2. In Class A the average number of days is greater than in Class B, or, in other words, those in which the date of delivery is after the estimated date are nearer the latter than those in Class A.

I argue, then, from these facts that, in Naegeli's method, the number of days added on is too great, and that by adding fewer days a still nearer approximation to the date of delivery might be got, and this conclusion comes into line with the average length of gestation arrived at from the authorities quoted above, which is less than that given by Naegeli. If two days less be added the result corresponds both to the average length of pregnancy which I have quoted, and with the average (practically) in Class A.

Where available—which, unfortunately, is seldom—Löwenhardt's method will be found to be more accurate than Naegeli's, and the two will be found to correspond almost exactly, provided two days fewer are added to the latter. In fifty other cases which I calculated by Löwenhardt's method, the date of delivery was in all within 1.6 days of the estimated date. Löwenhardt's method consists in counting the number of days between the last menstrual period and the one preceding that and multiplying by ten. The date can then be got by tables.

REFERENCES.

¹ Arch. f. Gynäk., Bd. lli, 456. ² Ibid., Bd. xvi, 210. ³ Beobachtungen über die Dauer der Schwangerschaft. ⁴ Die Berechnung und die Dauer der Schwangerschaft. ⁵ Arch. f. Gynäk. ⁶ Signs of Pregnancy. Second edition. ⁷ Practice of Obstetrics.

SCROFULOUS ULCERS OF THE LEGS (BAZIN'S MALADY)

SUCCESSFULLY TREATED BY HIGH-FREQUENCY CURRENTS.

By W. F. SOMERVILLE, M.A., B.Sc., M.D., F.F.P.S. GLASG.,
Glasgow.

MR. JONATHAN HUTCHINSON, in his *Archives of Surgery*, vol. v, p. 113, referring to Bazin's malady, says: "It is a name given to a manifestation of scrofula occurring mostly in young women, in which multiple ulcers, the consequence of a subcutaneous and self-infective inflammation occur on the legs, such ulcers being difficult of cure, prone to relapse, and presenting appearances very likely to be mistaken for syphilis." He further quotes in the same volume, p. 32, a translation by Dr. Colecott Fox of Bazin's description of the disease associated with his name.

The case now to be related must, I believe, be regarded as an example of Bazin's disease. It is true that the ulcers were present only on one leg, and that the symmetry, which has been a prominent feature of most of the cases recorded, was therefore lacking. But in view of the physical character of the ulcers, of their recurrence, and of the age and constitutional tendencies of the patient, this absence of bilateral distribution can hardly affect the diagnosis, and support for this position can be found in the fact that Mr. Hutchinson includes among his records at least two instances in which a similar limited manifestation of the disease existed.

The patient, a young lady aged 16, who had spent the greater part of her life in Eastern Europe, was brought to me by Dr. Alexander Thomson of Glasgow early in January, 1904. She was tall, of dark complexion, and somewhat phlegmatic disposition. With the exception of a number of ulcers on her left leg, and some evidence of anaemia, she appeared to be free from definite signs of disease. There was, however, a degree of coldness of the extremities, and at various times, it was said, she suffered from enlargement of the glands in the submaxillary region, facts which may be quoted in favour of the diagnosis here suggested. Neither in the family history nor in the physiognomy of the patient was there anything to suggest the possibility of a syphilitic taint. There is no history of tubercle in the family. The more recent history of the patient is included in the following note by Dr. Thomson:

History.

In April, 1897, I was called to attend Miss K. T., a young girl of 11 years of age, suffering from chicken-pox. The attack was a very severe one, the eruption being very copious, and the fever running high and lasting long; and a considerable degree of debility followed. The patient's home was in the Balkan States, and she was in this country merely on a visit. The coldness of the climate here made her always feel uncomfortable. Her personal history was free from any serious illness, but she had never been robust, and was always of a lethargic, indolent temperament.

After recovering from the attack of chicken-pox, she went to the coast for the month of July. On her return to town I was sent for to see her on account of the condition of her left leg. On the outer aspect of the

middle third of that limb were six or seven punched-out ulcers of various shapes and sizes. The largest was about $\frac{1}{2}$ in. in diameter, and the smallest about $\frac{1}{4}$ in. across. The ulcers presented a grey, unhealthy surface, and were discharging a thin, serous fluid. The skin in their neighbourhood was of a livid blue colour, and was much infiltrated.

The history given was that within a few days of going to the coast, nodules were observed on the leg in the affected region. These were not painful, but gradually rose above the surface and then slowly broke down to form ulcers. Under complete rest in bed for several weeks, the use of cod-liver oil and iron, and local application of lotions of boracic acid, etc., the ulcers gradually healed.

In September, 1897, the patient returned to her home in the East and remained there until September, 1902, when she once more came to Glasgow. During these five years she enjoyed fairly good health, and the leg gave her no trouble. For some months after coming here she continued well, but in June, 1903, nodules began to form in the region that had been affected six years previously. The stages through which these nodules passed were an exact repetition of what had taken place in 1897—namely, slow formation and elevation, breaking down, and ultimate formation of ulcers. The main difference noticeable was that the edges of the ulcers were on this occasion hard, white, and callous. They were seven in number, and the condition of the surrounding skin was as it had been during the former attack. The blue colour was, if anything, more deep, and the scars of the old ulcers were sharply defined as white patches. The new ulcers partly encroached upon the scars of the former ones.

On this occasion the treatment adopted in the former attack proved quite useless. The patient remained in bed for two or three months, and took malt, hypophosphites, syrup of iodide of iron, and cod liver oil. Locally the ulcers were treated with a great variety of dressings, including sulphate of zinc, black wash, compound tincture of benzoin, antiphlogistine, etc., but they utterly refused to heal. The only improvement noticeable was that the surrounding induration lessened and the ulcers had a cleaner and healthier appearance after being dressed for some weeks with antiphlogistine. Thorough scraping of the ulcers was also tried on two separate occasions, but without benefit. Seeing no improvement was being made, I requested my friend Dr. Somerville to try upon my patient's leg the effects of the high-frequency currents. I shall leave him to describe his treatment, the results of which proved highly satisfactory, and shall only add that I have seen the patient on several occasions since the electrical treatment was stopped, and that the ulcers continue soundly healed. With the exception of a temporary attack of acne she has, indeed, enjoyed her usual measure of health.

Comparing the facts of the case with the descriptions of Bazin's malady, I have no doubt that it is an example of that disease, though it must be placed among the rarer members of the group in consequence of the ulceration affecting only one of the lower limbs.

When the young lady came to me I found on the anterior aspect of the left leg seven punched-out ulcers ranging in size from a threepenny-bit to a florin. The ulcers had undermined irregular edges resembling markedly the ulcers produced by specific disease to which, as Mr. Hutchinson points out, cases of Bazin's malady are apt to be referred. The skin in the immediate neighbourhood of each ulcer had the dark-red "violaceous" character described by Bazin, and was free from irritability and tenderness.

Dr. Thomson has noted the treatment adopted by him. The high-frequency currents were first applied by me on January 12th, 1904, and were continued till March 28th, 1904, forty-one applications in all being employed. The patient sat for about eight minutes on the auto-condensation couch; thereafter the limb was treated by the spray éffluve and also with a flat glass electrode of high vacuum connected with the top of the Oudin-Dean resonator. Very shortly after treatment was commenced the ulcers began to take on a more healthy appearance; they gradually filled up, and the usual healing line was soon noticeable, till finally they were covered entirely with healthy skin.

I saw the patient at the end of January of this year, when I found the ulcers perfectly healed, the skin of the limb quite smooth, free from induration, and was surprised to learn that a short time previously the young lady had walked no less than thirty miles in one day without any evil effect, and had been climbing hills during the summer holidays.

THE CORNEAL REFLEX THE MOST RELIABLE GUIDE IN ANAESTHESIA.

By H. BELLAMY GARDNER, M.R.C.S., L.R.C.P. LOND.,
Anaesthetist and Instructor in Anaesthetics, Charing Cross Hospital.

THE number of signs of anaesthesia which students are now supposed to take into consideration is altogether beyond the grasp of many men in moments of doubt. In addition to this, I believe that the common resort to the evidence of pupillary variations which are also produced by partial asphyxia, strong light and operative influence, quite