CHILDREN'S NUMBER

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Published monthly by the REVIEW AND HERALD PUBLISHING ASSN., TAKOMA PARK, WASHINGTON, D. C.

> Entered as second-class matter June 24, 1904, at the Post Office at Washington, D. C., under the Act of Congress of March 3, 1879

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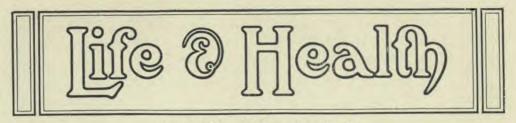


Painting by Volk

QUEEN OF THE WORLD

The mother, in her office, holds the key Of the soul; and she it is who stamps the coin Of character, and makes the being who would be a savage, But for her gentle cares, a Christian man; Then crown her queen of the world.

- Old Play.



HOW TO LIVE

Editor H. W. MILLER, M. D. Associate Editor L. A. HANSEN Office Editor G. H. HEALD, M. D.

Vol. 32

July, 1917

No. 7

THE CARE of THE BABY

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THE child's life is divided into definite periods, namely, the newborn, infancy, childhood, and youth.

It is customary to designate a babe as "newborn" until all traces of its prenatal, or intrauterine, existence have disappeared.



MANOAH'S SACRIFICE "How shall we order the child, and how shall we do unto him?" Judges 13: 12.

This is usually accomplished by the end of the first month of independent life.

Infancy follows the newborn period, and continues until the eruption of the first, or milk, teeth is completed; it is, therefore, limited to the first three years of life.

Childhood extends from the third to the seventh year, at which time the permanent teeth make their appearance.

Youth includes the years from seven to puberty. In this article we are interter of young life. How can we remedy it? Much is being done by the Child Welfare Leagues. The percentage of deaths has been lowered, but still, with all instruction and care, the percentage holds high. Ignorance and carelessness in care and food are one cause. One hundred and twenty thousand of the deaths before the first year are directly traceable to ignorance in feeding. Poor inheritance is another cause of infant mortality.

ested in the first two periods only.

Every child born into this world has a right to be well born, but statistics show that every year 300,000 die in the first year of life. Eighty-five per cent of these a r e bottle - fed. There must be some cause for this great slaughIn Bible times it was considered important for the mother and father to know how to care for the child before its birth. The wife of Manoah asked the Lord how she should care for the child, and was instructed to eat no unclean thing and drink no wine or strong drink. If it was necessary in those times to use such care for the proper development of a child, it surely is necessary now; but instead we find mothers paying no heed whatever to their food and drink before the birth of the infant, and very little after it. The only thought is to

satisfy every craving. In fact, it is usually felt that during the time of pregnancy every little craving should be met.

Wherever the habits of parents are contrary to physical law, the injury done to themselves will be repeated in future generations. Satan knows this very well, and he is perpetuating this work by hereditary transmission. Experiments with animals, exposing them to the fumes of alcohol and

tobacco, have proved that it is not so detrimental to the older animals as to the offspring from such exposed animals. Those born have been deficient in strength, and few survived, only seventeen per cent of their offspring living.

If narcotics given to animals affect the growth of their young, they must affect the human offspring exposed to the fumes in the same way. Many little ones live in homes filled with tobacco smoke, being obliged to breathe the fumes from the breath of parents who use both alcohol and tobacco. The result must be deterioration.

When the young child begins its life and nurses its mother's milk, it may receive milk that will cause distress and lay the foundation for further trouble. The question whether a child will be robust or weak is often determined by its food during the first three months of its life. The corner-stone of the constitution is laid during that period. A great part of the immense mortality of the first year is traceable to disorders of nutrition.

It is of prime importance, therefore, that the mother subsist upon such foods as will not ferment or decay and produce

discomfort in the child. It is not necessary that a child ery

> the first three months with colic. Proper food eaten by the mother will insure a supply of good, wholesome milk for the babe.

If we wish good milk and cream from a cow, we must feed her on grains as well as grass and hay. A cow fed on slops.

garbage, etc., will give inferior milk, with a small percentage of fat, though the quantity may be increased. So, too, with mothers: the

use of vegetable soups and sloppy foods produces a large quantity of milk, but of such inferior quality that the child is not satisfied and happy, but distressed, after eating.

On the contrary, a diet of cereals, milk and cream, whole-wheat bread, and unpolished rice, with eggs, ripe olives, nuts, sweet fruits, and simple desserts, as custards and rice pudding, will produce good rich milk for the baby, and create less gas in the stomach and abdomen.

Vegetables are more liable to ferment, and should not, as a rule, be used during the first three months. Mothers nursing

SUMMER HYGIENE of INFANTS

Kate Lindsay, M. D. Boulder-Colorado Sanitarium



THE summer hygiene of infants includes sanitary food, clothing, clean water, pure air, proper rest, protection from biting and infection-carrying insects, infection-carrying ani-

mals, and human infection carriers; as well as protection from overheating and exhaustion from high temperature, proper out-of-door exercise, and avoidance of all nervous and mental irritation and overexcitement.

Keep the little one calm and happy by removing all sources of physical discomfort, as well as all causes of nervous and mental overstimulation.

The question of proper feeding is all-

important when we remember that the greatest cause of the mortality of infants under one year of age is from what are known as gastrointestinal disorders, and that these disorders are all greatly increased, as well as the infantile death rate, during the warm months. In the



city, epidemics of infectious diseases of the bowels and stomach in July and August sometimes reach as high as fifty to eighty per cent, so that a oneyear-old baby incurs greater risks from what it eats than the soldiers in the trenches on the European battle fields do from their exposure.

Nature has provided one suitable food for the first year of life,— mother's milk, sterile, clean, of proper temperature, in



composition containing all the food elements needful for normal infantile growth, containing digestive and antiseptic bodies. which help prepare the food for absorption and also aid the body in resisting infection. No artificial food can ever be made to take its place. The infant with a healthy, happy, hopeful, sanitary, willing mother, has the question of summer food sanitation simplified to proper regulation of the mother's

life. Plenty of sleep, proper food, outof-door exercise, proper clothing, and mental and moral serenity are essentials, the mother giving up her life for the infantile welfare for the first year of its existence, when its brain, muscles, and all the other tissues and organs of its

body are being built up. The mother, being then its chief food dependence, can either determine whether it shall die prematurely, grow up an invalid, or



become a useful citizen, likely to make the world better for its having lived.

Nothing should lead a mother to over-

work, or in any way exhaust her energy or interfere with her ability to be a good wet nurse, especially during hot weather. As much of her time as possible should be spent out-ofdoors; and whatever happens, she should control her emotions and maintain selfcontrol. Anger, jealousy, despondency, fretting, and all depressing emotions do harm to the body by disturbing the mammary

functions and impairing the quality of the natural infant food. Whatever she does, whether she eats, drinks, acts, thinks, or feels, should be done for the infant's welfare in summer and winter, and at all other seasons.

Deprived of mother's milk, the baby, especially in hot weather, is sorely handicapped. Mother's milk is a clean, living food, and sterile, if taken in a natural way. Artificial foods are the reverse. Even with the most painstaking care in their preparation, they all contain dirt and germs; and cow's milk, under the most perfect modification, is a very inferior substitute. The baby that has to depend on a bottle in hot weather, or at any other season, incurs at least four times the risk of the breast-fed baby.

If the baby must be fed on artificial foods, no pains should be spared to secure the best possible certified milk, and to keep it from becoming infected after it leaves the milkman's care. All bottles, nipples, and other utensils should be clean and sterile. Not the smallest detail should be neglected at any time. In hot weather, when milk spoils so readily, there should be special painstaking in preparing the baby's food, lest it prove to be a death-dealing liquid rather than a nourishing food.

Fresh, pure air and clean water are of equal importance to the baby. The air should be pure, free from dust of all kinds, and from all foul gases, and should be kept in motion. Stagnant air

is depressing, especially in hot weather. The close, dead city air of 85° or 90° F. will cause heat prostration, while travelers endure without serious discomfort 105° or 110° of temperature on our Western plains when there is a stiff breeze blowing.

Out of doors is the place for the baby in hot weather, night and day. In the morning when it is cool put the little one out

on the sunny side of the house; in the heat of the day, on the shady side; at night, in its crib on the porch.

We need more provision for the outof-door life of infants and small children. It is poor policy to keep them indoors until they become infected, and then build a sleeping porch on the home and send them to an open-air school, or have them die of tuberculosis. We need a practical, portable pen for the creeping, toddling infants, larger than any now in use, which will allow the babies a chance for exercise, and can be moved to any side of the house where the baby will get fresh air and be in the sunshine or in the shade, as the temperature of the weather indicates. It could even be carried into the yard. Every home should have, if possible, a grassy yard, well-kept and free from filth, especially animal and human excrement. A good fence is necessary to keep the little ones in and animals out; and there should be plenty of playthings and other sources of amusement to keep the children off the street, and give them a clean environment in which to play.

The matter of bathing and keeping cool could be partially solved by keeping the infant out in the open air, also by using suitable clothing and the tepid bath. Only one garment, the most practical being the rompers, is needed in hot



weather, with some outside wrap for cool mornings and evenings. It would lessen infantile mortality if the morning and evening chill and the noonday overheating could be avoided by properly regulating the play places and clothing of the children so that the morning sun will warm up the night-chilled morning air, and the noonday heat be modified by a shady porch or tree-shaded lawn.

A cool bath, a clean light garment, and a quiet sleep in the midday shade will help much to tone up the infant to endure the depressing effects of midsummer heat. An electric fan will help, but it is not always practicable to have one. A wet sheet hung up in the room and kept wet will help cool the air. It is much easier to live out of doors and keep cool in the country than in the city. However, something can always be done to keep the body cool and free from the depressing effects of summer heat.

Just a word about the texture of infant clothing. Woolen is often advocated for infants all the year round. But to many it may be a torture, and tend to cause nettle rash and other skin eruptions, and so irritate and damage the child's nerves. Soft cotton is the best for the inside garment. The evening and morning wrap may be woolen. The writer remembers well, in her early medical practice, riding seven miles at three o'clock on a cold December morn-

ing to see a baby that it was feared was going into convulsions, only to take off a woolen shirt, give the baby a soda bath, and put it in soft gauze underwear, the weary little one going fast asleep during the treatment. The most obvious causes of infantile disorders are

the ones most liable to be overlooked. Next to air and food comes pure water. Many a poor baby goes thirsty, and cries and frets because it is thirsty, and no one thinks to give it a drink. Water should be clean, sterile, and not too cold, and given regularly between meals. During the second year fruit juices to the amount of a tablespoonful or two may be given twice a day with the water. A cool bath in the morning and a tepid one in the evening are beneficial. No child should be sent dirty to bed. Five minutes will do the work, and it may be done with a wash cloth and two quarts of water.

Screens and mosquito net will keep off the biting and disease-carrying insects, and are easily used over the baby pen, and to some extent will shut out the human and animal contagion carriers. Cats, dogs, and other animals should not be kept in the same room with children. nor come in too close contact with them. The yard where the little ones play should not be the common pasture for the domestic animals, quadruped or biped. A clean soil, covered with a thick, soft mat of grass, is one chief means of keeping the house, air, food, and water clean. To realize the importance of this, one has only to remember the millions of victims of hookworm in the South, all infected from the unclean soil, and also the victims of other intestinal worms, the ova of which breed in excrementinfected ground, and mostly in the hot weather in our temperate zones, but in the tropics at all seasons.



When the baby frets and cries, or is what is called a bad baby, and the little ones are quarrelsome and hard to manage, it is the time to find out the cause. It may be a pin pricking, a rough inner garment, to o much or too little clothing, a sour stomach, an aching ear, a

skin rash, a wet diaper. Diagnose the case, nurse or mother, before using harsh discipline likely to make the timid (Continued on page 215)

WHEN TO CONSULT THE DOCTOR

Wells Allen Ruble, A. M., M. D. New England Sanitarium, Melrose, Mass.



THE most sacred right of every individual is to be well born, and the next is to be well reared. Speaking of our hereditary tendencies, Holmes said, "We are the omnibuses in which all

our ancestors ride." "Like father, like son," is a commonly accepted expression of belief in hereditary influence.

The matter of increasing the population of our land by immigration is one demanding and receiving the consideration of the highest legislative bodies. It is supervised by a board of immigration, each individual admitted being subjected to close medical and other examinations. Through this channel a million or more "foreigners" are annually injected into our national life. their own kind. In other words, it is the duty of every pair who would unite themselves in marriage, to consult competent medical authority regarding their physical and temperamental adaptability to each other and their individual fitness for such a union. This may be thought to be visionary, but the day is coming — and it is not far distant when such supervision will be legally required.

In considering first, then, the interest of the infant, it is his right to have had responsible advisers in his procreation. Of all things in the world most important to him, but over which he has absolutely no control, is that of his own existence. Why, then, should he not have the right of a wise foreword?

Every pair after wedlock, if not before, should seek medical advice before

assuming

most

hood.

that

desirable

Especially

privilege, parent-

should the contem-

At the same time when this comparatively small number of newcomers are being held up and scrutinized by the public gaze, four or five million of welcome and unwelcome citizens are arriving through the nuptial portal, without supervision and without consultation save of a dual nature.

The first danger signal when medical advice should be sought is before consummating the



"A million or more 'foreigners' are annually injected into our national life."

union of two individuals and granting them the unlimited privilege of increasing the population indefinitely after plated mother seek advice to ascertain whether her health and physical frame are of such a nature as to permit of such an experience without danger to herself and to her offspring. Such advice often comes too late to be of service.

Having cast the die and finding herself a prospec-

tive mother, it is the duty of every woman to seek medical advice as to her manner of life during this period. The danger signals during this time are headache, backache, lassitude, tired feelings, puffiness about the eyes, swelling ankles, dull or sharp pain in pelvis, and any abnormality in the kidney secretions. Any of these call for medical advice. Careful pelvic measurements should be taken by a physician

early in this period in order that complications may be avoided at birth.

Of all times in one's life when competent medical skill is needed, it is when he is ushered into this world. The mother then, too, needs skilled hands. The day of the midwife. unadvised. has passed from civilized society. The nurse, though indispensable, is not all-sufficient. Too many a mother incurs lifelong suffering in the birth chamber through improper attention at this time. Se-

cure a competent physician early in this experience. Confide in him, be faithful in following advice, and thus most of the inconveniences and mishaps of childbirth will be avoided.

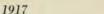
The baby having arrived and the mother "doing well," they are both under the care of the doctor for ten days or more. After that, all being well, the doctor will expect to be called should his services be required. Thereafter the parents must know something of the conditions that would require a physician's care.

After the first few days of life, during which the baby should exercise his

lungs quite freely in crying, he should sleep the larger part of the twenty-four hours. He should be awakened at regular intervals to fed and atbe tended to otherwise. If the baby cries incessantly, something is wrong. If breastfed, which method should always be practiced if possible, it is well to have the milk tested to ascertain if it is of the proper composition for the child. If it is not, the child will suffer sooner or later and will

show signs of malnutrition. It is wise not to wait for these signs, but to have the milk properly tested. If bottle-fed, which method should be avoided as far as possible, the milk must be modified. and the source of supply guarded in accordance with the advice of the physician. Sweating about the head, vomit-

| | | Communic | able Diseases | | |
|---------------------|--------------------|---------------------|-------------------|------------------------|---------------------|
| Disease | Developing Time | Eruption Appears | Eruption Lasts | Duration of Disease | Isolation Period |
| Measles | 9 to 14 days | 4th day | 3 to 6 days | 10 to 14 days | 6 to 14 days |
| Scarlet fever | 1 to 7 days | 24 hours | 7 to 10 days | 10 to 14 days | 8 to 9 weeks |
| Whooping cough | 2 to 14 days | None | | 8 to 12 weeks | Until well |
| Diphtheria | 2 to 10 days | None | | 8 to 10 days | Until germ free |
| Typhoid fever | 5 to 35 days | 6th day | 3 weeks | 4 to 8 weeks | Until germ free |
| Infantile paralysis | 3 to 33 days | None | | 1 to 2 weeks | 6 weeks |
| Smallpox | 12 to 15 days | 6th day | 12 days | 4 to 5 weeks | Until skin clears |



ing curdled milk, restlessness, crying, lack of gain in weight, thin, pinched appearance of face and hands, are signs of improper nourishment, and demand attention. The accompanying table (No. 1) gives the normal development of the average child during the first few years.

The matter of the first teeth is of importance as an indication of proper development. The accompanying table (No. 2) gives the average development.

During early childhood a matter that

| | TABLE 1 | |
|------------|------------------|--------------|
| Table of | Weight and Lengt | th of Child |
| Age | Weight (lbs.) | Height (in.) |
| Birth | 7.5 | 20.5 |
| 6 months | 6.25 | 25 |
| 1 year | 20 | 28.5 |
| 11/2 years | 22 | 29.5 |
| 2 years | 26 | 32.5 |
| 3 years | 30.5 | 35 |



| TABLE | 2 | | | |
|--------------------------|------|-----|-----|-----------|
| Time of Appearance | of I | irs | t T | eeth |
| Two lower front teeth | 6 | to | 9 | months |
| Four upper front teeth | 8 | to | 12 | months |
| Two lower side front and | | | | |
| four front molars | 12 | to | 15 | months |
| Four canine teeth | 18 | to | 24 | months |
| Four posterior molars | 24 | to | 30 | months |
| Six teeth | | | | year |
| Twelve teeth | | | 11 | 1/2 years |
| Sixteen teeth | | | | years |
| Twenty teeth | | | | 1/2 years |

should receive attention is that of the genitals, especially of boys. Insist that the physician observe carefully, and then follow his advice. Circumcision or other operation is often necessary.

Watch the child carefully for symptoms of adenoids and enlarged tonsils. Mouth breathing, frequent and lasting colds, nasal speaking, are signs of these conditions. They should receive a doctor's most careful attention.

> The eruptive diseases and other diseases of children are always a call for a physician. These are so varied in their manifestations, and the consequences are so different and often so serious that expert counsel should be sought in all these cases. (See table, p. 201.)

> In short, as it is better to be safe than sorry, consult the doctor in any condition that is not understood. Make your family physician your friend. Do not annoy him with trifling matters. but act upon the principle that you pay him (and don't fail to do this) to keep you and your family out of trouble, rather than to get out when you are in trouble. In the long run this course is cheaper in both money and worry. Some less civilized people than we, pay the doctor to keep them well, and cease to pay him when they get sick. This is wise, and the practice will sometime become civilized enough to be admitted to our shores. May it be soon.

July

VACCINATION

H. W. Miller, M. D.

Superintendent Washington (D. C.) Sanitarium



C ONTAGIOUS diseases find their greatest mortality among the children. The adult becomes immune to a certain disease, as a result of an

attack of the disease, or of vaccination against it, or because he has passed the period of susceptibility to it. Measles, for example, is much more prevalent among children than among adults: and most of the eruptive diseases have their greatest incidence, and therefore their greatest mortality, among children. Typhoid fever is not very common among children. Smallpox, on the other hand, is prone to attack unvaccinated children, among whom its death rate is exceedingly high. Smallpox and diphtheria, two of the diseases especially dangerous to child life, may be almost entirely prevented by vaccination. But in the attempt to prevent epidemics of these two diseases, we are far from reaching our ideal. The mortality from this source is still too high.

The principle upon which vaccination is based is that the body can be educated to resist a particular germ poison. For instance, it is possible to inject into the tissues germ products of a certain disease, say of smallpox or diphtheria, which enable the tissues to set up an effective resistance against that particular disease.

The object to be obtained through vaccination is not simply to prevent loss of life. In addition to the high mortality, smallpox and diphtheria cause other mischief not shown on the mortality lists. Many of the children who survive are left lifelong invalids. For example, smallpox often results in blindness, deafness, joint disease, insanity, or paralysis, and predisposes, through the weakening of the organs of the body, to

other diseases, such as pneumonia, tuberculosis, and diphtheria. Among those who recover we often find paralysis of an arm or a leg, complete loss of the voice, marked modification of the voicethrough complete or partial paralysis of one or both vocal cords, and deafness from suppurating disease of the ear.

For one hundred and twenty years, vaccines prepared from healthy heifers have been used for the prevention of smallpox. Dr. Edward Jenner observed that milkmaids frequently became infected from the udders of cows having cowpox, and that these women were never infected by smallpox. On May 14, 1796, he heard a milkmaid of Sodbury, England, say, "I cannot take that disease; I have had the cowpox." This gave him a clew, and he began the gen-



eral use of this method of preventing disease. In the decades following, vaccination preserved the lives of a multitude of people, whose gratitude knew no bounds.

The value of vaccination for smallpox is appreciated in practically every nation of the world, but its application to children ought to be more generally and more vigorously enforced. In countries where smallpox is endemic, vaccination of children should not be delayed beyond the first year of life; at any time after six months, healthy children can be vaccinated with safety, but the end just as effective in preventing the disease as a heavier reaction.

In countries where vaccination is enforced, smallpox has practically been eliminated. The following are substantially the health laws which have been enacted by these governments: Every child must be vaccinated before the expiration of the first year of life, unless it has had smallpox, or unless some physical disability renders it impracticable. In the latter event, the child must be vaccinated within one year after the removal of the existing disability. Every pupil of a public or private edu-

of the first year is the most desirable time. Vaccination then limits the risk of infection, and can usually be done with slight discomfort to the child. Vaccination in childhood seems to give a more prolonged immunity than later in life. Frequently a vaccination made in early childhood will last a lifetime; that is, no subse-



DOES VACCINATION PROTECT? Unvaccinated child at left, vaccinated child at right.

quent vaccination will take, nor will the individual so vaccinated contract the disease. In all lands there should be a law requiring vaccination for smallpox before the termination of the second year. There can be no definite rule as to the proper time for revaccination. Revaccination at the occurrence of every epidemic is a safe rule, if the epidemics are as much as three years apart. A successful vaccination should give complete protection for a period of two or three years, even during a continued epidemic of smallpox.

The amount of reaction to the smallpox virus, by swelling, redness, and pain, is not necessarily an indication as to the degree of immunity established, as sometimes a very slight reaction is

cational institution should be vaccinated again between the ages of t'hirteen and fourteen years, unless there is medical proof that he has had an attack of smallpox within five years, or has been successfully vaccinated within The that time. vaccination must be performed by a licensed physician. Previously to

the use of antitoxin for diphtheria, the death rate ranged from fifteen to twenty-five per cent. Today the death rate has been reduced to two per cent among children on whom antitoxin has been used. Where statistics have been limited to cases that have had early administration of diphtheria antitoxin, the death rate has been less than one per cent. The manufacturers of antitoxin have so far eliminated the dangers of contamination by other germs that the administration of antitoxin has become perfectly safe. No other manifestation of the cure of acute infectious disease will compare in rapidity with the disappearance of the diphtheritic membrane following a dose of antitoxin.

(Continued on page 216)

INTESTINAL DISORDERS of CHILDREN

W. T. Lindsay, M. D. Superintendent Madison (Wis.) Sanitarium

E shall not attempt in this article to deal in an exhaustive way with the disorders of the intestinal tract, but rather to take up the more common conditions, and those particularly which prevail during the summer months.

In dealing with the intestinal tract of children, we do not have the many disturbing factors that are found in the cdult. The child at birth has an intestinal tract free from germs. This condition lasts for only a comparatively short time, however, as in spite of the best of care, the food entering the alimentary canal carries with it germ life, which soon multiplies to a marked degree, and never again in the life history do we find the alimentary tract in any other condition than swarming with The majority of these are bacteria. harmless, and perhaps even beneficial in many instances. Some, however, under favorable conditions take on vicious tendencies, which result in acute inflammations of the bowel wall, comparable to the sore throat associated with the common cold.

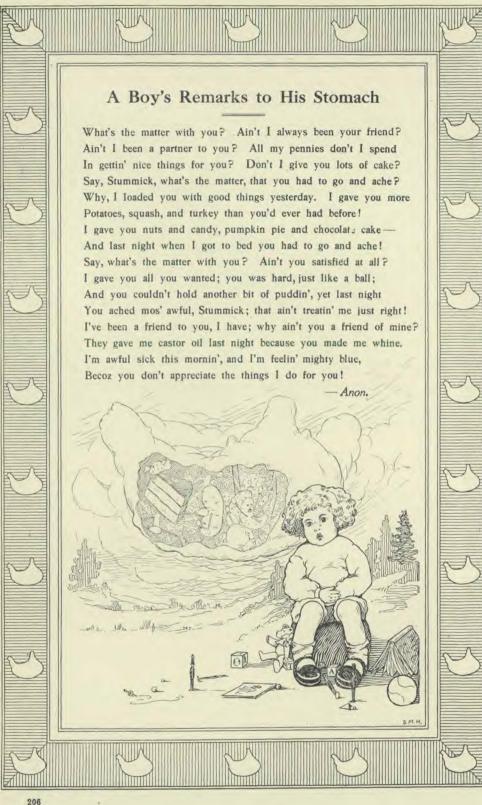
It is a striking fact that intestinal disorders are many times more common in artificially fed children than in the breast-fed. It is reasonable to suppose that mother's milk would not be freer from organisms at its secretion than would cow's milk. The difference between the two feedings is summed up in a combination of two conditions: First, the cow's milk, or artificial feeding, whatever it may be, is not the same in composition as the mother's milk; second, this food must be preserved for some time, and at every handling is sure to receive a certain amount of contamination. Foods that have been preserved or canned, as condensed milk or the socalled patent baby foods, may under

certain conditions be the best that one can use, but they are a dead food, lacking certain ferments of which the child is in need, and which he can best receive from his mother. No pains should be spared in providing the natural food for the child until he has reached the age of ten or twelve months, and where possible, it is better that he should not be weaned during excessive hot weather, as most people well know.

The children most often afflicted by intestinal disorders are those artificially fed, or those that have come to the age where supplementary feeding is advised or at least is indulged in. We believe that by the sixth month even breast-fed babies should be given some orange juice, and after eight months vegetable broth or well-cooked but thin cereal preparations, such as oatmeal or cream of wheat. The apparent necessity for such feeding comes from the fact that by the time the child has reached this age, he is in need of certain salts in which the milk is deficient, and which will be supplied by this additional food. Iron, particularly, is one substance that is not supplied by an exclusive milk diet. While there is an idea current that children who have come to the eighth month should have some supplementary feeding, much harm is done by the indiscriminate use of any and all foods served to other members of the family.

As the summer months draw on, foods are much more liable to be contaminated by fermentation and various degrees of decomposition than during the winter, and for this reason children artificially fed or receiving some type of supplementary feeding are much more prone to intestinal disorders in the summer than during the cooler months.

The cause of many of these diseased conditions could be attributed to too-



frequent feeding, too-rapid feeding, or the use of improper foods.

The physician called to the bedside of a child during the summer is confronted by one of two conditions. In one, the little patient will be feverish, cross and irritable, with a dry, coated tongue, and a rather tender abdomen, giving a history of constipation or diarrhea. In the other the summons from a very anxious mother will come to see a child in what is commonly spoken of as a convulsion. In both of these instances we have an acutely inflamed bowel, containing decomposing food materials, which quickly contaminate the blood stream, resulting in rise of temperature and other symptoms given above.

While it is not prudent to outline a course of treatment applicable to all these cases, certain fundamental principles may be laid down. First, the child should receive no food for perhaps twenty-four hours, other than water or thin cereal gruels. These should be given in free amounts. It is always advisable to use the cleansing enema (one teaspoonful of salt to one pint of hot water), whether or not there is a condition of diarrhea. In case of constipation, precede this saline irrigation by a soapsuds enema. In these cases, the so-called infant syringe is inadequate, and except in children under two months, a fountain syringe and a liberal amount of water should be used. Usually some simple cathartic is of advantage; just what one, should be determined by the needs of the individual case.

On investigation, it is often found that milk not strictly sweet was given, or that the food used was insufficiently cooked, or that such articles as green corn, pickles, coarse vegetables, or even worse things were permitted the child, and were directly responsible for the attack. Many mothers seem to lack a sufficient amount of moral backbone to say "No" to their children when they tease for that which their judgment tells them the children should not have.

Some seem to feel that to deny the little ones these things which they say they want, is an exhibition of lack of motherly instinct, or even hard-heartedness. We can scarcely appreciate this frame of mind, but rather feel that the mother who says "No" to her child, and explains that such things are not good for him, is living up to the true spirit of motherhood.

The second condition, where the child is quickly thrown into a convulsive seizure, usually results from the same cause as the former trouble; but because of a more delicate constitution or a more virulent infection, the fever rapidly jumps to 103° or even higher. and the saturation of the blood stream with the poisons produced in the bowel results in such an irritation of the nervous system that a veritable nerve storm is precipitated. The child is not in such critical danger as he would seem to be, but nevertheless, there is need for prompt action. The convulsion can usually be controlled by immersing him in a tub of water as hot as can be borne. If nothing at all is done except to loosen the child's bands, and rub the extremities, the convulsion will usually pass over in a short time. Then the bowel should be quickly and thoroughly flushed, and the intestinal tract emptied by a mild but thorough purgative.

In cases where the absorption of poisons has been so extensive that the convulsions tend to recur frequently, it may be necessary for the attending physician to administer some quieting potion, although this is seldom necessary. A hot full bath, thorough irrigation to the bowel, and hot applications across the abdomen to relieve the marked congestion in those organs, are usually all that is necessary.

For the next few days, the abdomen should be protected from chilling. We have found that the so-called cotton poultice serves the purpose nicely. A portion of any kind of cotton batting as it comes from the roll is cut suffi-

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MINOR DISORDERS of CHILDREN HOME TREATMENT

Lola G. French, R. N. Washington (D. C.) Sanitarium



HILDREN, especially in early infancy, respond most readily to treatment properly applied. The first essentials in giving treatment are suitable surroundings,

— a warm room, properly lighted and ventilated, and, ready at hand, all articles needed for the completion of the treatment, that there may be no delay when once the procedure is begun. Delays mean undue exposure, and needless tiring of the patient. Treatments given by proper methods afford early relief; but on the other hand, the delicate life being very susceptible, not infrequently fatalities have been recorded as resulting from apparently trivial errors in the care given.

A cold in the head is of very common occurrence in children, and while it in itself is of minor importance, when we consider the grave conditions that may arise from weakened resistance, it should be looked upon as the beginning of some serious infection, and given due consideration at its outset.

Healthy children should have frequent action of the bowels, and in time of cold or any internal congestion this part of the child's care should have attentive observation. A teaspoonful of castor oil may well be given at the beginning of a cold, however slight. A warm foot bath, with cool compresses to the head, tends to relieve the congestion of the inflamed area, and aids in the elimination which should always be very active through the skin.

The warm cleansing bath should be a part of the daily program. It must be remembered that in the bathing of children two precautions need to be conscientiously observed. First, see that

the water fully covers the body in the bath, or that a blanket is spread over the uncovered parts, and keep cold compresses to the head. The room temperature should not be less than 80°. The second precaution is not to make the water so hot as in the case of an adult. for the body surface of a child is greater in proportion to its weight than that of an adult. For example, a child weighing twenty pounds has a body surface of five square feet, whereas an adult weighing one hundred and fifty pounds has but fifteen or sixteen square feet of surface - the ratio in the child being one to four and in the adult one to ten. It becomes apparent that extremes of hot and cold cannot be so readily borne by the child, and a thermometer, rather than the hand, should be used in determining the temperature of the bath, which should ordinarily be from 98° to 100°.

Great care should be used in the selection of a nonirritating soap. A good grade of Castile soap is generally satisfactory. Skin rashes are more often due to too frequent use of soap or a poor quality of it, than to too frequent bathing. When the child has been in the bath ten minutes, he may be taken out and dried thoroughly and quickly, protecting him with a blanket meanwhile to prevent chilling, after which he should be kept indoors, and better still, placed in bed for a short time.

The ears frequently become infected through the extension of a cold from the nasal or throat passages, and earache may often be very unyielding to treatment. Too often, some means of quieting the child is used, such as paregoric, instead of giving diligent attention to relieving the local trouble in the ear. In the more serious cases the ear often has to be lanced. By a warm foot bath, or by syringing the ear with oil or water at a temperature of 105° , instant relief is sometimes obtained.

It is estimated that thirty per cent of the blindness today is due to neglect of the hygiene of the eyes in infancy and childhood. Furthermore, nearly all conditions of cross-eye and visual defects have their origin in childhood. The most common reason for this is the fact

that children hold objects close to the eyes on account of the short reach. It is immaterial how closely objects are held to the eyes if the objects are of sufficient size to require no effort to make out the details. All visual errors should be corrected in early childhood, even before the period of study.

Children often awaken with the eyelids glued together as a result of a mild irritation of the lining of the eyelids, due

to draft or to dust particles accumulated in the eyes; this is an indication that the eyes require a bath. Saturated boracic acid solution diluted with four parts of water, answers very well for this, and should be instilled in the eyes every two or three hours. To irrigate or cleanse the eyes, lay the child on a sofa or bed with the head fixed or held, saturate a little portion of sterile cotton with the boracic acid solution, and squeeze into the open eye, thus thoroughly washing it. It is dangerous to point a medicine dropper into the eye of a child. By coating the margin of the eyelids with a little sterile vaseline at bedtime the sticking together of the lids may often be avoided.

It is singular that it is not thought necessary to consult a dentist at the period of dentition, during which children lose their teeth, and have a new set, which often grow irregularly in the jaw. But it is only recently that dentists



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tual. Then again, the absorption of pus from abscess of the teeth or from pyorrhea, gives rise to foul breath, and not infrequently it is claimed that diseased tonsils arise from infection carried from the decaying teeth. We anticipate that not far distant, dentists will find an abundant field in specializing on the care of the teeth of adolescent children.

Many times the lack of tact and acquaintanceship with children results in failure to assist them. Almost any treatment may be successfully adminis-(Continued on page \$17)

have been willing to see children, other than to pull out loose snags. Unquestionably a great deal of the digestive disorders in children arise from decaying teeth.

Although children are especially dependent upon thorough mastication for the digesproper tion of foods. frequently there are little abscesses around the gums, and teeth are lost, making mastication verv ineffec-

EDITORIAL

Hygiene of Infancy



HOUGH the child enters life with strong hereditary tendencies, it is powerfully influenced by its early surroundings and training. This training may be such as to increase or to diminish the hered-I itary bent. What the child has inherited is there for life, but it may by wise training be so modified as to lessen the evil and strengthen the good tendencies. The earlier the training, the more powerful the effect.

Owing to poor physical endowment on the part of children and ignorance regarding the care of infants on the part of mothers, the mortality of children, especially under two years, has not decreased, but has rather tended to increase. The old-time methods practiced by grandmother in her early motherhood days, are sometimes sought, rather than the practitioner who is up to date in medical science. The larger per cent of infants today are feeding at some other fountain than the maternal breast.

It must be remembered that formerly the physician had only objective signs as a guide in diagnosing diseases of very young children, and those a little older could but poorly convey to him, through verbal expression, anything adequate to enable him to come to an intelligent conclusion regarding their illnesses. What he found and what he saw were of necessity his guide.

And right here may be seen the great progress that medical science has made. A mute may come into a doctor's office today, and by means of labor ..tory analyses, X-ray, cystoscope, and many other modern methods, an absolutely accurate diagnosis may be made. On account of the facilities which the medical profession has at its command, definite information in regard to the infant can be obtained, and a remedy intelligently applied, provided the grandmother with her time-honored remedies will forbear a little season and give the physician an opportunity to apply the knowledge acquired in the past decade.

Stomach and intestinal disorders are the most frequent causes of decadence in the health of infants and children, often resulting in malnutrition that renders a child very susceptible to current infectious diseases.

The intestinal tract of the baby is very simple in its structure, being at first a straight tube, and later forming dilatations and convolutions. The infant's diet must therefore be simple. Promiscuous combinations of foods result in paleness, peevishness, emaciation, and mental derangement. Particularly should be mentioned the feeding of candy, sweetmeats, and highly seasoned pastry. These substances are irritants, and even in the adult often produce what is commonly styled bilious attacks.

The candy eaters among children can be as readily determined by observation as can the morphine addict among men. Accompanying the use of these delicacies in children are a sallow complexion, waxy skin, abnormal crav-

EDITORIAL

ings, and capricious appetite. Catarrh of the bowels and constipation are very common in children, and often result in lifelong dyspepsia. Indulgences in early childhood often lay the foundation for sluggish liver action, nerve exhaustion, and general debility. Wrong habits tolerated during this period are more or less fixed for life. How important that there should be correct physical training and proper hygienic surroundings at a time when nature most readily responds to such environment!

Today, when so much has been written, even in the lay press, concerning adenoids and diseased tonsils, we still find, upon examination, a large number of children with deformed mouths, distorted facial features, obstructed nasal breathing, flat and hollow chests, due to diseased tonsils and to large adenoids protruding into the mouth and nasal cavities.

Another prevalent opinion is that it makes very little difference about the exposure of children to measles, whooping cough, scarlet fever, chicken-pox, and kindred epidemics of childhood, as it is taken for granted that childhood is the best time to have these diseases, and every one must expect to have them sometime. It would seem that the mortality attending these diseases has brought untold sorrow to so many homes that we could no longer look with indifference upon epidemics of this character. Just as well conclude that the beginner should run his automobile in the ditch and break an arm or a leg in order to learn to be cautious in the future.

The child is marked by every disease that it has. No infant or child can grapple with any infection, even though he becomes the ultimate victor, without having a lifelong wound inflicted. Physical and mental development, through the practice of hygienic laws and the most guarded scrutiny in reference to infectious and contagious diseases, is as yet the best safeguard against disease, and by far the most dependable asset in recovery from infection at later periods of life. None too strict regulations can be adopted by every household for the protection of its weaker members, especially the smaller children.

Nearly all cases of pneumonia in children begin with a cold, and colds in children are generally readily curable. All that is required is proper care, and treatment for the immediate relief of the cold. This may take the mother away from other duties. The house may not in every particular, during such a time, accord with the mother's ideals of cleanliness and order, but the prevention of a case of pneumonia and the saving of the life of a helpless infant will overbalance these small considerations.

At a time when the birth rate has decreased and infant mortality increased, it would seem that all, and especially parents, would seek to learn how to preserve the life and health of children, and to aid them in developing into stalwart, disease-resisting adults. And the greater hope of attaining this result lies in the development of science, and in the faithful practice and intelligent application of its principles on the part of mothers.

Harry M. Miller

Care of the Baby

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their children on a cereal diet with milk and cream, will have rich milk, and for the first and second months the child will sleep very much and in comfort, with no colic at all.

Human milk for an infant far excels cow's milk; but when the natural nourishment fails, we must find something as near mother's milk as possible. Modified cow's milk comes as near it as we can possibly get.

Every child is a law unto himself, and we cannot treat all alike. Some children do well on the prepared foods in market, with mixed feeding (that is, with some nursing from the breast and some from the bottle); but as a rule such foods are not of much value for young infants, as the starch which most of them contain produces flatulency, sour stomach, and green, foul-smelling stools.

There are many milk formulas given by various authorities for modification of milk. The top-milk method by Holt, — the Materna graduate method, which consists of using a graduated 7-paneled glass with modifications arranged on the panels, is very practical for the nurse or mother. Bauer's method requires some figuring to get the formula arranged correctly.

The caloric method consists in finding the weight of the child and arranging the formula with reference to its weight. An infant that sleeps a great deal will require less food than one that is very wakeful; and the high-strung, nervous, and very active child requires considerably more than others. Children require more per kilo or per pound of weight than grown people, partly because they need a certain amount of growth, and partly owing to the fact that the proportion of surface is greater in a small body. Atrophic children and those under weight for their age require more than the normal child, and the needs of premature children are much larger than ordinarily would be expected. The requirements the first three months are about 100 calories per kilo; during the second three months, between 100 and 90; and during the latter part of the first year, 80 calories per pound. Formulas are worked out arranging fats, protein, and sugar in right proportions to increase the weight of the child.

When a child is gaining, even though slowly, it is better not to disturb its digestion by frequent changes. Many mothers are so eager to get great gain when the child is fed artificially that they listen to every neighboring woman's suggestion, and change to a new food nearly every week. Such frequent changes upset the digestion of the child, and lasting harm is often done.

Weigh the child twice a week, and keep a record of its gain or loss.

Keep the bottles and nipples scrupulously clean. Boil bottles and nipples daily in a soda solution, one teaspoonful of soda to a pint of water. Old nipples with large holes, which are soft and collapsible, must be thrown away and new ones supplied.

In making up formulas, always prepare the whole quantity for the day, placing the required amount in each bottle. Cork with sterile cotton and place on ice. When ready to use, remove the cork of cotton and heat by setting the bottle in warm water. Adjust the nipple, and feed.

Watch carefully that the child does not take the food too fast. It is better to hold the bottle; then the child can be watched so that it will not take the milk too rapidly, and the bottle can be tipped just right to prevent sucking air. Fifteen minutes should be consumed in taking the food from the bottle. There is considerable difference between nursing milk from a bottle and from the mother's breast. The human nipple has several openings so the milk comes in six or eight fine streams, while from the rubber nipple one large stream comes into the mouth.

Do not resort to a pacifier or comforter, or allow the child to suck its fingers. Habits once formed are hard to break. The child sucks its fingers because it is not satisfied. Some fault exists in its nourishment. See to it that this is discovered and removed. Sucking thumbs or fingers, pacifiers, etc., lead to the growth of adenoids. To break a child of sucking his fingers, use the Hand-I-Hold aluminum cups, which are adjusted easily and securely. Hold the hands so the fingers cannot be sucked.

Sour stools and green stools always indicate some trouble with the food, either too much sugar, too much fat, or milk slightly sour. Constipation often exists when the child is artificially fed, and we may find it in the breast-fed child. To correct this trouble, give during the first month flaxseed jelly, made by steeping flaxseed in warm water until a jelly is formed. Remove the seeds by straining, and give one or two teaspoonfuls of the jelly. Slippery-elm jelly is also good, used in the same way. Milk of magnesia may be given in onehalf-teaspoonful doses twice daily. Children three months old will be benefited by giving one teaspoonful of prune juice twice daily; later, orange juice may be substituted.

Colie in young infants is often relieved by nursing hot water from the bottle, then lifting the child over the shoulder and expelling the gas. An enema will often give instant relief. Always keep the child's feet and hands warm, to prevent colic.

Nursing mothers must avoid chilling their hands or feet, overworking or overheating, getting too tired, angry, or worried. These conditions will produce colic in the child.

The mother must constantly remember that she eats and lives for the young life that obtains its food from her.

Summer Hygiene of Infants

(Continued from page 199)

child more painfully diffident, and the defiant, determined child more incorrigible, in either case doing the brain and nervous system irreparable damage. Remember that a hot day in August is trying to the nerves of older children and adults, and it is the testimony of observing teachers that the deportment grade is lowered by depressing heat.

The matter of summer infantile hygiene is a subject which is of so vast importance and upon it so many lives depend, that it behooves all parents, nurses, and others caring for infants and small children to be prepared to meet and quell the army of disease-producing and death-dealing enemies, which are waiting for the little ones in this summer of 1917. Just what the special details of this preparation should be, will differ with the conditions and home environments of the family, those of the country farm home or the homes of the well-to-do, with ample grounds and better surroundings, differing widely from those of the crowded city tenement. But often one finds in the country a total disregard of all sanitary principles.

One element of hygienic preparedness for bottle-fed babies during the hot weather, is to find a food which agrees with each particular infant before hot weather sets in; another is never to wean or make any radical change in diet during the hot weather, unless it is an absolute necessity, and another is to keep the food sterile, cool, and clean. The baby's exercise pen and the out-ofdoor clean yard and playground can all be made ready the same as the flower or the vegetable garden in the early spring. Surely it is as important to plan a safe environment for a baby to grow in as it is to seek proper soil and other preparations to raise prize dahlias and beets for the county fair exhibit.

On the farm a little expense and painstaking work will do much. Screen the porches and keep out the flies, and get ready the hot weather clothing. And even in the congested city tenement something can be done to prepare for summer by seeking out a good milk supply; changing the baby from the sunny to the shady side of the house; putting it to sleep in a well-barred and screened window box; and in the daytime going to some shady park, and at night putting it to bed with a clean skin and a clean garment, also protecting from insects by screens and netting.

It is much a matter of custom what preparation is made to prevent hotweather infantile diseases. If it were as much a habit to prepare the baby's environment so as to safeguard its life in summer as it is to make a garden or plant corn, all parents with children would be thinking about the matter and getting ready to save the babies by seeking to know how best to prepare to meet and vanquish the causes of infantile hot-weather disorders.

Every mother should know that any looseness of the bowels in hot weather should never be neglected, and under no circumstance attribute a diarrhea to teething. Dentition is a natural process of growth, and should not cause any serious disturbance of any function of the body.

It is encouraging to know that most of the causes of infantile hot-weather disorders are preventable, and that by preparedness we may modify the depressing effects of summer heat. Give the body proper food and plenty of water. This last measure is important to remember, as babies get thirsty and often take too much of even mother's milk if they are not given water. Also give them plenty of rest, and protect them from insects, and thousands of infant lives may be saved in this summer of 1917.

Vaccination

(Continued from page 204)

If a case of diphtheria occurs in a community and there is the least suspicion of contact with it, those exposed should, if under four years of age, be given a preventive dose of diphtheria antitoxin.

An attack of the disease or the use of antitoxin for its prevention, gives quite a prolonged immunity against the disease. In fact, it is generally regarded as sufficient to carry one through the period of childhood without reinoculation. Diphtheria antitoxin should always be administered by a physician, who should, under all circumstances and in all cases, be consulted in reference to the advisability of using it. All bias and prejudice against vaccination should be laid aside, that the physician may act in accordance with the experience of the medical profession. Experience in many epidemics has taught the profession that among the things essential for safeguarding infant mortality the use of vaccines is very prominent.

Intestinal Disorders of Children

(Continued from page 207)

ciently large to cover the entire abdomen, and a band placed about it and pinned snugly, holds it in place. We believe that the chilling of the abdomen

in young children is frequently the cause of bowel trouble. When the warm summer days come, the mother is anxious to remove the long dresses, and perhaps about this time discards the abdominal band. The children's clothing is short, and so constructed that it offers little protection below the waistline. In many cases where frequent intestinal trouble has shown itself, we have found that the replacing of the flannel band about the bowels is sufficient to stop further attacks.

The most important factors in the avoidance of summer intestinal troubles of childhood are simplicity and regularity in feeding, together with thorough sanitation and adequate clothing.

Minor Disorders of Children

(Continued from page 211)

tered provided one gains the confidence of his young patient, and this can often be done by gentleness and careful handling, rather than by repeated assurances. Better far give the treatment very mildly to begin with than to force the child during the period of treatment. However, one should not fail to do certain essential things because he meets with a particularly obstinate disposition now and then.

We desire to emphasize the importance of method in the care of children, and the absolute recognition of certain principles as essential to results in this work.

Sanitarium Notes and Personals

Tri-City Sanitarium

Dr. H. W. Vollmer, formerly of Forest Grove, Ore., has accepted the position of superintendent of the sanitarium.

Kansas Sanitarium

The medical offices have received some muchneeded repairs. The walls have been repapered, and the rooms are now in very good condition. Difficulty is frequently experienced in providing rooms for all who desire to come. Even the gymnasium has been pressed into service as a guestroom, and friends of patients have had to go into the city to find accommodations. Nearly every nurse in training is or has been on duty with patients or in the treatmentrooms, and it was necessary to provide outside help for the domestic work.

Wabash Valley Sanitarium

Churches in Indianapolis recently united in giving the sanitarium a linen shower. As is usual on such occasions, every one worked hard to make it a success, and as a result, the institution has a large supply of linen, of which it was much in need.

About forty of the principal Y. M. C. A. secretaries of Indiana were entertained at the sanitarium during a convention held here. Dr. Dunscombe gave a short address. Many of the visitors seemed much interested in sanitarium work, and a number of letters have been received in regard to sending members of their families or friends to the institution.

Mr. Benson, a well-known landscape gardener of Indianapolis, visited the sanitarium last week, and spent the day in planning for further beautifying the grounds with shrubbery, vines, and flower beds. It would be hard to find a more ideal place for demonstrating the possibilities of landscape gardening than this beautiful spot on the banks of the Wabash River.

The wife of Dr. W. C. Dunscombe expects to leave Cape Town, South Africa, with the children, to join her husband at the Wabash Valley Sanitarium, as soon as she can secure passage. Many prayers will ascend to God that heavenly messengers may protect them from every danger on their long voyage.

Walla Walla Sanitarium

The sanitarium has installed a push-button Otis elevator, at a cost of about \$2,350. This amount includes repairs to shaft, new doors, etc. The elevator "has almost made a new sanitarium out of the place." A new \$200 Majestic range has been installed in the kitchen. The operating-room has been enlarged a third, and thoroughly renovated. It now has two additional windows, and is enameled in white. Other improvements in the appearance of the building have been made.

DUESTIONS AND ANSWERS

Conducted by J. W. Hopkins, M. D., Washington (D. C.) Sanitarium

This is a service for subscribers to LIFE AND HEALTH. If a personal reply is desired, inclose a two-cent stamp. If you are not already a subscriber, send also the subscription price with your question. Replies not considered of general interest are not published; so if your query is not accompanied by return postage for a personal answer, it may receive no attention whatever. Remember that it is not the purpose of this service to attempt to treat serious diseases by mail. Those who are sick need the personal examination and attention of a physician. State your questions as briefly as possible, consistent with clearness, and on a sheet separate from all business matters. Otherwise they may be overlooked.

For prompt attention, questions should be addressed to J. W. Hopkins, M. D., Takoma Park, D. C.

Chronic Rheumatism

"What treatments are good for the cure of chronic rheumatism? Do you recommend Epsom salts baths? "

The hip and leg packs, fomentations, hot foot baths, and electric light baths are excel-lent for this trouble. These should be followed by graduated cooling sponge baths, and when the person has become accustomed to the cold water, a cold mitten friction should be given, following the sweating bath. Epsom salts baths are good, but a great deal of their value is due to the heat of the water. The diet must be looked after. Tea, coffee, alcohol, and flesh meats must be eliminated.

Cane Sugar

"Do you approve of the use of cane sugar, even in small quantities?"

Cane sugar is an excellent source of en-ergy, and is therefore a food. That it is not a natural food, is shown by the fact that it occurs very sparingly in nature, and then only in weak solutions. When taken in the strength of five per cent or greater, Pawlow found that it produced a marked irritation and catarrh in the stomach and intestines of animals on which he was experimenting. Cane sugar is therefore an irritant to the gastrointestinal tract, particularly in persons who are sensitive to its use, and it is a marked cause in producing catarrh of the stomach and bowels, torpidity of the liver, and other difficulties, as catarrh of the nose, throat, and ears. It is not digested in the stomach, but is acted upon only by the intestinal juices, so that its worst results are produced in the stomach. It should be used in very small quantities, and only by those who find that they can safely do so.

Remedy for Neuritis

"Please give a remedy for neuritis."

In the treatment of neuritis there are sev-eral things which must be borne in mind. The general health must be built up as much as possible by good food, fresh air, rest, plenty of sleep, and moderate exercise if possible. If the individual cannot take exercise, he should have mild massage, except to the painful part. To induce sleep, it is hardly more than neces-sary to remove the cause of the pain. This can be done by giving fomentations to the painful part, then wrapping it in cotton bat-

ting and bandaging it. The part should be put in a position where it will remain quiet and at ease. It is sometimes well to rub the part with a liniment, as chloroform liniment, before putting on the cotton batting. Either men-thol or methyl salicylate ointment is good.

You will find that it will afford great relief to get the bowels and stomach in condition. The use of white bread is often a cause of neuritis. Bran or Graham should be sub-We find it absolutely necessary to stituted. have the patient stop the use of flesh foods, including fish and chicken, and to abstain from the use of tea and coffee. These things, which produce poisons, are often the only cause of neuritis. It is true that neuritis may be caused by injury, by exposure to cold and wet, and by other diseases. If this is true, these conditions should be relieved.

Pink Eye; Neurasthenia and Insanity; Hay Fever

"Please give cure for pink eye. Can in-herited neurasthenia or insanity be cured? Is there a vaccine treatment that will cure hay fever?"

For the treatment of pink eye, you will find that the use of cool compresses over the eyes fifteen to thirty minutes three times a day will help relieve the condition. We also irrigate the eye with a boric-acid solution and apply vaseline or boric-acid ointment to the edge of the lids. A few drops of a twenty-five-percent solution of argyrol should be instilled into each eye four or five times a day. The eye should be kept closed for a few minutes while this solution is in it, and then the boric-acid ointment applied. This disease is contagious, and if it shows a tendency to become chronic or to run too long, you should consult a physician in regard to it.

Inherited neurasthenia can be cured. As to inherited insanity, it depends altogether on the kind of insanity which is inherited. The insanity resembling neurasthenia can be cured.

There is a vaccine for hay fever which is said to cure the disease, but as hay fever is so often predisposed by catarrh of the nose and throat, or by growths or diseased conditions in the nose, also by indigestion and constipation, I think it is well to combine the vaccine treatment, if it is used, with the treatment for these other conditions. I do not think the vaccine treatment will accomplish a cure unless it is so used.

Boils on the Neck

"Give your treatment for boils on the neck."

This condition comes from a low-resisting power of the skin and blood. The infection comes from the skin, but it will not develop unless the blood has poor resistance. The treatment, therefore, should consist in raising the general vitality by use of tonic cold baths in the morning, by alternate hot and cold applications to the spine or to the liver and abdomen once a day, and by carefully attending to the eliminative organs, as the skin, kidneys, and bowels. For the local treatment, the boils should be opened early, and touched with iodine, followed by pure alcohol. It is often well to cauterize the center of the boil with pure carbolic acid followed by alcohol. A cleansing soap is often of value, such as a bichloride of mercury soap or a soap containing resorcin. Following the washing, resorcin ointment or zine oxide ointment may be used.

No-Breakfast Plan

"What is your opinion of the no-breakfast plan?"

The no-breakfast plan is not to be advised. It is often well to eat sparingly at breakfast, particularly for those who are engaged in office work, of sedentary habits, and who find that a light meal agrees better. It must be remembered that food is the only natural laxative. When one awakes in the morning, all the muscles become active — those of the bowels partaking in the increased activity. The ingestion of food at the regular breakfast hour is a great factor in producing normal action of the bowels. Therefore, if one finds that he does better with little for breakfast, he should take something, as a tablespoonful of break food, and fruit. The fruit, if acid, should be eaten at the close of the meal. Lettuce or celery with zwieback may also be taken, and a cup of hot cereal coffee is also beneficial. The no-breakfast plan is not rational, as it induces constipation and does not provide fuel for use later in the day.

Periodical Daily Fast

fast?"

"What do you think of a periodical daily

I do not consider this a means of regaining or maintaining health. It is much better to fast by the use of a fruit diet for a day rather than by entire abstinence from food. Food is needed to maintain the regular action of the bowels, and this is important, as they are an avenue for the escape of many waste matters and poisons. If this function is interfered with, harm results. A person may abstain from food for a meal perhaps, say at the evening meal, but more than that is not wise, as a rule. If fruit cannot be taken, some other light food, as cereal gruels, zwieback, toasted flakes, should be taken. The patient should also drink plenty of water, and perhaps take a good enema on the day when this treatment is taken.

Obesity

"Give your treatment for obesity."

There are many methods of treating this condition. Among them may be mentioned abstinence from food, particularly from certain fat-producing foods; an increased amount of exercise; cold bathing; diminution in the quantity of water taken; and the use of fleshreducing drugs, as thyroid extract. My suggestion would be to be weighed once or twice a week, and insist on losing one or two pounds a week. This may be accomplished by lessening the food taken at meals both in quantity and in variety. If you will eat few articles of food at the meal, limiting yourself to two or three, and partake very sparingly of them, you will find it an easy matter to lose weight.

The obese person is usually very economical in the use of food, gaining in weight on what a thin person would starve on. Of course there are certain foods which cannot be eaten by the obese, as sugar, butter, cream, olive oil; but if the above plan is followed, if the individual is weighed once or twice a week, takes a reasonable amount of exercise, drinks moderately of water, and takes tonic baths, there will be no difficulty experienced in losing weight.

Pain and Soreness in Back

"Give the cause and treatment of pain and soreness in the back of the neck and between the shoulders. I am past fifty years, passing through the menopause, and suffer from stomach trouble and constipation."

This pain of which you complain is evidently caused by the period through which you are passing. The formation of gas in the bowels and stomach is also caused by the same trouble. At this time you should endeavor to arrange your life very carefully. Avoid excitement. Take plenty of rest by going to bed early. Get out in the fresh air every day. Keep the stomach and bowels in good condition. Lie down and sleep for at least an hour in the middle of the day, if you can.

Fomentations to the spine every night will give you relief. Apply three fomentations up and down the back, taking about ten or twelve minutes to give them, then apply two across the abdomen. In all, it will take fifteen or sixteen minutes. I think that you should get some mineral oil, and use a tablespoonful or two every night.

Ringing in the Ears

"What causes ringing in the ears? and what can be done for it?"

Ringing in the ears is sometimes due to general nervous conditions, and often to other causes, as middle-ear disease, chronic catarrh, and increased blood pressure in arteriosclerosis. In either of these conditions, the cause should be removed. The adoption of a vegetarian diet, with regular movements of the bowels, treatment of stomach and liver, and other measures to raise the general health, will often bring good results in the treatment of this trouble. An ear specialist should be consulted.

NEWS NOTES

Rabies Controlled

According to the report of the Commissioner of Health of the city of New York, there has been a very encouraging decrease in the number of rabies cases in the city since the adoption of the muzzling ordinance.

That Number Thirteen

A California family of thirteen which received the prize for the largest family that attended the Panama-Pacific Exposition, recently ate some pork, and as a result every one, except the youngest, a nursing infant, contracted trichinosis.

The Most Dangerous Anesthetic

Dr. J. F. Baldwin, of Columbus, Ohio, in an article in the March, 1917, *Interstate Medical Journal*, characterizes nitrous oxide-oxygen as the most dangerous anesthetic in use. He reports fourteen deaths from its use in the eity of Columbus, one occurring in a dental chair.

Sore Eyes from Cats

At the Royal Medical Society, London, Mr. Arnold Lawson, a surgeon, reported three cases of conjunctivitis which resulted from the habit of fondling cats. In one case a girl of fifteen, very fond of a Persian cat, buried her face in its fur. The next day her eyes became sore, and she had a severe fit of sneezing, followed on the following day by inflammation of the eyes and nostrils, these tissues being swollen, and the eyes discharging purulent matter.

A Great Medical School

In order to establish a great medical school in connection with the University of Chicago, the General Educational Board, the Rockefeller Foundation, and the University are coöperating and establishing an endowment which, with the land, valued at \$500,000, will total \$8,000,000. The university will also take over the Presbyterian Hospital. The entire teaching staff will be organized on a full-time basis, the teachers in the clinical as well as the laboratory studies giving their entire time to teaching and research work in the hospital and medical school.

Infantile Paralysis

Recent investigation into the eause of this disease has led to the belief that it is transmissible to certain animals, that the germ is capable of growing in milk at summer temperature, and that it is not destroyed by Pasteurization. It is suggested that while it may be transmitted directly by contact, it is more probably a milk-borne disease. If this should prove to be so, it would indicate that there might be a decided advantage in returning to the old method of "sterilizing" or boiling the milk, a process that has been recently shown to be less objectionable than had been supposed.

Disease in Food Handlers

In New York City all persons who handle foods for the public are examined by the health department. Last year the examination showed that out of 20,357 food handlers, 1,000 had tuberculosis, and 133 had venereal disease. Of the pushcart men, 8 per cent were found to be syphilitic.

Germs Necessary to Life

Prof. I. Kianizin, of the Imperial University of Odessa (Journal Physiology, Cambridge, Dec. 5, 1916), has repeated his experiments which were reported in 1900, showing that higher animals soon die when microörganisms are entirely absent from their air and food, the length of life varying in different animals. Other investigators have shown that the partial absence of microörganisms have a deleterious effect on nutrition. From his data Kianizin concludes that microörganisms of inspired air are taken up by the leucocytes, and are the source of their oxidizing ferment. That is, the white blood corpuscles capture, from the inspired air, germs from which they manufacture the ferments necessary to carry on the oxidizing process of the body.

Table-Scrap Milk

In German cities of more than 40,000 population, kitchen waste and table scraps are gathered, dried, pressed into cakes, and used to feed milk cows. According to one estimate, such food is converted into a million quarts of milk daily. Animal waste matter, including slaughterhouse refuse, bones, bodies of dead animals, some from the war zone, in place of being used as fertilizer, are dried, pressed, and used, either alone or with carbohydrates, as animal feed. Is it also turned into milk for human consumption ?

Federal Meat Inspection

The average number of carcasses condemned annually by the Federal meat inspection service is 262,000, while the number of parts of carcasses condemned is very much greater. On reinspection about 18,000 pounds of meat is condemned annually because it has become tainted or unfit for food. "Unfortunately," says the Scientific American, "the government service extends only to establishments engaged in interstate and foreign commerce, and to imported meats. About 40 per cent of the meat slaughtered in the country gets no federal in-spection, and it is well known that much of this gets no inspection at all. To make the situation more serious, establishments subject to federal inspection tend to exercise such care in the purchase of animals as to reduce condemnation to a minimum, the result being that animals of doubtful soundness are diverted to establishments operating without inspection." If you get federal inspected meat, it may be good; if you get the other kind, the chances are strongly against its being good.

Hay Fever Dispensary

The Samaritan Hospital, Philadelphia, has opened a dispensary for the diagnosis and treatment of sufferers from rose cold and hay fever.

Bubonic Plague in England

Bubonic plague has been discovered in Liverpool, and as a result the officers of the port of New York are taking extra precautions to prevent the importation of rats from that city.

Donate Milk for School Children

Two large dairy companies have donated to the Bureau of Child Hygiene, New York City, 500 books, each containing coupons for 30 quarts of milk, to be used for the benefit of school children needing additional nourishment.

Carried Typhoid Many Years

A typhoid carrier, a woman 76 years old, has been discovered by the health department of the city of New York. She had typhoid fever forty-nine years ago, and has evidently carried the germs of typhoid ever since. How many persons she may have infected no one can tell.

Home Nursing and Simple Treatments

This is the title of a series of lessons based on Amy E. Pope's "Home Care of the Sick" and Dr. G. H. Heald's "Colds: Their Cause, Prevention, and Cure." The lessons have been examined and indorsed by the General Conference Medical Department. They are designed to meet the needs of mothers in the home, and of others who wish to do missionary nursing, but are unable to take a full course of instruction at one of our sanitariums. The total cost, including textbooks, is \$5.50. Those who are interested should write at once for full particulars to the Fireside Correspondence School, Takoma Park, D. C.

Food or Liquor?

That the liquor business is a burden on the country is shown by the attitude of the nations in their effort to limit the out-put of liquor during the war. The sentiment in this country is strongly in favor of prohibition as a war measure. Frank A. Vanderlip, president of the National City Bank of New York, the larg-est in the country, said: "I strongly favor complete national prohibition. I believe we are facing a serious test of our national character and efficiency, and am firmly convinced that a national prohibition measure would be of transcendent importance in its effect upon the national spirit in conserving our food supply and in raising the efficiency of the nation. The man power released from the liquor industries could be directed into productive channels, where the need for labor will be acute, and thus be readily absorbed. The needs of the agricultural and industrial situation will make this a peculiarly opportune time to put through a national prohibition law with minimum shock to our economic machinery during the readjustment."

Cockroach Remedies

According to a writer in *The Nurse*, one can drive out roaches by anointing the pathway of these pests daily for several weeks with oil of rosemary, oil of citronella, or oil of eucalyptus. These pungent oils seem to be equally effective. One might choose the one that would be least disagreeable to the members of the household.

Protein a By-Product

German chemists discovered that from a mixture of sugar, ammonia, and the proper mineral salts, yeasts can elaborate protein. Some of this they use for human food; some for stock. In practice they take from paper-pulp mills the waste water containing cellulose, and the waste water from gas houses containing ammonia. The yeasts change the cellulose into sugar, and the sugar and ammonia into protein.

Vaccination Protects

Going from a Montana town where smallpox had been prevalent, a man, his wife, and five children arrived in a Southern California town, where he visited his brother who also had a wife and five children. Shortly after arrival, one of the visiting children developed smallpox, and every member of the two families took the disease, except the mother of the California family, who had been vaccinated in childhood.





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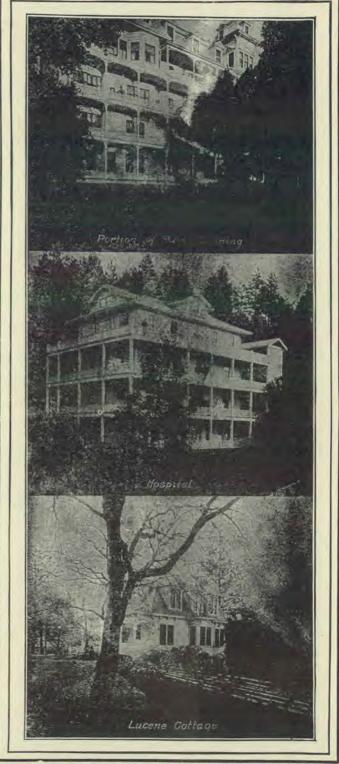
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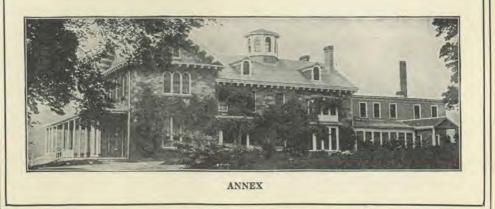
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