AMOSOV, I.S., kand.med.nauk

Apparatus for contrast examination of the heart and vessels. Vest. rent.i rad. 34 no.6:63-65 N-D '59. (MIRA 13:5)

1. Iz kafedry rentgenologii i meditsinskoy radiologii (nach. - chlen-korrespondent AMN SSSR G.A. Zedgenidze) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.
(ANGIOCARDIOGRAPHY equip. & supply)

AMOSOV, I.S. (Leningrad, F-125, kanal Griboyedova, d. 115, kv.5)

Method for an X-ray investigation of the pulmonary respiratory function; roentgenopneumopolygraphy and tomopneumopolygraphy. Vest. rent.i rad. 36 no.3:31-36 My-Je '61. (MIRA 14:7)
(LUNGS--RADIOGRAPHY)

TSEYTLIN, Yakov Mikhaylovich; AMOSOV, I.S., red.

[Reliability of spring mechanisms for measuring heads and pickups] Nadezhnost' pruzhinnykh mekhanizmov izmeritel'nykh golovok i datchikov. Leningrad, 1964. 22 p. (MIRA 17:9)

AMOSOV, I.S.; VLASOV, P.V.

First Scientific Session of the Institute of Medical Radiology of the Academy of Medical Sciences of the U.S.S.R. Vest. rent.i rad. 40 no.5:73-75 S-O '65. (MIRA 18:12)

AMOSOV, I. S.

Vibratsii pri tochenii i metody bor'by s nimi [Vibrations in machining and methods of preventing them]. Pod red. M. A. Anserova. Leningrad, 1952. 22 p. (Vsesoiuz. o-vo po rasprostraneniiu polit. i nauch. znanii. Leningrad. Dom nauch-tekhn. propagandy).

SO: Monthly List of Russian Accessions, Vol. 6, No. 5, August 1953

ANOSOV, I.S.

Tochnost', vibratsii i chistota poverkhnosti pri tokarnoi obrabotke (Precision vibration and smooth surface finishing in lathework). Pod obshch. red. M.A. Anserova. Moskva, Mashgiz, 1953. 70 p. (B-chka tokarya-novatora, no. 7)

SO: Monthly List of Russian Accessions, Vol 7, No. 8, Nov. 1954

AMOSOV, Ivan Sergeyevich, kand.tekhn.nauk dots.; SKRAGAN, Vasiliy Aleksandrovich, kand.tekhn.nauk dots.; MATALIN, A.A., kand.tekhn.nauk dots., retsenzent; BORODULINA, I.A., red.izd-va; POL'SKAYA, R.G., tekhn. red.

[Precision, vibrations and smooth surface finishing in lathework] Tochnost', vibratsii i chistota poverkhnosti pri tokarnoi obrabotke. Izd. 2-oe, perer. i dop. Pod obshchei red. M.A.Anserova. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1958. 88 p. (Bibliotechka tokarya-novatora, no.9) (MIRA 11:5)
(Turning)

18.5200
18.1120

81473
S/123/60/000/05/03/009

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1960, No 5, p 97, # 21488

AUTHOR: Amosov, I.S.

TITLE: Durability Tests of a New High-Speed Steel

PERIODICAL: Nauchno-tekhn. inform. byul. Leningr. politekhn. in-t, 1958, No 11, pp 44 - 49

TEXT: The author cites investigation works in the field of tool materials which would make it possible to tool labor-consuming heat-resisting steel grades under conditions of impact load and intensified cutting process. The cutting properties of 5 melts of high-speed steel with various contents of tungsten (13 - 18%), cobalt (4 - 10%), vanadium (1 - 4.5%), carbon and other components were investigated. The author compared the cutting properties of the steel grades tested with those of the steel grades P18 (R18), P18M (R18M) and P9K5 (R9K5) during the machining of the X23H13T (Kh23N13T) grade heat-resisting steel. The tests were carried out on a vertical milling machine with a single-tooth milling cutter of constant geometry:

Card 1/2

MARKOV, Arkadiy L'vovich; ZLOTOPOL'SKIY, M.D., dotsent, kand.tekhn.nauk, retsenzent; AMOSOV, I.S., dotsent, kand.tekhn.nauk, red.; LEYKINA, T.L., red.izd-va; SPERANSKAYA, O.V., tekhn.red.

[Measurement of spur gears] Izmerenie tsilindricheskikh zubchatykh koles. Izd.2., perer. i dop. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 271 p. (MIRA 12:4)
(Gearing, Spur--Measurement)

SKRAGAN, Vasiliy Aleksandrovich; AMOSOV, Ivan Sergeyevich; SMIRNOV, Aleksandr Alekseyevich; BALAKSHIN, B.S., prof., doktor tekhn. nauk, retsenzent; RYSTSOVA, V.S., dotsent, kand.tekhn.nauk, red.; CHFAS, M.A., red.izd-va; SHCHETININA, L.V., tekhn.red.

[Mechanical engineering laboratory; methods manual for laboratory work in the mechanical engineering course] Laboratoriia tekhnologii mashinostroeniia; metodicheskoe posobie k laboratornym zaniatiiam po kursu tekhnologii mashinostroeniia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 129 p. (MIRA 14:1)

(Mechanical engineering)

S/241/62/007/004/001/003
I015/I215

27.2400

AUTHOR: Amosov, I. S.

TITLE: Changes in the pulmonary blood vessels in chronic radiation sickness

PERIODICAL: Meditsinskaya radiologiya, v. 7, no. 4, 1962, 57-64

TEXT: The present study is a continuation of a previous investigation published by the author (Med. radiol. no. 9, 1959). The purpose of this study was to investigate the mechanisms of pathogenesis of the so-called radiation pneumonia. The experiments were carried out on 105 rabbits of which 15 served as control animals and the remaining 90 were subjected to irradiation in order to obtain chronic radiation sickness. The examination of the results was made by angiocardiography. The dosage and technique of irradiation, as well as the application of angiocardiography, are fully described.

The main feature of the disorders caused in the lungs in the course of chronic radiation sickness, is that the small pulmonary vessels were affected, and this was accompanied by pulmonary emphysema and fibrosis. These findings were in contrast to the angiocardiographic picture of general hemodynamic disorders found in acute radiation sickness. The occluded vessels were recanalised in animals which survived the chronic radiation sickness. There are 3 figures.

Card 1/2

S/121/62/000/008/002/002
D040/D113

AUTHORS: Amosov, I.S., Belov, A.V., Zlotnitskiy, B.V., and Popandopulo, A.N.

TITLE: The cutting properties of cobalt-vanadium high-tungsten high-speed steel

PERIODICAL: Stanki i instrument, no. 8, 1962, 33-35

TEXT: P 18K4K8M (R18F4K8M) steel, which already existed in 1958, contains 1.25-1.40% C, 4.4-5.0% Cr, 15.5-17% W, 3.2-3.8% V, 7.5-8.5% Co and 1.2-1.5% Mo. The results are given of cutting tests conducted at the Nevskiy mashinostroitel'nyy zavod im. V.I.Lenina (Neva Machine-Building Plant im. V.I.Lenin), the Leningradskiy metallicheskiy zavod im. XXII s"yezda KPSS (Leningrad Metal Plant im. XXII s"yezd KPSS) and the Leningradskiy politekhnicheskiy institut im. M.I.Kalinina (Leningrad Polytechnic Institute im. M.I.Kalinin). Cutting tools made of R18F4K8M proved to be 2-6 times more durable than tools made of similar standard steels, and can be used for milling austenitic steel. The cutting speed range is 20-30 m/min, and the cutting properties depend to some extent

Card 1/2

S/121/62/000/005/002/002
D040/D113

The cutting properties of cobalt-vanadium .....

on the heat treatment procedure, recommendations for which are given. This steel is forgeable and weldable, but cannot be ground so easily as P 18 (R18) steel. Cutting blades and tips made of R18F4K8M can be attached to mills and shanks by electric welding with preheating in a $BaCl_2$ bath, quenching and multiple tempering. There are 3 figures and 6 tables.

Card 2/2

TSEYTLIN, Yakov Mikhaylovich; L'VOVICH, Izrail' Vol'fovich; YUSOV, Oleg Ivanovich; AMOSOV, I.S., red.

[Photoelectric transducers for the automation of inspection operations] Fotoelektricheskie datchiki dlia avtomatizatsii kontrolia. Leningrad, 1963. 26 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Metody i sredstva kontrolia, ispytaniia materialov, detaley i mekhanizmov, no.4) (MIRA 17:5)

AMOSOV, I.S.

Attachment for high-speed serial exposures with the RUM-5 X-ray unit. Vest. rent. i rad. 38 no.5:55-58 S-O'63 (MIRA 16:12)

1. Iz kafedry rentgenologii i radiologii (nachal'nik - prof. V.S. Vakhtel') Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.

L 9835-66 EWT(d)/EWT(m)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l) JD

ACC NR: AT5028811 SOURCE CODE: UR/2563/65/000/250/0022/0028

40
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B+1

AUTHOR: Amosov, I. S.; Ivanov, O. A.

ORG: Department of Machinery Manufacture Technology, Leningrad Polytechnic Institute (Kafedra tekhnologii mashinostroyeniya, Leningradskiy politekhnicheskiy institut)

TITLE: The accuracy of active control in cylindrical infeed grinding

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy, no. 250, 1965. Avtomatizatsiya i tekhnologiya mashinostroyeniya (Automation and technology of machinery manufacture), 22-28

TOPIC TAGS: quality control, grinding, metallurgic process

ABSTRACT: The following active control devices for cylindrical external grinding have been serially produced in the Soviet Union: 1) the BV-711 clamp gage with an electric-contact sensor; 2) the AK-3/DI-1 clamp gage with an inductive sensor; and 3) a BV-1096 bench gage with a pneumoelectric-contact sensor. The authors conducted laboratory and shop studies of the three devices. It is found that the accuracy of active control should be determined not by nonessential errors, but by specific criteria: a) the variation in the wear of the contacts; b) the variation in the adjustment in the contacts; and c) misalignment of the contacts. The accuracy in processing a batch of parts should be determined not only by the magnitude of dispersion, but also by the position of the center of the grouping of the dimensions of the parts in the batch. The accuracy of processing a batch of parts depends not only on the active

Card 1/2

L 9835-66

ACC NR: AT5028811

5

control instruments, but also to a great degree on the cycle and modes of grinding. A complete analysis of the accuracy of finishing may be given only after an investigation of the temperature deformations of the parts and the time lag of the branch of the grinder, depending on the cycle and the modes of grinding. The investigation was performed at the Department of Machinery Manufacture Technology (kafedra tekhnologii mashinostroyeniya) in 1963-1964 with the participation of A. L. Markov, head of the Laboratory of Measuring Equipment (laboratoriya izmeritel'noy tekhniki), junior scientific associate S. L. Murashkin, training foreman A. P. Norkin, laboratory technician A. V. Andreyeva, and student B. N. Kolyshkin. Orig. art. has: 6 figures and 3 tables.

SUB CODE: 13 / SUBM DATE: none

Card 2/2

AMOSOV, K. K.

USSR/Engineering
Rolling
Concrete, Reinforced

Nov 48

"Rolling of Broken Profile Elements," V. P. Severdenko, Cand Tech, Sci, K. K. Amosov, Engr, Moscow Steel Inst, 1½ pp

"Stal'" No 11

Describes method of calibrating rollers to produce periodic profiles. Method has been successfully used in laboratory. Recommended for industrial manufacture of steel rods with spiral or herringbone grooves for reinforcing concrete.

PA 19/49T65

AMOSOV, M., starshiy instruktor.

Council of labor veterans. Sov. profsoiuzy 5 no.5:71-72 My '57.
(MIRA 10:6)
1. TSentral'nyy komitet profsoyuza rabochikh morskogo i rechnogo flota
(Aged) (Works Councils)

AMOSOV, M.

Workdays of a ship's committee. Sov. profsoiuzy 6 no.1:39-40 Ja '58. (MIRA 11:1)

1.Starshiy instruktor TSentral'nogo komiteta profsoyuza rabochikh morskogo i rechnogo flota.
(Trade unions) (Ships)

AMOSOV, M.

Our river transport workers go in for sports and physical training.
Sov. profsoiuzy 6 no.12:56-57 S '58. (MIRA 11:9)

1.Starshiy instruktor TSentral'nogo komiteta profsoyuza rabochikh morskogo i rechnogo flota.
(Sports)

| 1600

33803
S/137/62/000/001/057/237
A060/A101

AUTHORS: Amosov, M. M., Dianov, V. V.

TITLE: Study of the processes of pressing and high-temperature sintering of electrolytic powders of tantalum and niobium

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1962, 38-39, abstract 1G292 ("Poroshk. metallurgiya", 1961, no. 3, 14 - 19, English summary)

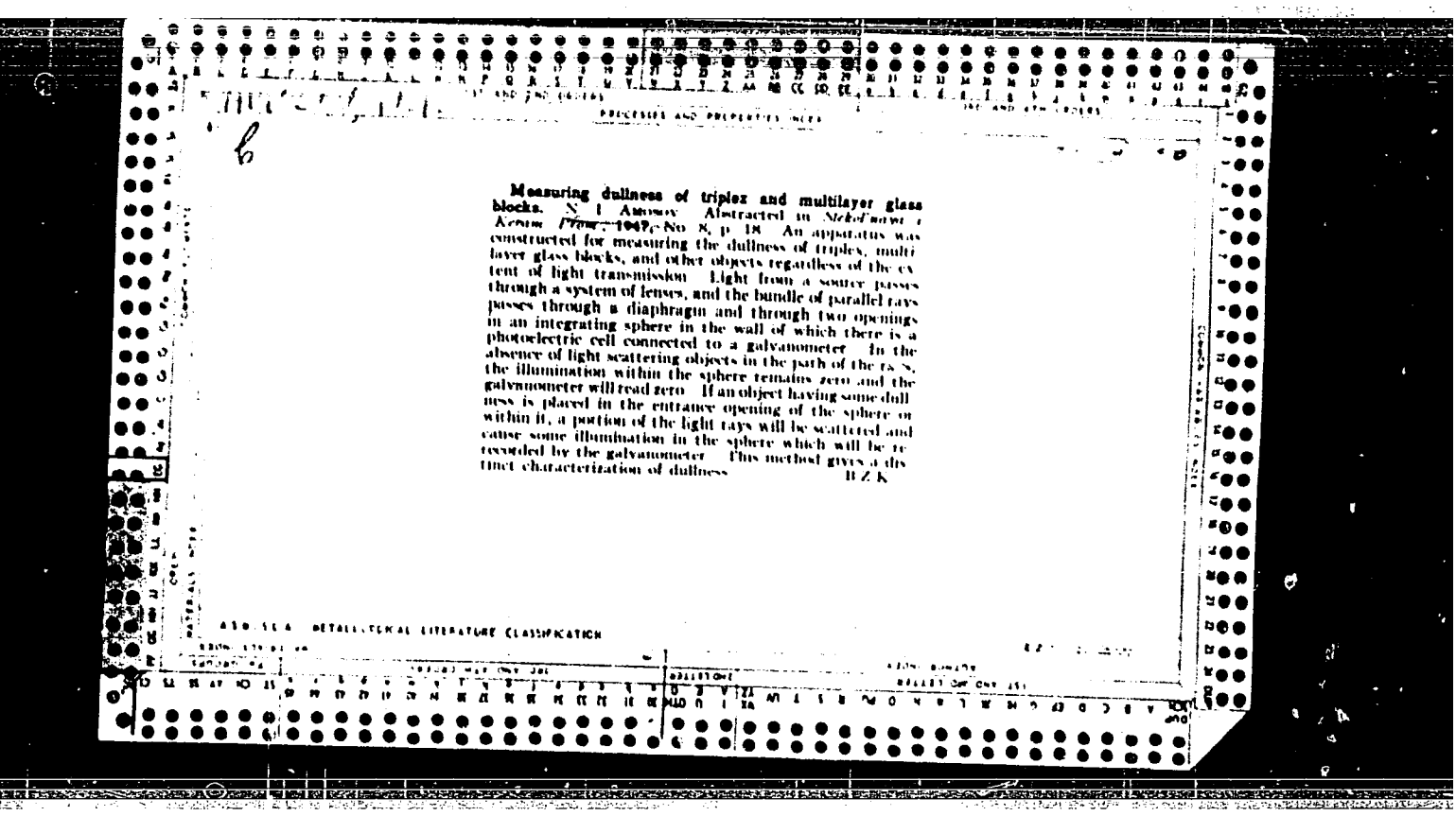
TEXT: The authors describe the effect of pressure of pressing upon the ρ and the porosity of pressed and sintered briquets of Ta and Nb. It is noted that for Ta at 1,000 - 1,600°C there occurs a vigorous separation of impurities (CO and salts of alkali metals) and an increase of open porosity. For Nb briquets this is not observed, and the open porosity increases only at 2,000 - 2,200°C on account of the elimination of the lower oxides of Nb (the same anomaly of change in porosity is observed also in Ta). The results of the variation in the chemical composition of Ta and Nb moldings after vacuum sintering at 1,000 - 2,700°C (content of Fe, Ni, C, O, the lower oxides, N, H) are cited.

[Abstracter's note: Complete translation] R. Andriyevskiy

Card 1/1

AMOSOV, N.; KOGAN, S., otvetstvennyy red.; LIL'YE, A., tekhn.red.

[What the Soviet regime has given the workers] Chto dala Sovetskaia vlast' trudiashchimsia. [Moskva] Mosk.rabochii, 1945. 30 p.
(Labor and laboring classes) (MIRA 11:6)



Measuring dullness of triplex and multilayer glass blocks. N I Amosov Abstracted in *Stekol'naya i Keramika* 1949, No 8, p 18 An apparatus was constructed for measuring the dullness of triplex, multilayer glass blocks, and other objects regardless of the extent of light transmission Light from a source passes through a system of lenses, and the bundle of parallel rays passes through a diaphragm and through two openings in an integrating sphere in the wall of which there is a photoelectric cell connected to a galvanometer In the absence of light scattering objects in the path of the rays, the illumination within the sphere remains zero and the galvanometer will read zero If an object having some dullness is placed in the entrance opening of the sphere or within it, a portion of the light rays will be scattered and cause some illumination in the sphere which will be recorded by the galvanometer This method gives a distinct characterization of dullness

B Z K

Journal of Applied Chemistry
June 1954
Industrial Inorganic Chemistry

Waviness of Russian three-layer safety glass. N. I. Amosov and M. K. Savitskii (*Stekło i Keramika*, 1952, 9, 14; *Glass Ind.*, 1954, 35, 104).—The "waviness" (greatest deviation in angular minutes of a transmitted light beam) of glass laminated with cellulose nitrate or vinyl butyral, varied from 2' to 10', with 88% of the batch within 3' to 6'.

J. A. Sugden.

AUTHOR: Amosov, N. I.

72-58-8-8/17

TITLE: The Classification of Optical Distortions Caused by Curved Car Windows (Otsenka opticheskikh iskazheniy, vnosimykh gnutymi avtomobil'nymi steklami)

PERIODICAL: Steklo i keramika, 1958, Nr 8, pp. 25 - 26 (USSR)

ABSTRACT: The author suggests the following method of classification: at a height of 1500 mm above the ground a fixed sight point is arranged which corresponds to the position of the eyes of the driver (Fig 1). A cylindrical screen is mounted on the arc of a circle of a radius of 2000 mm the center of which is located at the sight point; this screen covers an arc of at least 120°. All the inner screen surface is covered with black and white squares like a chess-board. The screen surface can also be covered with circles or rings (Fig 2). Between the view-finder and the screen the glass to be tested is fixed (Fig 1). Then it can be observed through the view-finder whether an optical distortion is caused or not. If nothing can be found by visual observation the place in question can be photographed from position of the view-finder and the distortion can be measured on the photograph.

Card 1/2

PHASE I BOOK EXPLOITATION SOV/4944

Kamnev, P.V., Candidate of Technical Sciences, Docent, Ed.

Peredovoy opyt kovki (Advanced Experience in Forging) [Leningrad] Lenizdat, 1959. 246 p. 5,000 copies printed.

Ed.: Ye.V. Yemel'yanova; Tech. Ed.: I.M. Tikhonova.

PURPOSE: This collection of articles is intended for workers and engineers in die-forging shops and for personnel of affiliated branches in the machine industry.

COVERAGE: The articles deal with the advanced experience of a number of Leningrad plants in mechanizing and improving production methods in die forging. Recommendations are made concerning the specialization of forging shops, and the further development of open-die forging processes. Articles by operators-innovators in forging shops of the Novo-Kramatorskiy (New Kramatorsk) and Ural'skiy (Ural) machinery plants are included. The collection contains some of the papers which were discussed during the conference in June 1958 (P.V. Kamnev, Chairman) on open-die forging, called by the regional section for the pressworking of metals of the Leningradskoye Pravleniye nauchno-tekhnicheskogo obshchestva mashinostroitel'noy promyshlennosti (Leningrad Administration of the Scientific and Technical Society of the Machine Industry) and the Leningradskiy Dom nauchno-tekhnicheskoy propagandy (Leningrad House of Scientific and Technical Propaganda). The foreword includes a list of the participants who submitted papers to the aforementioned conference. There are no references.

AVAILABLE: Library of Congress

Card 4/4

VK/wrc/sfm
4/26/61

AMOSOV, N.I.; SAVITSKIY, M.R.

Checking dimensions and the shape of plate glass.
Standartizatsiia 25 no.6:45-47 Je '61. (MIRA 14:6)
(Plate glass--Measurement)

AMOSOV, N.I.; SAVITSKIY, M.R.

Classification of glass products. Stek. i ker. 19 no.6:14-17 Je '62. (MIRA 15:7)
(Glass--Classification)

AMOSOV, N.I.; SAVITSKIY, M.R.

Measuring the obliquity of shopwindow glasses. Standartizatsiia 26 no.7:33-34 Jl '62. (MIRA 15:7)
(Windows)

AMOSOV, N.I.; SAVITSKIY, M.R.

Specifications of the translucence of sheet glass in standards. Standartizatsiia 28 no.1:30-31 Ja '64. (MIRA 17:1)

AMOSOV, N.I., kand. tekhn. nauk

Transfer of adhesive material inside laminated safety glass during its preparation. Stek. i ker. 20 no.9:12-15 S '63. (MIRA 17:6)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut stekla.

AMOSOV, N.I., kand. tekhn. nauk

Efficient glassing of motor vehicles. Avt. prom. 31 no.1:33-35 Ja '64. (MIRA 18:3)

1. Gosudarstvennyy institut stekla.

[redacted], N. I.

22706 Amosov, N. I. Analiz khirurgicheskoy deyatel'nosti lechebnykh uchrezhdeniy bryanskoy oblasti. Sov. meditsina, 1949, No. 7, s. 31-33.

SO: LETOPIS' No. 30, 1949

AMOSOV, N. M.

Formation of artificial stomach in total gastrectomies. Vest. khir. Grekova, Leningr. 72 no.2:53-54 Mar-Apr 1952. (CLML 22:2)

1. Candidate Medical Sciences. 2. Of Bryansk Oblast Hospital (Head Physician -- N. Z. Ventskevich).

AMOSOV, N.M.

Stomach--Cancer

Surgical therapy of cancer of the cardia and the lower portion of the esophagus. Vest. khir. 72 No. 4, 1952

Monthly List of Russian Accessions, Library of Congress, November, 1952 UNCALSSIFIED

AMOSOV, N.M.

[illegible] V 1. [illegible] July [illegible]

4342. AMOSOFF N.M. *Analysis of results obtained in 100 pulmonary resections for tb. (Russian text) PROBL. TUBERK. 1953, 3 (58-63) Tables 8

Report of 100 cases including 48 pneumonectomies, 5 bilobectomies, 7 lobectomies with segmental resection, 39 lobectomies and one segmental resection. The indications for pneumonectomy and lobectomy in cases suffering from cavitary processes limited to a single lung are: presence of a giant cavity, pulmonary tb combined with bronchiectasis, lower lobe cavities and bronchial stenosis. Contra-indications are: evidence of tb dissemination to the other lung, resistance of the tb germs to antibiotics and a poor respiratory and cardio-circulatory function. The best results have been obtained in cases subjected to the operation within the first 3 yr. of the disease. Pre-operative administration of streptomycin is essential. The results obtained were: postoperative complications (empyema, bronchial fistula, etc.) in 10, death in 3, recurrence in 6. Parenti - Ferrara (IX, 15)

AMOSOV, N.M., kandidat meditsinskikh nauk; VENTSKEVICH, N.Z., zasluzhennyy vrach RSFSR, glavnyy vrach

Surgical therapy of gastric cancer. Sov.med. 17 no.6:42-43 Je '53. (MLRA 6:6)

1. Bryanskaya oblastnaya bol'nitsa (for Amosov and Ventskevich). 2. Onkologicheskiy dispanser (for Amosov). (Cancer)

AMOSOV, N.M., kandidat meditsinskikh nauk; VENTSKEVICH, N.Z., zasluzhennyy vrach RSFSR, glavnyy vrach.

Cerebrospinal protocaine anesthesia administered in individual doses. Vest. khir. 73 no.5:28-31 S-O '53. (MLRA 6:11)

1. Bryanskaya oblastnaya bol'nitsa. (Spinal anesthesia)

AMOSOV, N. M.

AMOSOV, N.M., professor (Kiev)

Pneumonectomies and lobectomies in the treatment of pulmonary tuberculosis. Khirurgiia no.5:34-40 My '54. (MLRA 7:7)
(TUBERCULOSIS, PULMONARY, surgery,
*lobectomy & pneumonectomy)

AMOSOV, N.M.

Summaries of papers presented at the XXVI Congress of Surgeons of the USSR, Moscow, 20 - 27 January 1955, included:

Surgical Treatment of Pulmonary Tuberculosis.

N. M. AMOSOV

SOURCE: [redacted]-A-46013 (Official Publication) Unclassified.

AMOSOV, N.M., dekter meditsinskikh nauk (Kiyev, Klinicheskiya, D. 4)

Pneumonectomy with excision of the parietal pleura in the treatment of empyema. Vest.khir. 75 no.2:11-16 Mr '55. (MLRA 8:5)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. A.A.Mamolat) i Bryanskoy oblastnoy bol'nitsy (glav. vrach--zasl. vrach RSFSR N.Z.Ventskevich).
(EMPYEMA, PLEURAL, surgery,
pneumonectomy with parietal pleurectomy)

AMOSOV, N.M.

[Surgical treatment of suppurative diseases of the lungs] Khirurgicheskoe lechenie nagnoitel'nykh zabolevanii legkikh. Kiev, Gos. med. izd-vo USSR, 1956. 190 p. (MIRA 9:12)
(LUNGS--SURGERY)

AMOSOV, N.M., professor

Surgical treatment in late development of tuberculosis following lung resection. Probl.tub. 34 no.3:22-27 My-Je '56. (MLRA 9:11)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. A.S.Mamolat)

(TUBERCULOSIS, PULMONARY, surg.
resection in late develop. of tuberc. after surg.)

AMOSOV, Nikolay Mikhaylovich

[Pneumonectomy and resection of a lung in tuberculosis] Pnevmonektomiia i rezektsii legkogo pri tuberkuleze. Moskva, Medgiz, 1957. 194 p. (MIRA 11:6)
(LUNGS--SURGERY)

AMOSOV, N.M., professor (Kiyev, ul. Krasnoarmeyskaya, d.90a, kv.37)

Diagnostic puncture of the left atrium; preliminary report. Nov. khir.arkh. no.1:49-52 Ja-F '57. (MLRA 10:6)

1. Kafedra torakal'noy khirurgii (zav. - prof. N.M.Amosov) Kiyevskogo instituta usovershenstvovaniya vrachey.
(MITRAL VALVE--DISEASES)

AMOSOV, N.M., prof; OSIPOV, B.K., prof.

Congress in Czechoslovakia devoted to pulmonary resections.
Khirurgiia 33 no.7:139-144 Jl '57. (MIRA 10:11)
(LUNGS--SURGERY)

AMOSOV, N.M., professor; BARENBOYM, A.M., starshiy nauchnyy sotrudnik

Resection of a pulmonary lobe in pregnancy [with summary in French]
Probl.tub. 35 no.4:108-109 '57. (MIRA 10:8)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza imeni akad. F.G.Yanovskogo (dir. A.S.Mamolat)
(PNEUMONECTOMY, in pregn.
(Rus))
(PREGNANCY, in various dis.
tuberc., pulm., pneumonectomy (Rus))

AMOSOV, N.M., red.; BARENBOYM, A.M., red.; GORCVENKO, G.G., red.; KLEBANOV, M.A., red.; MAMOLAT, A.S., red.; POTOTSKAYA, L.A., tekhn. red.

[Treatment of patients with cavitary pulmonary tuberculosis] Lechenie bol'nykh kaverneznym tuberkulezom legkikh. Kiev, Gos. med. izd-vo USSR, 1958. 275 p. (MIRA 11:11)

1. Ukrainskiy nauchno-issledovatel'skiy institut tuberkuleza im. F.G.Yanovskogo. 2. Direktor Ukrainskogo instituta tuberkuleza(for Mamolat).

(TUBERCULOSIS)

AMOSOV, N.M. (Kiyev, ul. Krasnoarmeyskaya, d. 90a, kv. 37)

A new guillotine valvulotome. Ko.khir.arkh. no.6:131-132 N-D '58.
(MIRA 12:3)

1. Klinika torakal'noy khirurgii Ukrainskogo instituta tuberkyleza.
(SURGICAL INSTRUMENTS AND APPARATUS)
(MITRAL VALVE--SURGERY)

AMOSOV, N.M., prof.

Bipleural approach in pericardiectomy. Vrach.delo no.7:699-701 Jl '58 (MIRA 11:9)

1. Kafedra torakal'noy khirurgii (zav. - prof. N.M. Amosov) Kiyevskogo instituta usovershenstvovaniya vrachey.
(PERICARDIUM--SURGERY)

AMOSOV, N.M., prof.

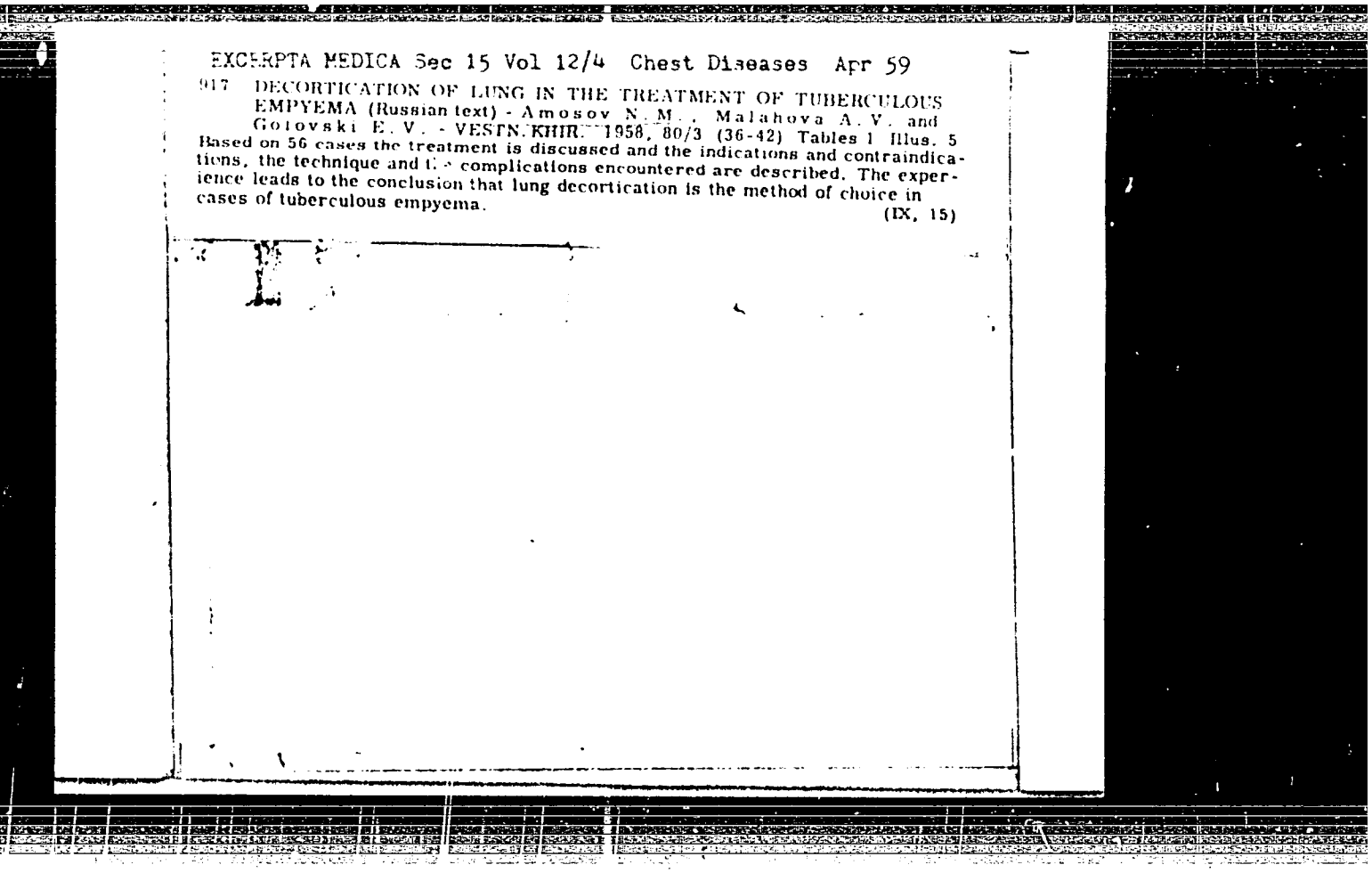
Lung resection combined with thoracoplasty. Preliminary report.
Pat., klin. i terap. tub. no.8:309-311 '58. (MIRA 13:7)

1. Iz Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza im. akad. F.G. Yanovskogo.
(LUNGS--SURGERY) (CHEST--SURGERY)

AMOSOV, N.M., professor

Congress in Czechoslovakia devoted to lung resections. Pat., klin.i terap.tub. no.8:362-366 '58. (MIRA 13:7)

1. Iz otdeleniya torakal'noy khirurgii (rukovoditel' - prof. N.M. Amosov) Ukrainskogo nauchno-issledovatel'skogo instituta tuberkuleza im. akad. F.G. Yanovskogo.
(LUNGS--SURGERY--CONGRESSES)



EXCERPTA MEDICA Sec 15 Vol 12/4 Chest Diseases Apr 59

917 DECORTICATION OF LUNG IN THE TREATMENT OF TUBERCULOUS EMPYEMA (Russian text) - Amosov N. M., Malahova A. V. and Golovski E. V. - VESTN. KHIR. 1958, 80/3 (36-42) Tables 1 Illus. 5

Based on 56 cases the treatment is discussed and the indications and contraindications, the technique and the complications encountered are described. The experience leads to the conclusion that lung decortication is the method of choice in cases of tuberculous empyema.

(IX, 15)

AMOSOV, N.M.; BEREZOVSKIY, K.K.; ZABRODA, G.S.

Result of 100 pneumonectomies with use of the UKL-60. Eksp. khir. 3 no.6:3-7 N-D '58. (MIRA 12:1)

1. Iz kliniki torakal'noy khirurgii (zav.- prof. N. M. Amosov) Ukrainskogo instituta tuberkuleza imeni F. G. Yanovskogo (dir. dots. A. S. Mamolat).

(PNEUMONECTOMY
appar. for suturing lung stump (Rus))

AL', G.E., doktor med.nauk; AMOSOV, N.M., prof.; ANTELAVA, N.V., prof.; BOGUSH, L.K., prof.; VOZNESENSKIY, A.N., prof.; VIL'NYANSKIY, L.I., kand.med.nauk; LAPINA, A.A., prof.; MASSINO, S.V., doktor med.nauk; MIKHAYLOV, F.A., prof.; RABUKHIN, A.Ye., prof.; KHRUSHCHOVA, T.N., prof.; SHAKLEIN, I.A., prof.; YABLOKOV, D.D., prof.; EYNIS, V.L., prof., zasluzhennyy deyatel' nauki, otv.red.; KORNEV, P.G., prof., red.; KUDRYAVTSEVA, A.I., prof., red. [deceased]; LAPINA, A.I., red.; LEBEDEVA, Z.A., kand.med.nauk, red.; STRUKOV, A.I., prof., red.; SHEBANOV, F.V., prof., zasluzhennyy deyatel' nauki, red.toma; GRINSHPUNT, Ye.M., red.; LYUDKOVSKAYA, N.I., tekhn.red.

[Multivolume manual on tuberculosis] Mnogotomnoe rukovodstvo po tuberkulezu. Moskva, Gos.izd-vo med.lit-ry. Vol.2. [Tuberculosis of the respiratory organs] Tuberkulez organov dykhaniia. Red.toma A.E.Rabukhin i F.V.Shebanov. Book 2. 1959. 408 p. (MIRA 13:5)

1. Chleny-korrespondenty AMN SSSR (for Antelava, Bogush, Yablokov, Strukov). 2. Deystvitel'nyy chlen AMN SSSR (for Kornev).

(TUBERCULOSIS)

AMOSOV, N.M. (Kiyev, ul.Krasnoarmeyskaya, d.90a, kv.37)

Some problems of lung surgery. Nov.khir.arkh. no.1:3-12 Ja-F '50. (MIRA 12:6)
(LUNGS--SURGERY)

AKIMOV, V.I.; ALEKSEYENKO, I.P.; ALENT'YEVA, K.A.; AMOSOV, N.M.; ARUTYUNOV, A.I.; BRATUS', V.D.; VASHCHENKO, I.D.; GELLERMAN, D.S.; GRISHIN, M.A.; DANKEYEVA, Z.N.; DENISOVA, A.G.; DOLGOVA, M.P.; IVANOV, N.A.; ISHCHENKO, I.N.; KATS, V.A.; KOLOMIYCHENKO, M.I.; LAVRIK, S.S.; LIMAREV, A.A.; NAZAROVA, N.G.; NOVACHENKO, N.P.; PETRUNYA, S.P.; PKHAKADZE, A.L.; RUDENKO, F.A.; SERGIYEVSKIY, V.F.; TAYTSLIN, I.S.; TARZAKOVSKIY, B.S.; CHERZHONOK, P.I.; SHALABAYA, M.P.; SHUMADA, I.V.; SHUPIK, P.L.

Konstantin Konstantinovich Skvortsov; obituary. Nov.khir.arkh. no.3:142-143 My-Je '50. (MIRA 12:10)
(SKVORTSOV, KONSTANTIN KONSTANTINOVICH, 1871-1950)

AMOSOV, N.M.; LISSOV, I.L.; MOKHNYUK, Yu.N.; SIDARENKO, L.N.; TRESHCHINSKIY, A.I.

Heart operations with the use of artificial blood circulation. Grud. khir. 2 no.6:18-30 N-D '60. (MIRA 14:1)

1. Iz kliniki torakal'noy khirurgii Ukrainskogo instituta tuberkuleza (dir. - dotsent A.S. Mamolat) i kafedry torakal'noy khirurgii Kiyevskogo instituta usovershenstvovaniya vrachey (dir. - dotsent M.N.Umovist). Adres avtorov: Kiyev, 38, Baykovaya gora, Institut tuberkuleza.

(BLOOD--CIRCULATION, ARTIFICIAL)
(HEART--SURGERY)

AMOSOV, N.M. [Amosov, M.M.] (Kiyev); SHABANOVA, Ye.A. [Shabanova, L.O.] (Kiyev)

Solution to the problem of diagnosis by electronic computer. Avtomatyka no. 1:47-55 '61. (MIRA 14:4)

(Medical electronics) (Diagnosis)

S/148/60/000/009/015/025
A161/A030

AUTHORS: Vydrin, V.N., Volosnikov, V.P., Sardinskiy, N.P., and Amosov, P.N.

TITLE: Investigation of lead in a continuous merchant mill

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no. 9, 1960, 110-115

TEXT: Theoretical lead calculation methods exist for rolling strip on smooth rollers only. The new method described permits measurements of lead on any rolling mill. It is based on measurement and comparison of distances passed by a point on the surface of the roller and a point on the surface of metal being rolled. Two electromechanical pickups (interrupters) watch the velocity of the rollers and of the strip. The pickups (Fig.1) have a collector (1) at the same axle (2) with a disc (3) with file-cut on the edge to prevent slip. The axle runs on two ball bearings in casing (5) and is fixed by the bushing (6) and cover (7), and sealed with gaskets (8 - and 9) and packing (10). The collector plates are connected to the pickup mass through the contact (11) so that the brush slides alternately over the conducting and over the idle plate when the disc rotates, and the circuit

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Investigation of lead ...

50-60 microsecond duration are the count pulses. A special control system has been built for a precise simultaneous start and end of the count from both pickups, with start push button ПК earthing the anode voltage circuit through a high-resistance resistor. The voltage difference formed at the moment is differentiated and fed into the pulse forming circuit ФИ, and the voltage front rises abruptly. The pulse from the ФИ is differentiated, amplified in the amplifier У-3 and fed to start the control trigger УТ. The excitation time of the trigger is the metering time. The trigger УТ controls through the cathode follower КП, the coincidence circuits И receiving also the pulses from the ФИС units. The counting storage units СНР-1 and СНР-2 count pulses during the excitation time of the trigger УТ. The УТ is returned into the start position by again pressing the starting push button ПК. The counting storage units are binary counters, but the counters used in experiments were decade counters (with ten series-connected triggers) permitting count $2^9 + 2^8 + 2^7 + 2^6 + 2^5 + 2^4 + 2^3 + 2^2 + 2^1 + 2^0 = 1023$ pulses. This was sufficient at a rolling speed of up to 10 m/sec and 2 sec metering time. Neon lamps are connected into the anode circuits of the triggers for fixing the excitation. The system is returned into a start position after metering

Card 3/10

Investigation of lead . . .

pulse values; n_p - the number of pulses counted from the pickup on the roll. The metering error is 0.098% at maximum pulse number 1023. Experiments were carried out on the planishing stand No.9 of the mill, in rolling spring steel strip 76 x 9.5 mm. The results of pulse count are given in a table. The mean lead in normal rolling was 4.9%, the maximum 7.6%, and the minimum 2.7%. The effect of tension on the lead is shown in curves (Fig.5). At a certain degree of velocity mismatch, when the lead curve crosses the X axis, the strip slips in the rollers. The front tension increases lead, but it was produced by the No.10 stand alone in this case, and the rear tension from the stands No.1 to 8 was stronger. Conclusion: The suggested metering method permits: a) measuring and recording on oscillograph film the value and the variations of lead or lag in any rolling mill; b) to reveal slip of rolls; c) to determine the rolling diameter in rolling in grooves from the relation

$$\frac{n_n}{n_\beta} = \frac{D_K}{D_\delta}$$

where n_n - the number of pulses of the pickup on the strip; n_β - the pulses

number from the pickup on the roll; D_r - the roll barrel diameter; D_K - the rolling diameter. There are 5 figures and 1 table.

ASSOCIATION: Chelyabinskiy politekhnicheskiy institut (Chelyabinsk Polytechnical Institute) and Chelyabinskoye otdeleniye GPI "Tyazhpromelektroproyekt" (The Chelyabinsk Branch of the GPI "Tyazhpromelektroproyekt")

SUBMITTED: 7 December 1959

S/148/60/000/011/008/015
A161/A030

AUTHORS: Vyarin, V. N., Amosov, P. N., Boyko, M. Ye.; Moshkin, S. I.

TITLE: Investigation of pressure and tension in a continuous small-gage merchant rolling mill

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no. 11, 1960, 81 - 87

TEXT: Data on the rolling pressure and its dependence on tension in continuous merchant mills are of practical and theoretical interest, but little study had been devoted to the problem up to now. The subject investigation has been carried out on a 500 mm mill by the use of a membrane type dynamometer (Figure 2) for pressure and a different dynamometer for tension (the latter described in Ref. 1, same first authors, in this periodical No. 6, 1959). The tension dynamometer has been improved, the new design is shown (Figure 3); it was calibrated directly in the mill stand. Measurements data were recorded by a MPO-2 (MPO-2) oscillograph, under normal operation, and with artificially produced tension at the rear or at the front. Tension dynamometers were installed from both sides of stand

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Investigation of pressure and ....

-stand mills, but in continuous mills working at tension (even if very slight) it results in regular variations of pressure and tension, and the thickness of the rolled metal varying periodically. Eccentricity of the roll trunnion bores might have a similar effect, but not in these experiments for the shape of the harmonics would then be smoothly sinusoidal, and this is not the case. The oscillograms regularly show four peaks in every period, corresponding to the four positions of the Hook joint in the space. Eccentricity of the rolls could not have this effect, for it did not exceed hundredths of one millimeter. There are 9 figures and 2 Soviet references.

ASSOCIATION: Chelyabinskiy politekhnicheskiy institut i Chelyabinskiy metallurgicheskiy zavod (Chelyabinsk metallurgical institute and Chelyabinsk metallurgical plant)

SUBMITTED: February 17, 1960

Card 3/6

Investigation of pressure and ...

Figure 2: Membrane dynamometer for pressure. (1) lid;(2) fastening screws; (3) gasket; (4) wire strain gages;(5) housing.

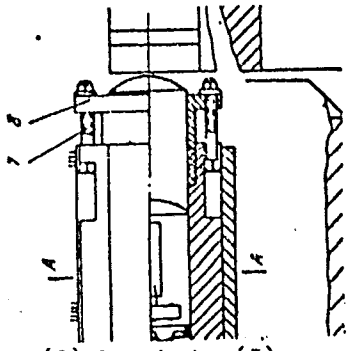

Figure 3: New tension dynamometer. (1) abutment screw;(2) bracket; (3) housing; (4) bushing; (5) core; (6) stop screw; (7) tie bolt; (8) stuffing box lid; (9) transition block; (10) wire strain gages; (11) stop; (12) attachment bolts.

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S/148/60/000/011/008/015
A161/A030

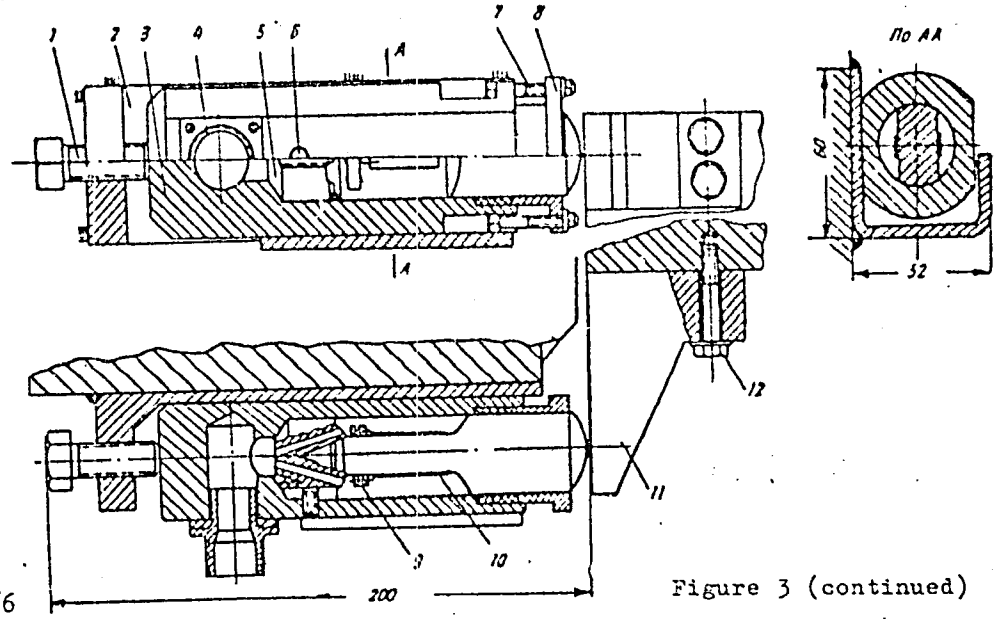
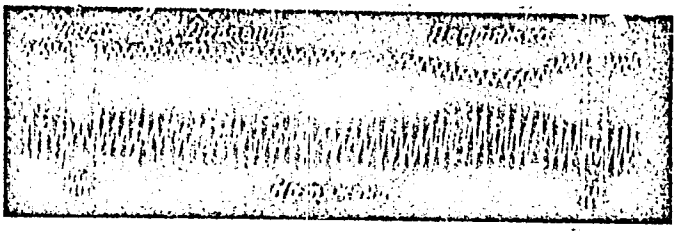


Figure 3 (continued)

Card 5/6

Investigation of pressure and ....

Figure 8: The effect of rear tension on the pressure in finish stand (simplified).



Card 6/6

S/115/61/000/007/002/004
E194/E435

AUTHORS: Vydrin, V.N. and Amosov, P.N.

TITLE: An instrument for measuring strip tension on continuous section rolling mills

PERIODICAL: Izmeritel'naya tekhnika, 1961, No.7, p.9

TEXT: In 1956 the Chelyabinsk Polytechnical Institute suggested a method for direct measurement of tension on continuous section rolling mills; it is described in previous articles (Ref.1: Vydrin V.N., Boyko M.Ye., Amosov P.N. and Moshkin S.I. Izvestiya vysshikh uchebnykh zavedeniy MVO SSSR, Chernaya metallurgiya, 1959, No.6; Ref.2: Vydrin V.N. Metallurgizdat, M., 1960). It is now proposed to introduce this device into production to control the speed of the roughing group of stands of the mill. The strip in a continuous mill may be subject to either tension or compression and the same pick-up should be suitable for operating with either. Accordingly, a new type of pick-up was developed and its construction is described here. Referring to the illustration, the frame of the pick-up 5 contains a core 9 carrying a strain gauge bridge. The core is fixed into the body of the frame without backlash by means of the

Card 1/3

VYDRIN, V.N.; BOYKO, M.Ye.; MOSHKIN, S.I.; AMOSOV, P.N.

Investigating the process of strip rupture in continuous rolling mill stands. Izv. vys. ucheb. zav.; chern. met. 4 no.7:97-100 '61. (MIRA 14:8)

1. Chelyabinskiy politekhnicheskiy institut i Chelyabinskiy metallurgicheskiy zavod.
(Rolling (Metalwork))

VYDRIN, V.N.; AMOSOV, P.N.; AGEYEV, L.M.

Dynamometer with a nonamplifying circuit and resistance strain gauges. Izm. tekh. no.8:24-25 Ag '63. (MIRA 16:10)

VYDRIN, V.N.; AMOSOV, P.N.; FEDOSIYENKO, A.S.; KRAYNOV, V.I.

Measuring irregularities of angular velocity in rolls. Izm. tekh. no.11:31-34 N '64. (MIRA 18:3)

42173

26.2120 (3807)

S/096/62/000/012/002/003
E194/E135

AUTHOR: Amosov, P.Ye., Engineer

TITLE: Investigation of the mechanism of operation of a high-speed contact type annular gland

PERIODICAL: Teploenergetika, no.12, 1962, 44-49

TEXT: A contact type gland is defined as one in which sealing depends on sliding contact between the shaft and gland; the face of the annular gland contacts the face of a disc on the shaft. Conditions for obtaining minimum wear with such glands are discussed. The gland is fully sealed when contact occurs over a closed ring, but this happens rarely and the ring is usually penetrated by a few small channels of very variable section through which the liquid leaks. The theory of such a gland is briefly discussed and the following notation is used:
p_1 - liquid pressure; p_2 - pressure immediately beyond gland; p_{av} - mean pressure per unit area of contact ring; p_k - nominal contact pressure, which is partially opposed by the pressure p_{av} and is partially transmitted to the disc;

Card 1/4

p_k^* - actual contact pressure between shaft and glands;

$p_k - p_{av} = p_k^*$; $\alpha = (p_k - p_2)/(p_1 - p_2)$;

$k = (p_{av} - p_2)/(p_1 - p_2)$.

Tests on glands with α less than 1 were made with p_1 up to 15 kg/cm^2 with sliding speeds in the range 15 - 60 m/sec. The stationary annular ring had a contact surface of carbon/graphite impregnated with lead, operating against a steel disc. Experimental contact diagrams for the gland are given. Sealing was assessed by measuring leakage of water through two contacts machined to a finish of standard class 10 - 12 and the results are plotted as leakage and coefficient of friction as function of α. The value of k varies between 0.15 and 0.8. To minimise wear the actual contact pressure should be maintained as low as possible, the minimum depending on the physical properties of the liquid and of the contacting materials; for water and the materials tested the recommended value is:

$$p_k^{\varkappa} > 0.5 - 1 \text{ kg/cm}^2.$$

The efficiency of sealing depends on the ratio between α and k. Sealing breaks down unless α is greater than k. Leakage of liquid through the joint can be calculated by the following formula:

$$q = A \frac{\pi d_{av}}{(\alpha - k)(p_1 - p_2)} \text{ cm}^3/\text{min} \qquad (6)$$

where: d_{av} - average diameter of the ring, cm; A - an empirical constant which ranges from nearly zero when the metal surface departs from flatness by 0.9 mm to 6.0 when the departure is about 1.4 mm. The coefficient of friction is given by the formula:

$$f = f_1\left(1 + \frac{k}{\alpha} B\right) \qquad (7)$$

where: B ranges between 1 and 10, being an empirical coefficient which is directly proportional to the sealing efficiency of the gland. In the glands tested with α greater than 1 the

coefficient of friction was 0.01 to 0.15, and with α less than 1 it was 0.05 to 0.25 and was practically independent of speed. From the data given the principal parameters of contact type glands can be calculated.
There are 7 figures and 1 table.

Card 4/4

ZAKHARENKO, S.Ye.; GRIMPRESS, B.L.; AMOSOV, P.Ye.

Special features of the glands of screw compressors. Trudy LPI no.221:139-147 '62. (MIRA 15:9)
(Compressors)

AMOSOV, P.Ye.

Choice of a face packing system. Trudy LPI no.221:148-152 '62.
(MIRA 15:9)

(Turbomachines)

AMOSOV, S.B., kand.tekhn.nauk

Technology of manufacturing flanges welded to joints. Mont. i spets. rab. v stroi. 24 no.4:11-13 Ap '62. (MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhnicheskikh i sanitarno-tekhnicheskikh rabot.
(Flanges)

AMOSOV, S.B.

Manufacture of butt-welded flanges. Kuz.-shtam.proizv. 5 no.4:9-11 Ap '63. (MIRA 16:4)
(Pipe flanges) (Sheet-metal work)

AMOSOV, S.B., kand. tekhn. nauk

Presses for working the ends of pipes. Mont. i spets. rab. v stroi. 23 no.11:16-17 N '61. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhnicheskikh i sanitarno-tekhnicheskikh rabot.
(Hydraulic presses) (Pipe)

GYUNTER, Nikolai Maksimovich; KUZ'MIN, Rodion Osiyevich; AMOSOV, S.I. [redacted] redaktor; DZHANELIDZE, G.Yu., redaktor; AKILOV, G.P., redaktor; VOLCHOK, K.M., tekhnicheskiy redaktor.

[Collection of problems in higher mathematics] Sbornik zadach po vysshei matematike. Pod red.S.I.Amosova i G.IU.Dzhanelidze. Izd.13-oe, perer. Moskva, Gos.izd-vo tekhniko-teoret.lit-ry. Vol.1. 1957. 282 p. (MIRA 10:11)
(Mathematics--Problems, exercises, etc.)

GYUNTER, Nikolay Maksimovich; KUS'MIN, Rodion Osipovich; AMOSOV, S.I., red.; DZHANELIDZE, G.Yu., red.; AKILOV, G.P., red.; VOLCHOK, K.M., tekhn. red.

[Collection of problems in higher mathematics] Sbornik zadach po vysshei matematike. Pod red. S.I. Amosova i G.IU. Dzhanelidze. Izd.13., perer. Moskva, Gos. izd-vo fiziko-matematicheskoi lit-ry. Vol.2. 1958. 286 p. (MIRA 11:9)
(Mathematics--Problems, exercises, etc.)

KOSHLYAKOV, Nikolay Sergeyevich, prof. [deceased]; GLINER, Erast Borisovich; SMIRNOV, Modest Mikhaylovich; DZHANELIDZE, G.Yu., prof., retsenzent; AKOSOV, S.I., prof., retsenzent; AKILOV, G.P., dots., nauchnyy red.; LUK'YANOV, A.A., tekhn. red.

[Differential equations in mathematical physics] Differentsial'nye uravneniia matematicheskoi fiziki. Pod obshchim rukovodstvom N.S.Koshliakova. Moskva, Gos. izd-vo fiziko-matem. lit-ry, 1962. 767 p. (MIRA 15:3)

1. Chlen-korrespondent Akademii nauk SSSR (for Koshlyakov).
(Differential equations) (Mathematical physics)

AMOSOV, V

A Quarter of a century at the open hearth furnace. Moscow, Foreign Languages Publ., 1951.
79 p. illus., port.

AMOSOV, V.A.

Principal factors in the conformation of fishes. Vop.ikht. no.6:55-74 '56. (MLRA 9:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut ozernogo i rechnogo rybnogo khozyaystva -- VNIORKh.
(Fishes--Anatomy)

AMOSOV, V.A.

Changes in the weight and size of fishes during fixation in formaldehyde and subsequent soaking in water. Vop. ikht. no.16:187-190 '60. (MIRA 14:4)

1. Laboratoriya ikhtiologii Gosudarstvennogo nauchno-issledovatel'skogo instituta ozernogo i rechnogo rybnogo khozyaystva.
(Fishes--Collection and preservation)

AMOSOV, V.A.

The index of specific back curvature, a new indicator of the fatness of fishes. Vop. ikht. no.17:122-139 '61. (MIRA 14:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut ozernogo i rechnogo rybnogo khozyaystva (GosNIORKh).
(Fishes—Anatomy)

AMOSOV, V.A.

Body shape and meatiness of Coregonus peled (Gmelin) in Lake Vrevo. Vop.ikht. 3 no.1:186-189 '63. (MIRA 16:2)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut ozernogo i rechnogo rybnogo khozyaystva (GosNIORKh), Leningrad.
(Vrevo, Lake—Whitefishes)

L 44233-66 EWP(e)/EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/JG

ACC NR: AR6020940 SOURCE CODE: UR/0137/66/000/002/G039/G039

AUTHOR: Meyerson, G. A.; Amosov, V. A.; Liskovich, V. A.

54
13

ORG: none

TITLE: Universal laboratory set for investigating processes of high-temperature sintering of refractory metals

14 27

SOURCE: Ref. zh. Metallurg. Abs. 2G283

REF SOURCE: Elektrotermiya. Nauchno-tekhn. sb., vyp. 45, 1965, 14-17

TOPIC TAGS: sintering, high temperature sintering, refractory metal

ABSTRACT: A laboratory set is described for sintering refractory metals and their alloys in various gaseous media and in vacuo. The set is part of the production equipment for high-temperature sintering and (welding) of refractory metals and permits the use of both direct and indirect heating of rods. V. Pryanikova. Orig. art. has: 3 figures. [Translation of abstract] [NT]

SUB CODE: 11/

Card 1/1 nT UDC: 621.726.002.5

AMOSOV, V.F.

"EM1 electric train" by M.R. Barskii, V.O. Kolesnichenko, E.S. Kanter. Reviewed by V.F. Amosov. Elek. i tepl. tiaga 3 no.3:3 of cover Mr '59. (MIRA 12:5)

1. Zamestitel' nachal'nika depo Moskva, Oktyabr'skaya doroga.
(Electric railroads--Trains)

PETROV, Viktor Nikolayevich; AMOSOV, Valentin Fedorovich; ROMANOV, I.M., inzh., retsenzent; SIDOROV, N.I., inzh., red.; KHITROVA, N.A., tekhn. red.

[Maintenance and repair of the mechanical equipment of electric railroad motor cars] Remont mekhanicheskogo oborudovaniia motor-vagonnogo podvizhnogo sostava. Moskva, Vses.izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1961. 96 p. (MIRA 14:12)
(Railroad motor cars—Maintenance and repair)

PHASE I BOOK EXPLOITATION SOV/5409

Moscow. Gosudarstvennyy soyuznyy ordena Lenina zavod. Byuro tekhnicheskoy informatsii.

Sbornik materialov po vakuumnoy tekhnike, vyp. 24. Iz opyta raboty otdela tugoplavkikh metallov (Collection of Materials on Vacuum Engineering, no. 24. From the Work Experience of the Refractory Metals Section) Moscow, Gosenergoizdat, 1960. 86 p. 600 copies printed.

Sponsoring Agency: Gosudarstvennyy soyuznyy Ordena Lenina i Ordena Trudovogo Krasnogo Znameni zavod. Byuro tekhnicheskoy informatsii.

Editorial Staff: R.A. Nilender, Factory Chief Engineer (general editing), A.G. Aleksandrov, V.D. Vladimirov, and B.I. Korolev; Ed.: I.L. Iglitsyn; Tech. Ed.: G. Ye. Larionov.

PURPOSE: This collection of articles is intended for technical personnel engaged in vacuum engineering.

Card 1/3

COVERAGE: The booklet contains articles which describe the application of vacuum techniques in various metallurgical processes, some methods of regulating the gaseous content of gas-filled tubes, and other uses made of vacuum techniques. No personalities are mentioned. References accompany most of the articles.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress

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8-3-61

AMOSOV, V.M.

Investigating the sintering of the electrolytic powder of tantalum. Sbor. mat. po vak. tekh. no.2[illegible]:5-19 '60. (MIRA 14:2)
(Sintering) (Tantalum) (Metal powders)

AMOSOV, V.M.

Production of plastic niobium from electrolytic powder. Sber. n. t. po vak. tekh. no.24:22-34 '60. (MIRA 14:2)
(Niobium) (Powder metallurgy)

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A052/A101

AUTHORS: Konstantinov, V. I., Amosov, V. M., Kholobes, Ye. A.

TITLE: The production of electrolytic tantalum, niobium and their alloys. 2nd report

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1962, 46 - 47, abstract 7G323 ("Poroshk. metallurgiya", no. 5, 1961, 42 - 52; English summary)

TEXT: Three types of electrolyzer designs with different methods of heating were tested. As a result of experiments, an optimum electrolyzer design has been developed in which the electrolyzer itself (made of Ni or nichrome) serves as a cathode, without additional heating, with a hole in the conical bottom and with a mobile graphite anode. Furthermore, the effect of the following factors was studied: the method of feeding the electrolyzer, the degree of filling the bath with the cathode deposit, the composition of electrolyte, the temperature of the process, the cathode, anode and volume current density. The purification of electrolytic Ta and Nb powders from electrolyte salts was realized by heating

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in argon at 630 - 650°C and a subsequent vacuum degasification at 1,000°C. The work of an industrial installation for production of Ti, Nb and their alloys is described. The process is carried out at ~700°C without heating from outside due to a high current density (D_c = 50 a/dm^2, D_a = 120 - 160 a/dm^2, volume current density ~130 a/dm^2). The electrolyte consists of 17.5% K_2TaF_7, 55% KCl and 27.5% KF; the bath is refilled periodically with Ta or Nb oxides or with their mixture. The technical and economic characteristics of the process and the purity of powders produced are high. For the 1st report see RZhMet, 1962, 30308.

R. Andriyevskiy

[Abstracter's note: Complete translation]

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E021/E435

AUTHOR: Amosov, V.M.

TITLE: Preparation of Plastic Tantalum From Electrolytic Powder

PERIODICAL: Tsvetnyye metally, 1961, No.6, pp.65-72

TEXT: The aim of the work was to study the basic technology of the operations in the preparation of plastic tantalum from electrolytic powder paying particular attention to the high temperature processes of vacuum refining. The effect of grinding the electrolytic powder was first investigated. The best method of grinding was found to be in a steel ball mill. After grinding, pressings were made using 6 tons/cm^2 and the strength of the pressings tested. Fig.1 shows the time (hours) of grinding (x-axis) against the particle-size-composition (%, curves 1 and 2), density (curve 3) and strength (kg/mm^2, curve 4). The optimum grinding regime was found to be grinding for 1 hour, sieving through a 0.15 mm sieve, and an additional grinding of 2 hours for the coarse fraction. This gave a mean particle size of 100 to 120 and a density of 5.7 g/cm^3. Before pressing and sintering, the amounts of carbon and oxygen in the powder must be determined.

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A slight excess of oxygen over the amount required to form carbon monoxide is required to give the best results in the final sheet. If there is insufficient or a large excess of oxygen, tantalum oxide or carbon must be added. The pressing process was investigated using pressures of 2.1 to 10.5 tons/cm^2 in a vertical hydraulic press. The pressings formed were 5 x 5 x 120 mm. The relation between density (curves 1,2) and strength (kg/mm^2, curves 3,4) and pressure (tons/cm^2) is given in Fig.3. Curves 1 and 4 are from electrolytic powder; curves 2 and 3 from powder prepared from the thermal method. Sintering investigations were carried out on mouldings pressed at 6.3 tons/cm^2, in a laboratory vacuum apparatus with direct heating of the samples by an electric current. Fig.5 shows the effect of temperature on porosity (%, 1), density (2), weight loss (mg/cm^3, 3) and specific electrical resistance (4). Fig.7 shows the effect of the temperature on the loss in the impurity content. Marked refining begins at 1600°C. The Ta + Nb content increases as the impurities are removed and reaches 99.8 to 99.85% at 2600 - 2700°C. 2600°C was chosen as the sintering temperature. The effect of sintering time is shown in Fig.8, curve 1 being the loss in weight,

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curve 2 the density, curve 3 electrical resistance and curve 4 the open porosity. After 4 or 5 hours, both the processes of densification and refining have practically finished. The recommended regimes of sintering are given in the table. Following these methods, plastic tantalum could be produced. It was capable of being rolled into sheet 0.05 mm thick and less. The impurities were not greater than carbon 0.03%, titanium 0.01% and silicon 0.004%. Iron and nickel were not detected. There are 8 figures, 1 table and 4 Soviet references.

ASSOCIATION: Moskovskiy elektrolampovyy zavod
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