

DINABURG, A.D.

Facial reflexes. Zhur.nevr.i psikh. 53 no.9:697-701 S '53. (MLBA 6:9)

1. Onkologicheskaya klinika Nauchno-issledovatel'skogo instituta neyrokhirur-
gii Ministerstva zdravookhraneniya USSR. (Reflexes)

DINABURG, G.D. Prof. SIROTININ, M.M. Prof.

"Report on the Activities of the Kiev Society of Pathologists for 1953."

SO: Medych. Zhur. 24, No 6, 112-115, '54 (MLRA 8:7)

1. Chlen-Korrespondent AN URSR (for Dinaburg). 2. Golova pravlinnya Kiv'skogo tovaristva patologiv (for Dinaburg.)

DINABURG, A.D.

DINABURG, A.D.

Pathogenesis of the acute course of a cerebral tumor. Zhur.
nevr. i psikh. 54 no.6:552-557 Je '54. (MLRA 7:7)

1. Neyrokhirurgicheskiy institut Ministerstva zdavookhraneniya
USSR.

(BRAIN, neoplasms,
*physiopathol.)

DINABURG, A.D.

O.I. Smyrnova-Zankova; on her 75th birthday and 50 years of scientific, educational and social activity. *Visnyk AN URSS* 26 no.5:40-42 My '55. (MIRA 8:8)
(Smyrnova-Zankova, O.I., 1880)

DINABURG, A.D.

DINABURG, A.D.; TRESHCHINSKIY, A.I.

Clinical aspects of lesions of the cervical intervertebral disks. Zhur.nevr. i psikh. 55 no.10:721-727 '55 (MLRA 8:11)

1. Otdel klinicheskoy i eksperimental'noy nevrologii (zav. prof. A.F.Makarchenko) Institutafiziologii imeni A.A.Bogomol'tsa AN USSR i Institut neyrokhirurgii Ministerstva zdравo-okhraneniya USSR, Kiyev.

(INTERVERTEBRAL DISKS, diseases,
causing neuralgias, cervical disks)

(NEURALGIA, etiology and pathogenesis,
intervertebral disk lesions, cervical)

(NERVES, SPINAL, diseases
radicular synd.caused by cervical disk lesions)

DINABURG, A.D., professor (Kiyev)

Discussion on the problem of "Trauma of the cranium and of the
brain". Vop.neirokhir. 20 no.2:12-17 Mr-Apr '56. (MLRA 9:7)
(BRAINS, wounds and injuries)
(WOUNDS AND INJURIES
brain)

Dinaburg, A.D.

DINABURG, A.D., prof.; DRACHEVA, Z.N., kand.med.nauk (Kiyev)

Pathogenesis of pulmonary edema and pneumonia after cerebral
apoplexy. Klin.med. 35 no.12:92-97 D '57. (MIRA 11:2)

1. Iz kafedry nervnykh bolezney (zav. - akad. B.N.Man'kovskiy)
Kiyevskogo meditsinskogo instituta i iz otdela eksperimental'noy
i klinicheskoy nevrologii Institutafiziologii AN USSR (zav. - prof.
A.F.Makarchenko)

(CEREBRAL HEMORRHAGE, compl.

pulm. edema & pneumonia (Rus))

(PULMONAR EDEMA, compl.

cerebral hemorrh. & pneumonia (Rus))

(PNEUMONIA, compl.

cerebral hemorrh. & pulm. edema (Rus))

DINABURG, A.D.; SHINKARENKO, A.K.

Pathogenesis of pyramidal disorders in tumors of the cerebellopontile angle [with summary in French] Zhur.nevr. i psikh. 57 no.4:488-495 '57. (MLRA 10:7)

1. Klinika blastomatozov (nauchnyy rukovoditel' - prof. B.N.Man'kovskiy) byvshego Kiyevskogo psikhonevrologicheskogo instituta.
(BRAIN NEOPLASMS, complications cerebellopontile angle, with pyramidal disord. (Rus))
(PYRAMIDAL TRACT, diseases, caused by cerebellopontile angle tumors (Rus))

MAKARCHENKO, A.F., prof.; DINABURG, A.D., prof.

Adenosinetriphosphoric acid in the treatment of infectious diseases
of the nervous system. Vrach.delo no.10:1009-1012 O '59.

(MIRA 13:2)

1. Otdel klinicheskoy i eksperimental'noy nevrologii (zaveduyushchiy -
chlen-korrespondent AN USSR, prof. A.F. Makarchenko) Instituta fizio-
logii AN USSR.

(ADENOSINETRIPHOSPHORIC ACID) (NERVOUS SYSTEM--DISEASES)

DINABURG, A.D.; RUBASHEVA, A.Ye.

Clinical and roentgenological picture of diseases of the cervical
intervertebral disks. Zhurnev. i psikh. 59 no.6:714-718 '59.

(MIRA 13:1)

1. Institut fiziologii imeni A.A. Bogomol'tsa (dir. - prof. A.F.
Makarchenko) AN USSR i Ukrainskiy institut usovershenstvovaniya vrachey.
(INTERVERTEBRAL DISK, dis.
cervical, clin. & x-ray aspects (Rus))

DINABURG, Anna Davydovna [Dinaburg, H.D.]; RUBASHOVA, A.Ye. [Rubashova, A.IE.]

[Intervertebral disks] Mizhkhrebtsevi dysky. Kyiv, Vyd-vo Akad.
nauk URSR, 1960. 175 p. (MIRA 13:9)
(INTERVERTEBRAL DISK)

MAKARCHENKO, A.F. [Makarchenko, O.F.]; DINABURG, A.D. [Dinaburg, H.D.]

Influenza as an etiological and provoking factor in the development
of diseases of the nervous system. Fiziol. zhur. [Ukr.] 6
no. 5:630-642 S-O '60. (MIRA 13:10)

1. Otdel klinicheskoy i eksperimental'noy patologii nervnoy
sistemy Instituta fiziologii im. A.A. Bogomol'tsa Akademii
nauk USSR.

(NERVOUS SYSTEM—DISEASES) (INFLUENZA)

MAKARCHENKO, A.F., prof.; DINABURG, A.D., prof. (Kiyev)

Role of disturbances of the cortical and subcortical activity in the change in vascular reactions during infectious diseases of the nervous system. Vrach. delo no.2:9-14 F '61. (MIRA 14:3)

1. Institut fiziologii im. A.A.Bogomol'tsa AN USSR. 2. Chlen-korrespondent AN USSR (for Makarchenko).
(NERVOUS SYSTEM--DISEASES) (CEREBRAL CORTEX)

DINABURG, A. D. (Kiev, URSS)

"Sur les modifications des organes internes conditionnees par
les affections cerebrales"

Report submitted to the 7th Intl. Congress of Neurology,
Rome, Italy, 10-15 Sep 61

DINABURG, A.D. [Dynaburg, H.D.]

Pathogenesis of the diseases of internal organs in patients with
brain lesions. Fiziol. zhur. [Ukr.] 7 no.3:362-368 My-Je '61.
(MIRA 14:5)

1. Institut fiziologii im. A.A.Bogomol'tsa AN USSR, Kiyev.
(BRAIN--DISEASES) (PHYSIOLOGY, PATHOLOGICAL)

DINABURG, A.D., prof. (Kiyev)

Clinical aspects of influenzal cervical neuralgia of the
sympathetic nervous system. Vrach. delo no.8:75-78 Ag '61.
(MIRA 15:3)

1. Otdel klinicheskoy i eksperimental'noy nevrologii Instituta
fiziologii imeni A.A. Bogomol'tsa AN USSR.
(NERVOUS SYSTEM, SYMPATHETIC--DISEASES)
(NEURALGIA)

MAKARCHENKO, A.F. [Makarchenko, O.F.]; PASTERNAK, M.N.; DINABURG, A.D.
[Dynaburh, H.D.]; MEL'NICHENKO, A.V. [Mel'nychenko, H.V.]

Role of the influenza virus in the development of diseases of
the nervous system. Fiziol. zhur. [Ukr.] 7 no.6:732-744 N-D
'61. (MIRA 15:3)

1. Otdel nevrologii i neyrofiziologii Instituta fiziologii
im. A.A. Bogomol'tsa AN USSR, Kiyev.
(INFLUENZA)
(BRAIN—DISEASES)

DINABURG, A.D.; KLEYN, E.G.; SHINKARENKO, A.K.

Pathogenesis of influenzal diseases of the nervous system.
Zhur. nevr. i psikh 61 no.8:1129-1135 '61. (MIRA 15:3)

1. Otdel klinicheskoy i eksperimental'noy nevrologii Institute
fiziologii imeni A.A. Bogomol'tsa (dir. -- prof. A.F. Makarchenko)
AN USSR i Kiyevskoye oblastnoye byuro sudebnoy ekspertizy.
(INFLUENZA)
(NERVOUS SYSTEM--DISEASES)

MAKARCHENKO, A.F. [Makarchenko, O.F.]; PASTERNAK, M.N.; DINABURG, A.D.;
MEL'NICHENKO, A.V. [Mel'nychenko, H.V.]; KLEBANOVA, L.B.

Experimental allergic encephalomyelitis. Fiziol. zhur.
[Ukr.] 8 no.3:292-308 My-Je '62. (MIRA 15:6)

1. Otdel nevrologii i nevrofiziologii Instituta fiziologii
im. Bogomol'tsa AN USSR, Kiyev.
(ENCEPHALOMYELITIS)
(ALLERGY)

DINABURG, A.D. [Dinaburg, H.D.]

Dynamics of the formation of cerebral motor disorders and the restoration of disordered functions in meningoencephalitis. Fiziol. zhur. [Ukr.] 8 no.3:397-404 My-Ju '62. (MIRA 15:6)

1. Otdel neurologii i neyrofiziologii Instituta fiziologii im. A.A. Bogomol'tsa AN USSR, Kiyev.
(ENCEPHALITIS) (MOVEMENT DISORDERS)- (CEREBRAL CORTEX)

MAKARCHENKO, A.F.; DINABURG, A.D.; PASTERNAK, M.N.; MEL'NICHENKO, A.V.

Experimental allergic encephalomyeloradiculitis. Zhur. nevr.
i psikh. 62 no.3:361-366 '62. (MIRA 15:3)

1. Otdel nevrologii i neyrofiziologii Instituta fiziologii
imeni A.A. Bogomol'tsa (dir. - prof. A.F. Makarchenko) AN USSR,
Kiyev.

(NERVES, SPINAL—DISEASES)
(ENCEPHALOMYELITIS) (ALLERGY)

MAKARCHENKO, A.F.; DINASBURG, A.D.; ROYTRUB, B.A.; LAUTA, A.D.

Clinical aspects and pathogenesis of diencephalitis of influenzal etiology. Zhur.nerv.i psikh. 62 no.6:825-832 '62. (MIRA 15:11)

1. Otdel nevrologii i neyrofiziologii Instituta fiziologii imeni A.A.Bogolom'tsa (dir. - prof. A.F.Makarchenko) AN UkrSSR, Kiyev.
(DIENCEPHALON—DISEASES)
(INFLUENZA)

МАКАРЧЕНКО, А.А. [Макаренко, А.А.]; МИХАЙЛИШВИЛИ, А.А.; ПЕТРОВИЧ, А.А.

Biochemical shifts in influenzal diencephalitis and their changes under the effect of adenosine triphosphoric acid. Fiziol. zhur. [Ukr.] 9 no.2:172-181 Mr-Apr '63. (MIRA 18:3)

1. Otdel neurologii i neyrofiziologii Instituta fiziologii im. A.A. Bogomoletsa AN UkrSSR, Kiyev.

DINABURG, A.D., prof.; RUBASHEVA, A.Ye., prof.

Significance of changes in the configuration of the intervertebral foramina in the pathogenesis of lumbosacral polyradiculitis. Sovet. med. 27 no.6:119-124 Je'63 (MIRA 17:2)

1. Iz Instituta fiziologii imeni A.A. Bogomol'tsa (direktor akademik AN UksSSR A.F.Makarchenko) AN UkrSSR i Instituta usovershenstvovaniya vrachey (direktor M.N.Umovist) Ministerstva zdravookhraneniya UkrSSR.

MAKARCHENKO, Aleksandr Fedorovich; DINABURG, Anna Davidovna;
GESHEL', L.A., red.; YANKÓVSKAYA, Z.B., red.

[Influenza and the nervous system] Gripp i nervnaia si-
stema. Kiev, Izd-vo AN USSR, 1963. 314 p. (MIRA 17:6)

MAKARCHENKO, A.F.; DINABURG, A.D.

The role of influenza as a provocative factor in the development and exacerbation of diseases of the nervous system.

Zh. nevropat. psikhiat. Korsakov 63 no.3:364-368 '63
(MIRA 17:1)

1. Otdel nevrologii i neyrofiziologii imeni A.A. Bogomol'tsa
(dir. - prof. A.F. Kamarchenko) AN UkrSSR, Kiyev.

MAKARCHENKO, A.F.; DINABURG, A.D.; ROYTRUB, B.A.

Adenosinetriphosphoric acid in treating influenzal encephalitis.
Zhur.nevr. i psikh. 63 no.12:1818-1822 '63.

(MIRA 18:1)

1. Otdel nevrologii i neyrofiziologii Instituta fiziologii imeni
A.A.Bogomol'tsa (direktor - prof. A.F.Makarchenko) AN UkrSSR,
Kiyev.

DINABURG, A.D.

Syndromes of spinal cord lesions (myelopathies) of ischemic
etiology. Fiziol. zhur. [Ukr.] 10 no.2:196-205 Mr-Apr '64.

(MIRA 18:7)

1. Otdel nevrologii i neyrofiziologii Instytutu fiziologii Im.
A.A.Bogomol'tsa AN UkrSSR, Kiyev.

DINABURG, A.D. [Dynaburg, H.D.]; KLEBANOVA, L.B.; YERYSH, A.I. [IERYSH, A.I.]

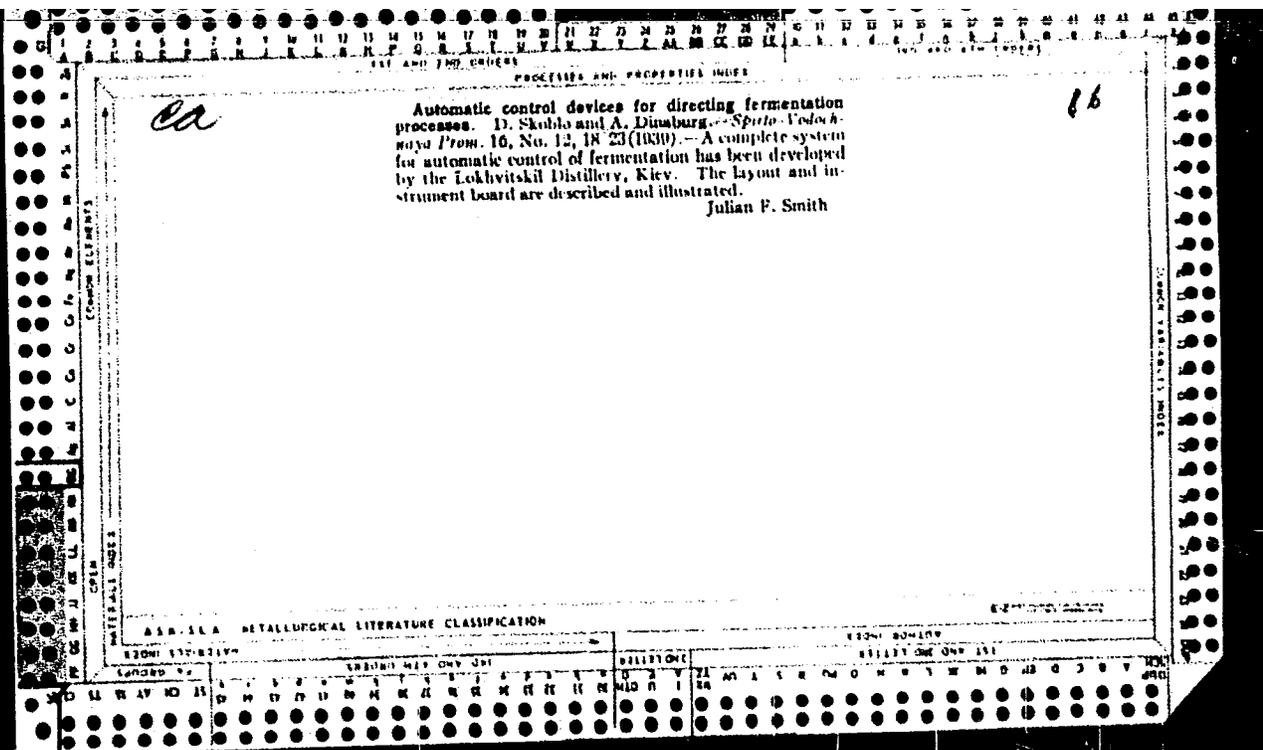
Thermoregulation in infectious diseases of the nervous system. Fiziol.
zhur. [Ukr.] 11 no.1:37-44 Ja-F '65. (MIRA 18:7)

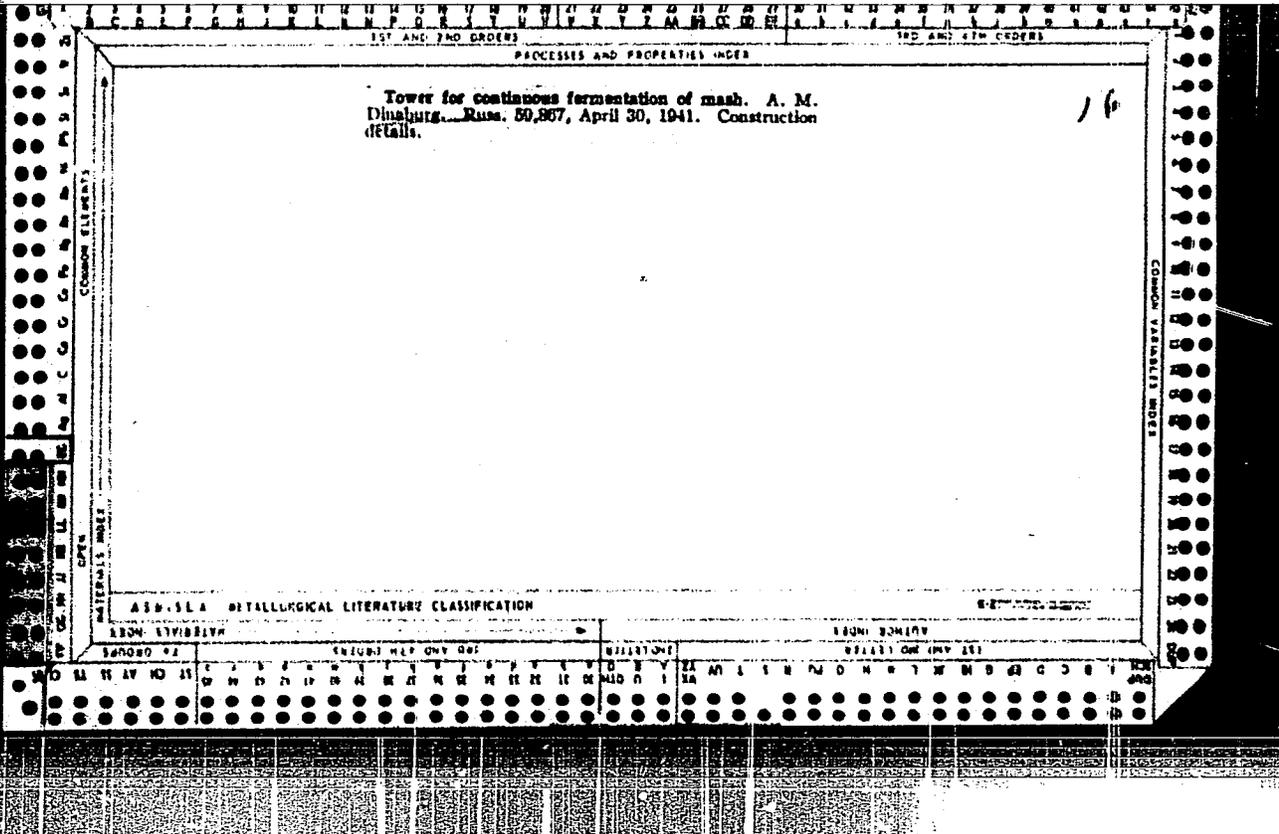
1. Otdel nevrologii i neyrofiziologii Instituta fiziologii im. A.A.
Bogomol'tsa AN UkrSSR, Kiyev.

MAKARCHENKO, A.F. [Makarchenko, O.F.]; DINABURG, A.D. [Dynaburg, H.D.];
GORBACH, N.L. [Horbach, M.L.]; SAYENKO-LYUBARSKAYA, V.F. [Saienko-
Liubars'ka, V.F.]; LAUTA, A.D.; YERYSH, A.I. [Ierysh, A.I.]; KLEBANOVA,
L.B.

Clinicophysiological characteristics of diencephalic pathology.
Fiziol. zhur. [Ukr.] 10 no.3:371-378 My-Je '64. (MIRA 18:9)

1. Otdel nevrologii i neyrofiziologii Institut fiziologii im. A.A.
Bogomol'tsa AN UkrSSR, Kiyev.





LINABURG, A.M.

"Automatic Control of Continuous Fermentation".

USSR Patent 65,004 issued 31 Aug. 1945.

Diaphragms in the pipes connected the fermentation vats with the CO₂-delivery tube have openings proportional to the evolution of gas. The purpose is to regulate the introduction of yeast and wort to the diaphragms.

SO: W-327, Mar., 24, 1948.

DINABURG, A.M.

Improvement of the GAB bottle washing machine. Spirt.prom.21
no.2:25-30 '55. (MIRA 8:10)

1. Ukrainskiy likero-vodochnyy trest.
(Bottle washing) (Distilling industries---Equipment and supplies)

DINABURG, A.M.

DINABURG, A.M.

Improvement of the GAB-47 bottle washing machine. Spirt.prom.

23 no.8:15 '57.

(MIRA 11:1)

(Bottle washing)

~~DINABURG A.M.~~

Aluminum caps for liquors and vodka bottling. Spirt. prom. 23 no.5:
33 '57. (MLRA 10:8)

1. Ukrlikervodrest.
(Liquor industry--Equipment and supplies)

DINABURG, A.M.

Carriers for bottle washing machines. Spirt. prom. 24 no.1:31-33
'58. (MIRA 11:3)
(Distilling industries--Equipment and supplies)

RUSAKOV, I.Ya.; DINABURG, A.M.

Metal bottle-carrying case. Spirt. prom. 24 no.3:38 '58. (MIRA 11:6)
(Distilling industries--Equipment and supplies)
(Containers)

DINABURG, A.M.

Utilisation of chains for conveyors in the packing section.

Spart. prom. 24 no.6:38-39 '58. (MIRA 11:10)

(Conveying machinery)

5(3)

SOV/71-59-3-11/23

AUTHOR: Dinaburg, A.M.

TITLE: Calculation of Capacity of Equipment of a Vodka Plant (Raschët moshchnosti oborudovaniya vodochnògo tsekha)

PERIODICAL: Spirtovaya promyshlennost', 1959,²⁵ Nr 3, pp 24-28 (USSR)

ABSTRACT: The capacity of a liqueur-vodka plant is now-a-days determined on the basis of calculation tables, as stipulated by the decree MPPT SSSR Nr 1492 of 17 September 1952. The drawback of these tables is that they disregard the mutual relationship existing between the various sections of production. The calculation tables give the efficiency of the filtering section only for 40% vodka. The Standard Research Laboratory of the Moskovskiy like-ro-vodochnyy zavod (Moscow Liqueur Vodka Plant) has published in 1952 a "Manual on Technical Standardization for Liqueur Vodka Plants" ("Rukovodstvo po tekhnicheskomu normirovaniyu dlya like-ro-vodochnykh zavodov") which gives on pp 54-55 calculation formulae for determining the efficiency of equipment of a vodka plant. The drawback of this manual is that the abundance of misprints in the formulae distorts their meaning. To substantiate his claims the writer cites a number of calculations and on

Card 1/2

SOV/71-59-3-11/23

Calculation of Capacity of Equipment of a Vodka Plant

hand of 4 examples shows the discrepancies which become apparent in the varying results arrived at from applying the calculation tables, the calculation formulae or analytical mathematical calculation.
There are 4 tables.

Card 2/2

DINABURG, A.M., inzh.

Analytic determination of basic parameters of feed devices. Mekh.i
avtom.proizv. 16 no.3:13-17 Mr '62. (MIRA 15:4)
(Feed mechanisms)

M

DATA BUR. C. 17.10

Foundry Practice for the Production of Lead Bronzes. H. D. Dinsburg and I. V. Alipov (*Litynoz Delo (Foundry Practice)*, 1941, 12, (3), 26-30; *Chem. Zentr.*, 1942, 113, (1), 2700; *C. Abstr.*, 1943, 37, 3386).—Lead-bronzes are substitute materials for aircraft bearings and anti-friction parts. The "18 5:25" alloy, containing 10% Sn and lead 25%, has the lowest coeff. of friction (0.0014). The alloy is produced by melting electrolytic copper under charcoal, adding tin and lead, desoxidizing with 0.1% phosphor copper, and water-tempering at 1080°-1090° C. into copper moulds preheated to 400° C. Water-cooled copper moulds have no advantage over cast-iron moulds. Rejections can be kept as low as 2 to 3% by close control of pouring and mould temperature.

ASS-51A METALLURGICAL LITERATURE CLASSIFICATION

DINABURG, B. I.

Pipe-fittings for the thermal power-plants. Leningrad, Gos. energ. izd-vo, 1950. 231 p.
(51-22357)

TJ395.D5

DINABURG, B.I., inzhener.

Experience using high pressure feed control valves. Elek. sta. 28
no.1:74-75 Ja '57. (MLRA 10:3)
(Boilers--Safety appliances)

DINABURG, B.I., inzh.

High-pressure safety valves used abroad. Energomashinostroenie 10
no.6:46-48 Je '64. (NIRA 17:9)

DINABURGE, G. D.

DINABRUG, G.D.

Changes in argyrophil substance in peripheral areas (skin, muscles and internal organs) during pathological processes in the spine. Medych.zhur. 22 no.2:67-74 '52. (MIRA 11:2)

1. Z viddilu patoanatomii (sav. - diysniy chlen AN URSS O.I.Smirnova-Zamkova) Insitutu klinichnoi fiziologii im. akad. O.O.Bogomol'tsya AN URSS (direktor - diysniy chlen AN URSS R.Ye.Kavets'kiy)
(SPINE--DISEASES) (CONNECTIVE TISSUES)

DINABURG, G.D.

Disorders in the cortical and subcortical activity in virus
neuroinfections [with summary in English]. Fiziol. zhur. [Ukr.]
3 no.2:3-12 Mr-Apr '57. (MIRA 10:6)

1. Institut fiziologii im. O.O.Bogomol'tsya AN URSR, viddil
klinichnoi i eksperimental'noi nevrologii.

(CEREBRAL CORTEX) (NERVOUS SYSTEM--DISEASES)
(VIRUS DISEASES)

DINABURG, A.D., professor (Kiyev)

Clinical and physiological characteristics of the hypertensive syndrome in supratentorial tumors of the brain. Vopr. neurokhir. (MLRA 10:5)
21 no.2:23-29 Mr-Apr '57

(BRAIN NEOPLASMS, compl.

hypertension, in supratentorial tumors, clin. aspects)
(HYPERTENSION, etiol. and pathogen.
supratentorial tumors of brain)

DINABURG, G.D. [Dinaburg, H.D.]; KLEBANOVA, L.B.]; YERISH, A.I. [Ierysh, A.I.]

Blood pressure and vascular tone in postinfluenzal neuroinfections.
Fiziol. zhur. [Ukr.] 4 no.6:804-813 N-D '58. (MIRA 12:3)

1. Institut fiziologii im. A.A. Bogomol'tsa AN USST, otdel klinichnoy
i eksperimental'noy nevrologii.
(BLOOD PRESSURE) (NERVOUS SYSTEM--DISEASE)
(INFLUENZA)

RIMSKAYA-KORSAKOVA, O.M.; DINABURG, I.B.

Baddelleyite in the massifs of ultrabasic and alkali rocks in
the Kola Peninsula. Min. i geokhim. no.1:13-30 '64. (MIRA 18:9)

DINABURG, M. S.

USSR/Chemistry

Card 1/1

Authors : Poray-Koshits, A. E.; and Dinaburg, M. S.

Title : Investigation of tautomeric compounds. Part 15.- Reaction of phenylmethylpyrazolone with ketones.

Periodical : Zhur. Obshchei Khim. 24, Ed. 4. 635 - 641, April, 1954

Abstract : Acetone, acetophenone and its substitutes in the nucleus of derivatives enter into reaction with one or two molecules of phenylmethylpyrazolone forming certain compounds in which R is the aromatic or aliphatic radical. The main tendency of the reaction depends upon the nature of the reacting ketone. The formation of a mixture of substances in the reaction of phenylmethylpyrazolone with acetone is explained by its ability of combining and reacting. Four references; 1 USSR 1947; 3 German since 1887. Table, chemical formulas.

Institution : The E. A. Poray-Koshits Technological Laboratory ^{of} organic dyes at the Leningrad-Len Soviet Technological Institute.

Submitted : October 29, 1953

DINABURG, M. S.

USSR/Chemistry Physical chemistry

Card : 1/1 Pub. 151 - 26/35

Authors : Poray-Koshits, A. E. and Dinaburg, M. S.

Title : Tautomeric compounds. Part 16.- About the mobility of hydrogen atoms in condensation products of phenylmethylpyrazolone with ketones

Periodical : Zhur. ob. khim. 24, Ed. 7, 1221 - 1226, July 1954

Abstract : The mobility of H-atoms in methyl groups of phenylmethylpyrazolone-methylketone condensation products, was determined experimentally. The effect of the H-atom mobility in methyl groups, their reaction with aldehydes and the product derived from such a reaction, are discussed. It was established that the products of phenylmethylpyrazolone-ketone condensation will react with aldehydes already in cold state. Methods and conditions, for catalyzing such aldehyde reactions, are described. Four USSR and 1 German reference. Graph.

Institution : The Leningrad Technological Institute, Leningrad

Submitted : December 18, 1953

Dinaburg, M. S.

62
 ▶ **Tautomeric compounds.** XVII. Reaction of diazo compounds with the products of condensation of phenylmethylpyrazolone with ketones. A. E. Poral-Koshits and M. S. Dinaburg (Zensovet Technol. Inst., Leningrad). *Zh. Obshch. Khim.* 24, 2208-12 (1954); cf. *C.A.* 49, 12446a. — To a diazonium salt soln. from 0.83 g. PhNH₂ in aq. HCl was added CO(NH₂)₂ to remove excess HNO₂, and the resulting soln. was added at 0° to 2.14 g. 4-isopropylidene-1-phenyl-3-methylpyrazolone in 25 ml. AcOH and 0.7 ml. concd. HCl, yielding after 1.5 hrs. 56.6% red 4-(α -methyl- β -phenylazo)-ethylidene-1-phenyl-3-methyl-5-pyrazolone, m. 178-4° (from AcOH). Diazotized *p*-O₂NC₆H₄NH₂ similarly gave 78% *p*-nitrophenylazo analog, red-violet, m. 234-6°; 2,5-Cl₂C₆H₃NH₂ similarly gave 51.4% 2,5-dichlorophenylazo analog, red, m. 184° (the diazonium salt was employed as the double salt with ZnCl₂ in this prepn.); *m*-H₂NC₆H₄CO₂H similarly gave 49.1% violet-red *m*-carboxyphenylazo analog, m. 235-

6°. Similarly, 4-(α -phenylethylidene-1-phenyl-3-methyl-5-pyrazolone gave: 87% violet-red 4-(α -phenyl- β -2,5-dichlorophenylazo)ethylidene-1-phenyl-3-methyl-5-pyrazolone, m. 185-6°; *p*-nitrophenylazo analog, 73%, green, m. 235-6°; 2-nitro-4-chlorophenylazo analog, 47%, brown, m. 226-7°; phenylazo analog, 60.8%, red-brown, d.comp. 118-20°; 2-carboxyphenylazo analog, blue-black, 81.8%, m. 214-16°. From 4-*m*-nitrophenylethylidene-1-phenyl-3-methyl-5-py-

razolone was similarly prepd. 51.5% green 4-(α -*m*-nitrophenyl- β -*p*-nitrophenylazo)ethylidene-1-phenyl-3-methyl-5-pyrazolone, m. 231-3°. Thus the condensation products of phenylmethylpyrazolone with Me ketones are capable of coupling with diazo compds. with participation of the Et atoms of the Me groups; this reaction is evident only in mediums contg. mineral acids, probably by removal of the unshared electron pair from the N atoms of the heterocyclic ring and formation of the onium salt. A rough representation of the ultraviolet spectra of the products is shown; they have 2 absorption max., one of which varies with the nature of the side chain; the 2nd max. is at 250 m μ , and is probably due to the pyrazolone ring. G. M. K.

DIMABORG, M. S.

3

~~The liquid-vapor equilibrium of the system diketene-acetic anhydride and diketene-acetic acid. M. S. Dimaborg and B. A. Porat-Koshits. *J. Appl. Chem.* 4:3:3:2. 1955-10 (Engl. translation).—See *C.A.* 80, 44e. D. M. R.~~

DMR

DINABURG, M.S.

AID P - 3429

Subject : USSR/Chemistry
Card 1/1 Pub. 152 - 14/18
Authors : Dinaburg, M. S. and B. A. Poray-Koshits
Title : Study of liquid-vapor equilibrium in the systems
diketene - acetic anhydride and diketene - acetic acid
Periodical : Zhur. prikl. khim., 28, 5, 548-552, 1955
Abstract : Comparison of the experimental data with values given
in the literature for pure substances showed that data
obtained for diketene-acetic anhydride are in good
agreement while the data for the system diketene -
acetic acid deviate markedly from those obtained for
ideal binary systems. Five tables, 3 diagrams, 4
references, 1 Russian (no date).
Institution : None
Submitted : 0 29, 1953

VERTKINA, V.N.; DINABURG, M.S., kand. khim. nauk; MAZAL', R.F.;
MAR'YANOVSKAYA, K.Yu.; PORAY-KOSHITS, B.A., prof.; UL'MAN, K.E.;
EFROS, L.S., prof.

Developments in the synthesis of direct dyes. Khim. nauka i prom.
3 no.2:191-212 '58. (MIRA 11:6)
(Azo dyes)

L 52986-65 EWT(m)/EPF(c)/EWP(j)/EWA(c) Pc-4/Pr-4 RM

ACCESSION NR AM5005252

BOOK EXPLOITATION

S/

33
B+1

Dinaburg, Maks Solomonovich

Light-sensitive diazo compounds and their uses (svetochuvstvitel'nyye diazocoyedineniya i ikh primeneniye), Moscow, Izd-vo "Khimiya", 1964, 255 p. illus., biblio., index. Errata slip inserted. 3,750 copies printed.

TOPIC TAGS: diazo compound, light sensitivity, microfilm, printing, photochemistry, copying process, dye, photographic material.

PURPOSE AND COVERAGE: The book describes a large group of light-sensitive diazo compounds and their use in various areas of technology. It cites the problems of the photochemistry of diazo compounds, methods of obtaining them and their stabilization, and also methods of obtaining light-sensitive materials of various types. The book considers the chemistry of the appearance of an image and methods of obtaining relief images using diazo compounds. It reviews modern methods of reproduction of drawings and design documents, polygraphic, micro-filming, etc. The book is intended for researchers, engineers and technicians in the organic synthesis industry, the organic dyes, photo materials, light copying and printing industries.

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Subm. 15 Aug 64

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Card

2/3

DINA BURG, V. A.
USSR/Chemistry

Card 1/1

Authors : Dinaburg, V. A; and Vansheydt, A. A.

Title : Mercaptans and disulfides as agents of the rearrangement of bonds during thermal polymerization of styrene

Periodical : Zhur. Ob. Khim. 24, Ed. 5, 840 - 848, May 1954

Abstract : The authors investigated the thermal polymerization of styrene at 99° in the presence of mercaptans and disulfides belonging to fatty, aromatic and heterocyclic compounds. They determined the molecular weights of polymers and obtained quantitative data on the rate of disappearance of highly active mercaptans during polymerization. A calculation of constants, regarding the rearrangement of bonds, showed that both mercaptans and disulfides are capable of changing bonds and that the structure of the radicals strongly affects the degree of activity of these or other agents. Diisopropyldicantogenedisulfide was found to be the most active agent among all other investigated disulfides. Fifteen references. Tables.

Institution: The Technological Institute, Leningrad, USSR

Submitted : October 9, 1953

DINABURG, V A.

AUTHOR: ^{p.r} Molodtsov, I. V. SOV/30-58-9-48 / 51

TITLE: Tasks of Library Cataloguing (Zadachi bibliotechnoy klassifikatsii) Scientific Conference in Leningrad (Nauchnaya konferentsiya v Leningrade)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 9, pp. 122 - 123 (USSR)

ABSTRACT: The conference took place from April 24 to April 26 in the Library of the AS USSR. Research work in this field has been and will further be carried out by the Vsesoyuznaya knizhnaya palata (All-Union Library), Gosudarstvennaya biblioteka im. V.I.Lenina (State Library imeni V.I.Lenin), Gosudarstvennaya biblioteka im.M.Ye.Saltykova-Shchedrina (State Library imeni M.Ye.Saltykov-Shchedrin) and many other libraries. Scientific cooperators of the institutes and libraries of the AS USSR participated in the conference as well as cooperators of the Academies of Sciences of the Ukraine, Belorussia, Kazakhstan, Turkmenistan, Latvia, Lithuania, Azerbaydzhan. The following reports were heard:
I.V.Molodtsov spoke about the fundamentals of classification.
V.N.Voronov on the fundamentals of the methods of classification.

Card 1/3

Tasks of Library Cataloguing. Scientific Conference
in Leningrad

SOV/30-58-9-48/51

I.G.Liorentsevich recommended to classify separately the problems of social life.

A.I.Morozova reported on problems concerning the classification of the history of economics.

V.A.Dinaburg spoke about the systematization of chemical publications.

✓ N.I.Kats ~~about~~ "the basis of classification of the history of the KPSS."

✓ T.I.Skripkina ~~spoke about~~ "the establishment of systematic library catalogues."

✓ V.M.Dukel'skiy ~~about~~ "the classification of physical publications."

V.P.Barzakovskiy disapproved of the including of chemistry in physical and mathematical sciences.

✓ A.A.Panov ~~dealt with~~ "the prospects of mechanization and automation of the working process in libraries."

B.Yu.Eydel'man approved of the order of classification from inorganic to organic nature.

Ye.I.Shamurin, E.N.Ambartsumyan ~~stated that the interruption~~ of the natural order of sciences from mechanics to biology

Card 2/3

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by technics is unjustified.

I.G.Khandzhayan emphasized that at the beginning of classification not only Dialectic Materialism but also Marxism-Leninism as a whole should be placed.

Card 3/3

SOURCE: Byulleten' izobretaniy i tovarnykh znakov, no. 4, 1965, 59

TOPIC TAGS: crosslinked copolymer, ion-exchange resin

ABSTRACT: This Author's Certificate introduces a method for producing single-purpose ion-exchange resins which contain weakly or highly acid groups by copolymerization of organic acids with a divinyl "cross-linking" agent. Ion-exchange resins with a controllable degree of "cross-linking" are produced by using methylenediacyl- or methylenedimethacrylamide as the "cross-linking" agent.

ASSOCIATION: none

SUBMITTED: 05Apr63

ENCL: 00

SUB CODE: MT, GC

NO REF SOV: 000

OTHER: 000

Cord: 1/1

MNUKHIN, S.S.; DINABURG, Ye.Ya. (Leningrad)

Epileptiform manifestations in early dextral and sinistral lesions
of the brain in children. Zhur. nevr. i psikh, 65 no.7:1073-1077
'65. (MIRA 18:7)

DINABURSKIY G.M.

AUTHORS: Dinaburgskiy, G.M. and Krits, I.G.

121-4-17/32

TITLE: Mechanisation of the End Fitting Joining Procedure for Flexible Hoses (Mekhanizatsiya protsessa zadelki kontsov gibkikh shlangov)

PERIODICAL: Stanki i Instrument, 1958, ²⁹No.4, pp. 33 - 34 (USSR).

ABSTRACT: The process of attaching end fittings to flexible hoses of the wire braided rubber type is described. A clamping fixture (Fig.3) and a torque limiting tool for inserting the socket are illustrated.

There are 4 figures.

AVAILABLE: Library of Congress

Card 1/1

1. House couplings-Attachment methods

DINABURSKIY, I. M., Engineer

"General Asymmetry of Three-Phase Circuits." Sub 10 Oct 47, Moscow
Order of Lenin Power Engineering Inst imeni V. M. Molotov

Dissertations presented for degrees in science and engineering in Moscow
in 1947 *Cand Tech Sci*

SO: Sum No. 457, 18 Apr 55

DINABURSKIY, I.M., dotsent, kand. tekhn. nauk

Schematic for starting a group of three-phase motors from a
single-phase network. Nauch. zap. KHIMSKH Fak. elek. sel'khoz.
1 no.10:75-79 '58. (MIRA 16:7)

(Electric motors—Starting devices)
(Electricity in agriculture)

GAYEVOY, Ye.V., kand. sel'sko-khozyaystvennykh nauk; DINARIYEVA, G.P.,
mladshiy nauchnyy sotrudnik

Use of aluminum salts for the preservation of fur sheepskins.
Trudy VNIIMP no.13:26-38 '62.

Using the acid treatment method for the preparation of soft
gelatin-yielding materials for gelatin production. Ibid.:39-51
(MIRA 17:5)

BRYUZGINA, G.; GAYEVOY, Ye., kand.sel'skokhoz.nauk; DINARIYEVA, G.; RADKEVICH, D.;
TRUDOLYUBOVA, Ye.; MASHKOV, V., kand.sel'skokhoz.nauk; PANYUKIN, I.,
kand.tekhn.nauk. [deceased]

New methods of preservation of fur and garment sheep pelts and
mechanization of their processing. Mias.ind.SSSR 33 no.5:15-21 '62.
(MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlennosti
(for Bryuzgina, Gayevoy, Dinariyeva, Radkevich, Trudolyubova). 2. Nauchno-
issledovatel'skiy institut mekhovoy promyshlennosti (for Mashkov, Panyukin).
(Hides and skins) (Assembly-line methods)

GAYEVOY, Ye.V., kand. sel'skokhoz. nauk; PANYUKIN, I.I., kand. tekhn. nauk; MASHKOV, A.N., kand. sel'skokhoz. nauk; DINARIYEVA, G.P., mladshiy nauchnyy sotrudnik; TRUDOLYUBOVA, G.B., mladshiy nauchnyy sotrudnik; RADKEVICH, D.P., mladshiy nauchnyy sotrudnik; BRYUZGINA, G.A., mladshiy nauchnyy sotrudnik

Use of formaldehyde compounds for the conservation of fur and garment sheepskins. Trudy VNIIMP no.15:24-43 '63.
(MIRA 17:5)

GAYEVOY, Ye.V., kand. sel'skokhoz. nauk; DINARIYEVA, G.P., mladshiy
nauchnyy sotrudnik; TRUDOLYUBOVA, G.B., mladshiy nauchnyy
sotrudnik; RADKEVICH, D.P., mladshiy nauchnyy sotrudnik;
BRYUZGINA, G.A., mladshiy nauchnyy sotrudnik

Efficiency of the use of formaldehyde compounds for the
conservation of fur and coat sheepskins during long
storage of the raw materials. Trudy VNIIMP no.15:43-55 '63.
(MIRA 17:5)

GAYEVOY, Ye.V., kand. sel'skokhoz. nauk; PANYUKIN, I.I., kand. tekhn. nauk; MASHKOV, A.N., kand. sel'skokhoz. nauk; DINARIYEVA, G.P., mladshiy nauchnyy sotrudnik; KAPKOV, R.K., inzh.

Development of the methodology for the processing of fur sheepskins preserved with formaldehyde hyposulfite compounds. Trudy VNIIMP no.15:56-66 '63. (MIR: 17:5)

COUNTRY : Rumania K
CATEGORY : Forestry. Dendrology.
ABS. JOUR. : RZhBiol., No. 4, 1959, No. 15468
AUTHOR : Dinoreanu, I.I.
INST. :
TITLE : New Site of Vegetation of Pinus cembra in the
Făgerăș Mountains.
ORIG. PUB. : Probl. geogr., 1957, 5, 392-395
ABSTRACT : A new habitat of P. cembra, discovered in Rumania
by a scientific expedition under the directorship
of V.B. Sochav, is described. These sites are
chiefly located higher than the upper limit of
vegetation of the fir at an altitude of 1,350 -
1,800 m above sea level. Along with P. cembra,
there are encountered here Alnus viridis, Pinus
mughus, Juniperus nana, and Sorbus aucuparia.
-- A. Yana

1/1

MOCIORNITA, C.; ANASTASIU, S.; CIOBANU, S.; DINCA, A.; SANDULESCU, N.

Considerations on the most suitable periods for calculating the
medium flow in Rumania. Studii hidrol 2:27-45 '62.

NITULESCU, M.; MOCIORNITA, G.; DINCA, A.; VIRCOL, L.; VOICU, Gh.; MIHAILESCU, Gh.; NAE, D.; BARBAT, V.; MIHAIL, M.; MUSETESCU, P.; CORBAN, V.; MATEESCU, M.

Monograph on the hydrology of the hydrographic basins of the Iza, Viscu, Sapinta, Tur Rivers.

NASTASEANU, S.; DINCA, Al.

Contributions to the knowledge of the Hauterivian in the
Resita-Moldova Noua-Banat zone. Dari seama sed 48'141-152
'60/61 [publ. '62].

NASTASEANU, S.; DINCA, Al.; STANOIU, I.; STILLA, Al.

Contributions to the knowledge of the stratigraphy of the Paleogene
deposits in the Polosnicu-Camenita (Banat). *Dati scara sed* 49 pp.214-
156 '61-'62 [publ. '64].

1. Submitted April 13, 1962.

DINCA, Al.

On the presence of Lower Senonian in the Rusca Montana Basin.
Darmi seana sed 49 pt.2.:173-175 '61-'62[publ. '64].

1. Submitted April 27, 1962.

MOCIORNITA, C.; DINCA, A.; NITULESCU, M.

Seasonal and monthly flow repartition on the Rumanian rivers
in an average year. Studii hidrol 5:3-23 '63.

Dinca, C.

ROMANIA/General Biology. General Histology.

B-3

Abs Jour : Ref Zhur-Biol., No 16, 1950, 71557

Author : Rimnicanu, C., Niclos, C., Dragan, H.,
Covaci, L., Dinca, C.

Inst : Romanian Academy, Timisoara Base.

Title : Morphological Changes of the Chondriome of
Embryonic Chicken Liver Cells under the
Influence of Morphine Introduction.

Orig Pub : Studii si cercotari stiint. Acad. RPR, Baza
Timisoara, Ser. stiinta mod., 1950, 3, No
1-2, 39-48

Abstract : By investigating the quantitative and quali-
tative changes of the chondriome of embryonic
chicken liver cells under the influence of
daily (from the 4th to 15th day of incubation)

Card : 1/2

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introduction of morphine (0.05 ml in a con-
centration of $5 \cdot 10^{-3}$), the authors observed
that in the first half of embryonal develop-
ment the introduction of morphine causes no
marked changes of the chondriome; but after
the 11th day of incubation, the introduction
of morphine causes both qualitative and quan-
titative changes of the chondriome, which in-
dicates significant strengthening of the me-
tabolic activity in the liver cells. The au-
thors conclude that the chondriome of the li-
ver cells participates actively in carbohy-
drate metabolism. — V. V. Kol'nik

Card : 2/2

Country : ROMANIA F
Category : Microbiology-Microbes Pathogenic for Man and Animal
Abs. Jour : Ref Zhur - Biol., No.19, 1958, 66250
Author : Draghiciu, O., Dinca, C.
Institut. : -
Title : Clinical and Serologic Observations on Cases of
Benign Leptospirosis in the Combined Hospital of
Beius during the Year 1955
Orig Pub. : Microbiol., Parazitol. si Epidemiol., 1957, Vol.2,
No.6, 536-543
Abstract : no abstract

1658

END

Card:

1/1

-54-

RUMANIA/Cultivated Plants - Technical, Oleaginous, Sacchariferous. 11-7

Abs Jour : Ref Jour - Biol., No 2, 1958, 32395

Author : Dinea, D.

Inst : Rumanian Agronomical Institute.

Title : Top Dressing the Cotton Plant.

Orig Pub : Anuarul lucrur. stint. Inst. agron., 1957, 89-97.

Abstract : Spraying the cotton plant with a 0.25% $MnSO_4$ (3 kg/ha) solution in the 3-4 leaf stage when the buds open and when seed vessels form (placing P and K into the soil) increased the yield of cotton wool by 17-25%. An acceleration of seed vessel ripening took place at the same time. -- A.M. Smirnov.

Card 1/1

RUMANIA / Chemical Technology. Chemical Products and H-28
Their Applications. Food Industry.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 10076.

Author : Otel, I., Dinca, E., Stamatescu, R.

Inst : Not given.

Title : Use of Nitrates and Nitrites in the Meat Industry.

Orig Pub: Lucrarile Inst. cercetari aliment., 1958, 2,
171-176.

Abstract: The optimum dose of nitrites added to a salting mixture in salting beef, or formed from nitrates, is established in the range of 8-10 mg/100 g beef. A good coloring of sausage meat of a semi-smoked sausage is obtained by the following salting mixture: salt 4.6 g%, Na nitrate 18.2 mg%, Na nitrite 2.6 mg%. Good results are obtained in production of raw-smoked sausage of the Sibiu type

Card 1/2

RUMANIA / Chemical Technology. Chemical Products and H-28
Their Applications. Food Industry.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 10078.

Abstract: when only Na nitrate, which is gradually reduced
to a nitrite in the maturing period, is added to
the salting mixture. The most uniform salting
mixture is produced by a ball-mill. -- Author's
abstract.

Card 2/2

220

DINCA, F.

Considerations on the torsion of cylindrical bars. p. 617. Academia
Republicii Populare Romine. Institutul de Mecanica Aplicata. STUDII SI CERCETARI
DE MECANICA APLICATA. Bucuresti. Vol. 6, no. 3/4, July/Dec. 1955.

So. East European Accessions List Vol. 5, No. 9 September, 1956

Supra Comportarea Harel Drepte Siff-
pate. In *Saraci Dinamice Axiale*. S.
Belati and H. Dines. *Stud. Cerc. Mat.*
1962, Jan. *1962*, pp. 135-140. In
Romanian. Study of the behavior of a
simply supported rod subjected to axial
dynamic stresses. 16

STP
AST

DINCA, FL.

On the Torsion of Certain Cylindrical Rods

Hamburger, L.; Dinca, Fl.; and Manca, V. Sur la torsion de certaines barres cylindriques. Acad. R. P. Roum. Stud. Cerc. Mec. Apl. 8 (1957), 1091-1100. (Romanian. Russian and French summaries)

3
1-FW

Dans la première partie du travail, on construit la fonction qui réalise la transformation conforme de l'intérieur du cercle unitaire sur l'intérieur d'un profil, ayant pour frontière deux courbes lisses, qui s'entrecoupent sous deux angles différents.

Dans la seconde partie, on indique une méthode de calcul approximative, utile dans le cas où l'intégrale de Schwartz, donnant la solution du problème, ne peut être effectuée sous forme fermée. *Résumé de l'auteur*

DINCA, F.

3243. Hamburger, L., Dinca, F., and Monea, V., On the torsion of cylindrical bars (in Russian), *Acad. Repub. Pop. Romine Rev. Mat. Appl.* 3, 1, 63-94, 1958.

Authors discuss the torsion of cylindrical bars of simply connected cross section whose boundary is formed by two fiat curves which intersect at two different angles (the corresponding profiles are met with in the construction of turbine blades). The function giving the conformal mapping of the interior of the unit circle on the interior of the above-mentioned cross section is constructed. A method of approximation is given for the case in which Schwarz's integral cannot be performed under a finite form. Paper also includes interesting applications.

P. P. Teodorescu, Romania

DINCA, F.

✓ 3245. Dinca, F., and Bolcu, H., On the torsion of cylindrical beams of doubly-connected cross section (in Romanian), *Studii si Cercetari Mecan. Appl.* 9, 3, 733-739, 1958.

Solution is given for the torsion of cylindrical beams of doubly connected cross section when the function that yields the conformal mapping of the cross section on a circular rim is previously given. Numerical applications for the domains bounded by regular polygons are included. P. P. Teodorescu, Roumania

3

64
4

24,4/00

80422

RUM/8-59-1-19/24

AUTHORS: Dinoă, F., Boicu, N.

TITLE: On the Torsion of Some Nonhomogeneous Cylindrical Bars

PERIODICAL: Studii si Cercetări de Mecanică Aplicată, 1959, Nr 1, pp 265 - 270 (RUM)

ABSTRACT: The torsion problem of a cylindrical bar with cylindrical inclosures of different materials can be solved by a general formula, as follows: Considering a normal section (Figure 1) in which C_1 is the trace of the external cylindrical surface, C_i is the trace of the cylindrical surface which separates the characterized material by the shearing module μ_i , S_1 is the internal field of C_1 and S_i is the internal field of C_i , the problem can be solved by determining a harmonic φ function in $\sum_{i=1}^n S_i$ while fulfilling the following conditions:

$$\frac{d\varphi}{dn} = ye - xm \text{ in } C_1,$$

$$S = \sum_{i=1,2,\dots} S_i, \mu_1 \left(\frac{d\varphi}{dn} \right)_1 - \mu_i \left(\frac{d\varphi}{dn} \right)_i = (\mu_1 - \mu_i)(ye - xm) \quad (1).$$

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On the Torsion of Some Nonhomogeneous Cylindrical Bars

80422

RUM/8-59-1-19/24

If the function φ is known, all values characterizing the torsion can be determined by elementary operations according to the formulae:

$$x_z = \tau \mu_i \left(\frac{\partial \varphi}{\partial x} - y \right), \quad y_z = \tau \mu_i \left(\frac{\partial \varphi}{\partial y} + x \right),$$

$$D = \sum_{i=1,2,\dots} \iint_{S_i} \mu_i (x^2 + y^2 + x \frac{\partial \varphi}{\partial y} - y \frac{\partial \varphi}{\partial x}) dx dy \quad (2).$$

Effective solutions of this problem have been supplied by I.N. Vecua [Ref 4], A.K. Rukhadze [Ref 3], N.I. Mushelishvili [Ref 2] and others. Subject article deals with the determination of the complex function, the real part of which corresponds to the conditions given by the formula (Nr 1) for the special case of two different materials, if the function is known which transforms suitably the sections $S_1 + S_2$ of the unitary circle, so that C_1 and C_2 are transformed into two concentric circles, the one with the radius $\bar{1}$ and the other with the radius $a < 1$ (Figure 2).

$$z = \sum_{n=0}^{\infty} d_n \zeta^n \quad (3)$$

is the transformation function. The problem can be solved if a function $f(\zeta)$ will be determined, which is defined by:

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80422

On the Torsion of Some Nonhomogeneous Cylindrical Bars

RUM/8-59-1-19/24

$$f(\zeta) = \begin{cases} f_1(\zeta) & \zeta \in S_1' \\ f_2(\zeta) & \zeta \in S_2' \end{cases} \quad (4),$$

so that the conditions (Nr 5) are satisfied:

$$\operatorname{Im} f_1(\zeta) = \frac{z\bar{z}}{2} + K_1 \text{ on } C_1', \quad \operatorname{Re} f_1(\zeta) = \operatorname{Re} f_2(\zeta) \text{ on } C_2',$$

$$\mu_1 [\operatorname{Im} f_1(\zeta)] - \mu_2 [\operatorname{Im} f_2(\zeta)] = (\mu_1 - \mu_2) \frac{z\bar{z}}{2} + K_2 \text{ on } C_2'. \quad (5)$$

Introducing the functions:

$$f_1(\zeta) = \sum_0^{\infty} \left(a_n \zeta^n + \frac{b_n}{\zeta^n} \right),$$

$$f_2(\zeta) = \sum_0^{\infty} c_n \zeta^n, \quad (6)$$

into the limit conditions (Nr 5), the author obtains for the determination of the constants:

$$a_n = \alpha_n + i\beta_n, \quad b_n = \tau_n + i\delta_n, \quad c_n = \gamma_n + i\nu_n \quad (7)$$

an infinite system of algebraic linear equations of a particular shape. By solving this system he obtains:

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$$\delta_n = -\frac{1}{2} \frac{(\mu_1 - \mu_2)(a^n L_{1n} - L_{2n})}{a^{-n}(\mu_1 + \mu_2) - a^n(\mu_1 - \mu_2)},$$

$$\nu_n = \frac{1}{2} L_{1n} - \delta_n (1 + a^{-2n}),$$

$$\beta_n = \frac{1}{2} L_{1n} - \delta_n,$$

$$\tau_n = \frac{1}{2} \frac{(\mu_1 - \mu_2)(a^n M_{1n} - M_{2n})}{a^{-n}(\mu_1 + \mu_2) - a^n(\mu_1 - \mu_2)}, \quad (8). \quad \checkmark$$

$$\eta_n = \frac{1}{2} M_{1n} + \tau_n (1 + a^{-2n}),$$

$$\alpha_n = \frac{1}{2} M_{1n} + \tau_n,$$

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The problem is solved by the method of Fourier. The series (Nr 6) with the coefficients given by (Nr 8) represent the effective solution of the problem.

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The first and fourth formulae of (Nr 8) become more simple if

$$\lambda_1 = \frac{\mu_1 - \mu_2}{\mu_1 + \mu_2} \ll 1, \quad (9)$$

so that λ_1^n for $n \geq 2$ can be neglected in ratio of λ_1 , and if

$$\lambda_2 = \frac{\mu_1}{\mu_2} \ll 1, \quad (11)$$

so that λ_2^n can be neglected for $n \geq 2$, against λ_2 . The rigidity of the bar is given by:

$$D = \mu_1 I_{p1} + \mu_2 I_{p2} + \frac{\pi \mu_1}{2} \sum_1^{\infty} n [L_{1n} (\delta_n - \beta_n) - M_{1n} (\alpha_n + \gamma_n)] + \frac{\pi (\mu_1 - \mu_2)}{2} \sum_1^{\infty} n a^n [M_{2n} \eta_n + L_{2n} \nu_n]. \quad (13).$$

The stress can be computed by simple derivations in accordance with the formula (Nr 2). By making equal $\mu_1 = \mu_2$ the formulae derived by I.S. Sokolnikof [Ref 5] are obtained for the homogeneous cylindrical bar. Applications: Taking for the transformation function (Nr 3) the series given by the formula of Schwartz-Christoffel, which transforms the unitary circle into a polygon with p sides, one obtains:

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$$d_{kp+1} = \left[1 - \frac{p-2}{2} - \dots - \frac{(p-2) 2 \dots (1 p(2-k) - 2 |)}{p^k k!} \right] \frac{1}{kp + 1} \quad (14).$$

Taking successively for p = 4, 6, 12 and a = 0.95, the author obtains the results shown by the table on page 269.

There are: 3 sets of diagrams, 1 table and 5 references, 2 of which are English, 2 Russian and 1 French.

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R/008/60/000/005/008/014
A231/A126

AUTHORS: Dincă, Fl., and Boicu, N.

TITLE: Calculation of elastic-dynamical properties of circular cylindrical tubes in the presence of axisymmetrical load

PERIODICAL: Studii și Cercetări de Mecanică Aplicată, no. 5, 1960, 1201 - 1217

TEXT: The authors describe a general solution for the axisymmetrical dynamical load in cylindrical tubes. Different solutions have been developed by Mitchel, Love, B. G. Galerkin, Grotzkiy, Marguerre, Cree and Vebel but no general solution was given yet. The theoretical equations of a displacement elasticity for an axisymmetric load of a cylindrical tube are presented by

$$\begin{aligned}
 (\lambda + 2\mu) \left(\frac{\partial^2 u}{\partial r^2} + \frac{1}{r} \frac{\partial u}{\partial r} - \frac{u}{r^2} \right) + 2\mu \frac{\partial^2 u}{\partial z^2} + \lambda \frac{\partial^2 w}{\partial r \partial z} &= \rho \frac{\partial^2 u}{\partial t^2}, \\
 (\lambda + 2\mu) \frac{\partial^2 w}{\partial z^2} + 2 \frac{\partial^2 u}{\partial r \partial z} + 2\mu \frac{\partial^2 w}{\partial r^2} + \frac{\lambda}{r} \frac{\partial u}{\partial z} + 2 \frac{\mu}{r} \frac{\partial w}{\partial r} &= \rho \frac{\partial^2 w}{\partial t^2}.
 \end{aligned}
 \tag{1}$$

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In these equations u is the radial displacement, w the axial displacement, λ and μ are the constant of Lamé, and ρ the material density. The stresses are expressed by Hooke's law and the limit conditions are given. Supposing that in the initial moment the body is free of stresses and at rest, $u = \frac{\partial u}{\partial t} = w = \frac{\partial w}{\partial t} = 0$, for $t = 0$. For the solution of the problem the authors use the Laplace transformation. The problem has thus been reduced to a system with the limit conditions given in formula:

$$\begin{aligned} r = r_0: \bar{R}_r &= \bar{f}_0(z, p); \bar{R}_z = \bar{g}_0(z, p), \\ r = r_1: \bar{R}_r &= \bar{f}_1(z, p); \bar{R}_z = \bar{g}_1(z, p), \\ z = 0: \bar{Z}_z &= \bar{f}_2(r, p); \bar{R}_z = \bar{g}_2(r, p), \\ z = e: \bar{Z}_z &= \bar{f}_3(r, p); \bar{R}_z = \bar{g}_3(r, p). \end{aligned} \quad (7)$$

In relațiile (5) c_1 , c_2 și c_3 sînt

$$c_1^2 = \frac{\lambda + 2\mu}{\rho}; \quad c_2^2 = \frac{2\mu}{\rho}; \quad c_3^2 = \frac{\lambda}{\rho}. \quad (8)$$

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In the further development Bessel functions are used. The functions J_1 and Y_1 are Bessel functions of the first order of the I and II kind. Formula

$$\begin{aligned} \bar{w} = \sum_k \{ & [C'_{1kp} J_0(\omega_1 r) + C_{2kp} J_0(\omega_2 r) + \\ & + C'_{3kp} Y_0(\omega_1 r) + C'_{4kp} Y_0(\omega_2 r)] \sin Kz + \\ & + [K'_{1kp} J_0(\omega_1 r) + K_{2kp} J_0(\omega_2 r) + K'_3 K_p Y_0(\omega_1 r) + \\ & + K'_{4kp} Y_0(\omega_2 r)] \cos Kz \}, \end{aligned} \quad (26)$$

unde constantele C'_{ikp} și K'_{ikp} sint

$$\begin{aligned} C'_{1kp} &= \mathcal{A} C_{1kp}, & C'_{2kp} &= \mathcal{B} C_{2kp}, \\ C'_{3kp} &= \mathcal{A} C_{3kp}, & C'_{4kp} &= \mathcal{B} C_{4kp}, \\ K'_{1kp} &= \mathcal{A} K_{1kp}, & K'_{2kp} &= \mathcal{B} K_{2kp}, \\ K'_{3kp} &= \mathcal{A} K_{3kp}, & K'_{4kp} &= \mathcal{B} K_{4kp}, \\ \mathcal{A} &= -\omega_1^2 + D \omega, \\ \mathcal{B} &= -\omega_2^2 + D \omega_2. \end{aligned} \quad (27)$$

permits the complete solution of the problem in which the effect of the ends has been neglected. On the basis of (27), the representations can be found

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