Province--Glacial epoch)

SHANTSER, Ye.V., glav. red.; YEFIMTSEV, N.A., otv. red.; BADER, O.N., red.; GRICHUK, V.P., red.; GROMOV, V.I., red.; MEL'NIKOVA, N.B., red. izd-va; GIDALEVICH, A.M., red. izd-va; KASHINA, P.S., tekh. red.

[Materials from the All-Union Interdepartmental Conference on the Study of the Quaternary Period] Materialy Vsesoiuznogo mezhduvedomstvennogo soveshchaniia po izucheniiu chetvertichnogo perioda. Moskva, Izd-vo Akad.nauk SSSR. Vol.1[General questions in the study of the Quaternary period. History of Quaternary flora, fauna, and fossil man] Obshchie voprosy izucheniia chetvertichnogo perioda. Istoriia chetvertichnoi flory, fauny i iskopaemogo cheloveka. 1961. 495 p.
(MIRA 14:5)

1. Vsesoyuznoye mezhduvedomstvennoye soveshchaniye po izucheniyu chetvertichnogo perioda. Moscow, 1957. 2. Geologicheskiy institut AN SSSR (for Gromov, Shantser) 3. Institut geografii AN SSSR (for Grichuk)
(Geology, Stratigraphic) (Paleontology, Stratigraphic)

YEFIMTSEV, N.A., otv. red.; SHANTSER, Ye.V., glav. red.; BADER, O.N., red.; GRICHUK, V.P., red.; GROMOV, V.I., red.; MEL'NIKOVA, N.B., red. izd-va; GIDALEVICH, A.M., red. izd-va; KASHINA, P.S., tekhn. red.

[Materials of the All-Union Conference on the Study of the Quaternary period] Materialy Vsesoiuznogo soveshchaniia po izucheniiu chetvertichnogo perioda. Moskva, Izd-vo Akad. nauk SSSR. Vol.1. [General problems in the study of the Quaternary period. History of Quaternary flora, fauna, and fossil man] Obshchie voprosy izucheniia chetvertichnogo perioda. Istoriia chetvertichnoi flory, fauny i iskopaemogo cheloveka. 1961. 495 p. (MIRA 14:8)

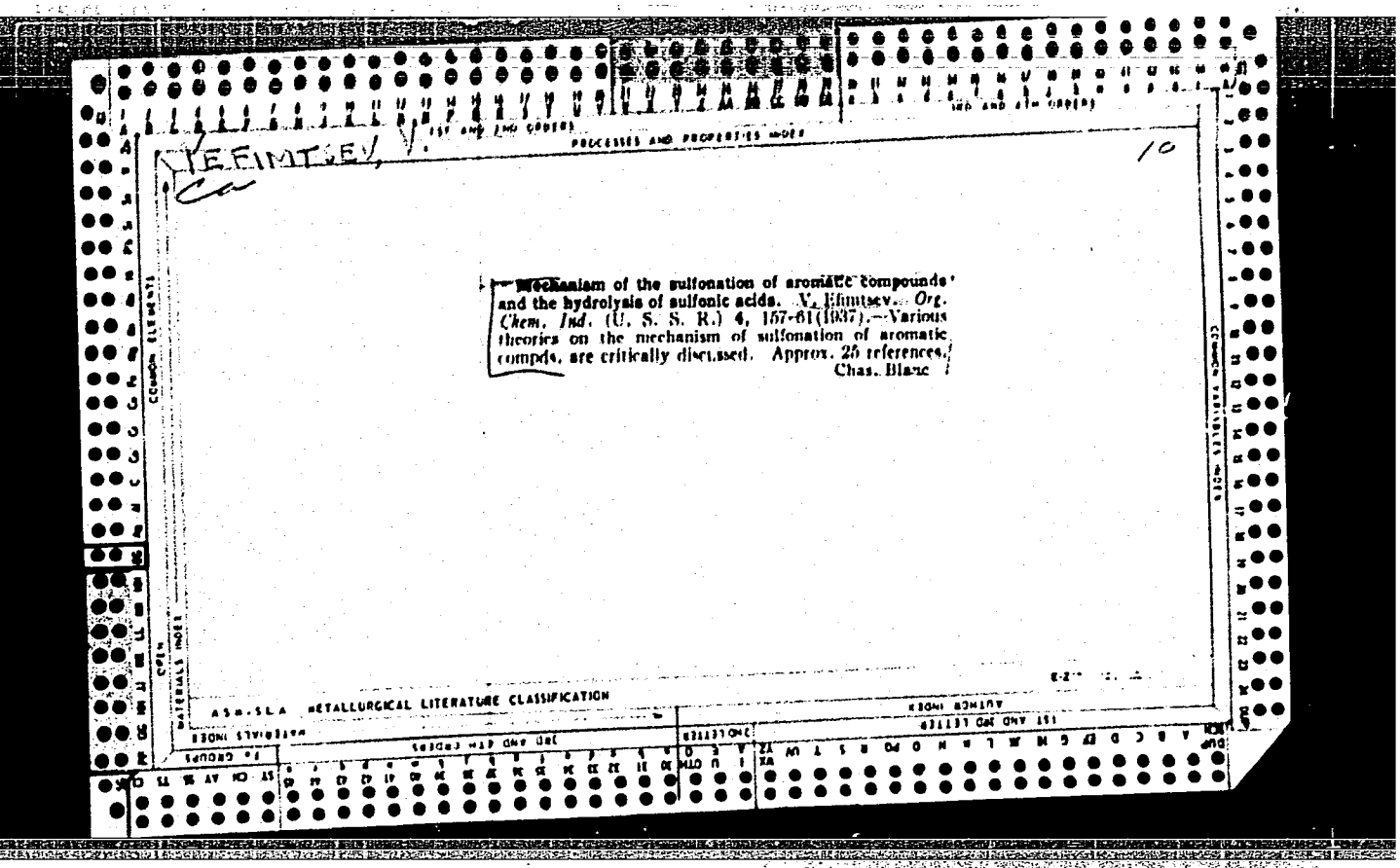
1. Vsesoyuznoye soveshchaniye po izucheniyu chetvertichnogo perioda, Moscow, 1957. 2. Geologicheskiy institut AN SSSR (for Gromov, Shantser). 3. Institut geografii AN SSSR (for Grichuk)
(Geology)

DEVYATKIN, Ye.V.; YEFIMTSEV, N.A.; SELIVERSTOV, Yu.P.; CHUMAKOV, I.S.

More about ice accumulations in the Altai. Trudy Kom. chetv.per. 22: 64-75 '63. (MIRA 17:2)

YEFIMTSEV, N.A.

Structure and origin of the Quaternary sediments of the Chuya and Katun' Valleys in the Gornyy Altai. Biul. Kom. chetv. per. no.29:115-131 '64. (MIRA 17:8)



KHIMTSEV, V.

Ca

10

Mechanism of the sulfonation of aromatic compounds and the hydrolysis of sulfonic acids. V. Khimtsev. *Org. Chem. Ind.* (U. S. S. R.) 4, 157-61(1937).—Various theories on the mechanism of sulfonation of aromatic compds. are critically discussed. Approx. 25 references.
Chas. Blanc

[illegible], F.F., [illegible]; YEFIMTSEV, Ye.I.

Polarographic method for studying the kinetics and action spectra of photosynthesis. Fiziol. rast. 12 no.2:364-370 Mr-Ap '65. (MIRA 18:6)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

ACC NR: AP7005625 SOURCE CODE: UR/0413/67/000/002/0074/0075

INVENTOR: Yefimtsev, Ye. I.; Litvin, F. F.

ORG: None

TITLE: A method for making metal microelectrodes in quartz insulation. Class 30, No. 190524 [announced by the Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 74-75

TOPIC TAGS: quartz, electrode design, platinum

ABSTRACT: This Author's Certificate introduces: 1. A method for making metal microelectrodes in quartz insulation. The procedure is designed for uniformly coating the metal section of the electrode with quartz glass, producing an electrode with the necessary shape and eliminating the gap between metal and quartz. A quartz capillary containing a metal such as platinum is heated in the zone of the metal to the temperature where the metal melts and the quartz softens and then stretched. After cooling, the gap between metal and quartz is filled under vacuum with a polymer material which has a high resistivity. 2. A modification of this method in which reliable low-resistance contact is made between the metal part of the microelectrode and the contact conductor by introducing the latter into the quartz cylinder until it touches the metallic part of the microelectrode which has been preheated to the melting point of the contact wire.

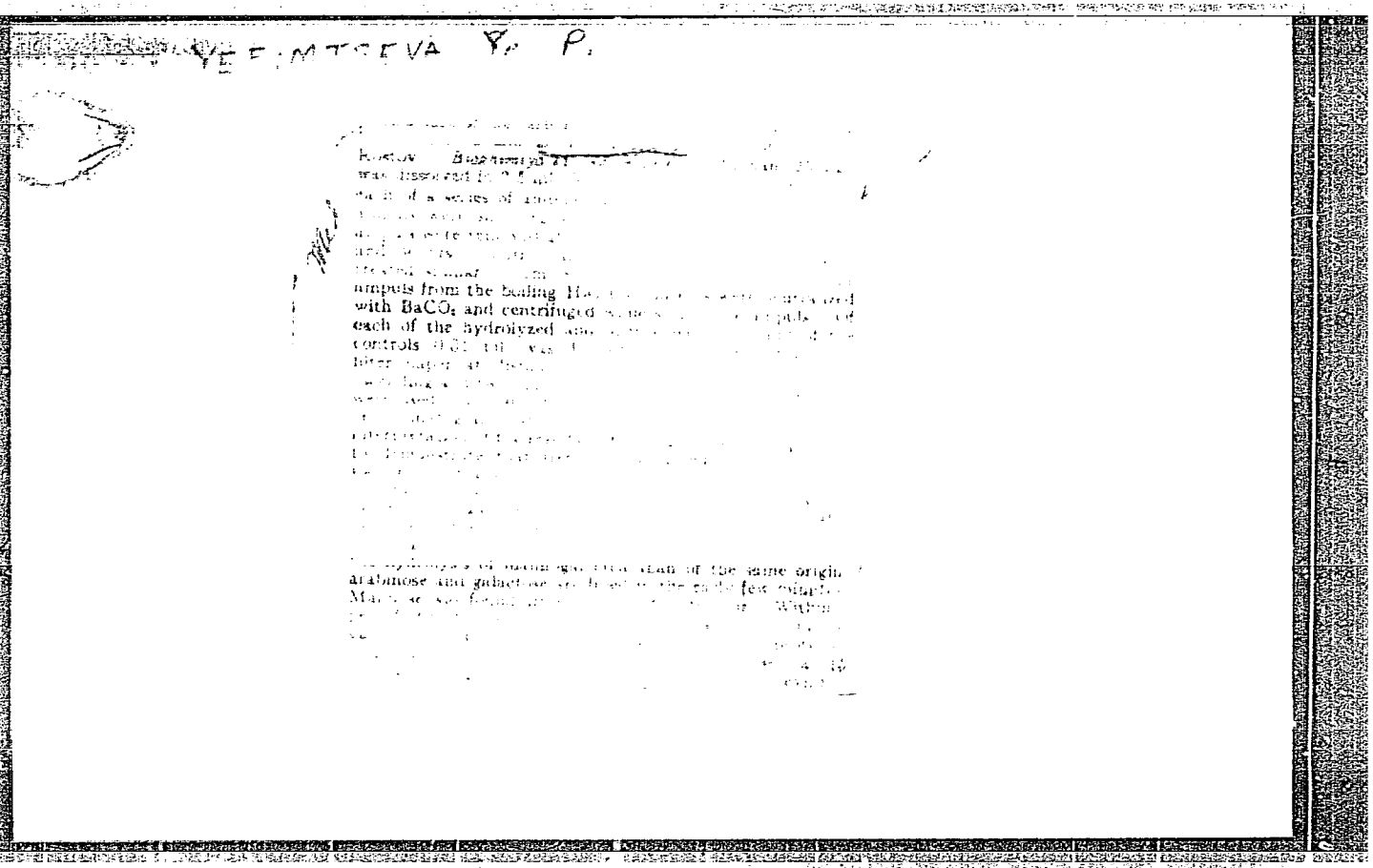
SUB CODE: 11, 09/ SUBM DATE: 090ct65

Card 1/1 UDC: 615.471:621.38.032.27

YEFIMTSEVA, A.F. (Donetsk)

Changes in the lymphatic vessels of the heart in rheumatic fever. Arkh. pat. 26 no.9:30-35 '64. (MIIA 38:4)

1. Kafedra patologicheskoy anatomii (zav. - prof. Ye.A.Dikshteyn) Donetskogo meditsinskogo instituta.



GUBAREV, Ye.M. [deceased]; YEFIMTSEVA, Ye.P.

Methodology of the isolation and study of the polysaccharides of cholera vibrios. Vop. med. khim. 11 no.2:89-94 Mr-Ap '65.

(MIRA 18:10)

1. Kafedra biokhimii Rostovskogo-na-Donu meditsinskogo instituta.

YEFIMTSEVA, Ye.P. [IEfimtseva, IE.P.]

Bacterial polysaccharides as pyrogens. Mikrobiol. zhur. 27 no.5:85-90 '65. (MIRA 18:10)

YEFIMTSEVA, Ye.P.

Pyrogenic properties of one of the polysaccharide fractions of Vibrio cholerae. Zhur. mikrobiol. epid. i immun. 33 no. 10: 141 0'62 (MIRA 17:4)

1. Iz Rostovskogo meditsinskogo instituta i Kemerovskogo meditsinskogo instituta.

ORLOVA, O.K.; YEFIMTSEVA, Ye.P.

Some biological properties of the carbohydrate fractions of the pathogen of diphtheria. Zhur. mikrobiol., epid. i immun. 41 no.3: 89-92 Mr '64. (MIRA 17:11)

1. Rostovskiy meditsinskiy institut.

BRUSKIN, B.R.; YEFIMTSEVA, Ye.P.

Some data on the chemical composition of the Siberian liver fluke (Opisthorchis felineus, Rivolta, 1884). Med. paraz. i paraz. bol. 33 no.6:701-704 N-D '64.

(MIRA 18:6)

1. Kafedra obshchey biologii i kafedra biokhimii Kemerovskogo meditsinskogo instituta.

S/075/62/017/004/001/006
I017/I217

AUTHORS: Korenman, I.M. and Yefimychev, V.S.

TITLE: Fluorimetric determination of scandium

PERIODICAL: Zhurnal analiticheskoy khimi, v.17, no.4, 1962, 425-428

TEXT: Salicylalsemicarbazide is used as a luminescent reagent for scandium. A home-made fluorimeter was used. The measurements were carried out with a light filter transmitting in the range 400-510 mμ. Acetate buffers and ammonia/ammonium chloride buffers were used for pH regulation. The reagent was a 0.1% solution of the salicylsemicarbazide in acetone. The intensity of the luminescence of solutions containing mixtures of

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S/075/62/017/004/001/006
I017/I217

Fluorimetric determination...

salicylalsemicarbazide water solution (8γ/ml) and an excess (12γ/ml) of scandium is studied and tabulated. The results show that in the pH range 2,5-7, the intensity is sufficient and that in the range pH = 2,5-4 and pH = 5,3-6,8 the intensity of luminescence is pratically contant. All the experiments are carried out at pH = 5,6±0,2. It was shown by the Yob method that at these pH's only the compound $Sc_1 anion_1$ exists. The study of the dependence between the luminescence and the molar ratio of the reagent and Sc content, carried out at pH = 5,6 with a constant Sc^{3+} concentration shows also that the molar ratio for maximum luminescence is 1:1. The determination of scandiumin mixtures was studied. The influence of 44 ions on the formation of the luminescent scandium-salicylalsemicarbazide was tested at pH = 5,6 in a ratio

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S/075/62/017/004/001/006
I017/I217

Fluorimetric determination...

of Sc^{3+} : Me^{n+}=1:200 and in many cases—1:1000. The amount of Sc in these tests was between 1 - 5 γ in 6 ml final solution; 1 ml of buffered (pH-5.6) saturated reagent solution was used. Most of the tested cations do not form fluorescent compound with the reagent and do not interfere, as Th^{4+} and Ce^{3+} form lumenescent compounds with the reagent, but the proposed method makes possible the fluorimetric determination of micro amounts (γ/20 ml) Sc in the presence of Th^{4+} and Ce^{3+} with a % error varying between 3.6 and 20%. There are 4 figures and 3 tables.

ASSOCIATION: Gor'kovskiy gosudarstvennyy universitet im. N.I. Lobachevskogo (Gorki State University im. N.I. Lobachevski)

SUBMITTED: June 20, 1961

Card 3/3

L 15179-63 EPF(c)/EWT(m)/BDS Pr-4 RM/WW

ACCESSION NR: AR3003331 S/0058/63/000/005/D053/D053

SOURCE: RZh. Fizika, Abs. 5D372 56

AUTHOR: Korenman, I.M.; Yefimy*chev, V. S.

TITLE: Concerning some luminescent compounds of salycilal-2-aminophenol

CITED SOURCE: Tr. po khimii i khim. tekhnol. (Gor'kiy), vyp. 1, 1962, 114-119

TOPIC TAGS: luminescence, salycilal-2-aminophenol compound, aluminum, gallium, indium, zinc, scandium, Al, Ga, In, Zn, Sc

TRANSLATION: The intensities of luminescence of the compounds of salycilal-2-aminophenol (HR) with Al^{3+}, Ga^{3+}, Sc^{3+}, In^{3+}, and Zn^{2+} were investigated. The compositions of these compounds were determined from the character of the dependence of the intensities on the ratio of the weights of HR and the metallic salts and on the time. Strong luminescence of the first four compounds (particularly with Al^{3+}) is attributed to two circumstances: 1) hydroxyls, which saturate the valence bonds of the metals and participate in the formation of the luminescent compound in addition to the metal and the anion of the reagent; 2) an important role is played by the formation of hydrogen bonds in the production of the rigid structure of the molecules and in the elimination of the possibility of nonradiative scattering of the

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ACCESSION NR: AR3003331

excitation energy. These compounds are ascribed the ability of acid dissociation, which increases the regidity of the structure of the luminescent anion: $R_2AlOH \rightleftharpoons (R_2AlO)^- + H^+$ and $RMeOHOH = (RMeOHO)^- + H^+$, where Me = Ga, In, Sc. Bibliography, 30 titles. V. Kolobkov

DATE ACQ: 17Jun63 SUB CODE: CH,PH ENCL: 00

Card 2/2

YEFIMYCHEV, V. S.

The Second All-Union Conference on the Preparation and Analysis of High-Purity Elements, held on 24-28 December 1963 at Gorky State University im. N. I. Lobachevskiy, was sponsored by the Institute of Chemistry of the Gorky State University, the Physicochemical and Technological Department for Inorganic Materials of the Academy of Sciences USSR, and the Gorky Section of the All-Union Chemical Society im. D. I. Mendeleyev. The opening address was made by Academician N. M. Zhavoronkov. Some 90 papers were presented, among them the following:

A. A. Popel' and Z. A. Saprykovo. Quantitative determination of paramagnetic ions in solution by NMR methods.

I. Ye. Zimakov. Determination of microimpurities (10^{-7} to 10^{-8}%) by repeated radioactive dilution.

A. A. Tumanov and V. S. Yefimychev. Determination of microconcentrations with salicylan-2-aminophenol.

(Zhur Anal Khim, 19 No. 6, 1964, p. 777-79)

TUMANOV, A.A.; YEFIMYCHEV, V.S.

Analytical potentialities of salicylal-2aminophenol. Report 1: Behavior of salicylal-2-aminophenol in aqueous solutions. Zhur. anal. khim. 20 no.9:889-897 '65. (MIRA 18:9)

1. Nauchno-issledovatel'skiy institut khimii pri Gor'kovskom universitete imeni N.I. Lobachevskogo.

YEFIM'YEV, A.

Combining dairy farms and dairy product plants. Tekh.mol. 28 no.1:5-6 '60. (MIRA 13:5)
(Dairying)

L 48317-65 EEO-2/EWG(j)/EWT(d)/EWG(r)/EWT(l)/EEC(a)/FSS-2/FS(v)-3/EEC(k)-2/EWG(v)/
EWA(d)/EEC-4/EEC(t)/EWG(a)-2/EEC(c)-2/EEC(c) Pn-4/Po-4/Pp-4/Pe-5/Pq-4/Pac-4/Pae-2
P1-4 SCTB TT/DD/GS UR/0309/65/000/005/0006/0008
ACCESSION NR: AP5013[illegible]

AUTHOR: Yefim'yev, A.

TITLE: Steps above the Earth [Data on Leonov's "walk in space"] 71 69 B

SOURCE: Nauchno-tekhnicheskiye obshchestva SSSR, no. 5, 1965, 6-8

TOPIC TAGS: Voskhod 2, space walk, spacesuit, Leonov

ABSTRACT: A description is given of the manner in which A. Leonov performed his "walk in space." The spacesuit worn by Leonov presents itself as a complex engineering scheme involving the color of the suit, the light filters protecting the astronaut from solar radiation, the self-contained oxygen-supply system, ventilation, its own power supply network to meet communications requirements, and the physiological control system. The spacesuit is made from rubber, fabrics, metal, synthetic materials, and consists of a metal helmet with transparent visor, an airtight suit, and special shoes and gloves. An umbilical cord is connected to the spacesuit, providing it with oxygen for breathing and air for ventilation of the suit. This extremely durable and elastic cable also contains flexible wires for transmitting telemetering data and maintaining communications with the spacecraft's commander and with ground stations. During the tests, physiologists decided to

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L 48317-65
ACCESSION NR: AP5013033

2

remove the nitrogen from the astronaut's body before he left the air lock. This way, it was possible to lower barometric pressure in the spacesuit to 0.4 atm without endangering the life of its occupant. It was found that the breathing of pure oxygen for over 1 hour literally washes all nitrogen from the tissues. The astronauts collaborated with designers and engineers in solving many of the complex design problems of the Voskhod-2 spacecraft. Practical suggestions offered by Pavel Belyayev and Aleksey Leonov proved valuable in testing egress techniques under deep vacuum and weightless conditions simulated on the Tu-104 aircraft. Orig. art. has: 3 figures. [VM]

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: SV, AC

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3254

Card 2/2

YEFIM'YEV, ALEKSANDR

S/025/60/000/07/01/008

AUTHOR: Yefim'yev, Aleksandr

TITLE: A Scientist Came to the Plant

PERIODICAL: Nauka i zhizn', 1960, No 7, pp 2 - 7

TEXT: The Plastics Laboratory at the Moskovskoye vyssheye tekhnicheskoye uchilishche (Moscow College of Engineering) has recently undertaken a study of the applications of plastics in mechanical engineering, for which purpose several of its associates were sent out to various plants to study the problem in situ and make their recommendations. At the "Krasnyy Proletariy" Plant, Professor Vladimir Nikolayevich Lymzin, assisted by the Plant's Senior Engineer, Filatov, and the Senior Designer, Yuriy Zhed', developed a lathe with plastic body parts instead of metal, based on the Plant's 1K62 lathe. A test model has been built and has shown that plastic gives less vibration and noise than metal. The plastic parts, packed with graphite fillers, need no lubrication; they have no internal stress and therefore do not deform. At the "Borets" Plant, Professor Vladimir Sergeyevich Korsakov used plastics to replace the manually-beveled plates, prefabricated parts and control devices used in the production of pumps. Utilizing some

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A Scientist Came to the Plant

8/025/60/000/07/01/008

of the properties of plastics, Professor Pronikov has designed an original device for automatic compensation of the automatic production lines in the Pervyy gosudarstvennyy sharikopodshipnikovyy zavod (First State Ball-Bearing Plant). This enables compensation of the wear on the individual lathes and machines without stopping the whole production line for repair or adjustment. Professor Nigmatulin is completing the design of a plastic ventilator fan for the "Moskvich's" cooling system. A plastic pneumatic suspension has been developed and tried out on a truck from the ZIL avtomobil'nyy zavod (Automobile Plant). This gives reliable and smooth suspension and would save up to 200 kg of alloyed steel per truck. Aleksandr Ivanovich Tselikov, Corresponding Member of the Akademiya nauk SSSR (Academy of Sciences of the USSR), has developed a new technological process and has adapted a rolling mill to turn out pipes and section plates of laminated plastic. Professor Zimin has developed an automatic machine for the extrusion of plastic parts. The machine is 10 times more productive than all existing models, Soviet or foreign. Unfortunately, there are no facilities for turning out plastic parts on an industrial scale. A central administration for plastics in mechanical engineering is needed in each Sovnarkhoz. This administration would have its own plastic plants. Until this time, shops for plastic parts should be set up at each large mechanical engineer-

Card 2/3

ing plant. These could be organized on the premises now occupied by metal-working shops which the advent of the plastics shops would make redundant. The names of Yakushev and Gevondyan are mentioned.

YEFIM'YEV, Aleksandr

Sucessor of metals. Nauka i zhizn' 27 no.10:33-39 O '60.
(MIRA 13:10)

(Plastics) (Machinery--Construction)

YEFIM'YEV, A.

Youth in the Electronic Data Processing Center. Tekh.mol. 31 no.5:2 '63. (MIRA 16:6)
(Electronic data processing) (Communist youth league)

YEFIM'YEV, Aleksandr

Color and music. Nauka i zhizn' 28 no.8:51-54 Ag '61.
(MIRA 14:8)

(Music and color)

YEFIM'YEV, A.; TSENIN, Yu.

Shock troops of the seven-year plan. Tekh. mol. 28 no. 3:10-12 '60.
(MIRA 14:4)

(Efficiency, Industrial)

YEFIM'YEV, A.

Study and work. Tekh.mol. 28 no.7:12-14 '60. (MIRA 13:8)
(Students)
(Technological innovations)

YEFIM'YEV, A.

Society of the builders of the future. Tekh.mol. 28 no.10:2-4 '60.
(MIRA 13:10)

(Design, Industrial)

YEFIM'YEV, A.

What time is it around the world? Tekh.mol. 28 no.9:16 '60.
(MIRA 13:10)

(Clocks and watches)

YEFIM'YEV, A.

Communist Youth League's assault on time. Tekh.mol. 28 no.11:1-3 '60. (MIRA 13:12)
(Efficiency, Industrial) (Communist Youth League)

YEFIM'YEV, A.

Remote control in petroleum tank farms. Tekh. mol. 28 no. 12:22 '60. (MIRA 13:12)

(Petroleum--Storage) (Remote control)

YEFIM'YEV, A.

Harnessed northern stream. Tekh.mol. 29 no.3:8 '61. (MIRA 14:3)
(Pechora River—Rivers—Regulation)

YEFIM'YEV, A.

Personal gifts to the 22d Congress of the Party. Tekh.mol. 29 no.9:12-13 '61. (MIRA 14:10)
(Technological innovations)

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S/029/62/000/001/002/004
D037/D113

AUTHOR: Yefim'yev, A.

TITLE: The Tayninka inventors

PERIODICAL: Tekhnika molodezhi, 30 no. 1, 1962, 14-16

TEXT: This popular article deals with new types of ornithopters, cutters and other vehicles developed by a group of 17 young designers led by Dmitriy Vladimirovich Il'in at Tayninka. An ornithopter with 6-m wings developed by Il'in was displayed at Babushkina in 1958. Due to a 42 kg vertical and 21 kg horizontal thrust it attains a speed of 100 km/hr. Engineer Viktor Chechin developed a special ВИЧ-1 (VICH-1) helicopter equipped with 2 plastic rotor wheels, rotating on one axis in opposite directions overhead. These wheels, each of which has 16 small two-blade turbines, produce a strong air flow. The pilot simply turns the gear pedal with his legs and the helicopter can attain a speed of 25-30 km/hr. By inclining the rotor wheels sideways or backwards, the helicopter can change the flight direction or even hover. It can land from high altitudes and, if equipped with a small engine, can cover long distances. Two new types of water craft are described: (1) the light super-high-speed ВОСТОК (VOSTOK)

Card 1/2

cutter, built on hinged underwater skis and equipped with a screw propeller and (2) the УТЕНОК (UTENOK) boat, which is made of glass plastics and can be paddle-, pedal-, or engine-driven. Serial production of this boat is being organized. The high-speed СОБОЛЬ (SOBOL') aerosledge made of glass plastics is very useful for travelling over difficult terrain. The rotor placed in a turbine designed by Vasiliy Arsent'yevich Popov serves as a combustion chamber, ventilator and compressor. In the ДЕЛЬФИН (DEL'FIN) amphibious helicopter now being built, the blade angle will be automatically changed by centrifugal forces, thus guaranteeing flight safety. A new nuclear power generator will transform nuclear into electrical power. Furthermore, the inventors' program includes a 4-seater plastic ВЕНЕРА (VENERA) motorcar, a МАЛЫШ (MALYSH) hydro-aero-sledge made of glass plastics, a КОРШУН (KORSHUN) amphibious cutter and a КОМСОМОЛ (KOMSOMOL) miniature motor-car. Valeriy Fedorovich Kononenko, Doctor of Technical Sciences and a member of Il'in's group, is sure that in the near future engines will be built permitting man to conquer space. Petr Vladimirovich Pylkov, Galina and Yuliy Nayda, Sasha and Lenya Baranov, Sasha Bakharev, Dima Mokrousov, Stepan Razumov, Vera Vasil'yevna Denisova, Valentin Frolov and Oleg Zadorozhnyy are mentioned. There are 5 figures.

Card 2/2

BELOUSOV, A.P., dots., kand. tekhn. nauk; YEFIM'YEV, A.N., dots., retsenzent; KUSIKOV, S.N., dots., retsenzent; KORSAKOV, V.S., prof., doktor tekhn. nauk, red.

[Design of attachments] Proektirovanie prisposoblenii. Moskva, Mashinostroenie, 1964. 186 p. (MIRA 18:2)

YEFIM'YEV, Nikolay Nikolayevich, prof., kand. tekhn. nauk;
IVANOV, A.P., red.

[Principles of the theory of submarine boats] Osnovy teorii podvodnykh lodok. Moskva, Voenizdat, 1965. 381 p. (MIRA 18:5)

ACC NR: AM5012917 Monograph UR

Yefim'yev, Nikolay Nikolayevich (Professor; Candidate of Technical Sciences)

Theoretical principles of submarines (Osnovy teorii podvodnykh lodok) Moscow, Voyenizdat M-va obor. SSSR, 1965. 381 p. illus., biblio. Errata slip inserted. 5,000 copies printed.

TOPIC TAGS: submarine, motion stability, propulsion performance, automatic control, ship navigation, MARINE ENGINEERING

PURPOSE AND COVERAGE: This book deals with the seaworthiness of submarines. Problems of buoyancy, its dependence on size and float lines, and its variations during submergence, surfacing, and submerged navigation are considered. Problems of stability and stability variations during freight transfer, surfacing and submergence, docking, and grounding, as well as at large angles of tilt and under static and dynamic conditions are discussed in detail. The unsinkability of submarines under surfacing and submergence conditions is investigated, with special attention to landing, trim, emergency surfacing, and practical problems arising during the navigation and operation of submarines. The propulsive performance and controllability of submarines in horizontal and vertical planes of operation is studied and the necessary data on pitching are included. The book is intended for submarine officers, as well as for all naval officers, auditors at academies, students at naval schools,

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Card 1/3 UDC: 629.127.001(075)

and persons interested in submarines. The author thanks A. Ya. Tsoytlin for his help with the book, and V. N. Yakovlev, V. M. Kryl'tsov, A. B. Geyro, M. I. Siron, N. O. Ul'yanov, B. A. Lobovich, and V. V. Pobedinskiy for perusing the manuscript and valuable comments.

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ACC NR: AM5012957

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SUB CODE: 13/ SUBM DATE: 07Oct64/ SOV REF: 041/ OTH REF: 009

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ACC NR: AP7007594 SOURCE CODE: UR/0104/66/000/008/0095/0095

AUTHOR: none

ORG: none

TITLE: Yefin Samolovich Groys (his 60th birthday)

SOURCE: Elektricheskiye stantsii, no. 8, 1966, 95

TOPIC TAGS: electric power transmission, electric power plant, electric engineering personnel

SUB CODE: 10

ABSTRACT: Ye. S. Groys was born in the Ukraine in March 1906. He graduated from the Kiev Electrical Engineering Institute in 1930 and worked in the Donets Basin Power Planning Institute, then in the Main Power Planning Institute and the Ministry of Electric Power Stations. His speciality has been protection from over-voltages in DC electric power transmission systems. He is active in the Society of Electric Power Engineers. He is a candidate of technical sciences. Orig. art. has: 1 figure. [JPRS: 38,330]

Card 1/1

Yefishev, A.

AID P - 333

Subject : USSR/Mining

Card : 1/1

Author : Efishev, A.

Title : The methods of treatment of pressure holes by acid

Periodical : Neft. Khoz., v. 32, #5, 31-34, My 1954

Abstract : Improvements in filtration of the pressure holes by dissolving some soil components by means of hydrochloric and hydrofluoric acids are described. Various methods of washing, cleaning and pumping are outlined. The effectivness of acid treatment is indicated by the productivity of wells before and after the treatment. 3 graphs.

Institution : None

Submitted : No date

YEFISHEV, I. I.

Industrial purification of sulfate turpentine. I. I. Efishev, A. V. Prokhorov, and [illegible] (Pulp and Paper Mill, [illegible]) [illegible]

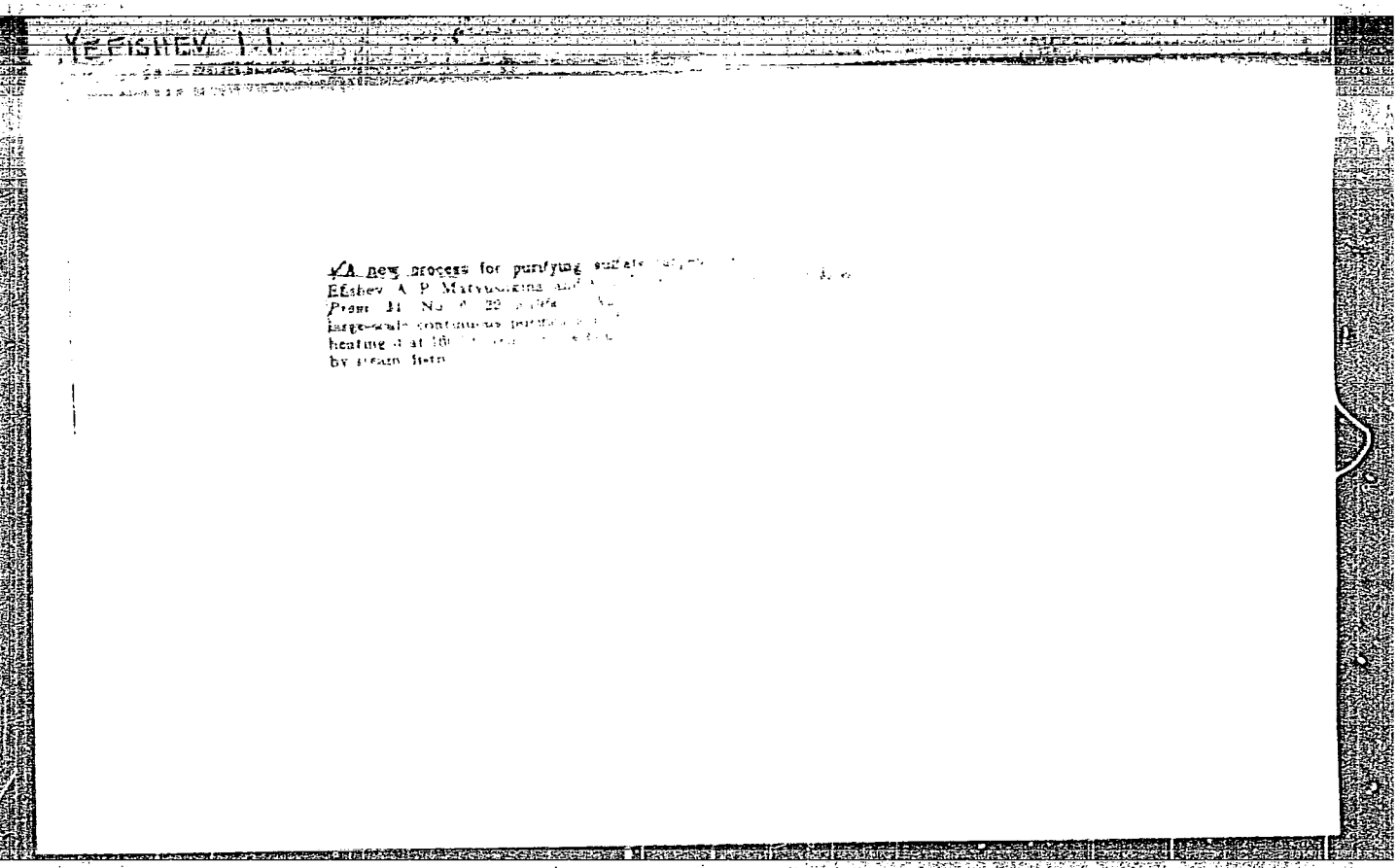
[illegible] H [illegible] was [illegible] kg. head fraction [illegible] intermediate fraction [illegible] product fraction [illegible]

YEFISHEV, I.I.

YEFISHEV, I.I.; PROKHOROV, A.V.

Catching blow-off products of sulfate cooking of cellulose. Bum. prom. 30 no.1:20-22 Ja '55. (MLRA 8:3)

1. Segezhskiy tsellyulozno-bumazhnyy kombinat.
(Cellulose)



KOMSHILOV, N.F.; LETONMYAKI, M.N.; PROKHOROV, A.V.; YEFISHEV, I.I.

Ways and methods for reducing the amount of sulfuric acid used in producing tall oil from sulfate soap. Izv. Kar. i Kol' fil. AN SSSR no.1:151-155 '59. (MIRA 12:9)

1.Laboratoriya lesokhimii Karel'skogo filiala AN SSSR i Nauchno-issledovatel'skiye gruppy Pitkyarantskogo sul'-fatnogo zavoda i Segezhskogo tsellyulozno-bumazhnogo kombinata.
(Sulfuric acid) (Tall oil)

[redacted]; ZUSINA, A.I., redaktor; SPIRIDONOV, N.F., tekhnicheskiy redaktor; SHCHERBAKOV, A.I., tekhnicheskiy redaktor

[Experience in applied science instruction in the schools] I opyta politekhnicheskogo obucheniia v shkole. [Kuibyshev] Kuibyshevskoe kn-vo, 1954. 113 p. (MLRA 9:10)

1. Kuybyshevskaya oblast'. Institut usovershenstvovaniya uchiteley (Science--Study and teaching)

15-57-4-5660

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4, p 220 (USSR)

AUTHOR: Yefleyev, A. P.

TITLE: Petroleum Flow to the Wells in Deposits of Nearly Circular Form (O pritoke nefti k skvazhinam v mestorozhdeniyakh, blizkikh k krugovym formam)

PERIODICAL: Uch. zap. Kuybyshevsk. gos. ped. in-t, 1956, Nr 14, pp 109-116

ABSTRACT: The author discusses a planar problem on the theory of seepage for a nearly circular deposit with a well expressed elevation and depression.

Card 1/1 No name

YEFLEYEV, O.A.

Automatic time regulator for pushing cars into a tunnel kiln. Stek. i ker. 23 no.1:37-38 Ja '66.

(MIRA 19:1)

YEFMAN, A.M.

Methodology of detecting blood characteristics in patients with cancer. Pat. fiziol. i eksp. terap. 8 no.1:64-66 Ja-F '64.
(MIRA 18:2)

1. Kafedra gospital'noy terapii (zav.- prof. V.M. Karatygin) Sverdlovskogo meditsinskogo instituta.

L 25678-66 EWT(1)/EWA(h)
ACC NR: AM6013862 Monograph UR/

Kaplan, Aleksandr YEfimovich; Kravtsov, YUriy Aleksandrovich; Rylov, Vladimir Nikolayevich

Parametric oscillators and frequency dividers (Parametricheskiye generatory i deliteli chastoty) Moscow, Izd-vo "Sovetskoye radio", 1966. 333 p. illus., biblio. 11,500 copies printed.

TOPIC TAGS: parametric oscillator, frequency divider, semiconductor diode

PURPOSE AND COVERAGE: This book is intended for specialists in the fields of radiophysics and electronics, for scientific and technical personnel, and for aspirants and students in schools of higher education concerned with the problems of parametric generation and the theory of nonlinear reactive parameter systems. The book presents the theory of parametric oscillators and frequency dividers with a nonlinear semiconductor-diode capacitance. Various lumped parameter generation systems-oscillators with one degree of freedom and oscillators with numerous degrees of freedom, both with multiple and nonmultiple oscillation frequencies-are investigated. Part of paragraph 7 of chapter 1 was written by Yu. V. Grigor'yev and paragraphs

Card 1/4 UDC 621.373.93

7 and 8 of chapter 2 were written by K. K. Likharev. The authors express their gratitude to Professor M. Ye. Zhabotinskiy, Professor V. V. Migulin, Professor S. M. Rytov, Professor R. V. Khokhlov, Yu. Ye. D'yakov, S. A. Akhmanov, V. P. Botavin, L. L. Goryshnik, Ye. M. Gershenzon, V. V. Grigor'yan, L. M. Kuzovkov, Yu. V. Ponomarev, O. K. Slavinskiy, V. S. Tsarenkov and V. S. Etkin.

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SUB CODE: 09/ SUBM DATE: 03Jan66/ ORIG REF: 070/ OTH REF: 020

Card 4/4 bla

S/191/61/000/003/011/015
B124/B203

AUTHORS: Shturman, A. A., Yefoyan, A. S.

TITLE: Production of molds for plastics by molding liquid metal alloys

PERIODICAL: Plasticheskiye massy, no. 3, 1961, 60-63

TEXT: At present, several methods are used to produce semisolid (provisional) molds from gypsum, plastics, wood, etc. for molding and casting plastics under pressure; but only comparatively small amounts can be molded, and the accuracy of dimensions of the products does not exceed that of the 7th class. In recent years, successful work has been done in Czechoslovakia for the production of molds for plastics from liquid Zn, Al, Cu, and Mg alloys. In 1960, the authors introduced this method at some Khar'kov plants (Plant for Dental Material, "Serp i Molot" Plant, etc.); an alloy of 97% Zn and 3% Al was used. The properties of the molded material are: Brinell hardness: 75 kg/mm^2, specific impact strength: 7 $kg \cdot cm/mm^2$, tensile strength: 25 kg/mm^2, relative elongation: 3%, and temperature of complete melting: 460 - 480°C. Patterns are made of steel

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Production of molds for...

or brass, taking account of the shrinkage of plastics. The alloy is molded in a special device (Fig. 1). Fig. 2 shows a device for molding the dies for the die casting of a plastic stopper. The production of molds of complicated shape for the molding of gears is described as an example for the application of the method. The material used for the production of molds can be re-cast and re-used several times. Die-cast polycaprolactam, polyethylene, polystyrene, Etrol, etc. parts can be produced with these molds, whereas the materials Л1 (L1), Л2 (L2), АКР-7 (AKR-7), polyvinyl chloride, etc., are worked by compression molding; they are also suitable for epoxy resins, polyesters, АСТ-Т (AST-T), etc. There are 8 figures and 1 Soviet-bloc reference.

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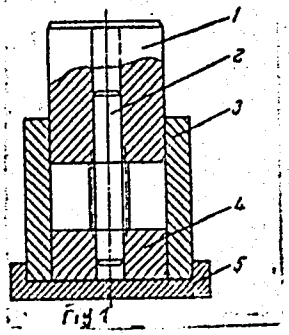

Fig. 1

Legend to Fig. 1: Device for molding the alloy. (1) Die, (2) pattern, (3) cylinder, (4) seal, (5) plate.

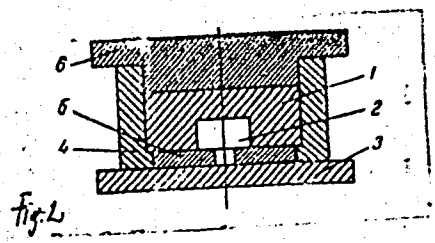

Fig. 2

Legend to Fig. 2: Device for molding the dies for die casting of plastic stoppers. (1) Alloy (die), (2) pattern, (3) supporting plate, (4) steel cylinder, (5) seal, (6) die.

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SHTURMAN, A.A.; YEFOYAN, A.S.; ASNINA, F.I.; BATOVSKAYA, F.A.

Models of current conducting plastics. Mashinostroitel' no.9:41 S '62. (MIRA 15:9)

(Plastics)

ACCESSION NR: AT4013977 S/3070/63/000/000/0084/0086

AUTHOR: Yefoyan, A. S.; Fel'dman, L. M.

TITLE: Installation for investigation of heavy-duty friction materials

SOURCE: Novy*ye mashiny* i pribory* dlya ispy*taniya metallov. Sbornik statey. Moscow, Metallurgizdat, 1963, 84-86

TOPIC TAGS: friction coefficient test, friction material, ceramic metal, friction clutch, brake, friction

ABSTRACT: Materials of rubbing details in brakes and friction clutches work at fast changing sliding velocities and surface temperatures. For such conditions, materials having stable coefficients of friction are required, such as ceramic metals working on steel. Hence, an ever increasing application of ceramic metals is observed in modern designs of brakes and friction clutches. An installation has been developed at the Khar'kovskiy Aviatsionny*y Institut (Aviation Institute of Khar'kov) for investigation of friction materials. The general assembly of this installation is shown in Fig. 1 of the Enclosure. In a frame 1, the drive shaft 2 having a flywheel 3 is mounted on rolling-contact bearings. The flywheel incorporates removable rings for changing of its moment of inertia. A

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friction disk 4 is fastened by a membrane to the overhung end of the drive shaft, in order to provide for self-adjustment according to wear of test specimens. The loading and measuring devices are mounted on a separate frame in order to reduce the influence of vibrations. The shaft 5 of the measuring device actuated by a traverse is mounted on two rolling-contact bearings. Two loading devices (see Fig. 2 of the Enclosure) are installed in dismountable bushings fastened to the traverse. Two test specimens are inserted in each of the loading devices, where they are loaded by an adjustable calibrated spring. Dial indicators serve for approximate observation of total wear at the friction disk and test specimens. The friction moment is transmitted by the traverse from the disk to the shaft 5, and then through the level 10 to the measuring balance equipped with a recorder. The test specimens (see Fig. 3 of the Enclosure) have a steel body faced with ceramic metal 1 mm thick. Grooves oriented in the sliding direction are cut in the ceramic metal layer in order to avoid an oil wedge formation between rubbing surfaces. In the described installation, long-duration tests at a constant sliding speed of 3 to 15 m/sec, and cyclic tests at a sliding speed varying from a maximum value to zero, can be performed. For long-duration tests the rotor is driven by the electro-motor 11 (see Fig. 1 of the Enclosure) through a belt drive. For cyclic tests, the belts of electro-motor 11 must be removed,

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and the electro-motor 12 accelerates the rotor to a certain speed, while electromagnet 13 is disengaging the test specimens. During subsequent deceleration, the accumulated kinetic energy of the rotating masses is consumed in friction work between the disk and the test specimens pressed to the disk. The cyclic tests simulate the working conditions of friction clutches and brakes. Control of electromotor, electromagnet, and the recorder drum is achieved by electronic programming equipment. Measuring instruments (tachometer, chronometer, and temperature indicators of disk and test specimens) are mounted on a panel located on the body of the balance. Simultaneous reading of all instruments can be obtained photographically at various instants during the runout. The test installation permits a recording of the friction coefficient within a sliding velocity range from 60 m/sec to zero during a preset time interval. At the established dimensions of the test specimens, pressures up to 5.9×10^6 N/m^2 (60 kg/cm^2) can be attained between rubbing surfaces. A typical diagram showing the relationships of friction coefficient and specimen temperature versus sliding velocity is given in Fig. 4 of the Enclosure for a copper-base ceramic metal under pressure of 4.42×10^6 N/m^2 (45 kg/cm^2). Orig. art. has: 4 figures.

ASSOCIATION: Khar'kovskiy aviatsionny*y institut (Khar'kov aviation institute)

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ACCESSION NR: AT4013977

ENCLOSURE: 01

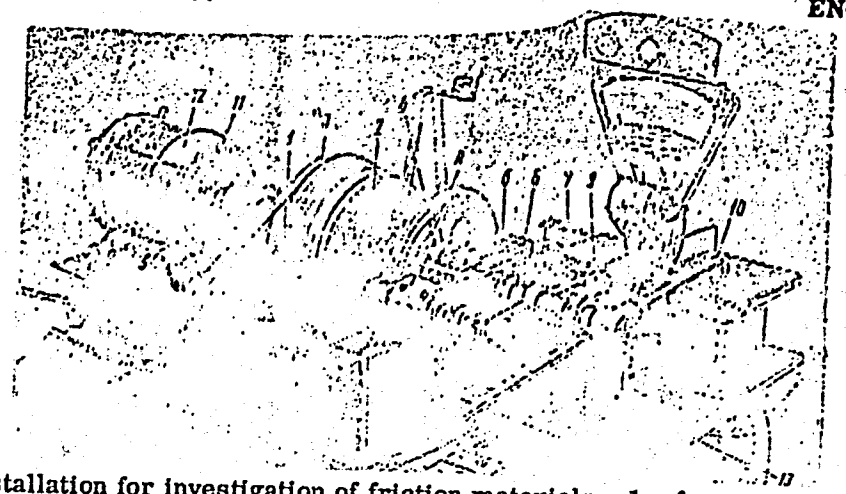

Fig. 1. Installation for investigation of friction materials. 1 - frame, 2 - drive shaft, 3 - flywheel, 4 - friction disk, 5 - shaft of measuring device, 6 - traverse, 7 - rolling-contact bearings of measuring device, 8 - dismountable bushings, 9 - dial gages, 10 - electro-motor with belt drive for constant-speed sliding tests, 11 - balance loading lever, 12 - accelerating electro-motor for runout tests (belts of electro-motor 11 must be removed), 13 - electromagnet disengaging test specimens when electro-motor 12 accelerating

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ENCLOSURE: 02

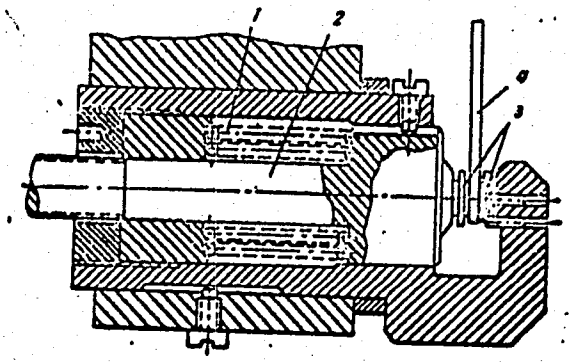

Fig. 2. Schematic illustration of loading device. 1 - calibrated loading spring, 2 - spring-load transmitting rod, 3 - test specimens, 4 - friction disk

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