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.

Two other cases, equally severe, have occurred to me; both recovered. I therefore must dissent from Mr. Erichsen's opinion, that cases such as he has alluded to "are hopeless alike, whether they are left or subjected to the knife."

A DESCRIPTION OF THE "SONDE À VIS PORTANT UN CONDUCTEUR".

By W. F. TEEVAN, B.A., F.R.C.S., Surgeon to the West London Hospital, etc.

THIS useful instrument, unknown, I believe, in this country, but used by Mr. Stokes of Dublin, and by American surgeons, was introduced into practice many years ago by M. le Docteur Ch. Phillips of Paris; and when I mention that that gentleman was sent for by M. Nélaton when he was unable to pass an instrument, and that he succeeded where the great master of surgery had failed, I think it will be deemed unnecessary for me to say much for an instrument coming from such an authority. The *sonde à vis portant un conducteur* is, as its name expresses, composed of two parts—a flexible bougie and an elastic catheter. The bougie tapers away at one end to a fine line, whilst its other extremity (A) enlarges to about the size of No. 2, and is fitted with a screw, which works into a socket on the vesical end of the catheter (B). The ends (C and D) of the bougie and catheter are screwed together like the bamboo rods used by the chimney-sweeps. The bougie is first passed into the bladder, and the catheter is screwed on to it, and then pushed slowly into the bladder, causing the whole of the bougie to enter that viscus, where its great flexibility allows it to coil up and remain quietly, without the patient being aware of its presence till the catheter has effected its object of drawing off the urine. The entire instrument is then withdrawn, or the catheter can be unscrewed to leave the bougie *in situ*, to serve as a guide for the next occasion, or to dilate the stricture.

The instrument is most useful. Firstly, for those cases of enlarged prostate and tumours of the bladder where the urethra is so tortuous that no ordinary catheter can be passed. The slender bougie can be wriggled in first, and so guide on the catheter. Secondly, for cases of stricture where the difficulty arises not so much from the tightness of the stricture as the deformity of the canal (Delpsch). Thirdly, for the performance of internal urethrotomy in the deeper portions of the urethra. When the *sonde à vis* has demonstrated that the bougie is in the bladder, it can be unfastened from the latter, which is then screwed on to the urethrotome to conduct it into the organ.

ON THE ESSENTIALS FOR EFFICIENT SANITARY WORK IN RURAL DISTRICTS.

By FRANCIS T. BOND, M.D., B.A. Lond.,
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THE success of sanitary, as of all other work, depends, in a large degree, upon its being commenced upon a proper basis. To lay an unsatisfactory foundation for the edifice of sanitary reform is attended by a double disadvantage; not only is the building itself insecure, and at all times untrustworthy, but the mere inertia of the materials which are piled upon it may prevent its subsequent reconstruction, except with an amount of difficulty which would be practically prohibitory. Even if the medical officer of health has himself the courage, after making a false start, to "try back" and to adopt a new plan of action, his Authority, and its other officials, are pretty sure to offer opposition either of an active or passive kind. Hence, it behoves him, for both his own satisfaction and protection, to decide carefully at the outset what scheme of organisation he will adopt with the view of enabling him to make himself thoroughly well acquainted with the sanitary state of his district, and to exercise that supervision over the steps that may be necessary for its improvement, which it is his interest, no less than his duty, to maintain.

There is one condition which is essential to the organisation of all sanitary work, and that is an efficient sanitary survey. Without such a survey, the knowledge of the medical officer of health can be neither exact, comprehensive, nor trustworthy. Without it, neither he nor the Authority can know what is the general state of the district, either at the outset, or at any subsequent period of their operations; and the advice which he may give to that body is always liable to be upset by the dogmatic assertions of prejudiced opponents, for want of being founded upon the solid basis of statistical facts. I am led the more strongly to insist upon the importance of a point which I should have thought self-evident to every intelligent person who has a real wish to forward the cause of sanitary improvement, because I know of cases in which considerable opposition has been made to the institution of a detailed sanitary survey by persons of intelligence, and even of reputation as authorities on sanitary matters, on the ground that it was superfluous and inquisitorial. Any person who maintains this position is evidently ignorant of the very elements of sanitary work. I will say nothing of the opposition which is occasionally offered to a survey by those who do not profess to be either acquainted with or interested in sanitary improvements. Such opposition is to be expected, and, where met with, may be taken as a good criterion of the difficulties which may be afterwards experienced in the more arduous work of rectifying sanitary defects. The readiness with which a Sanitary Authority adopts a recommendation by its medical officer of health for a detailed sanitary survey of the district, and with which the inspector proceeds to carry it out, is the best touchstone of the zeal with which both will support the further course of action which should follow upon the completion of the survey. I will now proceed to discuss the features which it appears to me important that the survey should embrace, and the method of proceeding which should be adopted by the medical officer of health in dealing with them. My opinions are founded upon the experience of a large district,* as well as upon that of other medical officers of health with whom I have communicated.

I think it desirable to express a very strong opinion at the outset upon the expediency of keeping the details of the sanitary survey quite distinct from those of the action taken in dealing with nuisances; and I do so because, in certain forms which have been largely circulated amongst Sanitary Authorities, the two are jumbled up together in a way which shows entire want of practical experience on the part of those by whom they have been drawn up, and which cannot fail to lead to inextricable confusion in attempting to use them as a complete record for either purpose. The sanitary survey is, and should be, only a record of facts, for the information of the Sanitary Authority and of the medical officer of health. In addition to it, there should be a distinct form for the registration of nuisances. Such a form will be a record of action on the part of the Sanitary Authority, the medical officer of health, or the inspector of nuisances, and to attempt to combine the two can only lead to carrying out neither of them satisfactorily.

The following are the provisions for information which the sanitary survey should include. I will take them in their order, each being supposed to be represented by a column of appropriate width.

1. *Consecutive Numbering*—from one upwards.
2. *Cross-reference to Record of Nuisances*, so that it may be seen at a glance whether any nuisance which the survey indicates as existing on the premises has been transferred by the inspector to the record, with the view of its being dealt with.
3. *Date of Inspection*.
4. *Situation and Description of Premises*.
5. *Names of Occupier and Owner*.
6. *Number of Rooms and Inmates*, with subdivisions for enumeration of living-rooms, sleeping-rooms, and inmates. In this column, the inspector should indicate whether the occupants consist of more than one family, or not, by adding to the number of the inmates (2, 3, 4, etc.), and, in case of lodgers, by appending (1, 2, 3, etc.). Where he has reason to consider that overcrowding exists, he should give the cubic capacity of each room, and the number of persons sleeping in each bedroom. It is of no practical importance that he should do so in other cases, and only involves unnecessary trouble. It is well that the inspector should sum up the total of each column at its bottom, carrying the totals on from page to page; this gives him very little labour at the time, and will save a good deal to the medical officer afterwards.
7. *Nature, Situation, and Condition of Closet-accommodation*.—These three items will include all that it is necessary to know under this head. Under "nature" will be stated whether it is a common privy, with open or covered cesspool, an earth-closet, or a water-closet; under "situation," whether inside the house or out, and, if the latter, at what

* I believe that my district is almost the largest in the kingdom, consisting of fourteen Sanitary Authorities, with a population of 130,000, and extending over 450,000 acres.