as there was now only some venous oozing from the wound, he applied a compress and bandage, by which all hæmorrhage was arrested. The child was, however, nearly pulseless. On the fourth day the bandage was changed, but, as there was no bleeding and no reason for removing the compress, this was not disturbed. On the tenth day the wound was healed, but a pulsating tumour about the size of a filbert had formed. Another compress and bandage were applied, but during the ensuing night the child became very excited and kicked about, causing a reopening of the wound and renewal of the bleeding.

I was now called in consultation, and found the child very anæmic, with some œdema of the right leg and foot. There was a wound a little above the bend of the right knee, from which the blood was oozing, and a pulsating tumour occupying the upper three-fourths of the popliteal region. It was evident that the popliteal artery or some large branch of it had been wounded. The child having been anæsthetised by Mr. Corner, I made a vertical incision for about three inches through the skin and fasciæ, and then removed a considerable quantity of tough, firmly adherent clot. The popliteal artery now became visible, at the bottom of the wound for about two inches in length, partly overlapped by the internal popliteal nerve. There was no trace of the popliteal vein, which had probably been completely divided at the time of the accident. When the nerve had been drawn to the inner side the wound in the artery could be seen on the posterior wall of the vessel, circular in shape, about one-eighth of an inch in diameter, and filled with clot. The surface of the vessel for about three-quarters of an inch below this was riddled with small holes, from which, even while the tourniquet was applied, some blood-stained fluid exuded. Two catgut ligatures were applied, so as to include between them about an inch of the artery. On the removal of the tourniquet there was still some fresh bleeding from the lower part of the wound. I therefore divided the vessel between the ligatures, dissected up the distal end, and again ligatured it about half an inch lower down. There being no more hæmorrhage, the wound was closed with carbolised silk sutures, and was dressed antiseptically. A back splint was applied to keep the limb at rest. For a week the wound remained aseptic, but showed little disposition to heal. The subsequent history of the case has been kindly sent to me by Mr. Corner:—"The wound did not continue aseptic, nor did any part heal by first intention; and when it was nearly healed a collection of pus was found high up on the front of the leg, which, on being opened, let out a lot of pus and a piece of muscle with a short tendinous attachment, the whole about an inch long. Now (Dec. 6th) the wounds, front and back, have been healed for several weeks."

I did not understand at the time of the operation how the smaller holes in the wall of the artery could have been produced. A possible explanation may be that vascular communications had formed between the vasa vasorum and the organising clot, and that these, necessarily torn across in the removal of the adherent clot, did not contract in consequence of the previous application of an Esmarch's bandage, which seems to produce temporary paralysis of the walls of the smaller vessels. The abscess and sloughing of muscle on the front of the leg were probably due to the breaking down of a thrombus.

The operation was done under carbolic spray, and presented no difficulty, owing to the able assistance of Messrs. Corner and Vernon.

LONGEVITY IN IRELAND.—In the quarter ending the 30th of September last the deaths of eleven persons in Ireland were registered whose ages were stated to be 100 years or upwards. Of these aged persons seven were women. Their respective ages were as follows:—One 100 years; one 101; two 103; one 104; one 106; and one 115. The first, one of the third, and the two last-mentioned deaths occurred in the Donaghmore, Forkill, and Meigh districts, Newry union. Three died at 100 years; six not mentioned; and one man, who died in the Killaun district, Enniscorthy union, at 101, was, the registrar states, able to work on his farm up to within a week of his death. In reference to two of the women who died at 100 and 103 respectively, the registrar observes of the former that she was able to go about the day before her death; her senses were perfect up to the last; and of the latter, the last eighty years of her life were spent in a cabin on the summit of the highest of the Burrew mountains.

SALICYLATE OF SODA IN ACUTE AND SUBACUTE RHEUMATISM.[1]

BY SIDNEY COUPLAND, M.D., F.R.C.P.,
PHYSICIAN TO THE MIDDLESEX HOSPITAL.

MY contribution to this subject consists in an analysis of eighty-four cases of acute and subacute rheumatism treated with more or less rigour by salicylate of soda. Statistics from the Middlesex Hospital bearing on this subject have been published by Dr. Finlay and Mr. Lucas in 1879,[2] and by Dr. Greenhow in 1880.[3] I decided to limit my survey to the cases which have occurred in my own wards during the two years I have been physician, in the hope that a closer scrutiny might thus be possible, than if one were dealing with a larger body of cases, and thus something more than a statistical inquiry be attempted. I may remark, however, that the number of cases exceeds that analysed by Dr. Greenhow, and as they came from the same hospital the two series may well be compared. But I have not, like Dr. Greenhow, excluded the mild cases, and with nine exceptions[4] the administration of the salicylate was commenced upon the day of admission. In a few cases it was entirely abandoned from intolerance on the patient's part or apparent inefficacy on the part of the drug.

I should also state that the doses which were administered were by no means heroic, the endeavour being to give as small an amount as possible consistent with the production of relief from pain and fever, for it had seemed that large and frequently repeated doses, rapidly efficacious though they are, have to be soon abandoned owing to the inconvenient, if not serious, toxic effects they produce. Only once, then, has as much as 160 grs. in the twenty-four hours been given, or 20 grs. every three hours—not often 120 grs., more frequently 90 grs. (or 15 grs. every four hours), and 60 grs. (or 15 grs. every six hours). Dr. Maclagan remarked at the last meeting that the rapid elimination of the drug required its frequent renewal and administration in large doses; but although I have several notes of the rapid appearance of the salicyl reaction in the urine, as tested by the perchloride of iron, I have also notes where the reaction has been obtained two or three days after discontinuance of the drug, and Dr. Fagge quoted a case of Dr. Habershon's in the same sense. Moreover, the toxic effects are seldom produced after the first dose, but after two or three doses have allowed the drug to act with cumulative effect. I should argue, then, that the drug continues to exert an effect for some time after its administration has been discontinued. The point, however, is one which will be raised again in speaking of relapses. I may simply add now that throughout the principle has been recognised to prevent relapse, if possible, by continuing the administration long after the subsidence of the primary fever and articular manifestations; and frequently the dose has been gradually reduced in the hope that the patient may be kept to a slight extent at least under its influence.

With these preliminaries I may proceed to deal with the series of cases treated by salicylate of soda. I have said they were 84 in number; and the course of each case, especially with reference to the salicylate, is shown graphically in the accompanying chart. (This chart[5] contained 86 cases; 4 of them—Nos. 6 to 9—were treated partly by salicin and partly by other methods; they were therefore excluded from the analytical summary. Of the remaining 82 two were readmitted, and were reckoned, for the sake of convenience, as new cases, thereby bringing the total to 84.)

GENERAL ANALYSIS.

Sex.—Of these 82 cases, 41 were males and 41 females.

Age.—

There were under 10 years	...	...		2	cases.
10 and	,,	20	,,	...	...	25	,,
20 and	,,	30	,,	...	...	46	,,
30 and	,,	40	,,	...	...	5	,,
40 and	,,	50	,,	...	...	3	,,
		60	,,	...	...	1	,,

(Nos. 10A and 31A, readmitted, not included.)

[1] Read before the Medical Society of London on Dec. 19th, 1881.
[2] THE LANCET, 1879, vol. ii., p. 420. [3] Clin. Soc. Trans., xiii., p. 262.
[4] In 2 on the second day, in 4 on the fourth, and in 1 case each on the seventh, ninth, and tenth days respectively. [5] Not published.

Number of Attacks.—The number of the attack of rheumatism from which the patient suffered was—

1st attack	... ...	38 cases.
2nd ,,	... ...	24 ,,
3rd ,,	... ...	13 ,,
4th ,,	... ...	3 ,,
5th ,,	... ...	4 ,,
		82

Date of admission.—There were admitted on the—

2nd day of declared symptoms	...	2 cases.
3rd ,, ,, ,,	...	14 ,,
4th ,, ,, ,,	...	8 ,,
5th ,, ,, ,,	...	5 ,,
6th ,, ,, ,,	...	13 ,,
7th ,, ,, ,,	...	10 ,,
8th ,, ,, ,,	...	11 ,,
9th ,, ,, ,,	...	1 ,,
10th ,, ,, ,,	...	3 ,,
12th ,, ,, ,,	...	1 ,,
14th ,, ,, ,,	...	8 ,,
17th ,, ,, ,,	...	1 ,,
In 3rd week ,, ,,	...	1 ,,
,, 4th ,, ,, ,,	...	3 ,,
,, 5th ,, ,, ,,	...	1 ,,
2nd month ,, ,,	...	2 ,,

Severity of Attack.—As the terms "acute" and "subacute" are too vaguely separated to be of much use as a means of classification, and yet, as it seems to be important to have some means of ascertaining whether the drug acts as well in mild as in severe cases, the series has been divided into six classes, according to the maximum temperature attained within the first twenty-four hours after admission, excluding the earliest record as being liable to be influenced by removal to hospital.

The classification results as follows :—

Above . .	104°	Class I.	5 cases	
104° and above	103°	,, II.	9	,,
103° ,,	102°	,, III.	15	,,
102° ,,	101°	,, IV.	23	,,
101° ,,	100°	,, V.	21	,,
100° ,,	98·4°	,, VI.	11	,,

All of these cases are complete, with the exception of one (No. 84) still in hospital. One case died.

SPECIAL ANALYSIS, WITH REFERENCE TO TREATMENT.

These cases will be analysed under the following heads :

1. Duration of pyrexia.
2. Duration of joint affection, as indicated by pain.
3. Relapses (*a*, of pyrexia; *b*, of joint affection), as to their time of occurrence, duration, and relation to the drug.
4. Duration of stay in hospital.
5. Total duration, from commencement of symptoms to date of discharge.
6. Frequency of pericarditis, endocardial murmurs, and their relation to treatment.
7. Other complications.
8. The toxic effects of the drug, or "salicylism."

1. *Duration of pyrexia.*—As there is not by any means an invariable connexion between the subsidence of the pyrexia and the disappearance of joint pain, even in cases uncomplicated by pericarditis or visceral inflammations, I have thought it well—following, indeed, Dr. Warner's example—to separate these two main features of rheumatic fever, in the hope, also, that one may be able to show whether the drug has more influence over the pyrexia than over the articular manifestation, or the reverse. Speaking generally, I can quite corroborate the statements made as to the very striking amelioration produced by the drug in the severity of the joint affection; but, also, as a general rule, it will, I think, be found that its influence over the pyrexia is even more striking, and that the pains in joints persist for a shorter or longer period after the temperature has become normal.

There are two cases in this series that stand apart. One is No. 84, still under treatment, and for seventeen days rebellious to salicylate of soda, given for ten days in doses of 160 grains, so that it was discontinued, and has only lately (thirtieth day) been represcribed. In her neither pyrexia nor articular inflammation has subsided for upwards of four weeks. The other is No. 25, which, being quite peculiar, has been excluded from these statistics. In that case the joint affection was mild but variable, eventually becoming chronic, and accompanied by much muscular wasting. The temperature, however, attained great height, particularly during the first four weeks after admission, calling for treatment by cold baths. The hyperpyrexia was genuine, the skin being burning hot, and its recurrence regular every afternoon, but the patient did not exhibit the usual nervous symptoms of cerebral rheumatism, and her life never seemed to be endangered. She remained in the hospital 154 days. To include such a case in the statistics of only eighty-four cases would materially modify the conclusions, and I therefore propose to omit it statistically, but to include it, as well as two other of the more interesting cases, in an appendix to this paper.[6] I need only remark that the high temperatures were developed whilst she was taking the salicylate, which was discontinued when shown to have no appreciable influence upon the pyrexia.

TABLE A.—*Showing the Days on which the Primary Pyrexia and Joint Pains Subsided, the Day of Discharge from Hospital, and the Number of Relapses, in connexion with the Severity of the Attack (Maximum Temperature).*

	No of case.	Day of subsidence of pyrexia.	Day of subsidence of joint pains.	Day of discharge.	Relapses. P.	Relapses. J.
Cl. I.—Ab. 104°.	1	11	13	38	0	0
	25	—	—	154	0	0
	70	3	5	28	0	0
	72	3	7	55	2	1
	81	5	10	82	3	3
Cl. II.—Ab. 103°—104°.	12	9	3	43	1	0
	16	19	9	61	0	0
	26	5	8	15	0	0
	32	4	7	28	0	0
	60 (*b*)	8	8	38	0	0
	64	4	4	21	0	0
	71	10	7	41	1	1
	83	4	4	17	0	0
	84	—	—	—	0	0
Class III.—Above 102°—103°.	3	5	4	57	0	1
	4 (*a*)	19	5	20	0	0
	10	3	5	40	0	0
	10A	5	7	34	0	0
	11 (*e*)	23	8	52	0	0
	18 (*d*)	11	11	59	2	2
	28	5	8	95	4	3
	31A	4	5	38	1	1
	33	24	25	81	1	1
	35	4	7	28	0	0
	43	6	10	28	0	0
	52	4	6	55	0	0
	76	19	19	38	1	1
	79	15	16	17	0	0
	80 (*a*)	5	6	17	0	0
Class IV.—101°—102°.	5	3	5	27	0	2
	14	3	8	42	3	2
	17	4	4	44	1	3
	19	29	3	77	0	0
	21	25	23	49	0	0
	22	5	6	37	1	1
	23	14	19	33	0	0
	24	3	5	33	0	0
	38	5	8	34	0	0
	42	2	7	36	1	0
	44 (*b*)	15	16	42	0	0
	47	2	7	64	2	2
	50	2	10	28	0	0
	51	6	16	55	1	1
	58	5	16	34	2	2
	59	3	4	17	0	0
	61	3	4	9	0	0
	62 (*b*)	7	5	20	0	0
	63	4	4	19	0	0
	65	11	12	28	3	3
	67	3	3	26	0	1
	73 (*b*)	2	5	27	0	0
	86	6	5	20	2	1

(*a*) Salicylate of soda was commenced on the 2nd day.
(*b*) ,, ,, ,, 4th day.
(*c*) ,, ,, ,, 7th day.
(*d*) ,, ,, ,, 9th day.
(*e*) ,, ,, ,, 10th day.

[6] To be published in the Society's Transactions.

TABLE A.—(*Continued.*)

	No. of case.	Day of subsidence of pyrexia.	Day of subsidence of joint pains.	Day of discharge.	Relapses. P.	Relapses. J.
Class V.—100°—101°.	2	4	5	5	0	0
	13	2	6	15	0	0
	27	4	3	11	0	0
	29	4	4	19	0	0
	30	2	2	22	0	0
	31	4	3	8	0	0
	34	4	4	15	0	0
	36	4	3	51	0	0
	40 (*a*)	3	5	58	1	3
	41	3	8	28	1	1
	45	3	5	18	0	0
	46	3	4	24	0	0
	48	4	7	28	1	1
	49	8	10	28	0	0
	53	3	16	73	1	2
	54	3	7	34	1	1
	55	4	11	83	4	3
	57	15	15	35	1	1
	68	36	3	85	3	6
	69	4	3	49	0	0
	78	13	10	17	0	0
Class VI.—100° and below.	15	4	5	22	0	0
	20	3	6	26	1	0
	37	5	4	53	1	0
	39	3	4	26	0	0
	56	2	9	48	1	2
	66	3	10	44	0	1
	74	—	2	13	0	0
	75	3	4	6	0	0
	77	2	9	17	0	0
	82	3	10	23	0	0
	85	2	2	6	0	0

(*a*) Salicylate of soda was commenced on the 7th day.

The results given in Table A show the primary pyrexia to subside in fifty-eight out of seventy-nine by the fourth day of treatment. In one case the temperature was never 99°, and in two it had fallen to normal before the salicylate was given. In some cases the pyrexia was more prolonged—e. g., to twenty-third, twenty-fourth, twenty-eighth, and thirty-fifth day of treatment (*vide* Chart No. 1).

In Table A the cases are arranged in the classes above-mentioned, and according to this the average duration of the pyrexia in each class from the commencement of treatment was as follows:—

	Subsidence on	Aft. treatmt. of
Class I. (4 cases), exclud. No. 25	5th day	4 days
Class II. (8 cases), exclud. No. 84	8th day	6·5 days
Class III. (15 cases)	10th day	8·2 days
Class IV. (23 cases)	7th day	5·5 days
Class V. (26 cases)	5·7th day	4·4 days
Class VI. (11 cases)	2·7th day	1·7 days

Thus the duration of the pyrexia is in tolerably exact relation to the maximum temperature attained—at any rate, when the latter does not exceed 103°.

The average duration of pyrexia calculated from the whole number of cases (with the exceptions named) was thus 6·4 days, the temperature becoming normal on the fifth day of the treatment by salicylate.[7]

2. *Duration of joint affection.*—This has been calculated upon the same plan as the pyrexia, with the result (*vide* Table A, and Chart No. 1) that 39 out of 80 cases lost their pain after four days' treatment, and 53 in six days. Of this number, 5 lost their pain on the first day, 10 on the second, and 2 before salicylate was given. In a few cases the joint affection was long-continued and persistent—most remarkably so in No. 84, now in the hospital.

As regards the relation of subsidence of articular manifestations, when treated by salicylate, to the severity of the primary fever, we have the following average results:—

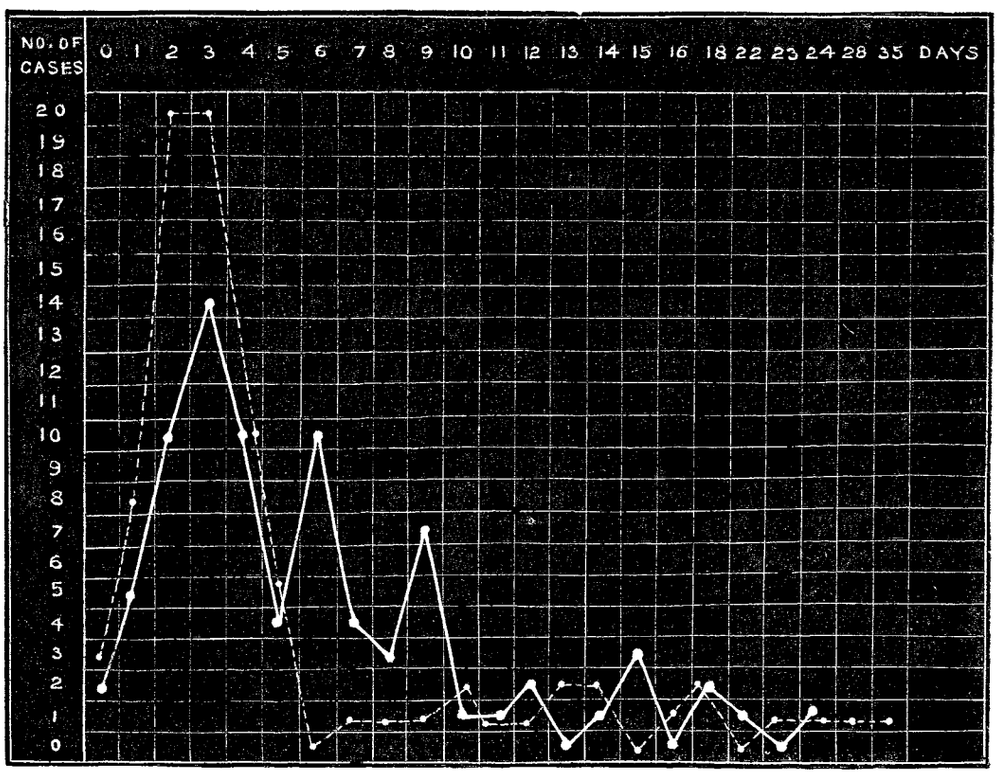
	Subsidence of joint pain.	After treatment of
Class I.	6·25th day	5·2 days
Class II.	6 25th day	4·7 days
Class III.	9·4th day	7 days
Class IV.	8 3rd day	6·8 days
Class V.	6 4th day	5 days
Class VI.	6th day	5 days

Here again Class III. stands highest, but not much above Class II. in yielding to the treatment. The average of the

[7] For the calculated average duration of pyrexia when the day on which the case was admitted is taken into account, see below, on "Total duration of illness."

CHART 1.

Showing the number of cases and the day of treatment upon which pyrexia and joint pain subsided.



Pyrexia is denoted by the dotted line, joint pain by the continuous line.

whole number gives a subsidence of pain on the 7·1 day from admission, or after 5·6 *days* of treatment by the drug.

I think we may infer from this that the salicylate did lessen the joint pain, especially as in those cases in which its administration was withheld for a time the pain did not abate. It further appears that although we have only to do with cases which are treated by the drug, such a cause as that of withholding its administration is sufficient to account for the difference between the day of subsidence of pain when calculated from admission, and when reckoned from the time of commencement of the drug.

(To be concluded.)

A BRISTLY BOY.

BY H. E. CAUTY, M.R.C.S.,
SENIOR SURGEON, ST. GEORGE'S HOSPITAL FOR SKIN DISEASES, LIVERPOOL.

THE following curious case appeared at the hospital on July 9th, 1881.

W. R——, aged ten, somewhat imbecile but well nourished; on removing his clothes the upper part of the back, both shoulders, and down the outside of both arms, appeared covered with short bristles of a clear darkish-brown-yellow colour, acuminated apices, and very clean; these bristles were at the edges of the group gradually shortened from their full length of $\frac{3}{32}$ in. until they joined the skin, which was at the junction raised into polygonal flat discs, finally graduating off to the sound healthy skin of the hands, chest, and back. These bristles also existed between the buttocks, where their tips were black with dirt, and as they interlaced before the buttocks separated, the appearance was most singular. The feeling communicated to the hand on passing it over the shoulders was exactly similar to that of touching a coarse brush, and the bristles gave way under the touch, resuming an upright position afterwards. There were a few pink maculæ over the body and considerable scaly thickening on and around the patellæ. There were also a few ordinary comedones and sebaceous collections on the back. The pulse was quick with nervousness. Bowels confined. Urine free and healthy. Tongue clean; appetite good. Sleeps well. The bristles were expelled comedones, containing very few immature hairs and very little sebum, drying up into a horny substance. They were tolerably firmly attached, requiring more force to remove them than to extract a well-rooted hair; and when removed they left a small central depression surrounded by a circle of torn epithelium which retained them in position. They averaged 100 to the square inch, and had existed over three months. The boy was ordered mercurial aperient every third night, and to be well rubbed with olive oil and a few drops of carbolic acid. A week afterwards, all these comedones were softer, and those in process of expulsion much more visible. The bowels were now regular. Ordered three ounces of lard and half an ounce of glycerine, to be followed every morning by the benzine lotion. This treatment was continued until September 9th, when most of the comedones had disappeared. Some few remaining partially expelled had inflamed; and there were also some inflamed punctæ where the comedones had been. The lard and glycerine to be continued.

Three months afterwards this boy had an attack of herpes, when I again saw him. The skin where the first crop of comedones appeared is now perfectly soft, while showing not the least trace of their past existence. There are three small sebaceous collections of the ordinary character, about the size of a pea. But the whole surface of the back, which had hitherto escaped, is now covered with slight polygonal elevations with a minute central spot, as though a comedo was about to appear, or, failing to find an exit, had caused slight swelling. During the progress of this case, a solitary comedo made its appearance on the back; and the time of expulsion from first to last was six weeks. It will be interesting to notice if all the parts at first free should follow the course of those affected, which at present appears possible; if so, I am afraid a profitable subject for exhibition has been destroyed. There appears some family tendency to abnormal sebaceous secretion, as a brother, aged twenty, had his face, ears, and neck quite black with comedones of the ordinary character. The formation of comedones of an extra horny character is not very rare; but their expulsion and retention on the skin in such quantities is very uncommon.

TWO CASES OF AMPUTATION TREATED WITH EUCALYPTUS GLOBULUS

BY EDWARD LAWRIE,
PROFESSOR OF SURGERY, LAHORE MEDICAL SCHOOL.

ON June 30th last I had occasion to perform a Carden's amputation of the thigh and Syme's amputation of the ankle, in cases of cancer of the leg and fungus disease of the foot. Having seen in THE LANCET of May 21st the annotation on Mr. Lister's speech on Eucalyptus Globulus at the Clinical Society, I employed this antiseptic during the operations and in the after-treatment, it being understood that strict Listerism was followed throughout. Both cases healed without inflammation by the first intention, although the patients were old men and were exhausted, the one by malarious poison and the other by syphilis and an open cancer.

This brief record is sent to THE LANCET in order to bring to the notice of the profession a very simple plan of carrying out Listerism, which I have employed for some years, and which acted perfectly in the cases under report. It consists in preparing the gauze dressing at the time it is to be used instead of beforehand. A stock mixture is kept of four to six parts of resin, four parts of spirit, and two parts of castor oil. Carbolic acid, or any other antiseptic, is added to this in the proportion required, and the gauze is impregnated with the mixture at the time of use. In the present instance, as we did not know the proportion of the antiseptic Mr. Lister would employ, the gauze was simply wrung out of the resin mixture and then dipped in tincture of eucalyptus globulus, of which it took up a large quantity very readily. Evaporation was prevented by a macintosh covering fixed with a splint and bandage; and the only after-treatment consisted in opening this once or twice and moistening the gauze with fresh tincture of eucalyptus. This plan is put forward as an adjunct, and not as a rival, to Mr. Lister's perfect method of carrying out his own system. It involves the use of a wet dressing, and has certain disadvantages; but, in a country like India at all events, its advantages, foremost among which may be mentioned its cheapness and easy application, outweigh them. Here and in other tropical climates Lister's prepared dressings speedily become inert owing to the heat. The result is that, as you cannot tell how far the dressings have deteriorated, you may be deceived by them, and never feel confident in using them; and their employment is apt to be followed by disaster, and consequent disrepute to Listerism. Moreover, in India the price of paraffin, except in such large towns as Calcutta and Bombay, is almost entirely prohibitive of the preparation of gauze in the way Lister recommends. In short, while the prepared dressings of the antiseptic system are expensive, and liable, under many circumstances, to deteriorate or become useless by keeping, these objections do not hold good with regard to storing some such liquid as that mentioned above instead of the dressings; and this method possesses the great additional advantage that the antiseptic or its proportions can be varied without difficulty, delay, or waste, to suit the requirements of any kind of wound.

ON A CASE OF LOCKED TWINS.

BY J. ARONDEL BARTON, M.B., C.M.

ON the morning of the 18th of August I was sent for to attend Mrs. C——, who was reported to be then "strong" in labour. On my arrival I found the patient to be a robust young woman, very short in stature, and eighteen years of age, and in her first labour. The nurse informed me that she had been in labour for over twelve hours, and that she had not expected to be confined until the end of October. On examination I found the vagina well dilated, the membranes ruptured, and the breech of a fœtus presenting well down in the pelvic cavity. The pains being very irregular and feeble I administered a subcutaneous injection of ergotine, shortly after which the pains became regular and strong, and the breech and body of the fœtus up to the level of the umbilicus were expelled. No further progress being made, I after a short delay passed my forefinger up over the thorax of