

when they analyzed the cases of scrotal cancer which occurred during 1837 to 1929 in the Blackburn Registration District. While the incidence ratio of scrotal cancer deaths in sweeps to total number of employed sweeps was 308 per 1,000, this ratio was found to be for the occupationally not predisposed part of the general population, 0.2 cases of scrotal cancer to 1,000 employed individuals.

Attention must be called to the fact that statistical evidence supplied from English sources covering a period of approximately 75 years indicates that sweeps display not only an excessive liability to cutaneous and particularly scrotal cancer, but also to cancer in general. Newsholme thus noted in a statistical analysis of the cancer mortality in England during the years 1861-1890 that chimney-sweeps exhibited the highest cancer death rate among all occupations studied (156 per 1,000 deaths compared with 36 per 1,000 deaths in miners). An even higher cancer death ratio among chimney-sweeps was found by Butlin for the years 1880-1882 (202 cancer deaths per 1,000 deaths against 36 cancers deaths per 1,000 deaths in the general population). Legge calculated the cancer death rate for sweeps from 25 to 65 years old for the years 1900-1902 and noted that it was 133 per 1,000 deaths in sweeps compared with 63 per 1,000 deaths in the general population. Similar data were given by Tatham, who noted a cancer death rate for sweeps of 156 per 1,000 and, for the general population, of 44 per 1,000, adding that the cancer liability of sweeps was eight times that of the general population. Hope's statements on this subject, covering 1900-1903, were practically identical with those recorded by Legge (cancer death rate of sweeps, 131 per 1,000; cancer death rate of occupied male population, 68 per 1,000).

Collis and Greenwood's assertion that there was a decrease in cancer deaths among chimney-sweeps, amounting to 40.6 per cent during 1900-1902 in comparison to the period 1890-1902, is not supported by the observations of all other investigators, who analyzed the same or closely related periods. Kennaway called attention to the fact that 40.8 per cent of the nonscrotal cancers of chimney-sweeps found among a total of 65 fatal cases (1910-1912) involved the respiratory and alimentary tract above the stomach, that is regions, in which in general only approximately 25 per cent of the total number of cancers are situated [16 scrotal cancers, 1 cancer of penis, 1 of inguinal nodes (18 typical chimney-sweeps' cancers); 6 cancers of tongue, 4 cancers of pharynx, 3 cancers of jaw, 3 cancers of esophagus (16 cancers of upper alimentary tract); 1 cancer of the lung, 2 cancers of the larynx (3 cancers of the respiratory tract); 10 cancers of the stomach, 6 cancers of the rectum, 6 (!) cancers of the liver (22 cancers of the lower alimentary tract); 1 cancer of the kidney, 1 cancer of the bladder, 1 cancer of the prostate, 2 cancers of the testis (5 cancers of the urogenital tract)].

Kennaway is convinced that these differences in the topographical distribu-