15-1957-10-13795

Structure of the Northern Part of the Minusinsk Basin and the Experiment of Applying Some Complex Methods in Studying It

upper Paleozoic rocks in the central parts of the basin, separating gently sloping anticlines and the complex limbs of anticlinal folds. The small blocks of the Paleozoic structure do not show in the Mesozoic rocks in the central parts of the basin. Large-scale asymmetrical synclines are characteristic, their axes trending in the same direction as the fault blocks. Folds in the covering rocks in the most elevated blocks agree with the general trend of these zones; they are arched anticlines complicated by block faulting. The development of the principal block-faulted structures originated in late Hercynian time. The methods which were used in preparing a tectonic map for the northern part of the Minusinsk basin are described. Surface geological examination was combined with interpretation of aerial photographs and subsequent visual observation from the air. The study of the relief of the Chebakovsko-Balakhtinskaya basin shows its relation to the structure.

K. A. Klitin

Card 4/4

AUTHOR: Krasil'nikov, B.N., Mossakovskiy, A.A. SOV-5-58-2-2/43

TITLE: Cover-Type Folds of the Northern Part of the Minusinsk Syncline and Their Relation to the Caledonian Structure (Skladki oblekaniya severnoy chasti Minusinskoy kotloviny i ikh svyaz' s kaledonskimi strukturami)

PERIODICAL: Byulleten' Moskovskogo obshchestva ispytateley prirody - Otdel geologicheskiy, 1958, Nr 2, pp 23-42 (USSR)

ABSTRACT: The studies of many scientists have been devoted to problems concerning the geological structure of the Minusinsk syncline, the tectonic location of which has been explained as an intermountain depression in the fold system of the Altay-Sayan region. Among them are V.A. Obruchev, A.D. Arkhangel'skiy, Ya.S. Edel'shteyn, A.N. Churakov, M.K. Korovin, V.A. Kuznetsov, V.S. Meleshchenko, G.I. Teodorovich, D.V. Obruchev, M.I. Grayzer, D.V. Obruchev, A.N. Sokol'skaya, S.M. Dorofeyko and Ye.F. Chirkova-Zaiesskaya, I.V. Luchitskiy, N.S. Zaytsev, V.S. Meleshchenko and K.D. Klitin dealt with questions of the tectonic structure of the individual depressions of the Minusinsk syncline, the morphology and origin of the structures of the folds, the importance of ruptures and their formation.

Card 1/3 B.N. Krasil'nikov, A.A. Mossakovskiy, Ye.D. Sulidi-Kondrat'yev

Cover-Type Folds of the Northern Part of the Minusinsk Syncline and Their Relation to the Caledonian Structure

and N.P. Kheraskov recently studied the deposits of this region dating back to the middle Cambrian period. I.V Luchitskiy and A.I. Anatol'yeva (1953) devoted their research work to the southern Minusinsk depression. It can be concluded from all the studies that within the Minusinsk syncline the structure of the Caledonian foundation does not differ in principle from the Caledonian structures of its framework (Kuznetskiy Altay, Sayany). In the lower Paleozoic era, the region now occupied by the Minusinsk syncline and its fold framework, consisted of a geosyncline system of inner elevations and depressions, which was transformed at the end of the Caledonian orogenic period into a system of linear anticlinal and synclinal folds. In the Devonian period the Minusinsk syncline developed into a diametrical meridian Caledonian depression At the beginning of the Hercynian orogenic period the Caledonian foundation was divided by systematic ruptures parallel to the course of the bigger Caledonian folds and acquired a fault-block character. Thus the Caledonian anticlynal zones were transformed into fault-block mountain elevations of a

Cover-Type Folds of the Northern Part of the Minusinsk Syncline and Their Relation to the Caledonian Structure

horst character, and the synclinal zones into a graben-type depression. All in all, the Minusinsk syncline has a superimposed structure which developed on a complicated Caledonian fold basis. The superimposed character of the Minusinsk syncline did not destroy the structural elements of the Caledonian tectonic surface. They had a considerable influence on the sedimentation process in the Hercynian period and are still reflected today in elevations and depressions of that time. There are 8 charts and 13 Soviet references

1. Geology--USSR 2. Geological time--Determination
3. Geophysics

Card 3/3

KATS, Ya.G.; KRASIL'NIKOV, B.N.; MOSSAKOVSKIY, A.A.; SULIDI-KONDRAT'YEV, Ye.D.; KHERASKOV, N.N.

Paleozoic stratigraphy of the Minusinsk Lowland and its marginal mountains. Trudy VAGT no.4:99-148 '58. (MIRA 12:6)
(Minusinsk Lowland--Geology, Stratigraphic)

BELOSTOTSKIY, I.I.; ZONENSHAYN, L.P.; KRASIL'NIKOV, B.N.; KUDRYAVTSEV, G.A.
MOSSAKOVSKIY, A.A.; POZHARISKIY, I.F.; KHERASKOV, N.N.

Division of the Altai-Sayan mountainous area into tectonic districts.
Biul.MOIP.Otd.geol. 34 no.4:150-152 Jl-Ag '59. (MIRA 13:8)
(Altai Mountains--Geology, Structural)
(Sayan Mountains--Geology, Strudtural)

BELOSTOTSKIY, I.I.; ZONENSHAYN, L.P.; KRASIL'NIKOV, B.N.; KUDRYAVTSEV, G.A.
MOSSAKOVSKIY, A.A.; POZHARISKIY, I.F.; KHERASKOV, N.N.

Formation and tectonic regions of the Altai-Sayan folded region.
Biul. MOIP. Otd. geol. 34 no.6:3-22 N-D '59. (MIRA 14:3)
(Altai Mountains--Folds (Geology))
(Sayan Mountains--Folds (Geology))

ZONENSHAYN, L.P.; KUDRYAVTSEV, G.A.; MOSSAKOVSKIY, A.A.

Analysis of Paleozoic geological formations in the eastern Altai-Sayan area and their tectonic features. Geol. i geofiz. no.12:13-23 '60. (MIRA 14:5)

1. Vsesoyuznyy aerogeologicheskiy trest, Moskva.
(Altai Mountains—Geology)
(Sayan Mountains—Geology)

MOSSAKOVSKIY, A.A.

Pre-Givetian discontinuity and angular unconformity in the Devonian of the Minusinsk depressions. Dokl.AN SSSR 132 no.6: 1391-1394 Je '60. (MIRA 13:6)

1. Vsesoyuznyy aerogeologicheskiy trest. Predstavleno akademikom A.L.Yanshinym.
(Minusinsk region--Geology, Structural)

MOSSAKOVSKIY, A.A.

Tectonics of the Batenevskiy Range in the Kuznetsk Ala-Tau.
Sov.geol. 4 no.9:135-143 S '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Batenevskiy Range--Geology, Structural)

MOSSAKOVSKIY, A.A.

Tectonics of the Kuznetsk Ala-Tau. Izv.AN SSSR Ser.geol. 26 no.12:30-36 D '61. (MIRA 14:12)

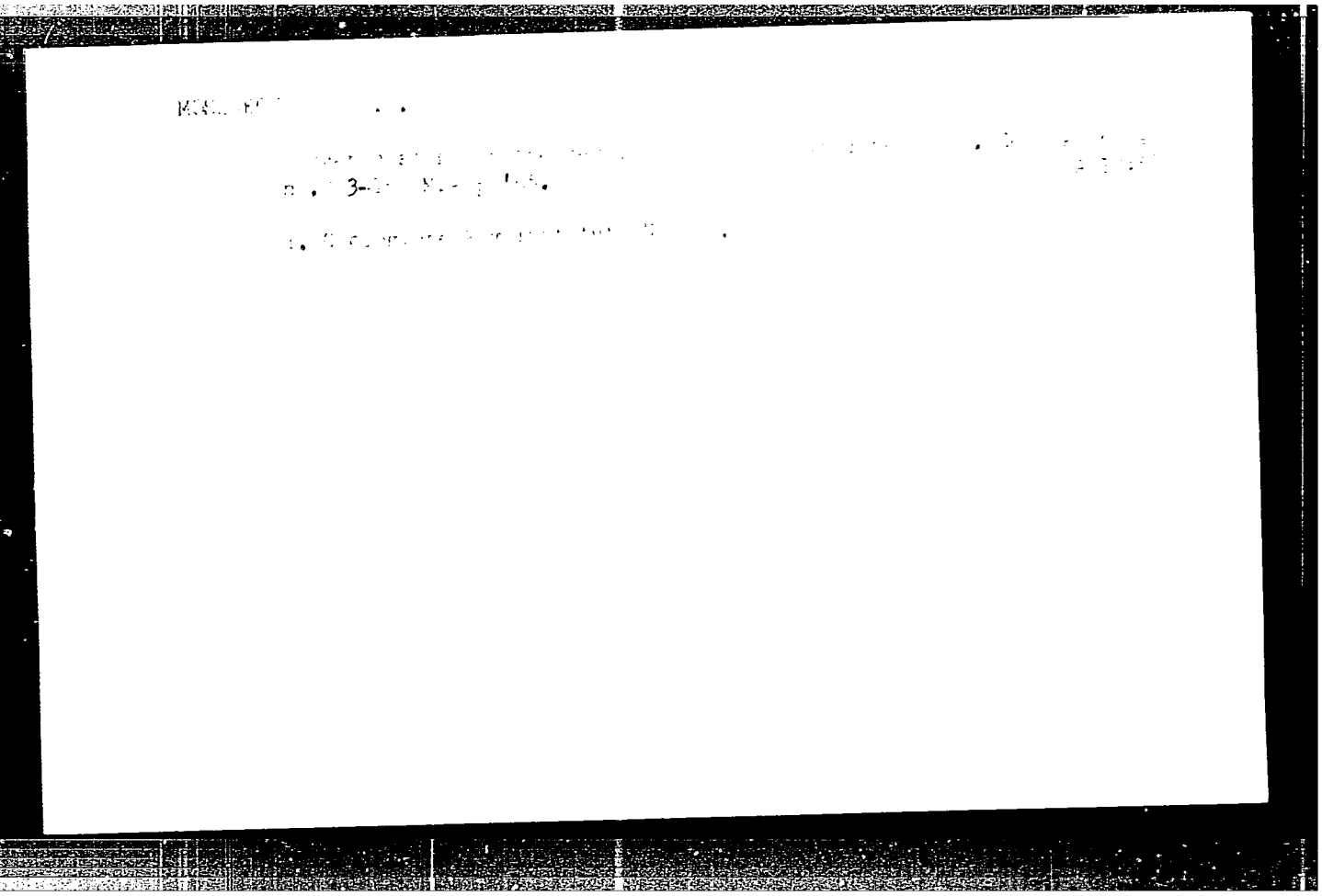
1. Vsesoyuznyy aerogeologicheskiy trest Ministerstva geologii i okhrany nedr SSSR Moskva.
(Kuznetsk Ala-Tau--Geology, Structural)

MOSSAKOVSKIY, A. A.

Dissertation defended in the Geological Institute for the academic degree of Candidate of Geologo-Mineralogical Sciences:

"Tectonic Development of Minus Troughs and Their Rocky Framework in the Pre-Cambrian and the Paleozoic."

Vestnik Akad Nauk No. 4, 1963, pp. 119-145



YANSHIN, A L., akademik, otv. red.; ZHARKOV, M. A., kand. geol.-min. nauk, red.; ZAMARAYEV, S. P., kand. geol.-miner. nauk, red.; ODINTSOV, V. P., red.; SILAYEV, Ye. V., kand. geol.-miner. nauk, red.; MESAMOVSKIY, A. A., red.

[Tectonics of the southern part of the Siberian Platform and prospects for finding petroleum in it] Tektonika iuga Sibirskoi platformy i perspektivy ee neftenosnosti. Moskva, Nauka, 1965. 377 p. (MIRA 18:11)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Institut zemnoy kory. 2. Chlen korrespondent AN SSSR (for Zamaraev).

MOSSAKOVSKIY, Aleksandr Aleksandrovich; BOGDANOV, A.A., prof., red.; MIRZOYEVA, M., red.izd-va; GUROVA, O.A., tekhn.red.

[Tectonic development of Minusinsk Lowlands and their mountain margin in the Pre-Cambrian and Paleozoic] Tektonicheskoe razvitie Minusinskikh vpadin i ikh gornogo obramleniia v dokembrii i paleozoe. Pod red. A.A.Bogdanova. Moskva, Gosgeoltekhizdat, 1963. 215 p. (MIRA 16:12)
(Minusinsk Basin—Geology, Structural)

MOSSAKOVSKIY, B.I. [Mossakovs'kyi, B.I.] (Dnepropetrovsk)

Design and construction of hatches causing no stress concentration in spherical shells. Prykl. mekh. 5 no.4:371-378 '59. (MIRA 13:3)

1.Dnepropetrovskiy gosudarstvennyy universitet.
(Elastic plates and shells)

MOSSAKOVSKIY, V. I.

MOSSAKOVSKIY, V.I.

Pressure exerted by a circular punch on an elastic semispace. Nauch.zap. IMA L'viv AN URSR 2 no.1:9-40 '53. (MLRA 8:11)
(Punching machinery) (Elasticity) (Dies (Metal-working))

MOSSAKOVSKIY, V.I.

Mossakovskiĭ, V. I. On estimation of displacements in spatial contact problems. Akad. Nauk SSSR. Prikl. Mat. Meh. 15, 635–636 (1951). (Russian)

When the distributed pressure p at a contact surface is known, the problem to find the deformation and the resultant force and moments is a comparatively easy problem. The difficulty usually lies in finding p. However, from an estimated or known value of the surface deformation, the resultant forces and moments can be obtained from the formulae derived in this paper. The formulae are specialized for a contact surface of elliptic form. The author points out that the same formulae were earlier obtained by L. A. Galin in another way.

F. Nicolson (Stockholm).

Source: Mathematical Reviews, Vol. 13 No. 7

MOSSAKOVSKIY,V.I.

General solution of the problem on determining pressure under the base of a circular cross-section punch-die, not accounting for frictional forces. Nauch.zap. IMA L'viv.fil AN URSR 2 no.1:41-53 '53. (MLRA 8:11)
(Dies(Metal-working)) (Elasticity)

MOSSAKOVSKIY, V. I.

USSR

62

Mossakovskiĭ, V. I. Application of a reciprocity theorem to the determination of resultant forces and moments in spatial contact problems. Prikl. Mat. Meh. 17, 477–482 (1953). (Russian)

A die with surface $z=f(x, y)$ is pressed into an elastic half-space. When the pressure-distribution under a plane die of the same form is known, the finding of the resultant pressure and its moments on a die with arbitrary surface reduces to integrations. *W. H. Muller* (Amsterdam).

I - F/W

(Dnepropetrovsk)

FD-653

MOSSAKOVSKIY, V. I.
USSR/Mathematics - Mixed problem in elasticity

Card 1/1 : Pub. 85 - 8/20

Author : Mossakovskiy, V. I. (Dnepropetrovsk)

Title : Fundamental mixed problem in the theory of elasticity for a half-space with circular lines of separation of the boundary conditions

Periodical : Prikl. mat. i mekh., 18, 187-196, Mar/Apr 1954

Abstract : Solves the basic mixed problem of elasticity theory for a half-space where on one part of the boundary (inside the circle) are given the components of the displacement vector, and on the remaining part are given the values of the components of the external stress. The author gives an example of the use of his method by solving the problem of the symmetric pressure of a planar circular stamp on an elastic half-space in the presence of cohesion. Acknowledges the helpful comments of N. A. Rostovtsev and the computational work of Miss L. I. Vekshteyn, student at Dnepropetrovsk State University

Institution : --

Submitted : February 4, 1952

MOSSAKOVSKIY, V.I.

Mossakovskiĭ, V. I., and Zagubiženko, P. A. On a mixed problem of the theory of elasticity for a plane weakened by a rectilinear gap. Doklady Akad. Nauk SSSR (N.S.) 94, 409–412 (1954). (Russian)

The method of solution of plane problems in elasticity developed by Muskhelišvili is used to solve a particular problem of deformation of an elastic plane weakened by a rectilinear crack when the plane is subjected to the action of forces of constant intensity making an arbitrary angle with the direction of the crack. *I. S. Sokolnikoff.*

MOSSAKOVSKIY, V.I.

MOSSAKOVSKIY, V.I. (Moscow)

Pressure of a near-circular cross-section die on resilient semi-space. Prikl. mat. i mekh. 18 no.6:675-680 N-D '54. (MLRA 8:3)
(Dies (Metal-working))

MOSSAKOVSKIY, V. I.

MOSSAKOVSKIY, V. I. "Some Spatial Contact Problems in the Theory of Elasticity." Acad Sci USSR. Inst of Mechanics. Moscow, 1955. (Dissertation for the Degree of Doctor in Physicomatnematical Science.)

SO Knizhnaya letopis'
No 2, 1956

FD-2491

USSR/Mechanics - Elasticity and Plasticity

Card 1/1 Pub 85-18/19

Author : Mossakovskiy, V. I.

Title : On modelling the first fundamental problem of the plane theory of elasticity for multiply connected regions

Periodical : Prikl. Mat. i Mekh., 19, 383, May-June 1955

Abstract : The author presents a method for modelling the first fundamental problem when the main vectors of the external stresses for some contours are different from zero. He states that in this case it is sufficient to conduct experiments on three models prepared from materials with various Poisson coefficients in order to determine the stresses.

Institution: --

Submitted : December 20, 1954

MOSSAKOVSKIY, V. I.

Mossakovskiĭ, V. I. The first fundamental problem of the theory of elasticity for a space with plane circular slit. Prikl. Mat. Meh. 19 (1955), 443–452. (Russian)

The author considers an elastic space with a plane circular slit inside. At the upper and lower walls of the slit the stresses are prescribed, and at the infinity all stresses vanish. There are four possible cases of the prescribed stress state at the upper and lower boundaries of the slit. The author considers only two of them, as the remaining two can be reduced to the cases solved by M. I. Leonov Prikl. Mat. Meh. 4 (1940), no. 5–6, 72–96; 17 (1953), 87–98; MR 2, 365; 14, 1146]. The author of this paper derives general solutions and illustrates his cases on examples where the prescribed stresses are constant. His solutions show that the results obtained by S. G. Mihlin [ibid. 10 (1946), 301–304] for a space weakened by one or more slits which are in the same plane are wrong.

T. Leser (Aberdeen, Md.).

1 - F/W

MOSSAKOVSKIY, V. I.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress (Cont.) Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.

Moiseyev, N. N. (Rostov-na-Donu). Some Problems in the Precise Theory of Stabilized Motions of Heavy Liquids. 206

Moiseyev, N. N. (Rostov-na-Donu). Motion Problem of Solid Body Containing Liquid Masses With Free Surface. 206-207

Mossakovskiy, V. I. (Dnepropetrovsk). On the Rolling of Elastic Bodies. 207

Mushtari, Kh. M. (Kazan'). Some Mathematical Problems of the Non-linear Theory of Flattened Shells. 207-208

Nemytskiy, V. V. (Moscow). On the Nature of Stabilized Conditions in Multidimensional Dynamic Systems. 208

Nudel'man, Ya. L. (Odessa). Some Problems in the General Theory of Elastic Stability. 208

Mention is made of Novozhilov and Ishlinskiy.

Card 69/80

SOV / 124-58-5-5669

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 106 (USSR)

AUTHORS: Mossakovskiy, V. I., Gubenko, V. S.

TITLE: On the Pressure of a Annular-shaped Die on an Elastic Semi-space (O davlenii kol'tsevogo shtampa na uprugoye poluprostranstvo)

PERIODICAL: Nauchn. zap. Dnepropetr. un-t, 1956, Vol 45, pp 171-175

ABSTRACT: The problem concerns the pressures developed underneath a rigid, flat-base die with a plan-view configuration of a circular ring. The proposition is reduced to one of the linear-stress relationship problems with the aid of a method suggested by V. I. Mossakovskiy (Prikl. matem. i mekhan., 1954, Vol 18, Nr 2, pp 187-196, RZhMekh., 1955, Nr 1, abstract 317). A linear second-order differential equation is indicated for the solution of the linear-stress problem obtained.

N. A. Rostovtsev

1 Dies--Pressure 2. Stress analysis
3 Mathematics--Applications

Card 1/1

AUTHORS: Mossakovskiy, V. I., Makarevich, O.P. and Rudyakov, Z.Z. (Dnepropetrovsk). 24-5-19/25

TITLE: Dependence of the adhesion coefficient on the speed of rolling. (O zavisimosti koeffitsienta stsepleniya ot skorosti kacheniya).

PERIODICAL: "Izvestiya Akademii Nauk, Otdeleniye Tekhnicheskikh Nauk", (Bulletin of the Ac.Sc., Technical Sciences Section), 1957, No.5, pp.126-129 (U.S.S.R.)

ABSTRACT: The problem of rolling of a wheel along an elastic semi-plane has been considered by Glagolev, N.I.(1) and Fromm (2). The assumption was derived that friction between the contacting surfaces obeys the Coulomb law and that the friction coefficient does not depend on the speed. These authors solved the problem for the case that the elastic constants of both bodies are the same. It was established that the contact surfaces can be sub-divided into two parts, namely, a coupling surface without slip and a slipping surface. In this paper an attempt is made to evaluate the influence of the speed on the change in the adhesion coefficient assuming a linear dependence of the friction coefficient on the relative speed of the points of the contacting surface and also that the elastic constants of

Card 1/2

Dependence of the adhesion coefficient on the speed of rolling. (Cont.)

24-5-19/25

the two contacting bodies are equal. Utilisation of the derived formulae is illustrated by the calculation of the movement of an electric locomotive along a rail, assuming that the driven wheel, of 60 cm radius, carries a load of 11 tons. The calculated maximum traction force as a function of the speed is graphed in Fig.3; the results are correct only for rolling speeds at which the relative speed at the contact area does not exceed 5 cm/sec. There are 3 figures and 4 references, 2 of which are Slavic.

Card 2/2

SUBMITTED: February 11, 1957.

AVAILABLE:

Mossakovskiy, V. I.

AUTHOR: Mossakovskiy, V. I. (Dnepropetrovsk) 24-11-21/31

TITLE: On the rolling of a wheel pair. (O kachenii kolesnoy pary).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1957, No.11, pp. 169-172 (USSR)

ABSTRACT: The problem of rolling of a wheel on a rail was considered by means of method based on the theory of elasticity and described in the papers of N. I. Glagolev (Ref.1) and H. Fromm (Ref.2). The relations derived by these authors can be applied directly only in the case of rolling of a fully symmetrical wheel pair. In this article the problem is considered of rolling on rails of a wheel pair consisting of two wheels of unequal radius fitted on an axle. In the same way as the above mentioned authors, it is assumed here that the material of the wheels and of the rails is the same and the problem is solved as the synthesis of two plane contact problems of the theory of elasticity, the wheel and the rail being considered as elastic semi-planes. In the first paragraph the dependence is established between the angular speed and the traction force. The solution is based on using the Reynolds assumption that the contact line is sub-divided into two parts, namely, the coupled part and the sliding

Card 1/2

On the rolling of a wheel pair. 24-11-21/31

part. The graph, Fig.2, p.171, shows the changes in the traction force T as a function of the angular speed ω for a concrete case of a steel wheel and a rail for R = 60 cm, P = 11 t/cm, $\mu = 8 \times 10^5$ kg/cm^2, $\nu = 0.3$, k = 0.33, v = 10 m/sec. The graph pertaining to slightly differing wheel radii R_1 = 60 cm, R_2 = 60.1 cm is shown in Fig.3, p.171; the total traction force as a function of the angular speed is shown in Fig.4, p.171. If the radii differ considerably the T vs. ω graph also shows a horizontal section for which T = 0, Fig.5, p.172. There are 6 figures and 4 references, 3 of which are Slavic.

SUBMITTED: July 24, 1957.

AVAILABLE: Library of Congress.

Card 2/2

AUTHOR: Mossakovskiy, V.I. (Dnepropetrovsk)

TITLE: The Pressure of a Circular Punch on an Elastic Half Space With an Elasticity Modulus Which is a Power Function of the Depth (Davleniye kruglogo shtampa na uprugoye poluprostranstvo, modul' uprugosti kotorogo yavlyayetsya stepennoy funktsiyey glubiny)

40-22-1-11/15

PERIODICAL: Prikladnaya Matematika i Mekhanika, 1958, Vol 22, Nr 1, pp 123-125 (USSR)

ABSTRACT: In the short notice the author considers a problem of Korenev [Ref 1] and generalizes it in certain points. Korenev investigated the pressure of a stamp which presses on a basis with variable modulus of elasticity. For the case which is symmetrical about an axis the solution could be reduced to Bessel functions. In the special case of a nondepending modulus of elasticity of the elastic half space the solution becomes particularly simple and passes over into well-known results. In this paper the author directs to some wants of clearness of the solution of Korenev and solves the problem in a somewhat more suitable way by applying a system of coupled integral equations. The solution obtained in general form is applied to the

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The Pressure of a Circular Punch on an Elastic Half Space With an Elasticity Modulus Which is a Power Function of the Depth 40-22-1-11/15

case of a circular stamp with constant axial pressure. For the pressure distribution below the surface of the punch results are obtained which deviate from the results of Koranev. There are 2 Soviet references.

SUBMITTED: June 17, 1957

Card 2/2

MOSSAKOVSKIY, V.I. (Dnepropetrovsk); RVACHEV, V.L. (Bedryansk)

Problem on the horizontal hydrodynamic impact of a sphere. Prikl. mat. i mekh. 22 no.6:847-849 N-D '58. (MIRA 11:12)
(Hydrodynamics)

Mossakovskiy, V. I.

report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

68. N. S. Gandeva, Kh. M. Mushtari, R. G. Surkin (Kazan): On a method of solving problems of the bending theory of shallow shells with the use of electronic digital computers.

69. G. T. Gasanov, A. G. Gurbanov (Baku): Solution of unsteady problems of hydrodynamics of viscous and visco-plastic fluids.

70. A. V. Gemmerling (Moscow): An approximate stability analysis of frames in the elastic-plastic range.

71. G. A. Geniev (Moscow): Some problems concerning the plane flow of compressible plastic media.

72. G. P. Gendzhian (Erevan): On a problem of elastic-plastic torsion of an anisotropic shaft.

73. I. S. Gerasimov (Moscow): A dynamic problem for a conical shell.

74. M. V. Gzovskii (Moscow): Tectonophysics — a new domain of application of mechanics to geological problems.

75. M. V. Gzovskii, D. Osokina (Moscow): Simulating of processes of plastic deformation and rupture of solids with great variations of time and size.

76. V. G. Gmoshinskii (Moscow): Development of a theory of pressure in rocks with the use of the methods of continuum mechanics.

77. I. I. Golberg (Moscow): Some generalizations of the basic equations of visco-elasticity.

78. I. I. Golberg (Moscow): The propagation of longitudinal waves in a visco-elastic rod.

79. A. M. Goldberg, V. G. Zoretkin (Leningrad): Theoretical and experimental methods of design of the locks of the Stalingrad hydroelectric power plant.

80. I. I. Goldenblat (Moscow): A generalized theory of plastic flow.

81. I. I. Goldenblat (Moscow): The theory of finite deformations of anisotropic elastic media.

82. I. I. Goldenblat, N. A. Nikolaenko (Moscow): A general creep theory of shells.

83. A. L. Goldenveizer (Moscow): Development of the theory of thin elastic shells.

84. A. L. Goldenveizer (Moscow): Asymptotic integration of the equations of the theory of thin elastic plates.

85. M. I. Gorbunov-Posadov (Moscow): Determination of the elastic zone boundary in a sand foundation, which approaches failure under the pressure of a rigid footing.

86. A. Ya. Gorgidze (Tbilisi): On secondary effects in torsion and bending of nearly prismatic bars.

87. I. V. Gorelik (Leningrad): On filtration force and viscous friction in water-saturated sand under dynamical conditions.

88. G. A. Goryachkin, G. N. Savin (Kiev): Contribution to the dynamics of inelastic one-dimensional continua of variable length.

89. A. S. Grigoriev (Moscow): On elastic-plastic deformation of non-homogeneous plates and disks.

90. A. S. Grigoriev (Moscow): Equilibrium of membrane shells of revolution for large displacements and strains.

91. G. S. Grigorian (Erevan): Creep design of thin orthotropic sandwich shells.

92. S. S. Grigorian (Moscow): The general equations of soil dynamics and some particular solutions.

93. D. V. Grilitskii (Lvov): Torsion of an elastic layer.

94. A. N. Grubin (Leningrad): Stress concentration in notched tension strips under large creep deformations.

95. V. S. Gubenko, V. I. Mossakovskii (Dnepropetrovsk): The pressure of an annular die on an elastic half space.

96. I. I. Gudushauri (Tbilisi): Effect of shear stresses in the design of foundation strips of arbitrary rigidity under arbitrary loads.

97. Y. G. Gulkanian (Erevan): The bending of a hollow prismatic rod with a rectangular hole.

98. A. M. Gutkin (Moscow): The limit equilibrium of an elastic-plastic disc that is compressed between rough rigid plates.

99. S. G. Gutman (Leningrad): A plane multiply-connected region subjected to a conservative body force and non-uniform heating.

100. S. G. Gutman (Leningrad): The equilibrium of a hollow cone under its own weight and hydrostatic pressure on one of its surfaces when the axis of the cone has an arbitrary orientation.

101. V. M. Darevskii, P. I. Zahnskii (Moscow): Buckling of cylindrical cantilever shell with ring-stiffened edge under internal pressure.

3/4

MOSSAKOVSKIY, V.I

S/179/60/000/02/012/032
E081/E241

AUTHORS: Golub, V. K., and Mossakovskiy, V. I., (Dnepropetrovsk)

TITLE: Bending of a Circular Plate on an Elastic Half-Space in the Presence of Adhesion

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk Mekhanika i mashinostroyeniye, 1960, Nr 2, pp 88-94 (USSR)

ABSTRACT: The paper is a continuation of previous work (Refs 6, 7). The problem under discussion is that of a circular plate of constant thickness h lying on an elastic half-space. A given axially symmetric load $q(\bar{r})$ acts on the plate, and reactive normal $[p(\bar{r})]$ and shear $[t(\bar{r})]$ stresses, also axially symmetric, act between the elastic half-space and the underside of the plate. Considering the equilibrium of an element of the plate the governing differential equation is obtained as (1.1) and (1.2), where $r = \bar{r}/a$, w(r) is the vertical displacement of a point on the middle surface of the plate, D the cylindrical rigidity of the plate, a the radius, N_r and N_θ are respectively the radial and circumferential forces in the middle plane. These forces

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S/179/60/000/02/012/032
E081/E241

Bending of a Circular Plate on an Elastic Half-Space in the Presence of Adhesion

are determined by (1.2) and the compatibility Eqs (1.3) and are given by (1.4) and (1.5). The horizontal displacement of a point on the underside of the plate can be written in the form (1.6), where the first term corresponds to bending and the second to deformation of the middle surface. Using previously published results, the displacement of a point on the surface of the foundation under the action of a distributed load $p(r_1)$ is found as (2.4), where r, r_1, R and φ are shown in Fig 1. A detailed mathematical analysis then leads to (3.24) and (3.25) for the vertical and horizontal displacements of a point on the surface of the foundation under the action of normal forces $p(x, y)$, where μ_0 is Poisson's ratio. To solve the problem of the elastic plate on an elastic half-space, it is necessary to find the unknown functions $p(r)$ and $t(r)$ (the reactions of the foundation) in the system of differential and integral equations (1.1), (1.6), (3.24) and (3.25). This is done by expressing $p(r)$ and $t(r)$ as series of modified Legendre polynomials

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Bending of a Circular Plate on an Elastic Half-Space in the Presence of Adhesion

(4.2). In the case of a uniformly distributed load over the whole plate, this leads to Eq (4.5) for w(r). Numerical calculations are carried out for α (= h/2a) = 0.3, ν (= Poisson's ratio of plate) = 0.3, ν_0 (= Poisson's ratio of foundation) = 0.35, 2n (Eq (4.2)) = 2.4, m (Eq (4.2)) = 1.3, k (= flexibility index) = 2 and 10. The results are tabulated at the foot of p 93 and show the effect of calculating with and without allowance for radial force N_r and frictional force t(r); the calculated values are for the centre of the plate. The left-hand of the Table reads:
Allowing for N_r and t(r).
Without allowing for N_r.
Without allowing for N_r and t(r).
From Tables (Ref 3).
Comparison of the first and second lines of the Table shows that allowance for the force N_r gives the following differences: for the moments M_r 4 to 17%; for compressive stresses (σ_r) and tensile stresses ($-\sigma_r$), 22 to 45% and 21 to 74%, respectively. The calculated

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values of the third line were obtained by P. I. Klubin's method and give higher values for both moments and stresses. The fourth line in the table gives values taken from the tables of M. I. Gorbunova-Posadov (Ref 3). The present values of M_r and σ_r are close to Posadov's, the difference being smaller for small flexibility coefficients. In particular, for $k = 2$ the divergence between the maximum compressive stresses amounts to 4%. Thus for calculations on a uniformly loaded plate working equally in tension and compression, the tables of Gorbunova-Posadov may be used without change. There are 2 figures, 1 table and 12 Soviet references.

ASSOCIATION: Dnepropetrovskiy gosudarstvennyy universitet (Dnepropetrovsk State University)

SUBMITTED: March 6, 1959

Card 4/4

GUBENKO, V.S. (Dnepropetrovsk); MOSSAKOVSKIY, V.I. (Dnepropetrovsk)

Pressure of an axisymmetric annular stamp on an elastic semispace.
Prikl. mat. i mekh. 24 no. 2:334-340 Mr-Ap '60. (MIRA 14:5)
(Elasticity)

GUDRAMOVICH, V.S. (Dnepropetrovsk); MOSSAKOVSKIY, V.I. (Dnepropetrovsk)

Contact problem for a flexible ring reinforcing a cylindrical shell. Izv.AN SSSR.Otd.tekh.nauk.Mekh.i mashinostr. no.2:153-156 Mr-Ap '61. (MIRA 14:4)
(Elasticity)

MOSSAKOVSKIY, V.I. [Mossakovs'kyi, V.I.] (...rovsk); ... [...]

Solving ... ular ...
... no. 1:35-33 '61.

1. Dnepropetrovskiy ... institut.
(... and shells)

L 13599-63 EWP(r)/EWT(m)/BDS AFFTC/APGC EM

ACCESSION NR: AP3004810 S/0179/63/000/004/0162/0166 55 53

AUTHOR: Mossakovskiy, V. I. (Dnepropetrovsk); Smely*y, G. N. (Dnepropetrovsk)

TITLE: Experimental investigation of the effect of testing-machine rigidity on the stability of plain cylindrical shells under axial compression

SOURCE: AN SSSR. Izv. Otd. tekh. nauk. Mekhanika i mashinostroyeniye, no. 4, 1963, 162-166

TOPIC TAGS: cylindrical shell, plain-cylindrical-shell stability, shell-stability test, shell stability, critical stress, buckling, buckling behavior, buckling stress

ABSTRACT: Results are given of a large number of tests undertaken to determine the influence of the rigidity (or elasticity) of testing machines on the critical (buckling) stresses of plain circular cylindrical shells under axial compression. The tests were carried out on the following machines: the industrial machines ZDM-100t (the most rigid of the three, with hydraulic drive) and ZDM-2.5t (intermediate rigidity, screw-nut type) and a machine of low rigidity, especially designed for "elastic loading" (compressed-air actuation). Comparison of the

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ACCESSION NR: AP3004810

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averaged values of data obtained on each machine showed that the higher values of critical stresses were measured on the more rigid machines. The reliability of the formula of the linear stability theory for calculating the critical stresses is discussed, the discrepancies between theoretical and empirical data are pointed out, and the effect of testing-machine rigidity on the magnitude of buckling stresses is explained. The shells tested were made of steel, 150 mm in diameter, 300 mm high, and had a wall thickness of 0.17 mm. The test arrangement and technique used are described, and oscillographic recordings of the results are shown in diagrams. The buckling behavior of shells during testing is analyzed, and through mathematical statistics (using Student's [W. L. Gosset] criterion) it is proved that the probability that the observed effect of testing-machine rigidity could be a random phenomenon is very low. Orig. art. has: 9 figures and 2 formulas.

ASSOCIATION: none

SUBMITTED: 05Feb63 DATE ACQ: 06Sep63 ENCL: 00

SUB CODE: AP NO REF SOV: 002 OTHER: 004

Card 2/2

ACCESSION NR: AP3003236 S/0040/63/027/003/0418/0427

AUTHOR: Mossakovskiy, V. I. (Dnepropetrovsk)

TITLE: Compression of elastic bodies in contact (axially symmetric case)

SOURCE: Prikladnaya matematika i mekhanika, v. 27, no. 3, 1963, 418-427

TOPIC TAGS: elastic body, identation process, semi-infinite surface

ABSTRACT: The details of compression contact between axisymmetric elastic bodies have been studied under the assumption of slowly increasing load, with no dynamic effects, and the stressed state of the body as a direct function of the load. The identation process of a smooth and absolutely rigid press acting on an elastic semi-infinite surface is considered, and the problem is solved for the case of large cohesion between the two surfaces in contact, with no slip. The case is then generalized to include two axisymmetric bodies with contact surfaces small compared to a linear dimension. The particular case of two spheres in contact is discussed and the total load determined. Orig. art. has: 50 equations and 1 figure.

Card 1/2

ACCESSION NR: AP3003236

ASSOCIATION: none

SUBMITTED: 13Dec62	DATE ACQ: 23Jul63	ENCL: 00
SUB CODE: AP	NO REF SOV: 009	OTHER: 003

Card 2/2

MOSSAKOVSKY, V.I. (Dnepropetrovsk)

"Solution of some mixed problems of the theory of elasticity and the theory of potential for a half-space by reducting them to auxiliary plane problems."

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

S/0198/64/010/003/0291/0296

ACCESSION NR: AP4037991

AUTHOR: Mossakovs'ky*y, V. I. (Mossakovskiy, V. I. (Dnipropetrovs'k Kharkiv); Ony*shchenko, V. I. (Dnipropetrovs'k, Kharkiv); Rvachov, V. L. (Rvachev, V. L.) (Dnipropetrovs'k, Kharkiv)

TITLE: On the use of Green functions to solve a compound problem in the theory of elasticity for a half-space

SOURCE: Pry*kladna mekhanika, v. 10, no. 3, 1964, 291-296

TOPIC TAGS: Green function, elasticity, half-space, stress, strain, boundary value problem, boundary condition, Kelvin function, problem compound.

ABSTRACT: A compound problem of the theory of elasticity for a half-space is reduced in the end to finding two functions which are harmonic in the half-space for the compound boundary conditions. For the case where the line of separation of the boundary conditions is a circle, this problem was solved in a previous article by expansion of the unknown functions into trigonometric series, but calculation difficulties rose with increase in the numbers of harmonics. In the present article, by inversion, a Green matrix is constructed which permits obtain-

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ACCESSION NR: AP4037991

ing a general solution of the problem in quadratures. The functions K_{if} used in the formula are harmonic and should satisfy the assigned boundary conditions. By introducing auxiliary axially-symmetric functions F_{if} and utilizing inverse transformation, the solution of the problem can be reduced to an already axially-symmetric problem of potentials theory which is solved by being reduced to a planar problem. As a result, the unknown functions F_{if}, and consequently also K_{if}, are obtained in the form of integrals from elementary functions. Orig. article has: 53 formulas.

ASSOCIATION: Dnipropetrovs'ky*y derzhavny*y universy*tet (Dnepropetrovsk State University); Kharkivs'ky*y insty*tut girny*chogo mashy*nobuduvannya, avtomaty*ky ta obchy*slyuvalnoyi tekhniky* (Kharkov Institute of Mining Machine Building, Automation and Computer Equipment)

SUBMITTED: 19Nov62 DATE ACQ: 12Jun64 ENCL: 00

SUB CODE: AS, ME NO REF SOV: 003 OTHER: 000

Card 2/2

L 16726-65 EWT(m)/EWP(w) ASD(f)-2 EM

ACCESSION NR: AP5000276 S/0040/64/028/006/1061/1069

AUTHORS: Mossakovskiy, V. I. (Dnepropetrovsk); Rybka, M. T. (Dnepropetrovsk)

B

TITLE: Generalization of the Giffith-Sneddon criterion to the case of an inhomogeneous body

SOURCE: Prikladnaya matematika i mekhanika, v. 28, no. 6, 1964, 1061-1069

TOPIC TAGS: elastic material, elastic stress, boundary value problem

ABSTRACT: The authors study the problem of two elastic half-spaces with different elastic properties. In the joining plane is a crack of radius a. Stretching stresses p = const are applied at infinity perpendicular to the plane of the crack. In rectangular coordinates, the boundary of the elastic half-spaces coincides with the plane z = 0 and the origin is at the center of the crack. The solution is sought in the form

$$u = \varphi_1 + z\frac{\partial\psi}{\partial x}, \quad v = \varphi_2 + z\frac{\partial\psi}{\partial y}$$

$$w = \varphi_3 + z\frac{\partial\psi}{\partial z} \qquad (1)$$

Card 1/2

where u(x,y,z), v(x,y,z), w(x,y,z) are projections of the elastic displacements on the coordinate axes; $\varphi_1 \varphi_2 \varphi_3$ and ψ are harmonic functions of x, y, z in space, related by

$$\frac{\partial \psi}{\partial z} = \frac{1}{4\nu - 3}\left(\frac{\partial \varphi_1}{\partial x} + \frac{\partial \varphi_2}{\partial y} + \frac{\partial \varphi_3}{\partial z}\right) \qquad (2)$$

where ν is the Poisson coefficient. This problem is reduced to an axisymmetric problem in potential theory, which is in turn reduced to a plane problem in potential theory. The authors solve the latter and apply their developed theory to the determination of the destructive stresses, normal and tangent, outside the crack on the dividing plane. Orig. art. has: 65 formulas and 1 figure.

ASSOCIATION: none

SUBMITTED: 14Jul64 ENCL: 00

SUB CODE: AS, ME NO REF SOV: 004 OTHER: 002

MOSSAKOVSKIY, V.I.; RYBKA, M.T. (Dnepropetrovsk)

Attempt at evolving a theory of the strength of brittle materials based on Griffith's ideas about the energy state of solids. Prikl. mat. i mekh. 29 no.2:291-296 Mr-Ap '65.

(MIRA 18:6)

MOSSAKOVSKIY, V.I. (Dnepropetrovsk); MOSSAKOVSKAYA, L.P. (Dnepropetrovsk)

Effect of a load acting outside the stamp on normal pressures under the base of a circular stamp. Prikl. mekh. 1 no.3:133-135 '65. (MIRA 18:9)

1. Dnepropetrovskiy metallurgicheskiy institut.

MOSSAKOVSKIY, V.I. (Dnepropetrovsk); [illegible], I.A. (Dnepropetrovsk), BIRKOVICH, I.Ye. (Dnepropetrovsk).

A problem of a plane having a fissure. Prikl. mat. i mekh. 18:2:209-211 Mr-Ap '54. (MLRA 7:5)

1. Dnepropetrovskiy gosudarstvennyy universitet.

MOSSAKOVSKIY, V.I. (Dnepropetrovsk); FOTIYEVA, N.N. (Dnepropetrovsk)

Impression of a symmetric stamp in an elastic semispace in the presence of a cohesion along the line of contact. Izv. AN SSSR. Mekh. no.6:67-70 N-D '65. (MIRA 18:12)

MOSSAKOVSKIY, Ya.V.

Economic efficiency of increasing the rate of drifting in the Donets Basin mines. Nauch.trudy MGI no.30:75-89 '60.
(MIRA 14:3)
(Donets Basin--Coal mines and mining--Costs)

MOSSAKOVSKIY, Ya.V.

Problem of lowering direct, standard costs in conjunction with higher rates of drifting. Nauch. trudy MGI no. 34:101-110 '60. (MIRA 14:4)

(Coal mines and mining—Costs)

MOSSAKOVSKIY, Ya.V., kand.ekonom. nauk

Planning the cost of drifting horizontal mine workings. Nauch. trudy MGI no.43:13-18 '62. (MIRA 16:9)
(Mining engineering—Costs)

STARZYNSKI, Stefan; BESKID, Miroslaw; MOSSAKOWSKA, Bibiana

Giant-cell tumor (osteoclastoma) developing from a phyllode tumor of the breast. Nowotwory 11 no.3/4:433-441 '61.

1. Z Zakladu Anatomii Patologicznej AM w Warszawie Kierownik: prof. dr med. L. Paszkiewicz i z Oddzialu Chirurgii Szpitala Miejskiego Nr 7 w Warszawie Ordynator: doc. dr med. W. Wiechno
(BREAST NEOPLASMS case reports) (CYSTOSARCOMA PHYLLODES case reports)
(GIANT CELL TUMORS case reports)

MOSSAKOWSKA, Bibiana

Traumatic hip dislocation in a 2-year-old infant. Chir. narzad. ruchu ortop. pol. 29 no.1:53-55 '64

1. Z Oddzialu Chirurgii Dzieciecej Miejskiego Szpitala Bielanskiego w Warszawie; ordynator: dr. med. J.Radlinska.

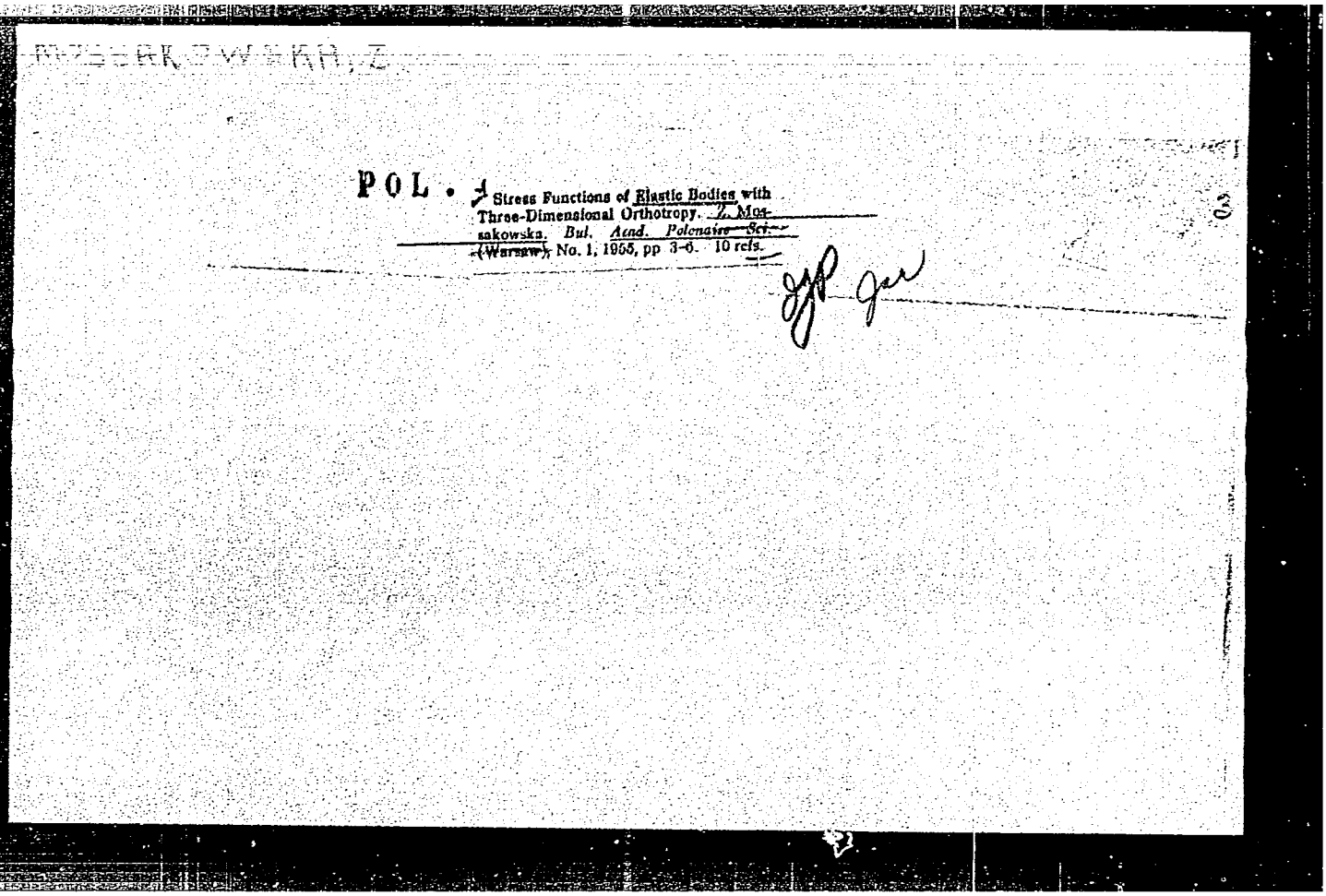
*

MOSSAKOWSKA, E.; NIEWIADOMSKI, H.

Obtaining sterols from waste from rapeseed oil refineries. p. 510.

PRZEMYSL SPOZYWCZY. Warszawa. Vol. 9, no. 12, Dec. 1955.

SOURCE: East European Accessions List (EEAL) LC, Vol. 5,no. 3, Mar. 1956



POL • Stress Functions of Elastic Bodies with Three-Dimensional Orthotropy. Z. Mossakowska. *Bul. Acad. Polonaise Sci.* (Warsaw), No. 1, 1955, pp 3-6. 10 refs.

MOSSAKOWSKA, ZOFIA,

Mossakowska, Zofia. Stress functions for elastic bodies ~~with three axial orthotropy~~. *Arch. Mech. Stos.* 7, 87–96 (1955). (Polish. Russian and English summaries)

A set of three partial differential equations of sixth order is derived for the three stress-functions of an elastic body of three-dimensional orthotropy. In the case of isotropy these equations reduce to that of the Galerkin stress functions.

A. M. Freudenthal (New York, N. Y.).

1 - F/W

MOSSAKOWSKA, ZOFIA

Distr: 4E4

Mossakowska, Zofia. Concentrated force in the interior of a transversely isotropic elastic semi-infinite space. Arch. Mech. Stos. 10 (1958), 233–251. (Polish and Russian summaries)

The author studies the problem of determining the stresses in a transversely isotropic semi-space under a point concentrated load. Three types of boundary conditions are considered: (1) zero stress; (2) mixed conditions; (3) zero displacements. The author proceeds in the following manner. He introduces the six second order partial differential equations satisfied by the components of the displacement vector. It is stated that these equations can be replaced by single sixth order partial differential equations for the three components of a new "displacement" vector. The physical displacements and stresses are then determined in terms of the new "displacement" vector. By choosing two components of this vector to be zero, the author reduces the problem to the solution of a single fourth order partial differential equation which is solved by use of a double Fourier integral.

N. Coburn (Ann Arbor, Mich.)

29289

24.4200 1327 2607 4512 1103

P/033/60/012/001/008/009
D250/D302

AUTHOR: Mossakowska, Zofia (Warsaw)

TITLE: One-dimensional dynamical problem of thermo-elasticity for an anisotropic medium

PERIODICAL: Archiwum mechaniki stosowanej, v. 12, no. 1, 1960, 137-146

TEXT: Expressions are derived for the displacement field in an anisotropic semi-infinite medium ($z \geq 0$) due to the sudden application at $t=t_0$ of a plane source of heat or temperature on $z=c$. The displacement field, the temperature and the stress components are expressed as

$$\begin{cases} u_i = (a_{i1}\partial_z^6 + a_{i3}\partial_z^4\partial_t^2 + a_{i4}\partial_t^6)\partial_z\varphi, \\ T = (a_{14}\partial_z^6 + a_{24}\partial_z^4\partial_t^2 + a_{34}\partial_z^2\partial_t^4 + a_{44}\partial_t^6)\varphi = a_{14}\prod_{j=1,2,3}(\partial_z^2 - \mu_j^2\partial_t^2)\varphi, \\ \sigma_{i3} = \varrho(a_{i1}\partial_z^4 + a_{i3}\partial_z^2\partial_t^2 + a_{i4}\partial_t^4)\partial_t^2\varphi. \end{cases} \quad (1.4)$$

Card 1/3

One-dimensional dynamical problem ...

and $\varphi(z,t)$ is obtained in the usual way by solving the equation for its Laplace transform $\tilde{\varphi}(z,p)$.

$$(\partial_z^2-\mu_4^2 p)\prod_{j=1\,2,3}(\partial_z^2-\mu_j^2 p^2)\tilde{\varphi}=\frac{\tilde{W}(z,p)}{k_3 a_{14}}. \qquad (1.11)$$

where $\tilde{W}$ is the transform of the heat source distribution function. The initial conditions are that the fields of displacement, velocity and temperature are everywhere zero at t=0, and the boundary conditions on z=0 are taken in turn as the four possible combinations of zero temperature, heat flow, traction and displacement. All four boundary conditions are taken both for the case of a plane heat source suddenly supplied and for that of a suddenly applied temperature, and full details of the solutions are given. These agree with previously obtained solutions for isotropic cases. There are 4 references, 2 Soviet-bloc and 2 non-Soviet-bloc. The reference to

Card 2/3

29289

One-dimensional dynamical problem ... P/033/60/012/ D250/D302

the English-language publications reads as follows: H. S. J. C. Jaeger, Conduction of Heat in Solids, London 1948

ASSOCIATION: Department of Mechanics of Continuous Media, Polish Academy of Sciences

SUBMITTED: September 7, 1959

Card 3/3

X

MOSSAKOWSKI, Jan; OLESINSKI, Wladyslaw

Hepato-lienal syndrome according to modern literature and according to observations at the Second Surgical Clinic of the Academy of Medicine. Polski tygod. lek. 9 no.11:327-331 15 Mar 54.

1. Z II Kliniki Chirurgicznej Akademii Medycznej w Warszawie; kierownik prof. dr J.Mossakowski.

(LIVER, diseases,
hepatolienal synd., surg.)
(SPLEEN, surgery,
hepatolienal synd., surg.)
(ANEMIA, HEMOLYTIC, surgery,)

MOSSAKOWSKI, Jan; OLESINSKI, Wladyslaw

Second Surgical Clinic of the Academy of Medicine. Polski tygod. lek. 9 no.15:455-459 12 Apr 54.

1. Z II Kliniki Chirurgicznej Ak. Med. w Warszawie, Kierownik: prof. dr med. J.Mossakowski.

(LIVER, diseases, hepatolienal dis.)
(SPLEEN, diseases, hepatolienal dis.)

MOSSAKOWSKI, J.

| Powierzchnie Wpływowe Płyt o Kon-
turze w Postaci Wycinka Pierścienia
Kołowego (The Influence Surfaces of
Plates Representing Annular Sectors).
W. Nowacki and J. Mossakowski. Arch.
Mech. Stosowanej (Warsaw), 3:3, 1954,
p 237. In Polish, abridged in English.
Determination of the influence surfaces
for the deflection of a plate, in terms of
the bending and torsional moments, and
of the shearing forces, with the function of
Green obtained for an infinite wedge
simply supported at the edges as a solution
of the basic problem

MOSSAKOWSKI J.

POL.

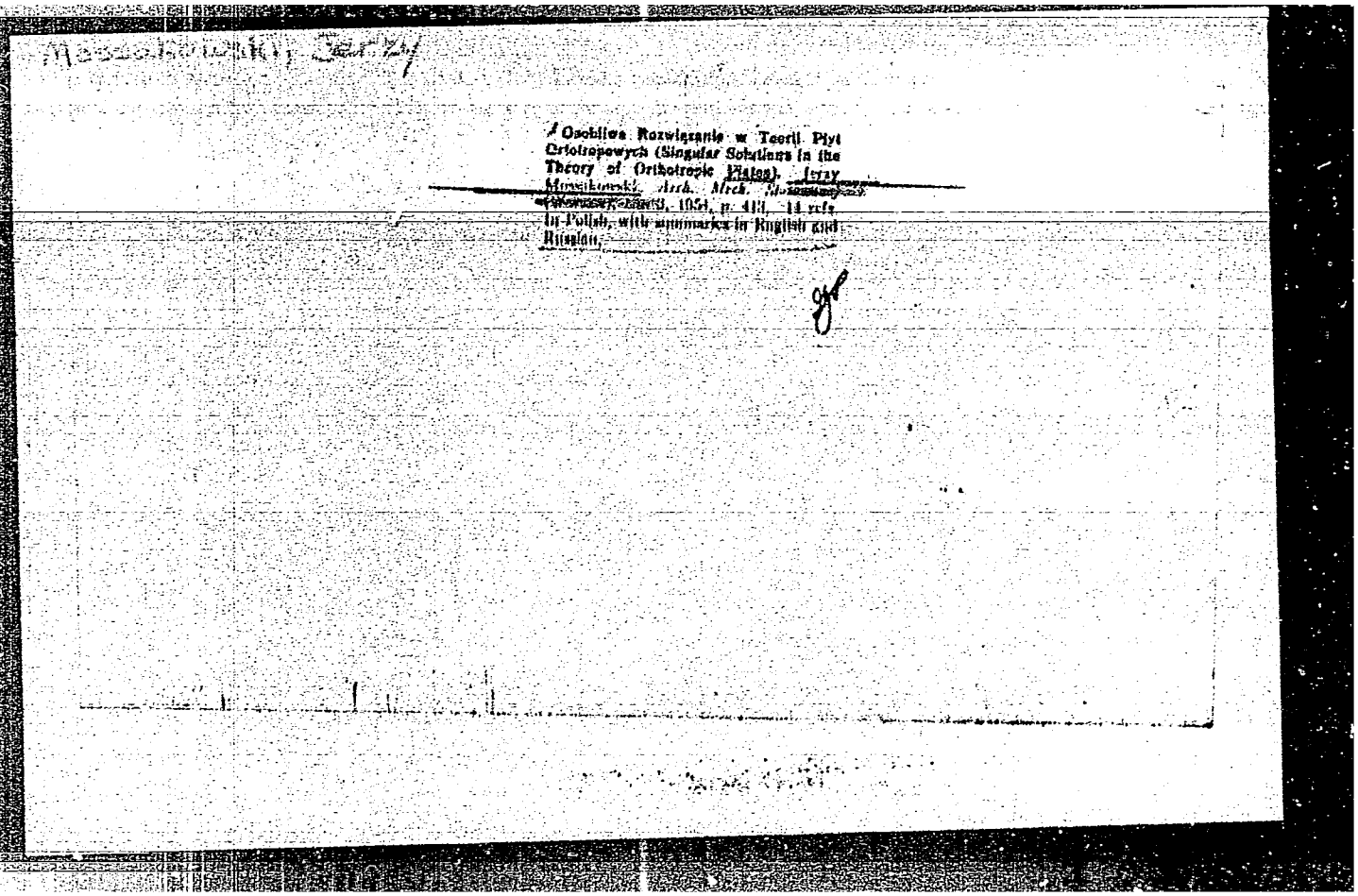
539.22 : 539.31

3390

Cywińska Z., Mossakowski J. The Influence Surfaces of an Orthotropic Semi-Infinite Strip

„Powierzchnie wpływowe ortotropowego półpasma płytowego". Archiwum Mechaniki Stosowanej (PAN), No. 1, 1954, pp. 53—64, 8 figs.

This paper submits a solution of the problem of an orthotropic semi-infinite strip, loaded by a concentrated force or moment. This problem is equivalent to that of finding the surfaces of influence (Green's function) of the strip. In all solutions reached in this paper, the second derivation of the function of deflection, d^2w/dx^2, d^2w/dy^2 and $d^2w/dxdy$ can be represented in forms of closed expressions. This makes it possible to find in a closed form the moments of torsion and bending and the shearing forces. Finally, two functions are submitted, the study of which will enable the rapid and accurate determination of the surfaces of influence of orthotropic plates.



/ Osobliwe Rozwiązanie w Teorii Płyt Ortotropowych (Singular Solutions in the Theory of Orthotropic Plates). Jerzy Mirosławski. Arch. Mech. Stosowanej. Warszawa, 1953, p. 413, 14 refs. In Polish, with summaries in English and Russian.

MOSSAKOWSKI, T.

POL.

Certaines Solutions Particulières dans la théorie des plaques Orthotropes. T. Mossakowski. *Bul. Acad. Polonaise Sc.* (Warsaw), No. 4, 1954, pp. 159-162. In French. Development of an analytical method to solve a problem in the theory of orthotropic plates.

MOSSAKOWSKI J.

705. Cywinska, Z., and Mossakowski, J. The influence surfaces of an orthotropic semi-infinite strip (in Polish, with Russian and English summaries). Arch. Mech. Stos. 6, 53-61, 1954.

Nearly all existing solutions of an orthotropic semi-infinite strip are in terms of slowly convergent trigonometric series. In this paper, authors make a successful effort to find solutions in a closed form summing up the series. The considered strip is loaded by a concentrated force of constant amount. Authors are interested mainly in having second partial derivatives of the deflection in a closed form because this is only needed to write down moments and shearing forces. Authors found also that solutions of all the examples contain various combinations of two basic functions. They propose a close study and tabulation of these functions.

T. Leser, USA

Mossakowski, T. Z.

1-F/7

Mossakowski, Jerzy. Singular solutions in the theory of orthotropic plates. Arch. Mech. Stos. 6, 413–432 (1954). (Polish. Russian and English summaries)

MS

A. Pucher [Ing.-Arch. 12, 76–100 (1941); MR 10, 86] introduced influence surfaces for solutions of isotropic plates. Equations of influence surfaces coinciding in case of plates with deflection functions consist in Pucher's method of two terms. The first term is a deflection function of an infinite plate, the second is a function formed of biharmonic polynomials whose coefficients must be determined so that this function satisfies boundary conditions. Pucher's method could not be applied to orthotropic plates because the influence function of an infinite orthotropic plate was unknown. The author's object was to extend Pucher's method to orthotropic plates. He solves the differential equation of deflection of orthotropic plates in a closed form and finds influence surfaces of an infinite plate. Using this solution he solves in addition three different support cases of a semi-infinite plate loaded by a concentrated force. After setting $E_x = E_y = E$, the author's solutions reduce to the well known solutions of isotropic plates. *T. Leser.*

MOSSAKOWSKI, J.

Some special solutions in the theory of anisotropic plates. p. 159

Vol. 2, no. 4, 1954, BULLETIN, Dep't of Technical Sciences, Polish Academy of Sciences

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, (EEAL), Vol. 4, No.9, LC, Sept. 1955, Uncl.

MOSSAKOWSKI, J.

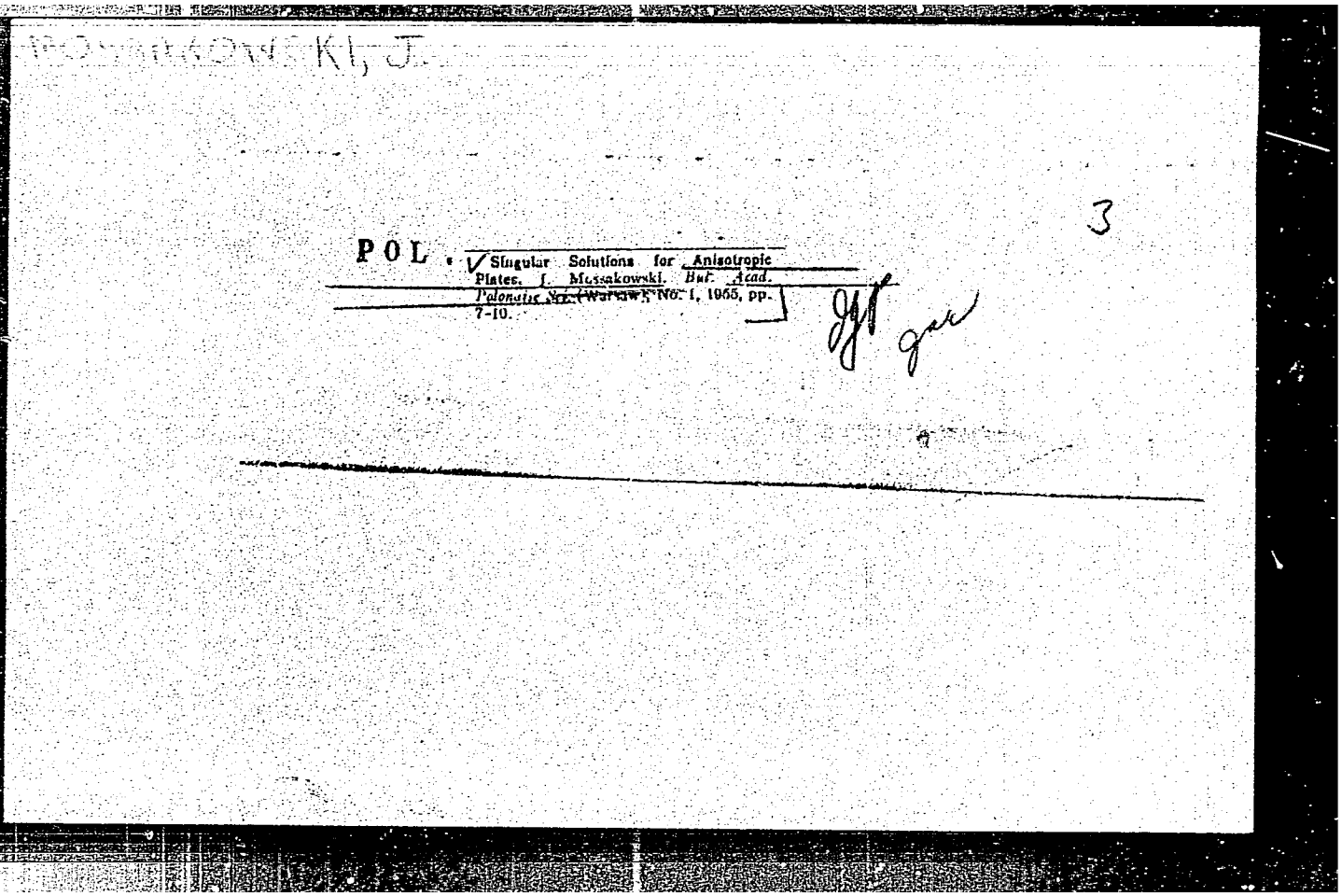
209/122 624.073.1

Certain Particular Solutions in the Theory of Orthotropic Plates (in French)

J. Mossakowski

Bull.Acad.pol.Sci. 2(1.4(4),159-162 1954 Poland

Solutions are obtained for the plate of infinite extent with a point load in the general case, and for special support conditions at the ordinate y = o, which enable surfaces of influence to be determined according to the method used by A. Pucher. This derives from an equation containing two functions, one representing the unbounded area and the other the static and boundary conditions for a rectangular plate. (Bibl. 4)



MOSZKOWSKI, J.

3

POL • ✓ Singular Solutions for Anisotropic Plates. J. Moszakowski. Bul. Acad. Polonaise Sci. (Warsaw), No. 1, 1955, pp. 7-10.

MOSSAKOWSKI, JERZY

Mossakowski, Jerzy. Singular solutions for anisotropic plates. Arch. Mech. Stos. 7, 97–110 (1955). (Polish. Russian and English summaries)

The author makes use of some particular integrals of the differential equation for small transverse deflections of thin anisotropic elastic plates to obtain the deflections and moments in an infinite plate under a concentrated load. The work is based on a representation of deflections by means of functions of certain complex variables determined by the anisotropy of the medium [see S. G. Lehnickiĭ, Anisotropic plates, OGIZ, Moscow-Leningrad, 1947; MR 10, 415].

I. S. Sokolnikoff.

I - F/W

V 2487. Massalowski, J. The Michell problem for anisotropic semi-infinite plates (in Polish), *Arch. Mech. stos.* 8, 1, 533–548, 1956.

The problem of a plane state of stress and strain in the case of an elastic semiplane of the general type of anisotropy, subjected to the action of an arbitrary concentrated force, is considered. Author represents the solution of the problem in the form of a sum of twelve terms of the $[A_{sk} z_{sk}(\ln z_{sk} - 1)]$ type, where

$$z_{sk} = X + \mu_s Y - \mu_k \eta$$

The coefficients μ are the complex roots of a characteristic equation of the fourth order for an anisotropic plane, and the parameters A_{sk} are obtainable from statical and boundary conditions of the problem. η is the ordinate of the point of action of the concentrated force.

The general and compact form of the solution enables obtaining a series of particular solutions; for instance, in the case of orthotropy and anisotropy, the solution of the problem of a force acting on the edge of an anisotropic plane, etc.

Two numerical examples show essential differences between the stress distribution in isotropic and anisotropic plates, concerning in particular the configuration of compressed and stretched regions.

M. Sokolowski, Poland

MOSSAKOWSKI, J.

Mossakowski, Jerzy. The state of stress and displacement in a thin anisotropic plate due to a concentrated source of heat. Arch. Mech. Stos. 9 (1957), 565–577. (Polish and Russian summaries)

RB 11

3

Adp

MOSSAKOWSKI, Jerzy (Warsaw)

Buckling of circular plates with cylindrical orthotropy.
Archiw mech 12 no.5/6:583-596 '60.

1. Department of Mechanics of Continuous Media, Institute of Basic Technical Problems, Polish Academy of Sciences.

L 19035-65 EWT(d)/EWT(1)/EWT(m)/EWP(w)/EPF(n)-2/EWA(d)/EWP(v)/EWP(k)/EWA(h)
Pf-4/Pu-4/Peb ASD(f)-2/AFWL/SSD/AFETR EM/WW/JW

ACCESSION NR: AP5001621 P/0033/64/016/004/1023/1038

AUTHOR: Mossakowski, J. (Warsaw)

TITLE: Buckling of a circular plate due to a concentrated heat source 21 6

SOURCE: Archiwum mechaniki stosowanej, v. 16, no. 4, 1964, 1023-1038

TOPIC TAGS: thermal buckling, thermal plate buckling, thermal stress, point heat source, point heat absorber

ABSTRACT: The thermal buckling of an isotropic circular plate caused by a steady point heat source, uniform over the thickness of the plate, in its center is discussed. The upper and lower plate surfaces are thermally insulated; heat exchange takes place only along the circumference of the plate. The elastic and thermal constants of the plate material are assumed to be independent of the temperature. Equations describing the thermal stress distribution and the shape of the distorted surface of the plate are used to investigate the forms of buckling (symmetric and asymmetric), the buckling criteria for various boundary conditions (clamped edge, simply supported edge, free edge), and to determine the corresponding critical values of the heat-source intensity. The cases in which there is an additional support at the center of the plate, along its diameter, or along several equidistant radii

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L 19035-65

ACCESSION NR: AP5001621

a r e m e n t i o n e d. The application of buckling criteria derived when there is a heat absorber instead of a heat source is indicated. Orig. art. has: 5 figures, 68 formulas, and 2 tables.

ASSOCIATION: Department of Mechanics of Continuous Media, IBTP Polish Academy of Sciences

SUBMITTED: 18Jan64 ENCL: 00 SUB CODE: AS

NO REF SOV: 002 OTHER: 001 ATD PRESS: 3157

Card 2/2

FILIPOWICZ, Maria; MOSSAKOWSKI, Miroslaw

Glioblastosis diffusa. Neur. &c. polska 5 no.6:653-662 Nov-Dec 55.

1. Z Instytutu Psychoneurologicznego w Pruszkowie. Dyrektor: prof. dr. Z. Kuligowski. i I Kliniki Neurologicznej Akad. Med. w. Gdansku. Kierownik: prof. dr. Z. Majewska.
(GLIOBLASTOMA MULTIFORMA)

MOSSAKOWSKI, Miroslaw; RADZIKOWSKI, Czeslaw.

Case of brachialgia in malignant metastases from the cervix uteri.
Polski tygod.lek. 10 no.45:1473-1474 7 Nov 55.

1. Z Kliniki Chorob Nerwowych; dyrektor: prof. dr. Majewska Zafia i z Zakladu Anatomii Patologicznej Akademii Medycznej w Gdansku; dyrektor: prof. dr. Czarnocki. Zakl. Anat. Patolog. A.M. w Gdansku
(NERVES, BRACHIAL PLEXUS, diseases,
compression by metastases from cervix uteri)
(CERVIX, UTERINE, neoplasms,
causing compression of brachial plexus)

MO[illegible]CWSKI, Miroslaw

Case of disseminated vasomotor disorders with simultaneous paralysis of the lower extremities and mental disorders. Neur. ref. polska 7 no.3: 319-331 May-June 57.

1. Z Zakladu Histopatologii Ukladu Nerowego PAN w Warszawie Kierownik: prof dr med. A Opalski.

(SPINAL CORD, diseases,
organic lesion with disseminated vasomotor disord., paralysis of lower extremities & ment. disord. (Pol))
(NEG, paralysis,
myelopathic, with vasomotor & ment. disord. (Pol))
(MENTAL DISORDER, case reports,
myelopathic, with vasomotor disord. & paralysis of lower extremities (Pol))
(CARDIOVASCULAR DISEASE, case reports,
vasomotor myelopathic, with ment. disord. & paralysis of lower extremities (Pol))

MOSSAKOWSKI, M.

Dissemination of multiple myeloma through the cerebrospinal fluid.
Neur. & pol polska 10 no.2:219-229 Mr-Ap '60.

1. Z Zakladu Histopatologii Ukladu Nerwowego Polskiej Akademii Nauk (Pracownia w Warszawie) Kierownik: prof. dr med. A.Kunicki.
(MYELOMA PLASMA CELL case reports)
(CEREBROSPINAL FLUID pathol)

MOSSAKOWSKI, Miroslaw

Elements of mesodermal origin in cerebral and cerebellar astrocytomas. Pat. polska 12 no.2:151-159 '61.

1. Z Zakladu Neuropatologii Polskiej Akademii Nauk Kierownik: prof. dr med. A. Kunicki
(BRAIN NEOPLASMS pathol)
(ASTROCYTOMA pathol)

MOSSAKOWSKI, Miroslaw; JEDRZEJOWSKA, Hanna

A case of co-existing rare styliform glioma of the spinal cord and spinobulbar syringomyelia. Pat. polska 12 no.1:57-65 '61.

1. Z Zakladu Neuropatologii PAN Kierownik: prof. dr A.Kunicki Z Kliniki Neurologicznej A.M. w Warszawie Kierownik: prof. dr I. Hausmanowa-Petrusewicz.
(SPINAL CORD neopl) (GLIOMA compl)
(SYRINGOMYELIA compl)

OSETOWSKA, Ewa; ZELMAN, Irmina; MOSSAKOWSKI, Miroslaw

A transitory form of disseminated and diffuse sclerosis of the brain. Pat. polska 12 no.4:381-390 '61.

1. Z Pracowni Warszawskiej Zakladu Neuropatologii PAN Kierownik Pracowni: doc. dr E.Osetowska.
(MULTIPLE SCLEROSIS pathol) (BRAIN pathol)

MOSSAKOWSKI, Miroslaw; KRASNICKA, Zuzanna; IWANOWSKI, Lech

Neuropathological syndromes in leukemias. Rozpr. wydz. nauk med. 7 no.1:157-184 '62.

1. Adiunkci Zakladu Neuropatologii PAN.
(LEUKEMIA) (BRAIN DISEASES)

DAMBSKA, Maria; CZOCHANSKA, Jagna; MOSSAKOWSKI, Miroslaw

A case of infantile type of amaurotic idiocy (Tay-Sachs). Neuropathological and histochemical studies. Pat. polska 13 no.2:159-171 '62.

1. Z Pracowni Warszawskiej Zakladu Neuropatologii PAN Kierownik: doc. dr med. E. Osetowska Z Kliniki Diagnostyki Chorob Dzieciecycy AM w Warszawie Kierownik: prof. dr med. Z. Lejmbach.
(AMAUROTIC FAMILIAL IDOCY pathol)

POLAND

JEDRZEJOWSKA, Hanna, MOSSAKOWSKI, Miroslaw, and RAJSZYS, Ryszard; Neurological Clinic (Klinika Neurologiczna) (Director: Prof. Dr. med. I. HOUSMANOWA-PETRUSEWICZ) and Department of Medical Radiology (Zaklad Radiologii Lekarskiej) (Director: Prof. Dr. med.sci. W. ZAWADOWSKI), both of the AM [Akademia Medyczna, Medical Academy] in Warsaw

"Spontaneous Bilateral Arteriovenous Anastomosis between Internal Carotid Artery and Sinus-Cavernosus. Case Report."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 31, 29 Jul 63, pp 1153-1158

Abstract: [Authors' English summary] Authors report a case in the title for a 66-year old woman. Bilateral exophthalmos and partial paresis of motor nerves appeared within two months, and patient complained of headache and tinnitus. Correct diagnosis was facilitated by arteriography of carotid arteries and kinematograph. Authors call attention to rare incidence of spontaneous bilateral carotid-cavernous anastomoses and discuss the possible pathogenesis of the disease. All 11 references are to English and French sources.

1/1

MOSSAKOWSKI, M.J.; WOLOWSKA, J.

A rare form of diffuse glioblastosis. Pat. pol. 13 no.4:455-466 '62.

1. Z Kliniki Neurologicznej AM w Warszawie Kierownik: prof. dr med. Irena Hausmanowa-Petrusewicz Z Pracowni Warszawskiej Zakladu Neuropatologii PAN Kierownik: doc. dr med. Ewa Osetowska.
(GLIOBLASTOMA MULTIFORME)

JEDRZEJOWSKA, Hanna; MOSSAKOWSKI, Miroslaw; RAJSZYS, Ryszard

Spontaneous bilateral arteriovenous fistula between the internal carotid artery and the cavernous sinum. Pol. tyg. lek. 18 no.31:1153-1158 29 Jl '63.

1. Z Kliniki Neurologicznej AM w Warszawie; kierownik: prof. dr med. I. Hausmanowa-Petrusewicz i z Zakladu Radiologii Lekarskiej AM w Warszawie; kierownik: prof. dr nauk med. W. Zawadowski.

(FISTULA, ARTERIOVENOUS)
(CAVERNOUS SINUS)
(CAROTID ARTERY DISEASES)