

I cannot omit acknowledging the kind courtesy with which Mr. Allarton furnished me with information on some points connected with his operation, when I applied to him on finding that the first edition of his work, "Lithotomy Simplified," was out of print, and the second not yet ready.

Blaenavon Ironworks, Monmouthshire, Dec. 12th, 1859.

DIPHTHERIA AT CROWLE, IN LINCOLN-SHIRE.

BY HENRY W. T. ELLIS, M.R.C.S.E., Crowle.

IN a recent leader in THE LANCET, communications were invited from medical practitioners on the subject of Diphtheria. Now, as it has fallen to my lot, in conjunction with my brother, Mr. P. S. Ellis, to see a great deal of the disease, I beg to forward a statement and summary of the cases which have come under our daily observation for the last fifteen months.

Introductory to any report on the prevalence of diphtheria in Crowle and the neighbouring villages, it is, perhaps, necessary to premise, that the district generally is below the level of the rivers Trent and Ouse at high water; and that, 1800 years ago, it formed part of an extensive forest in which the Britons took refuge from their Roman invaders, and which was subsequently destroyed by the latter. In the course of centuries, a peat moor became formed, varying in depth from one to twenty feet; but this is now, to a great extent, covered with warp, the alluvial deposit of the rivers abovementioned. The land is well drained, very fertile, and in the highest state of cultivation, the inhabitants being chiefly occupied in agriculture, and the first process of the manufacture of flax, here called line.

Crowle, with the hamlet of Ealand, containing a population of about 2500, is situated on the western and southern declivity of some rising ground called Crown-hill. As regards its geological formation, the subsoil consists of clay, sand, water-stone (a sort of crumbling rock), gypsum, and gravel of calcareous or magnesian limestone. There is a good and constant supply of water, derived from wells ten to thirty feet deep, rather hard, and, in some places, moory, silty, and undrinkable. The sanitary condition of the place and its inhabitants, as regards drainage, cleanliness, ventilation, and over-crowding, is almost unexceptionable, the people not being of the poorest.

The other villages in which diphtheria has been fearfully prevalent, and the cases in which were almost entirely attended by my brother, are Eastoft, population 550; Luddington, population 600; and Garthorpe, population 520: all on the banks of the old river Don, now partially filled up, but in places a reservoir of stagnant water. Althorpe, population 320; Keadby, population 440; and Amcotts, population 420, on the Trent, although not exempt from the disease, have been but lightly visited; but in them, as well as in Adlingfleet, there have been the strongest evidences of the contagious nature of the complaint. Taking the district generally, it is not now subject to ague, except amongst the Irish immigrants. Autumnal diarrhoea frequently prevails; fever occasionally; calculous complaints are common; bronchocele rare; scarlatina, with the exception of a few cases very recently (October), has not been seen for some years.

The present epidemic has prevailed to a great extent, and in a severe form, since the second week in September, 1858; and the mortality has been large; latterly, however, the cases have decreased, though not a day passes without some fresh ones. Altogether, there have been 564 attacked, and 78 deaths. The first three cases (children) occurred at an isolated farm-house, about two miles from Crowle; these all succumbed in twelve days; after the most diligent research, they could not be traced to communication with others. The next, the child of a respectable ironmonger, took place four days afterwards in Crowle, still without any evidence of infection. Sporadic cases kept happening until Christmas, when the complaint began to assume an epidemic form. At the same time, adenitis or inflammation of the glands of the neck, erythematous sore-throat, and tonsillitis, also prevailed. Both sexes, all ages and classes, have been the subjects of the disease; and in many instances it set in with great severity. The labouring population, small farmers, tradespeople, and children under twelve years of age were the principal sufferers, an infant of seven months being the youngest attacked. Amongst my brother's

patients, a clergyman, with his wife and daughter, took the disease; a little girl of my own was also the subject of it; and a draper lost his wife and both children from it.

With respect to the communicability of the disease from person to person, there have been the clearest and most irrefragable proofs, the period of incubation varying from three or four days to nearly a month. There have been several instances of a recurrence of the complaint, the second attack being occasionally fatal. Horses have also been affected by a similar disease, and many have died from it.

Diphtheria here has been invariably characterized by the presence of a white or slightly yellowish exudation on the tonsils, uvula, velum, or pharynx; in severe cases appearing also on the posterior nares, larynx, trachea, and bronchial tubes. The membrane has been of varied consistence and thickness, according to the part affected. On the tonsils and velum it seemed to consist of an increased and altered secretion of the mucus peculiar to the part, composed as it is of cells, corpuscles, and epithelial scales, and this in some instances was quickly reproduced after its removal; lower down, as discharged by vomiting or expectoration, it was evidently fibrinous, forming casts of the trachea and its bifurcation into the bronchi. In many cases the removal of the exudation caused abrasion of the surface, with bleeding points; and the membrane itself, especially from the trachea, displayed blood-corpuscles in patches, and in one instance, as examined by the microscope, a distinct fungoid growth in a state of putrefaction; the fœtor was generally very offensive. Preceding the appearance of the exudation for two or three days or more, the affected parts were swollen, highly congested, generally of a bright-red colour, but sometimes livid; frequently there was a good deal of œdema of the tonsils and uvula, seeming as if infiltrated with serum, and this appearance continued after the patch had formed. Convulsions in several cases preceded, in one accompanied, and in two followed, the removal of the disease; death ensued in the last two instances, an adult and his child. The complaint was generally ushered in by much constitutional disturbance, as evidenced by febrile excitement, vomiting, and headache, with suffusion of the eyes, followed by symptoms of depression and loathing of food. In three cases an eruption of bright-red spots or dots, small, distinct, not elevated or vesicular, accompanied the disease, and remained out three or four days; there was no desquamation. In one person, a married woman, menorrhagia ensued, and epistaxis in several, six of the latter being fatal. During the progress of the disease, the temperature of the skin became generally low, except in dyspnoeal agony, when there was, of course, sweating. In nearly all the most severe cases there was profuse and fetid muco-purulent discharge from the throat and nostrils; the submaxillary glands were frequently engorged, and in one instance suppuration followed. The urine was occasionally albuminous, but not generally. Diarrhoea proved fatal in four infants. Ulceration not unfrequently followed the removal of the exudation, and in one instance (a patient of my brother) an aperture remained in the left anterior pillar of the velum, sufficiently large to admit a quill, and causing much inconvenience. Regurgitation through the nostrils, from paralysis of the soft palate, was a frequent consequence, as well as altered voice. The nervous and muscular systems were much affected, anæmia, debility, and loss of power frequently occurring. Diplopia took place in five instances; complete paraplegia in two, the latter yielding to strychnine. Death generally happened from exhaustion or asphyxia, croupal symptoms often supervening. There has been no instance here of the disease being communicated by accidental inoculation, or the contact of the morbid secretion with a mucous or abraded surface; but in one case the exudation showed itself on the neck of a child blistered by the application of liquor ammonia, and also in a strumous girl with a scald on the foot.

As regards the treatment of the epidemic, it has essentially consisted in the use of the chlorates—the tincture of the sesquichloride of iron, chloride of potash, and hydrochloric acid, with gargles of the two last named. In many cases, a strong solution of the nitrate of silver, a drachm to the ounce, was applied to the fauces by means of a sponge. Occasionally, sulphate of copper emetics were given with advantage, as also ipecacuanha. Turpentine, internally, was tried in some, but scarcely with any good result. Gentle aperients were generally premised, and the exudation, if possible, removed by a spoon or the polypus forceps. In cases of debility, preparations of iron and quinine were administered. And throughout the progress of the disease a liberal and generous diet was enjoined, consisting of broths, beef-tea, eggs, milk, wine, porter, and brandy. Tracheotomy was in no instance resorted to. In all the fatal cases, notwithstanding prompt, energetic, and decided

means were used, the progress of the disease could scarcely, even for a time, be arrested.

P.S.—A very singular fact connected with the progress of the disease in this locality is, with the solitary exception of a child in Crowle, the entire immunity enjoyed by the Irish residents, numbering, probably, upwards of three hundred; they are chiefly located in Eastoft and Luddington, and afford almost our only examples of overcrowding, defective sanitary conditions, and inattention to hygiene.

Crowle, Bawtry, Dec. 1859.

ON A CONVENIENT INSTRUMENT FOR EXAMINING THE BASE OF THE TONGUE AND EPIGLOTTIS.

BY P. C. PRICE, ESQ., M.R.C.S.,

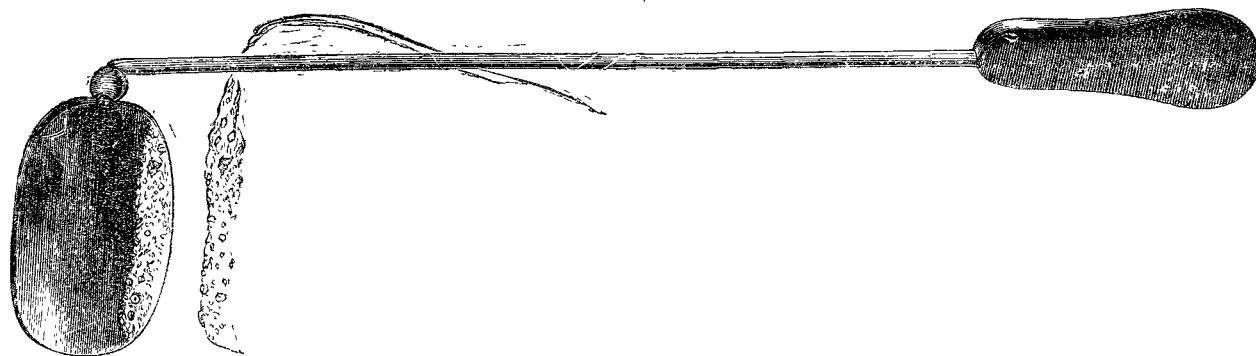
SURGEON TO THE GREAT NORTHERN HOSPITAL, THE METROPOLITAN INSTITUTION FOR SCROFULOUS CHILDREN AT MARGATE, ETC.

In cases of disease of the base of the tongue and parts immediately in relation with the epiglottis, much difficulty is often experienced in endeavouring to obtain a clear view of the parts involved, while it is often impossible even to catch a glimpse

of the morbid condition. When such is the case, the surgeon is compelled to remain content with the conclusion at which he may arrive by the symptoms exhibited. To facilitate the examination of the upper part of the throat, I am in the habit of using a little instrument, which is delineated in the accompanying woodcut. It consists of a small disc of hard steel, very highly polished, and attached to a slender rod of soft, bendable metal, by means of a ball-and-socket or screw joint, which gives great freedom of movement, and allows the plate of metal to be placed at any angle with its stem. The polished disc acts as a mirror of the first class, and when raised somewhat above the temperature of the breath (by being dipped into hot water), enables the surgeon to detect at the base of the tongue, and about the epiglottis, such morbid condition as excoriations, ulcerations, small tumours, &c.

In the woodcut is represented the back of the tongue, and also its reflection on the mirror. This simple contrivance was made for me by Mr. Matthews, of Portugal-street, and is much used, I believe, on the continent. In two instances of syphilitic ulceration of the throat, lately under my care in the Great Northern Hospital, it proved of considerable advantage; and its general utility will, I have but little doubt, be duly appreciated on many occasions.

Green-street, Grosvenor-square, Dec. 1859.



Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

TUESDAY, DEC. 13TH, 1859.

MR. F. C. SKEY, F.R.S., PRESIDENT.

ON THE ETIOLOGY AND TREATMENT OF PERITONITIS.

BY S. O. HABERSHON, M.D. LOND., F.R.C.P.,

SENIOR ASSISTANT-PHYSICIAN AND LECTURER ON MATERIA MEDICA AT GUY'S HOSPITAL.

THE author of the communication first alluded to the value of a knowledge of the causes of disease as a guide to right treatment, and to the importance of considering local disease as connected with a constitutional or general origin. In reference to peritonitis, he remarked that, although written and spoken of as an idiopathic disease, we did not find any proof that the malady really existed in that character. An analysis of the records of 3752 inspections after death at Guy's Hospital, and extending over a period of twenty-five years, was brought forward as confirming this statement, and as an indication of the general plans of treatment. 501 were instances of peritonitis, and they were divided—first, into those in which the disease is set up by mischief extending to the peritoneum from without, as from adjoining viscera, injury, or perforation; secondly, those which might be called blood diseases, connected with albuminuria, with pyæmia, or puerperal fever or erysipelas; and thirdly, those in which general nutritive change in the system is followed by acute or chronic peritonitis, as in struma or cancer, or after continued hyperæmia of the capillaries of the serous membrane, as in disease of the liver or heart, where very slight exciting cause suffices to produce acute mischief.

Of the first division, there were 266 instances, and 102 of these arose from internal or external hernia, or mechanical obstructions, and in 19 of the internal kind. Reference was made to the mode in which the extreme tension of the intestine leads to intense congestion of the mucous membrane, diphtheritic in-

flammation, and ulceration in the direction of greatest tension, leading to perforation in many cases. Different modes of treatment that have been used were referred to, and the use of opium alone advocated; the addition of calomel, as tending to increase the changes of the mucous membrane just mentioned, without any corresponding benefit, should preclude its use. 35 were injuries or operations directly affecting the serous membrane, and in 14 had followed tapping; many injuries of the abdominal viscera, proving fatal in a very short time: this number was lower than might be expected. The value of rest and of opium in all these cases, as recommended by Dr. Stokes and Dr. Graves in the treatment of perforation, was dwelt upon, as well as the injury that would result from mercury in tending to prevent localization of the mischief and increased depression. 56 were perforation of the intestine: 10 from hernia, 9 from the appendix cæci, 2 from the cæcum, 4 from cancerous disease of the colon, 9 from disease of the stomach, 15 from typhoid disease of the ileum, 4 from struma, 2 from ovarian adhesions, and 1 from cancerous disease of the vagina. In 5 other cases of fever, peritonitis had resulted, in 2 of which the perforation was not complete; 1 was of doubtful character, for the ulceration of the ileum was slight, and phthisis also present. In 19 cases, fecal abscess had taken place. In 42 cases the peritonitis was caused by extension of disease from the bladder, uterus, or pelvic viscera: thus, 10 from lithotomy, 6 from ovarian disease, and 14 from eructus in the bladder, cystitis, or stricture. In 11 cases, disease of the liver or gall-bladder had led to direct extension of disease to the serous membrane, and in 3 other cases it followed acute inflammatory disease of the colon, and from disease of the cæcum, not previously mentioned, in 3 instances. Thus 261 cases from the 501 were produced by disease not commencing in the serous membrane, but propagated to it from adjoining parts; and the author stated that in each of these instances, as far as medicinal treatment could be of service, he believed that the plan suggested by Drs. Stokes and Graves in instances of perforation of the stomach was of the greatest value, in promoting rest to the intestines, the localization of the mischief, and the acceleration of reparative changes; in many instances that local depletion and the external application of anodyne remedies might be combined with advantage; but that mercury, in the form of