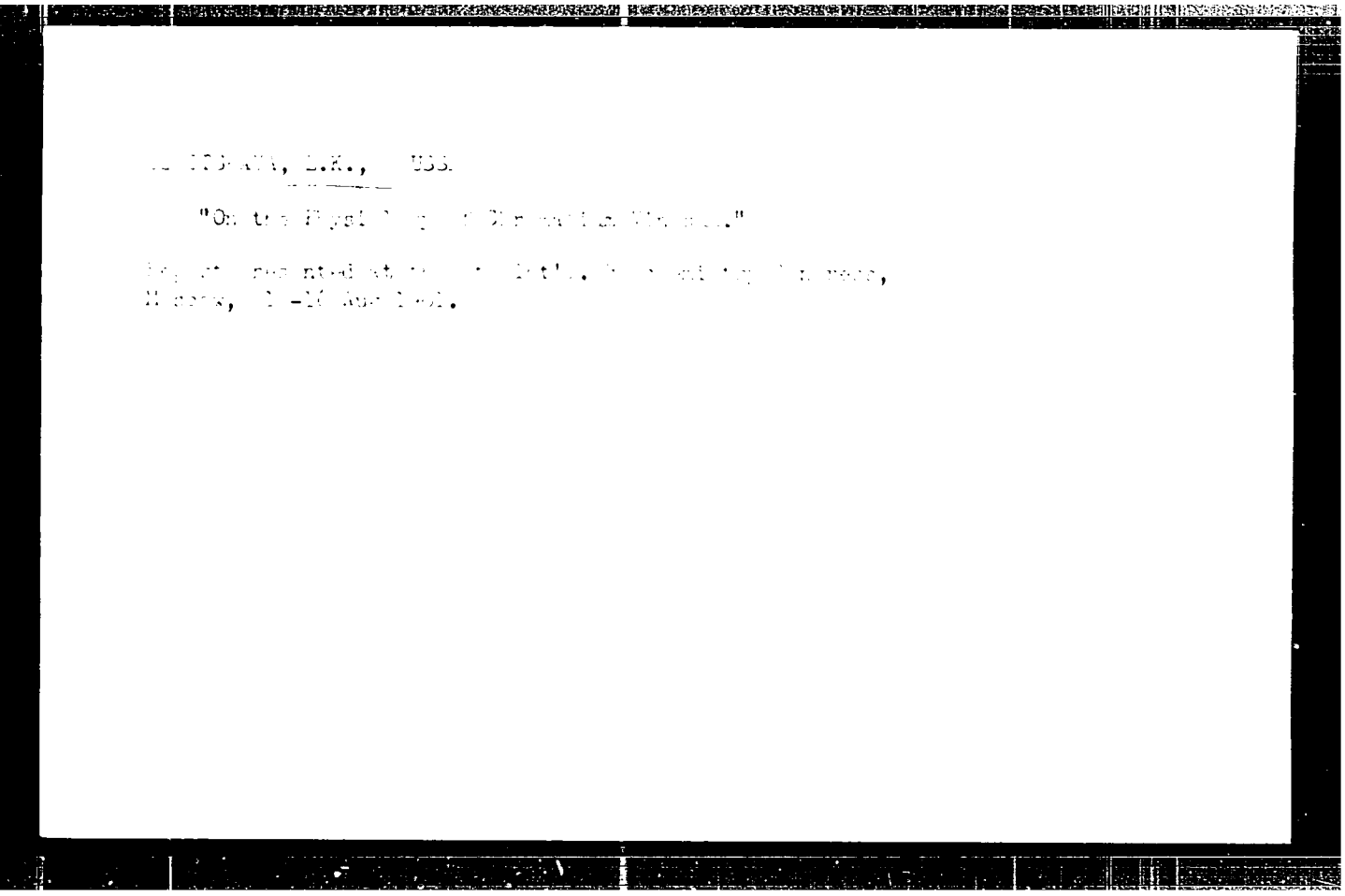


GORYUNOVA, S.V.; OSNITSKAYA, L.K.

Some investigations in the field of microbiology carried out in Hungary. Mikrobiologiia 30 no.2:374-376 Mr-Ap '61. (MIRA 14:6)
(HUNGARY—MICROBIOLOGY)

SHAPOSHNIKOV, V.N.; OSNITSKAYA, L.K.; CHUDINA, V.I.

Development of the purple sulfur bacterium, Chromatium vinosum, in various light intensities. Mikrobiologiia 30 no.5:825-832 S-O '61. (MIRA 14:12)

1. Institut mikrobiologii AN SSSR.
(BACTERIA, SULFUR) (LIGHT--PHYSIOLOGICAL EFFECT)
(CHROMATIUM VINOSUM)

OSNITSKAYA, L. K.

"Carbon Metabolism of Photosynthesizing Bacteria Chromatium Vinosum."

report presented at the Intl. Colloquium on Photosynthesis, Gif-Sur-Yvette, France, 23-27 July 1962.

Inst. of Microbiology USSR Acad. Sci.

L 36521-65 EWG(a)-2/EWG(c)/EWG(j)/EWG(r)/EWG(v)/EWT(l)/FS(v)-3 Pe-5 DD

ACCESSION NR: AP5003898 S/0216/65/000/001/0050/0065

44
43
B

AUTHOR: Osnitskaya, L. K.

TITLE: Role of carotinoids in the photosynthesis of purple sulfur bacteria

SOURCE: AN SSSR. Izvestiya. Seriya biologicheskaya, no. 1, 1965, 58-65

TOPIC TAGS: Chromatium vinosum, bacteria, culture method, plant pigment, carotinoid, light energy, photosynthesis, short wave radiation, long wave radiation, absorption spectrum, carbon dioxide

ABSTRACT: Purple sulfur bacteria (Chromatium vinosum) cultures were investigated to determine the role of carotinoids and the effect of light spectral composition and its intensity on photosynthesis. Bacteria cultures were grown anaerobically at 30° in glass vessels

containing a mineral medium. During incubation the cultures were exposed to different light spectral compositions produced by 30 watt luminescent lamps with various luminophors: 1) blue light, 400 to 500 millimicrons, 2) green light, 500-580 millimicrons, 3) red light,

ACCESSION NR: AP5003898

580 to 670 millimicrons, and 4) white light with complete spectral composition. Biomass and number of cells were determined spectrophotometrically according to optical density at 680 millimicrons and the amount of assimilated carbon dioxide was measured by a manometer. Absorption spectra of live cell suspensions were also measured. Findings show that photosynthesizing Chromatium vinosum

bacteria have the capacity to utilize light energy of different spectral compositions. Short wave rays in the carotinoid absorption region (blue and green light) are effective in bacteria photosynthesis. Multiplication of bacteria depends on the quality of light and its intensity. An increase in intensity of long wave radiation as well as short wave radiation produces a favorable effect on bacteria growth and biomass accumulation due to carbon dioxide assimilation. Blue light is more effective than green light in the development of photosynthesizing bacteria with equalization of light energy by erg units or by number of incident quanta. Photoassimilation of carbon dioxide by bacteria in the presence of blue or green light and also in the presence of 464, 497, 535 millimicron wave lengths and others which closely coincide with absorption maximums for basic carotinoid pigments indicates that these pigments participate in photosynthesis.

Card 2/3

T 15521-65

ACCESSION NR: AP5003898

Orig. art. has: 5 tables and 3 figures.

ASSOCIATION: Institut mikrobiologii AN SSSR (Microbiology Institute AN SSSR)

SUBMITTED: 31Mar64 ENCL: 00 SUB CODE: LS

NR REF SOV: 004 OTHER: 013

Card 3/3

I 44156-65 EWG(a)-2/EWA(c)/EWG(j)/EWG(r)/EWT(l)/FS(v)-3/EWG(v) Pc-5 DD

ACCESSION NR: AP5007991 S/0220/65/034/001/0019/0023

AUTHOR: Osnitskaya, L. K.; Chudina, V. I.

TITLE: Significance of spectral composition and intensity of light in the development of the purple sulfur photosynthetic bacteria *Chromatium vinosum*

SOURCE: Mikrobiologiya, v. 34, no. 1, 1965, 19-23

TOPIC TAGS: photosynthesis, sulfur bacteria, light spectrum, carbon

ABSTRACT: A pure culture of *Chromatium vinosum* was grown on Van Niel's mineral medium containing 0.2% Na_2S and 0.5% $NaHCO_3$ as the sole source of carbon. The experiments were carried out anaerobically and the temperature was kept between 26 and 28°. Bacterial growth was promoted by the energy supplied by light of varying spectral composition, including blue and green in the short-wave part of the spectrum. The dynamics of bacterial development varied with the spectral composi-

blue light (400-550 mμ) had greater effect on the growth of chromogenic bacteria than

Card 1/2

L 44156-65

ACCESSION NR: AP5007391

green light (500-560 mμ), provided that the light flux was equal in ergs and incident quanta. The rate of bacterial development in red light (580-700 mμ) was slower than in light of full spectrum composition. Orig. art. has: 1 figure, 4 tables.

ASSOCIATION: Institut mikrobiologii AN SSSR (Institute of Microbiology, AN SSSR)

SUBMITTED: 11Feb64 ENCL: 00 SUB CODE: LS

NO REF SOV: 010 OTHER: 004

Card 2/2 pb

L 27403-66 EWI(1) SCIB DD

ACC NR: AP6017701 SOURCE CODE: UR/0220/65/034/002/0204/0208

AUTHOR: Osnitskaya, L. K. 29 B

ORG: Institute of Microbiology, AN SSSR (Institut mikrobiologii AN SSSR)

TITLE: Photosynthetic development of the purple sulfur bacteria Chromatium vinosum in light within narrow regions of the spectrum

SOURCE: AN SSSR. Mikrobiologiya, v. 34, no. 2, 1965, 204-208

TOPIC TAGS: photosynthesis, bacteria, plant physiology, carbon dioxide, bacteriology

ABSTRACT: The development of Chr. vinosum on an inorganic medium by the photosynthetic utilization of CO_2 was studied on illumination in the ranges of 400-550 millimicrons (the region of absorption by carotenoids), 580-600 millimicrons (the region in which the short-wave peak of absorption by bacteriochlorophyll is located), and 700-1,000 millimicrons (the region of the principal absorption by bacteriochlorophyll). It was established that the bacteria resorbed CO_2 and developed only under the effect of light of the wavelengths 447, 464, 497, and 535 millimicrons, which corresponded to maxima of absorption by carotenoid pigments. This result indicated that carotenoids participate in the process of photosynthesis. Orig. art. has: 4 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 25Feb64 / ORIG REF: 003 / OTH REF: 009

Card 1/1 UDC: 576.8.095.324.4

OSNITSKAYA, L.K.

Some studies in the field of biochemistry and microbiology prepared by the scientific institutes of England.
Mikrobiologiia 34 no.3:569-573 My-Je '65.
(MIRA 18:11)

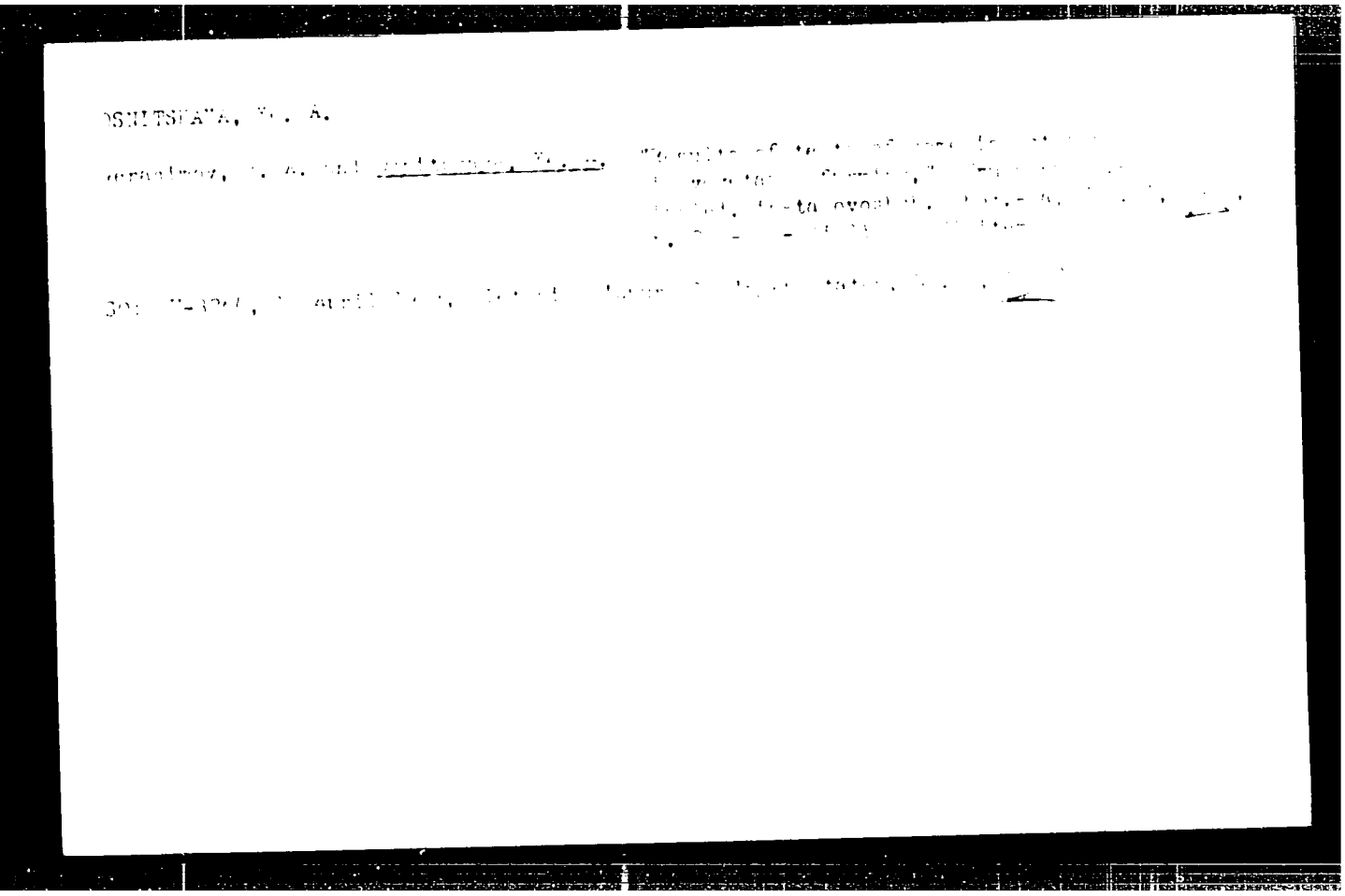
OSNITSKAYA, L.K.

Sixth International Biochemical Congress. Mikrobiologiia 34
no.5:931-937 S-O '65. (MIRA 18:1?)

OSNITSKAYA, L. K.

"Influence of Intensity and Spectral Composition of Light on the Process of Photosynthesis of Purple Sulphur Bacteria."

report submitted for 6th Intl Cong Biochemistry, New York, 26 Jul-1 Aug 1964.



OSNITSKAYA, Ye. A.

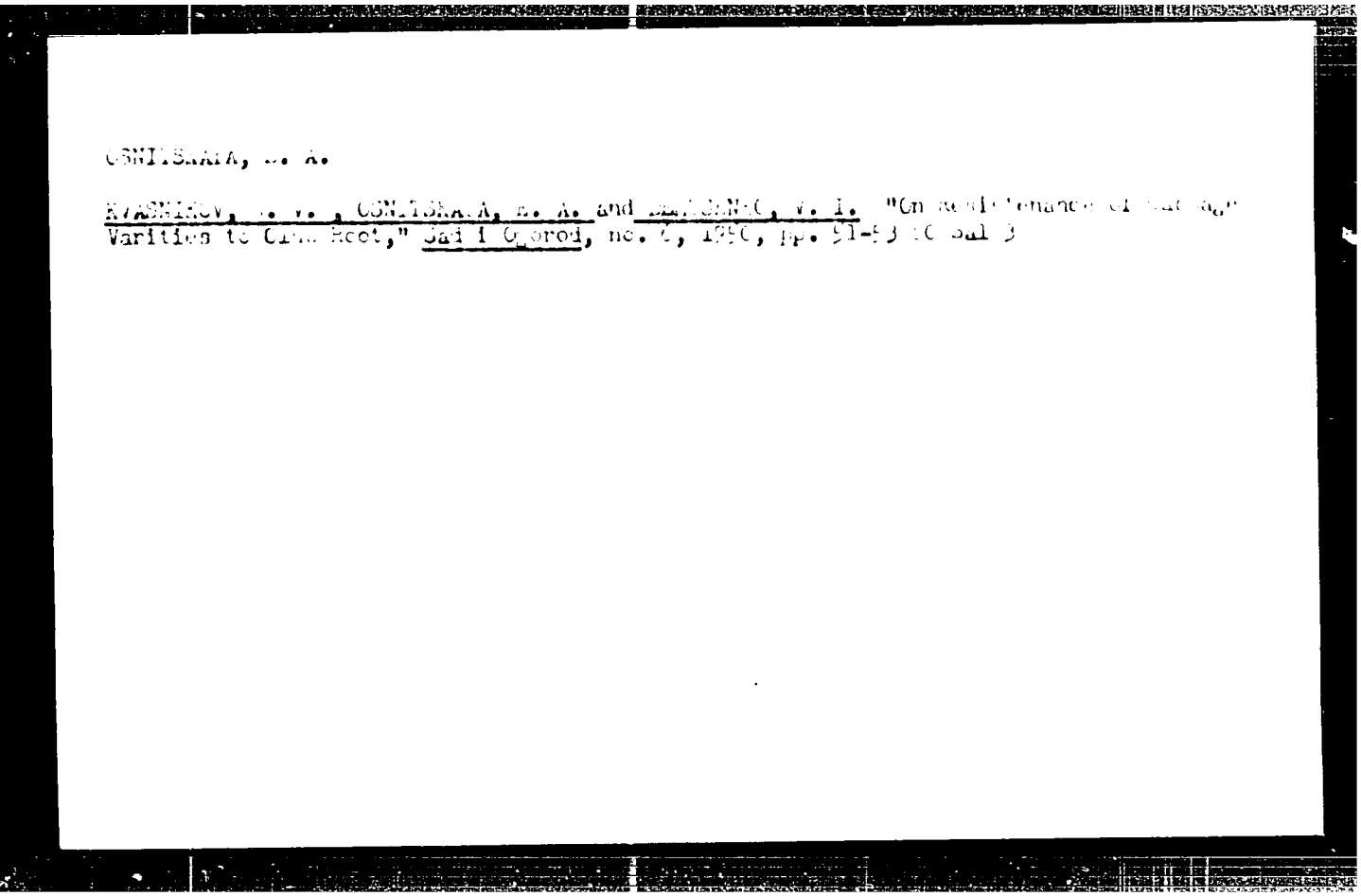
Osnitskaya, Ye. A. "The dynamic development of bulb rot of onion (Botrytis allii) in relation to conditions of environment and growth," Trudy nauch.-issled. in-ta ovoshch. khoz-va, Vol I, 1948, p. 252-64 - Bibliog: 7 items

SO U3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statey, No 3, 1949)

OSNITSKAYA, Ye. A.

Osnitskaya, Ye. A. "Alternariosis of cabbage seeds in the Adlersk rayon of Krasnodar Kray," Trudy nauch.-issled. in-ta ovoshch. khoz-va, Vol. I, 1948, p. 265-73

SO U-3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statey, No 3, 1949)



OSNITSARIA, ... A.

KVASHNOV, ... V. ; OSNITSARIA, ... A. and ... "On ... Varities to ... Root," Sad i Ogorod, no. ..., 1950, pp. 51-53 (Sad ...)

OSNITSKAYA, E. A.

GERASIMOV, B.A., and OSNITSKAYA, E. A. Control of Vegetable Pests and Diseases, State Publishers of Agricultural Literature, Moscow, 1944, 95 pp. 464.4 G31

So: Sira Si-90 53, 15 Dec 1953

OSNITSKAYA, Ye. A.

15159* (Control Measures Against Carrot Phomosis.) Mery bor'by s fomozom morkovi. K. A. Osnitskaia *Sad i Ogorod*, 1954, no. 7, July, p. 19-21.
Treating seeds with granosan, thiofos, and TMTD fungicides. Tables.

OSNITSKAYA, Ye. A.

[Neck rot of onions] Sheikovaia gnil' luka. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1957. 39 p. (MLRA 10:5)
(Onions--Diseases and pests)

IZRAIL'SKIY, V.P., prof., doktor biolog.nauk; SHUSTOVA, L.N., kand.med. nauk; GOHLENKO, M.V., doktor biolog.nauk; MURAV'YEV, V.P.; BEREZOVA, Ye.F., doktor biolog.nauk; SUDAKOVA, L.V., mikrobiolog; GRUSHEVOY, S.Ye., doktor sel'skokhoz.nauk; NEMLIYENKO, F.Ye., doktor biolog.nauk; BEL'TYUKOVA, K.I., doktor biolog.nauk; STARYGINA, L.P., kand.biolog.nauk; PERSHINA, Z.G., kand.biolog.nauk; ART'YKH'YEVA, Z.S., mikrobiolog; NOVIKOVA, N.S., kand.biolog.nauk; OSNITSKAYA, Ye.A., fitopatolog; YASHNOVA, N.V., fitopatolog-mikrobiolog; MIKZABEK'YAN, R.O., kand.biolog.nauk; TETYUREVA, I.V., red.; PEVZNER, V.I., tekhn.red.

[Bacterial diseases of plants] Bakterial'nye bolezni rastenii. Izd.2., perer. i dop. Moskva, Gos.izd-vo selkhoz.lit-ry, 1960. 467 p. (MIRA 13:7)

1. Chlen-korrespondent Ukrainskoy AN (for Murav'yev).
(Bacteria, Phytopathogenic) (Plant diseases)

OSNITSKAYA, Ye. A., Cand Biol Sci -- (diss) "Foot rot in onions." Moscos, 1960. 17 pp; (Moscow Order of Lenin Agricultural Academy im K. A. Timiryazev); 150 copies; price not given; (KL, 26-60, 133)

GERASIMOV, B. A.; OSNITSKAYA, Ye. A.; SIDOROV, A. I.

Sulfur smoke pots. Zashch. rast. ot vred. i bol. 5 no.10: 34-35 O '60. (MIRA 16:1)

1. Nauchno-issledovatel'skiy institut ovoshchnogo khozyaystva RSFSR, st. Perlovskaya, Moskovskoy zheleznoy dorogi.

(Fumigation)

OSNITSKAYA, Ye.A.; GERASIMOV, B.A.; LEONOVA, T.S., red.; SAYTANIDI, L.D., tekhn.red.

[Control of vegetable diseases and pests outdoors] Bor'ba s vreditelyami i boleznyami ovoshchnykh kul'tur v otkrytom grunte. Izd.2., dop. Moskva, Izd-vo M-va sel'.khoz.RSFSR, 1960. 28 p. (MIRA 14:6)

(Vegetables—Diseases and pests)

ALEKSANDROV, S.V., kand.sel'skokhoz.nauk; BOGUSHEVSKIY, A.A., kand.tekhn. nauk; VASHCHENKO, S.F., kand.sel'skokhoz.nauk; GERASIMOV, B.A., kand.sel'skokhoz.nauk; GROMOV, N.G. [deceased]; KORBUT, V.A.; KUDREVICH, I.A.; MAMAYEV, M.G., kand.tekhn.nauk; NOVIKOV, A.P.; OSNITSKAYA, Ye.A.; SIMANOVSKIY, A.Yu.; SLAPTSOV, S.A.; SPIRIDONOVA, A.I.; TARAKANOV, G.I., kand.sel'skokhoz.nauk; CHERNYKAYEVA, Ye.A.; KITAYEV, S.I., red.; PILATOV, N.A., zasluzhennyy agronom RSFSR; GRUDINKINA, A.P., red.; MARTYNOV, P.V., red.; ARTSYBASHEVA, A.P., tekhn.red.; BARBASH, F.L., tekhn.red.

[Vegetable growing under cover] Ovoshchevodstvo zashchishchennogo grunta. Moskva, Izd-vo M-va sel'.khoz.SSSR, 1960. 279 p. (MIRA 13:12)

(Vegetable gardening) (Greenhouses)
(Hotbeds)

GERASIMOV, B.A.; OSNITSKAYA, Ye A.; SAVZDARG, V.E , red.; GOL'KOVA, Z.D., tekhn. red.; TRUKHINA, C [illegible] tekhn. red.

[Pests and diseases of vegetables] Vrediteli i bolezni ovoshchnykh kul'tur. Izd.4., ispr. i dop. Moskva, Sel'khozgiz, 1961. 535 p. (MIRA 15:6)

(Vegetables--Diseases and pests)

GERASIMOV, B.A.; OSNITSKAYA, Ye.A.; MILOVIDOVA, N.D., red.; STREL'TSOVA, M.P., red.

[Pests and diseases of vegetable crops grown outdoors] Vrediteli i bolezni ovoshchnykh kul'tur v otkrytom grunte. Moskva, Kolos, 1964. 46 p. (MIRA 18:1)

OSNOS, G.M.

Determination of the concentration of citral in the blood and urine of puerperants by the use of paper discs following its intrauterine administration. Lab. delo 10 no.4:226-229 '64. (MIRA 17:5)

1. Kafedra akusherstva i ginekologii Uzhgorodskogo gosudarstvennogo universiteta. Nauchnyy rukovoditel' raboty - doktor med.nauk prof. I.N.Remvez.

OSNOS, G.M. [Osnos, H.M.]

Treatment of infected postnatal ulcers, perineal ruptures, and necrosis of the cervix uteri in parturients with citral. Ped., akush. i gin. 23 no.3:59-60 '61. (MIRA 15:4)

1. Rodil'niy budinok No.1 m. Chernivtsiv (golovniy likar - Ye.K. Vinyarskaya [Viniars'ka, E.K.] i kafedra akusherstva i ginekologii (zav. - prof. L.B.Teodor) Chernivets'kogo medinstitutu (direktor - M.M.Kovalev [Koval'ov, M.M.])
(PREGNANCY, COMPLICATIONS OF) (CITRAL)

OSNOS, G.M.

Frame holder for taking smear impressions. Lab. delo 7 no.12: 45-46 D '61. (MIRA 14:11)

1. L'vovskaya oblastnaya klinicheskaya bol'nitsa okhrany materinstva i detstva (glavnyy vrach T.I.Plakhova) i akushersko-ginekologicheskiy otdel (rukovoditel' S.I.Tregub) L'vovskogo nauchno-issledovatel'skogo instituta okhrany materinstva i detstva.
(MEDICAL INSTRUMENTS AND APPARATUS)
(DIAGNOSIS, CYTOLOGIC)

OSNOS, G.M.

Citral therapy of trichomonal colpitis. Sov.med. 26 no.10:102-104 O '62. (MIRA 15:12)

1. Iz Chernovitskogo klinicheskogo rodil'nogo doma No.1 (glavnyy vrach E.K.Vinyarskaya) i kafedry akusherstva i ginekologii (zav. - prof. L.B.Teodor) Chernovitskogo meditsinskogo instituta.
(VAGINA--DISEASES) (CITRAL) (TRICHOMONIASIS)

OSNOS, G.M. (Chernovtsy)

Treatment of postnatal and postabortal metroandometrites, caused by the retention of placental tissue, by intrauterine administration of citral. Kaz. med. zhur. no.1:72 Ja-F'63. (MIRA 16:8)

(UTERUS—DISEASES) (CITRAL)

OSNOS, O.M.

Treating cracked nipples with citral. Sov.med. 24 no.1:135-136 Ja '60. (MIRA 13:5)

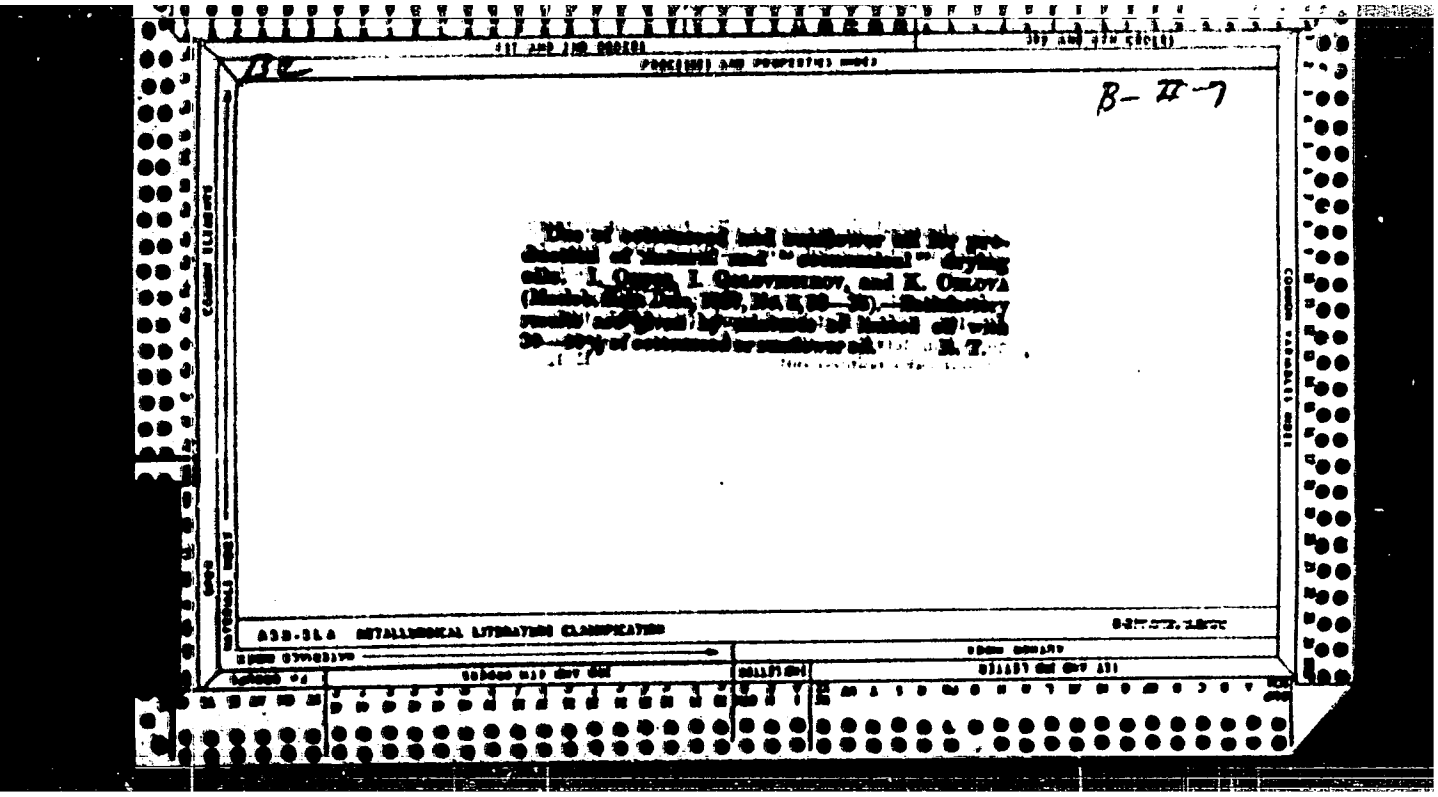
1. Iz rodil'nogo doma No.1 (glavnyy vrach E.K. Vinyarskaya) i kafedry akusherstva i ginekologii (zav. - prof. L.B. Teodor) Chernovitskogo meditsinskogo instituta.
(BREAST diseases)
(CITRAL therapy)

OSNOS, I.

Ce

26

Production of linseed oil suitable for house-paint preparation. I. Osnos, I. Golovistikov and K. Orlova. *Maslobóino Zhirovoe Delo* 13, No. 3, 13-16(1937).—Comparative tests in refining of 7 specimens of linseed oil showed that the results in removing the mucous ingredient and bleaching degree vary with the origin and methods of extn. of oil. The treatment with bleaching clays (floridin, askanit, tripoli, etc., cf. Dorn and Malovitzkaya, *C. A.* 30, 8050[9]) tends to remove the mucous ingredients, but gives poor bleaching effect. Activated charcoal gives good bleaching effect, but does not remove the mucous substances. The hydration with 1-3% H_2O also failed to remove the mucous ingredients. The best results are obtained by the combined treatment, resulting in a clear, pale oil, by treating raw oil with 2% of 0.25% HCl (H_2SO_4) at 30-50° for 30-40 min., then neutralizing with 100-150% (of the oil acidity) of 14°Bé. NaOH at 60-70° for 35-40 min. and finally bleaching *in vacuo* with 2% of dry or ignited clay at 95-110° for 1 hr. The bleaching effect can be increased by adding activated charcoal to the clay. The procedure can be modified, depending on the nature of the linseed oil. C. B.



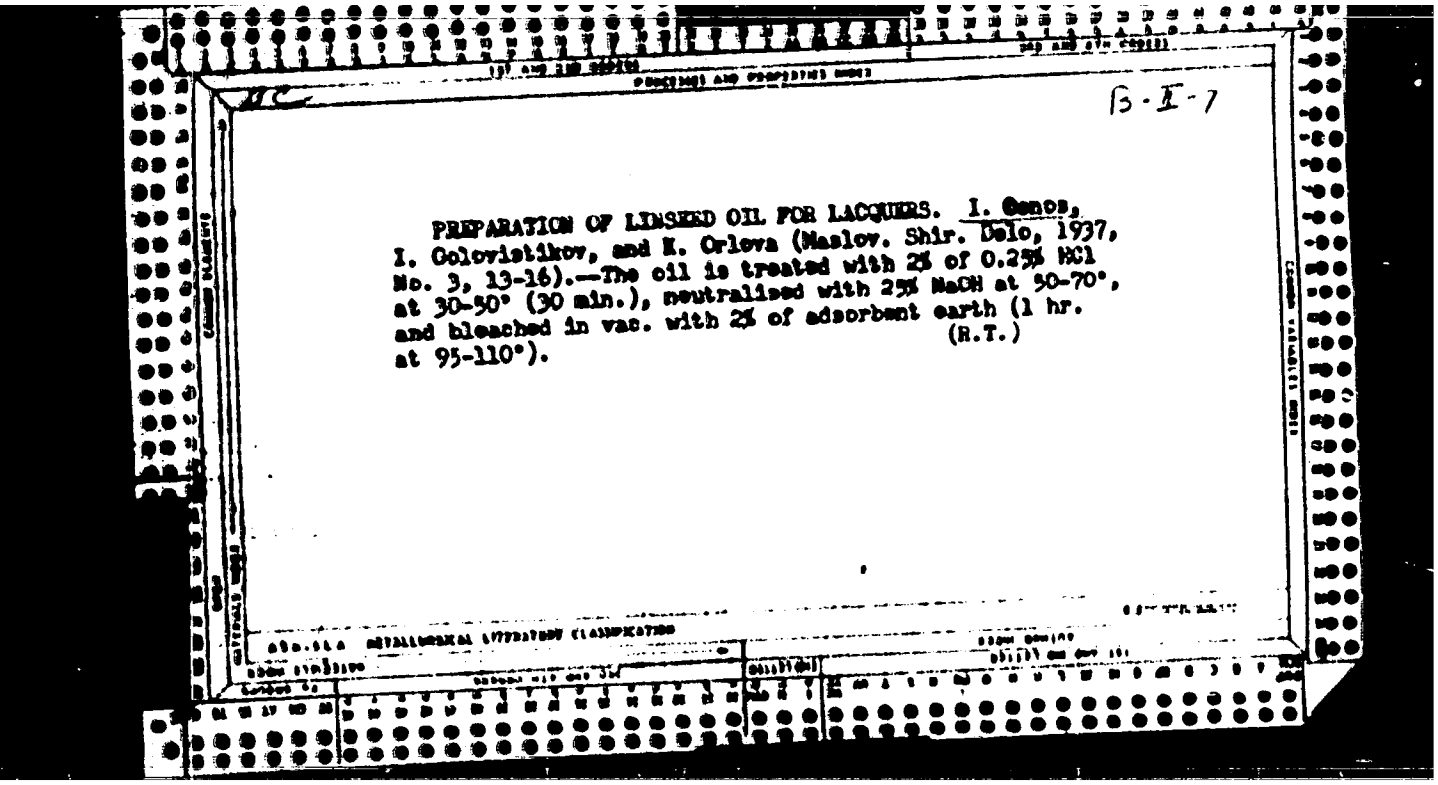
B- II-7

PROCESSES AND PROPERTIES INDEX

B-2-7

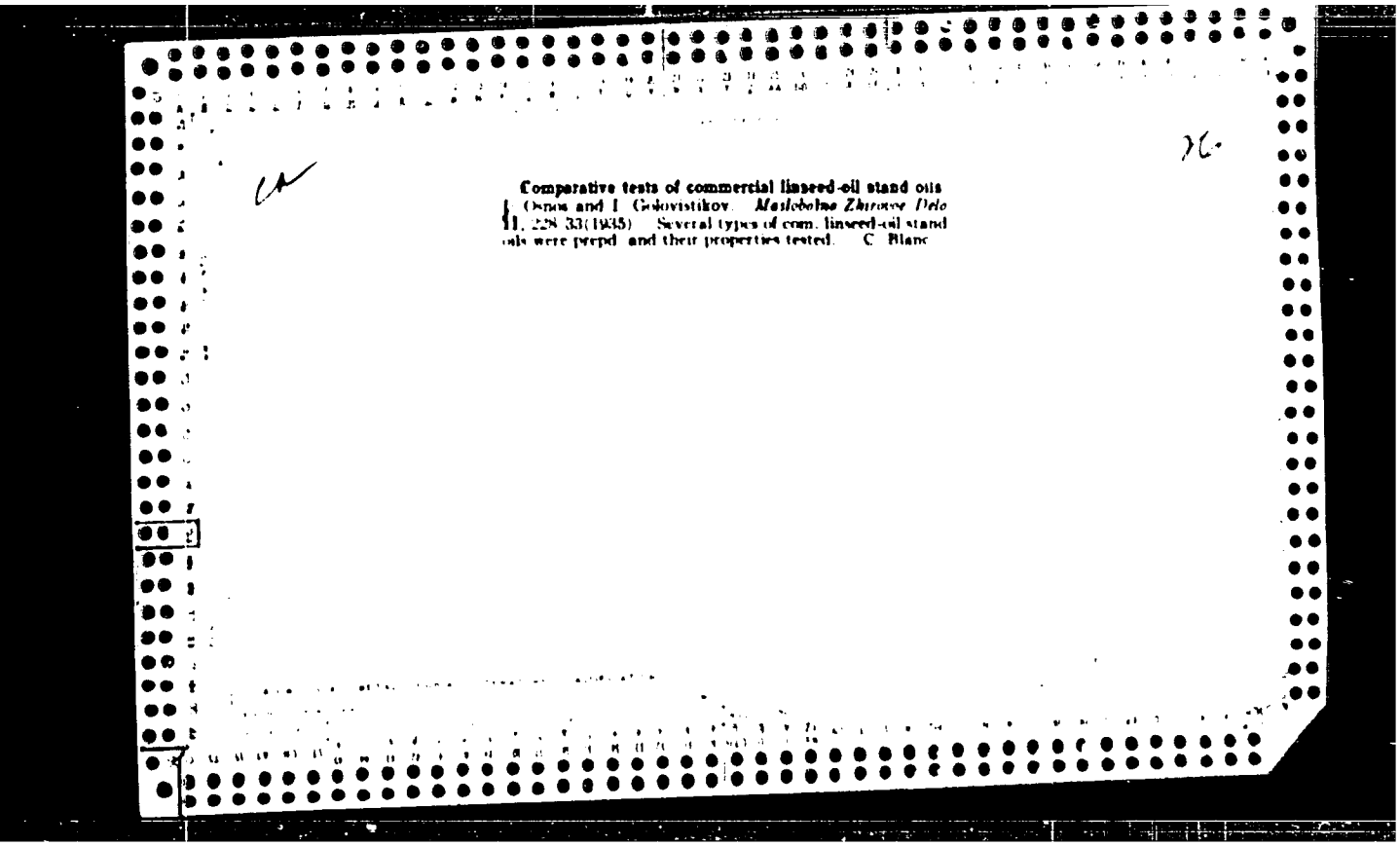
[illegible] of various catalysts for dehydration of castor oil. I. [illegible] and I. [illegible] (Masloboino Zhir. Prom., 1936, No. 6, [illegible]).—H_3BO_3 is a very active catalyst of dehydration of ricinoleic acid; the reaction commences at 180—110°, 200—210°, 180—200°, and 200—210°, respectively, in presence of 1·3, 0·5, 0·30, and 0·05% of H_3BO_3, the corresponding reaction times at 260° being 3·5, 6, 0·5, and 0·5 hr., respectively. The lightest-coloured product with the smallest acid val. is obtained with 0·17% H_2SO_4 at 260°. A disadvantageous feature of H_2SO_4 catalysis is the production of irritating fumes. Certain clays activated with H_2SO_4 catalyse the reaction, the effect given being ∝ their concn. R. T.

METALLURGICAL LITERATURE CLASSIFICATION

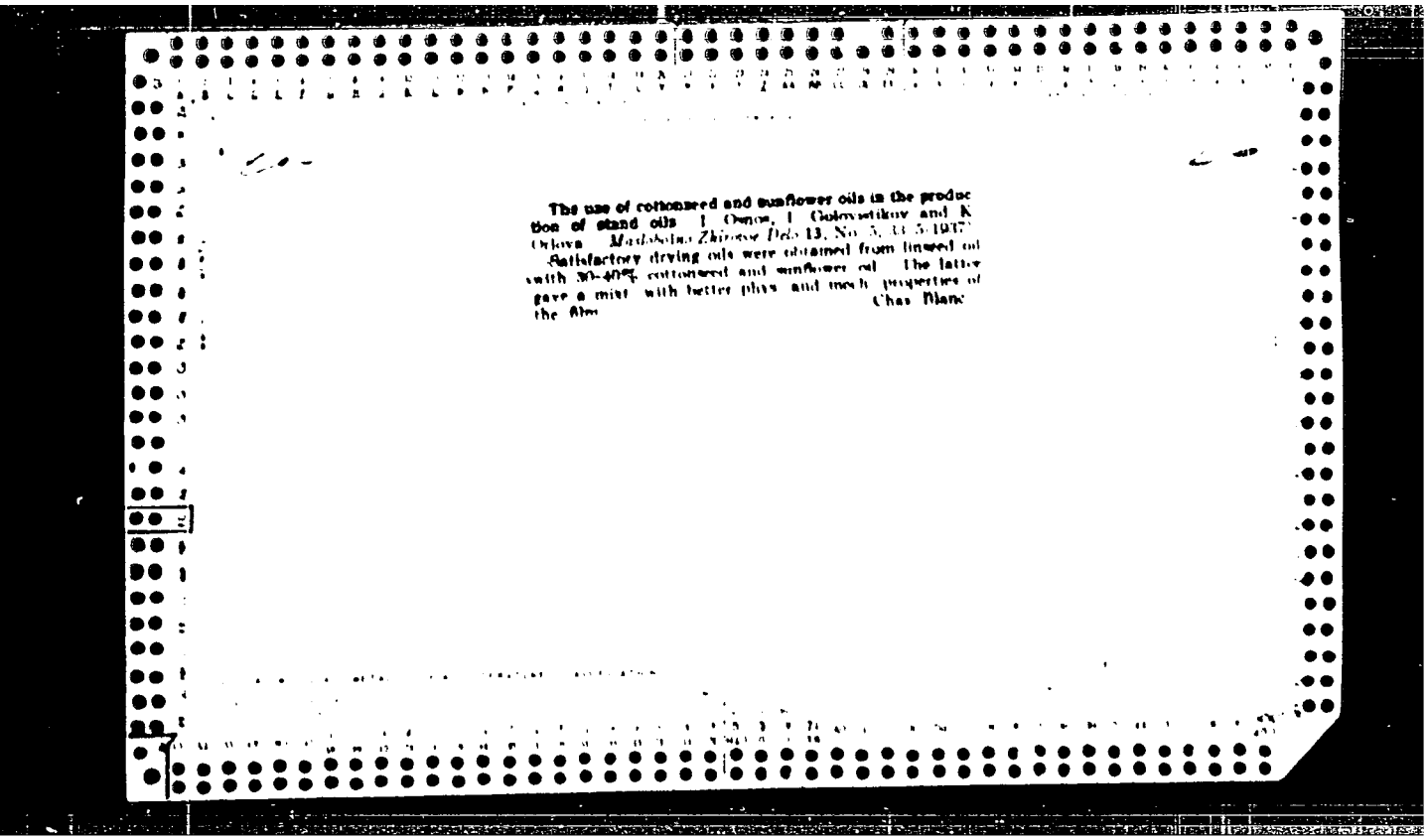


B-I-7

PREPARATION OF LINSEED OIL FOR LACQUERS. I. Genos, I. Golovistikov, and K. Orlova (Maslov. Shir. Delo, 1937, No. 3, 13-16).—The oil is treated with 2% of 0.25% HCl at 30-50° (30 min.), neutralised with 25% NaOH at 50-70°, and bleached in vac. with 2% of adsorbent earth (1 hr. at 95-110°). (R.T.)



Comparative tests of commercial linseed-oil stand oils
(Ossus and I. Golovistikov. *Maslobobno Zhirovoe Delo* 11, 228-33(1935). Several types of com. linseed-oil stand oils were prepd. and their properties tested. C. Blanc



The use of cottonseed and sunflower oils in the produc
tion of stand oils I Ostrov, I Golovastikov and K
Orlova *Maslobno-Zhirovoe Delo* 13, No 3, 11-5 1937
Satisfactory drying oils were obtained from linseed oil
with 30-40% cottonseed and sunflower oil The latter
gave a mist with better plus and mech properties of
the film Chas Blanc

PROCESSES AND PROPERTIES INDEX

BC

B-II-7

Recovery of castor oil dehydration by-products. I. [illegible] and I. [illegible] ([illegible]. Zhir. Delo, [illegible], No. 4, 27—30).—Experiments on the recovery of volatile products from the vapours evolved in the vap. dehydration of the heated crude oil are described. The following products and their yields, based on the original wt. of crude, were obtained. The condensate separates into an aq. layer (4·5%) containing glycerol, aldehydes, and low mol. wt. acids, and into an oily layer (6·1%). The oily layer is steam-distilled to yield a distillate containing 3·37% of oenanthol and 1·3% of unidentified compounds (I), and a residue containing 0·5% of org. acids (expressed as undecoic acid) and 0·75% of (I).

METALLURGICAL LITERATURE CLASSIFICATION

BC

8-I-7

Drying oil from castor oil. I. T. O[illegible] and I. I. Golov[illegible] (Maslob. Zhir. Delo, [illegible], No. 3, 30—32).—Castor oil is heated at 300° with 0·08% of MnO_2 for 4 hr., to yield a drying oil of inferior quality (wrinkled and sticky films). About 7·3% of volatile products are recovered. R. T.

METALLURGICAL LITERATURE CLASSIFICATION

OSNOS, I.T.,; IL'YINA, M.S.

Economic cottonseed-tung drying oil. Masl.-zhir.prom. 20 no.4:12-15 '55. (MLRA 8:9)
(Drying oils)

OSNOS, I.T.

OSNOS, I.T.

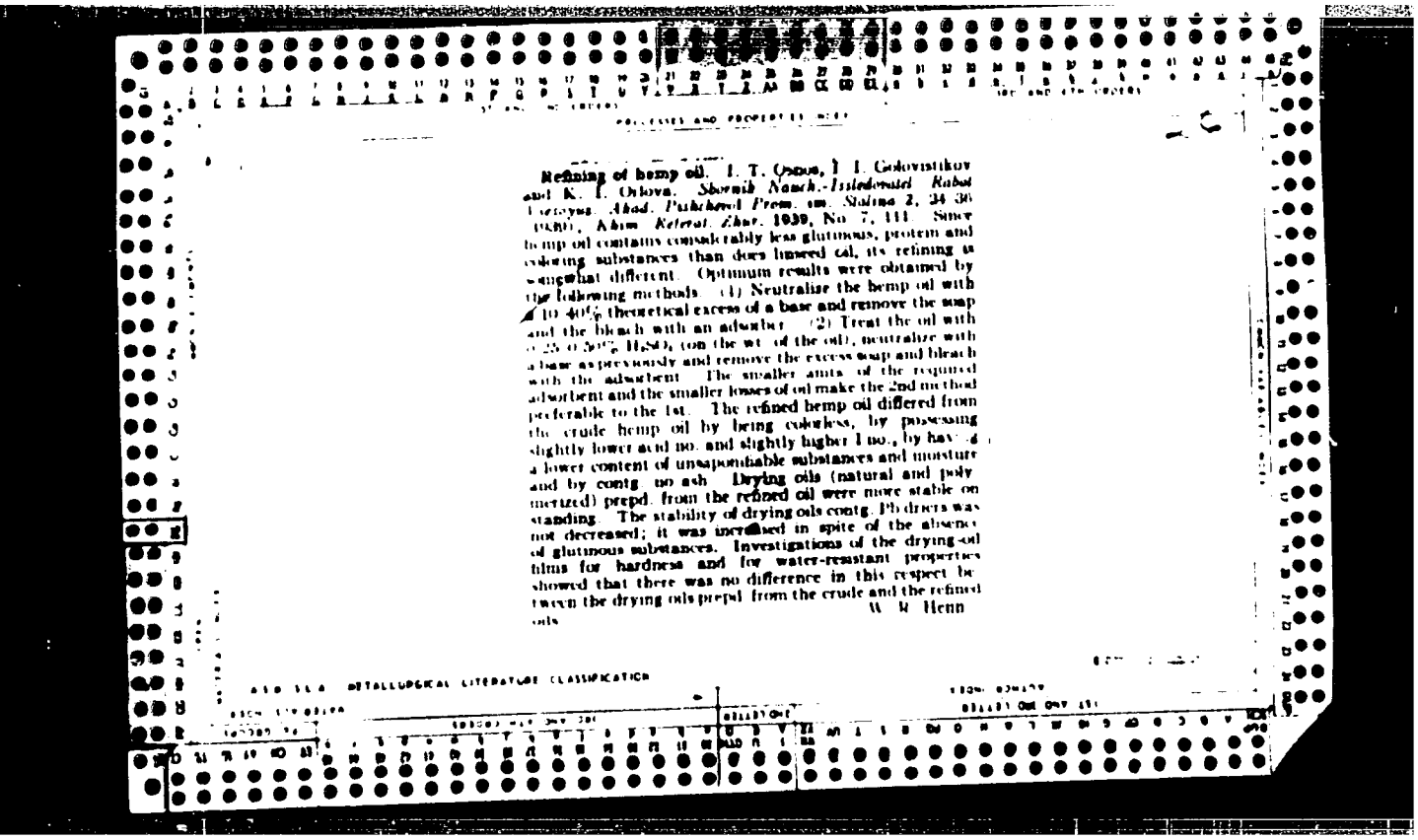
Unfavorable effect of certain phosphatides on the drying of linseed oil [Peintures, pigments, vernis 29 no. 5:390-392 '53]. Masl.-zhir.prom. 20 no.1:37 '55. (MLRA 8:3)
(Linseed oil)

OSNOS, I. T.

Comparative evaluation of various dehydration catalysts for castor oil. I. T. Osnos and [illegible]. Zhurnal Prikladnoi Khimii, Vol. 16, No. [illegible], [illegible]. Kaolin, [illegible] and Al_2O_3 are active catalysts in dehydrating castor oil at 280° but not at 230°. While as little as 0.005% SnO_2 is effective, H_2O_2 (0.5%) is active at 280°, although it takes the oil at that temp. Dehydration at 280° with 0.5% H_2SO_4 is very rapid and gives oil with a color reading of only 170 mg. on the Lovibond. With only 0.1% H_2SO_4, the catalysis, though slower, gives a still paler oil with acid no. 11 instead of 21 in oil dehydrated with 0.5% acid. Gumbrin (a Russian decolorizing earth) when activated by treatment with H_2SO_4 is almost [illegible] tive at 8% concn. as Al_2O_3 at 0.005%. The pale oil is obtained by use of kaolin or Al_2O_3, while a kaolin has the greatest darkening effect. Curve charts show the time-temp. relations of acid no., sapon. no., acetyl no., I no., viscosity and refractive index as dehydration proceeds with different catalysts. Julian F. Smith

Production of stand oil from castor oil I. I. Osipov and I. I. Golovistikov. *Masloboino Zhirovoe Delo* 15, No. 1, 20-2 (1939); cf. C. A. 32, [illegible]. The discussion is continued. Chas. Blanc

METALLURGICAL LITERATURE CLASSIFICATION



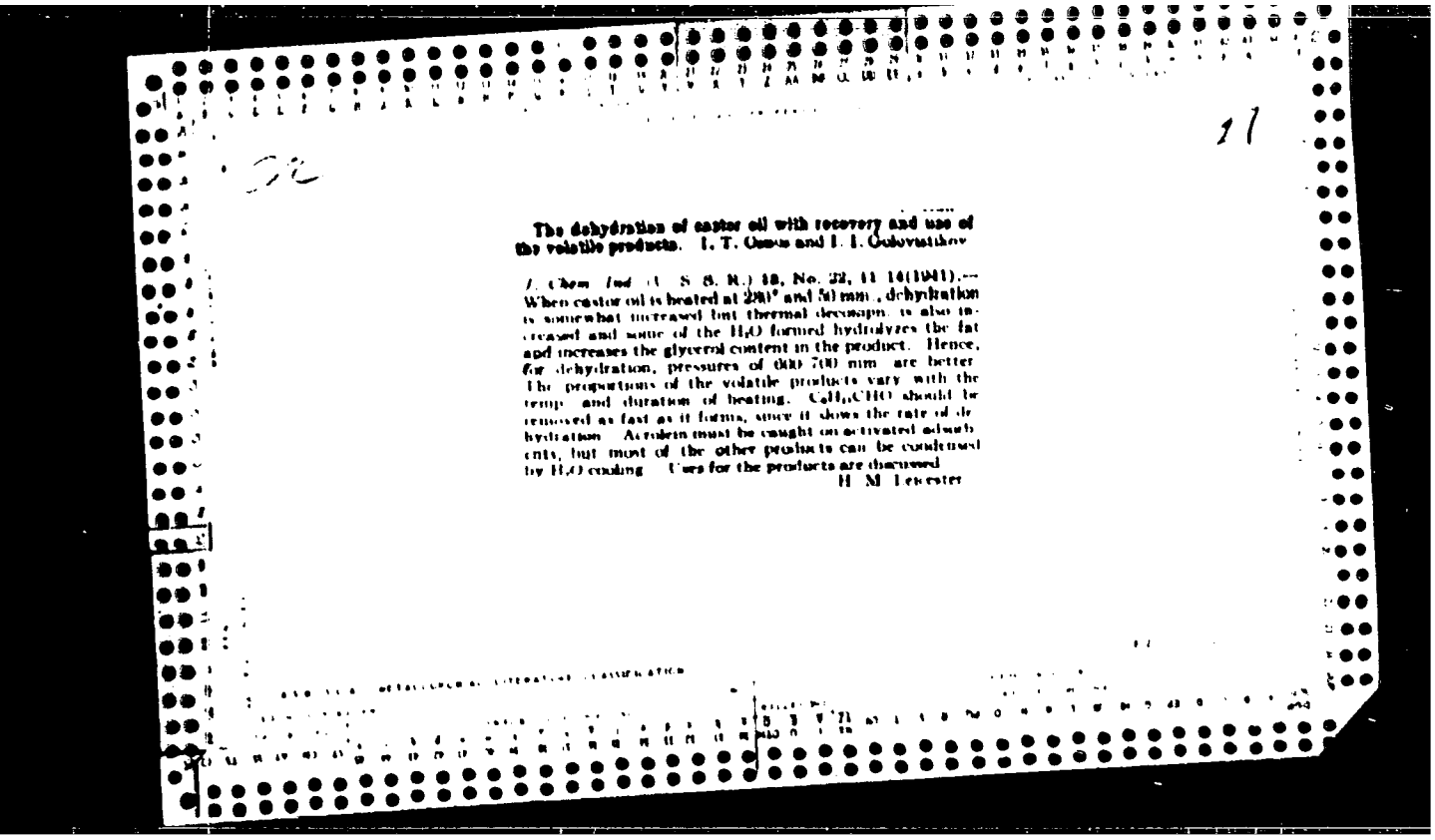
Refining of hemp oil. I. T. Osipov, I. I. Golovinskov and K. I. Orlova. *Sbornik Nauch.-Issledovatel. Rabot Leningrad. Khod. Parikhmer. Prom. im. Stalina* 2, 24-30 (1939). *Khim. Referat. Zhur.* 1939, No. 7, 111. Since hemp oil contains considerably less glutinous, protein and coloring substances than does linseed oil, its refining is somewhat different. Optimum results were obtained by the following methods. (1) Neutralize the hemp oil with 10-40% theoretical excess of a base and remove the soap and the bleach with an adsorbent. (2) Treat the oil with 0.25-0.50% H_2SO_4 (on the wt. of the oil), neutralize with a base as previously and remove the excess soap and bleach with the adsorbent. The smaller amts. of the required adsorbent and the smaller losses of oil make the 2nd method preferable to the 1st. The refined hemp oil differed from the crude hemp oil by being colorless, by possessing slightly lower acid no. and slightly higher I no., by having a lower content of unsaponifiable substances and moisture and by containing no ash. Drying oils (natural and polymerized) prepd. from the refined oil were more stable on standing. The stability of drying oils contg. Pb driers was not decreased; it was increased in spite of the absence of glutinous substances. Investigations of the drying-oil films for hardness and for water-resistant properties showed that there was no difference in this respect between the drying oils prepd. from the crude and the refined oils.

W. R. Henn

PROCESSES AND PROPERTIES INDEX

Production of refined linseed oil. I. I. Osmin, I. I. Golovistikov and K. I. Orlova. *Sbornik Nauch.-Issledovatel Rabot Vsesoyuz Abod Pishchevoi Prom.* in Sbornik 2, 7-23(1939); *Khim. Referat. Zhur.* 1939, No. 7, 112. A method for the production of refined linseed oil was developed and improved. Treat the oil with 0.25-0.50% HCl soln. with rapid and vigorous mixing and with heating for 15 min. at 30-40° and for 15-25 min. at 40-60°, let it settle for 2-3 hrs. at 50-60°, neutralize with a NaOH soln. (13-14°Bé.) with an approx. 5-50% excess with mixing and heating for 15 min. at 35-50° and for 15-30 min. at 50-70°), let the oil settle for 2-3 hrs. at 50-70°, wash with water at 70-85°, dry in vacuo at not higher than 120°, bleach in vacuo at 60-110° by means of an adsorbent for 30-60 min. until all foam is removed, let settle and filter. By this method it was possible to remove from the freshly pressed oil 75-90% of the glutinous substances which the oil contained. The obtained oil contained a very small amt. of moisture and ash, its color was lighter and its n and I no. were higher than those of the crude oil. The clearness of the color, the absence of sediment on standing, the absence of foam on heating and on blowing air through it are of considerable importance for the prepn. of natural and of polymerized drying oils from this oil. The drying oils dried much faster and gave no sediment on standing. No difference was found in the results of tests for hardness and for the water-resistant properties of the films of drying oils prepd. from the crude and the refined oils. W. R. Henn

METALLURGICAL LITERATURE CLASSIFICATION



11

The dehydration of castor oil with recovery and use of the volatile products. I. T. Ozerov and I. I. Gubovuzhov

J. Chem. Ind. (U. S. S. R.) 18, No. 22, 11-14(1941).—When castor oil is heated at 230° and 50 mm., dehydration is somewhat increased but thermal decomposn. is also increased and some of the H_2O formed hydrolyzes the fat and increases the glycerol content in the product. Hence, for dehydration, pressures of 600-700 mm. are better. The proportions of the volatile products vary with the temp. and duration of heating. $C_6H_{10}CHO$ should be removed as fast as it forms, since it slows the rate of dehydration. Acrolein must be caught on activated adsorbents, but most of the other products can be condensed by H_2O cooling. Uses for the products are discussed.

H. M. Leicester

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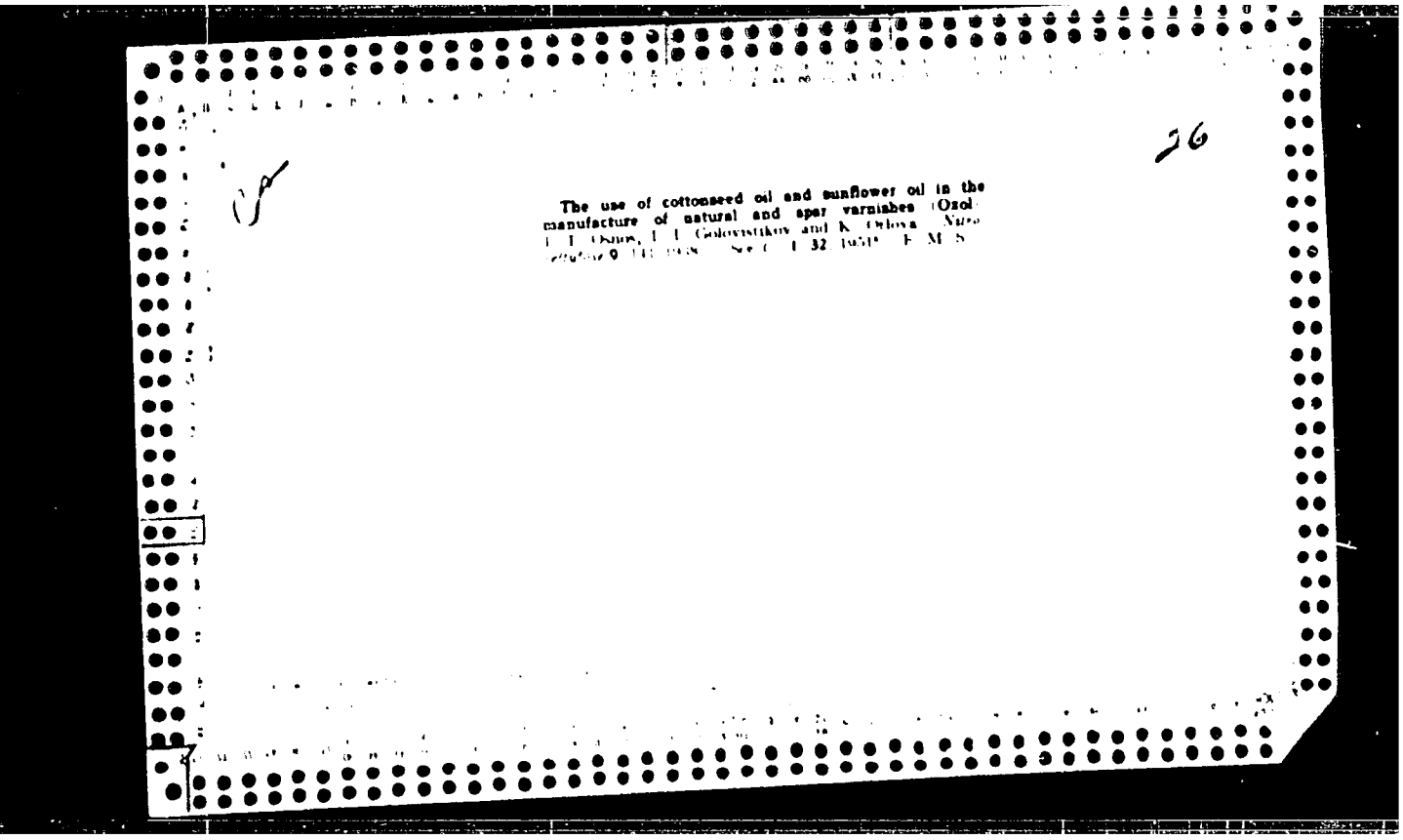
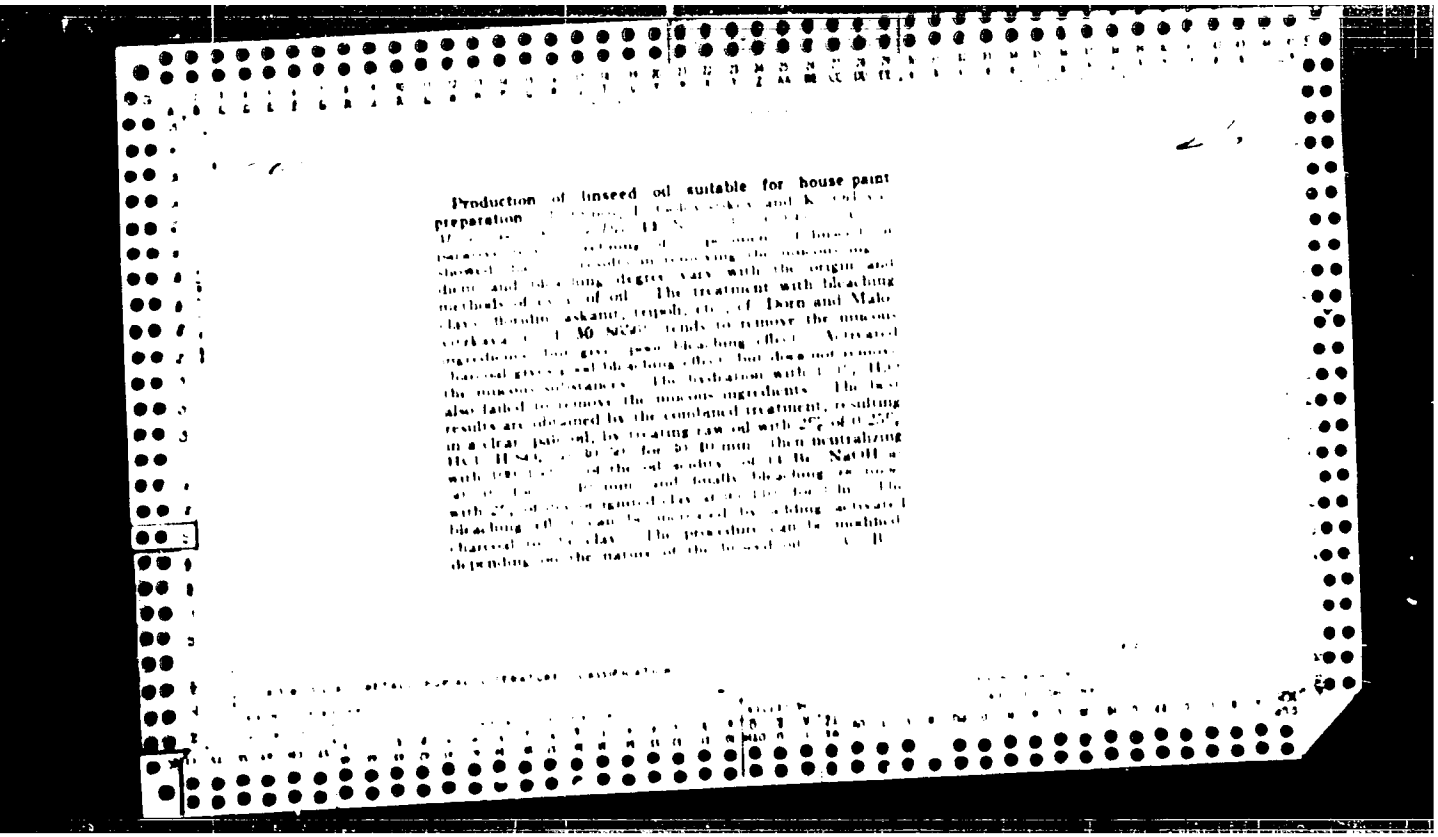
Utilization of the by products in the dehydration of castor oil I. I. Osmo and I. I. Golovistikov *Masloboino Zhirovoe Delo* **15**, No. 4, 27-30(1939); cf. C. A. 33, 4.81°. The dehydration of castor oil at 290° and 100 mm. for 12-13 hrs. in the presence of 0.5% catalyst (0.19% MnO_2 + 0.31% PbO) gave 88.2-80.2% of dry oil and 10.7% of a condensate. The latter on distn. with steam gave 73.7% *enanthaldehyde* and 20.4% of a distillate contg. 40% of undecylenic acid, or 3.37% and 0.5%, resp., on the wt. of raw castor oil. Chas. Blanc

METALLURGICAL LITERATURE CLASSIFICATION



The use of cottonseed oil and sunflower oil in the manufacture of natural and spar varnishes (Ozol



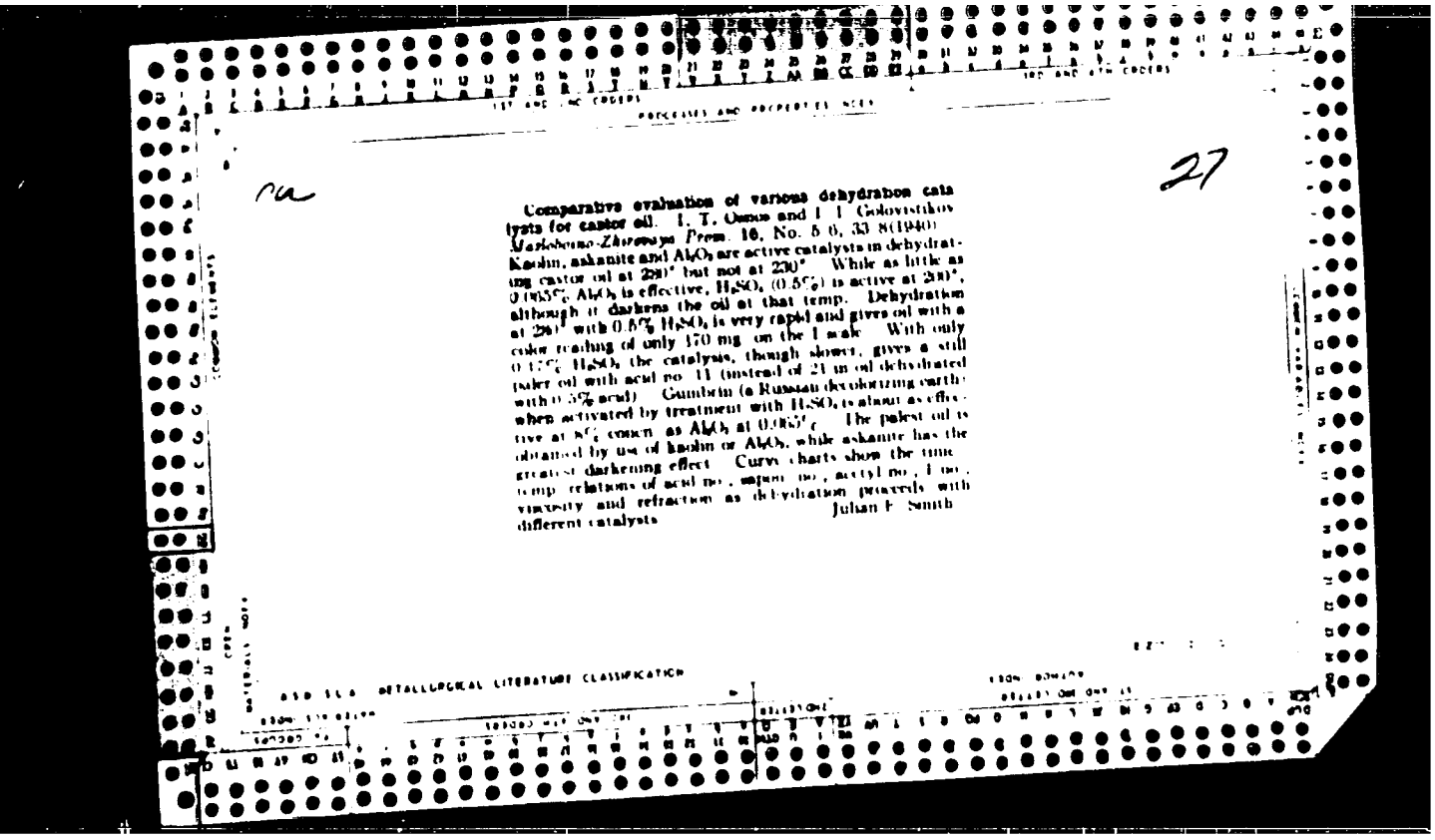
Production of linseed oil suitable for house paint preparation

CA

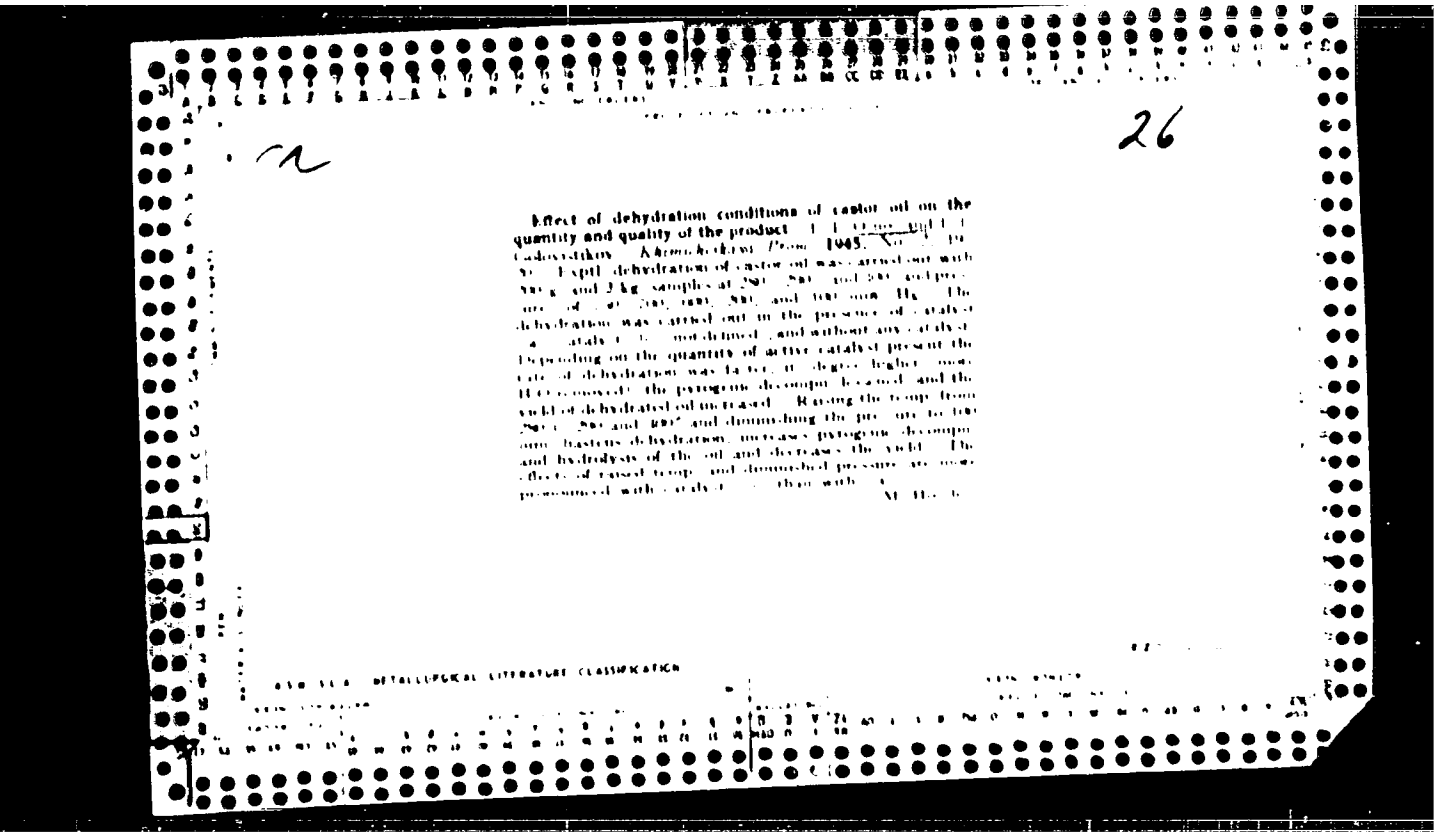
26

Film forming properties of stand oil obtained from castor oil. L. L. Osnos and I. I. Golovistikov. Maslobolno-Zhirovoe Delo 15, No. 6, 21-5 (1939); cf. C. A. 33, 5681[?]. — Addnl. exptl. evidence shows that the films formed by dehydrated castor oil, with and without the addn. of linseed and cottonseed oils, are inferior in their chem. and phys. properties to the films formed by polymerized linseed oil. Chas. Blanc

METALLURGICAL LITERATURE CLASSIFICATION



Comparative evaluation of various dehydration catalysts for castor oil. I. T. Ozmo and I. I. Golovistikov *Maslobono-Zhirovaya Prom.* 16, No. 5-6, 33-8(1940). Kaolin, askanite and Al_2O_3 are active catalysts in dehydrating castor oil at 230° but not at 220°. While as little as 0.085% Al_2O_3 is effective, H_2SO_4 (0.5%) is active at 200°, although it darkens the oil at that temp. Dehydration at 230° with 0.5% H_2SO_4 is very rapid and gives oil with a color reading of only 170 mg. on the I scale. With only 0.15% H_2SO_4 the catalysis, though slower, gives a still paler oil with acid no. 11 (instead of 21 in oil dehydrated with 0.5% acid). Gumbrin (a Russian decolorizing earth) when activated by treatment with H_2SO_4 is almost as effective at 5% concn. as Al_2O_3 at 0.085%. The palest oil is obtained by use of kaolin or Al_2O_3, while askanite has the greatest darkening effect. Curve charts show the time-temp. relations of acid no., saponification no., acetyl no., I no., viscosity and refraction as dehydration proceeds with different catalysts. Julian F. Smith



Effect of dehydration conditions of castor oil on the quantity and quality of the product

Production of stand oil from castor oil. I. I. Osinin and I. I. Cakovistikov. *Maslobožno Zhirovoe Delo* 14, No. 2, 17-21 (1938). The results of the investigation by a special tech. commission of the quality and methods of production of drying oil from castor oil at 3 different factories are discussed and some improvements are suggested. Chas. Blanc

METALLURGICAL LITERATURE CLASSIFICATION

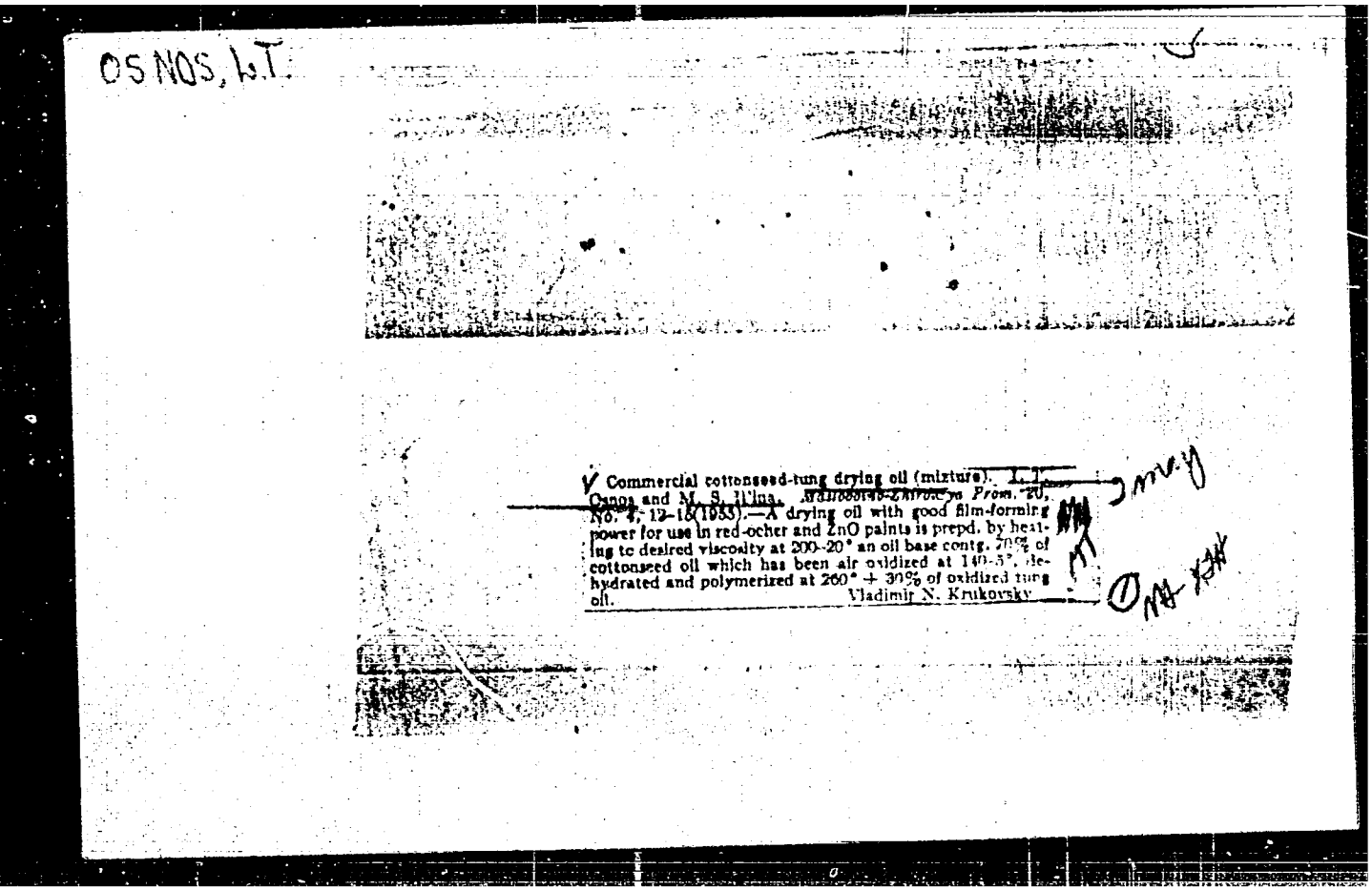
CA

26

The preparation of a varnish of the type "Novol" with small amounts of sulfur monochloride. J. Osnos and J. Golovtitzkov. *Masloboino-Zhirovoe Delo* 1932, 24 33, 54-77, 60-73.—The large amount of S_2Cl_2 which is at present used for the prepn of "sulfo-varnishes" (14-16% of the wt of oil) is objectionable in many respects. The object of this investigation was to decrease the proportion of S_2Cl_2 by replacing the raw

linseed by blown oil. The addn of siccatives greatly increases the absorption of o especially active are Co, Mn and Mn-Ca. By the use of siccatives the viscosity, sp gr and n are increased, the I no decreases and the acid no is not affected. At temps up to 135° the wt of the oil increases in the presence of siccatives, at 150° and higher temps the wt decreases at the beginning of the oxidation and is followed by an increase in the carbonization, which is accentuated by the addn of siccatives. At higher viscosities the rate of these changes decreases considerably, this showing that at the start of the oxidation the chem reactions predominate and that these are followed by processes of a colloidal nature. The drying and film properties of the oils oxidized in presence of siccatives are superior to those of oils oxidized without siccatives. On addn of S_2Cl_2 the reaction products show a loss in wt which increases in the following order: dehydrated, oxidized and raw linseed oil. With 3.28, 4.00 and 12.15% S_2Cl_2 the acidity of the effluent gases increased in the last two cases 6 and 8 times, resp. The reaction velocities as measured by the increase in temp., are considerably higher with oxidized oils than with raw or dehydrated oils. The increase in viscosity of the oils treated with the same amounts of S_2Cl_2 is considerably affected by the original viscosity of the oil. The treated oils show the same acid nos as the untreated, while I nos of the former are considerably decreased in proportion to the amounts of S_2Cl_2 used. A few expts were also carried out by treating linseed oil with S. The I nos of the S-treated oxidized oils are increased. On the basis of the above expts the production of the "sulfo varnish" was accomplished on a large scale (in batches of over 2 tons of oil). The results of the lab work were fully confirmed. The products were superior in many respects to the com varnishes contg 14-16% S_2Cl_2. The production method is described in detail. A comprehensive critical review of the literature prefaces the exptl part. F. H.

METALLURGICAL LITERATURE CLASSIFICATION



OS NOS, h.T.

Commercial cottonseed-tung drying oil (mixture). I. I. Ganos and M. S. Il'ina. *Masloboino-Zhirovoe Prom.* 20, No. 4, 12–16 (1955).—A drying oil with good film-forming power for use in red-ocher and ZnO paints is prepd. by heating to desired viscosity at 200–20° an oil base contg. 70% of cottonseed oil which has been air oxidized at 140–5°, dehydrated and polymerized at 260° + 30% of oxidized tung oil.

Vladimir N. Krukovsky

CHERNOV, V.I., dotsent; OSNOS, M.L., dotsent; MELAMUD, M.Ya.; YANKELEVICH, Ya.Kh.

Dispanseries in the control of cardiovascular diseases in the city of Lvov. Nauch.trudy L'vov.obl.terap.ob-va no.1:10-15 '61. (MIRA 16:5)

1. L'vovskiy gorodskoy otdel zdravookhraneniya (zav. otdelom - Ya.I. Skibel').
(LVOV--HOSPITALS--OUTPATIENT SERVICES)
(LVOV--CARDIOVASCULAR SYSTEM--DISEASES)

MONASTYRSKIY, R.Ya (L'vov); OSNOS, M.L., dotsent (L'vov); MELAMUD, M.Ya. (L'vov); YANKELEVICH, Ya.Kh. (L'vov); SIROMAKHA, G.M. (L'vov) KOPEL'MAN, Ye.Sh. (L'vov); KRASNOVA, S.B. (L'vov); BANAKH, R.D. (L'vov)

Organization of rheumatic fever control. Klin. med. 40 no.11: 89-93 N'62 (MIRA 16:12)

1. Iz L'vovskogo oblastnogo otdela zdravookhraneniya (zav. - R.Ya. Manastyrskiy).

MONASTYRSKIY, R.Ya.; CHERNOV, V.I., dotsent; OSNOS, M.L., dotsent; ROZANOV, Ye.M.

Further qualitative improvement of medical aid to cardiovascular patients in Lvov Province. Nauch.trudy L'vov.obl.terap. ob-va no.1:5-9 '61. (MIRA 16:5)
(LVOV PROVINCE—CARDIOVASCULAR SYSTEM—DISEASES)

MANASTYRSKIY, R.Ya.; CHERNOV, V.I.; STUKALO, I.T.; OSNOS, M.L.; MELAMUD, M.Ya. (L'vov)

Certification for specialists in internal medicine. Vrach.delo no.7: 735 Jl '59. (MIRA 12:12)
(LVOV PROVINCE--MEDICINE--LAWS AND LEGISLATION)

OSNOS, Ye.M.

New method of preparing the hands for surgery and sterilization of suture material and rubber gloves with a diocide solution. Khirurgiia 36 no. 5:124-129 My '60. (MIRA 14:1)
(ANTISEPTICS) (SURGERY, OPERATIVE)

OSNOVICH, L.D.

Contactless transistor relay. Izv. vys. ucheb. zav.; elektromekh. 4 no. 1:83-89 '61. (MIRA 14:4)
(Electric relays)

OSNOVICH, I.D., inzh.

Problem concerning the determination of dependent initial conditions in the calculation of transients in linear networks. Izv. vys. ucheb. zav.; energ. 4 no.11:25-28 N '61. (MIRA 14:12)

1. Novosibirskiy elektrotekhnicheskiy institut. Predstavlena kafedroy teoreticheskikh osnov elektrotekhniki.
(Electric networks)

OSNOVICH, L.D., inzh.; SHOR, A.M., inzh.

Capacitance in asymmetrical system of cylinders with alternating polarity. Izv. vys. ucheb. zav.; energ. 6 no.2:35-41 F '63. (MIRA 16:3)

1. Novosibirskiy elektrotekhnicheskiy institut. Predstavlena kafedroy teoreticheskikh osnov elektrotekhniki.
(Electric machinery) (Magnetic circuits)

OSNOVICH, Leonid Davidovich, starshiy prepodavatel'

Leakage coefficient and optimum width of polar caps in d.c. machines with printed armature windings. Izv. vys. ucheb. zav.; elektromekh. 6 no.5:576-581 '63. (MIRA 16:9)

1. Kafedra teoreticheskikh osnov elektrotekhniki Novosibirskogo elektrotekhnicheskogo instituta.
(Electric machinery--Direct current)

OSNOVICH, Leonid Davidovich, starshiy prepodavatel'; KAZANSKIY, Vasiliy Mikhaylovich, kand.tekhn.nauk, dotsent

Losses and eddy currents in the rotor windings of d.c. machines with printed windings. Izv. vys. ucheb. zav.; elektromekh. 6 no.6:676-682 '63. (MIRA 16:9)

1. Kafedra teoreticheskikh osnov elektrotekhniki Novosibirskogo elektrotekhnicheskogo instituta (for Osnovich). 2. Zaveduyushchiy kafedroy teoreticheskikh osnov elektrotekhniki Novosibirskogo elektrotekhnicheskogo instituta (for Kazanskiy).
(Electric machinery--Direct current)

OSNOVICH, Leonid Davidovich, starshiy prepodavatel'

Calculation of magnetic excitation field in the interpole gap of a d.c. machine with printed rotor winding. Izv. vys. ucheb. zav.; elektromekh. 6 no.11:1167-1174 '63. (MIRA 17:4)

1. Kafedra teoreticheskikh osnov elektrotekhniki Novosibirskogo elektrotekhnicheskogo instituta.

OSNOVICH, L.D., kand. tekhn. nauk; OSNOVICH, Z.A., inzh.

Calculation of a cylindrical armature with printed winding of a d.c. motor. Elektrotekhnika 35 no.6:44-46 Je '64. (MIRA 17:8)

KAZANSKIY, Vasiliy Mikhaylovich; OSNOVICH, Leonid Davidovich; [illegible], Yu.M., red.

[Low-torque d.c. motors with printed armature windings] Maloinertsionnye elektrodvigateli postoiannogo toka s pechatnoi obmotkoi na iakore. Moskva, Energiia, 1965. 95 p. (Biblioteka po avtomatike, no.142) (MIRA 18:8)

L 26077-66 EWT(1) UR/
ACC NR: AM5026857 Monograph

Kazanskiy, Vasiliy Mikhaylovich; Osnovich, Leonid Davidovich 51 B+1

Quick-response direct current electric motors with printed armature windings (Maloinertsionnyye elektrodvigateli postoyannogo toka s pechatnoy obmotkoy na yakore) Moscow, Izd-vo "Energiya," 1965. 95 p. illus., biblio. 8200 copies printed.

Series note: Biblioteka po avtomatike, vyp. 142

TOPIC TAGS: electric motor, armature, magnetic circuit, printed circuit, electric rotating equipment

PURPOSE AND COVERAGE: This booklet is intended for engineers and technicians concerned with the design and operation of automatic systems and servomotors. The book deals with problems of design and calculation of d-c, low-inertia motors with printed-circuit armatures. The peculiarities of some magnetic processes in this type of motor and problems of high-speed operation are discussed. The technology of printing processes used in the rotor production is briefly presented.

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L 26077-66
ACC NR: AM5026857

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AVAILABLE: Library of Congress

SUB CODE: 09/ SUBM DATE: 01Jun65/ ORIG REF: 042/ OTH REF: 019

Card 3/3 CC

L 05711-67
ACC NR: AR6010523 SOURCE CODE: UR/0196/65/000/010/I007/I007

AUTHOR: Shor, A. M.; Kazanskiy, V. M.; Osnovich, L. D.

TITLE: Selection of the optimal width of an active conductor of a disk printed armature

SOURCE: Ref. zh. Elektrotekhnika i energetika, Abs. 10I46

REF SOURCE: Izv. Tomskogo politekhn. in-ta, v. 132, 1965, 93-98

TOPIC TAGS: printed circuit, conductor, armature

ABSTRACT: A method is presented for the selection of the optimal width of an active conductor of a disk printed armature. The optimal width is determined from the conditions of the minimum electromechanical time constant and the minimum electrical losses in the armature winding. A definition is made of the degree of the influence of the active conductor width deviation from the optimal on the intertial and thermal qualities of the machine. A definitive solution is made on the basis of a quality comparison. In most cases the dominant influence is exerted by the inertia optimum. [Translation of abstract] Bibliography of 6 titles. G. Salgus

SUB CODE: [illegible], 09

Card 1/1 UDC: 621.3045.21.001.24:621.3.049.75

OSNOVICH, L.D., kand. tekhn. nauk; OSNOVICH, Z.A., inzh.

Calculation of a cylindrical armature with printed winding of a d.c. motor. Elektrotekhnika 35 no.6[illegible] Je '64.
(MIRA 17:8)

OSHOVICH, Z.A.

Basic stages of the development of the industrial electrical drive.
Trudy MEI no.29:87-100 '57. (MIRA 13:3)
(Electric driving)

ACC NR: AR6029469 SOURCE CODE: UR/0196/66/000/006/I010/I010

AUTHOR: Osnovich, Z. A.

25

TITLE: Optimum pole arc-over coefficient and saturation coefficient of printed cylindrical armature dc machines

SOURCE: Ref. zh. Elektronika i energetika, Abs. 6I60

REF SOURCE: Sb. dokl. k Nauchno-tekhn. konferentsii po elektr. mashinam s pechatn. obmotkami. Novosibirsk, 1965, 41-47

TOPIC TAGS: electric rotating equipment, electric motor, electric generator

ABSTRACT: Analytical and graphic expressions are derived for calculating the optimum values of pole arc-over (α_p) and machine saturation (K_m) coefficients assuring a maximum value of average induction in the air-gap of dc machines with printed cylindrical armatures. An analysis of the expressions has shown that $\alpha_p = 0.8 - 0.85$ and $K_m \approx 0.9$. [Translation of abstract] 6 illustrations. N. Astakhov

SUB CODE: 09

Card 1/1 egb

UDC: 621.313.2.001.24

L 08585-67

ACC NR: AR6029470 SOURCE CODE: UR/0196/66/000/006/I010/I010

38

AUTHOR: Osnovich, Z. A.

TITLE: An electromagnetic method for the design of the DC motor with a cylindrical printed armature and electromagnetic excitation

SOURCE: Ref. zh. Elektronika i energetika, Abs. 6I61

REF SOURCE: Sb. dokl. k Nauchno-tekhn. konferentsii po elektr. mashinam s pechatn. obmotkami. Novosibirsk, 1965, 48-55

TOPIC TAGS: electric motor, electromagnetic effect, excitation energy

ABSTRACT: The proposed design method gives all dimensions for the motor with minimum losses in its armature and maximum induction in its air gap. The power P_{II}, voltage U_{II}, and the speed of rotation n_{II} are specified. Continuous motor operation is required. The following parameters are initially selected: emf in the armature, $E_a \simeq 0.9U_{II}$; efficiency (excluding the excitation losses), $\eta \approx 0.8$; and the current density in the armature, i_a = 2500 - 3000 amp/cm^2 for a self-ventilating motor, and i_a = 3000—4000 amp/cm^2 for a motor with forced ventilation. A simple wave winding is selected with the number of poles equal to 2p = 4. The armature diameter is initially determined from the curve of $D_a = f(P_{II}/n_{II})$. After calculating the pole

Card 1/2 UDC: 621.313.13.024.001.24

L 08585-67

ACC NR: AR6029470

arch and leakage the average air-gap induction is established. The number of armature conductors for the selected D_a is determined by considering the known current density and the photochemical method of printed conductor production. Then, the dimensions of the poles and the stator are calculated by the usual methods. The magnetic circuit is computed next. The excitation winding current density of $i_e = 250$ amp/cm^2 is assumed during its design. In the calculation of the motor efficiency the mechanical losses are assumed to be $(0.01—0.02)P_H$.
[Translation of abstract] 4 illustrations. N. Astakhov

SUB CODE: 10

Card 2/2

OSMOVIKOV, G.

Putting grain receiving stations and flour mills under the same management. Muk.-elev. prom. 24 no.7:15-17 Jl '58. (MIRA 11:10)

1.Altayskoye krayevoye upravleniye khleboproduktov.
(Altai Territory--Grain trade)

OSHOVIKOV, G.

Some problems in planning construction work. Muk.-elev.prom.22 no.7: 31-32 Jl '56. (MLRA 9:9)

1.Altayskaya krayevaya kontora Zagotzerno.
(Grain elevators)

YAKIMOVICH, V., inzh.; MAGONIN, P.; SHELEST, S.; OSNOVIKOV, G.; KALACHEV, O., inzh.; DOKTORMAN, M.; ZHITYAYEV, S.; FARBER, A., inzh.

Suggestions of efficiency operators introduced at grain procurement stations and grain-milling enterprises. Muk.-elev. prom. 25 no.4:23-29 Ap '59. (MIRA 13:1)

1.Ministerstvo khleboproduktov Kazakhskoy SSSR (for Yakimovich). 2.Chelyabinskoye upravleniye khleboproduktov (for Magonin). 3.Glavnyy inzhener Novomoskovskogo zavoda po obrabotke semyan kukuruzy (for Shelest).4.Altayskoye upravleniye khleboproduktov (for Osnovikov). 5.Ministerstvo khleboproduktov RSSR (for Kalachev). 6.Luganskoye upravleniye khleboproduktov (for Doktorman). 7.Kuybyshevskoye upravleniye khleboproduktov (for Zhityayev).

(Grain elevators) (Grain milling)

OSHOVIKOV, G.

Building grain procurement stations on virgin lands. Muk.-elev.prom. 22 no.3:14-15 Mr '56. (MLRA 9:7)

1.Zamestitel' upravlyayushchego Altayskoy kontoroy Zagotzerno.
(Altai Territory--Granaries)

OSNOVNIKOV, G.

Experience in operating MUKZ-35 feed mills in the Altai Territory.
Muk.-elev. prom. 25 no.8:21-22 Ag '59.
(MIRA 13:1)

1.Altayskoye upravleniye khleboproduktov.
(Altai Territory--Feed mills)

SOV 124-57-5-5268

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 22 (USSR)

AUTHOR: Osnovin, S. D.

TITLE: Methods and Formulae for the Calculation of Concentrated Explosive Charges (Metody i formuly dlya rascheta sosredotochennykh zaryadov)

PERIODICAL: Izv. Tomskogo politekhn. in-ta, 1956, Vol 87, pp 70-83

ABSTRACT: The author makes a comparison of a number of methods of calculating explosive charges used for the blasting of rocky soils. The paper is in the nature of a review, but fails to cover fully even the most important known material. It does not, for example, contain any references whatsoever to the voluminous foreign literature on the subject with which it is concerned.

G. I. Pokrovskiy

Card 1/1

OSNOVIN, S.D.

New method of calculating elongated charges for limited throwing and charges for loosening. Izv.TPI 93:72-86 '58.
(MIRA 13:5)

(Mining engineering) (Explosives)

1. OSNOVIN, S. D., Docent

2. USSR (600)

4. Strip Mining

7. Basic mining terminology and classification in strip mining. Ugol' 27 No. 12, 1952

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

L 10150-67 EWT(m)/EWP(w)/EWP(t)/ETI IJP(c) JD/JG
ACC NR: AP6022509 SOURCE CODE: UR/0133/66/000/004/0355/0358

AUTHORS: Vinograd, M. I.; Gnuchev, S. M.; Gromova, G. P.; Smirnova, A. V.; Ryl'nikova, A. G.; Osnovin, V. A.; Krasnova, A. K.; Likhmova, I. V.; Yegorshina, Z. V.

ORG: none

TITLE: Nonmetallic inclusions in melts of steel 08Kh20N10G6 exhibiting different hot technological plasticity

SOURCE: Stal', no. 4, 1966, 355-358

TOPIC TAGS: alloy steel, metallurgic research, aluminum, cerium / 08Kh20N10G6 alloy steel

ABSTRACT: The effect of aluminum and rare earth elements (mainly cerium) on the technological plasticity of steel 08Kh20N10G6 was investigated. The investigation supplements the results of V. A. Osnovin and S. M. Gnuchev (Byulleten' TsIINChM, 1964, No. 6). The microstructure and twisting strength of the specimens was determined as a function of the temperature and nature of the reducing agent (see Fig. 1). It was found that addition of 1.5--2.0 kg/ton of Al and rare earth metals (0.15--2.0% on the basis of Ce) to steel 08Kh20N10G6 leads to a considerable increase in the high temperature plasticity of the latter. S. B. Lebedeva, I. A. Prokof'yeva, and L. I. Volkova participated in the experimental work.

UDC: 669.15:658.562

Card 1/2

L 10450-67

ACC NR: AP6022509

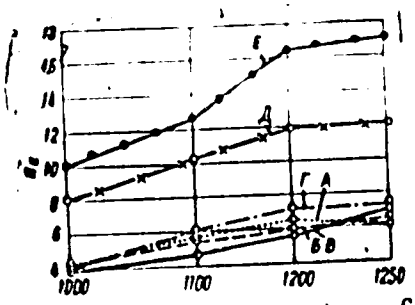

Fig. 1. Results of torsion tests at high temperatures (n_K - number of revolutions at which failure occurred) of different melts A - E. Specimen A reduced in the usual way. All others reduced as described above.

Orig. art. has: 1 graph and 6 photographs.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 009

OSNOVINA-LOMOVITSKAYA, A.D.; GOFMAN, Yu.I.

Diagnostic significance of D.I. Fin'ko's color reaction of bile in liver diseases. Lab. delo 5 no.1:13-17 Ja-F '59. (MIRA 12:3)

1. Iz kafedry fakul'tetskoy terapii (zav. - prof. D.D. Yablokov) Tomskogo meditsinskogo instituta.
(BILE) (LIVER--DISEASES--DIAGNOSIS)

OSNOVICH, Leonid Davidovich, starshiy prepaodavatel'

Transistor noncontact relay. Izv.vys.ucheb.zav.; elektromekh. 5 no.1:74-82 '62. (MIRA 15:2)

1. Kafedra teoreticheskikh osnov elektrotekhniki Novosibirskogo alektrotekhnicheskogo instituta.
(Electric relays)

39662
S/144/61/000/001/002/004
E194/E484

9.2140(1135,1150,1325)

AUTHOR: Osnovich, L.D.

TITLE: A Contactless Relay Based on Semiconductor Triodes

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika 1961, No.1, pp.83-89

TEXT: In recent years considerable successes have been achieved in the manufacture of large semiconductor triodes and this affords the possibility of making extensive use of them in power application, and in particular semiconductor triodes operating under switching conditions are promising for use as contactless relays and switches. This article describes the circuit of a heavy current contactless relay based on semiconductor triodes and studies the influence of the circuit parameters on its characteristics and gives the procedure for calculating and selecting these parameters. A circuit of the relay is given in Fig.1. This is an asymmetrical trigger circuit based on two semiconductor triodes connected in circuit with a common emitter. The resistance R_{H2} is a load resistance which connects the relay and so the relay itself does not enter directly into the circuit.

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S/144/61/000/001/002/004
E194/E484

A Contactless Relay ...

The article shows that the resistance R_{H1} is considerably greater than R_{H2} and consequently the collector current of the input triode T_1 is considerably less than that of the output triode. The voltage of the emitter collector input triode does not exceed the voltage of the emitter base of the output triode. Consequently, the output triode may be selected for low current and voltage, which is an important advantage of this circuit compared with the symmetrical trigger circuit. For this reason on disconnecting the load (the output triode is shut) the circuit requires considerably less power than when connecting the load, which is also an advantage over the symmetrical trigger circuit. The article also shows that by appropriate selection of parameters the relay may be provided with self return or may be made without it. The fundamental equations of the relay circuit are then formulated and for selection of the circuit parameters the two limiting conditions are considered, one with the output triode open and the input triode shut and the other with the output triode shut and the input triode open. Voltage and current expressions are derived for these cases. The influence of the resistances R_{oc}

A Contactless Relay ...

and R_y on the operation of the relay is considered on the basis of the input characteristic, an equation for which is derived, and the input characteristic is plotted in Fig.3. This graph also includes the load characteristic of the circuit. A special feature of the circuit is the presence of sharp transitions between the stable and unstable parts of the input characteristics. Expressions are then derived for the conditions under which the relay opens and closes and finally a procedure is proposed for calculation of the input characteristic according to a certain sequence. In order to prevent overheating of the triode, it may be necessary to provide cooling, for example by radiators. Usually, however, the input triode requires no special cooling as it takes much less power than the output triode. There are 4 figures and 4 Soviet references.

ASSOCIATION: Kafedra teoreticheskikh osnov elektrotekhniki
Novosibirskiy elektrotekhnicheskiy institut
(Department for Basic Theory of Electrical
Engineering, Novosibirsk Electrotechnical Institute)

SUBMITTED: May 12, 1960

Card 3/5

OSNOVICH, LEONID DAVIDOVICH, starshiy prepodavatel'

Choice of optiumu disc dimensions in d.c. machinery with printed windings. Izv. vys. ucheb. zav.; elektromekh. 4 no.6:63-66 '61. (MIRA 14:7)

1. Kafedra teoreticheskoy i obshchey elektrotekhniki Novosibirskogo elektrotekhnicheskogo instituta.
(Electric machinery--Direct current)

OSNOVINA, L.

Let's bring interdepartmental control closer to the enterprise.
Sov. torg. 36 no.11:33-34 N '62. (MIRA 16:1)

1. Glavnyy bukhgalter Sverdlovskogo gorodskogo upravleniya torgovli.
(Retail trade--Auditing and inspection)

MINDELI, E.O., kand.tekhn.nauk; KUSOV, N.F., kand.tekhn.nauk; ODNOPOZOV, Z.A., gornyy inzhener; RABICHEV, A.R., gornyy inzhener; MAMONOV, V.V., gornyy inzhener; GROZIN, V.M., gornyy inzhener; OSNOVSKIY, I.V., gornyy inzhener; VORONIN, V.S., inzhener-shakhtostroitel'; MUKHIN, L.V., gornyy inzhener

Discussion on N.V. Stadnichenko, V.T. Nazarov's article "Advantageous diameter size for boreholes." Ugol' 35 no. 4:31-35 Ap '60. (MIRA 14:4)

1. Kombinat Rostovugol' (for Rabichev, Mamonov & Grozin). 2. Rostovskiy sovnarkhoz (for Osnovskiy & Voronin).

(Blasting) (Boring) (Stadnichenko, N.V.) (Nazarov, V.T.)

Agriculture

ee (Princi les of forest mam ement) oskva, Goslesbumizdat, [illegible]

Monthly List of Russian Accessions, Library of Congress, July [illegible].

APPROVED FOR RELEASE: Wednesday, June 21, 2000 CIA-RDP86-00513R001238

OSNYACH, G.D.

Traumatic cyst of the pancreas. Klin.khir. no.8:74-75 Jl '62.
(MIRA 15:11)

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. I.M.Grabchenko) Vinnitskogo meditsinskogo instituta na baze Vinnitskoy oblastnoy bol'nitsy imeni N.I.Pirogova.

(PANCREATIC CYSTS)

OSNYACH, G.D.

Two cases of diffuse septic phlegmon. Nov.khir.arkh. no.6:80-81 N-D '57. (MIRA 11:3)

1. Kafedra khirurgii Vinnitskogo meditsinskogo instituta.
(HIP JOINT--DISEASES)