of positives rises with the interval of rest from treatment, so that the comparison is rather unfair on salvarsan. The table shows that the proportion of positive reactions is considerably less in the case of salvarsan, and it seems justifiable to say that the injection of salvarsan leaves the patient better from a Wassermann point of view than two years of treatment by mercurial injections. Possibly injections may not be the best form in which to administer mercury. My experience, again, from the point of view of the pathologist, is that they are as good as, if not better

TABLE I.—*Showing the Results of Wassermann Tests carried out on Untreated Primary and Secondary Cases of Syphilis, and on Treated Secondary, Tertiary, and Latent Cases.*

Stage of the Disease.	Results Obtained by the Original Test.			Results Obtained by Stern's Modification of the Wassermann Test.		
	Total Cases.	Positive.	Negative.	Total Cases.	Positive.	Negative.
Primary	190	123	67	123	90	33
Secondary untreated ...	145	139	6	77	76	1
Treated Cases (not with Salvarsan).*						
Secondary	294	195	99	189	161	28
Tertiary	44	34	10	15	13	2
Latent 1 to 6 months ...	164	76	88	101	69	32
Latent 6 to 12 months	145	74	71	67	47	20
Latent 12 to 18 months	139	57	82	74	50	24
Latent 18 to 24 months	57	14	43	22	17	5
Latent 2 years or more	48	11	37	36	25	11

* That is, have had not less than one complete course of six mercurial cream injections.

TABLE II.—*Showing the Effect of Mercurial Injections on the Wassermann Reaction in Syphilis.*

Tested After.*	Results Obtained by the Original Test.			Results Obtained by Stern's Modification of the Wasserman Test.		
	Total Cases.	Positive.	Negative.	Total Cases.	Positive.	Negative.
First course of six weekly injections (Hg. gr. j in each)	88	65	23	38	31	7
First interval of two months	21	15	6	14	11	3
Second course of four fortnightly injections (Hg gr. j in each)	79	42	37	35	26	9
Second interval of three months	26	18	8	23	22	1
Third course of four fortnightly injections (Hg. gr. j in each)	79	42	37	46	35	11
Third interval of three months	34	18	16	24	18	6
Fourth course of four fortnightly injections (Hg. gr. j in each)	101	32	69	72	43	29
Fourth interval of six months	40	23	17	26	16	10
Fifth course of four fortnightly injections (Hg. gr. j in each)	52	19	33	32	20	12
Fifth interval of one month	56	14	42	40	25	15
Sixth or seventh course of four fortnightly injections	81	28	53	51	36	15
Three months after end of usual period of treatment	124	47	77	73	56	17

* The number of injections stated is the minimum, and the length of interval the maximum in each case.

TABLE III.—*Showing the Effect of Salvarsan Injections on the Wassermann Reaction.*

Period which had Elapsed from Date of Injection to that of Test.	Results Obtained by the Original Test.			Results Obtained by Stern's Modification.		
	Total Cases.	Positive.	Negative.	Total Cases.	Positive.	Negative.
Six to twelve weeks ...	165	39	126	162	47	115
Three to eleven months*	99	33	66	97	44	53

* The results under this heading are based on the last test carried out on the serum of each case. The period is calculated from the date of the *last* injection.

than, any other. May I mention that all question of bias, subconscious or otherwise, in these tests was eliminated by the fact that I generally do from fifty to eighty Wassermann tests at one time, that each serum is designated by a number, and that I dictate each result, so am entirely ignorant of the nature of the case when it is read?

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

FATAL CASE OF HAEMATEMESIS IN AN INFANT SIX HOURS OLD.

Two cases of gastro-intestinal haemorrhage in the newborn have been published in the JOURNAL this year, one (July 1st) which recovered, and one (April 29th) in which death ensued at 36 hours. A number of cases have been recorded in the *Lancet* and in the BRITISH MEDICAL JOURNAL since 1900, and the pathology seems somewhat obscure. Amongst the causes given, erosions or ulceration of the stomach are included. A gastric ulcer in a child of 30 hours old dying from haematemesis is recorded by Dr. Goodhart in vol. xxxii of the *Transactions of the Pathological Society*. Gastric ulcer is rare in children. Dr. E. G. Cutler has collected twenty-six cases recorded in the *Boston Medical and Surgical Journal*,[1] the larger proportion being in the female sex. Of these cases six occurred soon after birth, the youngest being 35 hours old, and the others 2, 5, 7, 11, and 15 days.

Recently I have had a fatal case of haematemesis in a child 6 hours old, and in this case lesions were found in the stomach to account for the haemorrhage, but I regret that no microscopical examination was made. On June 11th, 1908, I was called by one of the district midwives to see a healthy primipara, aged 28; a well developed, full-time female child had been born at 9 a.m., and I was wanted to stitch a torn perineum; the child appeared to be healthy in every way. Six hours afterwards I was again sent for, and was informed that the child was very ill, vomiting blood. On arriving shortly afterwards I found the child dead, its garments, as also towels, etc., which had been used, soaked in fresh-coloured blood. I was told that the child had been lying by the mother's side since birth. She had noticed it becoming pale, and soon after it vomited a quantity of blood several times in rapid succession, became collapsed, and died just before my arrival and within an hour of the mother having noticed any change. I obtained permission to open the thorax and abdomen that afternoon. The larynx and trachea were clear, and the lungs and heart normal. The stomach was full of blood, and on cleansing the mucous membrane two erosions were found on the posterior surface, infiltrated with fair-sized vessels. From these the bleeding had taken place; the rest of the mucous membrane was pale; the intestines contained blood and meconium, but no further lesions were found; the rest of the abdominal organs appeared to be quite healthy.

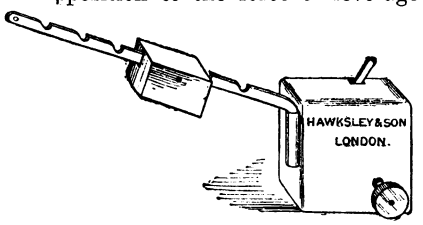
Amongst the cases I have been able to look up I have not found one in a child so young, or one proving so rapidly fatal.

Gloucester. FRANCIS H. SPRAGUE.

[1] See *Lancet*, November 5th, 1904.

A BALANCE-WEIGHT FOR THE CLINICAL POLYGRAPH.

Probably not a few beginners with the clinical polygraph have found among their other troubles a difficulty in keeping the spring of the sphygmograph in contact with the radial artery when the "arm" carrying the tambour for collecting the pulsations from the neck is placed *in situ*. The weight of this is apt, more especially in the case of slender wrists, to tilt the sphygmograph outwards, and thus to remove the instrument from the artery and to cause the loss of the radial tracing. If, in order to avoid such a result, the wrist strap of the sphygmograph is drawn more tightly, the consequences are unpleasant for the patient, and the undue pressure thus occasioned may diminish or suppress the arterial excursion. After various attempts to get rid of this annoyance I have secured a simple mechanical contrivance which may perhaps be of service to other workers. The principle of it is the provision of a weight in opposition to the force or leverage exercised by the "neck tambour" and by the arm which carries this tambour, and this in such a fashion as to allow graduation of the balancing or resisting force without altering the amount of pressure exerted on the radial artery by the spring and pad of the sphygmograph. To secure these ends a socket is fixed on that side of the box containing the clockwork of the sphygmograph opposite to the one carrying the tambour "arm," and into this socket is fitted an angled rod carrying a movable weight and notched so as to allow the weight to be temporarily adjusted at different points, the arrangement, in short, being similar to a steelyard. If after the sphygmograph has been attached to the wrist the tambour "arm" and the balance-weight are placed in position, the whole apparatus remains perfectly steady, and the inscription of the two tracings is much facilitated. The balance-weight is readily added to the present pattern of Dr. Mackenzie's clinical polygraph, and is not without value, at least in occasional instances, in the use of the sphygmograph pure and simple. It has been made for me by Hawksley and Son, 357, Oxford Street, W.



London, W. C. O. Hawthorne.

Reports

ON

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF THE BRITISH EMPIRE.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, PLYMOUTH.

REPORTS OF THREE CASES OF ABDOMINAL SECTION.

(By George F. Aldous, F.R.C.S.Edin., Surgeon to the Hospital, and to the East Cornwall Hospital, Bodmin.)

Two Abdominal Sections undertaken shortly after Childbirth.

Case I.—F. L., aged 37, multipara, was admitted on March 11th, 1911, with the following history: On the previous night she had been attended by a midwife, who delivered her of a living child, but was unable to remove the placenta, and, being in difficulties, sent for Dr. Duncan Stamp, of Plympton, who, finding intestine protruding from the vulva, immediately ordered her removal to hospital.

I saw her at 6 a.m. on March 11th in the operating theatre. She was very collapsed and blue; pulse 140, temperature subnormal; the diagnosis of ruptured uterus was verified by an incision. The placenta was floating among the intestines, and a quantity of blood filled the peritoneal cavity, a rent of 3 in. in the posterior wall of the uterus, extending into the pouch of Douglas, through which undamaged intestine protruded into the vagina. I decided to remove the uterus, leaving both ovaries, and spent some little time in stitching up the rent in Douglas's pouch and in cleansing the peritoneal cavity. The abdomen was closed, leaving rubber drainage tubes in the lower angle and vagina. Recovery was uneventful, save for a rise of temperature on the fifth day, due to a small collection of pus in the pelvis, which was dealt with. Drs. Duncan Stamp and W. Lang Hodge kindly gave their assistance at the operation.

Case II.—R. P., aged 23, primipara, was admitted on January 31st, 1911, suffering from intestinal obstruction with the following history: She had been confined on January 28th, 1911. Three weeks before this she was suffering from abdominal pain, and saw a doctor, who treated her; her confinement after ten hours' labour was not described as difficult, but necessitated an anaesthetic and forceps. Vomiting, with abdominal pains, began immediately after delivery, and the abdomen began to swell; during the next two days the vomiting continued, the bowels did not act, and the abdomen became very distended; she was therefore sent to hospital.

I saw her about noon on January 31st. She looked very ill, temperature 99°, pulse 160; the abdomen was enormously distended. Operative interference was indicated, but her condition suggested rapidity of manipulation. I therefore opened the abdomen by an incision between the umbilicus and pubes, a quantity of dirty serum escaped; the intestines were spotted with patches of grey lymph, and were generally adherent; a rapid examination revealed no point of obstruction, which was evidently due to the condition of general peritonitis; lumbar, suprapubic, and vaginal drains were placed in position after the peritoneal cavity had been well flushed out with normal saline. The operation lasted thirty minutes; the patient was very collapsed, but rallied after intravenous saline injection and strychnine hypodermically. She made a slow but good recovery, leaving the hospital in six weeks.

I am inclined to think that the peritoneal condition occurred some days before her labour, and was due to pneumococcal infection, which became more general and acute when the uterus got rid of its contents.

Solitary Cyst of the Liver.

M. H., a single woman, aged 43, was admitted on May 31st, 1911, with the following history: Till the previous week she had performed the ordinary duties of housemaid; she had noticed a swelling in the epigastrium for twelve months, which had become more prominent during the last month, but caused her no pain or discomfort. She consulted Dr. Colin Lindsay, of Plymouth, for biliousness; he noticed a large swelling in the epigastrium, and advised her removal to the hospital.

On admission the epigastrium was distended, extending downwards and backwards to the right kidney pouch; fluctuation was marked, and a distinct thrill was conveyed from the kidney pouch to the epigastrium; the heart's apex was in the left mid-axillary line; the stomach was pushed upwards and to the left; lung resonance was displaced up to the fourth rib on the right side.

Two days after admission the swelling became painful and increased in size, and on June 5th I opened the abdomen above the umbilicus. The cyst wall presented, and was tapped with a trocar; 12 pints (1½ gallons) of thin, dark, muddy-coloured fluid was drawn off. The swelling proved to be a solitary hepatic cyst occurring at the free border of the liver, having a thin layer of hepatic tissue covering it; the gall bladder was normal. The cyst wall was stitched to the parietal peritoneum and a drainage tube inserted. Dr. Pethybridge kindly examined some of the fluid, and found some crystals of haemoglobin, no blood cells or bile.

Remarks.—Non-hydatid cysts of the liver are very rare. Moschcowitz in 1906 could find only 83 cases recorded. Bland-Sutton suggests that these cysts arise from dilatation of the bile ducts, which subsequently fuse to form a single cyst; he records a case which contained 2 pints of fluid. Diagnosis is difficult, the condition simulating pancreatic cysts, hydronephrosis, hydatids, etc.

Reference.
Allbutt and Rolleston's *System of Medicine*.

interval it is impossible to rely on accurate recollection of these, and as time goes on it becomes more and more difficult to get at the true facts. Hence it is neither desirable nor necessary to await the results of the laboratory investigations before commencing the inquiries. Supplementary inquiries suggested by such results can always be made subsequently.

When the suspected food has not been prepared for the market in the district, the co-operation of the vendor should be secured, he being invited to produce the original packages, invoices and any other facts available, to show by what firm the implicated food was supplied to him, and on what date and in what bulk. Samples of any remaining portion of the actual food consumed by the persons attacked should be secured, and like samples of food of similar origin or prepared from the same ingredients. If of a perishable nature they should be placed in an ice box or cold store pending examination. In the case of canned goods the cans with the labels should be preserved, and unopened cans of identical kind with those suspected also obtained if possible.

When the circumstances do not point to a poison of bacterial origin, samples should be sent for chemical examination—usually to the public analyst. Ordinarily, in the case of meat samples, little is to be gained by asking for examination for "ptomaines," since it is by no means certain that "ptomaines," in the sense of alkaloidal substances produced by bacterial action, are present in meat foods which have caused poisoning, and the significance of the reactions held to demonstrate their presence is dubious. Chemical analysis, however, may be valuable in determining special points, such as the presence or absence of preservatives and their nature, and other matters, such as acidity and saltness. When materials have to be sent for bacteriological examination, it is of obvious advantage that the necessary arrangements should be considered beforehand, and the samples should always be transmitted surrounded by ice or otherwise insulated. If material has also to be collected from the patients themselves, the advice of the bacteriologist should be obtained in order that it may be transmitted with proper precautions and in a condition suitable for examination. It is also important that material should be available for any investigations which the Board itself may desire to make. When such investigations are intended to be made, early intimation will be sent. In all cases, however, the chemist or bacteriologist consulted should be asked to preserve the samples until it has been ascertained that there is no further use for them.

The Board is aware that neither general practitioners nor the general public are under any statutory obligation to report any cases of food poisoning to the medical officer of health, but believe that if the object in view is understood the co-operation of all parties will be easily forthcoming. The memorandum concludes with an appendix containing the headings under which the inquiries in question should be made and reported.

NEATH RURAL DISTRICT.

AMONG the many instances of inefficient local sanitary administration which have been disclosed by reports of the medical inspectors of the Local Government Board, few have been more flagrant than that of the Neath Rural District, in the county of Glamorgan. As long ago as 1877 the late Dr. Airy reported to the Board that there was a general want of administration and a great prevalence of insanitary conditions. In 1885 and 1886 Dr. D. S. Davies visited the district in the course of the general cholera survey, and in 1890 the late Dr. Spear reported great inaction on the part of the local authority. Nearly all the common infectious diseases have been prevalent from time to time in the district, but no effective action for their prevention has been taken, and the annual reports of Dr. Whittington, the medical officer of health, have shown that unwholesome conditions were frequent in the district, and that preventable nuisances were common. Early in the present year the district was again visited on behalf of the Board by Dr. S. W. Wheaton, whose report has just been issued. He states that throughout its existence the district council appears to have shown want of initiative and to have left untouched many matters which needed its close attention. There is abundant evidence throughout the report of the truth of this statement. There are nearly 6,000 houses in the district, but in only three localities have sewers been provided, and in one of these the cost of sewering has been borne by a private individual. Water-closets are usually hand-flushed; but as the water supply is scanty they are often in a very foul state, the pans covered with dried filth and very offensive. In some parts the contents of the privies are simply buried by the contractor in a hole in the yard or garden of the house concerned. Many yards are so small that it is hardly possible to find a vacant spot for this purpose. The streams in the district are used as the recipients of privy filth, which is also thrown about on waste places and in back streets. Owing to the absence of sewers houses have been largely built with soakaway cesspools, and consequently the ground beneath the dwellings is becoming saturated with filth, which may have injurious effects for some time after the premises have been properly sewered. The sanitary staff of this district, which has a population of 42,000 persons and is 24 miles in length, includes only the medical officer of health and two inspectors of nuisances. A considerable portion of the time of both inspectors is taken up in supervising the work of the scavenging contractors. The medical officer of health has no office, and is not provided with any clerical assistance.

POOR LAW MEDICAL APPOINTMENTS.

SCALPEL writes: A. and B. are father and son. A. has been holding a district Poor Law appointment for many years. B. is at home helping A., with the idea of permanency, but is not yet in partnership. Query: Is there any rule of the Local Government Board in reference to such appointments which prevents B. holding the office of health officer to the workhouse and another district, which are combined in the appointment in the same union—(1) as an assistant, (2) as a partner?

*** We are not aware of any rule of the Local Government Board which would prevent B. holding the appointments in question. The Local Government Board takes no cognizance of any assistant or partner as one of their responsible officials, though either of these can be nominated to act as deputy in case of absence or illness of the chief.

Obituary.

JOHN DIXON, M.B., C.M.EDIN., ETC., LONDON.

DR. JOHN DIXON was born at Staindrop, in the county of Durham, in the year 1842. His parents were members of the Society of Friends, and in due time the son was sent to Ayton School, and at about the age of 13 he went to work at his father's mills. He longed, however, to be a physician, and set himself to study in order to pass the preliminary examinations. He studied in Edinburgh and took in 1870 his L.R.C.P., and in 1872 graduated at the university as M.B., C.M. He got into touch with patients at the Edinburgh Cowgate Mission Dispensary, and filled the post of Resident Physician in the Royal Infirmary. Coming to London, he filled posts at the Temperance Hospital, French Protestant Hospital, and Bethnal Green Mission Hospital, and had a lucrative private practice at Victoria Park. His heart was set, however, on medical mission work, and he retired from private practice and commenced in January, 1880, the Medical Branch of the Mildmay Mission to the Jews, founded four years earlier by the late Rev. John Wilkinson. He was for nearly thirty-one years connected with this work as Superintendent Senior Missionary, and during that period more than 60,000 individual Jews and Jewesses must have been treated in this institution, the attendances in the latter years averaging about 25,000 per annum. He was much sought by Jewish patients, enjoying their confidence to a very remarkable degree.

Notwithstanding physical infirmities and many trials, he persevered faithfully in his work, frequently overtaxing his strength, and on August 1st he went to the neighbourhood of Lochailort for change and recreation. But on the 15th, after a picnic in the neighbourhood, he felt unwell, and within two or three hours he passed away. His body was brought to London and buried at Winchmore Hill on August 18th. J. G. R.

Medical News.

THE first international congress for the protection of motherhood and sexual reform will be held at Dresden on the 28th, 29th, and 30th of this month.

A MEETING of the International Medico-Psychological and Psycho-Therapeutic Association will be held at Munich on September 25th and 26th. Communications relative to the meeting should be addressed to Dr. von Hattinberg, Rauchstrasse, 12, München.

DURING the past summer session the number of students in the Faculty of Medicine in the Universities of Austria-Hungary were as follows: Vienna, 1,959; Innsbruck, 221; Graz, 387; Prague (German University), 344; Prague (Czech University), 669; Lemberg, 402; Cracow, 454.

THE Lettsomian Lectures before the Medical Society of London will be given by Dr. Archibald E. Garrod on February 5th and 19th and March 4th, 1912, the subject selected being glycosuria. The anniversary dinner of the society will take place at the Whitehall Rooms, Hôtel Metropole, on March 6th.

A SPECIAL course of lectures on illuminating engineering will be given at the Polytechnic, Regent Street, W., on Tuesday evenings at 7.30 p.m., commencing on October 31st till December 5th, and on Thursday evenings, commencing on January 11th, 1912, till February 15th.