

2 tar cancers per year among 2,500 workers employed in 65 hard coal briquette plants, making a total of ten cases from this source alone. In a review of occupational cancers published by Koelsch in 1924, reference was made evidently to the same cases without adding any new ones. In the same year Lennhoff (1924), on the other hand, increased the number of occupational tar and pitch cancers in Germany by three cases. During the course of the next fifteen years, Teutschlaender reported from time to time on the occurrence of these tumors among German workers, which he found especially prevalent among men working in briquette plants, while the workers of gas works were practically free from occupational tar cancer, according to his observations made in a larger number of factories in western Germany. Teutschlaender added a total of nine new cases of pitch cancer occurring among patent fuel workers. Oppenheim increased in 1929 this number further by four cases found among 24 men employed in an establishment handling tar. In the following year Lehmann mentioned the occurrence of tar warts in two workers engaged in the tarring of roads, while Brenner observed in the following year a case of tar cancer in a man working in a tar distillery. During the last decade additional cases were reported by Beintker, 1; Epstein, 1 (1930); Weiss, 1 (1931); Fuss, 1 (1932); Büngeler 1 (1934); Bering and Zitzke, 2 (1935); Staemmler, 20 cases during 1931 to 1934 in Germany placed officially on record (1936); and Lauchs, 3 (1938).

The total number of tar and pitch cancers of the skin of occupational genesis which are recorded for German workers since 1875 is sixty-three. This incidence is astonishingly low because at least a few of the cases included in this number have been counted in all probability twice. It cannot be assumed, however, that this figure reflects in any way the actual status. Lubarsch stated in 1922 that 3 to 5 per cent of those tar workers who showed tar dermatitis had a tar malignancy. Staemmler noted that during the period from 1931 to 1934, there occurred an average of five cases of this industrial neoplasm a year in Germany. In 1938, Lauchs reported in one single factory engaged in the manufacture of insulation plates (corkstone) the occurrence of three cases of pitch cancer. Lauchs moreover obtained information concerning a previous occurrence of cutaneous malignancies among the workers of this plant. During the years 1926 to 1937 four additional histologically confirmed cases of carcinoma of the skin were seen in workers employed in this particular plant by physicians of the community in which the plant was located. It is improbable that these seven cases represent the entire number of occupational cutaneous malignancies produced among the workers employed in this factory, as Lauchs noted that the management of the factory did not permit the examination of all the workers employed.

Inasmuch as Teutschlaender recorded similar experiences in regard to the cooperative spirit displayed by the management of factories in which tar and pitch cancers had occurred, it may be concluded that no reliable and complete