259 Industrial Gas Cleaning. N. Pilpel. Brit. Chem. Eng. 5, 542-550 (Aug. 1960).

There are 5 principal methods which are employed on an industrial scale for removing small particles and liquid droplets from gases and vapors. These are filtration, electrostatic precipitation, inertial separation, wet scrubbing and agglomeration. The purpose of the present article is to review recent developments in the theory underlying these methods and to describe equipment which is in current use in industry for the treatment of smokes, dusts and mists. -- Public Health Eng. Abstr.

260 Experimental Byssinosis. P. Tuffnell. Brit. J. Ind. Med. 17, 307-309 (Oct. 1960).

The symptoms of byssinosis were produced experimentally in 1 of 3 cotton-mill workers with pronounced byssinosis, by a dust prepared from the leaves of cotton plants. Dusts of calcium carbonate, bacteria, and fungi did not reproduce the symptoms. Two non-cases of byssinosis and 2 cases of chronic bronchitis did not react specifically to any of these dusts. -- Author's Abst.

261 Experimental Bagassosis. (2) Enzymes of Lung in Vitro. V. N. Singh, et al. Enzymologia 21, 350-355 (1960).

The present investigation on the effects of bagasse (sugar cane fiber) dust on the enzyme systems of guinea pigs in vitro is meant to form a background against which the effect of bagassosis on the enzymatic pattern of the lung in vivo could be reviewed. Using a Warburg respirometer and freshly-prepared guinea pig lung, studies were made of the effect of bagasse dust on the respiratory quotient and on the activity of malic dehydrogenase, lactic dehydrogenase, cytochrome oxidase, fumarase, adunosine, tryphosphatase, and transaminase. There was no noticeable change in the respiratory quotient or the activity of the first 4 enzymes, but there was an appreciable enhancement of the latter 2 enzymes in the presence of 1% bagasse dust. In the case of succinic dehydrogenase the effect of the whole bagasse, as well as the water-soluble extract, was studied. The former inhibited but the latter did not have any effect at all on the activity of the enzyme. -- APCA Abstr.

262 The Relationship of Byssinosis to the Bacteria and Fungi in the Air of Textile Mills. P. Tuffnell. Brit. J. Ind. Med. 17, 304-306 (Oct. 1960).

The principal causative agent of byssinosis lies in the dust of cotton mills. This dust contains bacteria and fungi. An attempt has been made to determine whether any association could be established between the numbers of viable bacteria and fungi in the air of 2 cotton and 2 jute mills, and the prevalence of byssinosis. No association was found except between the numbers of live organisms of B. pumilus and B. Subtilis, and the occurrence of byssinosis. This association does not establish a causal relationship, but it is suggested that an attempt should be made to produce typical symptoms in byssinotic subjects by means of organisms of the genus Bacillus. -- Author's abst.

263 Dust Diseases in Dundee Textile Workers. An Investigation into Chronic Respiratory Disease in Jute and Flax Industries. A. Mair, D. H. Smith, W. A. Wilson and W. Lockhart. Brit. J. Ind. Med. 17, 272-278 (Oct. 1960).

A survey of respiratory symptoms and function was carried out in Dundee among 123 men and women in the jute industry and 242 in the flax industry. The selection of workers was biased in favor of those working in the dustier departments as judged by eye and those in the older age groups. A group of 72 men in a heavy engineering firm were also selected as controls for comparison. Chronic bronchitis, as defined by Ogilvie and Newell (1957), was recorded in 27% of those interviewed, whose average age was 49. Byssinosis of various grades was recorded in 30% of all working in flax; of these 35 had cough alone worse on Monday, 34 had other respiratory symptoms worse on Monday and in only 4 persons did the exacerbation persist into