137-1958-4-4[illegible]

Regulation of Arc Voltage in Automatic Steel-Smelting Furnaces

automatic control system capable of maintaining constant arc voltage in conjunction with independent regulation of the electrical regimens of the individual phases and sufficiently precise regulation of the arc voltage in electric furnaces of [illegible] capacity. See also RzhMet, 1957, Nr 8, 14234.

V. I.

Card 2/2

8(4), 18(0) SOV/112-58-3-4530

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1958, Nr 3, p 163 (USSR)

AUTHOR: Lyukov, M. G.

TITLE: Principles Underlying the Realization of the Autonomous Control of Three-Phase Arc Steel-Melting Furnaces (O printsipakh osushchestvleniya avtonomnogo regulirovaniya trekhfaznykh dugovykh staleplavil'nykh pechey)

PERIODICAL: Dokl. L'vovsk. politekhn. in-ta, 1957, Vol 2, Nr 1, pp 177-181

ABSTRACT: A three-phase arc furnace is considered as a controlled system with three control parameters: current, voltage, or resistance of the arc in each phase. Automatic current or resistance control in each phase of a furnace with nonconducting hearth is not autonomous because controlling the variable in one phase also affects two other phases. This fact makes the controller schemes complicated and results in an inferior quality control. An automatic voltage control of the arc in each phase is autonomous because changing the arc voltage in one phase does not affect the arc voltages in other phases. It is

Card 1/2

8(4), 18(0) SOV/112-58-3-4530

Principles Underlying the Realization of the Autonomous Control of Three-Phase . . .

stated that the generally accepted view that arc voltage cannot be used as a control variable for an arc steel-melting furnace does not extend over the arc voltage controllers with amplidynes. The latter can restrict furnace power fluctuations within the limits provided by the best arc-furnace controllers and can insure a neutral zone of about 6-7%. Bibliography: 3 items.

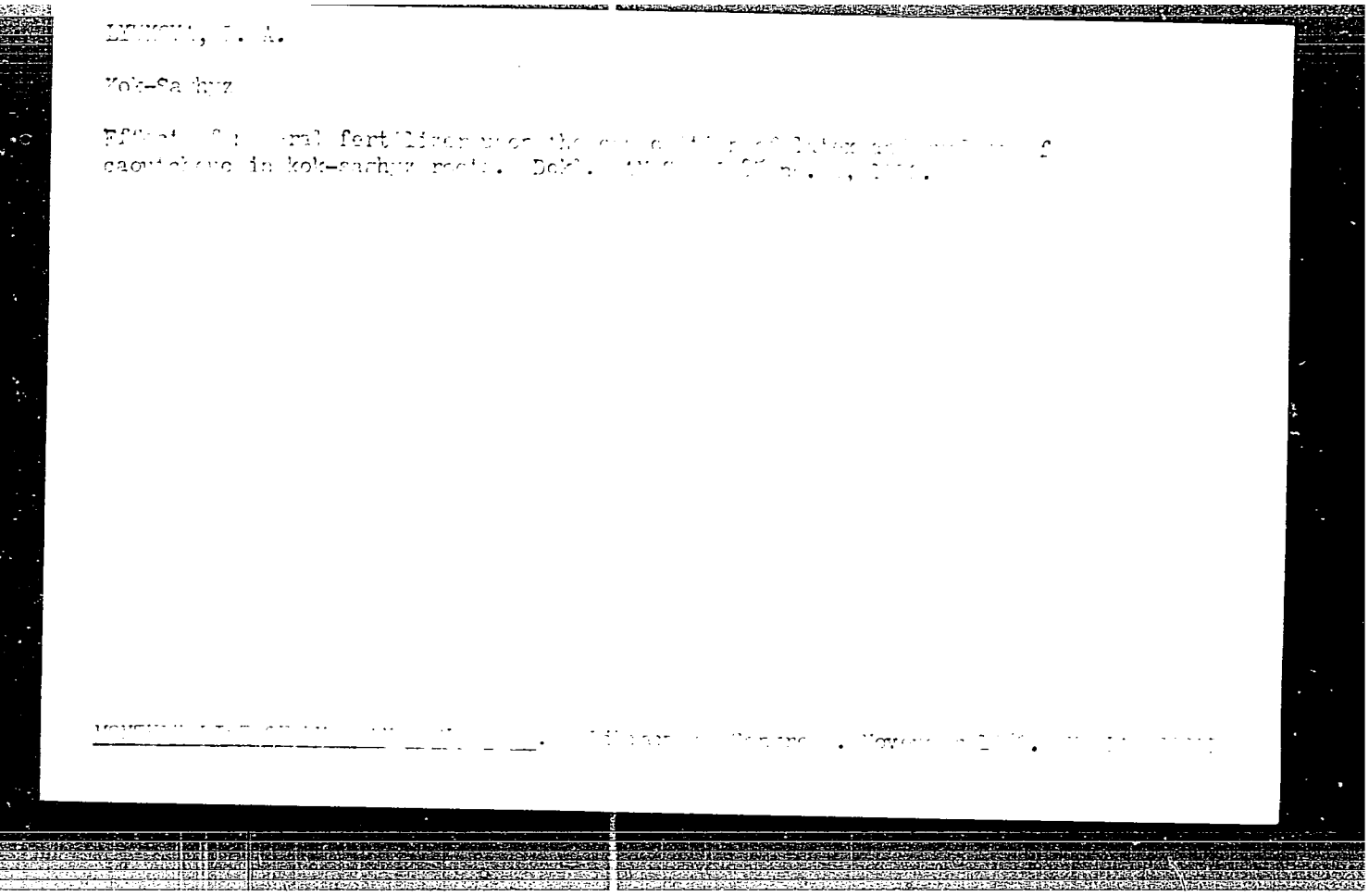
V.I.F.

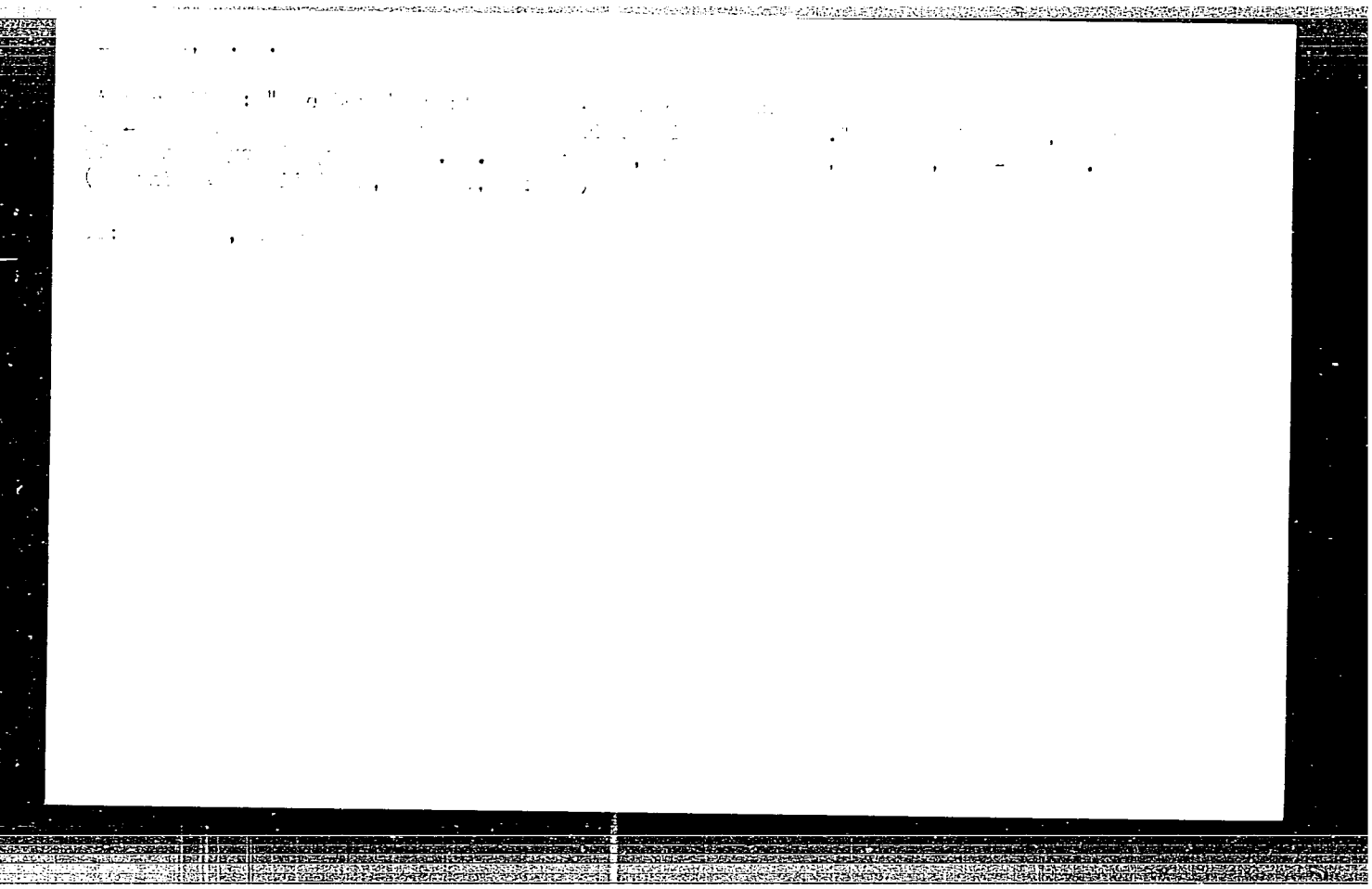
Card 2/2

CA

11D

Effect of oxidants on formation and properties of essential oil in plants. S. O. Grebinskii and L. A. Lyukova (L'vov State Univ.). *Doklady Akad. Nauk S.S.S.R.* 84, 773-5 (1952).—Spraying of garden sage and mint plants with aq solns of $MnSO_4$ 0.05%, $FeSO_4$ 0.02%, or $KMnO_4$ leads to a moderate increase of the yield of essential oils, with noted improvement of the odor and some increase in refraction. When spraying with 0.01% 1-naphthylacetic acid or heteroauxin or 0.0025% $CuSO_4$ similar qual. changes in the oil occur, but the yield is slightly reduced. $MnSO_4$ tends to increase the rate of respiration of the plant leaves.
G. M. Kosolapoff





Lyukova, L.P.

Effect of vitamins on opening of resting buds. S. O. Grebinskii, L. A. Lyukova, and K. N. Frishko (I. Franko State Univ., Lvov). *Doklady Akad. Nauk S.S.S.R.* 105, 1361-3(1955).—Injection of aq. solns. of thiamine or nicotinic acid significantly accelerated the opening of dormant buds of chestnut, oak, magnolia, linden, apple, cherry, and lilac plants. No difference was found between the action of 1 or 10 γ/ml. concns. At 100 γ/ml. the buds browned and died, however. Thiamine and its HCl salt gave identical results. The above solns. are somewhat more effective than exposure to 1% C_2H_2 for 24 hrs. Bud opening is accompanied by a rise of thiamine content as shown earlier (Ermakov *et al.*, *Metody Biokhim. Issledovan. Rastenii*, 1952). G. M. Kosolapoff

LYUKOVA, L. A.

Development of laticiferous system in its dependence on age and condition of mineral nutrition of plants. A. A. Prokof'ev and L. A. Lyukova (K. A. Timiryazev Inst. Plant Physiol., Moscow). *Fiziol. Rastenii* 3, 23-31(1956). —Field trials with kok-saghyz showed that latex accumulation depends on activity of cambial structures, with increase of the laticiferous system structure. N and P and especially N-P fertilizers increase the growth of laticiferous system and its capacity for latex. They also increase the cambial activity.
G. M. Kosolapoff

MD (1)

LYUKOVA, L.A.

Effect of nicotinic acid on the growth and yield of some vegetable plants [with summary in English]. Fiziol. rast. 5 no.1:24-30 Ja-F '58. (MIRA 11:1)

1. L'vovskiy gosudarstvennyy universitet im. I. Franko. L'vov.
(Nicotnic acid) (Vegetable gardening)

LYUKOVA, L.A.

Influence of nicotinic acid on the growth, productivity, quality, and anatomy of edible roots and other vegetables. Vitaminy no.4:199-205 '59. (MIRA 12:9)

1. Kafedra fiziologii rasteniy L'vovskogo gosudarstvennogo universiteta im. I.Franko.
(NICOTINIC ACID) (PLANTS, EFFECT OF VITAMINS ON)

CA LYUKOVA, Ye

12

Determination of vitamin B_1 in wheat grain by the microbiological method suggested by Schopfer. T. B. Darkanbaev, E. Lyukova, and S. Chernova. *Izvest. Akad. Nauk Kazakh. S.S.R., Ser. Fiziol. Biokhim. Rastenii* No. 2, (Whole No. 39), 112-18(1947). Vitamin B_1 can be detd. in wheat grain by a modified Schopfer method. The av. values for Kazakhstan grain is 445–96 γ per 100 g. Indications are that soil and climatic conditions affect the vitamin content. The procedure used consisted of growing *Phycomyces* in media with various concns. of vitamin B_1 to establish a "calibration curve." Then the fungi are grown in aq. exts. of the grain and the results are compared.
G. M. Kosolapoff

Lyukova, Ye. A.

USSR

Experiments on the use of waste from the Kazakhstan copper-mining industry as a microfertilizer. L. K. Klyshev and E. A. Lyukova. *Uchenye Zapiski Alma-Atinskogo Gosudarst. Pedagog. i Uchitel'sk. Inst.* 1, No. 2, 83–101 (1953); *Referat. Zhur., Khim.* 1954, No. 73960.—Preliminary tests were made on the use of 2 kinds of waste from the Balkhash Cu-ore industry for supplying minor elements. It is recommended for use on sugar beet and tobacco fields.

M. Hoch

LYUKSEMBURG, K.I.

Immunological indexes in subjects inoculated against typhoid and paratyphoid B fevers with a chemical adsorbed divaccine of the Gamaleia Institute of Epidemiology and Microbiology of the Academy of Medical Sciences of the U.S.S.R. Zhur. mikrobiol. epid. i immun. 31 no.2:65-68 D '60. (MIRA 14:6)

1. Iz Vil'nyusskogo instituta epidemiologii i gigiyeny i Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(TYPHOID FEVER) (PARATYPHOID FEVER) (IMMUNOLOGY)

LYUKSEMBURG, K.I.

Reactivity of a new divaccine (against typhoid fever and paratyphoid B) of the Gamaleia Institute of Epidemiology and Microbiology at the Academy of Medical Sciences of the U.S.S.R. Zhur.mikrobiol. epid. i immun. 32 no.4:108-112 Ap '61. (MIRA 14:6)

1. Iz Vil'nyusskogo instituta epidemiologii i gigiyeny i Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(VACCINES) (TYPHOID FEVER) (PARATYPHOID FEVER)

LYUKSEMBURG, K.I.

Data on the epidemiological effectiveness of divaccine and polyvaccine from the Gamaleia Institute of Epidemiology and Microbiology and of NIISI polyvaccine in relation to typhoid and paratyphoid B fevers. Zhur. mikrobiol. epid. i immun. 32 no.5:111-115 My '61.
(MIRA 14:6)

(VACCINES) (TYPHOID FEVER) (PARATYPHOID FEVER)

ACC NR: AP6020676 SOURCE CODE: UR/0016/66/000/006/0018/0023

AUTHOR: Lyuksemburg, K. I.; Chernokhvostova, Ye. V.; Rozentalene, L. V.; Belyayeva, A. I.

ORG: Institute of Epidemiology, Microbiology, and Hygiene, Ministry of Health LitSSR (Institut epidemiologii, mikrobiologii i gigiyeny Ministerstva zdravookhraneniya Litovskoy SSR); Moscow Institute of Epidemiology amd Microbiology (Moskovskiy institut epidemiologii i mikrobiologii)

TITLE: Identifying typhoid carriers by quantitative determination of 7S antibodies

SOURCE: Zh mikrobiol, epidemiol i immunobiol, no. 6, 1966, 18-23

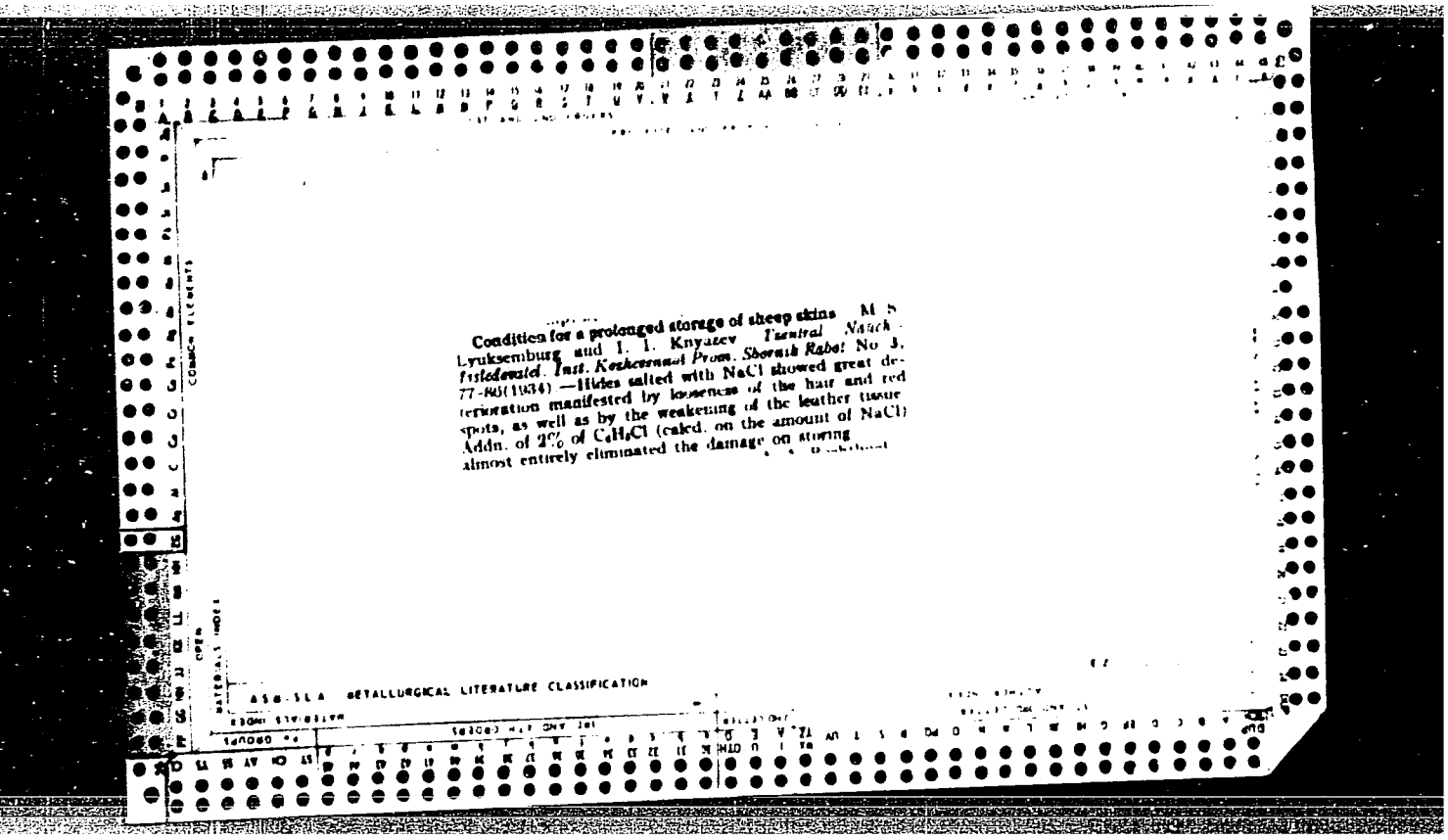
TOPIC TAGS: carrier, carrier state, typhoid, antibody, disease diagnosis, DISEASE CONTROL, BACTERIAL DISEASE

ABSTRACT:
The authors present a method of identifying suspected carriers among people who have had typhoid, based on differences in antibody content in the sera of carriers and healthy persons who have had typhoid. In carriers, 7S, O-, Vi-, and H- antibody titers were higher than in healthy people who had once had the disease. Orig. art. has: 2 figures and 1 table.

[W.A. 50; CBE No. 10]

SUB CODE: 06/ SUBM DATE: 11Sep65/ ORIG REF: 009/ OTH REF: 007

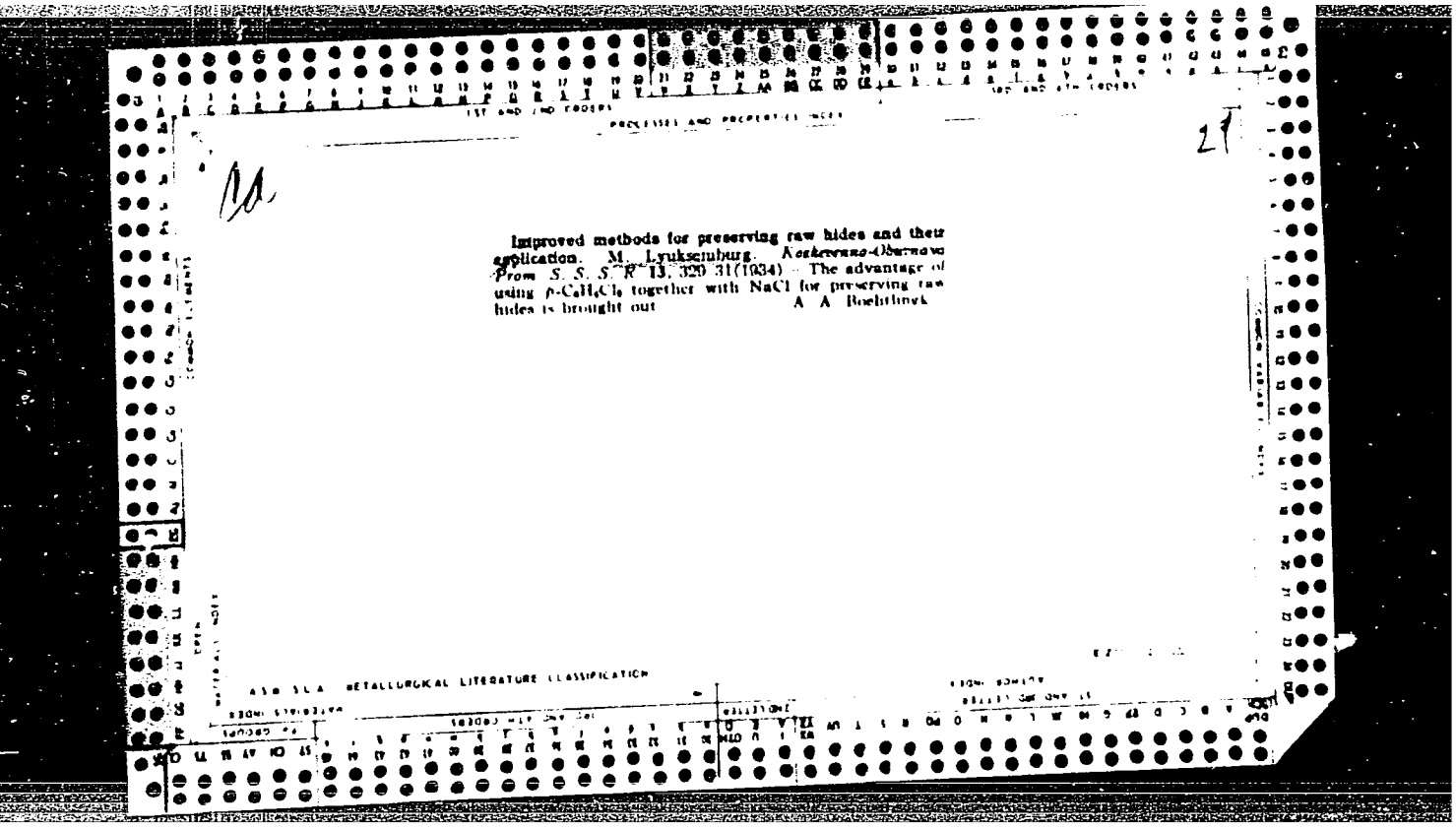
Card 1/1 UDC: 616.927-008.97 078.7



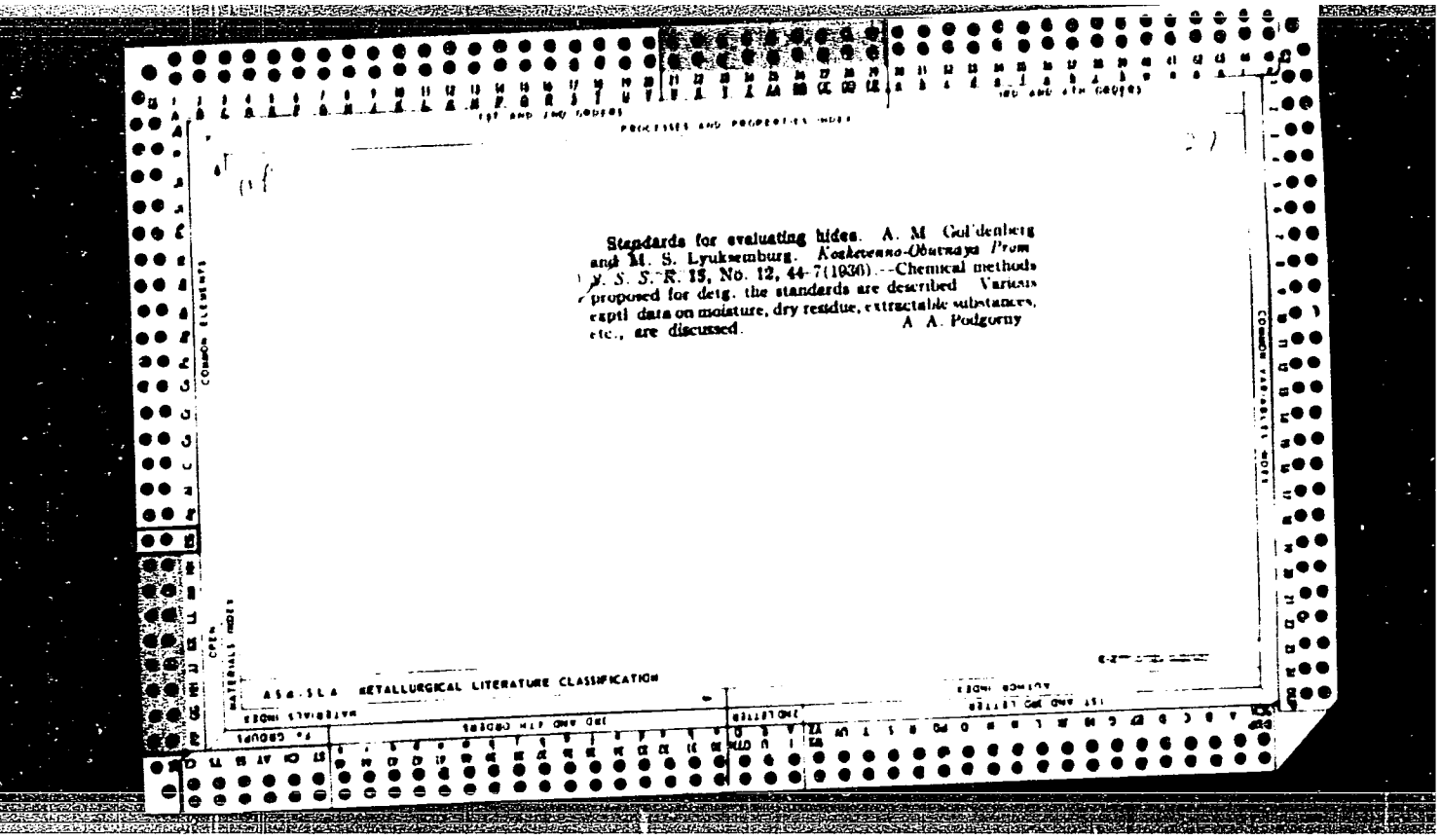
Conditions for a prolonged storage of sheep skins M. S. Lyuksemburg and I. I. Knyazev *Tsentral. Nauch. Issledovatel. Inst. Kozhevennoi Prom. Sbornik Rabot* No 3, 77-80(1934).—Hides salted with NaCl showed great deterioration manifested by looseness of the hair and red spots, as well as by the weakening of the leather tissue. Addn. of 2% of C_6H_5Cl (calcd. on the amount of NaCl) almost entirely eliminated the damage on storing.

Salting hides with salt solutions M. Lyukshubura. *Kozhevenno-Obuvnaya Prom.* (S. S. S. R.) 13, 98 (1934). According to observations made with a great variety of skins preserved in various salt solns. and with solid NaCl, it was found that the spoilage is considerably lowered when a strong soln. of NaCl is used. A. A. B.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Improved methods for preserving raw hides and their application. M. Lyuksenburg. *Kozevenno-Obuvnoe Prom. S. S. S. R.* 13, 329-31(1934).—The advantage of using p-CaH_4Cl_6 together with NaCl for preserving raw hides is brought out. A. A. Boehringer



Standards for evaluating hides. A. M. Gol'denberg and M. S. Lyuksemburg. *Kozhevenno-Obuvnaya Prom. S. S. S. R.* **15**, No. 12, 44-7(1930).--Chemical methods proposed for detg. the standards are described. Various expts. data on moisture, dry residue, extractable substances, etc., are discussed. A. A. Podgorny

PROCESSES AND PROPERTIES INDEX

29

Specifications for the useful dry residue in the delivery of wet-salted and dry raw hides. M. S. Lyubsendina and A. F. Shlyapnikov. *Trudy Vsesoyuz. Nauch.-Issledovatel. Inst. Kozhevenno-Obuvnoi Prom.*, Sbornik Rabot No. 11, 3-38(1940).—The following specifications are discussed: Method of analyzing the raw hides, method of a rapid analysis of raw hides (modified Orthmann method), layout of investigations, summary and analysis of the materials given out by raw hide laboratories, dry pressed raw material. A. A. Bochtlingk

METALLURGICAL LITERATURE CLASSIFICATION

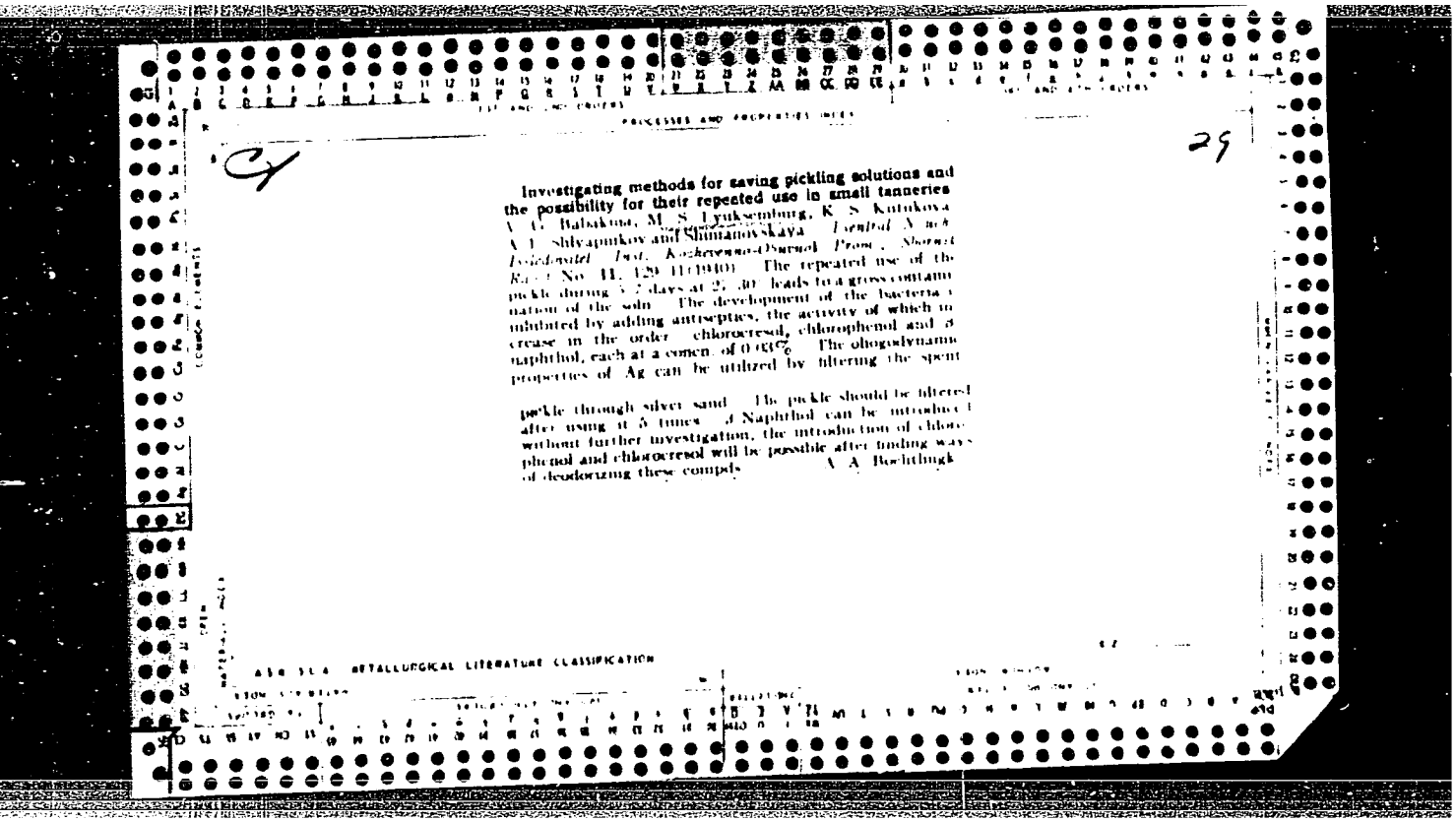
PROCESSES AND PROPERTIES INDEX

29

Properties and uses of skins from sheep of new breeds with reference to their wool and development of a pickling method. M. S. Lyuksemburg, V. F. Shlyapnikov, G. R. Volpe[illegible] and I. K. A. Krasnov. [illegible] *Nauch.-Issled.* [illegible] *Inst.* [illegible] *(Pushnoi Prom.), Sbornik Rabot* No. 11, 78-88 (1940). The effects of crossing breeds of sheep on the quality of the skin were studied. Only 25% of the skins from the new breeds had sufficient strength for use in the shoe industry. German and American methods of pickling lower the strength of the pelts during storage. Treatment of the raw hides with a soln. of p-C_6H_4Cl in turpentine with the addn. of petroleum sulfonic acids as emulsifier protects the material from spoilage during storage. The dried raw material can easily be soaked. Tanning with hyposulfite, chrome and chrome alum was found best.

V. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Investigating methods for saving pickling solutions and the possibility for their repeated use in small tanneries

V. G. Babakina, M. S. Lyuksemburg, K. S. Kutukova, A. I. Shlyapnikov and Shimanovskaya. *Tsentral. Nauch. Issledovatel. Inst. Kozhevenno-Obuvnoi Prom., Sbornik Rabot* No. 11, 129–41(1940). The repeated use of the pickle during 5–7 days at 25–30° leads to a gross contamination of the soln. The development of the bacteria is inhibited by adding antiseptics, the activity of which increase in the order chlorocresol, chlorophenol and β-naphthol, each at a concn. of 0.01%. The oligodynamic properties of Ag can be utilized by filtering the spent pickle through silver sand. The pickle should be filtered after using it 5 times. β-Naphthol can be introduced without further investigation, the introduction of chlorophenol and chlorocresol will be possible after finding ways of deodorizing these compds. V. A. Rochlitzki

LYUKSEMBURG, Moisey Solomonovich.

[Problems in improving the quality of hides] Voprosy uluchsheniia kachestva kozhevennogo syr'ia. Moskva, Gos. nauch.-tekhn. izd-vo tekst., legkoi i poligraf. promyshl., 1947. 65 p. (MLRA 7:12)
(Hides and skins)

Lyu Kseenburg, M-S.

LEONT'YEV, I.I.; LYUKSENBURG, M.S., kandidat tekhnicheskikh nauk, retsenzent; CHERNOBYL'SKIY, G.I., inzhener, retsenzent; PAVLOV, S.A., doktor tekhnicheskikh nauk, professor, spetsredaktor; IVANOVA, N.M., redaktor. DUBOVKINA, N.A., tekhnicheskiy redaktor

[Manual on processing hides] Rukovodstvo po obrabotke kozhsyr'ia. Moskva, Pishchepromizdat, 1953. 158 p. [Microfilm] (MLRA 7:10)
(Leather industry)

LYUKSEMBURG, M.S., kandidat tekhnicheskikh nauk; SHLYAPNIKOV, A.F.

Best contours for hides. Leg.prom.15 no.8:42-43 Ag '55.
(Hides and skins) (MLRA 8:10)

LEYTES, Veniamin Grigor'yevich, kandidat tekhnicheskikh nauk; LYUKSEMBURG, M.S., kandidat tekhnicheskikh nauk, spetsredaktor; FEDOSOVA, N.I., redaktor; GOLUBKOVA, L.A., tekhnicheskiy redaktor

[Raw hides, furs, and sheepskins; a commercial guide] Tovarovedenie kozhevennogo syr'ia, shubnoi i mekhovoi ovchiny. Moskva, izd-vo tekhn. i ekon. lit-ry po voprosam mukomol'no-krupianoi, kombikormovoi promyshl. i elevatorno-skladskogo khoziaistva Khleboizdat, 1956. (MLRA 10:1)
138 p.
(Hides and skins)

LYUKSEMBURG, M.S.; METEL'KOV, N.P.; SHUSTOROVICH, M.L.

Efficient use of raw leather. Leg.prom. 16 no.5:11-13 My '56.
(MLRA 9:8)

(Hides and skins)

LYUKSEMBURG, M.S., kand.tekhn.nauk

Improving the quality of hides and skins and the utilization of raw leather resources. Nauch.-issl. trudy TSNIKP no. 30:13-27 '59. (MIRA 14:5)

(Leather industry)

LYUKSEMBURG, M.S.; VAYSBERG, I.Ye.; MASLOV, I.G. [deceased]; SHNAYDER, I.S.; SHULENKOVA, I.Ye.

Norms for the expenditure of sole raw materials per area unit. Kozh.-obuv.prom. 2 no.7:8-11 Jl '60. (MIRA 13:8)
(Leather industry--Standards)

LYUKSEMBURG, M.S.

Problems of the efficient use of hides in leather manufacture. Kozh.-obuv.prom. 2 no.9:10-13 S '60. (MIRA 13:10)
(Leather)

LYUKSEMBURG, M.S.; ZHARNYL'SKIY, M.M.; RUMYANTSEVA, L.G.

Commerical and technical properties of coarse-wool sheepskins classified by breed and area of manufacture. Kozh.-obuv.prom.3 no.4:5-8 Ap '61. (MIRA 14:5)

(Hides and skins)
(Sheep)

AGAFONOVA, G.S.; LYUKSEMBURG, M.S.; MASHKINA, V.I.

Setting of standards for the acceptance test of dry cured hides. Nauch.-issl. trudy TSNIKP no.32:16-22 '60. (MIRA 15:12)
(Hides and skins—Standards)

LYUKSEMBURG, M.S.

Is it advantageous to use the side-cut method in the flaying of hides? Kozh.-obuv. prom. 5 no.6:20-23 Je '63. (MIRA 16:6)

(Hides and skins)

ARBUZOV, S.V.; VAYSBERG, I. Ye.; SUCHKOV, V.G.; Prinimali uchastiye: LYUKSENBURG, M.S., nauchnyy sotrudnik; SHNAYDER, I.S., nauchnyy sotrudnik; PESKIN, Ya.I., nauchnyy sotrudnik.

New standard methodology for the manufacture of leather for sole parts from hogskins. Nauch.-issl. trudy TSNIKP no.33: 3-7 '63 (MIRA 18:1)

1. TSentral'nyy nauchno-issledovatel'skiy institut kozhevenno-obuvnoy promyshlennosti (for Lyuksenburg, Shnayder, Peskin).

LYUKSHENKOV, A.G. DECEASED 1961/3

Cand. Pharmaceutical Sci c1960 (also see 1964 deceased)

records center
~~see 11c~~

PHARMACEUTICS

LYUKSHENKOVA, Ye.Ya., kandidat farmatsevticheskikh nauk

Diagnostic characteristics of the herb of celandine. Apt.delo 4 no.2:48-51 Mr-Ap '55. (MIRA 8:5)

1. Iz kafedry farmakognozii (zav. prof. L.A.Razdorskaya) Moskovskogo farmatsevticheskogo instituta Ministerstva zdravookhraneniya SSSR.
(PLANTS,
Chelidonium, pharmacol)

LYUKSHENKOVA, Ye.Ye.; KULYUKINA, A.V.

Anatomical structure of big flower Java tea. Apt.delo 5 no.3: 35-38 My-Je '56. (MLRA 9:8)

1. Iz kafedry farmakognozii Moskovskogo farmatsevticheskogo instituta Ministerstva zdravookhraneniya RSFSR.
(JAVA TEA)

LYUKSHENKOVA, E. YA.

Accumulation of active principles in Chelidonium majus. E. Ya. Lyukshenkova (Pharm. Inst., Moscow). *Aptechnoe Delo* 5, No. 6, 54–6(1956).—Alkaloids and vitamin C are found in the parts of the plant above the ground and the roots. The largest amt. is found in the stem and leaves during sprouting. It decreases with the development of the vegeta. on period and is at its lowest during the flowering and ripening of the fruits. In the roots the accumulation of alkaloids and vitamin C proceeds throughout the whole vegetation period. At the end of the period the alkaloids and vitamin C content is twice as large as at the beginning. The carotene content above and below the ground is at its height during the sprouting and declines considerably towards the end of the vegetation cycle. In order to get the best yield it is necessary to collect the plant before blooming sets in.

A. S. Mirkin

M

Country : USSR
Category: Cultivated Plants. Medicinal. Essential Oil Bearing. Toxins.

Abs Jour: RZhBiol., No 22, 1958, No 100505

Author : Lyukshenkova, Ye. Ya.
Inst : Moscow Pharmaceutical Inst.
Title : Anatomical Structure of Celandine (Chelidonium majus L.).

Orig Pub: Sb. nauchn. rabot. Mosk. farmatsevt. in-t, 1957, 1, 167-177

Abstract: Anatomical structure of the leaf, stem, rhizome, floral root, fruit and seed is described. There are 9 drawings in the text.

Card : 1/1

USSR / Cultivated Plants. Medicinal. Essential Oil-Bearing. Toxins. M-7

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6481

Author : Lyukshenkova, E. Ya.
Inst : Moscow Pharmaceutical Institute
Title : Pharmacognostical Study of Chelidonium Laciniatum Mill

Orig Pub : Mosk. farmatsevt. in-t, 1957, 1, 179-186

Abstract : Chelidonium laciniatum Mill. (I) is a mutant of Chelidonium majus L. (II). Examinations showed that there is no substantial difference in anatomical structure of organs in I and II. The content of the principal active substances (particularly of alkaloids and of vitamin C) is much less in I than in II. The content of alkaloids, of vitamin C and of carotin in

Card 1/2

USSR / Cultivated Plants. Medicinal. Essential Oil-Bearing. Toxins. M-7

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6481

both species depends on the age of the plant. The qualitative composition of alkaloids in the infusions of I and II was studied by observing their luminescence under UV - light and by using the method of distributive paper chromatography. It was shown that the content of chelidonine in the above-surface and of sanguinarine in the root system in II is higher than in I. However, the content of berberine (chelidoxantine) is somewhat greater in I than in II. The content of chelidonine in the part above the surface in I and II is much greater than in the root system. -- T. L. Braytseva

Card 2/2

LYUKSHENKOVA, Ye.Ya.; GEORGIU, M.; BURDYKINA-SHEKHTER, E.A.

Pharmacological study of the bog strawberry (Comarum palustre L.). Apt; delo 11 no.2:34-43 Mr-Ap '62. (MIRA 15:5)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(CINQUEFOIL)

LYUKSHENKOVA, Ye.Ya.; DOLGOVA, A.A.

"Course in pharmacognosy" by A.F.Gammerman. Reviewed by E.IA. Liukshenkova and A.A.Dolgova. Apt.delo 12 no.3:86-88 My-Je '62. (MIRA 16:1)

(PHARMACOGNOSY) (GAMMERMAN, A.F.)

VOLKOVA, P.A.; DOLGOVA, A.A.; IVANOVA, S.D.; LYUKSHENKOVA, Ye.Ya.; L'VOV, N.A.[deceased]; RAZDORSKAYA, L.A.[deceased]; RODIONOVA, V.M.; FEDOSEYEV, A.N., red.; MATVEYEVA, M.M., tekhn. red.

[Wild medicinal plants of the R.S.F.S.R.; Moscow Province] Dikorastushchie lekarstvennye rasteniia RSFSR; Moskovskaia oblast'. Moskva, Medgiz, 1963. 144p. (MIRA 16:8)

1. Kafedra farmakognozii I Moskovskogo meditsinskogo instituta im.I.M.Sechenova (for Volkova, Lyukshenkova).
2. Botanicheskiy sad I Moskovskogo meditsinskogo instituta im.I.M.Sechenova (for Rodionova).
(MOSCOW PROVINCE--BOTANY, MEDICAL)

LYUKSHENKOVA, Ye.Ya.

Morphological and anatomical study of the dogbane Apocynum cannabinum L. as raw material for drugs. Trudy Len. khim.-farm. inst. no.17:110-120 '64. (MIRA 18:1)

1. Kafedra farmakognozii farmatsevticheskogo fakul'teta 1-go Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.

LYUKSHIN, V. S.

Lyukšin, V. S. The embedding of a two-dimensional Riemannian manifold in a three-dimensional Euclidean space. Izvestiya Akad. Nauk SSSR. Ser. Mat. 13, 363–384 (1949). (Russian)

The author investigates anew a problem solved to one extent or another by Darboux, Janet, and others, of determining all surfaces R_2 in three-space whose metric is given by $ds^2=Edu^2+2Fdudv+Gdv^2$, where E, F, and G are three preassigned functions analytic in some domain of the variables u and v. His principal tool is a basic theorem of J. M. Thomas relating to certain systems of differential equations [Differential Systems, Amer. Math. Soc. Colloquium Publ. v. 21, New York, 1937]. The problem leads to a well-known system of differential equations nor of any standard type for existence theorems. The author carries out an explicit step by step modification of the system so that it becomes in turn a simple system in the sense of J. M. Thomas, a standard system, a passive system and, finally, a definite system. At this point the theorem of Thomas guarantees a unique solution for appropriate boundary conditions.

The solutions are analyzed in some detail; they fall into two classes, the general (Σ_1) and the particular (Σ_2). The distinction comes to turn about the question whether the parametric lines $u=c$ and $v=c$ are asymptotic lines (Σ_2) or are not (Σ_1). The general solutions have a pair of arbitrary functions associated with them; these measure the "pliability" of the surface as well as its freedom of position. There are four natural classes of particular solutions, two of them containing surfaces of negative curvature. Here in Σ_{21} the parametric lines $u=c$ are asymptotic but not geodesic, and in Σ_{22} they are asymptotic and also geodesic. The solutions in the class Σ_{21} are doubly asymptotic, in Σ_{22} they are geodesic as well. This last class has an arbitrary function $\varphi(u)$ associated with each solution, measuring the pliability of the surface with preservation of its linear generators.

L. Zippin (Flushing, N. Y.)

Source: Mathematical Reviews, Vol 11 No. 1

Lyukshin, V. S.

AGHERKAN, N.S., professor, doktor tekhnicheskikh nauk; LYUKSHIN, V.S., kandidat fiz.-mat. nauk; NIBERG, N.Ya., kandidat tekhnicheskikh nauk; OBMORSHEV, A.N., doktor tekhnicheskikh nauk; PLYZHNIKOV, I.S., kandidat fiz.-mat. nauk; MARKUS, M.Ye., inzhener, redaktor; KARGANOV, V.G., inzhener, redaktor graficheskikh rabot; SOKOLOVA, T.F., tekhnicheskiy redaktor.

[Handbook of machine construction in 6 volumes] Spravochnik mashinostroitelia v shesti tomakh. Izd. 2-e, ispr. i dop. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry. Vol. 1. 1954. 567 p. (MIRA 8:1)
(Mathematics) (Mechanics)

LYUKSHIN

VOLKOV, A.D.; LYUKSHIN, V.S.

Designing profiles for convolute worm gears. Stan. i instr. 28 no.10: 23-25 O '57. (MLRA 10:11)

(Gearing, Worm)

DIMENTBERG, F.M., doktor tekhn.nauk; LYUKSHIN, V.S., kand.fiz.-mat.nauk; NIBERG, N.Ya., kand.tekhn.nauk; OBMORSHEV, A.N., prof., doktor tekhn.nauk; PLUZHNIKOV, I.S., kand.fiz.-mat.nauk; UMANSKIY, A.A., prof., doktor tekhn.nauk; ACHERKAN, N.S., prof., doktor tekhn.nauk, red.; VUKALOVICH, M.P., prof., doktor tekhn.nauk, laureat Leninskoy premii, red.; KUDRYAVTSEV, V.N., prof., doktor tekhn.nauk, red.; PONOMAREV, S.D., prof., doktor tekhn.nauk, laureat Leninskoy premii, red.; SATEL', E.A., prof., doktor tekhn.nauk, red.; SERENSEN, S.V., akademik, red.; RESHETOV, D.N., prof., doktor tekhn.nauk, red.; GIL'DENBERG, M.I., red.izd-va; SOKOLOVA, T.F., tekhn.red.

[Reference book for machinery designers in six volumes] Spravochnik mashinostroitelia; v shesti tomakh. Red.sovet: N.S.Acherkan i dr. Izd.3., ispr. i dop. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry. Vol.1. Pod red.N.S.Acherkana. 1960. 592 p. (MIRA 13:10)

1. AN USSR (for Serensen). (Machinery--Design)

LYUKSHIN, S., dots., kand. fiz.-mat. nauk; [illegible], B.I., doktor fiz.-mat. nauk, otv. red.

[Theory of helical lines and surfaces; for use in designing metal-cutting tools] Teoriia vintovykh linii i poverkhnostei; primenitel'no k proektirovaniiu rezhushchikh instrumentov. Moskva, Mosk. stanko-instrumental'nyi in-t, 1963. [illegible] p. — [Album of drawings] Al'bom chertezhei. [illegible] p.

LYUKSHIN, V.S., dots., kand. fiz.-mat.nauk; SEMENCHENKO, I.I., zasl. deyatel' nauki i tekhniki doktor tekhn.nauk,prof., otv.red.

[Theory of the envelope of a family of surfaces; applied to the design of metal cutting tools] Teoriia ogibaiushchei semeistva poverkhnostei; prilozhenie k proektirovaniiu rezhushchikh instrumentov. Moskva, Mosk. stankoinstrumental'nyi in-t, 1963. 262 p. ___[Album of drawings] Al'bom chertezhei. 19 p. (MIRA 18:3)

LYUKSHIN, V.S., dots., kand. fiz.-matem. nauk; SEGAL, B.I., doktor fiz.-matem. nauk, prof., otv. red.

[Spiral lines and surfaces of a variable (axial) pitch] Vintovye linii i poverkhnosti peremennogo (aksial'nogo) shaga. Moskva, Mosk. stankoinstrumental'nyi in-t, 1964. 75 p. ___[Album of drawings] Al'bom chertezhei. 11 p.

[Circular spiral surfaces] Krugovye vintovye poverkhnosti. Moskva, Mosk. stankostroit. in-t, 1964. 52 p. ___[Album of drawings] Al'bom chertezhei. 7 p. (MIRA 18:3)

KHAZAK, M.B.; LYUKSHIN, V.V.

Device for determining the friction moment in escapement axle bearings. Sbor.st.LITMO no.47:50-55 '59. (MIRA 16:10)

L 13099-66 EWT(1)/EWT(m)/EPF(n)-2/T/EWP(t)/EWP(b)/ EWA(h)/EWA(c) JD/WW/JW

ACC NR: AP5025801 SOURCE CODE: UR/0363/65/001/009/1602/1606

AUTHOR: Lyukshin, V. V.; Zayonchkovskiy, Ya. A.

ORG: none

TITLE: Heat capacity of solid solutions of magnesium chromite and aluminum chromite with magnesium ferrite

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 9, 1965, 1602-1606

TOPIC TAGS: heat capacity, aluminum compound, magnesium compound, ferrite, aluminate, chromium compound, solid solution, entropy

ABSTRACT: The heat capacity of solid solutions formed by magnesium ferrite with magnesium chromite and magnesium aluminate was studied in the 90-600°K range. Depending on the temperature range an adiabatic calorimeter was placed in a furnace or a cryostat with liquid nitrogen. The maximum relative error of heat capacity determination was 2%. Determinations of standard entropy led to the conclusion that the solid solutions were close to ideal. Portions of the curves representing the temperature dependence of the heat capacity in the 90-298°K range were used to find the functions $C_p(T)$ in the form given by K. K. Kelley (U. S.

UDC: 536.63:54-165:54-31

Card 1/2

L 13099-66

ACC NR: AP5025801

Bur. Mines, Bull. 477, 1950):

$$C_p = D\left(\frac{\theta_D}{T}\right) + 3E\left(\frac{\theta_{E_1}}{T}\right) + 3E\left(\frac{\theta_{E_2}}{T}\right)$$

In the 300-600°K range, the extrapolated function

$$C_p = 37{,}33 + 7{,}02 \cdot 10^{-3}T - 6{,}73 \cdot 10^{5}T^{-2} \quad (300-800^\circ\,K)$$

was employed. In the 800-2290°K range heat capacity was described by the equation

$$C_p = 38.1 + 4.77 \times 10^{-3} T$$

Anomalies were observed on the curves of the temperature dependence of the heat capacity around the Curie points. Orig. art. has: 3 figures, 2 tables, 3 formulas.

SUB CODE: 07/ SUBM DATE: 12Mar65/ ORIG REF: 002/ OTH REF: 012

Card 2/2

L 17326-66 EWT(m)/T/EWE(t)/ETI IJP(c) HW/JD/JH
ACC NR: AR6025745 SOURCE CODE: UR/0058/66/000/004/A071/A071

AUTHOR: Zayonchkovskiy, Ya. A.; Gendelev, S. Sh.; Lyukshin, V. V.

TITLE: Epitaxial formation of single crystal films of ferrites by the chemical transport reaction method

SOURCE: Ref. zh. Fizika, Abs. 4A597

REF SOURCE: Sb. Simpozium. Protsessy sinteza i rosta kristallov i plenok poluprovodnik. materialov, 1965. Tezisy dokl. Novosibirsk, 1965, 11-12

TOPIC TAGS: epitaxial growing, single crystal growing, ferrite, magnetic thin film, transport phenomenon, surface property, crystallization, magnetic coercive force

ABSTRACT: The method of chemical transport reactions was used to grow single-crystal films of Ni, Mg, Co, and Mn ferrites with spinel structure. The substrates were either single crystals of MgO freshly cleaved along (100), or in individual cases natural (111) surfaces of $MgAl_2O_4$. The epitaxial growing of the ferrite film was effected in vacuum, using dry hydrogen chloride at 900-1000C as the chemical agent. A morphological study shows that the films, depending on the composition, are made up of flat discs, rounded-off hills, or faced pyramids separated by grooves. The dimensions and singularities of the structure of the sculpture elements depend on the crystallization regime. Under strong transport conditions, these elements have a skeleton structure; octahedra with negative edges are developed. The growth of the entire film occurs simultaneously from many centers on dislocations inherited from

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L 47706-66
ACC NR: AR6025745

the substrate. Goniometric measurements of the films demonstrate development of the (100), (111), and (110) planes, and more rarely (311). The spinel structure of the grown films was confirmed by x-ray diffraction and the lattice periods are determined. Magnetic measurements have shown that films of Mn-ferrites are characterized by a small coercive force (A_c = 1 - 2 Oe). This quantity amounts to several tens of Oe in Mg- and Ni-ferrites and to hundreds of Oe in Co-ferrites. [Translation of abstract]

SUB CODE: 20

Card 2/2

94-58-6-9/19

AUTHOR ~~Lyukshin V. Ye.~~

TITLE The Use of Screens When Welding Tips of Hard Alloys (Primeneniye ekranov pri spekanii (svarke) tugoplavkikh shtabikov)

PERIODICAL: Promyshlennaya Energetika 1958, Nr 6, p 16 (USSR)

ABSTRACT: When welding equipment type TsEP-223 is used to weld molybdenum and tungsten tips in hydrogen atmosphere by passage of current the tip is enclosed in a water cooled metal cap. When the tips are at high temperature a good deal of the heat is lost. The author proposed to instal a sheet nickel cylindrical reflecting screen round the tip which cut the power consumption by 14%. For this he was awarded fourth premium in an All-Union Power Economy Competition.
There are 2 figures.

Card 1/1 1. Molybdenum - Welding 2. Tungsten - Welding
3. Electric welding - Applications 4. Hydrogen - Applications

LYUKSHINOVA, A.

Savings of the population of the Moscow environs. Den. i kred. 21 no.7:48-50 Jl '63. (MIRA 16:8)

1. Nachal'nik Upravleniya gosudarstvennykh trudovykh sberegatel'nykh kass i gosudarstvennogo kredita Moskovskoy oblasti.
(Moscow Province--Savings banks)

L 58757-65 EPF(c)/EPF(n)-2/EPR/EWP(j)/EWT(m)/T Pc-4/Pr-4/Ps-4/Pu-4 WW/
DM/GG/JAJ/RM

ACCESSION NR: AP5012485 UR/0089/65/018/004/0418/0419
543.53:678.742

AUTHORS: Dubinskaya, N. A.; Lyul', A. Yu.; Pelekis, L. L 43 B

TITLE: Induced gamma activity in polyethylene bombarded with neutrons 19

SOURCE: Atomnaya energiya, v. 18, no. 4, 1965, 418-419

TOPIC TAGS: polyethylene, gamma activity, neutron bombardment, induced activity

ABSTRACT: The authors investigated the characteristics of induced activity of high pressure and low pressure polyethylene, produced by various Soviet enterprises. The purpose of the investigation was to determine the suitability of the polyethylene as packing material for activation analysis. The granulated polyethylene was irradiated in a vertical channel of an IRT reactor in a thermal-neutron flux of 9×10^{12} neutrons/cm^{2}sec, for two exposure times (15 minutes and 4 hours). The induced gamma activity was estimated from the integral

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L 58757-65
ACCESSION NR: AP5012485

counting rate measured by a scintillation gamma spectrometer with NaI(Tl) crystal measuring 40 x 40 mm. The distance between source and crystal was 4 mm. The results of various batches of polyethylene were compared with one another and also with British type WJG polyethylene. The various radioactive isotopes responsible for the gamma radiation of the neutron-bombarded polyethylene are identified. The cooling time necessary to reduce the activity by a factor of 100 and 10 was determined. It is tentatively concluded that the induced activity is due to contamination of polyethylene by various contaminating elements used in the catalysis and purification of the material. Original article has: 3 tables

ASSOCIATION: None

SUBMITTED: 30Mar64 ENCL: 00 SUB CODE: NP, MT

NR REF SOV: 000 OTHER: 004

Card 2/2

LYUL'CHAK, I.M., inzh.

Tubing layer for horizontal galleries. Shakht. stroi. no.4:17-19 '58. (MIRA 11:6)

1.Giproshakhtostroymash. (Mining machinery) (Mine timbering)

LYULEDZHAN, A.Ye.

Partial gigantism. Pediatriia no.7:69-70 '61. (MIRA 14:9)

1. Iz kafedry detskoy khirurgii (zav. - prof. M. D. Kovalevich.) Rostovskogo meditsinskogo instituta.
(HYPERTHROPHY)

LYULEDZHAN, A.Ye. (Rostov n/D, pr. Chekhova, d.13, kv.11)

Sarcoma of the cecum in a child. Vest.khir. 89 no.11:141-143 N '62. (MIRA 16:2)

1. Iz kafedry detskoy khirurgii (zav. - prof. M.D. Kovalevich) Rostovskogo n/D meditsinskogo instituta.
(CECUM--CANCER)

135-1-6/14

SUBJECT: USSR/Welding.

AUTHORS: Pashkov I.V., engineer; Lyulenkov G.G., engineer.

TITLE: Examples of automatic welding aluminum under flux. (Primary primeneniya avtomaticheskoy svarki aluminiya po flyusu).

PERIODICAL: "Svarochnoye Proizvodstvo", 1957, #1, pp 18-20 (USSR).

ABSTRACT: Practical experience in welding aluminum at the authors' plant was based on research work by the Electrical Welding Institute im. Paton, and other research organizations. Until now, welding of aluminum was practiced in shielding gases, by the oxyacetylene method, and by hand.

The new process considered, consists of welding with a melting electrode and a half-open arc, under flux AN- A1 (flux AN-A1) developed by the im. Paton institute. Its components: 50 % KCl, 15 % NaCl, and 35 % criomnite. It completely dissolves the oxide scab, but works well only when used in the form of molten mass. The article gives detailed technology of producing this flux.

The welding tractor TC-17M (TS-17M) has been adapted for welding aluminum by adding cooling water chambers and opening

Card 1/2

TITLE: Examples of automatic welding aluminum under flux. (Primary primeneniya avtomaticheskoy svarki aluminiya po flyusu). 135-1-6/14

the welding rod chamber, but the design does not yet work to full satisfaction and is being worked over at the im. Paton institute.

The mechanical testing, X-ray inspection, and macro-analysis show dense welds satisfying very high requirements. The process is stated to be one of the most advanced methodes of welding aluminum structures.

The article contains 4 tables and 5 photographs; it contains no references.

INSTITUTION: Sumy machine building plant im. Frunze (Sumskoy machinostroitel'nyi zavod im. Frunze).

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress

Card 2/2

PASHKOV, I.V., inzh.; LYULENKOV, G.G., inzh.

Practice in the automatic welding of alumimum. Trudy NIIKHIMMASH no.26:69-74 '58. (MIRA 13:7)
(Aluminum--Welding)

Lyulenkov, I.S.

BARDIN,I.P.; BORISOV,A.F.; BELAN,R.V.; YERMOLAYEV,G.I.; VAYSBERG,L.E.; ZHEREBIN,B.N.; BORODULIN,A.I.; SHAROV,G.V.; DOMNITSKIY,I.F.; CHUSOV,F.P. SOROKO,L.N.; KLIMASENKO,L.S.; PAVLOVSKIY,S.I.; ZIL'BERSHTEYN,M.B.; LYULENKOV,I.S.; NIKULINSKIY,I.D.; BRAGINSKIY,I.A.; SALOV,Ye.M.; TROSHIN,N.F.; PETRIKEYEV,V.I.; ARGUNOV,M.I.; DUL'NEV,F.S.; BIDULYA,L.N. GAYNANOV,S.A.; FROLOV,N.P.; VINICHENKO,V.S.; KOGAN,Ye.A.

G.E.Kazarnovskii; obituary. Stal' 15 no.8:757 Ag'55. (MLRA 8:11)
(Kazarnovskii, Grigorii Efimovich, 1887-1955)

ORLOV, D.M.; ZAYTSEV, L.P. [deceased]; LYULENKOV, I.S.; LYULENKOV, V.I.
SOKOLOV, L.D.

Efficient selection of counterweights for tower-type car dumpers. Izv.vys.ucheb.zav.; chern.met. no.4:177-183 '61. (MIRA 14:4)

1. Sibirskiy metallurgicheskiy institut.
(Metallurgical plants--Equipment and supplies)
(Dumping appliances)

LYULENKOV, I.S., inzh.; KOCHNEV, S.P., inzh.

Floor-type stripping machine with a floating shaft. Stal' 21 no.5: 478-479 My '61. (MIRA 14:5)

1. Kuznetskiy metallurgicheskiy kombinat.
(Metallurgical plants--Equipment and supplies)
(Steel ingots)

BAKLUSHIN, I.L., inzh.; VEKSIN, I.N., inzh.; GREBENIK, V.M., kand.tekhn.nauk, dotsent; LYULENKOV, V.I., inzh.; SABANTSEV, V.P., inzh.; SOKOLOV, L.D., doktor tekhn.nauk, prof.; SHIROKOV, V.N., prof.

Equipment for use with resistance wire transducers. Izv.vys. ucheb.zav.; chern.met. no.6:149-156 Je '58. (MIRA 12:8)

1. Sibirskiy metallurgicheskiy institut. Rekomendovano kafedroy mekhanicheskogo oborudovaniya metallurgicheskikh zavodov Sibirskogo metallurgicheskogo instituta.
(Metallurgical plants--Equipment and supplies)
(Machinery--Testing) (Transducers)

BAKLUSHIN, I.L., inzh.; VEKSIN, I.N., inzh.; GREBENIK, V.M., dotsent, kand. tekhn. nauk; LYULENKOV, V.I., inzh.; SABANTSEVM, V.P.; SOKOLOV, L.D., prof., doktor tekhn. nauk; SHIROKOV, V.N., prof.

Hydraulic calibration of 1500-ton power presses. Izv. vys. ucheb. zav.; chern. met. 2 no.4:113-121 Ap '59. (MIRA 12:8)

1.Sibirskiy metallurgicheskiy institut. Rekomendovano kafedroy mekhanicheskogo oborudovaniya metallurgicheskikh zavodov Sibirskogo metallurgicheskogo instituta.
(Hydraulic presses) (Calibration)

BAKLUSHIN, I.L., inzh.; VEKSIN, I.N., inzh.; GREBENIK, V.M., dots., kand.tekhn.nauk; LYULENKOV, V.I., inzh.; SABANTSEV, V.P., inzh.; SOKOLOV, L.D., prof., doktor tekhn.nauk; SHIROKOV, V.N., prof.

Investigating the 740 cold rolling mill for thin sheets. Izv. vys.ucheb.zav.; chern.met. 2 no.8:143-148 Ag '59. (MIRA 13:4)

1. Sibirskiy metallurgicheskiy institut. Rekomendovano kafedroy mekhanicheskogo oborudovaniya metallurchiskikh zavodov Sibirskogo metallurgicheskogo instituta.
(Rolling mills)

ALEYNIKOV, A.I.; BAKLUSHIN, I.L.; VEKSLIN, I.N.; GREBENIK, V.M.; LYULENKOV, V.I.; SABANTSEV, V.P.; SEREGIN, S.A.; SOKOLOV, L.D.; SHIROKOV, V.N.

Investigating the mechanism of the rotation process of ferroalloy furnace baths. Izv. vys. ucheb. zav.; chern. met. no.8:181-187 '60. (MIRA 13:9)

1. Sibirkiy metallurgicheskiy institut.
(Rotary hearth furnaces) (Iron alloys)

SOKOLOV, L.D.; SHIROKOV, V.N.; GREBENIK, V.M.; VEKSIN, I.N.; BAKLUSHIN, I.L.; LYULENKOV, V.I.; SABANTSEV, V.P.; KAZANTSEV, A.A.

Investigating stresses in models of steel pouring ladles. Izv. vys. ucheb. zav.; chern. met. 4 no.10:147-156 '61. (MIRA 14:11)

1. Sibirskiy metallurgicheskiy institut.
(Smelting furnaces--Equipment and supplies)
(Thermal stresses--Models)

ORLOV, D.M.; ZAYTSEV, L.P. [deceased]; LYULENKOV, I.S.; LYULENKOV, V.I.
SOKOLOV, L.D.

Efficient selection of counterweights for tower-type car dumpers. (MIRA 14:4)
Izv.vys.ucheb.zav.; chern.met. no.4:177-183 '61.

1. Sibirskiy metallurgicheskiy institut.
(Metallurgical plants—Equipment and supplies)
(Dumping appliances)

S/148/61/000/006/013/013
E193/E180

AUTHORS: Sokolov, L.D., Shirokov, V.N., Grobenik, V.M., Veksin, I.N., Baklushin, I.L., Lyulenkov, V.I., Sabantsev, V.P.

TITLE: Experimental and analytical determination of forces in cold rolling

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya metallurgiya, 1961, No.6, pp.191-193

TEXT: In the course of an earlier investigation carried out by the present authors (Ref.1: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya metallurgiya, 1959, 8), large discrepancies were found between the laboratory results and the operational data on forces acting on the rolls during cold rolling. It was revealed, however, in the course of further tests that in many cases the roll chocks had become worn (in some places to a depth of 0.4 mm) and it was postulated that this factor may have affected the load cell readings. In an attempt to find a way of eliminating this source of error, both during the calibration of the load cells and later in use, the effect of lead washers approximately 2 mm thick, placed under the dynamometers, was investigated. Fig.1 shows the

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S/148/61/000/006/013/013
E193/E480

Experimental and analytical ...

experimental conditions: a - an annular washer supporting the load cell along its periphery; б - a solid washer under the central part of the load cell; в - no washer; г - a solid washer of the size equal to that of the load cell. On the right-hand side of Fig.1, the calibrating force is plotted against the load cell readings; most consistent results were obtained when a large solid washer was used (graph г). The latter method was employed in roll force measurements and the results compared with roll force values, calculated according to A.I.Tselikov and A.A.Korolev (Ref.2: Prokatnyye stany, Metallurgizdat, 1958). The results are tabulated. It will be seen that the difference reached occasionally 30 or even 37%, the experimental values being always lower than the calculated figures. One possible explanation of this effect is provided by the fact that the temperature of cold rolled metal increases. Although the strength of the carbon steels and constructional alloy steels increases on heating between 20 and 400°C, this increase takes place during cold rolling at certain rolling speeds only. According to M.I.Manjoine (Ref.5: Journal of the Iron and Steel, v.150, p.3, VI, 1947, 380),

the "ageing peak" is shifted towards higher temperatures when the steel is rolled at high rolling speeds, so that under these conditions the strength of steel between 0 and 400°C decreases with increasing temperature. Consequently, if the temperature attained by the metal during cold rolling at high speeds is 300°C, its resistance to deformation (particularly at heavy drafts) decreases, which explains the discrepancy observed. There are 2 figures, 1 table and 5 references: 4 Soviet and 1 non-Soviet. The reference to an English language publication reads as follows: M.I.Manjoine, Journal of the Iron and Steel, v.150, p.3, VI, 1947, 380.

ASSOCIATION: Sibirskiy metallurgicheskiy institut
(Siberian Metallurgical Institute)

SUBMITTED: March 30, 1960

ALEYNIKOV, A.I.; BAKLUSHIN, I.L.; VEKSIN, I.N.; VOSKRESENSKIY, V.A.; GONCHAROV, O.M.; LYULENKOV, V.I.; SHIROKOV, V.N.

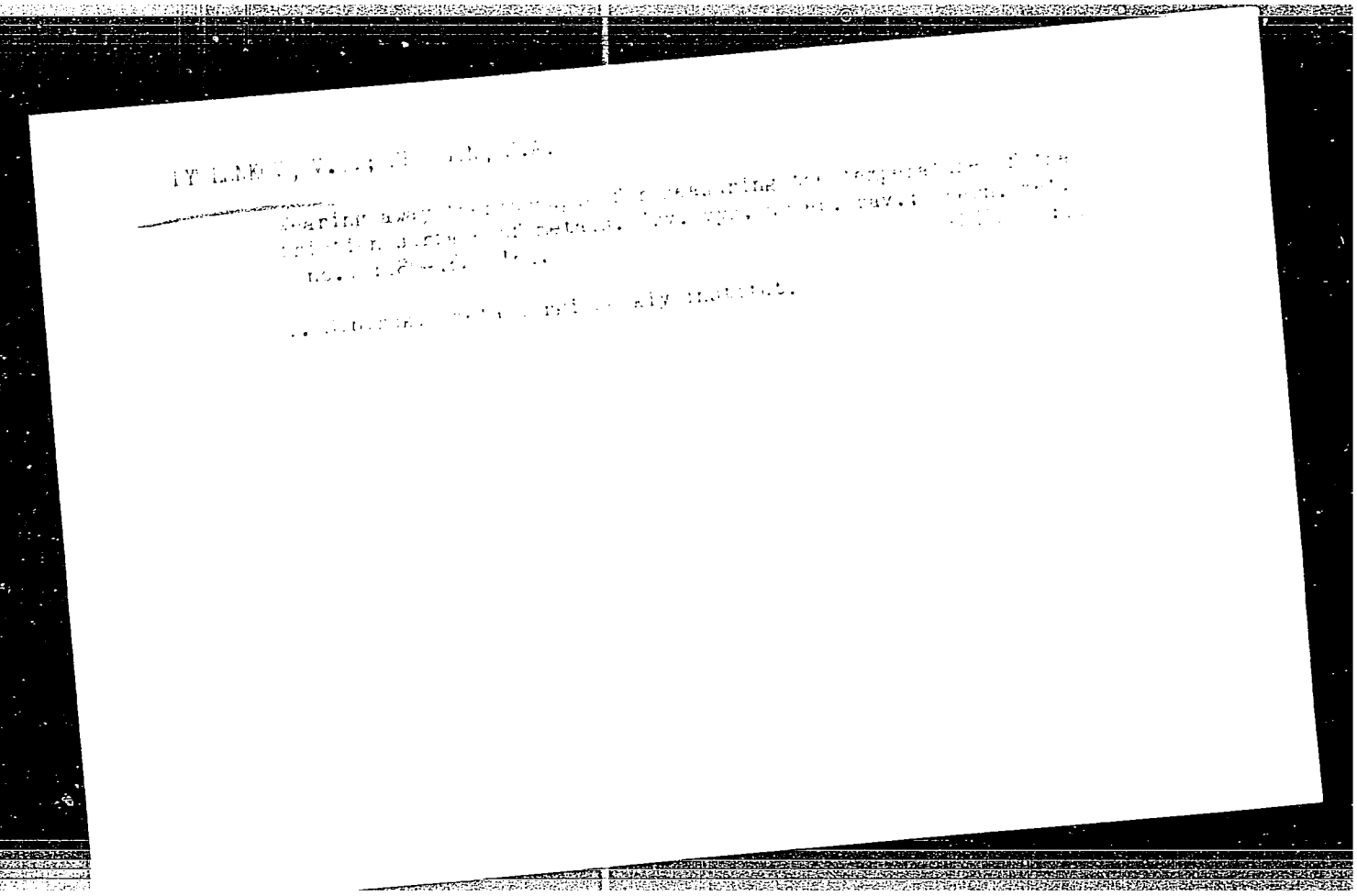
Investigating the throw mechanism of a charging machine on ferroalloy furnaces. Izv. vys. ucheb. zav.; chern. met. 6 no.6:204-208 '63. (MIRA 16:8)

1. Sibirskiy metallurgicheskiy institut.
(Metallurgical furnaces—Equipment and supplies)

BAKLUSHIN, I.L.; VEKSIN, I.N.; LYULENKOV, V.I.; SABANTSEV, V.P.; SOBOLEV, A.P.; SOKOLOV, L.D.; SHIROKOV, V.N.

Analyzing the reserve strength of the 1100 blooming mill stand in the Kuznetsk Metallurgical Combine. Izv. vys. ucheb. zav.; chern. met. 7 no.2:205-212 '64. (MIRA 17:3)

1. Sibirskiy metallurgicheskiy institut.



SEREGIN, S.A.; LYULENKOV, V.I.

Temperature-speed dependence of the coefficient of dry sliding friction. Izv.vys.ucheb.zav.; chern.met. 8 no.8:167-171 '65. (MIRA 18:8)

1. Sibirskiy metallurgicheskiy institut.

L 13375-63 BDS/EWT(m) AFFTC/ASD S/0120/63/000/003/0040/0048

ACCESSION NR: AP3002717

AUTHOR: Moiseyev, B. N.; Lyulevich, V. I.; Fedotov, O. P.

TITLE: Follow-up system of the outfit designed for measuring track-photograph coordinates

SOURCE: Pribory* i tekhnika eksperimenta, no. 3, 1963, 40-48

TOPIC TAGS: follower, nuclear measurement, bubbling chamber, track photograph

ABSTRACT: A projection-device follower is described of an automatic outfit intended for measuring bubbling-chamber photographs. Two versions of the follower were developed and tested: (1) a tv-type follower with a ring scanning in the camera tube and (2) an opaque radial-slit disk driven by a synchronous motor and exciting a photomultiplier tube. Pictorial diagrams and simplified connection diagrams describe details of both versions. Operating at a basic frequency of 400 cps with a superimposed frequency of 200 kc, the tv scanner is equivalent to a high-speed radial light-admitting slot. Methods of isolating the angle and the linear errors in the track following are discussed; the follow-up error is ± 2.5 microns at 1 mm/sec feed rate or better. Experimental characteristics of the

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ACCESSION NR: AP3002717

follower are presented: with a 16-mm-diameter disk, the minimum radius of curvature of the enlarged track image is 25 mm; the linear-error-channel sensitivity is 750 rpm per 1 micron of error (with 15% overcontrol); the angular-error-channel sensitivity is 3,000 rpm per 1° of error (no overcontrol). Orig. art. has: 6 figures.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki (Institute of the Theoretical and Experimental Physics)

SUBMITTED: 23Jun62 DATE ACQ: 12Jul63 ENCL: 00

SUB CODE: NS, SD NO REF SOV: 007 OTHER: 001

Card 2/2

SELENITSA, Muslim; LYULI, Metush; NIKANOROV, V.A. (g.Leningrad)

Organization of veterinary medicine in Albania. Veterinariia 36 no.9:83 S '59. (MIRA 12:12)

1.Nachal'nik Upravleniya zhivotnovodstva Ministerstva sel'skogo khozyaystva Albanii (for Selenitsa). 2.Dekan veterinarnogo fakul'teta Sel'skokhozyaystvennogo instituta Albanii (for Lyuli). (Albania--Veterinary medicine)

LYCHICHEV, A. N.

Dissertation: "Physicochemical Processes in Electric Spark Discharges." Kand Chem Sci, Khar'kov State U, Khar'kov, 1954. Referativnyy Zhurnal—Khimiya, Moscow, [illegible], Apr 54.

SO: SUM 194, 26 Nov 1954

Lyulichev, A.N.

USSR/ Physics - Spectral analysis

Card 1/1 Pub. 43 - 24/97

Authors : Lyulichev, A. N., and Palatnik, L. S.

Title : Adaptation of spectral analysis to the study of electro-spark treatment processes

Periodical : Izv. AN SSSR. Ser. fiz. 18/2, page 259, Mar-Apr 1954

Abstract : Investigations were conducted to determine the spectra of 342 combinations of electrodes prepared from technically pure Be, Mg, Al, Si, Ti, Cr, Fe, Co, Ni, Cu, Zn, Mo, Ag, Cd, Sn, Sb, W, Pb and Bi metals. The effect of the material and electrode form on the process of electro-spark treatment was studied by making a spectral analysis of the vaporous phase originating during electro-spark treatment. The results obtained confirm the suitability of the spectral analysis method for the study of all physico-chemical processes involved during electro-arc treatment of metals. Two USSR references (1946-1953).

Institution : The A. M. Gorkiy State University, Kharkov

Submitted : .....

LYULICHEV, A.N.; PALATNIK, L.S.

Investigation of the spark temperature of electric-spark metal hardening apparatus. Izv. AN SSSR. Ser. fiz. 19 no.1:66-67 Ja-F '55. (MIRA 8:9)

1. Khar'kovskiy gosudarstvennyy universitet imeni A.M.Gor'kogo (Spectrum analysis) (Spectrometer)

LEVINTOVICH, E.V.; LYULICHEV, A.N.; MARGULIS, O.M.; SHAKHTIN, D.M.

Methods of introducing a Ca^{45} radioactive indicator into a refractory mass. Ogneupory 21 no.2:73-75 '56. (MLRA 9:7)

1.Khar'kovskiy institut ogneuporov.
(Radioisotopes--Industrial applications) (Refractory materials--Testing)

K 6

Category : USSR/Optics - Spectroscopy

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 5005

Author : Palatnik, L.S., Lyulichev, A.N.
Title : Investigation of the Temperature in the Vapor Phase Occurring During the Electrical Spark Metal Working

Orig Pub : Zh. tekhn. fiziki, 1956, 26, No 4, 832-838

Abstract : A spectral method is used to determine the temperature of the plasma of the spark obtained in the setup for electric-spark metal hardening. The parameters of the setup are capacitance from 0.25 to 280 microfarad, current from 0.5 to 3 amperes, and voltage from 70 to 220 volts. The exposure used in the photography with the aid of the ISP-22 spectrograph using dispositive plates was 1 to 10 minutes. The spark temperature was measured by the Ornshteyn method with the aid of ten Fe II lines in the 2562-2756 A interval. It turned out to range from 7200 to 10200°. The spectra have a purely spark nature at a temperature of 9,000-10,000°, and are of a spark-arc nature at 7,000-8,000°. It is proposed to measure the spark temperature by comparison of the intensity of the arc and

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Category USSR/Optics - Spectroscopy

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 5005

spark lines of iron. For this purpose, four pairs of Fe I/Fe II lines were chosen, namely 2592-2593 A, 2594-2593 A, 2733-2731 A, and 2735-2731 A. The graphs of the temperature dependence of log (I_{FeI}/I_{FeII}) were plotted for these pairs in the 6,000-10,000° interval. The spectra of sparks were between iron electrodes and electrodes made of iron, copper, tungsten, aluminum, zinc, cadmium, magnesium, and carbon were photographed using capacitances of 280, 140, 80, 20, 8, and 0.25 microfarad. It was established that for the same capacitance the sparks obtained by different electrode pairs were in agreement, with the exception of the Fe-C pair (in this case it was 600, 1,000° lower). If the capacitance is kept constant, but different voltages and currents are used, the spark temperature between Fe electrodes remains practically constant over the range 70-220 volts and 1-3 amperes. Reducing the gap in the Fe-Fe pair increases the temperature; the same occurs when the electrode diameter is decreased. The following empirical dependence on the capacitance was established: $T = 7200 + 450\sqrt[3]{C}$ deg. C. It is concluded that the electric-spark processing of production objects is carried out not

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K 6

Category : USSR/Optics - Spectroscopy

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 5005

in the spark region, which is the optimum for controlled erosion, bu
in the spark-arc region Bibliography, 21 titles.

Card : 3/3

LYULICHEV, A. N.

USSR/Optics - Optical Methods of Analysis. Instruments, K-7

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35873

Author: Palatnik, L. S., Lyulichev, A. N.

Institution: University imeni Gor'kiy, Khar'kov, USSR

Title: Application of Spectral Analysis to the Investigation of Vapor Phase Occurring During Electric-Spark Working of Metals

Original Periodical: Zh. tekh. fiziki, 1956, 26, No 4, 839-849

Abstract: An investigation was made of the spectra of sparks, obtained directly from the setup for electric working of metals for 377 combinations of electrode-elements Be, C, Mg, Al, Si, Ti, Pb, Bi, Cr, Fe, Co, Ni, Cu, Zn, Mo, Ag, Cd, Sn, Sb, and W. The composition of the vapor-like phase was estimated with an accuracy to within an order of magnitude with the aid of the approximate expression $c_a/c_c \simeq I_a/I_c$, where c_a and c_c are the concentrations of the anode and cathode in the vapor-like phase, and I_a and I_c are the intensities of the brightest lines of the

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USSR/Optics - Optical Methods of Analysis. Instruments, K-7

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35873

Abstract: spectra of the anode and the cathode. The interaction and trans-fer criteria, suggested by L. S. Palatnik (Izv. AN SSSR, ser. fiz., 1951, 15, 80, 469), were used. In accordance with this criterion, it turned out that the composition of the vapor-like phase depends principally on the physical and chemical properties of the electrodes, with a decisive role being played by the thermal effect and by the processes of the electric spark working. The mode of the metal working has practically no influence on the composition of the vapor-like phase. The increase in the porosity of the electrodes and the reduction in their diameter leads to poorer heat transfer conditions and to a more intense evaporation of the material of the electrodes. The effect of polarity, as a rule, leads to an increase in the relative contents of the vapors of the element serving as the anode. For lightly-oxidizing elements one observed a contrary effect of the polarity. To strengthen by means of graphite it is advantageous to employ the following polarities: graphite-cathode, part-anode. Investigation of selective evaporation on the binary system Cu-Sn has shown that the composition of the vapor-like phase depends on the shape of the electrodes, on the material of the upper electrode, and on the polarity.

Card 2/2

137-58-6-13802

Translation from Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 171 (USSR)

AUTHORS: Lyulichev, A.N., Shakhtin, D.M.

TITLE: Use of a Readioactive Isotope of Calcium in Studying the Work of Laboratory Mixers (Primenenive radioaktivnogo izotopa kal'tsiya dlya izucheniya raboty laboratornykh smesiteley)

PERIODICAL: Byul. nauchno-tekhn. inform. Vses. n.-i. in-t ogneuporov, 1957, Vol 2, pp 93-98

ABSTRACT: A description of a method of control over mixing of charge material using radioactive Ca^{45} as a tracer. The work was done in a 600-g mixer with Z-shaped blades, on a 1-kg ceramic ball mill with silex balls, and on 3-kg crusher roll mills. The tests were run on a fine-grain silica batch with the grain composition, size of test samples, method of selection, and preparation of test samples being kept the same as in the case of working with magnetic powders. Into the silica batch ground to < 0.5-mm particle size, 1.5% $Ca(OH)_2$ or $CaCO_3$, tagged with Ca^{45}, 0.5% of sulfite-alcoholic mash, and 8.0% of water are introduced before mixing. During mixing by rollers or mixers the additives were introduced simultaneously in the form of

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Use of a Radioactive Isotope of Calcium (cont.)

milk of lime. During experiments with the ball mill the active additives were added in the form of a finely ground chalk powder. At definite intervals during the work of the mixer five 10-gr test samples were drawn from the mixed material. Cylindrical specimens of 20-mm diam were pressed from the test samples under 1000 kg/cm^2 pressure. The intensity of radiation of dried specimens was measured with an end-window counter TM-20 on a "B" type radiographic counting apparatus. A special film holder was made to ensure identical geometrical conditions. The scattering of the values of radioactive intensity, characterized by the magnitude of the mean square deviation ΔS, was chosen as the criterion of evaluation of the work of the mixers. From the blending curves plotted it is possible to determine the time of practical completion of mixing of the mass and of the homogeneity attained. The data obtained by radiographic measurements are confirmed as to the fact that the distribution of a tracer on addition of 0.3% $Ca(OH)_2$ is considerably less perfect than on addition of 0.6% $Ca(OH)_2$. It is deduced that the method can be used for a comparative study of various blending units especially when it is necessary to distribute small amounts of additives in the mass.

1. Laboratory mixers--Effectiveness 2. Laboratory mixers--Test results 3. Laboratory mixers--Application 4. Calcium isotopes--Radioactive--Application

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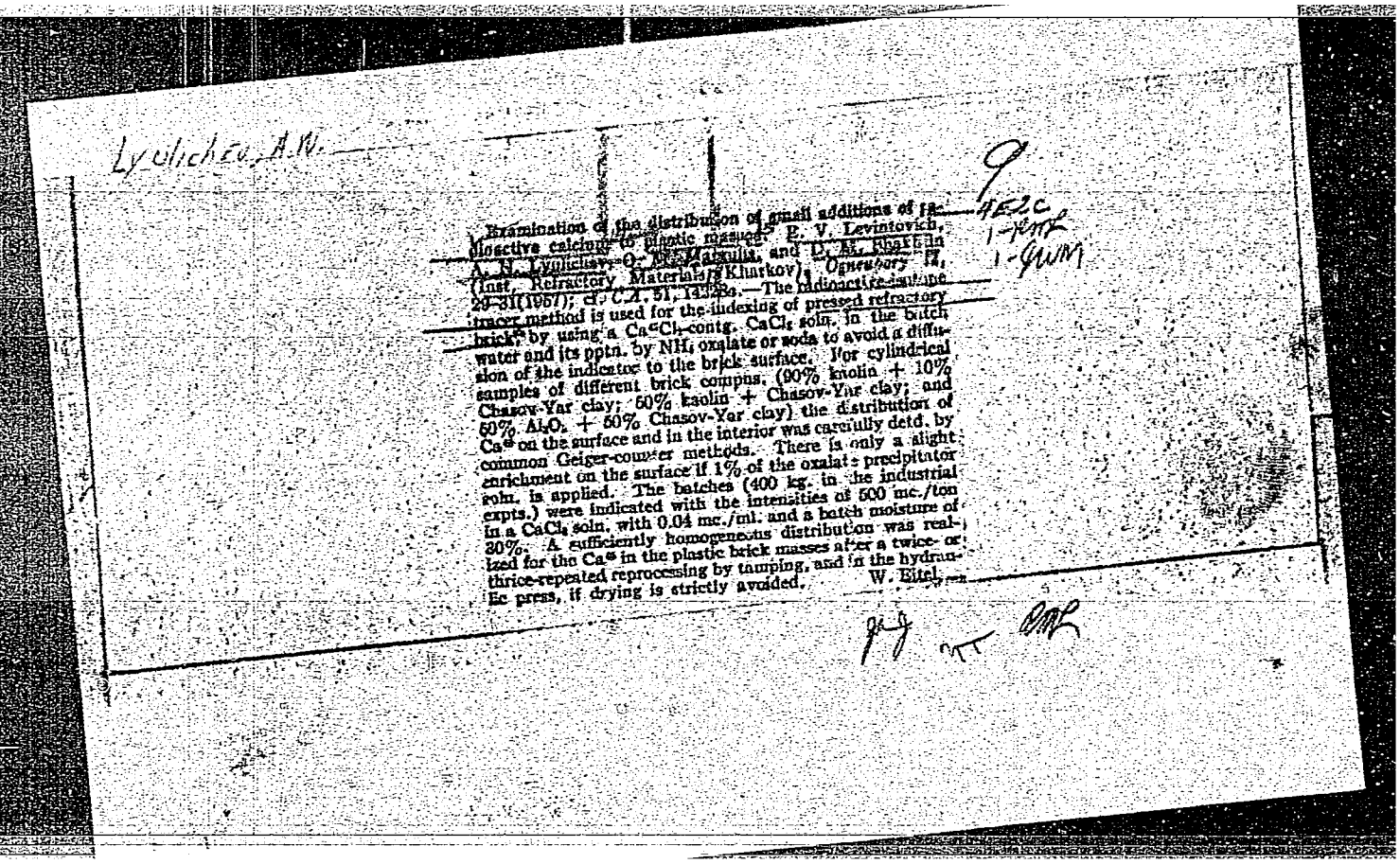

Lyulichev, A.N.

9

45-2c
1-year
1-GWM

Examination of the distribution of small additions of radioactive calcium to plastic masses. P. V. Levintovich, A. N. Lyulichev, O. K. Maksulla, and D. K. Kharkin (Inst. Refractory Materials, Kharkov). *Ogneupory* 22, 29–31(1957); cf. *C.A.* 51, 14228a.—The radioactive-isotope tracer method is used for the indexing of pressed refractory bricks by using a $Ca^{45}Cl_2$-contg. $CaCl_2$ soln. in the batch water and its pptn. by NH_4 oxalate or soda to avoid a diffusion of the indicator to the brick surface. For cylindrical samples of different brick compns. (90% kaolin + 10% Chasov-Yar clay; 50% kaolin + Chasov-Yar clay; and 50% Al_2O_3 + 50% Chasov-Yar clay) the distribution of Ca^{45} on the surface and in the interior was carefully detd. by common Geiger-counter methods. There is only a slight enrichment on the surface if 1% of the oxalate precipitator soln. is applied. The batches (400 kg. in the industrial expts.) were indicated with the intensities of 500 mc./ton in a $CaCl_2$ soln. with 0.04 mc./ml. and a batch moisture of 30%. A sufficiently homogeneous distribution was realized for the Ca^{45} in the plastic brick masses after a twice- or thrice-repeated reprocessing by tamping, and in the hydraulic press, if drying is strictly avoided. W. Eitel

32-8-20/61

AUTHORS Lyulichev, A.N., Chuprinin, F.I., Kovalenko, S.I.

TITLE Determination of the Conductance of Fireproof Materials in the Vacuum up to 2.200°C. (Opredeleniye elektroprovodnosti ogneupornykh materialov v vakuume do 2.200°C).

PERIODICAL Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 8, pp. 931-934 (USSR).

ABSTRACT The paper describes the construction of an apparatus and gives examples of its application. The vacuum device corresponds to 5.10^{-5} mm mercury column. The sample is heated by means of two graphite slabs with a recess in the middle part. These slabs consist of rods which are 15 mm in diameter and 250 mm in length. The ends of the rods, 50 mm each, remain round. The working surface of 150 mm length and about 14 mm width is planed off to a thickness of 1,5 - 2,0 mm. Moreover a recess of 40 mm length is made in the middle. The lower slab which is placed inversely toward the upper one is in its central part 12 - 13 mm distant from the upper plate and outside the recess (on the edge) about 20 - 23 mm. This fact permits to expose the sample placed in the center to higher temperatures, whereas the edges of the device remain at lower temperatures. The round ends of the rods which in the middle form the slabs are on the sides (left and right) introduced between the massive graphite clamps which are tightened by steel screws. One of the clamps receives a stable connection to the source of current by a copper rod, the other one, however, receives an elastic type of

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Determination of the Conductance of Fireproof Materials in the Vacuum up to 2.200°C.

connection because of the linear expansion due to the effect of heat. The device is moreover provided with tantalum sheet screens because of radiation of heat to the outside, which are connected among each another and represent a supporting basis for the device. The sample is fixed in the center of the device between two molybdenum electrodes, one of the electrodes being fastened stably and the other one posses- sing a spring connection. Examples for the application of this device are given and characteristic individual cases with regard to the sample materials are described. (3 illustrations).

ASSOCIATION All-Union Scientific research institute for fireproof substances. (Vsesoyuznyy nauchno-issledovatel'skiy institut ogneuporov).

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Card 2/2