ORLOV, M.M., inzh.

Efficient design column joints of the main structure. Energ. stroi. no.31:7-11 '62. (MIRA 16:7)

1. Moskovskiy filial Vsesoyuznogo instituta po proyektirovaniyu organizatsiy energeticheskogo stroitel'stva.
(Electric power plants)
(Columns, Concrete)

ОРЛОВ, М.Н.

USSR/Human and Animal Physiology - Digestion. V-7

Abs Jour : Ref Zhur - Biol., No 1, 1958, 4063

Author : G.V. Machavariani, M.N. Orlov
Inst : -
Title : Potain's Aspirator with a Duodenal Probe for Gastric Lavages.

Orig Pub : Voyen.-med. zh., 1957, No 5, 81-82

Abstract : A description is given of a simple apparatus for gastric labages; it includes a Potain's aspirator, a duodenal probe and an air pump for the compression and decompression of air in the aspirator.

Card 1/1

ORLOV, M. N.

"Kinetic Methods for Silver Determination in Solution"

submitted at the Conference on Kinetic Methods of Analysis, Ivanovo, 14-16 June 1960

So: Izvestiya Vysshikh Uchebnykh Zagedeniy SSSR, Khimiya i Khimicheskaya Technologiya, Vol III, No 6 Ivanovo, 1960, pages 1113-1116.

ORLOV, M.N.

RT-149 (Operating conditions in the use of frameswa). O rezhimakh rannogo pilen:ia. Lesnaia Promyshlennost', 10(10): 25-29; 10(11): 22-27, 1950.

1. CRLOV, M. N.
2. USSR (600)
4. Saws
7. New method of setting and tensioning frame saws. Les. prom. 12 No. 10, '52.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

1. ORLOV, M. N.

2. USSR (600)

4. Saws

7. New method of mounting and tightening frame saws., Les.prom, 12, No. 11, 1952.

9. **Monthly List of Russian Accessions**, Library of Congress, February 1953. Unclassified.

ORLOV, M.N.

New method for setting-up and tightening framed saws. Der. prom. 7 no.8:9-11 Ag '58. (MIRA 11:9)
(Band saws)

MANZHOS, P.M., prof., doktor tekhn.nauk; VOSKRESENSKIY, S.A., prof., doktor tekhn.nauk; ORLOV, M.N., dots., kand.tekhn.nauk; SOLOV'YEV, A.A., assistent

Errors in P.S. Afanas'ev's book "Design of woodworking machinery." Der. prom. 10 no. 4:25-26 Ap '61. (MIRA 14:4)

1. Kafedra stankov i instrumentov Moskovskogo lesotekhnicheskogo instituta. 2. Zaveduyushiy kafedroy stankov i instrumentov Moskovskogo lesotekhnicheskogo instituta (for Manzhos).
(Woodworking machinery) (Afanas'ev, P.S.)

ORLOV, M.P.

BESSUDOVA, E.P., inzhener; ORLOV, M.P.

The effect for outstanding quality of repair. Put' i put.khoz. no.6:16-17 Je '57. (MLRA 10:7)

1. Nachal'nik Putevoy mashinnoy stantsii-11 (for Orlov).
(Railroads--Maintenance and repair)

06186
SOV/115-59-11-14/36

6 (5), 9 (9)

AUTHORS: Astrov, D.N., Borovik-Romanov, A.S., Orlov, M.P., Strelkov, P.G.

TITLE: The Design of a Practical Temperature Scale in the Range of 10 - 90°K

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 11, pp 35-38

ABSTRACT: In a publication made by the authors in 1954 [Ref 1], a practical temperature scale in the range of 10 - 90°K was explained. In 1958, at a session of the Advisory Committee on Thermometry of the International Bureau of Measures and Weights, an international comparison of existing temperature scales between 10 and 90°K was suggested by VNIIFTRI - Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy (All-Union Scientific Research Institute of Physical and Radio Engineering Measurements). This article is based on the previous publication [Ref 1] of the aforementioned authors and deals with equipment and measuring methods. The au-

Card 1/2

ORLOV, M. P. (Engineer)

"Source of supply for argon arc welding of aluminum alloys of small (about 5 mm and less) thicknesses". Application of electric circuit with separate magnetic amplifiers ensured stable burning of welding arc of alternating current.

Report presented at the regular conference of the Moscow city administration NTO Mashprom, April 1963.
(Reported in Avtomaticheskaya Svarka, No. 8, August 1963, pp 93-95, M. M. Popekhin)

JPRS24,651 10 May 64

ORLOV, M. S.

ORLOV, M. S. Electrical specification for telecommunication nets. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1944. (Mic 53-78)

Microfilm T-4

ORLOV, M. S. PA 19/49

USSR/Radio Broadcasting Feb/Mar 1946
Cells, Rectifier

"Method of Adjusting Broadcasting Boosters Over Wires," M. S. Orlov, Candidate of Tech Sci, G. I. Babchinshaya, Moscow Relay Network, 2 pp

"Vestnik Svyazi - Elektro Svyaz'" No 2/3 (71-72)

Discusses the need of an automatic indicator in the event that there is breakdown in one of the booster blocks. Mentions apparatus like the VUO-500-1A rectifier cell, VUO-500 Condenser filter.

19/49

ORLOV, M. S. PA 1[illegible]

USSR/Radio, Wired Jul 1[illegible]
Cables, Underground

"Underground Radio Rebroadcasting Lines," M. S. Orlov, Candidate of Tech Sci, V. N. Dogadin, 2 pp

"Vestnik Svyazi - Elektro Svyaz'" No 7 (7)

Discusses the advantage of a system of underground wires coated with vinyl chloride over strung wire lines, with respect to subscriber or [illegible]er lines. This underground system was worked out by A. Severov at the Central Scientific Investigation Institute for Communications. Diagrams show the method of leading these wires into the individual houses.

1/[illegible]0

ORLOV, M.S., kandidat tekhnicheskikh nauk.

Basic principles of elastic supply in planning radio rediffusion systems. Vest.sviazi 7 no.10:7-9 O '47. (MLRA 9:1)
(Radio relay system)

ORLOV, M. S.

"Underground Radio Broadcasting Lines of Rural Radiofic:tion". One of a series of Telecommunications lectures gimen by experts in the scientific research institutes and educational institutes.

SO: Vest. Svyazi, P 24, No. 6, 1952.

ORLOV, Mikhail Sergeyevich; LEVINOV, K.G., otvetstvennyy redaktor; MARTSINKEVICH, T.M., redaktor; KHELEMSKAYA, L.M., tekhnicheskiy redaktor

[Coil loading of rural underground lines for radio systems] Pupinizatsiia sel'skikh podzemnykh linii radiofikatsii. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1954. 55 p. [Microfilm] (MLRA 8:2)

(Radio--Receivers and reception)

ORLOV, M.S., vrach

Stimulating the healing of fractures. Vop. travm. i ortop. no.13:106-107 '63. (MIRA 18:2)

1. Travmatologicheskoye otdeleniye Sakhalinskoy oblastnoy bol'nitsy.

ORLOV, M.V., inzh.

Problem of tolerances in ship hull building and principal trends toward its solution. Trudy NTO sud.prom. 8 no.3: 5-13 '59. (MIRA 13:5)
(Hulls(Naval architecture)) (Tolerance (Engineering))

ORLOV, M.V., inzh.

Studying the temperature conditions of the axle equipment of freight cars. Vest.TSNII MPS 21 no.2:34-37 '62. (MIRA 15:4)

1. Ural'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta Ministerstva putey soobshcheniya, Sverdlovsk.
(Car axles—Thermal properties)

ORLOV, M.V., inzh. (Sverdlovsk)

Potentials of savings in axle bearing lubricants. Zhel.dor.-transp. 44 no.11:79-80 N '62. (MIRA 15:11)
(Railroads--Equipment and supplies)

ORLOV, M.V., inzh. (Sverdlovsk)

Organizing the current maintenance of car axle boxes on lengthened haul distances. Zhel. dor. transp. 45 no.11:25-29 N '63.
(MIRA 16:12)

ORLOV, M.V. (Leningrad)

Approximate methods of calculating the warping of a cylindrical shell during the making of a welded girth joint. Avtom. svar. 17 no.4:38-42 Ap '64 (MIRA 18:1)

ORLOV, M.V., inzh. (Sverdlovsk); PERESETSKIY, A.Z., inzh. (Sverdlovsk); SENDEROV, G.K., inzh. (Sverdlovsk)

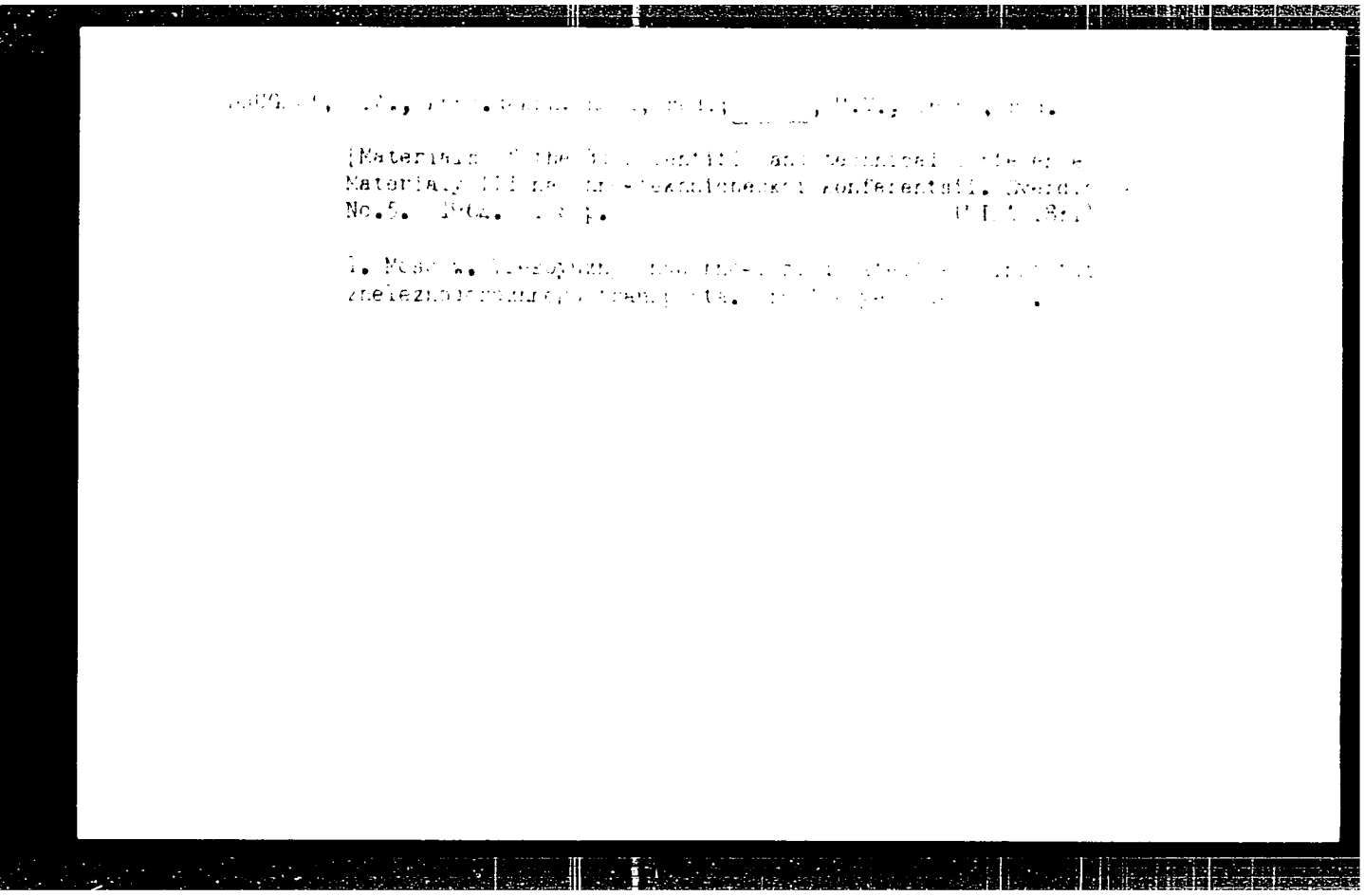
Present-day reliability requirements of freight cars. Zhel.dor. transp. 47 no.4:49-53 Ap '65. (MIRA 18:6)

GRIDYUSHKO, V.I., kand. tekhn. nauk; DYLDIN, Yu.N., inzh.; ORLOV, M.V., inzh.; KHIL'CHENKO, V.P., inzh.

Mechanization of current maintenance operations and ways to detect the technical flaws of freight cars. Trudy TSNII MPS no.289:5-51 '65. (MIRA 18:12)

ORLOV, M.V., insh.

Testing the working capacity of axle equipment with sliding bearings on electrified heavy duty lines. Trudy TSNII MPS no.289:52-77 '65. (MIRA 18:12)



1. ORLOV, M. V.

2. USSR (600)

4. Poultry Breeding

7. Biological control in the incubation section. Ptitsevodstvo no. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

VOLKOV, V.A.; FEDOROVSKIY, N.P., kand.biolog.nauk; PENIONZHKEVICH, E.E., prof., doktor biolog.nauk; MASLIYEV, I.T., kand.sel'skokhoz.nauk; KRIKUN, A.A., kand.sel'skokhoz.nauk; PATRIK, I.A., kand.sel'skokhoz. nauk; MALINOVSKAYA, A.S., kand.biolog.nauk; DAKHNOVSKIY, N.V., kand.biolog.nauk; OKLOV, M.Y., kand.sel'skokhoz.nauk; REDIKH, V.K., kand.sel'skokhoz.nauk; GOFMAN, M.B., zootekhnik; GRIGOR'YEV, G.K., starshiy nauchnyy sotrudnik; GORIZONTOVA, Ye.A., starshiy nauchnyy sotrudnik; FEOKTISTOV, P.I., kand.veter.nauk; KOTEL'NIKOV, G.A., kand.veterin.nauk; SHKUDOVA, R.I., red.; BALAKIN, V.M., red.; GRADUSOV, Yu.N., red.; SOKOLOVA, G.S., red.; SAYTANIDI, L.D., tekhn.red.

[Duck raising] Utkovodstvo. Izd-vo M-va sel'khoz. R.S.F.S.R., 1959. 284 p. (MIRA 13:12)

1. Nachal'nik Glavnogo upravleniya ptitsevodstva Ministerstva sel'skogo khozyaystva RSFSR (for Volkov). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut ptitsepromyshlennosti (for Grigor'yev). 3. TSentral'nyy nauchno-issledovatel'skiy institut ptitseperera-batyvayushchey promyshlennosti (for Gorizontova).
(Ducks)

ORLOV, Mikhail Vasil'yevich; OSIPOVA, V.N., red.; SHESHNEVA, E.A., tekhn. red.; LEVINA, L.G., tekhn. red.

[Biological control in incubation] Biologicheskii kontrol' v inkubatsii. Moskva, Izd-vo M-va sel'.khoz.RSFSR, 1963. 130 p. (MIRA 16:7)
(Incubation)

ORLOV, M.V., inzh.

Device for lubricant feeding to the car axle journal. Vest. TSNII MPS 24 no.5:41-44 '65. (MIRA 18:9)

1. Ural'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta Ministerstva putey soobshcheniya.

3(1)
AUTHOR: Orlov,M.Ya. SOV/33-35-5-9/20

TITLE: On the ~~Anomalous~~ Excitation of Hydrogen in the Atmosphere of α Boo (Ob anomal'nom vozbuzhdenii vodoroda v atmosfere α Boo)

PERIODICAL: Astronomicheskiy zhurnal, 1958, Vol 35, Nr 5, pp 755-762 (USSR)

ABSTRACT: The author states that the ultraviolet emission of the corona of α Boo can not explain the anomalous excitation of hydrogen in the atmosphere of the star but this excitation of hydrogen can be caused by electron impacts in a chromosphere with an electron temperature of 10000° - 20000°. Such a chromosphere would be transparent in the continuous spectrum and should not produce noticeable helium absorption lines in agreement with the observation. The author's investigations base on results of S.A.Kaplan, S.I.Gopasyuk [Ref 14], and A.A.Nikitin [Ref 15].
There is 1 table, and 16 references, 6 of which are Soviet, 9 American, and 1 Dutch.

SUBMITTED: November 12, 1957

Card 1/1

ORLOV, M. YA., [illegible]

Neutron Propagation in the Nickel Screen of a Fast Reactor.

report submitted for the IAEA Seminar on the Physics of Fast and Intermediate Reactors, Vienna, 3-11 Aug 1961.

ORLOV, M.Ya.; RODRIGES, M.G.

Spectrum of nova Herculis 1963. Astron. zhur. 40 no.5:952-953 S-O '63. (MIRA 16:11)

1. Glavnaya astronomicheskaya observatoriya AN UkrSSR.

ORLOV, M.Ya.; RODRIGES, M.G.

Spectral observations of Nova Herculis (1963). Astron. tsir. no. 238:1 Ap '63. (MIRA 17:6)

1. Gosudarstvennaya astronomicheskaya observatoriya AN UkrSSR.

GOLUBEV, V.I.; ZVONAREV, A.V.; NIKOLAYEV, M.N.; ORLOV, M.Yu.

Effect of reflectors made from different materials on an increase in neutron capture by the uranium shielding of a fast reactor. Atom. energ. 15 no.3:258-259 S '63. (MIRA 16:10)

(Neutrons—Capture) (Nucelar reactors)

GOLUBEV, V.I.; ZVONAREV, A.V.; NIKOLAYEV, M.N.; ORLOV, M.Yu.

Effect of reflectors made from various materials on the number of neutrons captured in the uranium carbide shield of a fast reactor. Atom. energ. 15 no.4:327-328 O '63. (MIRA 16:10)

L 8808-65 EWG(j)/EWT(m)/EPF(c)/EPF(n)-2/EPR/EWP(q)/EWP(b) Pr-4/Pg-4/
Pu-4 DIAAP/ESD(t) ES/SD/WW/JG/DM/AT/WH
ACCESSION NR: AP4043981 S/0089/64/017/002/0113/0119

AUTHOR: Bondarenko, I. I. (Deceased); Golubev, V. I.; Zvonarev, A. V.; Nikolayev, M. N.; Orlov, M. Yu.; Uznadze, O. P.

TITLE: Neutron propagation in uranium carbide

SOURCE: Atomnaya energiya, v. 17, no. 2, 1964, 113-119

TOPIC TAGS: uranium carbide, neutron propagation, spatial energy distribution, fast reactor, BR 1 reactor, plutonium, plutonium breeding

ABSTRACT: An investigation was made of the spatial energy distribution of neutrons in uranium carbide using a heterogeneous assembly of depleted uranium and graphite installed as a reflector in the BR-1

L 8808-65
ACCESSION NR: AP4043986

from the nuclear-physic point of view, uranium carbide is a very promising material for use in the breeding blankets of fast reactors. Since the diffusion length in uranium carbide is 1.4 times less than that in metallic uranium (calculated for the same density of uranium nuclei), the use of uranium carbide will permit a decrease in the uranium load in the breeding blanket and an increase in the concentration of accumulating plutonium. The breeding coefficient for ura-

ASSOCIATION: none

Card 2/3

L 8803-65

ACCESSION NR: AP4043986

SUBMITTED: 20Nov63 ATD PRESS: 3100 ENCL: 00

SUB CODE: MP NO REF SOV: 005 OTHER: 000

Card 3/3

L 55108-65 EWT(m)/EPF(n)-2/EWA(h) Pu-4 DM
ACCESSION NR: AP5014536 UR/0089/65/018/005/0469/0473

AUTHOR: Golubev, V. I.; Zvonarev, A. V.; Nikolayev, M. N.; Orlov, M. Yu.; Perenko, V. V.; Uznadze, G. P.

TITLE: Propagation of neutrons in iron

SOURCE: Atomnaya energiya, v. 18, no. 5, 1965, 469-473

TOPIC TAGS: reactor shield, neutron propagation, fast neutron, intermediate neutron, self screening, resonance blocking

ABSTRACT: Results are presented of an experimental and theoretical study of the spatial-energy distribution of neutrons in the iron shield of the BR-1 reactor. The neutron distribution was determined in the plane of the center of the reactor and in vertical test channels of the core and of the

L 55108-65

ACCESSION NR: AP5014536

2

[Group Constants of Fast and Intermediate Neutrons for the Calculation of Nuclear Reactors], M., Atomizdat, 1964) makes it possible to obtain satisfactory agreement between experiment and calculation, by taking into account the resonant self-shadowing of the cross sections. However, these constants cannot be used to calculate the spatial-energy distribution of the neutrons on the boundary between iron and other media. It is pointed out that alloying of iron greatly reduces the resonance effects. "The authors are deeply grateful to the late I. I. Bondarenko for interest in the work and useful discussions, and also to the crew of the BR-1 re-

ASSOCIATION: none

SUBMITTED: 16Mar64 ENCL: 01 SUB CODE: MP

NO REF SOV: 007 OTHER: 001 ATD PRESS: 4024

Card 2/3

ORLOV, N

ORLOV,N., inzhener

Using fork-lift trucks in block rubble quarries. Stroi.mat.,izdel., i konstr. 1 no.7:20-21 Jl'55. (MLRA 8:11)
(Quarries and quarrying) (Fork-lift trucks)

ORLOV, N.

Mechanization of the cutting of frozen ground. Na stroi. Ros. 3 no.10:22-23 O '62. (MIRA 16:6)

1. Glavnyy mekhanik upravleniya stroitel'stva Permskogo soveta narodnogo khozyaystva.
(Frozen ground) (Earthwork)

VOLOSHIN, V., inzh.; ORLOV, N., inzh.; TARADIN, M., inzh.

Electric stand for the running-in and testing of marine diesels.
Rech. transp. 21 no.10:35-37 O '62. (MIRA 15:10)

1. Gosudarstvennyy institut po proyektirovaniyu i issledovaniyam na rechnom transporte.

(Marine diesel engines)

ORLOV, N . KULDYREV, S.

So they went for the championship. Voen. Znan. [illegible]

ORLOV, N.A.

Students study of Ostashevo District, Moscow Province. Geog. v shkole 21 no.3:50-53 My-Je '58. (MIRA 11:6)

1. Shkola No.246, Moskva.
(Ostashevo District--Physical geography)

ANDRIANOV, D.P., doktor ekon. nauk, prof.; GENDEL'MAN, M.Z., kand. tekhn. nauk, dots.; GLICHEV, A.V., kand. ekon. nauk, dots.; DIDENKO, S.I., kand. ekon. nauk, dots.; ZHURAVLEV, A.N., kand. tekhn.nauk, prof.; ZAKHAROV, K.D., kand. tekhn.nauk,, dots.; MOISEYEV, S.V., kand. tekhn. nauk, dots.; OL'SHEVETS, L.M., kand. tekhn. nauk, dots.; ORLOV, N.A., prof.; POPOV, P.G., ispolnyayushchiy obyazannosti dots.; SARKISYAN, S.A., kand. ekon. nauk, dots.; STARIK, D.E., kand. tekhn.nauk, ispolnyayushchiy obyazannosti dots.; TER-MARKARYAN, A.N., kand. tekhn. nauk, prof.; TIKHOMIROV, V.I., kand. tekhn.nauk, prof.; CHESNOKOV, V.V., kand. ekon. nauk, dots.; SHERMAN, Ye.I., kand. ekon. nauk, dots.; EL'BERT, L.M., kand. ekon. nauk, dots.; LAPSHIN, A.A., dots., retsenzent; NOVATSKIY, V.F., kand. ekon. nauk, red.; TUBYANSKAYA, F.G., red. izd-va; KARPOV, I.I., tekhn. red.

[Organization, planning and economics of airplane production] Organizatsiia, planirovanie i ekonomika aviatsionnogo proizvodstva. [By] D.P.Andrianov i dr. Moskva, Oborongiz, 1963. 694 p. (MIRA 16:10)
(Airplane industry--Management)

SAKSIN, V.F.; BUGROV, V.P.; ORLOV, N.A.

Oxalate complex of magnesium. Uch.zap.Arosl.tekhnol.inst. 2:73-80 '57. (MIRA 12:7)

(Oxalic acid) (Magnesium compounds)

PURPOSE: This book is primarily intended for industrial chemists and technologists interested in the kinetics of chemical reactions and their related physical processes.

COVERAGE: The twenty-two articles of this collection deal mainly with industrial processes for the preparation of organic compounds, problems of heat physics and general mechanics related to these processes, and with industrial chemical equipment. No personalities are mentioned. References are given after each article.

ORLOV, N.A.

5(3) SOV/63-4-3-19/31

AUTHORS: Mogilevskiy, Ye.M., Candidate of Technical Sciences, Finger, G.G.

TITLE: Scientific-Technical Conferences and a Seminar on the Production and Processing of Chemical Fibers

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 3, pp 398-401 (USSR)

ABSTRACT: In November-December 1958 the All-Union Scientific-Technical Conference on Problems of the Application of Chemical Fibers in the Textile, knit goods and Haberdashery Industry took place with the participation of the VKhO imeni Mendeleyeva (All-Union Chemical Society imeni Mendeleyev). It was attended by 250 representatives of plants and scientific research institutes and scientists from China, Hungary, Poland and Czechoslovakia. The deputy of the president of the GNTK of the USSR N.A. Petrov pointed out that rational processing methods are necessary. A.N. Volkov (Upravleniye khimicheskikh volokon Goskomiteta Soveta Ministrov SSSR po khimii - Board of Chemical Fibers of the State Committee on Chemistry in the USSR Council of Ministers) presented a paper on the state and development of the production of chemical fibers in the USSR; Professor Z.A. Rogovin (Moskovskiy tekstil'nyy institut - Moscow Textile Institute)

Card 1/6

on technical methods of developing the production of chemical fibers; Professor A.B. Pakshver (VNIIV) on modern methods of studying the properties of chemical fibers; Candidate of Technical Sciences I.I. Pikovskiy (GNTK USSR) on: "The Production of Unwoven Materials From Artificial and Synthetic Fibers"; Professor V.Ye. Gusev (Moskovskiy tekstil'nyy institut - Moscow Textile Institute) on the basic principles of mixing natural fibers, especially wool, with chemical ones; N.Ya. Alekhin (GNTK USSR) on preparing staple yarn from fine viscose fiber; Professor V.A. Usenko (Moscow Textile Institute) on the effect of twisting staple yarn on its physical-chemical properties; A.I. Golod (Moninskiy kamvol'nyy kombinat - Moninsk Worsted Yarn Combine) on the experience of processing staple fibers in his plant; N.A. Orlov (VNIILtekmash), P.I. Aristov (IVNITI), Doctor of Technical Sciences A.N. Vanchikov (TsNIIKhBI) on the problems of designing and introducing new types of technological equipment. The Conference noted the backwardness in the development of efficient spinning, weaving and finishing equipment, the insufficient coordination of work and the lack of necessary laboratory equipment. On December 15-17, 1958, the All-Union Conference of Workers of the Industry of Chemical Fibers took place

Card 2/6

ORLOV, N.A.

BARANOV, A.F., redaktor; BIZYUKIN, D.D., redaktor; VAKHNIN, M.I., otvetstvennyy redaktor toma, professor, doktor tekhnicheskikh nauk; VEDENISOV, B.N., redaktor; IVLIYEV, I.V., redaktor; MOSHCHUK, I.D., redaktor; RUDOY, Ye.F., glavnyy redaktor; SOKOLINSKIY, Ya.I., redaktor; SOLOGUBOV, V.N., redaktor; SHILEVSKIY, V.A., redaktor; ALFEROV, A.A., inzhener; ANASHKIN, B.T., inzhener; AFANAS'YEV, Ye.V., laureat Stalinskoy premii, inzhener; BELENKO, I.M., dotsent; BORISOV, D.P., dotsent, kandidat tekhnicheskikh nauk; ZHIL'TSOV, P.N., inzhener; ZRAR, N.R., inzhener; IL'YENKOV, V.I., dotsent, kandidat tekhnicheskikh nauk; KAZAKOV, A.A., kandidat tekhnicheskikh nauk; KRAYZMER, L.P., kandidat tekhnicheskikh nauk; KOTLYARENKO, N.F., dotsent, kandidat tekhnicheskikh nauk; MAYSHEV, P.V., professor, kandidat tekhnicheskikh nauk; MARKOV, M.V., inzhener; NELEPTS, V.S., dotsent, kandidat tekhnicheskikh nauk; NOVIKOV, V.A., dotsent; ORLOV, N.A., inzhener; PETROV, I.I., kandidat tekhnicheskikh nauk; PIVKO, G.M., inzhener; POGODIN, A.M., inzhener; RAMLAU, P.N., dotsent, kandidat tekhnicheskikh nauk; ROGINSKIY, V.N., kandidat tekhnicheskikh nauk; RYAZANTSEV, B.S., laureat Stalinskoy premii, dotsent, kandidat tekhnicheskikh nauk; SHANSKIY, A.A., inzhener; FEL'DMAN, A.B., inzhener; SHASTIN, V.A., laureat Stalinskoy premii, inzhener; SHUR, B.I., inzhener; GONCHUKOV, V.I., inzhener, retsenzent; NOVIKOV, V.A., dotsent, retsenzent; AFANAS'YEV, Ye.V., laureat Stalinskoy premii, retsenzent;

[Technical handbook for railroad men] Tekhnicheskii spravochnik zheleznodorozhnika. Vol. 8. [Signaling, central control, block system, and communication] Signalizatsiia, tsentralizatsiia, blokirovka, sviaz'. Red. kollegiia A.F.Baranov [i dr.] Glav.red. E.F.Rudoi. Moskva, Gos. transp. zhel-dor. izd-vo, 1952. 975 p. (Continued on next card)

BRYLEYEV, A.M., laureat Stalinskoy premii, inzhener; GAMBURG, Ye.Yu., inzhener, retsenzent; GOLOVKIN, M.K., inzhener, retsenzent; KAZAKOV, A.A., kandidat tekhnicheskikh nauk, retsenzent; KUT'IN, I.M., dotsent, kandidat tekhnicheskikh nauk, retsenzent; LEONOV, A.A., inzhener, retsenzent; SEMENOV, N.M., laureat Stalinskoy premii, inzhener, retsenzent; CHERNYSHEV, V.B., inzhener, retsenzent; VALUYEV, G.A., inzhener, retsenzent; METTAS, N.A., laureat Stalinskoy premii, inzhener, retsenzent; NOVIKOV, V.A., dotsent, retsenzent; PIVOVAROV, A.L., inzhener, retsenzent; POGODIN, A.M., inzhener, retsenzent; KHODOROV, L.R., inzhener, retsenzent; PIVOVAROV, A.L., inzhener, retsenzent; POGODIN, A.M., inzhener, retsenzent; KHODOROV, L.R., inzhener, retsenzent; SHUPLOV, V.I., kandidat tekhnicheskikh nauk, retsenzent; KLYKOV, A.F., inzhener, retsenzent; YUDZON, D.M., tekhnicheskiy redaktor; VERINA, G.P., tekhnicheskiy redaktor.

[Technical handbook for railroad men] Tekhnicheskii spravochnik zheleznodorozhnika. Vol. 8. [Signaling, central control, block system, and communication] Signalizatsiia, tsentralizatsiia, blokirovka, sviaz'. Red. kollegiia A.F.Baranov [i dr.] Glav.red. E.F.Bndoi. Moskva, Gos. transp. zhel-dor. izd-vo, 1952. 975 p. (Card 2) (MLRA 8:2)
(Railroads--Signaling) (Railroads--Communication systems)

Orlov, Nikolay Aleksandrovich

N/5
?53.421
.K9

Posobiye Telegrafistu (Manual for the Telegraphist, By) V. F. Kryuchkov, i Nikolay Aleksandrovich Orlov. Moskva, Transzheldorizdat, 1955.
226 p. Illus., Diagrs.

KRYUCHKOV, Vladimir Feofanovich; ORLOV, Nikolay Aleksandrovich; STROGANOV, L.P., inzh., red.; KHITROV, P.A., tekhn.red.

[Manual for telegraph operators] Posobie telegrafistu. Izd.2., perer. i dop. Moskva, Gos.transp.zhel-dor.izd-vo, 1959. 191 p. (MIRA 12:5)
(Telegraph—Operators' manuals)

PHASE I BOOK EXPLOITATION SOV/6558

Andrianov, D. P., M. Z. Gendel'man, A. V. Glichev, S. I. Didenko, A. N. Zhuravlev, K. D. Zakharov, S. V. Moiseyev, L. M. Ol'shevets, N. A. Orlov, P. G. Popov, S. A. Sarkisyan, D. E. Starik, A. N. Ter-Markaryan, V. I. Tikhomirov, V. V. Chesnokov, Ye. I. Sherman, and L. M. El'bert.

Organizatsiya, planirovaniye i ekonomika aviatsionnogo proizvodstva (Organization, Planning, and Economics of the Aircraft Industry) Moscow, Oborongiz, 1963. 694 p. Errata slip inserted. 5000 copies printed.

Ed. (Title page): L. M. Ol'shevets, Candidate of Technical Sciences, Docent and N. A. Orlov, Professor; Reviewer: A. A. Lapshin, Docent; Ed.: V. F. Novatskiy, Candidate of Economical Sciences; Ed. of Publishing House: F. G. Tubyanskaya; Tech. Ed.: I. I. Karpov; Managing Ed.: L. A. Gil'berg.

PURPOSE: This textbook is intended for students of aircraft engineering schools of higher education. It may also be useful to engineering personnel of aircraft industry.

Card 1/3

Organization, Planning (Cont.)

SOV/6558

COVERAGE: The book presents a comprehensive review of problems connected with economics of the aircraft industry and with the organization and planning of aircraft production. Concrete problems of organization of work at aircraft enterprises are analyzed as they apply to various types of aircraft plants, e.g., aircraft construction plants, engine manufacturing plants, instrument-making plants. Specific features of the organization and planning of production in industrial and experimental plants are outlined. The Introduction and Ch. I, II, and XI were written by Professor N. A. Orlov; Ch. III by Docent S. V. Moiseyev, Cand. of Techn. Sciences; Ch. IV and XIX by Docent S. A. Sarkisyan, Cand. of Econ. Sciences; Ch. V and X by Docent D. E. Starik, Cand. of Techn. Sciences; Ch. VI by Docent P. G. Popov; Ch. VII by Docents Ye. I. Sherman, Cand. of Econ. Sciences, and K. D. Zakharov, Cand. of Techn. Sciences; Ch. VIII by Docent M. Z. Gendel'man, Cand. of Techn. Sciences, Docent A. V. Glichev, Cand. of Economic Sciences, and Professor A. N. Ter-Markaryan, Cand. of Techn. Sciences; Ch. IX by Professor A. N. Zhuravlev, Cand. of Tech. Sciences; Ch. XII and XIII by Professor D. P. Andrianov, Doctor of Econ. Sciences; Ch. XIV by Professor V. I. Tikhomirov, Cand. of

Card 2/26

3

Techn. Sciences; Ch. XV, XVI, XVII, XXII by Docent L. M. Ol'shevets, Cand. of Techn. Sciences; Ch. XVIII and XXI by Docent S. I. Didenko, Cand. of Econ. Sciences; Ch. XX and XXIV by Docent L. M. El'bert, Cand. of Econ. Sciences; Ch. XXIII by Docent V. V. Chesnokov, Cand. of Econ. Sciences. L. M. Ol'shevets and N. A. Orlov supervised the group of authors and completed the scientific editing. Each part of the book is accompanied by references, all Soviet, and in addition there are 9 Soviet references relating to the whole book.

TABLE OF CONTENTS:

ORLOV, N.A., prof.; OSADO, P.A., red.; GERASIMOVA, Ye.S., tekhn.red.

[Planning of specialization and cooperation in industry] Planirovanie spetsializatsii i kooperirovaniia v promyshlennosti. Moskva, Gosplanizdat, 1958. 93 p. (MIRA 12:2)
(Industrial organization)

ZABELIN, Boris Mikhailovich; ORLOV, N.A., prof., retsenzent; KONDRASHEV, D.D., kand.ekon.nauk, red.; SALYANSKIY, A.A., red. izd-va; EL'KIND, V.D., tekhn.red.

[Specialization and cooperation in machinery manufacturing in the U.S.S.R.; a follow up on materials on railroad-car construction and other branches] Spetsializatsiia i kooperirovanie v mashinostroenii SSSR; po materialam vagonostroeniia i drugikh otraslei. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1958. 146 p. (MIRA 12:1)

(Machinery industry)

SOV/122-58-11-2/18

AUTHOR: Orlov, N.A., Professor

TITLE: The Specialisation of Industrial Units and the Automation of Production (Spetsializatsiya predpriyatiy i avtomatizatsiya proizvodstva)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Nr 11, pp 7-10 (USSR)

ABSTRACT: Several ways in which specialisation can assist productivity and automation are discussed. The building-up of machine tool plants from standard units is regarded as a decisive contribution. A reduction in machining allowances capable of saving up to 25% of the 300,000 tons of swarf produced by the heavy engineering industry alone can be achieved by greater reliance on specialised manufacture of more accurate blanks. A substantial increase in the use of castings and forgings is foreseen by 1965. Major trends of development in mechanised casting and forging are mentioned. In the automotive industry, the main immediate requirement is to concentrate the production of standard parts in specialised plants. By 1965, 90% of the fastenings (compared with 37% now), 100% of the pipe fittings (compared with 30% now) and 100% of the

Card 1/3

The Specialisation of Industrial Units and the Automation of Production

gear boxes (compared with 50% now) are to be made in specialised plants. Other details, standardised only in single industries, must be produced by specialised methods. Turbine blades, conveyor rollers, rolling mill and haulage machinery elements, machine tools spindle units and hydraulic control system units, compressors, filters, radiators, suspension springs, pistons, wheels and dampers are mentioned. The existing reserves resulting from the re-organisation into Regional Economic Councils should be used for setting up such specialised manufactures. Before the recent change, ministries outside the mechanical engineering ministries controlled 3500 plants employing 1 million operatives and possessing 52% of all the metal working machines in the country although contributing only 30% to the output of the engineering industry. National standards for machine components cover 50,000 types and sizes but insufficient use has

The Specialisation of Industrial Units and the Automation of Production

been made of them in planning specialised manufacture. Plans include the erection of 1400 automatic production lines. The importance of adequate documentation and of research into production problems is emphasised.

Card 3/3

OMAROVSKIY, Aleksandr Grigor'yevich; ORLOV, N.A., prof., retsenzent; BERRI, L.Ya., prof., doktor ekon.nauk, retsenzent; KHOTEYEV, A.A., kand.ekon.nauk, red.; SALYANSKIY, A.A., red.izd-va; UVAROVA, A.F., tekhn.red.

[Production specialization and the distribution of machinery manufacture in the U.S.S.R.] Spetsializatsiia proizvodstva i razmeshchenie mashinostroitel'noi promyshlennosti SSSR. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 178 p. (Machinery industry) (MIRA 12:4)

SATEL', Eduard Adamovich, prof., doktor tekhn.nauk, red.; LETENKO, Viktor Aleksandrovich, kand.ekon.nauk; BRYANSKIY, Georgiy Anatoliyevich, kand.ekon.nauk; SAMODRSKIY, Georgiy Ivanovich, kand.ekon.nauk; ORLOV, N.A., prof., retsenzent; FRUMIN, I.L., inzh.-ekon., retsenzent; STEL'MAKHOVICH, N.A., kand.tekhn. nauk, retsenzent; BELYAYEV, A.V., inzh.-ekon., retsenzent; SOCHINSKIY, A.R., inzh., red.; SALYANSKIY, A.A., red.izd-va; EL'KIND, V.D., tekhn.red.

[Principles of the technology of production and labor organization] Osnovy tekhnicheskoi podgotovki proizvodstva i organizatsiia truda. Pod red. E.A.Satelia. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1959. 330 p. (MIRA 12:10)
(Machinery industry)

25(5)

SOV/28-59-3-1/29

AUTHOR: Orlov, N.A., Professor

TITLE: Specialization of the Production of General-Use Machine Components and Parts (Spetsializatsiya proizvodstva obshchikh uzlov i detaley mashin)

PERIODICAL: Standartizatsiya, 1959, Nr 3, pp 3 - 8 (USSR)

ABSTRACT: The author stresses the urgent necessity for specialized plants to produce machine parts and components of general use, like fasteners of all general kinds, torque-transmitting components (reducing gears, chains and sprockets, etc.), parts of hydraulic and pneumatic drives, electric equipment, and states that the present state of standardization is hampering the development. By the end of the current Seven-Year Plan the output of equipment for the foundry industry must be more than doubled, semi-automatic and automatic production lines increased 2.1 - 2.3 times, forging presses and hammers by about 1.5 times, chemical equipment by 3.2 - 3.4 times,

Card 1/5

Specialization of the Production of General-Use Machine Components and Parts

etc. This is only possible with maximum standardization, and the minimum use of particular equipment components. The use of standardized machine tool components and parts reduces by 3 to 4 times the designing work on special machine tools and the whole production cycle by 1.5 to 2 times. Although standardization is largely completed in the machine-building industry, centralized production is at present insufficient, which can be seen from the fact that there only 18 plants specialized in production of fastenrs, but 1,350 plants are producing them, and that the production costs per ton varies from 2,000 rubles at a specialized plant to 30,000 rubles at a non-specialized. The metal consumption per ton of finished product varies between 1 and 3 tons. The planned number of special plants producing fasteners is 114 (Table 1). The small inefficient plants will have to be closed. The relatively high

Specialization of the Production of General-Use Machine Components and Parts

technical and economic efficiency of the Leningradskiy staleprokatnyy zavod (Leningrad Steel Rolling Plant) in producing fasteners is still low comparing with a specialized production shop, as can be seen in table 2. The annual production of fasteners planned for 1965 is 900,000 tons. In the case of reduction gears, there are 126 plants in the country producing them, some in quantities of less than 1,000 and even 100 a year. As estimated by "Giprostroydormash", about 400,000 reduction gear units will be produced in 1965 for all industry branches (Table 3), and not less than 150,000 tons of metal are required for the job; 15 - 16 specialized plants are planned for the production of general-use reduction gears. The standards for the reduction gear parts are yet to be worked out, and the example of the gear reducers being produced at the time is telling: the "RM" reducers with 250 mm between axes

Specialization of the Production of General-Use Machine Components and Parts

produced by the Izhevskiy zavod (Izhevsk plant) weigh 102 kg, while similar reducers "TsD2-25B" of the Kiyevskiy mekhanicheskiy zavod (Kiyev Mechanical Plant) weigh 142 kg; the "RM-250B" reducers of the Izhevsk plant weigh 84 kg, and similar reducers made by the Pavshinskiy zavod (Pavshino Plant), 247 kg. The number of work hours spent for machining identical parts of gear reducers varies largely, and is 6 to 8 times that theoretically-calculated for the job. A comparison (Table 4) of technical characteristics of gear drives made in the USSR and abroad (Czechoslovakia and Germany) shows that USSR-produced drives are slightly inferior and two to four times heavier. Special gear-producing plants exist only in the automobile and tractor industry. The majority of others are making gears for their own use, and it is estimated that existing 5,000 different gear types and sizes can be brought down to 300 - 400 standard

pecialization of the Production of General-Use Machine Components
nd Parts

type-sizes, which could be produced in special plants on production lines. The specialization of the production of wheels (for automobiles, trailers, road machines, bicycles, motor cycles and motor rollers, wheels and casters for materials handling equipment, mine cars, etc.) is mentioned as an example of rational organization of centralized specialized production, but the standardization of wheels must be carried out, and specialized workshops and plants will have to be built for the production of wheel spokes for farm machinery, front and rear bushes of bicycle wheel hubs, etc. VNIIK completed in 1957 a nomenclature of general-use components and parts that can be rationally and commercially produced by special plants, and the author thinks that this nomenclature can now well be used for detailed specialization. There are 4 tables.

SSOCIATION: Gosplan SSSR (Gosplan of the USSR)
ard 5/5

ORLOV, Nikolay Alekseyevich, prof.; ISLANKINA, T.F., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Mechanical engineering is the base for over-all mechanization and automation] Mashinostroenie - osnova kompleksnoi mekhanizatsii i avtomatizatsii. Moskva, Izd-vo "Znanie," 1960. 31 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.4, Nauka i tekhnika, no.5). (MIRA 13:3)
(Technological innovations) (Automation)

ZABOLOTNYY, I.I., inzh.; ORLOV, N.A., inzh.; YAKIMOV, I.D., otv. red.

[Manual on engineering geological operations in explorations for lumber industry enterprises] Nastavlenie po inzhenerno-geologicheskim rabotam pri izyskaniiakh predpriiatii lesnoi promyshlennosti. Leningrad, 1962. 190 p. (MIRA 17:7)

1. Moscow. Gosudarstvennyy institut po proyektirovaniyu lesnogo transporta. 2. Gosudarstvennyy institut po proyektirovaniyu lesnogo transporta, Moscow (for Zabolotnyy). 3. Nachal'nik tekhnicheskogo otdela Gosudarstvennogo instituta po proyektirovaniyu lesnogo transporta, Moscow (for Yakimov).

BERRI, L.Ya., doktor ekon. nauk; KLIMENKO, K.I., doktor ekon. nauk; OBLOMSKIY, Ya.A., kand. ekon. nauk; SAVINSKIY, E.S., kand. ekon. nauk; KHEYNMAN, S.A., doktor ekon. nauk, red.; MOSKVIN, D.D., kand.ekon.nauk, nauchn.red.; ORLOV, N.A., prof., red.; SAZANOVICH, N.K., mlad.red.; SIMKINA, G.S., mlad.red.

[U.S.A. industry in 1929-1963; technical and economic trends and structural changes] Promyshlennost' SShA v 1929-1963 gg., tekhniko-ekonomicheskie tendentsii i strukturnye sdvigi. [By] L.IA.Berri i dr. Moskva, Ekonomika, 1965. 406 p. (MIRA 18:5)

ORLOV, N.A., inzh.

Growth rates. Avtom., telem. i svlaz' 9 no.11:19-20 N '65.
(MIRA 18:12)

L 02312-67 EWT(m)/T WW/JW/WE

ACC NR: AR6016568 SOURCE CODE: UR/0196/65/000/012/T014/T014

AUTHOR: Rozhdestvenskiy, V. P.; Astaf'yeva, E. A.; Orlov, N. A.

TITLE: Using chromatographic analysis for determining the properties of liquified gas

SOURCE: Ref. zh. Electrotekhnika i energetika, Abs. 12T58

REF SOURCE: Sb. Ispol'zn. gaza v nar. kh-ve. Vyp. 3. Saratov, 1965, 276-280

TOPIC TAGS: chromatographic analysis, gas liquefication, gas composition analyzer, gas chromatography, vapor pressure, heat of combustion

ABSTRACT: The authors study the possibilities and some characteristics of chromatographic analysis of liquified gases in connection with specification of individual cases by GOST 10196-62, and also in connection with testing of new gas-jet units. The work was done on a LKh-4K chromatograph. One of the fractionating columns of the instrument was filled with tripoli treated in mineral oil and soda. It is shown that chromatographic analysis may be used for determining the composition of liquified gas as well as such important parameters as vapor pressure, heat of combustion and specific weight. 2 illustrations, 1 table, bibliography of 8 titles. ["Giproniigaz" Institute]. V. Speysher. [Translation of abstract]

SUB CODE: 07, 20

Card 1/1 UDC: 662.767:543.544

ORLOV, N. D.

"Calculation of the Maximum Thickness of the Wall of a Cast Iron Mold for Pouring Screw Stock of Copper Alloys." Sub 28 May 51, Moscow Inst of Nonferrous Metals and Gold imeni M. I. Kalinin

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

ORLOV, N. D.

Shaped Casting of Copper (Cont.) book, Collection of Articles. 509 Moscow Mashgiz, 1957/ 205 pp. 6,500 copies

Orlov, N. D., Candidate of Technical Sciences. Properties, Melting and Casting of Silicon Bronze 102

According to the author, lead bronzes can often be replaced by less expensive silicon brass, which also has superior mechanical properties. Tables and diagrams show the changes in mechanical properties with the variation of silicon content. The effect of adding given amounts of lead, iron, phosphrous, manganese, tin, arsenic, nickle and aluminum are also examined. In casting of silicon brass shrink cavities are said to occur frequently but can be avoided by carefully designed riser systems. Blowing with nitrogen and chlorine gas is also discussed. No personalities are mentioned. There are 13 references, of which 12 are Soviet and 1 is Polish.

This book contains papers presented during a technical and scientific convention Moscow, Dec. 1955, on theory and practice of shaped copper-alloy castings.

Babayev, D. N., Engineer. Efficient Methods of Melting and Casting Copper Alloys; Plant Practice 117

In this paper the author deals with the melting and casting of standard copper alloys designated LK 8-3L; AMts-9-1 and OSN 11-3-1. Castings from those alloys are tested for impermeability at 60 to 380 atm. hydraulic pressure, or 45 to 320 atm.

Card 9/17

PHASE I BOOK EXPLOITATION SOV/4969

Orlov, Nikolay Dmitriyevich, and Vladimir Mikhaylovich Mironov

Spravochnik liteyshchika; fasonnoye lit'ye iz splavov tyazhelykh tsvetnykh metallov (Foundry Worker's Handbook; Shaped Castings of Heavyweight Nonferrous Metal Alloys) Moscow, Mashgiz, 1960. 402 p. Errata slip inserted. 7,000 copies printed.

Ed. (Title page): N. N. Rubtsov, Doctor of Technical Sciences, Professor; Reviewers: A. G. Spasskiy, Doctor of Technical Sciences, A. V. Kurdyumov, Candidate of Technical Sciences, M. V. Pikunov, Candidate of Technical Sciences, V. M. Chursin, Candidate of Technical Sciences, N. Z. Pozdnyak, Engineer and D. M. Zaslavskiy, Engineer; Eds: N. D. Orlov, Candidate of Technical Sciences, and S. N. Pomerantsev, Engineer; Ed. of Publishing House: V. I. Rybakova, Engineer; Tech. Ed.: B. I. Model'; Managing Ed. for Literature on Heavy Machine Building: S. Ya. Golovin, Engineer.

Card 1/7

ORLOV, Nikolay Dmitriyevich; VLADZIYEVSKIY, A.P., prof., doktor tekhn. nauk, red.

[Foundry practice]Liteinoe proizvodstvo; uchebnoe posobie po razdelu "Liteinoe proizvodstvo" kursa "Tekhnologiia metallov." Moskva, Mosk. inzhenerno-ekon. in-t im. S.Ordzhonikidze, 1962. 103 p. (MIRA 16:2)

(Founding)

S/128/62/000/009/003/003
A004/A127

AUTHOR: Orlov, N. D.

TITLE: Conference on problems of the die-casting theory

PERIODICAL: Liteynoye proizvodstvo, no. 9, 1962, 44 - 45

TEXT: On December 21, 1961, a conference on problems of the pressing rate and hydraulic impact in die casting was convened by the Komitet tsvetnogo lit'ya liteynoy sektsii (Committee of Non-ferrous Castings of the Foundry Section) TsP NTO Mashprom in Moscow. L. N. Neverov reported on the results of experiments for measuring the plunger motion speed, pressure and temperature of the melt in the compression chamber and gas pressure in the mold. M. F. Makel'skiy gave an account of the results of his tests on a casting machine with horizontal compression chamber. A. K. Belopukhov emphasized the difference between the pressing rate and the admission rate which decisively affects the casting quality. V. M. Plyatskiy pointed out that only with a sufficiently fast filling of the die the necessary heat condition of the melt can be maintained. P. P. Moskvin reported on the optimum filling rates of the mold with the melt. M. L. Zaslavskiy mentioned that the filling rate is necessarily closely connected with the heat conditions of casting.

Card 1/2

S/128/62/000/009/0[illegible]/0[illegible]
A004/A127

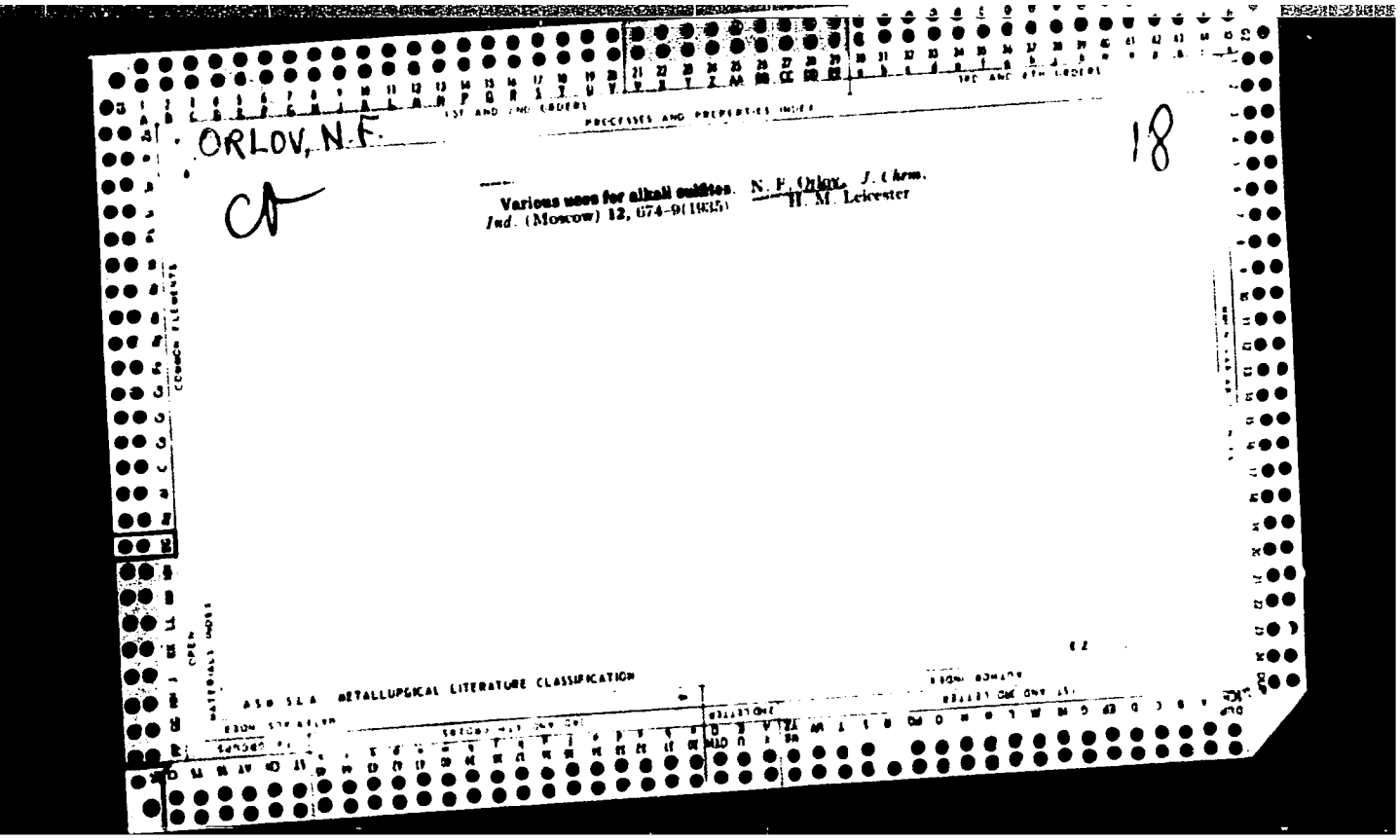
Conference on problems of the die-casting theory

I. S. Tiraspol'skiy expressed the opinion that the casting rates should correspond to the characteristic features of the castings and melt properties. N. A. Shubin dealt with the problem of hydraulic impact referring to articles concerning this subject that appeared in "Liteynoye proizvodstvo" 1960, no. 3, and 1961, no. 1.

Card 2/2

ORLOV, N.D.; OSOKIN, N.Ye., kand. tekhn.nauk, retsenzent;
CHERNYAK, C.V., inzh., red.

[Short course in foundry practice] Kratkii kurs liteinogo proizvodstva. Moskva, Mashinostroenie, 1964. 220 p.
(MIRA 18:2)



ORLOV, N. F.

Dissertation: "The Effect of Ultraviolet Light on Glass of the Ternary System Sodium Oxide-Boron Oxide-Silica." Cand Chem Sci, Optical Inst, Moscow, 1953. Referativnyy Zhurnal--Khimiya, Moscow, No 7, Apr54.

SO: SUM 284, 26 Nov 1954

ORLOV, N. F.

62-11-18/29

AUTHORS: Dolgov, B. N., Orlov, N. F.

TITLE: Synthesis of Tetrakis-[Trialkyl(aryl)siloxy]Titanes Under Presence of Tertiary Amines (Sintez tetrakis-[trialkil(aril) siloksi]- titanov v prisutstvii tretichnykh aminov).

PERIODOCAL: Izvestiya AN SSSR, Otdelenie Khimicheskikh Nauk, 1957, Nr 11, pp. 1395-1396 (USSR)

ABSTRACT: Here a new method for the synthesis of the tetrakis-[trialkyl(aryl)siloxy]titanes $(R_3SiO)_4$ Ti is described. It is based on the reaction of the trialkyl-(aryl)silanole with titanium-tetrachloride under presence of nitrogen bases (dimethylaniline, pyridine, and the like) as acceptors of the hydrogen chloride

$$4R_3SiOH + Ti \xrightarrow{\text{base}} (R_3SiO)_4Ti$$

Product elimination is 40-95%.

The tetrakis-[trialkyl(aryl)siloxy]titanes produced synthetically according to this method are colourless

Card 1/2

Synthesis of Tetrakis-[Trialkyl(aryl)siloxy]Titanes Under Presence of Tertiary Amines. 62-11-18/29

liquids or crystals with scent of camphor, which are soluble in organic solvents. There are 7 references, 3 of which are Slavic.

ASSOCIATION: Institute for Silicate Chemistry of the AN USSR (Institut khimii silikatov Akademii nauk SSSR).

SUBMITTED: June 26, 1957.

AVAILABLE: Library of Congress

Card 2/2

ORLOV, N.F

20-5-32/60

AUTHOR: ORLOV, N.F.

TITLE: New Halogen Containing Organoaluminumsilicic Compounds of the $R_3SiOAlX_2$ type.

(Novyye galogensoderzhashchiye alyuminiykremneorganicheskiye soyedineniya tipa $R_3SiOAlX_2$.- Russian)

PERIODICAL: Doklady Akademii Nauk SSSR 1957, Vol 114 Nr 5, pp 1033-1035 (U.S.S.R.)

ABSTRACT: The compounds of the $R_3SiOAlX_2$-type (X = Cl,Br) were hitherto not described in published works. In two papers opinions are expressed on the possibility of the formation of such compounds, which were, however, never isolated and for which no constants or analysis results were given. The author developed a method of synthesis for these compounds. It consists of heating equimolecular amounts of hexa-alkyl-disiloxane with aluminumhalogenide with simultaneous distillation of the corresponding trialkyl-halogensilane. The heating of the reaction mixture is stopped when its temperature surpasses the boiling point of the initial hexaalkyl-disiloxane by 20-30°C. With a 70-85 % yield the reaction proceeds according to the following system:

CARD 1/2

20-5-32/60

New Halogen Containing Organoaluminumsilicic Compounds of the $R_3SiOAlX_2$ type.

$$R_3SiOSiR_3 + AlX_3 \longrightarrow R_3SiOAlX_2 + R_3SiX.$$

The properties of trialkyl-siloxy-aluminum-dihalogenides are described. In contrast to hexa-alkyl-disiloxane hexachlorodisiloxane does not react with chloroaluminum under the same conditions. Experimental part with the usual data. (3 Tables, 2 Slavic references).

ASSOCIATION: Institute for the Chemistry of Silicate of the Academy of Science of the U.S.S.R.
(Institut khimii silikatov Akademii nauk SSSR)
PRESENTED BY: I.N. Nazarov, member of the Academy.
SUBMITTED: 4.3.57
AVAILABLE: Library of Congress.

CARD 2/2

CRLCV, N.S.

AUTHORS: Dolgov, B. N., Orlov, N. F. 20-4-19/52

TITLE: Synthesis of Tetrakis(Trialkyl(Aryl)Siloxy) Titanium by Means of Re-etherification of Tetra-Alcoxy-Titanates (Sintez tetrakis-(trialkil(aril) siloksi)- titanov metodom pereeterifikatsii tetraalkoksititanatov).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 4, pp. 615-618 (USSR)

ABSTRACT: The only monomeride titanium-silicon-organic combination of the type $(R_3SiO)_4$ that is tetrakis (trimethylsiloxy)titanium: $[(CH_3)_3SiO]_4Ti$ was extracted for the first time in 1955 from the reaction of trimethylsilanole with titaniumtetrachloride in presence of ammonia with an exploit of 18% (reference 1). Next it was extracted in 1957 from the reaction of natrium-trimethyl-silonate with the same chloride (reference 2). The authors studied the synthesis of the substance mentioned in the title above by re-etherification of alkyl-orthotitanates by trialkyl (aryl) silanoles in presence of metallic natrium as a catalyzer. The reaction proceeds well according to the scheme:

$$(RO)_4Ti + 4R_3SiOH \xrightarrow{Na} (R_3SiO)_4Ti + 4ROH$$

The substances received, as mentioned in the title above, are colorless, comparatively mobile liquics (tetrakis (trimethyl-

Card 1/2

Synthesis of Tetrakis (Trialkyl(Aryl)Siloxy) Titanium by Means of Re-etherification of Tetra-Alcoxy-Titanates. 20-4-19/52

siloxy)titanium, tetrakis (methyl-diethylsiloxy) titanium, tetrakis (triethylsiloxy) titanium and tetrakis (methyl-di-n-propylsiloxy) titanium), or crystals (tetrakis (tri-n-propylsiloxy) titanium). They are stable in dry air and readily soluble in organic solvents. The inclination towards hydrolysis decreases when the radical combined with silicon is increased. Finally follows the experimental part with the usual data. There are 5 references, 3 of which are Slavic.

ASSOCIATION: Institute for Silicate Chemistry of the AN USSR (Institut Khimii silikatov Akademii nauk SSSR)

PRESENTED: June 2, 1957, by A. N. Nesmeyanov, Academician

SUBMITTED: June 28, 1957,

AVAILABLE: Library of Congress

Card 2/2

SOV/2o-122-2-22/42

AUTHORS: Orlov, N. F., Dolgov, B. N., Voronkov, M. G.

TITLE: Tris(Triorganosilyl)-Vanadates (Tris(Triorganosilil)vanadaty)

PERIODICAL: **Doklady Akademii nauk SSSR**, 1958, Vol 122, Nr 2, pp 246 - 249 (USSR)

ABSTRACT: The organic derivatives of vanadium are little investigated, especially, because vanadium is not liable to form stable organic compounds with a vanadium-carbon bond(Ref 1). But also compounds in which a vanadium atom is combined with a carbon by means of oxygen are deficiently described (Ref 2). The present paper is an investi ation of the synthesis of hitherto unknown organosilicon vanadium derivatives which contain a binding V-O-Si (see the title). The authors have produced these derivatives by interaction of triorganosilanes with V_2O_5, $VOCl_3$ or with trialkyl vanadates $OV(OR)_3$ as well as the reaction of the sodium triethyl silanolate. The first method is discussed. Another simple method of synthesis of tri-organosilyl ethers of the ortho-vanadic acid is based

Card 1/3

on the reaction of vanadium oxychloride with triorgano-silanolene in the presence of hydrogen chloride-acceptors, (ammonia, tertiary amines, and others). The yield of ethers is 60-80%. A suitable synthesis of the silicoorganic ethers of the ortho-vanadic acid is the trans-etherification of the trialkyl vanadates by means of triorganosilanolene in the presence of catalytic amounts of sodium derivatives of the latters. They are formed by addition of metallic sodium. Finally, the compounds in question can be produced with a good yield by the reaction of sodium triorganosilanolates with vanadium oxychloride. The properties of these compounds are discussed and the constants tabulated in table 1. There are 1 table and 7 references, 4 of which are Soviet.

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry, AS USSR)

PRESENTED: April 30, 1958, By A.N.Nesmeyanov, Member, Academy of Sciences, USSR

ORLOV, N. F.

N. F. Orlov, b. N. Dolgov and M. G. Voronkov, "The New Synthesis Methods of Trialkyl-(aryl)-Siloxiderivative Elements of the III, IV and V groups of the Periodic System."

Report presented at the Second All-Union Conference on the Chemistry and Practical Application of Silicon-Organic Compounds held in Leningrad from 25-27 September 1958.
Zhurnal prikladnoy khimii, 1959, Nr 1, pp 238-240 (USSR)

5(3) SOV/62-59-5-30/40

AUTHORS: Orlov, N. F., Voronkov, M. G.

TITLE: Trialkyl-ortho-vanadates (Trialkilortovanadaty)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 5, pp 933-934 (USSR)

ABSTRACT: In accordance with papers by Prandtl and Hess (Ref 2) the synthesis of trialkylvanadate from V_2O_5 with alcohols is carried out according to the reaction equation $V_2O_5 + 6ROH \rightleftharpoons 2OV(OR)_3 + 3H_2O$. As this reaction is reversible by the formation of water, it was necessary to take measures in order that water be removed. This was done by a continuous azeotropic distillation with benzene. In this way a synthesis of 6 trialkyl-ortho-vanadates was successfully carried out, the isomeric butyl- and amyl esters of orthovanadic acid, two of which had hitherto been unknown. This method does not produce a very large yield (20-25%), but is very simple and was therefore preferred by the authors also to the synthesis from $VOCl_3$, which is known from publications. Mention is then made of the fact that in the reaction of V_2O_5 with triorgano-

Card 1/2

Trialkyl-ortho-vanadates

silanoles taking place at similar conditions the corresponding silicon-organic esters, the tris-(triorganosilyl)-orthovanadates are formed with a good yield. The table gives the physical data of the synthetized compounds. There are 1 table and 6 references, 2 of which are Soviet.

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry of the Academy of Sciences, USSR)

SUBMITTED: October 21, 1958

5(3) SOV/62-59-8-11/42

AUTHORS: Dolgov, B. N., Orlov, N. F., Voronkov, M. G.

TITLE: New Titaniumsilicon-organic Compounds - Trialkylsiloxy-titanium-halides

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 8, pp 1408-1411 (USSR)

ABSTRACT: In the present paper a report is made on the syntheses of silicon-organic titaniferous compounds. These compounds are hardly known in publications. Mention is made of Andrianov, Ganina and Khrustaleva (Ref 2) who described the synthesis of polyorgano-titanium siloxanes. The silicon-organic titaniferous compounds can be obtained according to the following pattern by the effect of hexaalkyl disiloxanes on titanium tetrachloride:

$$nR_3SiOSiR_3 + TiCl_4 \longrightarrow (R_3SiO)_nTiCl_{4-n} + nR_3SiCl \qquad n=1-2$$

The reaction takes place as soon as the materials have been heated for some time. A reflux cooler is used. 7 different compounds of the general type $(R_3SiO)_n TiX_{4-n}$ X=halogen were synthesized. The individual synthesis processes are described in the experimental part. The analysis of the com-

Card 1/2

pounds obtained was carried out by Yu. N. Platonov. If heating is continued over some time, the compounds tend to decompose. There are 1 table and 15 references, 4 of which are Soviet.

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry of the Academy of Sciences, USSR)

SUBMITTED: December 16, 1957

SOV/62-59-8-36/42

AUTHORS: Orlov, N. P., Voronkov, M. G.

TITLE: Tris(trialkylsilyl)-antimonites

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 8, p 1506 (USSR)

ABSTRACT: The silicon-organic esters of antimonic acid which have been unknown up to now were synthesized by the authors according to 2 different methods: (1) by means of an azeotropic separation of H_2O from a mixture of trialkylsilane and Sb_2O_3 : $6R_3SiOH + Sb_2O_3 \rightleftarrows 2(R_3SiO)_3Sb + 3H_2O$. The $(R_3SiO)_3Sb$ yields according to this method were up to 70%. (2) By means of an esterification of the trialkylantimonites with triorganosilanes $(R'O)_3Sb + 3R_3SiOH \rightleftarrows (R_3SiO)_3Sb + 3R'OH$. In this case the yields were up to 90%. Thus the compounds $[CH_3(C_2H_5)_2SiO]_3Sb$, boiling point 160° (5mm Hg); $[(C_2H_5)_3SiO]_3Sb$, boiling point 170° (3mm Hg) were obtained. The refraction of the Sb-O binding (5.25 ml) was also determined for the first time. More exact data will be published.

Card 1/2

Tris(trialkylsilyl)-antimonites

SOV/62-59-8-36/42

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry, Academy of Sciences, USSR)

SUBMITTED: May 11, 1959

Card 2/2

5(3)
AUTHORS: Orlov, N. F., Dolgov, B. N. SOV/20-125-4-35/74

TITLE: New Methods for the Synthesis of Organosiloxanes (Novyye metody sinteza organosiloksanov)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 4, pp 817-820 (USSR)

ABSTRACT: Hydrolysis is the most important method for the synthesis mentioned in the title. Apart from undoubted advantages this method shows, however, also a number of considerable shortcomings: among others the difficulty of obtaining compounds with a certain alternation of radicals. This alternation is due to the possibility of condensation of equal molecules, containing the SiOH-group. In a survey of publications (Refs 1-11) the authors mention papers that are in almost all cases favoring processes of several stages. The authors suggest new, simple and convenient methods for the production of organosiloxanes with a certain structure. They are based upon the reactions of the catalytic dehydrocondensation of organosilanes containing an Si-H-bond with organosilanoles and water in the presence of colloidal nickel. The first reaction:

Card 1/3

$$\equiv SiH + HOSi \equiv \xrightarrow{Ni} \equiv SiOSi \equiv + H_2 \qquad (1)$$

may be used for both the synthesis of monomers and particularly of asymmetric organodisiloxanes and of polymeric organosiloxanes. As the interaction of equal groups is prevented and the catalyst does not favor any side reaction whatsoever, yields in final products are achieved amounting to 80-90%. Apart from octaorganotrisiloxane the authors obtained also a fraction with a lower boiling point which corresponded to a hexaalkyldisiloxane with the radicals of the initial trialkylsilane. It was found that triorganosilanes do readily react in interaction with water in the presence of colloidal nickel and form hexaorganodisiloxane (3). The results achieved led to the discovery of a second method of synthesis of organosiloxanes. The basis are organosilanes with an Si-H-bond. The general form of reaction (3) is expressed by scheme (4):

$$\equiv SiH + HOH + HSi \equiv \longrightarrow \equiv SiOSi \equiv + 2H_2 \ .$$

It is possible to extend reaction (4) to both monomeric and polymeric organosiloxanes. The reaction with water in the presence of nickel is more convenient than the methods hitherto known (Refs 12-14)