

DARENSKIY, D.I.

Thrombopenic purpura in thyrotoxicosis. Klin. end. 38 no.7:
146-147 '60. (MIRA 13:12)
(PURPURA (PATHOLOGY)) (HYPERTHYROIDISM)

DARENSKIY, D.I.

Air embolism in an experiment; abstract. Voen.-med.zhur. no.3:
81 Mr '61. (MIRA 14:7)
(EMBOLISM)

DARENSKIY, D.I., kand.med.nauk

Case report on venous aneurysms. Khirurgiia 37 no.5:115 My '61.
(MIRA 14:5)
(ANEURYSMS)

DARENSKIY, D.I., kand.med.nauk (Chita, Yakumskaya ul., d.27, kv.21)

Staircase approach to the thyroid gland in strumectomy. Vest.
khir. no.1:133-134 '62. (MIRA 15:1)

(GOITER) (THYROID GLAND--SURGERY)

DARENSKIY, D.I., kand. med. nauk (Omsk)

Peptic ulcer of the intestinal graft in experimental gastrectomy.
Khirurgiya 40 no.8:87-90 Ag '64. (MIRA 18:3)

L 54114-65 EWT(m)/EWP(e)/EPA(s)-2/EPF(c)/EWP(i)/EPR/EWP(b) Fc-L/Pr-L/Ps-L/Pt-7
 ABSTRACT NO. APS015412 KX 24H TR/0286/45/000/008/0047/0047
 36
 B

AUTHOR: Darenskiy, V. A.

TITLE: Glass for glass fibers. Class 32, No. 170153

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 8, 1965, 47

TOPIC TAGS: glass fiber, glass composition, chemically stable glass fiber

ABSTRACT: To improve the chemical durability of glass fibers, glass of the following composition is used: SiO_2 , 51—54%; Al_2O_3 , 12—15%; Fe_2O_3 , 6—14%; CaO , 8—1.5%; MgO , 5—10%; R_2O , 2—6%. BO]

ATTENTION: Ukrainskiy filial vsesoyuznogo nauchno-issledovatel'skogo instituta
 stekla i shkafa (Ukrainian Branch of the All-Union Scientific Research Institute
 of Glass Fiber)

SUBMITTED: 01Apr63

ENCL: 00

SUB CODE: MT

NO REF SOV: 000

OTHER: 000

ATT PRESS: 4024

Card 1/1

IMMER, Abram Samoylovich, kandidat tekhnicheskikh nauk; **ISLANKINA, T.F.**,
redaktor, **ISLANT'YNA**, P.O., tekhnicheskikh redaktor

[Shell molding] Lit'e v obolochkovye formy. Moskva, Izd-vo
"Znanie," 1956, 38 p. (Vsesoiuznoe obshchestvo po rasprostraneniю
politicheskikh i nauchnykh snanii, Ser. 4, no.15) (MIRA 9:7)
(Shell molding (Founding))

DARER, A.S.

AID P - 5145

Subject : USSR/Engineering

Card 1/1 Pub. 103 - 4/18

Author : Darer, A. S.

Title : The 832-type molding machine for making casting casings

Periodical : Stan. 1 instr., 5, 14-18, My 1956

Abstract : The author describes the design and operation of a new semi-automatic radial machine for making molds of sand and resin for casting contour forms. The machine is designed by the Scientific Research Institute of Founding Machines of the Ministry of the Machine-Tool and Instrument Industry (NIILITMASH), and is used for mass production in foundry practice of ferrous and non-ferrous metals. Three drawings, 1 cyclogram, 1 table and 1 graph.

Institution : As above

Submitted : No date

USSR/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria,
Physical-Chemical Analysis, Phase Transitions.

B-8

Abs Jour: Referat. Zhurnal Khimiya, No 3, 1958, 7170.

of NaCl or KCl to solutions containing a constant amount of $MgCl_2$, the curves Δt - composition in molar parts are analogous in both the systems, but Δt is smaller in the system II. Some chemical interaction between KCl and $MgCl_2$ in the solution is assumed. See part I in RZhKhim, 1957, 14689.

Card. : 2/2

-44-

Dated R.S.
MUN, A.I.; DAREB, R.S.

Cryoscopy of aqueous solutions of salts. Part 3: The systems $\text{LiCl--CaCl}_2\text{--H}_2\text{O}$ and $\text{LiCl--MgCl}_2\text{--H}_2\text{O}$. Zhur. neorg. khim. 2 10:2483-2485
O 1977. (MIRA 11:3)

1. Institut khimicheskikh nauk AN Kazakhskoy SSR.
(Cryoscopy) (Systems (Chemistry)) (Chlorides)

BEKTUROV, A.B.; MUN, A.I.; DAHER, R.S.

Magnesium chloride in salt lakes of northern Kazakhstan. Vest. AN
Kazakh. SSR 14 no.5:68-74 My '58. (MIRA 11:7)
(North Kazakhstan Province—Salt industry) (Magnesium salts)

MUN, A.I.; DARER, R.S.

Seasonal changes in the salt composition of the brine of Lake Teke.
Izv. AN Kazakh SSR. Ser. khim. no.1:29-34 '60. (MIRA 13:11)
(Teke, Lake--Brines)

DARER, R.S.; MUN, A.I.

Freezing-out and evaporation of the Teke Lake brine. Izv. AN Kazakh.
SSR. Ser.tekh. i khim.nauk no.3:3-8 '64. (MIRA 17:2)

BEKTUROV, A.B.; MUN, A.I.; DARER, R.S.

Chemistry and technology of mineral fertilizers and natural salts.
Trudy Inst.khim.nauk AN Kazakh.SSR 10:5-19 '64.

(MIRA 17:10)

DARER, R.S.

Complex utilization of salts of the lake Zhalauly. Trudy Inst.khim.
nauk AN Kazakh.SSR 10:20-26 '64. (MIRA 17:10)

MUN, A.I.; DARER, R.S.

Chemical composition of silt solutions of the lake Seletytengiz. Trudy
Inst.khim.nauk AN Kazakh.SSR 10:27-42 '64.

(MIRA 17:10)

ACC NR: AP6032421

SOURCE CODE: UR/0387/66/000/009/0087/0092

AUTHOR: Mishin, S. V.; Dareshkina, N. M.

ORG: Northeastern Joint Research Institute, Siberian Department, Academy of Sciences (Severo-vostochny, kompleksnyy nauchno-issledovatel'sky institut, Sibirskoe otdeleniye Akademii nauk)

TITLE: Identification of exchanged components from seismograms of distant earthquakes

SOURCE: AN SSSR. Izvestiya. Fizika Zemli, no. 9, 1966, 87-92

TOPIC TAGS: seismic wave, seismography, earth crust, longitudinal wave, transverse wave, stratigraphy

ABSTRACT: The identification of exchanged waves on the basis of amplitude to time ratios of the wave components is discussed. The factoring, proposed in this paper, eliminates the background of longitudinal waves, thus widening the range of utilization of the earthquake seismograms for the study of the lower earth crust. Because of the low velocities of those waves, the seismograms have to be enlarged and redrawn. This adds to the errors in interpretation. The resolution is limited by the periods of the recorded oscillations and it is still necessary to identify the entry of each wave into a new stratum. To identify the stratigraphic boundaries, the average velocities

UDC: 550.342

Card 1/2

ACC NR: AP6032421

of the longitudinal and transverse waves should be known, i. e., determined by some other method. Orig. art. has: 3 figures, 2 tables, 1 formula.

SUB CODE: 08/ SUBM DATE: 17Jun65/ ORIG REF: 011

Card 2/2

DAREV, I.

Darev, I. Commandant. n. 20. BULGARSKI VOIN. Sofiya. Vol. 4, no. 5.
May 1955.

SO: Monthly List of the East European Accession (EEAL) LC. Vol. 4,
no. 10, Oct. 1955. Uncl.

DAREVSKAYA, Ye. M. and BAKHTEYEV, G. Kh.

"An Intergeneric Hybrid between Barley and Ely Mus," Dokl. AN SSSR,
47, No.4, 1945.

Inst. for Grain Husbandry, Nemchinovka

DAROVICHAY, Ye. M.; TSITSIN, M. V.

Mem., Scientific Research Institute of Grain Agriculture, Nemchinovka (-1947-)

"The Rubus Flagellares Will. and Rubus Saxatilis L. Hybrid," Dok. AN, 57,
No. 8, 1947

BAKHTYEV, F.Kh.; DAREVSKAYA, Ye.M.

Hordeum lagunculiforme Bacht. and *Hordeum spontaneum* C.Koch from
the Turkmen S.S.R. Bot.zhur. 47 no.2:267-272 F '62.
(MIRA 15:3)

1. Botanicheskiy institut imeni Komarova AN SSSR, Leningrad.
(Turkmenistan--Barley)

DAREVSKIY, A.I.

42263 DAREVSKIY, A.I. Nekotoryye voprosy rascheta potentsial'nykh poley elektrotekhniki. Trudy Mosk. energet. ih-ta im Molotova, VYP 3, 1948 s. 104-20- Bibliogr. b nazv

SO: Letopis' Zhurnal' nykh Statey, Vol. 47, 1948

DAREVSKIY, A.I., dotsent, kandidat tekhnicheskikh nauk

Notes on theoretical electrotechnics. Trudy MEI no.14:91-94 '53.
(Electric networks) (MLRA 8:7)

DAREVSKIY, A.I.

AID P - 2355

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 19/30

Authors : Zeveke, G. V., Kand. of Tech. Sci., Dotsent
Ionkin, P. A., Kand. of Tech. Sci., Dotsent
Netushil, A. V., Doc. of Tech. Sci., Prof.
Strakhov, S. V., Kand. of Tech. Sci., Dotsent, Moscow
Power Engineering Institute im Molotov; Darevskiy, A.I.,
Kand. of Tech. Sci., Dotsent, All-Union Correspondence
Polytechnical Institute; Lomonosov, V. Yu., Doc. of Tech.
Sci., Prof. Central Scientific Research Institute of the
Ministry of Electric Power Stations; Neyman, L. R., Prof.
Corr. Mem. of Academy of Sciences, USSR Leningrad Poly-
technical Institute im. Kalinin

Title : Concerning a textbook on the theory of electrical engi-
neering for a university course (Discussion) (Same
journal, Nos. 6, 7, 12, 1953; Nos. 3, 4, 1954)

Periodical : Elektrichestvo, 5, 69-73, My 1955

Abstract : The discussion concerned the coordination of the course
in the theoretical bases of electrical engineering with

AID P - 2355

Elektrichestvo, 5, 69-73, My 1955

Card 2/2 Pub. 27 - 19/30

the courses of mathematics and physics in order to avoid duplication. As a result of the discussion, a plan for future textbooks was outlined on the basis of two such books, one written by a collective of authors from the Moscow Institute of Power Engineering, the other by L. R. Neyman and P. L. Kalantarov of the Leningrad Polytechnical Institute. The conclusions of the discussion will be included in the new program of the Ministry of Higher Education.

Institution: None

Submitted : No date

AUTHOR: Darevskiy, A. I. SOV/105-58-9-3/34

TITLE: The Electrostatic Field of a Split Phase (Bundle Conductor)
(Elektrostaticheskoye pole rasshcheplennoy fazy)

PERIODICAL: Elektrichestvo, 1958, Nr 9, pp 16 - 19 (USSR)

ABSTRACT: In investigating the electric properties of transmission lines with split phases (bundle conductors), the author, using bipolar coordinates, solves Laplace's equation for plane parallel fields produced by one of the following arrangements: 1) Two equally charged cylinders, 2) two conducting cylinders, 3) two equally charged cylinders at the tips of an equilateral triangle, and an axis. In 2), the influence of the neighbor phases can be taken into account, and in 3) the influence of the ground (the mirror images of the conductors being assumed as axes). There are 3 figures and 1 references, 0 of which is Soviet.

ASSOCIATION: Vsesoyuznyy zaochnyy politekhnicheskii institut (All-Union Polytechnical Institute for Instruction by Correspondence)

Card 1/2

DAREVSKIY, A.I.; IONKIN, P.A.

Partial capacities (conductivities) of electrode systems and
separate fluxes in the resulting field. Elektrichestvo
no.5:80-81 My '60. (MIRA 13:9)
(Electric charge and distribution)

IGNEIN, Petr Afanas'yevich, prof.; MEL'NIKOY, Nikolay
Aleksandrovich, prof.; DAREVSKIY, Aleksandr Iosifovich,
docent; KUKHARKIN, Yevgeniy Stepanovich, dots.
KHRUSTALEVA, N.I., red.

[Theoretical principles of electrical engineering] Teore-
ticheskie osnovy elektrotekhniki. Moskva, Vysshaya shkola,
Pt.1. 1965. 333 p. (MIRA 18:11)

DAREVSKIY, I. S.

"The Food of the Ordinary Viper," Priroda, No.7, 1949

DARVSKIY, I.S.

Systematic position of the Transcaucasian variegated desert lizard
Eumias arguta (Pallas) (Reptilia, Sauria). Dokl. AN Arm. SSR.
16 no.4:117-121 '53. (MIRA 9:10)

1. Zoologicheskiy institut Akademii nauk Armyanskoy SSR. Predstav-
leno G.Kh. Binyatyanom.
(Transcaucasia--Lizards)

DAREVSENY, I.S.

New species of Ablepharus from the Armenian SSR (Ablepharus chernovi sp.
nov. Reptilia, Sauria). Biol.MOIP. Otd.biol. 58 no.2:39-41 '53.
(MLRA 6:6)
(Armenia—Lizards)

DAREVSKIY, I.S.

Useful role of viviparous lizards in connection with the problem of evaluating the economic importance of lizards in our fauna. Biol.MOIP Otd.biol. 58 no.4: 21-31 '53.

(MIRA 6:11)
(Lizards)

DARIVSKIY, I.S.

Discovery of the skink *Ablepharus deserti* Strauch. in the Murgab Valley and the probable zoogeographic data of the find. Izv. AN Turk. SSR no.2:72-74 '55. (MLRA 9:5)

1. Zoologicheskiy muzey Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova.
(Murgab Valley--Skinks)

DAREVSKIY, I.S.
DAREVSKIY, I.S.

Lizard enemies of beekeeping. Priroda 44 no.9:119 S '55. (MLRA 8:11)

1. Zoologicheskiy institut Akademii nauk Armysanskoy SSR
(Lizards) (Bee culture--Diseases and pests)

DAREVSKIY, I.S.

~~Vipera kaznakovi~~
Vipera kaznakovi Nik., a species of venomous snakes new to the
fauna of Armenia. Izv. AN Arm. SSR. Biol. i sel'khoz. nauki 9
no.12:127-130 D '56. (MLRA 10:2)

1. Zoologicheskii institut Akademii nauk Armyanskoy SSR.
(Mokryye Gory--Serpents)

DAREVSKIY, I.S.

Structure and function of the nasal gland of *Malpelen mensesculanus* Herm.
(Reptilia, Serpentes). Zool.shur.35 no.2:312-314 F '56. (MIRA 9:7)

1. Biologo-pechvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta
imeni M.V. Lomonosova.
(Serpents)

DAREVSKIY, I.S. (Yerevan)

Striking motion of the poisonous snake. Priroda 45 no.4:100-101
Ap '56. (MIRA 9:7)

1. Zoologicheskiy institut Akademii nauk Armyanskoy SSR.
(Serpents)

DAREVSKIY
CHERNOV, S.A.; DAREVSKIY, I.S.

New data on the herpetological fauna of southwestern China
[with summary in English]. Biol.MOIP. Otd.biol. 61 no.5:9-
12 S-O '56. (MLRA 10:2)

(YUNNAN PROVINCE--REPTILES)

DAREVSKIY, I.S. Can Biol Sci -- (diss) "Fauna of Reptiles of
Armenia and Its Zoo-geographical Analysis", Yerevan, 1957,
28 ^{pp} ~~pages~~ (Zoological Inst ^{Acad Sci} ~~of~~ USSR. Scientific Council).
150 copies ^{Bibliography: pp 27-29 (10 titles)} (RL, 10-58, 119).

- 16 -

DAREVSKIY, I. S.

Systematics and ecology of rock lizards *Lacerta saxicola* Eversmann,
occurring in Armenia. Zool. sbor. no. 10:27-57 '57. (MIRA 11:7)
(Armenia--Lizards)

DAREVSKIY, I.S.

Turanian elements in the herpetetic fauna of Transcaucasia and possible
paths of their infiltration from Central Asia. Izv. AN Arm. SSR.
Biol. i sel'khoz. nauki 10 no.12:69-77 D '57. (MIRA 11:2)
(Transcaucasia--Reptiles)

AUTHOR: Darevskiy, I. S. SOV/20-122-4-54/57

TITLE: Natural Parthenogenesis in Certain Subspecies of Rock Lizards, *Lacerta Saxicola* Eversmann (Yestestvennyy partenogenez u nekotorykh podvidov skal'noy yashcheritsy *Lacerta saxicola* Eversmann)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 4, pp 730-732 (USSR)

ABSTRACT: The polymorphous lizard mentioned in the title is, in the Kavkazskiy (Caucasian) part of its distribution area, divided into 13 well characterized subspecies, 6 of which occur in the Armyanskaya SSR (Refs 1,2). In 1936 the researchers' attention (Ref 3) was attracted by the paradoxical fact that one species, *L. saxicola armeniaca* Mehely which is widely distributed in Armeniya (Armenia), has no males at all. The authors concerning explained this by a biological anomaly, since in the other subspecies of Kavkaz males occur frequently also. Besides the above mentioned subspecies, *rosembekowi* and *dahli* (Ref 2) also have no males. The author collected these lizards during an entire summer in order to explain this phenomenon, and he found only females (Table 1). This was also the case with

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Natural Parthenogenesis in Certain Subspecies of
Rock Lizards, *Lacerta Saxicola* Eversmann

SOV/20-122-4-54/57

lizards which hatched from eggs in the laboratory (Table 2). No sperms could be found in the genital tracts of the mature females of the three subspecies mentioned (swabs were carried out by V. N. Kulikova, Institut tsitologii AN SSR - Institute of Cytology AS USSR). To check this three other Armenian females subspecies were dissected, and normal living sperms were found (Table 3). On the basis of this, the author would like to consider as proven, that males are lacking in the 3 Armenian subspecies of rock lizards mentioned above. This was confirmed by obtaining progeny from known unfertilized females. The paper is continued together with V. N. Kulikova (see above). There are 3 tables and 3 references, 2 of which are Soviet.

ASSOCIATION: Zoologicheskii institut Akademii nauk ArmSSR
(Zoological Institute of the Academy of Sciences, Armenian SSR)

PRESENTED: May 16, 1958, by Ye. N. Pavlovskiy, Academician

Card 2/3

Natural Parthenogenesis in Certain Subspecies of
Rock Lizards, *Lacerta Saxicola* Eversmann

SOV/20-122-4-54/57

SUBMITTED: May 5, 1958

Card 3/3

DAREVSKIY, I.S.

Zoogeographical characteristics of reptile fauna of the Sevan Basin
and its probable origin. Izv. AN Arm. SSR. Biol.nauki 12 no.10:15-
22 0 '59. (MIRA 13:3)

1. Zoologicheskii institut Akademii nauk ArmSSR.
(SEVAN REGION--REPTILES)

SOV/26-59-3-38/47

30(1)

AUTHOR:

Darevskiy, I.S., Candidate of Biological Sciences (Yerevan)

TITLE:

The Arrow-Snake in the Caucasus

PERIODICAL:

Priroda, 1959, ⁴⁸Nr 3, p 119 (USSR)

ABSTRACT:

In May 1957, as a member of an expedition organized by the Zoologicheskii institut Akademii nauk Armyanskoy SSR (Zoological Institute of the Armenian AS), the author found a young male, 448-mm-long, arrow-snake *Psammophis lineolatus* (Brandt) in the East Caucasus near the village of Kyarim-Kuli Diza in the Dzhus'fa Rayon of the Nakhichevan' ASSR. The animal was found 600 km away from its nearest natural habitat and under quite different conditions than this snake usually has in Central Asia. The snake was given to the gerpetologicheskoye otdeleniye Zoologicheskogo instituta Akademii nauk SSSR (Herpetological Department of the Zoological Institute of the AS USSR). There are 2 references, 1 of which is British and 1 Soviet. Zoologicheskii institut Akademii nauk Armyanskoy SSR (Zoological Institute of the Armenian AS)

ASSOCIATION:

Card 1/1

17(4)

AUTHORS:

Ushakov, B. P., Darevskiy, I. S.

SOV/20-128-4-55/65

TITLE:

A Comparison Between Heat Resistance in Muscular Fibres and Temperature in Two Sympatric Species of Lizards Living in Semi-desert

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 4, pp 833-835 (USSR)

ABSTRACT:

The heat resistance of tissue in cold-blooded animals of closely related species is not always the same, but varies with the temperature of the species' habitat (Refs 1-7). This property is regarded as a cytophysiological criterion of the species (Ref 8). From this point of view a comparison between ecology and heat resistance of cells is very interesting in sympatric species of animals living in the same area and under the same climatic conditions. Lizards living in Transcaucasia: *Eremias pleskei* Bedr. and *Er. strauchii* Kessler from the semi-desert of the Araks valley in Armenia are objects well suited for comparison. The resistance mentioned in the title was found by determining the time interval within which isolated muscles are not excitable. The muscles of either species were examined in a Ringer's solution

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SOV/20-128-4-55/65

A Comparison Between Heat Resistance in Muscular Fibres and Temperature
in Two Sympatric Species of Lizards Living in Semi-desert

at five different temperatures from 44 to 49°. Average results are given in figure 1. This shows that the muscular tissues of each of the mentioned species are of a different resistance. The whole curve characterizing *Er. strauchii*'s resistance, is shifted into the range of low temperatures. The statistical truth of the differences in the mentioned period shows that heat resistance is higher in *Er. pleskei* than in *Er. strauchii*. This difference corresponds to the temperature of the habitat of these two species. Although they live in the same area, their activity develops at different hours of the day. Figure 2 shows the number of lizards of the two species which were found at different times of the day. In spring (April to June) *Er. pleskei*, however, appears only at about 3-4 p.m., when the ground has been warmed thoroughly by the sun. When the summer heat starts, *Er. strauchii* preferring cooler temperatures, leaves its hiding place only for a short time in the morning and at night, while *Er. pleskei* remains active (Fig 2b) also during the greatest heat. On cool and cloudy days, *Er. strauchii* appears already with the first sun rays. This

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SOV/20-128-4-55/65

A Comparison Between Heat Resistance in Muscular Fibres and Temperature in Two Sympatric Species of Lizards Living in Semi-desert

lizard awakes from hibernation earlier in spring and goes to its place of hibernation later in the year than the other species. These differences are also true for the time of oviposition; *Er. strauchii* starts three weeks earlier. The totality of these differences is expressed also by the difference of the body temperature of these two species: $36-38.6^{\circ}$ in *Er. strauchii* and $39-41.5^{\circ}$ in *Er. pleskei* during their active period. Table 4 also gives data regarding the northern and the altitude borderline of their occurrence which corresponds to the above mentioned facts. Furthermore experimental results are given with regard to the occurrence of heat-stroke caused by direct insolation (Ref 9). This shows that *Er. pleskei* not only likes heat better than *Er. strauchii*, but also has a higher resistance to it. The differences in the resistance mentioned in the title prove that during the development of these two species, an adaptive transformation of their cell proteins took place which played a decisive part in the divergence and development of these species. These adaptations warrant a specific and optimal microclimate for

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SOV/20-128-4-55/65
A Comparison Between Heat Resistance in Muscular Fibres and Temperature
in Two Sympatric Species of Lizards Living in Semi-desert

the closely related species of one biotope. There are 2
figures, 1 table, and 14 references, 8 of which are Soviet.

ASSOCIATION: Institut tsitologii Akademii nauk SSSR (Institute of Cytology
of the Academy of Sciences, USSR).
Zoologicheskiy institut Akademii nauk ArmSSR (Zoological
Institute of the Academy of Sciences, Armyanskaya SSR)

PRESENTED: May 25, 1959, by Ye. N. Pavlovskiy, Academician

SUBMITTED: May 15, 1959

Card 4/4

DAREVSKIY, Il'ya Sergeyevich

[Poisonous snakes of Armenia] IAdovitye zmei Armenii. Erevan,
Armianskoe gos.izd-vo, 1960. 45 p. [In Armenian.] (MIRA 14:6)
(Armenia—Serpents)

DAREVSKIY, I.S.

Seasonal changes in the fat bodies and gonads of some lizards of
the Aras Valley, Armenia. Zool. zhur. 39 no.8:1209-1217 Ag '60.
(MIRA 13:8)

1. Zoological Institute of the Academy of Sciences of Armenian
S.S.R., Yerevan.

(Aras Valley—Lizards)
(Fat)

(Generative organs)

DAREVSKIY, I.S.

Dynamics of population, migration, and growth of the takyr lizard
Phrynocephalus helioscopus persicus De Fill in the semidesert of
the Aras Valley, Armenia. Biul. MOIP. Otd. biol. 65 no. 6:31-38
N-D '60. (MIRA 14:2)

(ARAS VALLEY--LIZARDS)

DAREVSKIY, I.S.

Interesting case of infestation of the water snake *Natrix tessellata*
Laur. with trematode larvae. Izv. AN Arm. SSR. Biol. nauki 14
no.1:99-101 Ja '61. (MIRA 14:3)

1. Zoologicheskiy institut AN Armyanskoy SSR.
(ARMENIA--TREMATODA) (PARASITES--SERPENTS)

DAREVSKIY, I.S.

"Amphibians and reptiles of Europe"; third catalog as of Jan. 1,
1960 by Robert Mertens, Heinz Wermuth. Reviewed by I.S.Darevskii.
Zool. zhur. 40 no.11:1749-1750 N '61. (MIRA 14:11)
(Europe--Amphibia--Catalogs and collections)
(Europe--Reptiles--~~Catalogs~~ and collections)

DAREVSKIY, I.S.

Evolution of eyelid adhesion in lizards. Dokl.AN SSSR 137 no.6:
1477-1480 Ap '61. (MIRA 14:4)

1. Zoologicheskiy institut AN Armyanskoy SSR. Predstavleno
akademikom I.I.Shmal'gauzenom.
(Lizards) (Eyelids)

DAREVSKIY, I.S.; CHUMAKOV, I.S.

New Pleistocene species of the lizard Ablepharus from the Rudnyy
Altai. Paleont.zhur. no.1:127-130 '62. (MIRA 15:3)

1. Zoologicheskii institut AN Armyanskoy SSR i Geologicheskii
institut AN SSSR.

(Altai Mountains--Lizards, Fossil)

DAREVSKIY, I.S.

Origin and biological role of natural parthenogenesis in the polymorphous group of the Caucasian rocky lizards *Lacerta saxicola* Eversmann. Zool. zhur. 41 no.3:397-408 Mr '62. (MIRA 15:3)

1. Zoological Institute of the Academy of Sciences of the Armenian S.S.R., Erevan.

(Caucasus--Lizards) (Parthenogenesis (Animals))

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Taxonomical features and some characteristics of the oogenesis of hybrids between bisexual and parthenogenetic forms of the lizard *Lacerta saxicola* Eversmann. *Sitologia* 4 no.2:160-170 Mar-Apr '62.
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sitologii AN SSSR, Leningrad.
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Indonesia). Zool. zhur. 43 no.1:80-88 '64 (MIRA 17:7)

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Leningrad.

ALEKPEROV, A.M., doktor biolog.nauk; DAREVSKIY, I.S., kand.biolog.nauk

The sense of smell in snakes. Priroda 53 no.1:128 '64. (MIRA 17:2)

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Unisexual propagation of reptiles. Priroda 53 no.7:45-53 '64.
(MIRA 17:7)

1. Zoologicheskiy institut AN SSSR, Leningrad.

DAREVSKIY, I.S.; KULIKOVA, V.N.

Natural triploidy within a polymorphous group of the Caucasian lizard *Lacerta saxicola* Eversmann, resulting from hybridization between bisexual and parthenogenetic varieties of this species. Dokl. AN SSSR 158 no.1:202-205 S-O '64 (MIRA 17:8)

1. Zoologicheskiy institut AN SSSR i Institut tsitologii AN SSSR. Predstavleno akademikom Ye.N. Pavlovskim.

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Biology of the giant Indonesian monitor (*Varanus komodoensis* Ouwens).
Zool. zhur. 43 no.9:1355-1360 '64. (MIRA 17:11)

1. Zoologicheskiy institut AN SSSR, Leningrad i Bogorskiy zoologicheskii muzey na ostrove Yava, Indoneziya.

DAREVSKIY, I.S.; KRASIL'NIKOV, Ye.N.

Some characteristics of the blood cells of triploid hybrids of
Lacerta saxicola Eversmann. Dokl. AN SSSR 164 no.3:709-711 S '65.
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i klinicheskoy khirurgii i gematologii AMN SSSR. Submitted
November 27, 1964.

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Forgotten description of *Lacerta saxicola valentini* Boettger
from Armenia. Izv. AN Arm.SSR.Biol.nauki 19 no.10:71-74 0
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1965.

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Dokl.AN SSSR 107 no.3:373-376 Mr '56. (MIRA 9:7)

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Izgi b priamougol'noi plastiny srednei tolshchiny (zadacha Karmana).
Moskva, 1936. 23 p. (TSAGI. Trudy, no. 297)

Summary in English.

Title tr.: Deflection of a rectangular plate of a medium thickness
(Karman problem).

QA911.M65 no. 297

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 1955.

DAREVSKIY, V.M.

ELENEVSKIY, G. S., and Y. M. DAREVSKIY.

Kruchenie dvukhlonsheronnogo piramidal'nogo kryla s nepreryvno raspolozhennymi
shest'kimi na izgib nerviurami. Moskva, 1937, 44 p., illus., tables, diagrs.
(TSAGI. Trudy, no. 292)

Summary in English.

Title tr.: Torsion of a two-spar pyramidal wing with closely spaced ribs of great
stiffness.

QA911.M65 no. 292

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress,
1955

DAREVSKII, V. M.

RT-1648 (Determination of the stresses produced by the landing impact in the bulkheads of a seaplane bottom)
TRUDY TSENTRAL'NOGO AERO-GIDRODINAMICHESKOGO INSTITUTA, (449): 1939. (Original Russian source unavailable for review)

DAREVSKIY, V. M.

PA 13T92

USSR/Mathematics

Feb 1946

"Intrinsically Perfect Methods of Summation," V. M.
Darevskiy, 8 pp

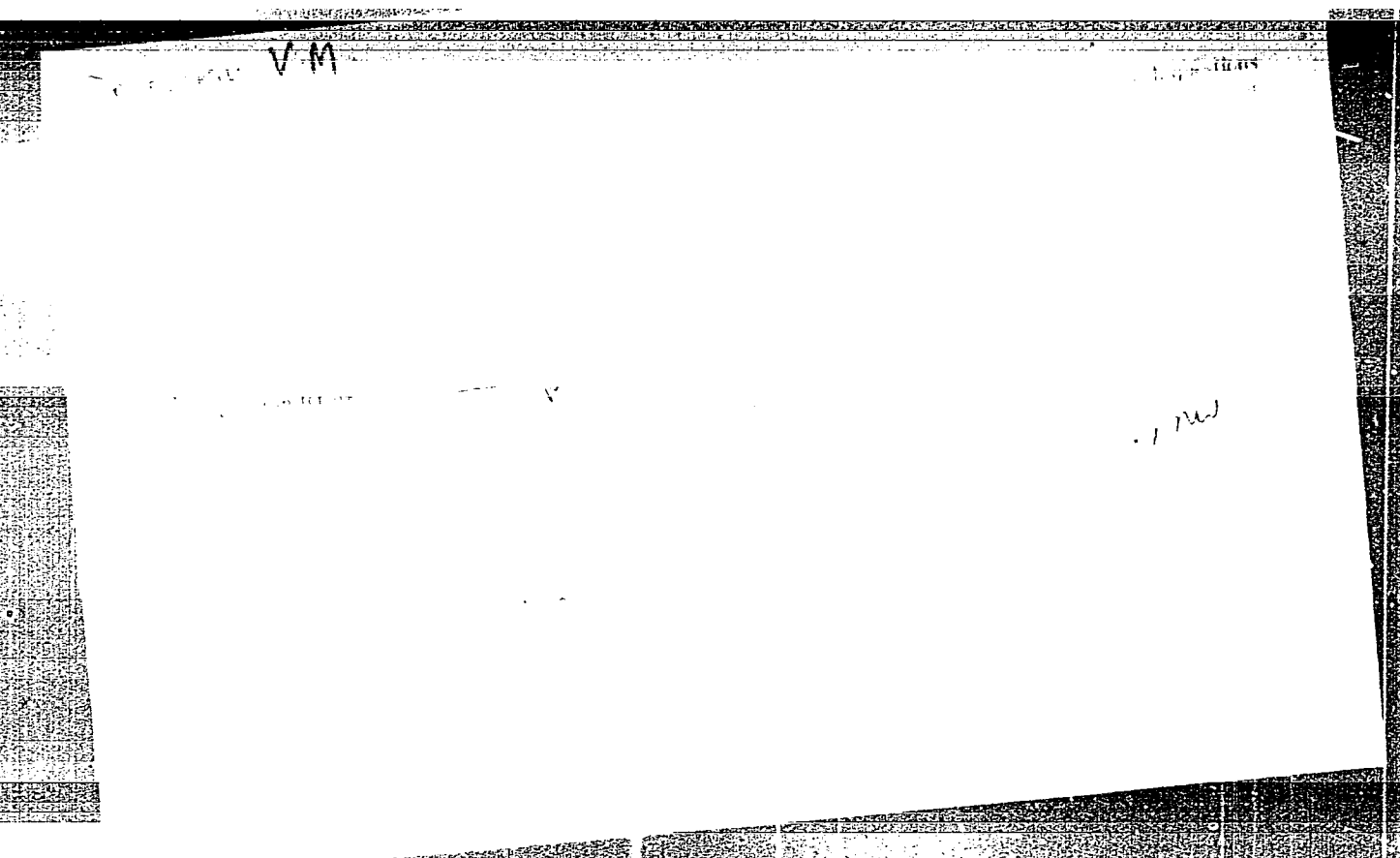
"Izv Ak Nauk Ser Mat" Vol X, No 2

Regular methods of summation by infinite matrices--
the so-called Toeplitz method, and consideration of
the problem of characterizing intrinsically perfect
methods.

13T92

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Let A and B be regular sequence-to-sequence matrix
methods of summability of the Silverman-Toeplitz type.
Let A be row finite, and let X_1, X_2, \dots be a sequence
of positive numbers such that $x_n \neq 0$ whenever the

sequence $\{x_n\}$ is not eventually zero.
Then A is (A, B) -summable if and only if
the sequence $\{x_n\}$ is summable by A .

Let A be a regular sequence-to-sequence matrix
method of summability of the Silverman-Toeplitz type.
Let A be row finite, and let X_1, X_2, \dots be a sequence
of positive numbers such that $x_n \neq 0$ whenever the
sequence $\{x_n\}$ is not eventually zero.

DAREVSKIY, V. M.

V. Darevski, V. M. Concentrating the effect on a cylindrical
subject 2 Concentrated load
SSSR (N S 175 7 10 (1950)) (Russian)

DAREVSKIY, V. M.

178T96

USSR/Physics - Elasticity
Shells

11 Nov 50

"Problem of the Action of Certain Loads Upon a Cylindrical Shell," V. M. Darevskiy

"Dok Ak Nauk SSSR" Vol LXXV, No 2, pp 169-172

Problem of action, on thin cir cyl shell, of element of load or loads obtained in the limit, i.e., loads uniformly distributed on the sec of generatrix and directrix of circle. Gives simple asymptotic formulas for detg those int strength factors which are unbounded in neighborhood. Submitted 12 Sep 50 by Acad M. V. Keldysh.

178T96

DAREVSKIY, V. M.

PA 193T48

USSR/Mathematics - Cylindrical Shells, Sep/Oct 51
Computation of

"Theory of Cylindrical Shells," V. M. Darevskiy

"Prikl. Matem. i Mekh." Vol XV, No 5, pp 531-562

Author outlines solns of eqs of cylindrical shells under elementary load and some proofs of problems concerning transition from elementary load to limiting cases. Initial eqs of A. Lyav ("Mathematic Theory of Elasticity," 1935) are used, but method is also valid for initial conditions of V. V. Novozhilov ("Theory of Thin Shells," 1947) or V. Z. Vlasov ("General Theory of Shells," 1949).
Submitted 18 May 50.

193T48

1. DAREVSKIY, V. M.
2. USSR (600)
4. V. M. Darevskiy's dissertation "solving some problems of a cylindrical shell." Izv. AN SSSR. Otd. tekhn. nauk no. 10, 1952.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

DAREVSKIY, V. M.

USSR/Mathematics - Stress of Materials Mar/Apr 52

"Solutions of Some Problems of the Theory of Cylindrical Shells," V. M. Darevskiy, Moscow

"Prikl Matemat i Mekh" Vol XVI, No 2, pp 159-194

Based on results of previous article by author (cf. "Prikl Matemat i Mekh" XV, 5, 1951) action of concentrated load, evenly distributed along curvature of mean surface is analyzed. Some solutions, referring to solution in previous article in case of elementary load, are added. Received 18 May 50.

209T64

DAREVSKIY, V. M.

24-11-17/31

AUTHOR: Darevskiy, V. M. (Moscow).

TITLE: Stability of a cylindrical shell in the case of simultaneous effects of torques and normal pressure. (Ustoychivost' tsilindricheskoy obolochki pri odnovremennom deystvii krutyashchikh momentov i normal'nogo davleniya).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1957, No.11, pp. 137-147 (USSR)

ABSTRACT: The stability is investigated theoretically and experimentally of a cylindrical shell of "medium" length with non-deforming edges subjected simultaneously to torques and normal pressure. In the theoretical formulation it is assumed that the edges of a free thin cylindrical shell are joined with absolutely rigid elements, for instance, rings and it is assumed that there is no displacement at one edge of the shell. The loading is assumed to consist of a torque applied to the rigid elements and a normal, internal or external, pressure equally distributed along the entire shell. The stability problem is raised in the following formulation: in addition to a given fixed load, a variable load with the components $M = \lambda M_x$ and $q = \lambda q_x$ is applied whereby λ increases from zero and that "natural" value of λ is sought which is the smallest value at which

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Stability of a cylindrical shell in the case of simultaneous effects of torques and normal pressure.

loss of stability will occur. As the "natural" value of λ , the value is understood at which, in addition to the basic form of equilibrium determined by the displacements u^0, v^0, w^0 , another form of equilibrium is possible which is determined by the displacements $u' = u^0 + u, v' = v^0 + v, w' = w^0 + w$. That form of equilibrium is considered as the basic one which changes continuously with changes in the λ value by a multiplicity of all the values $\lambda \gg 0$; in practice the basic form is identical with the form of equilibrium determined by the linear theory of shells. It is assumed that the shell under consideration satisfies the conditions expressed by Eq.(1.1.1), p.138. Experiments show that the loss of stability in the elastic range with the load under consideration is accompanied by the formation of a larger number of waves and this permits using simplified linearised equations for the displacements, u, v, w as expressed by Eq.(1.2), p.138. According to Eq.(2.9) the stability of a shell satisfying the relations (1.1.1) or (1.1.2) is practically independent of its length, provided the internal pressure is high enough. An Card 2/3 expression is obtained for the critical value of the torque M

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for the case of a sufficiently large internal pressure q , Eq.(2.10), p.145. The conditions of applicability of this equation are defined by the inequality (2.14), p.146. The results of experimental investigations on 33 shells, which were machined with an adequate accuracy, together with the flanges, from tubes, are plotted in Fig.1, p.147. All these seven dural shells of 88 mm radius, 180, 270, 360 and 45 mm lengths and 0.51 mm thickness were tested for an equal external pressure. These experimental results were obtained by P. G. Burdin (see his dissertation VVIA imeni N. Ye. Zhukovskogo, 1956). Three dural and one steel shells were tested solely on torsion. The experimental results are in good agreement with the theoretical ones. There are 1 figure and 2 references, one of which is Slavic.

SUBMITTED: February 22, 1957.

AVAILABLE: Library of Congress.

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AUTHORS: Darevskiy, V. M., Kukudzhanov, S. N. SOV/20-123-1-12/56

TITLE: The Stability of an Orthotropic Cylindrical Shell Subjected to Torsion With Internal Pressure (Ustoychivost' ortotropnoy tsilindricheskoy obolochki pri kruchenii s vnutrennim davleniyem)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 1, pp 49-52 (USSR)

ABSTRACT: The present paper solves the problem of the above mentioned stability in the case of torsion with sufficient internal pressure. This shell is assumed to have an "average" length, which term is defined. The edges of the shell are assumed to be fastened in a hinge-like manner or to be embedded. The here discussed results are a generalization of the corresponding results derived in a previous paper by V. M. Darevskiy (Refs 1,2) for an isotropic shell. As initial equations, the equations for the equilibrium of the shell in consideration of their deformation and the usual relations between the internal force factors (silovoy faktor) and the deformations expressed by the displacements are used. If axial-, radial-, and shear stress

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Shell Subjected to Torsion With Internal Pressure

SOV/20-123-1-12/56

T_2^0 , and S^0 respectively do not depend on the dimensionless coordinates ξ and ψ , the additional displacements can be ascertained in a previously mentioned form (Ref 1). A rather voluminous equation for the additional displacement w in a radial direction is written down. In the case of a simultaneous action of the torsional moments M_* and the (internal or external) pressure q , the problem of the stability of the shell may be raised as in the previous paper by V. M. Darevskiy (Ref 1). In that case the problem is reduced to determining the critical value λ_{crit} (of the smallest eigenvalue) of the positive parameter λ in the case of a simple stress brought to bear upon the shell by the moments $M = \lambda M_*$ and by the pressure $q = \lambda q_*$. If it is known how to determine λ_{crit} , critical stress can be determined also if pressure remains constant during stress and if only the moments vary. A formula is derived for the eigenvalue λ and the corresponding computations

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SOV/20-123-1-12/56

are followed step by step. The formulae derived here apply only if they lead to critical stresses that are lower than the flow limit. The solution found in the present paper satisfies all boundary conditions of the given problem. There are 2 Soviet references.

PRESENTED: June 12, 1958, by Yu. E. Rabotnov, Academician
SUBMITTED: June 11, 1958

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Darevskiy, V. M.

14(10)

PHASE I BOOK EXPLOITATION

SOV/2276

Prochnost' tsilindricheskikh obolochek; sbornik statey (Strength of Cylindrical Shells; Collection of Articles) Moscow, Oborongiz, 1959. 157 p. Errata slip inserted. 2,400 copies printed.

Ed. (Title page): V.M. Darevskiy, Doctor of Physical and Mathematical Sciences; Ed.: S.I. Bumshteyn, Engineer; Ed. of Publishing House: A.P. Starykh; Tech. Ed.: V.I. Oreshkina; Managing Ed.: A.S. Zaymovskaya, Engineer.

PURPOSE: This book is intended for aircraft jet-engine designers and production engineers.

COVERAGE: This collection of nine articles covers problems of statics and dynamics of cylindrical shells which arise in the calculation of stability of jet-engine cases. Results of new theoretical and experimental investigations are included. No personalities are mentioned. References follow some of the articles.

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Foreword

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Strength of Cylindrical Shells (Cont.)

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Zakharova, A.P. Calculation of a Circular Cylindrical Cantilever Shell Loaded at the Free End by Uniformly Distributed Transverse Forces

The above problem is representative of jet-engine cases subject to stresses and deformations due to forces of inertia of the rotor in nonlinear flights. In the general case the safety coefficient and the clearance must be determined. The article is primarily concerned with stresses and deformations.

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Zakharova, A.P. Flexure of a Cylindrical Cantilever Shell Reinforced With a Rigid Radially Loaded Ring

The cylinder is reinforced with a rigid ring at its free end. The force is applied along one of the diameters of the ring. The problem is similar to the problem described in the first article and was treated analogously. Displacements due to flexure differ but little from displacements determined in the first article, and the category of the displacement is nearly momentless.

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Kshnyakin, R.I. Influence of an Axial Tensile Force on the Stability of Cylindrical Shells Subject to Flexure and Normal External Normal Pressure

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Strength of Cylindrical Shells (Cont.)

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According to the author the simultaneous action of an axial tensile stress and external pressure has not been thoroughly analyzed. He considers a thin, circular, closed shell under torsion. Other loads produce a momentless stressed state. The expressions of stresses and deformations are given.

Darevskiy, V.M. Stability of Circular Cylindrical Shells Under Flexure by a Transverse Force Combined With Torsion and Internal Pressure

72

In this article, the results of the author's former work are used to simplify the evaluation of the stability of cylindrical shells under the simultaneous action of torsional moments, internal pressure and transverse rim forces. The author describes conditions under which the evaluation of the stability of the shell may be determined by simple formulas. The above analysis is applicable to the calculation of combustion chambers of jet engines.

Darevskiy, V.M., and S.N. Kukudzhakov. Stability of Orthotropic Shells Under Torsion and Normal Pressure

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Strength of Cylindrical Shells (Cont.)

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The authors establish basic equations for the determination of stresses, moments and deformations, and then analyze separately cases of the uniform transverse compression, torsion, and torsion with pressure. The established formulas are valid only within the limits of elastic deformations.

Kukudzhanov, S.N. Stability of an Orthotropic Cylindrical Shell Under External Transverse Pressure With Axial Tension and Torsion With Axial Tension 109

In this article, results obtained for an isotropic shell by R.I. Kshnyakin are generalized for orthotropic shells. In order to establish final formulas, the author considers the stability of cylindrical orthotropic shells under outer transverse pressure with axial tension, and the stability of cylindrical orthotropic shells under torsion with axial tension.

Serdyukov, V.V. Stability of Anisotropic Cylindrical Shells Under Certain Loads 118

The author considers the stability of anisotropic cylindrical shells under the action of outer pressure, torsion and simultaneous action of torsion and normal pressure. Stability is studied on the basis of more complete equations than those est-

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Strength of Cylindrical Shells (Cont.)

SOV/2276

blished by Kh.M. Mushtari in his theory of thin shells (1938). The established formulas provide a method for determining critical stresses under simultaneous torsion and normal pressure.

Nikulin, M.V. Influence of Axial Stresses on the Frequency of Natural Vibrations of Cylindrical Shells 131

The author is concerned with natural vibrations of near-cylindrical shells, due to the dynamic action of an unbalanced rotor or to gas-dynamic impulses. In both cases the determination of natural vibrations of the system is important. The influence of axial stresses on the vibration frequency is considered, generally speaking, as independent of pressure. Formulas and graphical representations are given.

Nikulin, M.V. Natural Vibrations of Cylindrical Shells Prestressed by Torsional Moments 146

This article is a continuation of the preceding article. The author reduces three differential equations of vibration to one differentail equation of radial displacement. Thus an

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algebraic equation of the third order is obtained for determining of the square of the frequency without solving the third order. The boundary conditions are considered in detail.

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Translation from: Referativnyi zhurnal, Mekhanika, 1960, No. 4, pp. 119-120,
5043

AUTHOR: Darevskiy, V.M.

TITLE: The Stability of a Cylindric Cantilever Shell Bent by a Transversal Force With Torsion and Internal Pressure

PERIODICAL: V sb., Prochnost' tsilindr. obolochek. Moscow, Oborongiz, 1959,
pp. 72-94

TEXT: The stability of an elastic cylindric isotropic shell of medium length is considered subjected to simultaneous action of bending by a transversal force, torsion, and internal pressure. The shell is assumed to be cantilever having a rigid ring at its free end. The author uses his results (Izv. AN SSSR. Otd. tekhn. n., 1957, No. 11, pp. 137-147 - RZhMekh, 1958, No. 9, 10258) for a simplified estimation of the stability of such a shell; the estimation is carried out under the following conditions: 1) the critical λ_* ⁽²⁾ value must correspond to a small slope of the stability loss waves in the zone of maximum tangential stresses (zone 2); 2) λ_* ⁽¹⁾ must correspond either to the value $n_*=0$ or to such a value

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$n_* \gg 1$ that the variation of $\cos \varphi$ within the interspace between two adjacent node lines in the zone of maximum compression stresses (zone 1) near the shell edge may be neglected. Here, $\lambda_{*}^{(1)}$ and $\lambda_{*}^{(2)}$ are load parameters within the zones 1 and 2, which correspond to the critical value of the load, n_* is the number of waves of stability loss in the peripheral direction, and φ is the coordinate in the peripheral direction. The various load cases of the shell are considered for very large values of the internal pressure defined by the condition:

$$\frac{0.475}{8\sqrt{1-\nu^2}} \sqrt{\frac{l}{R}} \sqrt[4]{\frac{h}{R}} \leq \frac{|q^0| R^2 l}{|M_*|} \leq 0.22, \quad \checkmark$$

where ν is the Poisson number, h , R and l are the thickness, radius, and length of the shell, respectively, $q = \lambda q^0$ is the internal pressure, $M = \lambda M^0 = \pm (2RQ + |m|)$, Q is the transversal force, m is the torque. Simplified expressions for the critical loads and the critical load parameters λ_* are given. The case is considered that a transversal (inertial) force exists among the load components, uniformly distributed over the entire shell; expressions for λ_* and the critical

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stresses for various load cases are presented. The results from tests of 33
duralumin shells with wall thicknesses of 0.3, 0.4, 0.5, and 0.6 mm are added;
the stability was examined at the joint action of the loads. The values experimental-
ly obtained were compared with the theoretical results; the layout of the experimental
unit for examining the stability of the specimens is given. There are 4
references.

P.I. Zheludev

Translator's note: This is the full translation of the original Russian abstract.

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Translation from: Referativnyi zhurnal, Mekhanika, 1960, No. 4, p. 119, # 5042

AUTHORS: Darevskiy, V.M., Kukudzhanov, S.N.

TITLE: The Stability of a Cylindric Orthotropic Shell in Case of Torsion and Normal Pressure

PERIODICAL: V sb.: Prochnost' tsilindr. obolochek. Moscow, Oborongiz, 1959, pp. 95-108

TEXT: The authors consider the stability of an elastic orthotropic cylindric shell loaded by torque M and normal pressure q. The investigation is performed analogously to the investigations of an isotropic shell considered by V.M. Darevskiy (Izv. AN SSSR, Otd. tekhn. n., 1957, No. 11, pp. 137-147 - RZhMekh, 1958, No. 9, 10, 285). It is assumed that the shell satisfies the conditions

$$\sqrt{\frac{E_2}{E_1}} \varepsilon^{1/2} \ll \left(\frac{\pi R}{1} \right)^2 \ll \sqrt{\frac{E_2}{E_1}} \varepsilon^{-1/2}$$

$$\left(\varepsilon = \frac{h^2}{12 R^2 (1 - \nu_1 \nu_2)} \right)$$

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$$\sqrt{\frac{E_1}{E_2}} \epsilon^{1/2} \ll \left(\frac{\pi R}{l} \right)^2 \ll \sqrt{\frac{E_1}{E_2}} \epsilon^{-1/2}$$

Here, h , R , and l are the thickness, radius, and length of the shell, respectively, E_1 , E_2 , ν_1 and ν_2 are elastic moduli and Poisson coefficients in axial and peripheral directions, respectively ($E_1 \nu_1 = E_2 \nu_2$). Further such shells and such loading cases are considered, in which the critical value of the load parameter λ is defined by: 1) either the number n , a few times larger than the unity; 2) or numbers μ_1 , also a few times larger than the unity (where n is the number of waves in the peripheral direction, $\mu_2 - \mu_1 = 2\pi mR/l$, $m = 1, 2, \dots$), 3) or the number n , equal to zero or 1. It is assumed that the shell edges are hinged or stiffly restrained. Based on the conventional assumptions of the elasticity theory, a system of linearized equations of the equilibrium of the orthotropic cylindric shell is obtained; the equations are simplified further on the assumption that the shell represents a membrane. This system is reduced to one linear differential equation with partial derivatives of the eighth order for the additional radial displacement. It was assumed at deriving the equations

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that, in addition to the torsion and the normal pressure, the shell is loaded by an axial compressive force P which does not appear in the further consideration. The expression for the critical stress is obtained for one transversal compression acting uniformly, whereat the flexure in radial direction is prescribed in the form:

$$w = C \cos \mu \xi \sin n \varphi \left(\mu = \frac{m \pi R}{1}, \xi = \frac{x}{R}, \varphi = \frac{s}{R} \right) \\ (m = 1, 3, \dots).$$

Here, ξ, φ are coordinates in axial and peripheral directions, C is an arbitrary constant. Hereat it turns out that the complete system of boundary conditions will be satisfied. The radial flexure is represented in case of pure torsion in the form:

$$w = \sum_{i=1}^2 C_i \sin (\mu_i \xi - n \varphi).$$

Hereat, only one of the boundary conditions is satisfied, that is $w = 0$ at the shell edges. The expressions for the critical stress and the critical value of

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n_* were obtained. Further, the case of simultaneous action of torsion and normal pressure is considered; hereat, the critical value of the load parameter λ for arbitrary values of M and q may be obtained graphically by plotting the correlation $\dot{y} = \lambda - f(\mu)$ in the upper semiplane for various integral positive values of n and by inserting the horizontal chords of the length $2m\pi R/l$ ($m = 1, 2, \dots$) into these graphs. The ordinate of the lowest of these chords yields the value of λ_* . In case that the pressure is internal and sufficiently large in comparison with the value of the torque, approximate expressions for the critical value of the load parameters λ_* and M_* were found, whereat the pressure is assumed to be constant during the loading process. It is assumed that the equality

$$G = \frac{1}{4(1 - \nu_1 \nu_2)} (2\sqrt{E_1 E_2} - \nu_1 E_1 - \nu_2 E_2) \quad (*)$$

takes place, where G is the modulus of rigidity; this equality is a generalization of the known correlation between the modulus of rigidity and the modulus of elasticity for the isotropic shell. The case is considered, when the equality (*)

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