

KHABIZHANOV, B., kand.med.nauk

Every day accidents among the adult population of Semipalatinsk.
Zdrav.Kazakh. 22 no.6:10-13 '62. (MIRA 15:11)

1. Iz kafedry gosspital'noy khirurgii (zav. - dotsent K.Ch.
Chuvakov) Semipalatinskogo meditsinskogo instituta.
(SEMIPALATINSK—TRAUMATISM)

KHABIZHANOV, B.

Free skin transplantation. Zdrav. Kazakh. 21 no.11:23-25 '61.
(MIRA 15:7)

1. Iz kafedry gosspital'noy khirurgii (zav. - dotsent K.Ch.
Chuvakov) Semipalatinskogo meditsinskogo instituta.
(SKIN TRANSPLANTATION)

PETROVA, K.G., kand.med.nauk; ABDIYEV, N.; KHARIZHANOV, B.

Thromboembolism of the large vessels in children with toxic diphtheria of the pharynx and hemorrhagic syndrome. Zdrav. Kazakh. 22 no.6:33-36 '62. (MIRA 15:11)

1. Iz kafedry detskikh infektsionnykh bolezney (zav. - dotsent T.N.Nikonova) Kazakhskogo meditsinskogo instituta i Detskoy klinicheskoy infektsionnoy bol'nitsy No.2 g. Alma-Aty (glavnyy vrach - F.S.Sakova).
(DIPHTHERIA) (EMBOLISM) (HEMORRHAGE)

S/120/62/000/002/043/047
E194/E435

AUTHORS: Khablenko, A.I., Il'yashenko, O.I.

TITLE: An electromagnetic pump

PERIODICAL: Pribery i tekhnika eksperimenta, no.2, 1962, 178-179

TEXT: This article describes a laboratory gas pump of 10 to 40 litres per hour output. The special linen diaphragm is driven by the solenoid of a 6-watt a.c. electromagnet. The inlet and outlet flap valves are made of soft rubber. A prototype has been laboratory tested. There is 1 figure.

SUBMITTED: August 7, 1961

Card 1/1

KHABLENKO, D.O.

Useful capacity and life of Moscow Basin mines. Ugol' 32 no.5:
20-23 My '57. (MLRA 10:5)
(Moscow Basin--Coal mines and mining)

KHABLENKO, D.O.

How to evaluate the ways of increasing the economic effectiveness
of capital investments in the mining industry. Ugol' 36 no.3:35-
38 Mr '61. (MIRA 14:5)

(Coal mines and mining--Finance)

KHABLO, I.

Efficiency innovators of the Ukrainian automotive transport enterprises. Avt. transp. 34 no.8:13-14 Ag '56. (MLRA 9:10)

1. Zamestitel' ministra avtomobil'nogo transporta i shosseynykh dorog USSR.

(Ukraine--Transportation, Automotive)

KHABLO, I.

Machine-Tractor Stations

Some results of productive work of Voronezh Province machine-tractor and shelterbelt stations. MTS 12 no 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, September '52 ~~1952~~ / Unclassified.

1. KHABLO I. Eng.

2. USSR (600)

4. Tractors-Repairing

7. Perfect mastery of leading methods for organizing repair work, MTS 12 no.12
1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

KHABLO, I.; GAPANOVICH, N.; LEVINSON, B.; YUSHCHENKO, I.

Centralized maintenance and repair of storage batteries is
efficient. Avt. transp. 43 no.1;32-33 Ja '65. (MIRA 18:3)

CORBACHEVICH, Kirill Sergeyevich; KHABLO, Yevgeniy Petrovich; VISHNYA,
L.P., red.; ONOSHKO, N.G., tekhn. red.

[Why do they have such names? On the origin of the oldest place
names in Leningrad] Pochemu tak nazvany? O proiskhozhdenii starin-
nykh nazvaniy v Leningrade. Leningrad, Lenizdat, 1962. 197 p.
(MIRA 16:1)

(Leningrad--Names, Geographical)

KHABLOV, NIKOLAY ALEKSEYEVICH

EPP
.R93410

YAKOPNOYE USTROYSTVO I MERY PREDU-
PREZHDENIYA POTERI YAKOREY [ANCHOR IN-
STALLATION AND MEASURES TO PREVENT THEIR
LOSS] MOSKVA, "MORSKOY TRANSPORT",
1957

84, [3] P. ILLUS., DIAGRS., TABLES
(BIBLIOTEKA SUDOVODITELYA MORSKOGO FLOTA)
BIBLIOGRAPHY: P. 86

(

SOV/91-59-6-27/33

AUTHORS: Khablov, V.S., and Petrov, K.G., Engineers

TITLE: The Best Method of Artificial Respiration

PERIODICAL: Energetik, 1959, Nr 6, pp 36-37 (USSR)

ABSTRACT: The authors describe an ancient method of reviving an unconscious person by breathing into him "from mouth to mouth", perfected by American physician Peter Safar and approved by the American Association of Surgeons. The perfection consists of the use of a rubber or a flexible plastic pipe to avoid physical contact. The article describes the pipe and the method of its application. There are 2 drawings and 1 diagram.

Card 1/1

KHABLOV, V., inzhener

The Kama Hydroelectric Power Station. Tech. mol. 23 no.5:15-18
My '55. (MIFA 8:6)
(Kama Hydroelectric Power Station)

KHARLOV, V.

"Keranzit." Nauka i zhizn' 23 no.9:49 '56. (MLZA 9:10)
(Clay)

KHABLOV, V., inzhener-gidrostroitel'; NIKOLAYEV, Yu., inzhener-gidrostroitel'.

Using the "pioneer method." IUn, tekhn. no. 6:19-21 Je '57. (MLBA 10:7)
(Barrages)

AUTHOR: Khablov, V.

TITLE: **APPROVED FOR RELEASE: 09/17/2001**
Penokeralit (Penokeralit)

^{25-12-27/38}
CIA-RDP86-00513R000721620014-8"

PERIODICAL: Nauka i Zhizn', 1957, # 12, p 48, (USSR)

ABSTRACT:

A year ago, a new kind of porous artificial stone was produced in the Chemico-Technological Institute imeni Mendeleyev (Khimiko-tekhnologicheskii institut imeni Mendeleeva) under the supervision of Professor I.I. Kitaygorodskiy. This product, called penokeralit which is made of ordinary red clay, is 16 times lighter than bricks, and has excellent thermic and sound isolating properties. As a result of reduced transportation costs as well as savings made on account of lighter foundations needed and ease of construction, total savings amount to 8-40%.

There is 1 drawing.

AVAILABLE: Library of Congress

Card 1/1

KHABLOV, V., inzh.-mekhanik

Increasing the output of dredges. Izobr. 1 rats. no.1:42-43
Ja '59. (MIRA 12:1)

(Dredging machinery)

KHABLOV, V., inzh.

Perlite. Nauka i zhizn' 26 no.9:66-67 S '59. (MIRA 13:1)
(Perlite)

15(6)

SOV/35-59-2-25/48

AUTHOR:

Khablov, V., Engineer

TITLE:

Sandy Concrete (Peschanyy beton)

PERIODICAL:

Nauka i zhizn', 1959, ⁴ Nr 2, p 66-67 (USSR)

ABSTRACT:

This article deals with new methods intended to reduce the production costs of concrete by adding larger quantities of fine sand. The Soviet state standards limited the use of fine-ground sand, i.e. of grains less than 0.15 mm in diameter, to a maximum of 5%, but recent practice has ignored this. At the initiative of the Doctor of Technical Sciences, Professor I.A. Kireyenko, sand twice as fine as permitted by the standards was used at the Kuybyshev building site, and still-finer sands were used in other places. Now a new method of "sandy" concrete production has been proposed by the Doctor of Technical Sciences N.V. Mikhaylov. Cement, finely-ground in

Card 1/2

Sandy Concrete

SOV/35-59-2-25/48

special vibro-mills, is mixed with sand and water in vibro-mixers. The experimental vibro-mixers designed by the Candidate of Technical Sciences M.L. Morgulis have shown good results. The efficiency of a single-pipe vibro-mixer working on the basis of a vibro-mill of the type "M-200" is 8,000 and more per hour. The experimental mixing combine designed by Engineer Ye.V. Zalipayev, which works on the principle of simultaneous grinding of cement and sand, has shown still better results. This vibro-combine has a productivity of 8-10 tons of ready product per hour. There are 2 diagrams.

Card 2/2

KHABLOV, V., inzh.

Expanded clay filler. Znan.sila 34 no.2:27 F '59. (MIRA 12:3)
(Clay) (Lightweight concrete)

KHABLOV, Vladilen Stepanovich, inzh., nauchnyy sotr.; PERFILOV, I.F.,
inzh., red.

[Hydraulic classifiers developed by the All-Union Hydraulic and Sanitary Engineering Research Institute for separating Sand; experience of the "Gidromekhanizatsiia" Trust of the Ministry of Construction of the R.S.F.S.R.] Gidravlicheskie klasifikatory VNIIGS dlia fraktsionirovaniia peskov; iz opyta raboty tresta Gidromekhanizatsiia" Ministerstva stroitel'stva RSFSR. Moskva, Gosstroizdat, 1960. 11 p. (MIRA 15:7)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stva.
(Sand) (Hydraulic machinery)

KHABLOV, V., inzh.

Remote control of balanced hydraulic excavators. Rech. transp.
19 no. 6:58-59 Je '60. (MIRA 14:2)
(Remote control) (Excavating machinery)

KHABLOV, V., inzh.

Hydraulic separators designed by the All-Union Scientific Research
Institute of Hydro- and Sanitary Engineering. Stroitel' no.9:25 S
'60. (MIRA 13:9)

(Separators (Machines))

(Sand)

KHABLOV, V., inzh.

Hydraulic separation of sand and gravel-sand mixes. Rech. transp. 19
no.8:13-16 Ag '60. (MIRA 14:3)
(sand and gravel plants)

KHABLOV, V.S., inzh.

Quickly detachable connections for spoil pipes. Transp.stroi. 11
no.4:51-52 Ap '61. (MIRA 14:5)
(Earthmoving machinery) (Pipeline transportation of solids)

KHABLOV, V., inzh.

SVAM (anisotropic fiber glass) replaces concrete, steel, and wood.
Rech. transp. 20 no. 1:52 Ja '61. (MIRA 14:2)
(Glass fibers)

KHABLOV, V., inzh.

Quickly dismountable self-packing joints. Rech. transp. 20
no.9:47 S '61. (MIRA 14:9)

(Marine pipe fitting)

KHABLOV, V.S., inzh.

Using the new detonating explosive "igdet" in earthwork operations.
Prom. stroi. 39 no.4:55-56 '61. (MIRA 14:6)
(Explosives)

KHABLOV, V.S., inzh., nauchn. sotr.; NIKOLAYEV, V.M., kand. tekhn. nauk, nauchn. sotr.; DOBSHITS, M.L., inzh., red.

[Practices in erecting small earthen structures by the method of hydromechanization] Opyt vozvedeniia zemlianykh sooruzhenii nebol'shogo ob"ema metodom gidromekhanizatsii. Moskva, Gosstroizdat, 1962. 37 p. (MIRA 17:4)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoi pomoshchi stroitel'stvu. 2. Laboratoriya mekhanizatsii zemlyanykh rabot Nauchno-issledovatel'skogo instituta organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu Akademii stroitel'stva i arkhitektury SSSR (for Khablov). 3. Laboratoriya gidromekhanizatsii Vsesoyuznogo nauchno-issledovatel'skogo instituta transportnogo stroitel'stva (for Nikolayev).

KHABLOV, V.S., inzh.

Introduction of hydraulic engineering machinery in road and small-scale industrial construction. Stroi. i dor. mash. 7 no.7:26-29 JI '62.

(Earthmoving machinery)

(MIRA 15:7)

KHABLOV, V.S., inzh.

Applying hydromechanization to industrial construction. Prom.
stroil. 40 no.3:44-47 '62. (MIRA 15:3)

1. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii
i tekhnicheskoy pomoshchi stroitel'stvu "kademii stroitel'stva i
arkhitektury SSSR.

(Hydraulic engineering)

KHABLOV, V., inzh.

Hydraulic classifier without additional feed of water. Rech.
transp. 22 no.5:49 My '63. (MIRA 16:8)

(Separators (Machines))

KHABLOV, V. S., inzh.

Effective use of hydraulic machinery in industrial construction.
Prom stroi 41 no. 12:40-41 D '63. (MIRA 17:5)

1. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii
i tekhnicheskoy pomoshchi stroitel'stvu.

KHABLOV, V.S., inzh.

New VP-20S vibration-type soil scarifiers. Stroi. i dor.mash. 9
no.10:18-19 0 '64. (MIRA 18:1)

KHABLOV, V.S., inzh.

Economic effectiveness of using hydraulic mechanization at
construction lots. Stroil. i dor. mash. 10 no.8:5-6 Ag '65.
(MIRA 18:9)

KHABLOV, V.S., inzh.

Small hydraulic machinery for earthwork. Stroi. i dor.
mash. 10 no.12:14-18 D '65. (MIRA 19:1)

"Chlorination of Water in Wells," Higiena i Sanitariya (USSR), 1948, 6, 10-16

LEONOV, S.B.; KHABROV, M.F.

Reduction of the harmful effect of antimony in cyaniding
gold ores. Izv. vys. ucheb. zap.; tsvet. met. 4 no.4:91-96
'61. (MIRA 14:8)

1. Irkutskiy politekhnicheskii institut, kafedra obogashcheniya
poleznykh iskopayemykh.

(Cyanide process) (Antimony)

S/081/62/000/022/063/088
B166/B144

AUTHORS: Skobeyev, I. K., Podkopayev, N. V., Khabrov, M. F.

TITLE: Polyacryl amide and its coagulating effect

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1962, 487, abstract
22P76 (Sb. nauchn. tr. Irkutskiy n.-l. in-t redk. met.,
no. 9, 1961, 152-159)

TEXT: The ability of polyacryl amide to coagulate neutral, alkaline and
acidic ore pulps is studied. It is shown to be an efficient coagulant
for mineral dressing, separating and purifying solutions and sewage, and
for the intensification of dehydration processes. [Abstracter's note:
Complete translation.]



Card 1/1

LEONOV, S.B.; KHABROV, M.F.

Intensifying the cyaniding of gold-bearing ores. Izv. vys. ucheb.
zav.; tsvet. met. 6 no.3:100-105 '63. (MIRA 16:9)

1. Irlautskiy politekhnicheskiy institut.
(Cyanide process)

KHABRUNYAK, I.G.

S/133/62/000/004/008
A054/A127

AUTHORS: Kocho, V.S.; Panasyuk, A.D.; Samsonov, G.V.; Strel'chenko, A.G.;
Khabrnyak, I.G.

TITLE: Cermet tips made of zirconium boride for thermocouples used in the continuous measuring of liquid steel temperatures

PERIODICAL: Stal', no. 4, 1962, 317

TEXT: To develop a highly heat resistant material for thermocouple tips used in the continuous measuring of liquid steel temperatures in open hearth furnaces, tests were carried out in 1959 - 1960 at the Institut metallokeramiki AN UKrSSR (Institute of Cermets of the Academy of Sciences UKrSSR) with thermocouple tips made of zirconium boride. The tips, 120 mm in length, 11 mm O.D. and 4 mm I.D. were tested in 185-ton and 370-ton basic open-hearth furnaces into which they were placed by hand-operated thermocouples, equipped with blocks, 25 mm in diameter and 90 mm in length, made of reinforcement steel. The zirconium boride tips, which are more heat-resistant than those made of quartz, were immersed 10 - 11 times with the immersion time increased to 40 - 45 sec. To establish the service life of zirconium boride tips for continuous operation in

Card 1/2

Cermet tips made of

3/133/62/000/004/004/008
A054/A127

the metal-slag bath, tests were carried out in 10-ton and 250-ton open-hearth furnaces. The thermocouple and the tip were placed in a water-cooled seamless steel tube tuyere with copper bottom. The tip was fixed to the device with 4 - 5 mm thick asbestos cord. The metal layer (3-5 mm thick) and slag layer (up to 25 mm) settling on the tuyere wall during immersion could be removed more easily if the tuyere was refractory-coated before immersion. However, it was found that in the arrangement described the zirconium boride tip only protected the thermocouple against the heat of the bath and not against the gases which broke the foam after a continuous immersion of 2 - 3 min. To eliminate this, the authors developed a three-layer tip shown in a figure, consisting of an external jacket against the heat, an inner alundum layer to ensure gas permeability, whereas the gap between them was filled with burnt aluminum oxide. The bottom part of the tip was filled with zirconium boride powder, to decrease its heat inertia. At the upper end, the tip is sealed with calcined decarburized asbestos. As a result of using the new NP-30/6 (PR-30/6) type thermocouple tip, temperature measuring takes place with great accuracy: in the 1500-1650°C range the deviations are not greater than $\pm 1.5^\circ\text{C}$. The bath temperature is recorded with an ЭПН-09М (EPP-09M) type potentiometer, at a tape rate of 720 mm/h. The tips operate continuously in metal for at least 150 min, in slag for more than 60 minutes. There are 2 figures.

Card 2/2

BUNICH, P.G., kand.ekon.nauk, starshiy nauchnyy sotrudnik; PAKHOMOV, A.M.,
kand.ekon.nauk, starshiy nauchnyy sotrudnik; BUDAVEY, V.Yu., nauchnyy
sotrudnik; IVANOV, Ye.A., nauchnyy sotrudnik; KIRILLOV, I.A., prof.,
doktor ekon.nauk; KOVALEVA, A.M., kand.ekon.nauk; SAFRAY, G.Ye.,
kand.ekon.nauk; YAKOBSON, M.O., prof., doktor tekhn.nauk; GOGITISHVILI,
R.N., inzh.; KHABUR, B.P.; BROYDE, I.M.; FILATOV, N.L.; BLAZHEY,
Zdenko, doktor, ekonomist (Chekhoslovatskaya Respublika); NESHVER,
Vatslav, inzh., ekonomist (Chekhoslovatskaya Respublika); RYUMIN, S.M.,
red.; ZAVERNYAYEVA, L., red.izd-va; LEBEDEV, A., tekhn.red.

[Planning and financing of major repairs on fixed assets] Planiro-
vanie i finansirovanie kapital'nogo remonta osnovnykh fondov.
Moskva, Gosfinizdat, 1958. 223 p.

(MIRA 12:2)

(Continued on next card)

BUNICH, P.G.---(Continued) Card 2.

1. Moscow. Nauchno-issledovatel'skiy finansovyy institut. 2. Nauchno-issledovatel'skiy finansovyy institut (for Bunich, Pakhomov). 3. Nauchno-issledovatel'skiy ekonomicheskiy institut Gosplana SSSR (for Ivanov). 4. Moskovskiy inzhenerno-ekonomicheskiy institut im. S. Ordzhonikidze (for Safray). 5. Eksperimental'nyy nauchno-issledovatel'skiy institut metallorezhushchikh stankov (for Gogitishvili). 6. Zamestitel' direktora Tsentral'nogo nauchno-issledovatel'skogo instituta morskogo flota (for Khabur). 7. Nachal'nik finansovogo otdela sovmarkhoza Tatarskoy ASSR (for Broyde). 8. Ekspert Ministerstva finansov SSSR (for Filatov). 9. Investitsionnyy bank (for Blazhey). 10. Tekhniko-organizatsionnyy nauchno-issledovatel'nyy institut mashinostroyeniya (for Neshver).

(Industry--Finance)

STRUMPE, P.I., kand.tekhn.nauk, otv.red.; KHABUR, B.P., inzh., nauchnyy red.;
SUSHKOVA, T.I., red.; KOTLYAKOVA, O.I., tekhn.red.

[Economic aspects and operation of the merchant marine; present
state and trends in the expansion of the marine passenger fleet in
capitalist countries] Ekonomika i ekspluatatsiia morskogo flota;
sovremennoe sostoianie i tendentsii razvitiia morskogo passazhirskogo
flota kapitalisticheskikh stran. Leningrad, Izd-vo "Morskoi
transport," 1961. 67 p. (Trudy, no.33). (MIRA 14:8)
(Steamboats--Passenger accommodations) (Shipbuilding)

~~KHABUR~~, B.P., kapitan dal'nego plavaniya, red.; DENISOV, K.N., red. izd-va;
KOTLYAKOVA, O.I., tekhn. red.

[Manual for sea captains] Spravochnik kapitana dal'nego plavaniia. Pod
obshchei red. B.P.Khabura. Leningrad, Izd-vo "Morskoi transport,"
1961. 907 p. (MIRA 14:6)
(Naval art and science)

KHABUR, B.P.

Shipping and shipbuilding subsidies in capitalist countries. Trudy
TSNIIMF 7 no.37:3-18 '61. (MIRA 15:3)
(Shipping bonties and subsidies) (Shipbuilding)

KHABUR, B., starshiy nauchnyy sotrudnik; GURIN, L., kand.ekonomicheskikh nauk

Problems calling for solution. Mor. flot 22 no.7:15-17 J1 '62.

(MIRA 15:7)

1. Zamestitel' direktora TSentral'nogo nauchno-issledovatel'skogo instituta morskogo flota po nauchnoy rabote (for Khabur). 2. TSentral'nyy nauchno-issledovatel'skiy institut morskogo flota (for Gurin).

(Merchant seamen-labor productivity)

(Weekly rest-day)

KHABUR, B.P., kapitan dal'nego plavaniya, nauchn. red.;
KUZNETSOVA, N.P., tekhn. red.

[Handbook for a captain of long-distance sailing] Spravochnik kapitana dal'nego plavaniia. Izd.2. Moskva, Izd-vo "Transport," 1964. 802 p. (MIRA 17:3)

LIBERMAN, F.Ya.; VAL'KOVA, A.A.; DYLLIS, K.Yu.; RYUMINA, L.A.; SOBOLEVA, G.I.;
TUPOVA, V.V.; KHABUR, B.P., otv.red.; GUREVICH, G.Ye., kand.tekhn.
nauk, nauchnyy red.; GOROBETS, V.A., kand.voyen.-morskikh nauk, red.;
KOLODKIN, A.L., kand.yurid.nauk, red.

[Conditions for the commercial operation of the merchant marine during foreign sailing; rules, customs and practices in Japanese sea ports.] Usloviia kommercheskoi ekspluatatsii morskogo flota v zagranichnom plavanii; pravila, obychai i praktika morskikh portov Iaponii. Leningrad, Izd-vo "Morskoi transport." No.10, pt.1. 1963. 90 p. (Leningrad. Tsentral'nyi nauchno-issledovatel'skii institut morskogo flota, Informatsionnyi sbornik, no.93). (MIRA 17:2)

1. Sotrudnik sektora ekspluatatsii flota Tsentral'noto nauchno-issledovatel'skogo instituta morskogo flota (for Liberman, Val'kova, Dyllis, Ryumina, Soboleva, Tupova).

STRUMPE, P.I.; kand. tekhn. nauk, otv. red.; DRANITSYN, S.N.,
kand. tekhn. nauk, nauchn. red.; KHAENR, B.P., inzh.,
nauchn. red.; GOROBETS, V.A., red.

[Basic research] Osnovnye nauchnye issledovaniia. Le-
ningrad, Izd-vo "Morskoi transport," 1961. 107 p.

(MIRA 17:10)

1. Leningrad. Tsentral'nyy nauchno-issledovatel'skii
institut morskogo flota. 2. Direktor Tsentral'nogo nauchno-issledo-
vate'skogo instituta morskogo flota, Leningrad (for Strumpe).

KHABURZANIYA, K.F.; PUSTOVOY, I.V.

Twenty-fifth anniversary of M.I. Kalinin's appearance at the seventh
All-Russian Congress of Public Health Offices. Sov. zdrav. 14 no.6:
44-46 N-D '55. (MLRA 9:2)

(PUBLIC HEALTH, history,
in Russia)

KHABURZANIYA, K.F.
USSR/Medicine Industrial

FD-1875

Card 1/1 Pub. 102-10/15

Author : Pustovoy, I. V. and Khaburzaniya, K. F. (Moscow)

Title : Some ideas concerning the work of Medical Control Commission (VKK)

Periodical : Sov. zdrav., 2, 43-47, Mar-Apr, 1955

Abstract : The authority to determine whether any individual is physically incapacitated and must be temporarily relieved from duty has been vested in the VKK. The VKK has not been operating efficiently enough in that respect, however. This has been noted particularly in cases that are not clearly defined or too involved. In a situation like that a conference of specialists should be called to determine the causes for physical disability and proper therapeutic measures must be prescribed. Appraisal of physical fitness and diagnostic and therapeutic measures prescribed are part of the entire system of medical service and are indivisible. Appraisal of physical disabilities must be made part of the duty of practicing physicians, senior interns, and head of departments; they must also act as consultants.

Institution:

Submitted : December 30, 1954

KHABURZANIYE, K.F.

Name : KHABURZANIYA, K. F.
Dissertation : Organization of the activities of the
physician in charge of a therapeutic
section (sector physician) in a con-
solidated city hospital
Degree : Cand Med Sci
Defended At : Min Health USSR, Central Inst of
Advanced Training for Physicians
Publication Date, Place : 1956, Moscow
Source : Knizhnaya Letopis' No 6, 1957

~~APPROVED FOR RELEASE:~~ 09/17/2001

CIA-RDP86-00513R000721620014-8"

Improving the effectiveness of work of local general practitioners.
Sov.sdrav. 15 no.6:28-33 M-D '56. (MLRA 10:1)

1. Is kafedry organizatsii sdravookhraneniya (sav. - prof. N.A.
Vinogradov) Tsentral'nogo instituta usovershenstvovaniya vrachev.
(PHYSICIANS

in Russia, distribution of work in hosp.)

(GENERAL PRACTICE

in Russia, work distribution of GP's in hosp.)

PUSTOVOY, I.P.; KHABURZANIYA, K.F.

Abstracts of Soviet medical literature. Reviewed by I.P.Pustovoi,
K.F.Khaburzaniia. Sov.zdrav. 16 no.4:61-62 Apr '57. (MIRA 10:8)
(MEDICINE--PERIODICALS)

KHABURZANIYA, K.I. (Leningrad D-88, ul. Plekhanova, d.12, kv.12); FOMICHEV,
Ye.P. (Leningrad)

Foreign bodies in the lungs and the diaphragm. Grud. khir. 6 no.2:
102-103 Mr-Ap '64. (MIRA 18:4)

KHABURZANIYA, L.

Export insurance and credit in capitalist countries. Fin.SSSR
37 no.3:83-88 Mr '63. (MIRA 16:4)
(Investments, Foreign) (Insurance, Credit)

KhACHADUROVA, T. M.

USSR/Chemistry - Coatings, on Metals
Chemistry - Scratching, Resistance to

Jan/Feb 1948

"New Method of Determining the Thickness of Natural Passivating Coatings on Metals,"
I. V. Krotov, T. M. Khachadurova, Moscow Aviation Inst imeni Serge Ordzhonikidze, 7 pp

"Iz Ak Nauk SSSR, Otdel Khim Nauk" No 1

Describes new method to determine the thickness of coatings on metals by determining the depth of scratches produced on metal by means of simple instrument. Includes diagram of latter.

PA 66T35

KHACHADUROVA, T. M.

PA27/49T29

USSR/Chemistry - Aluminum, Corrosion of
Chemistry - Corrosion of Aluminum, by
Saline Solutions Jan/Feb 49

"Processes of Drop Corrosion of Aluminum: I, Corro-
sion of Aluminum in Contact With Drops of Saline
Solutions Without the Addition of Free Acid," V. Krotov
T. M. Khachadurova, Moscow Avn Inst Inent S.
Ordzhonikidze, 9 pp

"Iz Ak Nauk SSSR, Otdel Khim Nauk" No 1

Makes several new observations on processes of drop
corrosion in aluminum. Shows characteristic role of
atmospheric oxygen in these processes. Considers
results of experiments from thermodynamic standpoint.

27/49T29

USSR/Chemistry - Aluminum, Corrosion of
(Contd) Jan/Feb 49

Calculates characteristics and changes of the oxide
film on aluminum. Submitted 3 Jan 48.

27/49T29

KHACHADUROVA, T. M.

② 10/11
Corrosion of iron in gasoline, kerosene, and water containing sodium chromate. A. V. Krotov and T. M. Khachadurova. *Zhur. Priklad. Khim.* 26, 605-11(1953).—Fe immersed one half in a layer of aq. electrolyte, the other half in supernatant liquid fuel (aviation or cracked gasoline or kerosene) is uniformly and appreciably corroded in contact with aq. phase only. Adding K_2CrO_4 to the latter reduces corrosion sharply. With distd. H_2O , 0.5N concn. of K_2CrO_4 suppresses corrosion completely. Adding K_2CrO_4 to electrolytes transforms corrosion from general to localized. Corrosion is inhibited by K_2CrO_4 only in weak aq. electrolytes not contg. significant amts. of dissolved salts. The type of liquid fuel affects corrosion only slightly. E. M. R.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Metallurgy and Metallography

KHACHAPURIDZE, B.I. (Tbilisi)

Controversial problems concerning the effect of nonperceivable stimuli.
Vop. psikhol. 9 no.1:151-158 Ja-F '63. (MIRA 16:4)
(Perception)

KALININA, L.S.; GUROVA, S.A.; KHACHAPURIDZE, N.A.

Photocolorometric method of determining small quantities of
methyl alcohol in formalin. Plast. massy no.11:64-66
'65. (MIRA 18:12)

KHACHATOVROV, T.

Economic effectiveness of over-all mechanization and automation
of production. Vop. ekon. no. 12:61-74 D '59. (MIRA 12:12)
(Automation)

ABSTRACT

Dissertation: "Lapid restoration of Swiss breed." Candidate of Veterinary Inst, Yerevan, 1954. Referativnyy zhurnal--Khimiya, Moscow, No 3, 1954.

SC: BUM 204, 16 Nov 1954

KHACHATRYAN, A.

From experience in students' training at a textile factory.
Politekh.obuch. no.12:85 D '58. (MIRA 11:12)

1. Shkola No.5 g. Kirovakana Armyanskoy SSR.
(Field work (Educational method))

ZAZ'YAN, E.; KHACHATRYAN, A.

Soft drinks. Prom.Arm. 5 no.9:35-36 S '62.

(MIRA 15:9)

1. Upravleniye pishchevoy promyshlennosti Soveta narodnogo
khozyaystva Armyanskoy SSR (for Zaz'yan). 2. Yerevanskiy
limonadnyy zavod (for Khachatryan).
(Armenia—Soft drinks)

KHACHATRYAN, A. A.

24442 KHACHATRYAN, A. A. Operativnoye lecheniye dvukh sluchayev opukhloley spinnoy mozga. Sbornik nauch. Trudov (Yerevanck. nauch.-issled. IN-T ortopedii i vostanovit. Khirurgii), 1, 1949, S. 131-35.

SC: Letopis, No. 32, 1949.

Khachatryan, A.A.

KHACHATRYAN, A.A.

Kidney located in a sliding hernia. Urologia 22 no.4:61 J1-Ag '57.
(MIRA 10:10)

1. Iz Yerevanskogo nauchno-issledovatel'skogo instituta ortopedii
i vosstanovitel'noy khirurgii (dir. - prof. Kh.A.Petrosyan)
(HERNIA) (KIDNEYS--ANOMALIES AND DEFORMITIES)

S/022/59/012/05/04/009

AUTHOR: Khachatryan, A.A.

TITLE: On the Calculation of a Three-layer Orthotropic Shell ²⁰

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-matematicheskikh nauk, 1959, Vol. 12, No. 5, pp. 59-76

TEXT: The theory of two-layer anisotropic shells developed by S.A. Ambartsumyan (Ref. 1) is extended to thin shells which consist of three homogeneous orthotropic layers. The curvilinear coordinates α, β, γ are chosen so that α, β fall into the lines of principal curvature and γ into the normal. The author assumes that no sliding takes place between the layers. Furthermore that a) the line element normal to the central surface conserves its length during the deformation; b) for the determination of the deformations $e_{\alpha\alpha}^i$ and $e_{\beta\beta}^i$ the stress σ_{γ}^i is negligible compared with σ_{α}^i , σ_{β}^i c) for the determination of $e_{\alpha\gamma}^i$, $e_{\beta\gamma}^i$ the tangential stresses $\tau_{\alpha\gamma}^i$ and $\tau_{\beta\gamma}^i$ are the same as under assumption of the undeformable normal made for the shell as totality. In the case of an only normally loaded shell a

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On the Calculation of a Three-layer Orthotropic Shell

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complicated system of differential equations is explicitly given for the displacements u, v, w . A solution of this system is given for the special cases of a plate and of a cylinder shell. The author gives two numerical examples.

There are 1 figure, 2 tables, and 8 Soviet references.

ASSOCIATION: Institut matematiki i mekhaniki AN Armyanskoy SSR
(Institute of Mathematics and Mechanics AS Armenian SSR)

SUBMITTED: May 28, 1959

Card 2/2

MNDZHOYAN, A.L.; AROYAN, A.A.; KHACHATRYAN, N.Kh.

Furan derivatives. Report No. 24: Synthesis of some amino esters of 5-ethyl- and 5- phenylethyl-2-furancarboxylic acids. Izv.AN Arm.SSR.Khim.nauki 12 no.6:443-450 '59.
(MIRA 13:7)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.
(Furancarboxylic acid)

AMBARTSUMYAN, S.A.; KHACHATRYAN, A.A.

Stability and vibrations of anisotropic plates. Dokl AN Arm.
SSR 29 no.4:159-166 '59. (MIRA 13:4)

1. Institut matematiki i mekhaniki AN ArmSSR. 2. Chlen-
korrespondent AN ArmSSR (for Khachatryan).
(Elastic plates and shells)

24-4100

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S/179/60/000/01/014/034
E081/E535

AUTHORS: Ambartsumyan, S.A. and Khachatryan, A.A. (Yerevan)

TITLE: The Stability and Vibrations of Anisotropic Plates

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1960, Nr 1, pp 113-122 (USSR)

ABSTRACT: The paper is a continuation of previous work (Ref 1). It is assumed (1) that the plate is orthotropic, rectangular and of constant thickness h , with one plane of elastic symmetry parallel to the middle surface and the other two planes parallel to the sides; (2) the rectangular coordinate system (α, β, γ) is such that the $\alpha\beta$ plane is parallel to the middle surface with the α and β axes parallel to the sides; (3) the normal stress σ_γ on planes parallel to the middle surface can be neglected in comparison with the remaining stresses; (4) the distance along the normal (γ) between two points on the plate after deformation remains unchanged; (5) the tangential shear stresses $\tau_{\alpha\gamma}$ and $\tau_{\beta\gamma}$ are given by

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The Stability and Vibrations of Anisotropic Plates

Eq (1.1), where $\varphi(\alpha, \beta)$ and $\psi(\alpha, \beta)$ are arbitrary initial functions. The bending of the plate is governed by the three differential equations (1.2) containing the normal deflection of the plate w , the functions φ and ψ and the elastic constants of the plate B_{ij} and a_{ij} . In stability problems Z is given by Eq (2.1) and the equations become (2.2). For a simply supported plate subjected to bi-axial compression (Fig 1), the solution of the equations can be written in the form (2.4) which on substitution in (2.2) gives (2.5). The critical stress P_{mn}^* is then found as (2.6) with P_{mn}^0 , the critical stress, assuming the validity of the Kirchhof hypothesis, given by Eq (2.7), and d given by Eqs (2.8). If the plate is compressed in one direction only, Eq (2.7) is replaced by Eq (2.9). If the plate is made of a transversely isotropic material with the isotropic planes parallel to the middle surface of the plate, the equation for critical stress becomes (2.10) with D , c and k given by (2.11) and E , μ elasticity modulus and Poisson's

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ratio in the isotropic planes, G' is the shear modulus characterizing the change in angle between directions in the isotropic planes and directions perpendicular to them. The minimum value of the critical stress occurs when there is one half wave in the direction perpendicular to the stress; in this case ($n = 1$) Eq (2.11) becomes (2.12). Table 1 gives values of k and coordinates of some characteristic points of the curves $\Phi = \Phi(c) = p^* b^2 / \pi^2 D_{11}$ for $\mu = 0.25$. In the upper part of the table $h/b = 0.1$ and in the lower part $h/b = 0.2$. Values of Φ are plotted against $c = a/b$ in Fig 2; the curve for $k = 0$ corresponds to the classical solution. Values of $\Phi(c)$ for orthotropic plate (obtained on the electronic calculating machine M-3 of the Calculating Centre, Ac.Sc., ArmSSR) and for various values of k_1 and c are given in Table 2. It is assumed that $m = 1$ and

Card 3/7 $\frac{E_1}{E_2} = \frac{\mu_1}{\mu_2} = \frac{E_1}{B_{66}} = 5, \quad k_1 = a_{55}E_1 = a_{44}E_2, \quad \frac{h}{b} = \frac{1}{10}, \quad \mu_1 = 0.3$ ✓

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where E_1 , μ_1 and E_2 , μ_2 are the elasticity moduli and Poisson's ratios in the directions corresponding to α and β . For free vibrations, Z (eq 1.2) is replaced by

$$Z = - \frac{\gamma_o h}{g} \frac{\partial^2 w}{\partial t^2}$$

which leads to Eq (3.1), with γ_o the density of the material and g the gravitational acceleration. Writing the solution of (3.1) in the form (3.2) leads to the equation (3.3) for the frequency ω_{mn} , where ω_{mn}^o (Eq 3.4) is the frequency according to the classical solution. For a transversely isotropic plate, the frequency reduces to (3.5). Table 3 gives values of the ratio $\omega_{mn}/\omega_{mn}^o$ for modes of vibration in which $m, n = 1, 2$.

The departure of the true frequency from the classical frequency increases with increasing k and with increasing mode number. The equations of dynamic stability of an orthotropic plate are obtained by substituting the

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expression (4.1) for z in (1.2). If the plate is compressed in one principal direction only, the conditions (4.2) hold; assuming that the external force varies periodically with time ((Eq 4.3) where P is the amplitude and θ is the frequency), Eqs (1.2) take the form (4.4). Taking the solution in the form (4.5), where $w(t)$, $\varphi(t)$ and $\psi(t)$ are values of the functions w , φ and ψ at the centre of the plate, Eqs (4.4) become (4.6). Eliminating $\varphi(t)$ and $\psi(t)$ from (4.6) with respect to w , the differential equation (4.7) is obtained, where ω_{mn} , P_{mn}^* are the frequency of vibration of the unloaded plate (3.3), and the critical stress for uniaxial stress in the α direction. Eq (4.7) is the known Mathieu equation; for certain relations between its coefficients the solution increases without limit, corresponding to regions of dynamic instability of the plate. Rewriting (4.7) in the form (4.8), it is known (Ref 7) that the limits of the unstable regions are given by (4.9) for the first (principal) instability

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region, by (4.10) for the second region and by (4.11) for the third region, where θ^* is the critical frequency of the external forces. It will now and subsequently be assumed that there is one half wave only in the α and β directions (i.e. $m = n = 1$) and for simplicity the subscripts 11 are omitted. Under these conditions, the dynamic instability regions of a square plate ($a = b$) of transversely isotropic material are given by (4.13, 1st region), (4.14, 2nd region) and (4.15, 3rd region) in which the results are presented in a form for comparison with the classical results. From (4.8) $\lambda \leq 1/2$ and accordingly, the limiting λ^0 is given by (4.16). The values of $\theta^*/2\omega^0$ as a function of λ^0 calculated from (4.13) to (4.15) for various values of k are presented in Table 4; Fig 3 shows the instability regions for $k = 0$ and $k = 0.2$. Fig 3 and Table 4 show that the instability regions differ from the classical values ($k = 0$) by greater amounts as k increases. Similar calculations for a square

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The Stability and Vibrations of Anisotropic Plates

orthotropic plate were made electronically; the results are given in Table 5, where

$$k_1 = \frac{E_1}{E_2} = \frac{\mu_1}{\mu_2} = \frac{E_1}{G_{12}}, \quad k_2 = a_{55}E_1 = a_{44}E_2$$

where E_1 , μ_1 and E_2 , μ_2 are the elasticity moduli and Poisson's ratios in the directions corresponding with α and β ; $G_{12} = B_{66}$ with a_{55} , a_{44} and B_{66} known elasticity constants (top of p 114). The calculations were carried out for $\mu_1 = 0.3$, $h/a = 0.1$. There are 5 tables, 3 figures and 7 Soviet references.

ASSOCIATION: Institut matematiki i mekhaniki AN ArmSSR
(Institute of Mathematics and Mechanics, Ac.Sc., ArmSSR)

SUBMITTED: June 19, 1959

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C 111/ C 333

AUTHOR: Khachatryan, A. A.

TITLE: On Stability and Oscillations²¹ of Round Transverse-isotropic Plates²⁶

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-matematicheskikh nauk, 1960, Vol. 13, No. 1, pp. 73-80

TEXT: The author considers a transverse-isotropic round plate of constant thickness h ; the isotropy plane is in parallel with the central surface.

The consideration is carried out in the usual cylindrical system of coordinates (r, β, γ) . As in (Ref.1) the author assumes: 1. δ_γ is negligible on surfaces in parallel with the central surface 2. the distance along the normal (γ) remains constant under the deformation

3. $\tau_{r\gamma} = \frac{1}{2} \left(\frac{h^2}{4} - \gamma^2 \right) \varphi(r, \beta)$, $\tau_{\beta\gamma} = \frac{1}{2} \left(\frac{h^2}{4} - \gamma^2 \right) \psi(r, \beta)$, where

φ and ψ are unknown. From the equations given in (Ref.2) the author obtains in the considered case the relation

$$(1.4) \quad D \Delta \Delta W = (1 - Ka^2 \Delta) Z,$$

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On Stability and Oscillations of Round Transverse-isotropic Plates

where $W = W(r, \beta)$ is the normal displacement, a the radius of the plate,

$$D = \frac{Eh^3}{12(1-\nu^2)}, \quad K = \frac{1}{10(1-\nu^2)} \frac{E}{g} \frac{h^2}{a^2}, \quad \Delta = \frac{\partial^2}{\partial r^2} + \frac{1}{r} \frac{\partial}{\partial r} + \frac{1}{r^2} \frac{\partial^2}{\partial \beta^2}.$$

The equation (1.4) is the basis of the further investigated cases; I.

A plate compressed in its plane by a uniformly distributed stress P which is normal to the boundary. Then it is

$$(2.1) \quad Z = -P \Delta W;$$

if the plate is fixed along the whole boundary, then for the critical load it follows

$$(2.8) \quad P^* = \frac{26.38 D}{a^2(1 + 26.38 K)}.$$

II. The equation of the free oscillations of an unloaded plate is obtained with

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$$(3.1) \quad Z = - \frac{\gamma_0 h}{g} \frac{\partial^2 W}{\partial t^2}$$

where g is the acceleration of gravity, γ_0 the specific gravity of the plate. The characteristic frequencies following from this are essentially different from the values of the linear theory. III. The equation of the dynamic stability of a plate subject to a periodically variable stress along the boundary is obtained with

$$(4.1) \quad Z = - P \Delta W - \frac{\gamma_0 h}{g} \frac{\partial^2 W}{\partial t^2} .$$

There are 9 references: 8 Soviet and 1 American.

ASSOCIATION: Institut matematiki i mekhaniki AN Armyanskoy SSR (Institute of Mathematics and Mechanics AS Armyanskaya SSR)

SUBMITTED: October 31, 1959

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83618

S/022/60/013/004/001/004
C111/C222

24,4100

AUTHOR: Khachatryan, A.A.

TITLE: On Stability and Oscillations of the Transversal-Isotropic
Spherical Shell *no*

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-
matematicheskikh nauk, 1960, Vol.13, No.4, pp.19-28

TEXT: The author considers a thin spherical shell of transversal-
isotropic material. The isotropic planes are parallel in every point
of the medium surface of the shell. The paper bases on the general
theory of anisotropic shells of S.A. Ambartsumyan (Ref.1); whereby it
is possible to consider the influence of the transversal shifts in
tensions and deformations. The author uses the well-known relations of
(Ref.1) and (Ref.3) and neglects the terms of the order h^2/R^2
(h - thickness of the shell, R - radius of the shell). Thus he obtains
the following initial equation for investigations of stability and
oscillation for a closed spherical shell:

$$(1.15) \quad [c^2(\Delta+1)^2 + 1 - k\Delta](\Delta+2)w = \frac{R^2}{Eh} (1-k\Delta)(\Delta+1-\nu)Z$$

where

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On Stability and Oscillation of the Transversal-Isotropic Spherical Shell

$$(1.16) \quad c^2 = \frac{h^2}{12(1-\mu^2)R^2}, \quad k = \frac{Eh^2}{10(1-\mu^2)R^2G},$$

and w is the bending; $\Delta = \frac{R^2}{AB} \left[\frac{\partial}{\partial \alpha} \left(\frac{B}{A} \frac{\partial}{\partial \alpha} \right) + \frac{\partial}{\partial \beta} \left(\frac{A}{B} \frac{\partial}{\partial \beta} \right) \right]$.
 α, β are coordinates of the medium surface, $A = R$, $B = R \sin \alpha$,
 G is the modulus of shear in planes being perpendicular to the
 isotropic plane. Z is the normal component of the charging of the
 surface. The coefficient k is a correction of the classical theory.
 With the aid of (1.15) the author considers the case of a shell charged
 uniformly on the surface ($q = \text{const}$) and determines the minimum of
 the critical charge (for $k = 0$ there results a well-known formula of
 V.Z.Vlasov). Finally the author considers free oscillations of an
 unloaded shell (tangential forces of inertia are neglected). The
 eigenfrequencies are determined under certain restrictions. The case
 of a periodically variable charge

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C111/C222

AUTHOR: Khachatryan, A.A.

TITLE: On the Stability of a Circular Cylindrical Shell for Some Loads

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-matematicheskikh nauk, 1960, Vol. 13, No. 5, pp. 37 - 45

TEXT: Starting from the general theory of anisotropic shells of S.A. Ambartsumyan (Ref. 1) the author considers the stability of a transversal-isotropic circular cylindrical shell of a mean length l for a simultaneous influence of a uniform axial transverse pressure and the torsion. The author obtains the stability equations

$$(1.7) \quad \left(\frac{\partial^2}{\partial x^2} + \frac{1-\nu}{2} \frac{\partial^2}{\partial \beta^2} \right) u + \frac{1+\nu}{2} \frac{\partial^2 v}{\partial x \partial \beta} + \frac{\nu}{R} \frac{\partial w}{\partial x} = 0,$$

$$\frac{1+\nu}{2} \frac{\partial^2 u}{\partial x \partial \beta} + \left(\frac{1-\nu}{2} \frac{\partial^2}{\partial x^2} + \frac{\partial^2}{\partial \beta^2} \right) v + \frac{1}{R} \frac{\partial w}{\partial \beta} = 0, \quad (1.7)$$

$$- \frac{Eh^3}{12(1-\nu^2)} \Delta \Delta w + (1-k_0 \Delta) \left[T_1^0 \frac{\partial^2 w}{\partial x^2} + T_2^0 \frac{\partial^2 w}{\partial \beta^2} + 2S^0 \frac{\partial^2 w}{\partial x \partial \beta} - \right.$$

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$$\left. - \frac{Eh}{R(1-\nu^2)} \left(\nu \frac{\partial u}{\partial x} + \frac{\partial v}{\partial \beta} + \frac{w}{R} \right) \right] = 0.$$

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where u, v, w are the additional shifts; α, β, γ are the coordinates (α along the generating line, β along the arc of the cross section, γ along the normal of the middle surface); R is the radius of curvature of the middle surface. It is assumed that before the loss of stability the shell was in a state of tension free of moments and that T_1^0, T_2^0, S^0 are the inner tangential forces of the initial state free of moments; $k_0 = \frac{Eh^2}{10(1-\nu^2)G'}$,

E, ν are the modulus of elasticity and the Poisson's coefficient in the isotropic planes, G' is the modulus of shear in planes perpendicular to the middle surface.

If there is an axial pressure and a uniform transversal pressure then it holds

$$(2.1) \quad T_1^0 = -P, \quad T_2^0 = -qR, \quad S^0 = 0$$

Assuming that it holds

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$$\begin{aligned} u &= A \cos \frac{m \pi \alpha}{l} \sin \frac{n \beta}{R} \\ (2.3) \quad v &= B \sin \frac{m \pi \alpha}{l} \cos \frac{n \beta}{R} \\ w &= C \sin \frac{m \pi \alpha}{l} \sin \frac{n \beta}{R} \end{aligned}$$

then with $\lambda = \frac{m \pi R}{l}$ one obtains for the determination of the critical values of the external forces (for hinged supports along the boundary) :

$$(2.5) \quad \frac{P \lambda^2 + q R n^2}{E h} = c^2 \frac{(\lambda^2 + n^2)^2}{1 + k(\lambda^2 + n^2)} + \frac{\lambda^4}{(\lambda^2 + n^2)^2}$$

where

$$(2.6) \quad c^2 = \frac{h^2}{12(1 - \nu^2)R^2}, \quad k = \frac{k_0}{R^2} = \frac{E h^2}{10(1 - \nu^2)R^2 G'}$$

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If there is a torsional moment M at the ends then it holds

$$(3.1) \quad T_1^0 = T_2^0 = 0, \quad S^0 = \frac{M}{2\pi R^2}.$$

Demanding that of the boundary conditions only

$$(3.3) \quad w = 0 \quad \text{for} \quad \alpha = 0 \quad \text{and} \quad \alpha = 1$$

are satisfied then with the representation

$$(3.4) \quad w = \sum_{i=1}^2 C_i \sin \left(\mu_i \frac{\alpha}{R} - \frac{n\beta}{R} \right)$$

one obtains for the critical torsional moment

$$(3.6) \quad M^* = \pi R^2 E h \left\{ c^2 \frac{(\mu_i^2 + n^2)^2}{n \mu_i [1 + k(\mu_i^2 + n^2)]} + \frac{\mu_i^3}{n(\mu_i^2 + n^2)^2} \right\}$$

where c^2 and k are given by (2.6); μ_i ($i = 1, 2$) satisfy the condition
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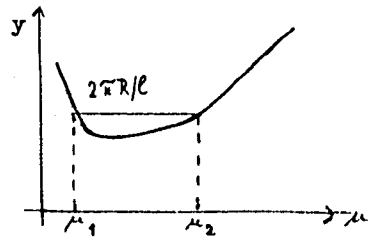
$$(3.5) \quad \mu_2 - \mu_1 = \frac{2m\tilde{\mu}R}{1} \quad (m = 1, 2, \dots)$$

and besides are so that (3.6) assumes the same value for $i = 1$ and $i = 2$.
The further investigation can graphically be carried out by drawing the
function

$$(3.7) \quad y = c^2 \frac{(\mu^2 + n^2)^2}{n\mu [1 + k(\mu^2 + n^2)]} + \frac{\mu^3}{n(\mu^2 + n^2)^2}$$

(Fig. 1). The ordinate of the chord yields the value $\frac{M^*}{\pi R^2 E h}$.

Fig. 1



Card 5/6

On the Stability of a Circular Cylindrical
Shell for Some Loads

S/022/60/013/005/004/008
C111/C222

There are 6 references : 5 Soviet and 1 American.

[Abstracter's note : (Ref. 1) is a paper of S.A. Ambartsumyan in
"Prikladnaya matematika i mekhanika, 1958, Vol. 22, No. 1"]

ASSOCIATION: Institut matematiki i mekhaniki AN Armyanskoy SSR
(Institute of Mathematics and Mechanics of the Academy of
Sciences Armyanskaya SSR)

SUBMITTED: May 13, 1960

Card 6/6

AMBARTSUMYAN, S.A.; KHACHATRYAN, A.A.

Stability and vibrations of a shallow orthotropic
cylindrical panel. Dokl. AN Arm. SSR 30 no.1:39-45
'60. (MIRA 13:7)

1. Institut matematiki i mekhaniki Akademii nauk Armyanskoy
SSR i Yerevanskiy gosudarstvennyy universitet. 2. Chlen-
korrespondent AN Armyanskoy SSR (for Ambartsumyan).
(Elastic plates and shells)

KHACHATRYAN, A.A.

Stability and oscillations of a transversally isotropic
spherical shell. Izv. AN Arm. SSR. Ser. fiz.-mat. nauk 13
no.4:19-28 '60. (MIRA 13:9)

1. Institut matematiki i mekhaniki AN ArmSSR.
(Elastic plates and shells)

KHACHATRYAN, A.A.

Stability of a circular cylindrical shell submitted to certain loads.
Izv. AN Arm. SSR. Ser. fiz.-mat. nauk 13 no.5:37-45 '60.

(MIRA 14:1)

1. Institut matematiki i mekhaniki AN Armyanskoy SSR.
(Elastic plates and shells)

KHACHATRYAN, A. A.

Cand Tech Sci - (diss) "Several tasks in the stability and vibrations of anisotropic plates and casings." Yerevan, 1961. 9 pp; (Committee of the Council of Ministers Armenian SSR for Higher and Secondary Specialist Education, Yerevan Polytechnic Inst imeni K. Marx); 150 copies; price not given; (KL, 5-61 sup, 194)

32383

S/124/61/000/012/037/038
D237/D304

10 6000 1327

AUTHOR: Khachatryan, A. A.

TITLE: On the stability and oscillations of plates isotropic in a transverse direction

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 12, 1961, 25-26, abstract 12V182 (Izv. AN ArmSSR. Ser. fiz.-matem. n., 1960, 13, no. 1, 73-80)

TEXT: With the aid of the equations of bending of circular plates with cylindrical anisotropy (S. A. Ambartsumyan, D. V. Peshtmaldzhyan, Izv. AN ArmSSR. Ser. fiz.-matem. n., 1959, 12, no. 1, 43-59-RZhMekh, 1960, no. 8, 10607), an equation is obtained for solving the problems of stability and vibration of round transversely isotropic plates of constant thickness, where the plane of isotropy is parallel to the mean plane of the plate. It is shown that the critical force in the statically stable state, frequency of free oscillations, and boundaries of regions

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D237/D304

On the stability...

of dynamic instability essentially depend on the coefficient

$$K = \frac{1}{10(1-\nu^2)} \frac{E}{G'} \frac{h^2}{a^2}, \quad (1)$$

where E, ν --modulus of elasticity and Poisson coefficient in the plane of isotropy, G' --shear modulus in planes normal to isotropy plane, h --thickness, a --radius of the plate. 9 references. [Abstracter's note: Complete translation.]

Card 2/2

37855

S/022/62/015/003/008/008
D234/D308

107100

AUTHOR: Khachatryan, A.A.

TITLE: Stability of a rectangular plate under certain loads

PERIODICAL: Akademiya nauk Armyanskoy SSR. Izvestiya, v.15, no.3, 1962, 129-132

TEXT: The loads acting on the plate are assumed to be

$$x = \pm \frac{a}{2} \quad \sigma_x^0 = -\gamma p, \quad \tau_{xy}^0 = \pm \frac{2\alpha p}{b} y, \quad (1)$$

$$y = \pm \frac{b}{2} \quad \sigma_y^0 = -\beta p, \quad \tau_{yx}^0 = \pm \frac{2\alpha p}{a} x,$$

where a, b - dimensions of the plate; α, β, γ - several constants;
p - pressure value.

The author deduces for the critical value of the parameter p

Card 1/2

Stability of a rectangular plate ...

S/022/62/015/003/008/008
D234/D308

$$p_{cr} = \frac{\pi^2 D_{ab}}{h} \cdot \frac{\left(\frac{1}{a^2} + \frac{1}{b^2}\right)^2}{\gamma \frac{b}{a} + \beta \frac{a}{b} - \frac{2\alpha}{3}}. \quad (9)$$

The case of a square plate for $\beta = \gamma = 1$ and $\alpha \geq 0$ is discussed. There is 1 figure.

ASSOCIATION: Institut matematiki i mekhaniki AN Armyanskoy SSR
(Institute of Mathematics and Mechanics, AS ArmSSR)

SUBMITTED: April 13, 1962

Card 2/2

KHACHATRYAN, A.A.

Stability of a rectangular plate under different loads.

Izv. AN Arm. SSR. Ser. fiz.-mat. nauk 15 no.3:129-132

'62.

(MIRA 15:9)

1. Institut matematiki i mekhaniki AN Armyanskoy SSR.
(Elastic plates and shells)

1965

1965

Khachaturyan, A. A.

10
9

Bending of rectangular transverse plates

AN ArmSSR. Izvestiya. Design of the machine tooling
nauk, v. 18, no. 1, 1965, 43-52

1965: bending stress, rectangular plate, is

1965: bending stress, rectangular plate, is

1965: supported and the two wider edges can

1. 10/1/1964

to either freely supported or to either or in freely

1. 10/1/1964

1. 10/1/1964

1. 10/1/1964

KHACHATRYAN, A.A.

Flexure of a semi-infinite plate by a load distributed along the edge. Izv. AN Arm. SSR, Ser.fiz.-mat. nauk, 18 no.2:39-47 '65.
(MIRA 18:6)

1. Institut matematiki i mekhaniki AN Armyanskoy SSR.

L 27122-66 EWT(d) IJP(c)

SOURCE CODE: UR/0198/66/002/002/0029/0035

ACC NR: AP6016865

AUTHOR: Melkonyan, A. P. (Yerevan); Khachatryan, A. A. (Yerevan) 47
B

ORG: Institute of Mathematics and Mechanics, AN ArmSSR, Yerevan (Institut matematiki i mekhaniki)

TITLE: Stability of rectangular films with transverse isotropy [This paper was presented at the 5th All-Union Conference on Plates and Shells held in Moscow from 3 to 6 February 1965]

SOURCE: Prikladnaya mekhanika, v. 2, no.2, 1966, 29-35

TOPIC TAGS: computer, computer calculation, shell structure stability/Razdan-2 computer

ABSTRACT: On the basis of the refined theory of anisotropic films of S. A. Ambartsumyan (Teoriya anizotropnykh obolochek — Theory of Anisotropic Shells —, Moscow 1961), the authors present a solution of the problem of the stability of a rectangular, transversely isotropic sheet which is hinge-supported on three sides and free on the fourth side and subjected to a uniform compression on two opposite hinged sides. By the introduction of a new function, the original system of equations of Ambartsumyan is reduced to a system of two independent equations for the normal dislocations and the derived function.

Computations performed on the Razdan-2 computer at the Computer Center of the Academy of Sciences Armenian SSR are tabulated.

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