KOSOBUTSKAYA, L. M.

Formation of chlorophyll in the colloidal solutions of etiolated leaves of the Lima bean plant. L. M. Kosobutskaya and A. A. Krasnovskii (A. N. Bakh Inst. Biochem., Acad. Sci. U.S.S.R., Moscow). *Biokhimiya* 19, 37–44 (1954).—In colloidal cell-free solns. of etiolated leaves of Lima bean, in the presence of light, there occurs, at the expense of protochlorophyll, a protein-lipide-chlorophyll union having a max. absorption at 670 mμ. The conditions favoring this reaction were studied. B. S. Levine

(3)

Kosobutskaya, L. M.

MP

Active form of chlorophyll in colloidal solutions of green leaf matter and its reversible photochemical changes. A. A. Krasnovskiĭ and L. M. Kosobutskaya. *Doklady Akad. Nauk S.S.S.R.* 104, 440–3(1955).—A centrifuged green soln. obtained from homogenized leaves of sugar beet in phosphate buffer at pH 4.8 or 8.6 was mixed with 1.5 parts glycerol, yielding a rather viscous soln. which was suitable for low-temp. spectrometric work. Strong irradiation of this at constant temp. led to a slow fall of absorption in the red at pH 7 and a much more rapid fall at pH 8.5; indication of the shape of such a kinetic curve was that a relatively labile form of chlorophyll was present which was attacked by illumination within a few sec. The loss of the color was caused by an absorption shift of 1.5–2 mμ to the longer wave length. The loss of color was much faster at 30° than at 20°; at 40–5° the color loss was irreversible. Illumination of the green soln. in contact with air led to rapid color loss in the red absorption max.; cutting off the light served to slightly increase this absorption for a few sec.; ascorbic acid also had a similar effect. The photooxidation and its reversal took place much more slowly at −40°. EtOH-glycerol solns. of chlorophyll a and b also showed similar behavior, in which case glycerol appeared to act as the reducing agent. The reaction was accompanied by increased absorption at 520–550 mμ; reduction of the products led to a fall of this absorption. If air was thoroughly removed, the irreversible decoloration of the green soln. could not be observed; brief illumination lowered the red absorption; darkness caused its reversal. Thus, in absence of air a reversible photoreduction of chlorophyll took place by the H donors in the solvent. The photoactive chlorophyll form (monomer) is capable of reversible photochem. reactions (cf. Franck, *Symposia Soc. Exptl. Biol.* 5, 160(1951)).

G. M. Kosolapoff

1

KUSOBUTSKIY, L. A., Master Med Sci --(diss) "Materials on the effect of sinthomycin, levomycetin and biomycin on Provacec rickettsia. (Experimental investigation), Leningrad, 1957, 16 pp. (Leningrad State Inst for Advanced Physician Training im. S. M. Kirova), 200 copies. (KL, No 40, 1957, p.95)

E

Country : USSR
Category: Virology. Viruses of Man and Animals. Rickettsias

Abs Jour: Ref Zhur-Biol., No 23, 1958, No 103535

Author : Kosobutskiy, I. A.
Inst : Minsk Medical Institute
Title : Methods of Studying the Effect of Antibiotics on Obligate Intracellular Parasites (Through the Example of the Rickettsia Prowazeki)

Orig Pub: Sb. nauchn. rabot. Minsky med. in-t, 1957, 18, 357-367

Abstract: White mice were infected with different strains of the Rickettsia prowazeki and treated with antibiotics. Quantitative and qualitative differences were established between the effects of levomycetin and biomycin. The prophylactic dose of biomycin is 100

Card : 1/2

USSR / Virology. Human and Animal Viruses. Rickettsiae.

Abs Jour: Ref Zhur-Biol., No 5, 1959, 19367.

Author : Kosobutskiy, L. A.
Inst : Not given.
Title : Method of Study of the Circulation of Rickettsiae in the Blood of Guinea Pigs.

Orig Pub: V sb.: Rikkotsiozy. L., 1958, 137-141.

Abstract: Twenty to thirty per cent of sexually mature lice survived on combined feeding during first three to five minutes on man and thereafter on a guinea pig. By means of this method R. prowazeki were isolated from the blood of the infected guinea pigs within two weeks after the termination of fever.

Card 1/1

KOSOBUTSKIY, L.A.; TIMOFEYEVA, M.M.

Some data on Q fever in White Russia. Zhur. mikrobiol. epid. i immun. 29 no.8:80-81 Ag '58. (MIRA-11:10)

1. Iz Belorusskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(Q FEVER, epidemiol.
in Russia (Rus))

KOSOBUTSKIY, M. I.

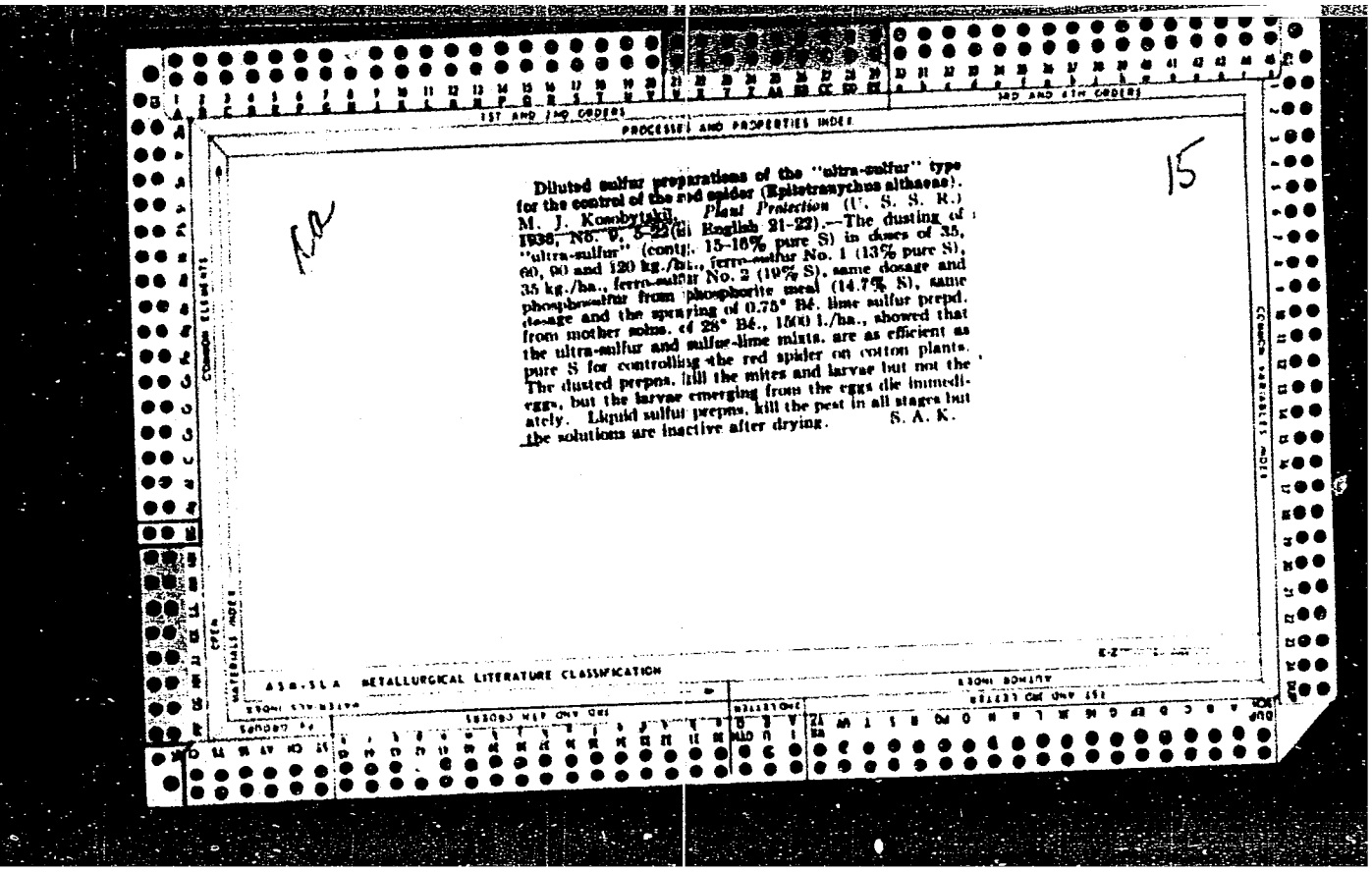
KOSOBUTSKIY, M. I. "Alfalfa Diseases," Biulleten' Sredneaziatskogo Nauchno-Issledovatel'skogo Instituta po Khlopkovodstvu, no. 3-4, 1934, pp. 133-152. 72.9 T182

SO: SIRA SI-19-53, 15 Dec 1953

KOSOBUTSKIY, M. I.

KOSOBUTSKIY, M. I., "A System of Control Measures Against Pests and Diseases in the Cotton Growing Regions of Central Asia," Zashchita Rastenii, no. 2, 1935, pp. 35-44. 421 P942

SO: SIRA SI-19-53, 15 Dec 1953



PROCESSES AND PROPERTIES INDEX

15

Diluted sulfur preparations of the "ultra-sulfur" type for the control of the red spider (Epitetranychus althaeae). M. J. Kombrylakh. *Plant Protection* (U. S. S. R.) 1938, No. 9, 5-22(Russian; English 21-22).—The dusting of "ultra-sulfur" (contg. 15-16% pure S) in doses of 35, 60, 90 and 120 kg./ha., ferro-sulfur No. 1 (13% pure S), 35 kg./ha., ferro-sulfur No. 2 (19% S), same dosage and phosphorsulfur from phosphorite meal (14.7% S), same dosage and the spraying of 0.75° Bé. lime sulfur prepd. from mother solns. of 28° Bé., 1500 l./ha., showed that the ultra-sulfur and sulfur-lime mixts. are as efficient as pure S for controlling the red spider on cotton plants. The dusted preps. kill the mites and larvae but not the eggs, but the larvae emerging from the eggs die immediately. Liquid sulfur preps. kill the pest in all stages but the solutions are inactive after drying. S. A. K.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

USSR / Cultivated Plants. Commercial. Oil-Bearing. Sugar-Bearing. M-5

Abs Jour: Ref Zhur-Biol., No 6, 1958, 25126

Author : Kosobutskiy, M.I., Sosnina, M.A.
Inst : Uzbek Agricultural Inst.
Title : Biological Factors Effecting Cotton Shoot Dying and Their Control

Orig Pub: Nauchn. tr. Uzb. s.kh. in-ta, 1956, 9, ch.1, 87-96

Abstract: Investigations made under production conditions in Samarkandskaya Oblast' in 1951-1954 has made it possible to bring to light 48 species of invertebrate and vertebrate animals and fungi which to one degree or another influence the destruction of germinating seeds and shoots of cotton until its budding. During cotton's first developmental period with an

Card 1/2

108

144

KOSOBUTSKIY, M. I.

Head of Dept. of Entomology, Uzbek Agricultural Institute.

Study of cotton plant pests.

SO: GOLIKOV, A. F., LITVINENKO, A. [illegible], Scientific Research Work in Agricultural Institutes of Higher Learning [illegible], 1957, Unclassified.

KOSOBUTSKIY, M.I.

Vertical movements (migrations) of spider mites on fodder plants. Trudy UzGU no. 87:3-31 '59. (MIRA 14:5)

(Red spider)

KOSOBUTSKIY, M.I.

Passive and active means of the spread of spider mites across an area with various ecological conditions. Trudy UzGU nos 87:33-94 '59. (MIRA 14:5)

(Red spider)

KOSOBUTSKIY, M.I.

Nature of the immunity of cotton and other plants to the damage by spider mites. Trudy UzGU no. 87:95-162 '59. (MIRA 14:5)
(Plants--Disease and pest resistance)
(Red spider)

KOSOBUTSKIY, M.I.

Nature of the immunity of cotton and other plants against infection by the spider mite Tetranychus telarius L. Vop. ekol. 4:38-40 '62. (MIRA 15:11)

1. Gosudarstvennyy universitet, Samarkand.
(Red spider) (Plants--Disease and pest resistance)

KOSOBUTSKIY, S.K.; LESNEVSKIY, R.M.

Counting device. Nauka - proizv. no.1:90-94 '63.
(MIRA 18:3)

L 06301-67 EWT(d)/EWP(1) IJP(c) GG/BB/GD

ACC NR: AT6015369 SOURCE CODE: UR/0000/65/000/000/0159/0163

AUTHOR: Bubel, V. M.; Kosobutskiy, S. K. (Deceased)

ORG: none

TITLE: A punched card reader

SOURCE: AN BSSR. Institut tekhnicheskoy kibernetiki. Vychislitel'naya tekhnika (Computer engineering). Minsk, Nauka i tekhnika, 1965, 159-163

TOPIC TAGS: digital computer, computer technology, computer input unit, punched card / Minsk 1 computer

ABSTRACT: This paper deals with a new type of on-line punched card reader designed to feed data into the punched tape input terminal of the Minsk-1 computer. The card reader extends the capability of this computer by providing an additional means of input. Standard 45-column cards are used at a speed of 100 cards per minute. The information is read in a series-parallel mode. An internal decoder converts the decimal data into 8-4-2-1 BCD code, compatible with the particular input terminal of the computer. The computer generates appropriate control signals utilized in the control module of the reader. A signal is fed into the computer whenever a word begins or ends. For the serial output of the digits, a shift register is used consisting of transistor-ferrite core elements. A laboratory model was built and tested with satisfactory results. The unit is small, simple, and reliable. Orig. art. has: 3 figures.

SUB CODE: 09/ SUBM DATE: 15Dec65

Card 1/1

POLEZHAYEV, Lev Vladimirovich, prof.; AKHABADZE, Lyubov' Viktorovna; MUZLAYEVA, Nina Andreyevna; YAVICH, Marina Pinkhusovna; KOSOBUTSKIY, V.I.

[Stimulation of the regeneration of the heart muscle] Stimuliatsiia regeneratsii myshtsy serdtsa. Moskva, Nauka, 1965. 395 p. (MIRA 18:11)

1. Akademiya nauk SSSR. Institut morfologii zhivotnykh.

KOSOBUTSKIY, V.I.

Quantitative characteristics of marrow in adult Chinchilla rabbits.
Dokl.AN SSSR 134 no.2:482-484 S '60. (MIRA 13:9)

1. Institut morfologii zhivotnykh im. A.N.Severtsova AN SSSR.
Predstavleno akad. A.N.Bakulevym.
(CHINCHILLA RABBITS) (MARROW)

KOSOBUTSKIY, V.I.

Weight characteristics of the skeleton and bone marrow in the common European hare (Lepus europaeus Pall.) Dokl. AN SSSR 143 no.1:242-244 Mr '62. (MIRA 15:2)

1. Predstavleno akademikom A.N.Bakulevym.
(Marrow)
(Bones)
(Hares)

KOSOGLYADOV, Ya.Z., kandidat tekhnicheskikh nauk; KAUFMAN, B.N., kandidat tekhnicheskikh nauk, redaktor.

[Protection of building elements from corrosion] Zashchita stroitel'nykh konstruktsii ot korrozii. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1953. 171 p. (MLRA 7:1)
(Corrosion and Anticorrosives)

MINKOVICH, B.D.; ANTONOV, G.I.; KOSOGOLOV, V.V.; KOTIK, P.L.

Manufacture of dense magnesite-chromite refractories. Ogneupory 28 no.7:305-311 '63. (MIRA 16:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov (for Minkovich, Antonov, Kosogolov). 2. Nikitovskiy dolomitnyy kombinat (for Kotik).

ANTONOV, G.I.; KOSOGOLOV, V.V.; NEDOSVITIY, V.P.; VINOGRADOV, N.I.; KHIL'KO, M.M.; MOLCHANOVA, M.I.

New design of ribbed arches with reinforced supports. Metallurg 9 no.2:18-21 F '64. (MIRA 17:3)

1. Ukrainskiy institut ogneuporov i Makeyevskiy metallurgicheskiy zavod.

VINOKUR, S.B.; MIKHAYLETS, I.D.; ANTONOV, G.I.; KOSOGOLOV, V.V.; MINKOVICH, B.D.

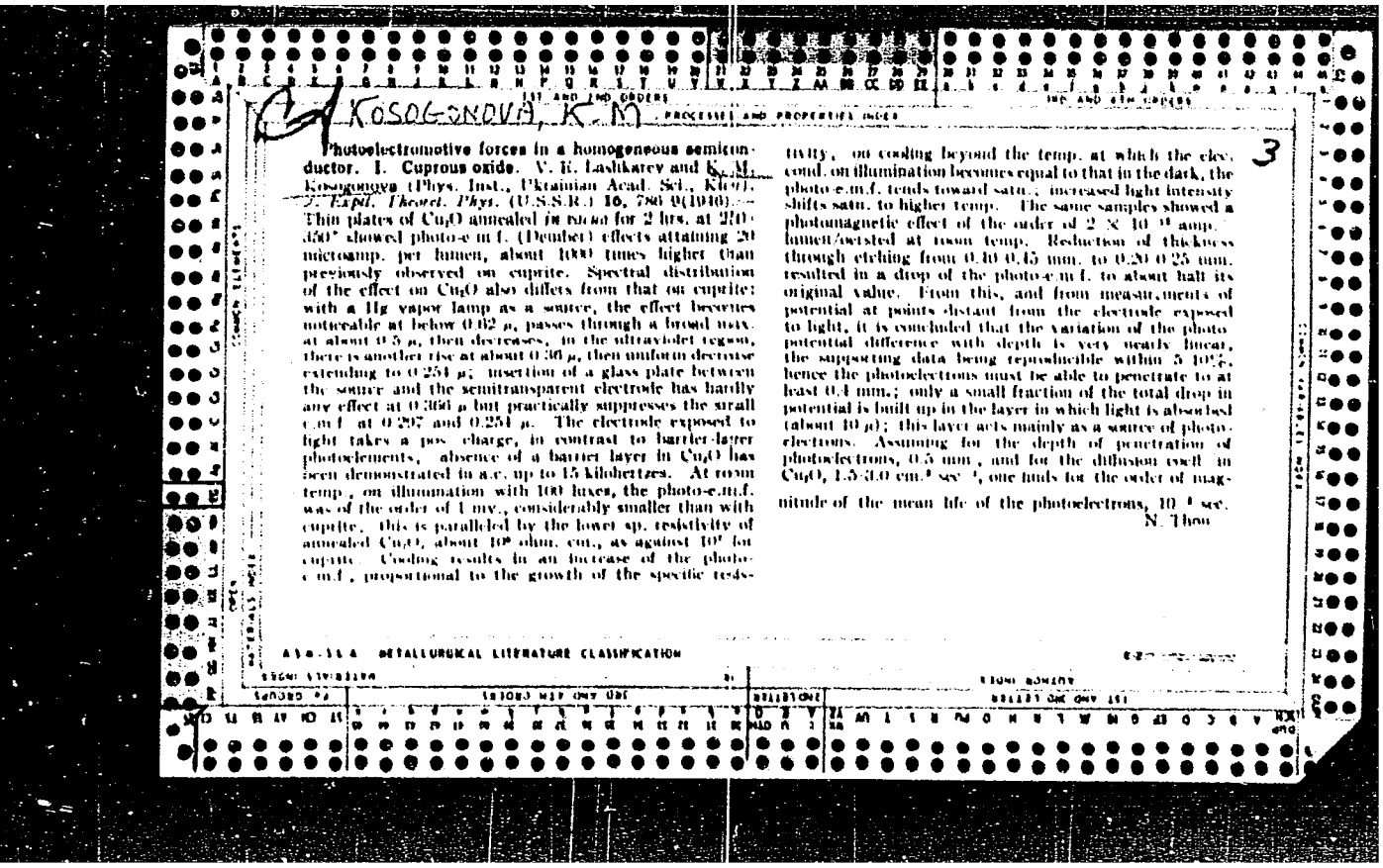
Manufacture of magnesite-chrome brick for the dome of an open-hearth furnace with insulation. Ogneupory 26 no.8: 351-354 '61. (MIRA 14:9)

1. Panteleymonovskiy ogneupornyy zavod im. K. Marksa (for Vinokur, Mikhaylets). 2. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov (for Antonov, Kosogolov, Minkovich).
(Firebrick) (Open-hearth furnaces)

ANTONOV, G.I.; BERMAN, Sh.M.; KOSOGOLOV, V.V.; SHEYKO, I.I.; KAL'NOY, Ye.L.; KHALEMSKIY, S.F.

Present state and prospects for the development of refractory linings in foundry open-hearth furnaces. Lit. proizv. no.6: 19-21 Je '63. (MIRA 16:7)

(Open-hearth furnaces--Design and construction)
(Refractory materials)



KOSOGONOVA, K. M.

Photoelectromotive forces in a homogeneous semiconductor. I. Cuprous oxide. V. E. Lashkarev and K. M. Kosogonova (Phys. Inst., Ukrainian Acad. Sci., Kiev). *Zhur. Eksper. Teoret. Fiz.* (U.S.S.R.) **10**, 780-9(1940).—Thin plates of Cu_2O annealed *in vacuo* for 2 hrs. at 200-350° showed photo-e.m.f. (Dember) effects attaining 20 microamp. per lumen, about 1000 times higher than previously observed on cuprite. Spectral distribution of the effect on Cu_2O also differs from that on cuprite: with a Hg vapor lamp as a source, the effect becomes noticeable at below 0.62 μ, passes through a broad max. at about 0.5 μ, then decreases, in the ultraviolet region, there is another rise at about 0.36 μ, then uniform decrease extending to 0.254 μ; insertion of a glass plate between the source and the semitransparent electrode has hardly any effect at 0.366 μ but practically suppresses the small e.m.f. at 0.297 and 0.254 μ. The electrode exposed to light takes a pos. charge, in contrast to barrier-layer photoelements; absence of a barrier layer in Cu_2O has been demonstrated in a.c. up to 15 kilohertzes. At room temp., on illumination with 100 luxes, the photo-e.m.f. was of the order of 1 mv., considerably smaller than with cuprite. This is paralleled by the lower sp. resistivity of annealed Cu_2O, about 10^6 ohm. cm., as against 10^9 for cuprite. Cooling results in an increase of the photo-e.m.f., proportional to the growth of the specific resistivity, on cooling beyond the temp. at which the elec. cond. on illumination becomes equal to that in the dark, the photo-e.m.f. tends toward satn.; increased light intensity shifts satn. to higher temp. The same samples showed a photomagnetic effect of the order of 2×10^{-9} amp./lumen/oersted at room temp. Reduction of thickness through etching from 0.40-0.45 mm. to 0.20-0.25 mm. resulted in a drop of the photo-e.m.f. to about half its original value. From this, and from measurements of potential at points distant from the electrode exposed to light, it is concluded that the variation of the photo-potential difference with depth is very nearly linear, the supporting data being reproducible within 5-10%; hence the photoelectrons must be able to penetrate to at least 0.4 mm.; only a small fraction of the total drop in potential is built up in the layer in which light is absorbed (about 10 μ); this layer acts mainly as a source of photoelectrons. Assuming for the depth of penetration of photoelectrons, 0.5 mm., and for the diffusion coeff. in Cu_2O, 1.5-3.0 $cm.^2$ $sec.^{-1}$, one finds for the order of magnitude of the mean life of the photoelectrons, 10^{-4} sec.

N. Thon

A7a-11a METALLURGICAL LITERATURE CLASSIFICATION

TYAZHKUN, Aleksey Petrovich, inzhener, PAVLYUK, Nikolay Stepanovich, inzhener, † KOSOGOROVA, Yelena Petrovna, inzhener; ANTONOV. F.I. redaktor; VERINA, G.P., tekhnicheskiy redaktor.

[Work practice of maintenance men of the Promyshlennaya section of the Tomsk railroad] Opyt raboty putseitsev Promyshlenskoi distatsii Tomskoi dorogi. Moskva, Gos.transp.zhel-dor izd-vo 1955. 33 p. (MLRA 8:11)
(Kemerovo Province--Railroads--Maintenance and repair)

KOSOGOV, A.

Reserves for improving the construction of schoolhouses from fully prefabricated elements. Na stroi.Ros. 6 no.2:10-11 F '65. (MIRA 19:1)

1. Nachal'nik tekhnicheskogo upravleniya Glavnogo upravleniya po stroitel'stvu v Moskovskom ekonomicheskom rayone Ministerstva stroitel'stva RSFSR.

KOSOGOV, Anatoliy Mikhaylovich; FINKTNSHTEYN, B.A., inzh., red.

[Building large-panel schools in rural areas; practices of the "Mosoblsel'stroy" Trust No.11 of the Main Administration for Construction in the Central Regions, of the Ministry of Municipal and Rural Construction of the R.S.F.S.R.] Stroitel'stvo krupnopanel'noi shkoly v sel'skoi mestnosti; opyt tresta "Mosoblsel'stroi" No.11 Glavtsentrostroia Ministerstva stroitel'stva RSFSR. Moskva, Stroiizdat, 1964. 19 p. (MIRA 17:12)

1. Moscow. Nauchno-issledovatel'skiy institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. 2. Nachal'nik otdela organizatsii i industrializatsii stroitel'stva Glavnogo upravleniya stroitel'stva predpriyatiy v tsentral'nykh rayonakh Ministerstva stroitel'stva RSFSR (for Kosogov).

KOSOGOV, A.M.; DRIBINSKIY, M.A.; RABORTOVICH, I.S.

Builders speak of polymer materials. Stroi.mat. 10 no.4:5-7 Ap '64. (MIRA 17:5)

1. Zamestitel' nachal'nika Tekhnicheskogo upravleniya Glavtsentrostroya (for Kosogov). 2. Upravlyayushchiy trestom krupnopanel'nogo domostroyeniya Glavtsentrostroya (for Dribinskiy). 3. Zamestitel' glavnogo inzhenera tresta Mosoblstroy No.2 (for Raboritovich).

GOTTSEV, Boris Tikhonovich; KOSOGOV, Anatoliy Mikhaylovich; RAZINKOV, P., red.; YAKOVLEVA, Ye., tekhn. red.

[Completely prefabricated construction in the suburbs of Moscow] Polnosbornoe stroitel'stvo v Podmoskov'e. Moskva, Mosk. rabochii, 1963. 68 p. (MIRA 17:3)

KOSOGOV, A.N. [Kosohov, A.N.]

Practices of a school for mothers. Ped., akush. i gin. 20 no.4: 38-39 '58. (MIRA 13:1)

1. Rayonnyy pediatr Sovetskogo rayona Krymskoy oblasti.
(MOTHERS)

RABKIN, M.A.; KOSOGOV, G.F.; CHERNYSHOV, I.S.; KISSEL', N.N.

Possibility of desulfurizing pig iron by the reduction of certain active metals. Izv.vys.ucheb.zav.; chern.met. no.7:18-23 '60. (MIRA 13:8)

1. Zhdanovskiy metallurgicheskiy institut i Zhdanovskiy metallurgicheskiy zavod im. Il'icha.
(Cast iron--Metallurgy)
(Desulfuration)

S/020/60/134/001/008/021
B019/B060

AUTHORS: Kosogov, G. F., Likhtman, V. I.

TITLE: Decrease of the Strength of Steels in Metallic Melts Due to Adsorption

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 1, pp. 81 - 84

TEXT: The analyses described here were made on carbon steels (0.05 - 1.10% C) after normalization of annealing. A coating with readily melting metals (tin and lead) was applied to the sample surfaces. Various methods of applying readily melting metals had been studied in preliminary investigations, and the soldering technique was eventually chosen by the authors. The metal layers applied were 0.10 to 0.05 mm thick. The samples were submitted to static tensile tests, in the course of which they were appropriately heated. Results regarding tin are graphically illustrated in Fig. 2. The coating effect was established in the temperature range of 250 - 500°C. It may be seen therefrom that the

Card 1/3

maximum of strength and stretching reduction increases with increasing carbon content and shifts toward higher temperatures. Similar results were obtained for lead. No such effect was found for Armco iron. The same effects arise, however, in the carbonization and nitration of Armco iron. As has been already known from experiments made with single crystals, these effects can be explained by the easier formation of microcracks due to easily melting metals on the action of states of stress promoting the formation of cracks. Such favorable states of stress are normal stresses, and since in torsion tests they are considerably smaller than in tensile tests, the strength and stretching reduction would have to be likewise smaller in torsion tests. This was fully confirmed by experiments. Medium-carbon steel, e.g., exhibits no reduction of the values by adsorption effects in torsion tests made on zinc at 350°C where the maximum reduction of strength and stretching was ascertained. There are 2 figures, 2 tables, and 14 references: 10 Soviet and 4 US.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences USSR)

Decrease of the Strength of Steels in Metallic Melts Due to Adsorption

S/020/60/134/001/008/021
B019/B060

PRESENTED: April 7, 1960, by P. A. Rebinder, Academician

SUBMITTED: March 28, 1960

Card 3/3

RABKIN, M.A.; KISSEL', N.N.; KOSOGOV, G.F.; CHERNYSHEV, I.S.

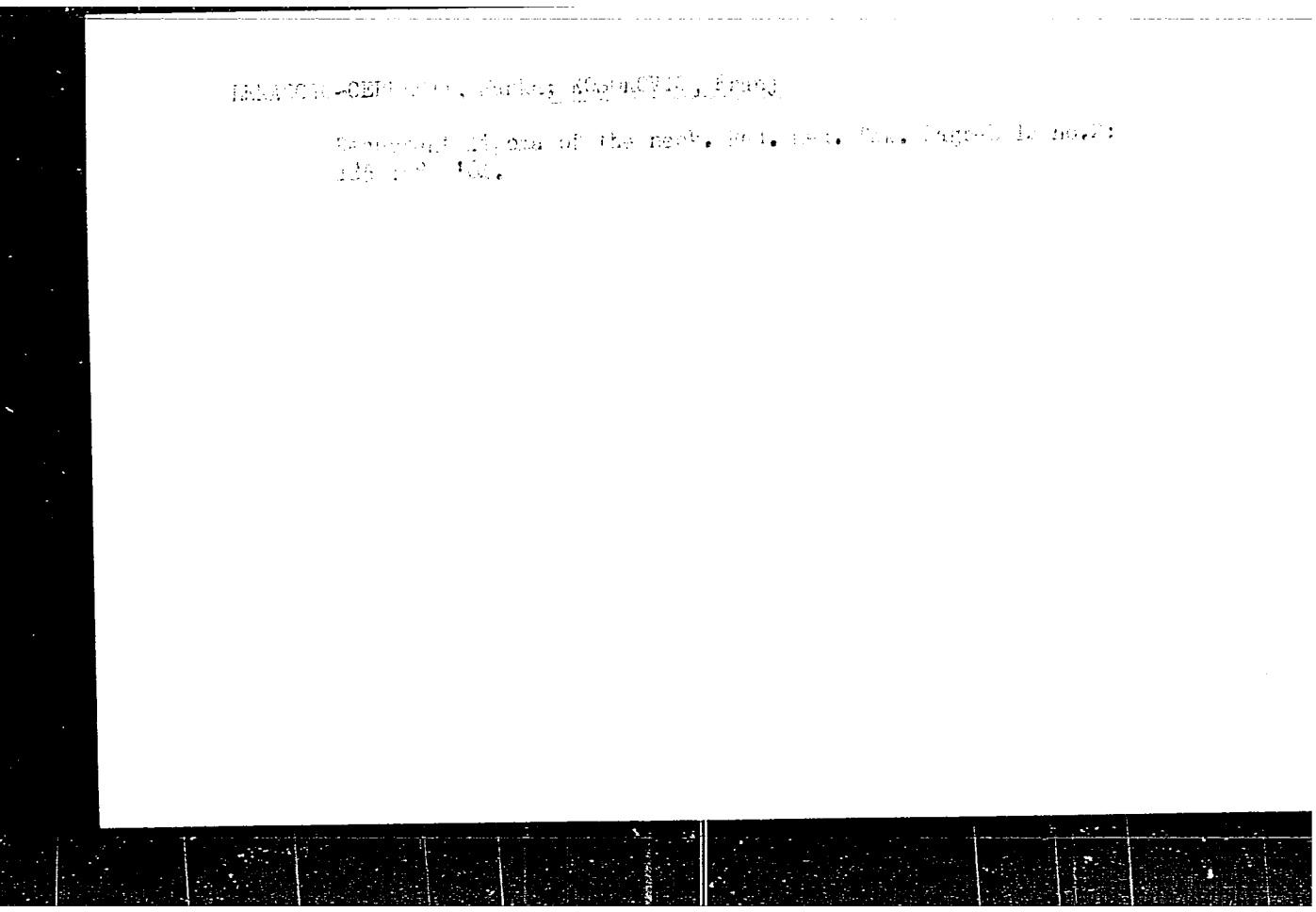
Effect of technological factors on the desulfuration of cast iron by the reduction of certain active metals. Izv. vys. ucheb. zav.; chern. met. 4 no.7:36-43 '61. (MIRA 14:8)

1. Zhdanovskiy metallurgicheskiy institut i Metallurgicheskiy zavod im. Il'icha.
(Cast iron--Metallurgy)
(Desulfuration)

RABKIN, M.A.; CHERNYSHEV, I.S.; KISSEL', N.N.; KOSOGOV, G.F.

Desulfuration of cast iron outside blast furnaces by the reduction of magnesium oxide by aluminum. Izv. vys. ucheb. zav.; chern. met. 6 no.9:28-32 '63. (MIRA 16:11)

1. Zhdanovskiy metallurgicheskiy institut i Zhdanovskiy metallurgicheskiy zavod im. Il'icha.



SARIC,Marko,dr.; KOSOKOVIC,Smiljka,dr.; ZORICA,Mladen,dr.; BERITIC,Tihomil,dr.

Occupational lead poisoning in workers employed in the construction of the "Liberty Bridge". Lijec. vjes. 81 no.11:803-809 '59.

1. Iz Instituta za medicinska istrazivanja JAZU i Interne klinike Medicinskog fakulteta Sveucilista u Zagrebu.
(LEAD POISONING)

KOSOLAPENKO, Georgiy Borisovich; MILEYKOVSKIY, Solomon Gerasimovich; DEM'YANCHENKO, G.V., otv. red.; PETROVA, V.Ye., red.; MARKOCH, K.G., tekhn. red.

[Specialized measurements in wire communications] Spetsial'nye izmereniia v provodnoi sviazi. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1961. 332 p. (MIRA 14:7)
(Telephone) (Telegraph) (Electronic measurements)

KOSOLAPKINA, L.I.;ALAMBAROV, I.N.

Condition of the nerve fibers in experimental lepromas. Vest. vener., Moskva no.3:14-17 May-June 1953. (CIML 25:1)

1. Candidate Medical Sciences for Kosolapkina. 2. Of the Pathomorphology Laboratory of the All-Union Institute for the Study of Leprosy (Director -- Prof. I. N. Perevodchikov; Head of Laboratory -- Candidate Medical Sciences L. I. Kosolapkina).

KOSOLAPKINA, L. I.

"Argyrophillic Substances in Leprosy." Dr Med Sci, Rostov-na-Donu State Medical Inst, Rostov-na-Donu, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

KOSOLAPKINA, L.I. (g. Astrakhan', ul. Kurskaya, d.20); SAVINICH, B.V. (g. Astrakhan', ul. Babushkina, d.62, kv.6)

Frequency of malignant in leprosy [with summary in English]. Vop. onk. 4 no.1:90-94 '58. (MIRA 11:4)

1. Iz Vsesoyuznogo nauchno-issledovatel'skogo instituta po izucheniyu lepry (dir. V.F.Shubin) i kafedry patologicheskoy anatomii (zav. - prof. M.S.Brumshteyn) Astrakhanskogo meditsinskogo instituta (dir. - dots. S.V.Zakharov)

(LEPROSY, complications,
cancer, autopsy statist. (Rus))
(NEOPLASMS, complications,
leprosy, autopsy statist. (Rus))

KOSOLAPOV, A.

Improvement of mold holders. Metallurg 6 no.5:21-22 My '61.
(MIRA 14:5)

1. Uralvagonzavod.
(Open-hearth furnaces—Equipment and supplies)

KOSOLAPOV, A.

Our experience in the organization of mine committees.
Sov.shakht. 10 no.11:33-34 N '61. (MIRA 14:11)
(Trade unions)

KOSOLAPOV, A.A.; KARPAS, A.A.

Local air suction from electrosmelting furnaces. Lit. proizv. no.8:37-38 Ag '62. (MIRA 15:11)
(Electric furnaces)
(Foundries--Heating and ventilation)

KOSOLAPOV, A.I.

Test data on the Bakhynay key well (Yakutia). Geol. i geofiz. no.8:106-110 '60. (MIRA 14:2)

1. Yakutskiy filial Sibirskogo otdeleniya AN SSSR.
(Yakutia--Gas wells)

KOSOLAPOV, Alek[illegible]y Ignat'yevich; CHERSKIY, N.V., otv. red.; YEROFEYEVA, I.M., red.izd-va; GUSEVA, A.P., tekhn.red.

[Geochemical studies of natural waters and gases in western Yakutia] Geokhimicheskie issledovaniia prirodnykh vod i gazov Zapadnoi IAkutii. Moskva, Izd-vo AN SSSR, 1963. 205 p. (MIRA 17:2)

KOSOLAPOV, A.I.

Portable thermo-vacuum degasser. Nauch. soob. IAFAN SSSR no.1:23-26 '58. (MIRA 17:1)

S/169/63/000/002/071/127
D263/D307

AUTHORS: Kosolapova, M. N. and Kosolapov, A. I.

TITLE: Application of the hydrochemical method in prospecting for kimberlite bodies

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 2, 1963, 10, abstract 2D64 (Geologiya i geofizika, 1962, no. 2, 95-100)

TEXT: Chemical composition of natural waters was studied in Yakutian ASSR, in kimberlite-bearing territory. Along with general analysis, the authors carried out determinations of Zn, Cu. Pb, Mo and total metals, by the dithizone method. Hydrochemical sampling showed that increased metal contents, chiefly Zn, are associated with areas of occurrence of kimberlites. The concentrations of Zn in surface waters close to the contact of kimberlites with surrounding rocks reach 0.08 mg/l, the background values being 0.005 mg/l. Hydrochemical anomalies are caused by increased Zn contents in surrounding rocks close to the contacts with kimberlites. If the

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Application of the ...

S/169/63/000/002/071/127
D263/D307

background concentrations of Zn in rocks are 0.0005%, then an increase to 0.005 - 0.007% may be observed 1 - 5 m away from the contact with kimberlites. Some anomalies were discovered, as a result of regional hydrochemical sampling, which deserve particular attention. The investigations indicate that the hydrochemical method is effective in prospecting for fundamental diamond deposits, in combination with geological and geophysical methods. [Abstracter's note: Complete translation.]

Card 2/2

GORNSHTEYN, D.K.; GUDKOV, A.A.; KOSOLAPOV, A.I.; LEYPTSIG, A.V.; MEL'NIKOV, V.M.; MOKSHANTSEV, K.B.; FRADKIN, G.S.; CHERSKIY, N.V.; TROFIMUK, A.A., akademik, nauchn. red. vyp.; ROZHKOV, I.S., glav. red.; KOBELYATSKIY, I.A., zam. glav. red.; SHATALOV, Ye.G., zam. glav. red.; BONDARENKO, V.I., red.; GRINBERG, G.A., red.; YELOVSKIKH, V.V., red.; RUSANOV, B.S., red.; SEMENOV, G.T., red.; TKACHENKO, B.V., red.; KALANTAROV, A.P., red.izd-va; GUSEVA, A.P., tekhn. red.

[Basic stages of the geological development and prospects for finding oil and gas in the Yakut A.S.S.R.] Osnovnye etapy geologicheskogo razvitiia i perspektivy neftegazonosnosti IAkutskoi ASSR. [By] D.K.Gornshtein i dr. Moskva, Izd-vo AN SSSR 1963. 238 p. (MIRA 16:12)
(Yakutia--Petroleum geology)
(Yakutia--Gas, Natural--Geology)

KOSOLAPOV, A.M.

AUTHOR: None Given 3-58-4-24/34

TITLE: From the Materials of "Vestnik Vysshey Shkoly" (Po materialam "Vestnika Vysshey Shkoly") Against the Superficial Study of the Economics of "People's China" (Protiv poverkhnostnogo izucheniya ekonomiki Narodnogo Kitaya)

PERIODICAL: Vestni Vysshey Shkoly, 1958, # 4, page 66 (USSR)

ABSTRACT: In # 1 of this periodical for 1958, a review by O.A. Arturov, V.G. Gel'bras and T.G. Mayorova of a lecture by A.M. Kosolapov "The Economical Order of the Chinese People's Republic", appeared.

Dotsent I.D. Tikhomirov, Head of the Chair of Political Economy of Leningrad University, advises the editor that the chair admits that the criticism was just.

AVAILABLE: Library of Congress

Card 1/1

KOSOLAPOV, A.M.

Mechanized removal of nozzles from ladles. Metallurg 7 no.1:25 Ja '62. (MIRA 15:1)

1. Uralvagonzavod.

(Open-hearth furnaces--Maintenance and repair)

SEKUNOVA, O.N., inzh.; KOSOLAPOV, A.S., inzh.

New compressor for the manufacture of polyethylene. Khim.mash. no.1: 19-21 Ja '59. (MIRA 12:7)
(Leningrad--Compressors) (Ethylene)

SOV/124-59-9-9845

Translation from: Referativnyy zhurnal, Mekhanika, 1959, Nr 9, p 39 (USSR)

AUTHOR: Kosolapov, A.T.

TITLE: Evolution Dynamics of a Cavitation Cloud and Its Effect on Solids

PERIODICAL: V sb.: Primeneniye ul'traakust., k issled. veshchestva, Nr 6, Moscow, 1958, pp 143 - 153

ABSTRACT: The author studied cavitation phenomena in glycerine, vaseline oil, water, aqueous solutions of sugar and sodium chloride, and other liquids subjected to ultrasonic wave propagation (30-kc frequency). The cavitation disintegration on single crystals of various substances was investigated, which were immersed into liquids unable to dissolve them (crystals of sodium chloride and potash alum in transformer oil, lithium fluoride and benzophenone in water, etc). Direction and velocity of the bubbles moving in the ultrasonic field, were determined by their dimensions. By the accumulation of bubbles in the pressure antinode, a cavitation cloud is originated, within which occurs the fusion of the bubbles and

Card 1/2

Evolution Dynamics of a Cavitation Cloud and Its Effect on Solids

their following ejection. The surface of the liquid above the cavitation cloud swells up as a result of an arising pressure, which differs from the radiation pressure of the low-frequency ultrasonic waves. The maximum swell up was observed in the sodium-chloride solution, the most stable in soapsuds. When a great bubble was entering the cloud, the ejection of single droplets from the liquid surface was observed. The cavitation cloud possesses a considerable disintegrating capacity. Besides the appearance of cavities on the crystal faces, resembling the etching patterns, a disintegration of an aluminum foil within the zone of the cavitation cloud was observed.

B.B. Kudryavtsev

L 10628-66 EWT(1)/EWT(m)/T/EWP(k)/EWP(b)/EWA(h) JD
ACC NR: AR5023529 SOURCE CODE: UR/0275/65/000/008/V015/V015

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 8V116

AUTHOR: Kosolapov, A. T.

TITLE: Using King's formula for measuring ultrasonic intensity

CITED SOURCE: Uch. zap. Mordovsk. un-t, vyp. 36, 1964, 112-117

TOPIC TAGS: ultrasonics, ultrasonic measurement, ultrasonic property, ultrasonic radiation

TRANSLATION: The method is suggested and an outfit comprising an equal-arm lever-type balance is described; they are intended for measuring ultrasonic intensity in a water-filled vessel. Based on King's formula for the radiation pressure exerted on the ball placed in a sound field, a formula is developed for determining sound intensity; the latter can be measured within an error of 9.6% or better.

SUB CODE: 20

Card 1/1

UDC: 534.29-8

L 10629-66 EWT(l)/EWT(m)/T/EWP(t)/EWP(k)/EWP(b)/EWA(h)/EWA(c) IJP(c) JD/HW/WB
ACC NR: AR5023530 SOURCE CODE: UR/0275/65/000/008/V015/V015

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 8V119

AUTHOR: Kosolapov, A. T.

TITLE: Effect of hydrostatic pressure and gas content in liquid upon the ultrasonic destruction of foil

CITED SOURCE: Uch. zap. Mordovsk. un-t, vyp. 36, 1964, 118-122

TOPIC TAGS: ultrasonics, metal surface, ultrasonic effect, lead, hydrostatic pressure, gas

TRANSLATION: Heretofore used the weight method of evaluating cavitation erosion of solid specimens required long-time ultrasonic application. The use of lead-foil specimens permitted cutting the application time to a few seconds, which ensured the constant quantity of gas dissolved in the liquid during the entire test. The erosion is measured by the number of perforations. The hydrostatic pressure P_z and the dissolved-air pressures P_a varied from 150 torr to 16 atm. A scheme and description of the experimental outfit are presented. The ultrasonic frequency was 22.5 kc; intensity, 1 w/cm^2. Experimental results are reported. Bib 3, figs 5.

SUB CODE: 20, 11

Card 1/1 UDC: 534.22-8

L 62855-65 EWT(1)/EWP(k)/T Pf-4/Pi-4

ACCESSION NR: AR5017571 UR/0058/65/000/006/H062/H062

SOURCE: Ref. zh. Fizika, Abs. 6H421

AUTHOR: Kosolapov, A. T.

TITLE: Effect of hydrostatic pressure and gas content in a liquid on the process of destruction of a foil by ultrasound

CITED SOURCE: Uch. zap. Mordovsk. un-t, vyp. 36, 1964, 118-122

TOPIC TAGS: ultrasound, cavitation, cavitation erosion, liquid bubble, resonant bubble

TRANSLATION: The usually employed weight method of estimating cavitation erosion of bulky specimens necessitates the use of prolonged soundings. The use of lead-foil samples has made it possible to reduce the sounding time to several seconds, thus ensuring constancy of the amount of gas dissolved in the liquid during the entire experiment. The measures of erosion were the numbers of perforations

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ACCESSION NR: AR5017571

(taken with weight unity) and of indentations (with weight 1/2). The hydrostatic pressure P_2 and the pressure of the dissolved air P_n were varied from 150 mm Hg to 16 atmospheres. A diagram and a description of the experimental set-up are presented. The ultrasound frequency was 22.5 kcs and the intensity was 1 W/cm^2. The erosion of samples in water and in carbon tetrachloride was investigated. The dependence of P_2 on P_n at maximum erosion, and the dependence of degree of erosion on P_2 at P_n = const, were determined. It is established that the dependences of the indentation diameter and of the theoretical resonance diameter of the air bubble on P_2 have an identical character. Erosion in liquid unsaturated with air takes place at the place where a bubble of resonant size strikes the foil. It has thus been established that the destruction of the foil is by bubbles of resonant dimension. The destruction occurs at an optimal content of dissolved gas: when there is a shortage of gas, there are no resonant bubbles, and where there is an excess of gas they oscillate weakly. The erosion is weaker in carbon tetrachloride, owing

Card 2/3

L 62855-65

ACCESSION NR: AR5017571

to the excess of dissolved air. Removal of the gas or an increase of P_2 intensify the erosion in carbon tetrachloride.

SUB CODE: GP ENCL: 00

dm
3/3
Card

KOSOLAPOV, A.V., inzh.

Semiautomatic device for the electrothermal and mechanical tensioning of reinforcement. Transp.stroi. 14 no.12:48-49 D '64. (MIRA 19:1)

KOSOLAPOV, A.V., inzh.

Automatic unit for determining the relaxation of stress in a wire. Bet. i zhel.-bet. 8 no.12:566-567 D '62. (MIRA 16:2)
(Concrete reinforcement--Testing)

KOSOLAPOV, A.V.

Tensile test of a wire at high temperatures. Zav. lab. 30 no.1: 88-90 '64. (MIRA 17:9)

1. Novosibirskiy inzhenerno-stroitel'nyy institut.

1. KOSOLAPOV, B. A.

2. USSR (600)

4. Electric Insulators and Insulation

7. Testing the insulation of the circuits of gas protection panels. Rab.energ., 2, no. 12, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

AUTHOR: Kosolapov, B.A., Engineer SOV-91-58-10-20/35

TITLE: An Automatic Magnetic Interlocking Relay (Rele s magnitnym samouderzhivaniyem)

PERIODICAL: Energetik, 1958, Nr 10, p 21 (USSR)

ABSTRACT: A modernized relay type RE-184, capable of interlocking due to residual magnetization, is used for the automatic oil-lubrication of machines. Experience in adjusting this relay has shown that in order to obtain reliable automatic interlocking, it is necessary to loosen the return spring almost completely, allowing it to return under the weight of the armature itself, and to reduce the pressure of the contacts to a minimum. However, even after this adjustment, the interlocking power is small. The adjustment also reduces the reliability of the work of the relay. The author says that he and others produced an automatic magnetic interlocking relay from a relay type RE-103/2A. For this, the factory core of the relay was replaced by a core turned from hard tempered steel. The factory winding of the relay was left without alteration and used for switching on. The cut-out

Card 1/2

An Automatic Magnetic Interlocking Relay SOV-91-58-10-20/35

winding was wound with 20,000 turns of PEL-0.11 wire and switched on via a resistance of 10,000 ohms. When the current passes through the cut-in winding, the core of the relay becomes magnetized and keeps the armature firmly in an operational state without special regulation. When the current is fed into the cut-out winding, the core is demagnetized and the armature drops down.

1. Electromagnetic relays--Design

Card 2/2

AUTHOR: Kosolapov, B.A., Engineer SOV-91-58-10-21/35

TITLE: An Automatic Device for the Protection of Solenoids for Switching-on Oil Breakers (Avtomat dlya zashchity solenoidov vklyucheniya maslyanykh vyklyuchateley)

PERIODICAL: Energetik, 1958, Nr 10, pp 21 - 22 (USSR)

ABSTRACT: To prevent the solenoids used for switching on oil breakers from burning out when the cut-in contactor is sealed, constant current automatic devices, with the corresponding relay apparatus, are used. The author describes two separate automatic systems, both simple and reliable, and both employing relay apparatus. He says that one of the systems has been in use for two years, and has shown itself to be completely reliable. There is one circuit-diagram.

1. Solenide--Operation

Card 1/1

KOSOLAPOV, B.A., inzh.

Concerning V.A. Shefer's article "Improvement of the control networks of the electromagnetic drives of oil-filled switches." Elek. sta. 34 no.3:87 Mr '63. (MIRA 16:3)
(Electric switchgear)
(Shefer, V.A.)

KOSOLAPOV, B.A., inzh.

Automation of the electrical section of a thermal electric power plant.
Elek. sta. 36 no.6:86-87 Je '65. (MIRA 18:7)

KOSOLAPOV, B. K.

Stand for testing vee slide-valves. Mashinostroitel' no.10:22 O '62. (MIRA 15:10)

(Slide-valves—Testing)

KOSOLAPOV, Boris Yefimovich.; CHIZHOV, N.N., red.; MAL'CHEVSKIY, G.N., red. kart.; VILENSKAYA, E.N., tekhn. red.

[Tunis; a geographical sketch] Tunis; geograficheskii ocherk. Moskva, Gos. izd-vo geogr. lit-ry, 1958. 43 p. (MIRA 11:11)
(Tunis)

KOSOLAPOV, Boris Yefimovich; CHIZHOV, N.N., red.; POPOVA, V.I., mladshiy red.; KISELEVA, Z.A., red.kart; VILENSKAYA, E.N., tekhn.red.

[Algeria] Alzhir. Moskva, Gos.izd-vo geogr.lit-ry, 1959. 79 p. (MIRA 13:10)
(Algeria)

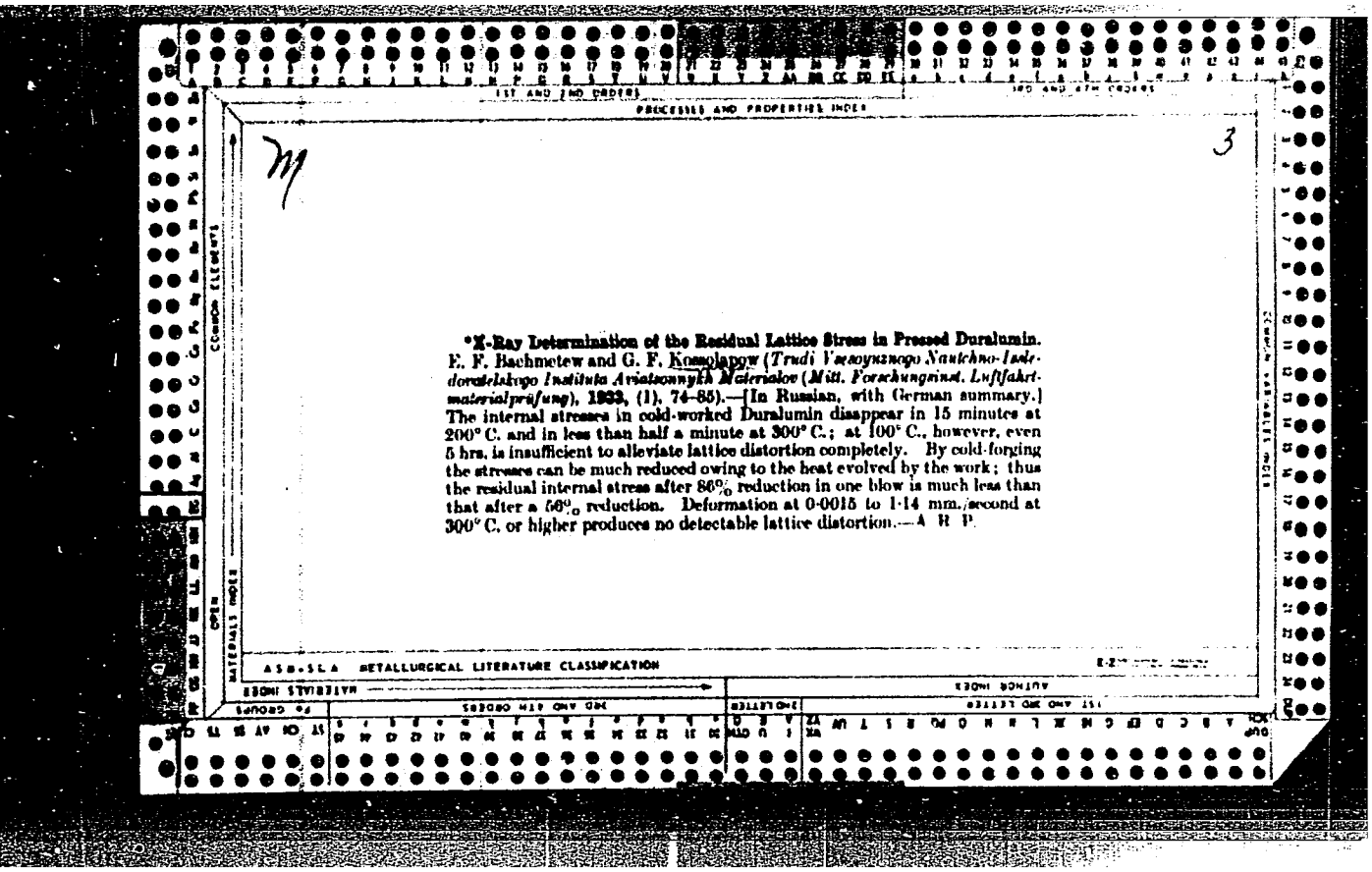
GAVRILOV, N.I.; GLUSHAKOV, P.I.[deceased]; KOSOLAPOV, B.Ye.; NIKOL'SKIY, M.I.; SHCHUKIN, Ye.A.; ZABIROV, B.Sh., red.; KOSTINSKIY, D.N., red; ZHURAVLEVA, G.P., mlad. red.; GOLITSYN, A.V., red. kart; BURLAKA, N.P., tekhn. red.

[Countries of North and Northeast Africa; geographical information] Strany Severnoi i Severo-Vostochnoi Afriki; geograficheskie spravki. Moskva, Geografgiz, 1962. 39 p. (MIRA 15:7)
(Africa, North--Geography, Economic)

KOSOLAPOV, D.I.

Craniological study of Karabair horses. Uzb. biol. zhur. no.3:68-71 '61. (MIRA 14:6)

1. Kafedra sel'skogo khozyaystva Tashkentskoy vysshey partiynoy shkoly.
(UZBEKISTAN—HORSE BREEDS) (SKULL)



***X-Ray Determination of the Residual Lattice Stress in Pressed Duralumin.** E. F. Bachmetew and G. F. Konoplapow (*Trudi Wsesoyuznogo Nautchno-Issledowatelskogo Instituta Awiatsionnykh Materialow* (*Mitt. Forschungsinst. Luftfahrtmaterialprüfung*), **1933**, (1), 74–85).—[In Russian, with German summary.] The internal stresses in cold-worked Duralumin disappear in 15 minutes at 200° C. and in less than half a minute at 300° C.; at 100° C., however, even 5 hrs. is insufficient to alleviate lattice distortion completely. By cold-forging the stresses can be much reduced owing to the heat evolved by the work; thus the residual internal stress after 86% reduction in one blow is much less than that after a 56% reduction. Deformation at 0·0015 to 1·14 mm./second at 300° C. or higher produces no detectable lattice distortion.—A. R. P.

KOSOLAPOV, G. F.

Rentgenograficheskoe issledovanie azotirovannogo sloia. Moskva, Gosmashgiz, 1934. 36 p., illus. (VIAM. Trudy, no. 15)

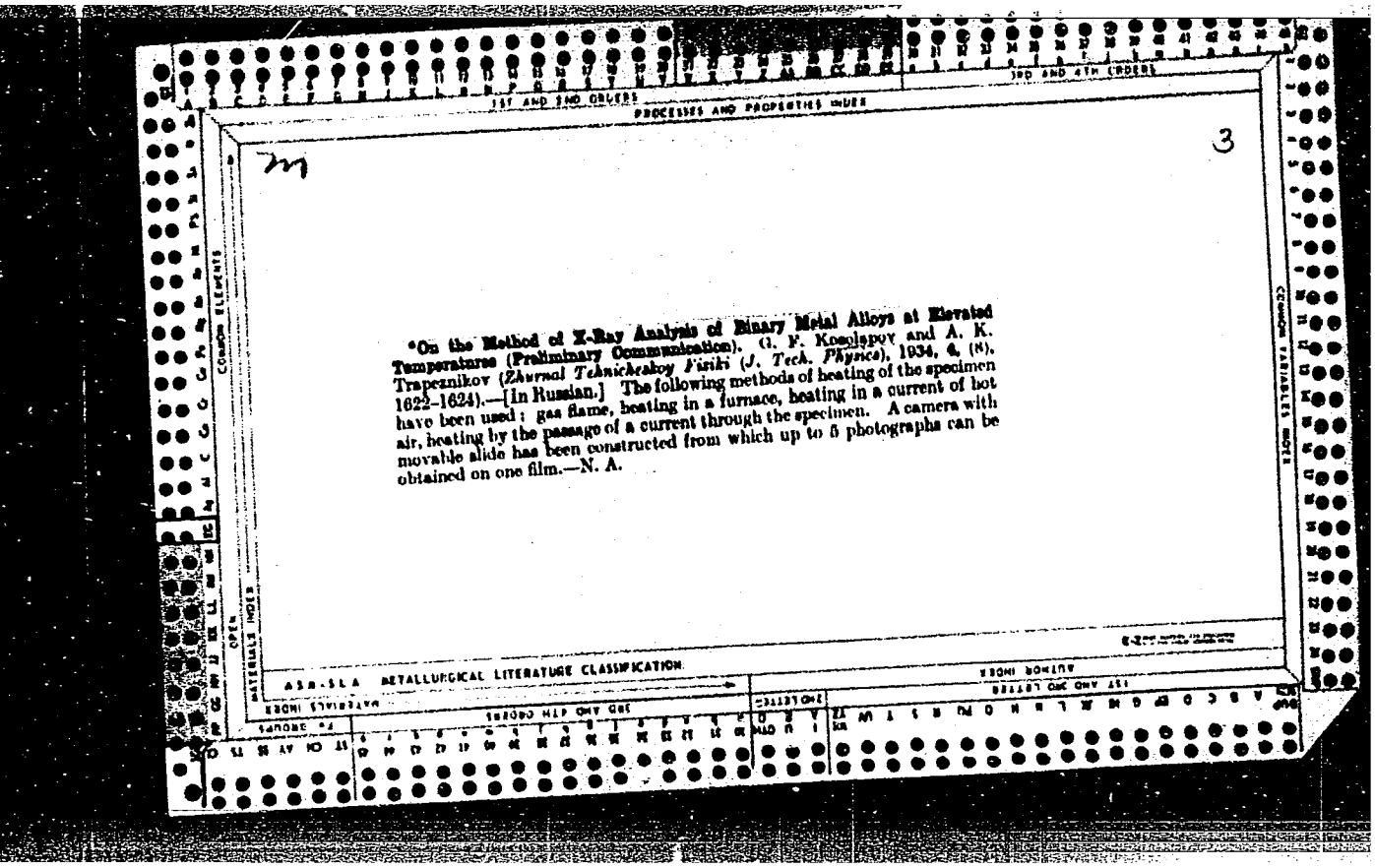
Summary in German.

Bibliography: p. 36.

Title tr.: X-ray investigation of a nitrated layer.

NN

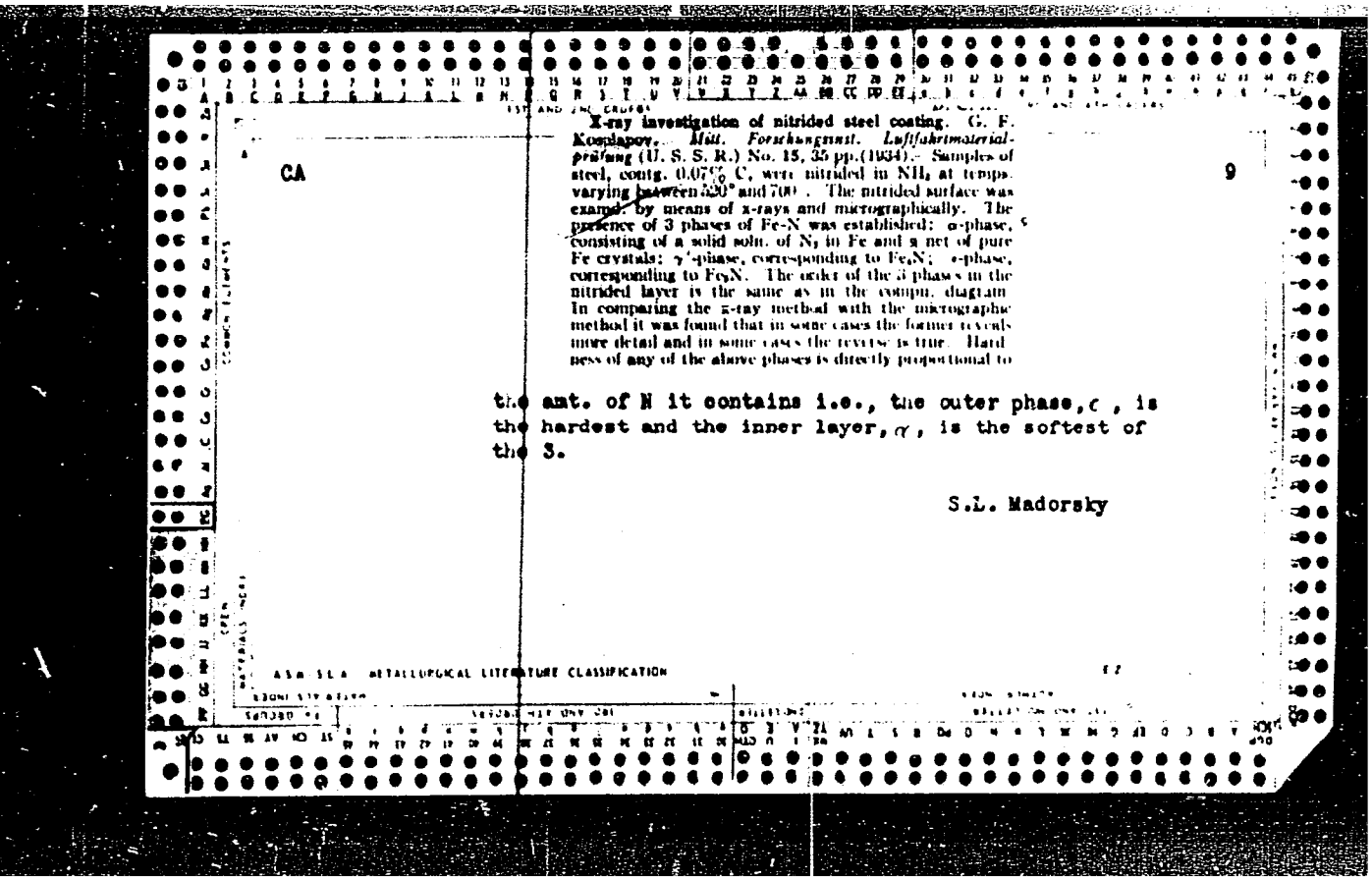
SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.



3

*On the Method of X-Ray Analysis of Binary Metal Alloys at Elevated Temperatures (Preliminary Communication). G. F. Kosolapov and A. K. Trapeznikov (*Zhurnal Tekhicheskoy Fiziki* (*J. Tech. Physics*), 1934, 4, (8), 1622–1624).—[In Russian.] The following methods of heating of the specimen have been used: gas flame, heating in a furnace, heating in a current of hot air, heating by the passage of a current through the specimen. A camera with movable slide has been constructed from which up to 5 photographs can be obtained on one film.—N. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



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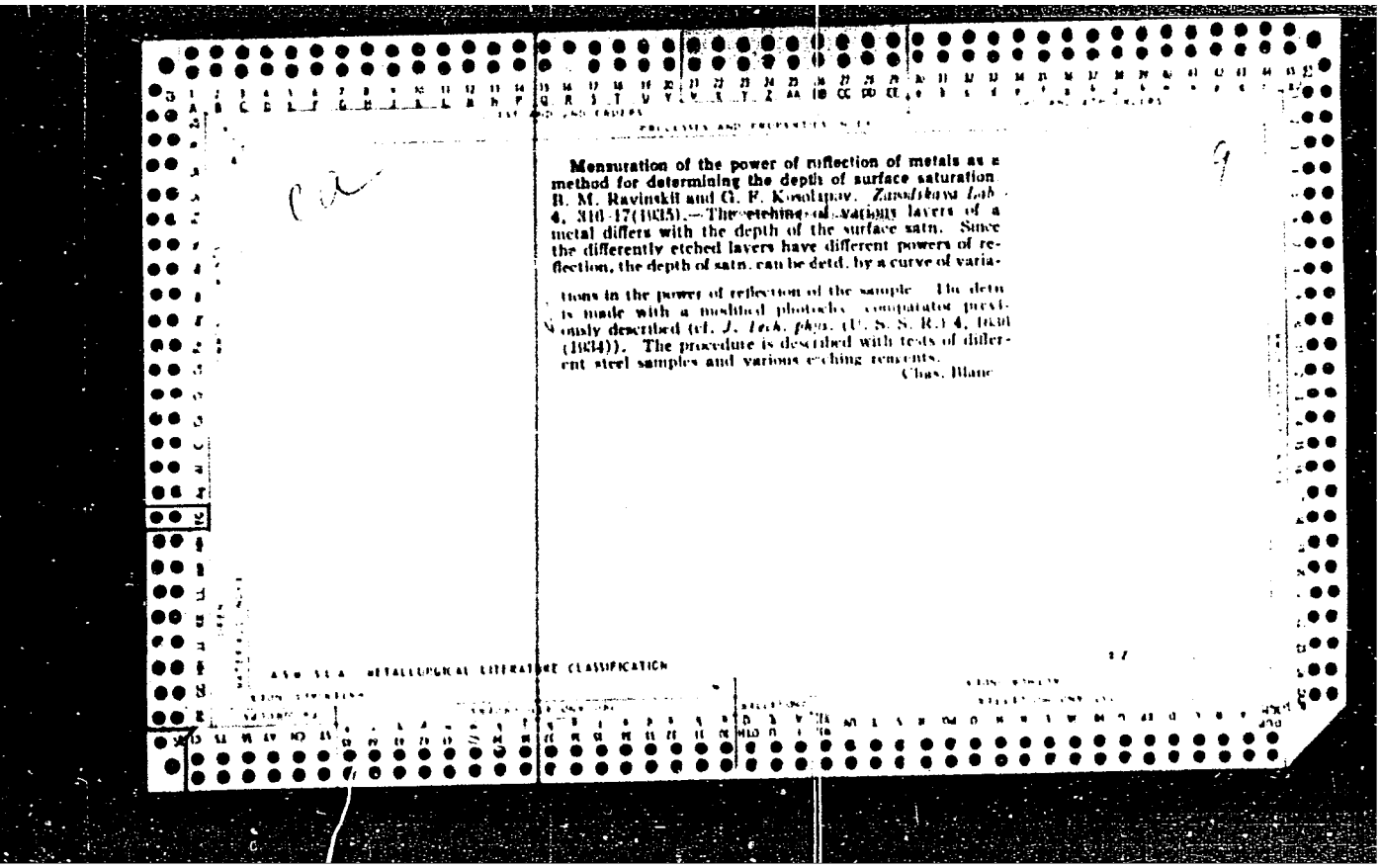
X-ray investigation of nitrided steel coating. G. F. Koeplapov. *Mitt. Forschungsinst. Luftfahrtmaterialprüfung* (U. S. S. R.) No. 15, 35 pp.(1934).— Samples of steel, contg. 0.07% C, were nitrided in NH_3 at temps. varying between 520° and 700°. The nitrided surface was examd. by means of x-rays and micrographically. The presence of 3 phases of Fe-N was established: α-phase, consisting of a solid soln. of N in Fe and a net of pure Fe crystals; γ'-phase, corresponding to Fe_4N; ε-phase, corresponding to Fe_2N. The order of the 3 phases in the nitrided layer is the same as in the compn. diagram. In comparing the x-ray method with the micrographic method it was found that in some cases the former reveals more detail and in some cases the reverse is true. Hardness of any of the above phases is directly proportional to the amt. of N it contains i.e., the outer phase, ε, is the hardest and the inner layer, α, is the softest of the 3.

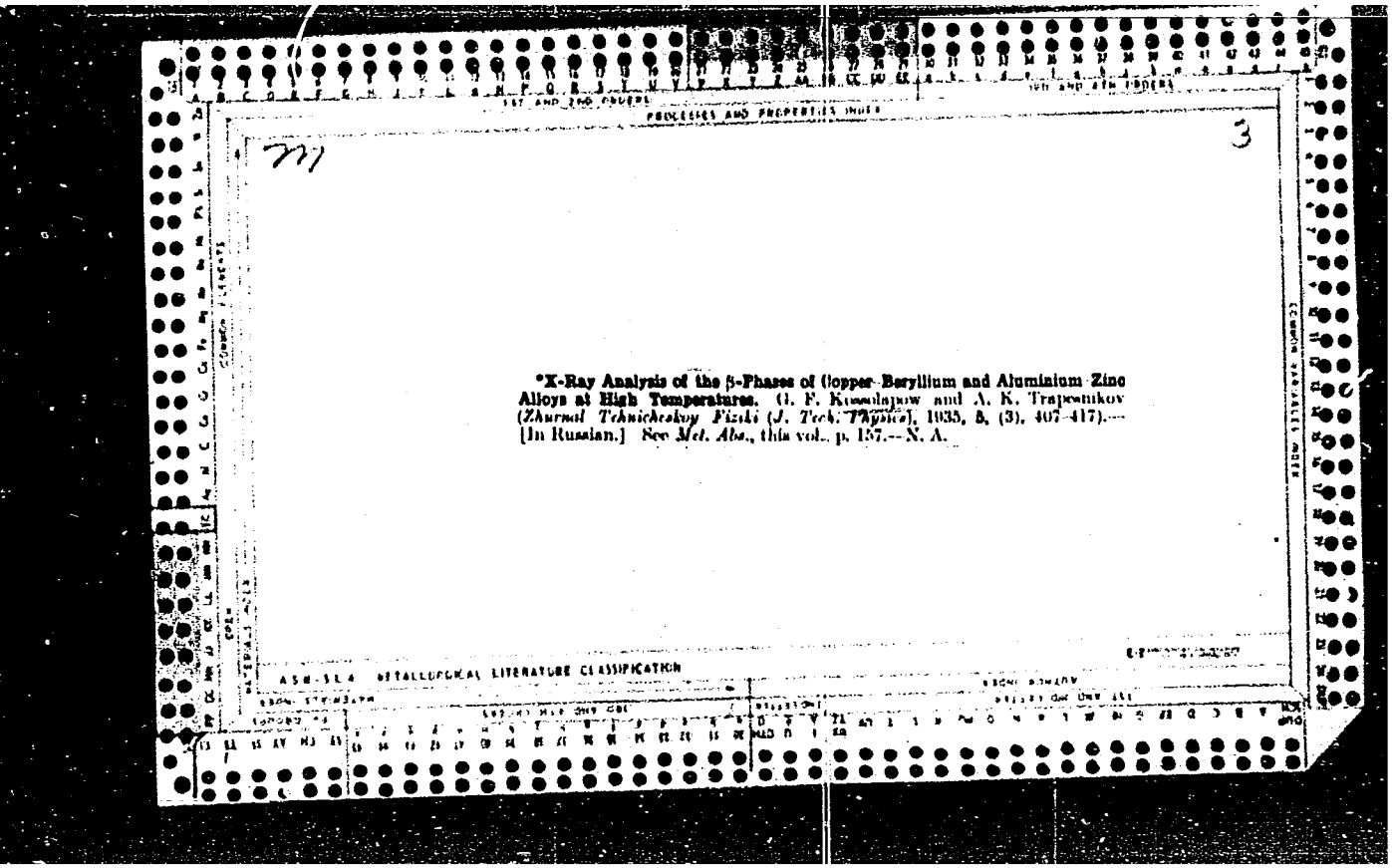
S.L. Madorsky

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION



Mensuration of the power of reflection of metals as a method for determining the depth of surface saturation. B. M. Ravinskii and G. F. Kosolapov. *Zavodskaya Lab.* 4, 310-17(1935).—The etching of various layers of a metal differs with the depth of the surface satn. Since the differently etched layers have different powers of reflection, the depth of satn. can be detd. by a curve of variations in the power of reflection of the sample. The detn is made with a modified photoelec. comparator previously described (cf. *J. Tech. phys.* (U. S. S. R.) 4, 1631 (1934)). The procedure is described with tests of different steel samples and various etching reagents.

Chas. Blanc



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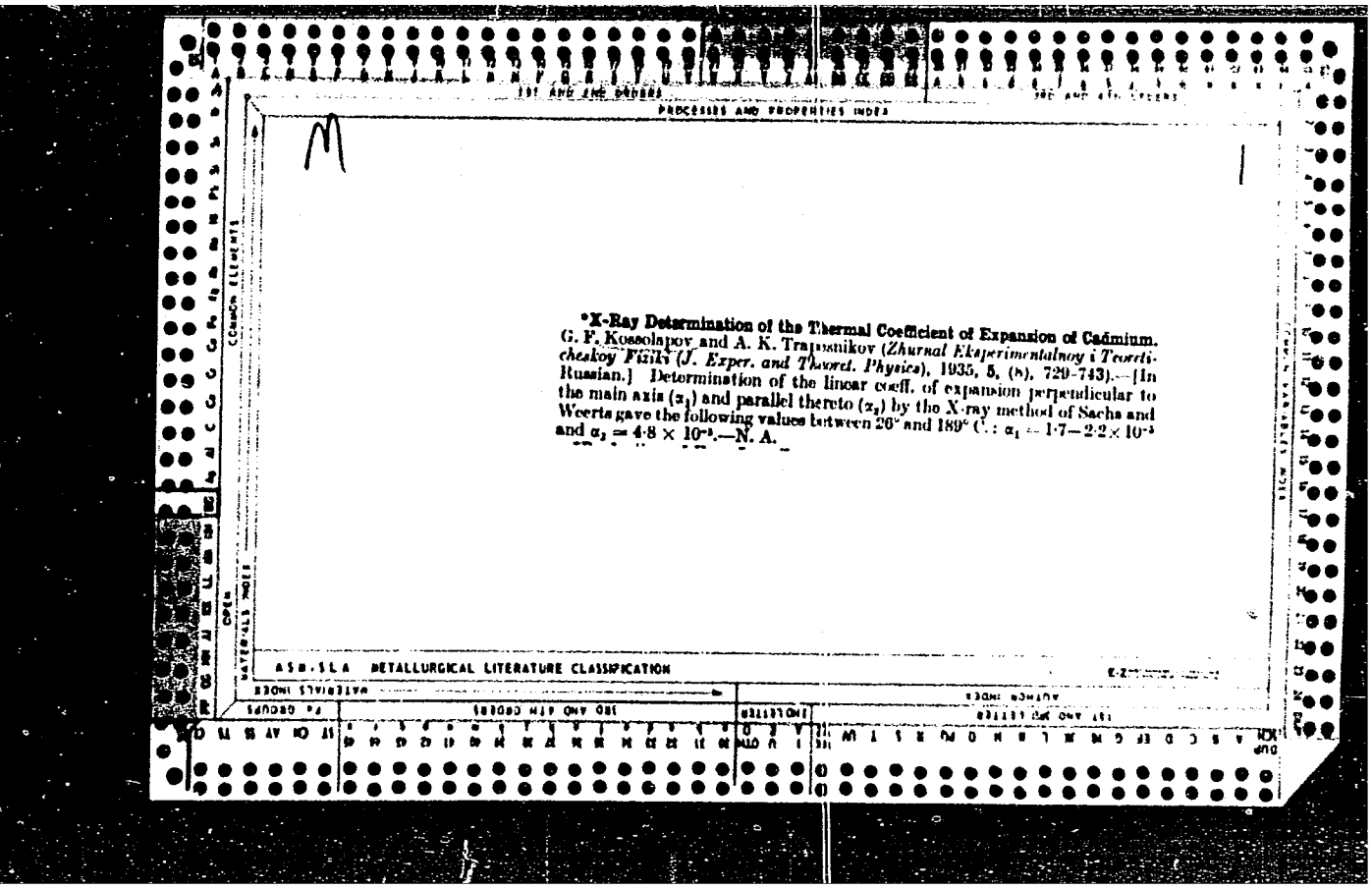
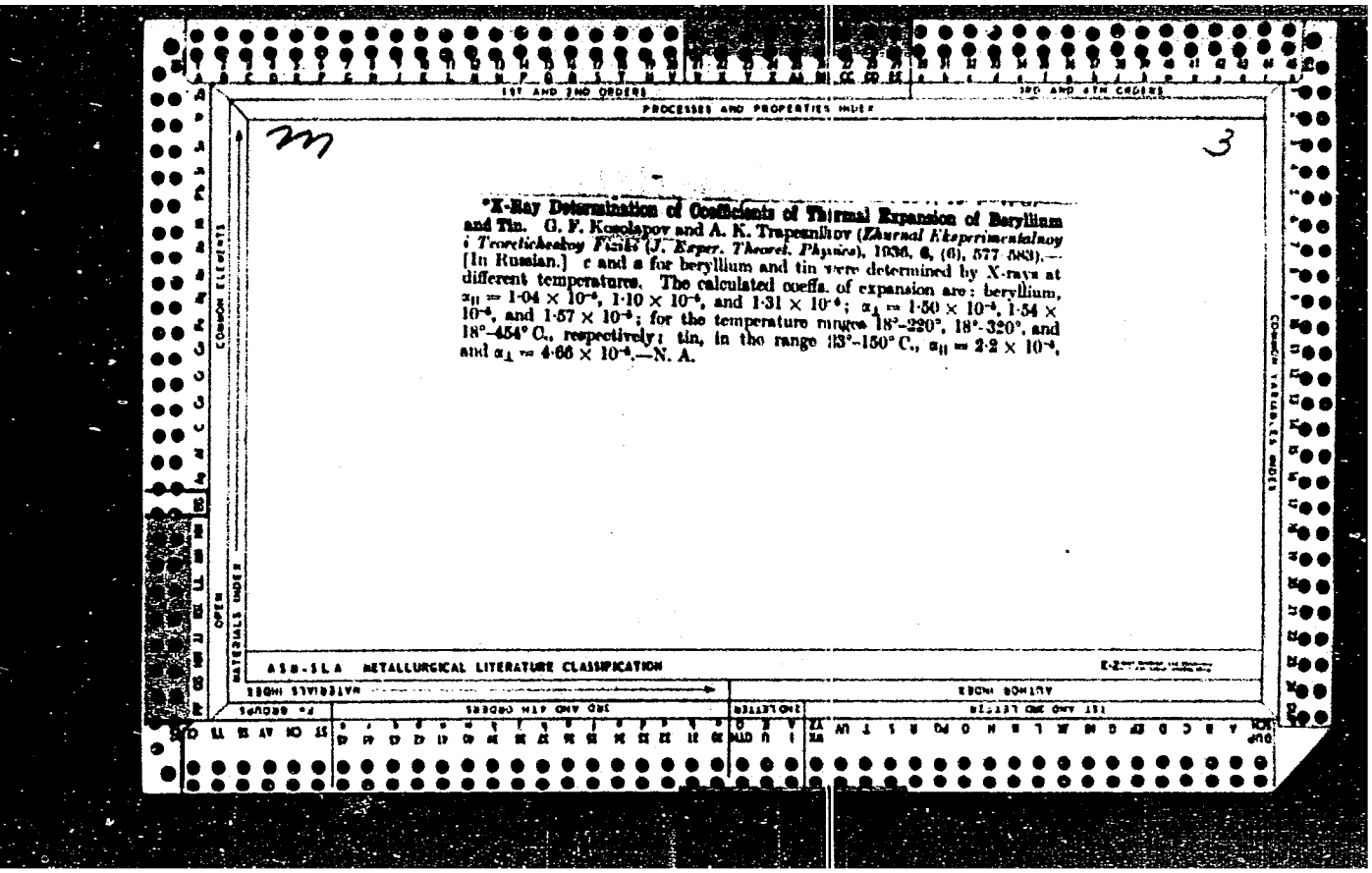
3

***X-Ray Analysis of the β-Phases of Copper-Beryllium and Aluminium-Zinc Alloys at High Temperatures.** G. F. Kussakajew and A. K. Trapeznikov (*Zhurnal Tekhicheskoy Fiziki* [*J. Tech. Physics*], 1935, 5, (3), 407–417).—[In Russian.] See *Met. Abs.*, this vol., p. 157.—N. A.

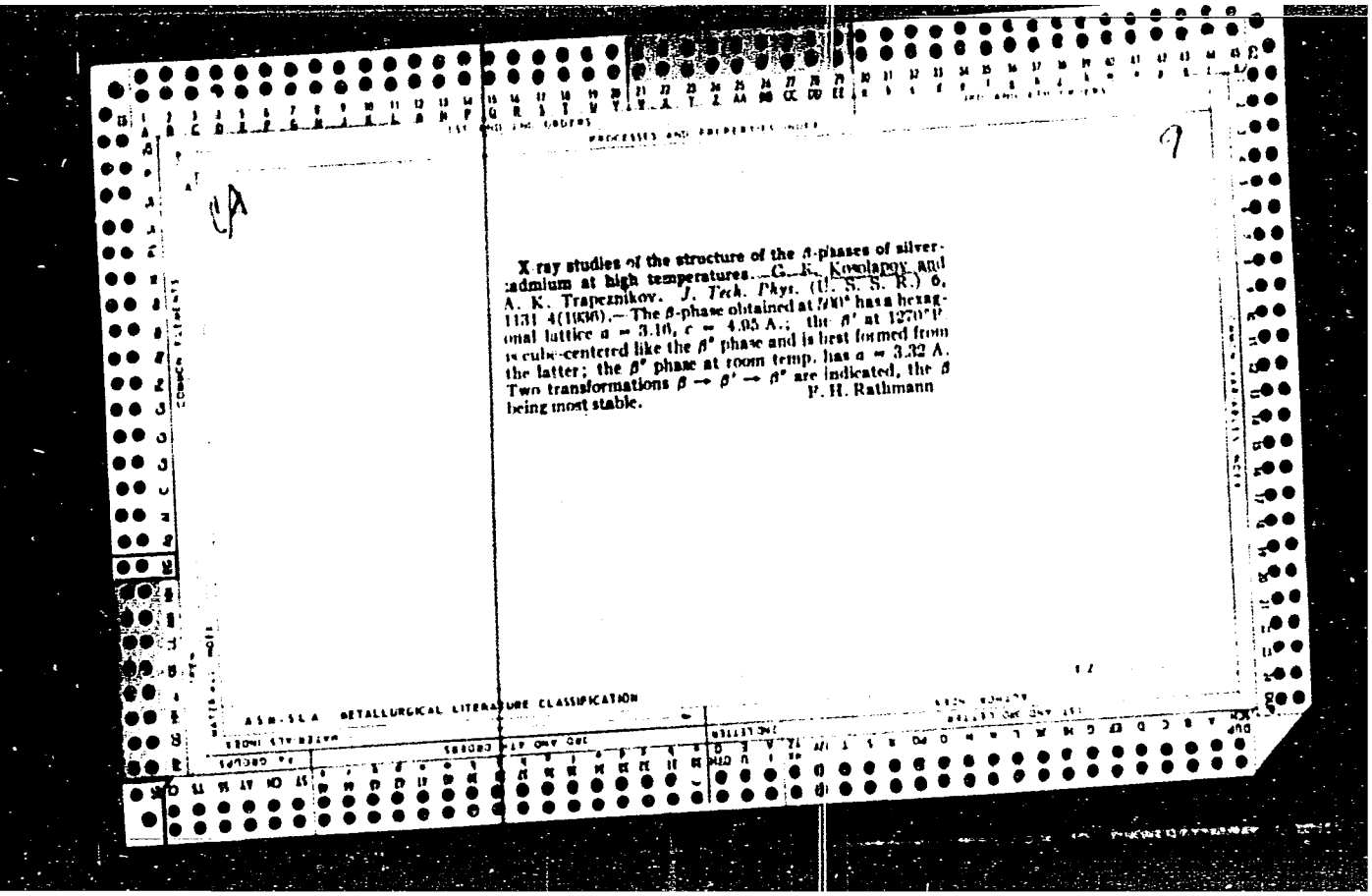
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



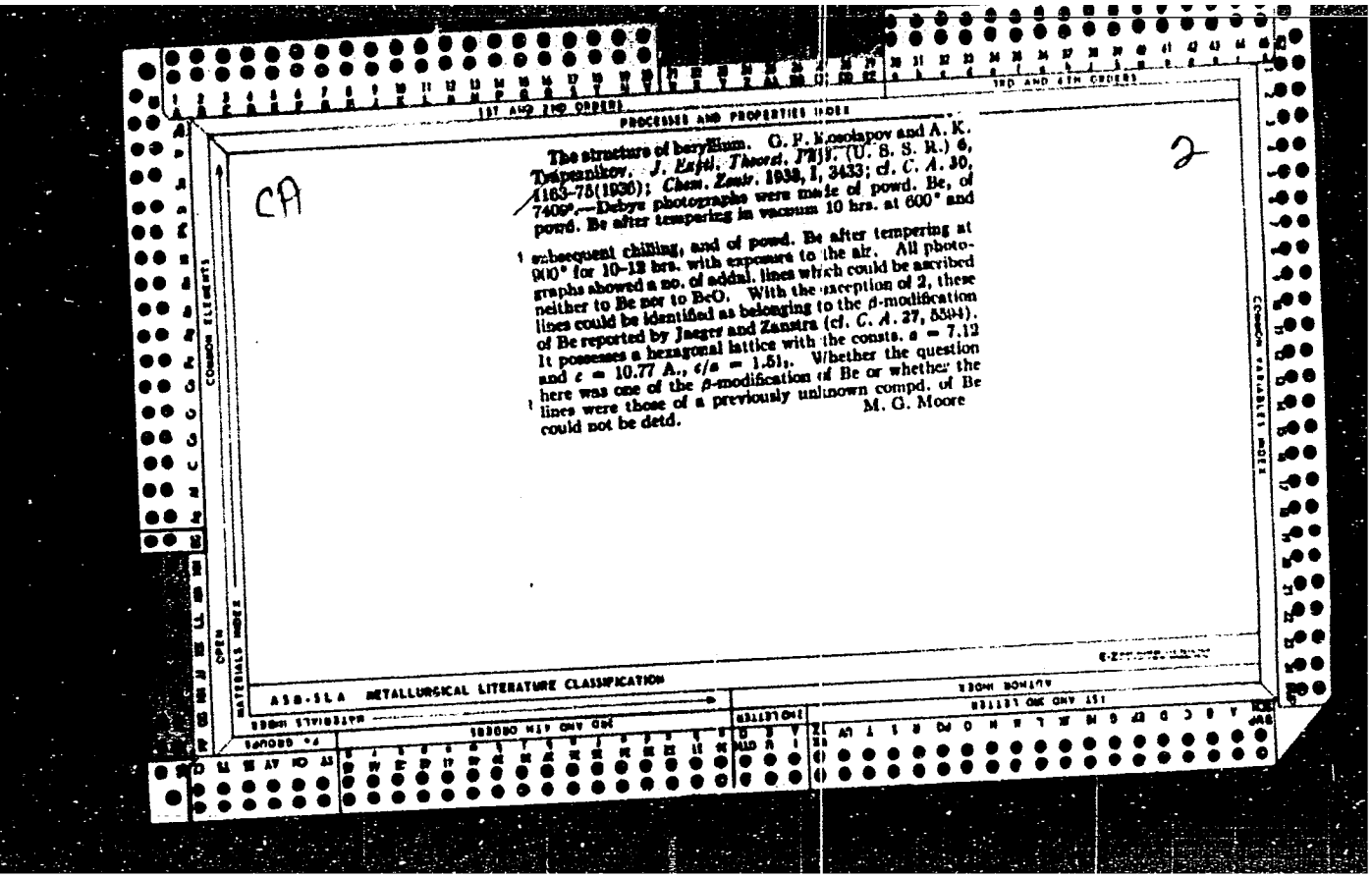
*X-Ray Determination of the Thermal Coefficient of Expansion of Cadmium. G. F. Kossolapov and A. K. Trapesnikov (*Zhurnal Eksperimentalnoy i Teoreticheskoy Fiziki* (*J. Exper. and Theoret. Physics*), 1935, 5, (8), 720–743).—[In Russian.] Determination of the linear coeff. of expansion perpendicular to the main axis (α_1) and parallel thereto (α_2) by the X-ray method of Sachs and Weerts gave the following values between 20° and 189° C.: $\alpha_1 = 1{\cdot}7-2{\cdot}2 \times 10^{-5}$ and $\alpha_2 = 4{\cdot}8 \times 10^{-5}$.—N. A.



"X-Ray Determination of Coefficients of Thermal Expansion of Beryllium and Tin. G. F. Konobejev and A. K. Trapeznikov (*Zhurnal Eksperimentalnoy i Teoreticheskoy Fiziki* [*J. Exper. Theoret. Physics*), 1936, **6**, (6), 577–583).—[In Russian.] c and a for beryllium and tin were determined by X-rays at different temperatures. The calculated coeffs. of expansion are: beryllium, $\alpha_{\parallel} = 1{\cdot}04 \times 10^{-6}$, $1{\cdot}10 \times 10^{-6}$, and $1{\cdot}31 \times 10^{-6}$; $\alpha_{\perp} = 1{\cdot}50 \times 10^{-6}$, $1{\cdot}54 \times 10^{-6}$, and $1{\cdot}57 \times 10^{-6}$; for the temperature ranges 18°–220°, 18°–320°, and 18°–454° C., respectively; tin, in the range 13°–150° C., $\alpha_{\parallel} = 2{\cdot}2 \times 10^{-6}$, and $\alpha_{\perp} = 4{\cdot}66 \times 10^{-6}$.—N. A.



X ray studies of the structure of the β-phases of silver-cadmium at high temperatures. G. K. Kovalapov and A. K. Trapeznikov. *J. Tech. Phys.* (U. S. S. R.) 6, 1131 4(1936).— The β-phase obtained at 700° has a hexagonal lattice $a = 3.16$, $c = 4.95$ A.; the β' at 1270° is cube-centered like the β" phase and is first formed from the latter; the β" phase at room temp. has $a = 3.32$ A. Two transformations $\beta \rightarrow \beta' \rightarrow \beta''$ are indicated, the β being most stable.
P. H. Rathmann



CA

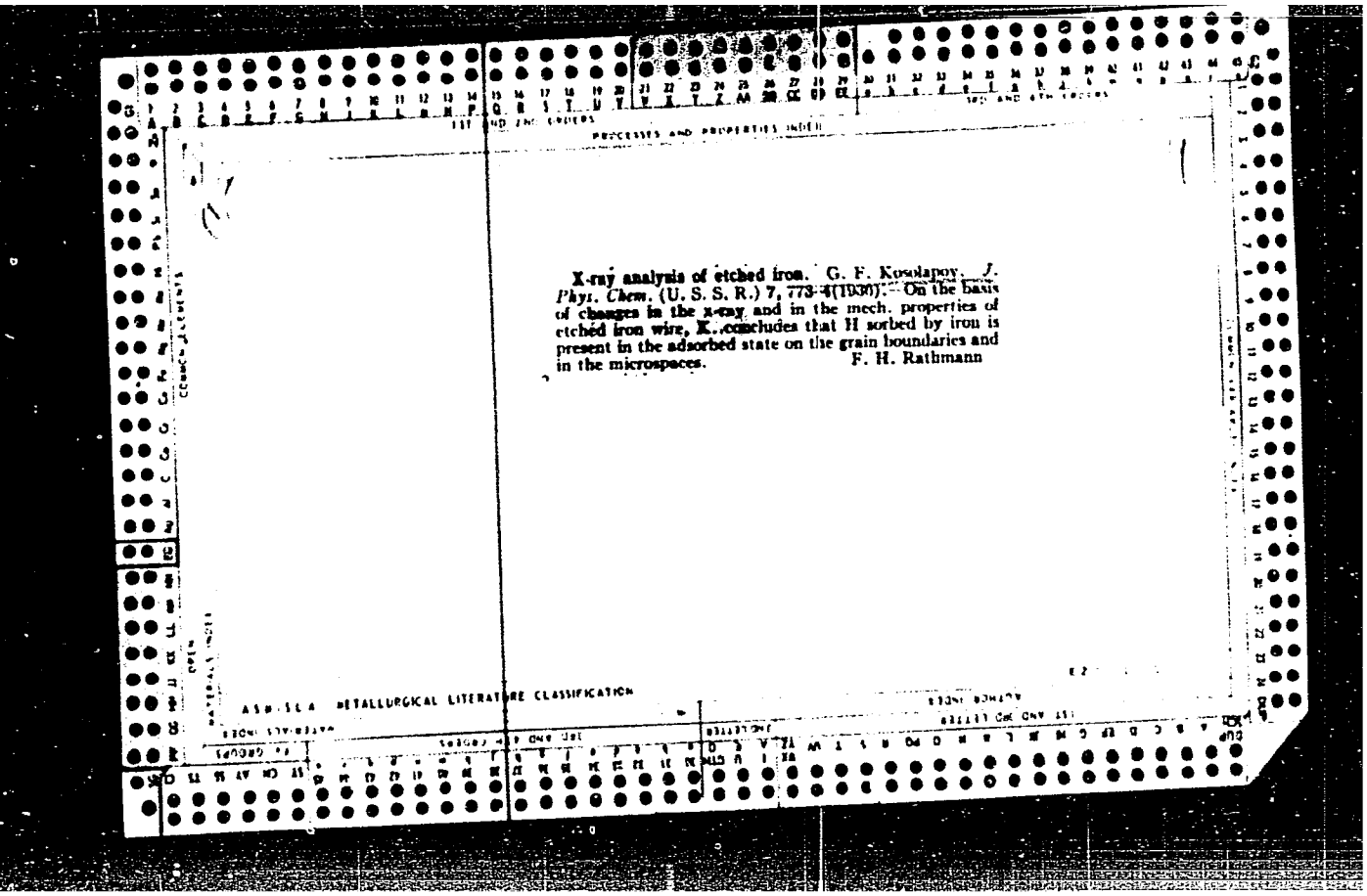
2

PROCESSES AND PROPERTIES INDEX

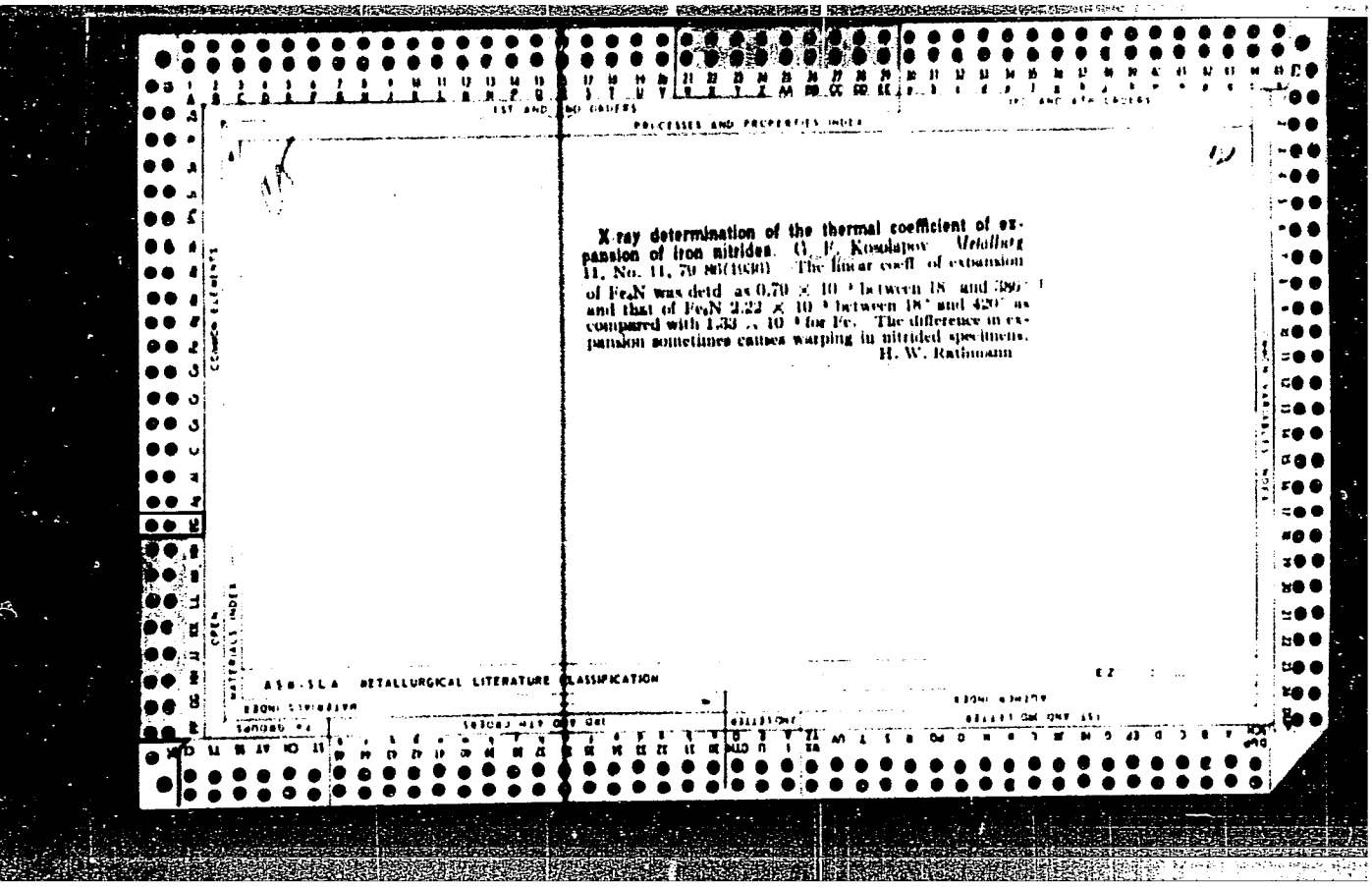
The structure of beryllium. G. P. Kosolapov and A. K. Trapeznikov. *J. Exptl. Theoret. Phys.* (U. S. S. R.) 6, 1163–75(1936); *Chem. Zentr.* 1938, I, 3433; cf. *C. A.* 30, 7409.—Debye photographs were made of powd. Be, of powd. Be after tempering in vacuum 10 hrs. at 600° and subsequent chilling, and of powd. Be after tempering at 900° for 10–12 hrs. with exposure to the air. All photographs showed a no. of addnl. lines which could be ascribed neither to Be nor to BeO. With the exception of 2, these lines could be identified as belonging to the β-modification of Be reported by Jaeger and Zanstra (cf. *C. A.* 27, 5594). It possesses a hexagonal lattice with the consts. $a = 7.12$ and $c = 10.77$ A., $c/a = 1.51_3$. Whether the question here was one of the β-modification of Be or whether the lines were those of a previously unknown compd. of Be could not be detd.

M. G. Moore

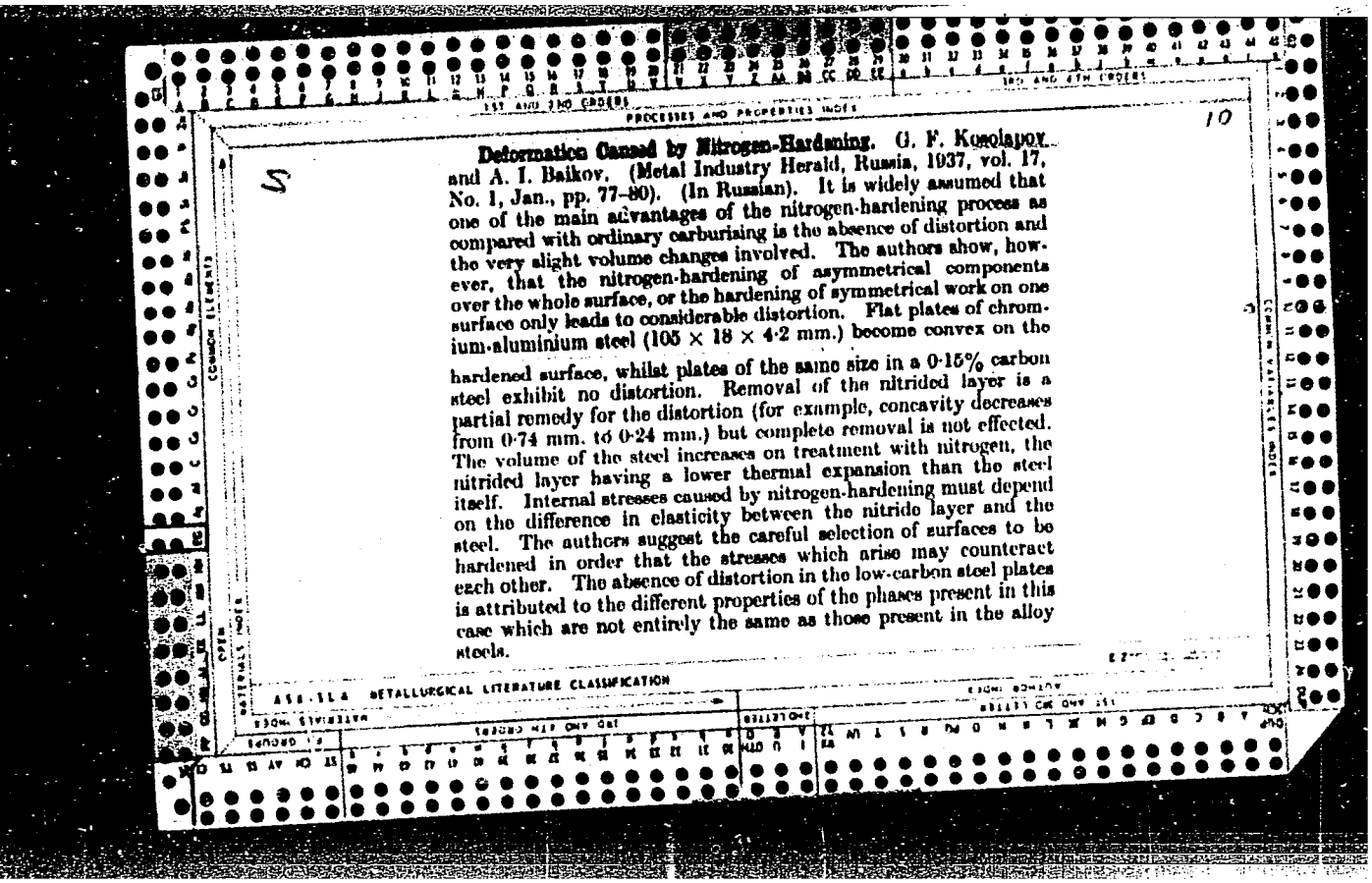
A58-51A METALLURGICAL LITERATURE CLASSIFICATION



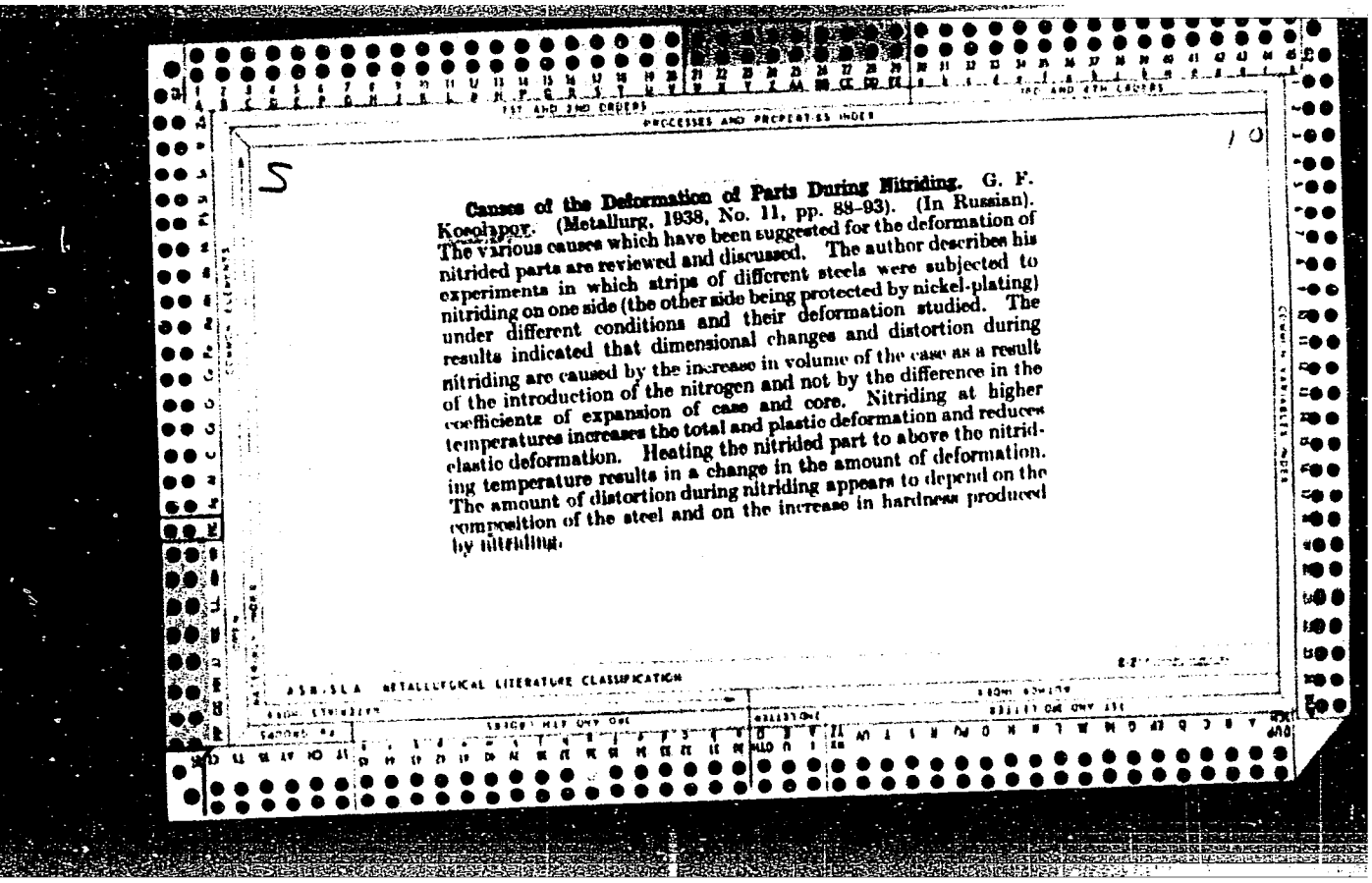
X-ray analysis of etched iron. G. F. Kosolapov. *J. Phys. Chem.* (U. S. S. R.) 7, 773-4(1936). On the basis of changes in the x-ray and in the mech. properties of etched iron wire, K. concludes that H sorbed by iron is present in the adsorbed state on the grain boundaries and in the microspaces. F. H. Rathmann



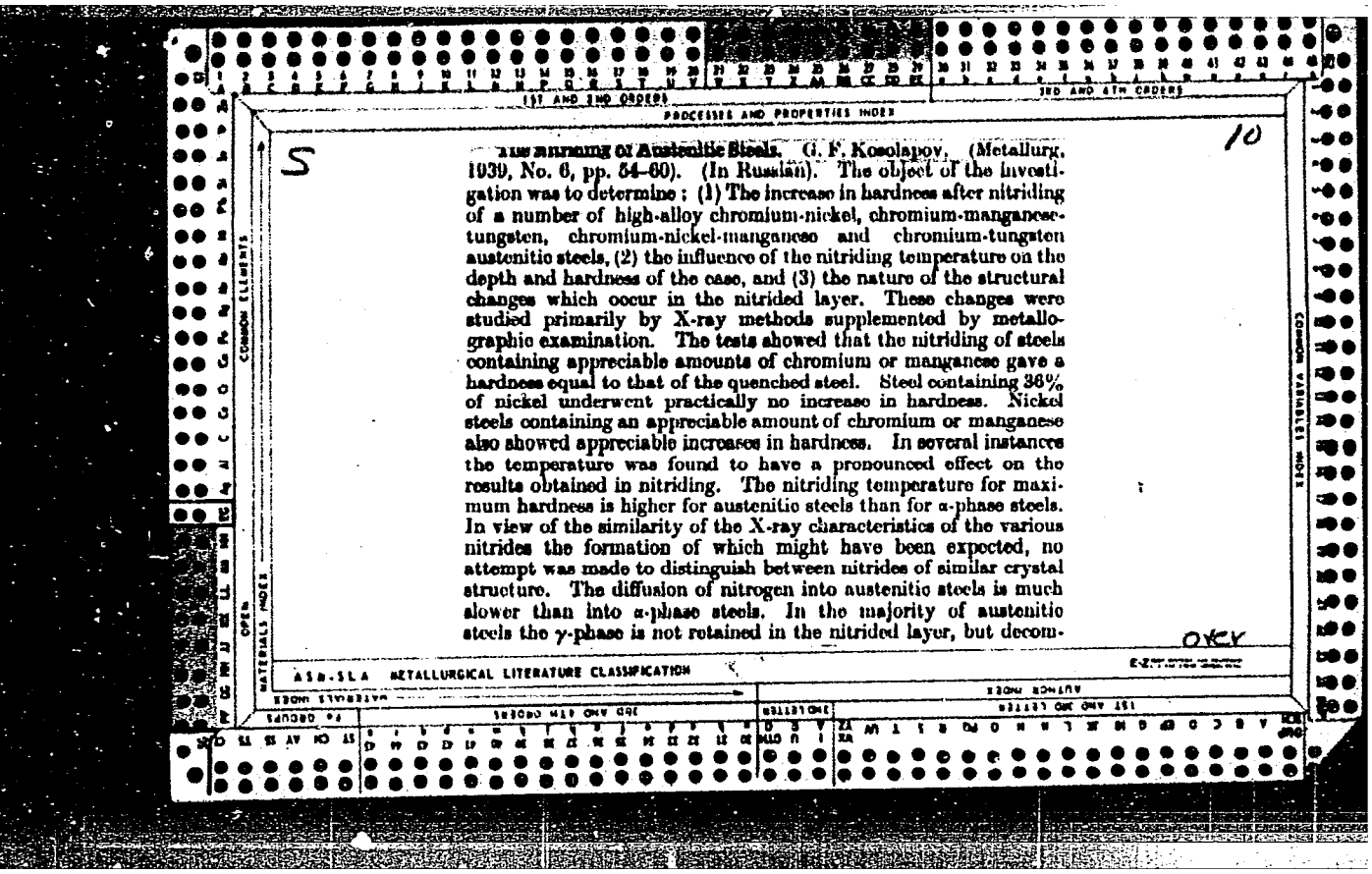
X-ray determination of the thermal coefficient of expansion of iron nitrides. G. F. Kosolapov. *Metallurg* 11, No. 11, 70-80(1936). The linear coeff. of expansion of Fe_4N was detd. as 0.70×10^{-5} between 18° and 390° and that of Fe_2N 2.22×10^{-5} between 18° and 420° as compared with 1.33×10^{-5} for Fe. The difference in expansion sometimes causes warping in nitrided specimens.
H. W. Ratinmann



Deformation Caused by Nitrogen-Hardening. G. F. Kosolapov and A. I. Baikov. (Metal Industry Herald, Russia, 1937, vol. 17, No. 1, Jan., pp. 77–80). (In Russian). It is widely assumed that one of the main advantages of the nitrogen-hardening process as compared with ordinary carburising is the absence of distortion and the very slight volume changes involved. The authors show, however, that the nitrogen-hardening of asymmetrical components over the whole surface, or the hardening of symmetrical work on one surface only leads to considerable distortion. Flat plates of chromium-aluminium steel (105 × 18 × 4·2 mm.) become convex on the hardened surface, whilst plates of the same size in a 0·15% carbon steel exhibit no distortion. Removal of the nitrided layer is a partial remedy for the distortion (for example, concavity decreases from 0·74 mm. to 0·24 mm.) but complete removal is not effected. The volume of the steel increases on treatment with nitrogen, the nitrided layer having a lower thermal expansion than the steel itself. Internal stresses caused by nitrogen-hardening must depend on the difference in elasticity between the nitride layer and the steel. The authors suggest the careful selection of surfaces to be hardened in order that the stresses which arise may counteract each other. The absence of distortion in the low-carbon steel plates is attributed to the different properties of the phases present in this case which are not entirely the same as those present in the alloy steels.



Causes of the Deformation of Parts During Nitriding. G. F. Kosolapov. (Metallurg, 1938, No. 11, pp. 88–93). (In Russian). The various causes which have been suggested for the deformation of nitrided parts are reviewed and discussed. The author describes his experiments in which strips of different steels were subjected to nitriding on one side (the other side being protected by nickel-plating) under different conditions and their deformation studied. The results indicated that dimensional changes and distortion during nitriding are caused by the increase in volume of the case as a result of the introduction of the nitrogen and not by the difference in the coefficients of expansion of case and core. Nitriding at higher temperatures increases the total and plastic deformation and reduces elastic deformation. Heating the nitrided part to above the nitriding temperature results in a change in the amount of deformation. The amount of distortion during nitriding appears to depend on the composition of the steel and on the increase in hardness produced by nitriding.



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Nitriding of Austenitic Steels. G. F. Kosolapov. (Metallurg, 1939, No. 6, pp. 54–60). (In Russian). The object of the investigation was to determine: (1) The increase in hardness after nitriding of a number of high-alloy chromium-nickel, chromium-manganese-tungsten, chromium-nickel-manganese and chromium-tungsten austenitic steels, (2) the influence of the nitriding temperature on the depth and hardness of the case, and (3) the nature of the structural changes which occur in the nitrided layer. These changes were studied primarily by X-ray methods supplemented by metallographic examination. The tests showed that the nitriding of steels containing appreciable amounts of chromium or manganese gave a hardness equal to that of the quenched steel. Steel containing 36% of nickel underwent practically no increase in hardness. Nickel steels containing an appreciable amount of chromium or manganese also showed appreciable increases in hardness. In several instances the temperature was found to have a pronounced effect on the results obtained in nitriding. The nitriding temperature for maximum hardness is higher for austenitic steels than for α-phase steels. In view of the similarity of the X-ray characteristics of the various nitrides the formation of which might have been expected, no attempt was made to distinguish between nitrides of similar crystal structure. The diffusion of nitrogen into austenitic steels is much slower than into α-phase steels. In the majority of austenitic steels the γ-phase is not retained in the nitrided layer, but decom-

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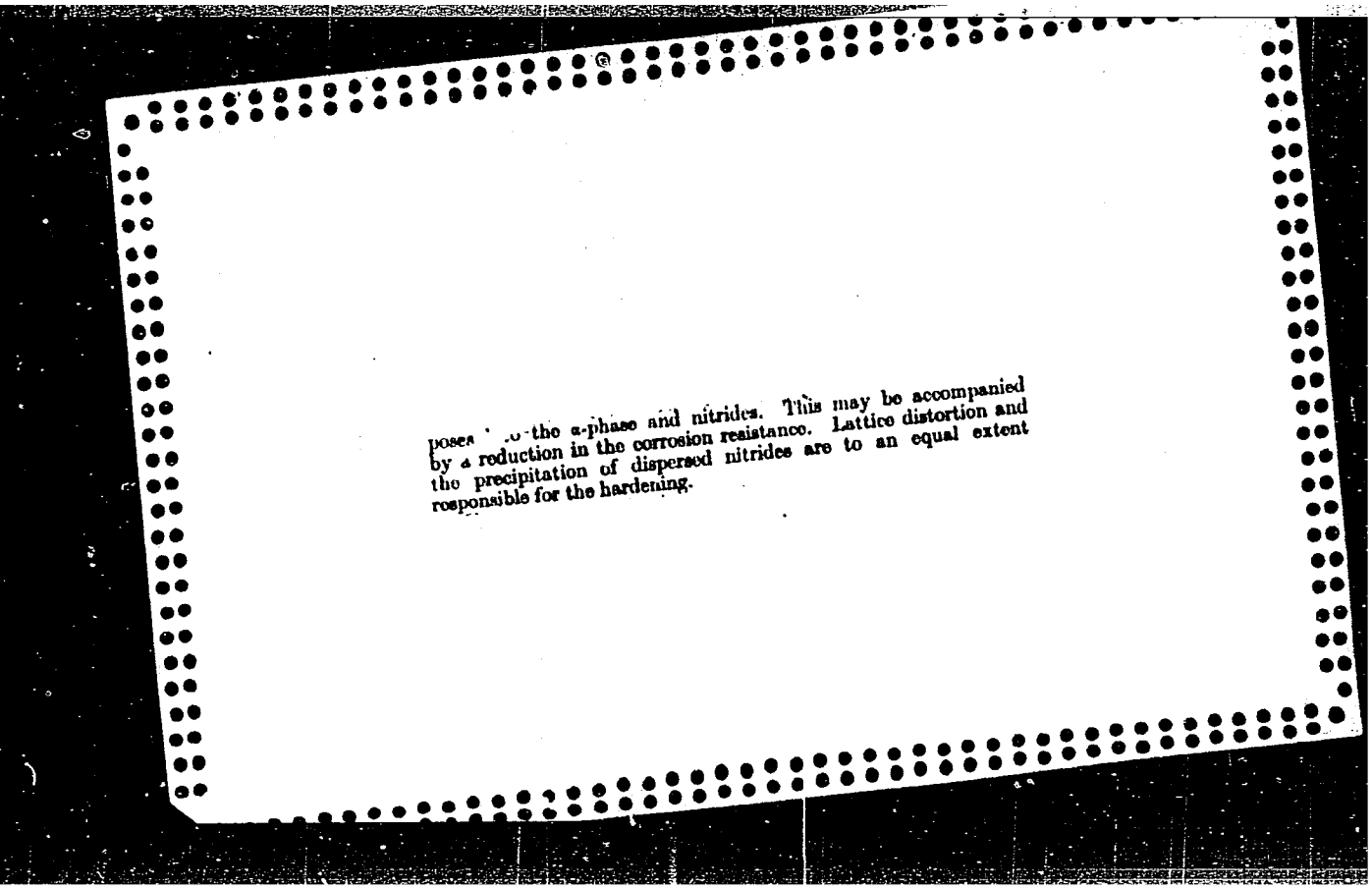
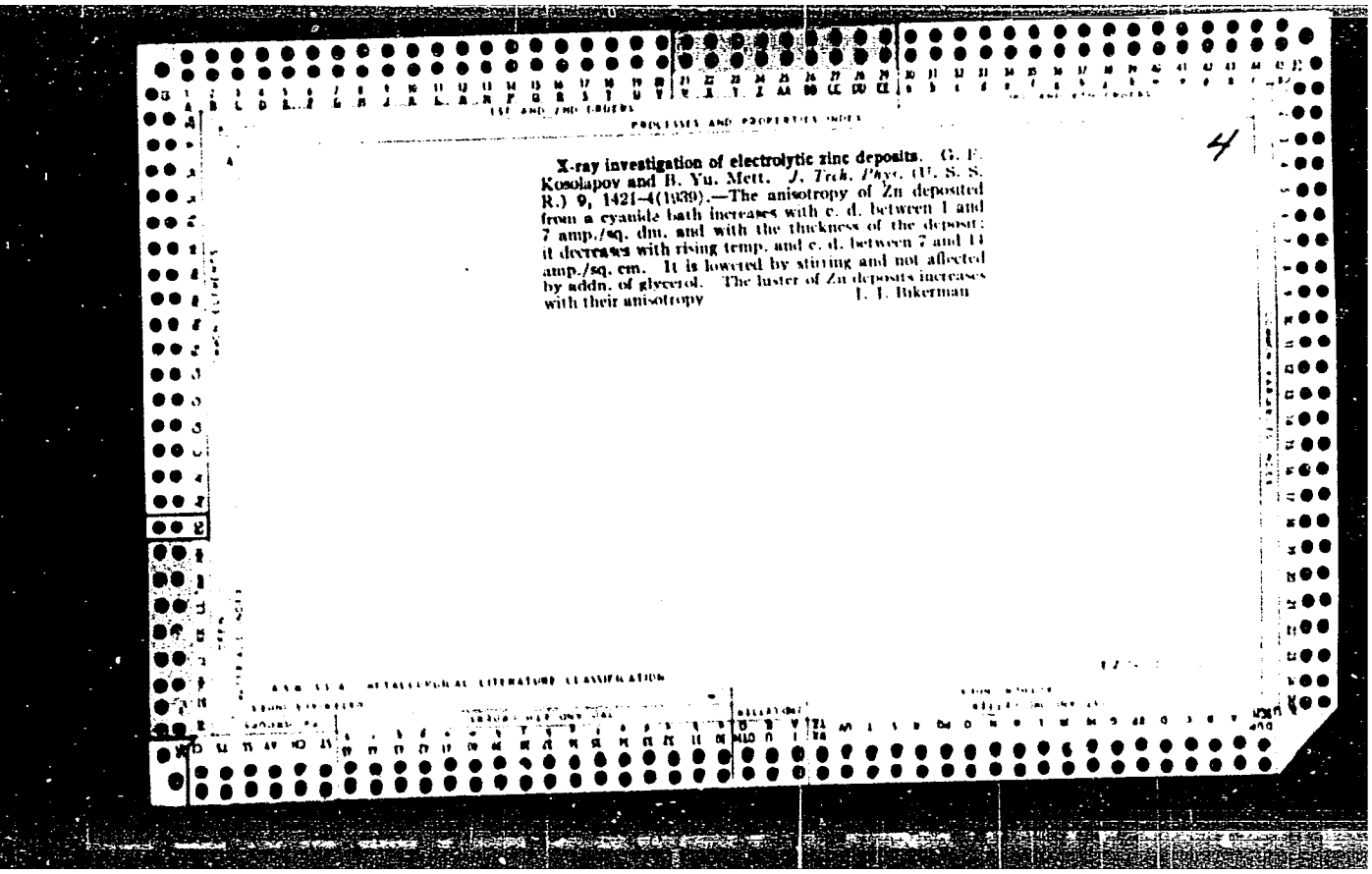


poses [illegible] the α-phase and nitrides. This may be accompanied by a reduction in the corrosion resistance. Lattice distortion and the precipitation of dispersed nitrides are to an equal extent responsible for the hardening.



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X-ray investigation of electrolytic zinc deposits. G. F. Kosolapov and B. Yu. Mett. *J. Tech. Phys.* (U. S. S. R.) 9, 1421–4(1939).—The anisotropy of Zn deposited from a cyanide bath increases with c. d. between 1 and 7 amp./sq. dm. and with the thickness of the deposit; it decreases with rising temp. and c. d. between 7 and 11 amp./sq. cm. It is lowered by stirring and not affected by addn. of glycerol. The luster of Zn deposits increases with their anisotropy I. I. Bikerman

Kosolapov, G.F.

Distr: 4E2c

X-ray analysis of surface layer of h... hard alloys after electric-spark treatme... pov and Yu. D. Tyapkin. *Metalloved. ... Metall. Mashinostr. Vysshee Tekh. Uch...* Gosudarst. Nauch.-Tekh. Izdatel. Ma... *Sbornik* 41, 226-32(1955); *Referat. ...* Abstr. No. 11219.—The x-ray pattern ... before treatment with the elec. spark sh... line and a line of W_3Fe_3C. After tre... previous phases disappeared, and the li... peared. The presence of austenite low... of steel; but after tempering the cutting ... proved. A hard alloy that had on its ... WC and (WTi)C, after spark treatme... lines of (WTi)C. Another hard alloy, ... WC on the surface, after spark treatme... and W_2C. On spark-hardening of still ... α-Fe and (WTi)C appeared on the surfa... graphite the lines of Fe_3C appeared; l... satd. with C. The change of the struct... attributed to the high temp., the prese... formations and interaction of the mediu...

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...h speed steel and ... G. F. Kosola- ... *Termicheskaya Obra-* ...*botka Metal. Mashinostr. Vysshee Tekh. Uch.* (Moscow: ...mashgiz, Lit.) ... *hur., Ref.* 1956, ... of high-speed steel ...ws the martensite ...ment the lines of ...es of austenite ap- ...s cutting qualities ...ualities can be im- ...surface the phases ... showed only the ...hat originally had ... showed both WC ...nother hard alloy, ...e. After addn. of ..., the surface was ...e after sparking is ...ce of phase trans- ... A. N. Peatoff

KOSOLAPOV, Georgiy Fedorovich; LYUTSAU, V.G., red.; SHAROVA, Ye.A., red. izd-va; VORONINA, R.K., tekhn. red.

[Roentgenography] Rentgenografiia. Moskva, Vysshaia shkola, 1962. 331 p. (MIRA 16:3)
(X rays—Industrial applications)
(Metallography)

ACC NR: AP6027631

2

and 170°C. The time for both stages is reduced as temperature is increased. The time for complete decomposition of the solid solution is 26 hours at 150°, 4 hours at 170° and 1 hour at 190°C. It was found that hardness increases during both stages with maximum increase in the precipitation stage. This indicates that the structure of the alloy is stable with respect to phase composition and concentration after heat treatment to maximum hardness and strength. The length of the specimens is increased by changes in the structure of the solid solution during the stage preceding precipitation. The specimens continue to increase in length up to complete decomposition of the solid solution although at a slower rate in the second stage. The change in the linear dimensions of the specimen is approximately 0.1% of the original dimensions. Plastic deformation of the tempered alloy accelerates the aging process somehwat although the change in dimensions is of the same order ~0.1%. The article was presented for publication by Doctor of technical sciences, Professor I. I. Sidorin, MVTU. Orig. art. has: 5 figures.

SUB CODE: 11/ SUBM DATE: 18Nov65/ ORIG REF: 004

Card 2/2 egh

CHERSKIY, Nikolay Vasil'yevich; KOSOLAPOV, A.I., kand. geol.-miner. nauk, otv. red.

[Possibilities for developing the chemical indutstry in the Yakut A.S.S.R.] Perspektivy razvitiia khimicheskoi promyshlennosti v IAkutskoi ASSR. IAkutsk, IAkutskoe knizhnoe izd-vo, 1964. 46 p. (MIRA 18:2)

KOSOLAPOV, G.M.

Selecting gas distribution phases. Avt.prom. no.7:21-23 Jl '60.
(MIRA 13:7)

1. Stalingradskiy sel'skokhozyaystvennyy institut.
(Automobiles--Fuel systems)

KOSOLAPOV, I.

85-58-6-3/43

AUTHOR: Kosolapov, I., Chairman DOSAAF Rayon Committee (Mariinskiy-Posad, Chuvashskaya ASSR)

TITLE: First Parachutists of Mariinskiy-Posad (Pervyye parashyutisty Mariinskogo Posada)

PERIODICAL: Kryl'ya rodiny, 1958, Nr 6, p 3 (USSR)

ABSTRACT: The author states that teams at the local forestry tekhnikum, construction tekhnikum, and High School No 1 include 80 parachutists trained by DOSAAF instructors, the former pilots and reserve officers N. V. Shvetsov, Ye. P. Pavlov, and A. V. Mochalov.

ASSOCIATION: Rayonnyy komitet DOSAAF (DOSAAF Rayon Committee, Mariinskiy-Posad)

1. Parachute jumping--USSR

Card 1/1

KOSOLAPOV, I.I.

KARASIK, G.A.; KOSOLAPOV, I.I.; GUSEV, V.N., inzhener, laureat Stalinskikh premiy, retsenzent; BOGORAD, I.Ya., kandidat tekhnicheskikh nauk, laureat Stalinskoy premii, retsenzent; SLONIMSKIY, V.I., kandidat tekhnicheskikh nauk, dotsent, redaktor; POL'SKAYA, P.G., tekhnicheskiy redaktor

[Construction of anode-mechanical cutting and grinding machines] Konstruirovanie anodno-mekhanicheskikh otreznykh i zatochnykh stankov. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1951. 238 p. [Microfilm] (MIRA 10:1)

(Cutting tools) (Grinding machines)

KOSOLAPOV,I.I.; KOSMACHEV,I.G.; VISHNITSKIY,A.L.; POPILOV,L.Ya., inzhener, retsenzent; SLONIMSKIY,V.I., [deceased], kandidat tekhnicheskikh nauk, redaktor; DLUGOKANSKAYA,Ye.A., tekhnicheskiy redaktor

[Work with anodic-mechanical grinders] Rabota na anodno-mekhanicheskikh zatochnykh stankakh. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry, 1952. 172 p. [Microfilm] (MLRA 9:3)
(Grinding and polishing)

VOL'NOV, I.N., [illegible], PERKIN, S.G.

Steam Pipes

Self-sealing plug for hydraulic testing of high-pressure pipes. Rab. energ. 2 no. 4, 1952

9. Monthly List of Russian Accessions, Library of Congress, July 1952, Uncl.

KOSOLAPOV, I.I., inzhener.

Device for cutting grooves in tube holes of boilers. Energetik 1 no.2: 9-10 Jl '53. (MLRA 6:8)
(Steam boilers)

KOSOLAPOV, I.I., inzhener.

Machining the openings of the semi-bushings of turbogenerators. Energetik 1 no.3:8-11 Ag '53. (MLRA 6:8)
(Dynamos)