ORLOV, A.N.

ORLOV, A.N., inzh.

Improving the production of works manufacturing glass containers.
Leg. prom. 17 no.12:11-15 D '57. (MIRA 11:1)
(Glass manufacture)

Orlov, A. N.

AUTHOR: Orlov, A. N. 72-1-9/13

TITLE: Experience Gathered in Factories (Iz zavodskogo opyta). Full Separation of the Gas Chamber of Flowing-Through Furnaces (Polnoye razdeleniye gazovogo prostranstva pechey s protokom).

PERIODICAL: Steklo i Keramika, 1958, Nr 1, pp. 27-28 (USSR).

ABSTRACT: At the suggestion by Stepanyan and Khalilov the glass smelting furnaces in the Baku plant were reconstructed. The plant has two flowing-through furnaces with smelting surfaces of 35 and 30 m^2. On one of them balloons of 1 l content are produced by means of an automatic device I PL, and the other produces bottles with a wide neck and 1/2 l content by means of two automatic devices JI-10. Up to the year 1955 the average daily output did not exceed 9000-9500 balloons and 46.000-47.000 bottles; in the case of the balloons production waste amounted to 40-50 %. In 1955 the furnace was reconstructed in the following manner for the production of balloons (see illustration): The output part of the furnace was made smaller in order to increase the specific extraction of glass mass to 8-10 t/m^2 per day; the arch, the furnace walls of the discharge part and of the feeders were heat-insulated; above the passage wall a dinas wall of 400 mm thickness, which was provided with 2 small

Card 1/2

Experience Gathered in Factories.
Full Separation of the Gas Chamber of Flowing-Through Furnaces. 72-1-9/13

openings for a possible heat regulation was erected. The better separation of furnace gases, which was attained in this way, showed good results; the average daily output of balloons increased according to data given for 12 months and with conditions remaining equal, to 15829, which means an increase of by more than 6000 balloons, while waste material decreased down to 12-15 %. After a further reinforcement of the blind wall to 500 mm, the daily output increased to 17470. This experience was utilized successfully also for the second furnace, in which case the daily output of 1/2 l bottles increased from 47.000 to 52.500. In the course of recent years good results were attained with such glass smelting furnaces also in American factories (reference 1).
There is 1 figure.

ASSOCIATION: Baku Glass Container Factory (Bakinskiy steklotarnyy zavod).

AVAILABLE: Library of Congress.

Card 2/2

ORLOV, A.N.

AUTHOR: Orlov, A.N.

TITLE: A Mechanical Conveyor for Glass Containers (Mekhanicheskiy perestavitel' steklotary).

PERIODICAL: Steklo i Keramika, 1956 Nr 2, pp. 29-30 (USSR)

ABSTRACT: In many glassworks the material is loaded on to the transport cars by hand for burning. The automatic conveyers of the type Л-2 introduced in 1941 were found to be complicated in operation and not economical. I.A. Vlasov, engineer of the Tiraspol' glassworks, recommended and developed an automatic conveyer for the automatic loading of products destined for burning, the scheme of which is shown by an illustration. It is driven by the automatic glass forming device ТТВМ over a vertical shaft and bevel gears. The construction and mode of operation of this device are described in detail. On a horizontal shaft levers and push rods are helically fastened. The push rods are fitted with Klingerite profile rolls, by means of which the glass products are pushed on to the net of the transport car. Vlasov conveyers were found to give satisfactory results in operation, and at present they are being used with success in all technological fields. The advantages offered by this device are

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A Mechanical Conveyor for Glass Containers

72-2-11/20

its small size, simple construction, reliability, low costs of production, and easy operation. There is 1 figure.

ASSOCIATION: Tiraspol' Glass Container Works (Tiraspol'skiy steklotarnyy zavod).

AVAILABLE: Library of Congress

Card 2/2

AUTHOR: Orlov, N. SOV/72-58-11-15, 15

TITLE: The Use of a Colloidal Graphite Lubricant for Glass-Forming Machines (Primeneniye kolloidno-grafitovoy smazki dlya stekloformuyushchikh mashin)

PERIODICAL: Steklo i keramika, 1958, Nr 11, pp 46-48 (USSR)

ABSTRACT: This lubricant was developed in 1946 in the Institut stekla (Glass Institute) by Professor O. K. Botvinkin and V. T. Marinina . It was first introduced into the Ordzhonikidzevskiy mekhanizirovannyy steklotarnyy zavod (Ordzhonikidze Mechanized Glass Container Factory) in 1956. The graphite starting material consists of an oil preparation with the trade mark MS of the Voskresenskiy khimkombinat (Voskresensk Chemical Kombinat). The preparation and application of this lubricant is described in detail. The finished lubricant is stored in a hermetically sealed container and constantly stirred by an electrically-driven propeller (Fig 1). After removing the fat from the compression molds the graphite lubricant, as is shown in figures 2 and 3, is applied using a pulverizor of the trade mark O-19. In the Ordzhonikidze Glass Factory this lubricant has been found to be very good, and the pro-

Card 1/2

The Use of a Colloidal Graphite Lubricant for Glass-Forming Machines

duction of glass containers has increased while the rejection quota has markedly diminished. The molds are 30 % more stable and the working conditions of the workers have improved, since considerably less vapor is given off by the burning oil. At the end of the year 1956 this lubricant was introduced into the Kamyshinskiy steklotarnyy zavod (Kamyshinskiy Glass Container Factory) with good success. There are 3 figures.

ASSOCIATION: Ordzhonikidzevskiy steklotarnyy zavod (Ordzhonikidze Glass Container Factory)

15(2) SOV/72-59-6-10/18

AUTHOR: Orlov, A. N.

TITLE: Uncooled Flat Arches of Charging Chambers of Tank Furnaces (Neokhlazhdayemyye ploskiye arki zagruzochnykh karmanov vannykh pechey)

PERIODICAL: Steklo i keramika, 1959, Nr 6, pp 42 - 43 (USSR)

ABSTRACT: At the Kamyshinskiy steklotarnyy zavod (Kamyshin Factory for Glass-vessels) the tank furnaces of a melting surface of 108 m^2 approximately are fitted out with a charging chamber 4100 mm wide. The furnace is charged by means of a mechanical table. The slit between the arch and the frit level is more than 150 mm wide. In order to protect the charger and the refractory bricks from the furnace flames, a water-cooled metallic slider was installed over the chamber, which costs more than 10000 rubles a year. Upon suggestion of S. F. Taranov, Chief Engineer of the Factory, the flat arches of the charging chambers were reconstructed in such a manner that the maximum slit width did not exceed 80 mm, which permits operation without a water-cooled slider. These flat arches were put into operation in 1956 and

Card 1/2

Uncooled Flat Arches of Charging Chambers of Tank Furnaces SOV/72-59-6-10/18

have stood the test. There is 1 figure.

ASSOCIATION: Kamyshinskiy steklotarnyy zavod (Kamyshin Factory for Glass-vessels)

Card 2/2

VEYNBERG, Kal'man Lipmanovich; GURFINKEL', Isaak Yevgen'yevich[deceased]; KOTLYAR, Abram Yevseyevich; NOL'KEN, Maksimilian Petrovich; ORLOV, Anatoliy Nikolayevich; KHERSONSKIY, Sergey Semenovich; SHKOL'NIKOV, Yakov Abramovich; BROMLEY, P.V., retsenzent; ZALIZNYAK, A.A., retsenzent; KISELEV, N.V., retsenzent; KLEGG, D.I., retsenzent; SHVAGIREV, Ya.D., retsenzent; DUKHOVNYY, F.N., red.; TRISHINA, L.A., tekhn. red.

[Equipment and mechanization of glass factories]Oborudovanie i mekhanizatsiia stekol'nykh zavodov. [By] K.L.Veinberg i dr. Moskva, Rostekhizdat, 1962. 451 p. diagrs. (MIRA 15:10)
(Glass—Equipment and supplies)

INDENBOM, V.L.; ORLOV, A.N.

Physical theory of plasticity and strength. Usp.fiz.nauk 76 no.3:557-591 Mr '62. (MIRA 15:4)
(Plasticity) (Strength of materials) (Crystallography)

ORLOV, A.N.

Finish and ornamental materials from polyester glass reinforced plastic materials. Der. prom. 12 no.4:21-22 Ap '63. (MIRA 16:10)

ORLOV, A.N.

Bodies of chairs and armchairs from glass reinforced plastic materials. Der. prom. 12 no.6:20-21 Je '63. (MIRA 16:10)

1. TSentral'noye proyektno-konstruktorskoye byuro po mebeli.

KAREL'SHTEYN, I.M., inzh.; ORLOV, A.N.

From foreign experience in the use of polyvinyl chloride in the manufacture of furniture parts. Der. prom. 13 no.[illegible] Mr '64.

1. [illegible]

L 24574-66 EWT(m)/T/EWP(t)/EWP(k) IJP(c) JD/HW

ACC NR: AP6009670 SOURCE CODE: UR/0181/66/008/003/0832/0841

AUTHOR: Orlov, A. N. 36 B

ORG: Physicotechnical Institute im. A. F. Ioffé AN SSSR, Leningrad (Fiziko-tekhnicheskiy institut AN SSSR)

TITLE: Contribution to the theory of the initial stage of plastic deformation of crystals

SOURCE: Fizika tverdogo tela, v. 8, no. 3, 1966, 832-841

TOPIC TAGS: crystal deformation, plastic deformation, crystal dislocation phenomenon

ABSTRACT: The author constructs a quantitative theory of the initial stage of plastic deformation based on the concrete model of the evolution of the dislocation structure of a crystal. It is assumed that the temperature is low enough that the climbing of the dislocations can be neglected, meaning that the deformation does not depend on the temperature or the velocity. During the initial stage the crystal contains a certain initial number of Frank-Read sources of

Card 1/2

L 24574-66

ACC NR: AP6009670 O

dislocations, but no further increase in the number of sources occurs during the deformation. Under these conditions the stress gives rise to dislocation dipoles and flat dipole clusters, upon being stopped by neighboring planes of unlike dislocations, or upon reacting with dislocations from other slip systems, or upon encountering barriers. The stopping of the dislocations causes blocking of the sources, and with increasing stress the blocked sources resume operation, activate new sources, make the clusters of dislocations and dipoles denser, and result in dipole clusters of greater length. The author calculates the dependence of the dislocation density and the magnitude of the plastic deformation on the stress in the region preceding the easy-slipping stage. The conditions under which easy slipping occurs are determined. The value of the stress at which the first clusters of dipoles pass through the entire crystal is determined, when the theoretical values of the dislocation density and of the plastic deformation is much smaller than observed experimentally during the initial slipping stage. The probable reason for differences between experiment and theory is that the number of sources during the initial stages is larger than that assumed in the calculations. Orig. art. has: 5 figures and 29 formulas.

SUB CODE: 20/ SUBM DATE: 28Jul65/ ORIG REF: 002/ OTH REF: 013

Card 2/2 bk

ORLOV, A.P., kand.tekhn.nauk; VOLKOV, V.P., inzh.

New norms of specific resistances for the design and construction of classification humps. Zhel.dor.transp. 45 no.6:50-52 Je '64. (MIRA 18:1)

ORLOV, A. P.

ORLOV, A. P. -- "Acquainting the Students with the Principles of Mechanical-Industrial Technology as One of the Tasks of Polytechnic Training." Academy of Pedagogical Sciences USSR. Institute of the Theory and History of Pedagogy. Moscow, 1954. (Dissertation for the Degree of Candidate in Pedagogical Science.)

; Vechernyaya Moskva, No 3, 1955

ORLOV, A.P.

REMIZOV, A.N.; ORLOV, A.P.

The teaching of electric engineering in pedagogical institutes in the light of new tasks in technical education. Politekh. obuch.no.12:70-72 D '57. (MIRA 10:12)
(Teachers, Training of) (Electric engineering--Study and teaching)

ORLOV, A.P., kand.pedagogicheskikh nauk

Methods of conducting instruction in school workshops. Uch.zap. Kol.ped.inst. Politekh.ser. 4 no.1:13-39 '59. (MIRA 14:4)
(Manual training)

ORLOV, A.P. (Voronezh)

Concerning the pollution of underg[illegible]nd water-supply sources by industrial sewage. Vod.i san.tek. no.2:35 F '60. (MIRA 13:5)

(Voronezh--Water--Pollution)

ORLOV, A.P.; BRENER, A.S. (Krym, Alupka)

Value of some laboratory investigations in the diagnosis of cancer.
Vrach. delo no.8:137 Ag '60. (MIRA 13:9)

1. Sanatoriy "Gornoye Solntse".
(CANCER) (MEDICAL TESTS)

ORLOV, A P

KHUSHINSKIY, L.V., doktor biologicheskikh nauk; MERKUR'YEVA, Ye.K., kandidat sel'skokhozyaystvennykh nauk; IZRAILEVICH, I.Ye., kandidat veterinarnykh nauk; IL'INSKIY, S.A., veterinarnyy vrach; IN'KOV, N.M., veterinarnyy vrach; STOGOV, K.S., veterinarnyy vrach; VANICHEV, M.I.,veterinarnyy vrach; MAZOVER, A.P., veterinarnyy vrach; ORLOV, A.P., veterinarnyy vrach; RYLOV, V.V., teterinarnyy vrach; SAKHAROV, N.A., veterinarnyy vrach; DIKAREV, P.I., redaktor; MUSHTAKOVA,L., tekhnicheskiy redaktor

[The working dog; manual for training specialists in raising work dogs] Sluzhebnaia sobaka; rukovodstvo po podgotovke spetialistov sluzhebnogo sobakovodstva. Moskva, Gos. izd-vo selkhoz. lit-ry, 1952. 616 p. (MLRA 10:1)
(Dogs--Training)

BOCHAROV, Vladimir Ivanovich; ORLOV, Aleksandr Pavlovich; KANEVSKAYA, M.D., red.; TSIGEL'MAN, L.T., tekhn.red.

[Training working dogs] Dressirovka sluzhebnykh sobak. Moskva, Izd-vo DOSAAF, 1957. 196 p. (MIRA 11:1)
(Dogs--Training)

GERD, M.A.; IN'KOV, N.M.; MAZOVER, A.P.; NAZAROV, V.P.; ORLOV, A.P.; SAKHAROV, N.A.; BABKINA, N.G., red.; GOR'KOVA, Z.D., tekhn.red.

[Principles of the raising of working dogs] Osnovy sluzhebnogo sobakovodstva. Moskva, Gos.izd-vo sol'khoz. lit-ry, 1958. 367 p. (MIRA 11:12)

(Dogs)

LUZHKOV, F.M.; NAZAROV, V.P.; NEMTSOV, K.Ye.; ORLOV, A.P.; POLTAVETS, I.S.; SHAR, Yu.I.; KANEVSKAYA, M.D., red.; MIKHLINA, L.T., tekhn. red.

[Keeping and training working dogs] Soderzhanie i dressirovka sluzhebnykh sobak. Moskva, Izd-vo DOSAAF, 1963. 227 p. (MIRA 16:7)

(Dogs--Training)

ORLOV, A.P., kand.tekhn.nauk; NIKOLAYEV, N.S., inzh.; KARYUKIN, S.Ye., inzh.

Electronic analog computers for designing humpyards. Zhel.dor. transp. 41 no.8:55-56 Ag '59. (MIRA 12:12)
(Electronic analog computers)
(Railroads--Hump yards)

ORLOV, Anatoliy Petrovich, kand. tekhn.nauk; KORNAKOV, A.M., red.; MEDVEDEVA, M.A., tekhn. red.

[Machines and mechanisms for switching movements of cars] Mashiny i mekhanizmy dlia manevrovykh peredvizhenii vagonov. Moskva, Vses.izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1960. 113 p. (MIRA 15:3)
(Railroads--Equipment and supplies)
(Railroads--Switching)

ORLOV, A.P., inzh.

Fast-acting electronic instruments for investigating the magnitudes of basic specific resistance of cars to rolling. Vest.TSNII MPS 19 no.5:61-62 '60. (MIRA 13:8)

(Railroads--Hump yards)
(Railroads--Electric equipment)

ORLOV, A.P., kand.tekhn.nauk

Measuring the resistance to motion of freight cars by means of radar systems. Vest.TSNII MPS 20 no.5:62 '61. (MIRA 14:8)
(Railroads—Freight cars—Testing)

ORLOV, A.S., zaslushennyy uchitel' shkol RSFSR, delegat Vserossiyskogo s"yezda uchiteley (g.Rostov, Yaroslavskoy oblasti).

Experience obtained in the teaching of mathematics under new conditions. Mat. v shkole no.5:4-9 S-O '60. (MIRA 13:10)
(Mathematics--Study and teaching)

ORLOV, A.S., inzh.; LUK'YANOV, K.I., inzh.; KOZHEVNIKOV, Yu.M., inzh.

Organization of preparatory work in the assembly of the elements of a blast furnace at the Western Siberian Metallurgical Plant. Prom. stroi. 41 no.2:13-17 F '63. (MIRA 16:3)

(Blast furnaces)

ORLOV, A. S.

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
Biological Chemistry

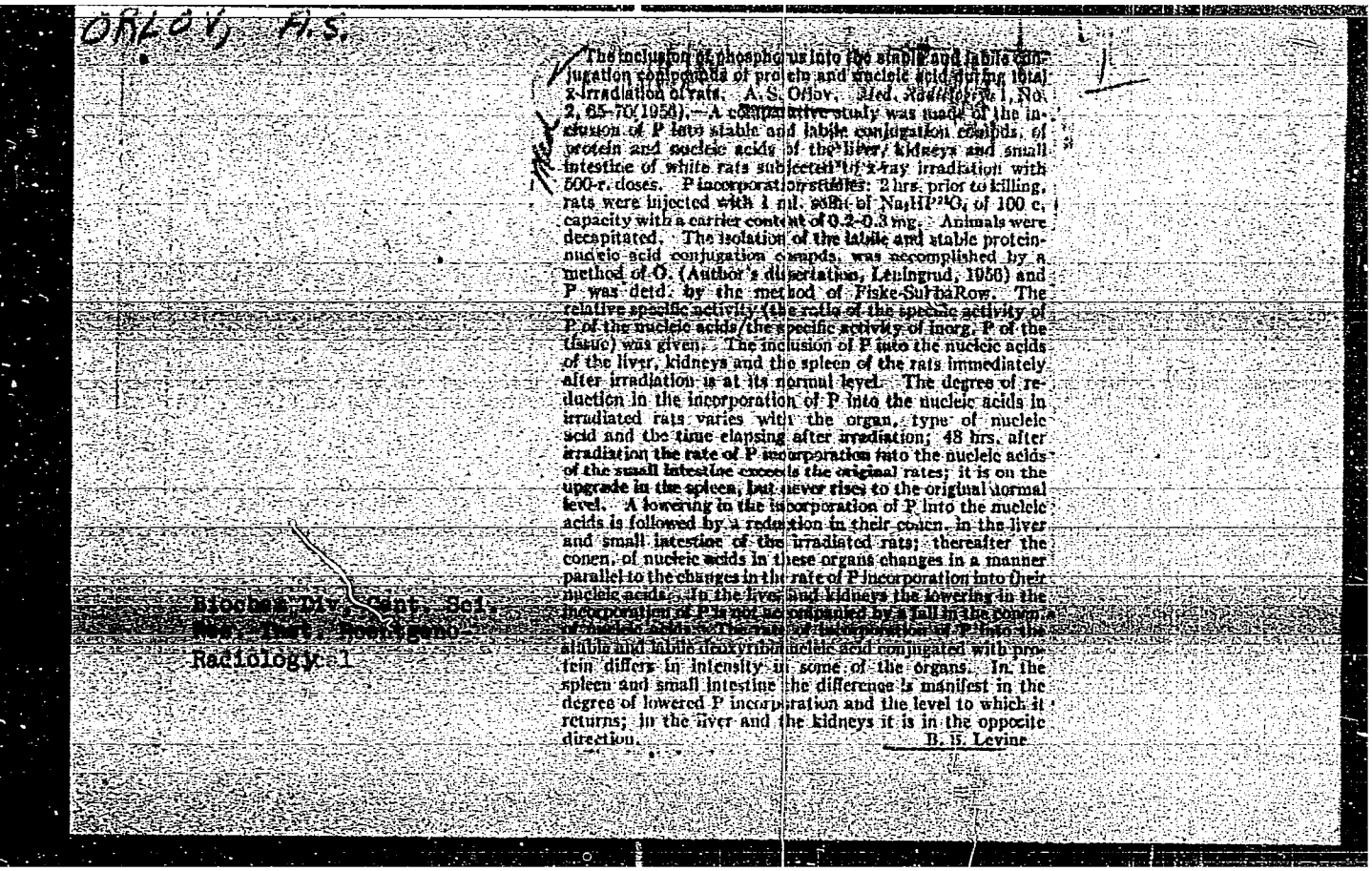
The renewal rate of nucleic acid, variously combined with protein. S. E. Manoilov and A. S. Orlov (Central Roentgenol. Radiol. Cancer Inst., Ministry Health U.S.S.R., Leningrad). *Biokhimiya* 18, 488-91(1953).—Liver contains pentose and desoxypentose nucleoproteins in stable and labile union with proteins. The stable pentose form predominates. The renewal rate of the stable form is greater than that of the labile form in the pentose and desoxypentose types; in the two stable types the rates are approx. the same. B. S. Levine

S. Ye. Manoylov

ORLOV, A. S.

ORLOV, A. S. -- "The Inclusion of Phosphorus in Nucleic Acids, Stably and Labilely Combined with Protein, in White Rats under General X-Ray Irradiation." Central Sci Res Roentgenological-Radiological Inst, Min Health USSR. Leningrad, 1955. (Dissertation for the Degree of Candidate in Biological Sciences)

SO: Knizhnaya Letopis', No 1, 1956, pp 102-122, 124



Orlov, A.S.

The inclusion of phosphorus into the stable and labile conjugation compounds of protein and nucleic acid during total x-irradiation of rats. A. S. Orlov. *Med. Radiology* 1, No. 2, 65-70 (1956).—A comparative study was made of the inclusion of P into stable and labile conjugation compds. of protein and nucleic acids of the liver, kidneys and small intestine of white rats subjected to x-ray irradiation with 500-r. doses. P incorporation studies: 2 hrs. prior to killing, rats were injected with 1 ml. soln. of $Na_2HP^{32}O_4$ of 100 c. capacity with a carrier content of 0.2-0.3 mg. Animals were decapitated. The isolation of the labile and stable protein-nucleic acid conjugation compds. was accomplished by a method of O. (Author's dissertation, Leningrad, 1956) and P was detd. by the method of Fiske-SubbaRow. The relative specific activity (the ratio of the specific activity of P of the nucleic acids/the specific activity of inorg. P of the tissue) was given. The inclusion of P into the nucleic acids of the liver, kidneys and the spleen of the rats immediately after irradiation is at its normal level. The degree of reduction in the incorporation of P into the nucleic acids in irradiated rats varies with the organ, type of nucleic acid and the time elapsing after irradiation; 48 hrs. after irradiation the rate of P incorporation into the nucleic acids of the small intestine exceeds the original rates; it is on the upgrade in the spleen, but never rises to the original normal level. A lowering in the incorporation of P into the nucleic acids is followed by a reduction in their concn. in the liver and small intestine of the irradiated rats; thereafter the concn. of nucleic acids in these organs changes in a manner parallel to the changes in the rate of P incorporation into their nucleic acids. In the liver and kidneys the lowering in the incorporation of P is not accompanied by a fall in the concn. of nucleic acids. The rate of incorporation of P into the labile and labile deoxyribonucleic acid conjugated with protein differs in intensity in some of the organs. In the spleen and small intestine the difference is manifest in the degree of lowered P incorporation and the level to which it returns; in the liver and the kidneys it is in the opposite direction.

B. S. Levine

Biochem. Div., Cent. Sci. Res. Inst. Roentgeno-Radiology

ORLOV, A.S.

Inclusion of phosphorus in nucleic acids of the organs following lethal-dose x-irradiation of rats [with summary in English]. Med. rad. 3 no.4:16-21 Jl-Ag '58. (MIRA 12:3)

1. Iz biokhimicheskogo otdela (zav. - prof. S.Ye. Manoylov) TSentral'nogo nauchno issledovatel'skogo rentgeno-radiologicheskogo instituta.

(PHOSPHORUS, metabolism,
eff. of x-ray lethal irradiation in rats (Rus))
(NUCLEIC ACIDS, metabolism,
same)
(ROENTGEN RAYS, effects,
lethal dose, eff. on nucleic acid & phosphorus metab. in rats (Rus))

DEN'MUKHAMEDOV, S.R., ORLOV, A.S.

Acute retention of urine caused by ureterocele. Urologiia 23 no.3:61 My-Je '58 (MIRA 11:6)

1. Iz urologicheskogo otdeleniya (nach. S.R. Den'mukhamedov) Leningradskogo okruzhnogo voyennogo gospitalya (nach. N.S. Sokolov).
(URETERS, abnorm.
ureterocele causing acute urinary retention (Rus))
(URINATION DISORDERS, etiol. & pathogen.
ureterocele causing acute retention (Rus))

MANOYLOV, S.Ye., ORLOV, A.S.

Method of separating nucleic acids variously bound with proteins in animal tissues [with summary in English]. Biokhimiia 23 no.5: 663-668 S-O '58 (MIRA 11:11)

1. Biokhimicheskiy otdel TSentral'nogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdravookhraneniya SSSR, Leningrad.

(NUCLEIC ACIDS, determ.
separation of acids various bound with proteins in animal tissue (Rus))
(PROTEINS,
nucleic acid bound, separation from animal tissue (Rus))

DEN'MUKHAMEDOV, S.R.; ORLOV, A.S.

Hemophilia in urological practice. Urologiia 25 no. 5:30-34 S-O '60. (MIRA 14:1)

(URINARY ORGANS—SURGERY) (HEMOPHILIA)

ORLOV, A.S.; ORLOVA, Ye.I.

Simple method for the quantitative determination of desoxyribonucleic acid in animal tissues. Biokhimiia 26 no.5:834-839 S-O '61. (MIRA 14:12)

1. Central Research Institute of Medical Radiology, Leningrad.
(NUCLEIC ACIDS)

ORLOV, A.S.; ORLOVA, Ye.I.

DNA content and biosynthesis in mouse tissues following repeated X-ray irradiation. Radiobiologiia 4 no.4:498-502 '64.

(MIRA 17:11)

1. Institut radiatsionnoy gigiyeny Ministerstva zdravookhraneniya RSFSR i TSentral'nyy institut meditsinskoy radiologii Ministerstva zdravookhraneniya SSSR, Leningrad.

ORLOV, A.S.

Metabolism of phosphorus compounds in the small intestine of mice following starvation and repeated irradiation. Radiobiologiia 5 no.4:528-532 '65. (MIRA 18:9)

1. Institut radiatsionnoy gigiyeny Ministerstva zdravookhraneniya RSFSR, Leningrad.

L 5104-66 EWT(1) GW
ACC NR: AP5025673

SOURCE CODE: UR/0286/65/000/018/0008/0008

AUTHORS: Korshunov, M. G.; Orlov, A. S.; Sivanbayev, A. V.

ORG: none

30
B

TITLE: A device for collecting specimens of unconsolidated soil under water. Class 5, No. 174571 [announced by All-Union Order of Lenin Design Research and Scientific Research Institute "Gidroproyekt" imeni S. Ya. Zhuk (Vsesoyuznyy ordena Lenina proyektno-izyskatel'skiy i nauchno-issledovatel'skiy institut "Gidroproyekt")]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 8

TOPIC TAGS: soil, geologic instrument

ABSTRACT: This Author Certificate presents a device for collecting specimens of unconsolidated soil under water (see Fig. 1). The device contains a rotary soil-collecting container mounted on a frame and suspended from a carrying cable. To automate the process of specimen collecting, an elastic pull (which may be made of rubber) is attached to the soil-collecting container. The frame carries a lever,

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UDC: 624.131.365

ORLOV, A. T.

Crucible tilting electric furnace. Transpstroi 13 no. 11:61
N '63. (MIRA 17:5)

ORLOV, A.T.

Barking birch raw materials for the production of veneers. [illegible]
prom. 13 no.4:11-12 Ap '64. (MIRA 17:4)

Name: ORLOV, A. V.

Dissertation: Changes in the quality of milk in the process of milking cows by various methods

Degree: Cand Agr Sci

Defended at [redacted]: Moscow Order of Lenin Agricultural Acad imeni K. A. Timiryazev

Publication

Defense Date, Place: 1956, Moscow

Source: Knizhnaya Letopis', No 47, 1956

MARTYUGIN, D.D., dots., kand. nauk; ORLOV, A.V., nauchnyy sotrudnik.

Accelerated milking with machines. Dokl. TSKhA no.27:239-243 '57.
(Milking machines) (MIRA 11:4)

USSR / Farm Animals. Cattle. Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7310

Author : Orlov, A. V.
Inst : Moscow Academy of Agriculture imeni K. A. Timiryazev
Title : Changes of Milk Quality in the Process of Milking Cows by Various Methods

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K. A. Timiryazeva, 1957, vyp. 30, ch. 2, 165-170

Abstract : In the process of milking cows with a 3-stroke machine, samples were taken by two and four hands (simultaneously by two milking girls) from separate milk fractions obtained every 2 minutes. It was established that in all milking methods the rapidity with which milk is given is the greater the larger the

Card 1/2

MARTYUGIN, D.D., kand.sel'skokhozyaystvennykh nauk, dotsent;
ORLOV, A.V., kand.sel'skokhozyaystvennykh nauk, assistent

Meat quality of the Kholmogory cattle. Izv. TSKhA no.5:121-133 '61. (MIRA 14:12)

(Beef)

ORLOV, Anatoliy Vasil'yevich, traktorist; ALEKEYEV, Ye., red.

[The tractor will not be idle in the field] Traktor v borozde ne stoit. Smolensk, Smolenskoe knizhnoe izd-vo, 1963. 19 p. (MIRA 17:7)

1. Sovkhoz "Kruzhba" Roslavskogo proizvodstvennogo upravleniya (for Orlov).

ORLOV, A.V., dotsent, kand. sel'skokhoz. nauk

Change in the protein value of meat in young Kholmogory cattle as related to age and feeding. Izv. TSKHA no.4:167-176 '64.
(MIRA 17:11)

1. Kafedra razvedeniya sel'skokhozyaystvennykh zhivotnykh Sel'skokhozyaystvennoy akademii imeni Timiryazeva.

POLYAKOV, I.I., prof., doktor biol. nauk; BARANOVA, K.V., dots.,kand sel'khoz. nauk; KAZANTSEV, F.M., dots., kand. sel'khoz. nauk; ORLOV, A.V., dots., kand. sel'khoz. nauk; BABKINA, N.G., red.

[Practical course in animal husbandry] Praktikum po zhivotnovodstvu. Moskva, Kolos, 1965. 222 p. (MIRA 18:7)

ORLOV, A.V., aspirant.

Distribution of labor and organization of wages in railroad transportation. Trudy MTEI no.7:37-52 '57. (MIRA 11:5)
(Railroads--Salaries, pensions, etc.)

ORLOV, A.V.

This shortcoming should be eliminated. Avtom., telem.i sviaz' 4 no.4:39 Ap '60. (MIRA 13:6)

1. Starshiy elektromekhanik Povorinskoy distantsii signalizatsii i svyazi Yugo-Vostochnoy dorogi.
(Railroads--Switches)

ORLOV, A.V., kand.ekonomicheskikh nauk

Sharing in accordance with labor and regulating wages in railroad transportation. Trudy MIIT no.136:85-94 '61.(MIRA 15:1)
(Railraods--Salaries, pensions, etc.)
(Wage systems)

ORLOV, A.V., kand.ekonom.nauk, dotsent

Wages and their regulation under socialism. Trudy MIIT no.166: 66-85 '62. (MIRA 16:6)
(Wages--Railroads)

KOMARNITSKIY, Yu.A.; ORLOV, A.V.; SUBBOTIN, A.S.; BERNDT, N.V., retsenzent; KOLTUNOVA, M.P., red.; VOROTNIKOVA, L.F., tekhn. red.

[Potentials for increasing labor productivity on railroads] Rezervy rosta proizvoditel'nosti truda na zheleznykh dorogakh. Moskva, Transzheldorizdat, 1963. 152 p. (MIRA 16:5)

(Railroads--Labor productivity)

ORLOV, A.V., kand.ekonom.nauk

Profit and the material stimulation of railroad workers. Zhel.dor. transp. 47 no.4:70-73 Ap '65. (MIRA 18:6)

ORLOV, A. V.

Orlov, A. V. "Infection problems in [the work of] the creative scientific genius Nikolay Ivanovich Pirogov," Voen.-med. zhurn., 1948, No. 12, p. 38-46

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

USSR/Medicine - Freezing Dec 51

"Active Therapy of General Cooling (Freezing) in the Light of Clinical Observations," A. V. Orlov, Cand Med Sci

"Klin Med" Vol XXIX, No 12, pp 28-36

Describes extensive clinical and exptl data which are interpreted in the sense that the method of slow warming is harmful, because slow warming actually leads to a further drop in temp. Advocates rapid warming (hot baths and hot drinks combined with parenteral administration of glucose and adrenalin). Points out the significance of

203T75

USSR/Medicine - Freezing (Contd) Dec 51

alimentary dystrophy, alcoholic intoxication, and encephalization of thermal regulation in humans (as distinguished from animals) in freezing and its therapy. Alc is harmful, because cortical regulation of temp is impaired by it. Rejects entirely alc and $CaCl_2$ as remedies. According to author's data, original rate of warming up in patients suffering from both alcoholic intoxication and exposure to low temps is more rapid and sustained, however.

203T75

ORLOV, A. V.

ORLOV, A.V., kandidat meditsinskikh nauk (Dudinka)

Botkin's law of the undulant development of the infectious process and pathogenesis of Botkin's disease. Klin.med.33 no.6:83-84 Je '55. (MLRA 8:12)
(HEPATITIS, INFECTIOUS
Botkin's law of undulent development)

USSR/Microbiology - Microorganisms Pathogenic to Humans and Animals F-3

Abs Jour: Ref Zhur - Biol., No 18, 1958, 81482

Author : Orlov, A.V.

Inst : -

Title : A New Serological Reaction -- Haptocholic Flocculation on Glass

Orig Pub: Voen.-med. zh., 1957, No. 7, 48-53

Abstract: The reaction of so-called "indirect agglutionation" of erythrocytes saturated with hapten, a specific serum, was suggested for purposes of express-analysis by Kravchenko and Sokolov in 1944-1945. This reaction, while highly sensitive and specific, has a number of shortcomings, which prompted the author to use another adsorbent for bacterial haptens, namely: cholesterin,

Card 1/3

USSR/Microbiology - Microorganisms Pathogenic to Humans and Animals F-3

Abs Jour: Ref Zhur - Biol., No 18, 1958, 81482

which, not being an antigen, cannot affect the serological specificity of the reaction. Its role, according to Igol's theory, is reduced to formation of "nuclei" on the surface of which haptens are adsorbed. Experiments of a similar arrangement of "haptocholic flocculation reaction" on glass (as designated by the author) and the Kravchenko-Sokolov reaction with haptens of pure stock cultures showed an equal sensitivity; at low serum titers, the "haptocholic reaction" was even more sensitive -- by 1.5-2 times. In experiments with a mixture of 3 cultures (Gertner's paratyphus bacteria, Flexner dysentery, and a live antipestis vaccine "1, 17"), the "haptocholic reaction" proved to be considerably more sensitive,

Card 2/3

(

SOV/177-58-9-13/51

AUTHOR: Orlov, A.V., Lieutenant-Colonel of the Medical Corps, Candidate of Medical Sciences

TITLE: An Improved Method of the Haptocholic Flocculation Reaction with the Application of Membranous Ultrafilters

PERIODICAL: Voyenno-meditsinskiy zhurnal, 1958, Nr 9, pp [illegible] (USSR)

ABSTRACT: The improvement of the method of haptocholic flocculation reaction is based on the following [illegible] data: 1) The method of concentrating the material to be investigated by ultrafiltration through a membranous filter (A.S. Rasunov and K.K. Bar[illegible] [illegible] following solution of the filter in an alkali medium and simultaneous extraction of polysaccharides (A.T. Kravchenko); 2) the method of obtaining [illegible] hydrosols and the results of studying their physico-chemical properties (Porges and Neyba[illegible], [illegible] etc); 3) the possibility of utilizing nitrocellulose preparations (collodion) as an adsorbent for antigens

Card 1/3

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R00123

SOV/177-[illegible]

An Improved Method of the Haptocholic Flocculation [illegible] with the Application of Membranous Ultrafilters

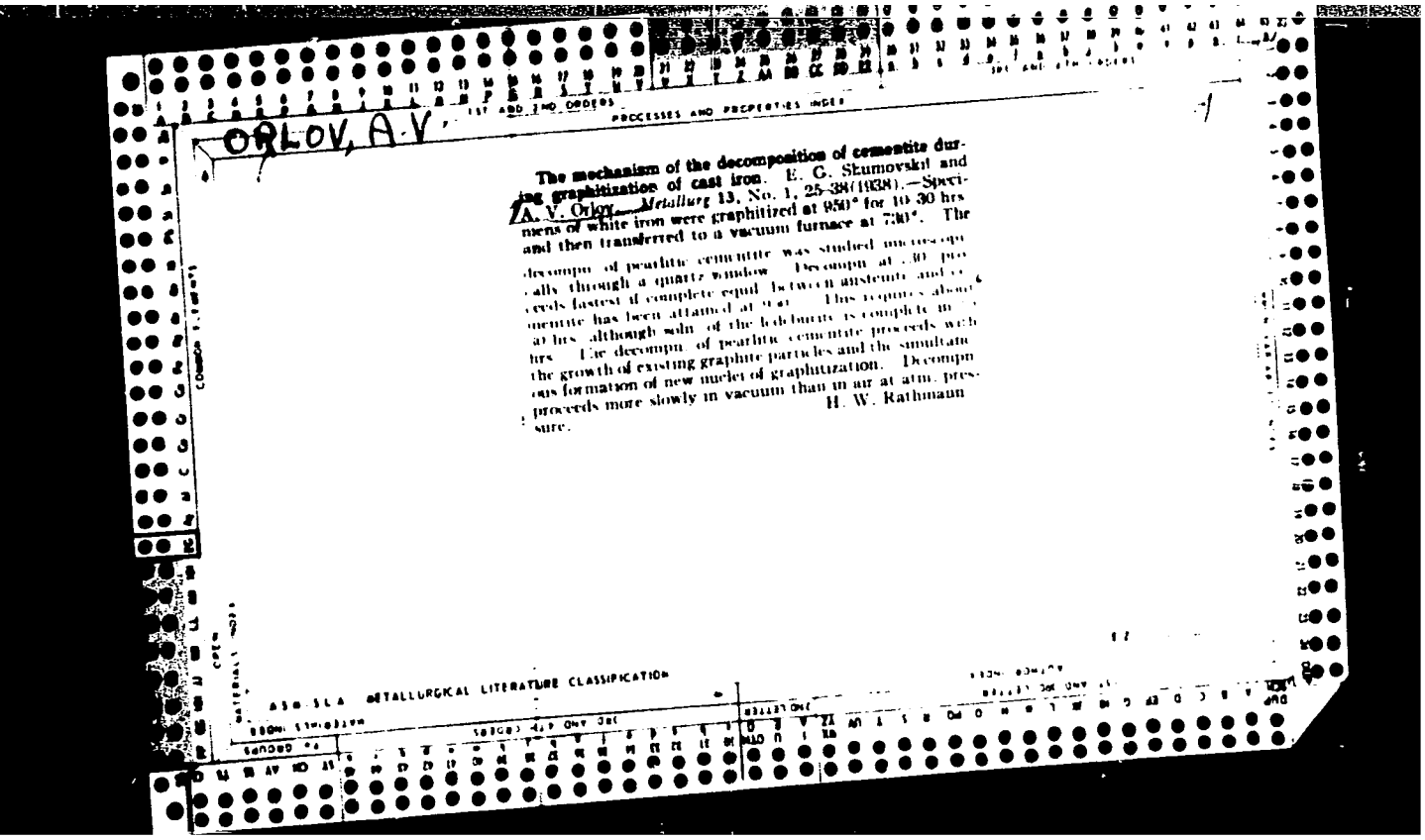
and haptenes in serological reactions (Ya.A. Komarnitskiy, N.V. Kholchev, etc.). The [illegible] modification of the method of preparing hapt[illegible] antigens is based on utilizing the fact that the sub- stance of the dissolved membranous filter which pre- cipitates in the sedimentation durin[illegible] of the solution adsorbs the polysaccharide pre[illegible] in the solution. The modification makes it possible to reach a sudden concentration increase [illegible] tracted polysaccharide not only due to the concentra- tion of the basic material by ultrafiltration, but also due to a more complete adsorption and sedimentation of the charged particles of the absorbent on the centri- fugation. The polysaccharide concentrated in this way is subjected to alkalization and cholesterination under conditions which guarantee the [illegible] dis- persion of cholesterin that forms together [illegible] hap- tene a reacting antigen complex. Simultaneously, the

Card 2/3

An Improved Method of the Haptochemic Flocculation Reaction with the Application of Membranous Ultrafilters

dissolved substances of the filter serve as a protective colloid, which stabilizes the suspension of the cholesterin. The alkaline reaction imparted to the haptochemic antigen helps to prevent a non-specific coagulation (spontaneous flocculation) of the cholesterin from the suspension. There is 1 set of literature data 1 Soviet reference.

Card 3/3



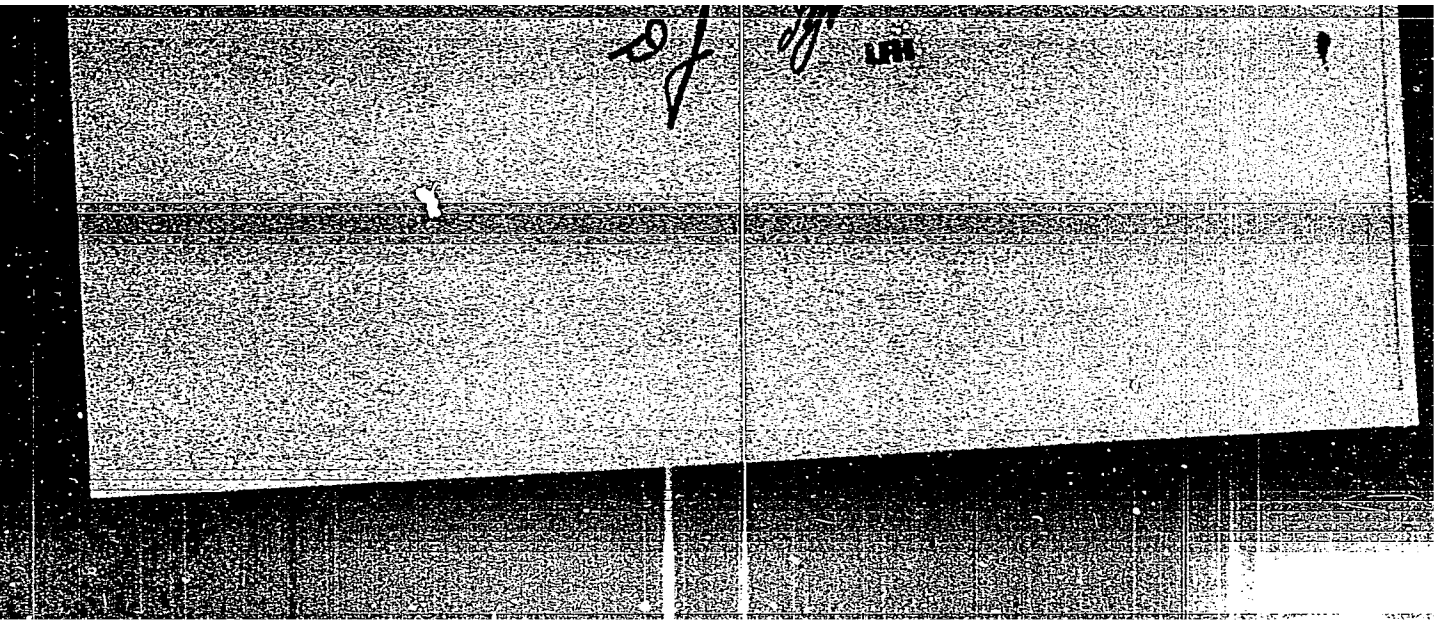
ORLOV, A.V.

PROCESSES AND PROPERTIES INDEX

The mechanism of the decomposition of cementite during graphitization of cast iron. E. G. Shumovskii and A. V. Orlov. *Metallurg* 13, No. 1, 25-38(1938).—Specimens of white iron were graphitized at 950° for 10-30 hrs and then transferred to a vacuum furnace at 730°. The decompn of pearlitic cementite was studied microscopically through a quartz window. Decompn at 730° proceeds fastest if complete equil between austenite and cementite has been attained at 950°. This requires about 30 hrs although soln of the ledeburitic is complete in 10 hrs. The decompn of pearlitic cementite proceeds with the growth of existing graphite particles and the simultaneous formation of new nuclei of graphitization. Decompn proceeds more slowly in vacuum than in air at atm. pressure.

H. W. Rathmann

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



137-58-4-7123

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 117 (USSR)

AUTHOR: Orlov, A. V.

TITLE: Roll-forging of Blanks for Forming Truckdrivers' Tool Kit Forgings (Val'tsovka zagotovok dlya shtampovki pokovok shoferskogo instrumenta)

PERIODICAL: Tekhnol. avtomobilestroyeniya, 1957, Nr 5, pp 44-52

ABSTRACT: The advantages of forming blanks on forging rolls as against forging in presses and in drop-hammers are examined. Examples of techniques for making certain forgings, and data of the NIITAvtoprom pertaining to calculation of forward slip and springing for the shaping of grooves on forging rolls are presented.

Ye L

1. Rolling mills--Forging--Processes

Card 1/1

AUTHOR: Orlov, A.V., engineer

TITLE: Increasing the Load Carrying Capacity of Cantilever Gear Transmissions (Povysheniye nagruzochnoy sposobnosti konsol'nykh zubchatykh peredach)

PERIODICAL: Vestnik Mashinostroyeniya, 1959, Nr 2, pp [illegible] (USSR)

ABSTRACT: In a gear train with overhung gear and pinion, the deflections of the shaft cause corner loading. The teeth must be stressed at their point of maximum loading To use their full carrying capacity, a longitudinal correction by barrelling has been suggested. A method simpler in manufacture is proposed in the present article. After determining the skewing angle, the profile of one of the gear wheels is ground at this angle which is achieved by simple turning of the grinding wheel carriage in the gear grinding machine by the required angle. A numerical example illustrates the conditions in overhung gear trains. Photographs show the comparison of correctly and incorrectly ground gears. There are 4 figures and 2 references of which 1 is Russian and 1 English.

Card 1/1

SOV/133-59-4-17/32

AUTHORS: Trishevskiy, I.S., Candidate of Technical Sciences; Klepanda, V.V., Engineer, and Orlov, A.V.

TITLE: Inserts of High Durability for Guides of Rod Mills (Vysokostoykiye vstavki dlya propuskov provolochnykh stanov)

PERIODICAL: Stal', 1959, Nr 4, pp 342-344 (USSR)

ABSTRACT: In a number of cases the application of roller passes on continuous rod mills presents some design difficulties, therefore in such cases it is necessary to utilize high durability friction passes. Characteristic data on the durability of passes on rod mills 250 used on the Magnitogorsk and Makeyevka works is shown in table 1. The Ukrainian Institute of Metals carried out an investigation on the possibility of increasing the durability of passes. The experimental work was carried out on the Makeyevka works during the rolling of rods 6.5 mm in diameter. Inserts made from chromium and boron steels (Fig 1) were tested. The results obtained are shown in table 2. It was found that the durability of passes with steel inserts with chromium steel working surface was on average 57 hours of continuous

Card 1/2

V/133-59-4-17/22

Inserts of high durability for tubes of hot mills

Work which is 7 times higher than that of the usual passes made from grey cast iron. The durability of passes with steel inserts with boron steel working surface was on average 100 hours of continuous work, i.e. 13.5 times higher than the durability of the usual tubes. Details on the chromium and boron steel inserts used for the investigation are given. There are 4 figures and 2 tables.

Association: Zaporozhskiy N.-I. Institut Metallov (Zaporozhye Scientific Research Institute of Metals)

Card 2/2

ORLOV, A.V., aspirant

Dynamic loads in gear transmissions. Izv.vys.ucheb.zav.; mashinostr. no.6:110-114 '59. (MIRA 13:5)

1. Moskovskoye vysshaye tekhnicheskoye uchilishche imeni N.E. Baumana i Institut mashinovedeniya AN SSSR.
(Gearing)

ORLOV, A.V., inzh.

Increasing the carrying capacity of bracket gears. Vest. mash. 39 no.2:18-19 F '59. (MIRA 12:3)
(Gearing)

ORLOV, A.V.; VIZUN, Yu.I., otv. red.

[Description and instructions for operating the "S-1" stand for impulse testing ferrite cores] Opisanie i instruktsiia po ekspluatatsii stenda "S-1" dlia proverki ferritovykh serdechnikov v impul'snom rezhime. 2 izd. Moskva, 1960. 37 p. (MIRA 16:3)

1. Akademiya nauk SSSR. Institut tochnoy mekhaniki i vychislitel'noy tekhniki.
(Cores (Electricity))--Testing)

S/179/60/000/006/034/036
E081/E135

AUTHORS: Orlov, A.V., and Pinegin, S.V., (Moscow)

TITLE: Experimental Investigation of Micro-Displacements in the Contact Region of Elastic Bodies and the Strength of the Surface Layer

PERIODICAL: Izvestiya Akademii nauk SSSR,Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1960, No. 6, pp. 172-175

TEXT: The paper is a continuation of previous work (Ref.2). The nature of the primary fatigue fracture of components in contact under reversed static or pulsating load, and also the work hardening with rollers of components under load is determined by the stresses and strains in the extreme surface layer of the component. The paper gives some results of experimental investigations of displacements and strains in the contact region at the extreme surface layer, using tensometry under static load, and with slow rolling under load. To avoid the difficulty of high stress and strain gradients, and to enlarge the area of the contact plane, the specimens were of hard steel with surfaces of

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S/179/60/000/006/034/036
E081/E135

Experimental Investigation of Micro-Displacements in the Contact Region of Elastic Bodies and the Strength of the Surface Layer

small curvature, compressed by high loads. Thus on compressing a sphere of diameter 20.3 cm on a plane with a load of 15 000 kg the diameter of the contact plane was about 9.4 mm under the maximum calculated stress of 34 000 kg/cm^2 at the centre of the plane. Three types of tensometers were used: a ring type, a multi-winding type and a tensile type. The basic object of the experiments was the measurement of radial displacement on compression and, in addition, the relative tangential extension was also measured. Cylindrical coordinates r, t, z are taken; u_r is the radial displacement; ε_r is the relative radial extension; σ_r is the normal radial stress; a is the radius of contact; ε_t, ε_z are residual strain components; σ_t, σ_z are residual stress components; P is the compressive force (kg); μ is Poisson's ratio; E is Young's modulus; r is the radius of the sphere, ℓ is the gauge length. The approximate equation:

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S/179/60/000/006/034/036
E081/E135

Experimental Investigation of Micro-Displacements in the Contact Region of Elastic Bodies and the Strength of the Surface Layer

The experiments showed: 1) that the actual size of the contact area exceeds the calculated size by about 3%, possibly as a result of plastic deformation; 2) a large difference exists between the magnitude of the displacements calculated for an infinite half-space and those measured on a plane specimen 110 x 110 x 30 mm compressed by a sphere. In Fig.2 the calculated curves u_{r1}, u'_{r1} are compared with experiment (curves u_{r2}, u^{o}_{r2}) for the internal contact zone and for the external area up to a radius of 30 mm on compressing a sphere 20.3 cm in diameter with a plane force of 15 000 kg. The difference between the calculated and experimental curves is attributed to the difference between the actual and calculated areas of contact and to the fact that the calculations refer to an infinite half-space whereas the experiments were made on specimens of finite size; 3) the displacements on the spherical surface are appreciably less than on the plane surface. Fig.3 shows the relative extension along a meridian on the surface of the sphere R = 10.15 cm compressed or rolled on

Card 4/8

S/179/60/000/006/034/036
E081/E135

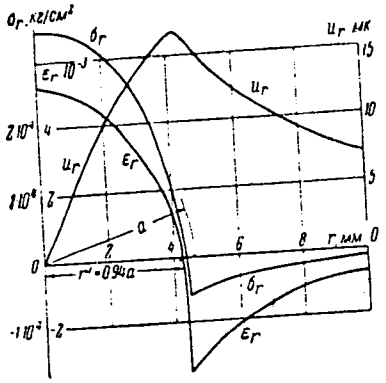
Experimental Investigation of Micro-Displacements in the Contact Region of Elastic Bodies and the Strength of the Surface Layer

the plane under load P = 15 000 kg with E = 2.15 x 10^6 kg/cm^2; 4) there is little difference between the micro-displacements measured when rolling the sphere backwards or forwards, or when under static conditions. Fig.4 shows the graphs of radial displacement on the plane surface. Curves 3 and 4 are for conditions of rolling towards and away from the end of the gauge; curves 1 and 2 are for absence of work hardening with roll. Curves of relative radial extension for slow rolling (v = 5 mm/sec) are shown in Fig.5, where curve 1 is theoretical for the plane, curve 2 is experimental for the plane and curve 3 is experimental for the sphere. The occurrence of shear and tensile stresses in the surface and the role of micro-cracks in the breakdown process are briefly discussed.
There are 5 figures and 2 Soviet references.

Card 5/8

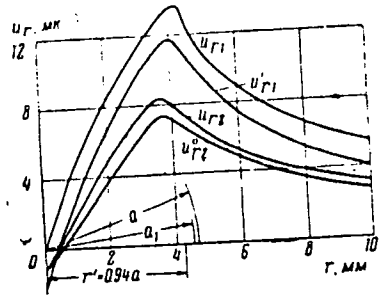
S/.79/60/000/006/034/036
E081/E135

Experimental Investigation of Micro-Displacements in the Contact Region of Elastic Bodies and the Strength of the Surface Layer



Фиг. 1

Fig.1



Фиг. 2

Fig.2

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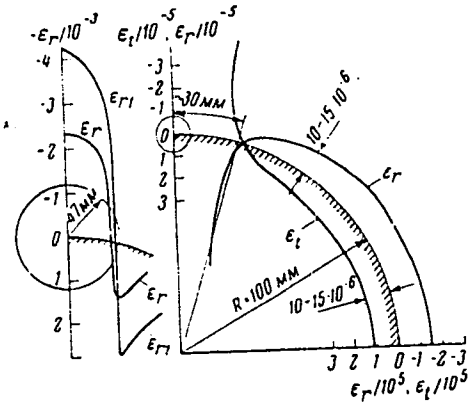
S/179/60/000/006/034/036
E081/E135

Experimental Investigation of Micro-Displacements in the Contact Region of Elastic Bodies and the Strength of the Surface Layer



Фиг. 3

Fig.3

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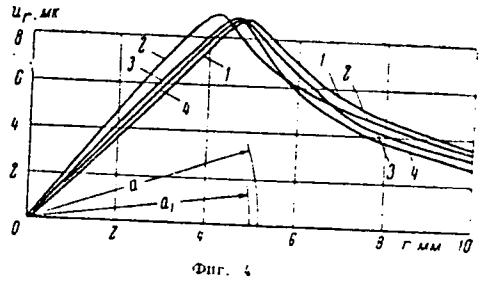
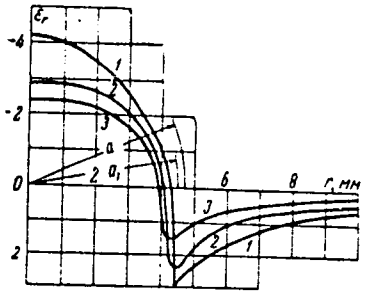
S/179/60/000/006/034/036
E081/E135

Experimental Investigation of Micro-Displacements in the Contact Region of Elastic Bodies and the Strength of the Surface Layer



Фиг. 4

Fig.4



Фиг. 5

Fig.5

SUBMITTED: June 2, 1960

Card 8/8

9,6180

AUTHORS: Pinegin, S.V., Doctor of Technical Sciences, Professor, Orlov, A.V., Engineer, and Verstak, I.I.

TITLE: A strain gauge method of measuring [illegible] in the contact zone of conjugated [illegible]

PERIODICAL: Vestnik mashinostroyeniya, no. 3, 1961, [illegible]

TEXT: Measuring elastic or plastic displacements of individual points in the contact zone is often difficult due to inaccessibility. An example is investigating deformations in the working surfaces of rails or in the tires of freight car wheels, surfaces of teeth in gears and worms, ball bearings, slot lessons, supporting flanges etc. As the area of contact in the ball bearing is small, its gradients of stresses and deformations are significant and present great obstacles in the measurements. The problem of equivalence of similar or natural experiments concerning contact loads is remains unsolved. This enhances the practical and theoretical interest of investigating stresses and deformations in the contact

Card 1/4

A strain gauge method ...

zone of actual components, consisting of the [illegible] materials. The article describes the design of [illegible] as the method of measuring [illegible] which was developed and applied by the [illegible] at the Institut mashinovedeniya [illegible]. The transducer consists of a thin wire [illegible] 15 - 20 µk diameter, placed in a [illegible] face. The groove can be formed with a [illegible] may be wedge-shaped or of [illegible] of 30 to 50 µk and a width [illegible] µk. The [illegible] groove is related to the [illegible] latter were 20 - 60 mm long in the [illegible] cer wire was insulated by dipping into [illegible] drying. One end of wire is welded [illegible] operation is performed with a [illegible] volts supply when investigating [illegible] of a microscope. The wire is then tensioned [illegible] kg/mm^2, and the other end is soldered [illegible] thick. The latter is then [illegible]

Card 2/4

A strain gauge method ...

zone. The displacements of the investigated point, i.e the weld spot of the front end of the transducer in relation to its rear end, increase or decrease its tension, and thus its electric resistance. The restrictiveness of the zone of local surface deformations and the relatively large length of the transducer allow the assumption of the rear end of the transducer as a fixed point which is used as a datum for computing the displacements of the front end of the transducer. In special cases the displacement of the rear end can be measured with an additional transducer or by calculation. To record the changes of the electrical resistance, the transducer is connected into a bridge circuit. The earthed end of the transducer must be connected with the similar (earthed) end of the supply coil. The unbalance current is amplified and indicated by the oscillograph with a simultaneous display of deformation and time marking. The calibration of the scope is made with the use of a standard (reference) beam, whose central part is subject to bending only. The scatter of indications does not exceed 4%. In the above it is assumed that the groove is sufficiently small to affect the distribution of displacements and stresses.

Card 3/4

28253

A strain gauge method ... S/122/61/000/003/003/013
D241/D305

This was verified by measuring local deformations on the flat surface of components in the area of its contact with a 8" diameter ball. Both surfaces were machined with high precision and hardened to HRC 62-63. Two tension transducers were placed at the flat component: one on the surface and one in a groove. The components were compressed and the distance between the contact center and the front end of transducer was varied. The same was repeated with the second transducer. For loads of 10 and 20 T the diameters of contacts were 8.2 and 10.3 mm. There is only a small difference between the indications of the two transducers, which confirms the previous assumption. Examples are given which demonstrate the possibilities of the strain gauge method in experimental investigations on contact problems. There are 6 figures and 2 Soviet-bloc references.

Card 4/4

PINEGIN, S.V. (Moskva); ORLOV, A.V. (Moskva)

Resistance to motion in some cases of free rolling. Izv.AN SSSR.Otd. tekh.nauk.Mekh.i mashinostr. no.3:91-97 My-Je '61. (MIRA 14:6)
(Motion) (Friction)

S/137/62/000/002/117/
A060/A101

AUTHORS: Orlov, A. V., Sandler, N. I., Kukol', V. V., Aleksandrova, N. I., Govor, U. S.

TITLE: Investigation of the borated layer of medium-carbon steel

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1962, 105, abstract 2 I 1... ("Sb. tr. Ukr. n.-i. in-t metallov", 1961, no. 7, 232 - 244)

TEXT. Using the methods of microscopic and X-ray structure analysis, an analysis was carried out of the structure of borated layer of steel 40 subjected to borating by the method of electrolyzing molten borax at 960°C at a current density of 0.2 ampere/cm^2 and 5-hour duration. The structure of the borated layer of steel 40 consists of the α-phase, carbide B_4C, borides FeB and Fe_2B, which, as one recedes from the surface, appear in the following order: α-Fe, B_4C, borides. The microhardness has the greatest value at the surface and decreases gradually with approach to the base metal. There are 16 references.

T. Fedorova

[Abstracter's note: Complete translation]

Card 1/1

LINKOV, G.M.; ORLOV, A.V.

Forging bracket rolls with an automatic manipulator. Avt.prom. 28 no.2:40-43 F '62. (MIRA 15:2)

1. Nauchno-issledovatel'skiy institut avtomobil'noy promyshlennosti.
(Rolls (Iron mills))

TSIRIK, L.M.; ORLOV, A.V.

Mechanizing the removal of forgings and tails from trimming presses. Avt.prom. 28 no.12:30-33 D '62. (MIRA 16:1)

1. Nauchno-issledovatel'skiy tekhnologicheskiy institut avtomobil'noy promyshlennosti.

(Forging)

ORLOV, A.V.

Present state and outlooks for the development of technological processes of rolling ingots for stamping. Avt.prom. 28 no.12: 35-36 D '62. (MIRA 16:1)

1. Nauchno-issledovatel'skiy institut avtomobil'noy promyshlennosti.
(Rolling (Metalwork))

ORLOV, A.V.; GEL'FGAT, Ya.A.; CHERKAYEV, V.V.; KECHEKEZYAN, A.N.

Structures of extra-deep wells. Trudy VNIIBT no.9:3-13 '63.
(MIRA 17:9)

GEL'FGAT, Ya.A.; OBLOV, A.V.; FINKEL'SHTEYN, G.E.; CHERKAYEV, V.V.

Establishing certain empirical dependence of bit-operation characteristics on the parameters of drilling practices. Trudy VNIIBT no.9:13-23 '63. (MIRA 17:9)

ORLOV, A.V.; BEDERDINOV, A.B.

Present state and trends of the development of the production of connecting rods by forging in the automobile industry. Avt. prom. 30 no.5:33-37 My '64. (MIRA 17:9)

1. Nauchno-issledovatel'skiy tekhnologicheskiy institut avtomobil'noy promyshlennosti.

L 3300-66 EWT(d)/EWT(m)/EWP(w)/EPF(c)/T/EWP(t)/EWP(b) DJ/JD

ACCESSION NR: AP5012077 UR/0380/65/000/001/0127/0135

621.833

AUTHOR: Orlov, A. V. (Moscow)

33
30
B

TITLE: Carrying capacity of Novikov transmissions for different types of contact

SOURCE: Mashinovedeniye, no. 1, 1965, 127-135

TOPIC TAGS: mechanical engineering, mechanical power transmission device, transmission gear

ABSTRACT: Novikov transmissions with large gears were tested for carrying capacity under point-contact and line-contact operating conditions. The tests were done on a machine for tangential loading of the gears with a force of 200 to 6000 kg. It was found that moderately loaded helical teeth with $\Delta r/\Delta r_1 \approx 0.1$ have a nearly elliptical contact. With increased wear, this form approaches the line-contact form, although an actual transmission can never be run in to the point where the contact is actually of the line type (in the true sense) because of variations in interaxial distance. Soviet and foreign operational experience shows that Novikov transmissions have a load capacity 2-2.5, and in isolated cases 6 times that of transmissions

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with involute teeth. With respect to contact strength, Novikov transmissions are most sensitive to variations in the interaxial distance, and the aggrevation of this sensitivity increases as the teeth are worn in (more precisely as $\Delta r/r_1$ is reduced). A comparatively small increase in the interaxial distance results in a concentration of the load on the edge of the concave tooth. Operational experience shows that this destroys the surface and leads to fatigue cracks which wear out the tooth. A shift in the maximum pressure area to the tip of the concave tooth is also due to intensive wear at the tip of the convex tooth with a corresponding redistribution of the load. Transmissions with point-contact are much less sensitive to deviations in the interaxial distance than worn-in transmissions. To correct inaccuracies in the gears, it is advisable to run in the transmissions with oscillating interaxial distances. When this operation is correctly done the contact area is increased and the sensitivity to interaxial variations (within a certain range) is decreased. The average pressure is only slightly dependent on shaft misalignment, but the direction of misalignment has a considerable effect on the configuration of the contact area. If the gap between the teeth is reduced on the disengagement side, the contact spot becomes a strip of approximately uniform width. Misalignment in the reverse direction causes a sharply defined edge-contact. In some cases the effect of individual errors can be corrected by mutual compensation. Orig. art. has: 9 figures, 2 tables.

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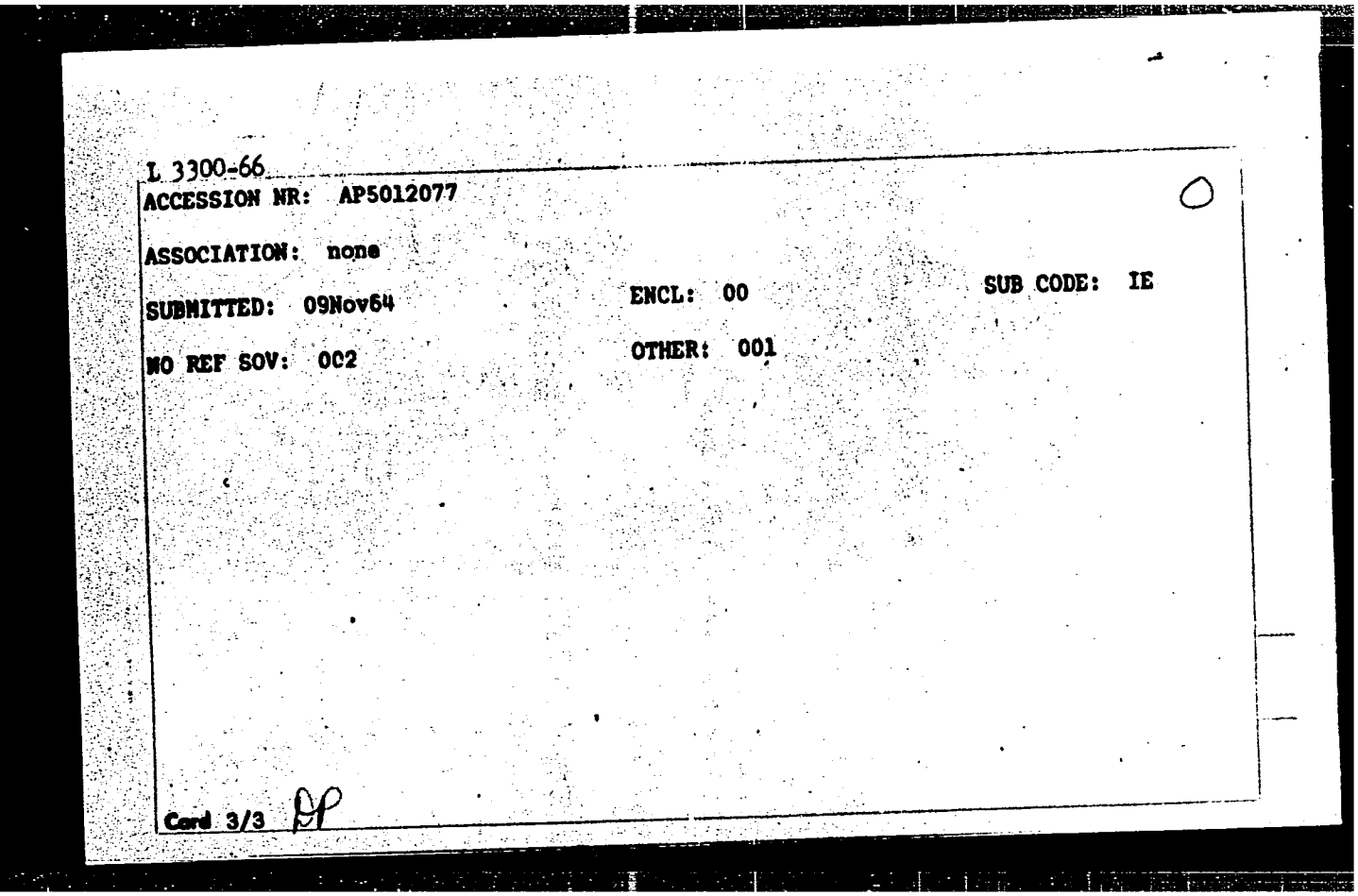

L 3300-66
ACCESSION NR: AP5012077

ASSOCIATION: none

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L 57531-65 EWT(e)/EWT(m)/EWP(w)/EWP(i)/EWA(d)/EWP(t)/EWP(z)/EWP(b)/EWA(c)
LIP(c) MJW/JD/JG UR/0137/65/000/005/I051/I051
ACCESSION NR: AR5015184

SOURCE: Ref. zh. Metallurgiya, Abs. 5I332

AUTHOR: Orlov, A. V.; Fel'dman, E. I.

TITLE: The effect of small additions of boron, vanadium, and titanium on the properties of 60S2 spring steel

CITED SOURCE: Sb. tr. Ukr. n.-i. in-t metallov, vyp. 10, 1964, 398-406

TOPIC TAGS: spring, steel, steel hardening, metal mechanical property, alloying, decarburization, austenitic grain, grain size, silicon containing alloy, boron containing alloy, vanadium containing alloy, titanium containing alloy, manganese containing alloy/ 60S2 steel, 60S2TR steel

TRANSLATION: An investigation was made of the effect of up to 0.005% boron, up to 0.75% vanadium, and up to 0.15% titanium on the properties of 60S2 steel. On the basis of 60S2 steel, the optimum chemical composition of spring steel 60S2TR was established as follows (in %): 0.55-0.65 carbon, 0.6-0.9 manganese, 1.5-2 silicon, 0.08-0.12 titanium, 0.002-0.005 boron. The mechanical properties of 60S2TR steel are not lower than those of 60S2 steel: sigma$_b$ is 152 kg/mm^2;

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$sigma_s$ is 137 kg/mm^2; $delta_{10}$ is 7%; a_k is 3.1 kgm/cm^2; R_c is 43; $sigma_s/sigma_b$ is equal to 0.9. The hardenability of 60S2TR steel is greater than that of 60S2 steel; at a silicon content of 1.5-1.7, this steel has less tendency toward decarburization particularly in the high temperature region, has a higher threshold for the start of austenitic grain growth, and a finer original grain size than 60S2 steel. From the resume.

SUB CODE: MM ENCL: 00

Card 2/2 dm

[illegible]ROV, A.V., inzh. (Moskva); BLEKHMAN, M.Ye., inzh. (Moskva)

Use of steam for knocking down hanging charges in bins. Energetik. 13 no.7:9-11 Jl '65. (MIRA 18:8)