CHIRULESCU, M., ing.; PLOSTINARU, D.; LARGU, Gh., corespondent; CALIS, Reghina, corespondenta; BARBALATA, St.

News. Constr Buc 16 no.775:1 14 N '64.

1. Head of Construction Site No.601, Tirgu Jiu (for Chirulescu).
2. Galati Branch of the Voluntary Editorial Office of "Constructorul" (for Barbalata).

Role of practical training. Constr Rec 17 no.?8413
15 Ja '65.

1. Labor Organization Service at Construction Site Group
Soc. Legal Issues for Housing Construction, Galati.

[illegible], Stanciu, economist; IANCU, Gheorghe; IORU, T., correspondent

New cadres for the 1965 tasks. Constr Buc 17 no.7834
9 Je '65.

BARBALATA, St., economist; ANGHEL, Nicolae, coresp.

Exchanges of experiences. Constr Bue 17 no.[illegible]420 F'65.

1. No.1 Group of Construction Sites, Regional Trust for Construction, Galati (for Barbalata).

PETRE, H., corespondent; FERARU, I., corespondent; BARBALATA, St., corespondent; CRETU, Radu, corespondent; DIMA, Dumitru, corespondent; HARMOS, Gavril, corespondent; HOTUPAN, Florian, corespondent; BAGDAZAR, Aurel, corespondent

May 1st, the builders report to the party. Constr Buc 17 no.799:1,3 30 Ap '65.

BARBALIC, Ivo

Overseas transit. Medun transp 9 no.5:326-327 My '63.

1. Generaldirektor der Hafenunternehmensgemeinschaft in Rijeka.

BARBALIC, Lj.

Distribution of epiphytic lichens in the territory of Zagreb.
Higijena, Beogr. 5 no.6:388-392 1953.

1. Zavod za farmaceutsku botaniku Farmaceutskog fakulteta u Zagrebu.
(LICHENS
distribution in Yugosl.)

BARBALIC, Ljubica

Considerations on the effect of colchicine on certain medicinal plants. Acta pharm.jugosl. 5 no.2:83-90 '55.

1. Institut fur Pharmazeutische Botanik, Pharmazeutische Fakultat, Zagreb.

(COLCHICINE, effects,
on medicinal plants)
(PLANTS,
medicinal, eff. of colchicine)

BARBALIC, R.

Zvonimir Jelinovic's Borba za jadranske pruge i njeni ekonomski ciljevi (The Struggle for Adriatic Railroads and Its Economic Goals); a book review, p. 135.

POMORSTVO. Rijeka, Yugoslavia. (Publication on shipbuilding and merchant marine; with English and French summaries. Includes a supplement; Bilten Pomorstva o radu Sindikata radnika i sluzbenika pomorske privrede Jugoslavije, information bulletin on the activity of the Union of Workers and Employees in the Maritime Economy of Yugoslavia.) Vol. 13, no. 4, 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 9, Sept. 1959.

Uncl.

BARBALIC, R.

Our famous sailboats; the bark Lealta.

POMORSTVO. Rijeka, Yugoslavia. (Publication on shipbuilding and merchant marine; with English and French summaries. Includes a supplement: Bilten Pomorstva o radu Sindikata radnika i sluzbenika pomorske privrede Jugoslavije, information bulletin onthe activity of the Union of Workers and Employees in the Maritime Economy of Yugoslavia.) Vol. 13, no. 4, 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 9, Sept. 1959.

Uncl.

BARBALIS, P.; ZEMITE, A.; HEILANDE, A., red.

[Improvement and fertilization of soils] Augsnu ielabosana un mesloşana. Riga, Latvijas Valsts izdevn., 1964. 237 p. [In Latvian] (MIRA 18:3)

BARBALIS, P. D. In Latvian

BARBALIS, P. D. -- "Biological Processes of Decomposition of Lupine and Serradella in the Soil and Their Influence on the Harvest of Rye." Latvian Agricultural Academy, 1953. In Latvian (Dissertation for the Degree of Candidate of Agricultural Sciences)

SO: Izvestiya Ak. Nauk Latviyskoy SSR, No. 9, Sept., 1955

BARBALIS, PETERIS DONATA

"d. Balta amolina audzesana un izmantosana. Riga, Latvijas valsts izdevnieciba, 1957. 54 p. (Growth and use of sweet clover)."

DA Not in DLC

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

CONTENT : USSR
CATEGORY : Soil Science. Organic Fertilizers.

[illegible] : RZhBiol., No. 3 1959, No. 10705

[illegible] : Berbelis, V. D.
[illegible] :
TITLE : Application of Green Manure in Latvian SSR

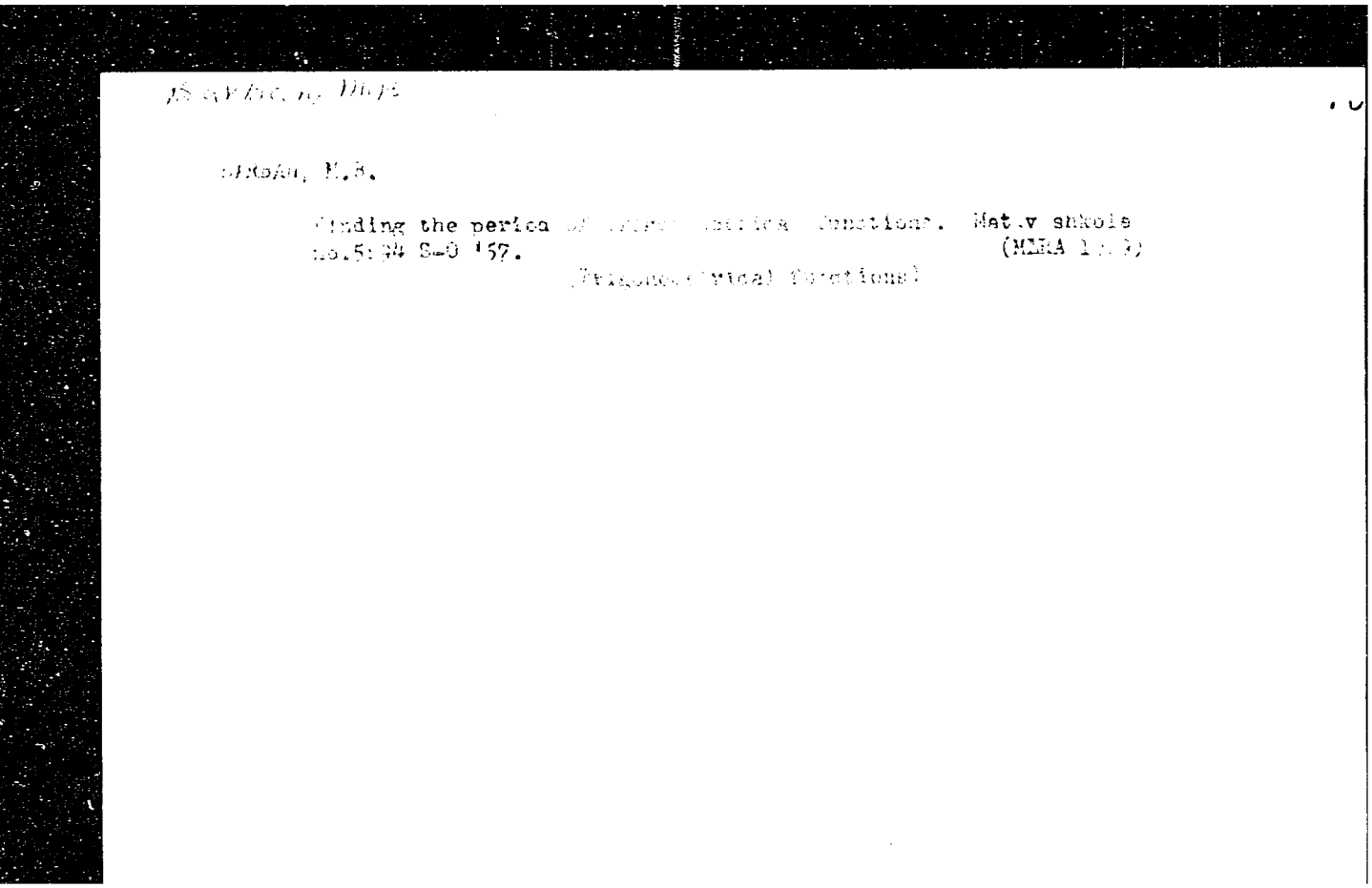
[illegible] : Vestn. s.-kh. nauki, Lyst, No. 3, 141-144

[illegible] : Experiments conducted at Tiraynemskaya [illegible] at Priverulikskaya [illegible] the experimental farm "Lubanskiy" showed that in conditions of Latvian SSR, the best crops [illegible] are on heavy soils are annual lupine, [illegible] sown in early [illegible] - perennial lupine and on [illegible] turf-carbonate soils - white melilot. -- N. N. Nelidova

[illegible] 1/1

BARBALIS, Petr Donatoyich, kand.sel'skokhoz.nauk; YAKOBSONS, Yuliy Oskarovich, kand.biolog.nauk; KOREYSHO, Ye.G., red.; PROKOF'YEVA, L.N., tekhn.red.

[White sweet clover in the non-Chernozem zone] Belyi donnik v nechernozemnoi polose. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 52 p. (MIRA 13:11)
(Sweet clover)



[illegible] M.B.

[illegible]finding the perio[illegible] [illegible] functions. Mat.v sbkoln no.5:94 S-O '57. (MIRA 1[illegible])

(Trigonometrical functions)

BARBAN, M.B.

Selberg's sieve as applied to certain evaluations from below.
Dokl.AN Uz.SSR no.3:7-8 '59. (MIRA 12:7)

1. Sredneaziatskiy gosudarstvennyy universitet im. V.I.Lenina.
Predstavleno akademikom AN UzSSR T.A.Sarymsakovym.
(Sequences (Mathematics))

S/166/60/000/004/012/012XX
C 111/ C 333

AUTHOR: Barban, M. B.

TITLE: Power- and Trigonometric Series of Analytic Functions of an Integer Argument

PERIODICAL: Izvestiya Akademii nauk Uzbekskoy SSR, Seriya fiziko-matematicheskikh nauk, 1960, No. 4, pp. 44-51

TEXT: Lemma 1: If

$$f(z) = \sum_{0}^{\infty} a_n z^n$$

is holomorphic in the circle of radius R and if on the periphery of the circle there lie only poles, where only one pole of highest order k is existing, then it is

$$(2) \qquad \lim_{n \to \infty} \frac{|a_n| R^n}{n^{k-1}} = M \neq 0; \; M = \text{const.}$$

Let the domain Π_1 be the set of the integer points of the plane $z = x + iy$ for which $|x| = |y|$. The set of the integer points for which $\max(|x|, |y|) \leqq r$ is called the square of radius r. The set of the points for which $\max(|x|, |y|) = r$ is called square boundary of radius r.

Card 1/5

S/166/60/000/004/012/012XX
C 111/ C 333

Power- and Trigonometric Series of Analytic Functions of an Integer Argument

Theorem 1: The domain of the absolute convergence of the series

$$(3) \quad \sum_{0}^{\infty} a_n z^{(n)}$$

is the square of radius r, and beyond it eventually points of Π_1. Here it is

$$(5) \quad r = \begin{cases} [\alpha_0] & , \text{ if } \alpha_0 \text{ non-integer} \\ \alpha_0 & , \text{ if } \alpha_0 \text{ integer and (4) for } \alpha = \alpha_0 \text{ converges} \\ \alpha_0 - 1 & , \text{ if } \alpha_0 \text{ integer and (4) for } \alpha = \alpha_0 \text{ diverges.} \end{cases}$$

Here α_0 is the abscissa of the absolute convergence of the series

$$(4) \quad \sum_{0}^{\infty} \frac{a_n n!}{2^n} \, n^{\alpha - 1}$$

Card 2/5

S/166/60/000/004/012/012XX
C 111/ C 333

Power- and Trigonometric Series of Analytic Functions of an Integer Argument

Let π_2 be the set of the integer points for which $|y| = |x \pm 1|$. The set of the integer points for which $y = r$, $|x| \leqq r$ is called upper side of the square of radius r. Lower, left and right sides are similarly defined. It is assumed to correspond:

the series $\sum_0^\infty i^n \frac{a_n n!}{2^n} n^{\alpha-1}$ to the upper side

the series $\sum_0^\infty (-1)^n \frac{a_n n!}{2^n} n^{\alpha-1}$ to the left side

the series $\sum_0^\infty (-i)^n \frac{a_n n!}{2^n} n^{\alpha-1}$ to the lower side

the series $\sum_0^\infty \frac{a_n n!}{2^n} n^{\alpha-1}$ to the right side.

Card 3/5

S/166/60/000/004/012/012XX
C 111/ C 333

Power- and Trigonometric Series of Analytic Functions of an Integer Argument

Theorem 2: In all points of a side of a square of radius α which do not belong to π_1 and π_2 there converge and diverge simultaneously the series corresponding to this side and the series (3).

Theorem 3 says that the considered power series can be multiplied term-by-term in the sense of N. A. Fuksman (Ref.4), where the radius of the square of the absolute convergence of the obtained product series is not smaller than the smallest radius of convergence of the factors.

Starting from the analogue of the exponential function of N. P. Romanov (Ref.1) the author defines the sine and cosine by Euler's formulas

$$\sin(c,z) = \frac{E(c,iz) - E(c,-iz)}{2i}, \quad \cos(c,z) = \frac{E(c,iz) + E(c,-iz)}{2}$$

Theorem 4: The series $\sum_{n=0}^{\infty}{}' a_n \cos(n, z + z_0)$ converges simultaneous-

Card 4/5

S/166/60/000/004/012/012XX
C 111 C 333

Power- and Trigonometric Series of Analytic Functions of an Integer Argument

ly with $\sum_{n=0}^{\infty}{}' a_n$. The series $\sum_{n=0}^{\infty}{}' \sin(n, z + z_0)$ converges simultaneously with $\sum_{n=0}^{\infty}{}' \frac{a_n}{n}$ (except the case $z = -z_0$, where the sin-series always converges).

The prime in $\sum'$ denotes that the term n = 2 is omitted.

There are 4 references: 2 Soviet, 1 American and 1 Hungarian.

ASSOCIATION: Sredneaziatskiy n. - i. gidrometeorologicheskiy institut (Central Asian Scientific Hydrometeorological Research Institute)

SUBMITTED: May 29, 1959

Card 5/5

GEL'FAND, I.M. (Moskva); DYUDENI, N.Ye. (SShA); KIRILLOV, A.A. (Moskva); PODSYPANIN, V. (Tula); TER-MKRTACHAN, M. (Yerevan); KUZ'MIN, Yu.I. (Moskva); VEYL', G. (SShA); FADDEYEV, D.K. (Leningrad); ARNOL'D, V.I. (Moskva); IVANOV, V.F. (San-Karlos, Kaliforniya, SShA); GRAYEV, M.I. (Moskva); LEBEDEV, N.A. (Leningrad); LOPSHITS, A.M. (Moskva); ZHITOMIRSKIY, Ya.I.; MITYAGIN, B.S. (Moskva); SKOPETS, Z.A. (Yaroslavl'); PUANKARE, A. (Frantsiya); GAVEL, V.V. (Brno, Chekhoslovakiya); SOLOMYAK, M.Z. (Leningrad); LEVIN, V.I. (Moskva); BARBAN, M.B. (Tashkent); FRIDMAN, L.M. (Tula)

Problems. Mat. pros. no.5:253-260 '60. (MIRA 13:12)
(Mathematics--Problems, exercises, etc.)

[illegible] SSR. Ser. fiz.-mat. nauk no.5 [illegible]
([illegible] 14.1[illegible])

[illegible] imeni V.I. Romanovskogo [illegible] UzSSR.
([illegible], Theory of)

BARBAN, M. B. (Tashkent, SSSR)

Normal order of additive arithmetic functions on a set of "displaced" prime numbers. Acta mat Hung 12 no.3/4:409-415 '61.

1. Predstavleno P. Turanom.

BARBAN, M.F.

Calculating the maximum range of an avalanche. Izv.AN Uz.SSR.Ser. fiz.-mat.nauk 6 no.1:74-80 '62. (MIRA 15:4)

1. Institut matematiki imeni V.I.Romanovskogo AN UzSSR.
(Avalanches)

BARBAN, M.B.

IU.V.Linnik's "big sieve" and a limit theorem for the number of classes of ideals of an imaginary quadratic field. Izv.AN SSSR.Ser.mat. 26 no.4:573-580 Jl-Ag '62. (MIRA 15:8)
(Ideals (Algebra)) (Limit theorems (Probability theory))

BARBAN, M. B.

Letter to the editor. Izv. AN Uz.SSR. Ser. fiz.-mat. nauk 7 no.1:82-83 '63. (MIRA 16:4)

1. Institut matematiki imeni V. I. Romanovskogo AN UzSSR.

(Calculus)

BARBAN, M.B.

Analogies of Titchmarsh's divisor problem. Vest. LGU. 18 no.19:5-13 '63. (MIRA 16:11)

BARBAN, M.B.

"Compactness" of the zeros of a Dirichlet L-series problem of the complexity of primes and "almost" primes. Dokl. AN Uz. SSR 20 no.1:9-10 '63. (MIRA 16:6)

1. Institut matematiki im. V.I.Romanovskogo AN Uzbekskoy SSR. Predstavleno akademikom AN Uzbekskoy SSR T.A.Sarymsakovym.
(Numbers, Prime)

BARBAN, M.B. (Tashkent)

"Density" of zeros in Dirichlet L-series and the problem of the addition of primes and "almost primes." Mat. sbor. 61 no.4:418-425 Ag '63. (MIRA 16:9)

BARBAN, M.B.

Note on the author's paper "New applications of Yu.V. Linnik's "big sieve." Teor. veroiat. i mat. stat. no.1:130-133 '64.
(MIRA 18:6)

BARBAN, M.B.; LINNIK, Yu.V.; CHUDAKOV, N.G.

Distribution of primes in short progressions mod p^n.
Dokl. AN SSSR 154 no.4:751-753 F '64. (MIRA 17:3)

1. Leningradskoye otdeleniye Matematicheskogo instituta im. V.A. Steklova AN SSSR. 2. Chlen-korrespondent AN SSSR (for Linnik).

BARBAN, M.B.; VINOGRADOV, A.I.

Number-theoretical basis of the probability theory of numbers.
Dokl. AN SSSR 154 no. 3:495-496 Ja '64. (MIRA 17:5)

1. Institut matematiki im. V.I.Romanovskogo AN UzbSSSR i Leningradskoye otdeleniye Matematicheskogo instituta im. V.A.Steklova AN SSSR. Predstavleno akademikom I.M.Vinogradovym.

BARBAN, M.B. (Tashkent, SSSR)

Number of divisors of "displaced" twin prime numbers. Acta mat Hung 15 no.3/4:285-288 '64.

DARBAN, M.B.

An analytic lemma of IU.V.Linnik. Izv. AN Uz.SSR.Ser.fiz.-mat.nauk 8 no.4:5-12 '64. (MIRA 18:3)

Shifting the zero boundary of L-functions and its effect on their "density." Ibid.:87-88

1. Institut matematiki imeni Romanovskogo AN UzSSR.

BARBAN, M.B.

Multiplicative functions from $\mathbb{Z}$ R-uniformly distributed sequences. Izv. AN Uz. SSR. Ser. fiz.-mat. nauk 8 no.6:13-19 '64. (MIRA 18:3)

1. Institut matematiki imeni Romanovskogo AN UzSSR.

BARBAN, I.S.

Correlation between the contents of capsular forms in the cultures of Weissensee and Park-Williams 8 strains of Corynebacterium diphtheriae and their toxin formation; electron-microscopic study. Zhur. mikrobiol., epid. i immun. 41 no.3:144 Mr '64. (MIRA 17:11)

1. Permskiy meditsinskiy institut i Permskiy institut vaktsin i syvorotok.

GURINOV, V.; SMETANKIN, S.; BARBANAKOV, V. (g.Taldy-Kurgan)

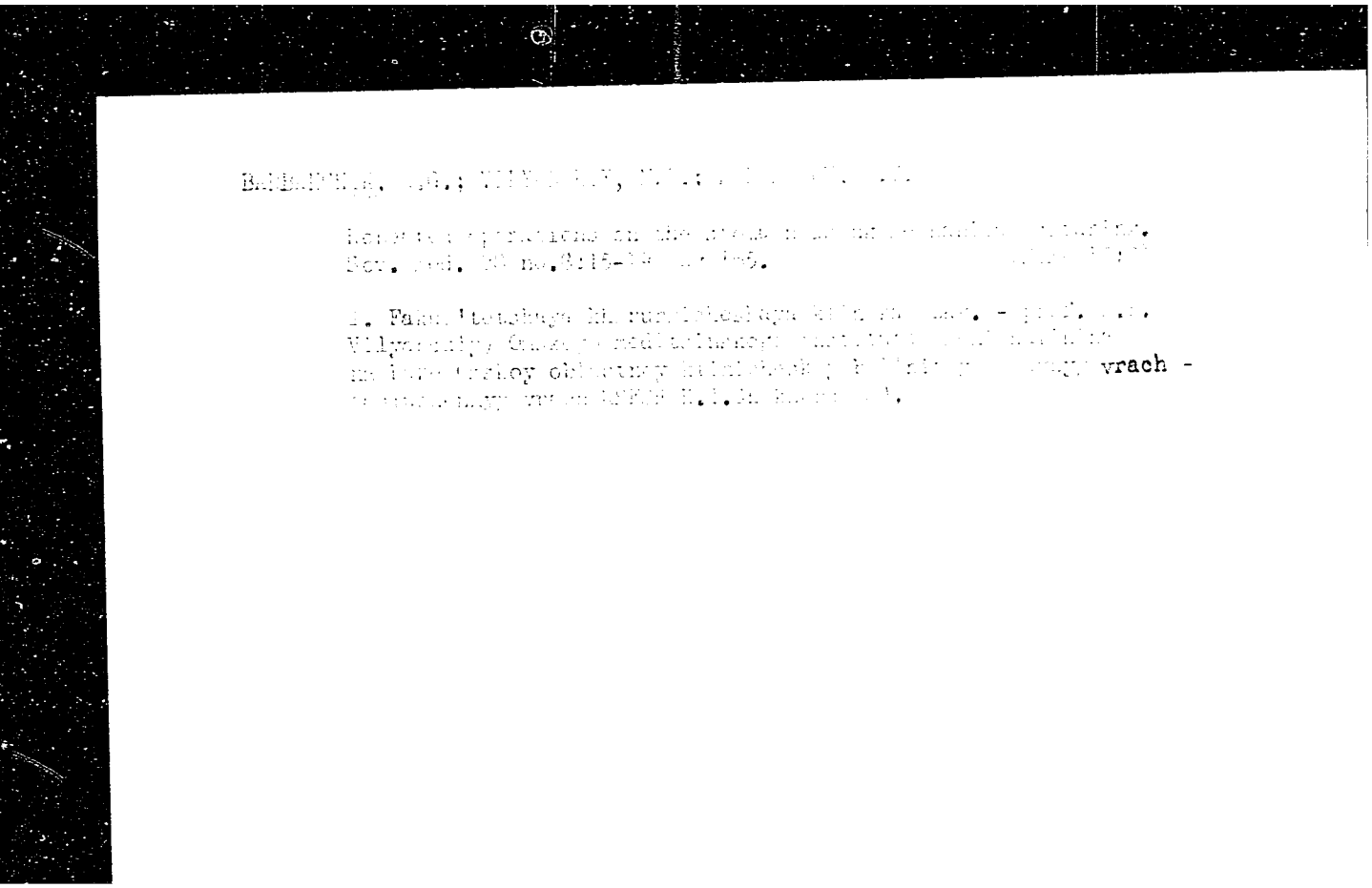
To the starting lines of our Spartakiada! Kryl.rod. 11 no.8:8 Ag '60. (MIRA 13:8)

1. Zamestitel' nachal'nika aerokluba po politicheskoy chasti, g.Bryansk.
(Aeronautics)

BARBANCHIK, A.G.; SIVERTSEV, Yu.Ya.

Immediate and late results of combined resections in gastric cancer. Kaz. med. zhur. no.2:37-38 Mr-Ap '62. (MIRA 15:6)

1. Fakul'tetskaya khirurgicheskaya klinika (zav. - M.P. Vilyanskiy, nauchnyy rukovoditel' onkologicheskogo otdeleniya - dotsent A.I. Kotserov) Omskogo meditsinskogo instituta imeni M.I. Kalinina, na baze Oblastnoy klinicheskoy bol'nitsy (glavnyy vrach - K.I. Shekhurdina).
(STOMACH--CANCER) (STOMACH--CANCER)



[illegible], G. F.

"The Blood Vessels and Heart in Brucellosis." [illegible], [illegible] State Medical Inst imeni M. I. Kalinin, Omsk, 1952. (KL, No 8, Feb 55)

SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

BARBANCHIK, S. F.

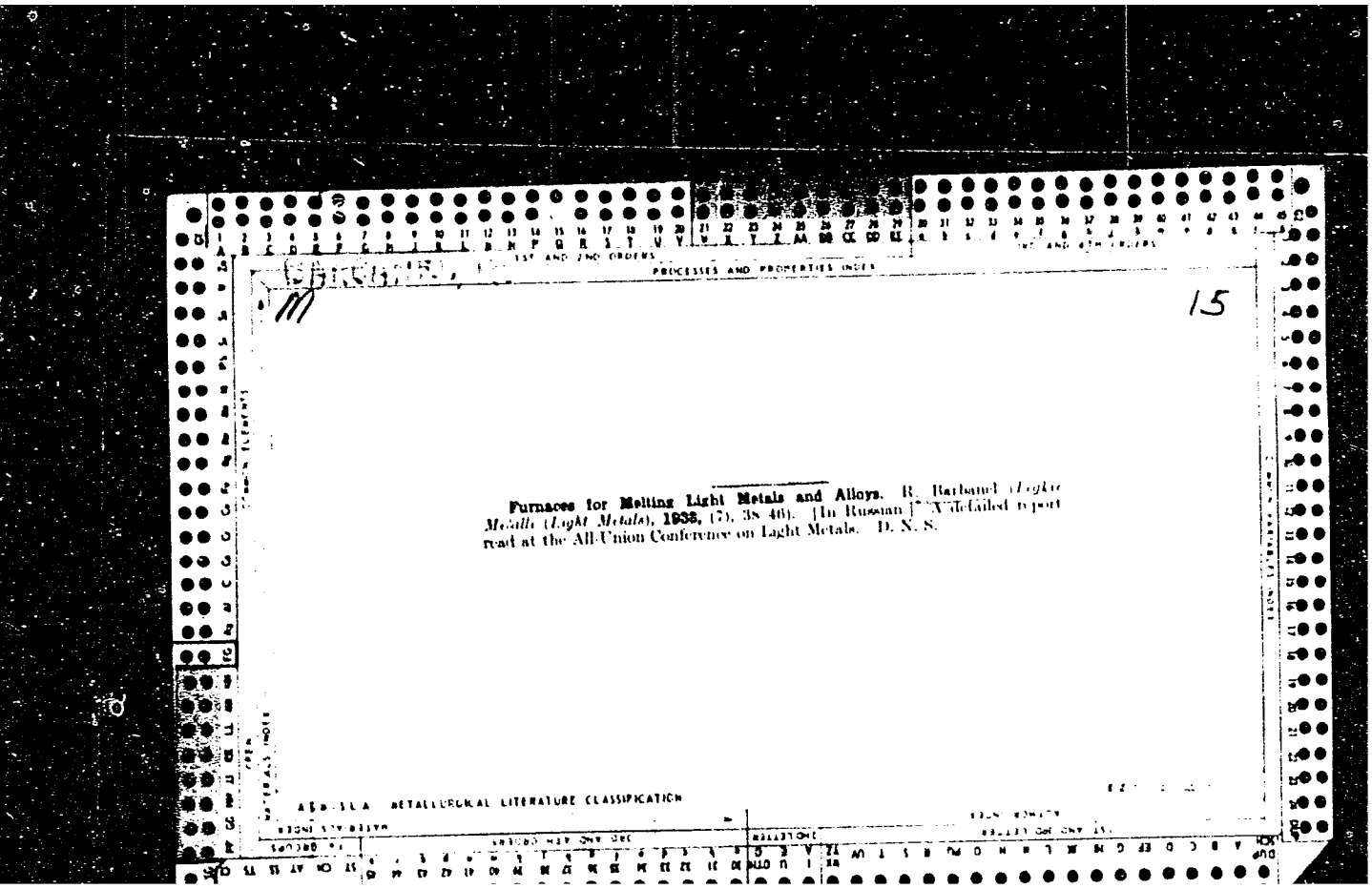
3645. BARBANCHIK, S. F. Chernyy Grib I Yego Lechebnoye Svoystva. Crnsk, Obl. Kn. Izd., 1954. 55s. 20 cm. 5,000 ekz. 20k.--(55-1470): 615.32

SO: Knizhnaya Letopis, Vol. 1. 1955

BARBANCHIK, Gerbert Fritsevich

[Tea fungus and its medicinal properties] Chainyi grib i ego lechebnye svoistva. 2.izd. Oblastnoe knizhnoe izd-vo, 1957. 52 p. (MIRA 12:2)

(ANTIBIOTICS) (FUNGI)



PROCESSES AND PROPERTIES INDEX

15

Furnaces for Melting Light Metals and Alloys. R. Barbaud (*Legkie Metally* (*Light Metals*), **1938**, (7), 38–46). [In Russian.] Valedictory report read at the All-Union Conference on Light Metals. D. N. S.

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

Barbanel' D G

137 1957 [illegible]

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 1 p 367 (USSR)

AUTHORS: Morachevskiy, Yu V., Barbanel', D G.

TITLE: On the Method of Colorimetric Determination of Small Quantities of Antimony in Copper-base Alloys (K metodike kolorimetricheskogo opredeleniya malykh soderzhaniy sur'my v splavakh na mednoy osnove)

PERIODICAL: Uch. zap. LGU, 1957, Nr 211, pp 62-75

ABSTRACT: A survey of methods for the determination of Sb in Cu-base alloys. Sb is separated from accompanying elements by means of co-sedimentation in which $Fe(OH)_3$, MnO_2, Ag and H_2SnO_3 are employed as collectors. Less frequently employed is the method of extraction of various Sb complexes by means of organic solvents as well as the method of eliminating the Sb by means of halides. Colorimetric methods of determination of Sb are divided into three groups: formation of a colored iodide complex (SbI_4^-), compound of Sb with rhodamine and methyl violet (RM), and the method of employing antimony to reduce a phosphorous-molybdenum complex until molybdenum blue is obtained. Most accurate of the above

To the Method of Colorimetric Determination (cont.)

Sensitivity of the method is 0.1 γ Sb in 1 ml. As for the preliminary separation of Sb, the Authors have reached the following conclusions: 1) in the sedimentation process of Sb, the minimum amount of the collector material, MnO_2-Ag, may be reduced four fold as compared with the technique indicated in GOST. On conversion to MnO_2, only 0.035 g are needed; 2) in the process of co-sedimentation of Sb with MnO_2-Ag a small amount of Ce is also deposited which results in a weakening of the $SbCl_6$ coloration; 3) the method of separation employing metastannic acid, which is colorimetrically determined with the aid of RM, produced excellent results. The accuracy of the method is approximately 0.0002 percent.

V. N.

1. Antimony-Determination 2. Colorimetry-Applications

Card 2/2

BARBANEL', D.G.; VERONINA, N.I.

Sorption of antimony by ion exchangers and its separation from copper. Uch. zap. LGU no.297:20-25 '60. (MIRA 13:11)
(Antimony)

L 36260-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/GS

ACCESSION NR: AT5007822 S/0000/64/000/000/0096/0100

16
B+1

AUTHOR: Barbanel', D. G.; Chang, Hua-li

TITLE: Extraction of antimony with ethyl acetate and its separation from copper

SOURCE: Leningrad. Universitet. Metody kolichestvennogo opredeleniya elementov (Methods for the quantitative determination of elements). Leningrad, Izd-vo Leningr. univ., 1964, 96-100

TOPIC TAGS: antimony separation, copper separation, ethyl acetate, copper alloy analysis, colorimetric analysis

ABSTRACT: The extraction of Sb^{3+} and Sb^{5+} from hydrochloric acid solutions with ethyl acetate was studied experimentally to develop an analytic method for determining Sb in copper alloys. Solutions containing 100 γ/ml Sb were extracted with ethyl acetate, reextracted with H_2SO_4, and Sb was determined colorimetrically by a published method (Uch. zap. LGU, 211, vyp. 15, 62, 1957). The maximum extraction of Sb^{3+} and Sb^{5+} was achieved from 3 N and 7 N HCl solutions, respectively, and 1-4 N H_2SO_4 solutions gave quantitative reextraction to the aqueous phase. Only trace amounts of Cu were extracted with ethyl acetate. Determination

Card 1/2

L 36260-65
ACCESSION NR: AT5007822

of Sb in an alloy containing 62.04% Cu, 37.87 Zn, 0.024% Fe, 0.010% P, 0.010% Pb, and 0.0007-0.0013% Sb (according to various analytic results), gave reproducible results of 0.0009-0.0010% Sb. Orig. art. has: 2 figures and 3 tables.

ASSOCIATION: none

SUBMITTED: 28Sep64 ENCL: 00 SUB CODE: IC ,GC

NO REF SOV: 005 OTHER: 001

Card 2/2

L 36259-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG/GS
ACCESSION NR: AT5007821 S/0000/64/000/000/0092/0095 15

AUTHOR: Barbanel', D. G.; Ryzhkova, G. G. B+1

TITLE: Sorption of indium on anion exchange resin EDE-10P from hydrochloric acid solutions

SOURCE: Leningrad. Universitet. Metody kolichestvennogo opredeleniya elementov (Methods for the quantitative determination of elements). Leningrad, Izd-vo Leningr. univ., 1964, 92-95

TOPIC TAGS: indium separation, column chromatography, anion exchange resin, semiconductor analysis

ABSTRACT: The sorption of indium on the Cl form of anion exchange resin EDE-10P was studied experimentally to develop analytic methods for semiconductors containing In, Sn, Cd and Sb. The dependence of the distribution coefficient on

SOV/123-59-12-47281

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 12, p 185 (USSR)

AUTHORS: Sakharov, M.V., Barbanel', R.I., Solov'yeva, V.V., Gurevich, Ye.I.

TITLE: The Effects of Modification on the Heat Resistance of the D16 Aluminum Alloy

PERIODICAL: Sb. nauchn. tr. nauchno-tekhn. o-va tsvetn. metallurgii. Mosk. in-t tsvetn. met. i zolota, 1958, Nr 29, pp 72-83

ABSTRACT: The authors state the results of a comparative investigation of the properties of the D16 alloy, non-modified and modified with Ti (0.03% in the form of Al-alloy with 5% Ti) in bars of 385 mm in diameter, manufactured by the semi-continuous casting method. The alloy was tested in the following states: cast without heat treatment, after diffusion annealing (at 495°C for 12 hours), after stabilization (at 300°C for 100 hours), after pressing, hardening (at 500°C) and annealing. The tests on durable strength

The Effects of Modification on the Heat Resistance of the D16 Aluminum Alloy

in the direction from the periphery to the center of the bars, which, evidently, is connected with the distribution of shrinkage defects. The modification with Ti, resulting in a considerable breaking up of the grains, led at the same time to a drop in DS of the cast crude alloy. The DS of the pressed and heat-treated alloy slightly increased as a result of modification. 7 figures, 4 references.

O.S.M.

Card 2/2

BARBANEL', R., inzh.; STOKLITSKIY, L., inzh.

Aluminum elements for heat exchangers. Khol. tekh. 35 no.4:66-67 Jl-Ag '58. (MIRA 11:10)
(Heat exchangers) (Aluminum)

25(1) SOV/115-59-1-3/15

AUTHOR: Barbanel', R.I., Martynov, I.G., Lebedev, B.F.

TITLE: Flat-Rolled Aluminum Pipes (Ploskosvorachivayemyye alyuminiyevyye truby)

PERIODICAL: Avtomaticheskaya Svarka, 1959, Nr 1, p 18-24 (USSR)

ABSTRACT: This article reports on experience in the production and assembly of flat-rolled aluminum pipes by methods worked out by the Experimental Design Office and the Institute of Electric Welding imeni Ye.O. Paton. The new technological process includes the semi-uninterrupted casting of round, hollow, thick-side ingots with an inner diameter equal to the diameter of the pipes to be cast. The inner surface is smeared with spindle oil and talc. The ingot is heated and rolled into a slab twice as thick as the future pipe. Surplus material on the edges is cut off, and the slab is rolled up, and is ready for use. A large consignment of pipes was prepared out of aluminum AD-1. The ingots were 7 m long, had an inner diameter of 150 mm, an outer diameter 290 mm. They were cut into pieces 2000-2500 mm in length, for the preparation

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of 6-8m thick and 45-47 m long slabs. When blown out under a pressure of 8 atm, the slab takes an almost round shape. The breaking pressure for pipes with 4 mm thick sides is 29-32 atm, with 3 mm sides it is 19-23 atm. In order to secure the pipe's strength, its edges must be 2-2½ times stronger than the sides. The rolled aluminum piece had the following qualities: breaking point 10-16 kg/mm^2; flow limit 7.5-14 kg/mm^2; relative stretchability 5-24 %. According to SU-70 of the Glavneftemontazhu (Main Directorate for Oil Installations), the laying of such aluminum pipes is considerably easier and cheaper than that of regular steel pipes. It was found out that such uninsulated pipes tested well, but when used in alkaline ground, the pipes must be insulated on the outside. This method was worked out by I.G. Martynov, R.I. Barbanel', P.A. Kolpakov, and L.I. Stoklitskiy. The assembly work was carried out by B.F. Lebedev with help from M.I. Dayubenko, I.F. Filimonova and

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25(1) SOV/129-59-1-3/15
Flat-Rolled Aluminum Pipes

A.D. Ivanov. There are two sets of photos, one diagram, one table and six Soviet references.

ASSOCIATION: Opytno-konstruktorskoye byuro moskovskogo oblastnogo sovnarkhoza (Experimental Designing Office of the Moscow oblast' Council of National Economy; Institut elektrosvarki imeni Ye. O. Patona, AN USSR (The Institute of Electric Welding imeni Ye.O Paton of AS UkrSSR).

SUBMITTED: October 22, 1958

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1.1200

S/136/60/000/012/009/010
E193/E183

AUTHORS: Barbanel', R.I., and Yermanok, M.Z.

TITLE: Investigation of Stresses During Extrusion of Ribbed Aluminium Alloy Components

PERIODICAL: Tsvetnyye metally, 1960, No. 12, pp. 74-80

TEXT: For both technical and economic reasons, extrusion is widely employed in the manufacture of ribbed components used in the aircraft and allied industries. The cross-section of some components of this type is illustrated below. The object of the present investigation was to determine the parameters required for analytical determination of the extrusion pressure for the case of a non-cylindrical (rectangular) container and experimentally to check the validity of the theoretical formula derived. The extrusion pressure, P, for the case of a rectangular container, can be calculated from a formula due to Professor I.L. Perlin (Ref. 2).

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Fig. 1

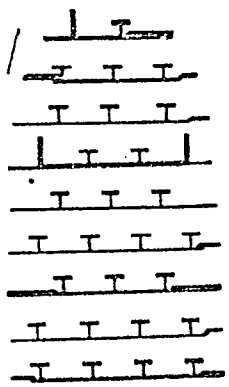

Рис. 1.

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For a rectangular container with radiused edges, which was used by the present authors, this formula becomes:

$$P = 2\left[\pi r + (a - 2r)\right] L_{s\ell} \cdot K_{kp} + \left[\pi r^2 + (a - 2r) \cdot 2r\right] \cdot \ln \mu \cdot \frac{1}{\sin \alpha} \cdot (K_{m.c} + \beta \cdot \alpha \cdot S_{d.c}) + F_{k.p} \cdot \mu \cdot f_N \cdot S_{d.k} \qquad (1a)$$

The unknown quantities in this formula include K_{kp} (stress, kg/mm^2, due to friction between the extruded metal and the container walls), $S_{d.c}$ (the mean value of the resistance to deformation, kg/mm^2, of the extruded metal in the deformation region), and $S_{d.k}$ (resistance to deformation of the extruded metal after leaving the deformation region). However, the present authors show that the formula given above can be used only for the values of S_d (resistance to deformation in the various cross-sections of

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the deformation region) known. These can be determined from the true stress/strain diagram constructed from experimentally determined load/strain curves for a given material. However, the values of S_d, determined in this manner, can be used in formula (1a) only if the duration of the deformation process during the tensile tests is equal to the duration, τ_d, deformation during extrusion. To calculate τ_d it is necessary to know the volume, V, of the deformation region of the extruded component, and the present authors derived a formula for V for the case of thin strip extruded from a rectangular container:

$$V = \frac{5}{6} \pi b_1^2 \cdot a_2 \qquad (2a)$$

where a_2 is the width of the extruded strip and b_1 is the thickness of the extrusion billet. All other relevant parameters of the extrusion process and the tensile tests being known, the present authors were able to calculate the correct rate of strain

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to be used during tensile tests, from the results of which the true stress/deformation diagrams were constructed for the aluminium alloy Д16 (D16), deformed at 350, 400 and 450 °C. Unfortunately, only values of $S_{d.H}$ (resistance to deformation of metal that has just entered the deformation region) could be determined directly from these diagrams. It was found, however, by application of the method of minimum squares, that the diagrams could be represented with sufficient degree of accuracy in the form of straight curves, from which the values of $S_{d.c}$ and $S_{d.k}$ could be found by extrapolation. In addition, the values of $S_{d.c}$ were calculated with the aid of formulae derived by several other workers. Since these calculations gave widely differing results, it was decided to check experimentally which of the formulae used gave the most accurate results. To this end, the alloy D16 was extruded in the form of rod, with the aid of a cylindrical container and a conical die (α = 65°), the extrusion pressure, P, was measured,

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and from the values of P, the magnitude of $S_{d.c}$ was determined for various extrusion conditions. The values of $S_{d.c}$ obtained in this manner were much lower than any calculated from the true stress/deformation diagrams, approaching most closely those obtained with the aid of a formula due to I.L. Perlin (Ref.6). In the final stage of the present investigation, the magnitude of P in extruding three types of ribbed components was determined experimentally. The values obtained were considerably lower than those calculated with the aid of formula (1a), in which the values of $S_{d.c}$ and K_{kp}, determined from data on extrusion of rods from a cylindrical container, were used. This discrepancy was found to be due to the fact that the calculated values of K_{kp} were considerably higher than its true magnitude. When correct values of K_{kp} (determined directly from data on extrusion of ribbed components) were used in formula (1a), the difference

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between the calculated and factual magnitude of P was only 21%. The general conclusion reached was that if the magnitude of $S_{d.c}$ and K_{kp} for a given alloy is determined experimentally, the extrusion pressure can be calculated with sufficient accuracy with the aid of formula (1a).
There are 5 figures, 4 tables and 8 Soviet references.

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S/806/62/000/003/018/018

AUTHOR: Barbanel', R. I.

TITLE: The heating in air-convection furnaces and properties of quench-hardened intermediate aluminum-alloy products.

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Issledovaniye splavov tsvetnykh metallov. no.3. 1962, 204-212.

TEXT: The paper examines the furnace-design features required to fulfill the prime process requirement, namely, an accurate maintenance of a desired temperature (T) regime, in forced-draft electric furnaces used for the pre-quench heating of Al-alloy parts. (1) Longitudinal T gradient. Elementary considerations show that an appreciable longitudinal T gradient is created by the conductive heat losses through the furnace walls; an arrangement is proposed in which the hot air flows in a narrow space between the wall and an inner duct and then returns in counterflow through the inner duct. Other heat losses are due to leakage, primarily inward leakage of cold air upstream of the blowers. Optimal switching arrangements are listed (triangle-star, parallel-in-series, double-star-triangle) to obtain the most accurate possible T regulation in a furnace. (2) The heating and cooling of convection furnaces. Convection furnaces afford a slower heating rate than saltpeter baths, because the heat-transfer coefficient from air to metal is small, even with elevated airspeeds. The increased heating time may result in unfavorable

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recrystallization and diffusion processes, for example, in cladded sheet material or in hot-extruded parts that depend on the additional strength afforded by the press effect. Some time saving and improvement in efficiency may be obtained by suitable design of speedy transportation of heated parts to the quenching apparatus. (3) Quality of parts pre-quench-heated in convection furnaces. Thin parts are substantially weakened in 2 hrs of heating, more so in 4 hrs, when practically the entire press-effect is lost. In thick parts the press-effect is more persistent. The heating time depends on both the thickness of the parts and the total charge. The tensile strength of the Д16 (D16) alloy is about the same in air heating and saltpeter-bath heating, but air heating lowers the yield limit of the material by 1 to 1.5 units, which may be attributed to an increase in grain size. In the B95 (V95) alloy air heating improves both the strength and the plasticity characteristics, provided the transportation to the quenching bath and quenching rate itself are accomplished at very high speed. To ensure unimpaired corrosion resistance of air-heated parts, it is important that the quenching solution contain 0.2-0.25% potassium bichromate as a degreaser. The intercrystalline-corrosion tendency is much reduced in air-heated parts as compared with saltpeter-bath-heated parts, especially if the quench-immersion rate is increased from 0.6 to 0.9 m/sec. The same applies to stress-corrosion cracking. There are 4 figures; no tables or references.

ASSOCIATION: None given.

Card 2/2

ACCESSION NR: AP4037201 S/0125/64/000/005/0080/0082

AUTHOR: Kirpa, I. G. (Engineer, Moscow); Barbanel', R. I. (Candidate of technical sciences, Moscow); Stoklitskiy, L. I. (Engineer, Moscow)

TITLE: Experience with manufacturing heat exchangers by cold roll welding

SOURCE: Avtomaticheskaya svarka, no. 5, 1964, 80-82

TOPIC TAGS: welding, aluminum welding, roll welding, cold roll welding, aluminum evaporator welding, aluminum condenser welding, refrigerator heat exchanger welding

ABSTRACT: Until a short time ago, refrigerator evaporators were manufactured from stainless steel by stamping half-channels in two blanks and subsequently resistance-welding them together along the channel contours. This method involved much labor and required large amounts (5 kg of 1Kh18N9 steel per evaporator) of steel "containing highly critical nickel." Condensers were

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ACCESSION NR: AP4037201

manufactured from "critical copper tubing." A "new" process for manufacturing evaporators and condensers is described in which two aluminum blank sheets with a masking pattern on one of them are cold-roll-welded together, and the channels are subsequently blown by 80-100-atm water pressure; the aluminum surfaces to be welded are roughened by metal brushing. A one-shot reduction of 75% and a pressure of 20-25 kg/mm^2 were used in rolling the sheets on a two-high mill with 600-mm rolls and a rolling speed of 0.5 m/sec. Welds strengthened by annealing at 500C for 1.5 hours could stand a test pressure of 25-55 atm. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 25Jan64 DATE ACQ: 05Jun64 ENCL: 00

SUB CODE: MM NO REF SOV: 002 OTHER: 000

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L 25641-65 EPR/EWP(k)/EWT(m)/EWP(b)/EWA(d)/EWP(t) Pf-4/Ps-4 IJP(c)
MJW/JD/HW
ACCESSION NR: AP5003375 S/0136/65/000/001/0074/0079 27 25 8

AUTHOR: Barbanel', R. I.; Yermanok, M. Z.

TITLE: Some specific features in extrusion of panels from flat containers

SOURCE: Tsvetnyye metally, no. 1, 1965, 74-79

TOPIC TAGS: aircraft panel, ribbed panel, panel extrusion, flat container, extrusion, ribbed tube extrusion, aluminum alloy extrusion, V95T-1 alloy, D16-T alloy

ABSTRACT: Extrusion from flat containers is used to make wide monolithic panels with diverse configuration of the cross section, a considerable asymmetry, and different thicknesses of the web and stringers along the panel width. The method assures a good surface finish and a small amount of final trimming work, but has the disadvantages of a limited panel width, usually 30—40% of the outside diameter of the container, and short service life of the containers. Extrusion of panels in the form of ribbed tubes which are then slit and flattened produces panels twice as wide as those extruded from flat containers. Higher extrusion speeds and a longer service life of the container are additional advantages of this method. The disadvantages of this method are an inferior surface finish and difficulties in flattening and in making asymmetric panels with a variable thickness along the panel

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width. Theoretical analysis and experiments resulted in a multilayer design of flat containers. A four-layer container was found to have the lowest stress level with a safety factor of 1.10—1.15 relative to yield strength. The containers operate under stresses approaching the yield strength, which cause some residual deformation. The service life of the inner container linings (1000—2000 extrusions) is acceptable for lot production. It can be prolonged by the use of stronger steels and improved design. High-strength aluminum alloys should be preheated for extrusion, e.g., to 420—460C for D16 alloy. Very asymmetric panels should be provided with additional false ribs (which are later removed by machining) to prevent twisting. Thin-web panels with massive ribs twist during heat treatment and therefore should be extruded from nonheat-treatable alloys. A minimum web thickness of 3—4 mm is permissible in extrusion with medium-size presses, and 4—5 mm with large presses. Panels extruded from flat containers have a slight anisotropy of mechanical properties considerably less than permitted by specifications. The V95T-1 alloy panels had a tensile strength of 55 and 52 kg/mm^2, and an elongation of 6 and 4% in the longitudinal and transverse directions, respectively. Extruded panels have a satisfactory flatness with a longitudinal camber of up to 1 mm per meter, a transverse camber of 0.3%—0.1% of the panel width, and a maximum curvature in the horizontal plane of 1 mm per meter. Orig. art. has: 5 figures. [MS]

L 25641-65
ACCESSION NR: AP5003375

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM, IE

NO REF SOV: 004 OTHER: 001 ATD PRESS: 3185

Card 3/3

BARBANEL', R.I.; YERMANOK, M.Z.

Technological features in the production of panels extruded from a flat container. TSvet. met. 38 no.1:74-79 Ja '65
(MIRA 18:2)

DRITS, M.Ye., doktor tekhn. nauk, otv. red.; BOCHVAR, A.A., akademik, red.; BELOV, A.F., doktor tekhn. nauk, red.; DOBATKIN, V.I., doktor tekhn. nauk, red.; MAL'TSEV, M.V., doktor tekhn. nauk, red.; FRIDLYANDER, I.N., doktor tekhn. nauk, red.; SVIDERSKAYA, Z.A., kand. tekhn. nauk, red.; YELAGIN, V.I., kand. tekhn. nauk, red.; BARBANEL', R.I., kand. tekhn. nauk, red.; SHAROV, I.V., kand. tekhn. nauk, red.; KADANER, E.S., kand. tekhn.nauk, red.; TROKHOVA, V.F., red.; CHERNOV, A.N., red.

[Metallography of light alloys] Metallovedenie legkikh splavov. Moskva, Nauka, 1965. 226 p. (MIRA 18:10)

1. Moscow. Institut metallurgii.

[illegible], S. A.

[illegible] [illegible], S. A. Issledovaniye [illegible] [illegible] [illegible] [illegible] apparatury. Trudy Leningr. In-ta [illegible], [illegible]. 2, [illegible], S. [illegible].

SO: Letopis', No. [illegible], [illegible].

BARBANEL', S.R.

ANDEREG, G.F.; BARBANEL', S.R.

[Assembling and equipping a motion-picture projector]. Montazh i oborudovanie kinoustanovok. Izd. 2-e. Moskva, Iskusstvo, 1954, 408 p. (MLRA 8:3D)

BARBANEL', Simon Rafailovich; EYSYMONT, L.O., redaktor; ALEKSANDROV, V.I., tekhnicheskiy redaktor; VOLYNTSEVA, V.A., tekhnicheskiy redaktor.

[Repair of motion-picture projectors] Remont kinoproektsionnoi apparatury. Moskva, Gos.izd-vo "Iskusstvo", 1955. 266 p. (Motion-picture projectors) (MLRA 9:5)

BARBANEL', S.R.

Influence of the wear of a phonogram on its basic characteristics. Trudy LIKI no.3:41-51 '55. (MLRA 9:8)

1. Kafedra zvukotekhniki.
(Sound--Recording and reproducing)

SOV/112-59-3-6168

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 3, p 278 (USSR)

AUTHOR: Burgov, V. A., Tsirulina, Z. V., Seredinskiy, A. I., and Barbanel', S. R.

TITLE: Light-Modulating System With a Ribbon Oscillograph for Sound Phototranscribing (Svetomoduliruyushchaya sistema s lentochnym ostsillografom dlya fotograficheskoy zapisi (perezapisi) zvuka)

PERIODICAL: Tr. Leningr. in-ta kinoinzhenerov, 1956, Nr 4, pp 5-16

ABSTRACT: A light-modulating system with a permanent-magnet ribbon oscillograph is described which is intended for phototranscribing sound by the methods of variable density and variable area, standard, counter-phase, and "positive." In the variable-area recording, the recording dot is formed by projecting the illuminated mechanical slit upon the film, together with the oscillograph ribbon and the noise-suppressing shutter. To make a variable-density recording, the oscillograph and the noise-suppressing shutter must be turned by 90° and

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Light-Modulating System With a Ribbon Oscillograph for Sound Phototranscribing

focused in the plane of the inlet pupil of the cylindrical lens. The oscillograph ribbon made of "kol'chug" aluminum 0.17-mm wide, 0.01-mm thick, and 18-mm long (its vibrating part) is spanned on a frame with a tension of 40 g. The ribbon natural frequency is 8 kc; the response curve falls off by 2 db at a distance of 10 kc which is ensured by an electromagnetic damping of the ribbon. To ensure the maximum possible flux density in an air gap with the minimum size of the magnetic circuit, permanent magnets are made from "magniko," and the pole pieces from "permendur." The gap flux density is 28,000 gauss, gap length 18 mm, gap depth 1.5 mm, and gap width is 0.3 mm. The ribbon functions under constant-voltage conditions which are secured by the use of a deep-feedback amplifier in the output stage. The frequency response curve of the ribbon oscillograph is practically linear up to 10 kc with a blip at the 7 kc not exceeding +2.5 db. The amplitude characteristic taken at 1 kc is also linear. The ribbon resistance at AF is 0.75 ohms; the current consumed by

Light-Modulating System With a Ribbon Oscillograph for Sound Phototranscribing

the ribbon at 1 kc and 100% modulation is 80 ma; the power consumed is 4.5 mw. The above-described modulator was built by the Leningradskiy institut kinoinzhenerov (Leningrad Institute of Cinema Engineers) jointly with Tsentral'noye konstruktorskoye byuro (Central Design Bureau).

S.D.K.

BARBANEL', Solomon R.

BARBANEL', Simon Rafailovich; BARBANEL', Solomon Rafailovich; KOROLEV, Nikolay Mikhaylovich; SOLOMONIK, Aron Vul'fovich; TSIVKIN, Mikhail Vul'fovich; PROVORNOV, S.M., kand.tekhn.nauk, red.; EYSYMONT, L.O., red.; MALEK, Z.N., tekhn.red.

[Motion-picture projection] Kinoproektsionnaia tekhnika. Pod obshchei red. S.M.Provornova. Moskva, Gos.izd-vo "Iskusstvo," 1958. 517 p. (MIRA 12:3)

(Motion-picture projection)

ANDEREG, Georgiy Ferdinandovich; BARBANEL', Solomon Rafailovich; KACHURIN, Il'ya Konstantinovich; PANFILOV, N.D., red.; TUMANOVSKIY, R.F., tekhn. red.

[Equipment of wide-screen motion-picture theaters] Tekhnika shirokoekrannykh kinoteatrov. Moskva, Gos.izd-vo "Iskusstvo," 1961. 163 p. (MIRA 15:1)
(Motion-picture theaters—Equipment and supplies)
(Motion-picture projectors)

ANDEREG, Georgiy Ferdinandovich; BARBANEL', Solomon Rafailovich; FOMIN, A., red.; PEREGUDOVA, M., tekhn. red.

[Motion-picture theater equipment] Oborudovanie kinoteatrov. Moskva, Iskusstvo, 1962. 483 p. (MIRA 16:4)
(Motion-picture theaters--Equipmnt and supplies)

BARBANEL', S.R.; MELIK-STEPANIAN, A.M.; SOLOMONIK, A.V.

Investigating the wow coefficient of the speed stabilizers of sound reproducing systems. Trudy LIKI no.8:3-12 '62.
(MIRA 16:6)

1. Kafedra kinofotoapparatury Leningradskogo instituta kinoinzhenerov.
(Sound—Recording and reproducing)
(Motion-picture projectors—Testing)

BARBANEL', S.R.; PERTSEV, S.M.

Device for a semiautomatic plotting of the vibration graphs of objects photographed on motion-picture films. Trudy LIKI no.8:17-23 '62. (MIRA 16:6)

1. Kafedra kinofotoapparatury Leningradskogo instituta kinofotoinzhenerov.
(Motion-picture photography--Equipment and supplies)

BARDANEL', Simon Rafailovich; PROVOROV, Sergey Mikhaylovich; SOLOMIN, Aron Vladimirovich; ZHURAVSKAYA, N.K., red.;

[Apparatus for motion-picture projection and sound reproducing] Kinoproektsionnaia i zvukovosproizvodiashchaia apparatura. Moskva, Iskusstvo, 1954. 367 p. (MIRA 17:6)

ANDEREG, Georgiy Ferdinandovich; BARBANEL', Solomon Rafailovich; KACHURIN, I.K., red.; BORSHCHEVSKAYA, S.I., red.; LEVONEVSKAYA, L.G., tekhn. red.

[Handbook on the equipment of motion-picture theaters] Spravochnaia kniga po tekhnike kinoustanovok. Leningrad, Lenizdat, 1964. 479 p. (MIRA 17:2)

FEDORCHENKO, I.M.; CHAYKA, B.I.; NAVOYSHTYN, Ya.S.; CHERCHENKO, M.A.; BARBANEL', Ya.Ye.

Comparative testing of ceramic metal piston rings on tractor engines. Poroshk.met. 4 no.5:92-97 S-O '64. (MIRA 18:10)

1. Institut problem materialovedeniya AN UkrSSR i Spetsial'noye konstruktorskoye tekhnologicheskoye byuro Odesskogo zavoda zapasnykh chastey.

USSR/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria, B-0
Physical-Chemical Analysis, Phase Transitions.

Abs Jour: Referat. Zhurnal Khimiya, No 3, 1958, 7123.

Author : S.M. Ariya, Kan Kho-yn, Yu. Barbanel', G.M. Loginov.
Inst :
Title : Enthalpy of Strontium Arsenide Sr_3As_2 Formation.

Orig Pub: Zh. obshch. khimii, 1957, 27, No 7, 1743-1745.

Abstract: Sr_3As_2 (I) was prepared by the interactionof the components at 400° in an evacuated glass tube and it was homogenized at 900° later. The pressure of As vapors on preparations of various composition was investigated by Knudsen's effusion method. The vapor pressure is minimum on I and it rises with the rise of As percentage in the preparations. The I formation enthalpy was determined from the data on I solubility in hydrochloric acid and on enthalpy magnitude of I interaction with

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Leningrad State University

Card

KOLBINA, Ye.M. [deceased]; BARBANEL', Yu.A.; NAZAROVA, M.V.; ARIYA, S.M.

Thermodynamics of lower cobalt sulfides. Vest. LGU 15 no.4:122-129 '60. (MIRA 13:2)

(Cobalt sulfide) (Thermodynamics)

STARIK, I.Ye.; BARBANEL', Yu.A.

Some regularities of chemical interaction expressed by the law of mass action. Dokl. AN SSSR 140 no.3:644-647 S '61. (MIRA 14:9)

1. Radiyevyy institut im. V.G.Khlopina AN SSSR. 2. Cheln-korrespondent AN SSSR (for Starik).
(Chemical reaction--Conditions and laws)

STARIK, I.Ye.; BARBANEL', Yu.A.

Certain functions characterizing the state of a substance in solution. Dokl. AN SSSR 146 no.6:1352-1355 O '62. (MIRA 15:10)

1. Chlen-korrespondent AN SSSR (for Starik).
(Solution (Chemistry))

BARBANEL', Yu.A.

Diagram of the relative reaction yield as a means of the physicochemical analysis of solutions. Zhur. neorg. khim. 9 no.2:437-446 F'64. (MIRA 17:2)

[redacted], Yu.A.

Singular points on the isomolar diagram of "solution composition-reaction yield". Zhur. fiz. khim. 39 no.4:840-849 Ap '65.
(MIRA 18:1)

1. Submitted June 24, 1963.

BARABANOV, Anatoliy

In the land of ice armor (conclusion). Grazhd.av. 18 no.11:20-22 N '61. (MIRA 15:2)

(Antartic regions--Aerial exploration)

BARABANOV, Anatoliy Tikhonovich, pilot, komandir korablya Li-2

In the land with icy armor. Grazhd.av. 18 no.9:23-25 S '61.
(MIRA 14:9)

(Antarctic regions)

BARABANOV, Anatoliy

In the land of glacial armor. Grazhd.av. 18 no.12:26-28 D '61.
(MIRA 15:1)
(Antarctic regions--Russian explorations)

S/084/61/000/012/003/004
D047/D113

AUTHOR: Barabanov, Anatoliy, polar pilot

TITLE: In an ice-clad land

PERIODICAL: Grazhdanskaya aviatsiya, no. 12, 1961, 26-28

TEXT: This popular article, subtitled "Battling with the Elements", is the last of a series of 3 articles by the author dealing with the activities of Soviet scientific expeditions in the Antarctic. The highlights of this article, which is mainly propagandistic in nature, are descriptions of flights on supply missions to the stations Komsomol'skaya and Vostok, located high up on a mountain, a 7,200 km long flight from the main station Mirnyy to Lazarev station and back, and plans to establish three field stations 400-500 km from Mirnyy; one of these stations has already been set up and is called "Druzhba". The following personalities are mentioned: Ye. S. Korotkevich (leader of the fifth Soviet Antarctic expedition); pilots Aleksandr Pimenov and Yuriy Mikhaylovich Zotov; astronomist Dmitriy Khromikhin; meteorologist Aleksey Dergach; chief geologist D. S. Solov'yev; communist party secretary in Mirnyy D. P. Aralov; Mirnyy airdrome commandant Andrey Medvedev; aircraft mechanics Perevezentsev and Komardin;

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In an ice-clad land

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members of a sledge train including B. A. Krasnikov (leader), mechanical engineer S. A. Zakharov, navigator V. N. Mal'tsev, radio operator V. I. Skripko, drivers Yuriy S. Birger, Ch. P. Bubel' and V. I. Kontsev; and other members of the expedition, including Ivan Vechtomov, Valentin Sysoyev, Boris Revnov, A. Fedyukhin, V. Grishelev, A. Mezhevoy, Christian Popp (an East German), and Czech scientist Doctor Kostka. There are 3 figures.

Card 2/2

Mecheryguy Lockve, Moscow, [illegible].

cc: [illegible]