pital (a period of thirty-eight years). The average mortality in Mr. Erichsen's cases was twenty-five per cent., while it only amounted to eighteen at the cottage hospitals.

Table of Amputations and their Results—Primary or for Injury, and Secondary or for Disease—of the Thigh, Leg, Arm, and Forearm, performed in Cottage Hospital Practice by Country and Provincial Practitioners.

Nominal List of Cottage Hospitals.	No. of Beds.	PRIMARY.								SECONDARY.								Total.	
		Thigh.		Legs.		Arms.		F'arms.		Thigh.		Legs.		Arms.		F'arms.			
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.		
Ashford.....	6	..	..	2	1	..	..	1	..	..	..	..	..	..	..	..	..	3	1
Beccles.....	7	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..
Bournemouth.	6	..	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	3	..
Bourton-on- the-Water...	8	1	1	..	..	..	..	2	..	..	..	..	1	..	1	..	..	5	1
Burford.....	6	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Bromley.....	10	..	..	..	..	1	..	..	1	1	..	..	..	..	1	..	..	3	1
Boston.....	5	1	..	1	..	2	1	1	1	..	..	..	..	..	..	..	..	5	2
Buckh'rst Hill	5	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1
Bromyard.....	7	..	..	..	..	..	..	1	..	..	2	..	..	..	..	..	..	3	..
Crewkerne....	12	1	1	1	1	3	..	2	..	..	..	..	..	..	..	..	..	7	2
Cromer.....	6	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..
Chesham.....	7	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	2	..
Cranleigh....	6	1	..	..	..	..	..	1	1	3	..	..	..	2	..	..	..	7	1
Cirencester....	6	..	..	..	..	..	..	1	..	4	..	..	1	..	..	..	..	6	..
Charlwood....	4	..	..	1	1	..	..	..	..	1	..	..	..	..	..	..	..	1	1
Dorking.....	12	..	..	..	..	1	..	..	..	4	..	..	..	..	..	..	..	2	..
Enfield.....	6	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..
Erith.....	7	..	..	..	..	..	..	..	1	1	2	..	..	..	..	..	..	3	1
Fairford.....	8	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	1	..
Fowey.....	8	1	1	1	..	..	..	..	..	3	..	..	..	..	..	..	..	5	..
Frome.....	10	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Hayes.....	5	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..
Hillingdon....	4	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
Hatfield.....	8	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	2	1
Broadoak....	8	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	3	..
Jarrow-on- Tyne.....	11	3	2	6	1	..	..	1	..	..	..	..	..	..	..	..	..	11	3
Iver.....	7	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	2	..
Kendal.....	16	..	..	..	..	1	1	1	3	1	3	..	1	..	..	..	..	9	2
Ledbury.....	5	..	..	1	..	2	..	..	..	..	..	..	..	..	1	..	..	4	..
Lloyd, Brid- lington....	13	..	..	2	..	..	..	..	3	1	..	..	..	..	..	..	..	5	1
Litcham.....	7	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Marlborough (Savernake)	20	3	..	4	..	2	..	1	..	1	..	..	1	..	1	..	..	13	..
Mildenhall....	8	2	1	1	1	..	..	..	1	..	..	..	..	..	..	..	..	5	1
Malvern.....	12	..	..	2	..	..	..	..	5	3	..	..	..	..	..	..	..	10	..
Market Rasen	4	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..
Milton Abbas.	6	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	1	..
Melksham....	6	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1
Nth. Lonsdale	50	5	4	10	8	1	..	..	..	1	..	..	..	..	..	..	..	24	5
North Cam- bridgeshire.	23	..	..	..	2	..	..	2	1	..	..	..	..	..	..	..	..	4	1
Newton Abt....	8	..	..	..	1	1	..	..	2	1	..	..	..	..	..	..	..	1	1
Ottery St. Mary	7	..	..	1	..	3	..	..	2	..	1	1	1	..	..	..	..	8	1
Oswestry.....	8	2	..	2	3	1	2	..	..	..	..	..	..	..	..	..	..	9	1
Petworth.....	8	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1
Petersfield....	6	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Penryn.....	13	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	..
Ross.....	6	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2	..
Royston.....	7	1	1	..	1	..	..	..	3	3	1	..	..	3	..	..	..	11	2
Reigate and Redhill....	12	..	..	1	1	2	..	1	1	2	..	..	..	..	..	..	..	7	2
Rugely.....	10	1	1	2	1	..	..	1	2	1	..	..	..	..	..	..	..	6	3
Ross Memo- rial, Dingwall	4	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..
Ruabon.....	6	1	1	4	..	..	..	..	..	..	..	..	1	..	..	..	..	6	1
Stockton-on- Tees.....	9	1	..	23	7	7	1	5	2	1	2	1	..	..	..	..	..	40	10
St. Albans....	7	1	1	2	..	..	..	3	1	..	..	..	..	..	..	..	..	7	1
Seacombe....	8	1	1	1	1	..	..	..	..	..	..	2	..	..	..	..	..	4	2
Stratton Corn- wall.....	5	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..
St. Leonards, Sudbury....	20	1	1	..	2	2	..	2	..	1	..	..	..	..	1	..	..	9	1
St. M'ry's Bur- ford, Tenbury	8	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..
Tewkesbury....	9	1	1	5	4	5	6	5	..	5	..	1	..	..	..	..	..	26	1
Trowbridge....	8	..	..	..	..	3	1	..	..	..	..	..	..	..	..	..	..	4	1
Ulverstone....	12	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Warminster....	7	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..
Wickham.....	6	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..

To facilitate comparison, I have prepared the following summary of the above table on the plan adopted by Sir James Simpson.

1. *Total Mortality of all Amputations*, in sixty-one cottage hospitals, having a total of 553 beds; total number of cases, 306; total number of deaths, 55; or 1 in every 5.6 died, or 18 in every 100.

2. *Mortality of the Individual Amputations*.—When we include

all the amputations of the thigh, leg, arm, and forearm, the results are—

Thigh Cases 80. Deaths 27 or 1 in 5.1, or 19.6 per cent.
 Leg „ 108. „ 18 or 1 in 6.2, or 16 „
 Arm „ 64. „ 7 or 1 in 9.3, or 10.7 „
 Forearm „ 54. „ 3 or 1 in 17.7, or 5.7 „

3. *Mortality from the Amputations that were Primary or for Injury*.

Thigh Cases 31. Deaths 18 or 1 in 1.7, or 58 per cent.
 Leg „ 76. „ 15 or 1 in 5.0, or 20 „
 Arm „ 53. „ 7 or 1 in 7.7, or 13 „
 Forearm „ 45. „ 3 or 1 in 14.3, or 7 „

4. *Mortality from the Amputations that were Secondary or for Disease*.

Thigh Cases 49. Deaths 9 or 1 in 5.5, or 18.4 per cent.
 Leg „ 32. „ 3 or 1 in 10.7, or 9 „
 Arm „ 11. *Nil.*
 Forearm „ 9. *Nil.*

These tables will be incomplete unless the cause of death in each case is recorded. Thus I find that, in the primary amputations for injury,

Of the Thigh Cases—13 died from shock, 1 from pyæmia, 1 from enteritis, 1 from inflammation of the lungs, and 1 from delirium tremens. In the remaining case, a compound fracture just above the knee, with destruction of the femoral artery, not detected at the time of reduction, mortification of the limb set in, and amputation was performed as the last resource.

Of the Leg Cases—6 died from shock, 3 from pyæmia, 1 from tetanus, 1 from delirium tremens, 1 from pneumonia; in 3 the causes not stated.

Of the Arm Cases—4 died from shock, 1 from pneumonia, 1 from tetanus; in 1 the cause of death is not stated.

Of the Forearm Cases—2 died from shock, and 1 from tetanus.

In the secondary amputations for disease—

Of the Thigh Cases—3 died from exhaustion, 2 from secondary hæmorrhage, 1 from shock, 1 from pyæmia; and in 2 the cause is not stated.

Of the Leg Cases—2 died from exhaustion; and in 1 the cause is not stated.

Where I have remarked that the cause of death is not stated, the cases were treated at the Stockton Hospital, the books of which give no information on the point.

Of the five cases of pyæmia, 2 occurred at Stockton, 1 at Crewkerne, 1 at Ashford, and 1 at the Lloyd Cottage Hospitals.

It will be observed that the great mortality in the primary amputations of the thigh is due to the fact, that two-thirds (12) of the deaths were caused by shock, consequent upon the severe injuries which the patients had sustained.

I purposely refrain from giving any other statistics than those which I have obtained from the Cottage Hospitals, as those prepared by the late Sir James Simpson, Mr. Erichsen, and other authorities are well known to the profession, and can easily be referred to. It must suffice for the purposes of this paper to point out that, according to the most recent authorities, the mortality in General Hospital practice, after the major operations, averages: In England, 41.6 per cent.; in Paris, 58.8 per cent.; in Glasgow, 39.1 per cent.; in Edinburgh, 43.3 per cent.; giving an average mortality of 45.7 per cent.

CIRRHOSIS OF THE LIVER: ALCOHOLIC PARALYSIS.

By CHARLES H. ROBINSON, F.R.C.S.I.,

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THE following case I believe to be of interest, as showing the rapid manner in which alcohol may paralyse the nervous centres and destroy life in a comparatively short time. This is my chief reason for detailing a case, which, so far as my experience goes, and as well as I can learn from writers on the subject of chronic alcoholism, is extremely unusual as regards its speedy termination.

Mrs. K., aged about 37, first came under my care in February 1876, suffering from irritation of the stomach, flatulence, loss of appetite, and vomiting, which subsided under treatment, but again recurred in about a fortnight, but did not continue long. In the following June, I was again in attendance, when I found her in rather delicate health, suffering a good deal from vomiting and with slight tremor of the hands. This last aroused my suspicions, and I instituted inquiries as regarded the possibility of the attack being due to stimulants taken in excess,

but was not able to obtain any satisfactory replies in reference to the matter.

In July, another attack came on, with symptoms of irritation of the kidneys and conjunctival jaundice; the urine, however, was free from bile and albumen. In the latter end of September, diarrhoea was added to the other symptoms, but did not continue long. I should add that I was informed that, during the past summer, she had suffered from hæmatemesis and epistaxis.

On January 8th last, I was sent for, and my patient then presented the following appearances:—Face sallow, tongue red and tremulous; conjunctiva jaundiced, skin dry and unperspiring, liver somewhat enlarged and hard, spleen also increased in size, pulse quick and weak, urine scanty and loaded with lithates, but Marechal's test could not detect any bile present. There were also loss of appetite, violent and persistent vomiting, the smallest quantity of fluid or solid food being immediately rejected, pain and tenderness in the epigastric and right and left hypochondriac regions, also a constrictive feeling about the chest. These symptoms and signs showed that there was considerable gastritis present; that the spleen was enlarged; and that the liver was in the first stage of cirrhosis; viz., that of increased volume and vascularity, the inflammatory stage of the disease, the lymph effused into the portal canals increasing the size of the organ; the dry and unperspiring skin, always present, I believe, in cases of cirrhotic liver, being caused by the action of the alcohol absorbed into the system acting on the secreting cells of the skin.

The early symptoms of cirrhosis of the liver are, it is well known, obscure, and it is an extremely difficult matter to obtain from ladies an acknowledgment that they indulge in spirituous liquors to excess. As Dr. Haddon, in a paper on Intemperance read before the Obstetric Section of the British Medical Association in Edinburgh, 1875, says: "Happily, it is still regarded as a great disgrace for a woman to be intemperate, and so she is bent upon deceiving us. We need expect no help from her in arriving at the real cause of her ailments, and the practitioner will, in the great majority of cases, receive from her husband or friends not even a hint as to the real cause of her suffering." As I have mentioned before, my suspicions had been excited; but the symptoms were now so apparent that I had no hesitation in stating to her friends my opinion of the cause of illness. I may here observe that the menses were irregular, having been absent for about seven months: this and the sickness of stomach, which was principally in the morning and had lasted for several months, were the grounds for the statement of the patient that the vomiting was merely the morning sickness of pregnancy.

The vomiting was almost uncontrollable, and I experienced extreme difficulty in arresting it. Ice was given, also milk and lime-water, enemata of concentrated beef-tea; and a mixture containing hydrocyanic acid, morphia, and solution of bismuth was administered with but slight improvement; blisters were applied to the epigastric region, and all food and drink given in very small quantities at a time. The thirst being intense, dilute phosphoric acid was prescribed with benefit; this, and sucking a thin slice of lemon and small pieces of ice, to a great extent relieved this distressing symptom. About the latter end of January, the vomiting gradually ceased, and at last it only occurred in the morning; vesicating collodion was again used over the pit of the stomach, and finally it disappeared, and did not recur again.

About the end of the month, two symptoms presented themselves for observation: double vision (from paralysis of one of the muscles of the orbit) and anæsthesia of a portion of the right side of the chest equal to a space covered by the palm of one's hand; they did not last longer than from two to three days, but were important as showing that the nervous system was being implicated.

On February 3rd, there was numbness of the knees and feet and very little sensation in either leg, a pretty sharp pinch not being felt. At this time, I gave a very unfavourable prognosis, and, on the 7th, met in consultation a medical friend, who corroborated my opinion. On the 8th, there were loss of motor power in both legs, inability to stand, cough, huskiness of voice; and, when swallowing liquids or solids, attacks of spasmodic dyspnoea occurred very constantly. The patient now complained of intense pain (hyperæsthesia) in the thighs, knees, and ankles. The pulse was very weak, the average beats per minute being 104 for the past week. The appetite was miserable, but she took a little jelly, ice, milk, etc., and a small quantity of Saumur champagne. The bowels had a tendency to constipation, and were regulated by occasional doses of Friedrichshall water. The patient was very irritable, and occasionally suffered from loss of memory, whilst the voice was gradually becoming weaker. Another consultation was now requested by her friends, some of whom could scarcely credit my assertion that the case was a hopeless one; and, on the 16th, I saw her with an eminent physician of this city, when she had great dyspnoea,

tracheal breathing, voice almost inaudible, and pulse 120 and extremely weak. Her nights were now restless, and drugs seemed to have no power in producing sleep; chloral-hydrate given in large doses and combined with bromide of potassium not being of any avail. On the 18th, there was oedema of both feet. Death took place early on the 20th, the patient being conscious to the last. During the last few days, the voice had fallen to a mere whisper, and it was only possible to understand a word now and then. The hands also had become affected, motive power being almost entirely lost.

The treatment was very simple, the principal difficulty being to arrest the vomiting; after this had been remedied, the patient took ten-grain doses of bromide of potassium, with small doses of morphia; tincture of iodine was painted over the hepatic enlargement, and an occasional night-draught of chloral was given, sometimes combining that drug with bromide of potassium.

It will be noticed that the first symptoms of the toxic action of alcohol on the nervous centres—viz., double vision and anæsthesia of a portion of the breast—was towards the latter end of January; these disappeared in a couple of days; but, on February 3rd, numbness of the lower extremities came on, and death supervened on the 20th, showing the swiftness with which various parts of the body had become involved in rapid succession.

THE PREVENTION OF POST PARTUM HÆMORRHAGE.

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INITIATED in midwifery by my late lamented friend Dr. Edward Rigby, I was early taught the importance of the "binder" as a means of preventing post partum hæmorrhage; and through a period of nearly thirty-three years, during greater part of which I have had a very extensive midwifery practice, I have only had one fatal case in my own practice.

In every case, I myself carefully bandaged the patient as tightly as possible with a shawl or large towel, in which I generally wrapped a book to form a pad over the uterus, with the best results, though I had then sometimes to deal with cases of hæmorrhage.

In the year 1861, however, I was engaged to attend one of the largest women I ever saw. She was tall and immensely stout. The labour was natural, but rather tedious; and, after it was over, violent hæmorrhage set in. Here any ordinary binder was useless; and to grasp the uterus through the parietes was impossible, from the immense quantity of fat on the wall of the abdomen. I had the advantage of the advice of my old friend Mr. S. D. Fereday, and all the means which we could devise were used without effect. We watched her for some hours, a certain quantity of draining going on in spite of our efforts; and we anticipated a certainly fatal issue. Where art had failed, however, nature came to her assistance, and she ultimately recovered.

In the following year, I was again asked to attend her, and was called to see her one Sunday morning. I had a most lively recollection of her last labour and a firm reliance on the binder, and was determined, if possible, to bring one to bear on her huge abdomen; so I went to a saddler who lived near, and there extemporised a binder. It consisted of an oval piece of the strongest "butt leather" he had, ten inches long by eight wide, to each side of which a strong strap (nearly as strong as stirrup-straps) with buckle was attached. With this I was able to attain some degree of pressure. Suffice it to say the labour went on well and no flooding took place.

For some time afterwards, I took my "binder" with me only when I had to attend stout persons; but I soon found that the comfort of it was so great and the advantages so signal, that I began to take it with me to every patient I attended, and have continued to do so for the last eight or nine years; and during that period I have not had a single case of hæmorrhage that has given me the slightest anxiety.

This is the practical fact I wish to bring forward: I apply the bandage gently before the child is born. I make the nurse press on the pad during the expulsion of the child. I then tighten the bandage pretty firmly; and, after the expulsion of the placenta, which is rarely long delayed, I again tighten it as firmly as the patient can comfortably bear. It is very rarely necessary to do more; but if the pains be sluggish or infrequent, and if pressure by the binder do not increase them, I give a dose of ergot just before the child is born.

My object in writing has been to insist on the importance of pressure (which is ably advocated by former correspondents of the