TRET'YAKOV, Ye.V., kand.tekhn.nauk; GUBAR', V.F.

Consumption of the metal charge in the production of steel at metallurgical plants in the Ukrainian S.S.R. Metal. gornorud. prom. no.6:17-19 N-D '63. (MIRA 18:2)

KAZAKOV, A.A.; MEDZHIBOZHSKIY, M.Ya.; GUBAR', V.F.

Dependence of the oxygen content in open-hearth steel on technological factors. Izv. vys. ucheb. zav.; chern. met. 7 no.11:59-65 '64. (MIRA 17:12)

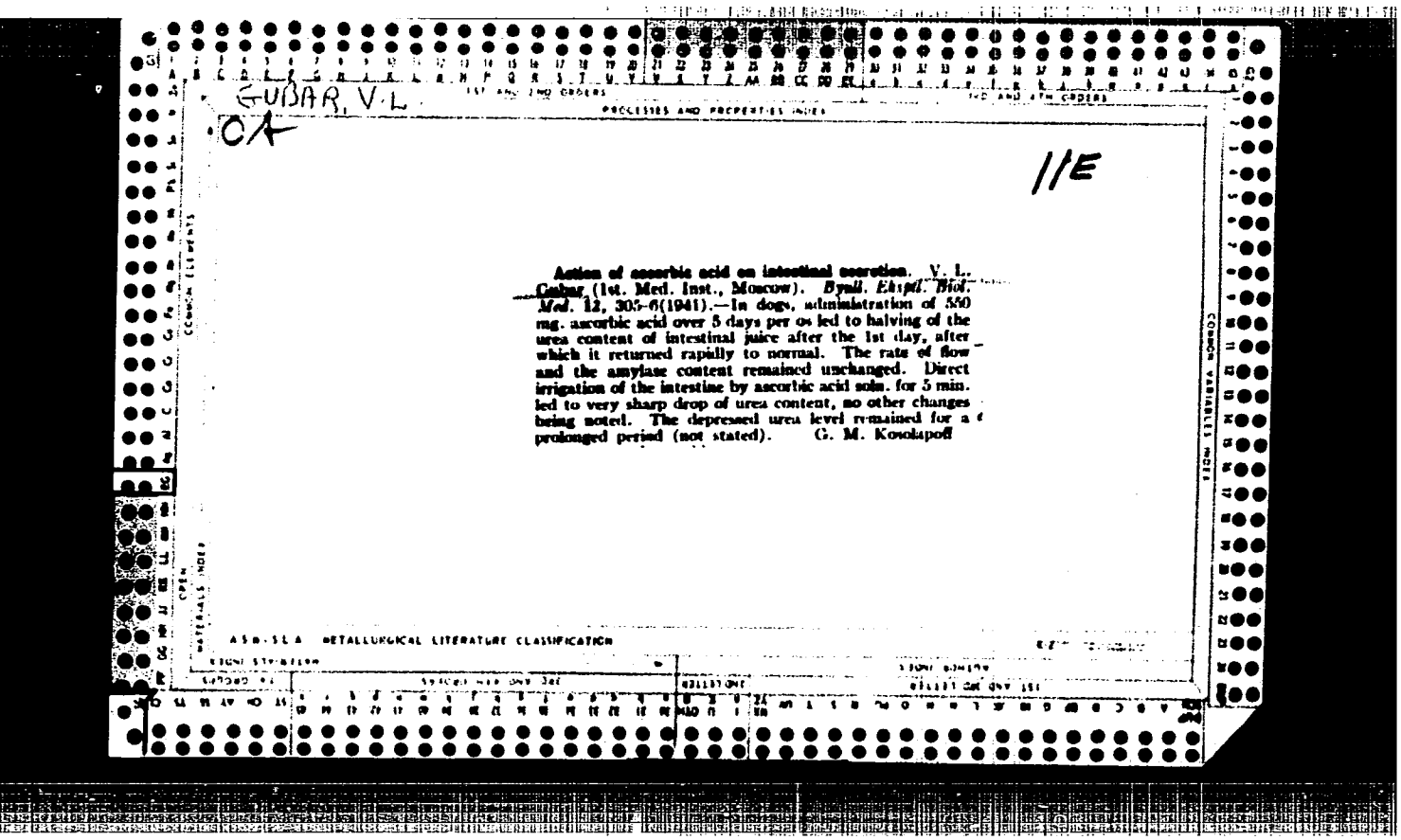
CHOKOV, Boris Pavlovich; ERIK, Aleksandr Borisovich; GUBAR', V.F., red.

[Production of wall panels from keramzit-perlite concrete] Proizvodstvo stenovykh panelei iz keramzitoperlitobetona. Kiev, Budivel'nyk, 1965. 54 p. (MIRA 18:8)

KULIKOV, V.O.; BORNATSKIY, I.I.; ZABUBIN, N.G.; DOROFEYEV, G.A.; KALUZHSKIY, Ye.A.; KAZAKOV, A.A.; KOVAL', R.F.; KORNEVA, N.K.; TRET'YAKOV, Ye.V.; TRUNOV, Ye.A.; Prinimali uchastiye: ANDREYEV, V.I.; GORDIYENKO, V.V.; GRINEVICH, I.P.; GUBAR', V.F.; DOLINENKO, V.I.; ZHERNOVSKIY, V.S.; ZHIGALOVA, Z.I.; KOMOV, N.G.; KURAPIN, B.S.; OLESHKEVICH, T.I.; PRIKHOZHENKO, Ye.

Mastering the operations of 650- and 900-ton (mega - gram) capacity open-hearth furnaces at the Il'ich metallurgical plant. Stal' 25 no.8:805-807 S '65. (MIRA 18:9)

1. DONNIICHERMET i Zhdanovskiy metallurgicheskiy zavod imeni Il'icha.



GUBAR, V.L.

CA

11E

Action of ascorbic acid on intestinal secretion. V. L. Gubar (1st. Med. Inst., Moscow). *Byull. Eksptl. Biol. Med.* 12, 305-6(1941).—In dogs, administration of 500 mg. ascorbic acid over 5 days per os led to halving of the urea content of intestinal juice after the 1st day, after which it returned rapidly to normal. The rate of flow and the amylase content remained unchanged. Direct irrigation of the intestine by ascorbic acid soln. for 5 min. led to very sharp drop of urea content, no other changes being noted. The depressed urea level remained for a prolonged period (not stated). G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

GUBAR', V.L.

Injurious effect of alcohol on the stomach. Vop.pit. 14 no.2:3-8 Mr-Ap '55. (MLRA 8:6)

1. Iz Instituta pitaniya AMN SSSR, Moskva.
(ALCOHOL, ETHYL, injurious effects, on stomach)
(STOMACH, diseases, alcohol lesions)

GUBAR', V.L.

Method of isolating a segment of a large intestine. Fiziol.zhur. 41 no.4:587-589 Jl-Ag '55. (MLRA 8:10)

1. Otdel lechebnogo pitaniya Instituta pitaniya AMN SSSR, Laboratoriya fiziologii i patologii pishchevareniya, Moskva.
(INTESTINE, LARGE, surgery,
isolation for exper. investigation in animals)

GUBAR', V.L.

Collection of urine from animals in long-term experimental studies [with summary in English]. Fiziol.zhur. 42 no.11:995-997 N '56. (MLRA 10:1)

1. Laboratoriya fiziologii i patologii pishchevareniya Otdela lechebnogo pitaniya Instituta pitaniya AMN SSSR, Moskva.

(URINE,
collection in animals in exper. studies (Rus))

GUBAR', V.L.

Current state of the problem of experimental gastritis. Vop.pit. 21 no.3:72-79 My-Je '62. (MIRA 15:10)

1. Iz kliniko-fiziologicheskoy laboratorii (zav. - doktor med.nauk V.L.Gubar') Instituta pitaniya AMN SSSR, Moskva.
(STOMACH--INFLAMMATION)

22(1)

SOV/47-59-2-16/31

AUTHORS: Rozhkov, M.M. (Penza); Starikov, P.A., Engineer (Khabarovsk); Klenov, A. (Sverdlovsk); Gubar', V.V.(Elektrostal'), and Malyy, E.L., Senior Engineer

TITLE: The Movie Projector "Shkol'nik" (O kinoapparate "Shkol'nik")

PERIODICAL: Fizika v shkole, 1959, Nr 2, pp 68-70 (USSR)

ABSTRACT: The "Kinap" Plants (motion picture equipment) in Kiyev and Leningrad are at present turning out portable film projectors KPSh-1. They are designed for introducing teaching processes in schools and demonstrating silent and sound films. The author lists a number of features which the film projectors ought to have, such as small weight and size, reliability and simplicity of operation, fire-proofness, the possibility to change the moving speed of silent films, to move them forward and backward, etc. The film projector KPSh-1 has these features only to a certain extent. The author examines each of them and points out the shortcomings. The disadvantages are also listed by P.A. Starikov, whose school acquired the film projector "Shkol'nik". A. Klenov (68-ya

Card 1/2

srednyaya shkola - Secondary School Nr 68 in Sverdlovsk), and V.V. Gubar' (Secondary School Nr 10 in Elektrostal', Moscow Oblast) complain that the projection tubes burned out and that new ones are not available in the Glavsnabpros shops. E.L. Malyy, Senior Engineer of the Film Section of Glavsnabpros, explains why the tubes burned out too quickly, stating that measures have been taken to supply the shops with the required tubes.

GUBAR' V. V.

USSR/Medicine - Mosquitoes Bird Nests May / Jun 49

"Bird Nests as Breeding Grounds for Mosquitoes (Phlebotomus)," P. A. Petrishcheva, V. V. Gubar', A. T. Voylocknikov, I. M. Grokhovskaya, K. M. Sokolva, O. Ya. Khodova, A.B. Gasparova, Div of Parasitol and Med Zool, I^st of Epidemiol and Microbiol, Acad Med Sci USSR, 2½ pp

"Zool Zhur" No 3

Investigated 113 nests of nine species of birds and found only eight contained evidence of mosquitoes. In these eight nests found eight larva, 25 pupa, and 136 pupa cases, indicating that nests are not one of more frequently used breeding places. Dir, Div of Parasitol and Med Zool: Acad Ye. N. Pavlovskiy. Dir, Inst of Epidemiol and Microbiol: Prof V. D. Timakov.

PA 151T55

176T68

GUBAR', V. V.

Jun 49

USSR/Medicine - Insects, Infectious Diseases

"On the Breeding of Phlebotomus in Colonies of Rhombomys opimus Licht.," P. A. Petrishcheva, V. V. Gubar', Dept Parasitol and Med Zool, Inst Epidemiol and Microbiol, Acad Med Sci USSR, Moscow

"Entomol Oboz" Vol XXX, No 3/4, pp 242-245

Various phases of Phlebotomus papatasii Scop., Ph. sergenti Parr., Ph. sergentii var. alexandri Sint., Ph. minutus var. arpklensis Perf., Perf., Ph. caucasicus Marz., and Ph. chinensis Newst. were detect[illegible]n subterranean dwellings of the rodent Rhombomys opimus Licht. in vicinity of Kara-ka[illegible]n Southwestern Kopetdag.

PA 176T68

GUBAR', Ye. G.

GUBAR', Ye. G.: "Dynamic systems on a surface with a small parameter in one of the derivatives". Minsk, 1955. Min Higher Education USSR. Belorussian State U imeni V. I. Lenin. (Dissertations for the Degree of Candidate of Physicomathematical Sciences.)

So: Knizhnaya letopis' No. 49, 3 December 1955. Moscow.

GuBAK, Ye. G.

16(1) PHASE I BOOK EXPLOITATION SOV/2660

Vsesoyuznyy matematicheskiy s"yezd. 3rd, Moscow, 1956

Trudy. t. 4: Kratkoye soderzhaniye sektsionnykh dokladov. Doklady inostrannykh uchenykh (Transactions of the 3rd All-Union Mathematical Conference in Moscow. vol. 4: Summary of Sectional Reports. Reports of Foreign Scientists) Moscow, Izd-vo AN SSSR, 1959. 247 p. 2,200 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Matematicheskiy institut.

Tech. Ed.: G.N. Shevchenko; Editorial Board: A.A. Abramov, V.G. Boltyanskiy, A.M. Vasil'yev, B.V. Medvedev, A.D. Myshkis, S.M. Nikol'skiy (Resp. Ed.), A.G. Postnikov, Yu. V. Prokhorov, K.A. Rybnikov, P. L. Ul'yanov, V.A. Uspenskiy, N.G. Chetayev, G. Ye. Shilov, and A.I. Shirshov.

PURPOSE: This book is intended for mathematicians and physicists.

COVERAGE: The book is Volume IV of the Transactions of the Third All-Union Mathematical Conference, held in June and July 1956. The book is divided into two main parts. The first part contains summaries of the papers presented by Soviet scientists at the Conference that were not included in the first two volumes. The second part contains the text of reports submitted to the editor by non-Soviet scientists. In those cases when the non-Soviet scientist did not submit a copy of his paper to the editor, the title of the paper is cited and, if the paper was printed in a previous volume, reference is made to the appropriate volume. The papers, both Soviet and non-Soviet, cover various topics in number theory, algebra, differential and integral equations, function theory, functional analysis, probability theory, topology, mathematical problems of mechanics and physics, computational mathematics, mathematical logic and the foundations of mathematics, and the history of mathematics.

Card 8/34

97-57-9-8/17

AUTHORS: Gubar', Yu. D. and Zhelekhovskiy, V. A. (Engineers).

TITLE: Electrical Curing of Coarsely/Porous Concrete. (Elektroprogrev krupnoporistogo betona).

PERIODICAL: Beton i Zhelezobeton, 1957, Nr.9. pp. 367-368. (USSR).

ABSTRACT: The Russian climate does not allow concreting during winter without pre-heating of all materials. Pre-heating by means of steam involves many difficulties; experience in using no-fine concrete and electrical pre-heating was obtained during the construction of Karagandinsk GRES-2 (power station). Concreting was carried out continuously from December to April. The mean monthly temperature in December was - 11.3°, in January - 15.6°, in February - 16.7°, and in March - 7.9°. The lowest temperature was - 42°. The velocity of north-west winds reached 12 m/sec. Because of concrete porosity, the formation of steam is rather exhaustive during pre-heating, which can result in over-drying. To obviate this, the maximal temperature for pre-heating no-fine concrete is lower than that of dense concrete, and should not exceed 33-35°C. The consumption of electricity per 1 m^3 of no-fine concrete is 20% lower than for dense concrete. The current

Card 1/4

used for pre-heating was 66-88 V. Fig.1 shows the temperature variation of no-fine concrete during pre-heating; it shows a continuous rise of 5-7° an hour in temperature during 5-6 hours. Six hours after the commencement of pre-heating, the temperature reached the maximum, and further increase in temperature was prevented by repeatedly switching off the current. After 14-15 hours of pre-heating, the power was finally switched off. The cooling down lasted 9-10 hours; that is, it was slower than warming up. During this cooling time, the concrete hardened sufficiently to withstand low temperatures. The graph in Fig.2 shows the increase in strength of no-fine concrete Mark 50 during pre-heating. The period during which the temperature increases corresponds with the period of initial setting. A sharp increase in the strength of the concrete occurred during the period of the highest temperature (shown on Fig.1 between the limits of the practically horizontal line). In that time the strength of the concrete reached 60% of the final strength. Later, when the temperature falls, the strength increases at a slower rate. To avoid freezing during transportation,

the concrete mix leaves the mixer at a temperature of not less than 18 - 20°C. If the temperature is lower than -15°C, 2% calcium chloride (by weight of cement) is added. This lowers the freezing point, and increases the electro-conductivity of the mixture. The graph in Fig.3 represents the pre-heating temperature of the concrete mix containing calcium chloride additive. This additive shortens the time of pre-heating and also the time of hardening. The quality of pre-heating of concrete depends largely on the shape and location of the electrodes. At first, steel plates were used fixed to form-work, but these proved unsatisfactory, as the paths of concrete immediately adjacent to the plates become overheated. Rod-type electrodes proved to be better, and were made from the waste of reinforcement steel, 4-6 mm diameter. The distance between electrodes was 25-27 cm. Fig.4 gives an illustration of a wall built from no-fine concrete. In using these electrodes no over-heating of concrete was experienced. Overheating may result if the temperature reaches 40-42°, and this is obviated by switching the current off; the concrete is allowed to cool down to 20-26°, and the current is

Electrical Curing of Coarsely/Porous Concrete. 97-57-9-8/17

then switched on again. Fig.5 shows a house built from no-fine concrete which had been electrically pre-heated. It is concluded that no-fine concrete can be used with efficiency in winter conditions. The temperature of the heated concrete should not reach more than 35°C. 60% of the ultimate strength is reached in 23-24 hours. There are 5 Figures.

AVAILABLE: Library of Congress.

1. Concrete-Curing methods 2. Concreting-Weather factors
3. Concrete-Heating

Card 4/4

BRODSKIY, A.M.; GUBAR', Yu.I.

Green's functions in the nonlinear field theory. Izv.vys.ucheb. zav.; fiz. no.4:71-78 '61. (MIRA 14:10)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Potentials, Theory of) (Field theory)

GUBAR', Yu.I.

"Linearizing" a nonlinear spinor field equation by way of "fusion" of fermions into bosons. Izv. vys. ucheb. zav.; fiz. no.5:140-146 '63. (MIRA 16:12)

1. Vsesoyuznyy zaochnyy mashinostroitel'nyy institut.

KHABE, L.; KISELEV, A., inzh.; GUBAREV, A., tekhnik-tekhnolog.

Double-deck millet huller. Mukh.-elev. prom. 24 no.4:16-18 Ap '58.
(MIRA 11:5)

1. Upravleniye mukomol'no-krupyanykh i kombikormovykh predpriyatiy Ministerstva khleboproduktov SSSR (for Khabe, Kiselev). 2. Voronezhskoye oblastnoye upravleniye khleboproduktor (for Gubarev).
(Grain milling machinery)

CA S-UBAREV, A.A.

4

Galvanoplastic method of preparation of matrixes for large-type type-casting machines. Kh. A. Grilikhes and A. A. Gubarev. *Poligraf. Proizvodstvo* 1951, No. 10, 14–15.—The form is made up of hand-set type between wooden strips, all flats are covered with an insulating layer of wax-paraffin-colophony compn., and before plating the print is dewaxed with petroleum solvent, followed by NaOH soln., washed, treated with 3–5% HNO_3, washed, coated with chalk-meal, and washed with EtOH. The print is then suspended in a plating bath of $CuSO_4$ 200, H_2SO_4 20, and EtOH 2 g./l. or $CuSO_4$ 200, H_2SO_4 30, and 2-naphtholsulfonic acid 1 g./l. and plated at c.d. 0.5–3.0 amp./sq. dm. at room temp. Once every 24 hrs. the forms are brushed with a steel brush. After deposition of a 1.3–1.5-mm. layer, the plate is polished and used in a machine for type-casting, preferably with an alloy of Sb 18–20, Sn 5, and Pb 73–5% (m. 350–400°). The mech. steps of operations are described and diagrams for setting-up the matrix for lathe-cutting are shown.

G. M. Kosolapoff

KOROLEV, V.N., inzh.; TSIRKIN, M.Z., inzh.; LAVRUSHINA, N.S., inzh.; KONTOROVICH, L.M., inzh.; GUBAREV, A.A., inzh.; Prinimal uchastiye MEL'SHTEYN, L.G.

Insulation of bar winding heads of the stators of hydrogenerators and turbogenerators. Elektrotekhnika 36 no.8:16-18 Ag '65. (MIRA 18:9)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta elektromekhaniki (for Mel'shteyn).

GUBAREV, A.G., inzhener.

Novel design of a durable hot-blast damper. Stal' 15 no.11:1037-1038 N '55. (MLRA 9:1)

1.Makeyevskiy metallurgicheskiy zavod.
(Blast furnaces)

DOBRYNIN, V.P., prof.; OL'SHANSKIY, M.A., akademik, lektor; YELIN, Ye.Ya., dots.; FAT'YANOV, A.S., prof.; GUBAREV, A.N.; TKACHENKO, P.I., dots.; CHIZHEVSKIY, M.G., prof., lektor; AVDONIN, N.S., prof., lektor; ONUCHAK, A.I., dots.; DUNIN, M.S., prof., lektor; SAVZDARG, E.E., prof., lektor; KREMENETSKIY, N.D., dots., lektor; AVER'YANOV, S.F., dots., lektor; POLUBOYARINOV, I.I., dots.; GUBAREV, A.N., red. izd-va; NAUMOV, K.M., tekhn. red.

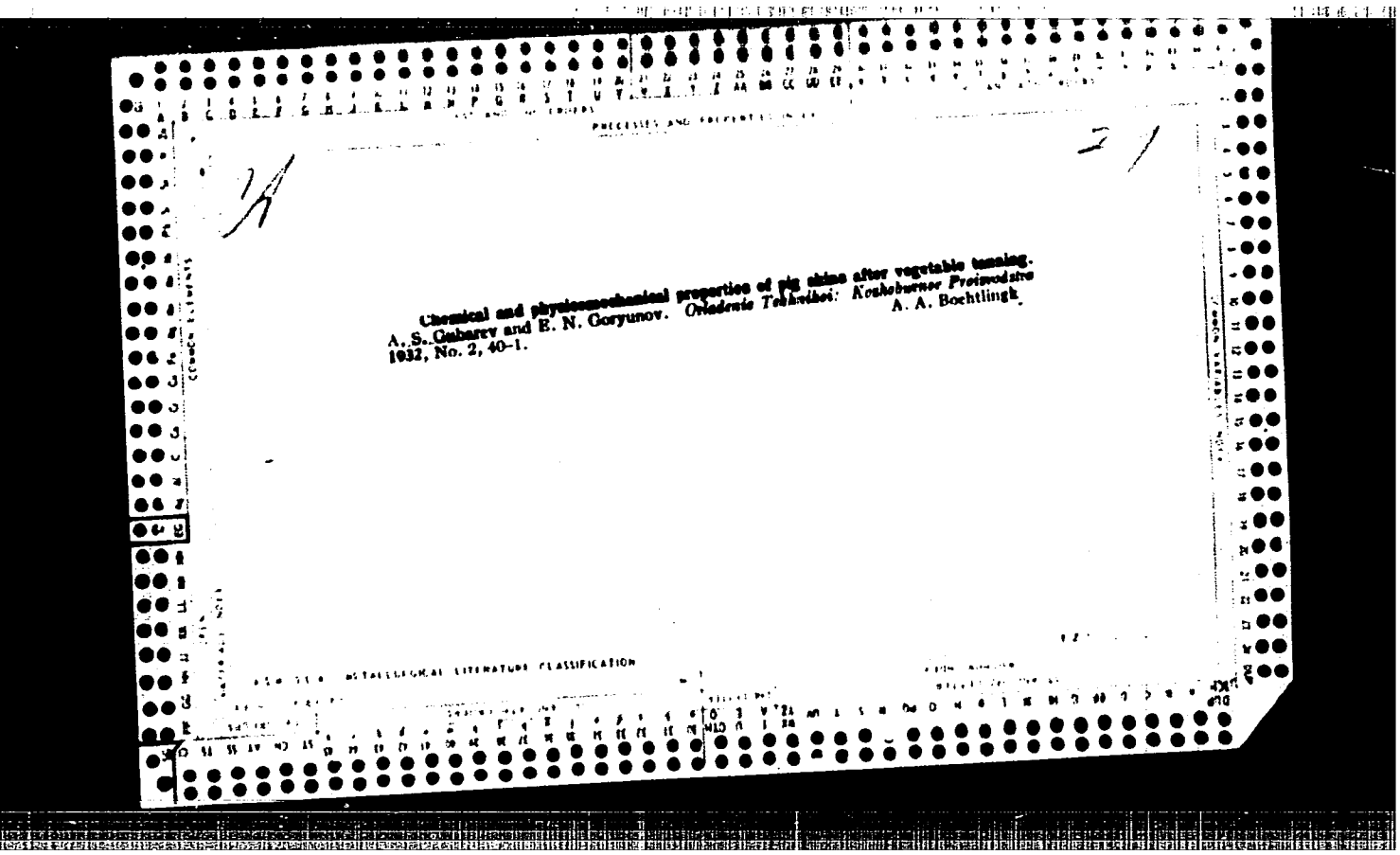
[Textbook on agriculture for party schools]Uchebnoe posobie po sel'skomu khoziaistvu dlia partiinykh shkol. Moskva. Pt.1. [Crop farming] Zemledelie. 1958. 397 p. (MIRA 15:1)

1. Kommunisticheskaya partiya Sovetskogo Soyuza. Vysshaya partiynaya shkola. 2. Vysshaya partiynaya shkola pri TSentral'nom komitete Kommunisticheskoy partii Sovetskogo Soyuza (for Dobrynin, Ol'shanskiy, Gubarev, Tkachenko, Chizhevskiy, Avdonin, Onuchak, Dunin, Savzdarg, Kremenetskiy, Aver'yanov). 3. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Ol'shanskiy). 4. Vysshaya partiynaya shkola pri TSentral'nom komitete Kommunisticheskoy partii Ukrainy (for Yelin, Poluboyarinov). 5. Gor'kovskaya Vysshaya partiynaya shkola (for Fat'yanov).
(Agriculture)

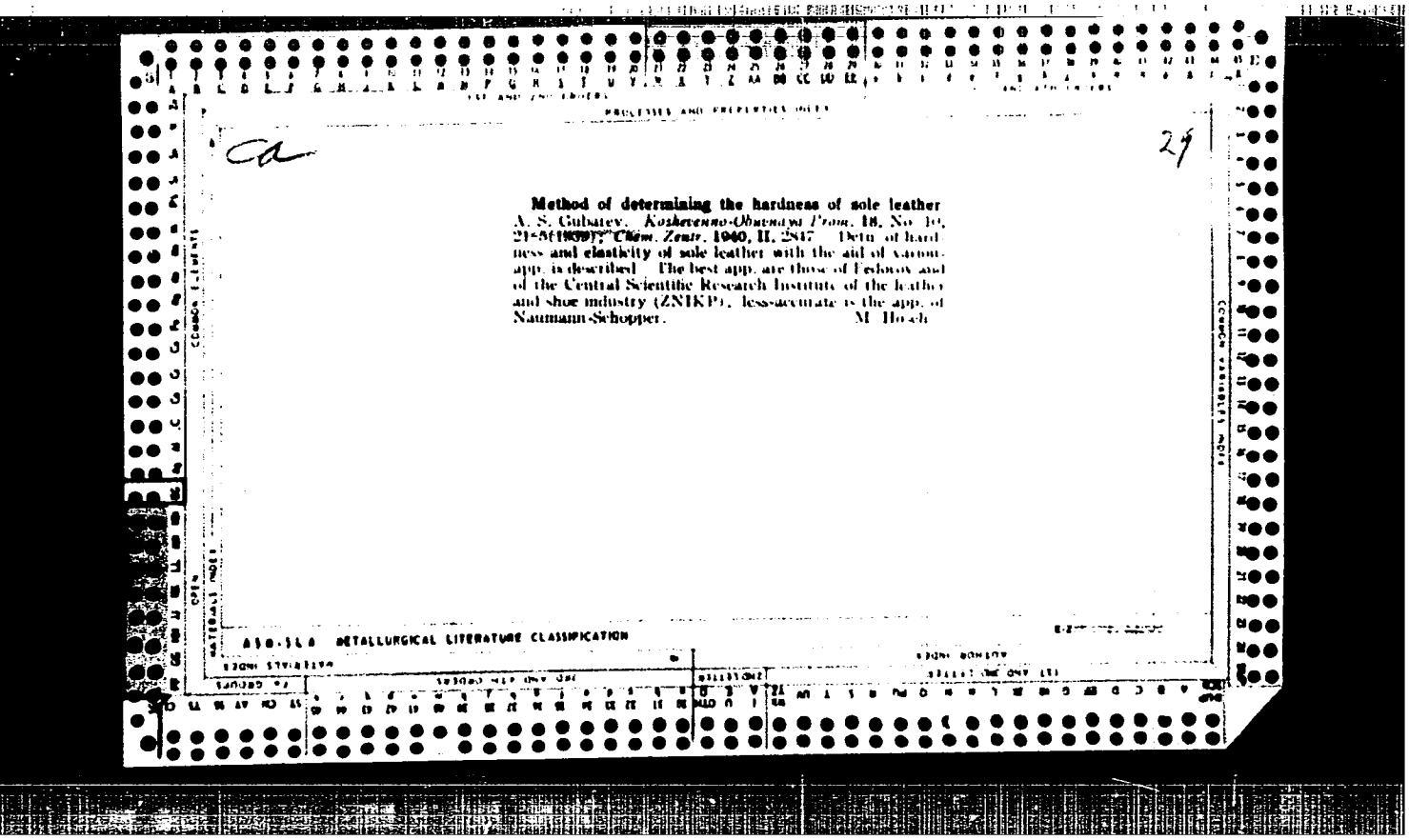
GUBAREV, A.N., assistent

Apparatus for determining soil moisture under field conditions. Izv. TSKHA no.5:233-238 '62. (MIRA 16:7)

(Soil moisture)



Chemical and physicomechanical properties of pig skins after vegetable tanning.
A. S. Gabarev and E. N. Goryunov. *Oviadenie Tekhnikoi: Koshebennoe Proizvodstvo* 1932, No. 2, 40–1.
A. A. Boehtlingk.

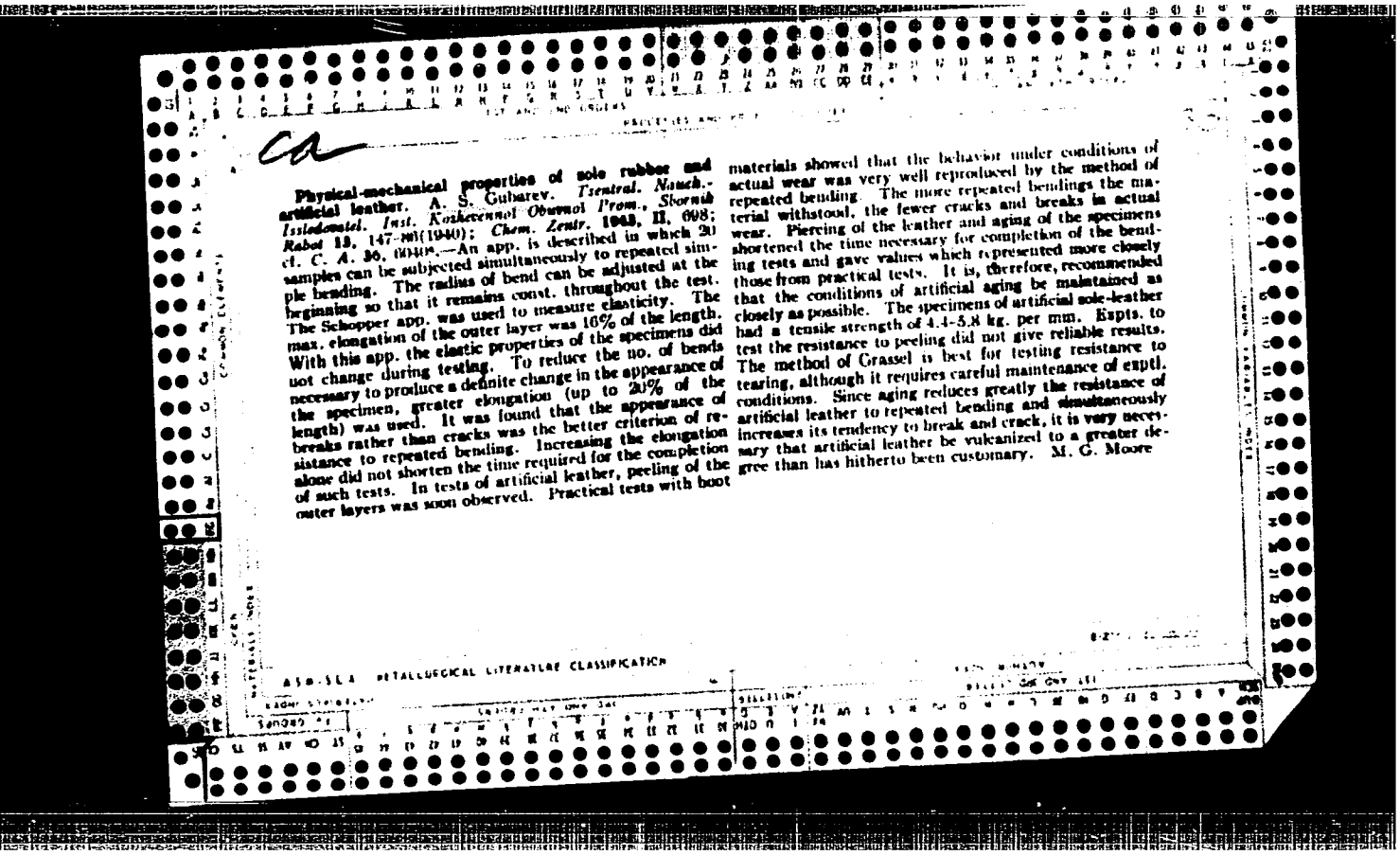


Ca

29

Method of determining the hardness of sole leather
A. S. Gubatev. *Kozhevenno-Obuvnaya Prom.* 18, No. 10, 21–5(1939); *Chem. Zentr.* 1940, II, 2847. Deta. of hardness and elasticity of sole leather with the aid of various app. is described. The best app. are those of Fedotov and of the Central Scientific Research Institute of the leather and shoe industry (ZNIKP), less-accurate is the app. of Naumann-Schopper. M. Hoch

A50-51A METALLURGICAL LITERATURE CLASSIFICATION



Physical-mechanical properties of sole rubber and artificial leather. A. S. Gubarev. *Tsentral. Nauch.-Issledovatel. Inst. Kozkozennoi Obuvnoi Prom., Sbornik Rabot* **13**, 147–80(1940); *Chem. Zentr.* **1943**, II, 698; cf. *C. A.* **36**, 6048.—An app. is described in which 20 samples can be subjected simultaneously to repeated simple bending. The radius of bend can be adjusted at the beginning so that it remains const. throughout the test. The Schopper app. was used to measure elasticity. The max. elongation of the outer layer was 10% of the length. With this app. the elastic properties of the specimens did not change during testing. To reduce the no. of bends necessary to produce a definite change in the appearance of the specimen, greater elongation (up to 20% of the length) was used. It was found that the appearance of breaks rather than cracks was the better criterion of resistance to repeated bending. Increasing the elongation alone did not shorten the time required for the completion of such tests. In tests of artificial leather, peeling of the outer layers was soon observed. Practical tests with boot materials showed that the behavior under conditions of actual wear was very well reproduced by the method of repeated bending. The more repeated bendings the material withstood, the fewer cracks and breaks in actual wear. Piercing of the leather and aging of the specimens shortened the time necessary for completion of the bending tests and gave values which represented more closely those from practical tests. It is, therefore, recommended that the conditions of artificial aging be maintained as closely as possible. The specimens of artificial sole-leather had a tensile strength of 4.4–5.8 kg. per mm. Expts. to test the resistance to peeling did not give reliable results. The method of Grassel is best for testing resistance to tearing, although it requires careful maintenance of exptl. conditions. Since aging reduces greatly the resistance of artificial leather to repeated bending and simultaneously increases its tendency to break and crack, it is very necessary that artificial leather be vulcanized to a greater degree than has hitherto been customary. M. G. Moore

KOTEL'NIKOV, V.N., kand.tekhn.nauk; CHENTSOVA, K.I., kand.tekhn.nauk; ZYBIN, Yu.P., doktor tekhn.nauk; KOCHETKOVA, T.S.; ZAKATOVA, N.D., kand.tekhn.nauk; GUBAREV, A.S., kand.tekhn.nauk; SHVETSOVA, T.P., insh.; VOROB'YEVA, A.A., kand.tekhn.nauk; MIRSKIY, V.I., insh.; NISNEVICH, Ye.A., kand.tekhn.nauk; GOL'DSHTEYN, A.V., insh.; KALASHNIKOVA, T.A., insh.; SHUSTOROVICH, M.L., kand.tekhn.nauk; MOREKHODOV, G.A., insh.; ZAKHAROV, S.R., retsenzent; BLAGOVESTOV, B.K., retsenzent; STRONGINA, O.P., retsenzent; SHMIDT, M.I., retsenzent; ZUYEV, V.T., retsenzent; KOSAREV, M.I., retsenzent; STEPANOV, I.S., retsenzent; RAMM, S.N., retsenzent; PEVZNER, B.M., retsenzent; VEYNBERG, I.A., retsenzent; TURBIN, A.S., retsenzent, SMIRNOVA, Ye.V., retsenzent; BUGOSLAVSKAYA, L.A., retsenzent; GAMOVA, A.S., retsenzent; KHANIN, N.M., retsenzent; MURVANIDZE, D.S., red.; PLEMYANNIKOV, M.N., red.; GRACHEVA, A.V., red.; MEDVEDEV, L.Ya., tekhn.red.

[Shoemaker's handbook] Spravochnik obuvshchika. Vol.1. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po legkoi promyshl. 1958. 540 p. (MIRA 12:4)

1.Gosudarstvennaya Ordena Lenina i Ordena Trudovogo Krasnogo Znameni obuvnaya fabrika "Skorokhod" imeni Ya.Kalinina (for Zakharov, Blagovestov, Strongina, Shmidt, Zuyev, Kosarev, Stepanov, Ramm, Pevzner, Veynberg, Turbin, Smirnova, Bugoslavskaya, Gamova, Khanin).
(Shoe manufacture)

GUBAREV, A.S.

28-58-1-9/34

AUTHORS: Zakatova, N.D., and Gubarev, A.S., Candidates of Technical Sciences, and Khomenkova, N.G., Engineer

TITLE: A New System of Sampling Chrome Leather (Novaya skhema otbora prob khromovykh kozh)

PERIODICAL: Standartizatsiya, 1958, # 1, pp 29-30 (USSR)

ABSTRACT: The article describes a new system of sampling chrome leather, developed by the Tsentral'nyy nauchno-issledovatel'skiy institut khozhevenno-obuvnoy promyshlennosti (Central Scientific Research Institute of the Leather-and-Shoe Industry). The new system consists in using a slightly smaller size of samples, as shown in the illustration (Figure 1). Tests at 6 different plants showed, that this system reduces waste and gives a more correct evaluation of smaller hides. The article includes a chart showing test results. A corresponding amendment is suggested for the "GOST 938-45"-standard.

There are 2 figures and 1 chart.

Card 1/2

A New System of Sampling Chrome Leather 28-58-1-9/34

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut kozhevenno-obuvnoy promyshlennosti (Central Scientific Research Institute of Leather-and-Shoe Industry)

AVAILABLE: Library of Congress

Card 2/2

VOYTSEKHOVSKIY, V.L.; SHUKHNINA, N.A.; FEDOROVA, I.M.; ZAKATOVA, N.D.; GUBAREV, A.S.

Determining the chemical and physicomechanical indices of Russian leather. Nauch.-issl.trudy TSNIKP no.32:37-71 '60. (MIRA 15:12)

(Leather—Testing)

SOV/124-57-5-5437

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 48 (USSR)

AUTHOR: Gubarev, A. V.

TITLE: An Investigation of Narrow Impulse-type Turbine Cascades (Issledovaniye korotkikh aktivnykh turbinnykh reshetok)

PERIODICAL: Sb. statey nauch. stud. o-va, Mosk. energ. in-t, 1955, Nr 8, pp 20-40

ABSTRACT: Results are given of an experimental investigation made of the end losses that occur in turbine-blade cascades exposed to a subsonic flow. The author examines the influence exerted by such factors as blade overlapping, the entrance angle, and the radial length of the blades. Included is a diagram designed to facilitate analysis of experimental data. There are typographical errors in the paper. Bibliography: 10 references.

N. A. Kolokol'tsov

Card 1/1

AID P - 4377

Subject : USSR/Power Engineering

Card 1/1 Pub. 110 a - 3/17

Authors : Deych, M. E., V. V. Frolov, Kand. Tech. Sci., and A. V. Gubarev, Eng., Moscow Power Institute

Title : Research on new shapes of cascades and pressure stages in turbines.

Periodical : Teploenergetika, 5, 13-22, My 1956

Abstract : Experiments with a series of bladings of new shapes including research at supersonic velocity, are described. Basic aerodynamic data of new blading are given. Mathematical analyzes of various control and pressure stages designs are presented. Twelve figures, 6 tables..

Institution : ~~None~~ Moscow Energetics Inst

Submitted : No date

GUBAREV, A.V., Cand Tech Sci--(diss) "Study of [illegible] operating quiet ~~seasons~~ of axial ~~axis~~ turbines at high velocities." Mos, 1958. 16 pp (Min of Higher Education USSR. Mos Order of Lenin Power Engineering Inst), 100 copies

(KL,26-58, 109)

-59-

GUBAREV, A.V.; DEYCH, M.Ye.

Certain features of a supersonic flow in active cascades. Nauch. dokl. vys. shkoly; energ. no.2:163-170 '58. (MIRA 11:11)
(Cascades (Fluid dynamics))

SOV/98-58-12-10/18

AUTHORS: Deych, M. E., (Dr. Tech. Sci.)
Gubarev, A. ., (Engineer)

TITLE: The investigation of working blades of turbines at high speed. (Issledovaniye rabochikh reshetok turbin pri bol'shikh skorostyakh)

PERIODICAL: Teploenergetika, 1958, No.12, pp. 36-42 (USSR)

ABSTRACT: As there are no theoretical methods of designing turbine blading for super-critical speeds, experimental developments assume great importance. At supersonic speeds the leading edge must be as sharp as possible and the back inlet face should only have slight curvature. To ensure stable flow in the channel between the blades it is necessary to avoid severe acceleration on the back profile. One way of doing this is to profile the back of the blade in such a way that there is steady construction of the flow up to the inlet section of the channel between the blades. Because of the nature of the resultant flow, this method may be called step-wise retardation of flow. A second method of achieving this object is to make the curvature at the inlet section of the back of the blade as small as possible and to ensure that there is a sharp change of velocity before the blade. At low supersonic speeds the second method can be used. At high supersonic speeds the stepwise retardation of flow is preferable. Alternatively, the channel between the blades may be constructed so that the jump occurs within the channel and retardation takes place in a system of steps

Card 1/ 3

of compression on a small inlet section of the channel. The inter-blade channel should be either expanding (first method) or contracting-expanding (second method). The main types of blade profile are illustrated in Fig.1; Fig.1a. shows profile type A intended for sub-critical speeds of Mach 0.9; Fig.1b. shows profile type B intended for Mach 0.9 - 1.25; Fig.1c. illustrates profile type C using the method of stepwise retardation, and Fig.1d. shows the profile type C using the direct jump method. Both class C profiles are used for high supersonic speeds of Mach greater than 1.3. An article by Deych and others in Teploenergetika, 1956, No.5. gave a notation of blading and profiles which is adopted here. The pressure distribution over profile TR-1B, seen in Fig.3., is noticeably dissimilar and the differences are discussed. Corresponding curves over profile TR-2B, which is designed to turn the flow through smaller angles, are presented in Fig.4. Velocity distribution curves over profile TR-1B with somewhat different angles, are given in Fig.5. The distributions of losses over the height of the blading are plotted in Fig.6., and the merits of the different bladings are compared. Graphs of profile losses in group B blades appear in Fig.7. Total loss curves for different types of blading are given in Fig.8. Plots of supersonic flow in turbine blading are sketched in Fig.9; the differences between

the flow in type A blades (Fig.9a) and type B blades (Fig.9b) is explained. The distribution of the flow outlet angle over the height of blading TR-1B is graphed in Fig.10. The terminal losses and the Mach number are related graphically in Fig.11, demonstrating that losses diminish rapidly as the Mach number increases. It is concluded that for Mach numbers of 0.9 - 1.0 it is necessary to use blades of group A. Blades of these profiles have low losses and stable characteristics over a wide range of angles of flow inlet. For Mach numbers of 0.9 - 1.25 the profiles should have sharp inlet edges and small curvature of the back of the blade on the inlet sections; also, there should preferably be straight sections in the region of the inlet and outlet edges. Profiles of group B cannot be used for high supersonic speed. The curves of total losses given in Fig.8, include two related to blades of group C designed in accordance with the principles explained in the article. Preliminary test results have shown the correctness of the basic idea and a new series of blading should accordingly be developed for high supersonic speeds. There are 11 figures and 7 references, 5 of which are Soviet.

ASSOCIATION: Moscow Power Institute (Moskovskiy Energeticheskiy Institut)

86081

S/096/60/000/012/004/008
E194/E484

26.2120

AUTHORS: Deych, M.Ye., Doctor of Technical Sciences and
Gubarev, A.V., Candidate of Technical Sciences

TITLE: The Question of "Blocking" of the Delivery Nozzle and of the Working Blading Profile in a Supersonic Flow

PERIODICAL: Teploenergetika, 1960, No.12, pp.27-33

TEXT: In investigating turbine blading of the active type in a supersonic flow "blocking" of the nozzle occurred under certain conditions; like the similar effect in wind tunnels, it occurs because the flow capacity of the model under investigation is less than that of the nozzle. In a wind tunnel the zone of Mach numbers in which "blocking" is observed may be altered by changing the geometry of the working part of the tunnel but "blocking" in turbine blades depends only on the geometry of the nozzle and blading and the "blocking" zone cannot be altered without altering these. Accordingly, designers of turbine type machines must determine regions of "blocking" of blading and analyse the resulting effects. The application of the λ hodograph method to the analysis of "blocking" conditions is first considered,

Card 1/5

The Question of "Blocking" of the Delivery Nozzle and of the Working Blading Profile in a Supersonic Flow

a description of the method is to be found in the book "Technical Gas Dynamics" by M.Ye.Deych. The continuity equation is written for the inlet and outlet sections of the blading in the form of Eq.(1). The equation may be used for graphical determination of the flow conditions in the blading by writing the axial projection of the referred flow through the blading in the form of Eq.(2) and (3). The hodograph of the vector may then be constructed which is a transcendental curve in a polar system of coordinates (λ, β). A typical hodograph is shown in Fig.2 and the circle corresponding to $\lambda = 1$ divides the plane of the hodograph into the two regions of subsonic and supersonic flows. The use of the λ hodograph method for calculation with subsonic speeds at inlet and outlet from the blading presents no difficulties. With supersonic discharge speed the inlet flow parameters cannot be arbitrarily selected because it is necessary to maintain the speed of sound in the minimum section of the channel between the blades. If this

The Question of "Blocking" of the Delivery Nozzle and of the Working Blading Profile in a Supersonic Flow

condition is fulfilled the hodograph method can be used without special difficulty for supersonic exit speeds from the blading. An example is then described with reference to Fig.2 given the inlet angle of flow to the blading β_1 and the dimensionless velocity λ_1. With supersonic speeds at inlet to the blading the analysis and calculation of the flow parameters beyond the blading is much more complicated. If the minimum section of the channel between the blades is assumed to occur at the exit the continuity equation for the characteristic sections may be written in the form of Eq.(4) and (5). It is then shown that supersonic flow at the inlet to the blading is theoretically possible only with an expanding nozzle under certain conditions. The occurrence of possible regions on the hodograph is discussed. The region of supersonic conditions in which "blocking" may occur is then considered. To simplify the analysis the case of an expanding nozzle and supersonic diffuser is considered, see Fig.3, in which

86081

S/096/60/000/012/004/008
E194/E484

The Question of "Blocking" of the Delivery Nozzle and of the Working Blading Profile in a Supersonic Flow

the blading is replaced by an equivalent contracting channel. It is shown that supersonic speeds in front of the blading are only possible when Eq.(9) is fulfilled. For practical purposes it is recommended to construct the λ hodograph diagram in the form shown in Fig.4. The method of constructing and that of using the diagram are explained. The diagram may be used to determine the angle of deflection of flow in the guide vanes and runner blading. Calculated and experimental curves of the relationship between the discharge angle of the flow from the runner blading as function of the inlet angle and the speed of discharge are plotted in Fig.5. Analysis of the system is much more complicated when there is an axial gap between the guide nozzle and the blading but the method of calculation may still be used in this case providing that it is remembered that if the gap is big enough, the flow conditions of the nozzle depend only on the back-pressure and the conditions of flow at the inlet to the blading on the pressure drop and the loss coefficient in the nozzle. A special feature of gas flow in the

Card 4/5

S/096/60/000/012/004/008
E194/E484

The Question of "Blocking" of the Delivery Nozzle and of the Working Blading Profile in a Supersonic Flow

nozzle blading system when there is an axial gap is that the blading reaction calculated from the flow parameters at the nozzle section and at the inlet to the blading are very different, see Fig.6. Serious errors may arise if the flow conditions in the blading are calculated from data relating to the nozzle discharge position. Special cases of blade "blocking" are then considered which may arise when the inlet angle of flow is other than that designed for. When the blading is moving relative to the nozzle, conditions under which blocking may occur are wider and the so-called condition of "partial blocking" is typical in this case for high supersonic speeds, this case is explained with reference to the vector diagram Fig.8. There are 8 figures and 5 Soviet references.

ASSOCIATION: Moskovskiy energeticheskiy institut
(Moscow Power Engineering Institute)

GUBAREV, A.V.; KAZINTSEV, F.V.; TROYANOVSKIY, B.M.

"Aerodynamic experiment in machinery construction" by I.L.Povkh. Reviewed by A.V. Gubarev, F.V. Kazintsev, B.M. Troianovskii. Energomashinostroenie 6 no.8:44 Ag '60. (MIRA 14:9)
(Machinery--Aerodynamics)
(Povkh, I.L.)

SHKVNDLIN, A. Ye. (Moskva); GUBAREV, A. V. (Moskva); KOVBASYUK, V. I. (Moskva); PROKUDIN, V. A. (Moskva)

Problem concerning the optimisation of the operation of magneto-hydrodynamic generators. Izv. AN SSSR. Otd. tekh. nauk. Energ. i avtom. no.6:34-38 N-D '62. (MIRA 16:1)

(Magnetohydrodynamics)

35100

S/147/62/000/002/014/020
E191/E535

26.2120

AUTHORS: Gubarev, A.V., Filippov, G.A., Lazarev, L.Ya. and Pand'ya, A.D.

TITLE: A method of design and the results of investigations of a bladeless guiding assembly for radial-axial turbines

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, no.2, 1962, 113-123

TEXT: A simplified analysis of the flow rests on the assumptions of an ideal gas, a uniform distribution of the flow parameters in the outlet section of the volute, and the flow parameters at the outlet section of the entry socket being constant in each cross-section of the volute. Analysis of the continuity equation shows the ratio of the inlet and outlet velocities in the volute to be the main parameter which determines the volute geometry. This ratio (the "acceleration factor") also determines whether a bladeless assembly is advisable and when it drops below 0.5, a bladed one is preferable. As the acceleration factor increases, the radius of the volute decreases. Various relations

Card 1/2

are derived and illustrated in graphs between the volute dimensions and the acceleration factor. The model of a bladeless stator for a rotor diameter of 130 mm, a rotor width of 12 mm and a flow angle of 12° at the rotor entry was tested in the laboratory. Energy losses in 16 cross-sections around the periphery were measured together with the flow angles and static pressures. The static pressures were also measured in the entry socket and along the mean volute line. Conclusions: the design procedure put forward permits the determination of the volute geometry and the behaviour of the volute flow under non-design conditions. The flow exit angle from the bladeless assembly depends on the flow velocity even at sub-critical heat transfer conditions. The efficiencies of bladeless and bladed assemblies (with well developed entry sockets) are equal. The volute must be accurately machined to avoid distortion of the velocity field at the turbine inlet. The limits of application of the bladeless stator have not yet been fully explored. There are 9 figures.

ASSOCIATION: Moskovskiy energeticheskiy institut, Kafedra parovykh i gazovykh turbin (Moscow Power Engineering Institute, Department of Steam and Gas Turbines)

SUBMITTED: November 17, 1961

39785
S/147/62/000/002/013/020
E191/E535

26 2170

AUTHOR: Gubarev, A.V.

TITLE: Investigation of rotor blade cascades for turbines at supersonic velocities

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, no.2, 1962, 102-112

TEXT: Some results obtained in the Author's dissertation presented to the Moscow Power Institute in 1958 are reported, wherein rotor blade cascades were studied at supersonic velocities. Previously, sharp entry edges were favoured but were later considered the source of additional losses. Nose shocks arising ahead of the cascades, belong to one of three groups, namely those due to flow around the leading edge, those dependent on the inter-blade channel ("channel choking") and those due to a deviation of flow inlet angle. To reduce the intensity of the edge shocks, the thickness and wedge angle of the edge should be reduced. This may conflict with the need to prevent choking of the channel. It is shown that the flow in the entry portion of the profile should not be accelerated. This can be achieved by making the back of the profile in this portion re-entrant or, by an oblique shock arising

Card 1/3

at the leading edge. In both cases the inter-blade channel is made either convergent-divergent or divergent. Supersonic cascades are usually installed where the volume flow is moderate and the end losses significant. Deceleration of the flow in the entry portion is also beneficial from the point of view of the end losses. About 30 different cascades distinguished by profile shape, relative pitch, and stagger were tested in a range of Mach Numbers between 0.85 and 1.54. Pressure distributions and total losses are illustrated in graphs for various cascades, the geometric particulars of which are given in a table. Flow patterns obtained by the Schlieren method are shown in a photograph. In one group of profiles, the thickness and wedge angles of the inlet and outlet edges are small and quite extensive sections on the back of the profile and others near the edges are straight. The curvatures of the back and the concave surface vary smoothly. Some profiles constitute slight modifications of this group. Another group of profiles has its concave surface formed by an arc of a single radius. The wedge angle of the inlet and outlet edges is zero. The inlet portion of the inter-blade channel has the minimum section and the channel diverges gradually. The field of flow

downstream of the cascades was also examined. The general conclusions lead to recommendations for the design of improved sections for supersonic velocities. The losses, although reduced down to half of those in existing sections are still excessive (13-15%). It is generally better to design cascades for the lowest Mach Number expected in operation. At large supersonic velocities, the end losses in cascades as developed in the present investigation are very small so that these cascades should be used for the inlet stages of turbines. There are 6 figures and 1 table.

ASSOCIATION: Moskovskiy energeticheskiy institut, Kafedra parovykh i gazovykh turbin
(Moscow Power Engineering Institute, Department of Steam and Gas Turbines)

SUBMITTED: October 13, 1961

X

DEYCH, M.Ye., doktor tekhn.nauk, prof.; GUBAREV, A.V., kand.tekhn.nauk; FILIPPOV, G.A., inzh.; VAN CHZHUN-TSI [Wang Chung-ch'i]

New method for profiling the guiding lattices of stages with low d/l ratio. Teploenergetika 9 no.8:42-47 Ag '62. (MIRA 15:7)

1. Moskovskiy energeticheskiy institut.
(Turbines)

DEYCH, M.Ye., doktor tekhn.nauk; GUBAREV, A.V., kand.tekhn.nauk; LAZAREV, L.Ya., inzh.; DZHAGANMAKHAN, A., inzh.

Investigating the new turbine blade cascade nozzle developed by the Moscow Power Engineering Institute for supersonic speeds. Teploenergetika 9 no.10:47-52 O '62. (MIRA 15:9)

1. Moskovskiy energeticheskiy institut.
(Turbines--Blades) (Nozzles)

L 10017-63 EPF(n)-2/EPR/EWG(k)/BDS/T-2/ES(v)/ES(w)-2--AEDC/AFFTC/AFWL/ASD/ESD-3/SSD--Pu-4/Pa-4/Pz-4/Ps-4/Pab-4/Pi-4--IJP(C)/AT/WW

ACCESSION NR: AP3003450 S/0179/63/000/003/0003/0008

AUTHOR: Gubarev, A. V. (Moscow); Kovbasyuk, V. I. (Moscow); Medin, S. A. (Moscow); Sheydlin, A. Ye. (Moscow); Shumyatskiy, B. Ya. (Moscow) 96

TITLE: Constant-velocity flow of electroconductive gas in the channel of a magnetohydrodynamic generator 25

SOURCE: AN SSSR. Izv. Otdel. tekhn. nauk. Mekhanika i mashinostroyeniye, no. 3, 1963, 3-8

TOPIC TAGS: magnetohydrodynamic generator, electroconductive gas, moving plasma

ABSTRACT: An analytical investigation is made under the following assumptions: 1) the gas is ideal, nonviscous, and nonheat conductive; 2) the channel flow is quasi-unidimensional; 3) the gas is electrically neutral; 4) the magnitude of the secondary magnetic field is negligible in comparison with that of the external field; 5) the gas conductivity is constant and isotropic; and 6) the electrode potential difference is constant. Equations determining the motion of an

Card 1/2

L 10017-63
ACCESSION NR: AP3003450

electroconductive gas in an MGD generator were established in accordance with Neyringer's investigation of 1961 (Neyringer. Optimal'naya generatsiya moshchnosti dvizhushcheysya plazmoy. Sb. perevodov "Dvizhushchayasya plasma," IL, 1961) and expressed in pertinent parameters. Because the solution of these equations requires an additional condition, it was assumed that the flow of gas takes place either with constant electric efficiency or constant magnetic gap. It was found that constant-magnetic-gap generators at pressure p = 0 generate their net power in proportion to the magnitude of local electric efficiency at the channel entrance. Constant-electric-efficiency generators require relatively high local electric efficiencies along the total channel length to insure high internal generator efficiencies. In high-power installations, channels with increasing magnetic gap are found to be preferable. Orig. art. has: 9 figures and 13 formulas.

ASSOCIATION: none

SUBMITTED: 03Jun62 DATE ACQ: 24Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 003 OTHER: 001

Card 2/2

L 9882-63 EPF(c)/EPF(n)-2/EPR/BDS/T-2--
AFFTC/ASD/SSD--Pr-4/Pu-4/Ps-4--IJP(C)/WW
ACCESSION NR: AP3000680 S/0096/63/000/006/0046/0048

72
71

AUTHOR: Gubarev, A. V. (Candidate of technical sciences); Li, Tsai-hsiu (Engineer)

TITLE: On the effect of flow nonuniformities on the characteristics of turbine cascades

SOURCE: Teploenergetika, no. 6, 1963, 46-48

TOPIC TAGS: turbine cascade, nonuniform flow fields, end losses

TEXT: The effect of nonuniform velocity profiles at turbine-cascade inlets on cascade characteristics was determined under static conditions. Nonuniform flow fields were generated in two experimental setups: 1) three tubes (two 4 mm in diameter and one, centrally located, 6 mm in diameter) were mounted 120 mm from the inlet to the cascade, and 2) two tubes (4 mm in diameter) were mounted symetrically 35 mm from the inlet. Total and end losses in the cascade at M = 0.1-0.8 were plotted for a) the experimental

Card 1/2

L 9882-63
ACCESSION NR: AP3000680

arrangements and b) uniform flow fields at 1.5% and 4% turbulence. In case b), the end losses amounted to 3.5--4% and 3%, respectively. In nonuniform fields the end losses amounted to only 1% and 2%, depending on the degree of nonuniformity. The decrease in end losses with increasing nonuniformity is explained by a mechanism involving secondary flows and the effect of flow nonuniformity on the boundary layer. Orig. art. has: 5 figures and 2 formulas.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Engineering Institute)

SUBMITTED: 00 DATE ACQ: 21Jun63 ENCL: 00

SUB CODE: 00 NO REF SOV: 003 OTHER: 000

Card 2/2

S/114/63/000/002/003/003
E194/E155

AUTHORS: Gubarev, A.V., Candidate of Technical Sciences, Fillippov, G.A., Engineer, and Pand'ya, A.D., Engineer

TITLE: A bladeless guide arrangement for centripetal turbines

PERIODICAL: Energomashinostroyeniye, no.2, 1963, 38-39

TEXT: Centripetal turbines, which are used to give low output combined with high efficiency, currently use bladed guide arrangements which are efficient only with low gas inlet speeds. Helical bladeless swirlers are simpler and smaller. They are based on the principle of accelerating the gas in a centripetal swirl by tangential delivery of the gas to the spiral casing ("scroll"). In designing this arrangement it is necessary to calculate the section of the spiral at a number of positions. Non-viscous uni-dimensional flow is assumed. The following design formulas are derived:

$$q_\varphi F_\varphi = q_1 \pi d_1 l_1 \left[\frac{2\pi - \varphi}{2\pi}\right] \sin \alpha_1 \qquad (5)$$

Card 1/2

A bladeless guide arrangement ...

$$\lambda_\varphi r_\varphi = \lambda_1 \frac{d_1}{2} \cos \alpha_1 \qquad (6)$$

where: q - quantity of gas; F - cross-sectional area of spiral; d - discharge diameter; ℓ - height; α - discharge angle. The suffix 1 relates to discharge conditions; the suffix φ to conditions at an angle φ from inlet. Tests were made on guide equipment designed to these formulas with a discharge diameter of 130 mm and height of 12 mm with $\alpha_1 = 12°$. Losses were plotted for a number of sections and varied considerably over the height of the guide equipment, particularly at low gas speeds. Discharge angles also varied. However, the losses were no greater than in a bladed guide equipment, and bladeless equipment should be used because it is smaller, lighter and easier to make. The design formulas recommended are accurate enough for practical purposes. Some of the variations in discharge angle probably resulted from manufacturing errors in spiral dimensions.
There are 5 figures.

Card 2/2

L 19884-63 EPR/EWT(1)/BDS AFFTC/ASD Ps-4 WW

ACCESSION NR: AP3004753 S/0096/63/000/008/0024/0028

AUTHORS: Gubarev, A. V. (Candidate of technical sciences); Hsiang I-ming; Lazarev, L. Ya. (Engineers)

TITLE: Effect of exit edge thickness on characteristics of turbine guide lattices

SOURCE: Teploenergetika, no. 8, 1963, 24-28

TOPIC TAGS: turbine, guide vane, blade, lattice profile, profile loss

ABSTRACT: A detailed investigation has been made of the exit edge thickness effect on turbine characteristics for mach numbers 0.2-1.2. Variation in thickness is achieved by changing the contour of the profile only on the concave side of the vane (see Enclosure 1). The selected lattice is type TS-1A with exit edge thickness of 1 mm. The pressure distribution on the lattice profiles is obtained for various values of blade pitch $\bar{t}$, edge thickness Δ, and mach numbers (see Enclosure 2). The effect of exit edge thickness was studied on lattice profile losses, on end losses, and on total turbine efficiency loss. Changing the thickness on the concave side, but leaving the effective exit velocity angle and lattice width constant, induces a significant decrease in profile losses with an increase in the magnitude of Δ. On the other hand, at large mach numbers, a critical increase in

Card 1/2

L 19884-63

ACCESSION NR: AP3004753

lattice loss was observed when increasing the exit edge thickness. Orig. art. has: 7 figures and 1 table.

ASSOCIATION: Moskovskiy energeticheskiy institut (Institute of Power Engineering)

SUBMITTED: 00 DATE ACQ: 30Aug63 ENCL: 02

SUB CODE: MD NO REF SOV: 005 OTHER: 001

Card 2/2

GUBAREV, A.V., kand.tekhn.nauk; LI TSAY-SYU [Li TS'ai-hsiu]

Effect of the nonuniformity of the flow on the characteristics of the cascades. Teploenergetika 10 no.6:46-48 Je '63. (MIRA 16:7)

1. Moskovskiy energeticheskiy institut.
(Turbines)

GUBAREV, A.V., kand. tekhn. nauk; SYAN I-MIN [Hsiang I-ming], inzh.;
LAZAREV, L.Ya., inzh.

Effect of the thickness of the outflow edges on the characteristics of turbine guide blading. Teploenergetika 10 no.8:24-28 Ag '63. (MIRA 16:8)

1. Moskovskiy energeticheskiy institut.
(Turbines)

GUBAREV, A.V., kand. tekhn. nauk

Problems concerning a magnetohydrodynamic method for converting thermal energy to electric power. Teploenergetika 10 no.9: 81-85 S '63. (MIRA 16:10)

(Magnetohydrodynamics)
(Thermoelectric generators)

ACCESSION NR: AP4038429 S/0294/64/002/002/0156/0159

AUTHOR: Gubarev, A. V.; Kovbasyuk, V. I.

TITLE: Analysis of the Hall effect in a moving plasma

SOURCE: Teplofizika vy*sokikh temperatur, v. 2, no. 2, 1964, 156-159

TOPIC TAGS: Hall effect, plasma energy balance, graphic computation, optimal plasma flow

ABSTRACT: By representing the electric field vector and the current density in the plasma as complex numbers, so that the power absorbed from the electric external field or given up to the field can be plotted as a family of circles in the complex plane, the authors develop a graphic method for determining the energy balance of a plasma moving in crossed electric and magnetic fields. The cases considered are zero longitudinal field, zero transverse field, zero longitudinal current, and electric field equipotentials making a fixed angle with the plasma velocity vector. It is pointed out that the graphical technique makes it very easy to determine the optimal plasma flow conditions (when the maximum energy transfer occurs at minimum dissipation). Orig. art. has: 4 figures and 6 formulas.

Card 1/2

ACCESSION NR: AP4038429

ASSOCIATION: Nauchno-issledovatel'skiy institut vysokikh temperatur (Scientific Research Institute of High Temperatures)

SUBMITTED: 12Nov63 ATD PRESS: 3075 ENCL: 00

SUB CODE: ME, EM NR REF SOV: 000 OTHER: 004

Card 2/2

GUBAREV, A.V., kand. tekhn. nauk

Features of a magnetohydrodynamic method for converting heat into electrical energy. Energ. stroi. no.41:69-77 '64. (MIRA 17:11)

L 06565-67 EWT(1)/EWT(m) IJP(c) AT/DJ

ACC NR: AP6029781 SOURCE CODE: UR/0294/66/004/004/0562/0571

60
8

AUTHOR: Breyev, V. V. (Moscow); Gubarev, A. V. (Moscow)

ORG: None

TITLE: Optimizing flow and load conditions in magnetohydrodynamic generators [Paper presented at the International Symposium on Magnetohydrodynamic Electric Power Generation, Paris, July 1964]

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 4, 1966, 562-571

TOPIC TAGS: MHD generator, electric generator, MHD conference

ABSTRACT: A general formulation is given for the problem of optimizing the working characteristics of a magnetohydrodynamic generator used as a power plant. A number of criteria are derived for evaluating the feasibility of using installations with MHD generators and theoretical numerical data are given on the output characteristics of the generators and of the installations as a whole. Analysis of the problem of selecting optimum conditions for operation of this type of generator shows that there are a number of specific characteristics in setting up this type of problem since the MHD generator is a combination of thermal and electric machines where the working fluid acts as the "power winding" of the electric generator. In selecting the optimum generator parameters for power installations, consideration must be given to the thermodynamic

UDC: 621.313.12:538.4

Card 1/2

L 06565-67

ACC NR: AP6029781

characteristics of the cycle and to power consummed in driving the compressor and excitation of the magnetic field. It is found that the internal efficiency of the process in the MHD generator cannot be used as a criterion for the ideality of the operating cycle for the installation since a reduction in this parameter reduces the overall dimensions of the generator as an electric machine with a simultaneous reduction in a number of losses (heat losses, power consummed in field excitation, etc.). The optimum rate of flow for the case where $M_{opt}<1$ is reduced by a reduction in the power of the MHD generator when gas conductivity decreases and the initial pressure of the cycle increases. These conditions also reduce the optimum coefficient of electrical loading. Production of low-power MHD generators on the basis of high temperature differentials is not practical. Below a certain output temperature the power of the MHD generator remains practically constant and the power of the installation decreases. Orig. art. has: 9 figures, 26 formulas.

SUB CODE: 20, 09, 10/ SUBM DATE: 02Mar65/ ORIG REF: 004/ OTH REF: 004

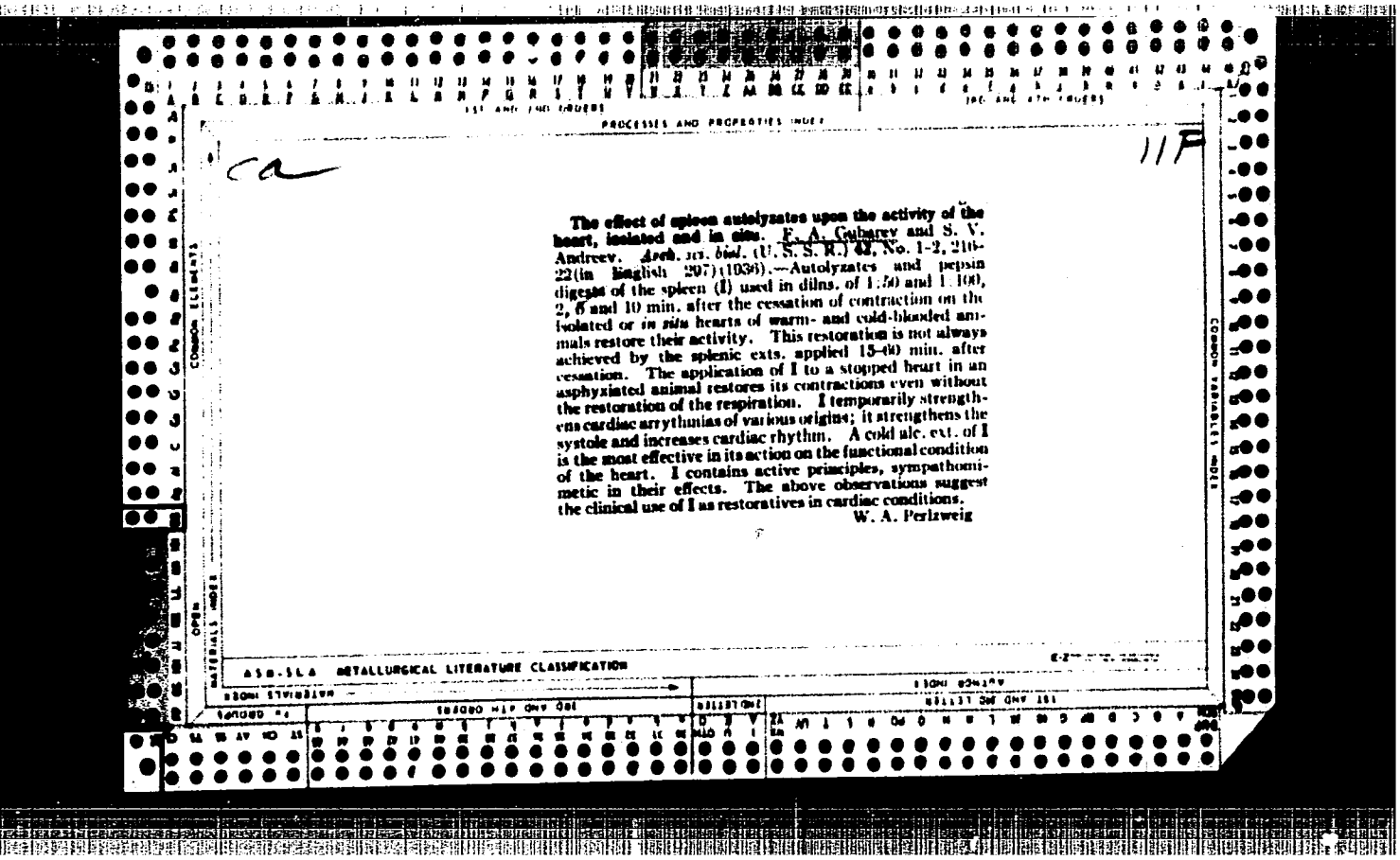
Card 2/2

GUBAREV, B.P.; DRYAKHLOV, A.I.; LANGE, E.B.; NEKLYUDOV, V.S.; TSUPRIKOV, A.Ye.

Automatic device for controlling the wear of casing lines. Neft. khoz. 40 no.4:26-29 Ap '62. (MIRA 15:5)
(Hoisting machinery) (Mechanical wear)

DRYAKHLOV, A.I.; NEKLYUDOV, V.S.; TSUPRIKOV, A.Ye.; GUBAREV, B.P.; LANGE, E.B.

Principles for designing an automatic computer for recording the performance of drilling stems. Trudy KF VNII no.9:68-75 '62. (MIRA 15:9)
(Oil well drilling--Equipment and supplies)



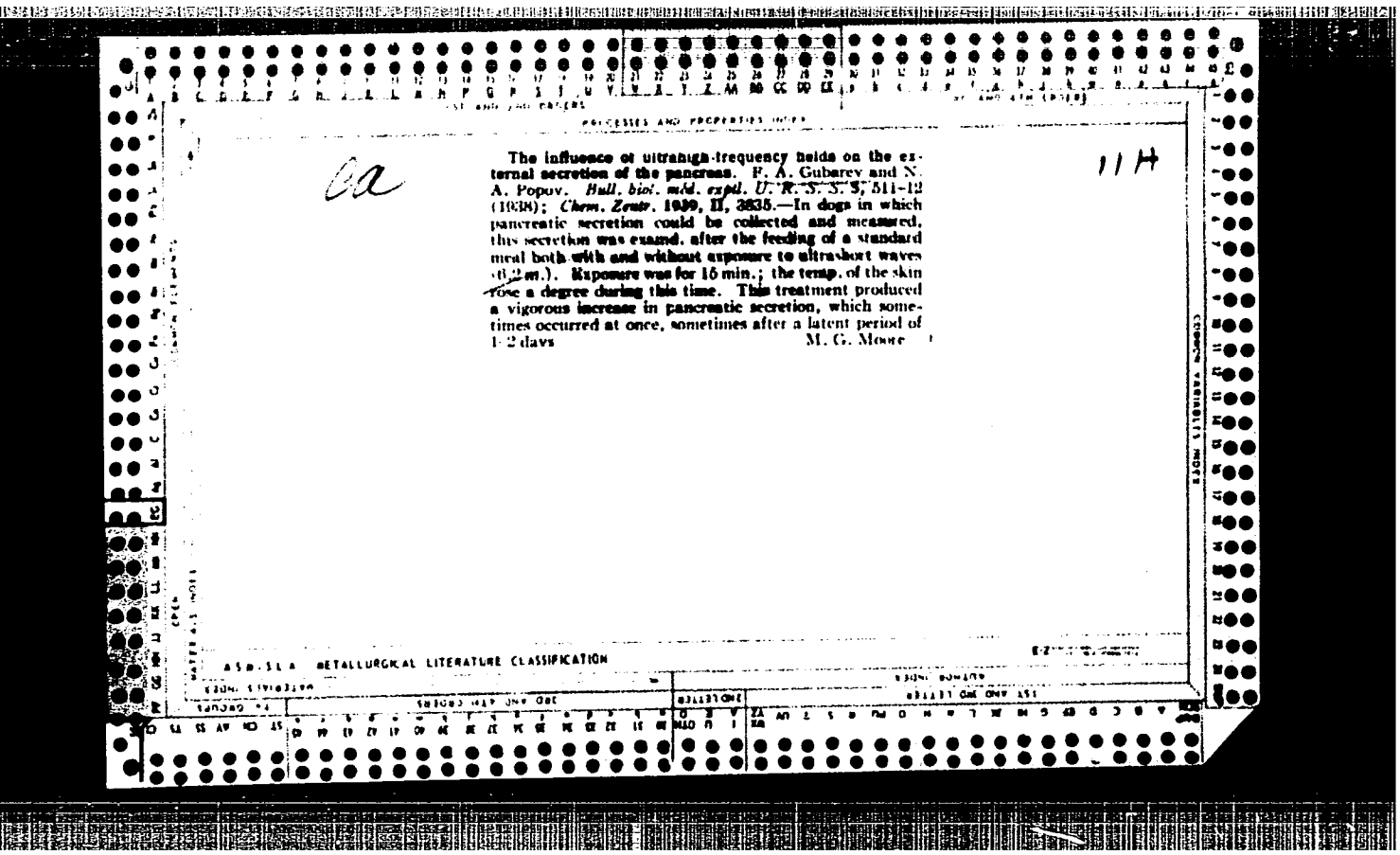
PROCESSES AND PROPERTIES INDEX

11F

The effect of spleen autolysates upon the activity of the heart, isolated and in situ. F. A. Gubarev and S. V. Andreev. *Arch. sci. biol.* (U. S. S. R.) 42, No. 1-2, 210-22(in English 297)(1936).—Autolysates and pepsin digests of the spleen (I) used in dilns. of 1:50 and 1:100, 2, 6 and 10 min. after the cessation of contraction on the isolated or *in situ* hearts of warm- and cold-blooded animals restore their activity. This restoration is not always achieved by the splenic exts. applied 15–60 min. after cessation. The application of I to a stopped heart in an asphyxiated animal restores its contractions even without the restoration of the respiration. I temporarily strengthens cardiac arrythmias of various origins; it strengthens the systole and increases cardiac rhythm. A cold alc. ext. of I is the most effective in its action on the functional condition of the heart. I contains active principles, sympathomimetic in their effects. The above observations suggest the clinical use of I as restoratives in cardiac conditions.

W. A. Perlzweig

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

11 H

The influence of ultrahigh-frequency fields on the external secretion of the pancreas. F. A. Gubarev and N. A. Popov. *Bull. biol. méd. exptl. U. R. S. S.* 5, 511-12 (1938); *Chem. Zentr.* 1939, II, 3835.—In dogs in which pancreatic secretion could be collected and measured, this secretion was exaind. after the feeding of a standard meal both with and without exposure to ultrashort waves (1.2 m.). Exposure was for 15 min.; the temp. of the skin rose a degree during this time. This treatment produced a vigorous increase in pancreatic secretion, which sometimes occurred at once, sometimes after a latent period of 1-2 days

M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

GUBAREV, F. A.

Jun 48

USSR/Medicine - Blood Transfusion
Medicine - Serotherapy and Hemotherapy

"Possible Use of Blood Obtained From Live Animals (Blood Serum of Large-Horned Cattle as a Substitute for Blood)," N. G. Belen'kiy, Dr Biol Sci, L. Ye. Kaplan, Cand Biol Sci, F. A. Gubarev, Cand Biol Sci, 11 pp

"Dok v-s Ak Sel'khoz Nauk" No 6

Nonspecific serum from cattle blood is a satisfactory plasma substitute. Produced good results even in cases where test animals had lost up to 70% of their blood. Large intravenous doses cause no undesirable reaction. Repeated injections of nonspecific serum produced no after effects. Submitted 3 May 48.

PA 33/49T74

GUBAREV, Fedot Ayer'yanovich, dots., kand. vet. nauk; STRAKHOVA, Nina Mikhaylovna, vet. vrach; VERNIKOVA, A.S., spetsred.; VASIL'YEVA, G.N., red.; KISINA, Ye.I., tekhn. red.

[Microbiology of meat and meat products] Mikrobiologiia miasa i miasoproduktov. Moskva, Pishchepromizdat, 1958. 78 p. (MIRA 11:10)
(Meat--Bacteriology)

USSR/Farm Animals. Poultry. Q-5

Abs Jour: Ref Zhur - Biol., No. 22, 1958, 101268

Author : Fedorovskiy, N.P., Gubarev, F.A., Nikol'skiy, B.S.

Inst : -

Title : Digestive Processes in the Intestines of Turkey-Hens.

Orig Pub: Ptitsevodstvo, 1958, No. 1, 26-30

Abstract: Chronic fistulas were inflicted in 6 Bronze breed turkey-hens at the terminal end of their duodenums. The chyme which was secreted from these fistulas was examined before feedings, during feedings, and after feedings, following certain intervals. The method of coloring food was used. The time which elapsed until such colored feed became visible was determined, as well as its transference speed, chyme quantity

Card 1/2

USSR/Farm Animals. Poultry. Q-5

Abs Jour: Ref Zhur - Biol., No. 22, 1958, 101268

and quality, hydrogen ion concentration, carbohydrate quantity in centrifuged residues, and proteolytic activity of centrifuged chyme. Twenty-two hours after feeding, the small intestine was free of food masses. The largest quantity of chyme was secreted 30-60 minutes after feeding. Consistency and properties of chyme depended upon quality of feeds and functioning capacity of digestive glands. Food of animal origin combined with green feeds and potatoes stimulated the activity of digestive glands well.

Card 2/2

GUBAREV, G.; KRIVOSHEYEV, K.; YEFREMOVA, N., normirovshchik

Shortened workday and the productivity of labor. Sots.trud. no.4:117-122 Ap '58. (MIRA 11:4)

1. Nachal'nik otdela truda, zarabotnoy platy i rabochikh kadrov Rostovskogo sovnarkhoza (for Gubarev). 2. Nachal'nik otdela truda i zarabotnoy platy zavoda "Avtopribor."
(Hours of labor) (Labor productivity)

GUBAREV, G.

Limits of a planned wage fund. Sots. trud no. 7:103-107 Jl '58.
(MIRA 11:8)

(Rostov--Hosiery industry--Production standards)

GUBAREV, G.; ZOTOT'KO, S. prepodavatel'; NAYDENOV, V.; ZHAROV, P.; BARYSHNIKOV, V.

Continuing the discussion of problems of labor organization under conditions of new technology. Sots. trud 5 no.5:66-74 My '60. (MIRA 13:11)

1. Nachal'nik otdela truda i zarplaty Rostovskogo sovnarkhoza (for Gubarev). 2. Vysshaya partiynaya shkola, Khar'kov (for Zolot'ko). 3. Nachal'nik tsekhovogo byuro truda i zarabotnoy platy Khar'kovskogo traktornogo zavoda (for Naydenov). 4. Nauchno-issledovatel'skiy institut truda, Moskva (Zharov). 5. Nachal'nik otdela truda i zarplaty Yuzhno-Kazakhstanskogo sovnarkhoza (for Baryshnikov).

(Labor and laboring classes)

(Automation) (Technological innovations)

GUBAREV, G.

Strengthen the principle of material self-interest in every way possible. Sots.trud 7 no.7:64-66 Jl '62. (MIRA 15:8)

1. Nachal'nik otdela truda, zarabotnoy platy i rabochikh kadrov Rostovskogo soveta narodnogo khozyaystva.
(Incentives in industry)

GUBAREV, G.

Improving the administrative apparatus. Sots. trud 7 no.8: 127-129 Ag '62. (MIRA 15:10)

1. Nachal'nik otdela truda, zarabotnoy platy i rabochikh kadrov Rostovskogo soveta narodnogo khozyaystva.

(Rostov Province--Industrial organization)

GUBAREV, Grigoriy Grigor'yevich; DORSHT, David Yakovlevich, starshiy inzh.; SOLOV'YEV, V.G., spetsred.; MAKAROVA, E.A., red.; SHADRINA, N.D., tekhn.red.

[Regulation of output norms and wages; practices of the Rostov hosiery factor] Uporiadochenie normirovaniia i oplaty truda; iz opyta Rostovskoi chulochnoi fabriki. Izd-vo VTsSPS Profizdat, 1958. 49 p. (MIRA 12:6)

1. Nachal'nik otdela truda i zarabotnoy platy Rostovskogo sovnarkhoza (for Gubarev). 2. Otdel truda i zarabotnoy platy Rostovskogo sovnarkhoza (for Dorsht).
(Wages)

GUBAREV, G.

Organizing technical work standards in an economic region. Sots.trud 4 no.1:126-128 Ja '59. (MIRA 12:2)

1. Nachal'nik otdela truda, zarabotnoy platy i rabochikh kadrov Rostovskogo sovnarkhoza.
(Rostov Province--Production standards)

GUBAREV, G.

Rationalizing and reducing the cost of the administrative apparatus. Sots.trud 5 no.8:120-122 Ag '60. (MIRA 13:11)

1. Nachal'nik otdela truda, zarabotnoy platy i rabochikh kadrov Rostovskogo sovnarkhoza.
(Rostov Province--Industrial organization)

GUBAREV, G.G.

In the Rostov Economic Region. Mashinostroitel' no.8:17-18 Ag '61. (MIRA 14:7)

(Rostov Province--Machinery industry--Production standards)

GUBAREV, G.V.

Standardization of automatic annular and disk valves.
Standartizatsiia 28 no.1:10-12 Ja '64. (MIRA 17:1)

KNOROZ, V.I., kand. tekhn. nauk; REZNIKOV, A.S.; GUBAREV, G.V.

Selecting tires for motor buses. Avt. prom. 29 no.11:19-23 N '63. (MIRA 16:12)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.

GUBAREV, G.V., inzh.; SERDAKOV, M.A., inzh.

Indexing a piston compressor using a tensometric pressure gauge. Khim i neft. mashinostr. no.2:41-42 Ag '64
(MIRA 18:1)

GUBAREV, I.

Unique heart surgery. Nauka i zhizn' 30 no.6:70-71 Je '63.
(MIRA 16:7)

(HEART—SURGERY)

GUBAREV, I., inzh.

Simple single-control model. Kryl.rod. 13 no.8:27-28 Ag '62.
(MIRA 15:8)

1. Moskovskiy aviamodel'nyy klub.
(Airplanes--Models)

L 16003-65 Pb-4/Pa-4 AMD
ACCESSION NR: AP4046670 S/0025/64/000/009/0062/0063

AUTHOR: Gubarev, I.

TITLE: Reanimation by high-voltage current

SOURCE: Nauka i zhizn', no. 9, 1964, 62-63

TOPIC TAGS: reanimation, clinical death, tachycardia, fibrillation, defibrillation device

ABSTRACT: Paroxysmal Tachycardia, which often results in clinical death due to the onset of fibrillation, has been successfully treated no less than 17 times by high voltage "electric shock." This method of reanimation from the threshold of clinical death has been developed and used successfully by Viktor Nikolayevich Semenov of the Laboratory of Experimental Physiology for Reanimation of The Organism, of the Academy of Medical Sciences of the USSR. His method of reanimation involves the use of a defibrillation device made by H. L. Guzvich of the same laboratory; this device is essentially a condenser capable of accumulating a charge of 3000—4000 v. Electrodes are placed over

Card 1/2

L 16003-65
ACCESSION NR: AP4046670

the heart and under the scapula so that the current passes directly through the heart. One discharge is sufficient to restore a normal pulse in patients with tachycardia, with the pulse rate reading 240 per min. The method has other medical applications, including parturition. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: LS

NO REF SOV: 000 OTHER: 000

Card 2/2

GUBAREV, I.D.

Readers' opinion on the aim of "Meditsinskaia radiologiia" Med.rad. 3 no.6:74-77 N-D '58. (MIRA 12:1)
(RADIOLOGY, MEDICAL--PERIODICALS)

LIVENTSEV, N.M., prof.; GUBAREV, I.D., red.; BIRKENVAL'D, G.V., tekhn. red.

[Methodological textbook for the arrangement of practical work in a physics class: Use of a dosimeter in studying X-ray absorption by various substances] Metodicheskoe posobie dlia postanovki i vypolneniia v fizicheskom praktikume raboty: Issledovanie pogloshcheniia rentgenovskogo izlucheniia razlichnymi veshchestvami s pomoshch'iu dozimetra. Moskva, Pervyi MOLMI, 1961. 17 p. (MIRA 15:12)
(Physics—Study and teaching) (X-ray absorption)

LIVENTSEV, N.M., prof.; GUBAREV, I.D., red.; BIRKENVAL'D, G.V., tekhn. red.

[Special methods in microscopy; optional lecture in a course in physics for physicians and biologists] Spetsial'nye priemy mikroskopii; fakul'tativnaia lektsiia po kursu fiziki dlia medikov i biologov, Moskva, 1-i Mosk. med.in-t im. I.M. Sechenova, 1961. 36 p. (MIRA 15:8)
(Microscopy--Technique)

MISHIN, Vasiliy Porfir'yevich, dots.; PRZHEBOROVSKIY, Yaroslav Stepanovich, prof.; GUBAREV, I.D., red.; YAROSLAVTSEV, I.I., tekhn. red.

[Practical work in physical and colloid chemistry for the students of medical and stomatological institutes] Praktikum po fizicheskoi i kolloidnoi khimii; dlia studentov meditsinskikh i stomatologicheskikh inst tutov. Moskva, 1-i Mosk. med. in-t im. I.M.Sechenova, 1961. 52 p. (MIRA 15:1)
(CHEMISTRY, PHYSICAL AND THEORETICAL—LABORATORY MANUALS)

PAVLENKO, Stefan Makarovich, prof.; GUBAREV, I.D., red.; BIRKENVAL'D, G.V., tekhn. red.

[Problems of reactivity in the light of the neurotrophic theory; a lecture]Problema reaktivnosti v svete nervno-troficheskoi teorii; lektsiia. Moskva, 1-i mosk. med. in-t im. I.M.Sechenova, 1961. 56 p. (MIRA 16:2)
(NEUROLOGY)

CHERKASOV, Ye.F.; GOLIKOV, V.Ya.; GUBAREV, I.D., red.

[Methodological manual on practical work in radiation hygiene for students of medical institutes] Metodicheskoe posobie k prakticheskim zaniatiiam po radiatsionnoi gigiene dlia studentov meditsinskikh institutov. Moskva, 1-i Mosk. med. in-t, 1965. 112 p. (MIRA 19:1)