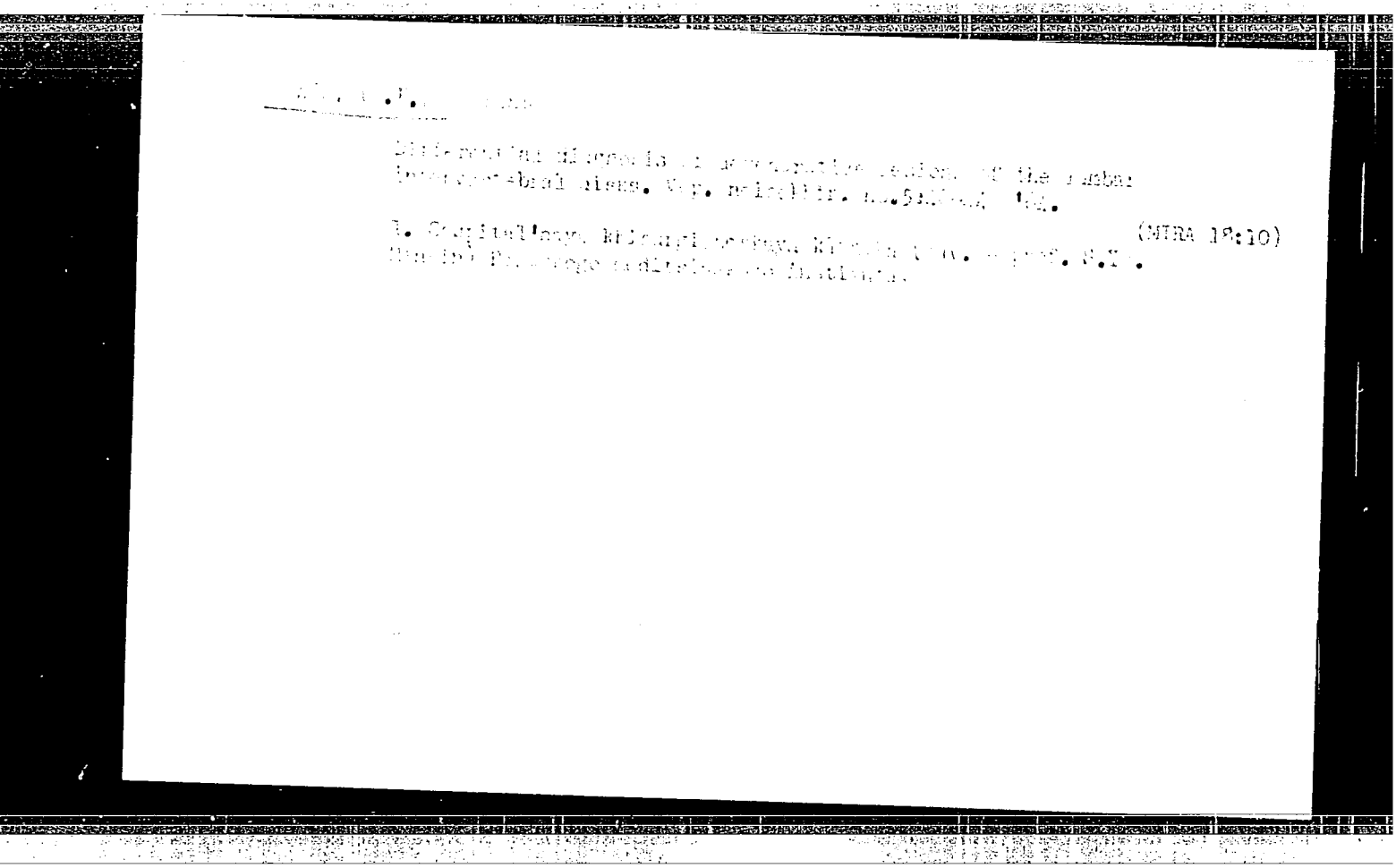
ASS, Ya.K.

Some changes in the sympathetic nervous system in patients with degenerative lesions of the lumbar intervertebral disks. Zhur. nevr. i psikh. 65 no.9:1294-1300 '65.

(MIRA 18:9)

1. TSentral'nyy institut travmatologii i ortopedii (direktor - prof. M.V. Volkov), Moskva, i gospital'naya khirurgicheskaya klinika (zaveduyushchiy - prof. S.Yu. Minkin) Permskogo meditsinskogo instituta.



(MIRA 18:10)

ASS, Ya.K. (Perm' 39, Komsomol'skiy prospekt, d. 68, kv.9); DMITRIYEVA, A.M.

Diskography in the diagnosis of degenerative lesions of the lumbar intervertebral disks. Ortop., travm. i proter. 26 no.4:14-18 Ap '65. (MIRA 18:12)

1. Iz TSentral'nogo instituta travmatologii i ortopedii (dir. - chlen-korrespondent AMN SSSR prof. M.V.Volkov), gospital'noy khirurgicheskoy kliniki (zav. - prof. S.Yu.Minkin) i kafedry rentgenologii (zav. - dotsent G.I.Rylova) Permskogo meditsinskogo instituta.

ASSA, CH.

Increasing the assortment variety and designs of cotton fabrics. p.31.
(LEKA PROMISHLENOST, Vol. 6, no. 3, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.

MITOV, A.; IVANOV, N.; SAVOV, S.; TEODOSIEV, L.; KHRISTOV, G.; IONKOV, S.; ASSA, N.; KAITAZOV, G.; DRAGIEV, M.; KRUSEVA, Iu.

Results of investigation in bening leptospirosis in southern Bulgaria. Izv. mikrob. inst., Sofia Vol. 3:57-82 1952.

1. Izvursheni v Propedevtichnata vutreshna klinika, v sutrudnichestvo s Patologo-anatomichniia i Mikrobiologichniia instituti pri Meditsinskata Akademiia I.P.Pavlov, Plovdiv.
(LEPTOSPIROSIS, statistics,
Bulgaria)

IURUKOV, B.; GIUROV, M.; ASSA, N.; TSONEV, Iv.; STOIANOV, V.

Insufficient and improper salicylate therapy of rheumatism as a cause of cardiac complications in Bulgaria; preliminary communication. Suvrem.med., Sofia 6 no.3:63-70 1955.

1. Iz Katedrata po bolnichna terapiia pri visshiia meditsinski institut I.P.Pavlov-Plovdiv (zavezhdashch: prof. V.Iurukov)
(RHEUMATIC HEART DISEASE, etiology and pathogenesis, errors in salicylate ther. of rheum. causing cardiac lesions, incidence in Bulgaria)
(SALICYLATES, therapeutic use, rheum., errors causing cardiac lesions, incidence in Bulgaria)

ASSANIEI, N., ing.

Rumanian Scientific Session of Chemistry. Cel Mirtle 13 no.7:
259 Jl'64

PLUGIN, I.Ye.; ASSANOV, P.V.; KOMAROV, I.A.

Nonseparable thermostatic condensate eliminator. Prom.energ. 15 no.2:20 F '60. (MIRA 13:5)
(Steam)

SOV-98-58-2-7/21

AUTHORS: Bykov, L.S., and Assanov, V.V. Engineers

TITLE: Experience in Using Wooden Pipelines of Large Diameter (Opyt ekspluatatsii derevyannykh truboprovodov bol'shogo diametra)

PERIODICAL: Gidrotekhnicheskoye stritel'stvo, 1958, Nr 2, pp 28-30 (USSR)

ABSTRACT: Two wooden pressure conduits with an inside diameter of 5.4 m and 182 m in length have been in operation for 20 years at the Skhodnenskaya GES. The pipelines, of continuous type, consist of pine staves with a groove at one and a flange at the other end. The author gives a detailed description of the construction. He also gives information on the work process, the direction in which the pipelines are laid, imperfections in the construction of end connections (causing leakage), and on the maintenance of the pipelines. Yearly expenses for repairs and preventive maintenance amount to 4,800 rubles, while total exploitation expenses are 14,100

Card 1/2

Experience in Using Wooden Pipelines of Large Diamter

rubles (equal to 1.7% of the pipelines original cost as against 8% on metal pipelines).
There is 1 photo and 1 table.

1. Pipeline--Construction 2. Pipelines--Costs 3. Wood --Applications

Card 2/2

ASSANOVA, Margarita Petrovna; AFONINA, Lyubov' Petrovna; IL'INA, Nina Ivanovna; SVETOZARSKAYA, Galina Fedorovna; SEVAST'YANOVA, Kamila Alekseyevna; GOLUBEVA, I.A., red.; RESHETIN, G.V., tekhn. red.

[Advanced practices in floriculture and landscaping] Peredovoi opyt v tsvetovodstve i ozelenenii; putevoditel'. Moskva, 1962. 35 p. (MIRA 16:5)

1. Moscow. Vystavka dostizheniy narodnogo khozyaystva SSSR. Pavil'on "TSvetovodstvo i ozeleneniye."
(Floriculture--Exhibitions)
(Landscape gardening--Exhibitions)

LIVSHITS, L.S.; PANICH, S.I.; ASSONOVA, Ye.A.

Effect of alloying on dissolved carbon concentration in ferrite.
Fiz. met. i metalloved. 13 no.4:572-576 Ap '62. (MIRA 16:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov.
(Steel alloys—Metallography)

ASSANOVICH, B.; DAVYDOV, V.

Cooperation of socialist countries in the organization of automotive transportation and the development of highways. Avt. transp. 37 no.12:46 D '59. (MIRA 13:3)
(Transportation, Automotive)

ASSAKOWICZ, S.

Integrated cost standards of road constructi ns. p. 130.
DROGOWNICTWO, Warszawa, Vol. 10, no. 6, June 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955, Uncl.

METAKSA, P.I.; TARANKOV, V.V.; ASSAN-NURI, A.O., redaktor; TAUMIN, I.M., redaktor; MASOLOV, Ya.M., [redacted] taktor.

[Submarine oil well drilling] Stroitel'stvo neftianykh skvazhin v more. Moskva, Gos.nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1954. 29 p. (MIRA 8:4)
(Oil well drilling, Submarine) (Petroleum in submerged lands)

ASSAUL, B.D.

Pea Peronospora. Zashch. rast. ot vred. i bol. 6 no.11:53-54 N '61. (MIRA 16:4)

1. Zaveduyushchiy laboratoriyey fitopatologii Uladovo-Lyulinetskoy selektsionnoy stantsii.
(Peas--Diseases and pests) (Mildew)

LAPTEV, Yu.P., starshiy nauchnyy storudnik; ASSAUL, B.D.; KOVALEV, N.V., kand. sel'skokhoz. nauk; ZAKHAROVA, T.I., mladshiy nauchnyy sotrudnik; MAMAYEVA, Kh.P.; DUBINEVICH, B.N., starshiy nauchnyy sotrudnik

Brief information. Zashch. rast. ot vred. i bol. 9 no.9:54-56 '64.
(MIRA 17:11)

1. Zaveduyushchiy laboratoriyey fitopatologii Vinnitskoy oblasti (for Assaul). 2. Maykopskaya opytnaya stantsiya Vsesoyuznogo nauchno-issledovatel'skogo instituta rasteniyevodstva (for Kovalev). 3. Vsesoyuznyy institut zashchity rasteniy (for Zakharova). 4. Moskovskiy pedagogicheskiy institut imeni V.I. Lenina (for Mamayeva). 5. Mironovskaya selektsionnaya stantsiya (for Dubinevich).

ASSAUL, N.

Harmfulness of the tarnished plant bug. Zashch. rast. ot vred. i bol. 10 no.12:50 '65. (MIRA 19:1)

1. Zaveduyushchaya laboratoriyey entomologii Uladovo-Lyulinetskoy opytno-selektsionnoy stantsii, Vinnitskaya oblast'.

ASSBURY, E.

How to improve reading habits and make better use of technical literature in workshops. p.396

Warszaw, Poland. PRZEGLAD KOLEJOWY. Wydawnictwa Komunikacyjne
Vol.10, no.9, Sept.1958

Monthly List of East European Accessions Index,(EEAI) LC, Vol.8, no.6
June 1959
Uncl.

ASSBURY, Edward, mgr.

What should be done in order to open doors for professional branch libraries to new technology. Przegl techn 79 no.2:55-58 '58.

(Poland--Technology) (Poland--Libraries, Special)

MAKUKHA, M.P.; ASSENGEYMER, L.S.

New sensitive reagents for detecting copper ions. Farmatsev. zhur. 16 no. 2:28-31 '61. (MIRA 14:4)

1. Kafedra farmatsevticheskoy khimii L'vovskogo meditsinskogo instituta, zav. kafedroy prof. M.M. Turkevich.
(COPPER--ANALYSIS)

S/081/62/000/004/020/087
B149/B101

AUTHORS: Makukha, M. P., Assengeymer, L. S.

TITLE: New sensitive reagents for the detection of copper ions

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 4, 1962, 136 abstract 4D66 (Farmatsevtichniy zh., no. 2, 1961, 28 - 31)

TEXT: 3-Phenylrhodanine (I) and the ammonium salt of rhodanine-3-acetic acid (II) have been suggested for the detection of Cu^{2+}, Cu^{2+} forms brown spots on paper impregnated with I and red spots on paper impregnated with II. The detectable minimum is (in γ Cu^{2+} for aqueous and ammoniacal solutions, respectively): 0.18 and 0.12 for I and 0.036 and 0.018 for II. It was found spectrophotometrically that I and II enter into complexes with Cu^{2+} in the ratio of 2 : 1. The compound I is also suitable for photometric determinations of Cu in ammoniacal solutions (10 mg of I are added to 100 ml of the sample solution). The calibration graph is rectilinear with a Cu concentration of less than 0.03 g/l. Co^{2+} and Hg^{2+} interfere with the determination. [Abstracter's note: Complete translation.]

Card 1/1

ASSER, Ya. Ye.; SHAPIRO, M.M.

Rapid roll changing on a continuous small shape mill. Metallurg 6 no.3:30-32 Mr '61. (MIRA 14:5)

1. Krivorozhskiy metallurgicheskiy zavod.
(Rolling (Metalwork))

ASSEVA, K.M.; GRUZDEVA, A.K.; VASIL'YEVA, G.V.

Frothing agent for ore flotation. Gor. zhur. no.9:75 S '64. (MIRA 17:12)

ASSING, I. A.

23971 ASSING, I. A. Nachal'nyye stadii vyvetrivaniya i pochvoobrazovaniya na massivno-kristallicheskikh porodakh. Problemy sov. pochvovedeniya, SB. 15, 1949, S. 80-94. -- Bibliogr: 5 Nazv.

SO: Letopis, No. 32, 1949.

Assing, I. A.

USSR/ Agriculture

Card 1/1 Pub. 123 - 3/11

Authors : Assing, I. A., and Teplyakova, Z. F.

Title : Effect of perennial grass on the fertility of irrigated light-chestnut colored soil

Periodical: Vest. AN Kaz. SSR 2, 21 - 37, Feb 1955

Abstract : Experiments were conducted to determine the effect of perennial grass on the content and composition of humas, on the microbiological processes and the accumulation of water-stable units in irrigated light-chestnut colored soil. The results obtained are listed. Eleven USSR references (1933 - 1954). Tables.

Institution: .....

Presented by: Bezsonov, A. I., Memb. Corresp. of Acad. of Sc., Kaz-SSR

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 7, p 127 (USSR) 14-57-7-14974

AUTHOR: Assing, I. A.

TITLE: The Soil Cover of the Southern Part of Dzungarskiy Ala-Tau in Kazakhstan (Pochvennyy **pokrov** yuzhnoy chasti Kazakhstanskoy Dzhungarii)

PERIODICAL: Tr. In-ta pochvoved. AN KazSSR, 1956, Vol 6, pp 44-80

ABSTRACT: This study encompasses all of the southern massif of the Dzhungarskiy Ala-Tau except for the alpine zone. Numerous soil zones are distinguished. 1) Desert and desert-steppe zones, occupying the fore-mountain plain (500 m to 1300 m above sea level), are composed of contemporary proluvial and deluvial deposits. Large biyurgun salt-plants represent the dominant vegetation. The above-surface vegetable mass constitutes 2.4 tons/hectare. Detrital hummocks carry

Card 1/3

light-brown (gray-brown) soils. Northern or Semirechka serozems develop in the loess deposits under wormwood vegetation. The lower parts of the relief in the Koktal depression are covered with meadow-serozem soils changing into steppes. In the area where the fore-mountain plain passes into the old alluvial valley of the Ili River, takyr-type soils with sparce haloxylons and biyurgun salt-plants are found. The foothill shelf near the village of Baschiy contains solonchaks in the process of becoming less saline. These pass into sulfate and chloride solonchaks down toward the ancient Ili River valley. Light chestnut, gravelly, carbonate soils, with a feather-grass-wormwood and wormwood steppe vegetation are common in the upper part of fore-mountain plain (up to 1500 m). The above-surface vegetable mass constitutes 2.9 tons/hectare. 2) The lower and middle elevations of the mountains are a steppe zone (1300 m to 2200 m). Here dark chestnut soils under a feather and fescue-grass steppe predominate, and their surface mass constitutes 3.5 to 3.9 tons/hectare. Mountain chernozems are found only on the northern

The Soil Cover of the Southern Part of Dzungarskiy 14-57-7-14974 (Cont.)

slopes of the ridges. Chernozems with medium humus content form under the grassy steppes at 1500 m to 1800 m; farther up they pass into leached, humus-rich chernozems under meadow steppes. Grassy steppes with wild rose and honeysuckle occupy the rocky southern slopes, and higher up (2200 m to 2400 m) juniper stands grow in the mountain-steppe thin skeletal soils. 3) A subalpine zone starts above 2200 m to 2400 m. The northern slopes are occupied either by subalpine meadows and junipers or by grassy meadows with steppe or high mountain plant varieties growing in their mountain meadow-steppe soils. Fir trees and associated meadows growing on the dark nonpodzol soils form an intermittent zone. A bibliography of 13 titles is included.

Card 3/3

E. Kornblyum

COUNTRY : USSR
CATEGORY : Soil Science. Soil Genesis and Geography. J

ABS. JOUR. : RZhBiol., No. 3 1959, No. 10653

AUTHOR : Assing, I. A.
INST. : Institute of Soil Science, AS KazSSR
TITLE : On Soils of the Desert Part of Foothill Plains of No ern Tyan'-Shan'.

ORIG. PUB. : Tr. In-ta pochvoved. AN KazSSR, 1957, 7, 57-69

ABSTRACT : The soils of the desert part of the foothill plains of Tyan'-Shan' are developed on proluvial deposits. In the zone of carbonate accumulation, associated with fine-grained loess-like deposits, dark colored foothill sierozems are developed, and in the lower part of the plain merging with the ancient alluvial plain of Ili River - light colored sierozems of light mechanical composition. Peculiar to the foothill sierozems are the characteristics of hydromorphousness, expressed morphologically in the form of rusty spots and insignificant deposits of gypsum at the depth of 120-140 centimeters, which permits the segration of these soils into the provinces of Northern or

CARD: 1/3

COUNTRY :
CATEGORY : J

JOUR. SOUR. : NZhBiol., No. 1959, No. 10653

AUTHOR :
INST. :
TITLE :

SOURCE, Mic. :

ABSTRACT : Semirechenskiye sierozems. On elevations with the ground water table at the depth of 2.5-4 meters, meadow-sierozem soils were marked out. In the zone of the sulphate accumulation on coarsely skeletal rubbly deposits, strongly gravelly gypsum-containing sierozems are developed. The best piedmont soils of the foothill plains are the dark colored sierozems of loess-like loamy mechanical composition and meadow-sierozem soils. Application of nitrogen

Card 2/3

COUNTRY :
CATEGORY : J

ABS. JOUR. : RZhBiol., No. 1959, No. 10653

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : fertilizers and the sowing of perennial leguminous grasses are recommended to increase their fertility. In irrigated agriculture on dark colored sierozems, one should beware of secondary salination. The gravelly, light colored sierozems are are utilized chiefly as pastures. Bibliography of 15 titles.

CARD: 3/3

NOVOGRUDSKIY, David Moiseyevich; ASSING, I.A., kand.geologo-mineral.nauk, otv.red.; ALEKSANDRIYSKIY, V.V., red.; ROROKINA, Z.P., tekhn.red.

[Soil humus and the microbiological factors of its formation] Pochvennyi gumus i mikrobiologicheskie faktory ego obrazovaniia. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR, 1959. 93 p.

(Humus) (Soils--Bacteriology) (MIRA 13:5)

BEZSONOV, Andrey Ivanovich, doktor, prof., zasluzhennyy deyatel' nauki Kazakhskoy SSR; USPANOV, U.U., otv. red.; BOROVSKIY, V.M., red.; SOKOLOV, S.I., red.; ASSING, I.A., red.; PROKHOROV, V.P., tekhn. red.

[Selected works] Izbrannye trudy. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR, 1960. 254 p. (MIRA 14:6)

1. Chlen-korrespondent AN Kazakhskoy SSR (for Bezsonov)
(Soils)

ASSING, I.A.

Characteristics of humus formation in mountain soils of the northern Tien Shan. Pochvovedenie no.12:16-22 D '60.
(MIRA 14:1)

1. Institut pochvovedeniya AN KazSSR.
(Tien Shan--Humus)

SOKOLOV, S.I.; ASSING, I.A.; KURMANGALIYEV, A.B.; SERPIKOV, S.K.; BEZSONOV, A.I., glav. red.; BOROVSKIY, V.M., red.; SOKOLOV, A.A., red.; STOROZHENKO, D.M., red.; USPANOV, U.U., red.; SHEVCHUK, T.I., red.; ROROKINA, Z.P., tekhn. red.

[Soils of the Kazakh S.S.R. in 16 volumes] Pochvy Kazakhskoi SSR v 16 v puskakh. Alma-Ata, Izd-vo Akad. nauk Kazakhskoi SSR. Vol.4. [Alma-Ata Province] Pochvy Alma-Atinskoi oblasti. 1962. 422 p. (MIRA 15:4)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut pochvovedeniya.

(Alma-Ata Province--Soils)

BOK, I.I.; BARBOT de MARNI, A.V.; VISLOGUZOVA, A.V.; GALIYEV, M.S.; LI, A.B.; LOMONOVICH, M.I.; YAKOVENKO, Z.V.; ASSING, I.I.; NURMANGALIYEV, A.B.; SOKOLOV, S.I.; GRIGOR'YEVA, Ye.P.; SEROV, N.P.; LEONOV, G.M.; ZAKHAROV, B.S.; ZAGAYNOV, V.I.; BOROVSKIY, V.M.; LITVINOVA, A.A.; POGREBINSKIY, M.A.; NASONOVA, O.M.; KHAYDAROV, R.M.; SUVOROVA, R.I., red.; ALFEROVA, P.F., tekhn. red.

[Ili Valley, its nature and resources] Iliiskaia dolina, ee priroda i resursy. Pod obshchei red. M.I.Lomonovicha. Alma-Ata, Izd-vo AN Kaz.SSR, 1963. 338 p. (MIRA 16:8)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut geologicheskikh nauk. 2. Nauchnyye sotrudniki Instituta geologicheskikh nauk AN KazSSR (for Bok, Barbot de Marni, Visloguzova, Galiyev, Li, Lomonovich, Yakovenko). 3. Institut pochvovedeniya AN KazSSR (for Assing, Nurmangaliyev, Sokolov, Borovskiy, Litvinova, Pogrebinskiy). 4. Institut botaniki AN KazSSR (for Grigor'yeva, Nasonova). 5. Institut zoologii AN KazSSR (for Serov). 6. Kazakhskiy politekhnicheskiy institut (for Leonov). 7. Ministerstvo sel'skogo khozyaystva KazSSR (for Zakharov). 8. Kazanskiy filial Instituta "Gidroproyekt" im. S.Ya.Zhuka (for Khaydarov).

(Ili Valley--Physical geography)

ASSLIDDINOV, F.A., kand. med. nauk

Oxyhemometric examinations in coronary deficiency. Nauch. trudy SamMI 23: 14-16 '63 (MIRA 17:3)

1. Iz kafedry vnutrennikh bolezney Samarkandskogo meditsinskogo instituta.

ASSMAN, A. & SHEBLOVSKAIA, N.

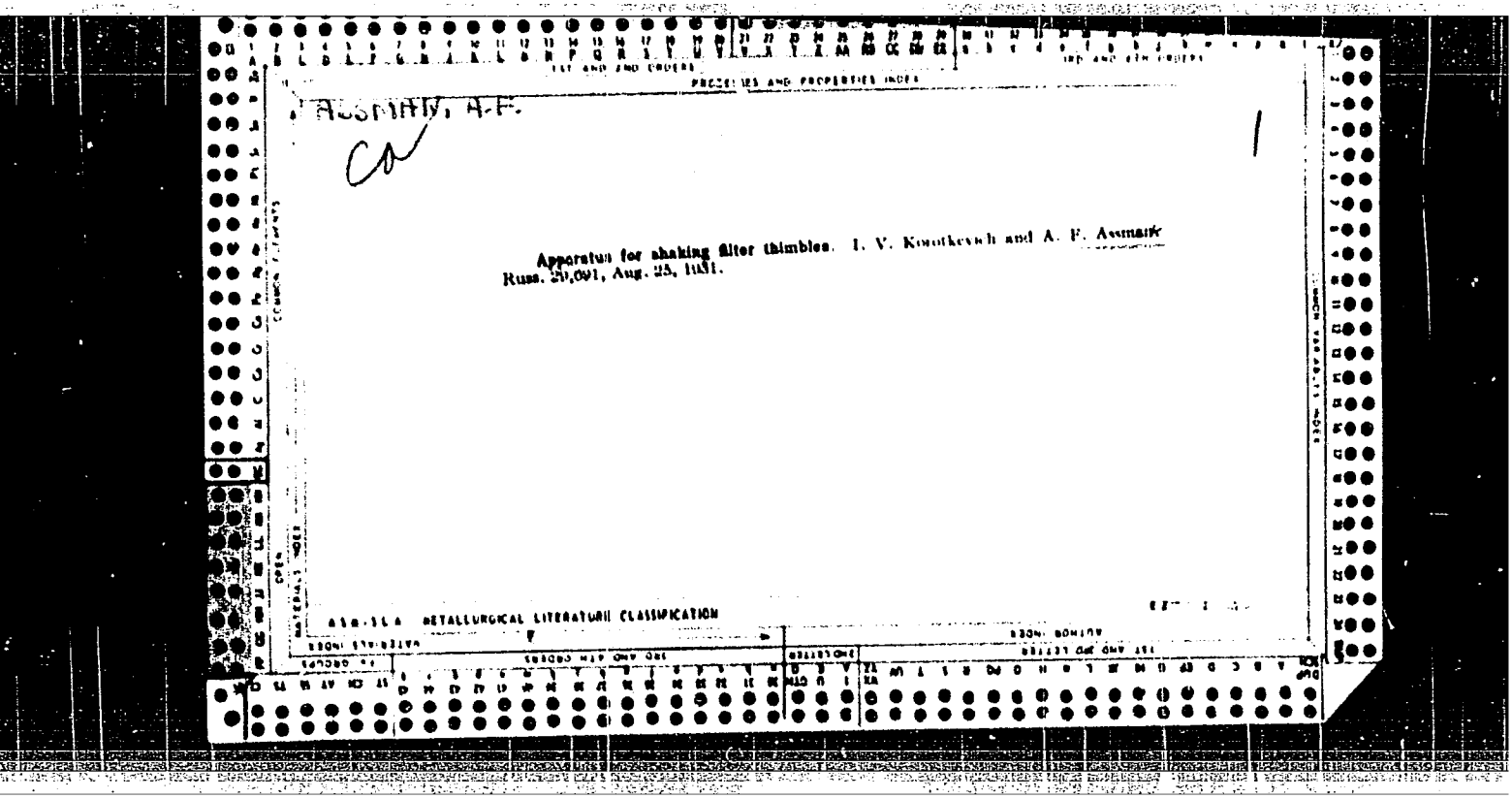
Assman, A.; Sheblovskaia, N.

Klyazma National Park. Tr. from the Russian. p. 18.

Wildlife and landscape reservations in Upper Austria. p. 20.

Vol. 10, no. 1, Feb. 1955
OCHRANA PRIRODY

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 9, Sept. 1955, Uncl.



ASSMAN, A. V. Cand. Biolog. Sci.

Dissertation: "Concerning the Role of the Microbenthes in the Self-Purification Processes of Running Fresh Water." Moscow Order of Lenin State U imeni M. V. Lomonosov, 14 May 47.

SO: Vechernyaya Moskva, May, 1947 (Project #17836)

1. ASSMAN, A. V.

2. USSR (600)

4. Water--Purification

7. Problem of the role of benthonic organisms in the natural purification processes of flowing waters, Trudy Gidrobil. ob-va, 4, 1952.

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

ASSMAN, A.V.

Role of algal growths in the formation of organic matter in Glubokoye Lake. Trudy Gidrobiol.ob-va 5:138-157 '53. (MLRA 7:5)

1. Glavnoye upravleniye po zapovednikam.
(Glubokoye Lake--Algae) (Algae--Glubokoye Lake)

KRISS, A.Ye.; ASSMAN, A.V.

Microorganisms as food for fishes. Dokl.AN SSSR 105 no.3:606-609 N '55. (MLRA 9:3)

1. Institut mikrobiologii Akademii nauk SSSR. Predstavleno akademikom Ye.N. Pavlovskim.
(Fishes--Food) (Microorganisms)

ASSMAN, A.V.

Micro-organisms as vitamin donors in the nutrition of young fishes. Vop. ikht. no.9:169-187 '57. (MIRA 11:1)

1. Laboratoriya morskoy mikrobiologii Instituta mikrobiologii Akademii nauk SSSR i Vsesoyuznyy Nauchno-issledovatel'skiy institut ozernogo i rechnogo rybnogo khozyaystva.
(Fishes--Food) (Vitamins) (Micro-organisms)

ASSMAN, A.V.

Role of micro-organisms as food for young fish [with summary in English]. Zool. zhur. 36 no.6:900-908 Je '57. (MLRA 10:8)

1. Institut mikrobiologii Akademii nauk SSSR.
(Fishes--Food) (Bacteria) (Yeast)

17(4,9)
AUTHOR: Asanin, A. V.

SOV/20-122-5-51/56

TITLE: Some Data on the Total Destruction of Berthos by Fishes (Nekotoryye dannyye o "vyyedanii" bentosa rybami)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 5, pp 932 - 935 (USSR)

ABSTRACT: The problem mentioned in the title is of theoretical as well as practical importance as it is part of the important problem of the accessibility of the nutritive organisms of various fishes. In practice it is important to determine the extent of the accessible food mass of the benthos for the type of fish concerned, in order to settle the problem of the tolerable density of young fishes. The breams, the wild carp, and the Abramis vimba (vobla) have a mouth of different types (Ref 3). The determines their type of food and their different ability to penetrate into the depth of the bottom soil. More than other benthos-eating fishes, the wild carp is capable of digging into the bottom and picking up organisms from a great depth. In spite of ex-

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periments carried out in aquariums (Refs 5-7) there are no experimental data on this problem in the open sea. Therefore the author published his first results obtained in 1957 in four cages in the central part of the estuary of the river Volga with bottom inhabiting chironomidal (midges) larvae (Chironomus semireductus Leon and Polypedilum nubeculosum Mg.) and wild carps as well as A bramis vimba and breams. In the total destruction of units the wild carp is first followed by the bream and the A'bramis vimba(Table 1). The wild carp eats also larger larvae than the two other types of fish as it penetrates into a greater depth (Ref 8). The author calculated the following values of the biomass eaten every day in each cage per kg of fish: For the wild carp it was 0.97 g, for the bream -1.31 g, and for the A'bramis vimba 0.18 g (this agrees with references 5-7). There are 1 figure, 1 table, and 8 references, 7 of which are Soviet.

Some Data on the Total Destruction of Benthos by Fishes SOV/2o-122-5-51/56

ASSOCIATION: Institut morfologii zhivotnykh im.A.N.Severtsova Akademii nauk SSSR (Institute of Animal Morphology imeni A.N. Severtsov AS USSR)

PRESENTED: May 26, 1958, by V.N.Shaposhnikov, Member, Academy of Sciences, USSR

SUBMITTED: May 8, 1958

Card 3/3

ASSMAN, A.V.

Some data on the effect of different feeding conditions on the morphological composition of carp blood. Vop. ikht. no.15:148-165 '60. (MIRA 13:9)

1. Ikhtiologicheskaya laboriya Instituta morfologii zhivotnykh A.N. Severtsova Akademii nauk SSSR.
(Fishes--Physiology) (Blood--Analysis and chemistry)

ASSMAN, A.V.

Changes in the availability of chironomid larvae consumed by fish. Izv. AN SSSR. Ser. biol. no.5:670-685 S-O '60. (MIRA'13:9)

1. Institute of Animal Morphology, Academy of Sciences of the U.S.S.R., Moscow.
(CHIRONOMIDAE) (FISHES--FOOD)

ASSMAN, A.V.

Availability of chironomid larvae to fishes. Trudy sov. Ikht. kom. no.13:361-363 '61. (MIRA 14:8)

1. Laboratoriya ikhtiologii Instituta morfologii zhivotnykh AN SSSR.

(Fishes—Food) (Chironomidae)

CHUGUNOVA, N.I.; ASSMAN, A.V.; MAKAROVA, N.P.

Growth and fatness dynamics in fishes as adaptive processes (based on experimental studies of carp in the Volga Delta). Trudy Inst. morf. zhiv. no.39:96-181 '61. (MIRA 14:11)
(Volga Delta--Carp) (Adaptation (Biology))

ASSMAN, A.V.

Consumption of natural food by carp under various food conditions and different stocking density. Trudy Inst. morf. zhiv. no.42: 64-119 '62. (MIRA 17:10)

ASSMANN, Jan

Extension of the service life of self-lubricating bearings from porous metals. Ropa a uhlie 6 no.9:270-272 S '64.

1. State Research Institute of Heat Technology, Prague.

ASSMAN, K. K.

USSR/Petroleum Industry
Water - Purification

Aug 1947

"Work of the Water-purifying Station for Flooding at the Artemneft Combine," V. A. Nogayev and K. K. Assman, 3 pp

"Neftyanoye Khozyaystvo" Vol XXV, No 8

Discusses the purifying station operation at Artemneft Trust to clean and sterilize the water of the Caspian Sea before it is pumped into oil wells to float up the oil. Explains process of purification and sterilization and gives diagram of filtration plant.

PA 18T13

GEL'PERIN, N.I.; ASSMUS, M.G.

End effect in the process of liquid extraction in an injector column. Khim.prom. no.4:269-274 Ap '61. (MIRA 14:4)

(Extraction (Chemistry))

GEL'PERIN, N.I.; ASSMUS, M.G.

Mass transfer in injector extraction columns. Khim.prom. no.5:348-350 My '61. (MIRA 14:6)

(Extraction apparatus)
(Mass transfer)

S/080/62/035/003/007/024
D258/D302

AUTHORS: Gel'perin, N. I., Assmus, M. G., and Korovin, S. S.

TITLE: Recovery of gallium by the method of liquid extraction in a continuously operated injector column

PERIODICAL: Zhurnal Prikladnoy khimii, v. 35, no. 3, 1962, 516-519

TEXT: The authors investigated the continuous, liquid-liquid extraction of gallium from aqueous solutions of a copper-bearing residue obtained in the course of aluminum electro-refining. A solution containing Ga (0.48 g/l), H_2SO_4(7.2 N), Cl^-(67.7 g/l) and also V, Al, $SO_2^=$, Fe, Mo, Cu and SiO_2 was brought up to a Cl^- content of 96.6 g/l and diluted until its H_2SO_4 concentration was 6 N. This solution and butyl acetate were injected, counter-currently and continuously, at the top and bottom, respectively, of a 900 mm column designed by N. I. Gel'perin and coworkers (Ref. 1: Khim. nauka i prom. 5, 560, (1956)). The gallium-bearing extract was continu-

Card 1/2

ously withdrawn near the top. Recovery of gallium varied slightly with the volume ratio of butyl acetate to aqueous solution, namely, from 96% at a ratio of 0.23 to 99.5% at 0.92. The increase in phase ratio was accompanied by a decrease in the Ga concentration in the extract - from 2.062% at the lowest mentioned ratio to 0.619% at the highest one; at the same time, Ga in the aqueous phase decreased from 0.014% to 0.005%. The withdrawal of samples at different points of the column showed an almost linear relationship of solvent concentration with column height. The same column was used for the re-extraction of Ga from butyl acetate by means of water; a complete recovery was achieved with a water/acetate ratio of 0.20. Adaptation to industrial plant scale was discussed. There are 3 figures, 2 tables and 3 Soviet-bloc references.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii M. V. Lomonosova (The Moscow Institute of Fine Chemical Technology im. M. V. Lomonosov)

SUBMITTED: July 11, 1960

GEL'PERIN, N.I.; PEBALK, V.L.; ROZOV, V.N.; ASSMUS, M.G.; MILOVANOVA, I.B.

Extractive purification of nickel solutions from iron and copper impurities. TSvet.met. 36 no.2:37-42 F '63. (MIRA 16:2)

(Nickel—Electrometallurgy) (Electrolytes)
(Extraction (Chemistry))

GEL'PERIN, N. I.; PERALK, V. L.; YURCHENKO, L. D.; ASSMUS, M. G.; BARANOVA, Z. P.; SHASHKOVA, M. N.; CHICKERINA, T. G.; ZAMYSHLYAYEV, V. G.; CHEKHOMOV, Yu. K.; KUZNETSOVA, M. I.

"Investigations in the field of the technique of liquid extraction."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

Moscow Inst of Light Chemical Technology.

L 30189-66

ACC NR: AT6020299 SOURCE CODE: HU/2504/65/052/01-/0093/0100

AUTHOR: Asszonyi, Cs.--Assoni, Ch.; Richter, R.--Rikhter, R. 20 B+1

ORG: [Asszonyi] Coal Mining Trust, Tatabanya; [Richter] Department for Mine Exploitation, Technical University for Heavy Industry, Miskolc

TITLE: General solution for the determination of the adjusting straight line 17

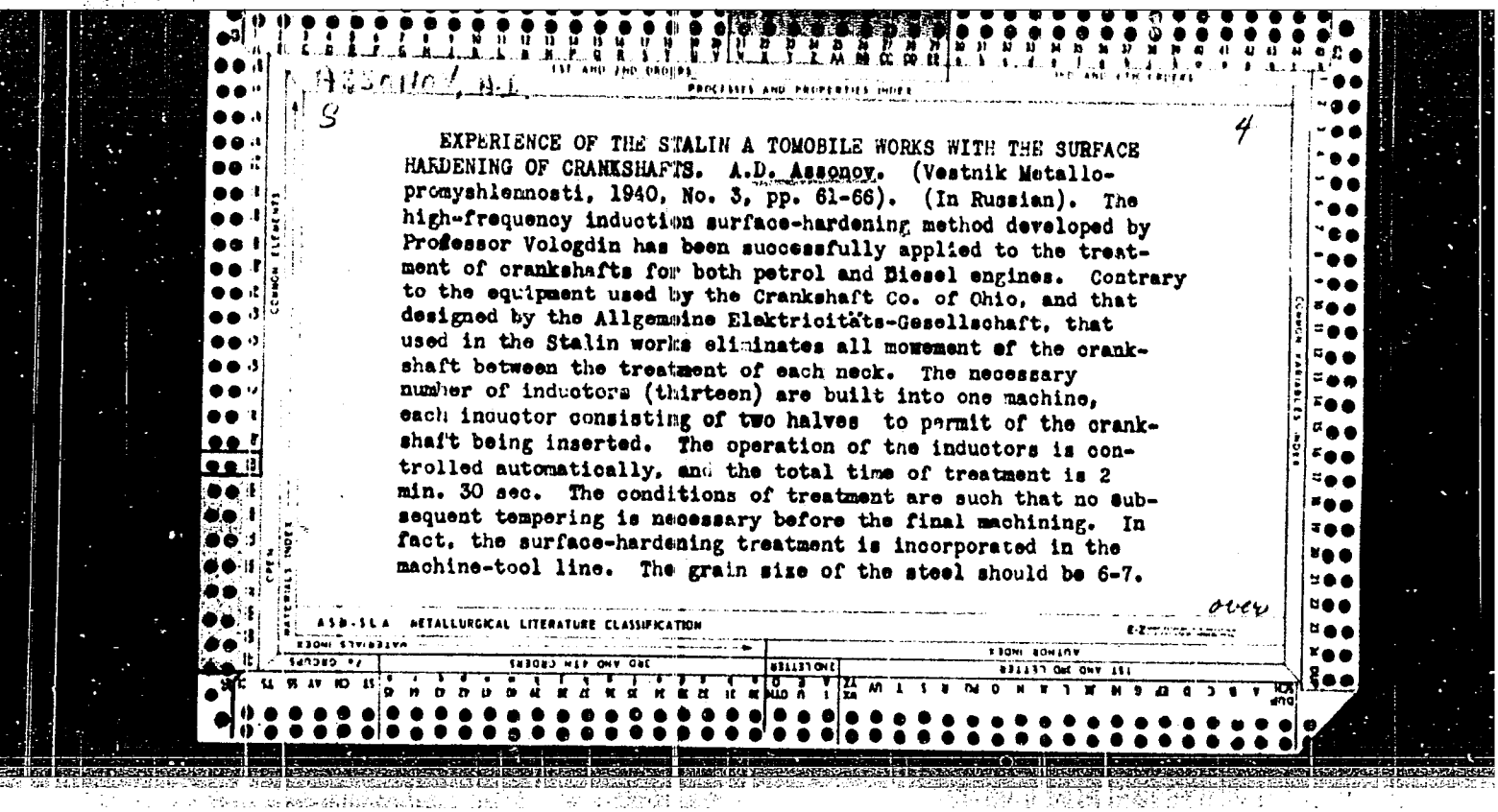
SOURCE: Academiae scientiarum hungaricae. Acta technica, v. 52, no. 1-2, 1965,93-100

TOPIC TAGS: mathematics, calculation

ABSTRACT: The method for the determination of the adjusting straight line adhering to a set of discrete points described by the authors Ibid., v. 47, 1964, and in Bergbauwissenschaften (in print) was generalized and equations were presented for the calculations involved under all circumstances. The technique is based on the principle of the minimum of the square sum of residuals which is to be attached to the set of points being in a discrete, approached, or given functional relation. Orig. art. has: 3 figures and 25 formulas. [Orig. art. in Eng.] [JPRS]

SUB CODE: 12 / SUBM DATE: 28Nov63 ORIG REF: 009 / OTH REF: 001

Card 1/1 (1 C)



Assonov, A.D.

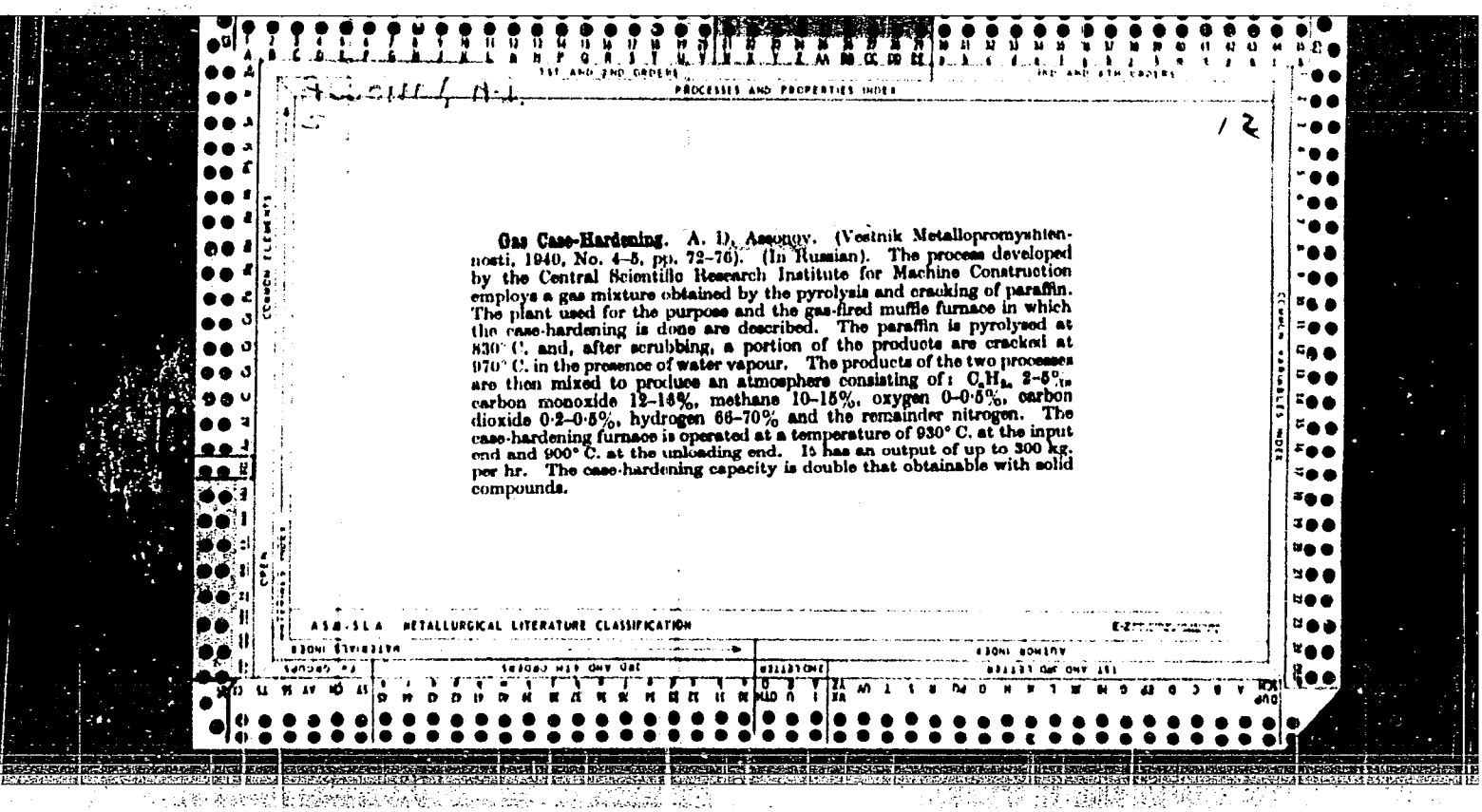
S

4

EXPERIENCE OF THE STALIN A TOMOBILE WORKS WITH THE SURFACE HARDENING OF CRANKSHAFTS. A.D. Assonov. (Vestnik Metallo-promyshlennosti, 1940, No. 3, pp. 61-66). (In Russian). The high-frequency induction surface-hardening method developed by Professor Vologdin has been successfully applied to the treatment of crankshafts for both petrol and Diesel engines. Contrary to the equipment used by the Crankshaft Co. of Ohio, and that designed by the Allgemeine Elektricitäts-Gesellschaft, that used in the Stalin works eliminates all movement of the crankshaft between the treatment of each neck. The necessary number of inductors (thirteen) are built into one machine, each inductor consisting of two halves to permit of the crankshaft being inserted. The operation of the inductors is controlled automatically, and the total time of treatment is 2 min. 30 sec. The conditions of treatment are such that no subsequent tempering is necessary before the final machining. In fact, the surface-hardening treatment is incorporated in the machine-tool line. The grain size of the steel should be 6-7.

over

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

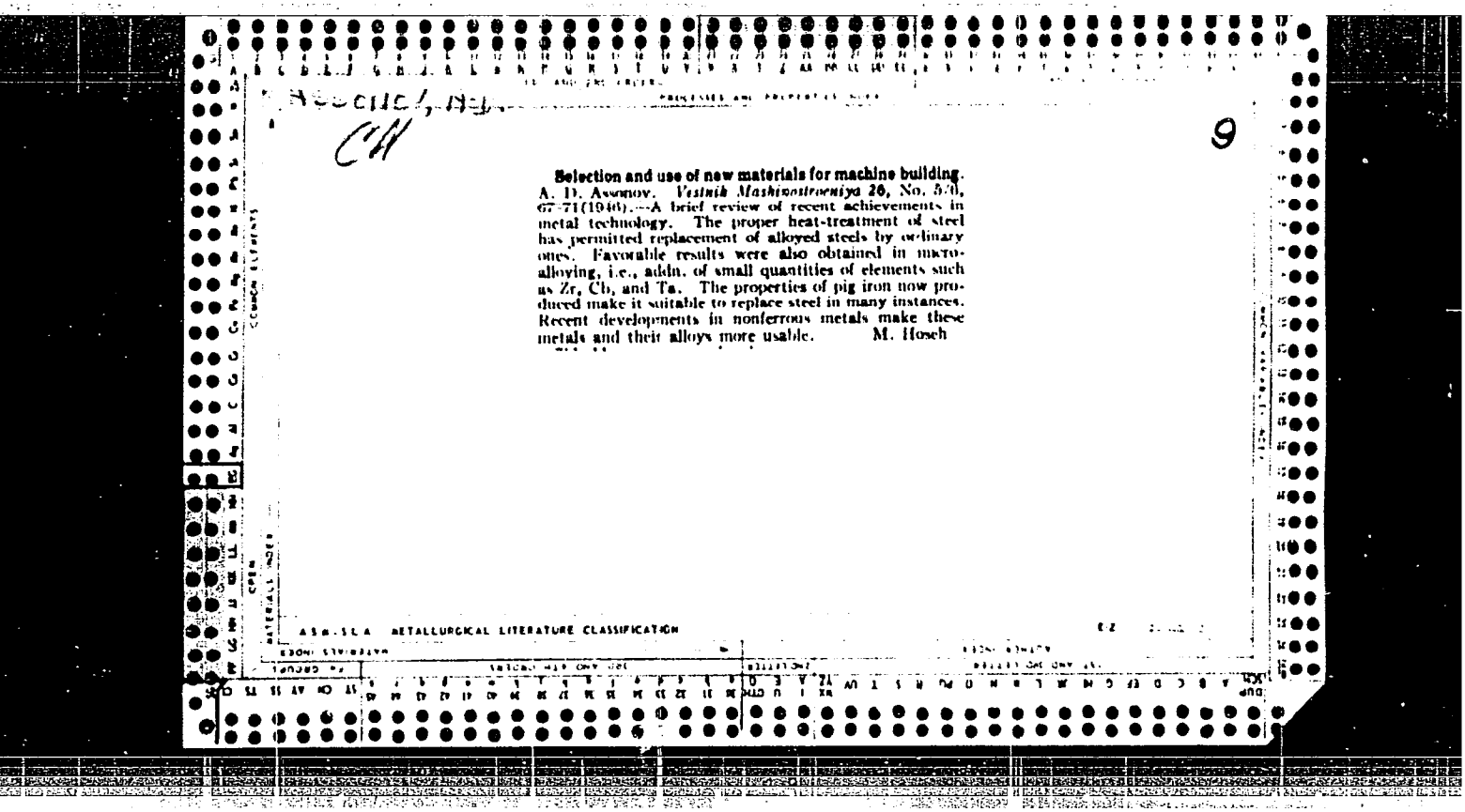


PROCESSES AND PROPERTIES INDEX

/ 2

Gas Case-Hardening. A. D. Assonov. (Vestnik Metallopromyshlennosti, 1940, No. 4–5, pp. 72–76). (In Russian). The process developed by the Central Scientific Research Institute for Machine Construction employs a gas mixture obtained by the pyrolysis and cracking of paraffin. The plant used for the purpose and the gas-fired muffle furnace in which the case-hardening is done are described. The paraffin is pyrolysed at 830° C. and, after scrubbing, a portion of the products are cracked at 970° C. in the presence of water vapour. The products of the two processes are then mixed to produce an atmosphere consisting of: C_nH_m 2–5%, carbon monoxide 12–18%, methane 10–15%, oxygen 0–0·5%, carbon dioxide 0·2–0·5%, hydrogen 66–70% and the remainder nitrogen. The case-hardening furnace is operated at a temperature of 930° C. at the input end and 900° C. at the unloading end. It has an output of up to 300 kg. per hr. The case-hardening capacity is double that obtainable with solid compounds.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Selection and use of new materials for machine building. A. D. Assonov. *Vestnik Mashinostroeniya* **26**, No. 5/6, 67–71(1946).—A brief review of recent achievements in metal technology. The proper heat-treatment of steel has permitted replacement of alloyed steels by ordinary ones. Favorable results were also obtained in micro-alloying, i.e., addn. of small quantities of elements such as Zr, Cb, and Ta. The properties of pig iron now produced make it suitable to replace steel in many instances. Recent developments in nonferrous metals make these metals and their alloys more usable. M. Hosch

ASSONOV, A. D., Engr. Cand. Tech. Sci.

Dissertation: "Accelerated Annealing of the White Cast Iron with an Increased Content of Chronium." Moscow Automotive Mechanics Inst, 24 Apr 47.

SO: Vechernyaya Moskva, Apr, 1947 (Project #17836)

ASSONOV, A. D.

List of Soviet Metallurgical Books. (Incorporated into the Research Library of the Steel Research Institute of the Ceskoslovenske Hute at the 1st March 1950).

A. D. ASSONOV: Dispercionniy metod otzhiga iz belogo ogupuna (Annealing of white iron castings), Moscow 1947.

SO: AAIR, 1400-52, 21 Aug 1952, p. 1, Unclass.

ASSONOV, A. D.

Termicheskaia obrabotka detalei avtomobilia. [Heat treatment of automobile parts]. [Redaktor M.N. Kuniavskii] Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1948. 211 p. illus.

DLC: TL240.A78

SO: Soviet Transportation and Communications A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

ASSONOV, A. D.

Case hardening of steel parts, (Moskva?), Izd VNITOMASh, 1951.

SO: MLRA. October 1952.

1. ASSONOV, A. D.

2. USSR (600)

4. Technology

7. Technology of heat treatment. Moskva, Mashgiz. 1952.

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

ASSONOV, A.D., kandidat tekhnicheskikh nauk, laureat Stalinskikh premiy; KOZLOVSKIY, I.S., kandidat tekhnicheskikh nauk, retsenzent; SHTYKOV, A.A., kandidat tekhnicheskikh nauk, redaktor; TIKHONOV, A.Ya, tekhnicheskiy redaktor

[Metals and alloys in automobile construction] Metally i splavy v avtostroenii. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954. 262 p. (MLRA 7:10)
(Alloys)
(Automobiles--Design and construction)

ASSONOV, A.D.

USSR/ Engineering - Cementation process

Card 1/1 : Pub. 12 - 2/16

Authors : Kozlovskiy, I. C.; Assonov, A. D.; and Orzhekhovskiy, YU. F.

Title : A new cemented steel, Mark 30KhGT, for automobile gears

Periodical : Avt. trakt. prom. 8, 3-8, Aug 1954

Abstract : Methods for cementing Mark 30KhGT steel were investigated. Mechanical and physical properties of the steel, and the thermal treatment of automobile gears are described. Ten USSR references: (1945-1952). Tables; illustrations; graphs.

Institution : .....

Submitted : .....

ASSONOV, A. D.

USSR/ Engineering - Metallurgy

Card : 1/1

Authors : Assonov, A. D., Laurate of the Stalin Prize, Cand. Tech. Sc.; Shepelyakovskiy, K. Z, Cand. Tech. Sc.; Lankin, P. A., Cand. Tech. Sc.

Title : Rapid cementation during heating with high-frequency current

Periodical : Vest. Mash., 34, Ed. 6, 56 - 60, June 1954

Abstract : A comparison is made between cementation method of articles in a furnace without muffles, using vaporized liquid carburizers, and a new method which uses a gas for treating the surface, the article being placed in a muffle and the heat produced by high-frequency current. A complete analysis is given of results obtained with various temperatures and the method is found to be adaptable to high-speed automatic production. Graphs; drawings; tables; illustrations.

Institution : ...

Submitted : ...

KUNYAVSKIY, M.N.; SAMOKHOTSKIY, A.I.; ASSONOV, A.D., kandidat tekhnicheskikh nauk, laureat Stalinskoy premii, retsenzent; RYBIN, V.V., inzhener, redaktor; KOLLI, A.Ya., redaktor; MATVEYEVA, Ye.N., tekhnicheskiy redaktor.

[Principles of metallography and heat treatment] Osnovy metallovedeniia i termicheskoi obrabotki. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroitel'noi lit-ry, 1955. 371 p. (MLRA 8:12)
(Metals--Heat treatment) (Metallography)

A - s - n - v, A.B.

112-1-1397

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 1, p. 214 (USSR)

AUTHOR: Assonov, A.B.

TITLE: Steps Towards the Automation of Forging-and-Heat-Treating Processes in Conditions of Mass Production (Puti avtomatizatsii kuznechno-termicheskikh protsessov v usloviyakh massovogo proizvodstva)

PERIODICAL: Sbornik: Avtomatizatsiya tekhnol. protsessov v mashinostr. Goryachaya obrabotka metallov. Moscow, AN SSSR, 1955, pp. 55-58.

ABSTRACT: Bibliographic entry.

Card 1/1

ASSONOV, A. D.

USSR/ Engineering - Heat treating

Card 1/1 Pub. 128 - 17/25

Authors : Assonov, A. D.

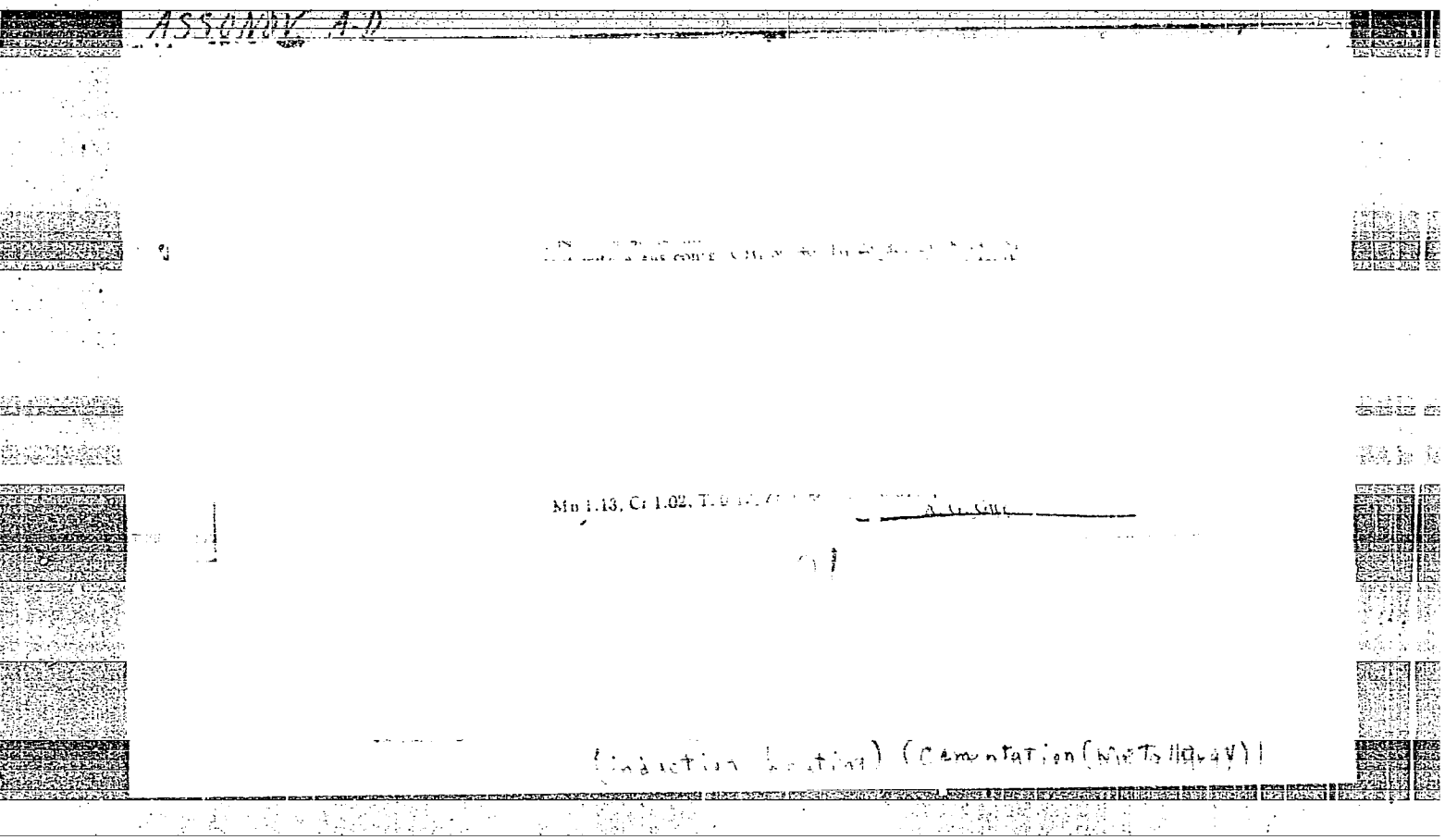
Title : Rapid heating of ingots for drop forging

Periodical : Vest. mash. 1, 76-77, Jan 1955

Abstract : A narrative report is presented concerning the construction of an experimental heating installation at the Stalin Automobile Plant, for rapid heating of ingots. The above mentioned installation is equipped with a recuperator for generator gases utilized as a heating media. Drawing.

Institution : .....

Submitted : .....



ASSONOV,A.D., kandidat tekhnicheskikh nauk, laureat Stalinskoy premii; SHEPELYAKOVSKIY,K.Z., kandidat tekhnicheskikh nauk; LANKIN,P.A., kandidat tekhnicheskikh nauk.

Rapid cementation by means of high frequency heating. Avt. trakt. prom. no.5:(insert) My '55. (MLRA 8:8)

1. Moskovskiy avtozavod imeni Stalina.
(Cementation (Metallurgy)

SOBOLEV, B.F., kandidat tekhnicheskikh nauk; ASSONOV, A.D., kandidat tekhnicheskikh nauk, retsenzent; LANDA, A.F., doktor tekhnicheskikh nauk, redaktor; MATVEYEVA, Ye.N., tekhnicheskiy redaktor

[Modification and artificial aging of malleable cast iron] Modifitsirovanie i iskusstvennoe starenie kovkogo chuguna. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 78 p. (MLRA 10:5)

(Cast iron--Metallurgy)

122-1-16/34

AUTHOR: Assonov, A.D., Candidate of Technical Sciences.

TITLE: Survey of the development of production processes for the heat treatment of steel (Obzor razvitiya tekhnologii termicheskoy obrabotki stali)

PERIODICAL: "Vestnik Mashinostroyeniya" (Engineering Journal), 1957, No.1, pp. 58 - 64 (U.S.S.R.)

ABSTRACT: Recent history in the U.S.S.R. is traced from its beginnings as a secret craft (even in 1920) to its present state. Each heat treatment (or allied) process is compared with American practice. Particular emphasis is placed on the newer processes of gas carburising, cyaniding, austempering, and the introduction of the newer American steels, particularly the H group steels among the low carbon class and the 0.35% carbon group for carburised and cyanided components. The main immediate progress is seen in the changeover to new steels. The replacement of low carbon case hardening steels by medium carbon heat treated steels is advocated. The heat treatment of motor car components must be based in future on: a) austempering of case-hardening steels from the forging heat, b) austempering of heat treated steel with tempering to requirements, c) surface (e.g. induction) hardening, d) volume hardening. Liquid cyaniding and low temperature tempering are obsolete

Card 1/1

Survey of the development of production processes for the heat treatment of steel. (Cont.) 122-1-16/34

and should be replaced by gas cyaniding and austempering. Separate heat treatment departments have no room in mass production.

Card 2/2 There are 7 figures and 5 photographs.

AVAILABLE: Library of Congress

129 - 2 - 8/10

AUTHOR: Assonov, A.D., Candidate of Technical Sciences, Shepelyakovskiy, K.Z. and Lanikn, P.A. (Moscow)

TITLE: Mechanical Properties of Steel Subjected to High Speed Cementation During High Frequency Heating. (Mekhanicheskiye svoystva stali, Podvergnutoy skorostnoy tsementatsii pri nagreve TB.Ch.).

PERIODICAL: Metallovedenie i obrabotka metallov, 1957, No. 2, pp 46-48 (U.S.S.R.)

ABSTRACT: The influence of high cementation temperatures on the mechanical properties of steel were investigated between 1938 and 1943 by S.S. Stroev who carried out cementation of components in a solid carburizing agent at 1100-1140°C for a period of ten hours. Some of the results obtained by Stroev are reviewed (Tables 1 and 2, p. 46). The authors cite data obtained experimentally as a result of high temperature gas cementation, using high frequency heating, for specimens and gears made from 18XГТ steel (composition: 0.16-0.24% C, 0.17-0.37% Si, 0.80-1.10% Mn, 1.00-1.30% Cr, ≤ 0.40% Ni, 0.08-0.15% Ti) after hardening from 870° C and tempering at 200°C; depending on the quality of the melt the values varying

Card 1/3

TITLE: Mechanical Properties of Steel Subjected to High Speed Cementation During High Frequency Heating. (Mekhanicheskiye svoystva stali, Podvergnutoy skorostnoy tsementatsii pri nagreve T.B.Ch.).

within the limits given in Table 4, p. 47. Comparison of these data with data obtained at sub-zero temperature (given in Table 5, p. 47) shows that high temperature heating does not have an adverse effect on the strength properties of steel. The influence of high temperature heating on the strength of steel was also investigated for specimens made from four other types of steel; the resulting mechanical properties are given in Table 6. The data given in Table 7 were obtained for steel heated in vacuum in the Vacuum Metallography Laboratory of the Engineering Research Institute Ac.Sc., under the direction of M.G. Lozinskiy. The data given in Table 8 were obtained after making apparent the grains by the oxidation method. The presence of Ti and Zr carbides in the steel impedes grain growth. Therefore, steel containing such carbides can be heated during carburization to up to 1200°C which permits a considerable shortening of the carburization process. Apparently over-heating Cr-Mn-Ti steel specimens with a naturally fine grain during case hardening does not influence the fatigue limit of this steel.

Card 2/3

TITLE: Mechanical Properties of Steel Subjected to High Speed Cementation During High Frequency Heating. (Mekhanicheskiye svoystva stali, podvergnutoy skorostnoy tsementatsii pri nagreve T B Ch.).

The text contains 9 tables. There are no references.

ASSOCIATION: Moscow Automobile Plant imeni Likhacheva.

PRESENTED BY: —

SUBMITTED: —

AVAILABLE: Library of Congress.

Card 3/3

129-10-12/12

AUTHOR: Pogodin-Alekseyev, G.I., Starodubov, K.F. and Assonov, A.D.

TITLE: Scientific and technical conference on heat treatment of metals in Leipzig, East Germany. (Nauchno-tekhnicheskaya konferentsiya po termicheskoy obrabotke metallov v Leyptsige)

PERIODICAL: "Metallovedeniye i Obrabotka Metallov" (Metallurgy and Metal Treatment), 1957, No.10, pp.53-63 (U.S.S.R.)

ABSTRACT: This conference was held between May 21 and 22, 1957. Over 600 people participated, including some foreign delegates. The conference papers can be classified into 4 groups dealing with heat treatment, induction heating during hardening and gas hardening, heat treatment of components of various grades of steel and theoretical problems of heat treatment. Summaries are given of some of the papers read by East German as well as by guest delegates.
There are 16 figures and graphs and 5 tables.

AVAILABLE: Library of Congress

Card 1/1

AUTHOR: ASSONOV, A.D.

TITLE: The Part played by Works Laboratories in the Developement of Technical Progress. (Rol'zavodskikh laboratoriy v razvitii tekhnicheskogo progressa. Russian).

32-6-1/54

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol 23, Nr 6, pp 643 - 646 (U.S.S.R.)

Received: 7 / 1957 Reviewed: 8 / 1957

ABSTRACT: For the increase of technological perfection and the quality of industrial goods coordination of common research work of scientific institutes and factory laboratories is of the great importance says the author of this article, and he maintains that such common research work is occasionally carried out, but not systematically and not according to a plan,. Systematic research work in cooperation with factory laboratories is at present being carried out only by the NAMI Institute (Scientific Academy for metallurgical research) with the purpose of developing new kinds of steel. Other "valuable cooperative unions" of scientific institutes with factories have been neglected or have completely fallen flat. It could be maintained, the author points further, that scientific institutes play the leading part in the introduction of the newest technology, in reality, however, it is the factory laboratory where progressive technology has mainly been developed. The results are that there is delay in adopting new technological methods,

Card 1/2

The Part played by Works Laboratories in the Developement of Technical Progress.

obsolete und unrational production methods are maintained etc. (Examples). It has therefore become highly important for scientific research institutes to take over a leading part in the introduction of newest technology in industry and thus to give active support to the progress of production. This must, however, not lead to a decrease of the importance of the able research engineer in the factory. On the contrary he must enjoy every support by the management in his valuable and responsible work.

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED:
AVAILABLE: Library of Congress

Card 2/2

AUTHOR: Assonov, A. D., Candidate of Technical Sciences, 32-10-17/32
Engineer-in-Chief of Metallurgy of the Automobile Factory imeni Likhachev, I. A.

TITLE: Comments

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 10, pp. 1212-1213 (USSR)

ABSTRACT: In his report on the occasion of the 40th anniversary of the October revolution, the author describes the development of the works within the period of Soviet power, especially of the works-laboratory which is reported to have had only 1 laboratory assistant, and 1 apprentice as personnel in 1917, whereas it now became an important center of science in the USSR, to which now belong the well-known Soviet scientists: Assonov, A. D., Shepelekovskiy, K. Z., Lankin, P. A., Yatskov, S. A. and Shklarov, K. G.- Authors of the process of "gascementation in high frequency heating" which was newly introduced in the works, further the specialists of magnetic control and spectroscopic analysis: Klimov, A. I., and Smirnov, V. F., as well as other specialists of metallurgy, candidates of sciences: Chirokov, V. T., Pryadilov, V. I., Bibergal, V. A., Golubyatnikov, V. A., Grigor'yev, A. G., Karasev, A. K., and others. These works owe their development to the collective of Soviet science. The research-works and practical methods of the various kinds of processing metals are mentioned

Card 1/2

Comments

32-1o-17/32

as particularly important. The introduction of new methods of processing metals which consists in conveying the component parts from the punch immediately to the refining processes by utilizing the heat still present, is planned to be introduced before long. Further, the cyanidation-processes practiced up to now, should be replaced by nitrocementation, and novel hardening methods of finished parts should be introduced as well. The duration of the hardening process by applying high frequency-heating should be reduced to some minutes. Many parts which were punched up till now, should be cast in the future. The manufacture of new species of steel alloys with carbide-forming elements, and others, is a correlated problem. Greater attention should further be paid to the investigation of processes of isothermic changes, diffusion processes and surface-solidification processes not only by carbon concentration, but also by saturation with chromium, boron and silicon. Moreover, the heat effect on the parts at high temperatures should be investigated. Special attention should be paid to the physical investigation of the metals in view of creating the necessary prerequisites for increasing Soviet machine production.

AVAILABLE: Library of Congress
Card 2/2

1. Metallurgy-USSR-Progress

25(1)

PHASE I BOOK EXPLOITATION SOV/1368

Assonov, Aleksandr Danilovich, Konstantin Zakharovich Shepelyakovskiy, and Petr Aleksandrovich Lankin

Gazovaya tsementatsiya s induktsionnym nagrevom (Gas Carburizing With Induction Heating) Moscow, Mashgiz, 1958. 87 p. 6,000 copies printed.

Reviewer: Lozinskiy, M.G., Doctor of Technical Sciences; Tech. Ed.: Model', B.I.; Managing Ed. for Literature on Metalworking and Machine-Tool Manufacture (Mashgiz): Doctor of Technical Sciences; Ed.: Shmykov, A.A., Beyzel'man, R.D., Engineer.

PURPOSE: This book is intended for engineers and technicians.

COVERAGE: The book deals with the practical aspects of a new method of rapid gas carburizing with immediate quenching, specifically as carried out with high-frequency induction heating. The immediate-quenching aspect required the development of new types of steel, since older methods involved heating after carburization. One such type of steel is that bearing the designation 18KhGT, developed by the Moscow Motor Vehicle Plant in collaboration with

Card 1/3

Gas Carburizing With Induction Heating SOV/1368

NAMI (Scientific Institute for Automobile Engines). In 1947 the same plant developed the method of gas carburizing with the aid of induction heating. Industrial application of the method was begun in 1953. The principal significance of the new method lies in the fact that practical use is made of elevated temperatures (1150-1200°C) for carburizing. The effect of these high temperatures on the properties of the cemented layer has to be studied further. The book contains material not previously published, describing methods, tested in practice, of gas-carburizing gear wheels on a mass scale. Techniques and equipment are described in detail. Recommendations are made for the adoption of the new process in industry. The following are mentioned as having taken part in developing the new carburizing method: S.A. Yaitskov, Engineer; I.N. Shklyarov, Engineer; M.O. Rabin, N.V. Senyushkin; A.N. Zhivotovskiy; N.I. Borisov. There are 21 references, all Soviet.

TABLE OF CONTENTS:

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Gas Carburizing With Induction Heating SOV/1368

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GO/mas
4-15-59

Technology of the Heat Treatment (Cont.) 574

from the heat-treating practices of the ZiL and GAZ automobile plants with emphasis on annealing, hardening, tempering, casehardening (pack and gas carburizing), and induction hardening of automobile steels.

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Technology of the Heat Treatment (Cont.) 574

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Technology of the Heat Treatment (Cont.) 574

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Technology of the Heat Treatment (Cont.) 574

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SOV/137-59-1-1845

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AUTHOR: Assonov, A. D.

TITLE: Introduction of High-temperature Carburization (Vnedreniye vysokotemperaturnoy tsementatsii)

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ABSTRACT: The im. Likhachev plant is introducing low-alloy steels for the manufacture of various machine parts. In changing over to 30KhGT steel the plant made big savings because the duration of the carburization cycle was decreased by 25% without any extra expenses. The composition of steel for 40-R connecting rods, which was introduced instead of 38-grade steel was developed by ZIL (im. Likhachev Plant) in co-operation with NAMI (Scientific Automobile Machinery Institute). 40KhGTR steel with B and Ti is in the process of being introduced. The author points to the possibility of raising the carburization temperature to 1150 - 1200° C using high-frequency-current heating and the necessity for finding protective carburizing atmospheres for high-temperature carburization. A. B.

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