Prevention consists in showers after work, daily change to clean work clothes, and protection against the sun.

Rubber manufacture. The chief irritants are the accelerators, antioxidants, and other chemicals going into the manufacture of rubber, the sulfur chloride used for "vapor curing," and solvents used to make rubber cements. In reclaiming rubber, alkalies are the chief skin irritants. In the manufacture of synthetic rubber, dermatitis may occur not only from the above-named chemicals, but also from styrene, acrylonitrile, and other chemicals used. Prevention consists in showers after work, clean dustproof work clothes daily, and protective ointments on the face to protect from dusts and fumes.

Ship builders. Welders are subject to flash burns (*see welders*) and electricians handling cables are subject to acne (see *wax makers*).

Solderers. Hydrochloric acid fumes and zinc chloride may cause dermatitis. Prevention consists in wearing impervious sleeves and applying protective ointment to the face.

Sugar refiners. Hot solutions of sugar crystallize on the skin and enmesh the hairs; boils may result when crystals are pulled off and hairs are pulled out. Paronychia may occur, and also dermatitis from alkalies used to purify sugar and from the dehydrating action of sugar. Prevention consists in daily change of clean work clothes, impervious sleeves, gloves to handle dry sugar.

Varnishers and lacquerers. The resins are skin irritants as are the solvents and thinners; the dyes and pigments are only rarely so. Prevention consists in daily change to clean work clothes, rubber gloves, and impervious sleeves.

Wax makers (synthetic). Solid chlorinated hydrocarbons cause acne-like lesions. Prevention consists in showers after work, daily change to clean work clothes, and proper exhaust ventilation.

Welders (and helpers). Flash burns may cause dermatitis, melanosis, and "eye flash." Dermatitis occurs from fumes of irritant metals contained in alloy steels. There is danger of spark burns. Prevention consists in wearing proper masks and dark glasses and flameproof clothing.

CHAPTER XV

The Visible Marks of Occupation and Occupational Diseases

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I. Introduction

Some, but not all, trades lead to external markings or signs on workers that may serve to identify either the trade or the diseases associated with the trade. In times past the term "stigmata" has been widely applied to these marks, but this term is at times inappropriate and confusing. In medicine, "stigma" or "stigmata" has been chiefly limited to the skin, and often possesses religious connotation. In general, the term denotes disgrace or inferiority. This is far removed from the purposes of a manifest of the signs of various trades imprinted upon the worker, many of which constitute honorable badges of long years of service. For this reason the designation "stigmata" is carefully avoided in relation to occupation. As here presented, the markings of trades and trade diseases are limited to those evidences that may be seen by the layman as he may observe fellow human beings at the factory entryway or on a bus or train, or as he passes along the aisle of a work department. The term "layman" in this instance merely connotes that the observer is not a physician, a nurse, or a dentist; he might well be highly skilled as an engineer, a chemist, or lawyer. Frequently the signs that may be observed are not single but occur in groups to which the term "syndrome" is well applied. Thus, given a known exposure to manganese, anyone presenting an expressionless, masklike face, who is unable to purse the lips as in whistling, whose gait is apparently not quite controlled, and who indulges in fits of unprovoked laughter or crying, should be suspected of having manganese poisoning. These signs constitute the syndrome of that disease.

While some definite medical ends may be served by a knowledge of occupational signs in their hundreds of variations, greater interest may reside in intellectual curiosity about the tell-tale indications of different trades or different trade diseases as branded onto the bodies of those who ply them. On the street, or anywhere else, there might be observed a man who reveals a circular hole about the size of a dime in the midline of his teeth as they rest in apposition. Further, it might be noted that this individual is having some difficulty with his breathing, the inhalations being feeble and short while the exhalations are prolonged and