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Albert G. Reynolds and John T. Yolland (to R. Y. P. Mfg. Co.). U. S. 2,305,193, Dec. 15. Various structural, mech. and operative details. 1

Reclaiming carbon dioxide used in storage tanks for fruit juices. Bergedorfer Eisenwerk Akt.-Ges. Astra-Werke. Ger. 707,928, May 29, 1941 (Cl. 53*k*. 1.01).

Decomposition of dry vegetables. Chemisches Werk Dr. Klopfer G. m. b. H. Ger. 707,782, May 29, 1941 (Cl. 53*c*. 6.01). The dry vegetables are comminuted and treated with solvents for chlorophyll and carotene. To the coln. is added a neutral fat and the chlorophyll and the carotene are distd. off. 2

Isolating vegetable proteins such as soybean protein. Percy L. Julian and Bernard T. Malter (to The Glidden Co.). U. S. 2,304,099, Dec. 8. The material, such as soybean meal, is extd. with water, caustic alkali and lime are added to the sepd. ext., and the resulting alk. liquor is centrifuged and the protein is recovered from the clarified ext.

Preserving green feed. Wilhelm Klein. Ger. 708,024, June 5, 1941 (Cl. 53*g*. 5.01). Green matter is preserved with $Na_2S_2O_3$. For 100 kg. of the green matter, an aq. soln. of up to 10 g. of $Na_2S_2O_3$ and the required quantity of acid to decomp. this salt are used.

13—CHEMICAL INDUSTRY AND MISCELLANEOUS INDUSTRIAL PRODUCTS

(PLASTICS, RESINOIDS, INSULATORS, ADHESIVES, ETC.)

HERMAN A. BRUSON

Mellon Institute in wartime. E. R. Weidlein. *Chem. Eng. News* 21, 467–78(1943); cf. *C. A.* 36, 2951[2].—The annual report is curtailed because of wartime restrictions. A table shows the industrial fellowships in operation during the fiscal year March 1, 1942 to March 1, 1943 and some discussion is given of investigations on cotton, high-temp. electrical insulation materials, plate glass, special plastics for aircraft and (under the heading "War services of Industrial Hygiene Foundation") lost workdays in essential manufacturers, plant-hygiene surveys and toxicology, Mg-dust hazards, industrial exhaust ventilation and Al powder in the treatment of silicosis as well as (from the Institute's Department of Research in Pure Chemistry) synthetic antimalarials, modified cinchona alkaloids, congeneric synthetics and drug standardization. 4
E. J. C. 5

Chemical industry advances in Brazil. Charles F. Bonilla. *Chem. & Met. Eng.* 50, No. 3, 96–9(1943).
E. H.

Chemical warfare and the mission of the veterinary. R. G. Espinet. *Rev. med. vet.* 22, 437(1940); *Anales asoc. quím. argentina* 30, 31B(1942).—Present knowledge of the action of chem. agents, their classification, and a description of the most important are given. Symptomatology, lesions and treatment of animals which have suffered from the effects of chem. agents, particularly horses and dogs, are given. 6
E. M. Symmes

Protection of civilians from vesicant agents. T. F. Bradley, J. T. Cassaday, T. G. Moore and Wm. C. Moore. *Chem. Eng. News* 21, 373–5(1943).—A description is given of the mobile war gas casualty station developed by the Stamford, Conn. civilian defense group. The decontamination truck, carrying the hot-water showers, was constructed for approx. $600. A list of auxiliary equipment and an operation schedule are given. Use of mobile units of this type avoids vesicant contamination of regular transportation and first-aid facilities. Four references. 7
Richard G. Rowe

Sorption of acetylene. E. V. Alekseevskiĭ and O. M. Kuznetsova-Kharina. *J. Gen. Chem.* (U. S. S. R.) 12, 296–304(in English, 304–5)(1942).—The suitability of a variety of commercial carbons, charcoals, silica gel and $Fe(OH)_3$ gel and a variety of carbons treated with numerous inorg. salts, as packing for gas-masks or respirators for protection against acetylene; all of these materials were found to be totally unsuitable. The sorption isotherms were detd. for acetylene on ethyl heptadecyl ketone, cellulose, acetylcellulose, acetylstearoylcellulose, nitrocellulose and nitroacetylcellulose. Only cellulose and acetylstearoylcellulose were found to have appreciably large sorption of C_2H_2. 8
G. M. Kosolapoff 9

The poisons in chemical industry. Victor Andriska. *Kem. Lapja* 2, No. 10, 2–3, No. 11, 1–4(1941); *Chem. entr.* 1942, I, 1400.—A review on the various poisonous substances, their manner of entering the organism, action, the individual reaction, treatment and prophylaxis.
A. E. Meyer

Sulfur dioxide injuries. Symanski. *Arbeitsschutz.* 1941, 465(1941); *Chem. Zentr.* 1942, I, 1907.—SO_2 injuries (frequently occurring in founding Mg alloys) although generally of temporary nature, may lead to indispositions lasting a week or longer.
R. P. E. Hopf

The occupational cancer of asbestos workers. A. J. Linzbach and H. W. Wedler. *Arch. path. Anat.* (*Virchow's*) 307, 387–409(1941); *Chem. Zentr.* 1942, I, 1513; cf. *C. A.* 33, 9488[1].—Description of a severe asbestosis of the lungs in a 60-year-old man with development of a cornifying squamous-celled epithelioma in the right inferior lobe. Asbestos injury was considered to be the cause of the cancer. The disease is, therefore, in agreement with Nordmann (*C. A.* 36, 2006[4]), to be considered an occupational cancer. Mech. tissue injury and chem. effects (hornblende and serpentine asbestos) are involved as injurious factors of the asbestos.
Ruth Berggren

Advances in plastics during 1942. G. M. Kline. *India Rubber World* 107, 573–5; *Mech. Eng.* 65, 245–7, 260 (1943); cf. *C. A.* 37, 1205[3].—A review, with 110 references.
C. C. Davis

The influence of temperature on the strength of plastics. II. Impact strength at high and low temperatures. R. Nitsche and E. Salewski. *Kunststoffe* 31, 381–8 (1941); *Chem. Zentr.* 1942, I, 935; cf. *C. A.* 34, 8104[1].—Strength tests were performed on 26 plastics in the temp. range −70 to +200°. Test specimens 10 × 15 × 120 mm. were used. The specimen was previously brought to the desired temp. then placed in position in the pendulum-type testing app. and sprayed with liquid of the same temp. The liquid stream was interrupted only for the actual test. The influence of temp. on strength is most marked in the cellulose derivs. In unlaminated moldings the strength-temp. curve depends largely on the nature of the filler. Laminated moldings show a steady increase in strength up to about +80°, above which it starts to diminish. Among the thermoplastics polyvinyl chloride and "Copolymer MP" show a marked temp. effect above 0°. It is proposed to use 20 ± 1° as a test temp. for cellulose acetate Type A, benzyl cellulose, vulcanized fiber and Cl-contg. vinyl polymerizates; 20 ± 2° for other plastics. There is no obvious relationship between the impact strength-temp. curve and the impression hardness-temp. curve.
Anthony M. Schwartz

Investigation of the mechanical behavior of synthetic resins at low temperatures and its dependence upon preparation and pretreatment. W. Röhrs and K. H. Hauck. *Kunststoff-Tech. u. Kunststoff-Anwend.* 11, 213–28(1941); *Chem. Zentr.* 1942, I, 543–4.—Investigation of the modulus of elasticity (I), and the elastic limit (II) of hardenable and nonhardenable synthetic resins in relation to temp. in the realm of low temps. (+20 to −70°). From compression measurements with a definite compression velocity, I and II were detd. in relation to temp. Expansion measurements and polystyrene viscosity measurements also served to complete the investigation. For phenol-formaldehyde cast resins and molding compds. as well as urea-formaldehyde molding material, the influence of the degree of hardening upon the mech. properties was