results one way or another. Should it be necessary to await laboratory findings before preparing a rough draft, this draft should still be discussed with plant men.

The final draft of the industrial hygiene survey report should be addressed to the man in charge of operations, usually the works manager. Copies should be sent to the plant or department head, the chief engineer, the personnel director, and the medical director.

The hygienist will accomplish more in the long run if his reports are not too broad. If he keeps in mind the long-range plan and then drives at one item at a time, he will be more easily understood and arrive at his objective sooner than if he proposes sweeping changes all at once. He should remember the boy with the bundle of sticks: he was not strong enough to break them all at once, but one at a time the task was easy.

CHAPTER THREE

The Industrial Hygiene Survey and Personnel

FRANK A. PATTY

I. Introduction

Industrial hygiene surveys are personal investigations conducted within the premises of an industrial establishment, primarily to determine the nature and extent of any conditions that may adversely affect the well-being of the persons employed. Usually the first result of such a survey is the obtaining of information necessary to the development of engineering and medical control measures for avoiding or eliminating harmful situations.

Industrial hygiene preserves for employed adults their basic capital—health. It is a major problem of the industrial hygienist to maintain and safeguard the physical and mental capacities of workers, and to prolong their productive lives. This is a task of fundamental importance, for bodily impairment makes difficult the building and the maintaining of sound morale.

Ramazzini[1] is the first outstanding industrial hygienist of whom we have a considerable record. His investigations about 1700 A.D. into the causes of occupational diseases were remarkably enlightening. However, like many who came after him, he dwelled at some length upon therapeutic measures for the cure of such diseases, and gave scant consideration to preventing them. Following this early auspicious beginning, it is remarkable that not until the third decade of the present century do we find any widespread realization or acceptance of the next stage in the development of the industrial hygiene survey, that is, the utilizing of engineering methods of control for the actual prevention of disease. Even at such a recent date, industrial hygiene was largely on a complaint-investigation basis: when serious diseases developed, industrial hygiene investigations were undertaken to develop control measures for preventing a recurrence.

The design of the modern industrial hygiene survey is to recognize harmful exposures, and to bring them under control, before workmen experience injury or

[1] B. Ramazzini, *De morbis artificum diatriba*, 1700 and 1713.