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Water rates in the new system of national economy management.
Vod hosp 15 no.1:39-41 '65.

1. District Water Resources Administration, Prague-East.

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Abdominal typhus in children. Cesk. pediat. 12 no.8:693-700 5 Aug 57.

1. Infekcni oddeleni OUNZ v Uh. Hradisti, prednost MUDr R. Vana.
(THYPHOID FEVER, in inf. & child
(Cz))

VANA, R.

"Jaroslav Svoboda, State Prize Winner." p. 241
"Orders of Labor Awarded on May 1, 1953." p. 242 (Prumysl Potravin, Vol. 4, no. 6, June 1953, Praha)

SO: Monthly List of East European Accessions, Vol. 3, no. 2, Library of Congress, Feb. 1954, Uncl.

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A delay-producing device for the TM-1694 synchroscope. p.24. (Sdelovaci Technika. Vol. 5, no. 1, Jan. 1957. Czechoslovakia.)

SO: Monthly List of East European Accession (EEAL) LC. Vol. 6, no. 7, July 1957. Uncl.

KOLAR,O.; OBRUCNIK, M.; VINA, V.

Level of serum mucoproteins during the course of tuberculous Dawson-Pette-Doring-von Bogaert encephalitis. Cesk. neurol. 28 no.1:23-28 Ja '65

1. Neurologickou klinika (predstata - prof. dr. J.Hlibek, DrSc.); Histologicky a embryologicky ustav (predstata - doc. dr. M. Obrucnik, CSc.) Lekarske fakulty Karlovske Univerzity v Hradci Kralove a Neurochirurgicke oddeleni Krajske nemocnice v Hradci Kralove (vedouci doc. dr. B.Zapletal, CSc.).

MIKULA, Frantisek; ZAPLETAL, Bohuslav; VANA, Vaclav

Papilloma of the choroid plexus of the 4th cerebral ventricle. Rozhl. chir. 41 no.6:432-437 Je '62.

1. Neurologicka klinika lekarske fakulty University Palackeho v Olomouci, prednosta clen korespondent CSAV prof. dr. Jar. Hrbek, DrSc. Neurochirurgicke oddeleni fakultni nemocnice v Olomouci, prednosta MUDr. B. Zapletal.

(CHOROID PLEXUS neoplasms)
(BRAIN NEOPLASMS case reports)
(PAPILLOMA case reports)

VANA, V.

Hypothermia in surgery of cerebrovascular malformations.
Rozhl. chir. 43 no.10:698-702 O '64.

1. Neurochirurgicke oddeleni lekarske fakulty Palackeho University v Olomouci, (vedouci MUDr. B. Zapletal).

REJSEK, K.; VANA, V.

Protoporphyrin in blood cells, Pracovni lek. 2 no.5:201-209 15 Nov 50. (CIML 20:6)

1. Of the Clinic of the Industrial Institute, Prague (Head--Prof. Teisinger,M.D.).

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Therapy of spontaneous panniculitis of Weber-Christian type, with cortisone and ACTH. Cas. lek. cesk. 93 no.46:1280-1281 12 Nov 54.

1. Z chirurgickeho oddeleni OUNZ v Ceske Lipe, prednosta MUDr V. Fabian

(PANNICULITIS, therapy
ACTH & cortisone)
(ACTH, ther. use
panniculitis)
(CORTISONE, ther. use
panniculitis)

VANA, Vladimir, MUDr.

Chemicals in agriculture. Prakt. lek., Praha 35 no.13: 301-303 5 July 55.

(FERTILIZERS
health aspects)
(INSECTICIDES
in agriculture, health aspects)

VANA, Vladimir; LISKOVA, Blanka

Occupational diseases reported during 1958. Pracovni lek. 11 no.8: 423-429 Oct 59.

1. Ministerstvo zdravotnictvi, Praha Ustav hygieny prace a chorob z povolani, Praha.
(OCCUPATIONAL DISEASES, statist.)

VANA, Vladimir

A new amendment to the health legislation. Pracovni lek. 12 no.6: 285-286 Jl '60.
(PUBLIC HEALTH legisl.)

VANA, V.

Occupational diseases. Pracovni lek. 14 no.1:5-8 '62.
(OCCUPATIONAL DISEASES)

VANA, V.

Health services for workers. Pracovni lek. 14 no.1:8-10 '62.
(INDUSTRIAL MEDICINE)

L 31438-66

ACC NR: AP6023191 SOURCE CODE: CZ/0082/65/028/005/0368/0373

18

AUTHOR: Klapetek, J.; Zapletal, B.; Dvorak, M.; Fiser, Z.; Vana, V. B

ORG: Neurological Clinic/headed by Dr. J. Hrbek, DrSc/, Faculty of Medicine, PU, Olomouc (Neurologicka klinika lekarske fakulty PU); Neurological Section/headed by Dr. B. Zapletal/, Faculty Hospital, Olomouc (Neurologicke oddeleni fakultni nemocnice)

TITLE: Electrocorticographic recording of an epileptic attack 22

SOURCE: Ceskoslovenska neurologie, v. 28, no. 5, 1965, 368-373

TOPIC TAGS: diagnostic instrument, nervous system disease, pathogenesis, cerebral cortex, man

ABSTRACT: Detailed description of two patients, female aged 29 and male aged 28 with epileptic attacks, the first being a Jacksonian and the second brought about by stimulation of an epileptic focus. Electrocorticography is considered very valuable for diagnostic and etiologic classification. Orig. art. has: 4 figures. [Based on Eng. abst.] [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 013

Card 1/1 JT

VANA, V.

Contribution to the treatment of total paralysis of the respiratory muscles in neuromyelitis optical Devic. Cesk. neurol. 28 no.6:426-428 N ' 65.

1. Neurochirurgicke oddeleni fakultni nemocnice v Olomouci (vedouci - doc. dr. B. Zapletal, CSc.

VANA', V.

Experiences with the administration of glycerin in neurosurgery.
Rozhl. chir. 44 no.9:670-672 S '65.

1. Neurochirurgicke oddeleni fakultni nemocnice v Olomouci
(vedouci doc. dr. B. Zapletal, CSc.).

KONIG, B.; VANA, V.; VOJACEK, K.

Contribution to pathology of the chiasma. Cesk. oftal. 22 no.1:68-75 Ja '66

1. Ocni klinika lekarske fakulty Palackeho University v Olomouci (prednosta - prof. dr. V. Vejdovsky, DrSc.); Neurochirurgicke oddeleni Fakultni nemocnice v Olomouci (vedouci: doc. dr. B. Zapletal, CSc.), Patologickoanatomicky ustav lekarske fakulty Palackeho University v Olomouci (prednosta: doc. dr. V. Valach).

CZECHOSLOVAKIA

VANA, V.; KLAUS, E.; Neurosurgical Department, Faculty Hospital (Neurochirurgicke Oddeleni Fakultni Nemocnice), Olomouc, Head (Vedouci) Docent Dr B. ZAPLETAL; Neurological Clinic, Medical Faculty, Palacky University (Neurologicka Klinika Lekarske Fakulty PU), Olomouc, Head (Prednosta) Prof Dr J. HRBEK.

"Premedication with Neuroleptics and Analgesics in Cerebral Arteriography."

Prague, Ceskoslovenska Neurologie, Vol 29, No 5, Sep 66, pp 357 - 360

Abstract /Authors' English summary 7: Application of neuroleptics and analgesics in cerebral arteriography was investigated experimentally in the neurosurgical department of the University Hospital at Olomouc. The results of treatment of 68 patients show that arteriography with premedication combined with local filtration anesthesia of the site of the arterial puncture on the neck is better than the usual methods of either local anesthesia only or of general anesthesia. 6 Western, 1 Czech reference.

1/1

VANACEK, J.; RASKOVA, H.

Free activity following intracerebral administration of bacterial toxins.
Cesk. fysiol. 7 no.3:254-255 May 58.

1. Katedra farmakologie fakulty detskeho lekarstvi v Praze.
(STREPTOLYSIN, effects,
O, smooth musc. activity after intracerebral admin. (Cz))
(MUSCLES, eff. of drugs on,
streptolysin O, eff. of intracerebral admin. on smooth
musc. activity (Cz))

VANACEK, J.; KREBS, V.; SCHEEROVA, E.; BIELEKE, W.

Apparatus for intracerebral injections in mice. Cesk. fysiol. 8 no.3: 255 Apr 59.

1. Farmakologicka katedra fak. detskeho lek. Praha. Ustav pro kortikoficeralni patologii v Berline-Buchu, Prednesno na III. fysiologickych dnech v Brne den 15. 1959.

(BRAIN,
intracerebral inject. appar. (Cz))
(INJECTIONS, appar. & instruments,
same)

DIABAC, A.; MACEK, K.; VANACEK, M.; TRCKA, V.

Reserpine-like action of phenoharmane. Cesk. fysiol. 8 no.3:177-178 Apr 59.

1. Vyzkumny ustav pro farmacii a biochemii, Praha. Predneseno na III. fysiologickych dnech v Brne dne 14. 1. 1959.

(RESERPINE, rel. cpds.
reserpine-like action of phenoharmane on 5-hydroxyindole acetic acid metab. (Cz))
(INDOLES, eff.
same)

VANACEK, Rudolf;STRYHAL, Frantisek

Massive osteolysis of Gorham-Stout. Acta chir. orthop. traum. cech. 27 no.1:89-95 F '60

1. I. klinika pro ortopedickou a detskou chirurgii KU v Praze, prednosta prof. MUDr. Miroslav Jaros II. patologickoanatomicky ustav KU v Praze, prednosta prof. MUDr. Vaclav Jedlicka
(HEMANGIOMA compl.)
(ILIUM compl.)

VANADZE, T.G.

USSR/Human and Animal Physiology - Blood Circulation. V-5

Abs Jour : Ref Zhur - Biol., No 1, 1958, 4015

Author : T.G. Vanadze

Inst : Academy of Sciences. Georgian SSR

Title : On the Condition of Vascular Reactions and Mechanisms of Their Changes in Patients with Hypertensive Disease.

Orig Pub : Tr. In-t klinich. i eksperim. kardiol. AN GruzSSR, 1956 (1957), 4, 95-104

Abstract : No abstract.

Card 1/1

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Present state of typification and standardization of equipment for palletization, handling of materials, and storage. Normalizace 12 no.1 : Suppl: $P_1/165$- $P_1/192$ '64.

1. Kovotechna National Enterprise, Prague.

VANADZINS, Z.; BRIVERE, A., red.

Sigulda. Riga. Latvijas Valsts izd-va, 1963. 1 v.
[In 5 languages] (MIRA 17:6)

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[Sigulda; color photographs by Voldemars Upitis]
Sigulda; Voldemara Upisa krasu foto. Riga, Latvijas Valsts izd-ba, 1964. 1 v. (MIRA 18:1)

VANADZINS, Z.; BRIVERE, A., red.

Riga. Riga, Latvijas Valsts izd-ba, 1964. 1 v.
(MIRA 17:8)

VANADZINS, Z.; BAUGIS, P., red.; KINCE, M., red.; KOVALOVS, V., red.; MACULEVICA, S., red.; ZVAGUZIS, I., red.; GRIVERE, A., red.

[Soviet Latvia] Padomju Latvija. Sovetskaia Latviia. Rīga, Liesma, 1965. 2 v.

(MIRA 18:10)

AVAKYAN, A.A., VANAG, A.I.

Rapid method of detecting Negri bodies with a phase contrast microscope. Zhur.mikrobiol. epid. i immun. no.6:90-96 Je '55. (MLRA 8:9)

1. Iz Instituta virusologii imeni D.I. Ivanovskogo AMN SSSR (dir.-prof. P.N. Kosyakov)

(RABIES, pathology,
Negri bodies, detection with phase contrast microscope)
(MICROSCOPE, PHASE,
of Negri bodies)

SHUBLADZE, A.K.; MAYEVSKAYA, T.M.; VANAG, A.I.

Some features of different strains of herpes viruses. Report No.2: Pathogenicity and morphological features of different strains of herpes viruses. Vop.virus. 7 no.3:286-293 My-Je '61. (MIRA 14:7)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva. (HERPES)

SHUBLADZE, A.K.; VANAG, A.I.; MAYEVSKAYA, T.M.

Some features of different strains of the herpes virus. Report No. 3: Role of erythrocytes in the pathogenesis of infection. Vop.virus. 7 no.3:293-299 My-Je '61. (MIRA 14:7)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.
(HERPES) (ERYTHROCYTES)

SHUBLADZE, A.K.; BARINSKIY, I.F.; BESPROZVANNYY, B.K.; ANAN'YEV, V.A.; VANAG, A.I.

Use of comparative virology methods in studying virus hepatites. Report No.1: Study of virus accumulation dynamics in the organs of experimentally infected animals. Vop. virus. 10 no.4:467-473 Jl-Ag '65. (MIRA 18:8)

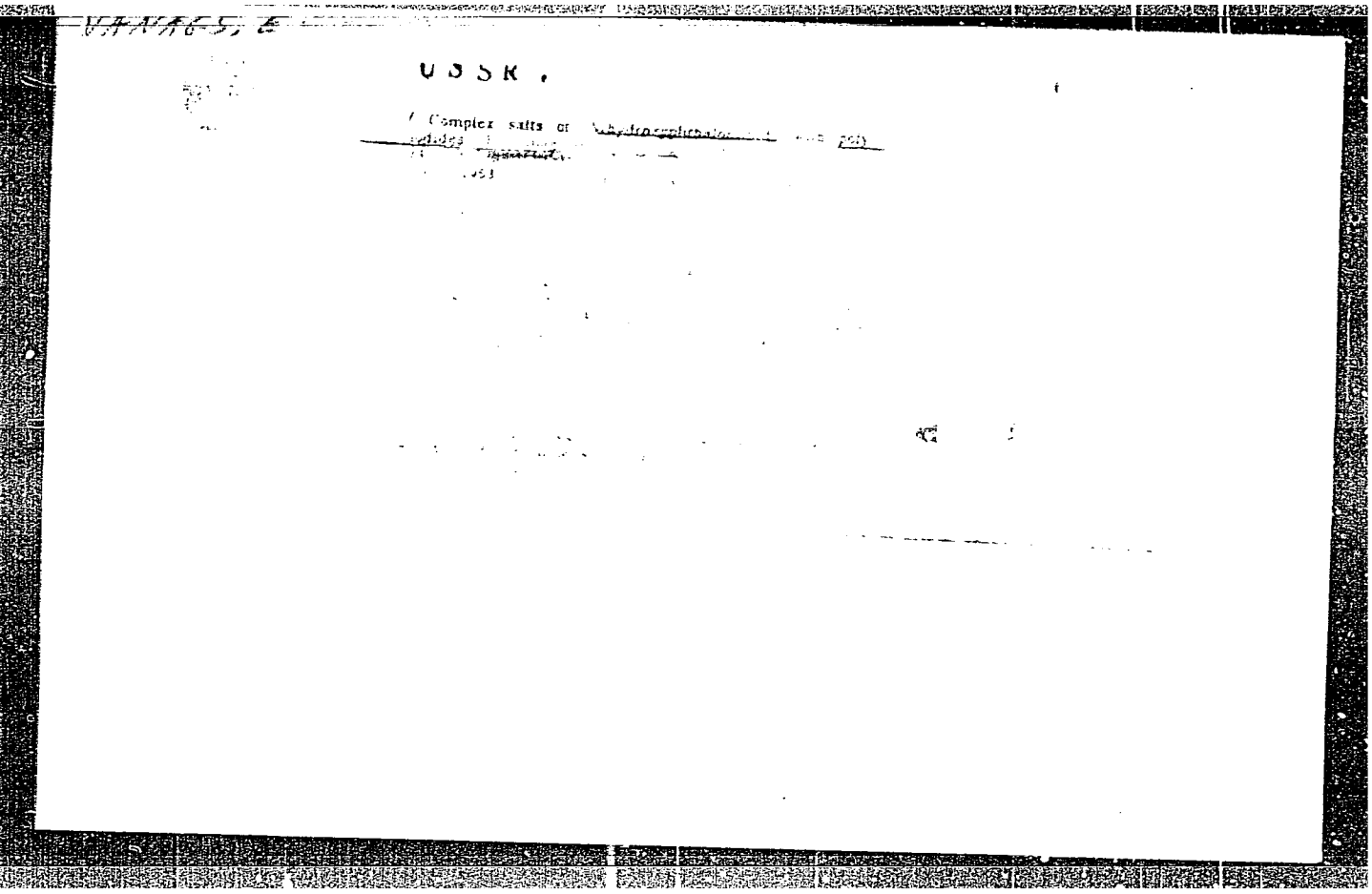
1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.

BYCHKOVA, Ye.N.; SHEN, R.M.; VANAG, A.I.

Viruses isolated from patients with encephalomyelitis and multiple sclerosis. Report No.2. Study of the pathomorphology of experimental infection. Vop. virus. 10 no.5:595-601 S-O '65.

(MIRA 18:11)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.



USSR

/ Complex salts of

VANAG, G.

1. VANAG, G.; VANAG, Ye.

2. USSR (600)

4. Oxyphthalonomide

7. New isomer of nitroindandione, the $\mathcal{N}$-osyphthalonimide. Dokl. AN SSSR 90 No. 1, 1953.

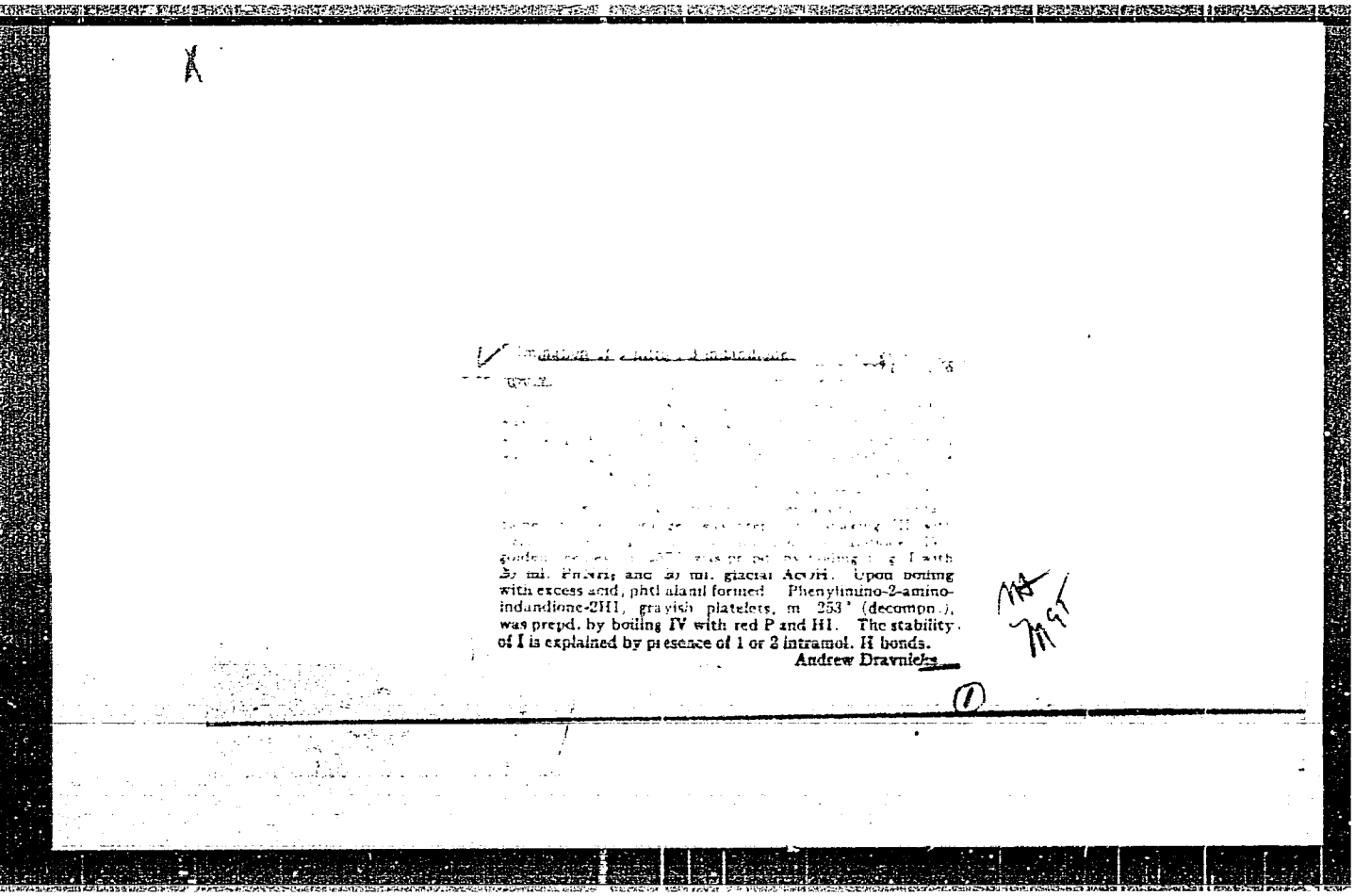
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

VANAG, E. V.

"Reaction of Nitroindanediol With Formaldehyde and With Acetic Anhydride." Cand Chem Sci, Latvian U, Riga, 1954. (RZhKhim, No 21, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55



with excess acid, phtl alanil formed Phenylimino-2-amino-indandione-2H1, grayish platelets, m 253° (decompn.), was prepd. by boiling IV with red P and HI. The stability of I is explained by presence of 1 or 2 intramol. H bonds.

Andrew Dravnieks

VANAG, E.; VANAG G.

Complex salts of N-oxyphthalonimide with polyiodides. Zhur.ob.khim. 24 no.11:1998-2001 N '54. (MIRA 8:3)

1. Voronezhskiy gosudarstvennyy universitet.
(Phthalonimides) (Iodides)

VANAG, E. V. In Latvian

VANAG, E. V. -- "Reaction of Nitroindadione with Formaldehyde and with Acetic Anhydride." Latvian State U, 1954. In Latvian (Dissertation for the Degree of Candidate of Chemical Sciences)

SO: Izvestiya Ak. Nauk Latviyskoy SSR, No. 9, Sept., 1955

VANAG, G.; VANAG, E.

Specific reaction for formaldehyde. Zhur.anal.khim. 10 no.1:63-64 Ja-F '55. (MIRA 8:4)

1. Institut khimii AN Latv. SSR, Riga.
(Formaldehyde)

ZALUKAYEV, L.; VANAG, E

Preparation of α-naphthyl-nitromethane and 4-nitro-α-naphthyl-nitromethane. Dokl. AN SSSR 103 no.4:619-621 Ag '55. (MLRA 8:11)

1. Institut khimii Akademii nauk Latviyskoy SSR. Predstavleno akademikom I.N.Nazarovym

(Nitromethylnaphtalene)

VANAGS, E.

USSR.

Specific reaction for formaldehyde. G. Vanags and E. Vanags (Inst. Chem., Acad. Sci. Latv. S.S.R., Riga). Zhur. Fiz. Khim. 11, 63-4(1938).--The method is based on the reaction between [illegible] and formaldehyde. Place 5 [illegible] of a [illegible] into a test tube [illegible] 1-2 drops of the [illegible] solution. After [illegible] ml. concd. H_2SO_4 and carefully heat over a flame [illegible] evaporating [illegible] the appearance of the [illegible] green fluorescence. The sensitivity of the reaction is 0.1 mg. formaldehyde in 0.1 ml. soln. Also in *J. Applied Chem. U.S.S.R.* 1e, 65-6 1938 (Engl. translation). M. Hoseh

VANAG, E.

USSR/Organic Chemistry - Synthetic Organic Chemistry E-2

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4338

Author : Zalukayev, L., Vanag, E.
Title : Preparation of Alpha-Naphthylnitromethane and Its Derivatives

Orig Pub : Zh. obshch. khimii, 1955, 26, No 2, 607-613

Abstract : Alpha-naphthylnitromethane (I), 4-nitro-I (II) and 4-bromo-I (III) were prepared by the previously developed method (RZhKhim, 1955, 21082). Reaction of alpha-naphthylacetic acid (IV) with phthalic ahnydride (V) was used to prepare alpha-naphthylidenephthalide (VI) which on action of CH_3ONa undergoes isomerization to 2-(alpha-naphthyl)-indandione-1,3 (VII). By nitration of VII was obtained 2-nitro-2-(alpha-naphthyl)-indandione-1,3 (VIII). Hydrolysis of VIII with NaOH gives I. On nitration of VI there is formed 4-nitro-alpha-naphthylidenephthalide (IX) which is isomerized to 2-(4-nitro-alpha-naphthyl)-

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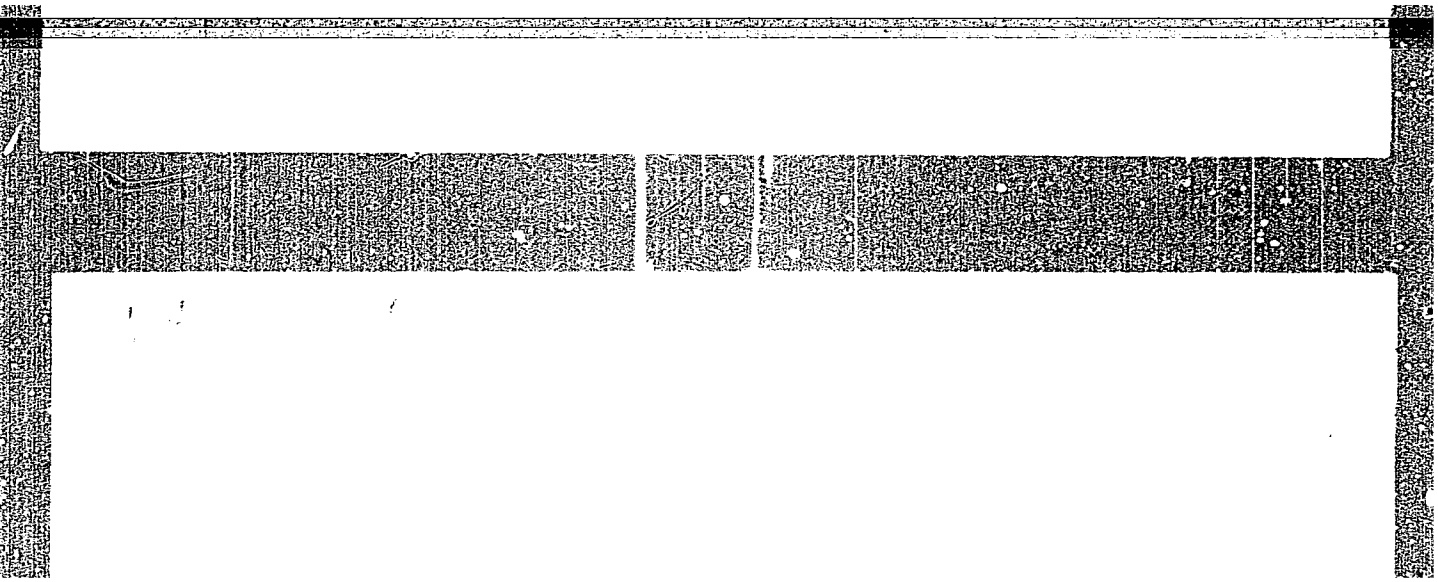
-indandione-1,3 (X). By nitration of X followed by hydrolysis was prepared II, the structure of which is established by preparation of 4-nitro-alpha-naphthoic acid (XI), by oxidation of IX and hydrolysis of II. III was synthesized analogously from 4-bromo-alpha-naphthylidenephthalide (XII), prepared by bromination of VI, followed by reduction with Zn. Mixture of 81 g IV, 81 g V and 2.5 g CH_3COONa, is heated until crystals are formed, boiled with alcohol, and VI is separated, yield of crude product 76%, MP 177-178° (from glacial CH_3COOH). 40 g VI and a solution of CH_3ONa (from 6 g Na) in 275 ml CH_3OH is boiled 0.5 hour, diluted with water and acidified, yield of crude VII 88%, MP 205-206° (from CH_3COOH). To a solution of 3.25 g VII in glacial CH_3COOH is added a mixture of 4 ml HNO_3 (d 1.52) and 8 ml glacial CH_3COOH; on cooling VIII is precipitated, yield 57%, MP 156°. Filtered solution of 10.3 g VIII in 300 ml of a 5% solution of NaOH is

acidified with diluted CH_3COOH and I is separated, yield of crude product 5.2 g, MP 71-72° (from glacial CH_3COOH). To 15 g VI are added 90 ml HNO_3 (d 1.34) in glacial CH_3COOH, mixture is heated 5 minutes at 40-45°, the precipitate is boiled with C_6H_6, and there are separated 9.8 g IX, MP 257°. IX is isomerized analogously to VI to get X, yield 70%, MP 203-204° (from glacial CH_3COOH). From 19 g X after nitration at 45° is obtained 2-nitro-2-(4-nitro-alpha-naphthyl)-indandione-1,3 (XIII), yield 74%, MP 165-166° (from CH_3COOH). Hydrolysis of XIII, analogously to VIII, gives II, yield 66%, MP 116-117° (from alcohol). 0.5 g II and 5 ml 80% H_2SO_4 are heated for 30 minutes and diluted with water, precipitate is treated with a solution of $NaHCO_3$, acidified and XI is separated, MP 219-220° (from aqueous alcohol). To 2.3 g IX and 4.5 g $Na_2Cr_2O_7$ in 60 ml glacial CH_3COOH are

added 5 ml concentrated H_2SO_4, and after the usual treatment there is obtained XI, yield 25%. To a boiling solution of 60 g VI in 450 ml CCl_4 are added 24 ml Br_2 in CCl_4, boiling is continued for 18 hours, after which the tribromo-derivative is separated, yield 58%, MP ~200°, 65 g of the latter and 100 g Zn are boiled 1 hour in 600 ml glacial CH_3COOH, XII is isolated, yield of the crude product 55%, MP 223-224° (from CH_3COOH or benzene). From 15 g crude XII is obtained the isomeric diketone, yield of crude product 14.5 g , MP 207-208° (from alcohol) 9.5 g diketone are nitrated as described above and there is obtained the 2-nitro-2-(4-bromo-alpha-naphthyl)-indandione-1,3, yield 45%, MP 147-148° (from CH_3COOH), which is hydrolyzed with a 10% solution of NaOH to get III, yield of crude product 90%, MP 91-92° (from alcohol).



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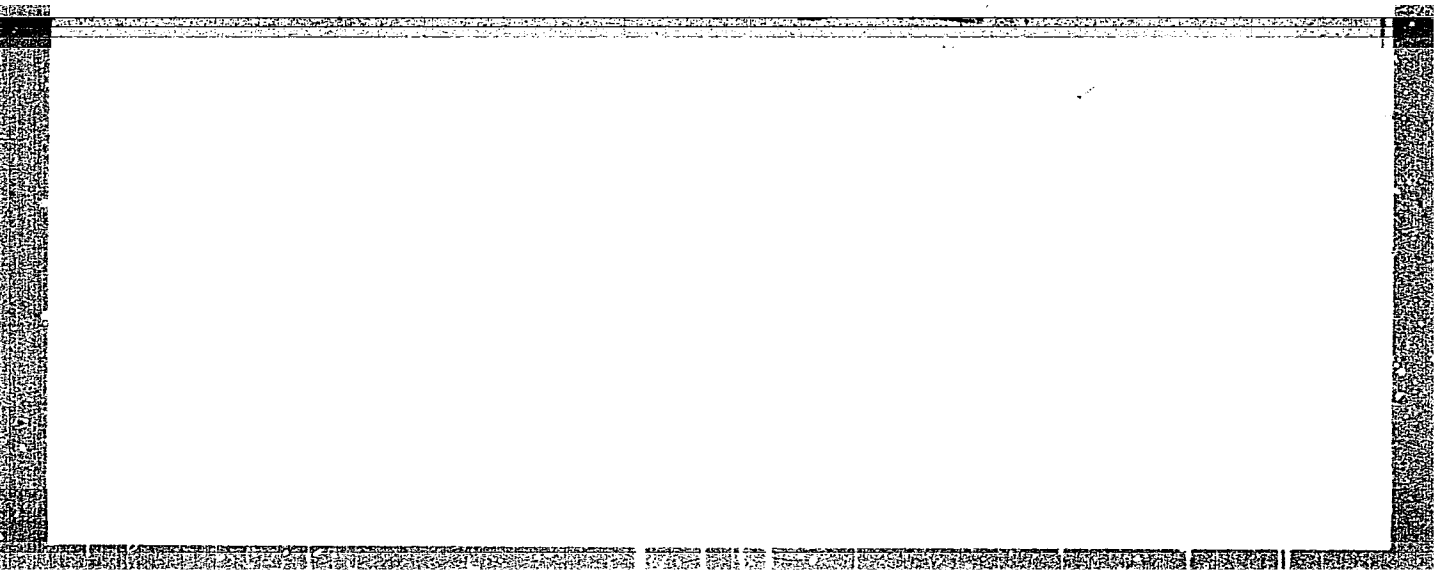

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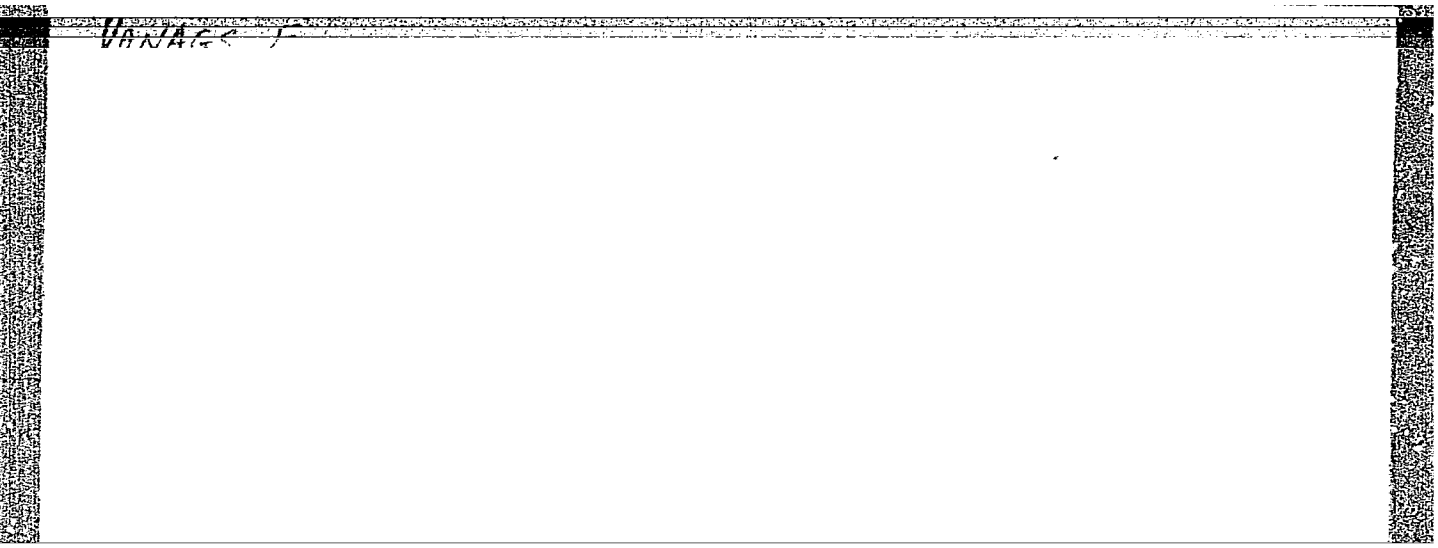

ZALUKAYEV, L.; VANAG, E. [Vanags].

Synthesis of ω-nitroethyl-p-nitrobenzene. Zhur.ob.khim.26 no.11:3115-3119 N '56. (MIRA 10:1)

1. Institut khimii Akademii nauk Latviyskoy SSR.
(Benzene)

Complex salts of N-hydroxyphthalonimide with poly-iodides. E. Vanags and G. V... Gen. Chem. U.S.S.R. 24, [illegible] (Engl. [illegible]) See C.A. 49, 7068c. B. M. R.

Vitnaits, E. V.

PHASE I BOOK EXPLOITATION SOV/4350

Sovershchaniye po khimii, tekhnologii i primeneniyu proizvodnykh piridina i khinolina. Riga, 1957

Khimiya, tekhnologiya i primeneniye proizvodnykh piridina i khinolina; materialy sovershchaniya (Chemistry, Technology and Utilization of Pyridine and Quinoline Derivatives: Materials of the Conference) Riga, Izd-vo AN Latviyskoy SSR, 1960. 299 p. Errata slip inserted. 1,000 copies printed.

Sponsoring Agencies: Akademiya nauk Latviyskoy SSR. Institut khimii; Vsesoyuznoye khimicheskoye obshchestvo.

Ed.: S. Dashkova; Tech. Ed.: A. Kiyavitsa; Editorial Board: Yu. A. Bankovskiy, Candidate of Chemistry, E. V. Vanags, Candidate of Chemistry (Resp. Ed.), L. P. Zalukayev, Doctor of Chemistry, and M. M. Kalnyn'.

PURPOSE: This book is intended for organic chemists and chemical engineers.

COVERAGE: The collection contains 33 articles on methods of synthesizing or producing pyridine, quinoline, and their derivatives from natural sources. No personalities are mentioned. Figures, tables, and references accompany the articles.

TABLE OF CONTENTS:

III. SYNTHESES BASED ON PYRIDINE AND QUINOLINE

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Vompe, A. F., M. V. Mantsch, N. P. Tarasova, and L. V. Ivanova. (Vsesoyuznyy nauchno-issledovatel'skiy kinofotoinstitut [All-Union Motion Picture Scientific Research Institute]). Mobility of the Alkoxy (Phenoxy) Group in Quaternary Salts and in Salts of γ-Alkoxy (Phenoxy) Pyridines.

Stepanov, F. N., and E. A. Aldanova. (Kafedra organicheskoy khimii Moskovskogo instituta tonkoy promyshlennosti [Department of Organic Chemistry, Moscow Institute of Fine Chemical Industry]). Synthesis of Alkyl Pyridines with Keto Halides 203

Vaserman, Ch. M., and S. A. Giller. (Riazhskiy meditsinskiy institut; Institut organicheskogo sinteza Akademii nauk Latviyskoy SSR (Riga Medical Institute; Institute of Organic Synthesis, Academy of Sciences Latvian SSR)). The Use of Saturated Nitrogen-Containing Heterocyclic Compounds for Synthesis of Ganglia-Blocking and Curariform Substances 207

Zalukayev, L. P., and E. V. Vanag. (Institut khimii Akademii nauk Latviyskoy SSR (Chemical Institute of the Academy of Sciences Latvian SSR)). Synthesis and Reactions of ω-Nitromethylquinolines 223

Card 8/10

AUTHORS: Zalukayev, L., Vanag, E. 79-12-22/43

TITLE: The Nitration of Phtalones (Nitrovaniye ftalonov).

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, Nr 12, pp. 3278-3282 (USSR).

ABSTRACT: In earlier works the nitration process of quinophtalone and the hydrolytic clearage of the nitration product in to 2-nitromethylquinoline was described. Later the reaction with the homologs of quinaldine was used and a useful method for the alcoholysis of nitroquinophtalone to the esters of α-nitro- α - (2 - quinolyl)-acetophenone-o-carboxylic acid were worked out (see formulae). In the present work the general application of this reaction with regard to phtalones of the 2-methylpyridine and 2-methylbenzthiazol is shown. With convenient conditions the authors obtained nitropyrophtalone (formula IV) and nitrobenzthiazophtalone (formula V). The compounds convert to alcohols when boiled and with alcohol influence they convert to the corresponding esters of the α - nitro - α - - substituted acetophenone-o-carbon acids (formula VI). In the case of a solution of nitrophtalones in alcalies with subsequent acidification of alkaline solutions it was possible to separate in both cases the corresponding nitromethanes with a heterocyclic substituent (formula VIII). The structure of 2-nitromethylbenzthiazol, which was obtained with a good yield and in the form of yel-

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The Nitration of Phtalones. 79-12-22/43

low crystals, was proved by its conversion to benzthiazol - 2 - carboxylic acid by means of sulfuric acid according to the general conversion of primary nitro compounds.
There are 4 references, 3 of which are Slavic.

ASSOCIATION: Chemical Institute AN Latvian SSR (Institut khimii Akademii nauk Latviyskoy SSR).
SUBMITTED: October 24, 1956.
AVAILABLE: Library of Congress.

1. Phtalones - Nitration

Card 2/2

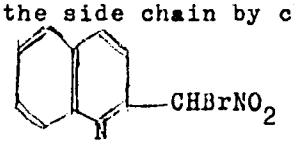
Vanag, E.

AUTHORS: Zalukayev, L., Vanag, E., 79-2-44/64

TITLE: Some Reactions of 2-Nitromethylquinoline (Nekotoryye reaktsii 2-nitrometilkhinolina) I. The Salt Formation and Effect of Haloids (Soleobrazovaniye i deystviye galoidov)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 2, pp. 483-486 (USSR)

ABSTRACT: The mobility of the hydrogen atoms and the great reactivity of the methyl group in 2-nitromethylquinoline admits an easy salt formation, a good solubility in lyes, as well as (at room temperature) an extremely simple substitution of the hydrogen atoms of the side chain by chlorine and bromine. The formula



is ascribed to the monobromide, since the following reasons indicate that the halogen is aromatically bound: the compound is easily soluble in lyes, here it is always separated unchanged after acidification. The bromine is easily cleft off by the influence of benzolchloride. The ultraviolet spectrum of monohalogen compounds is according to its character similar to that of 2-nitromethylquinoline. The power

Card 1/2

Some Reactions of 2-Nitromethylquinoline. I. The Salt Formation and Effect of Haloids. 79-2-44/64

of resistance against eyes must be especially pointed out. The behaviour of chlorine- and dihalogen compounds is analogous and the bonds to the carbon atom are also of aromatic character. The introduction of halogen to the nitro group weakens to a great extent the basic character of the quinoline ring. The halogen compounds of the 2-nitromethylquinoline are very weak bases which are not soluble in diluted acids. The preparation methods for potassium and ammoniumsalt, the mono- and dihalogen derivates as well as the chlorine-bromine substitution and all specific data of the compounds are given. There are 2 figures, and 2 Slavic references.

ASSOCIATION: Institute of Chemistry AS Latvian SSR (Institut khimii Akademii nauk Latviyskoy SSR)

SUBMITTED: January 14, 1957

AVAILABLE: Library of Congress

Card 2/2

5(3)

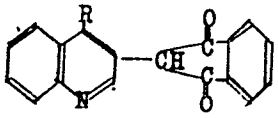
AUTHORS: Zalukayev, L., Vanag, E.

SOV/79-29-5-49/75

TITLE: Nitration of Phthalones. II (Nitrirovaniye ftalonov. II.)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 3, pp 1639-1642 (USSR)

ABSTRACT: The present paper gives results obtained from experiments made with the purpose of nitrating quinophthalones, that are substituted at the pyridine ring by an alkyl radical and that have the general formula:



As in the case of earlier attempts of producing nitrophthalones (from pyrophthalone, benzthiazophthalone, quinophthalone, Refs 1,2) also in the present case the reaction ran smoothly and under mild conditions. The derivatives of 2-nitro-2-substituted indandione-3 obtained undergo an alcoholysis on temperately heating in alcohol and form esters of α-nitro-α-alkyl quinolyl-2-acetophenone-o-carboxylic acid, wherein the radical of the alkoxy

Card 1/2

group corresponds to the radical of the alcohol used. Hydrolysis with sodium lye leads to α-nitromethyl-α-alkyl quinoline. The experimental part describes the reactions carried out and gives physical and analytical data in the compounds. There are 3 references, 2 of which are Soviet.

ASSOCIATION: Institut khimii Akademii nauk Latviyskoy SSR (Chemical Institute of the Academy of Sciences of the Latvian SSR)

SUBMITTED: April 16, 1958

VANAG, E. [Vanāga, E.] (Riga)

Interaction of 2-nitroindandione-1,3 with formaldehyde. In Russian.
Vestis Latv ak no.4:123-126 '60. (EEAI 10:7)

1. Akademiya nauk Latviyskoi SSR, Institut khimii.
(Nitroindandione) (Formaldehyde)

5.3610

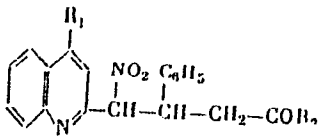
SOV/79-30-1-35/73

AUTHORS: Zalukayev, L. P., Vanag, E. V.

TITLE: Some Reactions of 2-Nitromethylquinoline. III. Reaction With α,β-Unsaturated Ketones

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 145-147 (USSR)

ABSTRACT: 2-Nitromethylquinoline was heated with chalcone, and 2-nitromethyl-4-methylquinoline with chalcone and benzal-acetone and derivatives with general formula (III) were obtained.



(III)

R_1 = H, CH_3; R_2 = CH_3, C_6H_5.

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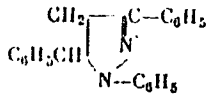
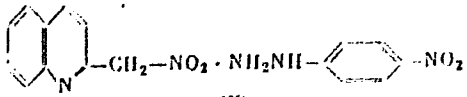
Some Reactions of 2-Nitromethylquinoline. 77369
III. Reaction With α,β-Unsaturated Ketones SOV/79-30-1-30/78

The reaction is reversible. γ-Nitrobutyrophenones with bases (phenylhydrazine, p-nitrophenylhydrazine, aniline) can eliminate elements of 2-nitromethylquinoline; as a result, a quinoline derivative and chalcone react with amines independently from each other. Specifically, phenylhydrazine with (III) forms 1,3,5-triphenylpyrazolidine.

$$C_6H_5CH{=}CHCOC_6H_5 + NH_2NH{-}C_6H_5 \rightarrow$$



2-Nitromethylquinoline with p-nitrophenylhydrazine forms the addition product (IV).



(IV)

Card 2/3

Some Reactions of 2-Nitromethylquinoline.
III. Reaction With α,β-Unsaturated Ketones

77369
SOV/79-30-1-30/78

γ-Nitro-γ-(4-methylquinolyl-2)-α-phenylbutyrophenone reacts similarly. γ-Nitro-γ-(quinolyl-2)-β-phenylbutyrophenone was obtained in 90% yield, mp 163°; γ-nitro-γ-(4-methylquinolyl-2)-β-phenylbutyrophenone, in 71% yield, mp 151-152°; γ-nitro-γ-(4-methylquinolyl-2)-β-phenylpentanone (yield 2.9 g, yellow crystals, mp 150-151°; 4.4 g of 2-nitromethyl-4-methylquinoline was taken as starting material); γ-nitro-γ-(p-nitrophenyl)-β-phenylbutyrophenone (0.85 g colorless needles, mp 178°; 0.9 g of p-nitrophenylnitromethane was taken as starting material). There are 5 references, 2 Soviet, 2 U.S., 1 German. The U.S. references are: E. Kohler, J. Am. Chem. Soc., 41, 1738 (1924); C. Allen, M. Bridgess, ibid., 51, 2153 (1929).

ASSOCIATION: Voronezh Agricultural Institute and Institute of Chemistry, Academy of Sciences of Latvian SSR (Voronezhskiy sel'skokhozyaystvennyy institut i Institut khimii Akademii nauk Latviyskoy SSR)

Card 3/3

SUBMITTED: January 5, 1959

5.3610

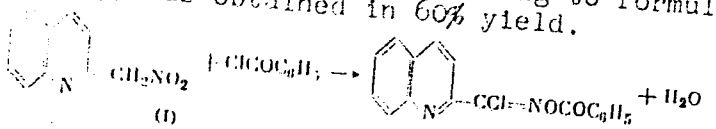
77880
SOV/79-30-2-31/78

AUTHORS: Zalukaev, L., Vanag, E. V.

TITLE: Some Reactions of 2-Nitromethylquinoline. II. The Reaction With Benzoyl Chloride

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, pp 506-510 (USSR)

ABSTRACT: 2-Nitromethylquinoline I was heated with benzoyl chloride. The product, corresponding to formula II (mp 156-151), was obtained in 60% yield.



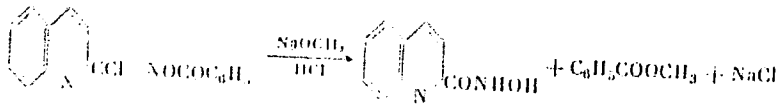
(I) (II)

Sodium methoxide (3% solution) reacts with II forming methyl benzoate and quinoline.

Card 1/3

Some Reactions of 2-Nitromethylquinoline. II. The Reaction With Benzoyl Chloride

77880
SOV/79-30-2-31/78



Quinoylhydroxamic acid is hydrolyzed with HCl and decarboxylated on distillation. As a result, the action of benzoyl chloride and sodium methoxide proceeds with denitromethylation of 2-nitromethylquinoline. H_2SO_4 reacts with the benzoylated product, forming a large amount of benzoic acid and a compound (mp 136°) which, according to its nitrogen content, corresponds to quinoylhydroxamic acid III (mp 136 dec.). Benzoyl chloride reacts with 2-nitromethylbenzothiazol forming compound IV (mp 152-153°).

Card 2/3

Some Reactions of 2-Nitromethylquinoline.
II. The Reaction With Benzoyl Chloride

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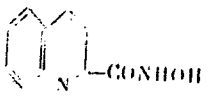
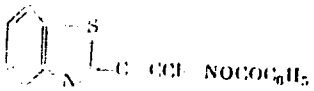
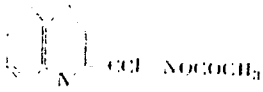


(III)



(IV)

2-Nitromethylquinoline (1g) was reacted with acetyl chloride (5 ml) and compound VII was obtained (0.45 g; mp 146-148°).



(VII)

There are 5 references, 4 Soviet, 1 German.

ASSOCIATION: Voronezh Agricultural Institute and Institute of Chemistry, Academy of Sciences, Latvian SSR (Voronezhskiy sel'skokhozyaystvennyy institut i Institut khimii adademii nauk Latviyskoy SSR)

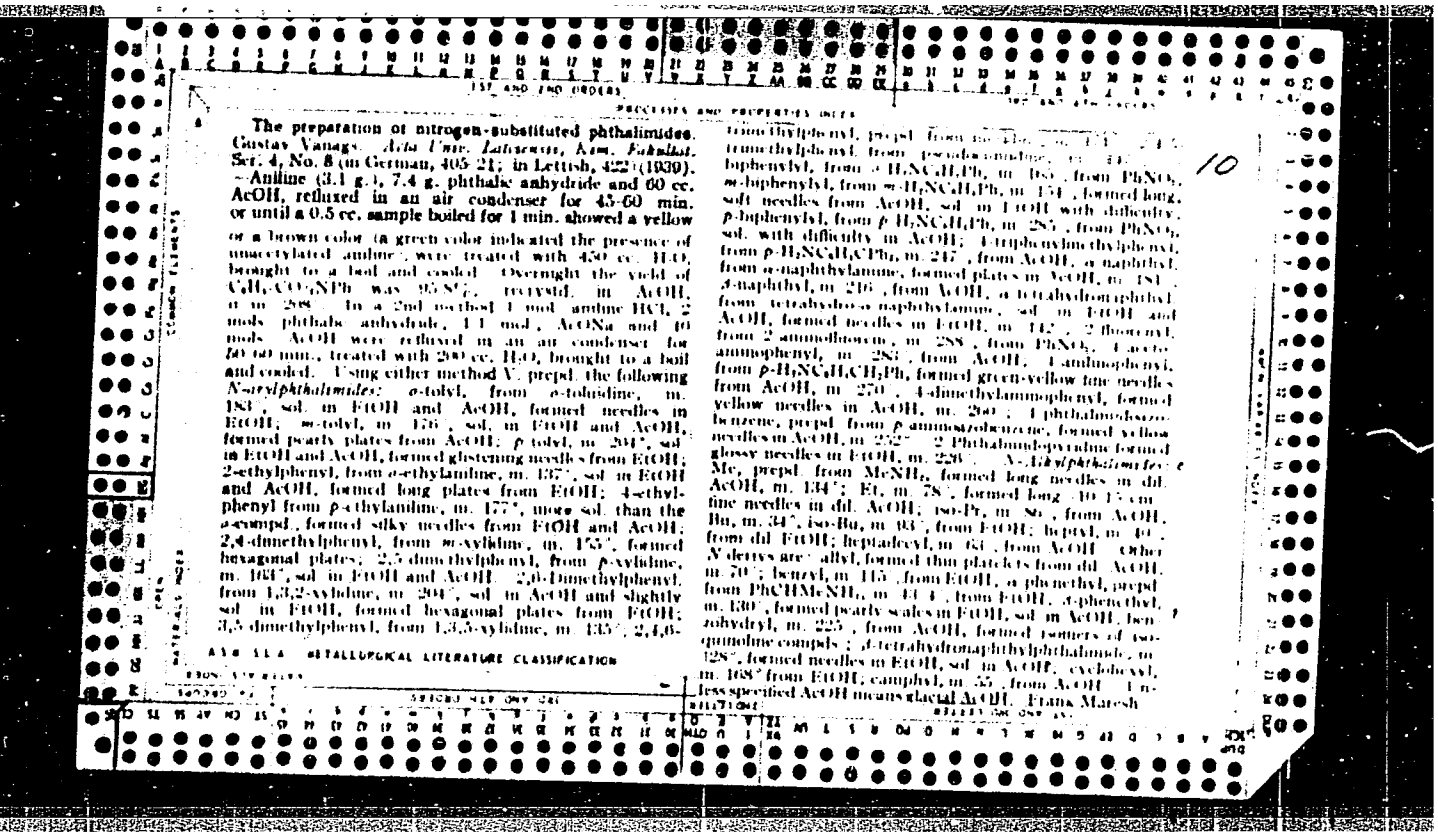
SUBMITTED: January 5, 1959

Card 3/3

VANAG, G.J.; LUKEVICS, E.J.

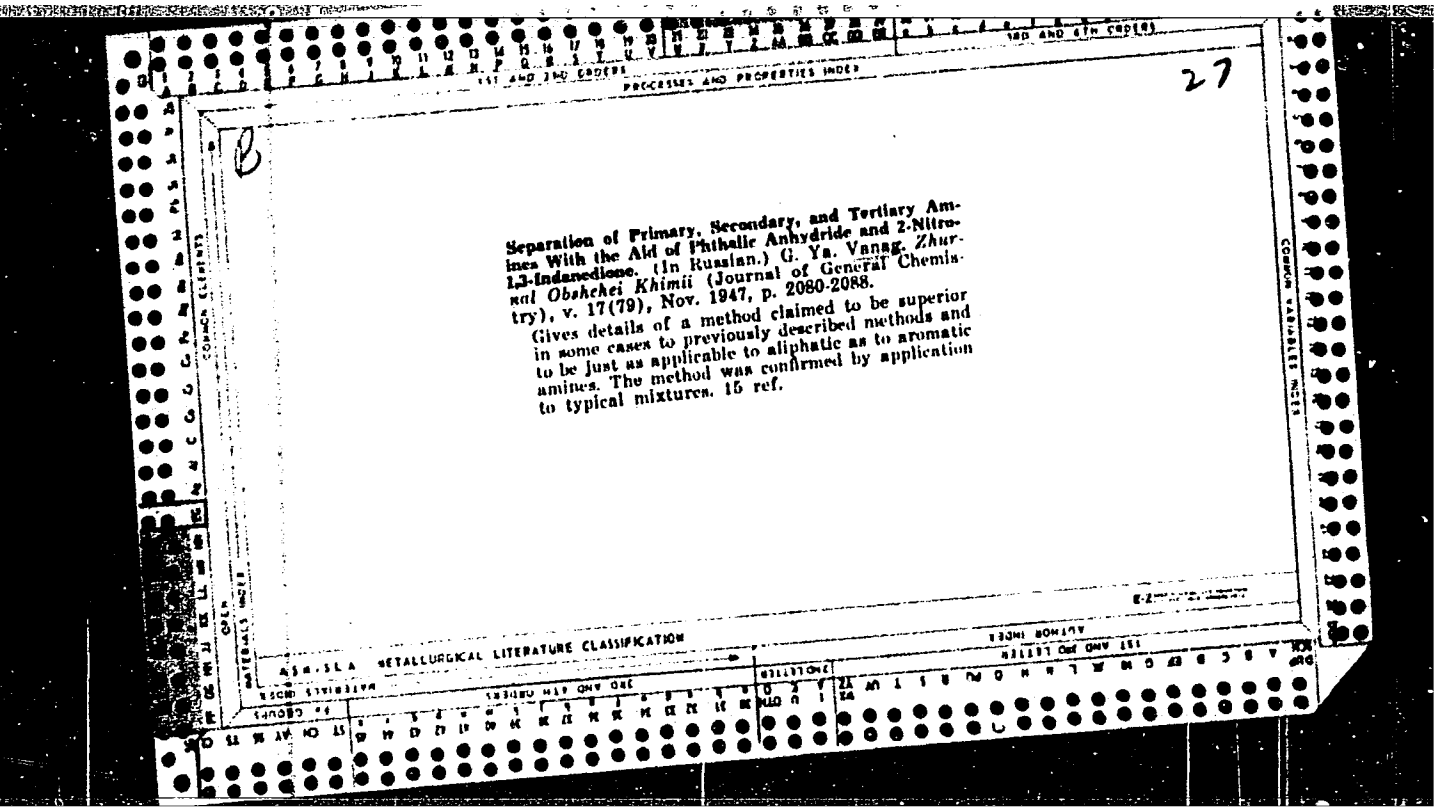
Liebermann reaction for the nitroso group. Zhur.ob.khim.26 no.5: 1400-1401 My '56. (MLRA 9:9)

1.Latviyskiy gosudarstvennyy universitet.
(Liebermann reaction) (Nitroso group)



The preparation of nitrogen-substituted phthalimides. Gustav Vanags. *Acta Univ. Latviensis, Acta. Fakultat. Ser.* 4, No. 8 (in German, 405-21; in Lettish, 422-(1939). —Aniline (3.1 g.), 7.4 g. phthalic anhydride and 60 cc. AcOH, refluxed in an air condenser for 45-60 min. or until a 0.5 cc. sample boiled for 1 min. showed a yellow or a brown color (a green color indicated the presence of unacetylated aniline), were treated with 450 cc. H_2O, brought to a boil and cooled. Overnight the yield of $C_6H_4(CO)_2NPh$ was 95.8%, recrystd. in AcOH, m. m. 208°. In a 2nd method 1 mol aniline HCl, 2 mols phthalic anhydride, 1.1 mol. AcONa and 40 mols. AcOH were refluxed in an air condenser for 30-60 min., treated with 200 cc. H_2O, brought to a boil and cooled. Using either method V. prepd. the following *N-arylphthalimides*: *o*-tolyl, from *o*-toluidine, m. 181°, sol. in EtOH and AcOH, formed needles in EtOH; *m*-tolyl, m. 176°, sol. in EtOH and AcOH, formed pearly plates from AcOH; *p*-tolyl, m. 201°, sol. in EtOH and AcOH, formed glistening needles from EtOH; 2-ethylphenyl, from *o*-ethylaniline, m. 137°, sol. in EtOH and AcOH, formed long plates from EtOH; 4-ethylphenyl from *p*-ethylaniline, m. 177°, more sol. than the *o*-compd., formed silky needles from EtOH and AcOH; 2,4-dimethylphenyl, from *m*-xylidine, m. 175°, formed hexagonal plates; 2,5-dimethylphenyl, from *p*-xylidine, m. 183°, sol. in EtOH and AcOH. 2,6-Dimethylphenyl, from 1,3,2-xylidine, m. 204°, sol. in AcOH and slightly sol. in EtOH, formed hexagonal plates from EtOH; 3,5-dimethylphenyl, from 1,3,5-xylidine, m. 135°, 2,4,6-trimethylphenyl, prepd. from [illegible], m. [illegible], 3,4-dimethylphenyl, from pseudocumidine, m. [illegible], biphenylyl, from *o*-$H_2NC_6H_4Ph$, m. 150°, from $PhNO_2$, *m*-biphenylyl, from *m*-$H_2NC_6H_4Ph$, m. 154°, formed long, soft needles from AcOH, sol. in EtOH with difficulty, *p*-biphenylyl, from *p*-$H_2NC_6H_4Ph$, m. 285°, from $PhNO_2$, sol. with difficulty in AcOH; 4-triphenylmethylphenyl, from *p*-$H_2NC_6H_4CPh_3$, m. 247°, from AcOH, *α*-naphthyl, from *α*-naphthylamine, formed plates in AcOH, m. 181°, *β*-naphthyl, m. 216°, from AcOH, *α*-tetrahydronaphthyl from tetrahydro-*α*-naphthylamine, sol. in EtOH and AcOH, formed needles in EtOH, m. 142°, 2-fluorenyl, from 2-aminofluorene, m. 288°, from $PhNO_2$, 4-acetoaminophenyl, m. 285°, from AcOH, 4-aminophenyl, from *p*-$H_2NC_6H_4CH_2Ph$, formed green-yellow fine needles from AcOH, m. 270°, 4-dimethylaminophenyl, formed yellow needles in AcOH, m. 240°; 4-phthalimidoazobenzene, prepd. from *p*-aminoazobenzene, formed yellow needles in AcOH, m. 252°. 2-Phthalimidopyridine formed glossy needles in EtOH, m. 226°. *N-Ethylphthalimides*: Me, prepd. from $MeNH_2$, formed long needles in dil. AcOH, m. 134°; Et, m. 78°, formed long 10-15 cm. fine needles in dil. AcOH; iso-Pr, m. 86°, from AcOH, Bu, m. 34°; iso-Bu, m. 93°, from EtOH; heptyl, m. 40°, from dil. EtOH; heptadecyl, m. 61°, from AcOH. Other *N* derivs are: allyl, formed thin platelets from dil. AcOH, m. 70°; benzyl, m. 115°, from EtOH, *α*-phenethyl, from PhCHMeNH$_2$, m. 114°, from EtOH, *β*-phenethyl, m. 130°, formed pearly scales in EtOH, sol. in AcOH, benzohydryl, m. 225°, from AcOH, formed isomers of isoquinoline compds.; *β*-tetrahydronaphthylphthalimide, m. 128°, formed needles in EtOH, sol. in AcOH, cyclohexyl, m. 168° from EtOH; camphyl, m. 55°, from AcOH. Unless specified AcOH means glacial AcOH. Frans Marsh

A1 B 1 E 4 METALLURGICAL LITERATURE CLASSIFICATION



27

B

Separation of Primary, Secondary, and Tertiary Amines With the Aid of Phthalic Anhydride and 2-Nitro-1,3-Indanedione. (In Russian.) G. Ya. Vanag. *Zhurnal Obshchei Khimii* (Journal of General Chemistry), v. 17(79), Nov. 1947, p. 2080-2088.

Gives details of a method claimed to be superior in some cases to previously described methods and to be just as applicable to aliphatic as to aromatic amines. The method was confirmed by application to typical mixtures. 15 ref.

VANAGS, G.

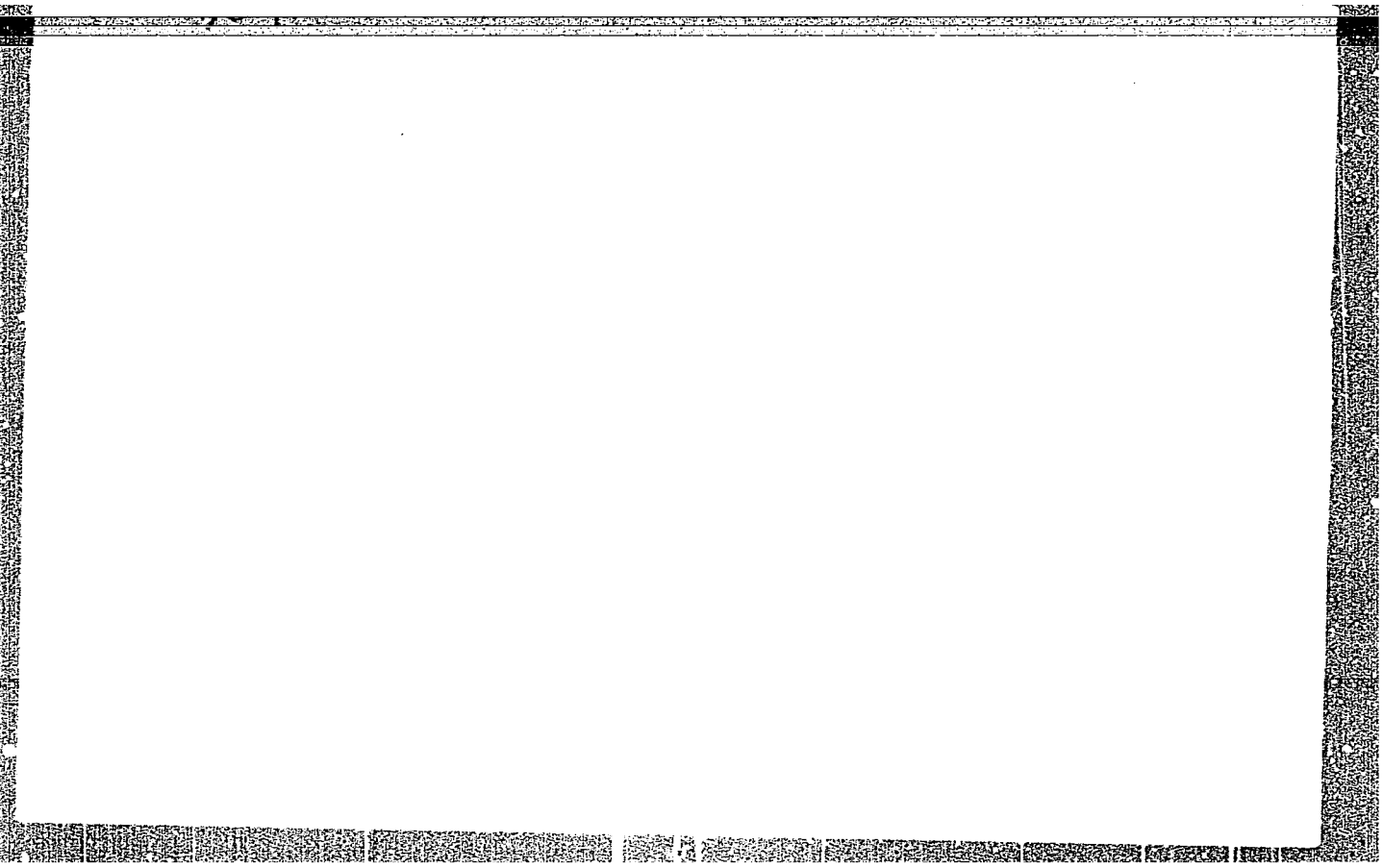
5

Chem Abs V48
1-25-54
Electronic Phenomena

Ultraviolet absorption spectra of 2-nitro-1,3-indandione. G. Vanags, J. Bidiss, and S. Hillers. *Latvijas PSR Zinātnu Akad. Vestis* 1949, No. 8(Whole No. 25), 21–30(Russian summary, 39–40).—Absorption spectra of 2-nitro-1,3-indandione (I) and its salts were detd. in many solvents. In highly dil. aq. soln., the nitroindandione ion is the absorbing agent, and can be represented as a resonance hybrid of 3 out of a no. of possible valence structures. In solvents of low dielec. consts. such as ether and dioxane, in which the energy of shifting of the electrons is high, the enol form slowly transfers into the diketo form; the rate of reaction is proportional to the dielec. const. In 100% H_2SO_4, the absorption is by a mol. form of I, characterized by a superposition of 3 other electronic structures; this form is an intermediate between the diketo and the enol forms. The spectrum of the Et ester of the indandionecarboxylic acid had analogous form, but with the absorption max. shifted by 760 A. towards higher frequency, which can be explained by structural considerations. Salts of I became colored on storage, and the spectra indicated that this is caused by intramol. shifts. A decrease in the ionization potential of the cation facilitates the formation of structures which absorb in the visible. The high ionization potential of Hg prevents formation of an ionic link and the salt of Hg with I remains colorless. Arguments in favor of H bonding in I are given.
A. Dravnieks

6/22/54

Condensation of 2-nitro-1,3-indandione with benzhydrol. G. Ya. Yanag, V. I. Platpiere, and M. A. Matkanova. *Zhur. Obshchei Khim.* (J. Gen. Chem.) 19, 1635-41 (1949).—Boiling 1.15 g. *2-nitro-1,3-indandione* (I) with 0.92 g. Ph_2CHOH (II) in 25 ml. HOAc 0.5 hr. gave 42.5% *2-nitro-2-benzhydryl-1,3-indandione* (III), m. 194-200° (from EtOH); a 34.8% yield is obtained when EtOH is used for solvent and some Ph_2CHOEt also forms. Glacial AcOH gives in 5 min. 84% of a product m. 202°. The product is unaffected by hot concd. H_2SO_4 unless charring is permitted; 1:2 H_2SO_4 has only a slight decompg. effect at reflux. III (1.2 g.) in 50 ml. AcOH boiled with 2 g. $PhNH_2$ 3 hrs. gave 1 g. phthalanil, m. 206-7°. III (3 g.) dissolves in 30 ml. of 1.5% MeONa in MeOH and upon dilu. with H_2O, filtration, and addn. of HCl yields 3.1 g. *2-nitro-3,3-diphenyl-2,3-dihydro-1,4-naphthoquinone*, m. 123-4° (from EtOH), as well as an *unidentified substance*, m. 60°, which ppts. upon dilu. of the filtrate with H_2O and HCl; the above naphthoquinone (0.5 g.), treated with warm 5% MeONa-MeOH until soln. took place and let stand overnight gave the *Na salt*, yellow needles, sol. in H_2O. If III is boiled with 5% MeONa-MeOH 4 hrs. only a small amt. of the naphthoquinone deriv. forms (sepd. as above) while acidification of the filtrate with HCl gives $Ph_2CHCH_2NO_3$, m. 68-70°, best crystd. from EtOH with a little HCl; repeated crystn. gives a pure product, m. 70-1°. Treatment of III with 5% aq. NaOH until soln. occurs, followed by dilu. and addn. of HCl until colorless, gave 4 g. tar, which with EtOH gave $Ph_2CHCH_2NO_3$, while the filtrate upon evapn. and sublimation gave *o*-$C_6H_4(CO)_2O$. Reduction of $Ph_2CHCH_2NO_3$ by Zn-AcOH yields the *amine compd.*, detected by the violet color test with biindone. Mild treatment of III with aq. alkali (NH_4OH) appears to yield *o*-$Ph_2CHCH(NO_2)COC_6H_4CO_2H$, which ppts. as a cheesy solid on acidification; however, on crystn. or evapn. of its solns. the acid character vanishes and the naphthoquinone deriv. forms spontaneously. G. M. K.



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CA

The condensation of 2-nitro-1,3-indandione with benzhydrol. G. Ya. Vanag, V. I. Platpiere, and M. A. Matskanova (Acad. Sci., Latvian S.S.R., Riga). *J. Gen. Chem. U.S.S.R.* 10, 1543-8(1940)(Engl. translation). -See *C.A.* 44 10874 B. L. M.

1937

CA

10

The structure of 2-nitro-1,3-indandione and of its salts. G. Ya. Vanag and E. Yu. Gudrinietze (Latvian State Univ., Riga). *J. Gen. Chem. U.S.S.R.* 19, 1551-3(1949)(Engl. translation).—See *C.A.* 44, 1087*a*. H. L. M.

1951

VANG, G. Ya

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2-Iodo-2-nitro-1,3-indandione. G. Ya. Vang and M. M. Lipman. *Doklady Akad. Nauk S.S.S.R.* 68, 693-6(1949).—Prepn. of 2-iodo-2-nitro-1,3-indandione, which cannot be prepd. analogously to the Cl or Br derivs., was effected by the action of iodine on the Ag salt of the nitro deriv. If a dry mixt. of these components is warmed in a sealed tube to 130° a strong *explosion* takes place with formation of o-$C_6H_4(CO)_2O$ and, apparently, Ag fulminate. If the mixt. does not explode, the product is the desired *2-iodo-2-nitro-1,3-indandione* (I), m. 128° (from C_6H_6), obtainable in up to 70% yields; even an excess of iodine fails to give more complete conversion. I gives yellow solns. in most org. solvents and liberates iodine on warming in soln.; at 145° I turns red and evolves iodine, a process complete at 165°, leaving an iodine-free material, sol. in H_2O with acid reaction, apparently with formation of o-$C_6H_4(CO)_2O$, converted to the acid with H_2O, and of ninhydrin. Treatment of I with aq. KI leads to formation of iodine in a quant. reaction, with the radical of the nitroindandione forming the K salt (II); the above occurs only in dil. solns., for in concd. aq. KI there is formed a ppt. of dark needles of a double salt, $II_2KI.I_2$, of the above K salt with KI and iodine. I reacts with $Na_2S_2O_3$ with evolution of iodine (sol. in excess thiosulfate), via initial binding by the thiosulfate of the pseudohalogen radical of the nitroindandione, and only after completion of this step does the usual iodine-thiosulfate reaction take place. Weak alkali also liberates iodine from I and the latter is sol. in excess of the reagent. Boiling I with H_2O yields nitroindandione and HOI. The following prepn. of I is more satisfactory than the sealed-tube procedure. Cooling a soln. of 3.4 g. *2-nitro-1,3-indandione* and 2.5 g. $AgNO_3$ in 600 ml. boiling H_2O yields the *Ag salt*, which ppts. progressively in 3 colors: yellow, orange, and finally white (the latter is least stable, but any of the 3 forms may be used in the prepn.); yield 49%, and the remainder may be recovered from the soln. (sply. 3 g./l.); the Ag salt decomp. vigorously at 230°, forming metallic Ag and o-$C_6H_4(CO)_2O$. The Ag salt (14.6 g.) and 9.5 g. iodine are thoroughly triturated and left for 5 days in a closed test tube; after retrituration and further a 1-2days' standing (complete clarification) and extn. with hot C_6H_6, there is obtained on cooling 73.5% I, m. 128°; additional amts. may be obtained from the soln. (sply. 9% in C_6H_6). The C_6H_6-insol. portion contains some unreacted Ag salt, extractable by hot H_2O, and 8.4 g. AgI. G. M. K

VANAGS, G.; LIPMANIS, M.

Quantitative analysis of salts of 2-nitro-1,3-indandione. Kim. Inst. Zinātnisk. Raksti, Latvijas PSR Zinātnu Akad. 1, 78-80 '50. (CA 47 no.19:9865 '53)

VANAGS, G.

(3)

Chemical Abstracts
May 25, 1954
Organic Chemistry

1 Alkylation of 2-aminofluorene. G. Vanags and E. Vanags. *Kim. Inst. Zinātnisk. Raksti, Latvijas PSR Zinātņu Akad.* 1, 93-6(1950)(in Latvian); cf. *C.A.* 42, 4470h. 2-(*Dimethylamino*)*fluorene* (I), gray crystals from alc., m. 173° (180° after repeated recrystn.), was obtained in 5-g. yield (74%) by refluxing 8 hrs. on a water bath 5 g. (1 equiv.) 2-aminofluorene (II) and 8 g. (2 equivs.) MeI in 10 g. MeOH, dilg. with 120 ml. H_2O, filtering the ppt., dissolving it in boiling dild. HCl, and pptg. again with dild NH_4OH. It dissolves in MeOH, EtOH, AmOH, Et_2O, $CHCl_3$, Me_2CO, C_6H_6, and glacial AcOH. I·HCl is unstable (hydrolyzes in H_2O). II and MeI in equimolar amts. did not yield a mono-Me deriv. as was expected. *2-(Ethylamino)-fluorene* (III), obtained in 2.2-g. (95.6%) yield by refluxing 8 hrs. on a water bath 2 g. (1 equiv.) II and 4 g. (2 equivs.) EtI in 8 ml. abs. EtOH, brown crystals from alc., m. 79°; the molar ratio 1:2 did not yield the expected di-Et deriv. The compd. dissolves in MeOH, EtOH, AmOH, Et_2O, Me_2CO, $CHCl_3$, C_6H_6, and glacial AcOH; boiled with bin-done in glacial AcOH it gave a green color that indicates a secondary amine. *2-(N-ethylacetamido)fluorene*, obtained in 0.2-g. yield by boiling 1 hr. on a water bath with reflux condensed and later without a condenser 0.3 g. III in 2 g. C_6H_6 and 2 g. AcCl, m. 105° (from alc.). E. G. M...

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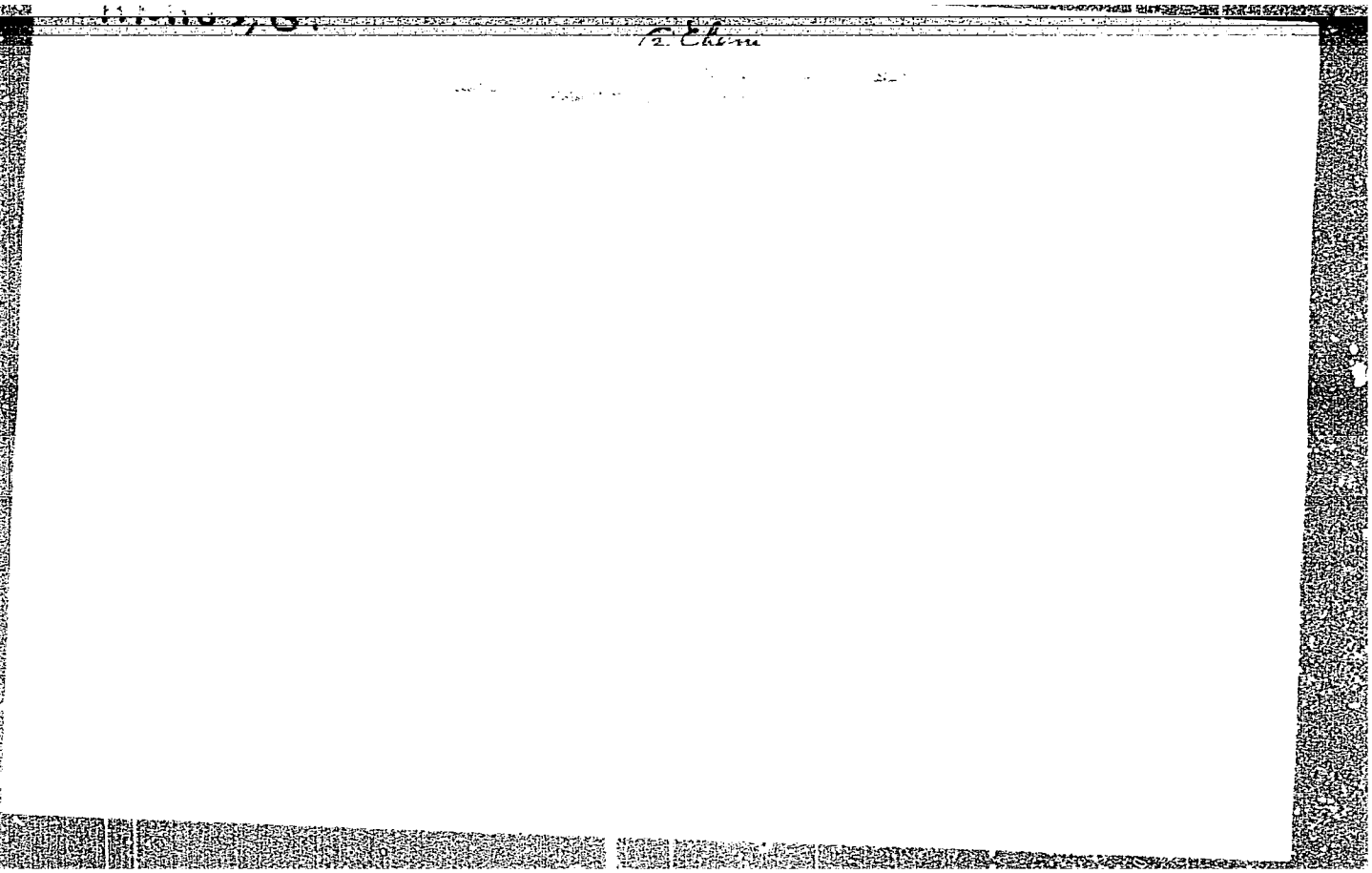

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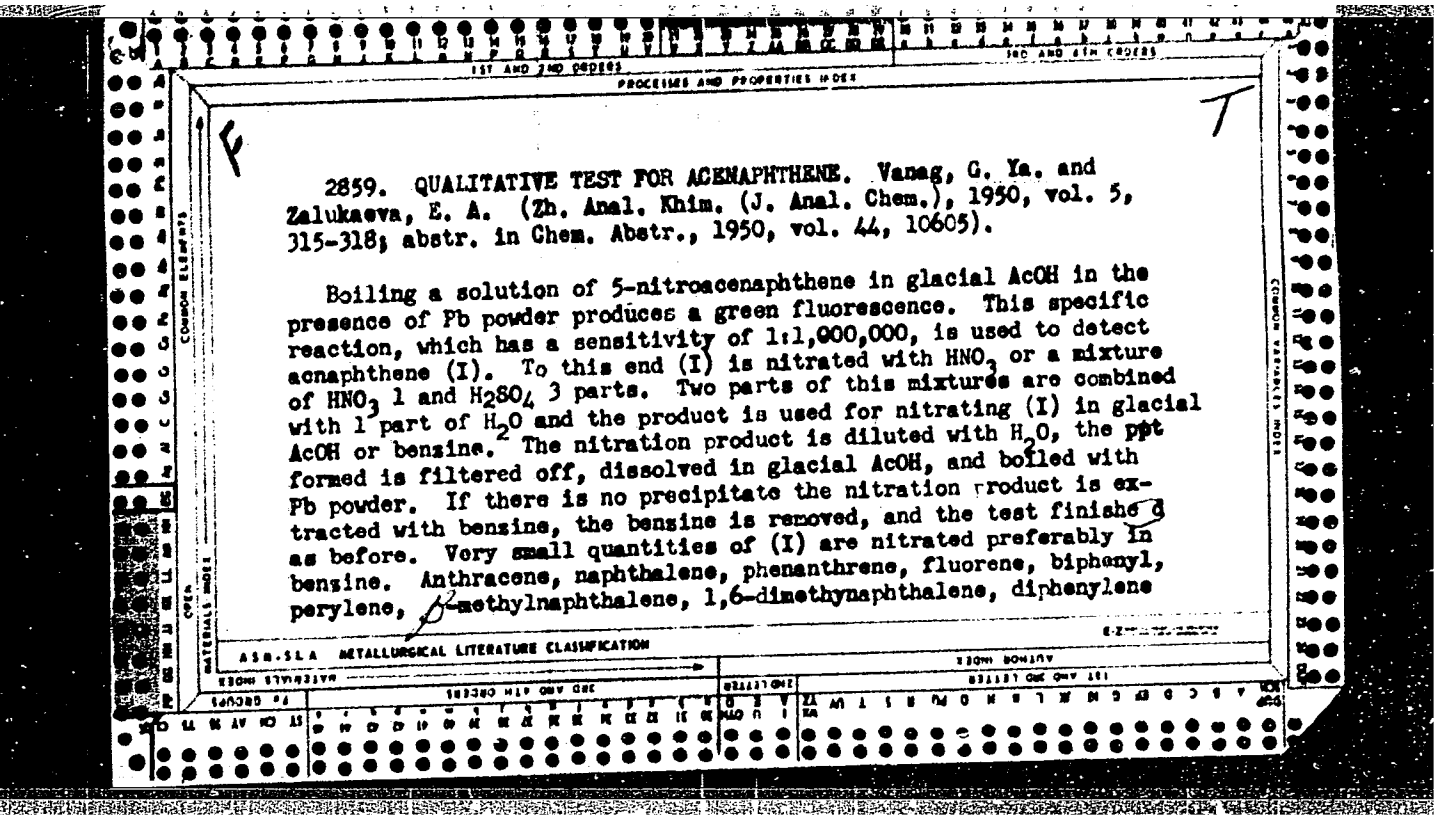
Lignin as reagent for amines. G. Ya. Vanag (Latvian State Univ., Riga). *Zhur. Anal. Khim.* 5, 110-18(1950).—Compds. contg. a primary or secondary aromatic amino group produce a color reaction with ligneous material. In most cases the color is yellow or orange. As ligneous material, wood can be used or, which is more convenient, paper, preferably newsprint. The reaction is best carried out in dil. HCl, glacial AcOH, or an alc. soln. contg. a drop of concd. HCl. Acylated amines do not give a pos. test. In some cases, e.g., phenylenediamines, isomers can be differentiated from the color difference. Approx. 150 amines, their specific color and limiting concn., are listed.
M. Hoseh



2859. QUALITATIVE TEST FOR ACENAPHTHENE. Vanag, G. Ya. and Zalukaeva, E. A. (Zh. Anal. Khim. (J. Anal. Chem.), 1950, vol. 5, 315-318; abstr. in Chem. Abstr., 1950, vol. 44, 10605).

Boiling a solution of 5-nitroacenaphthene in glacial AcOH in the presence of Pb powder produces a green fluorescence. This specific reaction, which has a sensitivity of 1:1,000,000, is used to detect acnaphthene (I). To this end (I) is nitrated with HNO_3 or a mixture of HNO_3 1 and H_2SO_4 3 parts. Two parts of this mixtures are combined with 1 part of H_2O and the product is used for nitrating (I) in glacial AcOH or benzine. The nitration product is diluted with H_2O, the ppt formed is filtered off, dissolved in glacial AcOH, and boiled with Pb powder. If there is no precipitate the nitration product is extracted with benzine, the benzine is removed, and the test finished as before. Very small quantities of (I) are nitrated preferably in benzine. Anthracene, naphthalene, phenanthrene, fluorene, biphenyl, perylene, β-methylnaphthalene, 1,6-dimethynaphthalene, diphenylene

oxide, naphthalic acid anhydride, etc. did not react. Nor did other derivatives of (I) give this reaction. The presence of these hydrocarbons severally or combined did not interfere with the test. Concentrated HCl and H_2SO_4 did not interfere, HNO_3 destroyed the fluorescence as did to a lesser degree H_2O_2. Oxalic, benzoic, citric, tartaric, and succinic acids did not interfere. Glacial acetic acid could be replaced by propionic, butyric, lactic, and monochloroacetic acid. Di- and tri-chloroacetic acid were unsuitable.

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VANAG, G. Ya.

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Complex salts of nitroindandione. G. Ya. Vanag and M. M. Lipsons (Acad. Sci. Latvian S.S.R.). *Doklady Akad. Nauk S.S.S.R.* 71, 473–6(1950); cf. *C.A.* 44, 1947b.—Addn. of I-KI soln. to an aq. soln. of K deriv. of $C_6H_4(CO)_2CHNO_2$ (I), does not lead to decolorization, but a greenish gelatinous ppt. forms, which readily loses I_2 on exposure to air; dried *in vacuo* in vapors of I_2, the product is a black powder with green luster, which loses I_2 on warming, and its compn. approximates $A_2.KI.I_2$, where A is the K deriv. of I. The *Na deriv.* of I could not be prepd. similarly, but was prepd. by addn. of powd. I_2 to concd. soln. of Na deriv. of I followed by standing 24 hrs. In appearance and behavior it is similar to the above. On storage in air the complex loses I atom of I forming $A_2.KI.I_2$. The product obtained by the action of powd. I_2 approximates the compn. $A_2.I_2$, which on standing in air forms A_2I_2. Similar prepn. of Ca analog, $A_2.CaI_2.2I_2$ (where A is the Ca deriv. of I) and the NH_4 analog, $A_{12}.2NH_4I.5I_2$ (where A is the NH_4 deriv. of I) results in analogous unstable solids; the NH_4 deriv. decomposes completely on exposure to air, yielding the NH_4 deriv. of I. Addn. of various salt solns. to these complexes yields colored slightly sol. ppts.; thus, *Sr salts* give a deep-violet ppt., which on long standing is converted to the yellow Sr deriv. of I; *Ba salts* give a flaky brown ppt.; *Pb* yields cherry red ppt. Other cations fail to give clearly defined products. Generally the most stable complexes are those contg., besides I_2, the iodide of a metal. As the at. wt. of the metal increases, the complex stability declines.

G. M. Kosolapoff

1. VANAGS, G.; ZALUKAYEV, L.

2. USSR (600)

4. Indandione

7. Reduction products of 2-nitro-2-benzohydrylin-dandione-1, 3 and benzohydryinitro-methane. Latv. PSR Zin. Akad. Vestis 5, 1951

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

1. VANAGS, G.: LIPMANIS, M.

2. USSR (600)

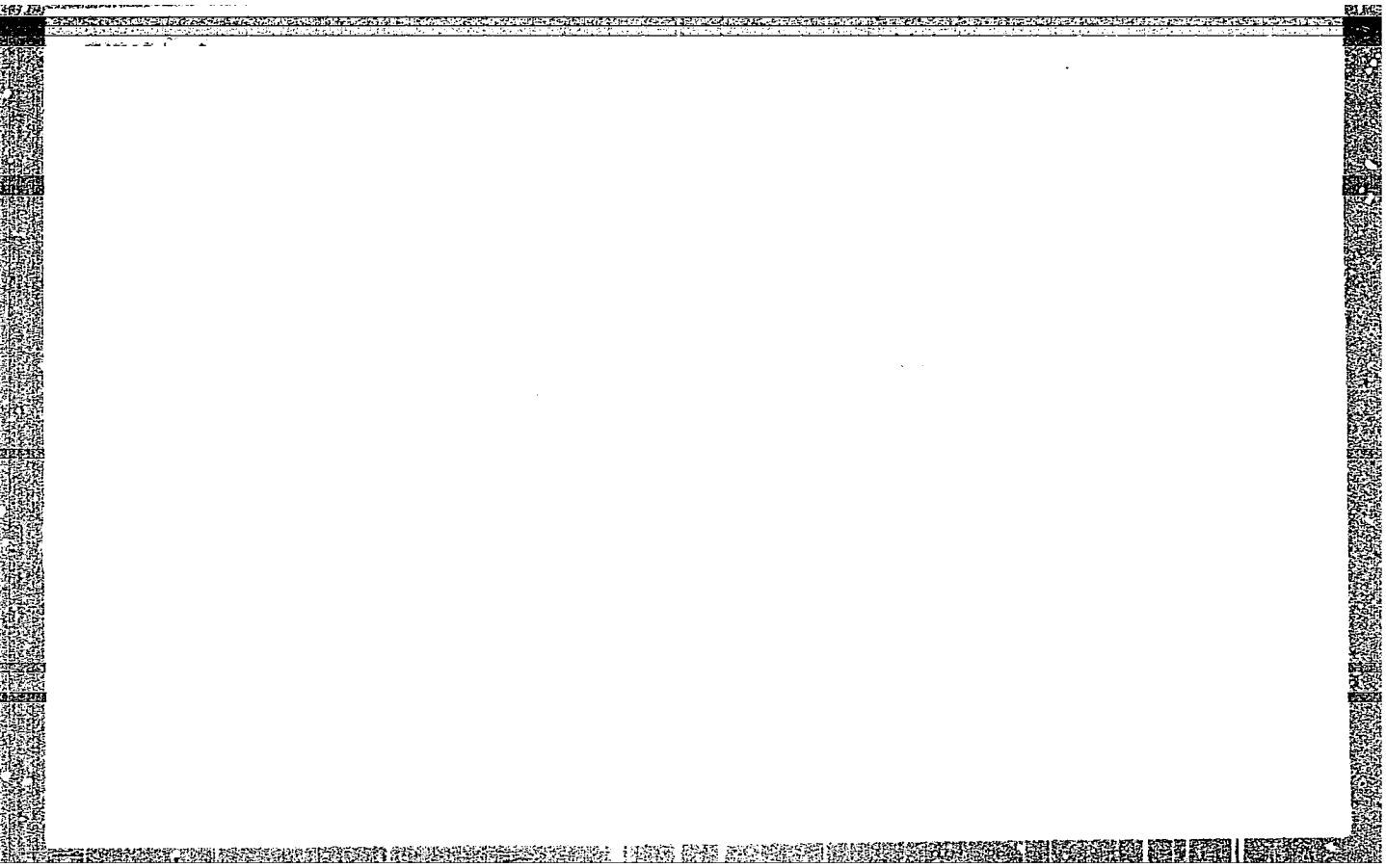
4. Indandione

7. Interaction of bis-indandione with iodine. Latv. PSR Zin. Akad. Vestis, no. 7, 1951.

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

VANAGS, G.; ZALUKAJEVS, L.

Products of reduction of 2-nitro-2-benzhydryl-1,3-indandione and benzhydryl-nitromethane. Latvijas PSR Zinātnu Akad. Vēstis '51, 753-6. (MLRA 5:10) (CA 47 no.22:12332 '53)



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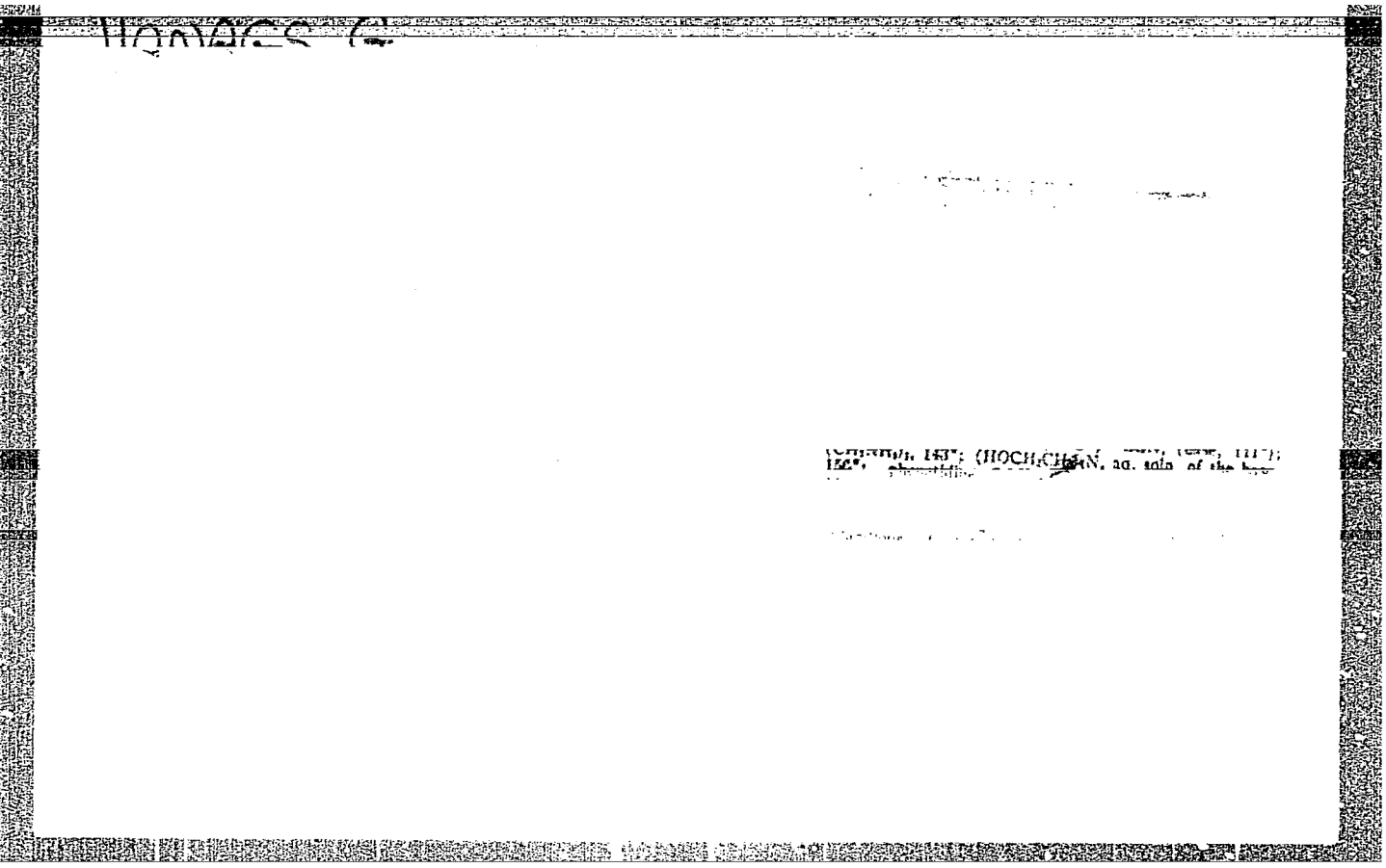

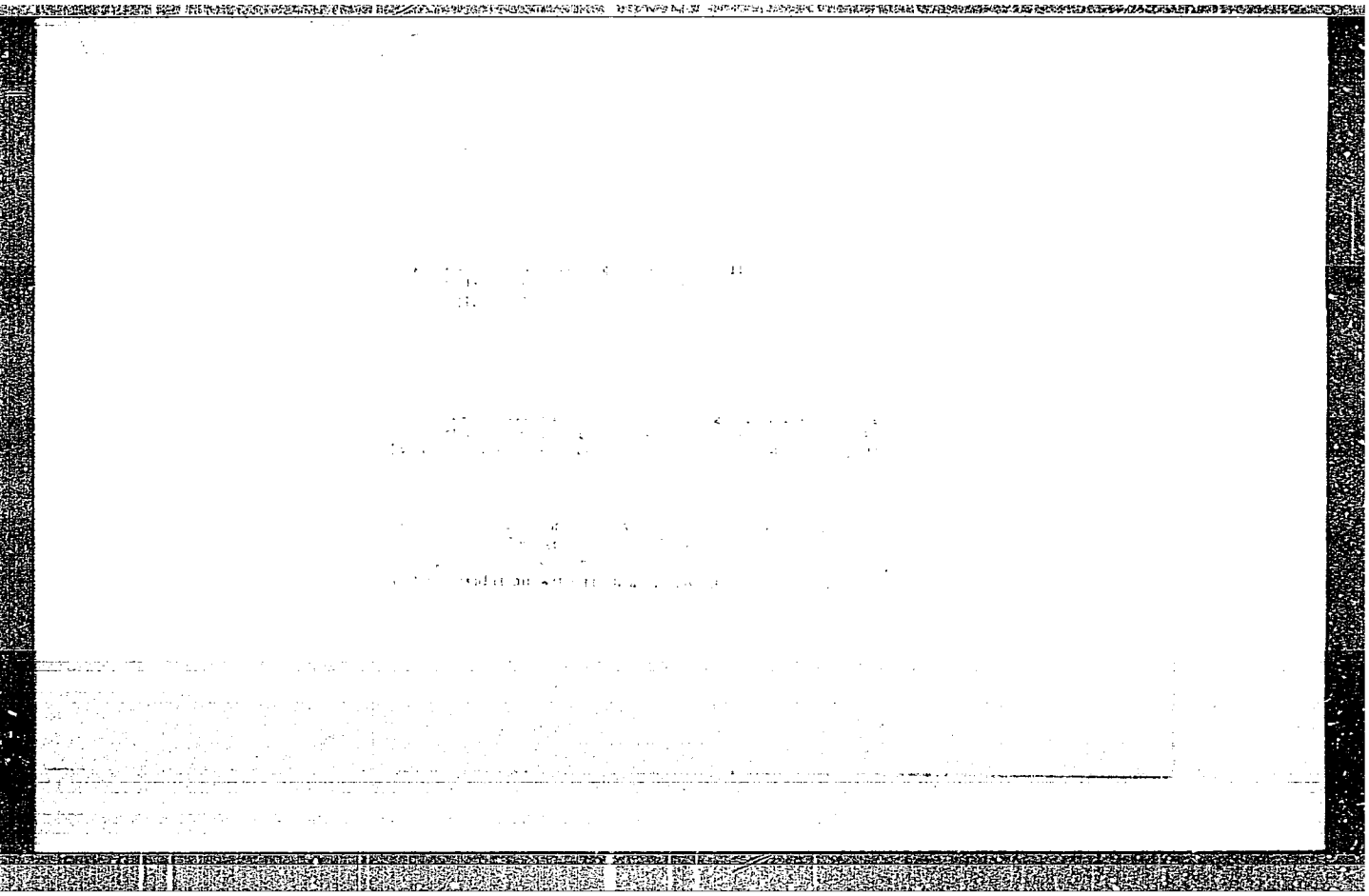

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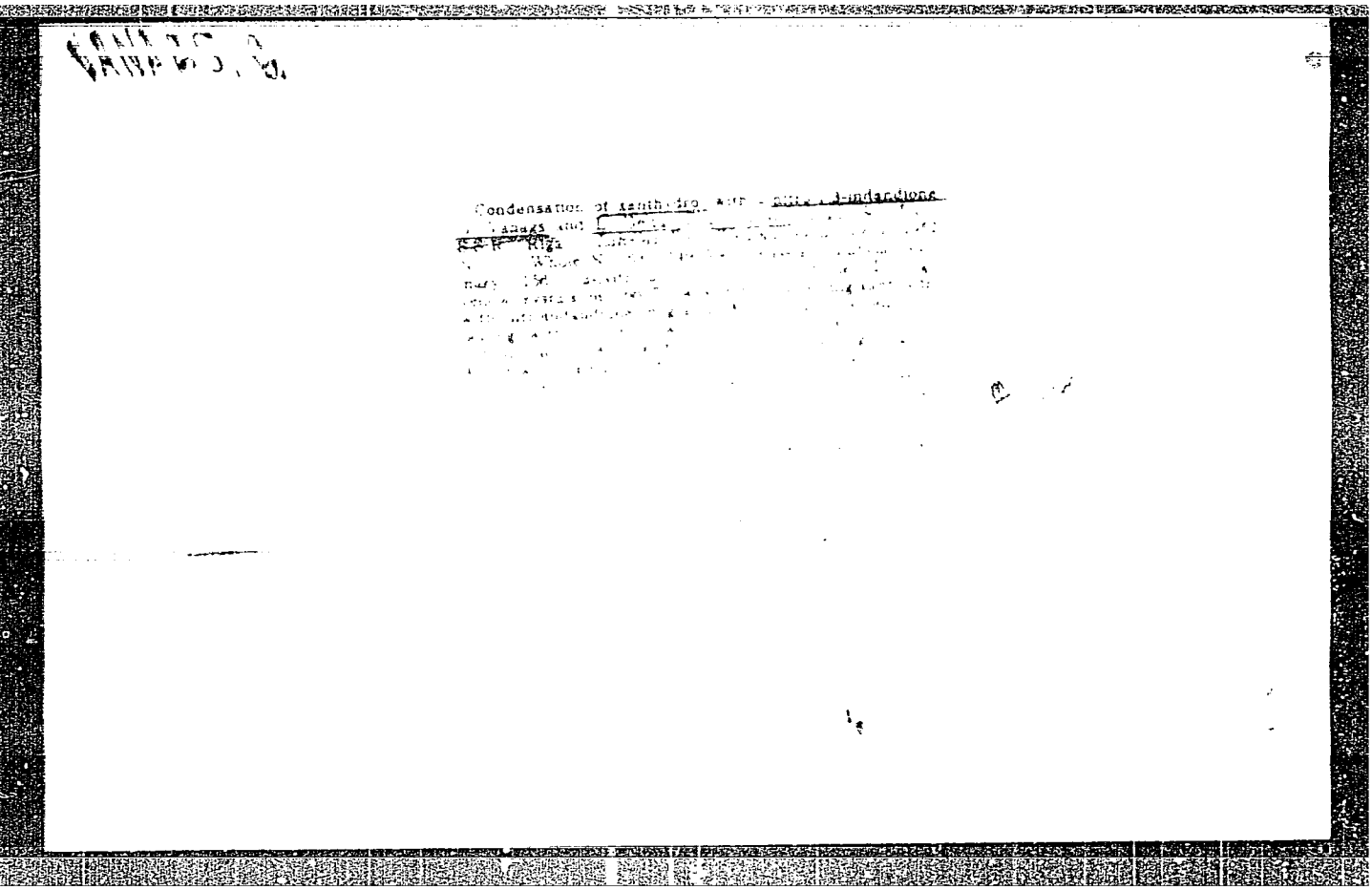

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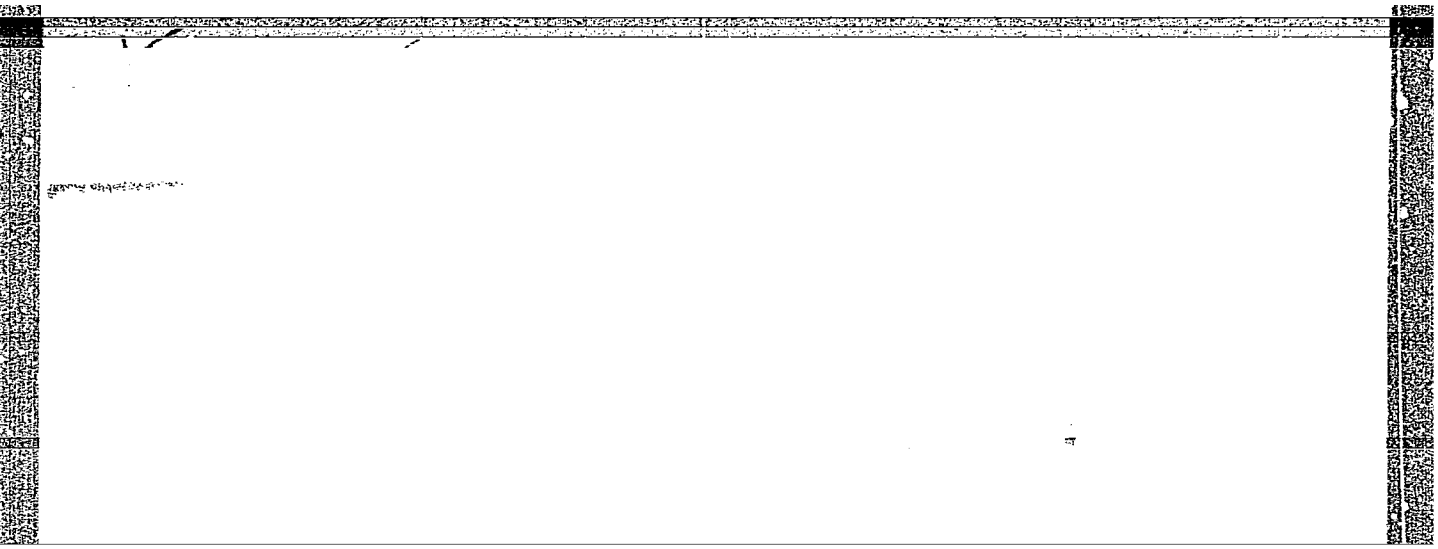

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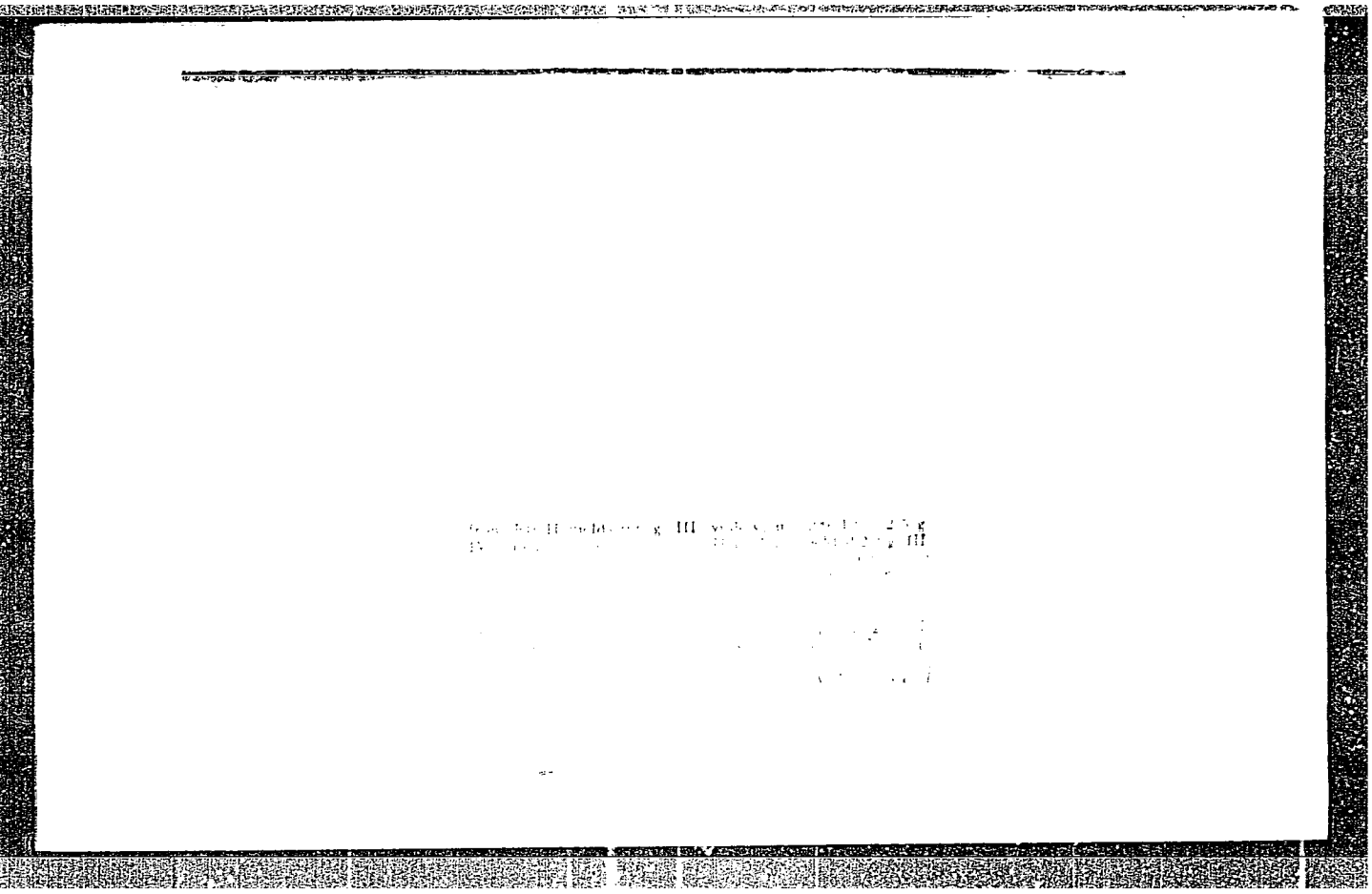

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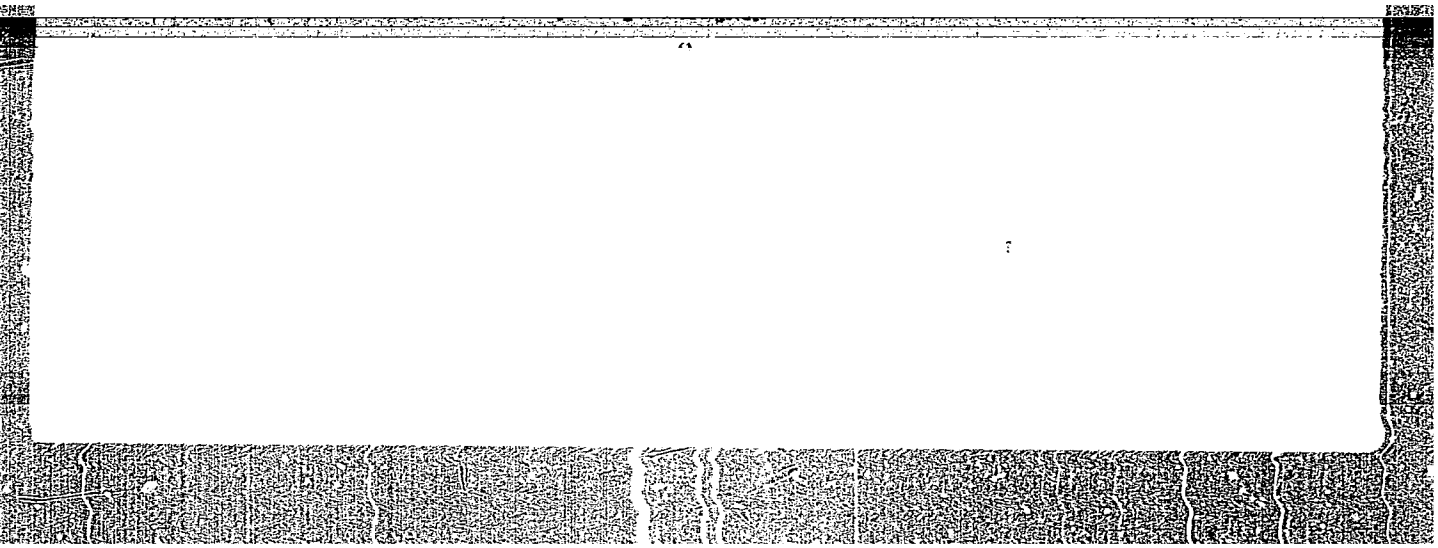

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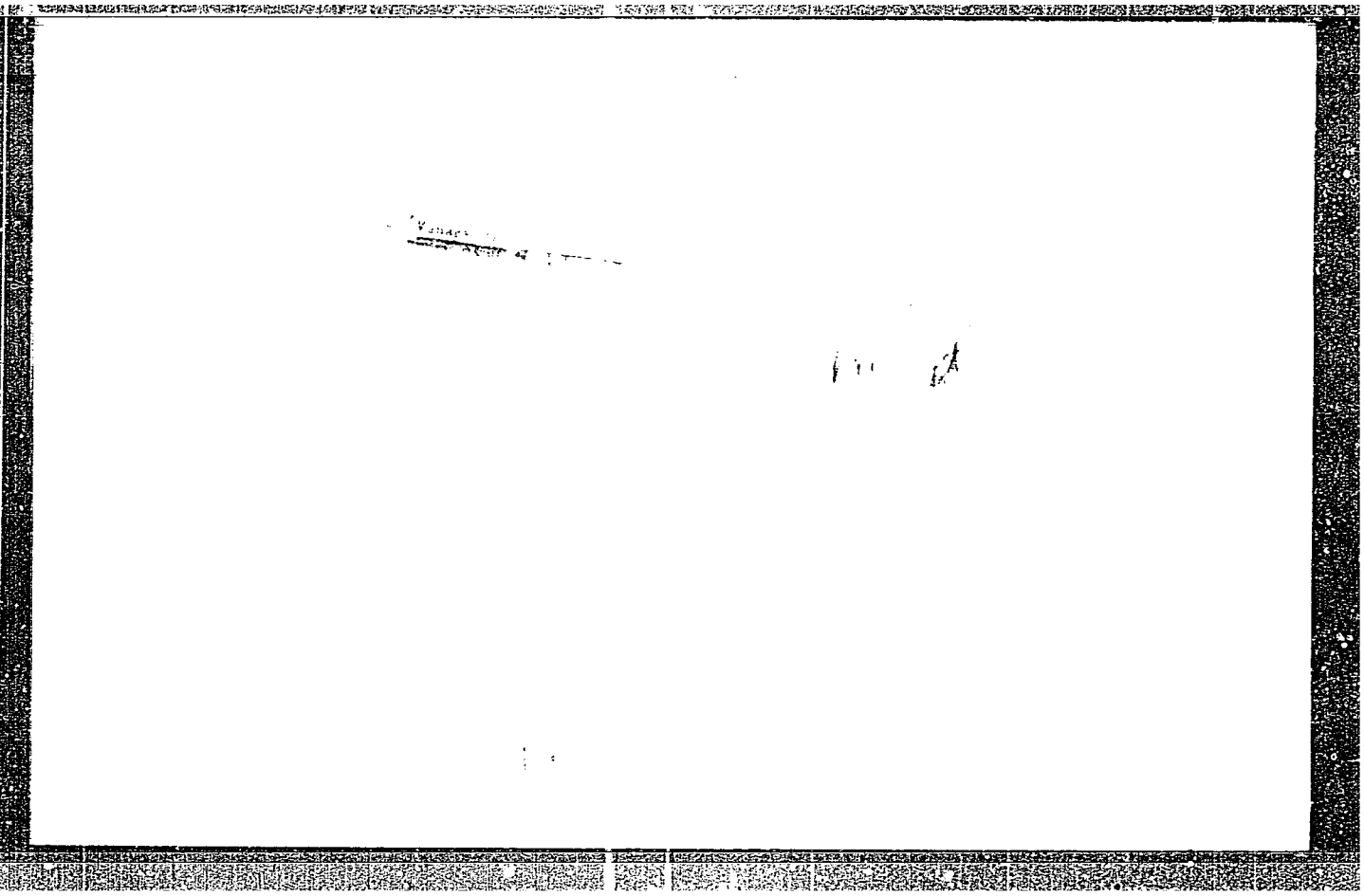
1. VANAG, G.; VANAG, Ye.

2. USSR (600)

4. Oxyphthalonomide

7. New isomer of nitroindandione, the $\mathcal{N}$-osyphthalonimide. Dokl. AN SSSR 90 No. 1, 1953.

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



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