tried many times to swallow a dose, but did not succeed. The next day the medical attendant was informed of the dog-bite for the first time; he did what he could to encourage the parents, who were much alarmed, and in their excited state it appears they actually forgot to tell him that the boy could not swallow the mixture. I was sent to the case on Jan. 14th at 3 P.M. The little patient was clinging very closely to his mother's neck; he made some inarticulate sounds and seemed greatly excited; he struggled continuously, but did not loosen his hold on the neck of his mother for an instant. A young woman washing dishes at a table near was splashing water about rather noisily. She desisted at my request, when the suffering child became quiet, relaxed his clasp, and smiled. There was a little girl in the room who now approached him. He gently stroked her face and hair, saying "Mary, Mary." After about ten minutes had elapsed a teaspoonful of water was offered him, but he no sooner saw it than he clenched his teeth and screamed. This was tried many times and in various ways, but he could not be induced to swallow the smallest quantity. He did himself try once or twice, but the effort was too great and ended in the same way. The jaws became fixed. There was spasmodic contraction of the thoracic muscles, and inarticulate cries. Exactly the same effect was induced by the mother of the child drinking some water when she endeavoured to persuade him to swallow. After every paroxysm there was a flow of saliva; sometimes viscid, sometimes frothy, and at other times watery. A clean handkerchief was handed to him, which he used unceasingly, wiping the mouth, and occasionally twisting and thrusting it into the throat till he appeared to be almost suffocated. When an opportunity occurred I examined the boy according to rule. The tongue was white and enlarged; the pulse was 100 and of fair volume; the temperature did not appear to be high (I could not ascertain it precisely, of course). The pupils were widely dilated. The expression of countenance was gentle and dreamy. The respiration was natural. The examination described in these few words was made at intervals and with great difficulty. The friends were recommended to have the case removed to the infirmary, and on this step being objected to Dr. W. A. Evans, medical officer of health for Bradford, was communicated with. My friend saw the patient in my absence, and thus had the opportunity of forming an independent judgment. At 5.30 P.M. my assistant, Mr. W. M. Muat, saw the child and observed the same train of symptoms. Perfect quietude was observed in the house. The patient frequently held out his hands for the glass of water always in readiness, but directly it was passed towards him he became violently convulsed. At 11.30 the same night he was visited again; he was then sitting on the couch in a peculiarly excited condition, tearing a newspaper into small pieces and talking incoherently; if his attention was suddenly attracted he became sensible for a moment, but relapsed immediately. He was never still, raising himself from his seat and falling back continually. Saliva was running from the mouth all the time; this he wiped away in the manner before described, forcing the handkerchief into the mouth and occasionally clutching his throat with both hands. The poor child expired quite suddenly about three o'clock next morning. There was no inquest.

I ought to mention that the dog, having bitten the child, was tied to a chair in the house of its owner, where it contrived to strangle itself. The body of the creature was sent to one of the destructors, so we had not an opportunity of examining it.

Bradford, Yorks.

THE REMOVAL OF PATIENTS TO ISOLATION HOSPITALS.¹

By G. H. FOSBROKE, M.R.C.S. ENG., D.P.H. CAMB.,
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THE WORCESTERSHIRE AND HEREFORDSHIRE BRANCH OF THE
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As the question of providing isolation hospitals is now coming prominently to the front, and I have been officially connected with two such institutions in rural districts for many years past, it occurs to me that my experience with

¹ A paper read at the Midland Branch of the Society of Medical Officers of Health on Jan. 3rd, 1895.

regard to the distances patients suffering from infectious diseases can be safely removed to hospital may be of interest to some. Having carefully considered the question, I have come to the conclusion that, assuming the locality to be non-mountainous, the highways good, and suitable ambulances (with attendant nurses) provided, such persons may without harm be removed as far as eleven or even twelve miles. Table I. shows the distances patients have been removed to six hospitals in Worcestershire and Warwickshire.

TABLE I.

	Alcester.	Evesham.	Kidderminster.	King's Norton.	Solihull.	Warwick.	Total.
Under 1 mile	302	9	11	—	39	—	361
From 1 to 2 miles ...	73	61	28	85	95	268	610
„ 2 to 3 „	67	4	741	331	138	—	1281
„ 3 to 4 „	—	26	57	311	75	1	470
„ 4 to 5 „	205	64	8	104	145	20	546
„ 5 to 6 „	362	72	7	274	16	55	786
„ 6 to 7 „	138	17	—	22	11	—	188
„ 7 to 8 „	42	2	20	3	16	7	90
„ 8 to 9 „	3	—	6	—	19	21	49
„ 9 to 10 „	2	—	2	—	11	9	24
„ 10 to 11 „	—	—	—	15	3	36	54
„ 11 to 12 „	—	—	—	7	18	—	25
Total	1194	255	880	1152	586	417	4484
Population of hospital district	17154	15072	38258	28300	29822	55200	—
Area in acres of hospital district	55071	47679	35129	22454	48693	68300	—

From this it will be seen that 242 patients in the above districts have been removed distances of from seven to twelve miles. I have selected these hospitals because I am personally acquainted with all of them, and have been officially connected with the Alcester and Evesham Hospitals since their establishment in 1875 and 1887 respectively. The majority of the cases removed to these hospitals were scarlet fever; the remainder were small-pox, diphtheria, and typhoid fever, there being comparatively few of the last named. It has been the custom in these districts for the medical adviser to state whether or not the individual patients are fit for removal and on that certificate the ambulance is sent. Thoroughly good ambulance arrangements and provision are in my opinion absolutely essential. It is by this means that it has been found practicable in London to transport cases of fever and small-pox (for distances equal to and even greater than those above mentioned) to the hospital and hospital ships of the Metropolitan Asylums Board. This has been done now for several years with safety to patients who are certified by their medical advisers to be fit for removal. In my opinion the powers conferred on county councils by Sections 6, 7, 8, and 9 of the Isolation Hospitals Act, 1893, should be utilised in rural and small urban districts to their fullest extent, inasmuch as the constitution of hospital districts including extended areas is generally conducive to efficiency as well as economy. Sections 6, 7, 8, and 9 of the Isolation Hospitals Act just referred to read as follows, viz. :—

“6. The county council may direct an inquiry to be made by the medical officer of health of the county as to the necessity of an isolation hospital being established for the use of the inhabitants of any particular district in the county, and in the event of such medical officer reporting that such an hospital ought to be established for the use of the inhabitants of a district, may take the same proceedings in all respects for the establishment of such hospital as if a petition had been presented by a local authority for the establishment of an isolation hospital for the district named in the report of such medical officer of health.

“7. The county council shall conduct the local inquiry into the necessity for the establishment of an isolation hospital, and as to the proper site for the hospital and the district for which it is to be established (in this Act called the hospital district), by a committee consisting of such number of their members either with or without the addition of such other persons or in such a manner as the council think expedient. All expenses properly incurred by any such committee shall be paid as hereinafter directed. The local inquiry shall be held subject to such regulations and otherwise as the council think fit. Due notice of the time and place at which any inquiry is to be held by the county council shall be given in such manner as the county council may think the best adapted to inform any persons interested, and such persons may attend and state their case before the members appointed to conduct such inquiry.

“8. (1) Every hospital district constituted under this Act shall consist of a single local area or two or more local areas as defined by

this Act. (2) The county council may vary any proposed hospital district by adding to it or subtracting from it any local area. A local area which is already provided with such isolation hospital accommodation as may, in the opinion of the county council, be sufficient for the reasonable exigencies of such area shall not without the assent of the local authority of such area testified by a resolution of such authority be included in the hospital district under this Act. (3) If any local authority having jurisdiction within any part of the proposed hospital district object to the formation of such a district or to the addition or subtraction thereto or therefrom of any local area within their jurisdiction, such authority may at any time within three months from the date of the order appeal to the Local Government Board, and the decision of such Board shall be conclusive. "9. On conclusion of a local inquiry by the county council as to the necessity for the establishment of an isolation hospital, the county council shall make an order either dismissing the petition or constituting a hospital district and directing an isolation hospital for such district to be established. Provided that the county council shall not take steps for the constitution of a hospital district for one or more contributory places forming a portion of a rural sanitary district within the jurisdiction of the county council, or for one local area, unless the sanitary authority of such place or places or area assent to the application or are proved to the satisfaction of the county council to be unable or unwilling to make suitable hospital accommodation for such place, places, or area."

The county council of Worcestershire, after holding an inquiry by a committee of three of its members, one of whom was Sir Douglas Galton, K.C.B., have recently issued an Order (Section 9) grouping six sanitary districts (four urban and two rural), which collectively include an area of 104,973 statute acres and a population of 54,379. The following table gives the area and population of these districts.

TABLE II.

District.	Area in statute acres.	Population.
Bromsgrove country urban district ...	10,596	5,072
Bromsgrove town urban district. . .	1,061	7,934
Redditch urban district	888	11,295
Droitwich urban district	1,705	4,021
Droitwich rural district	52,496	14,221
Bromsgrove rural district	38,227	11,836
Totals	104,973	54,379

The populous parts of this hospital district are for the most part situated to the centre of this area; but, on the other hand, there are two villages of considerable size which will be about twelve miles from the hospital. I propose, for the convenience of the medical officers and friends of the patients, that telephonic communication should be established between the hospital and the offices of the respective constituent authorities. By grouping these districts in this way I was able to show that considerable economy in construction and maintenance would be effected, as well as efficiency promoted, compared with any attempt on the part of the district councils interested to act independently. In conclusion, therefore, I submit that in most rural and small urban districts "grouping" of such areas for hospital purposes is desirable both for financial and other reasons. Furthermore, my experience—which I have recently learnt is corroborated by that of several medical officers of note—induces me to affirm that such a hospital district may often advantageously include a circle having a radius of eleven to twelve miles from the hospital as its centre, provided that the locality be non-mountainous, the highways well kept, the hospital accessible, and that thoroughly good ambulance arrangements are made.

Worcester.

A CASE OF DIPHTHERIA SUCCESSFULLY
TREATED BY INSUFFLATIONS AND
TABLOIDS OF PURE SULPHITE
OF MAGNESIUM.

By BROWNLOW R. MARTIN, M.B. DUBL.

THE following case, which presents many points of interest, seems worthy of record in the columns of THE LANCET. On Wednesday, Jan. 16th, 1895, I was called in consultation by my friend, Dr. F. F. Moore of Mill-hill-park, to see a girl five years of age. On the previous Sunday, Jan. 13th, Dr. Moore saw this child for the first time, and then found a

slight membranous patch on one tonsil, the temperature being 102° F. As this patch continued to increase and spread he, suspecting diphtheria, asked me to visit with him. On our arrival on the afternoon of the 16th the case presented the following appearance. The tonsils, soft palate, uvula, and pharynx were thickly coated with leathery membrane, leaving no doubt in my mind that the surmise was correct. In order to make sure I removed some of the exudation with a sterilised swab and with it inoculated a tube of sterilised blood serum obtained from the Clinical Research Association, and handed it to the patient's father to transmit by post to that society for examination by their experts. I then freely insufflated the throat with pure magnesium sulphite, and Dr. Moore kindly did so three or four times daily, and between whiles the tabloids were administered. The result of bacteriological examination was as follows:—"The culture shows large numbers of typical colonies of diphtheritic growth. Microscopic examination of the culture shows the colonies to consist of almost pure bacillus diphtheriæ; a few streptococci are associated with the bacillus." On visiting again with Dr. Moore on Friday, the 18th, the membrane had completely disappeared with the exception of a small patch not so large as a threepenny piece on one tonsil, and when I visited with him on Sunday, the 20th, every trace of membrane was completely gone. The points to which I would call attention are: 1. As to the child, she was thin, delicate, and anæmic, not in any way gifted with a constitution calculated to inspire one with much confidence as to her inherent ability to successfully combat an enervating disease. 2. Not only were the bacilli of pure diphtheria present, but also some streptococci. 3. No medicine of any kind was administered internally except the tabloids, the treatment relied on being the insufflations. 4. The rapidity of the cure. 5. The complete absence of any sequelæ, which, up to this day, the thirtieth, have not appeared.

Hammersmith, W.

A Mirror
OF
HOSPITAL PRACTICE.
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CHARING-CROSS HOSPITAL.

ENUCLEATION OF HYDATID CYST OF LIVER; RECOVERY;
REMARKS.

(Under the care of Mr. JOHN H. MORGAN.)

THE treatment of hydatid cysts of the liver has, like most other diseases of that organ amenable to surgical operation, undergone various changes during the past few years. With reference to tapping of such cysts it is interesting to get definite records of cases, and these are supplied by the statistics of Dr. Davies Thomas¹—411 cases treated with the following result: 163 were reported cured, in 92 the operation failed to cure, in 68 relief was afforded, in 5 no relief was afforded, in 10 the result was unknown, and 73 died. Better results have been obtained by direct incision and drainage, the cyst being stitched to the margins of the abdominal wound. This method has been replaced by the removal of the mother cyst at the time of incision. Dr. J. C. Verco,² in a paper on the treatment of hydatid cysts, stated that he has never seen a surgeon in South Australia leave the membranes in a hydatid cavity after it had been opened by incision. He also pointed out that the fear of hæmorrhage should not deter the surgeon, as there is no organic connexion between the cyst wall and the cavity in which it lies.

The patient, a woman aged thirty-eight years, had noticed for four years a fulness unaccompanied by pain in the right hypochondrium. Except for an attack of dysentery in childhood, she had enjoyed good health and had never had jaundice. She had lived in England all her life. On Aug. 9th,

¹ Sajous' *Annals of the Universal Medical Sciences*, 1894, vol. iii., cap. 5. ² *Ibid.*, 1892, vol. iii., cap. 25.