The management of the child after operation has been precisely dwelt upon throughout the details of the various cases brought forward in this paper to elucidate the subject:—the operative measures necessary in the treatment of hare-lip.

ART. II.—*Report of 989 Cases of Fever Treated and Noted. With Remarks.* By THOMAS H. BABINGTON, M. B., Surgeon, Co. Londonderry Infirmary.

THE period during which these cases of fever came under treatment, and were observed and noted, extended from October, 1847, to October, 1855.

Under the name fever several varieties are included which will be more particularly noticed.

In reference to the sex of the persons attacked, or rather admitted into hospital (as all the cases came under observation in hospital), 420 were males, and 569 females.

With respect to ages the cases may be classified as follows: Under 5, 28; from 5 to 10, 99; from 10 to 20, 371; from 20 to 30, 168; from 30 to 40, 111; from 40 to 50, 116; from 50 to 60, 49; from 60 to 70, 38; from 70 to 80, 8; from 80 to 90, 0; from 90 to 100, 1; total, 989.—Of the whole number 916 recovered, and 73 died.

The deaths are arranged as to ages as follows:—Under 5, 1; from 5 to 10, 1; from 10 to 20, 15; from 20 to 30, 11; from 30 to 40, 8; from 40 to 50, 13; from 50 to 60, 13; from 60 to 70, 7; from 70 to 80, 4; from 80 to 90, 0; from 90 to 100, 0; total, 73.

On looking over this classification of the ages of the persons attacked, it appears that considerably above one-half were under the age of 30, and more than one-third of the whole number were between the ages of 10 and 20. Is this susceptibility of the influence of the poison greater when the vital powers are occupied in nourishing the quickly growing frame, and the vital forces being exercised in this direction are not available to repel the infection?

In reference to the mortality, it is a small fraction over $7\frac{1}{4}$ per cent. And here it is to be observed, that in the young the per-centage of deaths, with regard to the number of cases attacked, is much less than in those more advanced in life; so that if, as observed above, the susceptibility of disease is greater, the power of resisting and holding out against its effects appears also to be increased. It appears from the figures that under

thirty years of age, 666 persons were attacked; and of these 28 died, or $4\frac{1}{2}$ per cent.:—From 30 to 50, 227 were attacked, and 21 died, or $9\frac{1}{4}$ per cent.; from 50 to 70, 87 were attacked, and 20 died, or 23 per cent.; from 70 to 80^a, 8 were attacked, and 4 died, or 50 per cent. Hence it appears that from the turn of life the mortality is greatly increased.

In the cases noted the following varieties were observed:—

1st. Simple continued fever, without complication.

2nd. Continued fever, with petechiæ.

3rd. Continued fever, with petechiæ, prostration, complications, and typhoid symptoms.

4th. Continued fever, with maculæ, or measly eruption, and complications.

These varieties, to a great extent, correspond with those enumerated in Dr. Graves' "Clinical Medicine"^b, viz.:—

"1st. Simple continued fever, without maculæ or any notable determination to particular organs.

"2nd. Continued fever, without maculæ, with determination to some organ.

"3rd. Continued fever, with maculæ.

"4th. Continued fever, accompanied from the very beginning by gastric derangement and epigastric tenderness.

"5th. The last mentioned species, but in a more intense form, having black vomit and yellowness of the skin super-added^c.

"6th. Continued fever, with petechiæ."

1st. On the simple continued fever, without complication, I need make no remark. The presence of petechiæ, as observed in No. 2, I am inclined to attribute to a vitiated and weakened state of the system, and have noticed the existence of petechiæ in whole families who, when attacked, resided in low, damp, close, and badly ventilated dwellings, the individuals being very much crowded together, and of necessity inhaling a very impure atmosphere. *Hence* the blood is imperfectly oxygen-

^a The patient attacked above ninety years of age not included.

^b Edited by Neligan, vol. i. p. 105. Edition of 1848.

^c Some years since, in private practice, I met with a case of fever of this variety in a patient (a clergyman aged 62) of very active habits. For two years he had adopted the homœopathic system, and, when attacked with the first symptoms of fever, had treated himself accordingly. Intestinal disturbance, vomiting, and purging, set in: on the fourth day of his illness these symptoms were checked; on the fifth day yellowness of the skin appeared; on the following day hiccup and vomiting, and speedily black vomit, which continued till the ninth day, when he sank. Throughout the whole course of the disease the brain remained unaffected, and the intellect perfectly clear.

ized, it loses its crasis, becomes thin and watery, the vital powers are weakened and depressed, a hemorrhagic tendency is engendered, and petechiæ are developed.

3rd. *The Continued Fever, with Petechiæ, Prostration, &c.*—The patients appear to be saturated with the poison; their skins are of a dark dusky colour, covered with petechiæ, blotches, and even vibices; great prostration of the strength; tongue black and dry; teeth covered with black sordes; delirium generally of a low type; involuntary discharges of urine and fæces. This is the variety which I would designate as typhus fever; we meet with similar symptoms in scarlatina and measles, frequently in erysipelas, and other surgical diseases, and where the symptoms above mentioned are observed to exist, it is the invariable custom of physicians and surgeons to remark, that the patients are labouring under typhoid symptoms, or fever of a typhoid type.

4th. *Fever with Maculæ or Measly Eruption.*—The cases of this variety which came under observation were all characterized by an eruption. This form appears to be the true typhus, and has considerable claims to be classed with the exanthemata as a disease *sui generis*. I believe having this form of fever once affords to the patient a considerable immunity ever after. The eruption appears about the fourth or fifth day from the commencement of the attack, and continues with varied degrees of distinctness till the twelfth or fourteenth day, and gradually disappears. It disappears on pressure, and quickly returns. I have observed the eruption of varied shades and colours,—bright red, dark purplish, and sometimes nearly black. These shades of colour I am inclined to attribute very much to the locality and habitation from whence the patient came, and to the malignancy of the disease; just as in scarlatina and measles we often see an eruption of a very dark colour, sometimes nearly black. In cases, also, complicated with bronchitis, if the bronchial affection is extensive, the eruption is generally of a dark colour. Throughout all the cases observed I have not been able to detect any other form of eruption.

Of the whole number treated, 409 were cases of simple continued fever, corresponding to the first variety noticed by Dr. Graves; 184 were simple continued fever with petechiæ; 95 were cases of typhoid fever with complications; and 301 had maculæ, or measly eruption—in fact, were cases of typhus fever, some with and some without complications of particular organs.

Throughout all the cases there was a marked absence of *crisis*; anything like it was observed in only 25 cases, and in

these it occurred by sleep. The principal complications observed were—

Abdominal tenderness,	in 45 cases,
Bronchitis,	„ 170 „
Cerebral affections,	„ 37 „
Chorea,	„ 1 „
Diarrhœa and dysentery,	„ 19 „
Hemorrhage from mouth,	„ 2 „
Hemorrhage from uterus,	„ 1 „
Jaundice,	„ 3 „
Mortification of extremities, &c.,	„ 4 „
Pleuritis,	„ 2 „
Pneumonia,	„ 1 „
Peritonitis,	„ 2 „
Pregnancy and miscarriage,	„ 1 „

Relapses occurred in 15 cases; abscesses, after recovery, in 5 cases—3 at the angle of lower jaw, 1 in the axilla, and 1 in the scalp.

The complications in fever are of a varied nature, and change with the type of the epidemic. Those chiefly demanding attention are the abdominal, the bronchial, and cerebral. These vary both in intensity and frequency with the nature of the epidemic. In one epidemic the majority of cases will be complicated with abdominal tenderness, vomiting, diarrhœa, and dysentery—and occasionally ulceration of the intestines. During the next epidemic nearly all the cases will have bronchitis, and some pneumonia; and again, there will be a run of cases in which affections of the brain and its membranes will be the formidable complication to be watched and combated. The latter, however, is not so frequently to be met with amongst hospital patients, in proportion to the numbers attacked, as in the middle and higher classes of society, where, amongst merchants, clergymen, lawyers, and medical practitioners, the cerebral complication in fever is as frequently present as it is frightfully fatal. With reference to the abdominal complication, I have not been able to detect any form of eruption characteristic of any peculiar intestinal lesion; nor do I think mere abdominal tenderness is much to be depended on as in itself indicative of serious internal disease in fever. I have found many patients wince and complain of pain on pressure made on the epigastrium and other parts of the abdomen, who evinced quite as much discomfort and uneasiness when the integuments of the thorax, the arms, or legs were similarly pressed upon.

Bronchitis was the most frequent complication throughout the cases coming under observation, and required most careful watching,—often beginning in an insidious and trifling form, and suddenly spreading through all the minute ramifications of the bronchial tubes. Four of the cases with this complication proved fatal within twelve hours, from such an intense form of the disease, and such extensive bronchial effusion, that I am inclined to designate the complication as suffocative bronchitis.

The cerebral affections were, as usual, very troublesome and difficult to manage; they were sometimes combined, and sometimes alternated with bronchitis or abdominal complications. It is unnecessary to mention how treacherous the cerebral affections are in fever, how insidiously they commence, how rapidly they run their course too often to a fatal termination, and how much watchfulness is required on the part of the medical attendant to protect his patient, and check the advances of this formidable enemy.

In reference to some of the particular cases mentioned amongst the complications, the case of chorea is somewhat remarkable. A girl, aged 16, who had been labouring under chorea from the age of 6, was attacked with typhus fever, and admitted into hospital on the fifth day, her whole body covered with maculæ; she had most violent and universal muscular twitchings. Musk, even in doses of one scruple every four hours, was ineffectually administered. As she proceeded through the disease, her vital powers sunk very low. She became insensible and unconscious. The free administration of wine, punch, and nutriment, was extensively resorted to. All the symptoms of chorea disappeared. She recovered; and it was not till her convalescence was perfectly established, that the symptoms of her former disease reappeared, which they did as severe as before, and still continue.

Hemorrhage was not of frequent occurrence.

In the case of hemorrhage from the uterus the patient passed through an attack of continued fever, accompanied by great cerebral excitement. She relapsed, and had an attack of typhus (maculated), with severe diarrhœa, followed by uterine hemorrhage. With much care, and after a protracted convalescence, she recovered. The cases of hemorrhage from the mouth were both of a severe nature, and occurred towards the termination of attacks of protracted continued fever, with typhoid symptoms. These cases had all the symptoms of a total breaking up of the vital powers. Hemorrhage from the nose I have observed in the early stages of fever, but never to

an extent requiring surgical interference; and it generally proved beneficial in relieving frontal headach when present.

Jaundice.—The presence of jaundice did not appear to influence or modify the fever, or its progress.

Mortification of the Feet, &c.—In every case in which this occurred the patient sank. In one case the mortification extended to the thighs, scrotum, and integuments of the abdomen.

Pleuritis, Pneumonia, and Peritonitis.—The inflammation in these cases was of a very low type, and would not bear general depletion. The cases of pleuritis and pneumonia recovered, those of peritonitis were fatal.

Enlargement of the spleen was present in one case, which proved fatal. The disease was one of great rapidity; the patient, a boy aged 18, sank very rapidly, and had symptoms, I should say, bordering on putrescence.

Pregnancy and Miscarriage.—The existence of pregnancy did not in any way influence the fever, nor did the occurrence of the miscarriage protract or check the disease. There was no hemorrhage to require any interference.

The mortality, as already mentioned, amounted to 73 cases, a fraction over $7\frac{1}{4}$ per cent. The causes of death were as follows:—

Cerebral Affections,	14
Bronchitis,	16
Diarrhœa,	1
Dysentery,	2
Peritonitis,	2
Purpura,	1
Prostration and Sinking,	30
Mortification,	4
Bed-sores,	2
Fright,	1
<hr/>	
Total,	73

The most fatal cerebral affection appeared to be congestion of the brain, terminating in effusion. I cannot recollect having, throughout all the cases, noted any inflammatory affection of the brain or its membranes. Cerebral congestion I have observed to be most fatal from the ages of 35 to 50, and principally to attack those who have been in the habit of drinking freely of ardent spirits, also in persons of studious habits, and deep thinkers. In all such, when attacked with fever, the sensorium suffers deeply, cerebral congestion sets in at an

early period, and even if this is combated and subdued, symptoms of sudden effusion come on, and run to a fatal termination; in the first the patients sink rapidly, in the latter they are frequently attacked with convulsions.

The cases fatal from bronchitis, diarrhoea, dysentery, and peritonitis, require no particular notice.

Purpura.—In this case the symptoms appeared at the end of a very protracted convalescence, and terminated fatally, with much hemorrhage from the mouth.

Prostration and Sinking.—From this cause 30 cases are enumerated as having proved fatal; 6 of them died a few hours after admission into hospital; 7 on the day after admission; 10 on the second day; 5 on the fifth day; 2 were protracted to the thirtieth day. All these cases were marked by extreme prostration of the powers of life, cold livid surface, sunken countenance, indistinct pulse, weak sounds and action of heart, partial stupor or indifference to all surrounding objects. In these cases no particular organ seemed to be engaged; the whole system was poisoned, and the vital powers so prostrated, that no resistance could be offered to the disease, nor could the powers of life be sustained.

One patient died from fright and fear. A young man, aged 20, passed favourably through typhus fever without complication, and was nearly convalescent,—a patient was admitted into the same ward with low typhoid fever, and sank and died in two days. On the day on which he died, this young man became much alarmed, shivered, had great nervous excitement and terror of death: his circulation became weak, his extremities and skin cold, and his surface covered with a cold sweat: all treatment was ineffectual, and he died within twelve hours.

As to the treatment adopted, little is to be said: throughout all, the treatment was purely expectant. In fever we have no specifics. The tongue may be foul, the secretions vitiated, the urine scanty, and the skin dry; but I question if our alteratives can be got to act on the stomach, liver, and duodenum, our diuretics on the kidneys, or our diaphoretics on the skin. The use of such at the very onset of the attack may do very well, and, no doubt, the timely administration of an emetic, an aperient, and a diaphoretic have, in many instances, cut short and warded off an attack of fever; but, when the disease has once set in, I believe, the administration of such will do more harm than good; all we then can do is, to stand by and assist nature, carefully watch our patient, and promptly combat symptoms and complications as they arise.

None of the cases noted required general blood-letting; I

never bled a patient labouring under fever; a few of the cases here recorded were bled before their admission into hospital; I have no hesitation in stating that they were thereby injured, that their disease was exacerbated, their debility increased, and their lives placed in great jeopardy. In the majority of cases we had marked symptoms of debility and prostration, and these frequently in combination with serious organic complications. Camphor, ammonia, wine, whiskey, and beef tea, were freely administered, and with decided benefit. I am inclined to give a decided preference to wine as a stimulant, as affording nutriment to a certain extent at the same time. I administered wine freely and unsparingly, without regard to the state of the tongue, being guided by its effects on the system generally, and specially by the sounds and action of the heart as indicated by the stethoscope (thanks to Dr. Stokes for his valuable remarks on this subject). In fact, throughout all the cases, I may say, the practice adhered to was the nutritive system. I believe the late much to be lamented and respected Dr. Graves did well for the fever-stricken sick and for the profession, when he made the remark, which his friend and eulogist Dr. Stokes has chronicled as what he at one time wished to be his epitaph, "*He fed fevers.*" The abdominal tenderness, when requiring treatment and accompanied by vomiting or intestinal irritation, was generally relieved by mustard cataplasms and turpentine epithems. The bronchial affections yielded to dry cupping, mustard cataplasms, and blisters, and where there was much difficulty in getting rid of the expectoration, infusion of senega, with ammonia, was beneficially administered.

Where the head was threatened or seriously engaged, as indicated by the "cerebral respiration" so accurately described by Dr. Graves, leeches and blisters, particularly the latter, were had recourse to, with marked benefit. There is another form of cerebral complication: it is not congestion, nor inflammation, but a peculiar kind of irritation; the patient is restless, sleepless, talkative, maniacal, frequently getting out of bed, difficult to manage, and not improved by mechanical or manual restraint. In such cases the timely administration of tartar emetic and opium saves the patient's life; unless one has witnessed the benefit derived from the use of this combination in the treatment of this peculiar cerebral complication in fever, it is impossible to tell how deeply we are indebted to the late Dr. Graves for his valuable suggestion and application of it as a remedial agent.

In conclusion, in the treatment of all the cases, the object

was, while carefully watching the disease, to avoid the “nimia diligentia”—to support the patients from the commencement, impressed with the idea that the disease was one of debility, and more or less engaging all the functions of the system, and at the same time to be prepared to combat formidable complications as they might arise.

This is, I believe, the true course to adopt in treating fevers; the disease not being a specific one, and we being as yet not furnished with many, if any, specifics for this or any other disease.

ART. III.—*On Aneurismal Sacs.* By W. COLLES, Surgeon to Steevens' Hospital.

IN the last Number of this Journal I published a few cases of aneurism, selected from my father's manuscripts; and in a remark appended by him to one of them in the year 1810, there is a doctrine propounded of which I find no further notice; but which, on consideration, appears to me to contain the true explanation of the process adopted by nature in her endeavours to control and cure this formidable disease; it accords with the various phenomena observed in its progress, and affords a ready explanation of those changes which no former theory of the disease accounted for. He considers the striated substance contained in the sac to be an effusion of lymph poured out by the sac itself. Surgeons formerly were satisfied with attributing the entire contents of the sac to a mere coagulation of blood, and their object in cure was to promote this coagulation, which they viewed merely as a mould of the interior, and as a plug to fill up the cavity, whereby a cure was effected. This theory was denied and refuted by Dr. Bellingham in his work on the Cure of Aneurism by Compression; but still he and other authors conclude that the blood first coagulates, and then, by some unaccountable process, forms the deposit. This explanation, so far true as it distinguishes between the coagulum and the layers of fibrine, is still deficient, as it gives the same origin to both, and fails to account for many facts observed in the progress and cure of aneurisms; whereas the doctrine here propounded would, I think, be found in accordance with the process adopted by nature in other parts, or in similar parts under other circumstances, and would offer a ready solution of the changes observed during the course of the disease, and lead to a due appreciation of the various remedies and means proposed for cure.