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kand. veterin. nauk; LIPINA, A.N., aspirant; SIMONOV, A.P., aspirant;  
BOCHAROV, D.A., kand. sel'skokhoz. nauk; KHRENOV, N.M., assistent

Sanitary and veterinary hygiene. Veterinariia 41 no.4:89-100  
Ap '64. (MIRA 17:8)

1. Samarkandskiy sel'skokhozyaystvennyy institut (for Akhmedov,  
Dustova). 2. Nauchno-proizvodstvennaya laboratoriya po bor'be s  
boleznyami molodnyaka sel'skokhozyaystvennykh zhivotnykh  
Ministerstva proizvodstva i zagotovok sel'skokhozyaystvennykh  
produktov RSFSR. (for Antonova). 3. Vsesoyuznyy nauchno-issledo-  
vatel'skiy institut veterinarnoy sanitarii (for Noskov). 4. Insti-  
tut zhivotnovodstva Ministerstva sel'skogo khozyaystva Uzbekskoy  
SSR (for Lipina). 5. Vsesoyuznyy institut gel'mintologii imeni  
akademika K.I. Skryabina (for Simonov). 6. Moskovskiy tekhnolo-  
gicheskiy institut myasnoy i molochnoy promyshlennosti (for  
Bocharov). 7. Khersonskiy sel'skokhozyaystvennyy institut imeni  
A.D. TSyurupy (for Khrenov).

EPSHTEYN, Ye.I., inzh.; SMORODINOV, A.N., inzh.; BOCHAROV, D.I., inzh.;  
BOCHKAREV, G.N., inzh.; Prinimali uchastiye: MURAV'YEV, I.T.;  
MASLOV, V.I.; LOBANOV, I.I.; IVANOV, A.P.; IVANOV, L.I.

Start of converter substations with mercury-arc rectifiers without  
sorting and forming of the rectifiers. Prom. energ. 18 no.9:32-35  
S '63. (MIRA 16:10)

BOCHAROV, D.A., kand. sel'skokhosyatsvennykh nauk

Disinfection on poultry farms. Veterinariia 41 no.11:98-  
99 N '64. (MIRA 18:11)

1. Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy  
promyshlennosti.

BOCHAROV, D.K.

USSR/Cultivated Plants, Medicinal Plants, Essential Oil Plants,  
Toxic Plants

M

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34846

Author : Bocharov D.K.

Inst : All-Union Institute for Fodder

Title : Biology of the Germination of Ergot Horns

Orig Pub : Byul. nauchno-tekhn. inform. Vses. n.-i. in-t kormov, 1957,  
No 2-3, 61-64

Abstract : Studies were made of the conditions of germination of the horns of ergot from the seeds of smooth bromegrass. In the presence of sufficient moisture and temperatures varying from plus 15°C. to minus 100°C. during 40 to 50 days, 92.7 to 95.8 percent of the horns germinated; in the course of 5 to 10 days: 25 to 37 percent; at minus 5°C. and in the course of 24 hours, up to 23 percent. Moisture in the absence of low temperatures does not contribute to the germination of the horns. The depth of location of sclerotics in the soil appears to hold great importance for the germination process.

Card : 1/2

1. BOCHAROV, D. V. Eng.
2. USSR (600)
4. Bricks
7. Experience with transportation of bricks in containers. Biul. stroi. tekhn. 9 no. 19, 1952.
9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.

~~BOCHAROV, F.~~

Mine clubs and industry. Mast.ugl. 6 no.6:17 Je '57. (MLRA 10:8)

1.Zaveduyushchiy kul'turno-massovym otdelom TSentral'ogo  
komiteta profsoyuza rabochikh ugol'noy promyshlennosti SSSR.  
(Coal miners) (Mine management)

~~BOCHAROV, F.; DOBRA, A.; ZAYTSEV, N.; KALUTSKIKH, N.; KOMOGORTSEV, N.; KOPANITSA, Ya.; MIKHAYLENKO, I.; PLIKHIN, P.; PODZHAROV, P.; Ruzov, M.; SEMENOV, N.; STAKHANOV, A.; USKOV, A.~~

Foma Evgen'evich Tiurin; an obituary. Mast. ugl. 7 no.11:32 N '58.  
(MIRA 11:12)  
(Tiurin, Foma Evgen'evich, 1898-1958)

BOCHAROV, G.D.

Influence of denervation of the swim bladder and enucleation on depth analysis in carp. Vop. srav. fiziol. anal. no. 1:115-122 '60.

(MIRA 14:4)

1. The Higher Nervous Activity Physiological Laboratory, University of Leningrad.

(CONDITIONED RESPONSE) (AIR BLADDER (IN FISHES))  
(EYE—WOUNDS AND INJURIES) (ORIENTATION)

BOCHAROV, G.D.

Survival rate of young humpback salmon (*Oncorhynchus gorbuscha* Walb.)  
depending on methods used in transferring them from fresh water into  
sea water. Trudy MMBI no.3:83-90 '61.  
(MIRA 15:3)

1. Laboratoriya srovnitel'noy fiziologii (zav.-E.Sh.Ayrapt'yants)  
Murmanskogo morskogo biologicheskogo instituta.  
(Salmon)(Adaptation(Biology))(Salinity)

BOCHAROV, G.D.

Active selective reaction of young humpback salmon (*Oncorhynchus gorbuscha* Walb.) in relation to sea water. Trudy MMBI no. 3:91-96 '61.  
(MIRA 15:3)

1. Laboratoriya srovnitel'noy fiziologii (zav. -E.Sh.Ayrapet'yants)  
Murmanskogo morskogo biologicheskogo instituta.  
(Salmon)(Salinity)

MATOCHIN, Yu.V.; BOCHAROV, G.D.

Activation of sodium excreting cells in the gills of humpback  
salmon and chum adapting to the life in sea water. Vop.ikht.  
2 no.4:687-692 '62. (MIRA 16:2)

1. Institut evolyutsionnoy fiziologii imeni I.M.Sechenova  
AN SSSR Leningrad i Murmanskij morskoy biologicheskiy institut  
AN SSSR, Dal'niye Zelentsy.  
(Gills) (Sodium metabolism) (Salmon)

BOCHAROV, G.D.

Materials on the adaptability of young pink and chum salmons to  
seawater. Trudy MMBI no.5:154-160 '64. (MIRA 17:4)

1. Laboratoriya srovnitel'noy fiziologii (zav. - E.Sh.Arapet'yants)  
Murmanskogo morskogo biologicheskogo instituta.

BOCHAROV, G. G.

Normativnyi uchet v mashinostroenii; uchet zatrat proizvodstva. Moskva,  
Mashgiz, 1949. 148 p.

The norm rating in machine-building; rating of production expenses.

DLC: HF5686.M2B6

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library  
of Congress, 1953.

BOCHAROV, G.G.

N/S  
703.303  
.361

Normative erfassung und Kalkulation der Produktion im Maschinenbau,  
von G. G. Bocharov und Kh. S. Kastanyev.

281 p. tables.

Translation from the Russian: Normativnyy uchet i kal'kulyatsiya produktov  
v mashinostroyenii, Moscow, 1951.

Bibliographical footnotes.

**BOCHAROV, G.G.**

Organization and significance of laying out metal sheets for lot cutting.  
Avt. tract.prom. no.8:1-3 Ag '53.

(MLRA 6:8)

1. Ministerstvo mashinostroyeniya.

(Metal cutting)

CHAIKIN, F.F.; BOCHAROV, G.G., redaktor; GHYAZNOV, V.I. redaktor; KAPRALOVA, A.A., tekhnicheskiy redaktor.

[Mechanization of production expense accounting in machine building enterprises] Mekhanizatsiya ucheta zatrat na proizvodstvo v mashinostroitel'nom predpriatii. Moskva, Gos.statisticheskoe izd-vo, 1954. 146 p.  
(Machine accounting)

(MLRA 8:8)

BOCHAROV, G.G.

ZHEBRAK, M.Kh., redaktor; KASTANAYEV, Kh.G., redaktor; BOCHAROV, G.G.,  
redaktor.

[Calculating the expenditure and employment of materials in  
machine-building factories] Uchet raskhoda i ispol'zovaniia materia-  
lov na mashinostroitel'nykh zavodakh. Otvetstvennye red. M.Kh.Zheb-  
rak, Kh.G.Kastanayev. Moskva, Gos. nauchno-tekhn. izd-vo mashino-  
stroit. i sudostroit. lit-ry, 1954. 262 p. (MLRA 7:8)

1. Dom inzhenera i tekhnika imeni F.E.Dzerzhinskogo, Moscow.  
(Machinery industry--Accounting)

BOCHAROV, G.G.

Accounting at the plant and cost reduction of government operations.  
Avt.-trakt.prom. no.9:3-4 S '55. (MLRA 8:12)

1. Ministerstvo avtomobil'noy promyshlennosti  
(Automobile industry--Accounting)

BOCHAROV, GRIGORIY GRIGOR'YEVICH

PHASE I BOOK EXPLOITATION

232

Bocharov, Grigoriy Grigor'yevich

Uchet proizvodstva i kalkulyatsiya v mashinostroyenii (Cost Accounting and Calculations in the machine-building industry) 2d ed., rev. Moscow, Mashgiz, 1957. 309 p. 7,000 copies printed.

Ed.: Shneyvas, P. Kh.

Reviewer: Yur'yev, N.M., Engineer; Editing of material on the economics and organization of production headed by: Saksaganskiy, T.D.; Ed. of Publishing House: Temkin, A.V.; Tech. Ed.: El'kind, V.D.; Corrector: Frolova, V.V.

PURPOSE: The book is intended for accountants, planning personnel, economists, and engineering and technical personnel in the machine-building industry.

Card 1/8

Cost Accounting and Calculations in the machine-(Cont.) 232  
COVERAGE: This book is concerned with problems of accounting and production cost calculation in the machine-building industry and it describes up-to-date methods of basic accounting and documentation used in the various branches of the machine-building industry. The examples in the text present hypothetical-illustrative numerical data. There are 12 Soviet references.

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MAKAROV, Vladimir Genadiyevich; ASTASHKEVICH, Ye.T., ekonomist, retsenzent;  
BOCHAROV, G.G., ekonomist, red.; TKACHUN, A.I., red. izd-va; MODEL',  
B.I., tekhn. red.

[Accounting theory; accounting principles in industry] Teoriia  
bukhgalterskogo ucheta; osnovy teorii bukhgalterskogo ucheta v  
promyshlennosti. Moskva, Gos. nauchno-tekhn. izd-vo mashino-  
stroit. lit-ry, 1960. 159 p. (MIRA 14:9)

(Accounting)

BOCHAROV, G.G., ekonomist, red.; ANTIPOV, V.P., red.; CHERNOVA, Z.I.,  
tekhn.red.; GORDEYEVA, L.P., tekhn.red.

[Accounting of the expenditures for production and the calculation  
of the unit costs of industrial products] Uchet zatrata na proiz-  
vodstvo i kal'kulirovanie sebestoimosti promyshlennoi produktsii.  
Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.ist-ry, 1960. 254 p.  
(MIRA 14:6)

1. Moskovskiy dom nauchno-tekhnicheskoy propagandy imeni F.Ye.  
Dzerzhinskogo.

(Cost accounting) (Machinery industry--Costs)

BOCHAROV, Grigoriy Grigor'yevich; GRANOVSKIY, G., red.

[Calculating the cost of industrial production] Kal'-  
kulirovaniye sebestoimosti promyshlennoi produktsii.  
Moskva, Finansy, 1964. 162 p. (MIRA 17:11)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205710013-2

BOCHAROV, G.G.; SHATALOV, P.I.

What is a rated accounting? Mashinostroitel' no.11:32-33  
'65. (MIRA 18:11)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205710013-2"

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205710013-2

BOCHAROV, G.S., inzh.

Equipment for flexing tests of gear teeth. Vest.mash. 38 no.10:18-20  
O '58. (MIRA 11:11)  
(Gearing--Testing) (Testing machines)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205710013-2"

BOLOTOVSKAYA, T.P.; BOLOTOVSKIY, I.A., kand. tekhn. nauk, dots.;  
BOCHAROV, G.S.; GULYAYEV, V.I.; KURLOV, B.A.; MERKUR'YEV,  
I.A.; SMIRNOV, V.E.

[Handbook on the geometrical calculation of involute toothed  
and worm gears] Spravochnik po geometricheskому raschetu  
evol'ventnykh zubchatykh i cherviachnykh peredach. [By] T.P.  
Bolotovskaya i dr. Moskva, Mashgiz, 1963. 472 p.  
(MIRA 17:4)

BOChAROV, I. A.

23527 DIFERENTsIAL'NYY DIAGNOZ SKRYTYKh I VYRAZhENNYKh FORM STERILITETA  
U KOROV I PROGNOZ PRI NEKOTORYKh FORMAKh STERILITETA. SBORNIK NAUCH.  
TRUDOV (LENINGR. VET. IN-T), VYP. 10, 1949, c. 129-38.

So: LETOPIS' NO. 31, 1949

*BOCHAROV, I. N.*

BOCHAROV I. A. (Prof.) and SINEV A. V. (Prof.), CHERNYAK, V. Z. (Prof.),  
SHAKALOV K. I. (Prof.), YANNUSKIN L. V. (Prof.), GOLOSHTAPOVA U. N.

Veterinary's Guide

Moscow, 1953

BOCHAROV, I. A. (Professor), SOKOLOV, N. I. (Lecturer) and VAYNSTRAUB, A. M.

"The etiology of infertility in cattle in Leningrad oblast and some bases for its therapy and prophylaxis", (Assistant, Department of Obstetrics and Gynecology), Collected Works No. 14, of Leningrad Veterinary Institute USSR Ministry of Agriculture P 109, Sel'khozgiz, 1954.

BOCHAROV, I.A.

[Pathology and therapy of internal, non-contagious diseases of domestic animals, and principles of diagnosis] Patologija i terapija vnutrennikh nezaraznykh boleznei sel'skokhoziaistvennykh zhivotnykh s osnovami diagnostiki. 5-e, ispr. i dop. izd. Moskva-Leningrad, Sel'khozgiz, 1954. 560 p. (MLRA 7:11D)

Bocharov I. A.

USSR / Farm Animals.

Q-2

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 45183

Author : Bocharov, I. A.

Inst : Not given

Title : The Basic Measures for Preventing the Sterility of Cows in  
the Kolkhozes and Sovkhozes of the Leningrad Oblast'

Orig Pub : Sb. rabot Leningr. vet. in-ta, 1957, vyp. 16, 24-27

Abstract : No abstract.

Card 1/1

13

BOCHAROV, Ivan Aleksandrovich, prof.; GOL'DSHTEYN, S.A., red.; CHUNAYEVA,  
МРУ., tekhn.red.

[Internal noncontagious diseases of farm animals with principles  
of their diagnosis] Vnutrennie nezaraznye bolezni sel'skokho-  
ziaistvennykh zhivotnykh s osnovami diagnostiki. Izd.6., perer.  
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 472 p. (MIRA 12:9)  
(Veterinary medicine)

PROTASOV, A.I., dotsent; SINKEV, A.V., prof.; SMIRNOV, A.M., dotsent;  
BAZHENOV, A.N., dotsent; VIL'NER, A.M., prof.; BASHMURIN, A.P.,  
dotsent; SHAKALOV, K.I., prof.; VELLER, A.A., prof.; NIKANOROV,  
V.A., prof.; FEDOTOV, V.P., dotsent; KUZNETSOV, G.S., prof.;  
BOCHAROV, I.A., prof.; SHCHERBATYKH, F.Ya., prof.; TSION, R.A.,  
prof.; GRIBANOVSKAYA, Ye.Ya., dotsent; ADAMANIS, V.F., assistant;  
KOLABSKIY, N.A., dotsent; MITSKEVICH, V.Yu., dotsent; GUSEVA, N.V.,  
dotsent; MYSHKIN, P.P., dotsent; GUBAREVICH, Ya.G., prof.;  
FEDOTOV, B.N., prof.; DOBIN, M.A., dotsent; SIROTKIN, V.A., prof.  
[deceased]; KUZ'MIN, V.V., prof.; YEVDOKIMOV, P.D., prof.; POLYAKOV,  
A.A., prof.; POLYAKOV, P.Ya., red.; BARANOVA, L.G., tekhn.red.

[Concise handbook for the veterinarian] Kratkii spravochnik veteri-  
narnogo vracha. Leningrad, Gos.izd-vo sel'khoz.lit-ry, 1960. 624 p.  
(MIRA 13:12)

(Veterinary medicine)

KUZNETSOV, G.S., prof., otv. red.; BOCHAROV, I.A., prof., red.; VOKKEN, G.G., prof., red.; TSION, R.A., prof., red.; DMITROCHENKO, A.P., prof., red.; SINEV, A.V., prof., red.; FEDOTOV, B.N., prof., red.; CHERNYAK, V.Z., prof., red. Prinimali uchastiye: NIKOL'SKIY, S.N., prof., red.; KPEYSIN, Ye.M., prof., red.; GUSEV, V.F., dots., red.; KOLABSKIY, N.A., dots., red.

[Papers presented at the Conference on Protozoological Problems Dedicated to the 90th Anniversary of the Birth of Professor V.L. IAkimov] Sbornik rabot Nauchnoi konferentsii po protozoologicheskim problemam, posviashchennaya 90-letiyu so dnia rozhdeniya professora V.L.IAkimova. Leningrad, 1961. 292 p. (MIRA 15:6)

1. Nauchnaya konferentsiya po protozoologicheskim problemam, posvyashchennaya 90-letiyu so dnya rozhdeniya professora V.L. Yakimova.
2. Stavropol'skiy sel'skokhozyaystvennyy institut (for Nikol'skiy).
3. Institut tsitologii Akademii nauk SSSR (for Kheysin). 4. Lenogradskiy veterinarnyy institu (for Kolabskiy).  
(Protozoology—Congresses)

BOCHAROV, I.A., prof.; POSPELOV, A.I., dotsent; SOKOLOVA, Z.A.

Causes of the deterioration of the quality of sperm in bulls.  
Veterinariia 41 no.10:61-63 O '64.

(MIRA 18:11)

1. leningradskiy veterinarnyy institut (for Bocharov, Pospelov).
2. Zaveduyushchaya stantsiyey l'skusstvennogo osemeneniya  
sel'skokhozyaystvennykh zhivotnykh "Jesnoye" Leningradskej  
oblasti (for Sokolova).

SOV/96-59-3-16/21

AUTHORS: Kafengauz, N.L., Candidate of Technical Sciences  
Bocharov, I.D., Engineer

TITLE: The Influence on Heat Transfer to Water of the Height  
of the Rectangular Cross-Section of a Channel (Vliyaniye  
vysoty ploskoy shcheli na teplootdachu k vode)

PERIODICAL: Teploenergetika, 1959, Nr 3, pp 76-78 (USSR)

ABSTRACT: The tests were made on special equipment designed to  
study high rates of heat-transfer to water below the  
boiling point and contained in a flattened tube. A  
schematic diagram of the equipment is given in Fig.1 and  
a sketch of the experimental tube in Fig.2. The latter  
were seamless nickel, 3.6 mm diameter with a wall  
thickness of 0.15 mm which were suitably pressed to give  
rectangular cross-section over a working section of  
50 mm length. The outsides of the tube were plated with  
copper but on one side only over the working section.  
Here the thickness of the copper was such that when  
electric current was passed through the tube not less  
than nine-tenths of all the heat was released in the  
copper layer. In fact the copper was about twice as

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SOV/96-59-3-16/21

The Influence on Heat Transfer to Water of the Height of the  
Rectangular Cross-Section of a Channel

thick as the nickel. With this arrangement the experimental conditions approximated to those of heat-exchange with heating from one side. The tubes were installed vertically and water was forced upwards through them by compressed air. Appropriate measurements were made of temperature and pressure; the experimental procedure is described. Formula (1) was used to calculate the heat flow. In all the tests the pressure in the tube was 40 atm and the water temperature at the inlet was 15°C. For each tube a series of tests was made at constant rate of heat flow with various rates of water flow. At high water-speeds, when the temperature of the cooled surface was below the boiling point of water, the heat exchange was represented with reasonable accuracy by the formula given for convective heat-exchange. When boiling occurred, this formula was no longer valid; graphs of the relationship between the temperature of the cooled wall of the tube and the rate of flow of water are given in Fig.3. Each series of measurements included determinations of the water speed

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SOV/96-59-3-16/21

The Influence on Heat Transfer to Water of the Height of the  
Rectangular Cross-Section of a Channel

at which the occurrence of critical heat exchange caused the tube to burn out. The test results are tabulated and plotted in Fig.4 from which it will be seen that a change in the cross-sectional height from 2 to 0.6 mm has no appreciable influence on this limiting water speed. From this it may be supposed that the geometrical dimensions of the rectangular section influence the critical heat-transfer to the liquid only when the height of the rectangle is commensurate with the size of the steam bubbles. There is no available data about the size of steam bubbles under these conditions at a pressure of 40 atm but an approximate value is suggested. A simple method of estimating the water speed at which critical heat-transfer will occur is explained. There are 5 figures, 1 table and 5 references of which 3 are Soviet and 2 English.

Card 3/3

BLISHCHENKO, I.P.; BOCHAROV, I.N.; GLUSHAKOV, P.I.; MIRONOV, V.S.;  
NIKOL'SKIY, M.M.; NIKOL'SKIY, N.M.; PUCHKOV, I.B.; CHERNIKOV,  
G.P.; SHCHEGININ, V.D.; YEPIFANOV, M.P., red.; ROMANOVA, N.I.,  
tekhn.red.

[Africa 1960: concise reference book; territory, population,  
economy, governmental system, foreign policy] Afrika 1960;  
kratkiy spravochnik. Territoriya, naselenie, ekonomika, gosu-  
darstvennyi stroi, vneshezniaia politika. Moskva, Izd-vo In-ta  
mezhdunarodnykh otnoshenii, 1960. 133 p.

(Africa)

(MIRA 14:3)

BOCHAROV, Ivan Nikolaevich, ogorodnik-lyubitel' (poselok Sheremet'yevo Krasno-Polyanskogo rayona Moskovskoy oblasti); LEONOVA, T.S., red.; SAYTANIDI, L.D., tekhn.red.

[How to obtain high yields of early tomatoes] Kak poluchit' vysokii urozhai rannikh pomidorov. Izd.2. Moskva, Izd-vo sel. khoz.RSSSR, 1960. 11 p. (Tomatoes) (MIRA 14:3)

16,6100 (1031,1253)  
16,6800 (1250,1327,1329,2403)

35320  
S/103/62/023/002/006/015  
D230/D301

AUTHORS: Bocharov, I.N., and Stakhovskiy, R.I. (Moscow)

TITLE: Probability distribution density analyzer for random processes

PERIODICAL: Avtomatika i telemekhanika, v. 25, no. 2, 1962,  
169 - 175

TEXT: The principle of the operation of the analyzer is based on the relation

$$W(x) \Delta x = \sum \frac{\Delta t}{T} \quad (1)$$

where  $W(x)$  - probability density distribution,  $\Delta x$  - small part of function argument containing point  $x$ ,  $\sum \Delta t$  - sum total of time for the limits of input function from  $x - \Delta x/2$  to  $x + \Delta x/2$ ,  $T$  - time of operation. Relation (1) is valid for stationary random processes that are ergodic. The apparatus realizing relation (1) will yield only the mean value in the interval  $x$  and not the exact value of  $W(x)$ . The smaller  $\Delta x$  in comparison with the dispersion of the sig-  
Card 1/3

S/103/62/023/002/006/015

D230/D301

Probability distribution density ...

nal, the closer the mean value to  $W(x)$ . The operation of the device is thus described by the relation  $\lambda = \Delta x / 2D^{1/2}$  where  $D$  - dispersion of the signal. The quantity  $\lambda$  can be called the resolving power of the analyzer. To calculate the total time during which the signal is within the limits stated previously, the process is as follows: Each time the input signal traverses a fixed interval level there results a single pulse, whose width equals the time of stay of the signal in the interval indicated. The indicated pulses are then integrated during the operation time  $T$ . In order to be able to vary the amplitude of the argument of function  $W(x)$  the input signal is combined with constant signal, whose value can be changed. This varies the level of the input signal in relation to interval  $\Delta x$ , whose center can be adjusted, thus varying the amplitude of the constant component; in this way all levels of the signal can be examined. The analyzer can be improved still further; with a small modification of the device it is possible to measure simultaneously the distribution density of two arbitrary processes; recommendations for the improvement are given. There are 5 figures and 5 references: 2 Soviet-bloc and 3 non-Soviet-bloc. The references to

Card 2/3

Probability distribution density ...

S/103/62/023/002/006/015  
D230/D301

the English-language publications read as follows: F.B. Smith, Eng.  
Rev., vol. 14, no. 5, May 1955; J. Daniel, Electronics, vol. 14,  
p. 162~163, March 1956; Lien Hwachii, Rev. Sci. Instr., vol. 30,  
no. 12, 1959.

SUBMITTED: March 13, 1961

X

Card 3/3

354217  
S/103/62/023/003/002/016  
D201/D301

16,6800 (1250, 1327, 1329, 2403)

AUTHORS: Bocharov, I.N., and Fel'dbaum, A.A. (Moscow)

TITLE: Automatic optimizer for the search for the least of several minima (global optimizer)

PERIODICAL: Avtomatika i telemekhanika, v. 23, no. 3, 1962,  
289 - 501

TEXT: The authors consider the principles of design and describe the practical circuit of a global optimizer. This is defined as one which determines the minimum of minima (or the maximum of maxima) of the output quantity Q with the corresponding values of the input quantities  $x_1, \dots, x_n$ . The search for this extremum is / may be realized in various ways, but not all of them can guarantee that the actual minimum will not be omitted. The authors suggest and describe three algorithms used for development of a model global optimizer. Algorithm No. 1 is one in which the process of search for the minimum is finished after the machine has performed  $\mu$  unsuccessful trials to find the optimum value of minimum of Q,  $2 \leq \mu \leq 16$ .

Card 1/2

Automatic optimizer for the search ...

S/103/62/023/003/002/016  
D201/D301

The second algorithm is the one in which the values of Q are compared after each measurement and the new value of its minimum replaces in the memory the previous larger one. The third algorithm is such that the sign of  $\Delta Q$  increment is sensed. With the reversal of sign the system goes into the normal minimum search operation. The basic parts of the global optimizer are a normal multi-channel automatic optimizer with the additional unit of global search, consisting of the extremum induction circuit (EI) and of a resetting cct (RC). The EI produces a trigger pulse, when the desired minimum is obtained; resetting circuit acts also as a limiter of integrator channel voltages. The experimental results of a model five channel global optimizer are given for the algorithm No. 1. The object was an electronic simulator with two minima and represented to parallel connected circuits for determining the moduli of inputs. The obtained recorded graph of the search process shows that the process consists of consecutive searches for both minima. The following took part in various stages of the optimizer development: R.I. Stakhovskiy, A.B. Shubin, A.V. Kalinina, V.P. Golyshhev, and M.G. Stupachenko. There are 10 figures and 7 Soviet-bloc references.

SUBMITTED: August 9, 1961  
Card 2/2

BOCHAROV, I. N.

PHASE I BOOK EXPLOITATION SOV/6012

Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki.

Avtomatycheskoye regulirovaniye i upravleniye (Automatic Regulation and Control) Moscow, Izd-vo AN SSSR, 1962. 526 p. Errata slip inserted. 9000 copies printed.

Resp. Ed.: Ya. Z. Tsyplkin, Professor, Doctor of Technical Sciences; Ed. of Publishing House: Ye. N. Grigor'yev; Tech. Ed.: I. N. Dorokhina.

PURPOSE: This book is intended for scientific research workers and engineers concerned with automation.

COVERAGE: The book is a collection of articles consisting of papers delivered at the 7th Conference of Junior Scientists of the Institute of Automation and Telemechanics, Academy of Sciences USSR, held in March 1960. A wide range of scientific and technical questions relating to automatic regulation and control is covered.

Card 1/12 3

Automatic Regulation (Cont.)

SOV/6012

The articles are organized in seven sections, including automatic control systems, automatic process control, computing and decision-making devices, automation components and devices, statistical methods in automation, theory of relay circuits and finite automatic systems, and automated electric drives. No personalities are mentioned. References are given at the end of each article.

TABLE OF CONTENTS:

PART I. AUTOMATIC CONTROL SYSTEMS

Andreychikov, B. I. The effect of dry friction and slippage [play] on error during reverse gear operation of servo-feed systems 3

Andreychikov, B. I. Dynamic accuracy of machine tools with programmed control 14

Card 2/~~12~~ 3

## Automatic Regulation (Cont.)

SOV/6012

Babunashvili, T. G. On dissipation in-the-large in three-dimensional nonautonomous and nonlinear autoregulation system 22

Buyanov, B. B. Investigation of optimal control system for a section-mill flying shear 28

Bocharov, I. N. Analyzer for distribution curves of random processes in the infralow frequency region 36

Butkovskiy, A. G. On the optimal control of processes 43

Volik, B. G. Automatic optimizer for chemical production process control 52

Gradetskiy, B. G., and Yu. I. Ostrovskiy. Design calculation of an extremal control system featuring storage of maximum in the presence of noise interference 63

Card 3/32 3

S/271/63/000/002/011/030  
A060/A126

AUTHOR: Bocharov, I. N.

TITLE: Analyzers for distribution curves of stochastic processes in the domain of sonic and subsonic frequencies

PERIODICAL: Referativnyy zhurnal, Avtomatika, Telemekhanika i Vychislitel'naya Tekhnika, no. 2, 1963, 50, abstract 2A307 (In collection: "Avtomat. regulirovaniye i upr.", Moscow, AN SSSR, 1962, 36 - 42)

TEXT: The author gives the principle of operation, the block diagram, the electronic circuit and the test results of an instrument for the automatic plotting of distribution curves of stochastic signals. The author considers the influence upon the operating precision of the instrument of the quantities entering in the formula defining the distribution curve: the quantization interval, the averaging time, and the frequency in the range from zero to 1,000 cps. Tests have shown that the instrument ensures a rapid production (in 1 - 5 min) of distribution curves with a deviation from the theoretical curves not exceeding 2%. There are 4 figures and 4 references.  
[Abstracter's note: Complete translation]

A. V.

Card 1/1

GLIKMAN, L.S.; BOCHAROV, I.V.; VIKHMAN, G.L.; ABROSIMOV, B.Z.; KIRILOV,  
Ye.A.; MEL'NIKOV, S.M.; AGAFONOV, A.V.; SOSKIND, D.M.

Rebuilding catalytic cracking units with a combined reactor-regenerator.  
Khim. i tekhn. topl. i masel 6 no.11:6-10 N '61. (MIRA 14:12)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut  
neftyanogo mashinostroyeniya.  
(Cracking process)

**BOCHAROV, I.V.**

Novokuybyshevsk Petroleum Refinery. Khim. i tekhn. topl. i masel  
9 no.11:24-27 N '64 (MIRA 18:1)

KAZANSKIY, V.L.; ATANAZEVICH, Ye.I.; VOLKOVA, S.A.; BOCHAROV, I.V.;  
UZUKOYAN, P.N.; ZHADANOVSKIY, N.V.; FINEILONOV, V.P.

Use of the hexane fraction from the central gas-fractionation  
plant (TSGFU) as raw material in the catalytic reforming systems.  
Khim. i tekhn. topl. i masel 10 no.10:6-7 O '65.

(MIRA 18:10)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut neftyanoy  
promyshlennosti, Kuybyshev, i Novokuybyshevskiy neftepererabaty-  
vayushchiy zavod.

BOCHAROV, K.

In Kursk Province. Zashch. rast. ot vred. i bol. 10 no.7:  
4-5 '65. (MIRA 18:10)

1. Nachal'nik Kurskoy oblastnoy stantsii zashchity rasteniy.

VOYEVODIN, A.V., kand. sel'skokhoz. nauk; KUDEL', K.Ye., nauchnyy sotrudnik;  
MURAROVA, O.I.; NIBYT, V.A.; TARASENKO, I.M., kand. biolog. nauk;  
SMELYANETS, V.P.; PALASKAS, D.N.; KOROBATOV, V.A., starshiy nauchnyy  
sotrudnik; BORDUKOVA, M.; KACHAYEVA, V., semenovod; GLINKA, Ye., agronom;  
SHEVCHENKO, A.B., aspirant; BOCHAROV, K.; GLEBOV, M.A., kand. ekonom.  
nauk

Results of herbicide testing. Zashch. rast. ot vred. i bol. 9  
no. 7:23-26 '64. (MIRA 18:2)

1. Vsesoyuznyy institut zashchity rasteniy (for Voyevodin).
2. Ukrainskiy nauchno-issledovatel'skiy institut zashchity  
rasteniy (for Kudel', Smelyanets). 3. Nachal'nik Kiyevskoy  
oblastnoy stantsii zashchity rasteniy (for Murarova).
4. Zaveduyushchiy Mironovskim punktom signalizatsii (for Nibyt).
5. Nizhnedneprovskaya stantsiya obleseniya peskov i vinogradarstva  
na peskakh, TSuryupinsk, Khersonskoy oblasti (for Tarasenko).
6. Zaveduyushchiy Kokandskim nablyudatel'nym punktom, Ferganskoy  
oblasti (for Palaskas). 7. Azerbaydzhanskiy nauchno-issledovatel'-  
skiy institut khlopkovodstva, Kirovabad (for Korobatov).
8. Zaveduyushchiy Moskovskoy kartofel'noy toksikologicheskoy  
laboratoriye (for Bordukova). 9. Sovkhoz "Voskresenskiy",  
Moskovskoy oblasti (for Kachayeva). 10. Moskovskaya  
kartofel'naya toksikologicheskaya laboratoriya (for Glinka).
11. Ukrainskiy institut rasteniyevodstva, selektsii i genetiki  
imeni V.Ya. Yur'yeva (for Shevchenko). 12. Nachal'nik Kurskoy stantsii  
zashchity rasteniy (for Bocharov).

1. BOCHAROV, K. P. Eng.
2. USSR (600)
4. Mine Hoisting
7. Dynamic braking of asynchronous drives of hoisting machines in vertical shafts. Ugol' 27 no. 12, 1952.
9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

VASILEVSKY, M.N., inzhener; BOCHAROV, K.P., inzhener.

Automatization of the skip hoist installation at the "Shcheglovka" mine  
no.1. Mekh,trud,rab. 7 no.5:10-13 My '53. (MLRA 6:5)  
(Coal-handling machinery)

BOCHAROV, K.P., inzh.

~~Results of industrial testing of automatically controlled hoisting machines in operation. Stor. DonUGI no.15:13-26 '56. (MIRA 10;11)~~

1. Laboratoriya shakhtnogo pod"yema.  
(Mine hoisting--Testing) (Automatic control)

15-57-10-14933

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,  
p 267 (USSR)

AUTHORS: Bocharov, K. P., Kotsarev, A. S.

TITLE: An Experiment on Mining Operations Using a Skip Hoist  
With Automatic Control (Opyt ekspluatatsii skipovoy  
pod "yemnoy mashiny s avtomaticheskim upravleniyem")

PERIODICAL: V sb.: Avtomatizatsiya v ugol'n. prom-sti, Moscow,  
Ugletekhizdat, 1956, pp 90-96

ABSTRACT: The author describes an experiment on mining operations  
using a skip hoist at mine No. 1-1 "bis" of the "Kras-  
nogvardeyskiy" Trust. The device was made automatic  
according to the system of the Stalino State Institute  
for the Design and Planning of Mine Construction in the  
Coal Industry and the Donets Coal Mining Institute. It  
was put into operation in June 1954. The hoist is  
started by a machine operator. The deceleration is  
effected by dynamic braking. A speed governor is used  
which becomes effective in response to the divergence

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15-57-10-14933

An Experiment on Mining Operations Using a Skip (Cont.)

between the actual and the rated speeds. The operation of the skip hoist is accomplished by a series of impulses. The hoist is stopped by a braking mechanism. The author raises the question of expanding the application of automatic controls on skip hoists. He shows the advantages of the automatic installation in mine No. 1-1 "bis" (reliability of operation, decreasing labor of machine operator, shortening the time of hoisting in comparison with the nonautomatic arrangement, the possibility of delivering coal by a single skip hoist, etc.). It is necessary to use auxiliary installations for prevention of cable sag and for automatic selecting of direction. The author considers the problems of automation of an entire group of skip hoists and the difficulties involved in such installation: inadequacies in the loading and unloading arrangements (the spilling of coal in the sump and under the hoppers because of unsatisfactory construction, the instability of the counterbalances in the hoppers, breaks in the apparatus, loosening of the connections on the skip hoist when the coal is let out of the buckets, etc.), the absence of reliable installations for control of the temperature of the

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15-57-10-14933

'An Experiment on Mining Operations Using a Skip (Cont.)

bearings, and the unsatisfactory method of lubricating the bearings.  
Card 3/3

V. K. Yasnyy

1. L. A. BOCHAROV, Prof.
2. USSR (600)
4. Bocharov, I. A.
7. "Special pathology and therapy of internal non-infection diseases of domestic animals." Reviewed by Z. K. Karpin, A. N. German. Veterinaria 30 no. 1. 1953.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

DYKIN, Aleksandr Vasil'yevich; BOCHAROV, L.N., red.

[Electronic and semiconductor devices] Elektronnye i  
poluprovodnikovye pribory. Moskva, Energija, 1965. 310 p.  
(MIRA 18:7)

KUGUKOV, L.; BOCHAROV, M.

Causes of unprofitableness on stock-fattening state farms and  
state delivery offices. Fin. SSSR 37 no.6:76-77 Je '63.

(MIRA 16:9)

1. Nachal'nik otdela finansirovaniya sel'skogo khozyaystva Kurskogo  
(sel'skogo) oblastnogo finansovogo otdela (for Kugukov). 2. Starshiy  
ekonomist otdela finansirovaniya sel'skogo khozyaystva Kurskogo  
(sel'skogo) oblastnogo finansovogo otdela (for Bocharov).  
(Kursk Province--Cattle--Feeding and feeds)  
(Kursk Province--Cattle trade)

YEMEL'YANOV, Ye.; BOCHAROV, M.; VOZNYUK, V.; TIMOSHIN, D.

Towards new achievements. Radio no.8:3 Ag '62. (MIRA 15:8)

1. Nachal'nik Novosibirskogo radiokluba (for Bocharov).
2. Predsedatel' soveta Novosibirskogo radiokluba (for Voznyuk).
3. Nachal'nik Sumskogo radiokluba (for Timoshin).  
(Radio operators)

BOCHAROV, M.A., inzh. (Kirovogradskaya obl.); KANASH, V.P., inzh.  
(Kirovogradskaya obl.)

Wide vistas of the sea.... Nauka i zhystia 10 no. 10:21-25 O '60.  
(MIRA 14:4)  
(Dneper River—Water resources development)

BOCHAROV, M.D., otvetstvennyy red.; GRININ, A.G., red.; KOZLOV, K.I., red.;  
KOSTYANKO, N.G., red.; KOCHYEYEV, I.P., red.; STAKHOVA, A.P., red.;  
TADYYEV, P.Ye., red.; SHEVTSOV, M.I., red.; TEKHTIYEKOV, M.I.,  
tekhn.red.

[In the mountains of the Altai] V gorakh Altaia. [Gorno-Altaisk]  
Gorno-Altaiskoe knizhnoe izd-vo. Vol.1. 1957. 72 p. (MIRA 11:6)  
(Altai Territory--Description and travel)

NEMCHENKO, V.S.; BOCHAROV, M.D.; KRISTOSTUR'YAN, N.G.; CHERKASOV, V.I.; ANDREYANOV, V.V.; KAUFMAN, V.M.; PAKHMANOV, V.F.; ZVORYKIN, A.A., otv.red.; ANICHKOV, N.N., red.; BARDIN, I.P., red.; BLAGONRAVOV, A.A., red.; VVEDENSKIY, B.A., red.; GRIGOR'IEV, A.A., red.; KAPUSTINSKIY, A.F., red.; KOLMOGOROV, A.N., red.; MIKHAYLOV, A.A., red.; OPARIN, A.I., red.; PETROV, F.M., red.; STOLETOV, V.N., red.; STRAKHOV, N.M., red.; FIGUROVSKIY, N.A., red.; KOSTI, S.D., tekhn.red.

[Biographical dictionary of leaders in the natural sciences and technology] Biograficheskii slovar' deiatelei estestvoznania i tekhniki. Vol.1. A - L. Otvetstvennyi red. A.A.Zvorykin. Red. kollegiiia: N.N.Anichkov i dr. Moskva, Gos.suschn.izd-vo "Bol'shaya Sovetskaia Entsiklopediya." 1958. 548 p. (MIRA 12:4)

1. Redaktsiya istorii estestvoznaniya i tekhniki Bol'shoy Sovetskoy Entsiklopedii (for Nemchenko, Bocharov, Kristostur'yan, Cherkasov; Andreyanov, Kaufman, Pakhmanov).

(Scientists)

ZVORYKIN, A.A., otv.red.; NEMCHENKO, V.S., zaveduyushchiy red.;  
BOCHAROV, M.D., starshiy nauchnyy red.; KRISTOSTUR'YAN,  
T.G., starshiy nauchnyy red.; CHERKASOV, V.I., starshiy  
nauchnyy red.; ANDREYANOV, V.V., red.; GARKOVENKO, R.V.,  
nauchnyy red.; KAUFMAN, V.M., mladshiy red.; PAKHMANOV,  
V.F., mladshiy red.; KOSTI, S.D., tekhn.red.

[Biographical dictionary of figures in the natural sciences  
and technology] Biograficheskii slovar' deiatelei estestvo-  
znania i tekhniki. Otvetstvennyi red. A.A.Zvorykin. Red.  
kollegiia: N.N.Anichkov i dr. Moskva, Gos.nauchn.izd-vo  
"Bol'shaya sovetskaya entsiklopediya." Vol.2. M - IA.  
1959. 467 p. (MIRA 12:7)

1. Redaktsiya istorii estestvoznaniya i tekhniki Bol'shoy  
Sovetskoy Entsiklopedii (for all except Zvorykin, Kosti).  
(Scientists) (Technology--Biography)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205710013-2

KORNIYENKO, A.G., inzhener-podpolkovnik; BOCHAROV, M.D., inzhener-kapitan

Universal service assembly. Vest.Vozd.Fl. no.8:72 Ag '61.  
(MIRA 14:8)  
(Motortrucks, Military)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205710013-2"

*BOCHAROV, M.I.*

BOCHAROV, M.I., mashinist.

Eighty-three tons of fuel saved. Elek. i tepl. tiaga no.11:31 N '57.  
(MLRA 10:11)

1. Depo Tashkent-Tovarnyy.  
(Locomotives--Fuel consumption)

BOCHAROV, M.K., dozent, kandidat tekhnicheskikh nauk.

Representation of sparse forests on topographic maps. Sbor.st.geod.  
no.10:63-71 '55. (MLRA 10:2)  
(Forests and forestry--Maps) (Maps--Symbols)

SOV/14-57-12-25394

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 12,  
p 12 (USSR)

AUTHOR: Bocharov, M. K.

TITLE: Showing Populated Points on Maps (Nagruzka kart  
naselennymi punktami)

PERIODICAL: Sb. statey po kartogr., 1956, Nr 9, pp 35-43

ABSTRACT: Selection of populated points to be shown on a map is  
based on M. K. Bocharov's method presented in Primeneniye  
vyborochnogo metoda v kartograficheskikh rabotakh,  
Inf. Tekhn. Sbornik VTS XXVIII, Moscow, 1952. This  
method consists of using formulas to compute the number  
of points to be shown and the area occupied by them,  
and of using data obtained in this way to prepare a  
plan for selection of populated points. The equation  
for computing the number of points is given as

$$\Gamma_n' = \Gamma_1 p^{n-1}, \text{ where } \Gamma_1 \text{ is the initial value of the}$$

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SOV/14-57-12-25394

## Showing Populated Points on Maps (Cont.)

map loading,  $\Gamma_n$  is the n-th value of the loading,  $\rho$  is the diversity coefficient of the loading. Experimental studies have shown that the minimum diversity coefficient  $\rho_r^*$  for a number of points used is 1.45; the optimum,  $\rho_r''$  is 1.55. Formula  $\Gamma_n^o = \sum_1^n \rho^{n-1}$  gives many values for the map area to be covered. The minimum diversity coefficient for map area covered is  $\rho_p \approx 1.4$ ; the optimum is  $\rho \approx 1.6$ . Using the formulas, the compiler can determine the necessary number and area covered by populated points to be shown, in order to indicate the difference among regions. To indicate this difference in terms of the density of populated points, the territory should be divided into seven or fewer degrees of density, q {more than 30; 10 to 30; 5 to 10; 1.3 to 5; 0.3 to 1.3; 0.1 to 0.3, less than 0.1}. Next, a corresponding number of seven or fewer degrees of map loading,  $\Gamma_m'$ , must be computed. If regional differences are to be shown on a map in terms of seven or fewer degrees of population density,  $\pi$  {more than 200, 100 to 200, 50 to 100, 25 to 50, 10 to 25, 1 to 10, Card 2/3

SOV/14-57-12-25394

Showing Populated Points on Maps (Cont.)

less than 1), then seven or fewer degrees of area coverage,  $M^P$ ,  
should be computed.  
Card 3/3

Z. G. R.

PHASE I BOOK EXPLOITATION 741

Bocharov, Mikhail Kuz'mich and Nikolayev, Sergey Aleksandrovich

Matematiko-statisticheskiye metody v kartografii (Mathematical and Statistical Methods in Cartography) Moscow, Geodezizdat, 1957.  
157 p. 2,500 copies printed.

Ed.: Sukhov, V. I.; Ed. of Publishing House: Shamarova, T. A.;  
Tech. Ed.: Romanova, V. V.

PURPOSE: This book was written with the aim of popularizing the methods of mathematical statistics among cartographers.

COVERAGE: The author discusses the necessity of the application of the methods of mathematical statistics in cartography. The fundamentals of mathematical statistics are given in connection with the elements of geographical maps, and many illustrative examples are included. The greater part of the book deals with the application of the methods of mathematical statistics to

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## Mathematical and Statistical (Cont.)

741

to various map elements, thus providing a mathematical basis for the analysis of cartographic data and for their more exact use in map making. Articles 1-6,8, and 10-19 were written by S. A. Nikolayev and articles 7 and 21-31 by M. K. Bocharov. Article 9 was jointly written by the above-mentioned authors. The authors thank reviewers N. M. Volkov, Yu. V. Kemnits and editor V. I. Sukhov for their help in preparing the book. There are 121 Soviet references (including 3 translations).

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## Mathematical and Statistical (Cont.)

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## Mathematical and Statistical (Cont.)

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*Geodeziya i kartografiya, m. 12.*

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AUTHOR: None Given

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TITLE: Chronicle (Khronika)

PERIODICAL: Geodeziya i kartografiya, 1959, Nr 7, p 80 (USSR)

ABSTRACT: From May 27 to June 1, a conference dedicated to the history of natural sciences and technology took place in Moscow. It was organized by the Institut istorii yestestvoznanija i tekhniki AN SSSR (Institute of History of Natural Science and Technology of the Academy of Sciences of the USSR) and the Sovetskoye natsional'noye ob'yedineniye istorikov yestestvoznanija i tekhniki (Soviet National Union of Historians of Natural Science and Technology). The following reports were delivered at the meetings of the Section of Geologic-geographical Sciences: S. Ye. Fel', "Russia's Cartography in the 18th Century". S. G. Yeremyan, "Topographic Map of Armenia Compiled at the End of the 6th and Beginning of the 7th Century". M. K. Bocharov, "Application and Development of Statistical Methods in Cartography". A. S. Chebotarev, "History of the Application of the Method of Least Squares in Geodesy". M. K. Ventsel', "Development of Accurate Methods of Astronomic Determinations

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BOCHAROV, N. F.

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1963/3

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Engineering

Railroads

Fires

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