On New Year's Eve, not having heard that he was materially worse, I called, and found him paler than on the occasion of my last visit, breathing rapidly and being occasionally troubled with a dry short cough, but still unwilling to acknowledge that he was suffering from more than a slight cold and fatigue. Next morning, I was hurriedly sent for at seven o'clock, with the message that he was taken very ill. On arriving at his house, I found that he was dead, having expired a few minutes after arising from his bed to mend his fire, with every symptom of syncope.

The subject of the second case was the wife of the above-mentioned gentleman, a lady 53 years of age, of florid complexion and full habit of body, who had for many years suffered from the effects of the so-called phosphatic diathesis in its worst form. In her youth, she had also suffered from frequent attacks of facial erysipelas. Two months before the history of the present case opens, she had a severe attack of congestion of the liver, with one or two slight paroxysms of apparent angina pectoris. From this she had quite recovered, and had returned from her month's sojourn in the Isle of Wight, greatly improved in health.

From the beginning of her husband's illness, and much against my wish, bearing in mind her previous history, she unsparingly devoted herself, both day and night, to his welfare. After five or six days and nights of the most unwearied attention to her husband, she began to complain of sore throat; her pulse and temperature rose, the former to 120, the latter to 103 Fahr., and other symptoms of fever declared themselves. In the course of a few hours, without any definite cause, such as a pin-prick or other injury, she experienced a throbbing pain in the right thumb, and it was soon evident that a whitlow was forming. The whitlow I hesitated to open for two days, knowing that it was impossible to prevent her from entering her husband's room as long as she was able to do so. At the end of that time, finding the pain unabated, and an erysipelatous blush and swelling appearing over the supratrochlear gland of the same arm, I incised the thumb freely, thus allowing the exit of a small quantity of matter. Beyond this, I leave out the enumeration of the other therapeutical procedures necessary in the further treatment of the case. From this time, however, the diffuse inflammation, which first occurred in the neighbourhood of the supratrochlear gland, gradually spread, until the whole of the upper arm, and, shortly before death, the shoulder, became involved in a most malignant form of cellulitis; free incisions into the now brawny substance of the limb gave exit to venous blood and watery serum only, the subcutaneous tissues and fasciæ having much the well-known appearance of sodden wash-leather. On the afternoon preceding her death, her temperature, which had during the morning registered 102.4 Fahr., fell to 99.5 Fahr., her other symptoms apparently being unaltered. This was the first intimation of immediately impending danger. The soreness of the throat had continued throughout her illness, during the last two days giving rise to most painful dysphagia. On examination, the soft palate and fauces exhibited extreme oedematous swelling, the mucous membrane being of a pale rose colour, but no trace of any membranous exudation on its free surface was perceptible. During the night of the last day of November she gradually sank, dying at half-past eight o'clock the next morning; the radial pulse being imperceptible for four or five hours previously to her death, and her consciousness remaining perfect until the last.

The third case in the same house, and which, from many of its symptoms, appeared not unlikely to have owed its origin to some blood-poison analogous in its nature to that of erysipelas, occurred in the person of a servant. For some weeks before her master's illness, the housemaid complained of general malaise and lassitude, slight occasional sore throat, rigors, and night perspirations, with some cough expectoration. When I first saw her, a few days after her master was taken ill, she was then confined to her bed. All the above symptoms had increased in severity; the throat was now exceedingly sore; there was much dysphagia, and occasionally dyspnoea, accompanied with free and constant expectoration of clear glairy mucus. Some redness, but no oedema, of the fauces was present. The pulmonary respiratory sounds were normal, and pain was experienced on pressure on either side of the larynx. In the course of a few days she was removed to her home in the lower part of the town, in consequence of the illness of her master and mistress. Here she became considerably worse; the difficulty of breathing increased, also the dysphagia; the expectoration of mucus was more copious; the temperature, which had been under 100 deg. Fahr., rose to 103.4 deg. Fahr. in the evening; the pulse was 120, soft and compressible. A prominent symptom during this period of her illness was a quiet form of watchful delirium, which continued day and night, both then and, to a less extent, for some time after, her removal to the General Hospital. There was also a copious diarrhoea, which lasted for two or three days; and at night the perspira-

tions were very profuse. On one occasion, the dyspnoea was so excessive that I remained with her during the greater part of one night, prepared to perform tracheotomy. After remaining for three or four days at her own home, she was taken to the General Hospital, where she slowly continued to improve, being discharged from that institution but a fortnight ago. It was somewhat remarkable that the tongue was throughout her illness quite moist; neither was it ever furred beyond a very limited extent.

The case of the master of the house affords possibly the example of an attack of erysipelas, originating *de novo* after a comparatively slight wound involving osseous structure. At the same time, it is impossible, I think, to avoid connecting its outbreak, however indirectly, with the illness of the housemaid, which bore in many ways a resemblance to that of her master and mistress, more especially in the affection of the throat with dyspnoea and dysphagia, a conspicuous symptom in each. It may be, perhaps, well to add, that neither Mr. Solomon nor I had to our knowledge been brought into contact with an erysipelatous patient for some weeks before the operation took place. I may also mention that I am not prepared to say that the ventilation of the house was all that could be possibly desired.

A CONTRIBUTION TO THE STATISTICS OF AMPUTATIONS.

By HENRY LOWNDES, L.K.Q.C.P.,
Surgeon to the Liverpool Northern Hospital.

THE interesting and practical papers by Mr. Callender have attracted great attention to what seems the divergence between the mortality following the great amputations in the present day, and that displayed in the statistics that led to the outcry against hospitalism.

In the following series, I have given my experience during the last five years at the Liverpool Northern Hospital, a rather crowded institution, containing 140 beds, which are in great part devoted to surgical accidents. Its laws stipulate that it "shall be confined as much as possible to severe accidents and acute cases." It is situated close to the busiest docks and warehouses, and is also close to the stations of the Lancashire and Yorkshire Railway. I believe that, in the number and severity of the accidents brought to it, it has, when we consider its small size, no rival.

The following amputations were all under my own care, and were, with one exception, performed for the results of accidents. There were thirty-four cases in all, viz.:

Primary Amputations.				
Part.		Number.		Result.
Thigh	- - - - -	3	- -	All died.
Leg	- - - - -	8	- -	All recovered.
Both legs, in a boy aged 14	- - - - -	1	- -	Recovered.
Arm	- - - - -	7	- -	{ 6 recovered; 1 died.*
Forearm	- - - - -	5	- -	All recovered.
Arm and entire scapula	- - - - -	1	- -	Died.
Secondary Amputations.				
Thigh	- - - - -	2	- -	Both died.
Leg	- - - - -	5	- -	{ 4 recovered; 1 died.
Arm	- - - - -	1	- -	Died.
Forearm (Disease of Wrist)	- - - - -	1	- -	Recovered.

Among the secondary amputations of the leg in this list, one man is counted twice. He had had both legs lopped off in the backwoods of America, and had his two painful conical stumps amputated here, on separate occasions, below the knee.† The eight primary amputations of the leg were for crushes of the leg, either from railway accidents, or, as is very common here, from the wheels of the heavy lorries used here passing over the leg. With one exception, the operation was performed just below the knee, as a more useful limb is thus left for working men. Moreover, I prefer this operation, as not opening the cavity of the joint. The secondary amputations were either, as in two instances, cases in which the patient had refused to permit any operation until gangrene had occurred, or cases of severe compound fracture in which it had been hoped to save the limb, and where amputation had at last to be unwillingly performed, with pyæmia perhaps impending, if not already poisoning the system.

* In this case, death was caused by hæmorrhage into the abdomen. This cavity was found full of blood, that had oozed from the vessels of the mesentery, which was found lacerated in three places.

† He is still in the hospital, but is recovering.

Of the mortality in the cases of primary amputation of the thigh, I need say little. Death, in each case, took place in three days at the farthest, and without any thorough rallying from the shock of the accident. The mode of amputation, or the treatment of the stump, can have little to do with the result.

The amputation of the arm and scapula was complicated with a laceration of the costal wall of the axilla, fracturing and exposing three of the ribs. The man died in twenty-four hours. The death in the arm amputation, as explained in the note, arose from causes unconnected with the operation. It is curious that, in this series, there are no shoulder-joint amputations. I published, in the *Liverpool Medical and Surgical Reports*, 1867, six cases which had occurred to me up to that time, and of which five recovered and one died.

When I was first appointed to the Hospital, twelve years ago, I found amputation below the knee a very serious operation. I became acquainted with hospital gangrene, sloughing of the flaps, and traumatic delirium. It is with great pleasure, then, that I look back on so many successful cases, in later years, of this operation, the mortality of which Mr. Erichsen, in his third edition, states as 40 per cent., from three years' statistics at the principal metropolitan and provincial hospitals.

I have been accustomed to follow the example of a very successful operator, Mr. Hussey of Oxford, in tying all large veins, as well as the arteries. In primary amputation, I have always seen more or less sharp febrile reaction, and I generally meet it with calomel and jalap, plenty of water and tea, and a diet restricted for two or three days to a little beef-tea and milk. As to the dressing of the stump, I usually touch its fresh surfaces with carbolic acid solution, bring them together as accurately as possible with silver sutures; then apply a layer of dry or wet lint covered over with one of lint soaked in carbolic oil; and then, as I was first taught to do by one of Mr. Callender's earlier papers, wrap the limb and stump in plenty of cotton-wool with a bandage loosely applied. I, of course, avoid all unnecessary disturbance of the stump. I do not avoid exposing it to the air during its dressing, and sponge it well with warm water. Sometimes it has not to be dressed from the first for many days. Arms and forearms often unite at once and require no dressing. Where matter forms in the cavity of the stump, and tension appears, I freely remove as many sutures as necessary, and break down all union between the flaps, if necessary, so as to ensure free and rapid exit to all discharges.

In conclusion, I may observe that I think the general results of amputations of late years have been much more favourable, and that the dangers of hospitalism have been much exaggerated. I cannot tell to what the improvement is to be attributed, unless to the superseding of ligatures by the use of catgut-threads cut short and of torsion, and to the greater use of antiseptics.

EPILEPTIFORM CONVULSIONS OF THE RIGHT SIDE, WITH APHASIA.

By J. LOCKHART CLARKE, M.D., F.R.S.,
Physician to the Hospital for Diseases of the Nervous System.

Mr. F., aged 74, a retired officer in the army, had jaundice two years ago, but was not confined to his house. During this period, he had an attack of epileptiform convulsions of the right side, followed by profound sleep for some hours. Six months later, he had a similar attack, the right side of the face being affected first by clonic spasm, and then drawn to the same side for several hours. After an interval of five months, he had another and similar attack; and one more, only a month later. After the last, he was profoundly unconscious for some hours, the arm and leg of the right side being somewhat flexed and stiff. The next day, he could use his right arm and leg, but they were both very weak. He was quite conscious, but had considerable difficulty in expressing his meaning, from inability to recollect the words he wished to use. To whatever question I asked him, he repeatedly answered, "my right arm, my right arm, my right arm is unable." The day after, he was somewhat improved, could walk, use his right arm, and say with difficulty nearly all that he wished, but he was quite unable to write even a short letter; for, whenever he attempted to do so, he substituted wrong words, or words that had no meaning, and, being sensible of his error, he at once gave up the attempt. During the next three days, there was a continuous jerking movement of the right arm, which was at length stopped by morphia.

Four months later, he had a very severe fit of convulsion of the right side. When I saw him, his head was twisted to the right, and both eyes deviated to that side. His lower jaw was in constant motion, and

his right arm was incessantly jerking. After a few minutes, both arms and both legs became convulsed. On no other occasion had the left arm and leg participated in the convulsive movements. The patient was quite unconscious, his bronchial tubes were choked with mucus, and after a few hours he expired.

In the intervals between the paroxysms, the treatment consisted chiefly of bromide of potassium, combined sometimes with digitalis.

A *post mortem* examination was made twenty-one hours and a half after death. The body was extremely emaciated. On opening the head, nothing remarkable was observed in the dura mater. On removing this membrane, a layer of fluid was found beneath the arachnoid, over the convolutions of both hemispheres. The quantity of fluid which escaped on removing the brain amounted to between two and three ounces. Most of the arteries were more or less atheromatous, and the gray substance of the convolutions and of other parts was exceedingly pale. The entire brain was small, and the whole of the left hemisphere was decidedly smaller than the right. The posterior lobe did not reach so far back on the left side as on the right, and was less pointed. The posterior half of the third frontal convolution, and the lower parts of the transverse frontal and transverse parietal convolutions, were very much wasted and depressed, so that the processes which run from them to the insula, and which normally are almost covered by them, were entirely exposed when the temporo-sphenoidal lobe was drawn aside. The heart was of average size. Its muscular tissue was healthy, but the wall of the left ventricle was much thickened. The aortic and pulmonary valves were quite healthy, as were also the tricuspid and mitral, with the exception of being a little atheromatous. The liver was small and firm to the touch, with a tendency to cirrhosis. There was a broad antero-posterior groove on the convex surface of its right lobe. The gall-bladder contained four gall-stones of the size of large marbles. Both kidneys were contracted; their cortical portions were diminished, and they were nodulated on the surface at different parts. On the surface of each, also, there was a cyst; that on the left kidney was about the size of a large marble. The spleen was small; its investing membrane had the appearance of having been inflamed, and its substance was softer than natural.

OVARIOTOMY SUCCESSFUL IN A GIRL EIGHT YEARS OLD.

By T. SPENCER WELLS, F.R.C.S.,
Surgeon to the Queen's Household and to the Samaritan Hospital.

OVARIOTOMY is now so generally and so often practised that a record of any single case is only interesting when there is something unusual in the history of the patient, or some peculiarity in the operation. The facts that an ovarian tumour of sufficient size to render surgical aid necessary has been observed in a girl only eight years old, and that ovariectomy has been successfully performed, appear to be of sufficient importance to call for the publication of a short account of the case.

On January 5th, 1874, a little girl, eight years of age, of German parentage, born in California, was brought to me from San Francisco, having been sent over by the advice of Dr. Levi C. Lane and Dr. Regensberger of that city. She was rather small for her age, and the central part of the abdomen was occupied by a tense movable cyst. I arranged a consultation for the 7th of January with Sir Wm. Jenner and Dr. Sutor; and we all agreed that there was a cyst in the abdomen, and that I should tap it with a fine trocar and aspirator to ascertain if it were hydatid or ovarian.

On the 8th of January, Mr. Thornton administered a little chloroform, and, with the kind assistance of Dr. Sutor, I removed twenty-six ounces of opaque slightly viscid fluid, which I had no doubt was from an ovarian cyst. A hard substance like half an orange, either the contracted cyst or a hard portion of the ovarian tumour, was felt to the left side, after the fluid had all escaped.

The child did not suffer at all after the tapping, but the fluid soon began to distend the cyst again.

On the 23rd January, Sir William Jenner saw her again, and wrote: "There is nothing in the chest to contraindicate operation. The result of tapping is very interesting. I fancy now I can feel connection with pelvic contents on moving the mass, as if there were a long pedicle. I have advised very decidedly the operation of removal. Children bear operations well."

On January 27th, assisted by Dr. Tracy of Melbourne, and by Mr. Thornton, chloro-methyl having been administered by Dr. Day, I made an incision, nearly four inches long, through the abdominal wall