LYPA A. L.

SALATICH, A. K. - Kand. biolog, nauk. A. L. Lypai arkh. Institut gradostroitel'stva Akademii arkhitektury USSR i LYPA A. L. - Kand. Biolog. nauk i KOSAREVSKIY, I. A. - Kand. Arkh.

Elementy vneshnego blagoustroystva nacelennykh mest (Al'bom parternoy zeleni)
Page 80

SO: Collection of Annotations of Scientific Research Work on Construction, completed in 1950.
Moscow, 1951

LYPA, A. L.

LYPA, A. L. -- "The Dendroflora of the Ukrainian SSR, Methods and Means of Enriching and Using It." Sub 7 Feb 52, Inst of Forestry, Acad Sci USSR. (Dissertation for the Degree of Doctor in Biological Sciences).

So: Vechernaya-Moskva January-December 1952

1. LYPA, A. L.

2. USSR (600)

4. Ukraine - Botanical Gardens

7. Significance of Ukrainian botanical gardens of the 19th century in the acclimatization of tree varieties. Biul.Glav.bot.sada no. 12, 1952.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

LYPA, O.L. [author]; KONDRATYUK, Ye.M.[reviewer].

"Landscaping populated places." O.L.Lypa. Reviewed by IE.M.Kondratiuk. Bot.zhur.[Ukr.] 10 no.1:108-109 '53. (MLRA 6:8)
(Lypa, O.L.) (Ukraine--Landscape gardening) (Landscape gardening--Ukraine)

LYPA, A.L.

Progress and prospects in the acclimatization of trees in the Ukraine. Report no.1. Nauk.zap.Kiev.un.12 no.7:77-92 '53. (MLRA 9:10)
(Ukraine--Acclimatization (Plants))

NAZAREVSKIY, S.I.; MAKAROV, S.N.; PILIPENKO, F.S.; GERASIMOV, M.V.; IL'INSKAYA, M.L.; VEKSLER, A.I.,[deceased]; VASIL'YEV, I.M.; IL'INA, N.V.; SOKOLOV, S.Ya.; LOZINA-LOZINSKAYA, A.S.; SAAKOV, S.G.;ZALESSKIY, D.M.; AVRORIN, N.A.; IVANOV, M.I.; PRIKLADOV, N.V.; SOBOLEVSKAYA, K.A.; SALAMATOV, M.N.; MALINOVSKIY, P.I.; LUCHNIK, A.I.; KRAVCHENKO, O.A.; VEKHOV, N.K.; GROZDOV, B.V.; MASHKIN, S.; BOSSE, G.G.; PALIN, P.S.,(g.Shuya, Ivanovskoy oblasti); MATUKHIN; ZATVARNITSKIY, G.F.; GRACHEV, N.G.; CHERKASOV, M.I.; KIRKOPULO, Ye.N.; LEVITSKAYA,A.M.; GRISHKO, N.N.; LIKHVAR', D.F. VIL'CHINSKIY, N.M.; LYPA, A.L.; OREKHOV, M.V.; SHCHERBINA, A.A.; TSYGANKOVA, V.Z.; BARANOVSKIY, A.L.; GEORGIYEVSKIY, S.D.; STEPUNIN, G.A. OZOLIN, E.P.; LUKAYTENE, M.K.; KOS, Yu.I.; VAIL'YEV, A.V.; RUKHADZE, P.Ye.; VASHADZE, V.N.; SHANIDZE, V.M.; MANDZHAVIDZE, D.V.; KORKESHKO, A.L.; KOLESNIKOV, A.I.,(g. Sochi); SERGEYEV, L.I.; VOLOSHIN, M.P.; RYBIN, V.A.; IVANOVA, B.I.; RYABOVA, T.I.; GAREYEV, E.Z. ;RUSANOV, F.N.; BOCHANTSEVA, Z.P.; BLINOVSKIY, K.V.; KLYSHEV, L.K.; MUSHEGYAN, A.M.; LEONOV, L.M.

Talks given by participants in the meeting. Biul.Glav.bot.sada no.15: 85-182 '53. (MLRA 9:1)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR (for Makarov,Pilipenko, Gerasimov, Il'inskaya, Veksler); 2. Akademiya komunal'nogo khozyaystva imeni K.D. Pamfilova for Vasil'yev); 3. Vsesoyuznaya sel'skokhozyaystvennaya vystavka (for Il'ina); 4. Botanicheskiy sad Botanicheskogo instituta imeni V.L.Komarova Akademii nauk SSSR (for Sokolov, Lozina-Lozinskaya, Saakov); 5. Botanicheskiy sad Leningradskogo

(continued on next card)

NAZAREVSKIY, S.L.---(continued) Card 2.

gosudarstvennogo ordena Lenina universiteta (for Zalesskiy); 6. Polyarno-Al'piyskiy botanicheskiy sad Kol'skogo filiala imeni S.M. Kirova Akademii nauk SSSR (for Avrorin); 7. Botanicheskiy sak pri Tomskom gosudarstvennom universiteta (for Ivanov); 8. Botanicheskiy sad pri Tomskom gosudarstvennom universiteta imeni V.V. Kuybysheva (for Prikladov); 9. TSentral'nyy Sibirskiy botanicheskiy sad Zapadno-Sibirskogo filiala Akademii nauk SSSR (for Salamatov, Sobolevskaya); 10. Botanicheskiy sad Irkutsko gosudarstvennogo universiteta imeni A.A. Zhdanova (for Malinovskiy); 11. Altayskaya plodovo-yagodnaya opytnaya stantsiya (for Luchnik); 12. Bashkirskiy botanicheskiy sad (for Kravchenko); 13. Lesostepnaya selektsionnaya opytnaya stantsiya dekorativnykh kul'tur tresta Goszelenkhoz Ministerstva kommunal'nogo khozyaystva RSFSR (for Vekhov); 14. Bryanskiy lesokhozyaystvennyy institut (for Grozdov); 15. Botanicheskiy sad pri Voronezhskom gosudarstvennom universitete (for Mashkin); 16. Orekhovo-Zuyevskiy pedagogicheskiy institut (for Bosse); 17. Botanicheskiy sad pri Rostovskom gosudarstvennom universitete imeni V.M. Molotova (for Matukhin); 18. Botanicheskiy sad Kuybyshevskogo gorodckogo otdela narodnogo obrazovaniya (for Zatvarnitskiy); 19. Zoobotanicheskiy sad pri Kazanskom universitete (for Grachev); 20. Gosudarstvennyy respublikanskiy proektnyy institut "Giprokommunstroy" (for Cherkasov); 21. Botanicheskiy sad Odesskogo gosudarstvennogo universiteta imeni I.I. Mechnikova (for Kirkopulo); 22. Botanicheskiy sad pri Dnepropetrovskom gosudarstvennom universitete (for Levitskaya); 23. Botanicheskiy sad

(continued on next card)

NAZAREVSKIY, S.L.---(continued) Card 3.

Akademii nauk USSR (for Grishko, Likhvar', Vil'chinskiy); 24. Kiyevskiy sel'skokhozyaystvennyy institut (for Lypa); 25. Botanicheskiy sad Chernovitskogo gosudarstvennogo universiteta (for Orekhov); 26. Botanicheskiy sad pri L'vovskom gosudarstvennom universitete imeni Iv. Franko (for Shcherbina); 27. Botanicheskiy sad Khar'kovskogo gosudarstvennogo universiteta imeni A.M. Gor'kogo (for TSygankova); 28. Botanicheskiy sad Zhitomirskogo sel'skokhozyaystvennogo instituta (for Baranovskiy); 29. Botanicheskiy sad Akademii nauk Belorusskoy SSR (for Georgiyevskiy); 30. Institut biologii Akademii nauk Belorusskoy SSR (for Stepunin); 31. Botanicheskiy sad Akademii Litovskoy SSR (for Lukaytene); 32. Botanicheskiy sad Latviyskogo gosudarstvennogo universiteta (for Ozolin); 33. Kabardinskiy krayevedcheskiy botanicheskiy sad (for Kos); 34. Sukhumskiy botanicheskiy sad Akademii nauk Gruzinskoy SSR (for Vasil'yev, Rukhadze); 35. Batumskiy botanicheskiy sad Akademii nauk Gruzinskoy SSR (for Shanidze); 36. Tbilisskiy botanicheskiy sad Akademii nauk Gruzinskoy SSR (for Mandzhavidze); 37. Sochinskiy park Dendrariy (for Korkeshko); 38. Gosudarstvennyy Nikitskiy botanicheskiy sad imeni V.M. Molotova (for Sergeyev, Voloshin); 39. Krymskiy filial Akademii nauk SSSR (for Rybin); 40. Botanicheskiy sad Moldavskogo filiala Akademii nauk SSSR (for Ivanova); 41. Botanicheskiy sad Botanicheskogo instituta Akademii nauk Tadzhikskoy SSR (for Ryzbova); 42. Botanicheskiy sad Kirgizskogo filiala Akademii nauk SSSR (for Gareyev); 43. Botanicheskiy

(continued on next card)

NAZAREVSKIY, S.L.---(continued) Card 4.

sad Akademii nauk Usbekskoy SSR (for Rusanov, Bochantseva); 44. Botanicheskiy sad Akademii nauk Turkmenskoy SSR (for Blinovskiy); 45. Respublikanskiy sad Akademii nauk Kazakhskoy SSR (for Klyshev, Mushegyan).

(Botanical gardens)

LYPA, A.L., profesnor.

Gradual acclimatization of plants. Priroda 42 no.9:76-81 S '53.
(MLRA 6:8)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko.
(Acclimatization (Plants))

LYPA, A.L.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
LYPA, A.L. KOSAREVSKIY, I.A. SALATICH, A.K.	"Planting of Trees in Inhabited Localities"	Kiev State University imeni T.G. Shevchenko

SO: W-30604, 7 July 1954

LYPA, M. L.

PROTSENKO, D.F.; LYPA, A.L.

Basic tasks in organizing the new botanical garden of the University of Kiev. Biul.Glav.bot.sada no.26:103-105 '56. (MLRA 10:2)

1. Kiyevskiy gosudarstvennyy universitet im.T.G.Shevchenko.
(Kiev--Botanical gardens)

LYPA, Aleksey Lavrent'yevich; BARBARICH, A.I., starshiy nauchnyy sotrudnik, otvetstvennyy red.; KHOKHANOVSKAYA, T.A., tekhn.red.

[Guide to trees and shrubs; wild and cultivated in the Ukrainian S.S.R.] Opredelitel' derev'ev i kustarnikov (dikorastushchikh i kul'tiviruemykh v USSR). [Kiev] Izd-vo Kievskogo gos. univ. Vo.2. 1957. 385 p. (MIRA 11:4)
(Ukraine--Trees) (Ukraine--Shrubs)

Lypa, A. L.

USSR/Cultivated Plants - Introduction and Acclimatization. M-2

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39157

Author : Lypa, A.L.

Inst : Botanical Institue AS USSR

Title : Some Data on the History of Plant Acclimatization and Gradual Acclimatization.

Orig Pub : Tr. Botan. in-ta, AN USSR, 1957, ser. 6, vyp. 5, 131-137.

Abstract : Successful acclimatizations by seed sowing made in 1809 by I.M. Karazin, who introduced over 50 tree species at the latitude of Kharkov, are described.
Studies made by a number of acclimatization and dendrological gardens are noted. Michurin's methods of acclimatization are described. A series of botanical gardens and dendrariums are recommended as acclimatization bases for experiments in gradual acclimatization (5 stages).

Card 1/1

LYPA, O.L.

Some parks of scientific interest in Vinnitsa Province.
Mat.pro okhor.pryr.na Ukr. no.1:45-54 '58. (MIRA 13:3)
(Vinnitsa Province--Parks)

LYPA, A.L.

An interesting case of apomixis in Ginkgo biloba L. Nauch. dokl.vys.shkoly;biol.nauki no.3:133-134 '58. (MIRA 11:12)

1. Predstavlena kafedroy vysshikh rasteniy Kiyevskogo gosudarstvennogo universiteta imeni T.G.Shevchenko.
(Parthenogenesis (Plants)) (Ginkgo)

LYPA, A. L.

AUTHOR: None Given

26-58-5-26/57

TITLE: Acclimatization of the Tulip Tree in the USSR (Akklimatizatsiya tyul'pannogo dereva v SSSR)

PERIODICAL: Priroda, 1958, Nr 5, pp 93-94 (USSR)

ABSTRACT: The tulip tree, Liriodendron tulipifera L. of the Manoliacea family, originating in North America, is cultivated in small amounts for ornamental and scientific purposes in the USSR, in the Caucasus, Crimea and southern parts of the Ukraine. It is not found in the north parts of the country due to severe winters. L. Chibiras, P. Dzhiaukshtas and V. Nekrasov of the Institut lesa AN SSSR (The USSR Academy of Sciences' Forest Institute) have described these trees which are of special importance with respect to selection problems. Professor A.A. Lypa (Kiyev) relates interesting details about the history of the tulip tree in Russia. The oldest and biggest tulip tree still existing in the USSR near the settlement Golovinka in the Lazarev district of the Krasnodar Kray on the Black-Sea shore of the Caucasus was planted in the 1840's. In 1956 it was 36 m high, had a circumference of 6.76 m and a crown of 25 x 27 m. There are 3 photos.

AVAILABLE: Library of Congress

Card 1/1 1. Tulip tree - Growth 2. Plants - USSR

30(1)
AUTHOR: Lypa, A.L., Professor

SOV/26-59-2-24/53

TITLE: A Giant Redwood Tree in the USSR (Mamontovo derevo v SSSR)

PERIODICAL: Priroda, 1959, Nr 2, pp 96-98 (USSR)

ABSTRACT: The famous sequoia tree from California is described in this article, with the mention that a few such young trees are also found in the Crimea and Caucasus. There is 1 photograph.

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko (Kiyev State University imeni T.G. Shevchenko)

Card 1/1

LYPA, A.L. [Lypa, O.L.]

Results and problems of dendrological investigations in gardens and parks of the Ukraine. Ukr.bot.zhur. 16 no.5:97-105 '59. (MIRA 13:4)

1. Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko, kafedra vysshikh rasteniy.
(Ukraine--Trees)

LYPA, A.L.

Recent data on the biology and geographical distribution of Ginkgo in cultivation in western Transcaucasia. Vest.Bot.sada AN Gruz. SSR no.66:123-127 '60. (MIRA 14:10)
(Caucasus--Ginkgo)

LYPA, Aleksey Lavtent'yevich, prof.; BILOKON', I.P., kand. biolog. nauk, otv. red.; SKRIPNIK, V.T.[Skrypnyk, V.T.], red.; MATVIICHUK, O.A., tekhn. red.

[Gardens and parks of the Ukraine; national parks and their preservation] Sady i parky Ukrainy; parky-pamiatky ta ikh okhorona. Kyiv, 1961. 50 p. (Tovarystvo dlia poshyrennia politychnykh i naukovykh znan' Ukrains'koi RSR. Ser.6, no.21)
(MIRA 15:1)

(Ukraine--Parks)

LYPA, L.L. [Lypa, O.L.]

"Planted forests of the Ukrainian steppe zone." Reviewed by O.L. Lypa. Ukr. bot. zhur. 18 no. 2:96-98 '61. (MIRA 14:5)
(Ukraine--Forests and forestry)

LYPACEWICZ, Stanislaw; ZIEMINSKI, Stanislaw

Economic information. Akt probl inf dok 7 no.5:22-34 S-O '62.

LYPACEWICZ, S.

Scientific information centers in the United States. Akt probl inf dok 7 no.5:52-58 S-O '62.

LYPACEWICZ, Stanislaw

Progress and information. Horyz techn 16 no.5:6-7 '63.

KWIEKOWA, Agnieszka; LYPACZEWSKA, Joanna; KUCHARSKI, Ryszard; KUCHTA, Jan; KWIT, Wladyslaw; ROPEK, Mieczyslaw

Considerations on the work of anti-tuberculosis dispensaries according to the analysis of records of patients under observation no less than 4 years. Gruzlica 27 no.11:1165-1172 N '59.

1. Z Poradni Przeciwgruzliczych: Instytutu Gruzlicy w Warszawie, Wojewodzkiej Centralnej w Lublinie, Miejskiej w Walbrzychu i Powiatowej w Chrzanowie.
(TUBERCULOSIS hosp.& clinics)

LYPENKO, A.V., student VI kursa

Treatment with resochin of lambliogenic cholecystitis. Vrach.delo no.10:151-152 O '62. (MIRA 15:10)

1. Kafedra gospital'noy terapii (ispolnyayushchiy obyazannosti zaveduyushchego - dotsent G.F.Boyko) Odesskogo meditsinskogo instituta.

(QUINOLINE) (GALLBLADDER--DISEASES) (GIARDIASIS)

LYPKAN, M.F.

Dynamics of nucleic acids during the intensification of processes of the regeneration of skin wounds. Ukr.biokhim.zhur. 24 no.4:442-447 '52.
(MLRA 6:11)

1. Kafedra biokhimiyi Kyyivs'koho ordena Trudovoho Chervonoho Prapora medychnoho instytutu im. akad. O.O.Bogomol'tsya.
(Nucleic acid) (Regeneration (Biology))

LYS, P.V. (Kiyev, ul.Yanvarskogo vosstaniya, d.3, kv.252)

Case history of foreign bodies in the abdominal cavity. Nov. khir. arkh. no.12:81-82 D '61. (MIRA 14:12)

1. Kafedra khirurgii II (zav. - prof. I.I.Kal'chenko) Kiyevskogo instituta usovershenstvovaniya vrachey.
(ABDOMEN—FOREIGN BODIES)

LYS, P.V. (Kiyev, ul. Yanvarskogo vosstaniya, d.3, kv.252)

Recurrent perforating gastric, duodenal and peptic anastomosis ulcers. Klin.khir. no.9:33-36 S '62. (MIRA 16:5)

1. Kafedra khirurgii II (zav. - prof. I.I. Kal'chenko) Kiyevskogo instituta usovershenstvovaniya vrachey.
(PEPTIC ULCER) (ALIMENTARY CANAL--ULCERS)

KAL'CHENKO, I.I., prof.; LYS, P.V.

Blood coagulation system in gastric cancer. Klin. khir. no.2:23-29 '65. (MIRA 18:10)

1. Kafedra khirurgii II Kiyevskogo instituta usovershenstvovaniya vrachey.

DOUTLIK, S.; JANDA, V.; LYSA, A.; KOVAROVA, B., techn. spoluprace

Clinico-electroencephalographic studies in varicella encephalitis.
Cesk. neurol. 23(56) no.7:444-450 '60.

1. Infekcni klinika fakulty detskeho lekarstvi KU, prednosta prof. dr. J.Prochazka Neurologicka klinika lekarske fakulty hygienicke KU, prednosta doc. dr. Z. Macek.
(CHICKENPOX compl) (ENCEPHALITIS etiol)
(ELECTROENCEPHALOGRAPHY)

POLAND

LYSAK, A.; Institute of Water Biology (Zaklad Biologii Wod), PAN /Polska Akademia Nauk -- Polish Academy of Science/, Krakow and Department of Animal Physiology (Zaklad Fizjologii Zwierzat), WSR /Wyzsza Szkola Rolnicza -- College of Agriculture/, Krakow.

"Thyroid Secretory Centers in the Carp (Cyprinus carpio L.) Revealed by Means of Iodine- 131,"

Warsaw, Bulletin de l'Academie Polonaise des Sciences: Serie des Sciences Biologiques, Vol X, No 12, 1962, pp 549-554.

Abstract: /English article/ Report on investigation on thyroid secretory centers in the carp by means of iodine-131. The studies were concerned with the duration and nature of the changes of iodine introduced into the organism and attempted to localise thyroid secretory center by using pharmacological drugs stimulating or inhibiting thyroid activity. 5 tables, 2 diagrams; 7 references, mostly Western.

1/1

LYSA, L., arkhitektor

Designs of feldsher-midwife stations. Sil'. bud. 11 no.3:21-22 Mr '61. (MIRA 14:2)
(Hospitals)

LYSAK, Andrzej, mgr., eng.

Further investigations on the influence of blood sampling of carp on their blood picture and rate of growth. Acta hydrobiol 3 no.4:261-279 '61.

1. Zaklad Biologii Wod, Polska Akademia Nauk, Krakow, ul. Slawkowska 17.

(Carp)

LYSAK, A.

Thyroid secretory centers in the carp (Cyprinus carpio L.) revealed by means of iodine ^{131}J. Bul Ac Pol biol 10 no.12: 549-554 '62.

1. Institute of Water Biology, Krakow, Polish Academy of Sciences and Department of Animal Physiology, College of Agriculture, Krakow. Presented by Z. Grodzinski.

LYSAK, A.I.

Gear-milling machine operator Aleksei Kulakov. Mashinostroitel' no.8:8 Ag '64. (MIRA 17:10)

LYSAK, A.I., inzh.

Mechanized spring coiling. Mashinostroenie no.1:24-25 Ja-F '64. (MIRA 17:7)

VOLODARSKIY, L.B.; KOPTYUG, V.A.; LYSAK, A.N.

Interaction between α-haloketones and hydroxylamine. Zhur. VKHO 10 no. 6:701-702 '65 (MIRA 19:1)

1. Novosibirskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR. Submitted March 3, 1965.

LYSAK, A.P.

Chick-pea in the steppes of Bashkiria. Zemledelie 24 no.1:72-73 Ja '62. (MIRA 15:2)

1. Sterlitamakskoye opytnoye pole.
(Bashkiria--Chick-pea)

KUZNETSOV, Aleksey Matveyevich; KOVALEV, Yevgeniy Semenovich; LYSAK, D.A., red.; KHRUSTALEVA, N.I., red. izd-va; VORONINA, R.K., tekhn. red.

[New means of manufacturing cement containing alumina] Novye sposoby proizvodstva glinozemistogo tsementa. Moskva, Gos. izd-vo "Vysshaia shkola," 1961. 86 p. (MIRA 14:7)

(Cement)

LYSAK, G., kand.sel'skokhoz. nauk; GOOGE, M.

Crops preceding spring wheat in Bashkiria. Zemledelie 27 no.4:11-13 Ap '65. (MIRA 18:4)

1. Baymakskoye opytnoye khozyaystvo.

LYSAK, G.D.; BONDARENKO, V.I.

Eye for joining a hoisting vehicle with a steel cable.
Gor. zhur. no.10:72 0 '63. (MIRA 16:11)

LYSAK, G.D.; PETRAKOV, A.I.

Catching device for the cage of a mine hoist. Gor. zhur. no.8:61 Ag '58. (MIRA 11:9)
(Mine hoisting--Safety appliances)

14(2)

AUTHORS: Baskevich, Ya.E., Lysak, G.D., and Kovler, S.Ya. SOV/127-59-2-11/21

TITLE: A Stopping Device for Mine-Shaft Cages With Friction Pulleys (Ulavlivayushcheye ustroystvo dlya kletey shakhtnogo pod"yëma so shkivami treniya)

PERIODICAL: Gornyy zhurnal, 1959, Nr 2, p 54 (USSR)

ABSTRACT: Author's Certificate Nr 106717, class 35a, 16$_{05}$. This is a description of a device ensuring additional safety in case the rope of a double-way shaft elevator breaks. It consists in an additional rope connecting the 2 cages, and passing, on the surface, thru 2 combined pulleys. There is 1 diagram.

Card 1/1

BELYY, Vasiliy Dmitriyevich; LYSAK, Georgiy Dmitriyevich, izobretatel'; PETRAKOV, Aleksandr Ivanovich, izobretatel', laureat Stalinskoy premii; KOZLOV, V.K., otv.red.; D'YAKOVA, G.B., red.izd-va; PROZOROVSKAYA, V.L., tekhn.red.; BOLDYREVA, Z.A., tekhn.red.

[Mine parachutes] Shakhtnye parashiuty. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 316 p. (MIRA 14:4)

(Mine hoisting--Safety appliances)

1. LYSAK, G. N.

2. USSR (600)

4. Rey-Bashkiria

7. Effectiveness of spring harrowing of winter rye in the Bashkir Ural Region. Dost. sel'khoz. No. 1, 1953.

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

LYSAK,

USSR/Agriculture - Hybridization

Card 1/1 Pub. 86 - 33/37

Authors : Lysak

Title : Original form of a wheat-rye hybrid

Periodical : Priroda 44/4, page 120, Apr 1955

Abstract : An account is given of attempts at crossing wheat and rye. The experiments prove unsuccessful for a long time because a grain having the characteristics of both wheat and rye did result, the second generation already producing either wheat or rye. Finally by taking wheat blossoms of a certain winter type and pollenating them with a certain type of winter rye, a very good hybrid was produced. Illustration.

Institution : .....

Submitted : .....

USSR/Soil Science - Cultivation, Melioration, Erosion. J.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67975

Author : Lysak, G.N.
Inst : -
Title : The Struggle with Water Erosion of Soils.

Orig Publ : S. kh. Bashkirii, 1957, No 7, 26-27.

Abstract : On the Buzdyak Testing Field, when a filed was plowed down the slope, over the course of three years 128 tons more of soil was eroded from spring fallow soil (96 tons from autumn fallow) than was eroded from fields plowed across the slope. It is recommended that the autumn fallow be furrowed and walled in at the same time as it is being plowed across the slope. On steep slopes it is advisable to create buffer strips 5-6 meters wide, with 50-60 meters between them. These measures must be combined with deep plowing (without moldboards) of spring fallow, using T.S. Mal'tsev's method. -- P.V. Shramko

Card 1/1

LYSAK, G.N., Cand ~gr ~ci -- (diss) "Soil Errosion and the role of differentiated agricultural engineering in ~~combating~~ the control of it (~~for~~ on the example of the Chermasano-Demskiy steppe)." Mos, 1958, 20 pp (Acad Sci USSR. Soil Inst im V.V. Dokuchayev) 150 copies (KL, 29-58, 135)

USSR/Soil Science - Tillage, Amelioration. Erosion. J

Abs Jour : Ref Zhur Biol., No 1, 1959, 1426

Author : Lysak, G.N.
Inst
Title : Wind Erosion of the Soil

Orig Pub : Zemledeliye, 1958, No 2, 53-56

Abstract : In the steppe regions of Bashkiria the destruction of plantings through wind blowing of the fine-grained soil is seen nearly annually. One recommends forest shelter-belts with buffer strips of perennials, sunflower stubble strips, plowing without turning over the surface while leaving the stubble, as well as snow-retention measures. -- F.N. Sofiyeva

Card 1/1

COUNTRY : USSR
CATEGORY : Cultivated Plants. General Problems.
ABS. JOUR. : Ref Zhur -Biologiya, No. 5, 1959, No. 20195

Author : Faizov, Kh.; Lysak, G.
INST. : ---
TITLE : Working Soils by T.S. Maltsev's Method in the Steppes of Pre-Uralian Bashkiria.

ORIG. PUB.: S. kh. Bashkirii, 1958, No.5, 12-15

ABSTRACT : No abstract

CARD : 1/1

LYSAK, G.N.

Summer [illegible] and the water balance of soils. Pochvovedenie no.7: 103-110 Jl '52. (CIA. 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zemledeliya i [illegible]. (Soil moisture)

LYSAK, JAN

POLAND/Chemical Technology, Chemical Products and Their Application, Part 3. - Food Industry. H-28

Abs Jour: Referat. Zhurnal Khimiya, No 10, 1958, 34212.

Author : Jan Lysak.
Inst : Not given.
Title : Airing of Grain Stored in Elevator Towers.

Orig Pub: Przegl. zboż.-młynarsky, 1957, 1, No 4, 6-9.

Abstract: No abstract.

Card : 1/1

H-28

POLAND/Chemical Technology - Chemical Products and Their Application. Food Industry.

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 26806

Author : Lysak Jan
Inst : -
Title : Experience with Drying of Wheat by Forced Ventilation.

Orig Pub : Przegl. zboz.-mlynarski, 1957, 1, No 5, 10-11

Abstract : Consideration of data that characterize the operation of 2 experimental units for the drying of wheat by forced air ventilation. Moisture content of the grain was decreased respectively from 19.6 to 15.9 and from 30.9 to 21.2%. In the unventilated control batches an elevation of temperature by 11-14°, due to spontaneous heating of the grain, was observed.

Card 1/1

LYSAK J.

POLAND/Chemical Technology. Chemical Products and Their Uses. Part III. Food Industry. H

Abs Jour : Ref Zhur-Khimiya, No 15, 1958, 51818

Author : Lysak, Jan
Inst : -
Title : Corn Drying by Blowing of Warm Air Through It.

Orig Pub : Przem. spozywczy, 1957, 11, No 12, 519-520

Abstract : Comparative tests have shown that drying efficiency is higher when corn drying is effected by means of slightly warmed air than in the case of conventional aeration. Grain drying is accomplished by layers, the lowest layers drying fastest. Such a

Card : 1/2

POLAND/Chemical Technology. Chemical Products and Their Uses. Part III. Food Industry. H

Abs Jour : Ref Zhur-Khimiya, No 15, 1958, 51818

method assures the preservation of the corn's alimentary and seeding qualities.
-- Z. Fabinskiy

Card : 2/2

COUNTRY : Poland
CATEGORY : H-28

ABS. JOUR. : RZKhim., No. 1959, No. 88241

AUTHOR : Lysak, J.
INST. :
TITLE : New Procedure of Storing Grain

ORIG. PUB. : Przegl. zboz.-mlynarski, 1958, 2, No 12, 352-354

ABSTRACT : For storing small amounts of grain a storage silo of cylindrical shape is recommended, which is built to the required capacity from any material. Individual silos can be connected into batteries and used as auxiliary containers in storehouses, grain elevators and mills. A silo provided with ventilation ports can be used for drying and conditioning the grain.

CARD:

251

LYSAK, L.

Mbr., Lab. Metallophysics, Ukr. Acad. Sci., -c1949-.

Physics.

Mbr., Moscow Inst. Steel im. I. V. Stalin, -1946-.

"Application of Monocrystals for the Study of Tempered Martensite Structure,"

SO: Zhur. Tekh. Fiz., 16, No. 11, 1946;

"Lometocs of the First Stage in Martensite Decomposition,"

SO: Zhur, Tekh. Fiz., 19, No. 5, 1949.

CA

V

Nature of the diffuseness of interference lines on x-ray patterns of tempered martensite. G. V. Kurdyumov and L. Lysak (Akad. Sci. Ukr. S.S.R., Kiev). *Zhur. Tekh. Fiz.* 17, 993-1002(1947); cf. *C.A.* 42, 836.—An exptl. study was made with specimens cut from the same single crystal used in the previously reported work. Reflections of Fe radiation from the (110) and (220) planes were measured on 0.4-mm. cylindrical specimens with [100] directions in austenite as axes. This method had the advantage that it did not depend on the *c* parameter of the tetragonal lattice and that it increased the intensity compared to the background. Also, the *a* parameter involved was almost independent of C concn. Line breadth was measured with microphotometer curves in which intensity was assumed to be proportional to blackening, since the latter did not exceed 0.8. Line width was taken as the ratio of integrated intensity to max. intensity. Reflections from (110) planes were photographed 60 mm. from the specimen; those from (220) planes were obtained by means of a 27.5 mm. Debye camera. The specimens were oscillated through 30°. Line breadths in degrees after 10 years' aging at room temp. were 26 × 10⁻³ for (110) and 126 × 10⁻³ for (220). The corresponding values after 1 hr's. tempering at various temps. were: 100°, 27, 120; 150°, 28, 130; 200°, 29, 91; 250°, 20, 89; 300°, 19, 80; 350°, 18, 74; 400°, 14, 52; 450°, 11, 39; 650°, 9, 31. Since chem. inhomogeneity is decreased in going from 100° to 150° tempering temp., line widening is not due to this cause in this case. However, in polycryst specimens tempered at 200° or less both tetragonality and inhomogeneity contribute to line widening. In the single crystals line widening was caused by the small size of coherent regions within martensite crystals. These regions remained about 10^{-6} cm. up to about 100° tempering temp. and grew larger at higher temps. Internal stresses, which were on the order of 100 kg./sq. mm. at tempering temps. of 100 to 150°, also contributed to line widening. These stresses decreased on tempering at about 200° and again at about 350°.

A. G. Guy

KURDYUMOV, G.V.; LYSAK, L.I.

Use of single crystals for studying martensite structural changes in tempering carbon steel. Sbor. nauch. rab. lab. metallofiz. no.1:37-52 '48. (MLRA 8:9)
(Martensite) (Steel--Heat treatment)

KURDYUMOV,G.V.; LYSAK,L.I.

Characteristics of blurredness in the interference lines on radiographs of tempered martensite. Sbor. nauch. rab. Lab. metallofiz. no.1:53-65 '48. (MLRA 8:9)
(Martensite) (X-rays--Industrial applications)

LYSAK, L.

USSR/Metals May 49
Martensite
Tempering

"Kinetics of the First Stage of Martensite Decomposition," G. Kurdyumov, L. Lysak, Lab of Metallophys, Acad Sci USSR, 7 pp

"Zhur Tekh Fiz" Vol XIX, No 5

PA 51/49T40

Studied martensite decompcsition as a function of tempering time at temperatures of 80, 100, and 120° C. Experiments confirmed heterogeneous nature of first stage of martensite decomposition. Curves of decomposition kinetics show formation

51/49T40

USSR/Metals (Contd) May 49

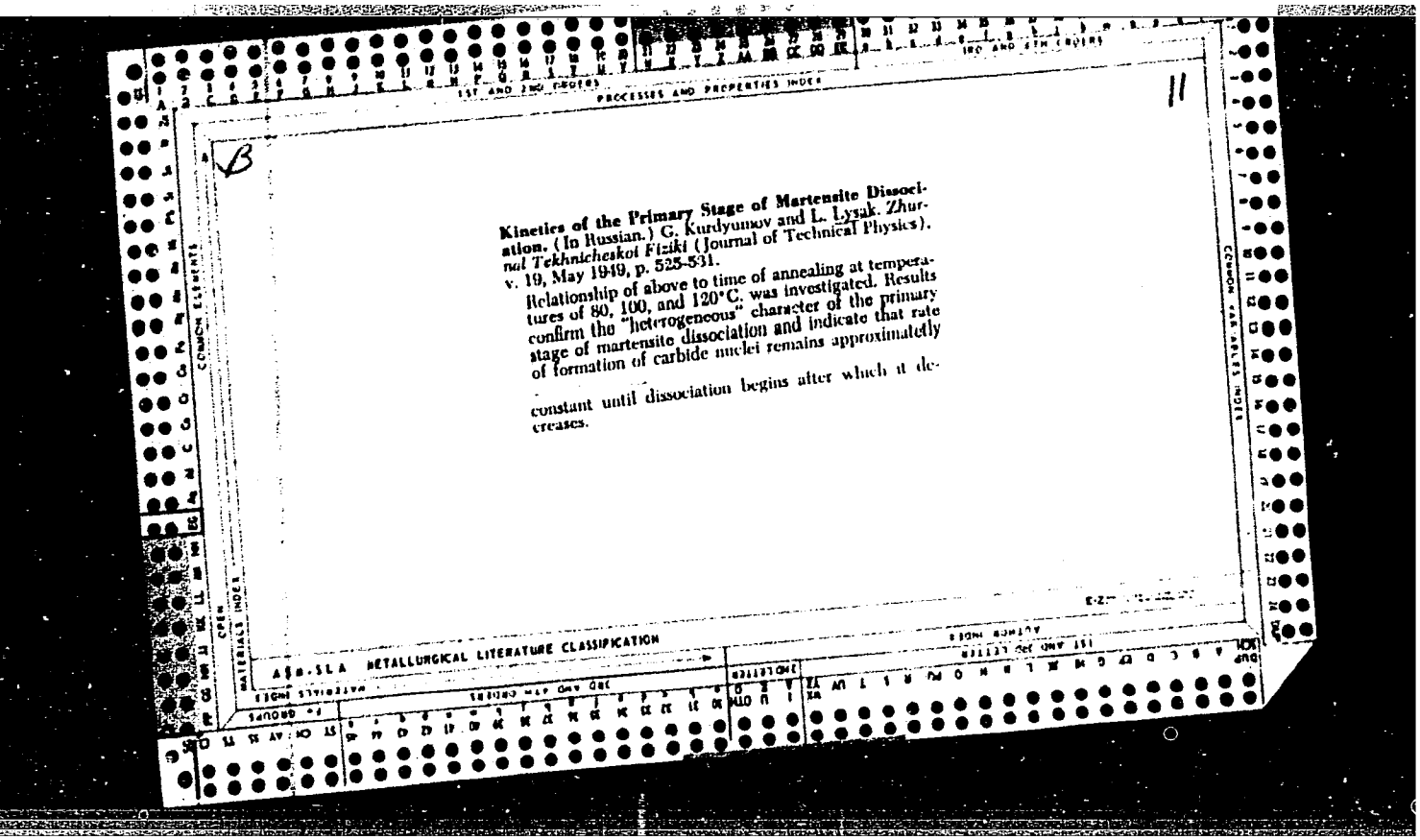
speed of carbide nuclei remains constant approximately until semidecomposition, after which it decreases. Decomposition time for temperatures 80, 100, and 120° C was equal to 6 1/3 hrs, 45 min, and 7.5 min, respectively. Submitted 28 Jul 48.

51/49T40

LYSAK, L. I.

Lysak, L. I. - "The effect of deformation on the decomposition of the Martensite in tempered steel", Doklady Akad. nauk Ukr. SSR, 1949, No. 1, p. 17-21, (In Ukrainian, resume in Russian), - Bibliog: 6 items.

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

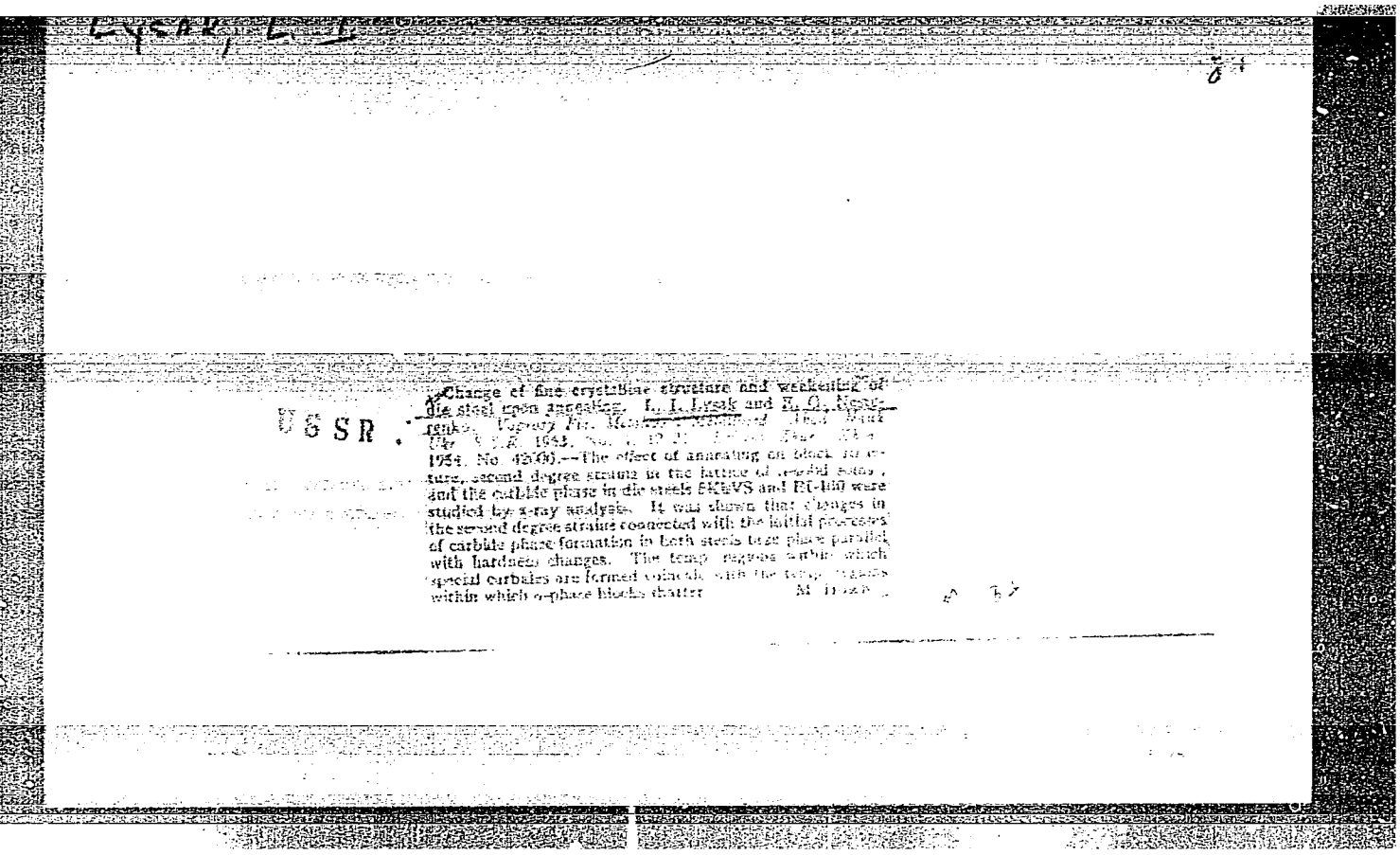


Kinetics of the Primary Stage of Martensite Dissociation. (In Russian.) G. Kurdyumov and L. Lysak. *Zhurnal Tekhnicheskoi Fiziki* (Journal of Technical Physics), v. 19, May 1949, p. 525-531.

Relationship of above to time of annealing at temperatures of 80, 100, and 120°C. was investigated. Results confirm the "heterogeneous" character of the primary stage of martensite dissociation and indicate that rate of formation of carbide nuclei remains approximately constant until dissociation begins after which it decreases.

USSR

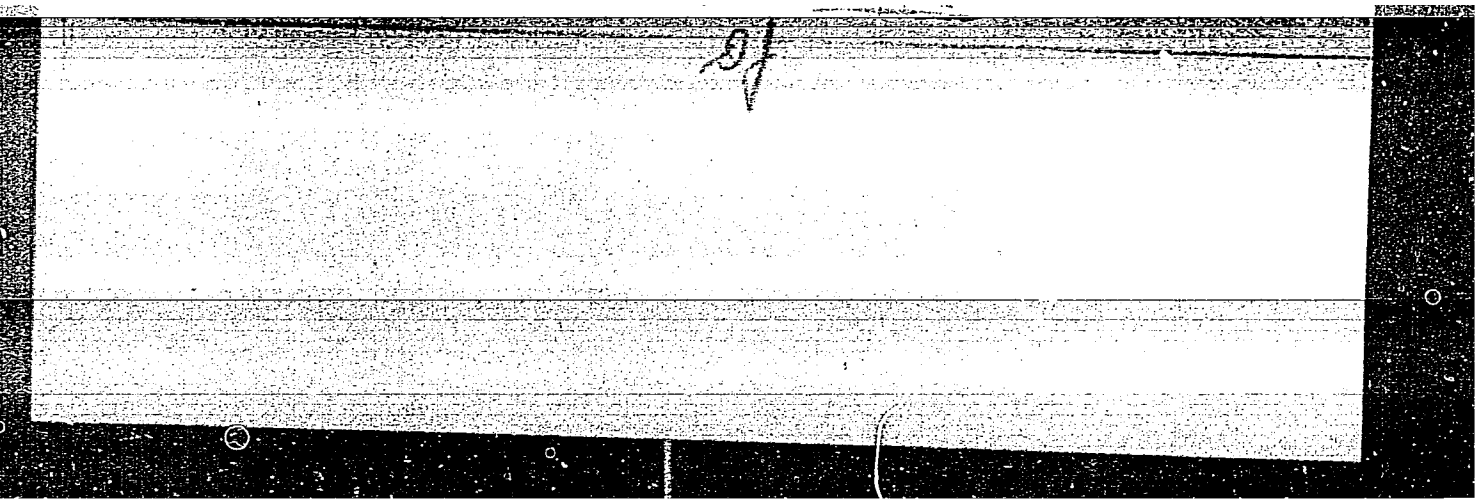
Fine crystalline structure and secondary [illegible] hardening of vanadium steel. [illegible] Voprosy Fiz. Metallov i [illegible] S. S. R. 1953, No. 4, [illegible]
No. 20602 [illegible]
[illegible]
[illegible] of the decrease [illegible]
[illegible]
crease [illegible]
strength [illegible]
[illegible]
hardness as affected by the [illegible]
by the characteristics of an isothermal anneal at [illegible]
[illegible]



USSR

Change of fine crystalline structure and weakening of die steel upon annealing. L. I. Lysak and N. G. Nosyrenko. Voprosy Fiz. Metallov i Metallovedeniya, Akad. Nauk Ukr. S.S.R. 1953, No. 4, 19-31. From Ref. Zhur. Mekh. 1954, No. 4360.—The effect of annealing on block structure, second degree strains in the lattice of tempered steels, and the carbide phase in die steels EKhVS and EI-181 were studied by x-ray analysis. It was shown that changes in the second degree strains connected with the initial processes of carbide phase formation in both steels take place parallel with hardness changes. The temp regions within which special carbides are formed coincide with the temp regions within which α-phase blocks shatter. M. Livshits

Crystalline structure of welded joints. L. I. Lysak and B. G. Nesterenko. *Voprosy Fiz. Metal. i Metalloved. Akad. Nauk Ukr. S.S.R., Sbornik Nauch. Rabot* 1953, No. 4, 22–9 —The brittle ductile change on normalizing welded joints was investigated. An x-ray study was made of a 0.11% C, 0.40 Si, 0.80 Mn, 0.40 Cu steel welded with a rod containing C 0.10, Mn 0.50 Cu 0.10%, and Si a trace. In brittle welds the α-phase lattice parameter changes from grain to grain, suggesting the presence of stresses of the first type. The middle portion of the seam of a brittle weld has stresses of the third type. Stress-relief annealing reduces the stresses of the second type. Normalizing reduces the stresses of the third type and enlarges the blocks. At the weld edges the block size and stresses of



LYSAK, L. I.

Charges in austenite concentration on deformation of steel. L. I. Lysak and L. G. Khaudros. *Dopovidi Akad. Nauk Ukr.R.S.R.* 1933, No. 4, 230–9(Russian summary, 239).—Quenched and tempered at 125°, steel cylinders were compressed axially in a die reaching a compression of 11% under 30 ton pressure. The x-ray study of slices taken from the center of the deformed cylinders showed progressively decreasing effort of compression on the amt. of the residual austenite. A deformation of 0, 2.36, 8.1, and 11.2% resulted in 28, 20, 9.7, and 4.5% of residual austenite, resp. No definite relation was found between the strength of the steel and the amt. of the residual austenite.

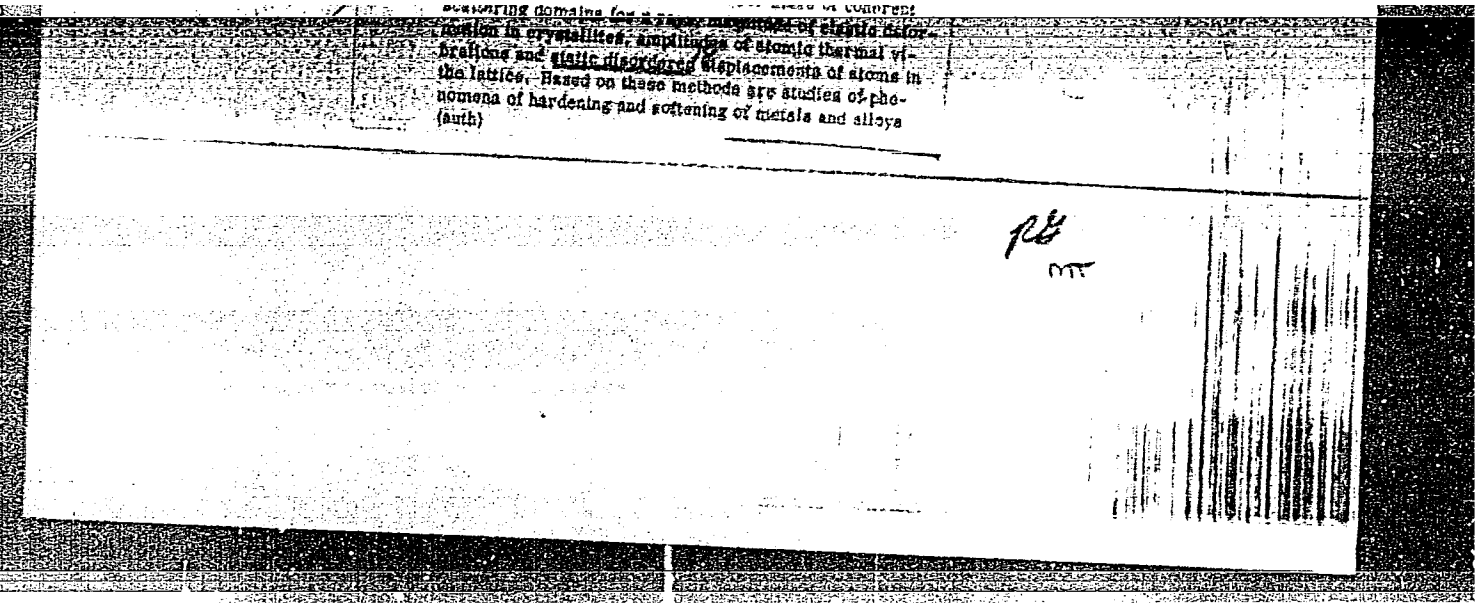
J. D. Gat

LYSAK, L. I.

5328 AERE-Lib/Trans-673

X-RAY INVESTIGATION OF THE DEFORMATION AND BOND STRENGTH IN THE CRYSTAL LATTICE OF METALS AND ALLOYS. G. V. Kurdyumov, V. A. Il'ina, V. K. Kritskaya, and L. I. Lysak. Translated by J Adam from Izvest. Akad. Nauk S.S.S.R. 17, 297-312(1953) 17p

Measurements of x-ray diffraction line widths and intensities yield fundamental data related to the fine structure of metals and alloys. These are: sizes of coherent scattering domains for x rays, magnitude of elastic deformation in crystallites, amplitudes of atomic thermal



scattering domains for a large number of atomic defor-
mation in crystallites, amplitudes of atomic thermal vi-
brations and static disordered displacements of atoms in
the lattice. Based on these methods are studies of phe-
nomena of hardening and softening of metals and alloys
(auth)

LYSAK L. I.

USSR.

Influence of chromium and silicon on the alteration of thin crystalline structure of steel on annealing. L. I. Lysak and G. Ya. Kozyrskii. *Zhur. Tekh. Fiz.* 23, 1701-[illegible] (1953).—The change in dimension of zones of coherent distribution (of blocks) and alteration of second kind of cryst. lattice of α phase of a Cr and two Si steels on annealing was studied by an x-ray method. It is shown that in the steels investigated the character of change on annealing, alteration of lattice and dispersion of blocks, is the same as in carbide lattices. V. N. Bednarski

LYSAK, L. I.

(4)

Structure of crystals of martensite in hardened steel. M. P. Arbuzov, L. I. Lysak, and B. G. Nesterenko (Lab. Metallophys., Acad. Sci. Ukr. S.S.R., Kiev). *Doklady Akad. Nauk S.S.S.R.* 90, 375–7(1953)(Engl. translation issued as *U.S. Atomic Energy Comm.* NSF-tr-153, 3 pp. (1953)).—Cell dimensions of martensite, electrolytically sepd. from hardened steel (0.98% C), were compared with standard annealed steel. Isolation of the martensite was necessary to prevent diffuseness of the lines caused by strain in a whole sample. Results showed practically no distortion of the second kind. Regions of coherent scattering are 2–3 × 10^{-5} cm. Distortions of the third kind are considerable in the direction of the *c* axis, and the mean square shift along the *c* axis is twice as large as that along the *a* axis. J. Robert Bridge

LYSAK, L.I.

"Study of InternalGrain Mosiac Structure of Metals From the Width of X-Ray Interference Lines" Sb. Nauch. Rabot Labor. Metallofiziki AN Ukr SSR, No 5, 1954, 45-60

Methods for measuring zone dimensions and II kind stresses in crystalline lattice are analysed by x-ray interference. Particular attention is paid to the separation of the width of the interference line into parts, one of which is due to microstresses of the crystalline lattice and the other to the small dimensions of the coherent zones. The distribution function of zones was experimentally determined from the deviation of the lattice parameter and from the intensity distribution function in the interference line. (RZhFiz, No 11, 1955)

LYSAK, L.

16321 Kinetics of the First Stage of the Martensite Decomposition. G. Kurdyumov and L. Lysak. *Henry Brutcher, Altadena, Calif., Translation no. 3041, 15 p. (From Zhurnal Tekhnicheskoi Fiziki, v. 19, no. 5, 1949, p. 525-531.)*
Austenite decomposition as function of time at 80, 100, and 120 C. Discussion of Hägg's earlier interpretation. Graphs, 7 ref.

(1)

LYSAK, Lenonid Ivanovich

(Laboratory of Metal Physics Acad Sci UkSSR)
Academic degree of Doctor of Technical Sciences, based on his defense, 11 April 1955, in the Soviet of the Kiev Order of Lenin Polytechnic Inst, of his dissertation entitled: "Changes in the crystaline structure of hardened steel under tempering."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 21, 22 Oct 55, Byulleten' MVO SSSR, No. 19, Oct 56, Moscow, pp. 13-24, Uncl. JPRS/NY-536

LYSAK, L. I.

"Change in the Crystalline Structure of Chilled Steel During Tempering." Dr Tech Sci, Kiev Order of Lenin Polytechnic Inst, Min Higher Education USSR, Kiev, 1955. (KL, No 11, Mar 55)

SO: Sum. No. 670, 29 Sep 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions.

LYSAK, L. I.

"Determination of the True Width of X-Ray Interferential Lines by Using a Standard Specimen"

an article in the book "Questions on the Physics of Metals and Metal Science" AS Ukr. SSR, Kiev, 1955, 151 pp.

So: Sum No. 1102, 19 Oct 56

LYSAK, L.I.

KURDYUMOV, G.V., akademik; IL'INA, V.A.; KRITSKAYA, V.K., kand.fiz.-mat.nauk; LYSAK, L.I., kand.fiz.-mat.nauk

X-ray investigation of distortions and binding energy in metal and alloy crystal lattices. Probl. metalloved. i fiz. met. no.4:339-359 '55. (MIRA 11:4)

(Metal crystals) (Metallography)

LYSAK, L.I.

Using a standard specimen for determining the true width of X-ray interference lines. Sbor.nauch.rab.lab.metallofiz.no.6:40-53 '55. (X rays--Spectra) (MIRA 9:7)

LYSAK, L.I.

Changes of fine crystalline structure by weakening of deformed iron. Sbor. nauch. rab. Inst. metallofiz. AN USSR no.7:3-11 '56.
(Iron--Metallography) (Deformations (Mechanics)) (MIRA 11:1)

SOV/137-57-6-10788

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 6, p 197 (USSR)

AUTHOR: Lysak, L.I.

TITLE: Influence of Strains on the Structure of Quenched and Tempered Steel (Vliyaniye deformatsiy na strukturu zakalennoy i otpushchennoy stali)

PERIODICAL: Sb. nauch. rabot In-ta metallofiz. AN UkrSSR, 1956, Nr 7, pp 12-19

ABSTRACT: The amount of retained austenite (RA) and martensite (M) in Nr U12A and Nr 45 steels after quenching and tempering at various temperatures is determined by the change in the relative integrated intensity of the lines in the Debye crystallogram derived from a slide subjected to Fe irradiation. The quantity of RA declines with increase in the degree of deformation ε. In the case of Nr U12A quenched steel it is 16% of the original $\varepsilon = 11\%$. The change in the strength of the steel under these conditions is not analogous to the change in the amount of RA, so that the strain hardening of steel cannot be explained merely by additional decomposition of RA. Deformation affects M in a manner analogous to tempering at temperatures of ~100-130°C. The possible mechanism of the effect of strain upon

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SOV/137-57-6-10788

Influence of Strains on the Structure of Quenched and Tempered Steel

the decomposition of M is examined.

L.V.

Card 2/2

SOV/137-57-6 10787
Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 6 p 197 (USSR)

AUTHOR: Lysak, L.I.

TITLE: Differentiation and the Principle of the Change Occurring in Tempering in the Type-2 Distortion of a Crystal Lattice of α-phase Steel (Differentsiatsiya i zakonomernost' izmeneniya pri otpuske iskazheniya II roda kristallicheskoy reshetki α-fazy stali)

PERIODICAL: Sb. nauch. rabot In-ta metallofiz. AN UkrSSR, 1956, Nr 7, pp 20-27

ABSTRACT: It is suggested that a differentiation be made in type-2 distortions (D) of crystal lattices of martensite (M) in steel, one category being the quenching (primary) D occurring in phase transformation, and the other being the secondary coherent and dispersion D occurring within M crystals as nuclei appear and crystal particles of the carbide separate from the solid α solution. The results of prior investigations are used to suggest the probable changes occurring in the tempering of steel to produce either of the indicated types of lattice D, as well as an explanation of the regularities of variation in type-2 D of M of crystal lattice in certain alloy steels. A principle of

Card 1/2

Differentiation and the Principle of the Change Occurring in Tempering (cont.)

practical importance for the rational alloying of steels for maintenance of a condition of high strength at high temperatures is suggested. What is important is not the amount of alloying element, but the selection thereof in such fashion that changes in carbide structure take place with increase in temperature of such nature as to be accompanied by the appearance of maximum secondary stresses. The higher the temperature of the carbide transformations, the higher the softening temperature of the steel. The nature of the alloying elements and carbide phases are of high significance in this connection.

O.K.

Card 2/2

Lysak, L. I.

1284* [illegible] Alpha Phase [illegible]
chenii vtorogo roda i faze zakalennoi [illegible]
L. I. Lysak [illegible]
v. 20, no. 5, June 1956, p. 624-630.

Distortions are the total effect of quench, coherent, and dispersion distortions.

Metal

Inst. Metallo-Physics - AS USSR

SOV/126-7-5-20/25

AUTHORS: Lysak, L. I. and Tikhonov, L. V.

TITLE: Change in Fine Crystalline Structure of Niobium on Hardening by Plastic Deformation (Izmeneniye tonkoy kristallicheskoy struktury niobiya pri uprochnenii plasticheskim deformirovaniyem)

PERIODICAL: Fizika metallov i metallovedeniye, Vol 7, Nr 5, pp 757-765 (USSR) 1958

ABSTRACT: This paper is concerned with a study of the changes in secondary and tertiary distortions of the crystal lattice, the size of coherent regions, the texture and similar properties of niobium after hardening to various degrees by cold plastic deformation. Pure niobium (99.997%) was used in this work. Hardening was carried out at room temperature by plastic deformation using three methods:
1. Static uniaxial compression in a 300 ton press;
2. Uniaxial compression under conditions of vibrational loading at a vibration frequency of the hammer of 37 per second and an amplitude of up to 1 mm;
3. Drawing through a die with different orifices, and

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Change in Fine Crystalline Structure of Niobium on Hardening by Plastic Deformation

4. Extension in the direction of the axis of the plate-like specimen.

For the deformation by the first two methods square niobium rods, 16 x 16 mm, were rolled into round rods of 10 mm diameter, from which cylindrical specimens of 7 mm diameter and 12 mm length were made. A batch of specimens was annealed in vacuum (approximately 10^{-5} mm Hg) at 1200°C for one hour. After annealing the hardness of the specimens was found to be 119 kg/mm^2. The degree of deformation of specimens having been compressed uni-axially was determined from the difference between the cylinders before and after deformation. The "true" stress used in compression was estimated according to formulae suggested by Shaposhnikov (Ref.11). The hardness of deformed specimens was measured on a Vickers hardness testing machine, using a load of 15 kg. The secondary distortions of the crystal lattice and the size of the regions of coherent scatter were determined by an X-ray method according to the diffuseness of the interference lines (110) and (330) obtained in the K_α - irradiation of a copper anode. X-ray pictures were taken in a Debye chamber, the drum of which had a diameter of 143 mm. In

Change in Fine Crystalline Structure of Niobium on Hardening by Plastic Deformation

Fig.1 the results of the study of hardening processes is shown. In Fig.2 the secondary distortions, $\Delta a/a$, are plotted against the true compressional stress S. In Fig.3 the results of the investigation of specimens having undergone small deformations (0-5%) by pulling are shown. It is concluded that in the hardening of niobium the following structural factors play a decisive role:

1. Fragmentation of blocks and grains.
2. Disorientation of blocks and grains.
3. The degree of texture if the hardness is measured in the direction of the deformation force.
4. The increase of any type of local lattice distortions, and
5. The uniformity of distribution of the distorted lattice throughout the metal.

There are 3 figures, 1 table and 23 references, of which 4 are Swiss, 5 English and 14 Soviet.

SOV/126-- -7-5-20/25

Change in Fine Crystalline Structure of Niobium on Hardening by Plastic Deformation

ASSOCIATION: Institut metallofiziki, AN USSR (Institute of Metal Physics, Ac. Sc., Ukr.SSR)

SUBMITTED: February 20, 1958

Card 4/4

LYSAK, L.I.

18(1,7); 25(1) PHASE I BOOK EXPLOITATION SOV/2306

Akademiya nauk Ukrainskoy SSR. Institut metallofiziki

Voprosy fiziki metallov i metallovedeniya (Problems in the Physics of Metals and Metallography) Kiyev, Izdo-vo AN Ukrainskiy SSR, 1959. (Series: Its: Sbornik nauchnykh rabot, Nr 9) Errata slip inserted. 3,000 copies printed.

Ed. of Publishing House: V.L. Shkurko; Tech. Ed.: M.I. Yefimova; Editorial Board: V.N. Svechnikov, Academician, Academy of Sciences, Ukrainian SSR (Resp. Ed.); S.D. Gertsriken, Doctor of Physical and Mathematical Sciences; and I.Ya. Dekhtyar, Doctor of Technical Sciences.

PURPOSE: This collection of articles is intended for scientific workers, aspirants, and engineers in the fields of the physics of metals, metallography, and metallurgy. It may also be useful to students of advanced courses in metallurgical and physical faculties.

COVERAGE: This collection of articles deals with the following topics: effect of high-speed heating, heat treatment, deformations, and crystallization conditions on phase transformations, structures, and properties of metals and alloys; the effect of additional alloying components on volumetric and intercrystalline diffusion in alloys; and the effect of repeated quench hardening and radioactive and ultrasonic treatment on the physical properties of alloys. No personalities are mentioned. References follow several of the articles.

LYSAK, L.I.

PHASE I BOOK EXPLOITATION SOV/4177

Akademiya nauk Ukrainskoy SSR. Institut metallofiziki

Voprosy fiziki metallov i metallovedeniya (Problems in the Physics of Metals and Metallography) Kiyev, Izd-vo AN USSR, 1959. 215 p. (Series: Its: Sbornik nauchnykh rabot, no. 10) 3,000 copies printed.

Ed. of Publishing House: O.M. Pechkovskaya; Tech. Ed.: E.A. Smirl; Editorial Board: V.N. Svechnikov, Academician, Academy of Sciences Ukr SSR (Resp. Ed.), I.B. Gorbatkin, Doctor of Physics and Mathematics, and I.Ya. Dekhtyar, Doctor of Technical Sciences.

PURPOSE: This collection of articles is intended for scientific workers, aspirants and engineers working in metal physics, metallography and metallurgy, and for students in advanced courses of metallurgy and physics departments.

COVERAGE: The collection of articles gives the results of an investigation of the effect of high heating rate, thermal treatment, deformation and crystallization conditions on the phase transformations, structure and properties of metals and alloys, and of the effect of alloying additives on volume and intergranular

Lysak, L. I.

18(7) PHASE I BOOK EXPLOITATION SOV/3355

Akademiya nauk SSSR. Institut metallurgii. Nauchnyy sovet po probleme zharoprochnykh splavov

Issledovaniya po zharoprochnym splavam, t. IV (Studies on Heat-resistant Alloys, vol. 4). Moscow, Izd-vo AN SSSR, 1959. 400 p. Errata slip inserted. 2,200 copies printed.

Ed. of Publishing House: V. A. Klimov; Tech. Ed.: A. P. Guseva; Editorial Board: I. P. Bardin, Academician; G. V. Kurdyumov, Academician; M. V. Ageyev; Corresponding Member, USSR Academy of Sciences; I. A. Oding; I. M. Pavlov, and I. P. Zudin, Candidate of Technical Sciences.

PURPOSE: This book is intended for metallurgists concerned with the structural metallurgy of alloys.

COVERAGE: This is a collection of specialized studies of various problems in the structural metallurgy of heat-resistant alloys. Some are concerned with theoretical principles, some with descriptions of new equipment and methods, others with properties of specific alloys. [illegible] specified conditions are studied and reported on. For details, see Table of Contents. The articles are accompanied by a number of references, both Soviet and non-Soviet.

TABLE OF CONTENTS:

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LYSAK, L.I.; TIKHONOV, L.V.

Changes in the fine crystal structure of niobium under the effect of hardening by plastic deformation. Issl.po zharopr. splav. 4:110-116 '59. (MIRA 13:5)
(Niobium--Metallography) (Deformations (Mechanics))

LYSAK, L.I.; SOGRISHIN, Yu.P.

Effect of plastic deformation methods on internal stresses in metals. Sbor. nauch. rab. Inst. metallofiz. AN URSR no.9: 22-26 '59. (MIRA 12:9)
(Deformations (Mechanics)) (Crystal lattices)

LYSAK, L.I.; TIKHONOV, L.V.

Changes in niobium crystal structures by various deformation methods. Sbor. nauch. rab. Inst. metallofiz. AN URSR no.9:27-35 '59. (MIRA 12:9)
(Niobium--Metallography) (Deformations (Mechanics))

SIROTENKO, D.Ya.; LYSAK, L.I.

Effect of chromium and cobalt on changes in certain properties of iron at high degrees of cold plastic deformation. Sbor. nauch. rab. Inst. metallofiz. AN URSR no.10:40-45 '59. (MIRA 13:9)
(Iron alloys--Testing) (Deformations (Mechanics))

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TITLE: Imperfections in the Crystalline Structure of Niobium resulting from High Degrees of Deformation

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ABSTRACT: In this work the change in the distortions of the crystalline lattice and in block sizes of niobium after extensive plastic deformation (> 70%) was studied in great detail, taking into consideration the anisotropic properties of the material. The material was hardened at room temperature by static uniaxial compression of cylindrical specimens to various extents. The test specimens were prepared as follows. Bars of niobium (99.997% Nb), 16 x 16 mm, were rolled into rods of 10 mm diameter. These rods were made into cylindrical specimens of 7 mm diameter and 12 mm length. The latter were annealed in vacuum (approximately 10^{-5} mm Hg) at 1200 °C for 1 hour. After deformation their hardness was tested in two directions perpendicular to each other, namely, in the direction in which the forming force (A) was acting,

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and in a direction at right-angles to this (B). In order to achieve this the deformed specimens were sawn into two halves (Fig 1). From the core of one half of each deformed specimen a cylindrical specimen of 0.9 mm diameter was cut out in such a way that its axis coincided with the radius of the specimen. After etching, the specimens were photographed in an X-ray camera, the drum diameter of which was 143 mm. Each specimen was rotated during exposure. The secondary distortions of the crystalline lattice and the dimensions of the regions of coherent scattering (blocks) were determined from the diffuseness of the interference lines (110) and (330) obtained in K_α-radiation of a copper anode of the tube (Refs 2 and 3). The static lattice distortions ($\sqrt{\overline{u^2}}$) were deduced from the intensity of the (110) and (220) lines obtained under the same conditions. The other halves of the specimens were studied in a URS-50I X-ray apparatus with automatic recording of the intensity distribution curves of the interference lines. During

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exposure a counter was used to record the equatorial parts of the interference lines. In such an exposure those planes reflected which were parallel (with a small angle of scatter) to the X-ray irradiated plane of the specimen surface. The physical broadening of the lines is due to lattice distortions and block dimensions in a direction perpendicular to the specimen surface. Two surfaces were investigated, namely, the end face, the normal to which is parallel to the direction of the deforming force, and the lateral surface, the normal to which is perpendicular to the direction of the deforming force (see Fig 1). The lines (110) (220) and (310) were obtained from the lateral surface in K_α-radiation of an iron anode. In the exposure of the end-face surface the lines (110), (200), (220) and (310) were recorded, using a K_α-radiation of an iron anode, and the lines (222) and (321) were recorded, using a K_α-radiation of copper. Calculation of the crystalline lattice distortions and block dimensions was carried out

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according to a method described by Lysak (Refs 2 and 3). The measured widths of the lines (110), (220) and (310) are shown in Fig 2. The width of the line (110) on the exposure of the lateral surface of a specimen deformed by 83% could not be measured because at a small angle of slip (24° 30') the surface area of the section is too small to cover the primary beam of X-rays. The width of the line (220) in the exposure of the end face surface of a specimen deformed by 72% remained unaltered as the intensity of this line was small. The results of the experiments are shown in Fig 3. The values with index T denote that they have been obtained from the end face, and those with index 5 that they have been taken from the lateral surfaces of the specimen. Fig 4 gives a schematic illustration of the mechanism of plastic deformation of a specimen in compression. Fig 5 shows the change in intensity of the interference lines of niobium in relation to degree of deformation. The authors conclude that the difference in hardness tested