After a few days, I suspected diphtheria; the child would never allow me nor the parents to examine the state of the throat, although rough usage was resorted to more than once or twice. During the time it suffered extreme prostration, and was supported by wine and beef-tea; it also took a mixture containing the tincture of the sesquichloride of iron. This child ultimately coughed up the membrane characteristic of diphtheria. A fit of vomiting and coughing came on at a time when it appeared beyond hope; but when the membrane was released, the child was relieved, and gradually rallied.

A remarkable case under my care was that of a boy aged four years, belonging to the Royal Naval and Military Free Schools. I first saw him twelve weeks ago from the date of this communication; he had then scarlatina anginosa, from which he recovered sufficiently to enjoy a walk. About a fortnight after his recovery his mother requested me to see him, as he had (to use her own words) "pimples coming out over his face and body." On visiting him, this proved to be variola discreta. He had been successfully vaccinated, judging from the cicatrices in his arm. The little fellow suffered severely; he had not regained his strength from the debilitating consequences of the previous illness. He was kept up by wine, beef-tea, ammonia, and bark, as maturation of the pustules went on but slowly. He recovered from this attack, but not sufficiently to return to school, when I was requested to visit him, as he had hooping-cough, which was and is now epidemic in this town; and this being complicated with pneumonia, terminated his existence a few days ago. There was something remarkable in the fact of this child having three of the most serious and fatal diseases of childhood in the short period of three months. One little girl who was in the habit of going to the house of the deceased is now under treatment for variola.

I trust the tonic treatment of scarlatina with iron may have a trial elsewhere, and prove as efficacious and successful as it has been with me. I conceive it is far better to prove by facts than to judge and condemn without a trial, simply because the treatment does not harmonize with the doctrine laid down by our popular authors and preceptors.

The population of the borough of Devonport in 1851, as set forth in the Government Returns, was 38,180. The total number of deaths from all causes from Midsummer 1857 to Midsummer of the present year, exceeded 1000. This, to me, appears high, and well deserving the attention of every medical practitioner of the place. My experience of Devonport scarcely extends over a period of two years, still I have seen enough to satisfy me that overcrowding, with its concomitant dirt and vitiated atmosphere, and the abominable and disgustingly filthy state of many courts and alleys, produce increase of disease of every kind. Many courts the sunshine never enters, and are notoriously tainted; they are, literally speaking, "fever nests" for the poor mariner who has enjoyed two or three years of healthy labour at sea, and who pitches, perhaps, on a locality where disease finds a resting-place, and is constantly dealing death and destruction to those around. Last year I addressed a lengthy communication to the public press on the subject of sanitary improvement, and the (then) probable approach of cholera to our shores. Considering that this place is becoming one of the largest and most important naval and military stations in the south of England, an excess of disease of any kind is a matter which deeply concerns every inhabitant; and available means should be suggested to the several officials to lower the rate of mortality by improving the sanitary condition. I could enlarge on this subject; but at present I will merely observe that the heavy mortality from scarlatina and types of low fever generally prevalent throughout the town, are in a great degree dependent on causes capable of being modified or counteracted; but I fear that, under existing arrangements, the matter will not meet with that careful investigation which it deserves. The density of population is greater than that of any other place I am acquainted with; and when any epidemic prevails, it is greatly aggravated in consequence of the various evils specified above. How far the mortality from scarlatina in young children, which has amounted to nearly one hundred in nine months, is dependent on causes capable of being lessened or counteracted, is a question deserving our consideration; and though it is impossible to prevent infectious disorders coming amongst us, there can be no doubt that they may be modified by means which we have under our control, if only put into operation and exercised judiciously. However objectionable it may be to some, it is a fact prominent in the minds of impartial observers and in indubitable records, that Devonport, in its present state, is not salubrious as a residence; and I have no doubt that some of my professional

friends long resident here could indicate causes which contribute to produce the degenerating state of health and the barrier to sanitary improvement.

November 22nd, 1858.

ON THE COMMUNICABILITY OF CHOLERA.

By PHILIP B. AYRES, M.D. Lond.

SUPERINTENDENT OF QUARANTINE, MAURITIUS.

THE mode of propagation of cholera has of late years formed a subject of warm dispute between two parties in the medical profession—the contagionists and the non-contagionists, as they are usually termed. While in India the capability of communication of this fearful disease is almost universally denied, opinion has been much divided amongst European practitioners, and the questions, first, whether cholera is propagated from individual to individual; and secondly, if communicated at all, whether the poison finds entrance to the system by the skin, the pulmonary mucous membrane, or that of the alimentary canal,—have been largely discussed.

The question of the communicability of disease is one usually surrounded by great difficulties, because the propagation of disease has necessarily been studied in large communities, and the only opportunities for establishing the fact of communication have been where the epidemic has made its appearance in small and remote villages, in which the movements of the few inhabitants can be most accurately traced. In larger towns, the movements of an individual can scarcely be followed, as is daily shown by the extreme difficulty with which the police track a criminal, and get up the evidence against him, so as to insure conviction.

The most striking example of the introduction of cholera into an island, previously and at other times perfectly exempt from cholera as an endemic disease, is afforded by the island of Mauritius, separated from the nearest continent by at least a thousand miles. Mauritius, since the abolition of slavery, has wholly depended for its labour on the introduction of coolie labourers from India, who are engaged there for a term of five years, with a free passage to their native country on the expiration of the term. The coolies are collected at Calcutta or Madras, where cholera is almost always prevalent, and brought to Mauritius after an average passage of twenty to thirty days from the latter, and thirty-five to fifty days from the former port. As may be anticipated, cholera not unfrequently makes its appearance to a greater or smaller extent amongst the coolie labourers, especially at the commencement of the voyage, but usually wears itself out long before the voyage is completed. Sometimes, however, from causes not easily to be explained, the disease continues to find victims until the approach to Mauritius; and the inhabitants of the island, having suffered from two fearful epidemics in 1854 and 1856, precautionary measures have been insisted on and accorded by the Government, and rigid quarantine is now established.

Without making any positive statement as to the mode of introduction of the disease into Mauritius in 1854 and 1856, it is an undoubted fact that the commencement of these epidemics was almost simultaneous in each year with the arrival of infected ships at Port Louis. The recent report of a committee of the Legislative Council appointed "to inquire into the probable cause or causes of the recent outbreak of cholera in the island of Mauritius," however, positively attributes the outbreak to communication with the coolies of two infected ships. The question of quarantine, especially as regards its power of excluding infectious or contagious diseases, is one now seriously discussed in Europe. As quarantine forms a serious impediment to mercantile transactions and individual locomotion, the mercantile community is universally opposed to it, and, aided by the old Board of Health, has endeavoured to throw discredit on its powers of prevention. In the opposition to quarantine, the argument has, for the most part, rested on its inefficient or negligent performance, or on the attempt to prove that certain diseases—cholera, yellow fever, typhus, &c.—are not infectious or communicable. The brief notice I am about to give of a recent quarantine at Mauritius will, I flatter myself, show indubitably that cholera is a communicable disease; and that a

well-regulated quarantine is capable of preventing the spread of the disease.

On the 14th October, 1857, a ship carrying coolie labourers from Madras arrived off Flat Island, the present quarantine station of Mauritius, after a passage of twenty-six days, and reported thirty-three cases of cholera and eighteen deaths during the voyage; the last death having occurred five days before her arrival. The coolies were landed on the 16th. Shortly after, another coolie ship, from Calcutta, passed, and, reporting herself healthy, went on to Mauritius; but as the ship's register of diseases had been destroyed, and as it was admitted by the captain and native doctor that cases of cholera had occurred during the voyage, the ship was ordered back to Flat Island, and the coolies were landed on October 23rd. This island, about one mile in diameter, had been previously inhabited for many months by about 150 persons, consisting of Europeans, European and coolie workmen, the officers and servants of the quarantine establishment, with a number of prisoners engaged in forming a jetty at the leeward of the island, near to which were two wooden houses inhabited during the quarantine by four workmen and five policemen. The whole of the persons on the island had been very healthy, only a few cases of ordinary diarrhoea and mild dysentery, and other trivial complaints, having to my knowledge occurred from the early part of June to October, and it having been reported to me, on good authority, that scarcely a severe case of disease had been known on the island for many months preceding my arrival. Both ship-loads of coolies were landed on the jetty, mustered close to the wooden houses before referred to, and their names called over, which necessarily detained them there for some time; they were afterwards sent to the opposite side of the island, where were the huts for their accommodation, those of the Calcutta vessel being placed on Gabriol Island, separated by a coral reef from Flat Island.

Two cases of simple bilious diarrhoea occurred soon after the landing amongst the Madras coolies, who were in a much better physical condition than those from Calcutta, but no case of cholera until the 26th of October, nine days after the landing, when a Madras woman was seized, and died the next day. Two cases, one of simple and one of choleraic diarrhoea, were reported on the 27th amongst the Calcutta coolies; but no new case of cholera until the 29th, when a workman living at the jetty, and a policeman who had been on duty at the same place during the landing of the coolies from both ships, but who had afterwards been stationed on Gabriol Island with the Calcutta coolies, were simultaneously attacked. On the 30th, a Madras coolie was admitted with choleraic and a Calcutta coolie with simple diarrhoea. On the 31st, one case of cholera and three of choleraic diarrhoea occurred amongst the Calcutta coolies. Nov. 1st, we had one case of cholera amongst the Madras and one amongst the Calcutta coolies; Nov. 2nd, three cases of cholera and one of choleraic diarrhoea amongst the Calcutta coolies; Nov. 3rd, two cases of cholera and two of choleraic diarrhoea, also amongst the Calcutta people; Nov. 4th, two cases of cholera, one from the Madras and the other from the Calcutta coolies.

On the 3rd November, seeing that cholera was largely on the increase, it was determined to remove the coolies from Gabriol to Flat Island; the removal was commenced on that day and completed on the 5th. From this date, no new case of cholera occurred until the 19th, when a Calcutta coolie was attacked; and on the 20th, another of the workmen living near the jetty: after which the disease entirely disappeared. It may be remarked that the disease seemed to be localized near the jetty; for in addition to the two cases of cholera occurring there amongst the workmen, several other policemen and workmen on duty at the spot suffered more or less from diarrhoea.

(To be concluded.)

THE POISONOUS TREES OF THE BOULEVARDS.—Much excitement is said to have been produced in Paris by the announcement made in the name of several savans of renown, of the dangerous nature of the trees now being planted on the Boulevards. The belief is current that this tree is of the most poisonous nature, "being no other than Tsichu of the Chinese, from which the varnish is gathered, a single drop of which running from the tree causes the most venomous ulcers to arise—ulcers which are incurable, and end in the painful death of the victim." Of course this is a groundless *canard*; meanwhile it is said to be amusing to witness the care with which the promenaders avoid either walking or sitting in the shade of these "arbres maudets," as they are already called.

A Mirror OF THE PRACTICE OF MEDICINE AND SURGERY IN THE HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.* lib. 14. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

STRANGULATED OMENTAL HERNIA, IN A WOMAN AGED SEVENTY-FIVE; OPENING OF THE SAC AND REMOVAL OF OMENTUM; CONVALESCENCE.

(Under the care of Mr. STANLEY.)

As we have remarked on previous occasions, the peculiarities exhibited in the various forms of hernia are sometimes very remarkable. These, perhaps, are the more striking in the aged, for in them, owing to the long standing of the rupture, we commonly meet with adhesions, and the appearances, even on examination by experienced hands, are often deceptive as to the actual nature of the tumour—whether, in fact, intestine or omentum has protruded, or both.

On the 19th of November, a case of this kind was brought into the operating-theatre, in the person of an old woman, aged seventy-five. The particulars of her history, so far as we could gather, were, that she had symptoms of strangulation on the 15th, which became more urgent the next day. The taxis, applied by Mr. Goddard, a surgeon of St. John-street-road, failed to produce relief, and she was brought to the hospital, and admitted into Lucas ward. She had been the subject of an umbilical hernia for many years, which had become irreducible.

When under the influence of chloroform, given by Dr. Martin, the taxis was tried, and the tumour became a little smaller, softer, and not so tense, but its complete reduction could not be accomplished.

It was now deemed advisable, by Mr. Lawrence, Mr. Skey, Mr. Paget, and others of the surgical staff present, to perform the operation for reduction, and be guided by circumstances as to ulterior proceedings. Accordingly, Mr. Stanley made his incisions above the tumour in the umbilical region, but on exposing the upper part of the sac, moderate pressure failed to reduce the hernia.

It now became a question whether the tumour should be left in the state in which it was, apparently consisting of intestine and omentum, or whether the operation should be proceeded with. The appearances were so deceptive, that Mr. Lawrence could scarcely distinguish between these two substances. Mr. Stanley extended his incisions over the sac, which was opened, and contained hard and thickened omentum, much congested, and strikingly resembling intestine, but none of the latter was found to be protruding. Folds of this were adherent to the walls of the sac and margins of the ring, and two or three large portions were removed, followed by a little bleeding, which was controlled by ligatures, and the lips of the wound were brought together by sutures.

Mr. Stanley observed there was a reasonable prospect of the patient doing well, for she appeared to possess a certain amount of stamina and vigour which augured favourably. There was no evidence to show that bowel had protruded in the present instance, although the tumour seemed smaller and softer when the taxis was employed; but the case altogether was a very striking one, and of a nature such as probably the student might not witness once in a hundred instances.

Of the value of the taxis under chloroform, we had an illustration, on the 17th of November, at University College Hospital, where a young man, the subject of a congenital inguinal hernia, with symptoms of strangulation since the 13th, and who was sent up from the country to be operated upon, was submitted to well-directed efforts by Mr. Erichsen in the operating theatre, when the hernia was completely reduced. The warm bath and the taxis, employed in the ward, had proved unavailing; he was then removed into the theatre for operation; but a trial was given to the taxis under chloroform, which so completely