The custom, as far as relates to the army, is similarly obscured by the mists of antiquity; but there it has analogies as respectable as those of the navy, for it is recorded that Thomas de Brotherton, uterine brother of Edward I, as Marshal of England took from every merchant or sutler buying or selling in the army, from every prostitute, and from those who erected lodges or stalls, the sum of 4d. for every week or part of a week. That this custom prevailed in the reign of Henry VIII, is proved by a later manuscript (Cotton, Nero D, 6), in which it is defined "*what the marshal shall have of every artificer*". Thus, "the marshal should have of every merchant, armourer, taylor, barber, and every man that buyeth or selleth in the field, every Saturday, in and for assigning of them their places for keeping of their shoppes, *four pence*; and likewise he shall have of the said persons sojourning but two or three days in one place."

Independently of this exposition of compulsory revenue derived by the great officer of an army, in recompense for services rendered, this interesting document throws light on the economy of the camps (*temp.* Henry VIII); and shows that, whatever surgical staff and means were provided by the kings, there was in camps another body of practitioners under the designation of "barbers", who exercised their legal practice of surgery in private capacity, and paid the marshal for the privilege. Of these men, that trusty old surgeon, Thomas Gale, who served in the army of Henry VIII at Montreuil in 1544, and at St. Quentin in 1557, wrote as follows: "I remember, when I was in the wars at Montreuil, there was a great rabblement there, that took upon them to be surgeons. Some were sow-gelders, and some horse-gelders, with tinkers and cobblers." These affected to make miraculous cures; but the Duke of Norfolk, the general, observing that his soldiers were dying of small wounds, directed Gale and other surgeons to make inquiry into the practices of those men, on which he states: "We made search through all the camp, and found many of the same good fellows, who took on them the name of surgeons, not only the name, but the payes also." Finally, "this worthy rabblement was committed to the Marshalsea, and threatened to be hanged unless they confessed to what they really were."

In explanation of what the newly created company of barber-surgeons did for the king's service, he writes: "I have myself holpe to furnish out of London in one year 72 surgeons, who were good workmen, which served *by sea and land*, and were well able to serve, and all Englishmen. Now, there are not 34 of all the whole company of Englishmen, and yet the most part of them be in noblemen's service, so that if we should have need, I do not know where to find 12 sufficient men."

As Thomas Gale died in 1572, his testimony may be taken as authentic on the state of medical affairs in the army in the time of Henry VIII until the early part of the reign of Queen Elizabeth; and from it we learn that the most efficient of the surgeons of the royal services were those furnished by the company of barber-surgeons of London.

The next reliable authority is William Clowes, who served in Queen Elizabeth's navy and army, became surgeon of St. Bartholomew's and Christ's Hospitals, and finally surgeon to the queen. In 1596, when holding the latter high appointment, he published a work entitled, *A Profitable and Necessary Booke of Observation for all those that are burned with the flame of Gunpowder, and also for the curing of Wounds made with Musket and Caliver, Shot, &c.*, which may be accepted as the earliest English work on military and naval surgery. In this he details some cases highly creditable to the naval surgery of that age; and pays great respect to some surgeons who made long voyages, but of others in that service he writes with great indignation in these words:

"It is most truly said there is no coine so current but hath in it some counterfeit, which make it suspicious; so is there no profession so good but hath also some counterfeits, which breed in it disgrace; and none so much, I suppose, as there be in some these daies, that take upon them the honest title and names of *travelling surgeons*—nay, these are idle and ignorant menslaers, or wandering runagate surgeons, that I speake of, which very boldly, with most glorious facings, challenge unto themselves to be the onely Masters of Chirurgery in the world, because they have a little travelled. Nevertheless, a number of these old, arrogant, and frivolous fellows are known to be men altogether ignorant of the art, both in reason, judgment, and experience; howbeit, some one of them will use more comparisons, prating and babbling words, than four wise men would willingly answer; and you shall also further know them by this note: They are most commonly unfurnished of all good medicines, either medicinal or instrumentall, unless it be some such paltry stuffe which a man would scarce lay to a gauld horseback, with other furniture answering to the same. And so they are no more able to performe any good cure they take in hand than they be able with one puffe of their winde to turn about a millstone, for their cures at their

comming home are plain demonstrations of their beastly ignorance, and thus they bring themselves to ignominie and shame, and the worthy artist into very great discredit. Therefore, friendly reader, let this be a warning unto thee, to take heede of these uncleane birds, who doe daily abuse many worthy persons, captaines, gentlemen, masters of ships, and merchants of good account by reason of the shamelesse braggings and boastings of their great, divine, magnificent skills in physike and surgerie, wherewith we say they are adorned, and exceed all others, under color hereof, by their fraud and subtile means; they have bene and daily are entertained to be *principall surgeons for great ships of war*, and charge of numbers of men: and having received aforehand towards the preparation and furnishing of their surgerie chests of some £20, and of some £40 and £50; but in conclusion, they falsified their promises, for shortly after they had received their money, they lay aloofe off, lurking for opportunitie, and so in the end ran away, and could not bee found nor heard of, untill the captaines that hired them had set saile and gone forwards in their great and long voyages without any surgeon at all. But, good reader, what hath ensued hereof? Truly, many a brave souldier and mariner hath perished, and sometimes the generall and captaines themselves, and so by this meanes, partly, the whole voyage hath bene overthrowne, by reason they had no helpe or succour, either of physike or surgerie, to relieve or comfort them. But what remedie or redresse I know not, they are no changelings, for still they persevere in their wickednesse, without check or controulment. The like broode of abusers and abuses I read of in some sort in a certain history, which lately came to my hand, and it is published in the French tongue, by a most famous surgeon in France, one Gulemeu (Guillemeau), surgeon to the French king, and it is written by him, etc."

[To be continued.]

ON THE USE OF IPECACUANHA IN INFANTILE DIARRHŒA.

By ROBERT FARQUHARSON, M.D.,

Physician to the Belgrave Hospital for Children.

ALTHOUGH ipecacuanha had long been known to possess some influence in checking excessive intestinal evacuation, it is only within the last few years that its powers in this direction have been accurately defined. Mr. Docker was, I believe, the first to point out that this drug may be relied upon as a true specific in cases of acute dysentery; and ample confirmatory evidence has now established the fact beyond all possibility of doubt.

Dr. Ringer, in his suggestive work on *Therapeutics*, tells us of the signal service rendered by small and frequently repeated doses of the wine in various forms of infantile diarrhœa; and Dr. Thorowgood, in the last volume of the Clinical Society's *Transactions*, has furnished the details of two cases of very inveterate dysenteric diarrhœa, rapidly cured by powdered ipecacuanha. Acting on the hints supplied by these able observers, I have recently been giving this remedy a full and impartial trial in a considerable number of cases of diarrhœa at the Belgrave Hospital for Children, and with results so satisfactory, that I feel myself justified in laying my experience briefly before the profession.

Without entering at present into the wide field of the varieties of this troublesome affection, or the endless forms of treatment which have been proposed, I shall, in the first place, lay down the familiar proposition, that many of these cases are due to the irritation of some unwholesome or ill digested article of diet. If, therefore, we can see our little patients early enough, the common sense indication is clear, and we can usually effect what we may really flatter ourselves is a cure, by prescribing some mild aperient. But it is very rarely that our services are required at this manageable stage; and, as a general rule, domestic, and, perhaps, even more skilled, treatment has been exhausted in the endeavour to check what has now become a chronic diarrhœa. The time for elimination having gone by, for it is hardly reasonable to suppose that irritating matters can linger about the intestines after days or weeks of active purging, we are bound to try the other remedies at our disposal. Now, as a rule, I have found that the diarrhœa of children does not bear astringents well.

Temporary benefit may seem to be derived from one or other drug of this class; but, after a few days, the purging returns as badly as before, and the patients suffer, as they often do, under the ill considered use of strong tonics, with headache, dryness of tongue, and slight feverish symptoms. We are, therefore, compelled to change our treatment from time to time; and, even after a careful trial of various and widely contrasted pharmacopœial preparations, we may find that we are making no progress, and that the patient is being gradually exhausted

by a number of dark, loose, and offensive evacuations. Ipecacuanha will here do us good service, and a very few doses will usually not only greatly improve the character and consistence of the alvine discharges, but greatly diminish, or quite check, their abnormal frequency without causing subsequent torpor of the bowels.

Dr. Ringer has well shown that in those few cases in which the drug does not absolutely stop diarrhoea, it causes the motions to become more solid and of natural colour, and that, no matter whether they be originally brown, green, or yellow, this beneficial result is produced. But my experience leads me to add, that ipecacuanha is not only quite useless, but may even do harm in those cases where the evacuations are whitish and watery. It is not uncommon, however, during cold or damp seasons of the year, to meet with diarrhoea in which dysenteric symptoms prevail, and where a previously healthy child is suddenly seized with purging of blood and slime, attended by great abdominal pain, tenderness, and tenesmus. We will here find that ipecacuanha exerts almost a specific action; and I have even found that a single dose of one grain has been sufficient to bring about most marked improvement in these troublesome symptoms.

I will now relate a few short cases in illustration of the preceding remarks.

CASE I.—Rosina W., aged 10, had been under my care as an out-patient at the Belgrave Hospital for some little time for diarrhoea, which had latterly assumed a dysenteric character. Six or seven loose and slimy motions, mixed with blood, were passed daily, and the pain and straining were so great as to reduce the girl's strength in a very considerable degree. Varied treatment having failed to give relief, she was ordered, on October 13th, a grain of powdered ipecacuanha and three grains of tragacanth powder thrice a day. On the 16th, the pain was quite gone, the number of evacuations was reduced to two in the day, and their consistence and quality were greatly improved. The ipecacuanha was increased to two grains; and on the 20th she was discharged well.

CASE II.—E. B., aged 4, a pale languid child, came under treatment in September for chronic diarrhoea, the motions being very frequent, and consisting of whitish slime. Astringents with opium were here quite useless; and no progress was made until ipecacuanha was prescribed in doses of a quarter of a grain, gradually increased to one grain, when all the symptoms rapidly subsided.

CASE III.—J. S., aged 3, was in hospital for a severe attack of broncho-pneumonia. The case went on most favourably until December 18th, when she was attacked by diarrhoea, consisting of a large number of dark offensive motions. The temperature went up several degrees, and the child was becoming much weakened by the discharge; but four powders of half a grain of ipecacuanha were sufficient to check what might have become a formidable complication.

CASE IV.—L. T., aged 5, came under observation at the Belgrave Hospital, on January 29th. He looked extremely anæmic and feeble, and was the subject of mitral disease; but, in addition to this, his mother stated that he had suffered for some months from chronic diarrhoea, the stools being almost hourly, and consisting of blood and mucus. A grain of powdered ipecacuanha was ordered to be taken thrice a-day; and on the 22nd I was gratified to learn that the diarrhoea had quite ceased.

Did space permit, or were it in any degree necessary for complete proof, I could adduce many more cases from a considerable experience of the use of ipecacuanha in children's diarrhoea; but I venture to think that those I have just related are sufficient to show how valuable this remedy really is. It will be observed that I have invariably made use of the powder in preference to the wine; and this I have done, not only because Dr. Ringer has quite established the merits of the latter preparation, but because its powers were recently developed in the most satisfactory way by the rapid recovery of a very severe case of tropical dysentery under the care of my colleague Dr. Anstie. I was, therefore, desirous of testing the true efficacy of the powder; and my comparative experience has shown me this, that it is more certain, as well as more rapid in its action, is better borne by the stomach, and, from its form, is more readily taken by children. I have often found the wine to fail where the powder has subsequently done good; and, as a general rule, I find it advisable to begin with doses of not less than from half a grain to one grain. Usually, there is a remarkable toleration of the drug, and I have frequently given five grains to quite young children without provoking even the slightest nausea. The combination with compound tragacanth powder, as proposed by Dr. Thorowgood, is a very good one; and, if a mixture be preferred, we may construct a very palatable prescription, with mucilage, hydrocyanic acid, and syrup of orange-peel, with, perhaps, a little compound tincture of cardamoms. The hydrocyanic acid I am inclined to look upon as of some little importance, as a trial of this remedy, in conjunction with

ipecacuanha wine in cases of whooping-cough, has convinced me that it neutralises in some measure the emetic action of the ipecacuanha; and, although I have just stated that the use of the powdered drug in comparatively small doses very rarely irritates the stomach, it may cause this unpleasant action now and then, and the combination just referred to may be of service in those more serious cases where the remedy is employed on a much larger scale.

MORTALITY AFTER AMPUTATIONS.

By ROBERT HAMILTON, F.R.C.S.,
Surgeon to the Royal Southern Hospital, Liverpool; etc.

THE views set forth by Mr. Erichsen on Hospitalism, in the pages of the *BRITISH MEDICAL JOURNAL*, will be read by all hospital surgeons with extreme interest. The distinguished position held by the writer, and his long connection with University College Hospital, together with the fact that he is the author of one of the most popular and widely known works on surgery, all combine to invest his opinion with very great weight.

The following statement, contained in Mr. Erichsen's lecture, at page 97 of the *BRITISH MEDICAL JOURNAL* of January 24th, arrests the attention, as it seems to discourage any interference on the part of the surgeon in those terrible railway accidents now so common, where one or more limbs have been frightfully mangled.

Mr. Erichsen says: "In extensive crushes and disorganisations of the lower extremity up to or even above the middle of the thigh, such as are now unfortunately frequent in railway accidents, in which the mangle of the limb more resembles that produced by a cannon shot than by an ordinary injury of civil life—in these cases, amputation at the thigh, or at the hip-joint, is the only available operation. Is it ever successful? I am not acquainted with a single case in which such an operation has succeeded in general hospital practice. For my own part, I shall never again amputate in that situation for such injuries."

This is strong and decided language. During the earlier part of my hospital experience I might have acquiesced in it; but some cases, of late years, have shown me that a careful removal of all disintegrated tissue does not add to the shock, and certainly places the patient in a more favourable position to rally. In a paper, which appears in the *Liverpool and Manchester Medical and Surgical Reports* for this year, on the after-treatment of large amputations, I have related three cases of extreme injury, where shock ought, and probably would, have proved fatal, if it had been supplemented with operative interference conducted in the usual manner. That they survived, I feel sure was as much due to the extreme care not to do anything which might intensify the shock the system had sustained; and, though immediate amputation was resorted to, yet this was done in a way that brought no fresh complement of abnormal action for the weakened vitality to contend against.

In one case, a young man had fallen in a railway cutting, and the wheels of several trucks had passed over his right thigh, crushing it completely through the middle third; all below was a disorganised mass. He lay unnoticed for more than half-an-hour; and, when taken up and brought into the hospital, his state of collapse was extreme; he was pale, pulseless, and cold; life seemed almost to have ebbed away. He lay on a stretcher on his stomach. Without the slightest disturbance, the stretcher was placed on a truck, the latter was raised by the lift to the operating-theatre, and there, without even turning him on his back, I proceeded to remove the injured limb; first securing the artery, then sawing off the bone in its upper third, and making the best flaps I could; when that was accomplished, I stopped. No attempt was made to bring the flaps together with sutures, but the stump was lightly covered with cotton-wool. After a time, he was carefully lifted on to a bed; occasional teaspoonfuls of brandy and water, or of iced water, were given him. In about twelve hours, he began to show signs of rallying. His progress after that was most satisfactory. He recovered with an excellent stump.

The only other case I will relate is that of a little girl of eight years. She was knocked down by a tramway-car, and both her arms were crushed, torn, and reduced almost to a pulp, each hanging merely by shreds of skin and muscle; both humeri were broken into splinters, and one leg was broken. Here, with the same care to disturb her as little as possible, I removed, within an hour of the accident, the mangled limbs. On the one side, only the head of the bone could be left in the glenoid cavity covered with the remains of the deltoid muscle, but the latter was short of skin-covering; on the other side, three inches of the humerus were left but with a bare allowance of skin. The state of collapse passed away in twenty-four hours, and the child made a good recovery.