NOVOTNY, J.

Ombrology and the needs of the water economy. p. 19.

Vol. 4, No. 1, Jan. 1954
VODNI HOSPODARSTVI
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 8, August 1956

NOVOTNY, J.

Research on the influence of forests on water conditions as compared with the influence of cultivated land. p. 202.

Vol. 4, No. 7, July 1954
VODNI HOSPODARSTVI
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 8, August 1956

NOVOTNY, J.

Problem of long-term balancing of the flow of water in rivers by dams. p. 367.

Vol. 4, no. 12, Dec. 1954
VODNI HOSPODARSTVI
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 8, August 1956

NOVOTNY, J.

General solution of the problem of long-term balance of water flow in rivers by means of water reservoirs. (To be contd.) p. 323.
VODNI HOSPODARSTVI, Prague, Vol. 4, no. 11, Nov. 1954.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6, June 1956, Uncl.

NOVOTNY, J.

"Calculation of results of cost accounting in electric-power plants."

ENERGETIKA, Praha, Czechoslovakia, Vol. 5, no. 3, March 1955

Monthly List of East European Accessions Index (EEAI), Library of Congress, Vol. 8, No. 8, August 1959

Unclassified

NOVOTNY, J.

NOVOTNY, J. Tasks of hydrology in the management of water. p. 224.

Vol. 5, NO. 7/7a, July 1955
VODNI HOSPONARSTVI
TECHNOLOGY
Praha, Czechoslovakia

Sc: East Europeon Accessions, Vol. 5, No. 5, May 1956

NOVOTNY, Jan

7.5-63 551.501.45:551.579.4

†Novotný, Jan. Reálné podmínky možnosti výpočtů povrchového odtoku vody z deštových srážek. [Practical conditions required for calculating runoff from rainfall data.] *Meteorologické Zprávy*, Prague, 8(2):29-35, April 30, 1955. fig., 84 refs., eq. DWB—The correlation between rainfall and runoff is treated theoretically and graphically, assuming rainfall of uniform intensity over the whole catchment. Typical peak flow curves are presented. The extensive list of references is a good survey, especially of German, Russian and Czech literature on the subject. *Subject Heading:* 1. Runoff evaluation.—*G.T.*

Novotny, J.

Czechoslovakia / Chemical Technology. Chemical Products H-5
and Their Application
Water treatment. Sewage water.

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1795

Author : Novotny J., Velek K., Celeryn Z.

Title : Sorption of Phenols from Sewage Water of Gas Plants with Ionites

Orig Pub: Paliva, 1956, 36, No 10, 335-342

Abstract: Description of the results of experiments, carried out under static and kinetic conditions. Composition of the phenolic fraction (in %): phenol 50.0, cresols 28.5, zylenols 21.5. The main bulk of the phenols must be removed from the sewage water by some other procedure, for example, by extraction with phenolsolvan. In such a case the extent of purification reaches

Card 1/2

Plynarensky-ustav, Prague-Běchovice

Czechoslovakia /Chemical Technology. Chemical Products H-5
and Their Application
Water treatment. Sewage water.

Abs Jour: Referat Zhur - Khimiya, No 1, 1958, 1795

98%. Under kinetic conditions were tested: strongly-basic anionite OAL, cathionite F Extra, Zeocarb 225 and Wofatit R. Under static conditions were tested Zeocarb 225, cathionite FN and F extra, and Wofatit S. The best results were obtained with Wofatit R and cathionite F, which sorb up to 18.5 g of phenol per 1 liter of cathionite. Cathionites sorb the phenols more readily from a acid medium (0.14 N H_2SO_4), the anionites -- from an alkaline (0.6 N NH_3).

Card 2/2

NOVOTNY, J.; BALATKA, B.

Terraces of the Radbuza and Uhlava rivers. p. 181.
(Sbornik, Vol. 61, no. 3, 1956, Praha, Czechoslovakia)

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

CZECHOSLOVAKIA / Chemical Technology. Chemical Products and Their Application--Water Treatment. Sewage H-5

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8713

(C) F-extra washed 0.0046; 0.758; C F-extra in H-form 0.0096; 0.711; the same in Na-form 0.0043; 0.787; C F-extra sulfonated for a period of two hours 0.661; 0.352; the same for a period of five hours 0.543; 0.377; anionite OAL in a Cl-form 0.0015; 0.930; the same in an OH-form 0.0012; 0.953; weakly basic anionite MFD in an Oh-form 0.0216; 0.698 (literature data on other ionites are given). The process was considered in the same manner as the distribution of a substance between two phases. The value of the distribution coefficient depends on the I concentration in the solution, changing, for instance, for sulfonated C F-extra from 300 to 110, while the I concentration

Card 2/3

L 45081-66

ACC NR: AP6027199 SOURCE CODE: CZ/0055/66/016/005/0409/0422

49
43
B

AUTHOR: Malek, Z.; Strajblova, J.; Fiala, J.; Novotny, J.

ORG: Institute of Radio Engineering and Electronics, Czechosl. Acad. Sci., Prague

TITLE: The influence of proper mechanical vibrations on some properties of TGS tandel (Paper read at the 2nd International Conference on Piezoelectricity in Liberec on Sept 1, 1965)

SOURCE: Chekhoslovatskiy fizicheskiy zhurnal, v. 16, no. 5, 1966, 409-422

TOPIC TAGS: mechanical vibration, tandel, flexural vibration, plane vibration, piezoeffect, permittivity, dielectric nonlinearity, frequency dependence

ABSTRACT: In the present paper the existence is proven of mechanical vibrations in TGS tandels in the frequency range from 5 kc/s to 1000 kc/s. A number of resonances were found in the given range of frequencies. Mainly plain and flexural vibrations occur. A study was made of their influence on the course of the

Card 1/2

L 45081-66

ACC NR: AP6027199

frequency dependence of the complex effective permittivity, dielectric nonlinearities of the tandel, and the thermoelectric force measured by a thermocouple on its surface. From the study of the frequency dependence of these parameters at various temperatures the conclusion is drawn that the probable cause of the origin of mechanical vibrations in a tandel is the piezoeffect. The authors would like to express their gratitude to Ing. J. Janta of the Institute of Radio Engineering and Electronics, Czechoslovak Academy of Sciences, to Associate Professor Dr. J. Tichy of the Technical University in Liberec and to Dr. J. Mastner of the Institute of Radio Engineering and Electronics for valuable discussions and suggestions, and to Associate Professor Dr. O. Taraba of the Czech Technical University for facilitating the ultrasonic experiments and helping to arrange them in his laboratory. The authors are also indebted to all their colleagues for their friendly help. [KS]
Orig. art. has: 7 figures and 2 formulas. [Authors' abstract]

SUB CODE: 09/ SUBM DATE: 15Feb65/ ORIG REF: 009/ SOV REF: 001/
OTH REF: 009/

Card 2/2 blg

NOVOTNY, JAROMIR

NOVOTNY, Jaromir, MUDr (Praha)

Dental caries and nutrition. Prakt. zub. lek. 2 no.1-2:31-38 1954.
(DENTAL CARIES, etiology and pathogenesis,
*nutritional factor)
(NUTRITION,
*nutritional factor in dent. caries)

NOVOTY, JAR

NOVOTY, Jar., MUDr (Praha)

Method of the treatment of pulpitis in Soviet preservative dentistry. Prakt. sub. lek. 2 no.3:62-65 1954.
(ROOT CANAL THERAPY)

NOVOTNY, Jaromir, Dr

Some differences between the teeth easily decaying and those resistant to decay. Cesk.stomat. no.2:48-53 Mar 55.

1. Z vyzkumneho ustavu stomatologickeho v Praze, reditel doc. Dr J. Kostlan.
(DENTAL CARIES, etiology and pathogenesis, constitutional decay tendency & resist.)

POUPA, O.; NOVOTNY, Jaromir

Fatty liver in lactation. Cesk. fysiol. 7 no.3:294-295 May 58.

1. Laborator pro fysiologii a patofysiologii premeny latek CSAV, Praha a Vyzkumny ustav stomatologicky, Praha.

(FATTY LIVER, exper.
in lactating animals (Cz))
(LACTATION,
relation to fatty liver in animals (Cz))

NOVOTNY, Jaroslav

International telephone communications. Cs spoje 7 no.11:6 N '62.

1. Ministerstvo dopravy a spoju.

L 24731-65

AM4043712 BOOK EXPLOITATION 11. B+/ G/

Raska, K. (Professor, Doctor of medical science); Havlik, O. (Doctor of natural science); Caladek, V. (Doctor of veterinary medicine); Novotny, J. (Doctor of medical science); [illegible], M. (Doctor of medical science); Symon, K. (Doctor of medical science); [illegible], J. (Doctor of natural science); Wolf, A. (Doctor of medical science), comps.

[illegible] protection in biological warfare (Der gesundheitsschutz im biologischen Krieg) [illegible], VEB DVG, 1962. 143 p. illus., biblio. No. of copies printed not given. [illegible] translation of Zdravotnicka obrana proti biologicke valce. Prague, SZdN, [illegible]. Not in LC.

TOPIC TAGS: biological warfare, civil defense, military medicine

PURPOSE AND COVERAGE: This book is intended for physicians, medical personnel, and general readers to acquaint them with biological warfare. Methods of protection are discussed.

TABLE OF CONTENTS

Foreword

Ch. 1. Short history of biological warfare -- 7

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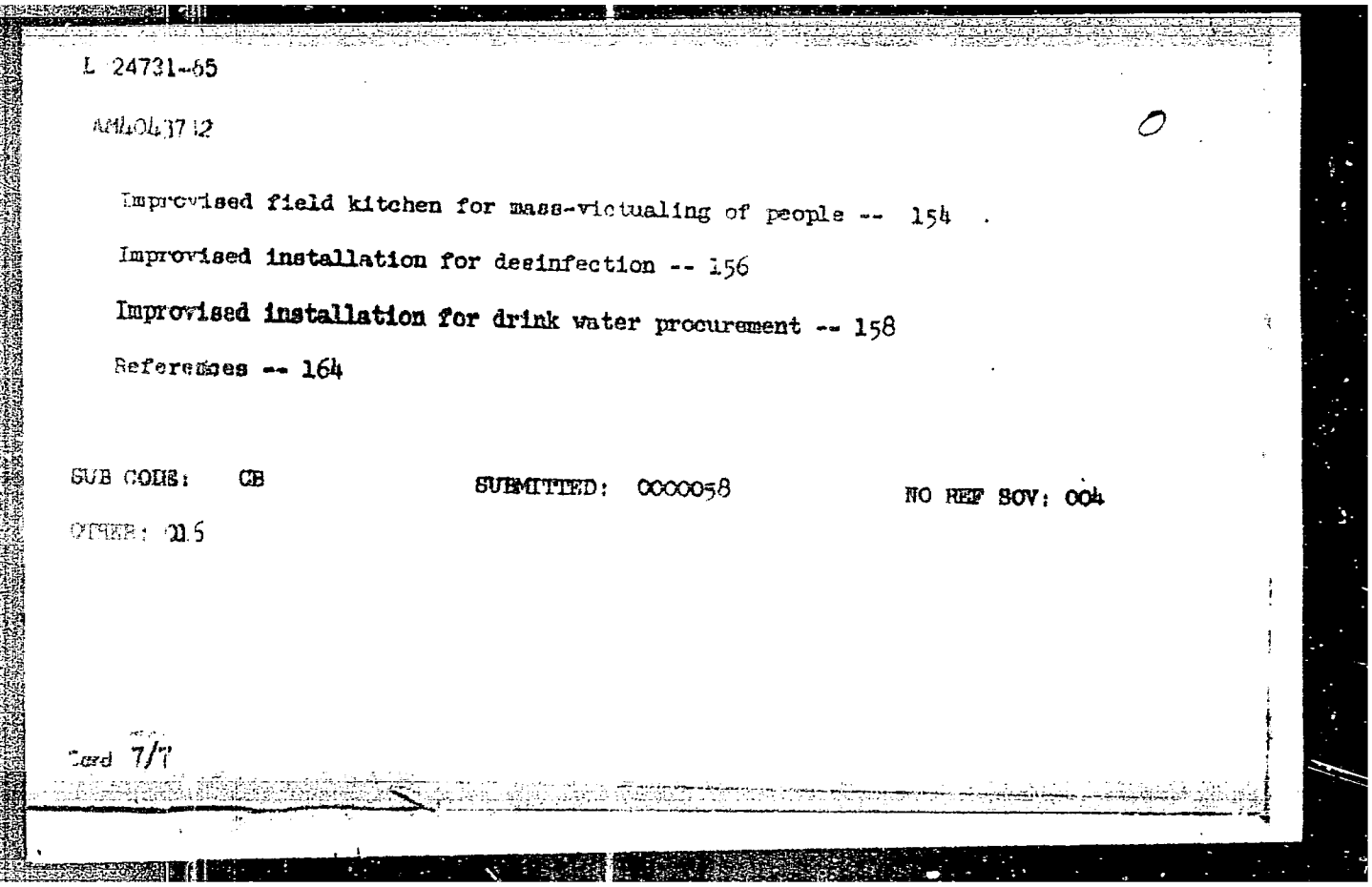
Card 5/7



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SUB CODE: CB SUBMITTED: 00Oct58 NO REF SOV: 004

OTHER: 015

Card 7/7

NOVOTNY, J.; DYMER, O.; HACLAVSKY, V.

Ambulatory pneumothorax. Roshl.tuberk. 10 no.1-2:11-33 '50.
(CIML 19:3)

1. Of the Central National Insurance Office (Head of the Health Division -- Docent Eduard Bresky, M.D.).

NOVOTNY, J.

New organization of control of tuberculosis. Cesk. nemoc. 20 no.7-10: 108-117 Sept-Dec 1952. (CLML 23:4)

NOVOTNY, J.

Control of tuberculosis on district scale. Lek. listy Brno 8 no.11:259-260 1 June 1953. (CIML 24:5)

1. Division (Head--Dobes, M.D.) of the Ministry of Health, Research Institute of Tuberculosis (Director--Docent Rudolf Krivinka, M.D.) Prague.

KOVOTNÝ, Jaroslav, MUDr.

Organization of fluorography. Česk. zdravot. 4 no.2:73-76 Mar. 1956.

1. Výzkumný ústav organisace zdravotnictví v Praze.
(TUBERCULOSIS, PULMONARY, prevention and control,
fluorography, mass technic in Czech)

L 13225-66 EWP(j)/EWA(c) RM

ACC NR: AP6006081 SOURCE CODE: CZ/0053/65/014/004/0312/0312

AUTHOR: Smetana, R.; Novotny, J.; Raskova, H.; Janku, I.

29
B

ORG: Institute of Pharmacology, CSAV, Prague (Farmakologicky ustav CSAV)

TITLE: Comparative studies of the deamination of 6-azacytidine [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 28 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 312

TOPIC TAGS: biologic metabolism, experiment animal, heterocyclic base compound, organic nitrogen compound, biochemistry

ABSTRACT: Study of metabolism of 6-azacytidine in vivo (urinary metabolism) and in tissue homogenates in mice, rats, guinea pigs, dogs, rabbits and cats indicates deamination to 6-azauridine, which is then excreted; 25-38% of the dose in all but rats (4%); the latter animals had no organ with pronounced deamination activity; in the other animal studies, deamination occurred in the liver, ileum and kidneys primarily. 6-azacytidine seems to cause all the effects mainly through its metabolite, 6-azauridine. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 005

Card 1/1

NOVOTNY, J.

CZECH

The manufacture of powdered and granulated material. I. Prchlík, C. D. Kartáková, and J. Novotný. *Palivo* 34, 121–5(1954).—Granulated and powd. material is used for purification of gases in gas works. The machinery, presses, mills for the disintegration, and mixers are described. It is pointed out that the agglomeration process is not feasible owing to the low strength of briquets in bulk handling.
Jos. Lederer

NOVOTNÝ, JAROSLAV

Use of chlorine dioxide. I. Oxidimetric determination of iodides in the presence of bromides and chlorides. Stanislav Skramovský, Zdeněk Tauer, and Jaroslav Novotný (Karlova Univ., Prague). *Chem. Listy* 48, [illegible] (1954). The detn. of I^- is based on the selective oxidation with ClO_2 which serves to det. I^- in the presence of 10,000-fold excess of Cl^- and 400-fold excess Br^-, by potentiometric titration. The titrant soln. of ClO_2 was prepd. by heating a mixt. of 150 g. $(CO_2H)_2.2H_2O$, 40 g. $KClO_3$, and 20 ml. H_2O at 60°, condensing the evolved gas, and dissolving the liquid ClO_2 in AcOH to obtain a 0.01*N* soln. the titer of which was detd. iodometrically. The detn. was carried out in approx. 2–4*N* H_2SO_4 with I concn. of 1 mg. I in 50–200 ml. soln. The method is suitable for detg. I in *pharmaceuticals*. The detn. is disturbed by all anions reacting with I^-, by Fe^{II}, As^{III}, Sb^{III}, Sn^{II}, Sn^{IV}; and by NO_3^- and large excess of Cr^{III}.

M. Hudlický

MA BI

Novotny, J.

5000

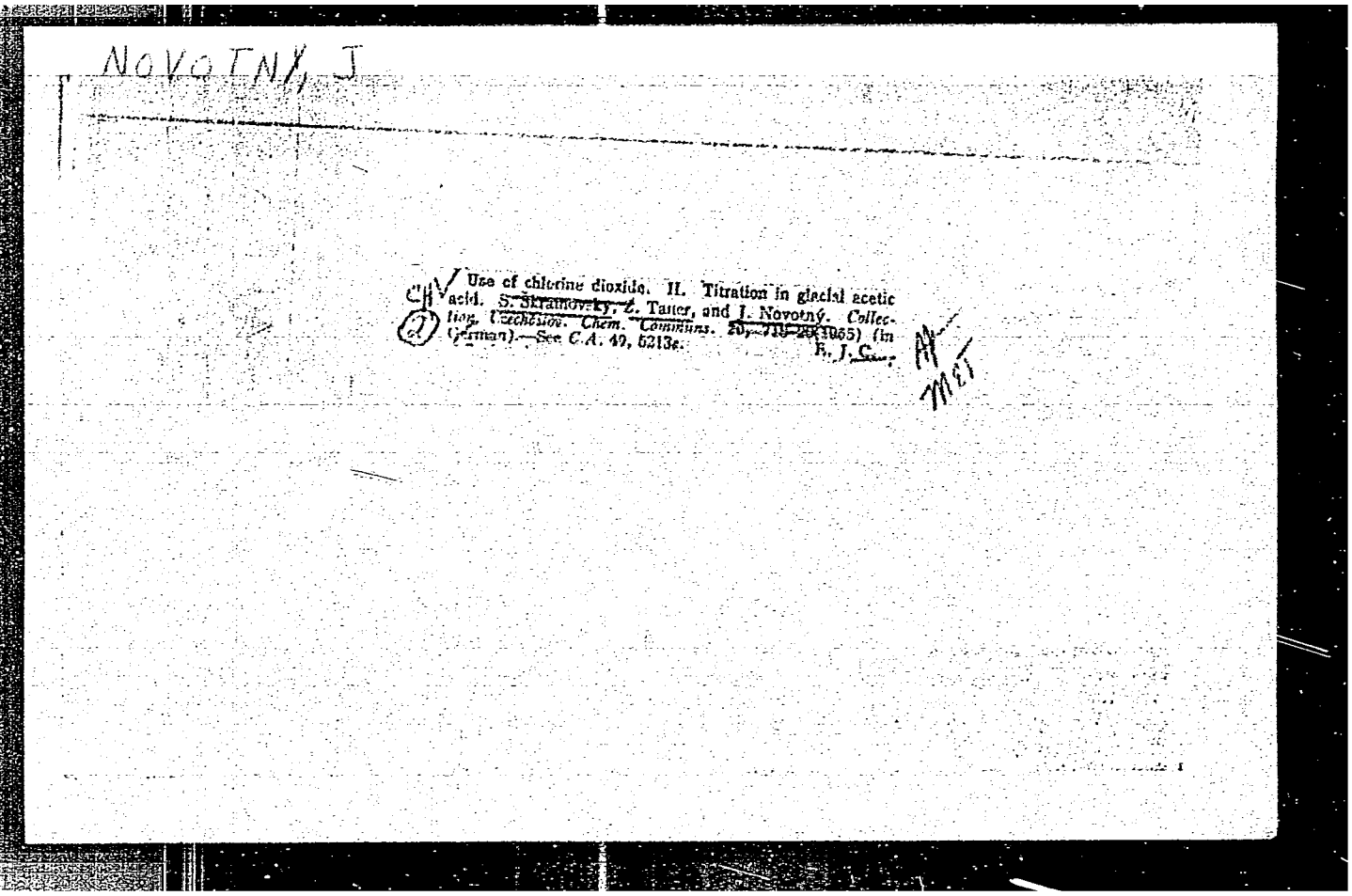
1

1905. **Vanadyl acetate, a new volumetric reagent for titration in glacial acetic acid.** J. Novotný (Karlovy Univ., Prague, Czechoslovakia). *Chem. Listy*, 1954, 48 (12), 1805–1807.—A 0·1 or 0·05 *M* soln. of vanadyl acetate in glacial acetic acid can be used as a reagent for polarometric titrations. With CrO_3 the following reaction occurs—

$$3\ VO(CH_3COO)_2 + CrO_3 \rightleftarrows 3\ VO_2(CH_3COO) + Cr(CH_3COO)_3;$$

1 ml of a 0·05 *M* soln. of vanadyl acetate is thus equivalent to 1·6668 mg of CrO_3. To prepare the reagent, NH_4VO_3 (23·4 g) is ignited, the resulting oxide is mixed with powdered oxalic acid dihydrate (12·6 g) and glacial acetic acid (48 g), and the mixture is heated on a water bath at 70° C, with constant stirring. A lively reaction occurs with evolution of CO_2, and the mixture turns blue-green. The reaction product is dissolved in glacial acetic acid (100 ml) and the soln., which is stable, is standardised manganometrically. G. GLASER

Chem



NOVOTNÝ, J.

Use of chlorine dioxide. II. Titration in glacial acetic acid. S. Stránovský, Z. Tatíček, and J. Novotný. *Collection. Czechoslov. Chem. Communs.* 30, 715-20(1965) (in German).—See *C.A.* 49, 5213e.

F, J, C

NOVOTNY, Jaroslav

27

4

Preparation of calcium hypophosphite. Jaroslav Novotný and Pavel Vanda (Karlova Univ., Prague). *Chem. průmysl* 8, 301-3(1958); cf. preceding abstr.—The optimum wt. ratio 20:5:100:2 of $Ba(OH)_2$:P:H_2O:activated C yielded Ba hypophosphite 3 parts in 99.65% purity. The same molar proportions were used for the prepn. of Ca hypophosphite. White P and the activated C were mixed with water in a N atm., and CaO was added. The reaction was carried out under reflux and the escaping PH_3 was burned in air and absorbed in water. After cooling, CO_2 was passed to ppt. excess $Ca(OH)_2$, the suspension was filtered, concd., and mixed with an equal vol. EtOH, pptg. $Ca(H_2PO_2)_2$. The yield was 0.56, 0.68 and 0.46 g./g. P with H_2O/P wt. ratios of 30, 20, and 10. Most of the reaction was found to take place within the 1st hr. Fe^{+++}, Al^{+++}, and solvents renewing the P surface (CCl_4, cyclohexanone) were not catalysts.

Herbert Morawetz

C

COUNTRY : CZECHOSLOVAKIA
CATEGORY : Inorganic Chemistry. Complex Compounds

ABS. JOUR. : RZKhim., No. 1 1960, No. 647

AUTHOR : Novotny, J.; Novotna, H.
INST. : Charles Univ, Prague
TITLE : Preparation of Powderlike Lithium Hydride

ORIG. PUB. : Collect. Czechosl. Chem. Communs, 1959, 24, No 3, 989-991

ABSTRACT : To prepare powderlike LiH, the aqueous solution of LiCl is subjected to electrolysis in an electrolyzer with Hg cathode, and the obtained amalgam of Li is washed with water and acetone and dried over P_2O_5. The Li content in the amalgam is about 0.05%. The dry amalgam of Li is heated in an atmosphere of H_2 up to 350°, Hg is distilled, and in the course of about 2 hours the temperature is increased up to 600°.

CARD: 1/2

NOVOTNY, Jindrich

A well organized operation improves the quality of postal service.
Cs spoje 7 no.1:20-21 Ja '62.

1. Instruktor odborneho uciliste spoju, Znojmo.

NOVOTNY, Jiri, Dr.

Paroxysmal hemoglobinuria. Pediat. listy, Praha 9 no.6:354-355 Dec 54.

1. Z Detskeho oddeleni KUNZ Ostrava-Zabreh, prim. Dr. B.Vranova
(HEMOGLOBINURIA, PAROXYSMAL, in infant and child)

VAVRIN, Jiri, inz.; NOVOTNY, Jiri, inz.

Calculation of wire wound resistors. Automatizace 7 No. [illegible]
0 '64.

1. Zavody prumyslove automatizace, Plant 01, Kosire.

NOVOTNY, Jiri, ins.

Use of the television tower as a medium wave transmitter. Cs spoje 8 no.1:14-16 F '63.

1. Ustredni sprava spoju.

NOVOTNY, J.; PRINC, L. - Inzenyrske Stavby Vol. 3, no.2, Feb. 1955

Report on the congress of experts in steel construction held in Prague , November 19, 1954. p.83

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

NOVOTNY, J.

Light welded lattice girders. p. 382.

STAVBY. Praha. Vol. 2, no. 10, Oct. 1954

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956

NOVOTNY, J.

Comparison of riveted and welded fullwall railroad bridge structures from the viewpoint of economy. p.335

INZENRYSKE STAVBY. (Ministerstvo stavebnictvi) Praha

Vol. 3, no. 8, Aug. 1955

East European Accessions List Vol. 5 No. 1 Jan. 1956

NOVOTNY, J.

Study of a lattice railroad bridge from the viewpoint of economy. p. 378.

INZENYRSKE STAVBY. Praha, Czechoslovakia, Vol. 3, no. 9, Sept. 1955

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960
Uncl.

NOVOTNY, J.

TECHNOLOGY

Periodical: INZENYRSKE STAVBY. Vol.3, no. 12, Dec. 1955

NOVOTNY, J. Steel constructions in one of our largest metallurgic works. p. 515

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no.3
March 1959, Uncl.

NOVOTNY, J.; NOVOTNY, O.; POSPISIL, S.

One year of experience in assembly-line construction carried out by Moravostav Trust, National Enterprise in Prerov. Pt. 1. p. 10.

Vol. 4, no. 1, Jan. 1956
POZEMNI STAVBY
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 8, August 1956

NOVOTNY, J.; NOVOTNY, O.; POSPISIL, S.

One year of experience in assembly-line construction carried out by Moravostav Trust, National Enterprise in Prerov. Pt. 2, p. 60.

Vol. 4, no. 2, Feb. 1956
POZEMNI STAVBY
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No, 8, August 1956

NOVOTNY, J.

Modern production methods in bridge construction plants. p. 228. INZENYRSKE STAVBY. (Ministerstvo stavebnictvi) Praha. Vol. 4, no. 5, May 1956.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

Novotny, J.

Steel structure of our highest blast furnace and of its equipment. p. 273. INZENYRSKE STAVBY. (Ministerstvo stavebnictvi) Praha. Vol. 4, no. 6, June 1956.

Source: EEAL LC Vol. 5, No. 10 Oct. 1956

NOVOTNY, J.

NOVOTNY, J. - Analyses of the supporting systems of steel structures made of aluminum alloys. p. 521, Vol.4, no. 11, Nov. 1956 INZENYRSKE STAVBY. (Ministerstvo stavebnictvi) Praha.

SOURCE: EAST EUROPEAN ACCESSIONS LIST (EEAL) VOL 6 NO 4 APRIL 1957

NOVOTNY, J.

NOVOTNY, J. A folding system of steel tubes for assembling provisional buildings for the construction site. p. 84.

Vol. 5, no. 2, Feb. 1957
INZENYRSKE STAVBY
TECHNOLOGY
Czechoslovakia

So: East European Accession, Vol. 6, No. 5, May 1957

NOVOTNY, J.

Calculation of steel hall constructions with a supposed cooperation of cross girders. p. 304.

(Inzenyskre Stavby. Vol. 5, no. 6, June 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

NOVOTNY, J.

DC 621.961

Novotný, J.: Cold Shearing

Strojírenství, Vol 8, Nr 6, 1958, pp 437-443

Distr: 4J2b

The article presents a comprehensive study on the cold shearing technology. The author discusses all the phenomena taking place in the material during the [illegible] operation and explains the factors affecting the productivity and [illegible] of shearing. Main relations are expressed by equations. Special attention is given to the problem of the so called drawn shear which is sometimes recommended in literature without proper justification. The comparison with common shearing indicates that the drawn shear may have certain merits only under specific conditions i.e. when the materials with fibrous structure are to be dealt with.

/Retyped clipped abstract/
Card 1/1

August 28, 1958/ml

NOVOTNY, J.

Comparison as to the weights and prices of a roof truss made of rolled steel or of steel tubes. p. 471.

POZEMNI STAVBY. (Ministerstvo stavebnictvi) Praha, Czechoslovakia, Vol. (1) no. 9, (September) 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 11, November 1959.

uncl.

NOVOTNY, J.

TECHNOLOGY

periodicals: POZEMNI STAVBY Vol. 7, no. 2, Feb. 1959

NOVOTNY, J. Lightweight purlins for steel-roof structures. p. 78.

Monthly List of East European Accessions(EEAI) LC Vol. 8, no. 5
May 1959, Unclass.

NOVOTNY, J.

"Methods for increasing the coefficient of drawing vessels in deep drawing of cylindrical vessels made of sheet metal." p. 279.

STROJIRENSTVI. (Ministerstvo tezkeho strojirenstvi, Ministerstvo presneho strojirenstvi a Ministerstvo automobiloveho prumyslu a zemedelskych stroju). Praha, Czechoslovakia, Vol. 9, No. 4, Apr. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959.
Uncla.

NOVOTNY, JOSEF

4

Heat transfer in a film evaporator. Jiří Lukavský and Josef Novotný (České vysoké učení technické, Prague). *Chem. průmysl* 10, 410–14(1960).—The tests were conducted on a lab. film evaporator (Luwa L 020 type). The inner diam. of the evaporator was 80 mm., the length of the heating surface was 480 mm., and the max. distance between the rotor and the evaporator tube 1 mm. The rotor was operated at 1000–2000 r.p.m. The estd. evapg. output was 20 kg. H_2O/hr. Distd. H_2O was used as the test liquid. The coeff. of heat transfer k was calcd. from the equation $Q = k.F.\Delta t$, where Q is the heat transfer rate calcd. from the energy balance, F is the heating surface, and Δt is the temp. drop between the steam temp. t_p and the b.p. of liquid t_v. The dependence of k on Δt and t_v at a liquid feed rate of 60 kg. per hr. and a rotor speed of 1000 r.p.m. and the dependence of k on the heat flux q at various t_v were detd. In both these cases, k increases with Δt, and with q only slightly up to $t_v = 70°$ and more rapidly for t_v over 80°. At $\Delta t = 40°$, $t_v = 80°$, and 1000–2000 r.p.m., k increases with the liquid feed rate, but the optimum output of the evaporator is reached between 40 and 50 kg./hr. By increasing from 1000 to 2000 r.p.m., k is increased ~15%. Deviations of k at various feed temps. and with other parameters const. were ≦3%. Comparison of the results with values reported by Bressler (*V.D.I. Zeitschrift* 100, 630(1958)) and Schneider (*CA* 49, 10678b) for an evaporator with movable blades, shows that fixed blades are advantageous at high wall temps.

P. Čefelín

85178

Z/054/60/000/012/013/015
E073/E535

1.1210 only 2208 2801

AUTHORS: Hrazdil, F., Engineer and Novotný, J., Engineer

TITLE: New Method of Shaping Hollow Bodies from Sheets, Wires etc. by Means of a Pressure Wave
(Patent Class 7c, 14, PV 2057-60, 26.3.1960)

PERIODICAL: Hutnické listy, 1960, No.12, pp.983-984

TEXT: To obtain the desired shape of the component, the pressure wave is controlled by choosing the shape of the pressure wave source, by the composition of several types of explosives of various efficiencies, by reflection of the pressure wave or by choosing the medium in which the wave propagates. In illustrations (Fig.2) the two simplest examples are shown. In these illustrations 1 denotes the component, 2 the die, 3 the explosive and 4 the weaker explosive. Further examples are described in which the shaping is by means of a reflected pressure wave or where the pressure wave acts partly directly and partly through another medium. There are 2 figures.

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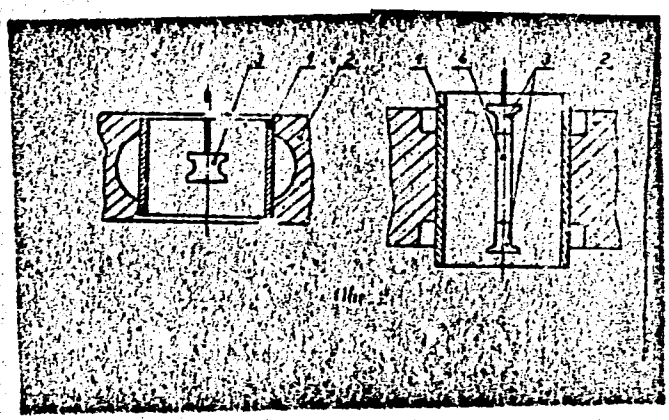
85178

Z/034/60/000/012/013/015
E073/E535

New Method of Shaping Hollow Bodies from Sheets, Wires etc. by Means of a Pressure Wave (Patent Class 7c, 14, PV 2057-60, 26.3.1960)

Fig.2



Card 2/3

Z/034/61/000/005/010/010
E073/E535

AUTHORS: Hrazdil, F., Engineer and Novotný, J., Engineer

TITLE: Die for manufacturing hollow bodies from sheet or tube blanks by using a pressure wave.
Patent granted. No.98 994, Class 7c, 14, 19c, 19, valid from February 6, 1960 (PV 799-60)

PERIODICAL: Hutnické listy, 1961, No.5, p.366

TEXT: [Abstractor's Note: This is a complete translation of the title of the patent. No further details are given.]

Card 1/1

Z/034/61/000/009/002/002
E073/E535

AUTHORS: Žaba, Z. and Novotný, J.

TITLE: Equipment for rolling cooling fins on metals tubes
Patent Application Class 7b, 16/01, PV 6579-60 dated November 3, 1960

PERIODICAL: Hutnické listy, 1961, No.9, p.672

TEXT: The machine is intended for producing ribs on copper or aluminium tubes. Fundamentally it consists of three grooved rollers and a sizing mandrel. The arrangement of the rollers in the stand is such that the bottom two rollers are supported in a stable manner and perform a forced rotary motion, whilst the third, top roll can revolve freely on an eccentric pivot, the movement of which until engagement is controlled by a lever, which is fixed onto the same pivot. The sizing mandrel is fixed to the end of the guiding tube in the thrust bearing so that, together with the rolled tube, it performs a rotary motion.

[Abstractor's Note: Complete translation.]

Card 1/1

Z/031/62/000/001/001/002
D006/D102

AUTHORS: Dufek, Josef, and Novotný, Josef

TITLE: Group machining of bevel gears

PERIODICAL: Strojírenská výroba, no. 1, 1962, 6-8

TEXT: The authors describe a method of group machining enabling the introduction of copy-turning of bevel gears at plants producing smaller batches. The method was developed for a group of 14 different bevel gears. It requires the use of a chucking fixture which permits exchanging the stop ring simultaneously with the chucking mandrel (in case the hole diameter of the new workpiece differs from the previous one), in order to secure a constant distance between the workpiece and the spindle face. This secures the accuracy of all machined parts because the master templates for the individual group member need not be readjusted but only exchanged. All 14 master templates have a uniform hole diameter so that they fit on one common pin with a fixed stop collar on the left end. An extension pin only has to be exchanged with the template according to the length of the latter. The master-template design has to be such as to make possible machining of both sides of the bevel gear. The method reduces operating times about 30% and is highly

Card 1/2

S/276/63/000/002/042/052
A052/A126

AUTHOR: Novotnyy, Jozef

TITLE: The up-to-date metal pressing technology in the ČSSR

PERIODICAL: Referativnyy zhurnal, Tekhnologiya mashinostroyeniya, no. 2, 1963, 2, abstract 2V9 (Chekhosl. tyazhelaya prom-st', no. 7, 1962, 2-13)

TEXT: The development of various metal pressing processes in the ČSSR is considered, such as 1) cutting sheets and profiles including finish punching and vibration cutting of sheets and cutting profiles in dies; 2) deep drawing (drawing with and without wall thinning, drawing stepped pieces; inverted drawing, stainless steels included; 3) forward and inverted cold extrusion; upsetting bolts; 4) a special method of cold volume stamping (radial stamping) used for making broach bits up to 8mm in diameter, borers, milling cutters, gears; 5) a method of knurling ribs on pipes; 6) bending pipes; 7) methods of hot stamping including finless stamping and stamping in gap rolls. There are 25 figures and 6 references.

S. Shirman

(Abstracter's note: Complete translation.)

Card 1/1

S/123/62/000/022/003/003
A004/A101

AUTHOR: Novotný, Josef

TITLE: Sheet stamping in the ČSSR

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 22, 1962, 12, abstract 22V62 ("Fertigungstechn. und Betrieb", 1962, v. 12, no. 3, 159 - 167, German)

TEXT: The author presents a review on the sheet-stamping methods used in the ČSSR. Drawing with negative clearance (i.e., with simultaneous thinning and reduction in diameter) ensures a more intense deformation per each passage than ordinary drawing and lower stresses in the dangerous component sections, where the bottom passes over into the walls. The transition radius from the conical to the cylindrical part of the die may be relatively small. For drawing stainless steel, dies of aluminum bronze of the following chemical compositions are used (in %): Al 12 - 14, Fe 4 - 6, Mn 4 - 6, Ni 1 - 3, with HB 400, or Al 14.5 - 20, Fe up to 5, Ni 1, Mn 0.5 - 2, with HB 400 - 450. These bronze grades eliminate sticking and ensure a service life of 45,000 parts of stainless

Card 1/3

Sheet stamping in the ČSSR

steel and 127,000 parts of carbon steel. In connection with the introduction of explosion stamping, investigations were carried out of the effect of the die speed in cutting rod material, which was effected on a special machine, on the resistance to cutting. The die speed was varied in the range of 5 - 30 m/sec. The hole-piercing tests were carried out at high die speeds, produced by explosion (100 - 300 m/sec) and at low speeds (approximately 0.001 m/sec). The service life of a 15 mm diameter die, the quality of the pierced hole and the distribution of hardening over its profile were tested. The required piercing force was calculated on the basis of the stress diagram. At low speeds, stress and cutting force are by 15 - 30% higher than at high speeds, while the hardening zone is smaller. An effect of the die hardness was not observed; increasing the speed to over 260 m/sec reduces the die life. Tests of deep drawing by explosion were carried out on a device consisting of a counter die with rigid clamping and a flat top die with the charge suspended above. Non-deep drawing tests were performed on a device consisting of the counter die with the charge suspended above. Formulae are presented for determining the weight of charge, depending on its distance from the blank and for determining the charge energy. The medium for transmitting the energy of explosion is either water or sand. The

S/123/62/000/022/003/003
A004/A101

Sheet stamping in the ČSSR

designs of the stamps for explosion forming are described. Passages have to be provided for in the dies for escaping of the air. The author presents a table showing the characteristics of explosives used in the ČSSR. There are 27 figures.

D. Vayntraub

[Abstracter's note: Complete translation]

Card 3/3

NOVOTNY, Josef, inz.

New problems in using high-strength steels. Inz stavby 12 no.4:179-180 Ap '64.

1. Chairman of the Regional Branch of the Czechoslovak Scientific and Technological Society, Ostrava.

NOVOTNY, Josef, ing.; SZIRAKY, Mikos [translator]

Some new cold-pressing methods. Gepgyartastechn 3 no.6:215-219 Je '63.

1. Brnoi Keplekeny Alakitasi Intezet, Csehszlovakia (for Novotny). 2. "Gepgyartastechnologia "szerkeszto bizottsagi tagja (for Sziraky).

KOVOTNY, KARAS.

Methods of determination of heat consumption in thermal electric plants. p.418

ENERGETIKA. (Ministerstvo energetiky a Ceskoslovenska vedecka technicka spolecnost pro energetiku pri Ceskoslovenske akademii ved) Praha, Czechoslovakia
Vol.4, no.10, Oct. 1955

Monthly List of East European Accessions (EEAI) LC, Vol.8, no.11, Nov. 1959, Uncl.

NOVOTNY, K.: MRAZEK, J.

Tesla TVN 100 vacuum-type evaporator for electron microscopy. p. 577

SLABOPROUDY OBZOR (Ministerstvo vscobenibe strojirenstvi, Ministerstvo spoju a Ceskeslovenska vedecko-technicka spolecnost, sekce elektrotechnika) Praha, Czechoslovakia, Vol. 20, no. 9, Sept. 1959

Monthly List of East European Accessions (EEAI), LC. Vol. 9, no. 2, Feb. 1960

Uncl.

NOVOTNY, K. ; MRAZEK, J.

The TESLA TVP 300 highvacuum resistance furnace and its applications. p. 703

SLABOPROUDY OBZOR. (Ministerstvo presneho strojirenstve, Ministerstvo spoju a Vedecka Technicka spolecnost pro electrotechniku pri CSAV) Praha, Czechoslovakia, Vol. 20, no. 11, Nov. 1959

Monthly List of East European Accessi ns (EEAI) LC, Vol. 9, no. 1, Jan, 1960

Uncl.

NOVOTNY, K.; GEROL'D, M.

Production of chlortetracycline for feed supplement by means of direct wheat bran enrichment. Antibiotiki 5 no.4:42-46 Jl-Ag '60. (MIRA 13:9)

1. Predpriyatiye po proizvodstvu kormov, obogashchennykh antibiotikami, Pogled u Gavlichkova Broda i Issledovatel'skiy institut antibiotikov, Rostoki u Pragi, Chekhoslovakiya.
(CHLORETETRACYCLINE) (WHEAT)

NOVOTNY, K., inz.

Air cushion vehicle for passenger transportation. Doprava no.9:325 '62.

NOVOTNY, Karel

Technical documentation; example of technicians in the South Moravia Region. Stroj vyr 10 no.6:269-270 '62.

1. Namestek ministra vseobecneho strojirenstvi; predseda sekce strojnictvi Ceskoslovenske vedecko-technicke spolecnosti.

NOVOTNYY, Kh. [Nowotny, H.]

Pyrophority of metal alloys. Usp. khim. 27 no.3:353-364 Mr '58. (MIRA 11:4)

1.Direktor Instituta fizicheskoy khimii Vysshey tekhnicheskoy shkoly, Vena).

(Alloys)

NOVOTNY, KLIMES.

Second Exhibition of Geodesy and Cartography. Geod kart obzor 9 no.11:310 N'63.

NOVOTNY K. Rehabilitacni lecba ranenych a nemochych Rehabilitation treatment of injured and ill patients Lekarske Listy, Brno 1948, 3/3 (70-71)

SO: Medical Microbiology and Hygiene, Section IV,Vol. I, #1-6

Novotny, K.

NOVOTNY K.

Kritická poznámka k intraspongiosnímu převodu krve u kojenců.
/Critical review of intraspongious transfusions in infants/
Čas. lékaře 6:11 1 June 51 p. 332-6.

1. Of the Orthopedic Department of the State District Hospital in Ostrava I (Head--Prof. Karel Novotny, M.D.).
CLML Vol. 20, No. 10 Oct 1951

NOVOTNY, Karel, MUDr

Traumatic posterior dislocation of the hip joint with neurological symptoms. Acta chir. orthop. traum. cech. 22 no.1-2:27-33 Feb 55.

1. Odd.pro orthopedii a traumatol. pohyboveho ustroji OUNZ, Ostrava I, prednosta MUDr. K.Novotny.

(HIP, dislocation
traum., posterior, with lesion of sciatic nerve, surg.)
(NERVES, SCIATIC, wounds and injuries
with traum. hip disloc., surg.)
(WOUNDS AND INJURIES
hip disloc., posterior, with lesion of sciatic nerve, surg.)

NOVOTNY, Karel, MUDr.

Recurrent dislocation of the metacaropcarpel joint of the thumb. Acta chir. orthop. traum. cech. 23 no.2:92-94 Feb 56.

1. Z Oddeleni Proorthopedii a Traumatologii Pohyboveho ustroji OUNZ Ostrava I.

(THUMBS, disloc.
carpometacarpal, recurr. surg. (Cz))
(DISLOCATIONS,
thumb, carpometacarpal, recurr., surg. (Cz))

NOVOTNY, Karel

Certain considerations on the diagnosis and therapy of closed injuries of the knee joint. Rozhl.chir.39 no.12:805-812 D '60.

1. Ortopedicke oddeleni MUNZ, Ostrava 1, prednosta MUDr. Karel Novotny.
(KNEE wds & inj)

NOVOTNY, K.

Experience with Bankart's operation in habitual dislocations of the shoulder joint. Acta chir. orthop.traum.cech. 29 no.2:198-202 '62.

1. Oddeleni pro ortopedii a traumatologii pohyboveho ustroji MUNZ v Ostrave I., prednosta MUDr. K.Novotny.
(SHOULDER fract & disloc)

CZECHOSLOVAKIA

NOVOTNY, K., MD.

Ward of Orthopedics and Traumatology (Oddelenie pre ortopediu a traumatologiu MUNZ), Ostrava

Bratislava, Lekarsky obzor, No 5, 1963, pp 307-310

"Intramedullary Epidermoid."

NOVOTNY, K.

Epidural varicose changes as a cause of lumbosciatic syndrome.
Bratisl. lek. listy 43 Pt. 2 no.5:285-289 '63.

1. Oddeleni pro ortopedii a traumatologii pohyboveho ustroji
MUNZ Ostrava I., vedouci MUDr. K. Novotny.
(DURA MATER) (VARICOSE VEINS)
(INTERVERTEBRAL DISK DISPLACEMENT)
(SCIATICA) (BACKACHE)
(CEREBRAL EMBOLISM AND THROMBOSIS)
(CEREBROVASCULAR DISORDERS)

NOVOTNY, K.

Atraumatic epiphysiolysis of the femur head in small children. (Complications of surgical treatment of congenital hip dysplasia). Acta chir. orthop. traum. Cech. 32 no.1:46-59 F'65.

1. Oddeleni pro ortopedii a traumatologii pohyboveho ustroji Mestskeho ustavu narodniho zdravi , Ostrava 1, (vedouci: MUDr. K. Novotny).

NOVOTNY, L. - Vol. 3, no. 10, Oct. 1953. ZA SOCIALISTICKOU VEDU A TECHNIKU

Method of improving the standard of living. p. 409.
Contribution to the methods of economic evaluation of research work. p. 444.

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

NOVOTNY, L.

"The Effect of Joint Production on the Costs and Prices of Food Products." p. 198 (PRUMYSL POTRAVIN, Vol. 4, No. 5, 1953) Praha, Czechoslovakia

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4, April 1954. Unclassified.

NOVOTNY, L.

Corrosion of the eye caused by iodine/nitrogen. Cesk. ofth. 17 no.3: 218-219 My '61.

1. Oeni oddeleni OUNZ - Michalovce, prednosta dr. L. Novotny.

(EYE wounds & injuries) (IODINE toxicology)
(NITROGEN toxicology)

HRDLICKA, A.; NOVOTNY, L.

Trigonourethral suspension. Cesk. gynek. 29 no.1:131-135 F'64.

1. Gyn.-por. odd.nemocnice ve Vitkove; vedouci: MUDr. A.Hrdlicka.

NOVOTNY, Ladislav, MUDr.

Medical care in physical education and the II celostatni spartakiada. Cesk. zdravot. 8 no.5:296-299 My '60.

1. Vedouci oddeleni zdravotni pece o telovychovu a sport, KUNZ - Ceske Budejovice.
(SPORT MEDICINE)

L 22069-66 EWP(t) IJP(c) JD
ACC NR: AP6010710 SOURCE CODE: CZ/0034/65/000/004/0302/0302

AUTHOR: Trencev, K. (Engineer); Pokorny, F. (Engineer); Kuzora, R.; Novotny, L.

ORG: none

TITLE: Method of treating poor iron-manganese ores

SOURCE: Hutnicke listy, no. 4, 1965, 302

TOPIC TAGS: iron, manganese, phosphorous, solvent extraction, sulfuric acid, sulfate, sintering, coke, ferromanganese, ammonia, precipitation

ABSTRACT: The article is an abstract of Czechoslovak Patent Application No: Class 18a, 1/04, PV 2798-63, dated 17 May 1963. Treatment of ores rich in P is discussed; P is converted into an insoluble chemical compound, and Fe and Mn into a soluble one. This can be achieved by a sulfating roast, or by leaching with sulfuric acid. The resulting mixture of sulfates is heated to 300° - 1000° for 0.5 to 4 hours, so that insoluble pyrophosphate is formed. Fe and Mn are then leached out with water. The best mixture for a sulfating roast or acid leaching contains 17.83% Mn, 8.48% Fe, 1.45% P; ratio of Fe to Mn should be about 1:2, P to Mn 1 : 19. After the heat treatment the product contains 22.24% Mn, 1.67% Fe, and 0.012% P, that is a Fe to Mn ratio of 1:13, and P to Mn 1:1853. The sulfates of Mn and Fe prepared in this manner may be used directly for the production of ferroman-

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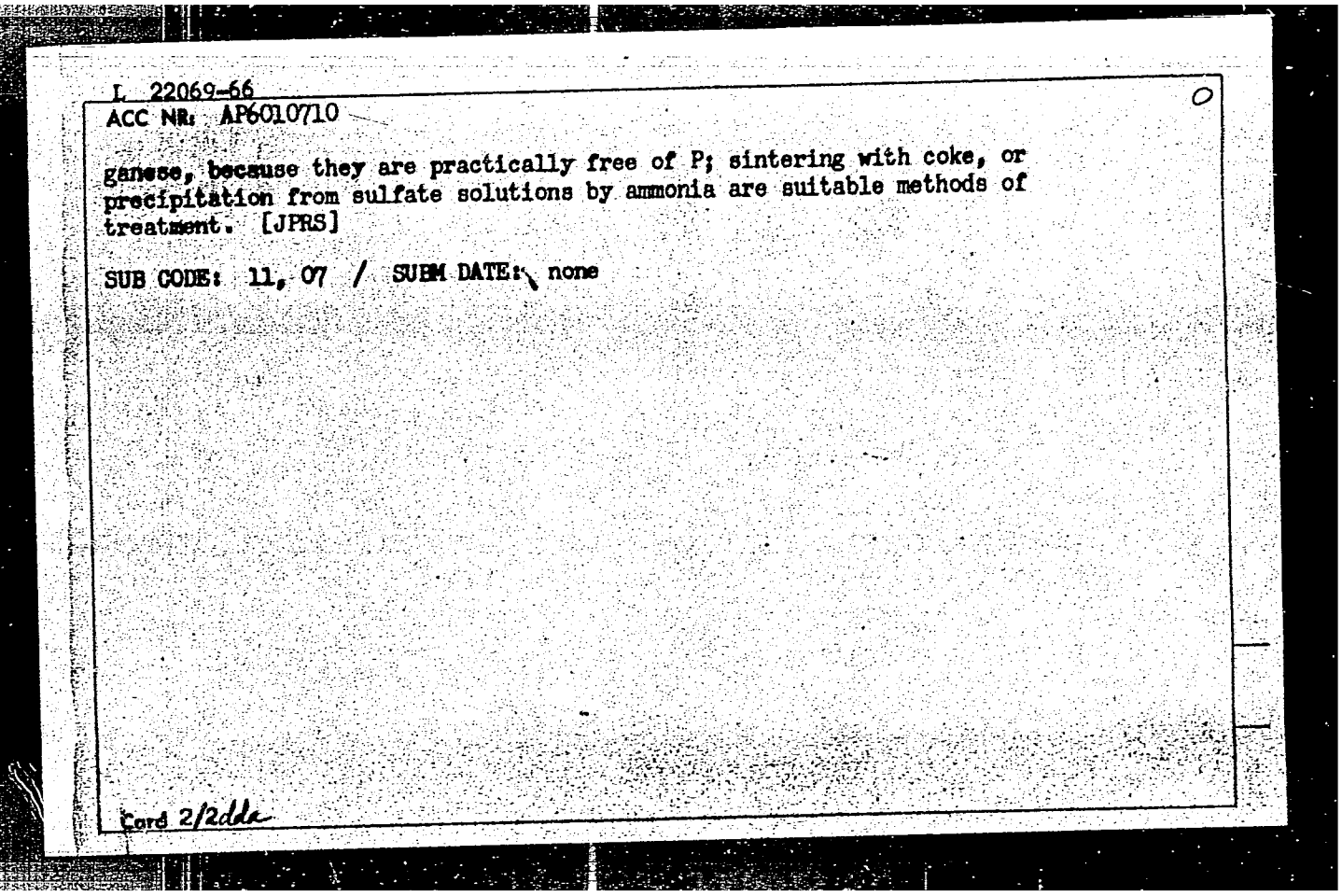


L 22069-66
ACC NR: AP6010710

ganese, because they are practically free of P; sintering with coke, or precipitation from sulfate solutions by ammonia are suitable methods of treatment. [JPRS]

SUB CODE: 11, 07 / SUBM DATE: none

Card 2/2 dda

NOVOTNY, L.

HORAK, V.; NOVOTNY, L.

Phtalic anhydride splitting of secondary amines [in German with summary in Russian]. Sbor.Chekh.khim.rab. 18 no.1:80-85 F '53. (MLRA 7:6)

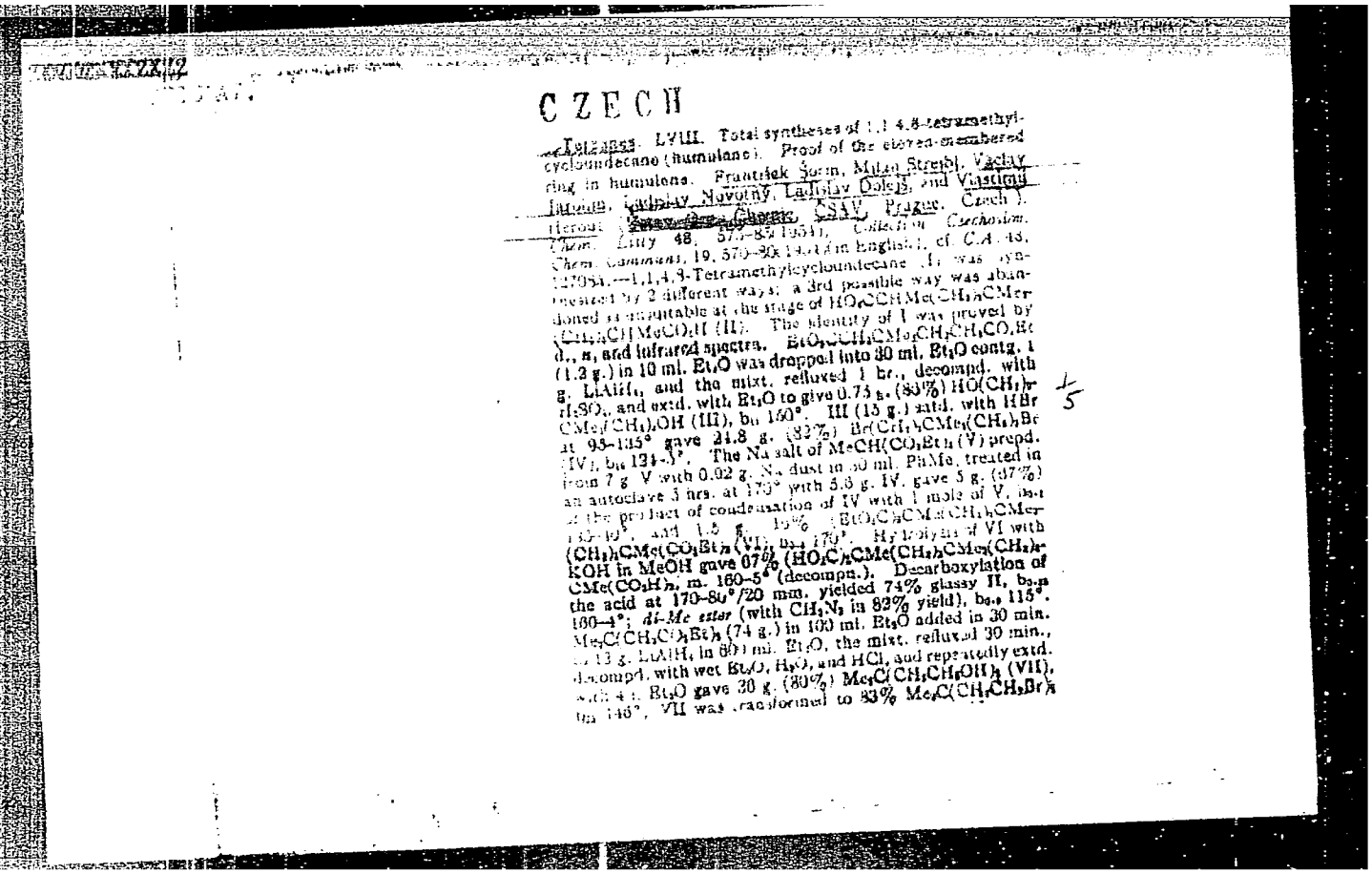
1. Institut organicheskoy khimii fakul'teta yestestvennykh nauk Karlova universiteta. (Amines) (Phtalic anhydride)

NOVOTNY, LADISLAV

CZECH

Preparation of dicarboxylic acids by the Kolbe method. Ladislav Janeš and Ladislav Novotný (Czech. Acad. Sci., Prague). *Collection Czechoslov. Chem. Communs.* 19, 716–18(1954)(in German).—See *C.A.* 49, 3881e.

E. J. C.



CZECH

Terpenes. LVIII. Total synthesis of 1,1,4,8-tetramethylcycloundecane (humulane). Proof of the eleven-membered ring in humulene. František Šorm, Milan Streibl, Václav Herout, Ladislav Novotný, Ladislav Dolejš, and Vlastimil Hanuš, Czechoslovak Academy of Sciences, ČSAV, Prague, Czech. Chem. Listy 48, 577-83 (1954); Collection Czechoslov. Chem. Communs. 19, 570-80 (1954) (in English). cf. C.A. 48, 12705i.—1,1,4,8-Tetramethylcycloundecane (I) was synthesized by 2 different ways; a 3rd possible way was abandoned as unsuitable at the stage of $HO_2CCHMe(CH_2)_3CMe_2(CH_2)_3CH(Me)CO_2H$ (II). The identity of I was proved by d., n, and infrared spectra. $Et_2O_2CCH_2CMe_2CH_2CH_2CO_2Et$ (1.3 g.) in 10 ml. Et_2O was dropped into 80 ml. Et_2O contg. 1 g. $LiAlH_4$ and the mixt. refluxed 1 hr., decompd. with H_2SO_4, and extd. with Et_2O to give 0.75 g. (80%) $HO(CH_2)_3CMe_2(CH_2)_3OH$ (III), b_{10} 160°. III (15 g.) add. with HBr at 95–105° gave 24.8 g. (82%) $Br(CH_2)_3CMe_2(CH_2)_3Br$ (IV), b_{16} 134–5°. The Na salt of $MeCH(CO_2Et)_2$ (V) prepd. from 7 g. V with 0.92 g. Na dust in 50 ml. PhMe, treated in an autoclave 5 hrs. at 170° with 5.8 g. IV, gave 5 g. (67%) of the product of condensation of IV with 1 mole of V, $b_{0.5}$ 165–70°, and 1.5 g. (19%) $Et(O_2C)_2CMe(CH_2)_3CMe_2(CH_2)_3CMe(CO_2Et)_2$ (VI), $b_{0.5}$ 170°. Hydrolysis of VI with KOH in MeOH gave 97% $(HO_2C)_2CMe(CH_2)_3CMe_2(CH_2)_3CMe(CO_2H)_2$, m. 160–5° (decompn.). Decarboxylation of the acid at 170–80°/20 mm. yielded 74% glassy II, $b_{0.5}$ 160–4°; *di-Me ester* (with CH_2N_2 in 83% yield), $b_{0.5}$ 115°. $Me_2C(CH_2CO_2Et)_2$ (74 g.) in 100 ml. Et_2O added in 30 min. to 13 g. $LiAlH_4$ in 800 ml. Et_2O, the mixt. refluxed 30 min., decompd. with wet Et_2O, H_2O, and HCl, and repeatedly extd. with Et_2O gave 30 g. (80%) $Me_2C(CH_2CH_2OH)_2$ (VII), $b_{0.5}$ 146°. VII was transformed to 83% $Me_2C(CH_2CH_2Br)_2$

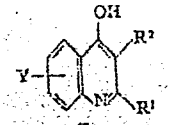
NOVOTNY, L. : DOLEJS, L.

"New Method for the Preparation of Dicarboxylic Acids by the Kolbe Synthesis", P. 401, (CHEMICKE LISTY, Vol. 48, No. 3, Mar. 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955, Uncl.

NOVOTNÝ, LADISLAV

Syntheses of 4-hydroxyquinoline derivatives. František Šorm and Ladislav Novotný (Czech. Akad. Věd, Prague). *Chem. Listy* 49, 801-2(1955).—As nitrogen analogs of apigenin, a series of quinolines (I), where R¹ and R² are alkyl or aryl groups, and Y one or more OH or alkoxy groups, were prepd. and tested for their spasmolytic effect



(I)

which was found with some of them. Essentially 3 methods were used for the prepn. of I. Method *A*: Refluxing 4.1 g. *p*-$EtOC_6H_4NH_2$ and 3.9 g. $AcCH_2CO_2Et$ in 50 ml. C_6H_6 with 1 drop 5% HCl in the app. for the sepn. of H_2O, distg. off the C_6H_6, and distg. the crude product gave in quant. yield *p-EtOC₆H₄NHCMe:CHCO₂Et* (II), $b_{1.5}$ 140°. Similarly were prepd. *p-HOC₆H₄NHCMe:CHCO₂Et*, m. 89–90° (from EtOH), and *o-HOC₆H₄NHCMe:CHCO₂Et*, m. 105°, starting with *p*- and *o*-$HOC_6H_4NH_2$, resp. Adding 8 g. II to 100 g. of mineral oil stirred and heated to 250°, heating the mixt. 20 min., and allowing the product to crystallize gave a quant. yield of *2-methyl-4-hydroxy-6-ethoxyquinoline*, m. 245° (from EtOH). Method *B*: Treating 2.7 g. *o*-$H_2NC_6H_4Ac$ in 30 ml. C_6H_6 with 1.6 g. dry C_5H_5N and then dropwise with 3.4 g. *p*-$MeOC_6H_4COCl$ in 10 ml. C_6H_6 yielded 5 g. *o-AcC₆H₄NHCOC₆H₄OMe-p* (III), m. 120°. Refluxing 2.2 g. III, 30 ml. EtOH, and 36 ml. H_2O,

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FRANKEL ET AL

treating the soln. with 0.6 g. NaOH in 4 ml. H_2O, refluxing the mixt. 5 hrs., distg. the EtOH, steam distg. the *o*-$AcC_6H_4NH_2$ formed by hydrolysis, evapg. the residue, acidifying the soln. with HCl, and crystg. the ppt. gave 0.72 g. *3-(p-methoxyphenyl)-4-hydroxyquinoline*, m. 315°. Method *C*: Treating a mixt. of 40 g. 3,5-$(HO)_2C_6H_3NH_2$ (IV), 100 ml. H_2O, and 150 ml. dioxane with 0.4 mole ketene during 1 hr. at room temp., cooling the mixt., and filtering the product gave 47.5 g. *3,5-$(HO)_2C_6H_3NHAc$* (V), m. 213° (from H_2O) (decompn.). Methylation of V with CH_2N_2 or with Me_2SO_4 gave 73% or 87%, resp., of *3,5-$(MeO)_2C_6H_3NHAc$*, m. 167° (from H_2O), the hydrolysis of which by refluxing 4 hrs. with 16% aq. alc. NaOH yielded 58% 3,5-$(MeO)_2C_6H_3NH_2$, m. 40°, $b_{3.5}$ 115°. Treating 12.5 g. IV in 50 ml. C_5H_5N and 30 ml. H_2O with 17 g. *p*-$MeOC_6H_4COCl$ gave 18.1 g. *3,5-$(HO)_2C_6H_3NHCOC_6H_4OMe$-p*, m. 214–15° (decompn.) (from H_2O). Methylation of this product with Me_2SO_4 in aq. acetone yielded 74% *3,5-$(MeO)_2C_6H_3NHCOC_6H_4OMe$-p* (VI), m. 119–20° (from aq. MeOH). Treating 20 g. VI in 200 ml. C_6H_6 with 14.5 g. PCl_5 under cooling, distg. *in vacuo* the C_6H_6 and $POCl_3$ up to 45°, and dissolving the crude product in 60 ml. PhMe gave a soln. of *3,5-$(MeO)_2C_6H_3N{:}CClC_6H_4MeO$-p* (VII). Adding 22 g. VII in 20 ml. PhMe to a mixt. prepd. from 1.8 g. Na dust and 12 ml. $CH_2(CO_2Et)_2$ in 100 ml. PhMe, refluxing the mixt. 4 hrs., distg. off the volatile products, dilg. the residue with H_2O, and extg. the mixt. with Et_2O gave *3,5-$(MeO)_2C_6H_3N{:}C(C_6H_4OMe$-p$)CH(CO_2Et)_2$* (VIII). Heating VIII 5 hrs. at 150–70° gave 40%

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FRANTISEK SORM

(based on VI) 2-(*p*-methoxyphenyl)-3-carbethoxy-4-hydroxy-5,7-dimethoxyquinoline, m. 221° (from EtOH), which yielded by sapon. with 20% alc. KOH 2-(*p*-methoxyphenyl)-3-carboxy-4-hydroxy-5,7-dimethoxyquinoline, m. 207° (from AcOH). Decarboxylation by heating 30 min. at 220° *in vacuo* yielded 80% 2-(*p*-methoxyphenyl)-4-hydroxy-5,7-dimethoxyquinoline, m. 241° (from EtOH), hydrolized by refluxing 3 hrs. with 48% HBr to 2-phenyl-4,5,7-trihydroxyquinoline, m. 348° (from MeOH) (yield 90%). Similar procedure was followed with 2,4-$(MeO)_2C_6H_3NH_2$ COC_6H_4OMe-*p*, m. 127–8°; 2,4-$(MeO)_2C_6H_3N{:}C(C_6H_4OMe$-*p*$)CH(CO_2Et)_2$, m. 118° (from EtOH). By the described methods, the following derivs. of I were prepd. (R^1, R^2, Y, method of prepn., m.p. given): Me, H, H, *A*, 225°; Me, H, 8-OEt, *A*, 192°; Me, H, 8-OH, *A*, 272°; Me, H, 6-OH, *A*, 270°; Me, H, 6,8-$(OMe)_2$, *A*, 221°; Me, H, 6,8-$(OH)_2$, *A*, above 300° (decompn.); Ph, H, H, *B*, 254°; Ph, CO_2Et, 6-OEt, *C*, 257°; Ph, CO_2H, 6-OEt, *C*, 269°; Ph, H, 6-OEt, *C*, 282°; *p*-$MeOC_6H_4$, CO_2Et, 6-OEt, *C*, 332°; *p*-$MeOC_6H_4$, CO_2H, 6-OEt, *C*, above 300° (decompn.); *p*-$MeOC_6H_4$, CO_2Et, 8-OEt, *C*, 173°; *p*-$MeOC_6H_4$, CO_2H, 8-OEt, *C*, 227°; *p*-$MeOC_6H_4$, H, 8-OEt, *C*, 202°; *p*-$MeOC_6H_4$, CO_2Et, *C*, 229°; *p*-MeO_6H_4, CO_2H, H, *C*, 270°; *p*-$MeOC_6H_4$, CO_2Et, 6,8-$(OMe)_2$, *C*, 208°; *p*-$MeOC_6H_4$, CO_2H, 6,8-$(OMe)_2$, *C*, 215°; *p*-$MeOC_6H_4$, H, 6,8-$(OMe)_2$, *C*, 209°; *p*-HOC_6H_4, H, 6,8-$(OH)_2$, *C*, 285°. M Hudlický

Novotný, Ladislav

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Plant substances. V. Isolation of further crystalline compounds from wormwood. Vlastimil Herout, Ladislav Novotný, and František Šorm (Czech. Acad. Sci., Prague). *Chem. Listy* 50, 691-7(1956); cf. *C.A.* 49, 13228*i*.—Chromatography of ligroine-ext. of *Artemisia absinthium* (*loc. cit.*) on neutral Al_2O_3 yielded cryst. compds. in the following sequence: a yellow lactone, $C_{20}H_{28}O_4$, m. 207° (from $CHCl_3$-$(Me_2CH)_2O$); hydroxyguaiazulenolide, m. 133-5°; a compd., m. 156° (from EtOH), $[\alpha]_D^{19}$ 285°; a hydroxy lactone, $C_{15}H_{22}O_4$, m. 98° (dimorphic form m. 108°, $[\alpha]_D^{19}$ −14.0°); absinthin dehydrogenated to chamazulene; a keto lactone, $C_{15}H_{20}O_3$, m. 114°, $[\alpha]_D^{19}$ −277°, (semicarbazone m. 222°); a compd., m. 124°; a keto lactone, $C_{15}H_{22}O_3$, m. 172°. The extd. drug was then treated with 90% EtOH, cryst. quebrachitol was sepd., and the filtrate was chromatographed, yielding absinthin, anabsinthin, a compd. m. 63°, and a compd. m. 252° which gave an acetyl deriv., m. 252°.

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