

the careful and industrious housewife cleans her rooms. Usually once a week, the mistress and her daughters, or the maid servants, as the case may be, cover their heads with a towel or a more or less fancy dusting cap to keep, as they say, the dust from getting into their hair. Thus protected, as they imagine, they proceed vigorously to apply the broom to the carpets or to the floors. Soon the air of the room is filled with dust so that it is almost impossible to see. After it has been thoroughly stirred up it is allowed to settle and the process of "dusting" is begun. During the whole operation, lasting from a few hours to a day or more, the mouth and nose have been left uncovered so that the germ-laden dust has free access to the lungs, into which it is freely inhaled as the active exercise causes the worker to breathe more deeply and more rapidly. Without doubt the carpet or the floor has had deposited on it during the week disease germs of some kind which have been carried in from the streets.

In this connection one of the experiments of Cornet, of Berlin, is specially interesting. He spilled sputum from a tuberculous patient upon the carpet of a room in which he placed forty-eight guinea pigs. After allowing two days for the drying of the sputum he swept the carpet with a rough broom to stir up the dust to be inhaled by the guinea pigs. Forty-six out of the forty-eight contracted the disease. This experiment forcibly illustrates the danger there is in the careless habit of expectorating on sidewalks, in street cars and other public places, and demonstrates that the practice of dry sweeping and dusting is a contributory source of danger.

So often while on the street the shoes come in contact with freshly expectorated material. The chances that it is tubercular are many. This infective material is carried into the house or into the store or workshop, there to be transferred to the floor or carpet, from which later, having dried meanwhile, it will be stirred up in sweeping or otherwise. In like manner the long skirt sweeping the sidewalk and the roadway not only collects the dust but must, from time to time, become smeared with sputum deposited by the filthy habits of the carless. This skirt drags over the carpets and rugs and deposits as it does so a portion of the material collected on the street. The remainder is stored with the skirt in a dark closet until a convenient time arrives for it to be thoroughly brushed and shaken, when the germ-laden dust is scattered throughout the house. And of course there are some who will say that these dangers are imaginary and yet one observer employed a number of women to wear long skirts through a city street for an hour; at the end of that time a thorough bacteriological examination was made and each skirt was found to have picked up tubercle bacilli and other organisms.

In spite of every care much dust, laden with the germs of disease, is always on the floor, and there is in this a very special and grave danger to children and it should be an absolute rule never to put a baby or young child upon the floor to play, as is so generally the custom. There should be a baby's floor-cloth, which can be spread upon the floor at any time, made of some material that can be readily kept clean.

THE HANDS

Another source of infection, not only in the case of tuberculosis but also of other infections as well, is the common habit of taking food during meals, or at other times, without washing the hands. Among refined people, of course, this does not often obtain, but some are often careless; and in the case of children too much care cannot be taken in this respect. Numbers of working people and business men neglect this precaution; the bank clerk takes his lunch while counting dirty bank bills and the merchant or store-keeper have only sufficient time to snatch a hurried lunch at the nearest restaurant, while the man who carries a dinner pail would think it folly to take the trouble necessary to protect himself to this extent.

HOUSES

Tuberculosis is essentially a house disease. There it is most easily implanted and there, too, it is most readily propagated, because in houses, workshops, stores, theatres, churches, schools, railway stations and the like are to be found the conditions which favor its spread. Studies in regard to the distribution of the deaths from tuberculosis in a single city ward in Philadelphia, covering a period of twenty-five years, have shown that 33 per cent. of infected houses have had more than one case. Less than one-third of the houses became infected in a quarter of a century and yet more than one-half the deaths from tuberculosis in a single year occurred in those infected houses.

THE WORKSHOP

Next to the house the place in which consumption is most frequently contracted is the workshop. As the disease is insidious in its onset and often slow in its progress many are able to follow their usual occupations for months, and even years, after the development of the disease. The sputum of these tuberculous people may contain millions of germs and yet their custom or habit is to spit wherever it may be convenient, and, as a result, the disease is spread. Naturally some occupations are more important factors in the transmission of the disease than are others. Those which expose the worker to much dust are especially dangerous in that the dust acts as a carrier of the disease germ, irritates the lungs and air passages and renders them an easy prey to the bacilli. Of workers in trades