worthy cause. And when after much strife and difficult labour, I turn to look back, I want to feel that my days have been spent in the task of making illumination in the midst of gloom, of bringing beauty to the difficult pathways.

(From The Pacific Coast Journal of Nursing, February.)

"NUTRITION."—"SARAH ANNE REFLECTS."

"Calories don't count on holidays!" sniffed plump Sarah Anne, as she nibbled complacently at her third chunk of delicious home-made pinoche. Now remorseful Sarah Anne has ten whole pounds to remove—nearly forty thousand calories! Precipitously, she decides to cut out bread and butter. Nothing in her timely resolution about the guilty tempter, candy! Let's see—I did eat about six slices of bread—thin ones. That's 400 calories. They'd have to be half an inch thick to make 600. And butter—well, I ate a pat at each meal. That's 300. Hm-m! At this rate, how on earth will I ever get rid of those pesky obstacles to beauty?" Forty thousand divided by 700 (oh dear, I never did like mathematics), that's fifty-seven. Nearly sixty days of misery just because I have about as much spine as a jelly-fish when it comes to good eats, especially candy!" Sarah Anne tapped her dainty foot nervously. The puckers in her forehead deepened. After a thoughtful ten minutes she stepped before the mirror, examined her face intently, then glanced to the right where hung a portrait of her rotund grandfather. "February—March—then more holidays. I'm not going to be an April fool!" Head up! Chin in! Eyes front!

"QUARE WOMEN."

Here is a tale of Kentucky which might have come from the pen of Lucy Furman in her chronicles of the Southern Mountaineer. However there are "Quare Women" even in our own West. The school health nurse had sent for Ina's mother—it was not the first time she had done so; and all in vain, she had called at Ina's home many times, for Ina's little brothers and sisters were also much in need of "physical adjustment and repair." But this was one of those rare days when luck is with a school nurse for Ina's mother called just the day that the nurse was visiting the school and appealed for support. Ina has diseased tonsils and a bad case of adenoids. Won't you have them taken out as soon as you can make the necessary arrangements? Suddenly the woman was interested! "No, Sir," she exclaimed. "I aims ter bury 'em with all their parts!"

(From The Canadian Nurse, March 1925.)

INSULIN.

AN ADDRESS BY DR. K. A. MACKENZIE.

In a short time it is difficult to touch upon all the interesting points. I take it that you have not studied it very carefully, so I shall begin by defining what Insulin is. Insulin is a hormone which is found in that portion of the pancreas known as the Islands of Langerhaus. Over 50 years ago, Langerhaus discovered that the pancreas had a double function, and that the islands
which he described contained a substance which had to do with the metabolism of sugars and starches, and which did not go through the ducts with the pancreatic juice. For 30 years nothing further was done to elucidate the problem. In 1889 two investigators, Von Mering and Minkowski, showed that dogs which had their pancreas removed, died in 10 to 14 days with severe glycosuria, and that if one-tenth of the gland was left, they survived; thus furnishing the best evidence up to that time that the disease called diabetes was due to a disease of the pancreas. Various investigators added further evidence which strengthened this view. In 1916, Sir Edward Schäfer, a well known Edinburgh physiologist, suggested the name Insulin, for a substance which they all knew was present in the pancreas, but which no one so far had isolated.

In 1922 Dr. F. G. Banting, with Mr. Best (now Dr. Best) carried out the experiment which made possible the use of Insulin, and placed him at once among those who have made wonderful contributions to the science of medicine. The experiment was as follows: He tied the duct of the pancreas in a dog. Several weeks later the dog was killed and it was found that the pancreas had degenerated but the islets of Langerhans had resisted degeneration better than other portions of the gland. He now made a solution of the gland which he injected into a dog in which the pancreas had been removed, and by repeating the injection he was able to keep the dog alive for 70 days. He thus demonstrated that the substance could be separated, and also proved its potency. The next step was to find a method of getting sufficient of this substance for clinical use. In 1922 Dr. J. B. Collip worked out a technique by means of which the Insulin could be extracted from normal fresh ox pancreas, and as the latter was available at the various slaughter houses in almost unlimited amounts, the problem of getting supplies was solved in a remarkable short time. This work of Banting was done in the laboratory of Dr. J. J. R. MacLeod, who rendered invaluable assistance to Banting in carrying out his idea. When the Nobel prize was recently awarded to Dr. Banting and Dr. MacLeod in equal amount, they in turn shared it with Dr. Collip and Dr. Best. The application of the remedy to human subjects rapidly followed, and it was found that glycosuria was controlled with as great certainty as in the dog. Within a remarkable short time evidence of its value in severe diabetes was available, and, most interesting of all, it was found that patients had been rescued from coma which was the great cause of death in diabetes; the onset of which in the past was almost without exception the beginning of the end. Such in brief is the story of the discovery of Insulin, which suddenly raised a young Canadian to a position of world fame, gave him a place in medical history for all time with Toronto and Canada recognized as a medical centre.

A few remarks now in regard to Insulin as we now use it. It is not a cure for diabetes. As a result of the disease of the pancreas, a certain amount of Insulin is destroyed in the body, and the administration of Insulin supplies the shortage. It assists the diabetic to assimilate carbohydrates, proteins and fats. It unquestionably allows the diabetic to live longer. It increases his efficiency as a worker. It rescues him sometimes from the jaws of death. It does not permit him to eat all foods. On the other hand it places more
responsibility on him for greater dietetic care. Of all diabetic cases about 25% require Insulin and 75% do not. It is very wrong to administer Insulin to a diabetic who does not need it. Our present plan of treatment is to place all patients on what we call a basal requirement diet, which is the amount of food required for a patient at rest. It varies in amount according to sex, height, weight and age. The proportion of fat, carbohydrate and protein is worked out according to rules given to us by authorities on nutrition. A few weeks on such a diet with certain increases, also made according to rule, enables us to say whether a patient can be treated by diet alone or requires Insulin. The amount is gauged according to the sugar loss, a definite amount of Insulin being required for a definite loss of sugar. Blood sugar estimations as well as urinary sugar estimations are used in the regulation of the dose. It is usually given a short time before meals. Up to the present the only method is the subcutaneous one. Oral and rectal administrations are useless. In cases of coma we give it intravenously with 10% glucose. An interesting feature in treatment by Insulin is the hypoglycemic reaction which should be familiar to doctor, nurse and patient. Overdose of Insulin causes severe reactions which are very alarming, may cause death, but are easily controlled by the prompt administration of sugar in any available form. I have so far had experience with 40 cases of Insulin administration and have witnessed all the effects which are claimed for it. The clinical effects which were noted by Banting and his co-workers in his earliest communications to medical Journals have been confirmed by clinicians all over the world in thousands of cases. While minor changes may be made from time to time in the details of treatment of diabetes, the potency and value of Insulin have been demonstrated beyond dispute, and it will always rank as one of the great discoveries of medicine.
HEALTH VISITORS' LEAGUE PAGE.

Dear Fellow Members,

Miss Simon sends me the following report on propaganda work carried out in villages in the Punjab by one of their workers: "Up to now Infant Welfare work and Baby shows have been carried out in big or small towns. Village people were not fortunate enough to get the advantage of work of this kind. To give them the benefit of welfare work and sanitary teaching the scheme of a touring Health Exhibition and Baby shows was instituted. We were aware of the prejudices among villagers as well as the difficulties of the pardah system; to remove some of these difficulties we selected villages of Jats, Ahirs, Gujars and Meos who do not keep pardah. As our scheme was new and novel and as we wanted to make it a success, the Deputy Commissioner and Mrs. Brayne with the Health Officer accompanied the Health Worker and the members of the Public Health staff. Villages in the Gurgaon and Nuh districts were selected and information about our shows was sent beforehand.

The experiment was more successful than we had anticipated. The total number of infants who attended the shows in all villages was 2,094. No exact record of the number of women attending was kept, nor of toddlers, but roughly the number was respectively 2,740 and 2,065. We took with us about 100 feet of kanats with which we made an enclosure so that if pardah women wished to attend they could do so. On the kanats posters about maternity and child welfare, plague, malaria and small-pox were put up. The Health Visitor had a table with scales and ointments and medicines for minor ailments. When women collected inside the posters were explained to them and they were given instruction about the care of their babies, cleanliness, etc. They were also told about the work of the dais in confinement and what they should do at this time.

A Baby show was held and Mrs. Brayne and the Health Officer assisted in judging the babies. Infants and toddlers up to five years were admitted to the show, the younger babies were given toys and the elder children sweets. When any defect in a child was noticed the Health Visitor explained to the mother what she ought to do to remedy it. The best babies were selected during the general judging and set aside and at the end of the show were given better toys as prizes.

In the evenings magic lantern lectures on child welfare, plague, cholera, malaria and small-pox were given. In each village we had shows and lectures for two days. In most of the villages not only the women living there attended but many came from other places three or four miles distant. While the women were inside the show the men were not allowed in, but the Deputy Commissioner lectured to them outside.
We left Gurgaon for Bhangola on the 5th January and had our show there for two days. The same procedure was carried out there and people also came from other villages. The women took a keen interest in all that was shewn to them.

Patharheri was the next stop and about 160 women attended the show. After two days we left in bullock carts for Taoru where we stayed one day. Here over 500 women came from all the villages round about. The number of babies in the Baby Show here was 3/4, apart from a large number of toddlers. School girls came and one gave a lecture on the care of infants. The crowd of women inside became so great that it was impossible to explain everything to them. We gave them a short talks and then let in the next lot who were waiting outside.

There are three dais at Taoru and they attended the Exhibition. The Health Visitor had a long talk to them and gave each dai a cake of soap. They seemed willing to learn but Taoru is too far from Gurgaon for them to attend classes.

We also visited Sohna, Ghasera, Sailani and other villages, in every place we had large numbers of visitors who listened with attention to the lectures and ought to benefit from the show.

This tour cost Rs. 100 per day but was well worth it. Plague permitting, "the circus" will visit the Punhana Meos, the Pulwal Jats and the Ballabgarh Gujars and Jats in the second half of the month."

All Health Visitors will be interested in this report. There is so much need for work in rural areas and so little can be done for lack of funds. Every village should have a health visitor, but at present that is a council of perfection, as there are not enough to supply the demand in towns. However in the future when more women come forward for training these dreams may materialise.

Yours sincerely,

EDRIS GRIFFIN,

Hon. Secretary, Health Visitors' League.
PERSONAL NOTES.

A very pleasant function was participated in by the friends of Dr. L. Hart of Madanapalle, S. India, on March 4th. The occasion was Dr. Hart’s thirtieth anniversary since her arrival in India. All these years she has been connected with the medical work of the Arcot Mission.

The people of Madanapalle and many of her friends from other places gathered on this day to offer their respects and do her honour. As a permanent memorial of this occasion it was decided to raise money to build a chattram for the hospital with which she is connected.

In connection with this function the foundation stone of the much needed new Nurses’ home was laid, for which funds had been sent from U.S.A.

Friends of Miss Houghton and Miss Tucker, both connected with the medical school in Vellore, and members of our Association will be interested to know of their miraculous escape the other day while in a motor accident. The car of which they were occupants overturned. There were five passengers in the car but not one of them sustained any serious injuries except for rather severe bruises.

Miss N. Blair, Nursing Superintendent of the Tuberculosis Sanitorium, Madanapalle, S. India, and Miss Josephine Te Winkle, Nursing Superintendent of the Mission Hospital in Madanapalle, are proceeding to U.S.A. on furlough. After spending some time in Europe they will sail for New York. We extend our good wishes to these two of our fellow workers and members of our Association for a prosperous journey and a happy furlough.

During the absence of Miss Blair from the Sanitorium at Madanapalle Miss Ekholm of Stockholm, Sweden, will act as the Nursing Superintendent. Miss Ekholm is new to the work in India, and we wish her success in her work there.

Miss H. Brumler will take up Miss Josephine Te Winkle’s work in the hospital at Madanapalle where she has been associated with Miss Te Winkle for the past two years.
LETTERS TO THE EDITOR.

The Lady Hardinge Medical College Hospital,
Delhi, the 20th April 1926.

Dear Editor,

The much delayed handbook has at last been received. I have posted copies to those members who, I understand, have paid Rs. 6 and am sending a copy per V. P. P. for Re. 1 to those members who have only paid Rs. 5.

I have still a small list of people who were members, and who have not apparently paid a subscription this year, I am sending a copy of this letter to them just in case there may have been some mistakes in compiling the list.

If there be any such who have paid Rs. 6 if they will send me a post-card quoting the date, number and name of payee, on their receipt I will forward them a copy at once. Should there be any of those who are being sent the handbook V. P. P. for Re. 1 who have previously paid Rs. 6 (and not Rs. 5), I should be delighted to return the Re. 1 to them on receipt of a post-card as above (that is unless such unfortunate members would be willing to give the large sum of Re. 1 to the Association, and so save the really hard-worked Secretary a little extra work).

If I have by mistake posted the handbook free to any member who has only paid Rs. 5, will she be good enough to send to Miss Ford the additional Re. 1. May I take this opportunity of making it known that the handbook is available to non-members for Rs. 1-8-0 plus the cost of postage, it has been compiled with a view to being a nursing guide for India. The following is a list of its contents:

3. Constitution.
5. The Nursing Journal.
6. Provincial Boards of Nursing Education.
7. Mission Boards of Nursing Education.
8. The Military Nursing Services in India.
11. The Punjab Midwives' Board.
12. X-Ray and Massage Activities.
13. The Indian Red Cross Society.
15. National Baby Week.
16. The Language School.
17. Travelling in India.
18. Nurses' Clubs and Hostels.
19. Miscellaneous—
   (a) The International Council of Nurses.
   (b) University Training for Nurses.
   (c) A Variant of the Hippocratic Oath.

20. List of Members—
   (a) Active Members.
   (b) The Health Visitors' League.
   (c) The Midwives' Union.

   Yours faithfully,
   L. Bonser,
   Hon. Secretary, Trained N. A. I.
   Simla,
   April 8th, 1926.

Dear Miss Editor,

Herewith the result of the competition which appeared in the February number of the Journal.

Ten candidates only entered. I think there was not enough time given, as the February Journal arrived here in March, and papers had to be sent in by the 15th.

Mrs. Franklin, our President, and Miss Griffin kindly judged them.

First Prize—Nurse Shanta Nath, Lady Reading Hospital, Simla (2nd year nurse).

Second Prize—Nurse Rosalind Eldred, Lady Kinnaird Memorial Hospital, Lucknow (2nd year nurse).

Mrs. Franklin suggests, I send the papers to you in case you would like them for the Journal. The English one is enclosed. The other needs translation, as it is in Roman Urdu, and will come later.

Of the ten papers sent in,

Four came from the Sarah E. Creighton Memorial Hospital, Brindibag.
Four from the Lady Kinnaird Hospital, Lucknow.
One from the Lady Hardinge Hospital, Delhi.
One from the Lady Reading Hospital, Simla.

I feel sure that such competitions will help to develop keenness amongst our nurses, and will help them to realize there are other hospitals and other nurses in India! And that is to the good.

Probably more will enter if they have a chance.

Miss Cowdray, Nursing Superintendent, Lady Kinnaird Hospital, Lucknow, kindly suggested she was willing to run one for Urdu-speaking nurses. I believe Miss Griffin has one ready too, so please don't feel too discouraged with our small beginning, but give our nurses and our cause some more competitions and encouragement.

Rs. 10 enclosed.

Yours sincerely,

E. M. Roseveare.

[The Prize papers will be published later.—Editor, N. J. of I.]
JOTTINGS.

By Miss Burke.

Cocaine is derived from cocoa leaves. "Coca crythoxylon" is a plant that grows in the mountains of Ecuador, Peru and Columbia. Its leaves produce cocaine if put through a certain chemical process. Cocaine is a white powder resembling confectioner's sugar. It is taken by addicts through the nose, like snuff. It sharpens the brain and increases courage. Criminals usually preface a big crime with a strong dose of it. They call it "snow" or "sugar." If the leaves of the coca plant wrapped around lime or chalk powder and chewed, a stimulating effect is felt. The native Indians of the South American mountains chew coca leaves when on a long journey or climb by foot. It temporarily keeps up their strength, and enables them to go without food for a time without feeling the effects of hunger.

To stone raisins.—Stoning raisins will be found an easier and less sticky job if a little butter is rubbed on fingers of the blade.

Work is the very blood and bone of existence, without it we should rot.

Kind words have converted more sinners than either zeal, domination, or learning, and these have converted none unless they were kind also.

A few grains of borax added to the tea before the water is poured on greatly improves the flavour.
EXAMINATION QUESTIONS.

Sent at the Punjab C. M. B. Examination at Delhi, April 8th, 1926.

1. What complications may arise during labour for which you would send for a doctor?

   (b) Mention briefly the causes of three of these complications.

2. What signs and symptoms would you find in a woman six months pregnant?

   (b) What are the positive signs of pregnancy?

3. What precautions would you take to (a) make a vaginal examination; (b) pass a catheter? What bad results may follow if these precautions are not carried out?

4. Give an account of the nurse's duties to the mother and baby immediately after delivery is complete.

5. What causes may lead to delay in the second stage of a breech presentation, and how would you deal with them?

6. What do you mean by ante-partum haemorrhage? Give its cause and what would you do in such cases?
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NOTICE.

TRAVELLING CONCESSION CERTIFICATES.

By the courtesy of the Railway authorities concessions are granted to trained nurses enabling them to travel in a class one higher than that for which they pay fare.

To obtain a concession form members of the T. N. A. I. should adopt the following procedure:—

Write to the Provincial Secretary (if there be no Secretary of your Province, write to the General Secretary) giving:—

(1) The names of the stations of departure and arrival.
(2) The line which will be travelled over when the journey starts or when a fresh ticket will need to be purchased in the case of a non-through booking.
(3) The date of travelling, or the date up to which the concession should be made available.
(4) Your registered number with the T. N. A. I.
(5) A stamp for reply.

The certificate when received from the Secretary should be sent with the prescribed form to the Divisional Superintendent in whose jurisdiction the journey is to be commenced, the Divisional Superintendent will then issue a concession which must be presented when purchasing the ticket.

N.B.—1. The use of blank forms has been prohibited owing, it is regretted, to their abuse in the past. Letters of application for concession certificates will not be answered unless the details given above are complied with. (Please note No. 5.)

2. Allow plenty of time when applying for the certificates. Your Secretary is probably a busy woman in a busy hospital and may not be able to reply by return.

The following is a list of some of the District Offices but at most of the largest Railway Stations, a District Traffic Manager’s office will be found:—

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<th>Railway</th>
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<td>O. &amp; R. Railway</td>
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<td>Moradabad.</td>
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<td>N.-W. Railway</td>
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* Numbers will shortly be given to each member.