Investigation of the Reactions of Pinacols With Substituted Acetylene Radicals. 79-28-3-19/61
XV. The Action of Sulfate of Mercury on the Asymmetric Dimethylphenyl-Phenyl-Acetylenyl- and the Asymmetric Methyl-Diphenyl-Phenylacetylenyl-Ethylene-Glycols

product could either be an isopropylidene derivative of glycol (VII) or that of a condensation product of oxydihydrofurfurans (II) with acetone 5,5-dimethyl-2,4-diphenyl-2-acetonyldihydrofurfuran-2,5 (VIII). The attempt to try and obtain the bond (VIII) by condensation of dihydrofurfurans (II) with acetone was successful. The heating of the acetone solution of the compound (II) with sulfate of mercury lead to a product which is identical with the one synthetized from glycol under these conditions. This experiment makes it possible to acknowledge the compound obtained from glycol in acetone solution under the action of sulfate of mercury, as being 5,5-dimethyl-2,4-diphenyl-2-acetonyl-dihydrofurfuran-2,5. The identity of the products obtained from (I a) and (II) was illustrated by taking the absorption spectra in ultraviolet light.
There are 2 figures and 12 references, 10 of which are Soviet.

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Investigation of the Reactions of Pinacols With Substituted Acetylene Radicals. 79-28-3-19/61
XV. The Action of Sulfate of Mercury on the Asymmetric Dimethylphenyl--Phenyl-Acetylenyl- and the Asymmetric Methyl-Diphenyl-Phenylacetylenyl-Ethylene-Glycols

ASSOCIATION: Leningradskiy tekhnologicheskiy institut imeni Lensoveta (Technological Institute imeni Lensovet, Leningrad)

SUBMITTED: January 23, 1957

Card 4/4

SOV/ 79-28-6-3/63

AUTHORS: Venus-Danilova, E. D., Serkova, V. I.

TITLE: Investigation of the Conversion of Pinacols With Substituted Acetylene Radicals (Issledovaniye prevrashcheniy pinakonov s zameshchennymi atsetilenovymi radikalami) XVI. Synthesis and Conversions of the Symmetric Dimethyl-Phenyl-Tertiary-Butylacetylenylethyleneglycol (3,6,6-Trimethyl-2-Phenylheptine-4-Diol-2,3) (XVI. Sintez i prevrashcheniya simm.dimetil-fenil-tretichno-butilatsetilenileti lenglikolya (3,6,6-trimetil-2-feniligeptin-4-diola-2,3))

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 6, pp. 1477-1482 (USSR)

ABSTRACT: At present it is still impossible to predict the direction of the conversion of the pinacols of the acetylene series, as every radical taking a certain position in the molecule of the pinacol influences its conversion. The authors only investigated the summary effect of these influences. However, the results of the conversions of the symmetrical dimethyl-phenyl-phenyl-acetylenylethyleneglycol (Ref 4) of the asymmetrical methyl-diphenyl-tertiary-butylacetylenyl

Card 1/3

Investigation of the Conversion of Pinacols With Substituted Acetylene Radicals. XVI. Synthesis and Conversions of the Symmetric Dimethyl-Phenyl--Tertiary-Butylacetylenylethyleneglycol (3,6,6-Trimethyl-2-Phenylheptine--4-Diol-2,3)

glycol(Ref 3), as well as of the asymmetrical methyl-diphenyl--phenylacetylenylethylene glycol (Ref 5) and of the trimethyl--phenylacetylenylethylene glycol (Ref 8) make possible a prediction to some extent. Of these compounds the first two yielded only enenealcohols, and the two latter ketones of the acetylene series. It may be expected that the symmetrical dimethyl-phenyl-tertiary-butylacetylenylethylene glycol (formula VIII) on the action of sulfuric acid had to convert to the enenealcohol (IX) or the ketone of the acetylene series (X). In order to check this assumption the symmetrical dimethyl-phenyl-tertiary-butyl-acetylenylglycol (VIII) was synthesized and treated with sulfuric acid in the heat. The only conversion product of this glycol on the action of a 30 % sulfuric acid was a ketone of the acetylene series, the asymmetric methyl-phenyl-tertiary-butylacetylenylacetone (3,6,6-trimethyl-3-phenylheptine-4-on-2) (X). It easily forms a semicarbazone and the 2,4-dinitrophenylhydrazone. The structure of this ketone was proved by oxidation, its infra-

Investigation of the Conversion of Pinacols With Substituted Acetylene Radicals. XVI. Synthesis and Conversions of the Symmetric Dimethyl-Phenyl--Tertiary-Butylacetylenylethyleneglycol (3,6,6-Trimethyl-2-Phenylheptine--4-Diol--2,3)

red spectrum, and by a comparison of its ultraviolet spectrum with the corresponding asymmetrical diphenyl-tertiary-butyl-acetylenylacetone (XI) (Fig 1). There are 1 figure and 16 references, 14 of which are Soviet.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut imeni Lensoveta (Leningrad Technological Institute imeni Lensovet)

SUBMITTED: June 17, 1957

1. Ethylene glycols--Synthesis

AUTHORS: Fabritsy, A., Venus-Danilova, E. D. SOV/79-28-12-14/41

TITLE: Investigation of the Transformations of Sec-Tert-α-Glycols of the Acetylene Series Under the Action of Mercury Salts (Issledovaniye prevrashcheniy vtorichno-tretichnykh α-glikoley atsetilenovogo ryada pod vliyaniyem soley rtuti) III. 2-Methyl-1,4-Diphenyl Butyne-3-Diol-1,2 (III.2-metil-1,4-difenilbutin-3-diol-1,2)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 12, pp 3227-3231 (USSR)

ABSTRACT: The results of the reaction of another (Refs 1, 2) sec-tert-α-glycol of the acetylene series, of 2-methyl-1,4-diphenyl butyne-3-diols-1,2(I) with mercury chloride and sulfate in alcohol solution are described. This glycol was synthesized according to Zh. J. Jotsich from phenyl-acetyl carbinol and magnesium bromo-phenyl acetylenyl:

$$C_6H_5CHOHCH \rightarrow C_6H_5CHCHCOCH_3 \rightarrow C_6H_5CHOH-\overset{CH_3}{\underset{|}{C}}OH-C\equiv C-C_6H_5 \cdot \text{Compound (I)}$$

Card 1/3 on the action of the mercury chloride dissolved in alcohol

rapidly separated a white, silk-like product which on heating the mixture gradually entered solution so that 3-methyl-2,5-diphenyl furan (Refs 6, 7-(III)) resulted as final product. It turned out that the final product obtained as crystals contained mercury and chlorine, and that, according to its analysis, it corresponded to the mercurized 3-methyl-2,5-diphenyl furan (II). It is considerably stable, even does not change on boiling with alcohol and water, and passes to a substituted furan only if hydrochloric acid is added, and on heating. Based on these results it may be assumed that the transition of the sec-, tert-, α-glycols of the acetylene series to the substituted furans takes place under the action of mercury chloride by way of the mercurized furans according to scheme 2. There are 13 references, 10 of which are Soviet.

Investigation of the Transformations of Sec-Tert-α-Glycols of the Acetylene Series Under the Action of Mercury Salts. III. 2-Methyl-1,4-Diphenyl Butyne-3-Diol-1,2 SOV/79-28-12-14/41

ASSOCIATION: Silezskiy politekhnicheskiy institut, Pol'sha i Leningradskiy tekhnologicheskiy institut imeni Lensoveta (Silesian Polytechnic Institute, Poland, and Leningrad Technological Institute imeni Lensovet)

SUBMITTED: December 20, 1957

Card 3/3

VENUS-DANILOVA, E. D.

Leningrad. Universitet

Voprosy teorii stroyeniya organicheskikh soyedineniy (Problems in the Theory of the Structure of Organic Compounds) [Leningrad] 1960. 239 p. Errata slip inserted. 3,725 copies printed.

Sponsoring Agency: Leningradskiy ordena Lenina Gosudarstvennyy universitet im. A.A. Zhdanova.

Resp. Ed.: T.A. Favorskaya; Ed.: V.D. Plastova; Tech. Ed.: S.S. Vedishcheva.

PURPOSE: This collection of articles is intended for chemists and organic chemists.

AVAILABLE: Library of Congress (QD476.L44)

5.3400

77417
SOV/79-30-1-75/76

AUTHORS: Al'bitskaya, V. M., Venus-Danilova, E. D.

TITLE: Letter to the Editor. Isomerization of Secondary-Tertiary Acetylenic α-Glycol Into a Substituted β-Furan

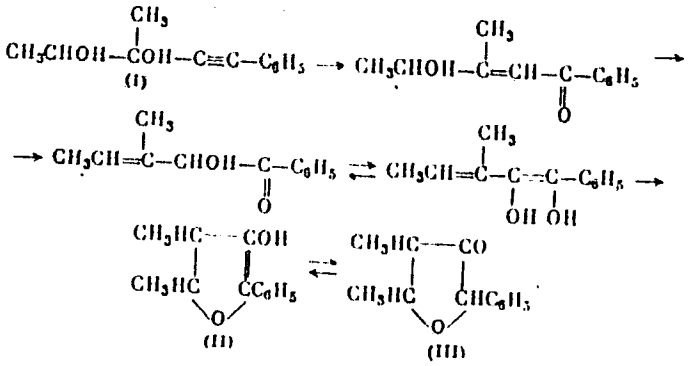
PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 349-350 USSR)

ABSTRACT: 3-Methyl-5-phenylpentyne-4-diol-2,3 (I) is converted, by heating-4-with 20-30% sulfuric acid, into 2,3-dimethyl-5-phenylfuran-4-one (III) in equilibrium with its enol form (II). The isomerization can be represented by the following scheme:

Card 1/3

Letter to the Editor. Isomerization of Secondary-Tertiary Acetylenic α-Glycol Into a Substituted β-Furan

77417
SOV/79-30-1-78/78



(bp of the furan 138-138.5° (4mm); M 199.6, 188.9 (calculated 190); n_D^{20} 1.5360; 81% enol; its semicarbazone: mp 116-117°). Infrared spectrum of

Card 2/3

Letter to the Editor. Isomerization of Secondary-Tertiary Acetylenic α -Glycol Into a Substituted β -Furan

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SOV/79-30-1-78/78

furanone had the following absorption bands: carbonyl (1,709 cm^{-1}), double bond (1,623 cm^{-1}), ether oxygen in the tetrahydrofuran ring (1073 cm^{-1}), and hydroxyl (3,440 cm^{-1}) Use of Absorption Spectroscopy in Chemistry--Primeneniye spektroskopii v khimii--IL (1959). There are 3 Soviet references.

ASSOCIATION: Leningrad Lensoviet Technological Institute (Leningradskiy tekhnologicheskiy institut imeni Lensoveta)

SUBMITTED: October 3, 1959

Card 3/3

5.3400

AUTHORS: Pavlova, L. A., Orlova, A. N., Venus-Danilova, E. D.

TITLE: Concerning the Condensation of 3,3-Dimethyl-1-Phenyl-1-Hydroxyphthalan and 5,5-Dimethyl-3,4-Diphenyl-3-Hydroxy-dihydrofuran-2,5 With Acetic Anhydride

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3, pp 735-742 (USSR)

ABSTRACT: This is the continuation of investigations of the condensation of hydroxyhydrofurans and hydroxyphthalans with acetone, phenylmethylpyrazolone, and other compounds (this journal, Vol 26, p 884 (1956); ibid., Vol 28, p 651 (1958); ibid., Vol 29, p 1588 (1959). In the present study, 3,3-dimethyl-1-phenyl-1-hydroxyphthalan (I) was condensed with acetic anhydride on boiling for 4 hr in the presence of pyridine. The reaction gave (3,3-dimethyl-1-phenylphthalyl-1) acetic acid (II, yield 35%; mp 106-107° C, from ethyl ether + petroleum ether) and o-isopropenylbenzophenone (IV, yield 52.4%, mp 42-43° C, from methanol dilute). The latter was formed as a result

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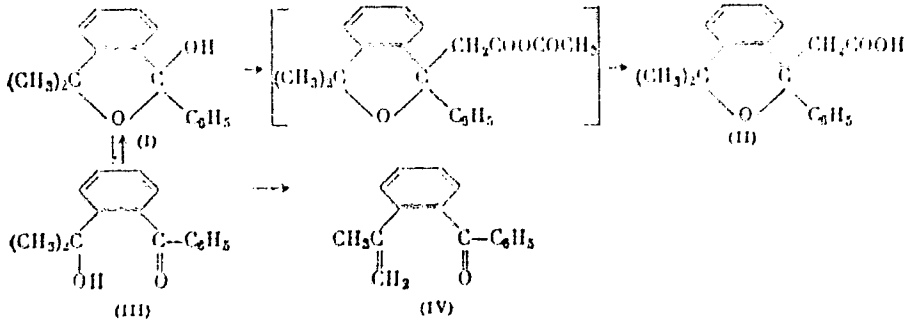
Concerning the Condensation of 3,3-Dimethyl-1-Phenyl-1-Hydroxyphthalan and 5,5-Dimethyl-2,4-Diphenyl-2-Hydroxy-dihydrofuran-2,5 With Acetic Anhydride

78251
SOV/79-30-3-5/69

of the dehydration of the open hydroxyketo-form (III) of phthalan I.

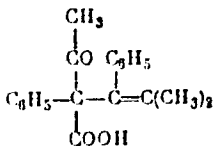


Card 2/5

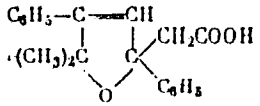
Concerning the Condensation of 3,3-Dimethyl-1-Phenyl-1-Hydroxyphthalan and 5,5-Dimethyl-2,4-Diphenyl-2-Hydroxy-dihydrofuran-2,5 With Acetic Anhydride

78251
SOV/79-30-3-5/69

The condensation of 5,5-dimethyl-2,4-diphenyl-2-oxydihydrofuran-2,5 with acetic anhydride gave (5,5-dimethyl-2,4-diphenyl-2,5-dihydrofuryl-2) acetic acid (VI, mp 137-138° C), and not acid (V) as suggested previously by the authors (this Journal, Vol 23, p 681 (1953).



(V)

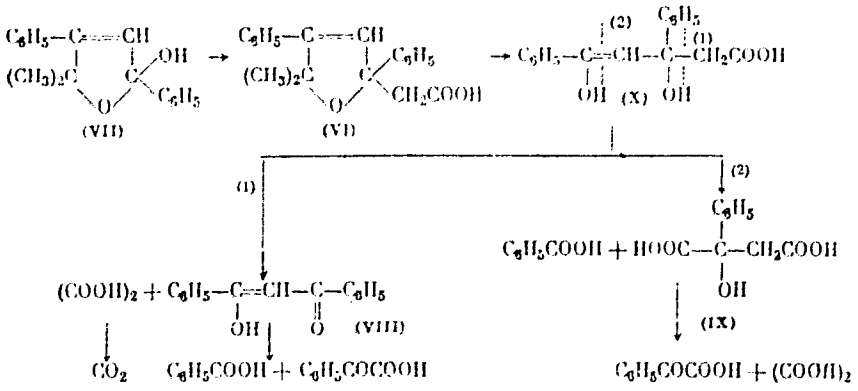


(VI)

Card 3/5

Concerning the Condensation of 3,3-Dimethyl--1-Phenyl-1-Hydroxyphthalan and 5,5-Dimethyl-2,4-Diphenyl-2-Hydroxy-dihydrofuran-2,5 With Acetic Anhydride

78251
SOV/79-30-3-5/69



Card 4/5

Concerning the Condensation of 3,5-Dimethyl-1-Phenyl-1-Hydroxyphthalan and 3,5-Dimethyl-2,4-Diphenyl-2-Hydroxy-dihydrofuran-4,5 With Acetic Anhydride

73-51
SOV/79-30-3-5/69

The structure of VI was confirmed by investigating its oxidation with potassium permanganate. The primary product of the oxidation, the hydroxyketo-acid (X), could not be separated as it was oxidized rapidly in 2 directions forming: (1) dibenzoylmethane (VIII, yield 39%) and oxalic acid; and (2) α-phenylmalic acid (IX, yield 10.7%) and benzoic acid. There are 23 references, 2 U.S., 2 U.K., 2 French, 1 Dutch, 8 German, 1 Czechoslovak, 7 Soviet. The U.S. and U.K. references are: J. B. Niedrl, W. F. Hart, J. Am. Chem. Soc., 59, 719 (1937); J. E. Humphries, J. Chem. Soc., 374 (1926); E. B. Barnett, J. W. Cook, I. G. Nixon, J. Chem. Soc., 504 (1927); E. H. Huntress, H. C. Walter, J. Am. Chem. Soc., 70, 3702 (1948).

ASSOCIATION: Lensoviet Leningrad Technological Institute (Leningradskiy tekhnologicheskiy institut imeni Lensoveta)

SUBMITTED: December 30, 1958

Card 5/5

ANTONOVA, A.A.; VENUS-DANILOVA, E.D.

Conversions of pinacones with substituted acetylene radicals. Part 18: Synthesis and conversions of unsym. methyldiphenylvinylacetylenylethylene glycol (2-methyl-1,1-diphenyl-5-hexen-3-yne-1,2-diol). Zhur. ob. khim. 30 no.9:2872-2877 S '60. (MIRA 13:9)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Hexenynediol)

S/079/60/030/009/015/015
B001/B064

AUTHORS: Danilov, S. N., Venus-Danilova, E. D., Orlova, A. N., Yegorov, A. G., Kazimirova, V. I.

TITLE: In Memory of A. I. Bol'shukhin

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 9, pp. 3145-3147

TEXT: A. I. Bol'shukhin died on November 14, 1959. An outstanding pedagogist, he ranked among the best teachers at several institutes of Leningrad University. A son of peasants, he was born in the Government of Vitebsk on February 20, 1906. At the age of only fifteen he was already allowed to frequent the preparatory classes at the physical and mathematical department of Leningrad University. He worked himself through his student years as a laborer and a clerk, and later was a laboratory assistant at the Tuberkuleznyy institut (Institute of Tuberculosis). There, under the guidance of E. D. Venus-Danilova he was able to complete his graduation treatise on the synthesis of thyroxine (Ref. 1), which gave a description of the intermediates 3,5-diiodo-4-(4'-ethoxy phenoxy)-nitro-

In Memory of A. I. Bol'shukhin

S/079/60/030/009/015/015
B001/B064

benzene; 3,5-diiodo-4-(4'-ethoxy phenoxy)-aniline along with his hydrochloric salt (Ref. 1). After graduation he worked out an original method of determining acetyl cellulose-bound sulfuric acid at the Institut drevesiny (Wood Institute), at the laboratory headed by N. I. Nikitin (Ref. 2). He collaborated in the synthesis of soluble cellulose triacetate (Ref. 3). As an assistant, he worked in the field of general, inorganic, and organic chemistry at the Lesnaya akademiya (Academy of Forestry), at the Komvuz imeni Stalin, at the Zootekhnicheskiy institut (Zootechnical Institute), and at the Leningradskiy gosudarstvennyy universitet (Leningrad State University). He submitted his dissertation for the degree of a Candidate of Chemical Sciences at the Leningradskiy tekhnologicheskiy institut im. Lensoveta (Leningrad Technological Institute imeni Lensovet). During the war he headed the laboratory of the Glavnaya vodoprovodnaya stantsiya (Central Hydrological Station) in Leningrad, and, later, the Trust "Lenvodoprovod". From 1943 on he was a docent at the Pedagogicheskiy institut im. Gertsena (Pedagogical Institute imeni Gertsen), and at the Leningradskiy pedagogicheskiy institut (Leningrad Pedagogical Institute). After the two institutes were merged he was appointed docent of the Chair of Inorganic Chemistry. A list is given of his writings a part of which was worked out jointly with E. D. Venus-Danilova, A. N. Orlova, A. G. Yegorov, N. I. Nikitin, T. N. Rudnev, N. Ya. Solechnik, S. G. Avraamov,

In Memory of A. I. Bol'shukhin

S/079/60/030/009/015/015
B001/B064

Ye. P. Brichko, V. L. Zhitorchuk. There are 1 figure and 20 Soviet references.

Card 3/3

VENUS-DANILOV, E.D.

Action of mercury salts on acetylenic α-glycols. Trudy LTI no.60:32-48 '60. (MIRA 14:6)

(Mercury salts) (Glycols)

ANTONOVA, A.A.; VENUS-DANILOVA, E.D.

Investigation of the conversions of pinacols with substituted acetylene radicals. Report 16: Synthesis and conversions of unsym-dimethyl phenyl vinylacetylenyl ethylene glycol (2-methyl-3-phenyl-6-hepten-4-yne-2,3-diol). Trudy LTI no.60:85-91 '60. (MIRA 14:6)

1. Kafedra organicheskoy khimii Leningradskogo tekhnologicheskogo instituta imeni Lensoveta.
(Heptenynediol)

ANTONOVA, A.A.; VENUS-DANILOVA, E.D.

Conversionsof pinacones with substituted acetylene radicals. Part 9: Reaction of dimethylbenzoylcarbinol with vinylacetylene in the presence of sodium amide in liquid ammonia. Zhur.ob.khim. 30 no.10:3263-3267 O '61. (MIRA 14:4)

1. Leningradskiy tekhnologicheskiy institut im. Lensoveta.
(Acetophenone) (Butenyne)

PAVLOVA, L.A.; VENUS-DANILOVA, E.D.

Hydroxydihydrfurans. Part. 7: Condensation of 5,5dimethyl-2,4-diphenyl-2-hydroxy-2,5-dihydrofuran with diethyl malonate. Zhur. ob. khim. 31 no.4:1150-1154 Ap '61. (MIRA 14:4)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Furan) (Malonic acid)

SERKOVA, V.I.; ANTONOVA, A.A.; VENUS-DANILOVA, E.D.

New type of 2-hydroxy-2,5-dihydrofuran condensation. Zhur.ob.khim. 31 no.9:3141-3142 S '61. (MIRA 14:9)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Furan)

SERKOVA, V.I.; ANTONOVA, A.A.; VENUS-DANILOVA, E.D.

Conversions of pinacones with substituted acetylene radicals. Part 20: Synthesis and conversions of assym. dimethylphenylmethylmethylacetylenyl ethylene glycol. Zhur.ob.khim. 32 no.6:1771-1778 Je '62. (MIRA 15:6)

1. Leningradskiy tekhnologicheskiy institut im. Leningradskogo Soveta.

(Ethanediol) (Acetylene)

VENUS-DANILOVA, E.D.; AL'BITSKAYA, V.M.; PRINTSEVA, Z.V.; VOROB'YEV, L.N.

Conversions of secondary-tertiary acetylenic α-glycols under the effect of sulfuric acid. Zhur.ob.khim. 32 no.7:2118-2122 Jl '62. (MIRA 15:7)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Glycols)

PAVLOVA, L.A.; YAKOVLEV, S.V.; VENUS-DANILOVA, E.D.

Transformations of pinacols with substituted acetylenic radicals. Part 21: Synthesis and transformations of 2-methyl-3-phenyl-5-p-tolyl-4-pentyn-2,3-diol. Zhur.ob.khim. 32 no.10:3260-3265 O '62. (MIRA 15:11)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

(Glycols)

MELENT'YEVA, T. G.; PAVLOVA, L. A.; VENUS-DANILOVA, E. D.

Hydroxydihydrofurans. Part 8: 3,3-dimethyl-tert-butylacetylenyl-1-hydroxyphthalan. Zhur. ob. khim. 33 no.1:55-59 '63. (MIRA 16:1)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

(Phthalan)

MELENT'YEVA, T.G.; PAVLOVA, L.A.; VENUS-DANILOVA, E.D.

Hydroxydihydrofurans. Part 9;
3,3-Dimethyl-1-phnylacetylenyl-1-hydroxyphthalan. Zhur.ob.khim.
33 no.6:1851-1857 Je '63. (MIRA 16:7)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Phthalan)

MELENT'YEVA, T.G.; PAVLOVA, L.A.; VENUS-DANILOVA, E.D.

Hydroxydihydrofurans. Part 10:
3,3-dimethyl-1-p-tolylacetylenyl-1-hydroxyphthalan. Zhur.ob.khim.
33 no.7:2126-2129 Jl '63. (MIRA 16:8)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Phthalan)

MELENT'YEVA, T.G.; PAVLOVA, L.A.; VENUS-DANILOVA, E.D.

Hydroxydihydrofurans, Part 11: 3,3-dimethyl-1-methylacetylenyl-1-hydroxyphthalan. Zhur. ob. khim. 33 no.8:2548-2552 Ag '63. (MIRA 16:11)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

ANTONOVA, A.A.; VENUS-DANILOVA, E.D.

Transformation of pinacols with substituted acetylenic radicals
Part 21: Synthesis and transformations of asymm.
dimethylphenylisopropenylacetylenyl ethylene glycol. Zhur. ob.
khim. 34 no.1:218-219 Ja '64 (MIRA 17:8)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

MELENT'YEVA, T.G.; PAVLOVA, L.A.; VENUS-DANILOVA, E.D.

Hydroxydihydrofurans. Part 12: Basic properties of the isomerization products of acetylenic hydroxyphthalans. Zhur. ob. khim. 34 no. [illegible] JL '64. (MIRA 17:8)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

ORLOVA, A.N.; PAVLOVA, L.A.; VENUS-DANILOVA, E.D.

Hydroxydihydrofurans. Part 13: Condensation of 3,3-dimethyl-1-phenyl-1-hydroxyphthalan and 5,5-dimethyl-2,4-diphenyl-2-hydroxy-2,5-dihydrofuran with malonic acid. Zhur. ob. khim. 34 no.10:3265-3270 O '64. (MIRA 17:11)

1. Leningradskiy gosudarstvennyy pedagogicheskiy institut im. Gerstena i Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

SERKOVA, V.I.; PAVLOVA, L.A.; VENUS-DANILOVA, E.D.

Transformations of pinacones with substituted acetylenic radicals. Part 23: Synthesis and transformation of non-symmetrical dimethyl-tert-butyl-phenylacetylenyl ethylene glycol. Zhur. ob. khim. 34 no.11:3624-3630 N '64 (MIRA 18:1)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

DANILOV, S.N., gl[illegible]. red.: ARBUZOV, A.Ye., red.; VVEDENSKIY, A.A., red.; VENUS-DANILOVA, E.D., red.; ZAKHAROVA, A.I., red.; IOFFE, I.S., red.; KAVERZNEVA, Ye.D., red.; LUTSENKO, I.F., red.; MISHCHENKO, K.P., red.; NEMTSOV, M.S., red.; PETROV, A.A., red.; FREYDLINA, R.Kh., red.; SHEMYAKIN, M.M., red.; SHUKAREV, S.A., red.; YUR'YEV, Yu.K., red.

[Biologically active compounds] Biologicheski aktivnye soedineniia. Moskva, Nauka, 1965. 305 p.
(MIRA 18:7)

DANILOV, S.N., glav. red.; ZAKHAROVA, A.I., red.; ARBUZOV, A.Ye., red.; VVEDENSKIY, A.A., red.; VENUS-DANILOVA, E.D., red.; IOFFE, I.S., red.; KAVTARADZE, Ye.D., red.; LUTSENKO, I.F., red.; MISHCHENKO, K.P., red.; NEMTSEV, M.S., red.; PETROV, A.A., red.; FREYDLINA, R.Kh., red.; SHEMYAKIN, M.M., red.; SHCHUKAREV, S.A., red.; YUR'YEV, Yu.K., red.

[Problems of organic synthesis] Problemy organicheskogo sinteza. Moskva, Nauka, 1965. 323 p. (MIRA 18:8)

PAVLOVA, L.A.; VENUS-DANILOVA, E.D.; YEL'TSOV, A.V.; ORLOVA, A.N.

5,5-Dimethyl-2,4-diphenyl 2,5-dihydrofuran. Zhur. ob. khim. 35 no.9:1690-1691 S '65. (MIRA 18:10)

DEYCHMAN, G.I.; GRIGO'YEVA, A.G.; VENUSTOV, N.V.

Effect of live virus concentrations in anti-influenza vaccine on its immunological activity [with summary in English]. Vop. virus 3 no.6:357-362 N-D '58. (MIRA 12:1)

1. Leningradskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok.

(INFLUENZA, immunol.
vaccine, eff. of live virus concentration on immunol. qualities (Rus))

VEN'YAMINOV, A.N., red.

[New varieties of fruit in the central region of the European USSR and the Ukraine]Novye sorta plodovykh kul'tur srednei polosy Evropeiskoi chasti SSSR i Ukrainy. Moskva, Izd-vo Mosk. univ., 1961. 462 p. (MIRA 15:12)
(Fruit--Varieties)

VEN'YAMINOV, A. N.

20890. Ven'yaminov, A. N. Michurinskoye ucheniye v deystuii (Iz praktiki selektsii mestnogo sorta slivy skorospelki) Sad. i ogorod, 1949, No. 6, s. 12-14.

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949

1. VEN'YAMINOV, A. N.

2. USSR (600)

4. Cherry

7. Clonal selection of the cherry. Agrobiologiia no. 5, 1952

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

1. VEN'YAMINOV, A. N., Prof.
2. USSR (600)
4. Chernenko, Semen Fedorovich, 1877 -
7. Anniversary of an outstanding plant breeder, Sad i og., No. 11, 1952.

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

VOL'TAKEVICH, A. K.

Selektsiia vishni, slivy i abrikosa v usloviiakh srednei [illegible] oblasti, plum and apricot varieties for [illegible] Moskva, Sel'khozgiz, [1954] 359 p.

SO: Monthly List of Russian Accessions, Vol 7, No 4, July 1954.

VEN'YAMINOV, A.N., professor.

Apricot in the central zone. Priroda 43 no.8:109-111 Ag '54.
(MLRA 7:8)

1. Voronezhskiy sel'skokhozyaystvennyy institut.
(Apricot)

VEN'YAMINOV, A. N.

Cherrie andplums Moskva, Gos. izd-vo selkhoz lit-ry, 1955. 191 s.

1. Cherry. 2. Plum.

KURYNDIN, Ivan Ivanovich; MALINKOVSKIY, V.V.; YEN'YAMINOV, A.N.; BELOKHONOV, I.V.; KRAVCHENKO, Z.I., redaktor; PEVZNER, V.I., tekhnicheskiy redaktor

[Fruit culture] Plodovodstvo. Izd. 5-oe, perer. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 464 p. (MLRA 9:11)
(Fruit culture)

ZAYETS, V.K., kandidat sel'skokhozyaystvennykh nauk; VEN'YAMINOV, A.N.; YENIKEYEV, Kh. K.; RYABOV, I.N.; KOSTINA, K.P.; PIMAYEV, Ye. P.; SYUBAROVA, E.P.; VASIL'YEV, K.V.; PROTASEVICH, L.A.; CHERNYATENKO, A.S.; UL'YANISHCHEV, M.M.; ORATOVSKIY, M.T.; DUKA, S.Kh.; SINITSYNA, N.S., redaktor; SOKOLOVA, N.N., tekhnicheskiy redaktor

[Breeding stone fruits; collection of articles] Selektsiia kostochkovykh kul'tur; sbornik statei. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1956. 278 p. (MLRA 10:4)

1. Moscow, Nauchno-issledovatel'skiy institut sadovodstva imeni I.V. Michurina.
(Fruit culture)

VEN'YAMINOV, A.N., prof.

Fertile hybrids of the domestic plum and oriental varieties.
Agrobiologiia no.4:68-72 Jl-Ag '58. (MIRA 11:9)

1. Voronezhskiy sel'skokhozyaystvennyy institut.
(Plum)

USSR/Cultivated Plants - Fruits. Berries. H-4

Abs Jour : Ref Zhur - Biol., No 9, 1956, 38511

Author : Ven'yaminov, A.N.

Inst : Voronezh Agricultural Institute.

Title : Michurin's Theory of Vitality in the Selection of Fruit Crops and Their Agrotechny.

Orig Pub : Nauch. Voronezhsk. s.-kh. in-ta, 1956, 26, No 2, 19-33.

Abstract : Data on the winter resistance of seedlings obtained from different combinations of varieties is given in this paper, as well as data relative to the influence of low temperatures on apricot pits and the effect of the vegetative proximity of plums seedlings. Data concerning the role of root systems, the influence of the graft on the length of the root system, and the yielding capacity of

Card 1/2

USSR/Cultivated Plants - Fruits, Berries I

II-8

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39511

different varieties of apple trees is also given in this paper. There are three ways to increase the vitality of plants: 1. Hybridization of varieties originally grown in areas which were far apart by mixing their pollen, by conducting preliminary graftings, and by using other methods which can increase the biological difference in the character of sexual cells. This process creates the most vital organisms. 2. Grafting on wildings (rootstock). The best rootstocks are the seedlings, which were obtained by free pollination of winter resistant, geographically remote varieties. Their biological qualities differ from those of the graft. However, a sharp difference between rootstock and the graft causes a decrease in vitality which expresses itself in poor adaptation and decreased growth ability. This brings about later on the premature extinction of the trees. 3. The selection of bud variations which cause the differences in the yielding capacity of individual trees. -- Ye.V. Kolesnikov

Card 2/2

BISTI, Yevgeniy Georgiyevich, kand. sel'khoz. nauk; VEN'YAMINOV, A.N., doktor sel'khoz. nauk, red.; GRIGOROVICH, A.T., red.; SKRADZSKAYA, P.G., tekhn. red.

[Planting orchards] Zakladka plodovogo sada. Voronezh, Voronezhskoe knizhnoe izd-vo, 1959. 42 p. (MIRA 14:10)
(Fruit culture)

VEN'YAMINOV, A.N., doktor sel'skokhozyaystvennykh nauk; YUSUBOV, A.M.

Effect of conditions of seed stratification on the development of apricot seedlings. Agrobiologiia no.1:148-150 Ja-F '59. (MIRA 12:4)

1. Voronezhskiy sel'skokhozyaystvennyy institut.
(Apricot)

SALMANOV, Aleksandr Semenovich, assistent; SHALIMOV, Sergey Ivanovich, nauchnyy sotrudnik; VEN'YAMINOV, A.N., doktor sel'skokhoz.nauk, red.; GRIGOROVICH, A.T., red.; SKHADZSKAYA, P.G., tekhn.red.

[Viticulture] Kul'tura vinograda. Voronezh, Voronezhskoe knizhnoe izd-vo, 1959. 41 p. (MIRA 14:1)

1. Kafedra sadovodstva Voronezhskogo sel'skokhozyaystvennogo instituta (for Salmanov). 2. Rossoshanskaya plodovo-yagodnaya stantsiya (for Shalimov).
(Viticulture)

VEN'YAMINOV, Aleksey Nikolayevich, doktor sel'skokhoz.nauk; GRIGOROVICH, A.T., red.; SERADZSKAYA, P.G., tekhn.red.

[Growing grafted fruit seedlings] Vyrashchivanie privitykh plodovykh sazhentsev. Voronezh, Voronezhskoe knizhnoe izd-vo, 1960. 34 p. (MIRA 14:1)

1. Zaveduyushchiy kafedroy sadovodstva Voronezhskogo sel'skokhozyaystvennogo instituta (for Ven'yaminov).
(Fruit culture)

VEN'YAMINOV, A.N., prof., doktor sel'skokhozyaystvennykh nauk; KOSHELENKO, V.M., kand.sel'skokhozyaystvennykh nauk

Use of hybrids in producing seeds of apple rootstock. Agrobiologiia no.1:114-116 Ja-F '63. (MIRA 16:5)

1. Voronezhskiy sel'skokhozyaystvennyy institut.
(Apple) (Seed production)

VEN'YAMINOV, A.N., prof.

New varieties of fruit plants in the central zone of the European part of the R.S.F.S.R. and the White Russian S.S.R. Trudy MOIP. Otd. biol. 4:7-333 '61. (MIRA 15:11)
(Fruit—Varieties)

1. VENYAMINOV, N.

2. USSR (600)

4. Korshunov, A. N.

7. "Analysis of reports on carrying out district budgets." A. N. Korshunov, N. M. Maydanyuk, Reviewed by N. Venyaminov. Fin. i kred. SSSR no.1 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953.

OBOLENSKIY, N., VENYAMINOV, N.

Budget

"Improve the practice of drawing up and carrying out local budgets." Sov.fin, 12, No. 5, 1952.

Monthly List of Russian Accessions, Library of Congress, August 1952. UNCLASSIFIED.

[redacted], M., [redacted].

Local Finance

Improve the practice of drawing up and carrying out local budgets. Sov. Fin. 13, No. 5, 1952.

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

OBOLENSKIY, N., VENYAMINOV, N.

Local Finance

Improve the practice of drawing up and carrying out local budgets. Sov.fin. 13, No. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, August 1952. Unclassified.

VENYAMINOV, S.

29016 Priemnik M-648. Radio, 1949, No 9, S. 26-29

SO: Letopsi' Zhurnal'nykh Statey, Vol. 39, Moskva, 1949

VEN'YAMINOV, S.A.; TOPCHIYEVA, K.V.

Gas chromatographic method of studying the adsorption of acetylene and vinyl chloride on technical aluminum oxide. Kin.i kat. 5 no.6:1107-1110 N-D '64. (MIRA 18:3)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, khimicheskiy fakul'tet.

TOPCHIYEVA, K.V.; ROMANOVSKIY, B.V.; VEN'YAMINOV, S.A.

Evaluation of the activity of catalysts employed in cracking. Vest. Mosk.un.Ser. 2: Khim. 15 no.1:3-10 '60. (MIRA 13:7)

1. Kafedra fizicheskoy khimii Moskovskogo universiteta.
(Catalysts) (Cumene) (Cracking process)

TOPCHIYEVA, K.V.; VEN'YAMINOV, S.A.

Kinetics of hydrochlorination of acetylene on aluminum oxide. Kin. i kat. 4 no.3:450-460 My-Je '63. (MIRA 16:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova, khimicheskiy fakul'tet.
(Acetylene) (Hydrochloric acid)
(Aluminum oxide)

TOPCHIYEVA, K.V.; VEN'YAMINOV, S.A.

Hydrochlorination of acetylene on aluminum oxide. Kin.i kat. 3 no.1:118-122 '62. (MIRA 15:3)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova, khimicheskiy fakul'tet.
(Acetylene) (Hydrochloric acid) (Aluminum oxide)

KADYROV, F.A.; VEN'YAMINOV, S.N.

Introduction of the small intestine through a gastroenterostomic opening into the stomach. Khirurgiia no.3:115-117 '62. (MIRA 15:3)

1. Iz khirurgicheskogo otdeleniya (zav. S.N. Ven'yaminov) Lipetskoy oblastnoy bol'nitsy.
(STOMACH--SURGERY) (INTESTINES--INTUSSUSCEPTION)

VENYAMINOV, V. N.

Analytical geometry. Moskva Akademiia vozdushnogo flota 1934. 144 p.

Yudin QA551.V45

KHORLIN, A.Ya.; VEN'YAMINOVA, A.G.; KOCHETKOV, N.K.

Structure of calopanax-saponin A. Dokl. AN SSSR 155 no. 3:619-622 Mr '64. (MIRA 17:5)

1. Institut khimii prirodynykh soyedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Kochetkov).

KORK, B. (Cork, B.); LAMBERTSON, G.; PICHCHIONI, O.; VENZEL, V.

Antineutrons produced by antiproton charge exchange. (Translated from "Phys.Rev.," 104, 1193, 1956). Usp.fiz.nauk 62 no.4:385-390 Ag '57. (MIRA 10:10)

(Neutrons) (Protons)

VERIAEVICH, V. N.

Sur un probleme de la representation conforme de M. Caratheodory. Matem. SB., 31 (1924), 91-93.

Geometricheskoye dokazatel'stvo osnovnykh teorem teorii proizvodnykh chisel. Matem. SB., 32 (1925), 101-110

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A. G.
Markushevich, A. I.
Rashevskiy, P. K.
Moscow, Leningrad, 1948

VENIAMINOV, Yu. [reviewer].

Remarkable experience ("Experience of progressive collective farms." Reviewed by IU.Veniaminov). Nauka i zhizn' 20 no.12:44-45 D '53.
(MLRA 6:12)
(Collective farms)

KHORLIN, A.Ye.; BAKINOVSKIY, L.V.; VAS'KOVSKIY, V.Ye.; VEN'YAMINOVA, A.G.; OVODOV, Yu.S.

Triterpene saponins. Report No.6: Distribution chromatography of triterpene saponins. Izv. AN SSSR. Ser. khim. no.11:2008-2011 N '63. (MIRA 17:1)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

KHORLIN, A.Ya; VEN'YAMINOVA, A.G.

Triterpene saponins. Report No.12; Saponins obtained from Kalopanax septemlobum (Thub.) Koidz. Izv. AN SSSR. Ser. khim. no.8:1447-1452 Ag '64. (MIRA 17:9)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

VENYGR, h., inz. (Praha)

Use of hydrostatic transmissions in the diesel hydraulic shunting locomotives. Strojirenstvi 14 no.1:70-75 Ja'64.

VENYGR, Karel, inz.

Apparatus for automatic sorting of piston rings according to free ferrite content. Automatizace 5 no.10:280 O '62.

1. Ceskomoravska-Kolben-Danek Praha.

VENYGR, Karel, inz.

Outlook for nonconventional railroads in Czechoslovakia and criteria for selecting a suitable system. Doprava no.11: 387-388 '62.

S/261/62/000/005/001/001
I010/I210

AUTHOR: Venygr, Karel

TITLE: Pump for transporting fluid metals

PERIODICAL: Referativnyy zhurnal, Otdel'nyy vypusk. Kompressory i kholodil'naya tekhnika, no. 5, 1962, 20, abstract 34.5.140. "Techn. zprávy ČKD", 1960, v. 6, no. 12, 392-393

TEXT: A prototype of a pump is described, in which a rotating system of permanent magnets is used for the creation of a rotating magnetic field. The immovable pumping pipe is located between the pole pieces of permanent magnets.

[Abstracter's note: Complete translation.]

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VENYUKOV, M. [author]; BOROB'YEV, V. [reviewer].

"Trips through the Amur River region, China, and Japan." M.Veniukov. Reviewed by V.Vorob'ev. Geog.v shkole no.5:76-77 S '53. (MLRA 6:8)
(Far East--Description and travel) (Veniukov, Mikhail Ivanovich, 1832-1901)

VENYUKOV, Mikhail Ivanovich, 1832-1901.

[Travels in the Amur region, China and Japan] Puteshestviia po Priamur'iu, Kitaiu i Laponii. [ ] Dal'nevostochnoe gos.izd-vo, 1952. 301 p. (MLRA 6:9)

(Far East--Description and travel)

VENYUKOV, V.T. (Stantsiya Khlevishche, Yugo-Vostochnoy dorogi);
ISHKOV, T.A., dorozhnyy master

Let's work the communist way. Put' prut.khoz. 5 no.11:8-9 N
'61. (MIRA 14:12)

(Railroads--Employees)

VENZERUL', S.U.

Methods of designing efficient code relays. Avtom., telem.i sviaz' 4 no.4:13-14 Ap '60. (MIRA 13:6)

1. Zamestitel' glavnogo tekhnologa zavoda "Transsvyaz'." (Railroads--Electric equipment) (Electric relays)

VENZERUL', S.U.

Repair of code relay. Avtom.telem. i sviaz' 4 no.11:39-41 N '60.
(MIRA 13:11)

1. Zamestitel' glavnogo tekhnologa zavoda "Transsvyaz'."
(Electric relays)

BERNSHTEYN, M.L., doktor tekhn. nauk, prof.; BELKIN, M.Ya., kand. tekhn. nauk; VENZHEGA, A.S., kand. tekhn. nauk; KALYAGINA, G.P., inzh.; RYABOVA, L.A., inzh.

High-temperature thermomechanical surface hardening. Vest. mashinostr. 45 no.6:63-65 Je '65. (MIRA 18:6)

VENZHEGA, A.S., inzh.; BELKIN, M.Ya., inzh.

Increasing the wear resistance of heavy-machinery parts. Mashinostroenie no.3:10-13 My-Je '64. (MIRA 17:11)

VENZHEGA, A.S., inzh.

New designs of metal-rolling and adjusting equipment. Vest. mash. 39 no.3:34-37 Mr '59. (MIRA 12:4)

1. Staro-Kramatorskiy mashinostroitel'nyy zavod.
(Kramatorsk--Rolling mills)

SOV/122-59-3-10/42

AUTHOR: Venzhega, A.S. (Engineer)

TITLE: New Designs of Rolling Mill and Finishing Equipment (Novyye konstruktsii prokatnogo i ad"yustazhnogo oborudovaniya)

PERIODICAL: Vestnik Mashinostro yeniya, 1959, Nr 2, pp 34-37 (USSR)

ABSTRACT: Rolling mills with a high degree of automatic control and of advanced design recently constructed by the Staro-Kramatorskiy Mach.-Building Works are briefly reviewed. 1. A continuous four-frame 4-roll mill for the cold rolling of steel strip of 180-300 mm width and 1.5-0.5 mm thickness at rates up to 15 m/sec. The loading of the strip bobbins, their unloading, and other operations are mechanised. The thickness is controlled by isotope micrometers ofTsLA design and for strip tension control, inductive pick-offs are installed. The working rolls are mounted on precision rolling bearings, the supporting rolls on fluid friction plain bearings. The bobbin diameter is 1500 mm and its weight 3700 kg. A high rear tension is applied. The mill is installed at Magnitogorsk.

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New Designs of Rolling Mill and Finishing Equipment

2. A reversing four-roll mill produces strip of 300 mm width and from 3 to 0.2 mm thickness at rates of 10 m/sec. 3. High-speed three-frame mills with two rolls produce flat spring stock up to a tensile strength of 260 kg/mm^2 at a rate of 10 m/sec. A laminating mill illustrated in Fig 1 was exhibited at the 1958 All-Union Industrial Exhibition. Full automation with continuous quality control was achieved. Carbide rolls are machined on special anodic-mechanical grinders to an accuracy of 1 micron ensuring a 1st grade of stock accuracy. New fly shears exceeding in speed the best foreign equipment by a factor of 1.5 have been produced. 1) Planetary shears without reciprocating parts achieve a high degree of balance. The shearing force reaches 100 tons and permits cutting a section of 100 x 100 mm at 800°C at rates of stock advance up to 7 m/sec. The cutting mechanism (shown diagramatically in Fig 2) consists of two drums each with two parallel planetary gears inside. 2) Eccentric crank shears have a mechanism illustrated in perspective in Fig 3, which consists of two rotating

New Designs of Rolling Mill and Finishing Equipment

eccentrics with a built-in crank each. By driving the eccentrics at different speeds and synchronising the speed of rotation of the cutting edges attached to the cranks with the speed of the advancing stock, different cut-off lengths can be obtained at a stock speed up to 5.2 m/sec and with a cutting force of 100 tons.
3) Universal fly-shears of 25 tons capacity are designed for rolling profiles up to a profile height of 60 mm and for tubes up to a diameter of 73 mm at metal speeds up to 15 m/sec. The knives are attached to connecting rods, whose heads are hinged in rotating cranks. The axis of rotation performs a complex motion created by eccentrics and two-eccentric shafts. The cranks rotate 2, 3 and 4 times faster than the eccentric and the two-eccentric shaft rotates twice as slow. 4. A bobbin binding machine has been made experimentally for wire bobbins at 800°C. Bobbins of 1400 mm outside diameter, 800 mm inside diameter and a height of 300 mm are bound by a mechanism consisting of a drum rotating in a housing on supporting rollers. A two-jaw vice is mounted in the drum. The

New Designs of Rolling Mill and Finishing Equipment

upper jaw contains tubes for guiding the binding wire of 3-6 mm diameter and scissors for cutting the wire. A single binding operation takes 15 seconds. Further equipment scheduled for manufacture includes: (1) An aluminium foil rolling mill to produce 8-12 micron thick, 900-1000 mm wide foil at a rate of 20 m/sec. (2) A reversing 20-roll mill for cold rolling of strip up to 1200 mm wide and up to 50 micron thick. (3) A reversing four-roll mill for the cold rolling of high carbon steel strip wound into bobbins. (4) A laminating, continuous, free frame, two-roller mill, for round and flat stock in alloy steel. (5) Equipment for cold-rolling of bent profiles from strip of up to 10 mm thickness and up to 1200 mm width at a rate of up to 1.5 m/sec. Several other units for cold-bending of profiles from strip, and for transverse cutting, are also scheduled. The need

New Designs of Rolling Mill and Finishing Equipment

for small size high capacity rolling bearings and for electro-magnetic clutches in automation schemes is emphasised.

There are 4 figures, including 2 photographs.

ASSOCIATION: Staro-Kramatorskiy Mashinostroitel'nyy Zavod (Staro-Kramatorskiy Machine-Building Works)

DRAYGOR, D.A.; VENZHEGA, A.S.; BELKIN, M.Ya.; VAL'CHUK, G.I.; ARUTYUNOV, I.G., kand. tekhn. nauk, retsenzent; SAVEL'YEV, Ye.Ya., red.

[Roll durability in cold rolling finishing] Stoikost' valkov chistovogo kholodnogo prokata. Moskva, Izd-vo "Mashinostroenie," 1964. 126 p. (MIRA 17:7)

VENZHEGA, A.S., inzh.; BELKIN, M.Ya., inzh.

Effect of grinding conditions on the surface layer quality of rolls for cold rolling. Vest. mashinostr. 43 no.10:68-70 O '63. (MIRA 16:11)

S/129/63/000/001/004/017
E073/E335

AUTHORS: Belkin, M.Ya. and Venzhega, A.S., Engineers

TITLE: Hardening of large components by surface-working as a substitute for heat treatment

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, no. 1, 1963, 15 - 16

TEXT: The technology of strengthening the top drum of flying shears weighing 28.4 t (cutting force 150 t, bending and torsion stresses in the dangerous cross-section 500 kg/cm^2), made from steel 34[illegible] (34KhNM), is described. Bearings and gears are shrink-fitted onto the 480 and 530 mm dia. drum neck. Step-shaped specimens (r:d = 0.13) were investigated. The fatigue limit of 160-mm dia. specimens increased as a result of work-hardening from 14.5 - 20.5 kg/mm^2 in the case of normalized specimens and from 19.0 - 24.5 kg/mm^2 in the case of heat-treated specimens. Work-hardened, normalized steel has a higher fatigue index than otherwise heat-treated steels. Therefore, the laborious hardening of high-temperature tempering can be substituted by cold deformation. The flying-shears drum was first normalization-annealed and then

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machined (with an addition of 2.5 mm). To prevent layering, the surface quality prior to work-hardening must not be lower than class 6. The area where the bearings and gears are fitted is work-hardened with a vibrating roller of 90 mm dia. with a profile radius of 7 mm, using a static force of 750 kg, impact energy of 3.4 kgm, feed rate of 1 mm/rev and a speed of drum rotation of 3 r.p.m. The attachment and tool rest are set to an angle of 45° relative to the drum axis. The drums are finish-machined to the required accuracy after work-hardening. There is 1 table.

ASSOCIATION: Staro-Kramatorskiy mashinostroitel'nyy zavod
(Staro-Kramatorsk Machine-building Works)

VENZHEGA, A.S., inzh.

Structural factors in the durability of rolls in cold finishing rolling of very thin strips. Met. i gornorud. prom. no.1:29-32 Ja-F '62. (MIRA 16:6)

1. Starokramatorskiy mashinostroitel'nyy zavod im. Ordzhonikidze.
(Rolls(Iron mills))

VENZHEGA, A.S.

Fighting to master advanced techniques. Mashinostroitel' no.4: 3-4 Ap '63. (MIRA 16:5)

1. Glavnyy inzhener Staro-Kramatorskogo mashinostroitel'nogo zavoda imeni S.Ordzhonikidze.
(Kramatorsk—Machinery industry)

BELKIN, M.Ya., [illegible]; [illegible], V.I.; VOYEIKIN, V.N.

[illegible] for depth of the hardened layer in alloyed steels. Metalloved. i term. obrab. metallov [illegible].

(MIRA 18:12)

1. Stanko-Kramatorskiy mashinostroitel'nyy zavod im. Ordzhonikidze.