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DANGEROUS TOOTH POWDERS

HEALLTH AND HYGIENE

APRIL, 1938

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HEALTH AND HYGIENE



If you wish to have any health problem discussed write to Health and Hygiene. Your letter will be referred to one of our doctors for reply. However, diagnosis of individual cases and prescription will not be undertaken. No letter will receive attention unless it is signed and accompanied by a stamped, self-addressed envelope.

Heart Murmurs

Helena, Montana

DEAR DOCTORS:

I was examined by our school doctor during the past semester and he told me that I had a heart murmur. I have been very much worried about my condition ever since. Does this mean that I have heart disease?—M. S.

Answer—It is true that certain murmurs are indicative of heart disease, but these are relatively rare compared with the unimportant murmurs.

Murmurs heard in the region of the heart may arise from anywhere in the chest. For instance, a murmur may be produced by the heart hitting against the lungs. Pressure of other structures in the chest on the larger blood vessels may cause murmurs. In fact, if the patient is placed in certain positions it is possible to hear a murmur in nearly every individual, regardless of the condition of the heart.

But even murmurs arising in the heart are not necessarily indicative of heart damage. In severe anemia, in fevers, and in high blood pressure, for example, murmurs are frequently heard, but these are not due to disturbances in the structure of the heart.

Well, then, you may ask, are there any murmurs that are due to diseases or alteration of structures in the heart? Yes, when the valves of the heart are damaged so that they leak, or, speaking medically, when the valves are "incompetent," murmurs may be heard. Such murmurs are usually heard during the time that the heart is filling with blood (diastole); murmurs which do not have an organic basis are generally heard only during the time that the heart is contracting and forcing the blood out (systole). Hence, the physician, by timing the murmur, is aided in determining the cause of a murmur.

It is folly to worry about a heart murmur without finding out the cause of the murmur. Most murmurs are of the kind that cause no trouble. In your case further investigation by your family physician or a heart specialist would be desirable.

Spray Painting

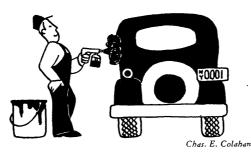
Brooklyn, New York

DEAR DOCTORS:

My father is an automobile painter who has worked at his trade for over forty years. For the past ten years he has used duco or pyroxylin-base paints to spray on cars. For over a year a great many types of synthetic paints have flooded the market and have been used extensively in auto paint shops because of their economy and filling properties.

Which is more harmful to the painter, the pyroxylin or synthetic paints? What possible diseases can be averted? What precautions would you advise?—M. J.C.

Answer—Both duco and pyroxylin paints contain harmful ingredients. Frequently benzol, toluol, or zylol is used as a thinner, and all of these are very poisonous. Ethyl, butyl, amyl or other acetates are often present in the synthetic paints, but these are not particularly dangerous. Recently, derivatives of glycol, particularly glycol ethers ("cellosolve" or methyl "cellosolve") have been included in lacquer formulas, and these are known to be harmful. Some of the colors may contain lead or arsenic.



All spraying with synthetic paints should be done in booths which are equipped with exhaust ventilation to carry off the fumes and vapors. Where this is not possible a suitable type of mask should be worn. The Mine Safety Appliances Company of Pittsburgh and the Willson Company of Reading, Pennsylvania, are leading manufacturers of protective masks. Their sales representatives can advise as to the most suitable type of mask for any type of work.

Paracelsus

Lansing, Michigan

DEAR DOCTORS:

I am enclosing a booklet describing a product called *Paracelsus*, for which, as you can see, won-(*Continued on page* 124) Despite the proven dangers of sodium perborate manufacturers still use it in their products.

Dangerous Tooth Powders

OES it surprise you to learn that one of the leading drug manufacturers in the country and one of the largest department stores in New York City are making and selling tooth powder that may actually cause severe chemical burns in the mouths of users?

Or, does it seem strange to you that a mouth wash that is widely advertised for the relief of bleeding gums and other oral conditions should actually be capable of causing serious and painful inflammation of the lining membrane of the mouths of those who use it?

LACK OF INVESTIGATION

If so, you do not fully appreciate the disregard for consumer welfare that characterizes the American drug and patent medicine industry. Nor have you an adequate idea of the chaotic and helter-skelter methods, the lack of scientific investigation, with which new and possibly harmful products are unloaded upon the public by large drug companies who have

little interest in anything except the profits they can make.

Today dentifrices and mouth washes containing sodium perborate as a principal ingredient are being sold and advertised freely in spite of the fact that denfists have long been aware of the dangers involved in the use of this chemical. The Council on Dental Therapeutics of the American Dental Association has refused to grant its seal of acceptance to any dentifrice containing sodium perborate. Technical dental and medical journals have printed articles attesting to the actual and potential dangers involved in its use. In any good medical library you can find clinical reports describing the unhappy consequences that have befallen those who have unwittingly employed it in what the advertisements call "mouth hygiene."

And yet, McKesson and Robbins continues to sell *Calox Tooth Powder* which contains about 10 per cent of sodium perborate. *Calox* has



"Doc, our advertising manager suggests that you discover one of the following: thirium, hydrovium, lactaniate . . ."

Mischa Richter

APRIL, 1938

proven a good thing for McKesson and Robbins, so Macy's department store in New York City has produced its own imitation of it which is called Macy's Tooth Powder with Sodium Perborate. Macy's say it's just as good as Calox, but they don't tell you that it's just as dangerous. Not to be left out of it, Astring-O-Sol has also developed a perborate-containing powder. The popular mouth wash known as Vince is largely sodium perborate, as is the one called Sodibor. Sauibb's Oral Perborate likewise contains a high percentage of this caustic ingredient.

AN AUTHORITY CITES DANGERS

Now let's see what a prominent dental authority has to say about products containing this ingredient. Dr. Isadore Hirschfeld, Associate Professor of Dentistry at Columbia University and Chairman of the Committee on Scientific Investigation of the American Dental Association, lists the following symptoms as common results of the use of perborate dentifrices and mouth washes:

- (1) Painful chemical burns of the lining membrane of the mouth.
- (2) Less painful, or painless, burns producing a milky white discoloration, especially of the margins of the gums.
- (3) A predisposition to abrasion and infection due to the inflamed condition of the mouth that is caused by the perborate.
- (4) A form of "hairy tongue" which in some instances causes gagging or irritation of the soft palate and pharynx.

Why, you may well ask, should the dentifrice and mouth wash manufacturers persist in

putting sodium perborate into their products if it can produce all of these drastic effects? The answer is — for no good reason at all, except perhaps that they have been able to make money by doing so. The use of perborate in dentifrices and mouth washes

fact that sodium perborate is sometimes used by dentists in the treatment of Vincent's infection, or "trench mouth." However, as the Council report of the American Dental Association points out, "dentists and physicians also use chromic acid and sodium sulphide in treating Vincent's infection, yet no one would be naive enough to recommend its use to the general public."

seems to rest on no better grounds than the

Be that as it may, William R. Warner, Inc., makers of Vince, decided that since sodium perborate could be used for a serious condition such as trench mouth by dentists who were familiar with the action of the drug and aware of its dangers, it would be a very good thing to provide John T. Citizen with sodium perborate to use as he saw fit for the treatment of any mouth condition he might have or thought he might have, or even for use as a pleasant tasting mouth wash. As a result "Vince Laboratories" was brought into being and Vince, a flavored sodium perborate, was thrown upon the market and advertised as a "general oral hygiene agent, mouth wash, oxygen liberator, tooth bleach, and dentifrice."

BLEEDING GUMS

As was to be expected, Vince came into general use as a remedy for an ailment that has been a great boon to advertisers — bleeding gums. According to the best dental opinion there is no scientific evidence that sodium perborate is "beneficial to the health of the gums, a bleach when applied externally, or that its use prevents diseases of the gums, "so the people who buy Vince for bleeding gums or for

> whitening the teeth are at least out of pocket, if they are not actually injured in one of the ways mentioned above. However, even though a person with bleeding gums may be able to afford to spend his money in this way, and even though he may escape direct in-

> > **APRIL**, 1938

A Good Dentifrice that You Can Make at Home

Hard soap, in fine powder form	60	grams
Precipitated calcium carbonate (chalk)	935	grams
Soluble saccharin	2	grams
Oil of peppermint*	4	c.c.
Oil of cinnamon*	2	c.c.
Oil of wintergreen*	8	c.c.

Stir powder while adding flavoring oils a little at a time. Put the whole in a mason jar and shake vigorously.

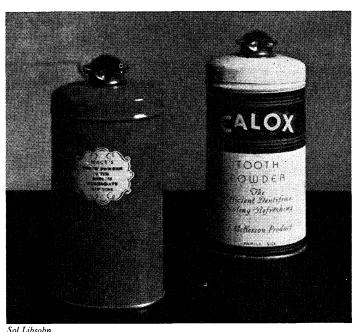
jury, reliance upon Vince may cost him dearly.

Bleeding gums may be caused by some local mouth condition, but they may also be caused by serious systemic diseases of which the person is unaware. Pernicious anemia, leukemia, agranulocytosis (all serious blood diseases), diabetes, tuberculosis, syphilis, and scurvy may give rise to bleeding of the gums. All of these diseases require prompt and careful treatment by a competent physician, and the person who puts his trust in the efficacy of Vince and waits for it to stop his "bleeding gums" may not get treatment in time to save him from the disease which is at the basis of his trouble. Undoubtedly more serious harm is done in this way than is caused by direct injury to the mouth and gums.

There is also the possibility that by altering or modifying the saliva in the mouth, a medicated mouth wash may interfere with the processes by which the mouth protects itself. It is the belief of dental authorities that the saliva in the mouth plays a big part in maintaining oral health. When a foreign chemical is introduced we do not know what effect it will have on the normal reactions of the saliva in the mouth. Crowley and Rickert, writing in the Journal of Dental Research, state in this connection, "We do not know but that by depressing certain harmless bacteria we may be actually lowering the resistance of the individual against disease producing forms."

NO MEDICATION ADVISABLE

Of course, compared with the harm caused directly or because of delayed treatment in serious disease conditions, the danger here is hypothetical and perhaps slight. However, it serves to emphasize the point, repeatedly made in technical dental literature, that the use of any medication in a mouth wash for daily use is not to be recommended. When dentists advise a mouth wash they generally recommend a normal saline solution (about one per cent of salt in water.)



Macy's is just as good as Calox—and just as dangerous. Both of these powder dentifrices contain sodium perborate.

The makers of perborate-containing dentifrices and mouth washes have made much of the fact that sodium perborate is an "oxygenliberator," and therefore an antiseptic. It is true that when sodium perborate is added to water, oxygen is released. However, the rate at which oxygen is released depends upon the temperature, the release of oxygen beginning at about 40 degrees Centigrade and increasing as the temperature rises. Now, the normal temperature of the mouth is only 37 degrees Centigrade, so that although the rate at which oxygen is released is probably somewhat higher in saliva than in water, it is very questionable just how much oxygen is released in the mouth. The Journal of the American Dental Association says: "It have been demonstrated that the amount of oxygen that may be liberated from sodium perborate under actual conditions of use in the mouth is small." So much for the value of perborate as an "oxygen liberator."

The Food and Drug Administration in a Notice of Judgment issued in August, 1934, found that sodium perborate when used as a mouth wash was not antiseptic.

We have so far established two facts: (1) sodium perborate in dentifrices does result in harm to some of its users; (2) sodium per-

^{*} The flavoring oils are poisonous when taken in substantial amounts, so care should be exercised in measuring these ingredients, and any oil that is left should be kept from children.

borate in dentifrices cannot be shown to have other dentifrices containing this caustic sub-any value.

other dentifrices containing this caustic sub-stance are not likely to be so careful about rins-

In view of these two facts it is interesting to note that McKesson and Robbins still clings to sodium perborate as an essential ingredient of their Calox Tooth Powder.

On two occasions since 1931, at the request of the company, the Council on Dental Therapeutics of the American Dental Association considered Calox for its seal of acceptance. The Council reported that it could not accept Calox as long as it contained sodium perborate, and also that many, if not most, of the claims made for the product were false. McKesson and Robbins replied that its opinions on Calox differed from those of the Council. Nevertheless, the company stated that it "would be delighted" to alter its opinions "to conform entirely to those of the Council were it not for the fact that at the present we have a tremendous investment in finishing materials, in advertising contracts, copy and display material which can not, because of economic reasons, be cast aside at this time." The company therefore requested that the Council withhold publication of its report "until such time as it is possible for us, from an economic standpoint, to revise our materials to conform to the opinion of the Council."

The Council obligingly withheld its report, but by the end of 1934 McKesson and Robbins had not yet found it convenient, "from an economic standpoint," to revise the materials in *Calox*. The company had built its ballyhoo on the extremely dubious claims made for sodium perborate, and it refused to remove sodium perborate from the formula even though it had been shown to be an undesirable ingredient.

A "CROWNING ACHIEVEMENT"

And "Calox Tooth Powder," says McKesson and Robbins in its advertising, "is the crowning achievement of our world-famous research laboratories!" If this is the best the McKesson and Robbins laboratories can do, we advise our readers to get their drug products from some other source.

When a dentist uses sodium perborate in treating diseased conditions of the mouth, he is very careful to rinse every trace of the perborate out of the mouth. Users of Calox, Macy's Tooth Powder with Sodium Perborate, and the

other dentifrices containing this caustic substance are not likely to be so careful about rinsing all traces of the dentifrice out of the mouth after brushing their teeth. It is for this reason that many painful burns are sustained. The least that the dentifrice makers might do is put a warning on the label, stating that the mouth should be thoroughly rinsed after using the product. This, however, might give the show away and cause people to shun the stuff altogether.

As The Journal of the American Dental Association has stated, the continued sale of sodium perborate dentifrices and mouth washes "is at least against the public interest, if it is not becoming a public nuisance." The same may be said of the advertising for dentifrices and mouth washes generally.

HOW TO PROTECT YOURSELF

What can you do to protect yourself and your pocketbook? The best thing you can do is to pay no attention to any advertisement for a dentifrice that claims to be anything other than an aid to the tooth brush in cleaning the teeth. And as for mouth washes, you will save money and be just as well off if you don't buy any of them. Plain salt water will do anything that the mouth washes will do, even though it might not taste quite so good.

The formula for a good, cheap dentifrice recommended by the Council on Dental Therapeutics of the American Dental Association is given on page 101. This formula may be made up at home or by a druggist, and onehalf of the recipe given will last the average family several months. Groups of consumers can effect considerable savings by using this dentifrice; individuals will not save so much for some drug stores and department stores now put out their own dentifrices, using this formula, at a reasonable price. A convenient container for the mixture is an empty salt box with a metal spout. The box can be filled from a small hole cut in the bottom of the box. Later a piece of paper can be pasted over the

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Springtime and the Sex Impulse

N the literature and poetry of all nations we find no end of references to the seasonal variations of man's erotic desires and activities. In modern times the most emphasis has been placed upon spring as the traditional season when the mating instinct and love-making are given the freest expression, but fall has also at certain periods of history been similarly designated. The Roman Liberales in March, in honor of Bacchus and Priapus, and the Bacchanales in October were expressions of this increased sexuality. And so is our modern Easter with its mixture of religious and sexual implications. At Easter time men and women break the period of Lenten abstinence and put on all their finery in order to stimulate and attract one another, while children are encouraged to hunt for Easter eggs, a sort of symbolic preparation for the time when, at the same season of the year, they will presumably be especially occupied with hunting for a mate. Hallowe'en and Thanksgiving, coming in the fall, are harvest festivals which nowadays have lost most or all obvious sexual significance, though we may perhaps detect a trace of it in the pranks of Hallowe'en. However, in ancient times, and even now among more primitive races, the harvest festivals were associated with great sexual activity.

THE MENSTRUAL CYCLE

Havelock Ellis, who has perhaps studied this subject more thoroughly than any other writer, says:

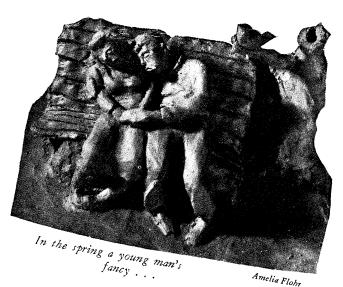
Throughout the vegetable and animal worlds the sexual functions are periodic. From the usually annual period of flowering in plants, with its play of sperm-cell and germ-cell and consequent seed-production, through the varying sexual energies of animals, up to the monthly effervescence of the generative organism in woman, seeking not without the shedding of blood for the gratification of its reproductive function, from first to last we find unfailing evidence of the periodicity of sex. At first the sun, and then, as some have thought, the moon, have marked throughout a rhythmic impress on the phenomena of sex.

The key to the understanding of annual sea-

sonal sexual periodicity is to be found in the understanding of menstruation. Menstruation is a secondary process, that is, it occurs because fertilization of the egg and pregnancy have not occurred. The primary process is the periodic ripening of the egg in the ovary and its breaking out of the ovary (ovulation) to start its journey down the Fallopian tube to the uterus, during which journey it may possibly be fertilized by a sperm cell. While the egg is ripening in the ovary the lining of the womb (uterus) undergoes certain changes to prepare it for receiving the fertilized egg and acting as a receptacle for the development of a baby. These changes in the womb are controlled by various hormones or chemical substances secreted by the ovaries and the pituitary gland. The relationship of these different glands is too complicated to describe here. It is sufficient to state that if the egg is fertilized on its way from the ovary to the womb, menstruation does not occur and a whole series of changes associated with pregnancy sets in; on the other hand, if fertilization does not take place the lining of the womb which has been prepared to receive the fertilized egg sloughs out and is ejected, and this process is called menstruation. Menstruation takes place about fifteen days after ovulation, or to count the other way, in a woman whose regular menstrual cycle is twenty-eight days, ovulation occurs on the thirteenth day from the beginning of the menstrual flow. It is for this reason that conception is most likely to take place about a week after the menstrual flow has stopped.

The time of ovulation in women corresponds to what is known as *estrus* in animals. It is during the period of estrus or "heat" in female animals — and only during this period — that mating occurs in most animals.

Observations of women's sexual desires have in general shown two periods of maximum desire during the month, one just after the end of menstruation and the other just before. It is apparent from what we have said above that it is during the former of these two periods,



that is, the one following menstruation, that pregnancy is most likely to occur. Fairly careful observation has shown that women are generally more passionate during this later period than during the one preceding menstruation. The need for sexual activity during the period before the onset of menstruation seems to be related partly to a feeling of depression that many women feel just before menstruating, and is more a need for affection and comfort than real sexual passion. Sexual passion is probably stimulated at this time by the tender and affectionate demonstrations which the need for comfort and a kind of non-sexual affection provoke.

If the hormone production in women is studied the production of the different hormones will be found to follow a regular periodic curve which determines the cyclic changes in the womb, and probably also determines to a considerable extent the degree of sexual desire.

The study of the sex hormones is relatively new and the problem is still not thoroughly worked out, particularly in regard to men. However, the results of these studies agree with the statements of some sexologists that there is also a monthly cycle of sexual desire in men, although it is much less marked than in women.

THE ANNUAL CYCLE

With this knowledge of monthly periodicity in mind let us now turn to the problem of annual or seasonal periodicity. Annual period-

icity of sexual activity is much more easily observed in animals than in man. Most animals have a regular mating season. In fact, most animals have sexual relations only during the mating or rutting season when estrus or "heat" occurs in the female, and are nearly or completely indifferent sexually at other times. This is particularly true of wild animals, but to a certain extent it is true of domestic animals as well, although domesticated animals tend to lose their strict periodicity and become able to breed at more frequent intervals. Thus, the wild dog breeds

only once a year, in the spring, while domesticated dogs breed in the fall as well.

The mating season seems to be determined by two things, the conditions that will be present at the birth of the offspring, and those that are present at the time of mating. Good physical condition is necessary for the vigorous activity of the mating season, and this of course depends on an abundance of food, which for animals is wholly dependent on the seasons. The two periods when food is most abundant in the temperate zones are spring and fall, and consequently mating takes place in one or the other of these seasons, depending on the length of the period of gestation (the period during which the developing offspring is being carried in the womb). Thus the native American deer mates during the fall season of abundance, the fawn is born during the spring season, is nursed through the spring and summer, and weaned in the late summer or early fall. If the mating took place in the spring, the fawn would be born in the fall. After a short time winter would set in and with the scarcity of food the doe would be unable to produce enough milk to keep the fawn alive, since she has a hard enough time keeping herself alive during the winter. On the other hand, many smaller animals which carry their young for a relatively short time mate in the spring and give birth to offspring in early summer.

It can easily be seen that these arrangements are quite logical, but this still does not explain just why they occur. As we pointed out in the

discussion of ovulation, estrus, and menstruation, these processes are all controlled by the activities of the endocrine glands, chiefly the sex glands (ovaries and testicles) and the pituitary. The activities of these glands are in turn influenced largely by environmental conditions such as the prevailing temperature, the amount and kind of food in the diet, the amount of sunlight, and so forth. All the details of these mechanisms are not yet worked out, but it has been definitely shown that in some animals sunlight is of the greatest importance, in others, temperature, and so on. Therefore we may safely conclude that this is true for animals in general.

THE EFFECT OF ENVIRONMENT

Man, however, is much less influenced in this respect by the conditions prevailing in his immediate surroundings, because with his greater intelligence he can secure more or less favorable conditions the year round. He stores up food containing all the necessary food elements so he is not dependent on the seasonal supply, he heats his home and wears warm clothing so he is independent of the temperature, and so on. The result is that his annual periodicity is much less marked than that of the animals. However, he is not entirely indifferent to his climatic and geographic environment. In Europe, for instance, the greatest number of conceptions occur in May and December-in spring and autumn—the two periods of greatest abundance. In the southern hemisphere the situation is reversed as would be expected. In the extreme north where man is more completely dominated by the environment, his periodicity is more marked; thus, among the Eskimos, during the long winter nights the general health is depressed and the sexual passions tend to become inactive. However, soon after the sun appears the sexual drive increases to such a degree that there is practically a real rutting season and for a time all of the young people are occupied with love-making. The result is that most of the children are born in the middle of the four-months-long night. Menstruation is often absent in Eskimo women during the winter months, a fact which gives further evidence of the effect of the environment on the endocrine functions.

Thus, we see that the identification of (Continued on page 127)



Ask the president of your bank or any intelligent citizen—about Bell-ans for indigestion—Advertisement for Bell-ans.

Imagine! Apply this new masque cream on retiring and see real results the next morning. Crepy looks refined, large pores deftly toned, wrinkles softened, fatigue lines smoother, sagging contours firmed. . . .—Advertisement for Beauty Sleep, The Miracle Masque Cream.

Like a magnet picks up nails, Nuchar picks up in a vise-like grip acid stomach gas and excess poisons that distress, bloat, and make you feel sour all over. It purifies the foul fermenting mess that lies like lead in your stomach and helps Nature speed up digestion so your stomach is emptied faster.—Advertisement for Nuchar Tablets.

Dioxogen Cream is the only cleansing cream that contains active oxygen. This invisible, powerful element penetrates deep into the tiniest crevices of your skin—expanding into millions of tiny, invisible bubbles. These gently force underlying impurities out to the surface.—Advertisement for Dioxogen Cream.

Did you ever drink a banana, quaff a carrot or down a glass of spinach? You may now have this unique and health-giving experience since the Fred Waring Liquifier (yes, Fred Waring the Band Man turned inventor) is on sale in the basement of R. H. Macy & Co.

The Liquifier is made of glass and chrome. The person bent on health fills the glass with one-third of water and places the fruit or vegetable in the top. One turn of the chrome top sets it into low speed, another turn of a lever sends it into high speed. Four blades, two vertical and two horizontal, whirr and insure the drinker a pure drink, free of residue. This amazing gadget can be used with AC or DC current. It sells for \$34.25 and blades may be replaced for \$3.75.—Press release from R. H. Macy and Company.

We invite our readers to send in contributions to this department.

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Practical advice to mothers on the baby's diet during the first year of life.

Starting the Child On Solid Foods

HEN should the child first be given solid foods? This question cannot be answered by giving any hard-and-fast rule, but most pediatricians will agree with the schedule set forth in bold type on the opposite page.

Most babies at three months of age are on a four-hour schedule. Cereal, then, would be given at the 10 A.M. feeding and again at the 6 P.M. feeding, each time followed by the milk. The cereal should be fed by spoon, beginning with one teaspoonful and gradually increasing up to about two to three tablespoonfuls. The following cereals may be prepared for the baby: Cream of Rice, Farina, Cream of Wheat, Ralston, Wheatena, and oatmeal. In eases where there is a family history of eczema, hayfever, asthma, or migraine it is better in the beginning to restrict the cereals to Cream of Rice and Farina.

The vegetables offered at four months of age should be given at the 2 P.M. feeding. The vegetables should be put through a strainer and given by spoon just as in the case of the cereals. At first a teaspoonful should be offered, then the amount should be gradually increased up

to two or three tablespoonfuls. A pinch of salt should be added for seasoning, and from a quarter to half a teaspoonful of butter, depending upon the amount of vegetables. At four months the vegetables may include



Charles Ma

carrots, peas, string beans, spinach, and potato (baked or boiled in the jacket and then mashed). A starchy vegetable, such as potato, and a green vegetable such as those mentioned above, should be given daily. In the beginning

it is better to get the baby accustomed to a different green vegetable daily. As soon as the baby is able to take at least a teaspoonful of leafy vegetables the potato may be started. Canned strained vegetables for infants, of which there are a number of good brands on the market, are quite satisfactory. At five months other vegetables may be added such as cauliflower, squash, asparagus tips, and beets.

SATISFACTORY DESSERTS

At five months desserts may be added to the dietary. They may be offered twice daily, following the vegetables at 2 P.M. and the cereal at 6 P.M. They should be started cautiously, just as in the cases of cereal and vegetables, beginning with a teaspoonful and increasing up to two or three tablespoonfuls. The following desserts may be given: ripe banana (beginning with an inch and gradually increasing up to a whole banana), Jello, or gelatine, Junket, apple sauce, stewed fruits of all kinds, and chocolate pudding. Banana should be mashed with a fork. Where there is a family history of sensitivity to cereals chocolate desserts should be omitted.

At six months the yolk of hard-boiled egg may be added. The egg should be boiled for from fifteen to twenty minutes. In the beginning a quarter of the yolk may be given, mashed up with the vegetables. This may be gradually increased until a whole yolk is given daily. At seven months the white of egg may be added, at first hard-boiled. If the baby tolerates hardboiled white of egg well, coddled egg may be given, at first very cautiously. To coddle an egg it must be placed in water which has been brought to a boil, the heat must be turned off, and the egg allowed to remain in the water for about five minutes. Where there is a family history of sensitivity or where the baby itself has developed evidences of sensitivity such as eczema, asthma, or other ailments it is better

to postpone giving egg white indefinitely. If the baby develops no symptoms of intolerance to egg it may be given daily.

Meat and fish may be added to the diet as soon as the baby has at least four teeth. Chicken, lamb chop, steak, liver (chicken, beef, or calf) should be given, at first in teaspoonful amounts and gradually increased up to about two tablespoonfuls. These foods should be broiled, chopped very fine, and given together with the vegetables. The following kinds of fish may be offered: whitefish, cod, flounder, filet of sole; they should be broiled or boiled.

period as possible. (See the article entitled *The Baby's Formula* in the March issue of HEALTH AND HYGIENE.)

- 3. To accustom the child to solid foods early, beginning with cereal, adding vegetables, desserts, egg, and so forth, in the order mentioned above.
- 4. To discontinue the 10 P.M. bottle as soon as possible. This may be done when the baby takes enough solid food to be satisfied from 6 P.M. to 6 A.M. without intermittent feedings.
 - 5. To discontinue the formula and gradu-

Ages at which solid foods should be given

- 3 months—cereals.
- 4 months—vegetables (carrots, peas, string beans, spinach, potato).
- 5 months—vegetables (cauliflower, squash, asparagus tips, beets).
- 6 months-yolk of egg.
- 7 months—whole egg.

When baby has four teeth-meat, fish, and fowl.

In cases of sensitivity it is advisable to omit the fish.

ally change over to whole, unmodified cow's milk (Grade A or B). This may be done as

In the dietary education of the infant under one year of age the following should be considered the most important objectives:

- 1. To discontinue the 2 A.M. feeding as soon as possible after the newborn period.
- 2. To begin preventive treatment against rickets and scurvy as soon after the newborn

ally change over to whole, unmodified cow's milk (Grade A or B). This may be done as soon as the baby weighs approximately eighteen pounds.

6. To change the feeding schedule to a three-meal schedule as soon as the baby is receiving cereal, vegetables, and desserts, and is making satisfactory gains in weight and development.

An Appeal from Spain

A S this issue was going to press we received the following communication from the Medical Bureau and North American Committee to Aid Spanish Democracy:

"I am bringing to your attention a grave situation which has developed during the past few days and which has been brought home to us by frequent cabled communications from Spain.

"A number of our ambulances in Spain have been blown to bits by fascist bombardment; one of our ambulance drivers was killed and two American nurses wounded.

"On Tuesday, March 15th, my committee received an anguished appeal from Spain calling for funds with which to purchase 140 ambulances, now available in Paris, for immediate dispatch to the Aragon front. Hundreds of wounded Loyalist

soldiers were reported being left to die on the battlefield for lack of ambulances to move them. By nation-wide appeals, we succeeded within 40 hours in raising funds for the purchase of 10 ambulances.

"At the moment of writing a telegram has come in from Hollywood informing us that the film colony is telegraphing funds to cover the purchase of 10 more ambulances.

"I appeal to readers of HEALTH AND HYGIENE to contribute what they can to meet this desperate need. Men are dying in Spain for our common cause. There is little that we can do to match their sacrifice. Whatever we can do must be done."

Sincerely,

HERMAN F. REISSIG, Executive Secretary.



Danger in the Beer Can

When you open a can of beer do you ever stop to think that the preparations used in making the lining of the can are a hazard to the health of the cannery workers? Although this is quite a new industry, cases of secondary anemia are already being reported among workers in plants where beer cans are made.

Wages and Hours

Those who think that regulation of wages and hours is a legislative innovation that will damage business should be reminded that in every one of the nine provinces in Canada hours of work are definitely restricted and in seven of them there are minimum wage restrictions as well.

Soot and Respiratory Diseases

Workers are exposed to fumes and dust and other occupational hazards at home as well as in the factories if they live in industrial towns where proper regulations for the protection of public health are not in force. An outstanding example of this is in Pittsburgh, where for many years the death rate from pneumonia has been much higher than in most other cities. In a study of 342 autopsies, the results of which have just been made public, it is shown that the amount of bituminous dust in the lungs bears a direct relationship to the likelihood of contracting pneumonia, bronchitis, and emphysema.

Halowax Danger Still Widespread

Several years ago there was an outcry against the poisoning of workers in the General Electric plant at York, Pennsylvania, and elsewhere by the substance sold under the trade name of *Halowax*. A recent report in *The Journal* of the American Medical Association shows that this danger is still widespread. The protective measures that have been introduced are so far short of what is needed that in one plant all of the workers exposed to *Halowax* have developed skin eruptions. The con-

tinued use of this substance without adequate protection is a serious menace to many workers. It is time the trade unions took up this matter and stopped depending on the paternalism of the big corporations.

Bladder Cancer in Dye Workers

Workers in dye plants are particularly liable to contract "analine tumors." An experimental study with dogs showed that the tumors developed in thirteen out of sixteen animals after about two years of exposure. These tumors resemble very closely the tumors that occur among dye workers. The study revealed that frequent examinations of the bladder will enable investigators to recognize this condition before it becomes serious.

Carbon Monoxide Poisoning

Whenever a case of asphyxiation due to carbon monoxide occurs, artificial respiration should be continued for many hours before hope of reviving a victim is given up. There are cases on record of victims who have been revived by artificial respiration as much as eight or ten hours after they have been thought to be dead.

Health Hazards in the Navy

The recruiting ads invite young men to join the navy and see the world. Perhaps it is pertinent to point out that prolonged exposure to the sun's rays, open air, and salt water constitute a real health hazard. A report on skin and mouth cancer in the navy during the past eight years shows that such cancers occur eight times as often with three times as high mortality among sailors as among the civilian population of similar age groups.

Workmen's Compensation

Did you know that of the 46 states having workmen's compensation laws, only 16 grant compensation for occupational diseases? Moreover, in the laws of these 16 states there are enough loopholes so that workers are unprotected from many genuine occupational diseases.

"Health on the Job" will appear as a regular feature in Health and Hygiene. Each month we will describe briefly the latest developments in industrial hygiene. We invite workers and trade unions to send us material that they feel would be of interest to readers of this department. We also invite queries on the subject of industrial hygiene, and we suggest that the topics discussed in this department be taken up in the meetings of the unions concerned.

A common-sense discussion of a much misunderstood subject, by an authority on physical education.

Debunking "Good Posture"

By GEORGE T. STAFFORD, Ed. D.
Professor of Physical Education, University of Illinois

NTEREST in "posture" is not something new. The early Greeks were interested in the well-poised body. Early physical educators laid much stress on the correct carriage of the body. The White House Conference on Child Health and Protection had its section on "Body Mechanics." The majority of parents have, at one time or another, admonished their children to "sit up straight." Orthopedic text books give considerable space to the subject of posture. But when we attempt to tell exactly what posture is, we find that there are a number of differences of opinion.

WORD HAS MANY MEANINGS

Posture is frequently spoken of as a static thing. The position assumed by the soldier who stands at "attention" is considered by many as correct posture. Moreover, the noun posture is usually prefixed by an adjective to give it meaning. Thus, an individual is said to have a "good" posture or a "bad" posture. Reference to a dictionary will show that the word is from the French positure, meaning the relative disposition of the various parts of anything and especially the position and carriage of the limbs and the body as a whole; in other words, attitude, poise. Other dictionary definitions are: "To place in a fixed position for a special purpose; pose. To assume artificially a mental attitude. To assume a particular posture of body, to put the limbs or body in artificial positions." And, when the word is used as a noun: "The visible disposition of the parts of a thing; position of the body. Mental attitude."

A careful examination of the above definitions may well leave the reader in a quandary as to the meaning of posture. Certain elements, however, stand out. Posture is a pose; posture is a mental attitude; various postures may be assumed for various purposes. The

posture which is assumed in prayer is different from the posture assumed by the soldier as he stands at attention.

As stated at the White House Conference on Child Health and Protection, posture must be considered as the mechanical correlation of the various systems of the body, with special reference to the skeletal, muscular, and visceral (internal organic) systems and their neurological associations. According to this interpretation, correct posture may be said to be the particular position of the body which allows for the most efficient mechanical use of the body with a minimum of bodily effort. This definition rules out *any* one posture as being correct for all purposes.

Many individuals do not use their bodies in an efficient manner. They walk with the feet turned out, the abdomen protruding, the chest flat, and the head thrust forward. Others sit in a bent-over position. It is obvious that these positions do not allow the body to function with a minimum of effort. Other individuals stand with the chin drawn in, the hands held stiffly at the sides, the shoulders thrown back, the back hollow, the knees stiff, and the feet turned out. Such posture may conform to the motion picture conception of the way a butler or doorkeeper should walk and stand, but it has little practical advantage for the average individual.

EXERCISES ARE OVER-RATED

When the body is not used correctly what effects may be expected? Many authorities mention the following disorders as results of incorrect posture: fatigue, joint strain, misplacement of the internal organs, and decreased efficiency of the body mechanism.

While not wishing to make the statement that these conditions are not prevalent in many individuals who use their bodies poorly, I cannot subscribe to the statement that poor use of



"Posture" is not something static. Good posture involves the most efficient use of the body with the least amount of bodily effort.

Sol Libsohn

the body is responsible for these disorders. Nevertheless it remains a fact that many individuals use their bodies in incorrect positions. What can be done about it?

The treatment of poor posture should begin in early childhood and should not be restricted to the use of artificial calisthenic exercises. In the first place the mental attitude of the child should be considered. Is the child happy? If he is unhappy and emotionally disturbed he will manifest his mental attitude in slumped posture -regardless of how much exercising he may do for the purpose of correcting it. In the second place there is the question of how much correction may actually be secured through the performance of artificial calisthenic exercises. If the child has reached the age of sixteen or seventeen, practically nothing can be done to correct faulty posture by means of calisthenic exercises.

PROPER TREATMENT

The treatment of faulty posture should start with a careful medical examination of the individual. Physical defects which lower the body's resistance must be removed. The question of the right kind and amount of food must be considered. Rest, sunshine, and emotional stability are necessary in many cases of poor posture. Possibly the child's shoes are too short or too narrow. When all of the above factors have been ruled out as causes of poor posture,

then and only then should the possible value of exercises be considered.

When considering exercise as a means of improving faulty posture the assumption is usually made that the child wants to improve his posture. But, does he? He is not seriously hindered in his normal activities because of his faulty posture. Even if he may desire to improve his posture he is not going to be enthusiastic about doing calisthenic exercisesespecially if his friends are engaged in a program of phyiscal education in which sports and games play a large part. Naturally he does not care to be segregated from the group and made to perform exercises, which in themselves are not interesting. How then shall we go about getting the child to perform those movements which will improve his faulty posture?

Every child has a natural interest in activity. This drive or urge is best expressed through games, sports, and stunts. By means of recreative sports, games, and stunts, in which the child is interested, he can be led to perform and enjoy those activities which may help to improve his posture. The boy with round shoulders may be introduced to the common head stand or hand stand. To perform either of these stunts, and especially the latter, he must place his shoulders in a position which temporarily corrects his faulty head and shoulder position. He may have to work hard to shorten the pos-

(Continued on page 127)

APRIL, 1938

Why a New Food and Drug Law?

Needed-An Up-to-Date Law!

This is the first of a series of eight articles prepared

by the Food and Drug Administration of the United

States Department of Agriculture. These articles

will explain in simple terms and with examples

from actual cases why it is impossible to safeguard

the public with the antiquated food and drug law

now in effect. Each article will recommend, on the

basis of past experience, one important requisite of

any new law that is put into effect. One article

T N THE summer of 1932, a case against B. & M. for violating the Federal Food and Drugs Act was tried in the Federal Court at Baltimore. A long line of medical experts testified for the government. The jury's verdict, branding the product a fake remedy, wound up a case started ten years earlier. B. & M., made by the F. E. Rollins Company

of Boston, was composed essentially of ammonia, turpentine, water, and egg. First sold as a horse liniment, it was later offered as treatment for human tuberculosis, pneumonia, and a long list of other serious diseases.

Back in 1922, a

case was brought against B. \mathcal{E} M. alleging, in the language of the Food and Drugs Act, that its preposterous therapeutic claims were "false and fraudulent." Under this wording of the law it is necessary for the government to prove not only that the manufacturer lied in his labels, but also that he knew he lied. Physicians skilled in the treatment of tuberculosis testified that the labeling was false. But the manufacturer, a man of advanced years and the dignity of a patriarch, gave such convincing testimony of his faith in B. \mathcal{E} M. that the jury decided in his favor.

DEATHBED TESTIMONIALS

Through the ten years that followed before the court finally curbed this audacious fraud. government investigators found a long list of victims who had been persuaded by the label to treat themselves with B. & M., for tuberculosis and other diseases, and who subsequently died from those diseases. Among the victims were three sisters, Martha, Elizabeth, and Margaret Allan, who were admitted to the Rhode Island Tuberculosis Sanatorium in 1924. Margaret heard of B. & M. She was not allowed to use the nostrum in the sanatorium, so she left to use it at home. She induced her sisters to leave, for the same home treatment. Martha died after using B. & M. for about four months. Elizabeth used B. & M. for about the same length of time; then returned to the sanatorium. She died three months later. Margaret, whose tuberculosis was only moderately advanced when she went

> home, used $B. \ \mathcal{G} \ M.$ for an entire year before she returned to the sanatorium, her disease far advanced. It was not long before she died.

But evidence of this kind was not enough to establish a

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will appear each month until the series is complete. case under the Food and Drugs Act. The evidence had to show that Rollins knew B. & M. would not produce the benefits he claimed for it. The mass of other cases investigated included that of Mrs. Edith Merchant, a tuberculosis victim of Ashland, New Hampshire. She wrote testimonials for B. & M., claiming she was cured. Rollins paid her for this service. While she was on her deathbed, her son

> death certificate showed the cause to be tuberculosis. Rollins knew this fact. By digging out repeated cases of this kind, the government finally met the legal requirement for showing bad faith on the part of the manufacturer.

> wrote testimonials signed with her name. Her

Before the decision in the Baltimore case forced Rollins to abandon his false labeling, no one can say how many persons lost their lives by relying on B. \mathcal{E} M. instead of rational treatment. However, the government found sixty-four certificates showing the death of B. & M. users from maladies the labeling promised to cure. For several years, the gross sales of B. & M. were more than \$100,000annually. In one year sales reached a peak of \$367,000. This gives some idea of the number of people who were using the fake remedy. (Continued on page 127)

SHIP'S QUARANTINE—PROTECTING OUR SHORES

Strict regulation of incoming ocean traffic is necessary to prevent the importation of epidemic diseases.

To MOST Americans the word "quarantine" is a rather unpleasant term, denoting disease, epidemics, and confinement. Thanks to the development of modern public health methods, the word is no longer in as common use as it once was, and we are likely to think of it as a term used to describe a method of protection against the plagues of the past. However, last summer the word was again featured in the headlines, and American citizens were reminded that active steps are still necessary to protect them against epidemic diseases.

One day last September the Hamburg-American liner Hansa docked in New York and discharged 993 travelers in spite of the fact that in the sailors' quarters below decks 29 members of the crew lay sick with typhoid fever. Just before entering the port the Hansa's doctor had sent a radiogram to the United States quarantine authorities, affirming that the ship was free of disease. Relying on the ship surgeon's word, the quarantine authorities allowed the disease-ridden ship to enter the harbor and discharge her passengers. Nearly a thousand people went ashore and departed to their various destinations, each one of them a potential bearer of the deadly disease.

HISTORY OF QUARANTINE

The word "quarantine" comes from the Italian quaranta, meaning forty. This was the number of days ships and travelers coming from a disease-ridden area were formerly compelled to remain under observation before being allowed to enter a city. The reason why forty days was the chosen period is not clear, though the Bible, as we know, was partial to this number, specifying among other rules, that lepers who were cured had to undergo a fortyday period of waiting before again mingling with other people. Actually, quarantine may cover any length of time, depending on the nature of the disease and the existing regulations concerning it. Quarantine today includes not only the isolation of infected persons,

Sol Libsohn Incoming vessels can bring with them diseases from distant parts of the world.

animals, and ships, but also the routine inspection of everything that enters the country from foreign lands.

The first modern attempt at quarantine dates back to January, 1374, when the ruler of Reggio, Italy, ordered all persons who were sick with the bubonic plague to be carried out of the city and left in the nearby fields, there either to die or recover. If they recovered no one was allowed to come in contact with them for ten days.

The first example of well-organized quarantine is that put into effect by the senate of the Venetian Republic in 1448. According to these regulations, which are still known as the "laws of quarantine," all those who fell ill with bubonic plague were sent, together with their families, to an island known as the quarantine station. If they recovered they were sent to another station where they were detained still another forty days. In 1485, Venice also instituted the first board of health. Other cities and nations followed the example of the Island Republic, and today quarantine regulations are an integral part of the public health service of every civilized country.

In this country the first quarantine regulations were adopted in Pennsylvania. In 1699 Philadelphia suffered from an epidemic of yellow fever, probably brought from the West Indies. Practically every family in the town of 4,000 lost at least one member. William Penn visited the colony at the time and was tremendously impressed by the severity of the epidemic. A year later quarantine regulations were adopted.

In 1728 the first ship to be affected by the new regulations was kept from entering the port. Two ships, the *Pharaoh* and the *Dorothy*, arrived at the same time from Bristol, England. Philadelphia's two quarantine officers boarded the vessels and found all the *Pharaoh's* passengers in good health, while in the *Dorothy* many were ill and fifteen had died. The *Pharaoh* was permitted to dock, but the *Dorothy* was ordered to anchor a mile from the city. The sick persons on board were transferred to an isolated and guarded spot on shore. Nine days later the ship was given permission to dock after all the bedding and cargo of woolen goods had been aired, and the entire ship had been washed with vinegar and smoked with tobacco. This took six days more.

Basically, the quarantine regulations with regard to incoming ships have not changed. Any ship intending to dock at an American port must certify before an American consul at the port of departure that there is no illness aboard at the time of sailing. Upon arrival at the American port the quarantine officers are the first to come aboard, and no one is permitted either to come aboard or go ashore until the officers have finished their inspection. They consult the ship's doctor, inspect the immigrants and other passengers, and perform any other sort of examination that they may think necessary. They have police powers and can take over command of the ship if they find it necessary. When the ship is finally permitted to enter the harbor, it is said to have received "practique."

RADIO PRACTIQUE

However, the United States and other countries have recently granted "practique" without actual examination. For years, army and navy transports have been allowed to enter ports in the United States after the ship's surgeon has sent a wireless message to the quarantine authorities, certifying that there is no disease on board. The ship is then granted what is known as "radio practique." With certain restrictions, "radio practique" was granted beginning February 1, 1937, to commercial vessels entering New York harbor. Full responsibility rests upon the ship's surgeon, who must detect any of the diseases with which the United States Public Health Service and the New York Board of Health are concerned: smallpox, bubonic plague, cholera, yellow fever, typhus and typhoid fever, leprosy, diphtheria, scarlet fever, and many others.

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THE HANSA AFFAIR

When it was discovered that the German ship *Hansa* had entered port with typhoid fever among its crew, the ship's surgeon was punished by revocation of permission to act any longer in that capacity. Moreover, the ship was denied the privilege of radio practique in the future, and consequently it must stop for regular quarantine inspection.

Many people feel that this was insufficient punishment, and that such leniency affords little protection against future infringements of our health regulations. There can be little doubt that the *Hansa's* surgeon was aware that many of the crew were gravely ill—ill enough to prevent him from applying for radio practique. It is probable that he reported the true state of affairs to the ship's captain who, either on his own authority or after having conferred with the line's officials in Germany, suppressed the information and applied for permission to dock without submitting to quarantine inspection.

There is a belief among many that the circumstances of the *Hansa* incident warrant the revocation of radio practique privileges to all German ships entering American ports. It is a fact that sickness has been observed with increasing frequency on board German boats. On April 10, before the *Hansa* incident, the Hamburg-American liner *Hamburg* arrived in New York with typhoid fever among the crew. Shortly after the *Hansa* incident the *S.S. New York*, another German boat was quarantined when health officers discovered typhoid fever aboard.

This prevalence of sickness on German ships is not without a definite cause. This cause

is revealed in a letter recently sent to President Roosevelt and Mayor La Guardia by an organization known as the "Supporters of Anti-Nazi German Seamen," from which we quote in part:

German seamen, interviewed by the undersigned committee, have stated that undoubtedly these plague conditions prevailing on certain German ships, are the result of bad food, unsanitary conditions and diseased drinking water for the crews.

We have also been informed by friends in German seaports that typhoid and other contagious diseases are widespread, thus converting every German ship into a potential disease carrier to foreign ports.

Bad quality food and malnutrition have made the German people generally susceptible to contagious illnesses, and we feel, in agreement with the populace of this country, that measures must be taken to prevent the spread of contagion of this sort to our shores.

Under such conditions, it is especially important that German ships should be carefully watched. The prevalence of sickness on German boats has its obvious causes in that the German seamen have been stripped of all rights by the present government. While heretofore, in the framework of the free trade union organizations, ship committees of German seamen supervised sanitary conditions on board ships for the crew and passengers, present conditions make this impossible. Today, even the slightest attempt by members of the crew to force through hygienic conditions and betterment of food is looked upon as "mutiny," with the threat of immediate arrest. That is also why it has been possible in several cases for typhoid infected German ships to evade quarantine here, and thereby to become a danger for the crew and passengers, and also for the people of the United States.

DRASTIC PRECAUTIONS NEEDED

Germany is desperately in need of foreign exchange with which to purchase armament materials abroad. One of the most fruitful sources of foreign money is steamship fares. Any news that there was illness aboard a German ship would naturally cause cancellation of some tickets that had already been purchased and would prevent the purchase of many others. But apparently Germany considers it better to risk spreading a deadly and contagious disease in the United States than to lose foreign money that can be utilized to purchase arms and war materials.

In view of what happened in the case of the *Hansa*, as well as the unhygienic conditions that seem to prevail in the crew's quarters on German ships, it would appear that the demand that radio practique be denied to all Nazi ships is not too drastic.

APRIL, 1938

State Hospitals for the Insane

ILLIAM RANDOLPH HEARST has long been recognized as the leading exponent of sewer journalism in America. So utterly unscrupulous and depraved have been his tactics as a publisher and plutocrat that millions of persons have concurred in Professor Charles A. Beard's opinion that no honest or decent man would touch him with a ten-foot pole. Consequently when "Dirty Willy" assumes the role of a crusading knight, complete with white horse and flaming sword, there are always some skeptics who promptly ask, "What's in it for him?"

This cynical attitude is fully justified by certain aspects of Hearst's highly checkered career. To cite only one example of the numerous Hearst acts that have caused widespread suspicion, we recall the time he carried on a vigorous campaign for the reduction of water, gas, and electricity rates. The campaign ceased suddenly and without any explanation when expensive advertisements by the companies under attack began to appear in the Hearst papers.

Hearst has always attempted to build the circulation of his papers by pandering to the baser appetites of his readers. He has shown a consummate skill in handling "sex news" from a sensational angle and in squeezing the last bit of salaciousness from the "scandals" that fill so many of his papers. In short, as has been publicly stated before, Hearst journalism is skillfully compounded of smut, sensationalism, and utter subservience to the forces of political and economic reaction.

A CIRCULATION BUILDER

Therefore, it is not strange that when Hearst recently published a series of articles in the New York Journal-American, attacking the New York state hospitals, and especially the Rockland State Hospital, there were many raised and questioning eyebrows. One theory advanced, and undoubtedly the correct one, was that Hearst was troubled by the disastrous drop in circulation which has resulted from the boycott carried on by many different groups against his papers and magazines. Hearst needed

another circulation builder, and the series of horror stories on the state hospitals was launched for this purpose.

The facts, or rather the plot, upon which the series of articles was based are briefly as follows: A Hearst reporter named Allen Bernard voluntarily applied at the Rockland State Hospital for admission, posing as an insane person. He cleverly simulated the symptoms of mental illness both in his general appearance and manner of speaking. He stated that he was feeling very depressed and that he had considered committing suicide. On the basis of his statements and actions he was accepted as a mentally ill person. After remaining in the institution for about two weeks he was released, though he encountered difficulties in persuading the authorities that he was sane. While in the hospital and afterwards he collected stories, rumors, and gossip from patients and employees. In addition he made many personal observations of the hospital routine, the food, the treatment and management of patients.

A HORROR STORY

On the basis of his experience and observations Bernard then wrote a series of articles about the hospital, a series which left the reader with the profound conviction that the food at Rockland is foul, unhealthful, and dangerous; that the attendants are brutal, ignorant, and sexually perverse; that the doctors are callous, criminally negligent of their duties, and woefully uninformed about the fundamentals of psychiatry; and that by comparison the torture racks of the Spanish Inquisition were beds of roses guarded by carefully chosen cherubim and seraphim. Lest we be suspected of exaggeration we quote a few of the headlines: Rockland Inmates Tell Own Stories of Despair; Patients Beaten, Asylum Attendant Admits; "Drugs Killed Inmate," Says Ex-Aide.

The reporter exults over his deception of the examining physicians who admitted him to the hospital. We really hate to spoil the good clean fun he enjoys over this little triumph, but there are no laboratory tests, no blood or other

examinations which can distinguish a mentally ill person from a petty fraud who has been "coached" in the symptoms that mentally ill patients show. Not only the psychiatrists at Rockland, but psychiatrists anywhere might well be taken in under such conditions.

for facts which soon makes itself manifest in the articles. For instance, there is the utterly false statement that any relative or other interested person may "incarcerate" a man or woman in a state institution for thirty days on the certificate of one physician. The fact is that only when the patient raises no objection to such commitment can he be sent to a state hospital on the certificate of one physician. If the patient raises any objection a hearing is held and a court order is required for commitment. This fact, however, did not deter Hearst's stooge reporter from painting a tear-jerking picture of innocent people being shanghaied by conniving relatives and left to rot in a den of "sex maniacs."

As authority for some of his more distressing and revolting tales of horror Bernard quotes a number of former employees without giving the circumstances under which they left the state hospital. One such "authority" told of a patient dying after an overdose of drugs. This attendant stated that he found the patient's "pulse and blood count good." If Mr. Bernard will step into a corner with us we will advise him that hospital attendants do not do blood counts; blood counts are performed only by doctors or by specially trained technicians, and the attendant in question was neither. We mention these flaws in Mr. Bernard's account because of their bearing on the general accuracy and honesty of the articles. Many other gross errors are readily noticeable throughout this supposed reporting of facts.

VALID CRITICISMS OF HOSPITALS

It is interesting to note that while the "exposé" protested vehemently against purely fictitious abuses and horrors, it does not sufficiently emphasize what might be considered quite valid criticisms of the state hospitals. For instance, it does not sufficiently stress the inadequate number of employees, a factor which is to a considerable degree responsible for the deficiencies of our state institutions for the insane. It is obviously absurd to expect that one or two at-

tendants can adequately supervise forty or fifty patients in a large ward. Nothing but the most superficial treatment—if, indeed, any treatment at all—can be given under such conditions. When the working day for attendants in the New York state hospitals was recently reduced Typical of Hearst reporting is the disregard from twelve to eight hours, no provision was made for funds for the hiring of the additional employees required by this change. As a consequence the number of attendants on duty at any given time has been reduced by about onehalf, although the number on duty previously had been woefully inadequate.

Another valid criticism of our state hospitals

A Cure for

Reports from research discovery may

P EFORE the discovery of insulin, the diabetic patient was doomed to an agonizing death. Until medical science found that pernicious anemia could be successfully treated with liver, pernicious anemia meant certain death. Now it seems that we may be on the threshold of another life-saving medical discovery—nicotinic acid for pellagra.

Pellagra is a disease that is widespread among the poorest farmers and workers in the southern part of the United States. Until recently the cause of the disease, which still claims large sections of the population, was not known, but Goldberger of the United States Public Health Service finally showed that it was due to an insufficient and poorly balanced diet. The disease has been called "the five D's," that is, a deficiency disease characterized by diarreah, dermatitis, dementia, and sometimes death. It is not uncommon among alcohol addicts who, because of their drinking, do not get a sufficient diet and suffer from lack of vitamin B, which contains the "pp" (pellagra preventive) factor.

Since Goldberg's researches a great deal of experimental work has been done on dogs and other animals in an attempt to get a more complete understanding of the problem. Extracts of certain foods such as liver, which is a potent pellagra preventive have been made, and these extracts have been further purified in the hope of isolating some one responsible substance.

In the summer of 1937, Elvehjem and his coworkers at the University of Wisconsin isolated nicotinic acid from a purified liver extract, and announced that they had cured black tongue in dogs by using nicotinic acid alone. Black tongue is a concerns the pay of the employees. The salary of attendants begins at \$54 a month and is increased, to the best of our knowledge, at the munificent rate of \$1 every six months. By paying such salaries the state cannot hope to obtain loyal employees whose work will be of a high grade. Naturally there is a rapid labor turnover. Attendants and nurses seize the first opportunity to leave a job that involves such terrific speed-up and wretched salaries.

That there are occasional instances of brutality under such conditions is both possible and understandable. Even the most well-intentioned worker will not always perform his du-

Pellagra?

workers indicate that new be important.

> disease which occurs in dogs in areas where pellagra is present, and it can easily be produced in dogs by feeding them a typical pellagra-producing diet. Nicotinic acid is an organic substance of rather simple structure which was first isolated from tobacco, but which is fairly common in

> More recently, Elvehjem's work has been confirmed by experiments at Duke University. In December, 1937, Dr. D. T. Smith and his coworkers announced that they had produced pellagra in a patient and then had cured him by means of nicotinic acid alone.

Of course, it is not safe to draw sweeping conclusions on the basis of this one case; there were other factors, both in the diet and in the conditions of the experiment, which may have influenced the result. Nicotinic acid will have to undergo still further trial under carefully observed clinical conditions before it can be definitely stated that it is a cure for pellagra. If Smith's conclusions are confirmed, the treatment may be easily and widely applied because of its cheapness—the cost of curing Smith's patient was only ten cents. It is suggested that small amounts of nicotinic acid may be added to table salt, as iodine is now added to prevent goitre in localities where iodine is deficient in the soil and water.

However, it should be pointed out that the problem of pellagra can ultimately be solved only by raising the standard of living to such a level that people can afford to buy the kinds of food that will prevent them from getting deficiency diseases. What the poor people of the South need is not nicotinic acid in their salt, but the kind of meals that will render such medication unnecessary.

ties cheerfully and efficiently under such conditions. But that this brutality occurs with the frequency or severity painted by Hearst's eloquent, though obviously careless reporter, we do not believe.

Having succeeded by misrepresentation in the task of getting a sane man admitted into a state hospital, Hearst works himself into a fine frenzv over the possibility that criminals in droves will seek refuge in state hospitals by simulating mental illness. We hasten to assure him that this can never become a very important aspect of the crime problem. We, too, are concerned with the problem of crime and we shall be glad to provide Hearst with a constructive anticrime program which he may publish, if he wishes, with black-letter scare-heads. Such a campaign would include the abolition of slums and the provision of decent housing conditions (has Hearst seen One-Third of a Nation?); it would include the provision of jobs for every man and woman able and willing to work for a living; it would include the study and treatment of crime for what it is-a diseased product of a diseased society; it would include clean journalism; finally, it would include taxation of those best able to pay the expenses of such a program.

EXPLOITING HUMAN MISERY

We are convinced that there are grave shortcomings in the New York state hospitals, but they are of the type that Hearst glosses over or ignores completely. Society might well have been grateful to him and might even have condoned some of the blacker spots in his pathological career had he in his last years chosen to offer a constructive program for the muchneeded changes in our handling of the problem of the mentally ill. Instead he has remained true to his tradition, and exploited human misery for his own selfish ends. About all that his exposé has done is to produce untold anguish in the hearts of the friends and relatives of those unfortunates who are of necessity confined in state hospitals.

The hope of the mental hygiene movement lies in an early attack on the psychiatric problems of patients needing care and this involves placing patients under proper psychiatric guidance and care at the earliest possible moment. Granted that the state hospitals are inadequate, (Continued on page 128)

Medicine Under the Swastika

Official Sanction With the shockfor Quackery ing news of Hitler's brazen nazification

of Austria, a deed by which the destinies of more than six million people are changed overnight and by which the fate of hundreds of millions more are made to tremble in the balance, a letter from Berlin printed in the March 12 issue of *The Journal* of the American Medical Association takes on a special significance.

This letter from *The Journal's* regular Berlin correspondent indicates how great an influence "nature" medicine, cultism, and *heilpraktik* (lay practice) have come to assert over medical practice in Germany since the advent of fascism under Hitler.

The German university cities and Vienna were once the foremost medical centers in Europe. Students came from all over the world to study under the famous scientists who congregated there. Then the blight of fascism fell upon Germany and medical science, like all culture. ceased to flourish. The Nazis, with their hateful doctrine of racial "purity," forced many of their most illustrious medical men into exile simply because they were Jews. Other non-Jewish doctors of note left the country of their own accord, unable to witness the subjugation of science, intelligence, culture, everything they held dear, to the brutal fanaticism of Hitlerian dogma. Germany ceased to count, medically speaking, and today the German universities are finding themselves forced to close their doors for lack of students.

Fascism is the natural enemy of scientific progress, and it was inevitable that under fascism the cults and pseudo-scientific healing should flourish and receive official sanction. Scientific medicine is based on logic and reason, and fascism, like the healing cults, depends for its very existence upon irrationality and superstition. Another thing that makes cultism particularly suited to the pur-

poses of the German government is that "nature cures" require very little expenditure of money for hospitals, sanatoria, public health services, and so forth. Hitler, however, does not allow cultist practice in the army.

The Journal's correspondent cites several instances in which the German courts have upheld nature healers whose irrational practice has resulted in the death of patients. We quote only one such instance in which a nature healer refrained from administering diphtheria antitoxin.

The defendant . . . was still treating the patient, a girl of 17, with swabbings and poultices as late as the fourth day of illness and after the diagnosis of diphtheria had been established. Only on the sixth day did he authorize transfer of the patient to a hospital, where she died. The public prosecutor asked a ten months' jail sentence but the doctor was acquitted.

Curing byTelephone

The following comment
of *The Journal* correspondent also sheds light on
the situation in Germany:

In a number of quackery trials, experts in the occult have been called on to defend the efficacy of occult therapeutics and these witnesses may even be licensed physicians. . . . In a case in point, a magnetic healer treated by telephone a child who ultimately succumbed to diphtheria. Placed on his trial for criminal negligence, the man was acquitted. The main thesis of his defense was that the absent treatment had actually increased the sick child's vitality and even effected temporary improvement in the general condition. The expert testimony of the local medical official was garbled in the extreme. . . .

And now that Austria has fallen into Nazi clutches, we may expect a similar mumbo-jumbo medicine to gain ascendancy in Vienna, the city that was once without an equal in the realm of medical science. The fate of medicine in these old world capitals of learning should be an object lesson to people in this country who do not want to see the progessions undergo the fate they have suffered in Germany.

"Gas" on the Stomach

ROM man's earliest days when he was evolving from a simian ape to homo sapiens, he has been troubled by "gas." In those remote days when the diet consisted chiefly of vegetables, fruits, nuts, and a few reptiles the amount of gas produced by this heavy vegetable diet was probably enormous. However, tree-swinging and the other athletic pursuits of our forebears probably prevented the accumulation from becoming troublesome. Even today those who are troubled by gas recognize the virtues of exercise, especially those forms of exercise in which there is movement of the abdomen. But while it is true that mankind has always been troubled by gas he did not become conscious of it as an ailment until after the golden age of advertising had set in. Now every fourth advertisement warns us about gas and tells us how to get quick relief by taking this or that solution or powder or tablet.

As a matter of fact, it is entirely normal for gas to accumulate in the digestive tract. The stomach normally contains about an ounce or two of gas and if an x-ray picture of a normal stomach is examined a large bubble of gas will almost always be seen in the upper part. This normal air pocket is called the stomach bubble. During a meal the bubble is forced upward and compressed into the upper part of the stomach. After a meal the pressure of the gas is obviously increased and when this pressure reaches a certain point the air forces open the entrance to the stomach, rises through the esophagus or gullet, and emerges as the well-known belch.

BELCHING AFTER MEALS

The pleasure many persons get from belching is not due to the evacuation of a poisonous gas but rather to an easing of the pressure in the stomach as a result of the release of air. Gas in the stomach is not caused by the fermentation of food. Fermentation cannot take place in the presence of much acid, and the stomach normally contains a considerable amount of free acid. Germs that ferment food cannot live in the presence of acid juice. Besides, even if

there were no acid present, the food does not remain in the stomach long enough to be fermented. The process of fermentation requires several hours and it is a fact that food remains in the stomach no longer than two or three hours.

Belching can also occur before eating or independently of meals altogether. Many persons claim the somewhat dubious accomplishment of being able to belch at will. The ability to do this is not a sign of any disease process in the stomach such as "acid stomach," a term that advertisers so fondly use in their slogans. Persons who can belch at will are able to do so simply because they are able to swallow a quantity of air and, when the pressure in the stomach reaches a certain intensity, to let go and evacuate the air.

SWALLOWING AIR

Most habitual belchers are unconscious of the fact that they swallow air and frequently they come to a physician, complaining of excessive belching. Physical examination will generally reveal no organic defect but if the physician inquires about the patient's habits he will often learn that the patient is of a rather nervous temperament. If the doctor watches him carefully he will probably see him gulping frequently. The belching is simply a symptom caused by a nervous habit of swallowing air.

Considerable quantities of air may also be swallowed when food is eaten in a hurry or under nervous strain. Under such conditions a person may feel a slight pressure or distension in the pit of the stomach after the meal, and relief may usually be quickly obtained by belching. Relief may also be obtained by taking bicarbonate of soda. The soda gives relief because it causes the formation of carbon dioxide gas, thus increasing the pressure within the stomach and finally forcing an evacuation of the gas.

Infants swallow a good deal of air while they are being fed. The baby is generally uncomfortable until the mother holds it upright for a few moments so that the air can be evacuated. After the belch both the mother and child are happy.

Of course, excessive belching may also be due to organic disease. One of the common symptoms of gall-bladder trouble is a feeling of distension of the stomach after meals, with frequent belching. A doctor, therefore, will always try to make certain that there is no evidence of gall-bladder trouble before saying that belching is due to a nervous habit or to too rapid eating.

SPASTIC CONSTIPATION A CAUSE

The feeling of distension of the abdomen may also be caused by an accumulation of gas in the colon. This is particularly true in persons who are troubled by spastic constipation. In this condition the colon does not function in a smooth, co-ordinated way. There is an interference with peristalsis (contraction and relaxation) and it is this interference that permits the gas, normally formed as a result of the digestion of food, to accumulate in the colon. With a normally functioning colon the gas is absorbed into the blood and exhaled through the lungs. In spastic constipation there is apparently an impairment of this process of absorption, so that gas accumulates rapidly, causing distension of the abdomen and a desire to evacuate.

Many persons with spastic constipation or "irritable colon," as it is otherwise known, dread to attend public gatherings because of the frequent desire to evacuate gas. They have learned that if the impulse to evacuate is suppressed the colon is likely to fill up with gas and distress may become acute. The moment the gas is expelled there is relief.

Excessive accumulation of gas in the colon, or "flatulence," as it is termed medically, also follows the taking of a purgative. The cause is the same as that described above in the case of spastic constipation—an interference with the normal activity of the colon by an irritant cathartic drug. The distension becomes much worse if a person with an irritable colon takes a cathartic. Flatulence may be caused not only by cathartics such as Epsom salts, citrate of magnesia, and cascara but also by mineral oil. The reason for this is not clear, since oil does not irritate the intestine, but it is a fact that flatulence may result from habitual dosing with

oil, especially when large quantities are taken. With normal doses of one or two tablespoonfuls daily there is as a rule no trouble.

It is widely believed that flatulence is caused by the fermentation of starchy food residues in the colon. As a matter of fact very little is known about the subject of fermentation in the colon. In the normal digestive tract starchy foods are completely digested and assimilated by the blood before the colon is reached. However, starch and other foods can reach the colon when a cathartic is taken. In the colon there are germs that can attack starch, so a true fermentation may take place. However, even this point is not entirely clear. Whatever the cause of flatulence may be, there is no doubt that it is very much increased as a result of habitual dosing with laxatives or cathartics.

Food with a great deal of roughage such as cabbage, string beans, peppers, cole slaw, celery, cucumbers, radishes, pickles, onions, broccoli, spinach, kale, and the jackets of potatoes can also cause flatulence. The roughage in these foods is indigestible and when it reaches the colon it produces an effect somewhat similar to that of cathartics. The intestine is irritated, normal peristaltic activity is disturbed, and gas accumulates. However, many persons are accustomed to eating large quantities of vegetables daily without ever being troubled by gas. These persons have unusually versatile digestive tracts and are able to eat large quantities of roughage foods without any difficulty. Others, however, are sensitive to a small amount of roughage foods and have learned to achieve comfort and freedom from flatulence by avoiding these foods. Certainly those who have spastic constipation must avoid them.

FOODS TO AVOID

Raw fruits such as apples, pears, grapes, watermelon, and the various nuts may also cause flatulence. Here, too, indigestible roughage is responsible. Soft, fresh bread is also frequently responsible for gas. Instead of being completely digested, smooth, doughy lumps form in the intestines, where they irritate the bowel and thus cause gas and sometimes cramps. People who suffer from gas should eat stale bread. Bran should be avoided by everyone.

Many persons with flabby abdomens are troubled by gas. Exercises that strengthen the abdominal muscles may relieve the condition. Wearing an abdominal belt has also been known to help. The belt not only supports the abdomen but it is believed that it improves the circulation of the blood through the abdominal cavity and the bowels, and thus facilitates the removal of the gas by the blood stream.

It should be remembered, however, that flatulence may also be due to organic diseases, some of them serious, such as heart disease, liver trouble, and peritonitis. Anyone who has had an operation involving the abdomen will remember the gas pains that followed the operation. The handling of the organs by the surgeon or the removal of a tissue such as the appendix irritates the peritoneal lining of the abdominal cavity, and by interfering with the normal activity of the colon favors the accumulation of gas. A doctor should always be consulted whenever gas is a troublesome or chronic symptom, since it may be due to some organic disease.

ALKA-SELTZER AND SUCH

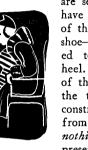
There are many drugs on the market which lay claim to virtues in the relief of gas. One variety, typified by Alka-Seltzer, depends for its effectiveness on the presence of sodium bicarbonate and an effervescent powder compressed into a tablet. Exactly the same effect may be obtained by taking half a teaspoonful of bicarbonate of soda in half a glass of seltzer water. If you want to follow the Alka-Seltzer formula strictly, a tablet of aspirin may be added to the water. Such remedies do not cure "acid indigestion" or "acid stomach." They simply give a deceptive sense of relief by causing belching. Another variety of drug advertised for relief of flatulence is represented by the cathartic pills such as Carter's Little Liver Pills. We have already made it clear that cathartics produce gas rather than prevent or cure it.

Distension of the colon by gas may be relieved by a small enema or by application of a hot-water bottle to the abdomen. Sometimes a half ounce of brandy or from ten to fifteen drops of essence of peppermint in half a glass of water may be helpful. These remedies should be taken only for occasional attacks of flatulence. Similarly, bicarbonate of soda should not be used habitually. The person with chronic or repeated flatulence requires medical examination and care.

How to Select a Shoe

MPROPERLY designed and poorly fitting shoes are responsible for most of the foot ills that afflict mankind, or more properly, womankind. Bunions, corns, calluses, "metatarsal trouble," soft corns, hammer toes all result when the feet are faultily shod. The only way to prevent such troubles is to wear proper shoes, and as part of the treatment of these troubles when they are fully developed, the wearing of a proper shoe is indispensable.

The worst foot troubles can be avoided if shoes



Ciruites Martin

are selected that do not have two major defects of the ordinary woman's shoe—the narrow, pointed toe, and the high heel. Corns on the tops of the toes and between the toes are caused by constriction and friction from the shoe, and by nothing else. The mere presence of a corn is suf-

ficient indication that the shoe does not allow sufficient room for the toes. The common "metatarsal trouble" is caused by a combination of the high heel, which throws the major portion of the body's weight on the front part of the foot, and the narrow forepart of the shoe which presses the toes together so tightly that they cannot fulfill their natural function of assisting in bearing the weight and propelling the body forward. When the toes are so constricted the weight is concentrated on the heads of the middle metatarsal bones, and consequently calluses are formed. Calluses are really protective growths that defend the tissues against irritation and unusual pressure.

HEEL-WIDE AND LOW

A proper shoe, therefore, has a low, broad heel of the non-wobble variety, and plenty of room for the toes. These are points which the purchaser must insist upon, since shoe salesmen will not show you such shoes of their own accord; in fact, many stores handling women's shoes do not even carry such shoes. The high-heeled, pointed-toed shoe will often feel comfortable when tried on in the shoe store because the toes are flexible and do not protest at once against their cramped quarters, and also because it is easier to walk short distances with a high heel than with a low heel. This is because with a high heel the entire body weight does not have to be lifted by the leg muscles at each step. For this reason women who are accustomed to high-(Continued on page 128)

APRIL, 1938

Is this highly esteemed vegetable over-rated as a source of vital food elements?

Spinach—Take It or Leave It

vegetable, spinach has in late years become one of the most highly esteemed of all vegetables in the popular mind. The obedient eating of spinach has been set up alongside putting-on-rubbers-when-it-rains and tooth-brushing as one of the unfailing criteria for distinguishing "good" children from "bad." So eager are mothers to assure themselves that their children are missing no healthful food, that in forcing spinach down unwilling throats they sometimes provide future problems for the psychiatrist. With these considerations in mind it may be worthwhile to review briefly the knowledge that food scientists have recently accumulated concerning this much discussed vegetable.

The reputation of spinach rests chiefly on its high content of minerals and vitamins. As we shall see later, this mineral content is not all available to the body. As a source of protein, fat and carbohydrate, the tissue-building and energy-giving elements, spinach is negligible. For this reason it is valuable along with the other leafy vegetables as one of the constituents of reducing diets. At the same time its fiber or roughage content is rather high, which makes it useful as a source of bulk but undesirable in disorders characterized by intestinal irritation.

THE VITAMIN CONTENT

Actually, spinach is to be recommended chiefly as a source of vitamins A and C. It is a very rich source of vitamin A, regardless of whether it is raw, cooked, canned, frozen, or dried. It is also a fairly good source of vitamin C; however, the vitamin C content decreases rapidly after the leaves are picked and allowed to remain at ordinary temperatures. If the leaves stand unrefrigerated for five or six days the vitamin C content becomes negligible. Spinach sold at the store has usually stood uniced for from twelve to forty-eight hours, so that its vitamin C potency is already somewhat reduced. Further reductions of from 40 to 60 per cent are caused by cooking, freezing, or

ROM an almost unkown leafy green vegetable, spinach has in late years become one of the most highly esteemed of all vegetables in the popular mind. The obedient eating of spinach has been set up alongside puting-on-rubbers-when-it-rains and tooth-brushing as one of the unfailing criteria for distinguishing "good" children from "bad." So canning, and the drying process destroys all of the vitamin C. The loss of vitamin C can be minimized by keeping the leaves in the refrigerator rather than in the vegetable bin until they are ready for cooking, and by drinking the juice in which the spinach has been cooked. Spinach is also a source of vitamins B and G, though not a rich source.

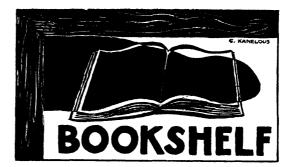
The popular fame of spinach, however, rests chiefly on its high iron content. By virtue of its iron alone spinach has been built up as an object of food-fetishism. The truth about the matter, as recent experiments have shown, is that despite its high iron content little of the iron it contains is in a form that can be utilized by the human body, and almost none of it can be assimilated by the intestines of the infant. The same is true of the calcium content of spinach. Calcium is neded for building bones but much of the calcium in spinach is also in an unutilizable form.

SHOULD NOT BE FORCED

Thus it is apparent that while spinach is a good food because of its vitamin A and C content, it is not to be prized as a source of available iron and calcium. It is therefore a wholesome and desirable food but not one that is indispensable. The vitamins it contains may be obtained from cod liver oil, butter, cream, and orange juice. Iron is better obtained from egg volk, whole-grain cereals, liver, prunes, apricots, and dried fruits generally, while calcium is best obtained from milk. It is consequently ridiculous to plague those children who dislike spinach in an unvielding effort to make them overcome their repugnance. Indeed, they can do very well without spinach, and the harm done by forcing them to eat it will very likely be greater than any good that may be achieved.

Iodized Salt

A RECENT issue of the New Hampshire Health News, publication of the State Board of Health, warns against the indiscriminate use of iodized salt.



RUSSIAN MEDICINE (XX, Clio Medica: A Series of Primers on the History of Medicine). By W. Horsley Gantt, M.D., 214 pages, 12 illustrations, Paul B. Hoeber, Inc., N. Y., \$2.50.

FEW thoughtful people with a wholly American background realize how the other half of the world lives and how it has lived for many centuries. Some conception of this may be gained by a study of the history, economy, and general culture of nations, but nothing gives as deep insight into the ways of life of a people as the methods used in caring for the ill and injured.

A background of brutality and chaos has characterized the development of most European "civilizations" and nations, and this brutality and chaos was reflected in a medical lore in which ignorance was surpassed only by folly. One of the most backward of all nations was tsarist Russia. W. Horsely Gantt's Russian Medicine sheds a great deal of light on that colossus of the north which for centuries lay sprawled like a prostrate giant over one-sixth of the world, but which, under a new regime, has rapidly come to life.

Dr. Gantt's studies may be divided into four periods. The first period deals with primitive medicine. This differed little from the pre-scientific medicine found elsewhere in the world. It may be symbolized by an episode from the annals of Vreden, a professor of orthopedics, who in 1880 was called upon to operate on a peasant who had been advised by a "healer" to insert a notched greenwood stick into his rectum to stop his diarrhea. Such a survival of medieval medicine may have been considered convenient but it was hardly

In this period, the use of amulets, herbs, steam baths, and the knout were all part of medical lore. Famines and epidemics killed swiftly and surely. Because of the low level of Russian culture the impact of foreign influences on medicine was not felt. Byzantine, Arabic, and western European medicine made slight impressions chiefly in the court but were not assimilated. The people continued with witch healers, baths, and garlic. Although physicians were imported from England, Belgium, France, and Italy it was not until the

time of Peter the Great that sufficient attention was given to science to bring about a period of Russian medicine that was independent of foreign physicians. Under Peter's influence European medicine began to take hold.

The first Russian doctor was Posnikov whom Peter sent to Padua with his own funds to graduate after four years of study with a Doctor's degree in both philosophy and medicine. The Gofs Hospital of Moscow, modelled after the Greenwich Hospital which Peter had seen in England, was founded by him on May 25, 1706. Increased intercourse with Europe ushered in a period of court and military medicine which formed the basis of the third period. The importance of Peter in modernizing medicine was incalculable. He is rightly called the father of Russian medicine. But for him and the Soviet influence Russia might be what the back stretches of China and India are today.

However, the period of independent medicine did not witness the solution of all problems. Famines and epidemics of almost fantastic proportions continued to sweep the nation. One of the greatest problems which the medical profession had to face was the inertia and ignorance of the masses. Slowly this difficult problem was attacked through the Zemstvos, or local governing bodies. Regional physicians with the aid of feldshers or practical assistants managed, by a great deal of work, to bring the simplest forms of public health and medicine to an ignorant and prejudiced people.

It is with this woefully inadequate care and background in mind that the achievements of Soviet medicine must be examined. These achievements can be summarized most simply by pointing to the absence of smallpox and cholera, diseases which had existed for decades in endemic and epidemic forms, in the greatly reduced incidence of typhus and typhoid fever, and in the reduction of the incidence of syphilis to one-quarter of what it was before the war, gonorrhea to one-third, and tuberculosis to one-half. Likewise, the tremendous increase in the number of hospital beds, the number of doctors, and particularly the number of students gives some index of the attention that the Soviet government is giving to the health problems of its people. Dr. Gantt tells the story of this astonishing development with sympathy and a long-view perspective.

Just as the United States has far outstripped what European medicine and science once taught us, so probably a new form of socio-economic organization will outstrip America in the application of scientific advances for human welfare. This is the future of Soviet medicine.

Dr. Gantt's book gives a fascinating account of the history of Russian medicine. Readers should supplement it with Dr. Henry E. Sigerist's great

APRIL, 1938

work on present-day Russian medicine (Socialized Medicine in the Soviet Union, Norton and Co., New York) for a complete account of Soviet medi-

TAKE CARE OF YOURSELF. By Jerome W. Ephraim, 287 pp., Simon & Schuster, N. Y. \$2.

THE reader is assured, both in the foreword and in the text that this book is not intended as a debunker. This leaves us a trifle perplexed as to its purpose. Most of the book is concerned with attacks on fraudulent advertising and discussion of the true virtues (if any) and vices of the numerous types of drugs and cosmetics sold to an uninstructed public. In addition, there is much authentic discussion of the structure of the body and the way in which it works. This material is presented in a readable fashion.

One serious drawback, however, is the author's failure to mention by name a single one of the hundreds of products he attacks. He urges caution in purchasing such products and then fails to give more than very infrequent practical hints on how to protect oneself against the almost universal fraud, misrepresentation, and outright deceit practiced by those promoting the sale of such products. Another fault is the author's failure to indict the advertising media without which this huge fraud could not be perpetrated. If the radio, the newspapers, and the magazines exercised any honest control over the nature of the "copy" for the publication of which they receive such handsome fees, a large part of the problem would be automatically solved.

It is interesting to note that in the foreword and in the "Note About the Author" at the end of the book, care has been taken to point out that Mr. Ephraim is himself in the drug manufacturing business, but that he is an honest drug manufacturer.

Medical Work in Spain

THE splendid work of the American Medical Bureau's personnel in Spain, both at the front and behind the lines, is vividly described in the February issue of AMI, the official organ of the International Sanitary Service. The articles, which are profusely illustrated, are written by Americans and Canadians in the Service. AMI can be obtained from the American Medical Bureau to Aid Spanish Democracy, 381 Fourth Avenue, New York City.

Another interesting magazine devoted to medical work in Spain is La Voz de Sanidad, the publication of the medical corps of the Fifteenth (International Division). This magazine is a valuable means of instructing the soldiers in the rudiments of military sanitation and medical technique.

Questions and Answers

(Continued from page 98)

derful claims are made. Are these claims warranted?—L. H.

Answer-Paracelsus is a mixture of several mineral salts. No one can or would deny the importance of the mineral salts in the functioning of the human organism. They are absolutely indispensable for life. They control the acid-alkali balance of the blood and tissues; they are essential to blood building and the clotting of the blood, to the structure of the skeleton, to the action of the heart, and to other vital body processes.

Among these salts only common table salt (sodium chloride) is consciously added to our food during or after its preparation. The other salts (containing calcium, phosphorus, potassium, and other elements) are constituents of the various ordinary foods that we consume.

In special circumstances additional supplies of minerals are necessary, but even in such cases they may be furnished, at least partially, as constituents of food. For example, in pregnancy, additional calcium for building the bones and teeth of the developing child is required by the mother. An increase in the consumption of milk, which is rich in calcium, is often sufficent to meet these requirements. In regions known as goitre belts, the drinking water and soil are apparently poor in the iodine which is necessary for the proper functioning of the thyroid gland, and in such localities iodine must be furnished to children.

The literature furnished by the manufacturers of Paracelsus implies that the ordinary diet is lacking in these esesntial minerals, and that therefore the body is continually battling against acidity and is greatly handicapped. This is not the case. A diet consisting of sufficient quantities of meat, dairy products, green vegetables, and fruits always furnishes an ample supply of the inorganic salts. Only in special circumstances, such as during illness, is it necessary to increase artificially the supply of these salts. Therefore, Paracelsus, which is a combination of various salts, is an unnecessary adjunct to the diet during health. If a person is ill he requires the advice of a doctor and not a cureall or nostrum such as Paracelsus.

Fibroid Tumors

Dallas, Texas

DEAR DOCTORS:

What are fibroid tumors? Are they curable?—

Answer—Fibroid tumors are muscular or fleshy growths of the womb. They are not cancerous. Very often, a woman does not know that she has them and they are discovered accidentally by the number of them.

These tumors may cause excessive menstruation, bleeding between periods, "bearing-down" pains, and perhaps frequent urination or constipation due to pressure on the bladder or bowel.

After the menopause or change of life fibroids have a tendency to grow smaller.

Treatment varies with the age of the patient, size and location of the growths, and the symptoms they are causing. If the tumors are small and are not causing any trouble, no treatment is necessary. There should be a periodic examination about every six months. Rapidly growing fibroids should be removed.

If a woman with fibroids that are causing trouble wants to have children, it is sometimes possible to remove the growths without sacrificing the uterus or womb, so that the woman may conceive and give birth after the operation. Sometimes, however, it is impossible to remove the fibroids without sacrificing the uterus.

When a fibroid causes pain or pressure operation is advisable. In young women an attempt should be made to preserve the womb. Near the change of life this is unnecessary. It is much more simple to remove the womb together with the tumors than to attempt to remove the growths only.

There are certain types of growths that can be treated by x-ray or radium. This saves an operation in some patients who cannot stand major surgery because of poor health.

Halowax Poisoning

Cincinnati, Ohio

DEAR DOCTORS:

What are the dangers to health connected with the use of the product known as Halowax?—C.R.

Answer-Halowax is the name applied to a variety of substances. Those in common use are chlorinated compounds of naphthalene and diphenyl. These compounds vary slightly in their properties and in their toxicity, depending upon how much chlorine is added to the naphthalene or diphenyl. In general those having more chlorine are more injurious to the body. Halowax is manufactured and sold by the Halowax Corporation of 247 Park Avenue, New York City. It is used widely in the manufacture of electrical equipment and particularly in the radio industry. It is used primarily as an insulating material. When it is used it is usually heated so that it can be applied in a melted form, and on cooling it becomes hard.

Halowax is one of the most dangerous substances used at present in industry. It has been known to produce fatal poisoning in a number of cases in several states including Massachusetts, Connecticut,

doctor. There may be a single tumor or a large New York, and Pennsylvania. It is most dangerous when it is heated, since then it gives rise to fumes that can be absorbed through the lungs, thus producing poisoning. When absorbed in this way it causes very severe damage to the liver which shows up as jaundice, and when this damage has occurred further exposure at any time is likely to produce serious illness or even death. It also has an effect on the skin, producing a very severe form of acne.

A considerable number of studies on Halowax have recently been made at the Harvard University School of Public Health. This work was done at the request of the Halowax Corporation so that the manufacturers are fully aware of the dangers connected with the use of their product. The utmost care is necessary in protecting workers who may come in contact with it.

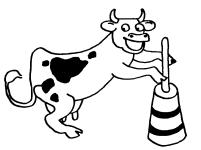
Sweet and Salted Butter

Sunnyside, Long Island, N. Y.

DEAR DOCTORS:

Is it true that salted butter is not as fresh as sweet butter?—S. T. F.

Answer-We are informed that both sweet and salted butter are churned from the same sweet



Chas. E. Colahan

cream at the same time. The only difference is that salt is added to one and not to the other.

Salted butter keeps better, that is, it does not become rancid easily when refrigerated. Sweet butter, on the other hand, is difficult to keep sweet for long periods, even if refrigerated. As a result one cannot always be sure of the "sweetness" of sweet butter. Sometimes, therefore, salted butter may actually be fresher than sweet or unsalted butter.

Assurance concerning the quality and freshness of butter depends to a large extent on proper inspection by government authorities.

Dr. Bethune Safe

ATEST reports indicate that Dr. Norman Bethune, reported missing in China, is safe in Shansi province, wheer he is working in the medical service of the Chinese Army.



A LITTLE LESS THAN 3,000 persons have taken advantage of our offer to arrange for free Wassermann tests by private physicians. Anyone who wants to have a free Wassermann test done by a private doctor may have it done by filling out the coupon at the bottom of this page and mailing it to us with three cents in stamps.

I. A. of Roxbury, Mass., writes: "It is our conviction that H. & H. should become a part of every person's medicine chest. It has become *our* medical dictionary.

"Your issues have been improving each month. Your articles on sex should certainly be continued because of their dependability and clarity. Our only regret is that the magazine is not larger. It has the advantage over other magazines in that you may profitably read every word of it.

"May we suggest that, if possible, you include a story based on a scientific personality."

BEGINNING WITH THE NEXT ISSUE we are going to have a whole series of articles on the important and dramatic figures in medical history. Next month we will tell the story of William Beaumont, the backwoods American physician, who by studying an Indian who came to him with a buckshot wound in his stomach, made the first important contribution towards the understanding of the digestive function of the stomach. Next in the series will be the story of O'Dwyer, the inventor of the intubator which has saved the lives of thou-

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sands of children who would otherwise have died of diphtheria. The third article will be devoted to Goldberger, the man whose work on pellagra led to an understanding of the nature of that disease.

MRS. R. O. OF LAKEWOOD, N. J., writes: "This has been a hard winter for me and my family, and many times Health and Hygiene was my guide in need. Many nights I sat up with the magazine in my lap, looking up the instructions for making mustard plasters for my children. If I was tempted by some advertisement to buy a cold medicine, I looked in the magazine first. Thanks for your honest information from me and the many people who read your magazine around here."

And from M. N., a medical student in Chicago: "For all my having done graduate work at the University of Chicago I must admit that I have yet to receive an issue of Health and Hygiene from which I didn't learn something of value. To the less educated layman the magazine must present a wealth of facts to fill large gaps in his knowledge as well as to dispel the many flagrant and harmful fallacies which are current."

B. R. OF Los Angeles informs us that when her feet are better she is going to try to get us some subscriptions. We appreciate this, and though we do not know the nature of B. R.'s ailment, it occurs to us that she might find the article entitled How to Select a Shoe in this issue helpful.

A LETTER FROM MRS. C. C. of Brooklyn, N. Y., wins this month's prize. It is typical of many letters that we receive, in that it states that HEALTH AND HYGIENE has been a big money-saver. Mrs. C. C. writes: "Until a year ago I was a 'sucker' for the advertisement writers and like thousands of others I was a firm believer in a great many fallacies about diseases and medicines. Then a friend of mine showed me a few copies of H. & H. and I immediately subscribed.

"Since, my eyes have been opened to a great many truths. I have stopped taking useless and harmful medicines and have saved a good many dollars.

"I anxiously await each issue, as I think H. & H. is one of the very few mediums through which we can learn the truth about the thousands of articles in this field that are offered for sale."

EACH MONTH WE WILL GIVE a free autographed copy of either Arthur Kallet's 100,000,000 Guinea Pigs or Carl Malmberg's Diet and Die to the person who sends us the best letter telling us what they like, or don't like, about HEALTH AND HYGIENE.

Spring and Sex

(Continued from page 105)

springtime with increased sexuality is not entirely based on superstition, but has at least some basis in fact. However, as man tends more and more to become the creator or controller of his environment rather than the creature of it. the seasons tend to exert less and less influence on his sexual as well as his other forms of activity. Today man has advanced to a stage where this influence may be demonstrated by scientific studies involving large numbers of individuals, although among individuals there may be fairly wide variations in the degree to which this influence is felt.

Modern commercialism and romantic literature have undoubtedly been responsible for an exaggeration of role the spring season plays in this respect.

A New Food and Drug Law

(Continued from page 111)

In 1933, the government lost a case on a medicine almost as spectacularly vicious as B. & M. This medicine is Banbar, recommended for diabetes, manufactured by L. B. Barlett of Pittsburgh, from an extract of the common "horse-tail" weed. Barlett has recently reduced the price from \$12 to \$9 a pint. In this case, medical experts testified that Banbar was worthless. As evidence, the government offered death certificates of patients who had used Banbar but died of diabetes. Some of these unfortunates, shortly before their deaths had written Barlett testimonials about the virtues of Banbar. But the government was unable to show that Barlett knew of these failures of his nostrum. The jury, under the instructions of the court concerning the necessity to prove fraud, decided in Barlett's favor. Sale of Banbar continues. And diabetics who could live out a normal life span if they took insulin, continue to abandon this life-saving drug in favor of Banbar and the undertaker.

These cases show what the government is up against in every attempt to protect the public against hundreds of dangerous and worthless nostrums. The necessity to prove fraud gives rise to this anomalous situation: The maker of a fake nostrum who is not aware of the loopholes in the Food and Drugs law may be promptly caught and brought to book; an-

other maker of the same nostrum, with the same labeling, who knows how to cover up evidence of his bad faith, may continue in business indefinitely. But the victims of the second fake are just as dead as the victims of the manufacturer who is caught by the law.

An adequately revised Federal Food and Drugs Act would correct this defect in the existing statute. The law should ban all representations concerning the effect of drugs which cannot be fully supported. It should place a very definite obligation on the manufacturer who undertakes the grave responsibility of prescribing for our ills to make certain that his claims are truthful.

(The second article in this series will appear in the May issue)

Debunking Posture

(Continued from page 110)

terior neck and shoulder muscles in order to assume the position of the hand stand. All the better from the exercise angle! The merit of this approach lies in the fact that when the child learns to perform these postural correction stunts he tends to repeat them because they are enjoyable—they are fun. Even if he should manage to secure correction of his round shoulders by calisthenic exercises alone, there would be little urge from within for him to continue his calisthenics.

Physical education should aim to prevent faulty posture by providing the elementary school child with those activities which are interesting and which at the same time will cause the child to use his body in a manner that develops poise and balance. To appreciate this poise and balance one has only to watch a skillful diver or a good tennis player. The posture of such individuals is usually very good. It is true that they may not stand like soldiers, but they use their bodies in an efficient manner. This correct use of the body through sports develops a type of posture which even the skeptic must call "good" posture.

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Who's Who on Our Advisory Board

Dr. Louis I. Harris

DR. LOUIS I. HARRIS was born in Austria on January 27, 1882. He was brought to the United States at the age of two. Educated at the College of the City of New



Dr. Harris

York and the Columbia University Medical School, he received the degree of Dcotor of Medicine in 1905. In 1917 he was given the degree of Doctor of Public Health by New York University.

Dr. Harris was chief of the Division of Industrial Hygiene of the Department of

Health of New York City from 1915 to 1917. From 1917 to 1926 he was director of the Bureau of Preventable Diseases of the same department. In 1926 he was appointed to the post of Commissioner of Health of New York City, an office which he held until 1928.

Dr. Harris is a fellow of the American Medical Association, a member of the American Public Health Association, the New York Academy of Medicine, the National Tuberculosis Association, Phi Delta Epsilon, and Pi Lambda Phi. He is the author of numerous clinical studies on industrial and occupational diseases and hazards, as well as studies on public health, and health and sanitation standards in schools.

Next month: Arthur Kallet

Consumers' Guide

WE recommend to our readers the publication of the Consumers' Counsel Division of the Agricultural Adjustment Administration entitled Consumers' Guide. This semi-monthly magazine contains much valuable information for consumers and housewives, and is sent free upon request to the editor, in care of the Department of Agriculture, Washington, D. C.

State Hospital for the Insane

(Continued from page 117)

they are the best that society has to offer at present. But Hearst has instilled in the minds of his readers such a horror of psychiatric care that the families of patients needing care will delay and avoid bringing them to the state hospital where, all things considered, they will usually receive the best care and the most help. Such delay frequently destroys the prospects of significant help to the mentally ill.

The first step in the improvement of the state hospital is an increase in the proportion of attendants and doctors to patients. The second step is an increase in pay for the grossly underpaid attendants. These steps can be carried out only by fighting vigorously against Hearst's campaigns to "Lift Oppressive Taxes," by which he means taxes on the rich. Only by increasing such taxation, by forcing the wealthy to give up some of their profits in order to pay for the care of those whose personalities have cracked under the process of producing this wealth, will the patients in the state hospitals receive better care.

The recent series of articles on Rockland State Hospital is but the latest stone in the ugly monument Hearst has built to his own memory. This monument will endure and the deeds of the man it commemorates will always be of special interest to future students of the diseased and the pathological.

How to Select a Shoe

(Continued from page 121)

heeled shoes often protest that they cannot wear low heels without suffering violent pains in the calf muscles. It is the unaccustomed labor of lifting the body weight with these muscles that causes the pain and stiffness, and like any other muscle symptoms caused by sudden, unusual exercise the discomfort will disappear after walking a few days with the lower heel has accustomed the calf muscles to their proper physiological burden.

If your feet are giving you trouble you need low heels and wide toes. Don't compromise—a "Cuban" heel is neither low nor broad, and a shoe the least bit pointed does not give proper room to the toes.

Chinese women have abandoned foot binding and tiny shoes. Let American women follow suit if they want to avoid foot misery and discomfort.

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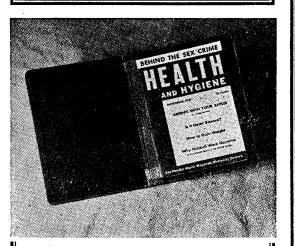
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May, 1936—Gonorrhea in Men, Ovaltine Bedtime Stories, Heartburn, Frigidity in Women,

Sept, 1936—Infantile Paralysis, Heart Disease, Good Housekeeping's Phony Seal.

Oct., 1936—Scarlet Fever, Concentrated Foods, Pleurisy, Urine Analysis.

Nov., 1936—Serutan, Influenza, Hypnotism Explained, Tonsils.

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