

1. STEPANOV, P. N.
2. USSR (600)
4. Geology and Geography
7. Geography of Industry of USSR, P. N. Stepanov. (Moscow, Education-Pedagogic Press, 1950). Reviewed by N. N. Baranskiy, Sov. Kniga, No 10, 1951.
9. Report U-3081, 16 Jan. 1953, Unclassified.

STEPANOV, P. N.

Russia - Economic Conditions

Geography and technology.

Vop. geog., 27, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1952. UNCLASSIFIED.

STEPANOV, P. E.

Metals

What the geographer needs to know about the production of ferrous metals. Geog. v shkole
No. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 1952, Uncl.

Textile- Industry and Fabrics

"Industrial geography of USSR." Review: by V. V. Lind, S. I. Iof. *Geogr. Ann.* no. 1, 1958.

9. Monthly List of Russian Accessions, Library of Congress, June 1958, Uncl.

2

STEPANOV, PETER NIKOLAYEVICH,
STEPANOV, Petr Nikolayevich, 1887-

[The Urals] Ural. Pod red. S.G. Strumilina. Moskva, Gos. izd-vo
geogr. lit-ry, 1953. 143 p. (MLBA 6:11)
(Ural mountains)

..STEPANOV, P.N.

The Ural region in the fifth five-year plan. Geog. v shkole. no.2:10-13
Mr-Apr '53. (MLRA 6:5)

(Ural mountain region--Natural resources)

STEPANOV, P.N.

KIBAL'CHICH, O. (Reviewer)

"Urals." P.N.Stepanov. Reviewed by O.Kibal'chich. Geog.v shkole
no.2:71-72 Mr-Ap '54. (MLRA 7:2)
(Stepanov, Petr Nikolaevich, 1887-) (Ural Mountain region)

Stepanov, P.H.

ALEKSANDROVA-ZAORSKAYA, V.V.; ARNOL'D, V.S.; ADAMCHUK, V.A.; BARANSKIY,
N.N.; BARDIN, I.P.; VASYUTIN, V.F.; VITYAZEVA, V.A.; GORDONOV,
L.Sh.; DOLGOPOLOV, K.V.; ZENKOVA, Z.A.; NEMCHINOV, V.S.; OKRU-
CHEV, V.V.; RYAZANTSEV, S.N.; SOKOLOV, A.V.; STEPANOV, P.H.;
CHERDANTSEV, G.N.

A.M.Volkov; obituary. Izv. AN SSSR Ser.geog. no.6:106-107 N-D '54.
(Volkov, Aleksandr Mikhailovich, 1890-1954) (MIRA 8:3)

USSR/Geophysics - Geographers

FD-683

Card 1/1 : Pub. 129 - 23/25

Author : Kibal'chich, O.

Title : Lomonosov lectures, 22-26 April 1954, in the Geographic Faculty

Periodical : Vest. Mosk. un., Ser. fizikomat. i yest. nauk, Vol. 9, No.3,
155-158, May 1954

Abstract : Prof. P. N. Stepanov, "Experience gained in the work of the 'Ural' Study [Kabinet] of the Chair of USSR Economic Geography. "Docent I. M. textbooks on economic geography of Hungary and Czechoslovakia." Prof. A. G. Voronov, "Principles governing the construction of collections on biogeography and their use in the preparation of geographers." Prof. G. K. Tushinskiy, "Development of stands and exhibits at museums." Prof. I. S. Shchukin, "Development of geomorphology in Moscow University." Prof. N. N. Zubov "theory of the regime of channels and lakes in air regions." Docent A. F. Miroshnuchenko, "Experience gained in compiling complex maps of natural conditions in territories utilized by Kolkhozes."

Institution : --

Submitted : --

STEPANOV, T N

Geografiya promyshlennosti SSSR (Industrial Geography of the USSR) Izd 2, perer. 1 dop. Moskva, Uchredgiz, 1955.

283p. maps.

"Bibliografiya": p. 270-280

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STEPANOV, P. N.

"Survey of USSR Chemical Industry Development," Moscow, Geografiya Promyshlennosti
SSSR, 1955

No. 745, p Dec 55 Translation

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"Geography of USSR Industry: XI. Geography of the Textile Industry," Geograf.
Prom. SSSR, Moscow, 1955

Translation of pages 226-246 in M-1154, 15 Jun 56

ALISOV, B.P.; BARANSKIY, N.N.; BELOUSOV, I.I.; BLIZNYAK, Ye.V.; BURENSTAM, A.G.;
VITVER, I.A.; VOSKRESENSKIY, S.S.; GVOZDITSKIY, N.A.; IVANOV, K.I.;
MEYERGOYZ, I.M.; MARKOV, K.K.; NIKOL'SKIY, I.V.; SAUSHKIN, Yu.G.; SOLOV'YEV,
A.I.; STEPANOV, P.N.; KHRUSHCHEV, A.T.

Nikolai Nikolaevich Kolosovskii, 1891-1954. Vop.geog. no.37:210-211 '55.
(Geography--Study and teaching) (Kolosovskii, Nikolai Nikolaevich,
1891-1954)

FROLOV, H.S.

"Urals." P.N. Stepanov. Reviewed by H.S. Frolov. Izv. Vses. geog.
ob-va 87 no. 3: 304-305 My-Je '55. (MIRA 8:9)
(Ural Mountain region) (Stepanov, Petr Nikolaevich, 1887-)

ANDREYEV, B.I., kand. ekonomicheskikh nauk, dots.; LYALIKOV, N.I., kand. geograficheskikh nauk, dots.; NIKITIN, N.P., prof.; NIKOL'SKIY, I.V., kand. geograficheskikh nauk, dots.; RAKITNIKOV, A.N., kand. geograficheskikh nauk, dots.; STEPANOV, P.N., doktor geograficheskikh nauk, prof.; TUTYKHIN, B.A., kand. geograficheskikh nauk, dots.; CHERDANTSEV, G.N., prof., red.; RODIONOVA, F.A., red.; TYUTYUNNIK, S.G., red. kart.; MAKHOVA, N.N., tekhn.red.

[Economic geography of the U.S.A.R.; general characteristics and the geography of branches of the Soviet national economy]
Ekonomicheskaya geografiya SSSR; obshchaya kharakteristika i geografiya otraslei narodnogo khoziaistva SSSR. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1958. 275 p. (MIRA 17:12)
(Geography, Economic)

STEPANOV, P.II.

Economic geography and fundamentals of industrial production.
Vest.Mosk.un.Ser.biol., pochv., geol., geog. 14 no.2:
181-185 '59. (MIRA 13:4)

1. Kafedra ekonomicheskoy geografii SSSR Moskovskogo gos.
universiteta.
(Geography, Economic--Study and teaching)

SAUSHKIN, Yu.G.; KALASHNIKOVA, T.M.; STEPANOV, P.N.; KOVALEV, S.A.; NIKOL'SKIY,
I.V.; LEBEDEVA, V.P.

Main economic regions of the U.S.S.R. Vop. geog. no.47:42-73 '59.
(MIRA 13:1)

(Economic zoning)

STEPANOV, PETR N.

"Economic-Geographic Study of Power Problems of the USSR"

report to be submitted for the Intl. Geographical Union, 10th General Assembly
and 19th Intl. Geographical Congress, Stockholm, Sweden, 6-13 August 1960.

STEPANOV, Petr Nikolayevich; LYUBIMOV, I.M., red.; KISELEVA, Z.A., red.
kart; KOSHELEVA, S.M., tekhn. red.

[Geography of the heavy industry of the U.S.S.R.] Geografia tiazhe-
loi promyshlennosti SSSR. Moskva, Gos. izd-vo geogr. lit-ry, 1961.
150 p. (MIRA 14:10)

(Industries, Location of)

STEPANOV, P.P.

Preparation of visual aids. Est.v shkole no.5:88-90 8-0 '54.
(MLRA 7:9)

1. Uchitel' sredney shkoly No. 7 g Kalugi.
(Teaching--Aids and devices) (Botany--Study and teaching)

STEPANOV, Petr Prokof'yevich, zasluzhennyy uchitel' shkoly RSFSR;
DMITRIYEV, G.F., red.; DZHATIYEVA, F.Kh., tekhn.red.;
KORNEYEVA, V.I., tekhn.red.

[Homemade visual aids on biology; from the work practice of
No.7 school in Kaluga] Samodel'nye nagliadnye posobiya po
biologii; iz opyta raboty shkoly no.7 g.Kalugi. Moskva, Gos.
uchabno-pedagog.izd-vo M-va prosv.RSFSR, 1959. 155 p.

(MIRA 13:5)

(Biology--Audio-visual aids)

STEPANOV, P.P., zasluzhennyy uchitel' shkoly RSFSR

Effect of binding materials on the stock-scion union in budding.
Biol. v shkole no.5:85-86 S-0 '60. (MIRA 13:11)

1. Srednyaya shkola No.7 g Kalugi.
(Budding)

BESSONOV, A.A.; STEPANOV, P.P.; GLOBIN, N.M.

Electronic devices for the automatic detection and counting of
defects in yarn. Biul.tekh.-ekon.inform. no.5:44-45 '60.

(MIRA 14:3)

(Yarn-Testing)

(Electronic instruments)

STEPANCV. P.P., zasluzhenny uchitel' shkoly

Grafting fruit trees with two and three year old shoots.
Biol. v shkole no.4:55-58 JI-Ag '61. (MIRA 14:7)

1. Srednyaya shkola No.7 goroda Kalugi.
(Fruit trees) (Grafting)

BONDUS, L.P.; STEPANOV, P.P.; ZIL'BERMAN, R.P.

Use of pneumoperitoneum in pulmonary tuberculosis at a climatological sanatorium. Probl.tub. 37 no.1:115 '59. (MIRA 12:2)

1. Iz Yaltinskogo klinicheskogo sanatoriya.
(PNEUMOPERITONEUM, ARTIFICIAL) (TUBERCULOSIS)

STEPANOV, Petr Prokof'yevich; KANDYBIN, M., red.

[Grafting of fruit trees and the sun; practices in using polyethylene film] Privivka plodovykh i solntse; opyty s primeneniem polietilenovoi plenki. Kaluga, Priokskoe knizhnoe izd-vo, 1964. 159 p. (MIRA 17:6)

VASIL'YEV, V.G.; GRACHEV, G.I.; NEVOLIN, N.V.; OZERSKAYA, M.L.; PODOBA, N.V. Prínimali uchastiye: ALEKSEYCHIK, S.N.; GUSHKOVICH, S.N.; DIKENSHTEYN, G.Kh.; DZVELAYA, M.F.; DRABKIN, I.Ye.; IVANOVA, M.N.; KAZARINOV, V.P.; KALININA, V.V.; KOZLEKHO, S.P.; MEDVEDEV, V.Ya.; PUSIL'NIKOV, M.R.; ROSTOVTSEV, N.N.; SKOBLIKOVA, G.I.; STEPANOV, P.P.; TITOV, V.A.; FOTIADI, E.E.; CHIRVINSKAYA, M.V.; SHMAROVA, V.P. GRATSIAKOVA, O.P., red.; BEKMAN, Yu.K., vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Manual for geophysicists in four volumes] Spravochnik geofizika v chetyrekh tomakh. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gornotoplivnoi lit-ry. Vol.1. [Stratigraphy, lithology, tectonics, and physical properties of rocks] Stratigrafiya, litologiya, tektonika i fizicheskie svoistva gornyx porod. Pod red. O.P. Gratsianovoi. 1960. 636 p. (MIRA 14:1)
(Petroleum geology) (Gas, Natural--Geology)

MKDVEDMV, V.Ya.; STEPANOV, P.P.

Density of the old formations in the western Tien Shan [with summary
in English]. Sov. geol. 3 no.10:81-98 0'60. (MIRA 13:10)

1. Trest Aerogeologiya, Vsesoyuznyy nauchno-issledovatel'skiy
institut geofizicheskikh metodov razvedki.
(Tien Shan--Geology, Structural)

S/035/62/000/002/038/052
A001/A101

AUTHOR: Stepanov, P. P.

TITLE: On the problem of reduction of gravity in mountainous regions

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 2, 1962, 24,
abstract 2G150 (V sb. "Razved. i promysl. geofiz.", no. 37, Moscow,
1960. 65-69)

TEXT: The author calculates reduction of Bouguer topographical (within the 0-zone of Hayford) and statistical for 23 points located in regions of Eastern Siberia, different in their relief (lowland regions of Yakutia, slightly broken, high-mountain regions of Pribaykal'ye and Zabaykal'ye). Heights are taken from 1:100,000 scale maps. Statistical reductions are calculated by Bouguer's reduction formula in which the value of density D is determined from the condition of minimizing the sum of squares of deviations of statistical reductions from topographical (at density 2.67) for the 23 points investigated. The value $D = 2.63$ was obtained. The mean square deviations of Bouguer and statistical reductions turned out to be equal to ± 1.83 and ± 1.39 mgal respectively B. Sh.

[Abstracter's note: Complete translation]

Card 1/1

LISHNEVSKIY, E.N.; STEPANOV, P.P.

Basic tectonic characteristics of the central and southern parts
of the Zeya-Bureya Plain. Geol. i geofiz. no.5:117-122 '63.
(MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh
metodov razvedki, Moskva.
(Zeya-Bureya Plain--Geology, Structural)

STEPANOV, P.P.

Use of topographic isostatic reductions. Prikl. geofiz. no.37:
147-153 '63. (MIRA 16:10)

YELISEYEVA, I.S.: STEPANOV, P.P.

Using magnetic and gravimetric prospecting data in the compilation
of structural diagrams of the basement surface. Razved. i prom.
geofiz. no.51:49-58 '64. (MIRA 17:11)

VOLKHONIN, V.S.; LISHNEVSKIY, E.N.; STEPANOV, P.P.

Subsurface structure of the Zeya-Bureya Depression according to geological and geophysical data. Izv. vys. ucheb. zav.; geol. i razv. 7 no.7:27-34 JI '64 (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki.

BUTOMA, B.Ye.; SOKOLOV, P.A.; BALAYEV, D.N.; SERGEYEV, N.M.; SHUMSKIY, K.A.;
TYAPKIN, M.Ya.; SMIRNOV, V.A.; PIROGOV, N.I.; FEDOROV, N.A.;
GOLYASHKIN, G.S.; KUZ'MIN, A.P.; AKULINICHEV, V.P. brigadir; GORBENKO,
Ye.M.; BYSTREVSKIY, L.M., inzh.; STEPANOV, P.S., brigadir; Us, I.S.,
brigadir-sudosborshchik, deputat Verkhovnogo Soveta SSSR; USTINOV,
P.D., slesar'-sborshchik; FINOGENOVA, N.Ya., tokar'; LERNER, M.;
ALEKSEYEV, R.Ye.; SIVUKHIN, K., starshiy master; OSTAP'YEV, A.I.;
TROFIMOV, B.A., inzh.; KOVRYZHKIN, V.F., inzh.; MOISEYEV, A.A., prof.;
GOLUBEV, N.V.; MOGILEVICH, V.I.; ANDRYUTIN, V.I.; ANDRIYEVSKIY, M.I.;
MATSKEVICH, V.D., dots.

Shipbuilders prepare for the 21st Extraordinary Congress of the GPSU.
Sudostroenia 25 no.1:1-25 Ja '59. (MIRA 12:3)

1. Predsedatel' Gosudarstvennogo komiteta Soveta Ministrov SSSR po sudostroyeniyu, ministr SSSR (for Butoma). 2. Nachal'nik upravleniya sudostroitel'noy promyshlennosti Leningradskoy oblasti (for Sokolov).
3. Direktor Baltiyskogo sudostroitel'nogo zavoda im. S.Ordzhonikidze (for Balayev). 4. Nachal'niki tsekhov Baltiyskogo sudostroitel'nogo zavoda im. S. Ordzhonikidze (for Sergeyev, Shumskiy). 5. Nachal'nik mekhanicheskogo tsekha Baltiyskogo sudostroitel'nogo zavoda im. S. Ordzhonikidze (for Tyapkin). (Continued on next card)

BUTOMA, B.Ye.---(continued) Card 2.

6. Brigada kommunisticheskogo truda Baltiyskogo sudostroitel'nogo zavoda im. S. Ordzhonikidze (for Smirnov). 7. Glavnyy inzhener Admiralteyskogo sudostroitel'nogo zavoda, Leningrad (for Pirogov). 8. Glavnyy inzhener sudostroitel'nogo zavoda im. A.A. Zhdanova (for Fedorov). 9. Nachal'nik elektrodnoy tsekha Sudostroitel'nogo zavoda im. A.A. Zhdanova (for Golyashkin). 10. Nachal'nik tsekha kommunisticheskogo truda sudostroitel'nogo zavoda im. A.A. Zhdanova (for Kuz'min). 11. Malyarnyy tsakh sudostroitel'nogo zavoda im. A.A. Zhdanova (for Akulinichev). 12. Glavnyy inzhener Nikolayevskogo sudostroitel'nogo zavoda im. I.I. Nosenko (for Gorbenko). 13. Nikolayevskiy sudostroitel'nyy zavod im. I.I. Nosenko (for Bystrevskiy, Us, Ustinov, Finogenova). 14. Slesarno-shorochnaya brigada Nikolayevskogo sudostroitel'nogo zavoda im. I.I. Nosenko (for Stepanov). 15. Zamestitel'nachal'nika konstruktorskogo byuro sudostroitel'nogo zavoda "Krasnoye Sormovo" (for Lerner). 16. Glavnyy konstruktor konstruktorskogo byuro sudostroitel'nogo zavoda "Krasnoye Sormovo" (for Alekseyev). 17. Sudostroitel'nyy zavod "Krasnoye Sormovo" (for Sivukhin). 18. Direktor sudostroitel'nogo zavoda "Leninskaya kuznitsa" (for Ostaf'yev). 19. Sekretar' partkoma Tsentral'nogo nauchno-issledovatel'skogo instituta (for Trofimov). (Continued on next card)

BUTOMA, B.Ye.--(continued) Card 3.

20. Predsedatel' Leningradskogo oblastnogo pravleniya Nauchno-tekhnicheskogo otdela sudostroitel'noy promyshlennosti (for Moiseyev).
21. Glavnyye inzhenery Konstruktorskogo byuro (for Golubev, Andryutin).
22. Glavnyy konstruktor Konstruktorskogo byuro (for Mogilevich).
23. Nachal'nik Tsentral'nogo tekhniko-konstruktorskogo byuro (for Andriyevskiy).
24. Zamestitel' direktora Leningradskogo korablistroitel'nogo instituta po uchebnoy chasti (for Matskevich).
(Shipbuilding)

STEPANOV, Petr Stepanovich; MURAV'YEV, Ye., red.; FILIPPENKOVA, M.,
tëkh. red.

[A province transformed by the October Revolution; studies on the
history of the building of socialism in Smolensk Province] Preobra-
zhennaia Oktiabrem; ocherki po istorii sotsialisticheskogo stroitel'-
stva v Smolenskoï oblasti. Smolensk, Smolenskoe knizhnoe izd-vo,
1961. 439 p. (MIRA 15:7)
(Smolensk Province—Economic conditions)

STAPANOV, P.S.

Current status of the subject of social hygiene. Sov.zdrav. 16
no.12:48-49 D '57. (MIRA 11:1)
(SOCIAL HYGIENE
in Russia, current status (Rus))

STEPANOV, P.S.

Simplified method for determining the curve of the daily
secretion of urobilin. Lab.delo 6 no.3:32 My-Je '60.

(MIRA 13:7)

1. Kafedra epidemiologii i mikrobiologii (zav. - prof. N.G.
Kamalov) Tbilisskogo instituta usovershenstvovaniya vrachey.
(UROBILINS)

STEPANOV, P.S. (Tbilisi)

Influence of the periods of detection and treatment of female
gonorrhoea on the manifestation of sterility. Kaz. med. zhur.
no. 2:110-111 Mr-Apr '64. (MIRA 14:4)
(GONORRHEA) (STERILITY)

STEPANOV, P.S. (Tbilisi)

Review of the collection "Materials of medical geography."
Sov. zdravookhr. 22 no.3:90-91 '63 (MIRA 17:1)

STEPANOV, P.S.

Development and course of syphilis in an irradiated organism.
Med. rad. 8 no.7:56-58 J1 '63. (MIRA 17:1)

LOGVINOV, Vladimir Savol'yevich; STEPANOV, P.T., red.

[Whiff of the steppe breeze; sketches] Glotok stepnogo
vetra; ocherki. Stavropol', Stavropol'skoe knizhnoe
izd-vo, 1964. 78 p. (MIRA 18:8)

STEPANOV, P.V.

PHASE I BOOK EXPLOITATION SOV/3721

Senchenkov, Aleksandr Filippovich, and Pavel Vasil'yevich Stepanov

Konstruktsiya i tekhnologiya izgotovleniya razreznykh lentochnykh serdechnikov dlya transformatorov (Design and Construction of Split-Ribbon Cores for Transformers) Moscow, 1958. 35 p. (Series: Peredovoy opyt proizvodstva. Seriya "Radiopriborostroyeniye," vyp.4) 3,000 copies printed.

Reviewer: T.I. Dmitriyeva; Ed.: B.A. Borodin; Tech. Ed.: R.A. Sukhareva.

PURPOSE: This booklet is intended for people interested in the production of radio and television receiver components.

COVERAGE: The booklet deals with methods of the production of split-ribbon cores for low-power transformers used in radio and television receivers. The authors emphasize the need for economizing costly materials in view of the fact that, according to plans,

Card 1/3

Design and Construction (Cont.)

SOV/3721

more than 10 million radio and television sets are to be produced in 1960, necessitating the production of some 30 million low-power transformers. The methods of production described in the booklet aim at better utilization of magnetic and insulating properties of materials used. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

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Ch. I. Split-Ribbon Cores	4
Advantages of ribbon cores attributed to the full utilization of the texture of cold-rolled transformer steel	5
Parameters of ribbon cores in the presence of an air gap	7
Designs of split-ribbon cores	10
Ch. II. Technology of Production of Split-Ribbon Cores	15
Method of coiling	20
Method of bending	21

Card 2/3

PROCESSES AND PROPERTIES INDEX

2

CP:

Statistical-mechanical interpretation of a particular case of second-order phase transition. P. H. RATHMANN. *J. Exptl. Theoret. Phys. (U. S. S. R.)* 9, 1222-72 (1959); cf. *C. A.* 25, 21^o.—Math.-theoret. G. considers the case of a binary val.-centered cubic lattice, using the Einstein heat-capacity model, and calculates the effect of the relation between degree of order and the state of excitation on the order-disorder transformation, assuming that only neighboring atoms exert an effect but taking into account differences in *at. diam.* The thermodynamic functions are derived. It is assumed that the strength of the bonds between neighboring atoms can be calcd. from the modulus of elasticity of the completely ordered alloy and of the pure components. F. H. Rathmann

METALLURGICAL LITERATURE CLASSIFICATION

650-51A

1ST AND 2ND ORDERS
PROCESSED AND PROPERTIES INDEX

9

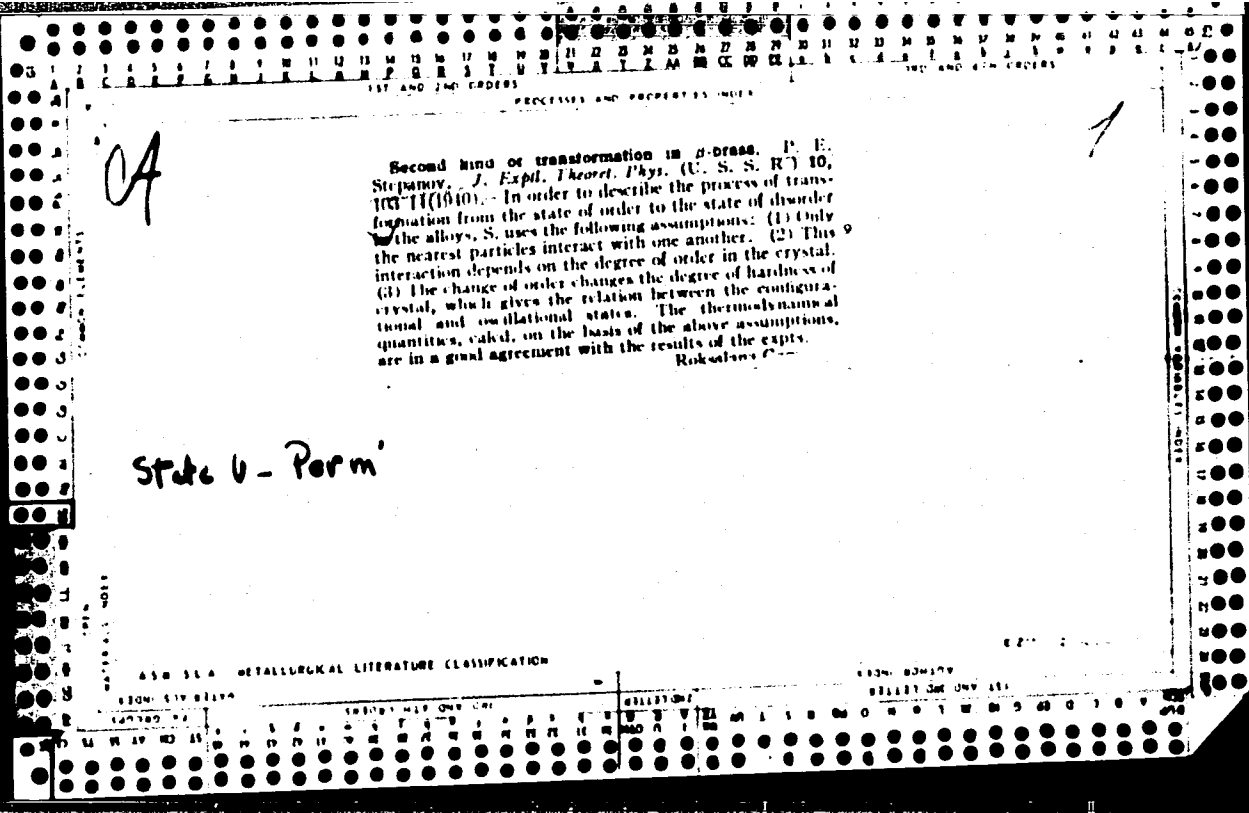
CA

Transformations of the second kind in β -brass. P. E. Scherrer. *J. Phys. (U. S. S. R.)* 2, 353-64(1940). See *Z. A. 34, 7921**. P. H. Rathmann

State U. Perm

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

GROUP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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2

CA

Relaxation phenomena in a shock wave in a gas.
 P. N. Suvorov (A. M. Gor'ki State Univ., Moscow).
 Zhur. Eksp. Fiz. No. 17, 577-582 (1967). — The possi-
 bility of using a shock wave for the investigation of the
 rate of the redistribution of energy between translational
 and rotational degrees of freedom is analyzed in the in-
 stance of a shock wave in N₂, where the usual ultrasonic
 method becomes impracticable owing to the brevity of
 the corresponding relaxation time, 10⁻⁹ sec., and the
 necessity of resorting to very high frequencies. The
 shock wave is composed of 2 regions, one, of a width cor-
 responding to the gas-dynamic time of flow path, being the
 seat of redistribution of energy among the translational
 degrees of freedom, the other, being the area of passage
 of energy from translational to rotational degrees of
 freedom, of a width corresponding to the time lag of that
 passage. Formulas are derived for the structure of a
 shock wave with relaxation permitting calcul. of the trans-
 lational-rotational relaxation time from the width of the
 2nd region and the pressure increase therein. Three deter-
 minations will give the heat capacity of the rotational degrees of
 freedom. N. Then

PA 174761

USSR/Physics - Low Temperatures
Oscillations,
Elastic

11 Sep 50

"Relaxation Absorption of Elastic Oscillation in
beta-Brass Close to the Curie Point," P. Ye.
Stepanov; Phys Inst Imeni Lebedev, Acad Sci USSR,
Molotov State U

"Dok Ak Nauk SSSR" Vol LXXIV, No 2, pp 217-220

Considers deg of disorder eta in Cu-Zn alloy (50%
atomic compn) crystd in vol-centered cubic lat-
tice; also relaxation time tau, logarithmic

174761

USSR/Physics - Low Temperatures
(Contd)

11 Sep 50

decrement beta of oscillation damping, and fre-
quency of oscillations omega. Finds analytical
expressions for dependence of independence of
deg of order upon displacement stress s. Sub-
mitted 8 Jul 50 by Acad M. A. Leontovlch.

STEPANOV, P. Ye.

174761

STEINBOV, I. B.

USSR/Chemistry - Heat Capacity of Crystals Nov 52

"The Heat Capacity of Crystals With a High Axial Elastic Anisotropy," P. Ye. Stepanov, Phys Inst Imeni P. N. Lebedev, Acad Sci USSR, Moscow

"Zhur Fiz Khim" Vol 26, No 11, pp 1642-1658

The author states that for crystals having axial symmetry on the basis of elastic properties there is, in the case of a sufficiently high anisotropy, a range of temps higher than those at which the heat capacity is proportional to the cube of the temp, and, on the other hand,

242712

Lower than those at which the law of Dulong and Petit applies, in which the temp curve of heat capacity has a special form specific for crystals of axial symmetry. The computation of the vibrational heat capacity in the field of temps mentioned can be made in an approximation of a continuous medium, as done in the Debye theory of heat capacities. This computation showed that the heat capacity of all stratified (in the case of axial symmetry) crystals is not expressed by a single formula, but by two formulae.

242712

MURRAY, Raymond L.; MARGULIS, U.Ya., redaktor; NAKHIMSON, I.G., redaktor;
STEPANOV, P.Ye., redaktor; GRIBOVA, M.P., tekhnicheskii redaktor

[Introduction to nuclear engineering. Translated from the English]
Vvedenie v iadernuiu tekhniku. Perevod s angliiskogo. Pod red.
P.E.Stepanova. Moskva, Izd-vo inostrannoi lit-ry, 1955. 408 p.
(MLRA 9:12)

(Nuclear reactors) (Nuclear engineering)

ACCESSION NR: AT4019042

S/0000/63/000/000/0142/0143

AUTHOR: Lebedev, V. I.; Stepanov, P. Ye

TITLE: Representation of the decay curves of fission fragments by functions of the assigned type (e super bt)

SOURCE: Voprosy* fiziki zashchity* reaktorov; sbornik statey (Problems in physics of reactor shielding; collection of articles). Moscow, Gosatomizdat, 1963, 142-143

TOPIC TAGS: nuclear reactor, reactor shielding, radiation decay, decay curve, fission fragment decay curve, e super bt function

ABSTRACT: In order to represent the decay curves of fission fragments, obtained experimentally, in the form of the sum of functions of an assigned type, the following problem is solved in this article. Given a function of two variables $(b; t)$, limited in a rectangle $[b' < b < b''] [t_0 \leq t \leq T]$, rather smooth and such that any system of functions $\varphi(b_j; t)$ at different b_j is linearly independent on the segment $[t_0, T]$; let the function $f(t)$ be given on segment $[t_0, T]$ at points $t = t_i (i = 0, 1, \dots, N)$. The following expression is designated through $E = E(t_0, T, n, p_i, a_j, b_j)$:

Card 1/2

$$E = \left(\sum_{i=0}^N [f(t_i) - \sum_{j=1}^n a_j \varphi(b_j, t_i)]^2 p_i \right)^{1/2}, \quad (1)$$

ACCESSION NR: AT4019042

where $p_i \geq 0$ are weights normed in a definite manner and selected on the basis of the required character of the approximation. The following problems are posed and solved in the article: (1) for given $E_1 > 0, n_1$, find the minimal $n (n_1 \leq n)$ at which $\min_{a_k, b_k} E < \epsilon_1$;

(2) for given n find $\min_{a_k, b_k} E; a_k, b_k$; (3) for given $n, b_k (k = 1, 2, \dots, n)$ find $\min_{a_k} E$.

The first and second problems are nonlinear: the third is linear. For the solution of the first and second problems the author employs a gradient iteration converging process with automatic selection of step increment. A program for the algorithm described in the paper was compiled for use with the delectronic digital computer M-20. This program was then used to develop decay curves of fission fragments of U^{235} . The curves were presented with an accuracy of 5% in the form of sums of $\sum a_k e^{-b_k t}$. Orig. art. has: 5 formulas.

ASSOCIATION: none

SUBMITTED: 14Aug63

DATE ACQ: 27Feb64

ENCL: 00

SUB CODE: NP

NO REF SOV: 001

OTHER: 000

Card 2/2

Torsion

Torsion of a resistor bar, weakened by two longitudinal, cylindrical holes. Insk. stor. no. 11, 1954.

9. Monthly List of Russian Accessions, Library of Congress, November 195~~8~~₂, Uncl.

STEPANOV, R. D.

USSR/Physics - Physical sciences

Card 1/1 : Pub. 124 - 14/29

Authors : Stepanov, R. D., Cand. of Techn. Sc.

Title : Durability and its physical bases

Periodical : Vest. AN SSSR 6, 78-80, June 1954

Abstract : Minutes of joint meeting of Technical and Physico-Mathematical Sciences Sections of the Acadm. of Sc. USSR at which various problems of durability, elasticity and mechanical characteristics of solid bodies were discussed.

Institution : ...

Submitted : ...

STEPANOV, R. D.

USSR/Miscellaneous - Plastics

Card : 1/1

Authors : Stepanov, R. D., Cand. in Tech. Scs. and Ayanyan, E. M.

Title : Mechanics of the technology and the production of various plastic masses

Periodical : Vest. AN SSSR, 24, Ed. 5, 66 - 67, May, 1954

Abstract : Describes a conference organized by the Institute of Mechanics of the Acad. of Scs. of the USSR for the purpose of studying scientific methods for the treatment of various plastic masses.

Institution : ...

Submitted : ...

СТЕПАНОВ Р. Д.

AUTHOR: STEPANOV, R.D. (Moscow) 40-5-6/20

TITLE: On the Flutter of Cylindrical Shells and Plates Moving in a Gas Flow (O flattere tsilindrisheskikh obolochek i paneley dvizhushchikhsya v potoke gaza).

PERIODICAL: Prikladnaya Mat.i Mekh.,1957,Vol.21,Nr 5,pp.644-657 (USSR)

ABSTRACT: Starting from the fundamental relations of the theory of cylindrical shells the author seeks the critical velocities for different boundary value problems for which there can occur a flutter of the shells during motions in the gas flow. In the calculation of the eigen oscillations it was started from the equations of cylindrical plates valid for small oscillations. The method of small oscillations cannot be applied, however, to all the interesting boundary value problems. Therefore the natural oscillations of the shells were calculated according to a variational method. In this way the critical velocities for a class of closed cylindrical shells of medium length for different boundary conditions at the ends of the shell were investigated. The results are given in tables. The convergence of the variational method was extraordinarily good. Besides of the closed cylindrical shells there were investigated, in addition, shells which are hinge-like opened along a generatrix of the cylinder. A comparison of the results shows

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On the Flutter of Cylindrical Shells and Plates Moving in a Gas Flow. 40-5-6/20

that it is generally sufficient for practical purposes to apply the equations for closed cylindrical plates in the simplified form for determining the natural oscillations. There are 2 figures, 2 tables, and 5 Slavic references. The author particularly refers to the papers by V.Z. Vlasov [Ref. 1] , A.A. Il'yushin [Ref. 3] , Bubnov-Galerkin, V.S. Zudina and I. F. Barkleyeva.

SUBMITTED: May 28, 1957

AVAILABLE: Library of Congress

Card 2/2

/ 10 6300

27249
S/124/61/000/007/013/014
A052/A101

AUTHOR: Stepanov, R. D.

TITLE: On the flutter of cylindrical panels moving in a gas

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 7, 1961, 21, abstract 76130
("Inzhenernyy sb.", no. 25, 1959, 92-100)

TEXT: An application of the Galerkin method to the solution of the problem of flutter of a round cylindrical open profile shell moving in a gas with the supersonic velocity is given. It is assumed that the shell has on its bounding longitudinal and lateral edges, attachments articulately fixed in the planes of these edges. The shell equilibrium equations are taken in accordance with the general engineering theory of slanting shells. Aerodynamic forces acting on the shell are allowed for by the formula of piston theory.

From the summary

[Abstracter's note: Complete translation]

Card 1/1

PLASMA IONOSPHERIC REFLECTION

Abstracts and SEE. Detailed abstracts
Eubank, J. G. et al., Ionospheric Reflection, Vol. 26 Moscow, 1958.
286 p. 2,400 copies printed.
Sponsoring Agency: Abstracts and SEE. Odeskenskoye Vuzovskoye Nauchnoye
Institut im. M. V. Lomonosova.

Rep. No.: A. A. 11,743; No.: G. I. Pribluzhnyi; Tech. No.: M. I. K. L. Lomonosova.
PURPOSE: This book is intended for engineers.

CONTENTS: The book contains 29 articles dealing with practical work performed
by scientific workers, such as the calculations of shells, rods, and plates,
and solving finite problems in stress distribution and equilibrium. Oscillations
(including finite problems) and vibration of shells, equilibrium of shell panels,
rods and solids, stability of rods, plates, frames and other members, stress
concentration, and buckling are discussed. Oscillations of aircraft wings
are studied. References accompany each article.

1. V. I. Zhurav. Concerning the Question of Elastic Equilibrium of
a Cylindrical Shell in a Shearing Shell With End Deflections [Received on
1/6/1958] 49

2. S. M. Zhurav. Deformation of a Free Cylindrical Shell Under
Shear [Received on 1/8/1958] 54

3. P. M. Zhurav. Concerning the Calculation of Bending Cylindrical
Shell Deflections [Received on 1/9/1958] 59

4. L. A. A. (see below). Concerning the Calculation of Curvature Parts
with Rectangular Components [Received on 10/27/1955] 66

5. M. I. Zhurav, A. E. (see below). Mutual Oscillations of Prismatic Shells
of the Type Used for Aircraft Shell Wing [Received 6/12/1955] 79

6. G. I. Zhurav, A. E. (see below). Two Simple Problems in Elastic Equilibrium
with Large Displacements [Received on 9/11/1955] 85

7. M. I. Zhurav. Concerning the Calculation of Elastic Curvature
Cylinders Connected Together in Individual Points [Received on 12/10/1955] 87

8. G. I. Zhurav. Curvature Components of Fundamental Beam Functions
[Received on 3/15/1956] 94

9. L. A. A. (see below). Experimental Testing of Performance of an
Orthotropic Cylindrical Shell Reinforced by a Ring [Received on 1/23/1958] 101

10. S. M. Zhurav, E. V. [see below]. Elastic Equilibrium of Solids of
Revolutions [Received on 11/30/1956] 113

11. S. M. Zhurav. Approximate Solution of a Problem Relating to
Certain Particular Cases of a Load Applied to an Elastic Annular Segment
[Received on 6/15/56] 117

12. S. M. Zhurav. Elastic Equilibrium of a Cylindrically Anisotropic
Shell Under a Load Uniformly Distributed Longitudinally [Received
on 12/1/1955] 148

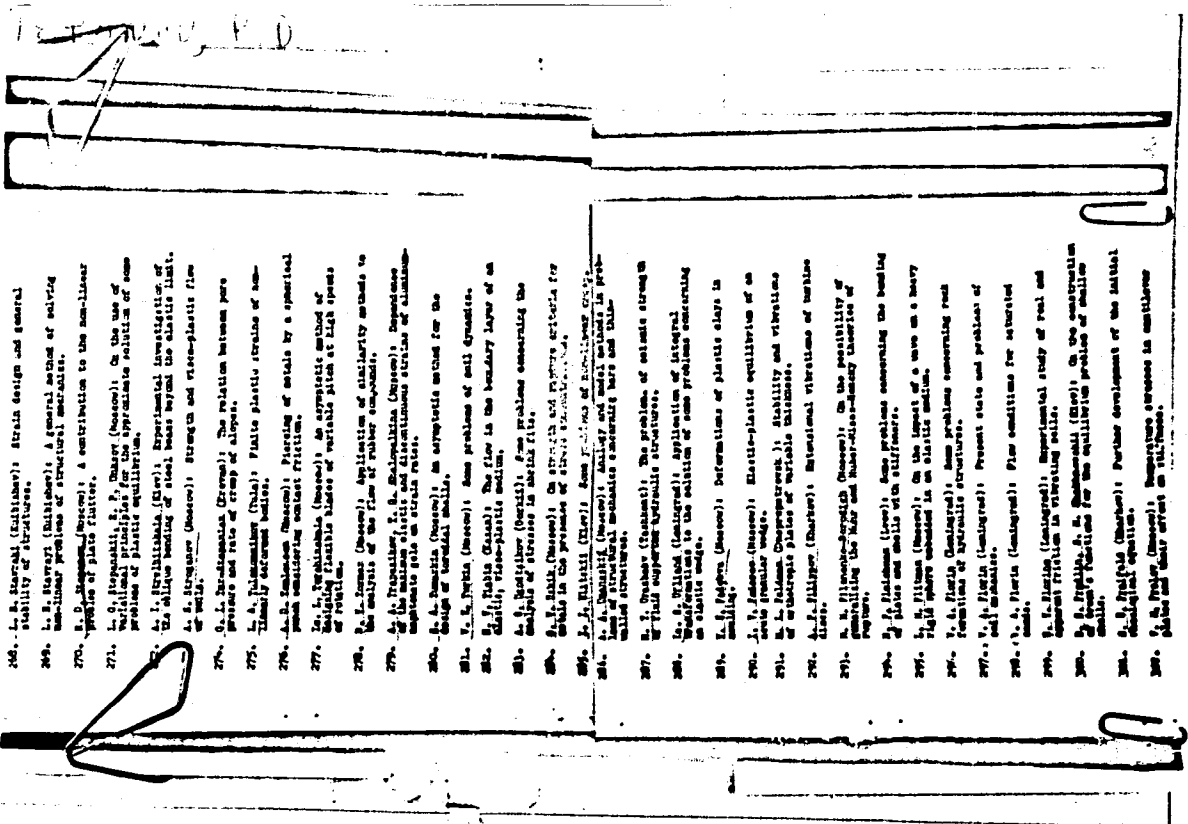
13. S. M. Zhurav. Stability of Rods and Plates Beyond the
Elasticity Limit [Received on 3/2/1958] 161

14. S. M. Zhurav. Stress Concentration Under Simple Loading
in an Orthotropic Plate Reinforced by a Circular Hole [Received on 2/20/1956] 179

Card 4/6

STEPANOV, R. D.

report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan. - Feb. 67



- 266. L. S. Zhuravskii (Moscow): Strain design and general stability of structures.
- 269. L. S. Zhuravskii (Moscow): A general method of solving non-linear problems of structural mechanics.
- 270. L. S. Zhuravskii (Moscow): A contribution to the non-linear problem of plate flutter.
- 271. L. O. Krasovskii, E. P. Zhuravskii (Moscow): On the use of variational principles for the approximate solution of some problems of plastic equilibrium.
- 272. A. I. Zhuravskii (Moscow): Experimental investigation of the oblique bending of steel beams beyond the elastic limit.
- 273. A. S. Aronovskii (Moscow): Strength and visco-plastic flow of soils.
- 276. G. I. Zhuravskii (Moscow): The relation between pore pressure and rate of creep of alloys.
- 277. L. A. Lukatskii (Dniep): Plastic plastic strains of non-linearly elastic bodies.
- 278. A. A. Zolotarev (Moscow): Flaring of metals by a spherical punch considering contact friction.
- 279. I. S. Zhuravskii (Moscow): An asymptotic method of calculating flexible blades of variable pitch at high speeds of rotation.
- 280. E. A. Zhuravskii (Moscow): An asymptotic method for the design of turbine shells.
- 281. V. S. Yudin (Moscow): Some problems of soil dynamics.
- 282. E. I. Galin (Moscow): The flow in the boundary layer of an elastic visco-plastic medium.
- 283. A. G. Kuznetsov (Moscow): Some problems concerning the analysis of stresses in metal filaments.
- 284. E. A. Zhuravskii (Moscow): On strength and rupture criteria for metals in the presence of elastic inclusions.
- 285. E. A. Zhuravskii (Moscow): Some problems of non-linear theory of structural mechanics concerning bars and thin-walled structures.
- 287. E. I. Galin (Moscow): The problem of elastic stresses in thin-walled structures.
- 288. E. I. Galin (Moscow): Application of integral equations to the solution of some problems concerning an elastic wedge.
- 289. E. I. Galin (Moscow): Determinations of plastic slaps in bending.
- 290. E. I. Galin (Moscow): Elastic-plastic equilibrium of an elastic wedge.
- 291. E. I. Galin (Moscow): Stability and vibrations of anisotropic plates of variable thickness.
- 292. A. I. Zhuravskii (Moscow): Rotational vibrations of turbine discs.
- 293. E. I. Galin (Moscow): On the possibility of generalizing the Mohr and Huber-Hill stress criteria of failure.
- 294. E. I. Galin (Moscow): Some problems concerning the bending of plates and shells with stiffeners.
- 295. E. I. Galin (Moscow): On the theory of a wave on a heavy liquid sphere embedded in an elastic medium.
- 296. E. I. Galin (Moscow): Some problems concerning the formation of hydrodynamic structures.
- 297. E. I. Galin (Moscow): Present state and problems of soil mechanics.
- 298. E. I. Galin (Moscow): Flow conditions for saturated soils.
- 299. E. I. Galin (Moscow): Experimental study of soil and contact friction in rotating soils.
- 300. E. I. Galin (Moscow): On the construction of a theory of plasticity for the equilibrium problem of elastic bodies.
- 301. E. I. Galin (Moscow): Further development of the initial boundary value problem.
- 302. E. I. Galin (Moscow): Numerical stresses in contact.

10.6300

S/044/62/000/007/015/100
C111/C333

AUTHOR: Stepanov, R. D.

TITLE: The application of asymptotic integration when solving an equation from the theory of eigen-oscillations

PERIODICAL: Referativnyy zhurnal, Matematika, no. 7, 1962, 36, abstract 7B174. ("Inzhenernyy sb.", 1960, 27, 207-210)

TEXT: Considered is the vibration of closed cylindrical shells and panels which have articulated struts along the elements of the cylinder. The problem leads to a differential equation of 8th order with variable coefficients. The solution of this equations is obtained using the method of asymptotic integration, which primarily means that the given equation is so transformed that the coefficients of the transformed equation are only slightly different from the coefficients of an equation with a known solution. An expression for the general integral of the initial equation is obtained. The bibliography contains 6 titles.

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[Abstracter's note: Complete translation.]

Card 1/1

VIKTOROV, V.V. (Moskva); STEPANOV, R.D. (Moskva)

Simulation of the action of a blast with concentrated charges in
similar soils. Inzh.sbor. 28:87-96 '60. (MIRA 13:10)

(Blasting)

10 6300

32706

S/145/60/000/012/001/008
D221/D301

AUTHOR: Stepanov, R. D., Candidate of Technical Sciences

TITLE: On the problem of plate flutter in a non-linear formulation

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye, no. 12, 1960, 46-54

TEXT: An elastic plate of rectangular plane section ab , and of thickness h exposed at one side to a supersonic gas flow is considered. It is assumed that the plate is supported along its entire contour by an ideally rigid diaphragm. The normal component of load is deduced on the basis of the piston theory described by A. A. Il'yushin (Ref. 4: Zakon ploskikh secheniy v aerodinamike bol'shikh sverkhzvukovykh skorostey, Prikladnaya matematika i mekhanika, v. 20, no. 6, 1956). The author proposes an approximate solution of Karman's equations for the plate. The form of bending is in the case of vibrations $w(x,y,t) = f(t)\psi(x,y)$. In the case of cylindrical bending (two term approximation of w in respect of the

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S/145/60/000/012/001/008
D221/D301

On the problem of plate ...

dimensionless coordinate ξ and a single term approximation with respect to $\eta = y/b$ a system of non-linear differential equations is obtained by Galerkin's method. The above are expressed in dimensionless variables ξ, τ, φ_1 and φ_2 . By substitution of variables $\frac{d\varphi_1}{d\tau} = u_1$ ($i = 1, 2$), this set is reduced to four non-linear differential equations of the first order. They were integrated by a computer for an interval of dimensionless time $0 \leq \tau \leq 40$. The automatic selection of the integration step by the method of Runge-Kutta is described. The system was solved for a plate having $a/b = 3$, $h/a = 1/400$ values of the constants and initial conditions are specified by the author. The results of calculations demonstrate that the value of the critical speed in the non-linear formulation depends on the initial conditions. Graphs of forced vibrations for speeds of 800 to 1600 m/sec are given, the initial deflection varying according to $w = \varphi_1(0) \sin \pi \xi + \varphi_2(0) \sin 2\pi \xi$. The analysis reveals that the frequency of oscillations and the magnitude of the

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D221/D30

On the problem of plate ...

critical speed of the plate markedly increase with greater amplitudes of the initial deflection. The envelope for speeds below the critical value is a curve of damped vibrations for all initial conditions. For higher speeds, the envelope takes the shape of a curve of periodic oscillations. Some increase in the amplitude takes place only for critical values of speed of flow. Investigations of the above solution present a practical interest. They reveal that the susceptibility of the plate to be excited into flutter decreases with greater initial excitation in the form of the initial bending. It is stated that among the computed cases especially interesting is the one in which at $\tau = 0$ the surface of the plate is subject to a speed $\dot{w} = \dot{\varphi}_1 \sin \pi \xi$; caused by a concentrated explosion, or impact of a meteorite. There are 4 figures and 4 Soviet-bloc references.

ASSOCIATION: Institut mekhaniki AN SSSR (Institute of Mechanics AS USSR)

SUBMITTED: April 15, 1960

Card 3/3

L 04641-67 EWT(m)/EWP(w)/EWP(t)/ATI IJP(o) AD/WB

ACC NR: AP6024412

(N)

SOURCE CODE: UR/0020/66/169/001/0085/0088

AUTHOR: Shal'nev, K. K.; Stepanov, R. D.; Logov, I. L.ORG: Institute of Problems of Mechanics, Academy of Sciences SSSR (Institut problem mekhaniki Akademii nauk SSSR)TITLE: Cavitation-mechanical strength of metals

SOURCE: AN SSSR. Doklady, v. 169, no. 1, 1966, 85-88

TOPIC TAGS: lead, cavitation, ultimate strength, erosion, metals stress, creep mechanism, yield stress

ABSTRACT: To check on the effect of cavitation erosion on various parts of hydraulic machinery, the authors have set up experiments to investigate the influence of cavitation on the deformation curves of metals under conditions of uniaxial tension. The investigations were made in a hydrodynamic tube with 24 x 100 mm working chamber. The cavitation was excited by a round cylinder of 24 mm dia. The stream velocity in all experiments was maintained constant at 22 m/sec; the stage of the cavitation zone was also kept constant. The experimental conditions were such that the frequency of the pulsations of the pressure should lie in the 200 - 30,000 cps range. The material tested was 99.985% pure lead (SI/grade), being the most plastic material that retains an elongation deformation after removal of the load. The samples were prisms of length 18 - 20 mm, thickness 1.2 - 1.5 mm, and height 10 - 12 mm. The load was produced by a suspended weight. Tests were made under both continuous and intermittent conditions. The authors point out that in all the theories of cavitation sight is

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UDC: 532.528

J. 04641-67

ACC NR: AP6024412

3

lost of the structure of the cavitation zone accompanying the erosion zone and its physical aspects. The cavitation zone was shown by one of the authors in another paper (Shal'nev, DAN v. 139, No. 1, 1961) to consist of caverns which occur periodically, pulsate, and are carried away by the stream. This unstable state of the cavitation zone gives rise to sound waves and pulsating pressures, producing conditions for the material which differ from the ordinary static tests. The tests resulted in creep curves for lead under vibration and cavitation at different stresses. The strain curves were plotted from creep curves for intervals of 30 and 120 sec. The results showed an appreciable increase in the creep of the lead in the cavitating liquid, compared with tests in air, and a decrease in the yield point of the lead. Various other changes in the mechanical properties of the lead under the influence of cavitation are briefly discussed. The authors thank N. A. Lysov and I. A. Kolesnikov for help with the laborious experiments. This report was presented by Academician P. Ya. Kochina 24 September 1965. Orig. art. has: 4 figures.

SUB CODE: 20, 11/ SUBM DATE: 10Sep65/ ORIG REF: 002/ OTH REF: 001

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Card 2/2

ARKHANGEL'SKIY, V.A.; STEPANOV, R.D.

In the scientific institutions of Canada. Vest. AN SSSR 31 no.11:
101 N '61. (MIRA 14:11)

(Canada--Mechanics--Research)

КОСТЕВ, А.В., СОЛНЦЕВА, Г.А., СТЕПАНОВ, А.С.

Reactions of hydrazine derivatives. Part 3rd. Synthesis of 1,5-diamine by the hydrogenolysis of pyrazolines. Zhur.ob.khim. 32 no.7:2249-2254 11 '62. (MIRA 15:7)

1. Moskovskiy gosudarstvennyy universitet.
(Amines) (Pyrazoline) (Hydrogenolysis)

TALISMAN, L.V.; KOLYASHKINA, G.M.; KALYAYEVA, N.V.; STEPANOV, R.G.

Pyrolysis of gas condensates of Krasnodar Territory wells.
Khim. i tekhn. topl. i masel 8 no.7:1-6 JI '63. (MIRA 16:7)

1. Kuybyshevskiy filial NIIS.
(Krasnodar Territory---Condensate oil wells)

STEPANOV, R. S. Cand Agr Sci -- (diss) "^{Structure properties}Texture and characteristics
of the wood pulp of ~~one~~ fir trees^{of} in the Moskovskaya Oblast." Mos, 1957.
13 pp 20 cm. (Mos Order of Lenin Agr Acad im K. A. Timiryazev). 110 copies.
(KL, 23-57, 115)

Stepanov, R.S.

USSR / Forestry. Dendrology.

K-3

Abs Jour: Ref Zhur - Biologiya, No. 1, 1958, 1330

Author : Stepanov, R.S.

Inst : Moscow Agricultural Academy imeni K.A. Timiryazev

Title : The Wood Characteristics of the Moskovskaya
Oblast' Spruce

Orig Pub: Dokl. Mosk. s.-kh. akad. imeni K.A. Timiryazeva,
1957, No. 29, 345-350

Abstract: No Abstract.

Card 1/1

USSR / Forestry. Dendrology

K-2

Abs Jour: Ref Zhur-Biol., No 13, 1958, 58369

Author : Stepanov. R. S.

Inst : Moscow Agricultural Academy Imeni K. A. Timiryazev

Title : The Influence of the Microscopic Structure of Fir
Wood on its Physico-Mechanical Properties

Orig Pub: Dokl. Mosk. s.-kh. akad.im. K. A. Timiryazeva, 1957,
vyp. 31, 338-342

Abstract: No abstract

Card 1/1

STEPANOV, R.S. (Krasnodar)

Epiloid neoplasms under experimental conditions. Eksp. khir.
4 no.4:57 J1-Ag '59. (MIRA 12:11)
(GIANT CELL TUMORS exper)

STEPANOV, R.S., kand.med.nauk

Preservation of the hand in a case of severe injuries of the
radiocarpal joint. Ortop., travm.i protez. no.2:64-65 '62.

(MIRA 15:3)

1. Iz kafedry fakul'tetskoy khirurgii (zav. - prof. I.A. Ageyenko)
Kubanskogo meditsinskogo instituta im. Krasnoy Armii.
(WRIST--WOUNDS AND INJURIES)

STEPANOV, R.S., kand.med.nauk (Krasnodar, ul. Yarmarochnaya, d.75, kv.36)

Two cases of extensive anomalies of the bony system. Nov.
khir.arkh. no.4:72-74 '62. (MIRA 15:5)

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. I.A. Ageyenko)
Kubanskogo meditsinskogo instituta.
(BONES--ABNORMITIES AND DEFORMITIES)

STEPANOV, R.S., kand.sel'skokhozyaystvennykh nauk

Patterns of the relationship among morphological,
anatomical, physical and mechanical indices in spruce.

Izv. TSKHA no.2:209-213 '62.

(MIRA 15:9)

(Spruce)

(Wood)

~~STEPANOV~~ Sergey; KORNDORF, S.F., redaktor; BERG, A.I., redaktor; DZHIGIT, I.S.,
redaktor; YELIN, O.G., redaktor; KULIKOVSKIY, A.A., redaktor; MOZHZEVELOV,
B.N., redaktor SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMN,
B.F., redaktor; CHECHIK, P.O., redaktor; SHAMSHUR, B.I., redaktor;
VORONIN, K.P., tekhnicheskiy redaktor

[Calculations for measuring instruments] Raschet izmeritel'nykh priborov.
Moskva, Gos. energeticheskoe izd-vo, 1955. 30 p. (Massovaya radiobiblio-
teka, no.215) [Microfilm] (MIRA 8:2)
(Measuring instruments)

STEPANOV, Svetislav, inž., stručni saradnik,

Hydroelectric-Power Plant Zvornik. Tesla no.17/18:6-9
'56.

1. "Energoprojekt," Beograd.

KRUCNOV, V.I.; STEPANOV, S.A.

Correlation and stratigraphic schemes of the Devonian sediments of
some regions in the Sayan-Altai fold area. Trudy SNTGOSIMS no.49:
108-124 '64. (MIRA 18-3)

STEFANOV, S.A.

FE 10104

USSR/Medicine - Public Health, Centers Dec 1947
Medicine - Health - Education

"Library Shack, the Health and Education Center on a
Farm" S. A. Stepanov, 3½ pp

"Pel'dsher i Akusherka" No 12

Briefly describes the local offices and organizations
set up by the Moscow Oblast Station for Health Educa-
tion at the various farms. Discusses some aspects
of organizing such health education centers in the
libraries of various farms in the Moscow Oblast.

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50764

STEPANOV, S.A.

Dysentery transmitted by healthy persons. Vrach.delo no.1:1301-1304
D '58. (MIRA 12:3)

1. Kafedra epidemiologii (sav. - deystvitel'nyy chlen AMN SSSR,
prof. L.V. Gromashevskiy) Kiyevskogo meditsinskogo instituta.
(DYSENTERY)

STEPANOV, S.A., aspirant

Morphological and histochemical pituitary changes in atherosclerosis and hypertension. Kaz.med.zhur. no.4:52-53 J1-Ag '62. (MIRA 15:8)

1. Kafedra patologicheskoy anatomii (zav. - prof. A.M.Antonov)
Saratovskogo meditsinskogo instituta.
(HYPERTENSION) (ARTERIOSCLEROSIS) (PITUITARY BODY)

STEPANOV, S. A., aspirant

Morphological and histochemical changes in the thyroid gland in atherosclerosis and hypertension. Probl. endok. i gorm. 8 no.3: 58-65 My-Je '62. (MIRA 15:6)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. A. M. Antonov) Saratovskogo gosudarstvennogo meditsinskogo instituta.

(ARTERIOSCLEROSIS) (HYPERTENSION)
(~~THYROID~~ GLAND)

KARPOVA, M.I.; STEPANOV, S.A.

Experimental study of the harmful effect of grain dust.
Gig. i san. 28 no.7:28-32 J1 '63. (MIRA 17:1)

1. Iz Saratovskogo nauchno-issledovatel'skogo instituta
sel'skoy gigiyeny i kafedry patologicheskoy anatomii
Saratovskogo meditsinskogo instituta.

STEFANOV, B. A.

Solidification of Metals : (Cont.) Trans. of 2nd Conf. on Theory of Foundry Processes, '56; Moscow, Mashgiz, 532pp Shapranov, I.A., Candidate of Technical Sciences; E.V. Petrova, Engineer; and S.A. Stepanov, Engineer. Solidification of High-strength Iron Castings	161
Belousov, N.N., Candidate of Technical Sciences. Solidification of Castings of Nonferrous Alloys Under Application of Pressure	176
Lykov, A.V., Doctor of Technical Sciences, Professor. Kinetics of the Warming-up of Solid Bodies	215
Kolacheva, O.V., Engineer. Investigation of The Thermal Conditions of the Solidification of Castings in Shell Molds	231
Yegorenkov, I.P., Candidate of Technical Sciences. Investigation of the Process of Cooling Heavy Iron Castings in the Mold	243
II. PHYSICAL AND CHEMICAL PROCESSES IN METAL SOLIDIFICATION	
Khvorinov, N.I. Solidification and Crystallization of Metal	257

Card 4/8

. STEPANOV, S. A.

AID P - 4243

Subject : USSR/Engineering
Card 1/2 Pub. 128 - 1/33
Author : Stepanov, S. A., Minister of Transport Machine Building
Title : To outfit the railroad transport with new modern equipment.
Periodical : Vest. mash., ³⁶#1, p. 3-6, Ja 1956
Abstract : The July plenum of the Central Committee of the Communist Party ruled the outfitting of transport facilities with new, modern and efficient machines and equipment. Railroad locomotives must be converted from steam to the Diesel engine which many factories are now starting to produce and with gas turbine engines for fast passenger trains (140-160 klm/hour). Railroads will be equipped with new freight and passenger cars. Bearings will be changed from sliding friction to roller. In the cities new street trolleys will be installed. New, more efficient production methods are being introduced by using high-power presses for making parts

AID P - 4243

Vest. mash., #1, p. 3-6, Ja 1956

Card 2/2 Pub. 128 - 1/33

by stamping; also new casting devices are going to be used. Many designers are working on new models of transport machines and equipment.

Institution : None

Submitted : No date

S/137/61/000/011/084/123
A060/A101

AUTHORS: Snapranov, I. A., Petrova, E. V., Stepanov, S. A.

TITLE: On the main factors affecting the structure and the mechanical characteristics of magnesium cast iron

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 11. 1961, 1, abstract 1112
(V sb.: "Polucheniye izdeliy iz zhidk. met. s uskoren. kristallizatsiy". Moscow - Kiyev, Mashgiz, 1961. 19 - 38)

TEXT: The main conditions for obtaining Mg-cast iron possessing the highest and most homogeneous mechanical characteristics are: provision of graphite in the spherical form, sufficiently complete elimination of the modification products, optimal chemical composition of the cast iron, use of heat-treatment. To obtain graphite in the spherical form it is necessary to have not only a definite quantity of residual Mg in the cast iron (0.03 - 0.1%), but also an increased C content in the original metal. The main sources of non-homogeneity of the mechanical characteristics of the Mg cast iron is the presence in the body of the cast metal of nonuniformly distributed modification products: to eliminate them completely it is necessary to ensure a C content of no less than 3.4 - 3.5% in the liquid

Card 1/c

S/137/61/009/011/084/123
A060/A101

On the main factors affecting...

metal before modifying, a sufficiently intense and long metal stirring, a high temperature during the modifying (1,390 - 1,410°C) and the casting (1,320 - 1,340°C), the casting of molds by stopcock or siphon ladles. As result of introducing Mg in the case of sufficiently complete elimination of the modification products, the C content in the cast iron is reduced to 2.5 - 3.0%, S - to 0.004 - 0.008%. To obtain the highest mechanical characteristics in Mg cast iron the following content of the main elements in the original metal before modifying is required (in %): C not less than 3.5, Si 2.5 - 3.0, Mn not more than 0.6, P not more than 0.1, S not more than 0.1. Heat-treatment improves the mechanical characteristics of Mg cast iron. There are 16 references.

A. Savel'yeva

[Acceptor's notes: Complete translation]

Card 2/2

21.6000 also 2220

31558
S/081/61/000/022/038/076
B110/B101

AUTHORS: Arkhangel'skiy, A. A., Stepanov, S. A.

TITLE: Devices for controlling the contamination of air and surfaces by soft β -radiators

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 270, abstract 221310 (Sb. "Radioakt. izotopy i yadern. izlucheniya v nar. kh-ve SSSR. v. I". M., Gostoptekhizdat, 1961, 144-146)

TEXT: The authors describe a 50-liter flow-type ionization chamber for recording the contamination of air by C^{14} and S^{35} in the order of 10^{-9} curies/liter. Tube counters with thin mica windows or scintillation counters are used for determining the contamination of working places and clothing. [Abstracter's note: Complete translation.]

Card 1/1

VARGIN, V.V.; STEPANOV, S.A.

Effect of gamma rays on glasses of the system $\text{Na}_2 - \text{Al}_2\text{O}_3 - \text{SiO}_2$.
Dokl. AN SSSR 147 no.3:609-611 N '62. (MIRA 15:12)

1. Predstavleno akademikom A.N. Tereninym.
(Glass) (Gamma rays)

ACCESSION NR: AT4016063

S/2698/63/000/000/0147/0152

AUTHOR: Gulyayev, B. B.; Stepanov, S. A.; Alekseyev, P. Ye.; Sandomirskiy, M. M.

TITLE: An investigation of the properties of high-strength cast steel with good weldability

SOURCE: Soveshchaniye po teorii liteyny^{*kh} protsessov. 8th, 1962. Mekhanicheskiye svoystva litogo metalla (Mechanical properties of cast metal). Trudy^{*} soveshchaniya, Moscow, Izd-vo AN SSSR, 1963, 147-152

TOPIC TAGS: welding, steel welding, high strength steel, cast steel, cast steel welding, steel, alloy steel

ABSTRACT: Engineers in various fields are making wide use of cast-welded structures, the parts of which consist of stamped details, rolled stock, and steel castings. The welding properties of cast steel, however, depend markedly on the composition. The authors therefore developed a new grade 12DKhNGDL steel which welds easily and may be used for complex castings. First of all, only 0.1-0.2% carbon was used in the steel, plus the following combined admixtures: chromium and nickel; chromium, nickel and molybdenum; or chromium, manganese and silicon, as well as vanadium and copper.

1/3

Card

KOVPASYUK, V. I.; MEDIN, G. A.; PROKUDIN, V. A.; STEPANOV, S. A.

"Some Aspects of Noble Gases MHD-Generator Operation."

paper submitted for Intl Symp on Magnetohydrodynamic Electrical Power Generation,
Paris, 6-10 Jul 64.

Moscow High Temperature Inst

L 43773-90 EWF(e)/En7(m) 00/AR

ACC NR: AR6000271

SOURCE CODE: UR/0081/65/000/014/M014/M014

AUTHORS: Vargin, V. V.; Stepanov, S. A.TITLE: Effect of radiation on $\text{Na}_2\text{O}-\text{Al}_2\text{O}_3-\text{SiO}_2$ and $\text{Na}_2\text{O}-\text{ZnO}-\text{SiO}_2$ glasses 55. B

SOURCE: Ref. zh. Khimiya, Abs. 14M149

REF SOURCE: Sb. Stekloobrazn. sostoyaniye. T. 3. Vyp. 4. Minsk, 1964, 39-43

TOPIC TAGS: silicate glass, radiation effect, zinc oxide, aluminum oxide

ABSTRACT: Introduction of Al_2O_3 and ZnO into sodium silicate glasses lowers the intensity of the auxiliary absorption bands at 2 and 2.8 ev. This is related to the formation of tetrahedral AlO_4 and ZnO_4 with coordination number four. The band at 3.4 ev, characteristic of Al^{+3} ion with coordination number six, appears when the ratio of $\text{Al}_2\text{O}_3:\text{Na}_2\text{O} = 1$, and the band at 4.6 ev, characteristic of Zn^{+2} with coordination number six, appears as soon as ZnO is introduced. The inflection of the thermal stability curve for the band 4.6 ev of sodium silicate glasses occurs when the ratio of $\text{ZnO}:\text{Na}_2\text{O} = 1$. The state of equilibrium between Zn^{+2} ions with coordination numbers of four and six in $\text{Na}_2\text{O}-\text{ZnO}-\text{SiO}_2$ glasses takes place at any content of ZnO . The anomalous effect of Al_2O_3 and ZnO on glasses containing 35% Na_2O is due to the presence at some Si atoms of two unbridged oxygen ions. Authors' resumé [Translation of abstract]

SUB CODE: 11

Card 1/1 LC

ACCESSION NR: AP4034940

S/0181/64/006/005/1531/1539

AUTHOR: Karapetyan, G. O.; Stepanov, S. A.; Yudin, D. M.

TITLE: Color centers in sodium aluminosilicate glasses

SOURCE: Fizika tverdogo tela, v. 6, no. 5, 1964, 1531-1539

TOPIC TAGS: glass, sodium aluminosilicate glass, color center, F center, radiation effect, radiation damage

ABSTRACT: The EPR and optical absorption spectrum of $\text{Na}_2\text{O}-\text{Al}_2\text{O}_3-\text{SiO}_2$ glasses irradiated with gamma rays from a Co^{60} source with a dose rate of 10^{-4} r/hr was investigated. The experimental data obtained are analyzed in terms of models for the production of the traps found in the literature or proposed by the authors. The interpretation of the models is expected to be helpful in making detailed calculations based on the theory of molecular orbitals. Orig. art. has: 4 figures and 1 table.

Card 1/2

ACCESSION NR: AP4034940

ASSOCIATION: Gosudarstvennyy opticheskiy institut im. S. I.
Vavilova, Leningrad (State Institute of Optics)

SUBMITTED: 31May63

DATE ACQ: 20May64

ENCL: 00

SUB CODE: OP

NO REF SOV: 005

OTHER: 011

Card 2/2