to twenty-four per cent., and nearly ten per cent. reach the age of seventy-five, or three per cent. more than formerly reached seventy. And judging from the death records, the number of centenarians is increasing. Be this as it may, however, there is still a large mortality which is preventible. Some years ago Mr. Simon calculated it at one hundred and twenty-five thousand yearly ; and mere deaths—as Mr. Simon pointed out—do not represent the whole of the mischief.

There is, in addition, an incalculable amount of physical suffering and disablement, of sorrow and anxiety, of straitened means—frequently of pauperism and destitution—which must be added to the sum of evil which arises from preventible causes.

There is much still to be done in almost every branch of Hygiene—in drainage and water supply in many towns and villages; in the ventilation of houses, workshops, public buildings; in the housing of the poor, so as to prevent overcrowd-ing; in the management of infectious diseases; in habits of eating and drinking, of exercise and dress. There are many things I should wish to say on the majority of these subjects, but it is impossible for me to touch upon more than a few. I must content myself with alluding-in conclusion-to one or two of the most general and common faults in the health conditions of daily life, not because they are the most striking, but because they seem to be overlooked, or else acquiesced in as of no serious importance; and yet they exercise a most powerful influence upon health. Take, for instance, the question of ventilation, and the importance of fresh air. There is no point in hygiene upon which educated people are better instructed, or of the necessity of which they are more convinced, than this, yet thousands-who are not driven by necessity, but in the mere pursuit of pleasure and excitementdeliberately place themselves for hours together in ill-ventilated rooms, crowded with a mass of humanity, where the atmosphere is chemically poisonous, and probably loaded with organic germs.

There are no class of buildings worse ventilated than public buildings. We know by our own unpleasant personal experience that this is so. But there is actual proof. In Newcastle, for example, the North Eastern Sanitary Association* find—on a chemical and bacteriological examination of the atmosphere of twenty-six public buildings of various kinds—that the necessity for improved ventilation is almost universal. In many the air was extremely polluted. Drowsiness, depression, a burning sensation in the head, a headache or sore throat the next day, are

* Report of North-Eastern Sanitary Inspection Association.

common results of crowded meetings-the deleterious effect of air loaded with carbonic acid and organic effluvia. Consider what the atmosphere of a crowded hall, or concert room, or drawing room is, where the air space per head-instead of the orthodox twelve hundred cubic feet-is, perhaps, not more than one hundred; so that nothing but a hurricane, sweeping through constantly, could keep it fresh, and supply the necessary oxygen. Every gathering of this kind involves a blood poisoning. Look at many schools, where children are crowded together in small space. The North Eastern Sanitary Association affirm that there is good reason to believe that the dwellings of the lowest class compare favourably with crowded school-rooms, as to the condition of the air. Even in private and public schools of the better class the dormitories are constantly too crowded, so that it is impossible to ventilate them sufficiently, without dangerous draughts. Few that I have seen have sufficient air space per head.

Consider, again, what most bedrooms are; usually far smaller than sitting-rooms. The sitting-rooms are ventilated by fires and open doors and people passing in and out, and the occupants do not stay there constantly for many hours, but move about the house, or gain fresh air out of doors.

Yet people spend eight or ten hours in their small bedrooms with tightly closed doors and windows—practically nearly half their lifetime in an atmosphere they would not tolerate in their waking hours.

I have seen in great houses in London, with magnificently spacious reception-rooms, a family of five or six children, and one or two Nurses, packed for these long hours of the night in a room with air-space fitted only for one-third the number. Nothing is more important to the health of the young than ample space of sleeping room. There is, however, another side to the picture. Too much zeal for ventilation sometimes does harm. It is very necessary to secure full ventilation in Hospitals, but I have known unfortunate patients wafted into the next world by a too free exposure to a blast of cold air. I now have all patients especially sensitive to chill, such as cases of bronchitis or Bright's disease, protected by a canopy.

Another great enemy, whose deteriorating effect on health is hardly realised, is gas. An ordinary gas-burner, consuming three feet of gas per hour, gives out as much carbonic acid as ten men.* So that in an ordinary sitting-room, with the five-light chandelier so common, the gas burnt would yield carbonic acid equal to that produced

^{*} Parkes's "Hygiene," 4th edition, page 98 and page 137.



