



## MODEL HOSPITALS.

In the description of an imaginary "City of Health" read recently by Dr. Thompson before the Social Science Convention at Brighton, England, the following plan for hospitals is given:

Passing along the main streets of the city we see in twenty places, equally distant, a separate building, surrounded by its own grounds—a model hospital for the sick. To make these institutions the best of their kind, no expense is spared. Several elements contribute to their success. They are small, and are readily removable. The old idea of warehousing diseases on the largest possible scale, and of making it the boast of an institution that it contains so many hundred beds, is abandoned; the still more absurd idea of building hospitals for the treatment of special organs of the body, as if the different organs could walk out of the body and present themselves for treatment, is also abandoned.

It will repay us a minute of time to look at one of these model hospitals. One is the *fac-simile* of the other, and is devoted to the service of every five thousand of the population. Like every building in the place, it is erected on a subway. There is a wide central entrance, to which there is no ascent, and into which a carriage, cab, or ambulance can drive direct. On each side the gateway are the houses of the resident medical officer and of the matron. Passing down the centre, which is lofty and covered in with glass, we arrive at two side-wings, running right and left from the centre, and forming cross-corridors. These are the wards; twelve on one hand for male, twelve on the other for female patients. The cross-corridors are twelve feet wide and twenty feet high, and are roofed with glass. The corridor on each side is a framework of walls of glazed brick, arched overhead, and divided into six segments. In each segment is a separate, light, elegant removable ward, constructed of glass and iron, twelve feet high, fourteen feet long, and ten feet wide. The cubic capacity of each ward is 1,680 feet. Each patient who is ill enough to require constant attendance has one of these wards entirely to himself, so that the injurious influences on the sick, which are created by mixing in one large room the living and the dying; those who could sleep were they at rest, with those who cannot sleep because they are racked with pain; those who are too nervous or sensitive to move, or cough, or speak, lest they should disturb others; and those who do whatever pleases them—these bad influences are absent.

The wards are fitted up neatly and elegantly. At one end they open into the corridor, at the other toward a veranda, which leads to a garden. In bright weather those sick, who even are confined to bed, can, under the direction of the doctor, be wheeled in their bed out into the gardens without leaving the level floor. The wards are warmed by a current of air made to circulate through them by the action of a steam-engine, with which every hospital is supplied, and which performs such a number of useful purposes that the wonder is how hospital management could go on without this assistance.

If at any time a ward becomes infectious it is removed from its position, and replaced by a new ward. It is then taken to pieces, disinfected, and laid by ready to replace another that may require temporary ejection.

The hospital is supplied on each side with ordinary baths, hot-air baths, vapor baths, and saline baths.

A day sitting-room is attached to each wing, and every reasonable method is taken for engaging the minds of the sick in agreeable and harmless pastimes.

Two trained nurses attend to each corridor, and connected with the hospital is a school for nurses, under the direction of the medical superintendent and the matron. From this school nurses are provided for the town; they are not merely efficient for any duty in the vocation in which they are always engaged, either within the hospital or out of it, but from the care with which they attend to their own personal cleanliness, and the plan they pursue of changing every garment on leaving an infectious case, they fail to be the bearers of any communicable disease. To an hospital four medical officers are appointed; each of whom, therefore, has six resident patients under his care. The officers are called simply medical officers; the distinction, now altogether obsolete, between physicians and surgeons being discarded.

The hospital is brought, by an electrical wire, into communication with all the fire-stations, factories, mills, theatres and other important public places. It has an ambulance

always ready to be sent out to bring any injured persons to the institution. The ambulance drives straight into the hospital, where a bed of the same height on silent wheels, so that it can be moved without vibration into a ward, receives the patient.

The kitchens, laundries, and laboratories are in a separate block at the back of the institution, but are connected with it by the central corridor. The kitchen and laundries are at the top of this building, the laboratories below. The disinfecting-room is close to the engine-room, and superheated steam, which the engine supplies, is used for disinfection.

The out-patient department, which is apart from the body of the hospital, resembles that of the Queen's Hospital, Birmingham: the first out-patient department, as far as I am aware, that ever deserved to be seen by a generous public. The patients waiting for advice are seated in a large hall, warmed at all seasons to a proper heat, lighted from the top through a glass roof, and perfectly ventilated. The infectious cases are separated carefully from the rest. The consulting-rooms of the medical staff are comfortably fitted, the dispensary is thoroughly officered, and the order that prevails is so effective that a sick person, who is punctual to time, has never to wait.

The medical officers attached to the hospital in our model city are allowed to hold but one appointment at the same time, and that for a limited period. Thus every medical man in the city obtains the equal advantage of hospital practice, and the value of the best medical and surgical skill is fairly equalized through the whole community.

In addition to the hospital building is a separate block, furnished with wards, constructed in the same way as the general wards, for the reception of children suffering from any of the infectious diseases. These wards are so planned that the people generally send sick members of their own family into them for treatment, and pay for the privilege.

## THOUGHTLESS CRUELTY.

A few days ago, a teacher in a public school, to punish a child, lifted him by the ears, dropped him, lifted him again and again and dropped him, till the child was seriously, perhaps fatally, injured. I have seen a lady lifting a child by the ears and carrying it out of a room to punish it for some trifling offence. We are shocked and disgusted by the recital of brutalities inflicted on children by their drunken parents or infuriated teachers; but it is quite probable that the amount of cruelty by injudicious and respectable parents, under a mistaken sense of duty, far exceeds the crimes of the ignorant and intemperate. Many parents box the ears of children,—striking them a square blow on the side of the head—a dangerous and wicked punishment. The sudden compression of the air within the ear is very apt to be injurious, and the shock to the brain is perilous to the intellect. The injury may not be perceived at the time, but the foundation of future and unspeakable suffering and sorrow may be laid by one inconsiderate blow on the temple of a child. More common than this, and equally cruel, is the practice of pulling the ears of children, the most common mode, with some parents, of punishing their own children. Teachers sometimes hold a child's ear while he is reading, and pinch or pull it at every blunder, thus hoping to keep the child's attention fixed for fear of the pain. A worse mode could not be adopted, for the child's mind is diverted to the danger and from the lesson, and so he stumbles. Such parents and teachers deserve corporal punishment themselves. The delicate organism of the human ear requires the most gentle handling, and to treat it as a mere cartilage to be pulled for the purpose of punishing, is a piece of inhumanity that reason forbids and religion condemns. Some parents send their children into a dark closet where they are in terror of imaginary goblins. Perhaps this is not as common as it was fifty years ago, but it is not out of use. It is not infrequently the cause of idiocy or insanity, and no judicious parent will permit it to be practiced in his house. Nurses often frighten children with tales of terror, threats of bears and big men, to carry them off. A nurse detected in such crimes should be discharged before night. She cannot be cured, and she must not be endured.

Cruel and unusual punishments are forbidden by human law. It is wonderful that parental instincts and human love are not strong enough to restrain the hand of fathers and mothers from hasty, passionate and intemperate violence on their own flesh and blood. A father vents his impatience on the son of his affections. A mother waxes with care, wanting to read her novel or go to sleep, beats her babe to make it quiet. But a parent or teacher should never punish a child, in heat or with sudden violence. Such punishment has no moral force in it. The calm, judicial, righteous judgment is as needful in the infliction of pain upon an erring child, as in the sentence of a prisoner at the bar. If you cannot govern yourself, you are quite unfit to govern children, and if you strike a child in

haste or under excitement, you deserve to be whipped yourself.

Is the rod to be abolished, and would we condemn the punishment of children when they do wrong at home or in school? So far from it, the wisdom of Solomon is wisdom yet. To deny the right and duty of punishing disobedient children, is logically to overturn the government of man and of God. And as obedience in society is in order to the highest happiness of the community, so in the family those children are the happiest who are taught and required to obey. Scolding will not make them obedient. Fretting makes them worse. Harshness, severity, cruel pains, loud words, and hasty blows are all wrong. But an even temper, inflexible purpose, unyielding to the entreaties of the child who wishes to do wrong; these are virtues that dwell in every right mind, and will regulate the government of every well-ordered house.—*Irenaeus, in N. Y. Observer.*

A MICROSCOPIC DIFFICULTY.—With every increase of power in the objective there is a shortening of the focus and a lessening of the area of the real field of observation. For instance, the one inch focus objective, might take in the whole of a fly at one view. But suppose it is desirable to so enlarge a single organ of that insect as to be able to inspect all its peculiarities, it would have to be done with a higher power, and when done this particular organ would itself fill the field. It is a little curious how general the difficulty seems to be to comprehend this point. Suppose an artist be required to paint in life-size the portrait of a babe, and a spread of canvas just large enough be furnished for that purpose. But the patron has changed his mind, and now requests the artist to paint on the same canvas a life-size likeness of the child's father. It is plain that the thing is impossible. We have a friend who is very skilful with the microscope. A neighbor one day brought in a dead gold-fish, some three inches long. He said he had been so delighted by thinking on that animalcule that was magnified a thousand times, that he had often thought how splendid a gold-fish would look when so enlarged; and "Now," said he, "wouldn't you be so good as just to put your very strongest magnifier on this fish?" Only to think, he expected to see inside that narrow tube, all clad in golden armor an ichthyic monster 250 feet long, every scale of whose plate-armor would be ten feet broad; and these, too, fluted with grooves into any one of which a man might lay his right arm!—*Harper's Monthly.*

DANGER OF WHIPPING HORSES.—Prof. Wagner says: "I would caution those who train or use horses, upon another point, viz., that of exciting the ill-will of the animal. Many think they are doing finely, and are proud of their success in horse training by means of severe whipping, or otherwise rousing and stimulating the passions, and then from necessity crushing the will through which the resistance is prompted. No mistake can be greater than this, and there is nothing that so fully exhibits the ability, judgment, and skill of the real horseman as the care displayed in winning instead of repelling the action of the mind. Although it may be necessary to use the whip sometimes, it should always be used judiciously, and great care should be taken not to rouse the passions, or excite the will to obstinacy. The legitimate and proper use of the whip is calculated to operate upon the sense of fear almost entirely. The affectionate and better nature must be appealed to in training a horse, as well as in training a child. A reproof given may be intended for the good of the child, but if only the passions are excited, the effect is depraving and injurious. This is a vital principle, and can be disregarded in the management of sensitive and courageous horses only at the risk of spoiling them. I have known many horses of a naturally gentle character to be spoiled by whipping once, and one horse that was made vicious by being struck with a whip once while standing in his stall."

A MYSTERY EXPLAINED.—Several members of a family in this city recently found themselves troubled with red spots and blotches on their bodies, the disease appearing somewhat like ivy poison. Not understanding the cause, the family physician was consulted, and he suggested that it might be the result of the careless use of copper utensils in cooking food, and was clearly of opinion that it was due to poison in some form. Further investigation developed the fact that the servant girl, in her ignorance, had been using water from the hot water faucet for making tea and coffee, boiling potatoes, and, in short, for all cooking purposes. This at once furnished a solution of the problem. The hot water, in this, as in nearly all cases where hot water comes from the pipes, is drawn from a large copper boiler, which, by its situation in respect to the pipe, can never be thoroughly cleaned out, and in course of time collects sufficient impurities from the water and particles of the copper to render it poisonous for all use in drinking or in cooking. It is further rendered noxious by its passage

through lead pipes, and by its never being fresh, as in the cold water, which usually comes direct from the street main. It would not be surprising if many cases of sickness in this or any other cities could be traced directly to the cause we have indicated above, and house-keepers should watch their domestics vigilantly to see that only the water from the cold water pipes is used in any part of cooking for the family.—*Worcester Spy.*

SPURGEON ON THROATS.—Spurgeon says: "If you wish to ruin your throats, you can speedily do so; but if you wish to preserve them, note what is now laid before you. I have often compared the voice to a drum. If the drummer should always strike in one place on the head of his drum, the skin would soon wear into a hole; but how much longer it would have lasted him if he had varied his thumping, and had used the entire surface of the drum-head! So it is with a man's voice. If he uses always the same tone, he will wear a hole in that part of the throat which is most exercised in pronouncing that monotone, and very soon he will suffer from bronchitis. I have heard surgeons affirm that Dissenting bronchitis differs from the Church of England article. There is an ecclesiastical twang which is much admired in the Establishment—a sort of steeple-in-the-throat grandeur—an aristocratic, theologian, parsonic, super-natural, infra-human mouthing of language and rolling over of words."

A HORSE WITH A SILVER THROAT.—The *Cincinnati Commercial* has this account of "a horse with a silver throat": "He was a kindly, hard-working beast belonging to the Cincinnati Omnibus Company, but was 'wind-broken,' and on that account had grown almost useless. It was a pity, and a loss as well, to turn him out to die—he wouldn't sell—so it was determined by Myers, the veterinary surgeon, to try an experiment, an expedient—in short, a 'kill-or-cure' remedy. So two months ago he made an incision in the animal's throat and inserted a silver tube in the wind-pipe to facilitate breathing, leaving a sort of artificial nostril at the point of insertion. The device works like a charm, the terrible wheezing has ceased, the incision has healed up beautifully, and the horse is doing his full day's work and eats his full allowance. The silver throat can be removed and replaced at will for cleansing, but is so arranged as not to get out of place or cause any inconvenience to the horse."

A SAFE LIGHT.—The night policemen of Paris carry a convenient lantern whose construction is thus described: A small vial holds a piece of phosphorus as large as a pea, upon which is poured enough boiling olive oil to fill up about a third of the vial. The latter is then closely stopped by a cork. In use, the stopper is released for a moment, so as to permit the entrance of air to the phosphorus. The vacant inner space is thereupon lit up, diffusing a clear and, of course, perfectly harmless light. When the light fades it may be revived by a fresh uncorking. A lamp so prepared will hold good for six months without renewal.

Nursing—that is, the care of the sick—ought to be an institution. Nothing is more needed than regular establishments in which nurses may be trained to perform their parts. Many persons falling sick are dependent upon the services of others besides the members of their own families. Sairy Gamp is by no means an uncommon illustration of a class of hired attendants upon those who require the most tender and watchful care. For example, a friend of the writer, a lady of considerable distinction, happened to become very ill at a famous Boston hotel. She was not without friends at hand, and much pains was taken to procure her a suitable nurse. She grew rapidly worse, and was not expected to survive from day to day. After trying several unsatisfactory ones, by the recommendation of an eminent physician a woman was sent to take the place of others who had been found incompetent. This nurse was tall, gaunt, and somewhat ghastly-looking. Upon approaching the bedside of our friend, she passed her hand gently over the forehead of the patient, and asked, "May I not smooth your pathway to the grave?" In the middle of the night the lady, awaking, saw the nurse trying on her bonnet, who, being thus detected, turned from the mirror and coolly enquired if it was becoming. The lady told her she might keep it, supposing she had herself no further use for it, especially since it had been thus appropriated and the nurse was summarily dismissed as soon as morning came. Happily the lady recovered in spite of such melancholy and at the same time officious nursing, and now, after some years, is enjoying herself in foreign travel; but she says the memory of that night gives her a chill even now.—*Harper's Monthly.*

Sir Josiah Mason, the wealthy pen manufacturer of Birmingham, England, has built in that city a scientific college, at a cost of \$500,000, and has endowed it with a gift of \$150,000. Besides this, he has sold his business, and intends to give the proceeds, about \$500,000, to the college.