

*The Oriental Watchman and*

# *Herald of Health*

*A Magazine for Home and Happiness*



**February**  
**1956**



---

The orchestra of the Calcutta Blind School has acquired a name for itself. It has given several performances over the A.I.R. Network.

---

Photo U.S.I.S.

---

## CALCUTTA BLIND SCHOOL GETS BRAILLE PRINTING PRESS

H. N. MUKERJEE

A NEW, modern Braille printing press, a gift of the New York Institute for the Education of the Blind, will soon go into production in Calcutta. When this happens, the entire current need of Braille books and printed matter of the eastern region of India will be met.

Fittingly this Braille press is to be housed on the campus of the Calcutta Blind School, only five miles from the heart of Calcutta and one of Asia's pioneer institutions for training blind children to

be useful citizens. An appeal for Rs. 100,000 to meet the cost of the buildings to house the press and the library has met with generous response from the public. More than Rs. 22,000 has so far been donated.

The story of this gift goes back many years. Since the school was founded in 1897 by Mr. Lal Behari Shah, the grandfather of the present principal, blind students have been transcribing their books into Braille by hand, page by page,

a tedious and slow process. When this was brought to the attention of Rajkumari Amrit Kaur, India's Health Minister, she promptly wrote to Dr. Merle E. Frampton, Principal of the New York Institute for the Education of the Blind, knowing that her request would receive sympathetic attention. The response from Dr. Frampton was immediate.

Impressed with the work of the Calcutta Blind School, he donated  
*(Continued on back page)*

# The Oriental Watchman and Herald of HEALTH

## Contents

47th YEAR OF PUBLICATION

February 1956

L. J. LARSON, Editor

DUNBAR SMITH, M.D., D.N.B., D.T.M. & H. (LOND.)  
ASSOCIATE EDITOR

J. B. OLIVER, M.D., D.T.M.  
ASSOCIATE EDITOR

### FEATURE ARTICLES

	Page
Calcutta School Gets Braille Printing Press	2
Every Woman's Hidden Fear (Part II)	8
The Professional Nurse	10
Baby Helps Himself	12
Your Telephone System	14
Contact With Nature	16
What You Are Made Of	18
Alcohol and Heredity	20
Polio Primer	22
Dangerous Practices	32
<b>FOR CHILDREN</b>	
One Trick Too Many	24
<b>FOR YOUTH</b>	
The Students' Guide	6
<b>FOR HOMEMAKERS</b>	
The Father and His Children	26
Household Hints and Recipes	27
<b>FOR EVERYBODY</b>	
Minute Meditations	3
Beware! Cannibals!	4
Better Bodies	7
Five Essential Minerals	11
Gardening for Health	31
The Doctor Says	33
The Last Word	34

### OUR COVER

OUR COVER—Tippu Sultan's Tomb at Srirangapattinam  
by S. G. Jayapalan.

Published monthly by the Oriental Watchman Publishing House. Two years' subscription: India, Rs. 17-8-0; Pakistan, Rs. 17-8-0; Burma, Ks. 17-8-0; Ceylon, Rs. 17.50. Foreign Postage, Rs. 1-2-0 extra.

Our representatives are authorized to receive cash for your subscriptions and to give our official receipt for the same.

Terms of Payment are cash in advance. Magazines are sent only for paid subscriptions.

Cheques and Remittances—Cheques for subscriptions given to our travelling representatives should be crossed and made in favour of the local branch office under whose jurisdiction they are working.

Regional Offices—Subscriptions may be sent to our nearest agency: for Madras State, Travancore-Cochin State, and south half of Hyderabad State—9 Cunningham Road, Bangalore; for Bombay State—16 Club Road, Byculla, Bombay 8; for Uttar Pradesh, East Punjab, Delhi and adjacent States—27 Barakhamba Road, New Delhi; for Bihar, Orissa and West Bengal—"Morabadi Villa," Ranchi, Bihar; for

Assam—Nongthymmai, Shillong, Assam; for East Pakistan—Gopalganj P.O., Faridpur Dist., East Pakistan; for Ceylon—7 Alfred House Gardens, Colpetty, Colombo 3; for West Pakistan—32 Mozang Road, Lahore; for Burma—68 U Wisara Road, Rangoon.

Change of Address—In requesting change of address, or referring to your subscription, kindly return wrapper or quote reference numbers appearing thereon, and indicate your old as well as your new address. Duplicate copies cannot be supplied without extra charge when intimation of change of address has not been given in advance.

Non-Receipt and Loss of Copies—If your magazines fail to reach you, please inquire at your local post office. If you get no satisfaction there, please inform us.

When making any complaint about the late receipt of this magazine, please send the wrapper along with the complaint. This will enable the post office to fix responsibility for delayed delivery.

## Minute Meditations

### TOBACCO AND YOU

D. A. DELAFIELD

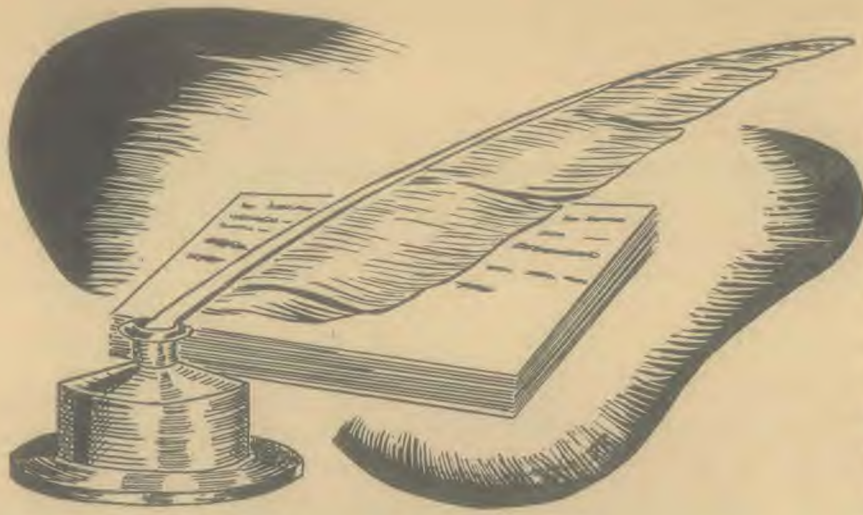
**I**F YOU worked for J. S. Bridewell, oilman-rancher of Wichita Falls, Texas, you might collect two hundred and fifty rupees for laying aside your tobacco—from March 25 to Christmas, that is. Each of Mr. Bridewell's 175 employees was invited to consider the offer and make his own decision without pressure of any kind. That's the right way to do business of this sort.

Mr. Bridewell's offer focuses our attention on a question vital to the health of millions of people. May we suggest four really basic reasons why smokers should quit tobacco?

1. Economic. The moderate smoker who puffs away at a package of cigarettes a day would actually save between Rs. 330 and Rs. 475 a year if he let the expensive little things alone. If his wife is a moderate smoker and also discards cigarettes, they would save between Rs. 660 and Rs. 950 a year, enough money to landscape the compound, buy the paint to redecorate the house, or perhaps a good radio. Better still, the money might be given to some worthy charity. What a liberal offering it would be!

2. Physical. The non-smoker is not tormented with the fear of lung, lip or throat cancer and other dangerous and often fatal ailments. Moreover, the chances are that he would never contract these increasingly common and terrible diseases.

3. Social. A tobacco abstainer finds it easier to practice the golden rule. For example, he does not saturate the air of buses,  
(Continued on p. 5.)



## THE EDITOR SAYS

### BEWARE! CANNIBALS!

**I**F I should walk into your house and after a few pleasantries tell you that you are a murderer and a cannibal, you would probably call the police and ask them to throw me out of the house or even lock me up as a dangerous character. However, there are a great many people who are guilty of murder even though they have never actually taken anyone's life by violent means. There are others who are guilty of cannibalism even though they have never tasted human flesh. There are women who are guilty of murder, in that they prepare harmful foods and set them before their husbands and families. A woman can very easily take the life of her husband by being too kind to him, particularly, if that kindness takes the shape of providing him with rich food, because doctors now are agreed that for every ten pounds a man carries in over-weight, he will shorten his life by about five years.

However, I do not wish to talk today about diet or over-weight, but I am going to talk with you about something that I think is even more important than that. We are going to think today about

"tongue murder" and "mental cannibalism." We should remember that every individual has not only his physical body but also his reputation to consider. It has been said that reputation is what people think you are while your character is what you really are. Many people who would never for an instant harbour a thought of murdering the physical body of a neighbour or an acquaintance would have no hesitation to destroy that person's reputation by slanderous remarks, and I contend that when an individual destroys another's reputation he is a murderer.

Let us take an example. I think of a young person. He was not a bad young man. He had by persevering labour and effort achieved a degree of success in his community and in his school. He was honoured by his fellow students and respected by his teachers. He was looked upon as a promising youth in the community in which he lived. His reputation was excellent and we can truthfully say that he was a young man of exceptional character. But, in the community in which he lived, there also lived a lady and this lady

made it her business to snoop. In fact, some people called her Sister Snoop. Figuratively speaking, she had a very long nose and was always meddling in somebody else's affairs. And so one day she began talking about this young man. She never said anything specifically bad about him because at that time there wasn't anything bad that she could say about him. But, she would ask insinuating questions about him until as the result of her sowing, a harvest of woe came into being. His neighbours and acquaintances no longer had confidence in him. He was no longer held in that high esteem and respect that he had formerly enjoyed. His former associates began to shun him. Parents of young people did not want their children to associate with him and could never give any adequate reason for their attitude. This young man had become the victim of slander and gossip. Because of that slander and gossip, he was deprived of his good reputation. He was deprived of the honour and respect and position which was rightfully his and of which he was truly deserving but of which he was robbed by the evil of Sister Snoop's vile insinuations.

Driven from the homes of his wholesome companions, shown disrespect and lack of affection in the school, having lost his status in the community, and all this unjustly, this young man finally found other associates who were also outcasts from society. He decided that since people had treated him in such a way they were not deserving of his goodwill nor of his co-operation, and he became anti-social. His new acquaintances were rowdies and truly a disreputable lot, and he in time became identified with them. Then Sister Snoop went around saying to everyone she met "See, didn't I tell you so? He is just a common no good person." Yet actually, she was the cause of his having become what he was.

*(Continued from p. 3.)*

In this case, Sister Snoop destroyed his life. The young man the community had once known—fine, clean, honourable, possessed of all those noble qualities that we could name—was no more. It was as though he had died and his place had been taken by another one who was disreputable, violent and mean. Was not that woman whom we have called Sister Snoop actually guilty of murder with her tongue? Was she not as truly a cannibal feasting upon the quivering flesh of her victim as are those primitive peoples who occasionally still practice the barbaric custom of eating the flesh of their victims? And not only did that woman destroy the young man but think of the harm that she did to his family, to his associates and to the community in general.

replied, "Well, you will have to agree that he is persistent, and he certainly keeps at his business."

It is true. We can find something good in everyone, and how much happier this old world would be if we would look to the good instead of trying to dig up all the evil in our associates. Let us determine that we will not be guilty of the crime of "tongue murder" or "mental cannibalism."



## LETTERS TO THE EDITOR

Sir:

May I, a Ceylon reader of your journal, know from other readers, what they think about pictures in newspapers, magazines, and books known as cartoons. Are they of any educational value? If so, why haven't recognized colleges and universities cared to teach their pupils to produce these seeds of mirth, and why is it that your magazine contains such stuff in quantity comparable to a pinch of salt?

Down here in Ceylon, people now talk of one language for the entire country and people talk of one language for their particular nationality. Don't you think that these pictures or illustrations named cartoons can talk to them all [regardless of] their particular language?

Yours truly,  
H. E. S.

trains, trams, and aeroplanes with the heavy, lethal fog of tobacco smoke, which is often offensive to non-smokers.

4. Spiritual. The body is the temple of God, and any habit that harms it defiles the holy temple. Would anyone deny that smoking clouds the sensitivity of the brain? And when the brain is dull, can there be deep spiritual response?

We have a neighbour who took his last smoke three years ago. He told me he thinks better, eats better, sleeps better, and really is a better man—since he threw away his last pack.

Another neighbour, a colonel in the Air Force, discarded his cigarettes too. He was annoyed with himself to think that he, a man who commanded a group of fighter planes, was actually taking orders from this little white parcel of calamity that he carried around in his shirt pocket. And now he has smoked his last pack. He is a free man. The last time I saw him he asked me to talk to his wife. "She shouldn't be smoking either," he asserted. "You see, we're expecting a baby. I fear that if she doesn't stop, something might happen to her, and I'm afraid for the baby, too."

Whatever the reason that applies to you, quit smoking. You have everything to gain if you do and everything to lose if you don't. It's really that important.

---

Life is like a bank account. You get back only what you put in. Experience is the interest.—*Reformatory Pillar.*

There is no better way to take the irk out of work than by putting love into it.—*York Trade Compositor.*

It takes a lot of time to get experience, and once you have it you ought to go on using it.—*Benjamin M. Duggar.*

Conductors of great symphony orchestras do not play every musical instrument; yet through leadership the ultimate production is an expressive and unified combination of tones.—*Thomas D. Bailey.*

I would that this were an isolated case, but how frequently is this sort of crime committed! It seems that there are some who are so possessed of the evil one that they cannot resist the temptation to undermine the reputation of any individual they see who stands with his head erect and looks at the world through a clear eye. Their greatest joy comes from undermining reputations. Would it not be better if we could each of us resolve this year that we would try always to say something good about the other chap rather than to slander him?

I often think of the story of the old grandmother. A group of young people were talking about their friends and acquaintances one afternoon. They were criticizing and finding fault with them and it got on the old grandmother's nerves. Finally she said, "Children, surely they are not as bad as all that! You must remember that there is something good in every one." One of them turned to her and said, "Grandmother, I think that you would even find something good in the devil!" Grandmother thought a minute and

## THE STUDENTS' GUIDE

“ANARCHY is seeking to sweep away all law, not only divine, but human.

The centralizing of wealth and power; the vast combinations for the enriching of the few at the expense of the many; the combinations of the poorer classes for the defence of their interests and claims; the spirit of unrest, of riot and bloodshed; the world-wide dissemination of the same teachings that led to the French Revolution—all are tending to involve the whole world in a struggle similar to that which convulsed France.

“Such are the influences to be met by the youth of today. To stand amidst such upheavals they are now to lay the foundations of character.”

This view of conditions coming upon the earth is not a pleasant one but it is evidently all too true. Everywhere we witness the breakdown of law and order. On every hand we see persons, groups, and even nations who defy society by trampling upon all the principles of human decency and impudently flaunt before mankind their total disregard for the rights of others. We see nations violating the very fundamentals of international law in their dealings with their neighbours, yet screaming to high heaven the lie that their neighbour is mistreating them. It would seem that in many instances even the national imagination has become diseased. All thinking men and women stand with bated breath as they view not only the international conditions of earth but also as they observe the internal situation of the countries in which they live. Nationalism, Capitalism, Communism, Trade Unionism, Linguistic Provincialism, Goondalism,

Rowdyism all raise their heads and stand unmasked before a trembling world.

These things would not be if all persons were to conduct their lives on the basis of the maxim “Do unto others as you would that men should do unto you.” But men are not kind and loving and generous. Instead, they are grasping, jealous, selfish and saturated with hateful distrust.

It is not a nice world into



### GIRLS AS BRIGHT AS MEN

GIRLS are as intelligent as men when it comes to solving a mechanical problem such as finding a defect in a gear train, Dr. Edmond Mech of the University of Oklahoma and Drs. Nicholas A. Fattu and Ervin Kapos of Indiana University have noted.

Worry in either a man or a woman makes a difference in solving a problem. Persons who are not worried and anxious, they found, have an advantage in finding a correct solution to the gear-train problem.

which the youth have come. It is no longer the world of make-believe they so enjoyed as children. As they have matured to take their places in life, the world has become to them a thing of hard reality.

Many youth have learned good lessons and have been filled to overflowing with high standards and high ideals. But as they have met life squarely in what they thought would be a fair fight, they have been disillusioned to find that standards have crumbled and ideals are largely disregarded. These youth are disillusioned. The future for them has become as it were an enormous dog fight with the more powerful beast the victor.

But youth need not fail. Youth can succeed. Youth can maintain standards and integrity although the world about them is in chaos.

If youth is to succeed, if youth is not to fail, if youth is to maintain high principles as they enter upon life, they must form strong, noble characters during their formative years. And as they form their characters, they must never forget that man without God is incomplete. They should remember that the one universal foundation and pattern in character building that applies with equal force to every nation, every race, every community, every family and every person is that divine law—“Thou shalt love the Lord thy God with all thy heart, . . . and thy neighbour as thyself.” A character truly based upon such principles will stand the strains and stresses that life may bring. Such a character will cause its possessor to “shine as the stars” and enable him to “ride upon the high places” of the earth.

# BETTER BODIES

**V**ERY early in life children should be taught the fundamentals of physiology and hygiene. The mother should begin this instruction in the home. Then when children become of school age the teachers should continue this educative process. Actually, it is our conviction that physiology and hygiene are basic to all educational effort. Thus, as children grow to young manhood and young womanhood, and instruction along this line is continued and adapted to their age and interests, they will be qualified to intelligently care for themselves and later for their families.

Children and young people should be taught the importance of protecting themselves from the inroads of disease by caring for their body in such a way as to preserve each organ in vigorous health. They should also be taught how to take care of accidents and to treat the more common diseases.

If we would truly build better bodies, the best time to lay the foundation is in early childhood. Then all later effort will have a good chance for success.

For this reason we believe that every school should give thorough instruction in hygiene and physiology. And we also believe that it is more essential for schools to be provided with facilities for illustrating the structure, use and care of the body than it is for the schools to be provided with maps and globes and charts for the teaching of, for example, history and geography. Of what value will be the knowledge of history or geography or literature or any other

branch of learning if in the end the body and/or mind of the pupil is not strong and healthy?

It is also true that there are many matters which should be included in the study of physiology which, at present, receive little or no attention. It should, for example, be made indelibly clear to the students that the human body is governed by law—natural law—or as some say—divine law. The students should be impressed with the fact that every careless or wilful violation of these laws is a sin against the Creator. If we disobey nature's laws carelessly, wilfully or ignorantly, we are injuring the body in one way or another and often we are injuring not only our own bodies but also are placing in jeopardy the very existence of those who will be our descendants.

How vitally urgent it is then that children and youth should be as-

sisted in obtaining a thorough knowledge and understanding of these laws! They should realize the importance of proper diet, the place of proper exercise, the importance of the care and training of children, the value of a knowledge of how to treat the sick, etc. Such matters should be given the attention they really deserve in our school systems. And, too, it is imperative that we all come to a clearer understanding of the influence of the mind upon the body. The energy—electric power—if you please, of the brain is developed and maintained by mental activity. It is this power or energy which vitalizes the whole human system. Thus mental activity is an essential aid in building a healthy body and in resisting disease.

The importance of self-control, the power of the will and the use of the will in preserving and recovering health, need greater emphasis than they receive. Our children and youth need to be informed too concerning the depressing and ruinous effects of such feelings as anger, discontent, and selfishness. They should have the disastrous results of impurity of mind and body made clear to them. And then in contrast, they should be shown the wonderfully invigorating power found in gratitude, cheerfulness and unselfishness and the great strength of body, mind, and soul that comes from a life of purity and morality.

This matter of building better bodies is much more than just the repeated practising of certain muscle-building exercises.

(Continued next month.)



# EVERY WOMAN'S HIDDEN FEAR

(Second of Two Parts)

JEAN PAUL PRATT, M.D.

Division of Gynæcology and Obstetrics,  
Henry Ford Hospital, Detroit, Michigan.

EVERY one has a fear that appears to be greatest for his particular age. During the reproductive years of marriage the two greatest fears are the fear of becoming pregnant and the fear of not being able to become pregnant. Circumstances, finances, ambitions, and sometimes selfishness are the leading factors in the controversy about parenthood. With some young people the time to become pregnant is always, later, "when things are just right." To many people there never is a propitious time. Over families with this idea a great fear of pregnancy hovers. In spite of these days of planned parenthood Mother Nature sometimes has her way.

I have seen women terrified and unhappy when told they were pregnant. It takes all the skill and understanding of the physician to make such a woman want to have the child and thereby accomplish the fulfilment of womanhood.

Often when menstruation is interrupted it does not mean pregnancy. Any woman who considers herself regular skips now and then without any apparent reason. If pregnancy is suspected, there are several laboratory tests helpful for establishing the diagnosis. An early diagnosis of pregnancy is desirable so that care of the pregnant woman be started as soon as possible. This is important to the

mother as well as the unborn child.

The most tragic fear of all is the fear of not being able to have a child. This fear is sometimes unfounded. Much has been done to overcome infertility. In treating it there must be understanding between husband and wife, but intelligence as to the facts is important too. Each may secretly fear that he is at fault. The wise thing to do is to see a competent physician well versed in this field. He may dispel the fears.

The emotions can hinder motherhood. How often we hear that shortly after adopting a child the foster mother becomes pregnant. The maternal instinct is aroused, and the anxiety of living in a childless home is relieved. A normal, calm pattern of living helps establish the chemical balance in the body that is favourable to fertility.

At the beginning of pregnancy

menstruation stops, though some bleeding may occur during pregnancy. The uterus grows and enlarges to accommodate the foetus. Now the uterus does not shed the lining, but continues to build to furnish nourishment for the developing child.

Usually even small amounts of blood indicate trouble. A tubal pregnancy is likely to be indicated by discharge of small amounts of dark blood. Pay attention to even a slight bloody discharge, because a tubal pregnancy requires prompt medical care.

Another cause of bleeding in early pregnancy is threatened loss of the foetus. Some fertilized eggs are not normal, and nature very wisely gets rid of such imperfections. The imperfect egg fails to continue its development, and is expelled.

During the first three months of pregnancy a little bleeding may be within the limit of normal. The responsibility of deciding whether the bleeding is normal should be the physician's.

More old wives' tales about the menopause have persisted through the years than about any other phase of womanhood. I sometimes find intelligent women believing that they will become masculine; they will lose interest; that it is the jumping-off place into old age;





that the menopause is always accompanied by turbulence.

The menopause simply means that a woman's reproductive years are over. Menstruation ceases, and thereby she can lose many of her fears. She can be just as charming, just as young, in appearance and feeling, as her good sense permits. It is like stepping from one room into another. The room you step into is just as bright as the one left, and has many additional compensations.

Fear of having trouble at the menopause is much greater than the trouble itself. In reality the menopause is merely a transition, such as from childhood to adolescence and from adolescence to maturity.

The most frequent questions asked at the time are:

1. Will I stop menstruating suddenly, or will it be a gradual process?

2. Will the flow be heavier or lighter?

3. How will this change effect my personal life?

The answers are simple:

1. There is great variance in the manner of cessation of menstruation at the menopause. The flow may stop suddenly, without any warning, and never reappear. Or it may be at longer intervals, such as a few months or even a year.

2. The number of days of flow may be fewer and fewer with each succeeding menstruation. The flow may be less in amount. It should be emphasized that too frequent and too heavy a flow is not normal. Either requires an explanation.

3. There is no need of any change or interruption physically or emotionally.

Hot flashes, commonly associated with the menopause, are in woman an indicator of diminishing function of the ovary. The monthly cycles of the uterus are controlled by the secretions from the ovaries (the hormones).

In many instances hot flashes are from causes other than lack of hormones. Nevertheless, with the first flash women are prone to ask the doctor for a shot. All women should know that indiscriminate use of hormones has created a problem bleeding. Perhaps the reason is that the cycles have already become irregular. If the hormones are taken, the irregularity is increased in some cases.

A sensible approach to the menopause overcomes more of the hurdles. Physicians should sympathetically and kindly inform their patients of the facts, and thereby put them at ease in their minds. A good understanding of the facts and a serene attitude overcomes most fears.

The woman menopause patient must not dwell on her difficulties. It is always wise to become absorbed in outside interests to the extent that personal fears fall into the background.

So much has been said about cancer that I hesitate to say anything for fear of adding to the anxiety. But it is to the public interest that in the past decade people have been awakened to the necessary watchfulness for any symptom of the disease. Because much of the hidden fear has been taken away from cancer many more cures have been effected

through early examination.

But women must guard against needless fears of cancer. At the slightest irregularity they must not immediately think that they have cancer. If they have any fears, the best thing is to determine the facts. They must not live for months and years with such a fear. Actually, in most cases when friends or family insist that the woman seek competent medical advice of a physician, she finds that her fears are needless.

Any fear of cancer should be brought into the open immediately. Any spotting is a danger signal that should be investigated. If it occurs during the reproductive years or after, it should have prompt attention. It is not necessarily a sign of cancer, but it is Nature's way of saying, "Be Warned!" Every cancer could be cured if found early enough.

Medicine has made greater progress in the past one hundred years than in previous centuries. Among its advances is the lessening of fear by knowledge, and a working, intelligent, practical understanding of the body, and its ailments by the layman. Today's doctor is better equipped to cope with the problems of health than any former doctor. This combination gives us all a better chance for a longer, healthier, and happier life.



# THE PROFESSIONAL NURSE

D. LOIS BURNETT, R.N.

The professional nurse is no small member of the medical team. She is indispensable.



Photo S. G. Jayapalan

Maybe she will grow up to become an important professional nurse.

**W**HAT does professional nursing mean to you? Nursing is a profession, and professional nurses are a significant part of the medical and health team. The team refers to a group of persons working together for a common purpose. Each member carries his share of responsibility, and is willing to forgo personal prominence that the purpose of the group may be accomplished.

It is appropriate to regard as a team all the group who serve the patient, whether giving curative care or instructing with regard to the prevention of disease and the maintaining of health. The doctor serves as the director of the team, and the total service given the patient depends to a great extent on the manner and degree to which he draws on the capabilities of the nurses, the dietitians, the laboratory technicians, the physical therapists, and other members.

The patient has a right to expect a high degree of competence from each member of the medical team. Until quite recently total medical knowledge was much more meagre than it is today. Formerly it was possible for the family doctor to be quite well informed in regard to medical science and also to execute many of the procedures in patient care. Today scientific investigation is going forward so fast that it is impossible for a doctor to have a high degree of competence in several branches of medicine. The result is specialization in medicine and greater dependence on other members of the medical and health team to perform certain functions as the doctor devotes himself to applying the results of medical research.

Today a nursing science is developing. The professional nurse not only serves as an associate to the physician on the medical team

*(Continued on p. 29.)*

# FIVE ESSENTIAL MINERALS

FRANCES L. DITTES, Ph.D.

There are seventeen or more mineral elements in the body, thirteen of which are known to be absolutely essential. If we obtain adequate amounts of calcium, phosphorus, iron, copper, and iodine each day in our foods, it is not likely that we shall be lacking in the other mineral elements.

MINERAL	DAILY ALLOWANCES	BEST FOOD SOURCES	BODY FUNCTIONS
<b>Calcium</b>	Calcium in foods is measured in grams. One ounce equals about 30 grams. Adults .... 0.8-1.0 gm. Children .... 1.0-1.4 gm. During pregnancy and lactation .... 1.5-2 gm.	Foods having most available calcium: Milk (milk products) 1 qt. milk provides 1 gm. calcium. Broccoli .... 0.13 Cauliflower .... 0.12 Kale greens .... 0.22 Turnip greens .... 0.26 Almond nuts .... 0.25 Soybeans, dry .... 0.23 Dried beans .... 0.15 Dried figs .... 0.16 Molasses .... 0.25 Collards .... 0.20	Contributes to formation of strong bones and teeth. Helps to clot blood, regulate heart-beat, maintain mineral balance in all body tissues. Calcium, phosphorus, and vitamin D help prevent softening of bones as occurs in rickets.
	<b>Phosphorus</b>	Phosphorus in foods is measured in grams. One ounce equals about 30 grams. Adults .... 0.88-1.6 gm. Children .... 1.00-1.4 gm. During pregnancy and lactation .... 1.5-2 gm.	Grams of phosphorus per 100 grams fresh substance. (100 grams—about 3½ oz.) Soybeans .... 0.66 Egg yolk .... 0.59 Beans, dried .... 0.46 Almonds .... 0.45 Peas, dried .... 0.41 Peanuts .... 0.39 Oatmeal .... 0.38 Lentils .... 0.38
<b>Iron</b>		Iron is measured in milligrams. Head of common pin weighs about 1 milligram. Adults .... 12 mg. Children .... 8-15 mg. During pregnancy and lactation .... 15-18 mg.	Milligrams of iron per 100 grams fresh substance (100 grams—about 3½ oz.) Dried beans .... 10.5 Egg yolk .... 8.6 Fruits (dried): Apricots .... 7.6 Peaches .... 6.1 Prunes .... 2.8 Molasses .... 7.3 Peas (dried, split) .... 5.7 Whole-grain cereals, breads; oatmeal .... 5.2 Entire-grain cereal .... 5.0 Green leafy vegetables: Kale, chard, turnip tops .... 2.5-3.5 Fresh soybeans .... 2.8
	<b>Copper</b>	The requirement for copper is approximately 1/10 that for iron (1-2 mg. daily).	Copper is sufficiently distributed in foods so that the normal human dietary supplies enough of this element to meet body needs.
<b>Iodine</b>		Iodine is measured in milligrams—1,000 milligrams—one gram. Estimated 0.15-0.30 mg. per day.	Iodized salt Sea foods Green leafy vegetables grown near seashore, or in soil not depleted of iodine content.

# BABY HELPS HIMSELF

GENEVIA I. COLE

**Y**OUR baby can help himself. And he wants to! You will have to help him learn how, and you must do it without appearing to take things out of his hands. Stand by to direct him in his efforts to learn, but remain in the background. Let him have his little victories. Grant him the privilege of feeling a sense of achievement. This business of acting independently is a very crucial point in your child's life. Now, when you start guiding him toward successful adulthood, is the time to turn his tiny feet into the right course.

When your little Mary first reaches for a spoon and tries to get food into her mouth, she really isn't seeing how big a mess she can make on the high-chair or floor. She is learning to help herself. And success in even this small endeavour will give her confidence. It is a good idea to let Mary eat at the grown-ups' table occasionally. Being treated as an equal will give her a feeling of belonging to the family. More than that, it will help her in social development. She is probably ready to feed herself at a year.

Mary's little four-month-old brother needs a play-pen so that he can learn to push himself around. In the play-pen he has a chance to learn to sit up, to push with his feet, and eventually to pull himself up all on his own.

Your child really has a curiosity and a desire to dress himself. You'll

*Put yourself out a bit when baby is tiny,  
and you will have a self-reliant child.*

probably find him undressing first, and perhaps in some embarrassing places. Don't throw up your hands in horror and scold him. In doing so you may curb his desire to try and do things for himself.

To help your child dress himself, buy him clothes that are easy for him to put on, such as slip on shirts, polo shirts, and overalls with sturdy straps. Try to keep away from fancy ribbons, buttons, and buckles.

Even simple clothes need to be logically arranged to give the child the most help in his learning period. See to it that they are right side out. Spread out the overalls on the floor. Arrange the shoes so that they are wide open, with the tongues pulled out and forward. By quietly making things easier for him you encourage him to continue trying.

Let your child wash his own face and hands. He may leave a little dirt on them. But you can help him wash it off, after you have praised him for trying. Don't leave him to struggle along entirely on his own, but avoid taking the joy out of his accomplishments. Remember always that effort deserves

praise as much as accomplishment. Always give your baby praise for his effort in trying to help himself. It is really a must.

A mother naturally may yearn to keep her baby helpless and reliant on her. But it is very important to build a feeling of self-reliance in a child. His lifetime development depends on it; and you do it by letting him help himself in routine activities such as dressing, washing, and eating! Firmly put your yearnings aside for the sake of his lifetime happiness.

The best way to help your baby establish good emotional stability is to have it yourself in your home. Many of his habits will be patterned after yours. If you have emotional control, he will probably have it too—now and later on!

But don't demand that he reach a completely perfect standard. He will become too discouraged to try.

To help yourself, your family, and your baby—plan your work, and make sure that you get the proper amount of rest, recreation, and social activity. Learn to keep the "bad emotions" of fear, anger, and worry within bounds. Develop

those of joy, laughter, and love.

Keep your child from developing fear by remembering that most fears are learned. Then prevent them from taking hold of him. Most important, as much as possible prevent unpleasant associations for him. This precaution goes a long way in keeping fear down. Whatever happens, help him to take it with courage. Make him feel secure—free from threats, too frequent punishments, and fearful situations. Give him comfort (but not pity) when he is hurt. Don't show or talk about your own fears.

You must have the patience of Job in dealing with your baby. Patience is your biggest asset, through it you can help him on the road to becoming a sound, healthy person.

It is quite likely that your child will go through some phase of behaviour. It is a part of natural growth, and has its uses in his development. If some of his tricks such as getting covered with mud and telling tall tales offend your adult sensibilities, don't let it disturb you. Deal with them, but don't let them upset you. You must learn to be patient. In time your youngster will achieve sound growth by finding a better way of relieving his inner tension. He will then lose interest in the old way. Tactfully, kindly, lead the way toward sensible, mature responses.

Your child has ways of learning from troublesome experiences and any form of creative expression, such as free or constructive play, talking things out, and painting. They draw upon his inner resources, and thus strengthen them. He is learning to handle life's situations.

Many times a child's wants contradict each other. He both loves and hates the same person. He wants to smash his toy and yet have it for play. Too many demands from society go against



Photo B. Ranganathan

The child has ways of learning from troublesome experiences and any form of creative expression.

his natural impulses. He all too easily becomes selfish, and he has to learn to live closely and comfortably with other people. He is going to have to accept a good many tough situations, and you, his parents, must see to it that he does so as comfortably, yet as nobly as possible. By being patient and understanding, you can help him to make them a part of himself successfully. When he learns to do that, your control over him takes its rightful place as a temporary convenience required only until the necessary controls can be gradually built into his personality.

You can really be glad when your youngster begins to spit at people if he was biting them before. He's making progress. But of course he mustn't stop there. You can slap his mouth if you like, and

probably he would stop spitting and go back to biting or perhaps begin scratching. Or you can congratulate yourself that he's coming along, be very patient, and try to teach him the next step.

Try to keep all his natural inclinations satisfied in a balanced way. If they are neglected, any one of them may build up to intensity. You wouldn't think of skipping his meals, so never think of getting too busy for loving companionship. He needs the security only love can give him.

Be sure to help your child by—

1. Giving him plenty of love.
2. Accepting his feelings.
3. Helping him to control their expression.
4. Providing safety valves.
5. Cultivating responsibility in him.

# YOUR

# TELEPHONE

# SYSTEM



H. O. SWARTOUT, M.D., Dr. P.H.

**Y**OUR body has a framework of bones held together by ligaments, with joints between many adjacent bones that permit motion. You have many muscles, whose contraction brings about this motion. In addition you have several different organs whose chief work is to nourish or protect you or keep you in touch with the outside world. The work of your organs is to do many varying actions, which are often classed under the general term of vital activities.

Although some of your bodily activities do not take place unless you choose, most of them go on without your thinking about them. Actually, though, no part of your body (except perhaps parts of your brain) acts without influence from outside itself. We often speak of this influence as a stimulus.

The source of many stimuli directed to other parts of the body is the brain, and the paths they

travel are your nerve fibres. Not all nerve fibres carry stimuli from the brain to the body. Some carry information from the outside to the brain. There are many other nerve fibres that never connect directly with the brain but begin or end at some way station, called a ganglion. From the ganglion still other fibres carry the stimuli onward.

Your brain, nerves, and ganglia are the essential parts of your nervous system, an intricate control mechanism ruling your bodily activities. In many respects the nervous system resembles a large modern telephone system. Many nerve fibres have sheaths that act much like the insulation on wires.

Your brain is the central office of your nervous system. Just as the central office of a telephone system does, it may send out-going messages. But more often in both systems the out-going messages depend on information sent in from the outside. For instance, you

can decide to pick up a glass and fill it with water without having any reason for doing so, yet your decision results in the muscle contraction necessary to do the act. Generally a sensation of thirst plus the sight of a glass and a water faucet would precede the decision that would result in your picking up the glass and filling it with water.

Many modern telephone systems are of the dial type, in which contact with the desired destination occurs without anyone in the central office knowing about it, though it may be possible for somebody there to listen in. Nervous control of the heart, the lungs, and most of the other vital organs is much like this dial system. There are many way stations in or near these organs, to which messages go out to bring about the necessary action of the organs. Ordinarily your heart beats without your being conscious of its action. But

if you direct your attention to the action of the organ—listen in, if you please—you can detect every heartbeat. This principle is even more striking in the process of breathing, but much less so in digestion.

So much for the normal activities of a healthy human body. There are unusual manifestations in a telephone system when the machinery breaks down, accidents occur, and storms rage. Even so, troublesome or even dangerous effects are often seen when something goes wrong within the nervous system, or when adverse influences play upon it.

Sometimes the insulation on adjacent wires wears through, or perhaps bare wires come into contact with others when they sway in the wind. Such short circuits may block telephone messages or they may be heard by people for whom they are not intended. Similarly, accident, disease, or faulty diet may destroy or damage the nerve fibre sheaths, with the result that misleading information reaches the brain. Often this information is interpreted as pain, and sometimes the "pain" appears to be in a location along the nerve fibre different from the place where the damage really exists. The location usually is near the end of the fibre.

A common example of such misinterpretation of messages is the sensation of numbness or tingling in the third and the little fingers that results when the spot called the funny bone of the elbow is struck or vigorously pinched. Another example is the pain or chilliness one thinks he feels in the foot or toes of an amputated leg. During recent years medical scientists have become more and more aware of the fact that pain in the legs and feet actually may be due to something wrong in the back.

Destruction or deadening of nerve fibres will block all messages,

just as destruction of a wire in a telephone system will block all messages. Leprosy may have this effect. Many lepers have areas on the skin in which they can feel no pain.

Sometimes peculiar sounds are heard over a telephone when there is no damage to a wire nor a short circuit. These sounds are due to induction, which may occur when electricity is flowing through a nearby wire.

A similar principle is of great importance in connection with the nervous system. Even though there may be no directly connected nerve fibres, conditions in your stomach may affect the action of your heart. And whatever disturbs your mind has a disturbing effect on the vital organs. The depressive effect of anger, grief, or fear on the action of the stomach has frequently been mentioned by medical scientists.

The principle also works in the case of lower animals. Physiology textbooks often discuss the fact that the digestive organs of a kitten unaccustomed to dogs will stop working if a dog is brought near while the kitten is digesting food.

Right here is the key to a wise use of your bodily telephone system. You may or may not be able to do much about some of the adverse circumstances surrounding

you. For instance, you may avoid unpleasant associates and choose agreeable ones. You have some hope of becoming able to maintain a cheerful mental attitude. If you have unusual difficulty doing so, you may consult a psychologist or a psychiatrist. He can help you manage your own mind, and through managing it bring about greater improvement in the troublesome sensations and actions of a body suffering under the control of a disarranged nervous system.

Remember, it is your brain, the seat of your mind, that is the central office of your body's telephone system; and, as in any telephone system, the condition of the central office has more influence on the way the whole system works and the service it gives to those it reaches than any other factor.

Healthy cheerfulness can become a habit. You can learn to take life as it comes without being upset by the irritations that beset you.

When you must wait for a traffic light to turn green for you, drop your shoulders, draw a deep breath of air into your lungs, lift your head, and allow a pleasant look to come over your face.

If the telephone rings many times during the day, don't become  
*(Continued on p. 25.)*



---

Your central nervous system closely parallels a city's complicated telephone network.

---



Photo A. V. Ramamoorthy

Outdoor life is the only remedy that many invalids need.

# Contact With Nature

E. G. WHITE

**T**HE Creator chose for our first parents the surroundings best adapted for their health and happiness. He did not place them in a palace, or surround them with the artificial adornments and luxuries that so many to-day are struggling to obtain. He placed them in close touch with nature, and in close communion with the holy ones of heaven.

In the garden that God prepared as a home for His children, graceful shrubs and delicate flowers greeted the eye at every turn. There were trees of every variety, many of them laden with fragrant and delicious fruit. On their branches the birds carolled their songs of praise. Under their shadow the creatures of the earth sported together without fear.

Adam and Eve, in their untainted purity, delighted in the sights and sounds of Eden. God appointed them their work in the garden, "to dress it and to keep it." Each day's labour brought them health and gladness, and the happy pair greeted with joy the visits of their Creator, as in the cool of the day He walked and talked with them. Daily God taught them His lessons.

The plan of life which God appointed for our first parents has lessons for us. Although sin has cast its shadow over the earth, God desires His children to find delight in the works of His hands. The more closely His plan of life is followed, the more wonderfully will He work to restore suffering humanity. The sick need to be brought into close touch with nature. An outdoor life amid natural surroundings would work wonders for many a helpless and almost hopeless invalid.

The noise and excitement and confusion of the cities, their constrained and artificial life, are most wearisome and exhausting to the sick. The air, laden with smoke and dust, with poisonous gases, and with germs of disease, is a



peril to life. The sick, for the most part shut within four walls, come almost to feel as if they were prisoners in their rooms. They look out on houses and pavements and hurrying crowds, with perhaps not even a glimpse of blue sky or sunshine, of grass or flower or tree. Shut up in this way, they brood over their suffering and sorrow, and become a prey to their own sad thoughts.

And for those who are weak in moral power, the cities abound in dangers. In them, patients who have unnatural appetites to overcome are continually exposed to temptation. They need to be placed amid new surroundings, where the current of their thoughts will be changed, they need to be placed under influences wholly different from those that have wrecked their lives. Let them for a season be removed from those influences that lead away from God, into a purer atmosphere.

Institutions for the care of the sick would be far more successful if they could be established away from the cities. And so far as possible, all who are seeking to recover health should place themselves amid country surroundings, where they can have the benefit of outdoor life. Nature is God's physician. The pure air, the glad sunshine, the flowers and trees, the orchards and vineyards, and outdoor exercise amid these surroundings, are health-giving and life-giving.

Physicians and nurses should encourage their patients to be much in the open air. Outdoor life is the only remedy that many invalids need. It has a wonderful power to heal diseases caused by the excitements and excesses of fashionable life, a life that weakens and destroys the powers of body, mind, and soul.

How grateful to the invalids weary of city life, the glare of many lights, and the noise of the streets, are the quiet and freedom of the

country! How eagerly do they turn to the scenes of nature! How glad would they be to sit in the open air, rejoice in the sunshine, and breathe the fragrance of tree and flower! There are life-giving properties in the balsam of the pine, in the fragrance of the cedar and the fir, and other trees also have properties that are health restoring.

To the chronic invalid, nothing so tends to restore health and happiness as living amid attractive country surroundings. Here the most helpless ones can sit or lie in the sunshine or in the shade of the trees. They have only to lift their eyes to see above them the beautiful foliage. A sweet sense of restfulness and refreshing comes over them as they listen to the murmuring of the breezes. The drooping spirits revive. The waning strength is recruited. Unconsciously the mind becomes peaceful, the fevered pulse more calm and regular. As the sick grow stronger, they will venture to take a few steps to gather some of the lovely flowers, precious messengers of

God's love to His afflicted family here below.

Plans should be devised for keeping patients out-of-doors. For those who are able to work, let some pleasant, easy employment be provided. Show them how agreeable and helpful this outdoor work is. Encourage them to breathe the fresh air. Teach them to breathe deep, and in breathing and speaking to exercise the abdominal muscles. This is an education that will be invaluable to them.

Exercise in the open air should be prescribed as a life-giving necessity. And for such exercises there is nothing better than the cultivation of the soil. Let patients have flower beds to care for or work to do in the orchard or vegetable garden. As they are encouraged to leave their rooms and spend time in the open air, cultivating flowers or doing some other light, pleasant work, their attention will be diverted from themselves and their sufferings.

*(Continued on p. 29.)*



Photo B. Ranganathan

The flowers are precious messengers of God's love to His afflicted family.

# WHAT

THE human body is sometimes spoken of as a machine, and again as a structure—both ideas having many facts to support them. Those who speak of it as a machine are thinking about how it works. Those who call it a structure are thinking about what it is made of and how it is built.

In most cases a structure has a framework. It determines the general shape of the structure and helps to hold the various other parts together and keep them in proper relation to each other. The body has a framework, commonly called the *skeleton*.

When we hear or see the word *skeleton* we naturally think of *bones*. The body framework consists largely of bones. Holding the bones together are many tough bands called *ligaments*. Acting as pads or spacers between many adjacent bones are *cartilages* of various shapes and sizes.

The various bones serve three chief purposes, though few of them serve all three. They support weight. They protect organs. They permit and often aid controlled motion. They may differ widely in shape and structure, but always in such a way as to suit the purposes they serve.

The long bones of the thigh and leg are good examples of bones adapted to bear weight. The solid portions of these bones have burden-bearing strength greater weight for weight than mild carbon steel and twice as great as granite.

These bones have tubular shafts. Engineers have long known that a given quantity of material provides more stiffness and useful strength in the form of a tube than in the



# YOU ARE MADE OF

H. O. SWARTOUT, M.D., Dr. P.H.

form of a solid bar. They have also known that if the walls of the tube are relatively thick, no internal bracing is necessary; if its walls are thin, the tube is likely to buckle and give way if it does not have such braces.

The ends of the long bones need to be considerably broadened to provide bearing surfaces wide enough to ensure stable joints. But these enlarged ends would be much heavier than necessary if their bony shell were as thick as the shaft of the bone. We find that the bone ends have thin shells but are well provided with internal braces.

The part of the body framework in which there is perhaps the greatest need for proportions in thickness of the bony shell and the arrangement and strength of inside braces is the upper part of the thigh bone, or *femur*. According to discussions, pictures, and diagrams published by the medical scientist, Koch, this part of the skeleton fully covers engineering requirement. Truly, it was the Master Engineer who designed the human body long before the principles of engineering were known to mankind.

Some of the vital organs of the body are so delicate as to need special protection. The most delicate of all is the brain. Quite fittingly, the brain is enclosed by a strong box of bone, the *skull*. Its only opening of any considerable size is in the base, well away from danger. The wall of this box is composed of two moderately thick layers of bone. The outer layer is the thicker of the two. There is an intricate meshwork of cross-brac-

ing bony plates between the outer and the inner layers. The whole box in shape and structure is an admirable example of the economical use of material to serve a specific purpose.

The heart and lungs are also delicate organs. Unlike the brain, they must expand and contract in order to do their work. It would not do for them to be encased in a solid box. They are protected by a bony cage, narrow at the top and broad beneath, formed by the breastbone and the backbone as

---

The human body is a marvel of intricate workmanship designed by a Master mind.

---

posts in front and behind, and the ribs as curved bars around each side. The ribs are so shaped, so directed from back to front, and so attached to the breastbone and the backbone that they adjust to every need of the lungs. When the chest muscles lift the breastbone and the arches of the ribs, the bony cage is expanded from both front to back and from side to side. This is what happens when you take a breath. Such motions do not make the bony cage less effective as a protection for the heart and lungs. They allow for all necessary expansions of these organs.

The body framework permits and directs motion by means of its *joints*. A typical joint is composed of the broad ends of two adjacent bones. A layer of smooth cartilage covers each bone end where it comes in contact with the other bone end. Broad but thin bands of

ligament extend from one bone end to the other, forming a more or less complete bag enclosing the joint. This bag is lined with a smooth membrane that secretes a lubricating fluid.

Ligaments are not elastic. Wherever joints need to move freely, as at the shoulders, the elbows, the hips, or the knees, the ligaments have enough play to allow for such motion without stretching. In joints where but little motion is needed, the ligaments are heavier and stronger and have very little play. In joints such as those between adjacent sections of the backbone, little motion is needed. A tough pad of cartilage between adjoining sections and firmly attached to each of them has enough play to allow for the required motion. No lubricated bearing surfaces are required. Here the ligaments are extraordinarily heavy, strong, and tight.

The movements of the body framework are made by the *muscles*. The chest muscles act during breathing to lift the breastbone and the arches of the ribs. Muscles are masses of fleshy material of a more or less red colour. They have the ability to contract. The typical muscle is attached to two adjacent bones and stretches across a joint. Because muscles are joined to bones at each end the contraction of muscles is what makes bones move. Typically, this motion is a bending or a straightening at a joint. Careful study of body motions reveals that all of them consist of such bendings or straightenings, singly or in  
(Continued on p. 29.)

# ALCOHOL AND HEREDITY

ERNEST GORDON

THE following excerpts are taken from *Un Fleau social l'Alcoolisme*, a publication of the French National Committee for Defence Against Alcoholism. This committee is headed by Dr. Rouvillois, the official head also of the medical profession in France, and in its membership is the entire medical faculty of the University of Paris, deans of all the French medical schools, and a long list of eminent medical professors and specialists.

"Alcoholism is a sickness more treacherous than syphilis, tuberculosis, and cancer, since it is caused by a slow and unperceived impregnation of the organism with alcohol. *Hundreds of thousands are alcoholics who never have been drunk. For alcoholism is a permanent state, due to repeated consumption of small amounts of alcoholic drink.*

"Alcohol is an anti-food because it dehydrates the mucous membrane, coagulates the albumen, checks action of the digestive fluids, prevents the utilization of vitamins, hinders the action of sugar in muscular contraction.

"Nor does it warm the body. It is the single known substance which cannot be utilized in the production of heat because the speed of its oxidation never increases.

"In France, two thirds of the alcoholics are wine alcoholics (*viniques*). Wine is the juice of

grapes, devitalized by the loss of sugar and become harmful by the emergence in it of alcohol."

But the devastations of alcohol on adults sink into relative insignificance when compared with what they practise on the children of drinkers.

*"Alcoholism is more disastrous to the offspring of the alcoholic than to the adult alcoholic himself.*

"Apart from bad example and alcoholic poverty, the alcoholic bequeaths to his children many different deficiencies. Fifty to ninety per cent of degenerates (in France) are children of alcoholics, percentages varying in different areas of France; sixty per cent of misfits also. Of juvenile delinquents one half are of alcohol provenance; in Paris three fourths.

"Among poisons whose actions on the nervous system and organs of reproduction is markedly fatal, alcohol incontestably takes the first place. Tests made by Nicloux recently have shown that of all glands, the endocrine and digestive glands and the testicles retain the most alcohol. You may be sure it

does not remain inactive. Above all, it attacks the noble elements which produce the germ cells and the internal secretions indispensable to general equilibrium. It overturns their structure and stifles and hardens them.

"It is not astonishing, then, that children issuing from abnormalized germs are marked for a miserable future. *Heredo-alcooliques* (children burdened with an alcohol inheritance) have undeveloped genital organs and a nervous system permanently unstable and often wholly disorganized. With moral sense weakened, when not extinguished, they are the destined prey of bad impulses. This is not usually understood by those who are unaware of their alcoholic antecedents.

"Degenerates and children of degenerates, they often crumble into manias. From the pitiful flock of sons and daughters of drunkards are recruited social rebels, misfits, the vicious, prostitutes, and criminals—in proportion of seventy-five per cent.

"Certainly all *heredo-alcooliques* are not fatally destined to organic or psychic degeneracy, to crime and insanity. There are degrees in their morbidity. These depend on the age and intensity of the intoxications of those who bred them.

*"But never, absolutely never, do the children of alcoholics come*



into the world wholly sound. If, as infants, they do not show visible defects, abnormalities of limb, of skull, of thorax, so common among them, they suffer often from gastric disturbances, are nervous, crying, agitated, and usually puny. At twenty they can have the size of a child of twelve or fourteen. As to intelligence, even under the most favourable conditions there is backwardness in comprehension, difficulty in fixing attention, which at times becomes impossible. Others are simple-minded, mentally undeveloped, even idiotic.

"To complete the picture one must add that these children are frequent prey to convulsions and epilepsies. Two thirds, at least, of the cases of real epilepsy, so say the specialists, have an alcoholic heredity.

"The parents may be sober at conception. But what happens when the mother takes drink during pregnancy?

"The foetus must always pay for the intemperance of its mother. The organic injuries will be in proportion to the period of the pregnancy. During the first two months in which the maternal blood brings this poison to the foetus, that is, when all is fluid and beginning to take shape, the whole work of construction of tissues can be profoundly modified. The infant will be born, if born, dwarfed with abnormalities or monstrosities. If the alcohol intervention comes later in the foetal life, when permanent form has already been reached and the organs definitely shaped, functional troubles as well as organic disturbance will be less.

"That which one must fix in one's mind, must repeat to others again and again, is that *the intoxication of one day, a single day, on the mother's part can be catastrophic for the little one she is carrying. It can cause malformations which may perpetuate themselves to numerous generations.*"



Photo L. Vignier

Three-fourths of the juvenile delinquents in Paris are of alcoholic parentage.

Official 1953 documentary confirmation can be found in the 145-page *Report of the Cost of Alcoholism in France* issued by the president of the Council of the French Government. The director of the investigation was M. Brunaud of the Ministry of Finance. The following briefly summarizes its conclusions on alcohol and heredity:


1. Syphilis plays a minor part in heredity of abnormal children.

2. *The co-existence of an alcoholic heredity with bodily or mental abnormalities is very common. It has been proved to exist in fifty per cent of cases. The constancy*

*of this proportion in all classes of children is very striking.*

3. As a provisional conclusion, the investigator considers that *three fourths of the congenital bodily or mental abnormalities discovered are related to the alcoholism of forebears.*

4. *Juvenile delinquencies seem to be related to these abnormalities. Circumstances unrelated to alcoholic heredity and family conditions contribute without doubt to provoke a criminal act, as for example bad company, but they would not have sufficed if alcoholism and its (inherited) effects had not preceded them.*



**N**EARLY half a million U. S. children bared their arms last year to receive a shot of a new polio vaccine, popularly called the Salk vaccine, as it was developed by Dr. Jonas E. Salk of the University of Pittsburg. The National Foundation for Infantile Paralysis designated 217 areas in 44 States where trial tests took place with this vaccine in 1954. Only the States of Minnesota, Arizona, Florida, and Maryland, and the District of Columbia did not participate in the tests.

Let us review briefly the events leading up to the present point in the development of polio vaccine.



#### **What was new about the Salk polio vaccine?**

When the Salk vaccine was developed, it was the first time scientists had succeeded in preparing a safe killed-virus vaccine against polio that included all three strains of polio virus—Lansing, Brunhilde, and Leon.



#### **How can dead virus protect us against polio?**

Shots of killed virus can result in the production of antibodies in our blood, which should act against live polio virus trying to invade our blood stream.

How do these antibodies protect us? Consider for a moment a vaccine that we are all familiar with, such as typhoid. Typhoid vaccine is prepared from killed typhoid germs. When typhoid

# P O L I O

J. WAYNE McFARLAND, M.D.

*Where does polio start?*

vaccine is shot into our arms, we do not get the disease. But our blood reacts, and produces antibodies against typhoid. Then if we drink some contaminated water containing typhoid germs we are protected against typhoid fever by these antibodies in our blood. They act like an army of anti-typhoid soldiers ready to do battle for us if any enemy typhoid germs show up.

The Salk polio vaccine is expected to work in the same way. It should protect us against polio by stimulating the production of anti-polio bodies in our blood.



#### **How effective will these anti-polio bodies be?**

Our scientists must discover whether this vaccine will be strong and give rise to a large army of anti-polio soldiers or whether it will be weak and result in producing only a small number of antibodies against polio. As in any battle, the more soldiers (antibodies) we have in our army, the better chance we have to defeat the enemy (polio).

We don't know yet how long these anti-polio soldiers will stay with us after we get the shots. But from experience with other vaccines and from experiments on animals

with this vaccine scientists are optimistic. Preliminary trials with the Salk vaccine on 7,500 Pennsylvania children showed an antibody response, as measured in laboratory tests, exceeding expectations. From these tests Dr. Salk predicted that his vaccine may give lifelong protection against polio.



#### **Which children received the vaccine in 1954?**

Because polio often strikes children in the age group of the first, second, and third school grades, these were the children selected for the 1954 polio vaccine tests in the areas where vaccine was given.

In some cases, children of the second grade were given vaccine, whereas those of the first and third grades received no shots but served as controls (normal children under usual circumstances for purposes of comparison). In other areas some children received vaccine and others served as controls by being given shots of inert substances. Blood specimens to study antibody response were taken in two per cent of the cases.

If results of the tests are favourable, additional children will be given anti-polio protection with the vaccine, exceeding the number immunized last year.





# PRIMER

MARTHA A. CONGRESS

ay in the United States?



**Is Dr. Salk the sole discoverer of this vaccine?**

No. He headed the group of scientists at the University of Pittsburgh who developed this killed-virus polio vaccine. Their work was made possible by the results of other scientific experimenters. Most important of these are Dr. John Enders and his associates at Harvard, particularly Drs. Thomas Weller and Frederick Robbins, who were first to succeed in growing polio virus in test tubes, in non-nervous tissue. This discovery assured ability to grow polio virus in sufficient quantity to produce a vaccine. The independent research of Dr. Dorothy Horstmann at Yale and Dr. David Bodian at Johns Hopkins then proved that the virus is present in circulating blood during the early phase of the disease. These discoveries suggested that a vaccine could be developed and that it might protect against polio by stimulating formation of antibodies in the blood. These antibodies would fight against the virus and neutralize it before it had a chance to invade the central nervous system and perhaps cause paralysis.

The search for a polio vaccine was on—and it led to the discovery

of the present killed-virus vaccine by Dr. Salk.



**What about gamma globulin?**

Gamma globulin is not a vaccine but a blood fraction of short-term value in the fight against polio. It is made from pooled normal bloods according to a technique devised in 1942 by the late Dr. E. J. Cohn and others working with him at Harvard Medical School.

The idea behind the use of gamma globulin in polio is briefly this: Antibodies form in our blood during our lifetime as a result of exposure to different disease organisms. By mixing a large number of normal adult bloods, antibodies against various diseases including polio, it is believed, are sure to be present. These antibodies are concentrated in gamma globulin. Parents are already familiar with this material; doctors have been using it for measles prevention in children after their exposure to measles.

Polio antibodies present in adult blood are transferred to others by injecting them with gamma globulin. This gives them a passive type of immunity, for it does not stimulate production of their own

antibodies. The disadvantage of passive immunity is that it does not last as long as the active type produced by vaccines. Gamma globulin gives protection for about six weeks. It is a case of easy come, easy go.

Another disadvantage of gamma globulin is the difficulty and expense of its production. It takes a lot of human blood to produce a little gamma globulin. It cannot be multiplied in the laboratory by cultivation as is the case with bacteria and viruses used in vaccines.

Field tests made in 1951-52 with gamma globulin to study its effect on polio proved that, when given in the proper dose and at the proper time, the substance did confer temporary immunity; this immunity appeared immediately. Polio vaccine will give immunity over a longer period of time, as yet undetermined, but it requires several weeks after the last shot of vaccine before immunity develops. Vaccine, therefore, should be given before the polio season begins; gamma globulin can be used later. The two together might provide a double-edged sword against polio. In 1954 the National Foundation set aside \$19,000,000 toward the purchase and provision of gamma globulin for public use in polio-stricken areas.

A few years ago there did not seem to be much hope of controlling polio. Now, the end of this disease may be near. Then parents will no longer have to fear the annual season. They will not have to read anxiously the columns of new polio cases reported in the newspapers daily.



# STORY TIME

## ONE TRICK TOO MANY!

THELMA LEE OLANDER

**J**OSHI liked to tease. At times he almost drove his mother to distraction. He would tie her sari in knots when she wasn't looking, or slip up behind her and "boo" loudly in her ear. At school he pulled the girls' hair, or tripped the boys when running, and sometimes hid their caps or lunch buckets. One day he ruined a little girl's blouse by splashing ink over it.

Even his pets and the farm animals came in for a share of teasing. His mother and father talked to him, trying to help him see how unkind he was. Even his teacher warned him. "Joshi," he said, "someday your teasing will backfire on you, and you will get the worst of it." Joshi promised to change, but the next chance he had to play a trick on someone, he couldn't let it pass. Poor boy! I honestly believe he tried, but the habit was growing stronger all the time.

On the farm where Joshi lived, the boys rose early in the morning to help with the milking, to get hay for the cows, and to scatter grain for the chickens. At night they hurried home from school to get their chores done before supper. But in between these busy times, Joshi found plenty of opportunities to play tricks.

One week in the winter, Father and Mother made a visit to some relatives, leaving the boys in charge of the farm. The oldest brother was almost grown and could do most of the work, and with Joshi's help and that of the youngest brother, the parents were sure all would be well.

Everything went smoothly during

the week. The boys did their chores every morning in plenty of time to get to school, and in the evening were able to finish everything before dark. Then came Sunday afternoon, and Mother and Father would be home the next day. The boys looked forward happily to their return, for they knew they would praise them for having looked after things so well.

Joshi went out early on Sunday evening to gather the eggs. The boys planned to go to a programme at the country church later, and hoped to get their work done so they would not be late. Joshi gathered the eggs from the nests in the henhouse, searched through the hayloft, felt in the mangers, under the feed boxes, and even went to the buggy shed, for the hens sometimes laid eggs in the old, unused buggy.

Then he went to the haystack. On the south side of the stack the dogs burrowed long tunnels

through the hay, so that during the cold weather they would have warm and cozy beds. The hens made use of these sheltered burrows when the dogs were not in them, and every evening Joshi would find a good many eggs tucked away there.

As he fell to his hands and knees to crawl into one of the long tunnels, he noticed Fido curled up at the end of it, warm, comfortable, and fast asleep. A gleam came into Joshi's eyes as he thought, "Here's where I play a good trick on Fido!" He laughed softly to himself as he imagined how frightened and surprised the dog would be.

The boy crawled slowly into the burrow, keeping his eyes on Fido, with the hope that he would not awaken. The hay made little whispering sounds, but Fido had been chasing rabbits most of the day and was so tired he slept on.

When Joshi was about two feet from the dog, he made a quick lunge and shouted "Boo!"

The suddenness of the attack and the terrifying noise brought the dog to life with a frightened snarl. He charged at his supposed enemy. His sharp teeth closed over Joshi's face, and with a scream of pain the boy quickly backed out of the tunnel. In a moment the dog recognized him and became his usual friendly self, but Joshi ran to the house, his face and nose bleeding.

His older brother applied first aid, then called the doctor. After his wounds were cleansed and dressed, the doctor learned the cause of the accident. He looked at the boy for a long moment, then said, "Well, Joshi, I've heard about your tricks. This isn't a pleasant way to learn a lesson, but perhaps it may be an effective way. When you are tempted to 'play a trick' on someone or some animal after this, just remember what happened to you in the haystack!"

And I am glad to say that Joshi always remembered.





## YOUR TELEPHONE SYSTEM

(Continued from p. 15.)

upset by its interruptions. Lay down your work, answer the telephone calmly, and then resume your task happily.

You will feel better and look better if you maintain a pleasant atmosphere in your home. Your children will materially benefit from it, for they are happy when happiness is about them. Cheerfulness keeps your telephone system in good tone. Keep the lines clear for important calls.

## THE DOMINANT EYE

If you have ever wondered whether you are right- or left-handed, your eye will tell. Simply roll up a newspaper into the shape of a cone and look through the wide end, directing your gaze upon a small object. Close each eye in turn. The eye that is closed when the object disappears from view is your dominant eye.

If you find that the object has disappeared when your right eye is closed, you are usually right-handed also. This simply means that the dominant eye is the one that leads the other in fixation on an object. It is not necessarily the better or the sharper in vision.

It has been discovered by the Better Vision Institute that some causes of poor reading ability among children are a failure of dominance, in which neither eye takes control for fixation. Confusion and poor reading follow. Devices have been developed in which a child copies his lessons by reflection in a mirror, reads through the mirror, and thus develops a dominant eye by practice. It may take as long as three months, depending on the age of the child and the difficulty he has in reading.



**DALDA**  
brand  
**VANASPATI**



it's more than a cooking medium—it's a FOOD!

HVM. 253-50

## HOW TO FORECAST HEIGHT

THE height, weight and breadth of 18-year-olds can be predicted with "a high degree of probability" when they are only a few years old, reported New York City's Dr. Irving Kowaloff in the New York State *Journal of Medicine*. Examples, based on statistical studies of large numbers of children: when a boy is two years old, his

height and pelvic breadth should be multiplied by two, his weight by five, to predict what his measurements will be when he is eighteen. The same formula applies to girls' dimensions, except that weight and height should be calculated at the age of 18 months instead of two years.

# HOMEMAKERS' HELPS

M. NINAJ LARSON

## THE FATHER AND HIS CHILDREN

**T**HERE is generally no question as to the mother's part in the training of the children. But frequently fathers are under the impression that this responsibility rests only with the mother. They think that father's only work is to support and to protect his family. However, many wise and thinking men are quite conscious of their important role in the family, and with planning and thought they do all they can to train their children to be good individuals, and worth-while citizens of their community and nation. The destiny of the world depends upon the way that mothers and fathers, in combined effort, train the children that God has given them.

Ordinarily fathers love their baby children. One loves to see the joy of a father playing with his little baby son or daughter. The average father keeps on loving his children, but it seems to him that he cannot get quite so close to them when they are older—there is some sort of barrier between him and them. This need not be.

Sometimes the mother is at fault. Instead of disciplining a child herself, she may say, "Just wait until Father comes home. Then you will really get it." And the first thing Father hears when he returns from work is a detailed recital of Sonny's misbehaviour. Mothers, why not make it a practice to greet Father happily and joyfully? Then he will enjoy coming home to his boys and girls.

Fathers will not be considered severe and stern and unbending if they will be companions to their children. Just living in the same house together or eating at the same table is not companionship. A father needs to play with his children. Children love to play, and what nicer treat for them is there than for Mother and Father to join them in some of their outdoor and indoor games? Let Father and Mother originate and lead out in some of the games.

Take walks with your children. Not only will they love your presence, but what a fine opportunity to point out to them the varied shapes of trees and leaves, the lovely sky, the joyful birds. And also what a wonderful opportunity to draw character-building lessons from the things God has made! Teach them to be trusting and happy as the singing birds. Keep them as busy as the bee or ant. As God provides the sunshine and rain for the flowers and for the plants to grow, so does He care for children. Numberless such lessons may be drawn for the children when we go walking with them.

Tell your children stories, stories that will help them develop good characters. Tell them of your own childhood and life. Many of us have fond recollections of the stories our fathers told. Draw your children to yourself by this means.

We know a great man, not only successful in his work, but also loved by people in different countries of the world, who, after work hours, daily gave a specific portion of the day to his children.

During that time he would see no visitors nor engage in any business, for this was the children's time. Do you think it was worth while?

Fathers need to work with their children, either in the garden, in the home, at their trade, or at some hobby. What better way for children to learn to be true to duty and to learn the dignity of labour and usefulness than by working with Father?

Though we shall not discuss the question of discipline at this time we would like to say that speaking kindly and gently, and punishing intelligently go a long way in solving disciplinary problems as they come up. If Father keeps himself under control, he will have no difficulty in administering family government.

Both daughters and sons need their fathers. But as daughters need the special companionship and help of their mothers, so do sons need the special companionship of their fathers. A father should come into specially close contact with his boys in work and in play. His kind and tender words, his larger experience, his sympathy, his interest in their happiness, will draw them close to him, and will help them to choose the right way of life all through their growing years. He can understand their restless energy. He can understand their desire to create something with their hands. When a father plans for his boys and directs their restless energy into useful, pleasant lines, and when he takes them with him on hikes and trips, there need be no fear that they will seek the association of questionable companions. He knows the way a boy must go. He knows the problems boys face. Being their companion will open the way for him to help them along life's paths.

There needs to be definite cooperation with the mother in the training of the children. It is not wise to disagree on matters of discipline before the children. If a

father and mother are cheerful, if they are tender and courteous to each other, their children will also become cheerful, tender and courteous.

Though you are busy, take time, make time for your children. Do not give them an opportunity of picturing you as the silent man who only eats at the same table and sleeps under the same roof, and who is hardly ever at home except to eat and sleep. Give yourself opportunity for adventurous friendship and companionship with your family and for being a teacher on the way of life to those of little experience in your home.

With fathers and mothers working together to train their children to take their place in life, they may be sure that their sons and daughters will open their hearts to them in confidence and that they will become useful men and women true to duty and firm and clean in character, men and women of whom they and their country, and God our Father can be proud.

---

---

## HOUSEHOLD HINTS

**POTATOES:** Here is a good way to serve those small round potatoes that taste so good in some curries. Just boil them in salted water until they are thoroughly cooked. They should be dry and mealy. Serve hot with a little cream, or with a little ghee, or with a little melted margarine or butter. If you have parsley, chop it fine and sprinkle over the hot potatoes. No other seasoning is needed.

**PINEAPPLES:** Pineapple is delicious and has a cooling taste in the hot summer time. If you live where there is a great abundance of pineapples, squeeze the juice out for drinking. Serve the pineapple cool and sliced without sugar. It is good with curds or cottage cheese. *Life and Health* magazine reported some time ago that experiments

showed that the raw fresh pineapple is effective in killing round worms. It is a good article of food to include in the diet frequently.

**MEASURING:** If you do not have two measuring cups, you can easily make one do. Whenever you are using a recipe that calls for both dry and wet ingredients, first measure the dry ingredients, and then your measure can be used for measuring the liquid ingredients.

**CHILDREN'S CLOTHES:** Children's clothes should be loose and not binding. Warm weather clothes should be made of light, cool cotton. During the monsoon or winter not only should the child's abdomen, chest, and head be covered, but also his legs. Warm clothes insure a more free circulation clear down to the toes, and thus insure better health for your child.

"Front fasteners large enough for the child to handle easily are suggested. Medium-sized buttons are better than snaps (press buttons) or hooks and eyes. Ties are better for infants.

"Children's clothing should be attractive. Dark colours show the soil less; clear colours in soft or light shades are more easily seen. If material is a print, the design should be small. Simple decorations are preferred—edge stitching, binding and facings in contrasting colours, simple embroidery.

"Clothes should be easy to launder. A sturdy material with flat construction launders better than frills. The clothing should be



made of washable material whenever possible." says M. L. Bessom, Extension Clothing Specialist at the University of New Hampshire.

**EGGS.** How do you care for eggs? Here are two rules for the care of eggs:

1. Do not wash eggs when you store them. Wash them just before you use them. There is a "bloom" on eggs that helps in keeping odours and bacteria from entering.

2. Store eggs immediately in a covered container. If you have a refrigerator, store them in it. Do you know that an egg stored in a refrigerator for two weeks is as fresh as an egg kept at ordinary room temperature for three days?

**CLEANING.** We like to keep our homes clean. Sometimes it seems like a tedious chore. But it is not such a chore when we have good tools to work with, and when we keep these tools clean. All buckets, brooms, and cleaning cloths of any kind should be thoroughly washed and sunned.

## FEATHERWEIGHT PANCAKES

Three egg whites (beaten until stiff but not dry); three egg yolks (beaten until light and lemon coloured);  $\frac{1}{4}$  teaspoonful salt;  $\frac{1}{4}$  cup flour;  $\frac{3}{4}$  cup cottage cheese (made from curds).

Add the salt, flour and cottage cheese to the egg yolks. Fold in whites, drop by small spoonfuls onto hot, lightly greased griddle. Cook until golden brown on both sides. Serve with butter and maple or jaggery syrup if desired.

## EGG AND DHAL SANDWICH SPREAD

One fourth cup masur dhal; one cup water; half cup tomato juice; salt and seasoning (sage) to taste; three beaten eggs; two tablespoonfuls cream; chopped parsley; one minced onion.

Brown onion in a little vegetable



## LIFEBUOY SOAP

*protects you from the germs  
in everyday dirt*



MADE IN INDIA



L. 254-X38

oil. Add dhal, water and tomato juice and let cook until dhal is soft and thick. Add seasonings, beaten egg and cream, and cook for five minutes.

### GROLEY APPLE SALAD

Four large firm apples; one cup

chopped walnuts; one cup whipped cream; one cup fruit dressing.

First make and cool the fruit dressing, consisting of: One fourth cup lemon juice (lemon powder may be used)  $\frac{1}{2}$  cup water,  $\frac{1}{2}$  cup sugar. Thicken with two table-  
spoonfuls cornstarch which has

been made into a paste with a little water. Pare and dice apples, add coarsely chopped nuts and immediately pour the fruit dressing over to prevent apple discoloration. Lightly mix in whipped cream, reserving a small amount of cream and nuts for garnish.

## CONTACT WITH NATURE

(Continued from p. 17.)

The more the patient can be kept out of doors, the less care will he require. The more cheerful his surroundings, the more hopeful will he be. Shut up in the house, be it ever so elegantly furnished, he will grow fretful and gloomy. Surround him with the beautiful things of nature; place him where he can see the flowers growing and hear the birds singing, and his heart will break into song in harmony with the songs of the birds. Relief will come to body and mind. The intellect will be awakened, the imagination quickened, and the mind prepared to appreciate the beauty of God's Word.

In nature may always be found something to divert the attention of the sick from themselves and direct their thoughts to God. Surrounded by His wonderful works, their minds are uplifted from the things that are seen to the things that are unseen. The beauty of nature leads them to think of the heavenly home, where there will be nothing to mar the loveliness, nothing to taint or destroy, nothing to cause disease or death.

Let the physicians and nurses draw from the things of nature, lessons teaching of God. Let them point the patients to Him whose hand has made the lofty trees, the grass, and the flowers, encouraging them to see in every bud and flower an expression of His love for His children. He who cares for the birds and the flowers will care for the beings formed in His own image.

Under such influences as these, many suffering ones will be guided into the way of life. Angels of heaven co-operate with human instrumentalities in bringing encouragement and hope and joy and peace to the hearts of the sick and suffering. Under such conditions

the sick are doubly blessed, and many find health. The feeble step recovers its elasticity. The eye regains its brightness. The hopeless become hopeful. The once despondent countenance wears an expression of joy. The complaining tones of the voice give place to tones of cheerfulness and content.

As physical health is regained, men and women are better able to exercise that faith in Christ which secures the health of the soul. In the consciousness of sins forgiven, there is inexpressible peace and joy and rest. The clouded hope of the Christian is brightened. The words express the belief, "God is our refuge and strength, a very present help in trouble." "Yea, though I walk through the valley of the shadow of death, I will fear no evil; for Thou art with me; Thy rod and Thy staff they comfort me." "He giveth power to the faint; and to them that have no might He increaseth strength."

---

## WHAT YOU ARE MADE OF

(Continued from p. 19.)

combination. The body framework makes motions possible, but it is the muscles that bring them about. In bulk and weight, muscles make up about half of the material of the average human body.

Muscles do not act by themselves. In a normal and healthy body their action is balanced and harmonious. This balance is due to the action of *nerves*, which go to all the muscles and stimulate them to contract with such force and in such order as are needed to bring about the suitable motions. Most nerves are white and shiny in appearance. They are special cords going out directly and indirectly from the *brain*. They do not compose any large fraction of the bulk of the body, but they are essential to its activities.

The brain, the heart, and the lungs are organs. There are many

other organs, and it is quite likely that you could name several of them. Organs are specialized parts of the body adapted to do specific kinds of work. Some of them are necessary to life, and are appropriately called *vital* organs. All other organs are not absolutely necessary. Their loss by surgery would not put the body to any great disadvantage.

Each organ has a more or less typical size and shape, and all organs are connected with the body framework. They, the framework, the muscles, and the nerves make up the body. Each contributes its part to the body's activities. The human body is wonderful and marvellous.

---

## THE PROFESSIONAL NURSE

(Continued from p. 10.)

but also carries out a nursing care plan within the framework of the physician's orders.

The increase in responsibility for graduate and student nurses has been gradual. Several years ago a well-known medical teaching centre conducted a study of the graduate and student nurses' assignments. It showed that the nurses were performing seventeen procedures that were formerly carried out only by physicians, such as taking blood pressure and giving intramuscular injections. The study showed twenty-four other procedures in which the nurse assists the physician and is responsible for the arrangement of equipment and the care of the patient after the treatment. The nurse's responsibility also has been enlarged for teaching the patient care of himself; for example, insulin administration for the diabetic patient. It is expected that medical research will continue to enlarge the scope of the nurse's service.

The nurse is the member of the

health team who has oversight of the patient for long periods of time. Because her care of the patient does often extend over long periods of time without specific direction from the doctor, she must make the decision as to what should be reported to him and when. This nurse-patient relationship makes it possible for the competently trained professional nurse to be eyes and ears for the doctor as she reports her observations to him and carries on the activities of nursing care.

Advance in medical science has made it possible to undertake surgery where previously it could not have been attempted. The result of increases in technical information has been to bring larger numbers of the acutely ill into the hospital. Also, getting people on their feet earlier in illness has required more skilled nursing care and emotional support. These newer ways of treating patients have decreased the total time of the patient's illness but also have increased the actual number of hours of highly skilled nursing care required per patient during the period of hospitalization.

The professional nurse makes provision for the patient's total nursing care. This includes the mental, emotional, and spiritual needs of the patient.

Medical science is giving more and more attention to the influence of the mind in maintaining health and restoring the body during illness. There is an increasing awareness that "the relation that exists between the mind and the body is very intimate. When one is affected, the other sympathizes. The condition of the mind affects the health to a far greater degree than many realize. Many of the diseases from which men suffer are the result of mental depression. In the treatment of the sick, the effect of the mental influence should not be overlooked. Rightly used, this influence affords one of the most effective agencies

for combating disease."

The Christian nurse is thus able to inspire the patient to acquire more faith, hope, and courage, which are some of the fruits gained by those who are willing to partake of divine love.

The nurse's unique situation of being close to the patient over long periods of time also places her in the position of being the member of the medical team who has much responsibility for her health teaching of the patient. Her education aims at giving her success in this important field. She is able to learn much about the health habits of the patient as well as of his family. This acquaintance gives her some

competence to direct the patient to evaluate the home environment as it affects the health of all the members of his family.

Often a qualified nurse can give counsel that will help solve some difficult health problem. For example, a patient may confide in the nurse her concern over the behaviour problem of her school-age child. It may be that the nurse will be able to show a relationship between the behaviour problem and the family's late retiring hours, late morning rising, hurried, inadequate breakfasts, and unsatisfactory preparations for midday lunches.

In addition to serving the patient as a teacher of health, the professional nurse generally is competent to serve as a teacher of home-nursing classes and be active in group projects for the betterment of community health.

The responsibilities of the professional nurse are extending over such a broad scope that her education also must be enriched and increased to qualify her to perform these functions. On the other hand there are still many activities in nursing care that do not require a high degree of technical and professional skill. Considering the tremendous demand for nursing care, it is neither possible nor advisable to have the nurse with professional education give all nursing care to all patients. There would be too much work to be done by too few people.

Nursing is a humanitarian service. Its workers endeavour to make their contribution co-ordinate with the work of the other members of the medical health team in caring for the patient's spiritual, mental, emotional, and physical needs. To carry on this service effectively they utilize the results of medical research to direct those whom they serve to attain an optimum health status, and render expert nursing care for those who are ill.

---

**The Publishers of this Magazine  
Insure Their Motor Cars and  
Property with:**

## **The National EMPLOYERS' Mutual General Insurance Association Limited**

**Head Office for the East:  
32 Nicol Road, Ballard Estate,  
Bombay 1.**

**Telephone: 22823**

**Telegrams: "EMPLOMUTUA"  
Chief Office for Northern India:  
4 Peareylal Buildings, Queens-  
Way, New Delhi.**

**Telephone: 7625**

**Telegrams: "EMPLOMUTUA"  
Chief Office for West Pakistan:  
Atiya Building, Bank Square,  
Lahore.**

**Telephone: 3516**

**Telegrams: "EMPLOMUTUA"**

---

# GARDENING FOR HEALTH

## Gardens in Memory

Geraldine Young Palmer

**Y**OU awake in the dead of the night and sleep eludes you. Count sheep? No, too uninteresting. Solve all the problems awaiting you with the daylight? No, too stimulating. Repeat to yourself what in school we used to call memory gems, or multiplication tables, or plan the house you'd like to build? Too much work.

You ask yourself, "What is the most restful, relaxing thing in the world?" Ah—that's it—a garden! So you stare up into the darkness and float off on a little garden tour of your own.

Your first garden! You were seven, and you had a little rake and spade. You planted radishes and nasturtiums. And you went out every day and dug up some of the seeds to see whether they had sprouted. Since you planted them much too thick, there were plenty left to grow. Although you pulled the radishes as soon as they reached the size of your own little pink fingernail, their fresh, peppery flavour made up in intensity for what they lacked in size.

And then grandmother's garden—an enchanted place for small fry. Where else could you find ground cherries in their little Chinese-lantern husks? When in all the years since have cucumbers tasted as they did then, pulled finger size from the vine and eaten rind and all there in the patch? What plant wizard will ever evolve a tomato that will have half the flavour those ripe, juicy red globes had, warm from the sun? A handful of salt in

one hand, a big tomato in the other—ambrosia! Grandmother must have been a dear patient lady, you muse regretfully, for tomatoes could drip pretty bad. There was a little brick-lined path through the garden, and the hot sun drew out the tangy fragrance of its border.

And then you began to grow up, and you branched out into sweet peas and snapdragons. You planted your first tuberose under your low bedroom window, where its heavy romantic fragrance made you wish you were out in the moonlight. Your fervour for gardening took a terrific setback the day you ran a spading fork through a toad who hadn't set his alarm clock for spring. You didn't touch a fork again for two years!

And suddenly you were grown up, and you planted pansies because they were Father's favourite flower; lantanas because you didn't know what they would look like. Then you had a hot little walled garden under the Southern Cross, where pale roses grew on the iron grille, carrots had no flavour at all, and a gardener clapped his hands as a signal for you to unlock the gate.

Then it was an Ooty garden, and your first real one, you thought. Great purple globes of egg-plant, too beautiful to eat; green peppers, green beans, red tomatoes, and yellow squash, cucumbers, zucchini, and New Zealand spinach. Floods of yellow Banksia roses on the fence, and deep-red Hadleys—the first rose you ever bought!—

ascades of Belle Blanca. Thousands of pearly pink little Cecil Brunners, as dainty as shells and just large enough for a fairy. Under a tree a sky-blue bed of forget-me-nots. When have you ever seen forget-me-nots since without remembering tenderly your little first-born son, his head bent over the tiny blue flowers to kiss them, the light of happy wonder in his eyes, and his first poem coming like music from his baby lips in a little voice as soft as the wing of the white butterfly hovering over them?

"Forget-me-nots! Forget-me-nots!

Why are they called forget-me-nots?

They say—

Don't forget how sweet I am,  
And don't forget I'm blue!

Don't forget I'm coming back  
in the springtime,

And don't forget to love me!

That's what they say—

That's why they're called

Forget-me-nots!"

Oh, happy Baby! So long as there is one thing left to you in life as wonderful as seeing a bed of forget-me-nots for the first time, you will never grow old.

Garden! it's a beautiful word. Yes, it's one of the loveliest words in the world—garden! Think of your own garden right now. Your own garden is the best of all.

So you couldn't sleep? Well, who wants to! Isn't that a glimmering of daylight you see? Three minutes and forty steps will take you into the garden!

# DANGEROUS PRACTICES

FREEMAN C. OIKLE

VOLTAIRE is said to have made a statement about physicians that could well be paraphrased here as follows: "The patient pours himself or his friends full of drugs of which he knows little, into a body he knows absolutely nothing about." This statement is becoming more true each day for the patient who takes modern medications without medical supervision, and the gamble with health is at long odds.

Publication of advance knowledge on new drugs frequently builds hopes without telling the possible danger in the promiscuous use of these drugs.

Penicillin is a good example of this. Practically everyone is familiar with this drug, its history, and some of its uses. But unless you are one of the unfortunate ones who have encountered a reaction to this preparation, you do not realize its dangerous properties.

Penicillin, if you can obtain it without a prescription, will have to be procured from illegal sources. It may cause several reactions, from the mildest form of hives to an intense itching and swelling requiring hospitalization. The more severe reactions is a blistering and peeling of the skin of the arms and legs.

Other antibodies, such as aureomycin and terramycin, may cause nausea and diarrhoea. They can bring about even more serious disturbances by killing off the natural friendly bacteria in the intestinal tract that are so necessary to digestion.

Sulfa drugs often cause sensitivity to light and skin rashes. Sleeping drugs, besides being habit forming, can cause skin hæmor-



rhages that leave large discoloured patches. Skin rashes often result from the continued use of bromides.

Cortisone, a benefit to the patient with rheumatoid arthritis, is used also in many other conditions, from eye infections to certain types of skin disorders. Internally, it may lead to a false diabetes and may even cause swelling due to fluids retained in the tissues.

When taken without correct medical supervision these medicines can be dangerous. Stringent laws

have been passed to protect you, yet each hour of the day pharmacists are besieged with requests and even demands to give without prescription medications that should be rigidly controlled and to ignore the laws that have been enacted for your protection.

In older days it was common practice to use medications prescribed for one patient for other members of the family, and in many cases the prescription was passed down through generations. These afforded relief for simple illness and could not cause too much harm in most cases.

Today the practice of medicine is different.

The patient consulting a physician today usually obtains treatment for a specific condition, diagnosed on an individual basis.

It takes years of scientific training, plus laboratory findings, to correctly diagnose a disease, but the patient will often try to diagnose his own condition, or worse yet, recommend his own medicine to someone else.

To most people a prescription is a bit of illegible writing on a small piece of paper that somehow the pharmacist is able to decipher. The medicine, then, is usually supplied in a tablet or capsule that disguises its flavour. These tablets do not look dangerous, and you may think, "Why should they not be used for other members of the family with similar symptoms?"

This is dangerous practice. Your prescription is for you *only*. It may well injure someone else.







# THE DOCTOR SAYS

1. This question and answer service is free only to regular subscribers.

2. No attempt will be made to treat disease nor to take the place of a regular physician in caring for individual cases.

3. All questions must be addressed to The Doctor Says. Correspondence personally with the doctor is not available through this service.

4. Questions to which personal answers are desired must be accompanied by ADDRESSED AND STAMPED ENVELOPES. Answers cannot be expected under ONE MONTH.

5. Questions sent in on Post Cards will not receive attention.

6. Make questions short and to the point. Type them or write them very clearly.

7. Questions and answers will be published only if they are of such a nature as to be of general interest and without objection, but no names will be published. Address "The Doctor Says," Oriental Watchman and Herald of Health, P. O. Box 35, Poona 1.

## FREQUENT URINATION:

Ques.—"I am suffering from frequency of urination—about 16 to 17 times a day, more at night. General weakness in body is felt and pain in large muscles, and tiredness. My urine was tested for sugar and glucose but tests showed no diabetes. What is the disease and what medicines should I take?"

Ans.—Urinary frequency of which you complain may be due to a contracted bladder. As I note that you do not have sugar in the urine and the specific gravity is 1.028. These findings would be different if you had one of the two types of diabetes. There is no record of pus cells or bacteria in the urine, which would rule out another common cause of infection in the bladder.

Frequent urinating at night is sometimes associated with a de-compensated heart. Of course, without examining you personally, it is not possible for me to make a diagnosis. I would advise that you see a competent physician, who can give you a thorough examination, determining the bladder capacity etc., and carefully

testing your urine for the presence of bacteria.

?

LIPOMAS: Ques.—"My mother, aged 55, has suffered for many years from a kind of Eczema which appeared on her hands at certain seasons. In 1953 this condition was cured by X-ray treatment. From 1948 she has got gland-like swellings under her skin. They are distributed all over her body, are painless, but cause considerable anxiety to her. What would you advise her to do about these lumps?"

Ans.—I gather from your letter that the main problem concerning your mother's health is the presence of small lumps, which have appeared in various parts of the body. Most probably they are what we call "Lipomas," which are harmless tumours of fat. These could be removed surgically if the person so desires. I would advise, however, if there is any question about its nature that one be removed by a qualified surgeon and sent to a pathologist, for a proper diagnosis to rule out the possibility of other types of tumours.

?

TATTOO MARK: Ques.—"I have a tattoo mark in the middle of my forehead. Kindly let me know what I can do to get rid of this disfiguring mark."

Ans.—The tattoo mark if not too large can be removed surgically without leaving a disfiguring scar. This possibility I would advise you to investigate.

?

## PREMATURE GREY HAIR:

Ques.—"My hair began to turn white when I was 16 years old. Now I am 18 years old and my hair is still white in colour. I never had any treatment or consulted any doctor. Will you give me a good and a brief advice to regain my black hair?"

Ans.—Your premature greyness of the hair is due to some heredi-

tary factor. Little can be done except the use of dyes with temporary results.

?

EPILEPSY: Ques.—"My brother, 22 years of age, suffers from fits. He has the sensation of shock in his right hand and foot and then falls unconscious. He has been taken to the hospital for treatment and has been also given electrical treatment. He improved slightly, but gets the attacks occasionally, and is greatly worried. Kindly suggest some treatment."

Ans.—Your brother apparently is suffering from a disease known as epilepsy. There are several types. One is due to an accident or injury to the brain, another to an infection and a third, which is the most common type, the cause of which is unknown. This disease may in time go away of itself. Occasionally a surgical operation of the brain, which must be performed by a skilful and highly qualified brain surgeon may bring relief. In most cases taking Phenobarbitone half grain once or twice a day will keep a person who has an occasional fit from having them. There are other drugs which are much more effective which may be used if the Phenobarbitone, which is comparatively harmless, does not work.

Some of the world's greatest men such as Napoleon Bonaparte and some of the world's greatest music composers and scientists were epileptics. This disease is nothing to be ashamed of and your brother should not be concerned about it. He should live a normal life and with the mild type of trouble he has, he will probably live as long as the average person of his generation.

A poor man can be happy but no happy man is poor.—*Banking.*

Cast all your cares on God; that anchor holds.—*Tennyson.*

In youth we learn, . . . in age we understand.—*Lake Mills Graphic.*

Ideas must work through the brains and the arms of good and brave men, or they are no better than dreams.—*Emerson.*

# THE LAST WORD

To GET a tight ring off a finger without cutting the ring, use a yardlong piece of string or heavy wool. Slip it under the ring, toward the back of the hand. Then wind one end of the string tightly around the finger, in ascending coils, past your knuckle joint. Next, unwind the string, starting from the bottom. The string becomes a lever to lift the ring off, over soft flesh which was compressed by the string-winding operation, writes Dr. E. Peritz in the *Journal of the American Medical Women's Association*.

DON'T punish children for bed-wetting; instead, train them properly in bladder control, says Dr. Edward J. Werdein, Georgetown University, Washington, D.C., in *Medical Annals of the District of Columbia*. Some mistake or neglect in early bladder training is often apparently responsible for the trouble. Training should not be started earlier than the eighth, nor later than the twelfth month. Put the baby on the toilet chair at regular intervals during the day, increasing the intervals as control is lengthened. Praise success but pass lightly over failures. Don't attempt night training until daytime control is achieved. A supper relatively low in fluids can be helpful. If wetting is persistent at night, awaken the child completely before the expected time for wetting and increase this interval gradually until not needed. If the child is still incontinent at age four, a fuller medical checkup may be needed.

THE American Dental Association reports use of a new device

that generates gradually refrigerated air to deaden pain in dental patients. The temperature of the air stream developed by the device is lowered from 98 to 33.8 degrees, thus anesthetizing the gum tissues. As the dental work is completed the air stream is again warmed to body temperature. Dentists using the device report only six out of 100 persons treated reported any pain.

NEEDLE shots can be painless if the solution injected is a non-irritating kind, declares Dr. Janet Travell, Cornell University Medical College. An ice cube or, better yet, a spray of a powerful cooling agent like ethylene chloride helps. Pain in muscles can be avoided by testing for and avoiding "trigger areas" which are especially sensitive, or by using a local anesthetic in the injected fluid. She writes in the *A. M. A. Journal* that there are three reasons why the injection can hurt: entry of the needle with sudden distension of tissues; irritation due to the injected fluid itself or from antiseptic on the skin, and abnormal sensitivity of the skin or muscles.

Patchy baldness, known medically as alopecia areata, can be helped by a ringworm remedy, say two Baltimore doctors—H. M. Robinson, Sr., and his son, R. C. V. Robinson.

According to the Southern Medical Association, the doctors discovered the hair-growing capacity of a chemical, benzol benzoate. They were using the chemical on patients with ringworm of the scalp, and noted the rapid

growth of the hair in the bald areas. So they decided to try it on patchy baldness, which afflicts some people. Thirty-six out of forty patients noted improvements after one year. The chemical seemed superior to liquefied phenol, ultraviolet light, and ointment. And also did not require too many visits to the doctor.

EVERY pregnant woman should receive iron during pregnancy, preferably late in pregnancy, Dr. Roy G. Holly, Omaha, Neb., told doctors at the Sixth American Congress on Obstetrics and Gynecology. A combination of iron and cobalt seems a bit more helpful than a supplement of iron alone, he said.

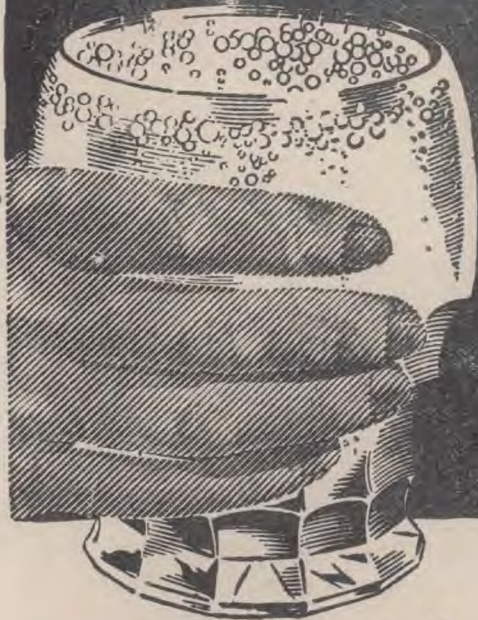
## CONTROL OF ITCHING

The local anesthetic procaine may help relieve the "Chronic itcher," says Dr. Samuel R. Perrin, of Western Pennsylvania Hospital, Pittsburgh.

Speaking to a meeting of the American Academy of Dermatology and Syphilology in Chicago, Dr. Perrin stated that procaine is known chiefly as a local anesthetic, but for relief of itching it can be taken by mouth, injected by vein, or even placed right on the itching skin area in a solution called efacaine. In some of the more acute itching skin conditions the discomfort can be relieved and control of the condition even hurried along by the use of procaine.

Printed and published by L. C. Shepard at and for the Oriental Watchman Publishing House, Salisbury Park, Poona 1, 1439-56.

# SPARKLING DRINK



## ends stomach upsets

Refreshes you  
while it does you good!

Eno is a mild but surprisingly efficient antacid—never causes an upset, but gives quick, positive relief from acid indigestion, flatulence and heartburn.

That's because of Eno's special buffering antacid action. When someone overeats—or eats something that doesn't "agree"—Eno helps to put things right again.

And Eno is so exhilarating and refreshing to drink! In 8 seconds it makes you *feel* better. Not just your stomach, your mouth too! Always keep Eno's "Fruit Salt" handy.

# ENO'S "Fruit Salt"



*The words "ENO" and "FRUIT SALT" are registered Trade Marks*



---

Students of the Calcutta Blind School "examine by touch" the new Braille printing press presented to the institution by friends in America.

---

Photo U.S.I.S.

---

the printing press. In addition, some other Braille apparatus and some 1,000 volumes of Braille books were also donated to the school to form the nucleus of a library. The American Foundation for Overseas Blind, New York, is also reportedly considering donation of some Braille apparatus and appliances to the school.

Since its founding, the Calcutta Blind School has trained hundreds of sightless children to be self-reliant and has taught them useful occupations. Many of its former students are today teachers, artisans, music masters and even businessmen. One of them has been elected to the Indian Parliament.

The school, co-educational in character, and with 165 boys and girls on roll, prepares the students for the West Bengal School Final examination. Its curriculum includes not only straight study

courses, important though they are, but also vocational training in various crafts, as a part of its rehabilitation programme.

The industrial section of the school provides a six-year course. The blind children are taught here to develop their latent talents and skills and at the same time to learn a craft. Basket-making, spinning and weaving, and wicker-work are some of the crafts that are taught here. The articles produced by the students find a ready market through a selling point in the shopping centre of Calcutta.

Listening to the school orchestra, one is amazed at the wonderful talent and virtuosity displayed by them. The school orchestra has acquired a name for itself. It has given several performances over the network of All India Radio.

Physical culture, including drill and swimming, is a regular feature

of a day's programme. Extra-curricular activities like scouting, dramatics and musical concerts, help develop the personalities and character of the students.

Perhaps one of the most interesting classes is that for the little children. Stuffed animals, birds, tricycles, wooden blocks, toys and other play-things are kept in a room, where little children learn by playing. They get to know the animals and birds by "feeling" them with their hands. More important is the psychology that they learn not to consider lack of vision as a serious impediment to their having a fuller life.

Besides the important function of providing educational facilities for the blind in Bengal, the Calcutta Blind School has also been the nursery of a large number of teachers who are today manning the numerous blind schools located across the sub-continent of India.

Its high standards have attracted future teachers of the blind from all over India. In addition, it has inspired a number of states to establish blind schools of their own by proving that, under wise and sympathetic guidance, sightless people can become an integral part of the economic structure of society.