THE PROCESS OF CHILDBIRTH by Mark Hornstein, M.D.

Health
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November 1938

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SEXUAL PROMISCUITY

ARE YOU A SODIUM BICARBONATE ADDICT?
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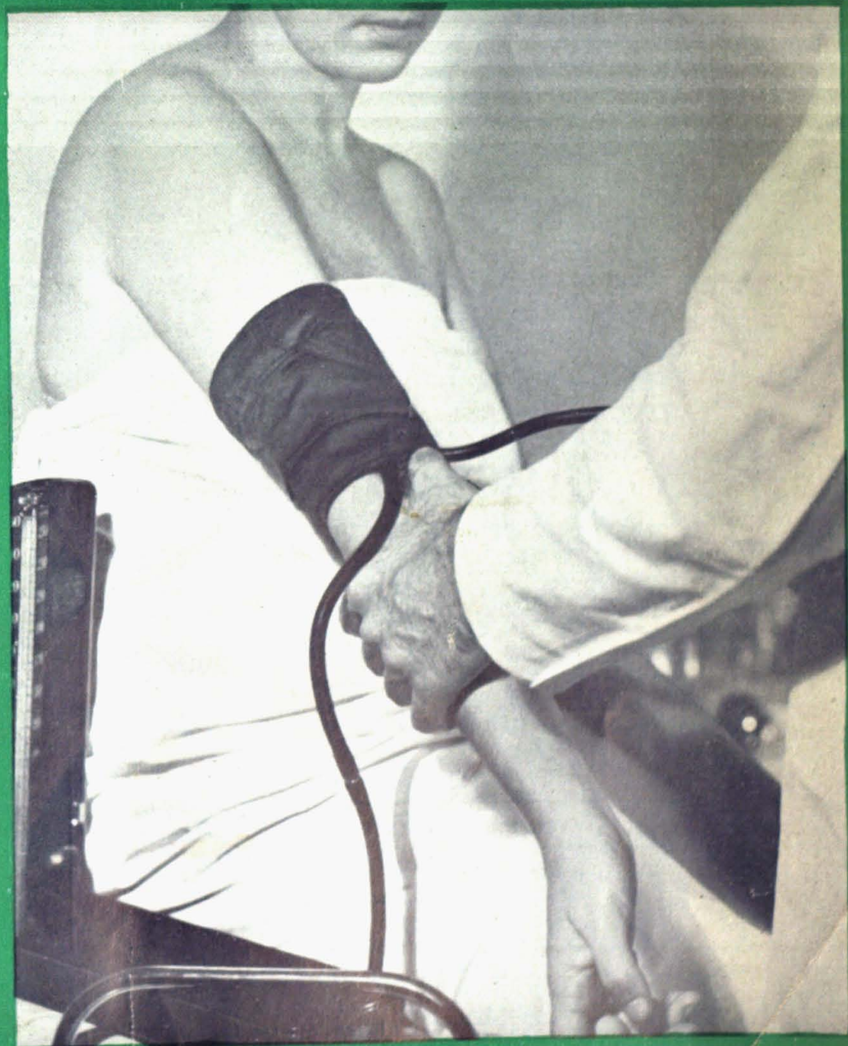

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(see page 21)

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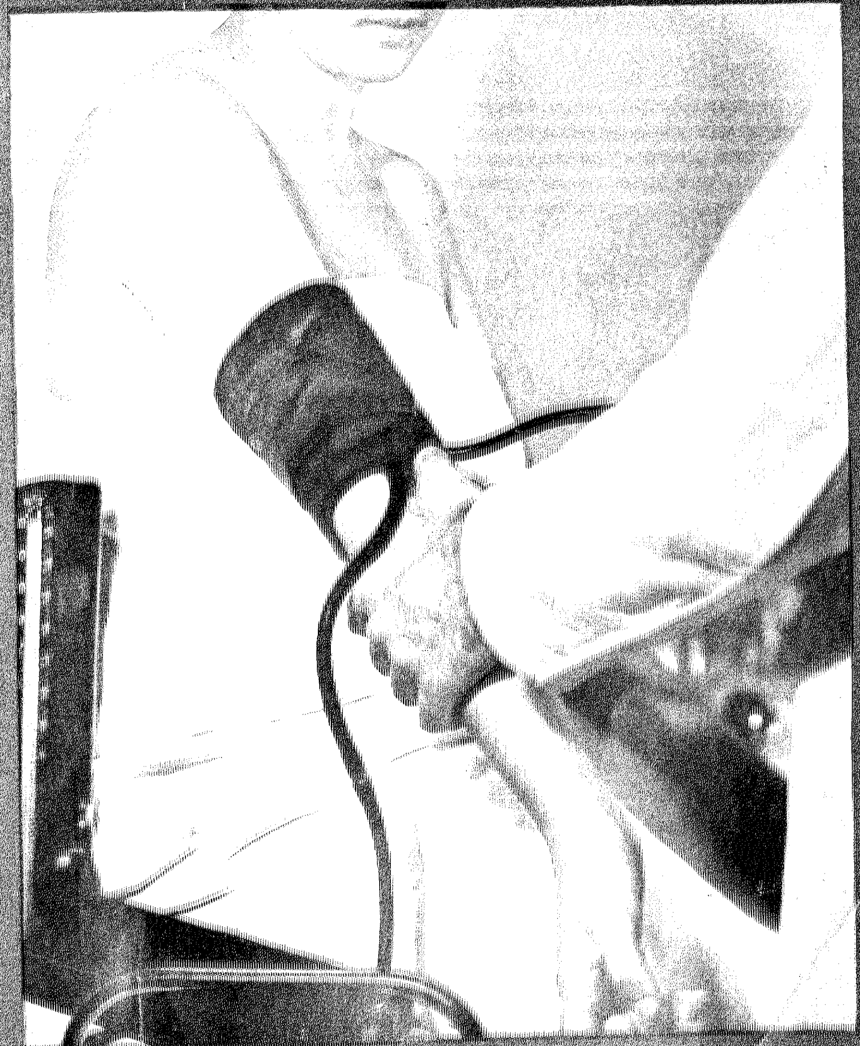

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Health AND HYGIENE

"Nothing is more important to a nation than the health of its people."—Franklin Delano Roosevelt

THE POPULAR HEALTH MAGAZINE WRITTEN BY DOCTORS

Next Month

STIMULANTS AND PEP PILLS—Many people today are using benzedrine sulfate tablets as a "pick-up" when they are tired and run-down. What are the possible consequences of this practice? And what about alcohol, coffee, tea, *Coca-Cola*, and the other stimulants that are widely used.

CAESAREAN CHILDBIRTH—Dr. Mark Hornstein, the obstetrician who wrote the article *The Process of Childbirth* in this issue, turns his attention to abnormal childbirth and discusses delivery by means of surgical intervention.

AND NOW—ALLERGY IN YOUR COSMETICS—The field of allergy or individual sensitivity to particular substances has opened up a rich field of exploitation for the manufacturers of cosmetics. Dr. Herman Sharlit, a skin specialist, gives the facts about allergy as it applies to you and the cosmetics you use.

IS GAS ANESTHESIA HARMFUL?—It is claimed by some that the gas commonly used as an anesthetic by dentists in extracting teeth is harmful to some individuals and may even cause death. A dental surgeon examines these claims in the light of the best and most complete knowledge to date.

JOSEPH HIRSH CONTRIBUTES AN ARTICLE ON THE REMOVAL OF BIRTHMARKS. Dr. Broadwin continues JERRY THE "INCORRIGIBLE." Madeline Ross discusses FACE CREAMS. Reliable tips on what to do for WINTER COLDS are given in our "Medicine Chest" department.

And many more interesting and enlightening articles and features.

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CARL MALMBERG, *Editor*

Any Month

A FORTUNE MAGAZINE POLL RECENTLY completed shows that the American Medical Association is "within hailing distance of its own downfall," as a result of the reactionary, stand-pat attitude of its leading officials. This hardly comes as news to us, since HEALTH AND HYGIENE has been saying as much for some time, but we are glad to have our view corroborated by Fortune's findings.

According to "Fortune" the A.M.A. is now backing down on its former policies, is beginning to repudiate its leadership, and by taking a more liberal stand on certain vital problems is trying to get back in the graces of the public.

Sic transit gloria Fishbein!

•

"THE MOST PREVALENT AILMENT excepting the common cold," says Dr. Walter Clarke, director of the American Social Hygiene Association, concerning gonorrhea. With public attention focussed so intently on the subject of syphilis, this other venereal disease has not received the attention it deserves. We intend to have an article on it soon.

•

A TYPICAL LETTER FROM ONE OF THE many doctors who read HEALTH AND HYGIENE:

"Enclosed find my check to cover the renewal of my subscription to your excellent magazine as well as those of two new subscribers.

"As a physician I realize fully the inestimable value of the part HEALTH AND HYGIENE does and can play to further the medical education of lay (and may I add, our own professional) individuals.

"I feel it my duty to my own profession as well as to the community to publicize the existence of this periodical and get subscriptions to it. I have just started. I intend to continue with crusading zeal."

Very sincerely yours,
ABRAAM STEINBERG, M.D.
Pittsburgh, Pa.

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FIGHT CANCER WITH KNOWLEDGE

To be forewarned is to be armed against this deadly and insidious disease. An article prepared by the New York City Cancer Committee.

THE AVERAGE PERSON HAS A FEAR AND DREAD OF cancer that hardly applies to any other disease condition. In addition to this there is also a feeling that cancer is an unclean disease, and a desire on the part of its victim to keep the malady a secret. For these reasons there has been some discussion as to whether an attempt to educate the public concerning cancer and its early symptoms does not produce more mental suffering than can be offset by any benefit which may result from such education.

The conclusion of this discussion must, in the end, depend upon whether or not individuals can be spared unnecessary suffering and death by giving thought to the possibility that a malignant disease is threatening while it is still in its early stages.

OUTLOOK TODAY IS IMPROVED

Let us see what are the facts. We are a long way from knowing the whole story of cancer in its many manifestations and it is true that, in some cases, the growth of cancer is so insidious that no evidence of its presence is apparent until it is advanced to a point where present means of treatment are not able to cure it. The number of such cases, however, is constantly decreasing so that it is increasingly possible, by careful study, to find cancer in its early stages. On the other hand, to offset these hidden cases, there are innumerable others in which the signs and symptoms are evident at a very early stage and which can be effectively cured by our present methods of treatment.

Nothing is gained by delay. All the advantages lie on the side of prompt action. In this respect cancer differs in no way from various diseases of the heart, Bright's disease, hardening of the arteries, and many other ultimately fatal conditions. In some of these the onset is insidious and treatment is of very little benefit either in lessening the symptoms or in forestalling ultimate death. And yet no one, suspecting that he or she suffers from such conditions, guards it as a secret or fails to seek and secure, as soon as possible, the best treatment that can be given.

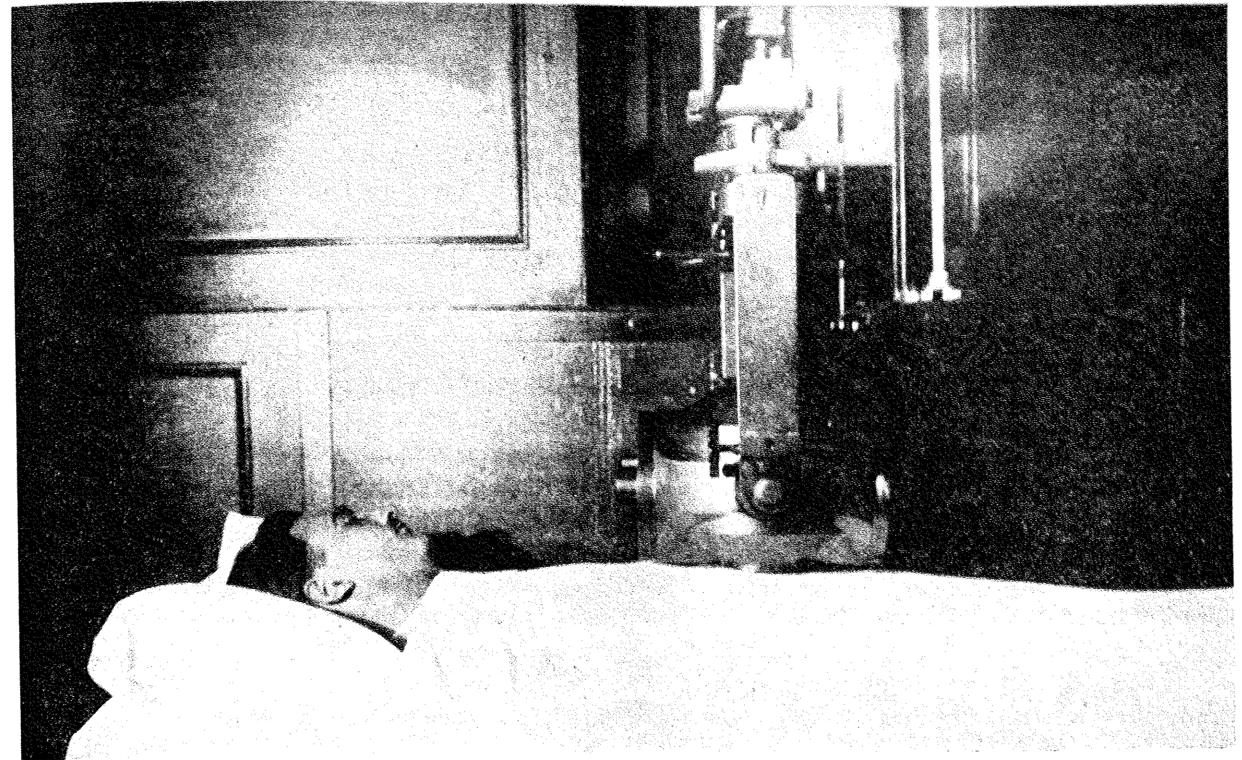
Why then behave in a different way towards cancer? It may be that the secretiveness concerning cancer and the feeling that it is an unclean disease are based upon the fact that in the past hereditary influences were thought to have a marked bearing on the growth of a cancerous tumor. It is not an uncommon experience for a doctor to find a patient who wishes to hide the fact that he or she suffers from cancer because of the effect that such knowledge might have upon other members of the family. In feeling that it is a hereditary condition, there is an associated feeling that it is a blood disease and therefore a family taint. However, we now know that heredity plays a less important role than we once thought, and probably only a very indirect role. Moreover, in the past, when treatment was far less adequate and effective than today, cancerous tissues did advance and undergo breaking down changes which made the condition truly distressing to behold, and this probably is an additional reason for those feelings which result in fear and secretiveness. Treatment by actual surgical operation and various physical methods, as well as careful attention to secondary infection, have almost entirely removed the distressing picture of the disease that was so manifest in the past.

MANY ARE REASSURED

Physicians are constantly seeing patients who for one reason or another have for a long time been obsessed with the fear that they were suffering from cancer, but who, on finally receiving medical advice, have been completely reassured and made happy by the knowledge that there was no basis whatever for their suspicion and fear.

It is not necessary to give actual figures to let you know what per cent of cancer in various parts of the body is now susceptible to complete cure—*if recognized and treated early.* But it is no exaggeration to say that many forms of early cancer can be cured under these conditions with absolute certainty by means of treatment already at our disposal. It is well to emphasize that this is true of some cases in which cancer, if untreated, develops in its most distressing form.

But our means of treating cancer after it has become far advanced are not adequate. There is no human ill in which the reward for early action is so definite as in the case of cancer. We are able to strike a further note of optimism by telling you that each year brings forward some further advance in technique, so that cases which were formerly beyond help are brought within the "curable" class.



New York City Cancer Committee

A patient receiving radium treatment for cancer in Memorial hospital, New York City. Modern technique of this kind can cure many cases formerly considered hopeless.

The medical profession as a whole is in no way discouraged in the age-long fight that has been carried on against malignant growths. Improvements in instruments of precision in making early diagnoses; improvements in surgical instruments and surgical technique; improvements in the application of x-ray and radium; improvements in the knowledge of chemical agencies—all are part of the fight which is getting us nearer to mastery in this particular field.

Those who are devoting their lives to cancer research believe they are approaching the time when discoveries will be made which will result in much more certain recognition of the earliest tissue changes which announce the cancerous growths. X-ray technique has improved and is improving considerably so that smaller and smaller growths in the stomach can be detected. The same is true in the intestinal and urinary tract. Changes within the head caused by malignant growths are constantly coming to our knowledge at a sufficiently early time to make a successful removal by operation and radiation a possibility. Bones which are so frequently attacked by various forms of malignancy are yielding up their secret to careful study.

The breast is the most common site of a malignant growth. Means at our disposal make the discovery of breast tumors possible at a very early stage, and anatomical conditions make it possible to treat such tumors with the utmost chances of success. And yet suffering and death from this form of cancer is still a common thing.

SELF-DIAGNOSIS IS DANGEROUS

Since delay is so dangerous in cancer, attention must be called to one of the factors most responsible for delay. With the increasing interest in medical matters by the laity, with the knowledge that is gained through public health programs, articles in the daily papers and the magazines, radio talks, and proprietary medicine advertising, the average individual comes to believe that he is a pretty good doctor himself. Self-diagnosis is a common practice and self-administered treatment a frequent result. You all know that the man who is his own lawyer is said to have a fool for a client. We hesitate to draw an exact parallel in

the case of the man who is his own doctor—but will leave the hint for your consideration.

However correct the layman may be in determining that he is suffering from a sore throat and not tonsillitis, or from rheumatism and not flat foot, or from lumbago and not a disease of the vertebral column, he is treading on very dangerous ground when he decides he is suffering from a simple ulcer of the lip instead of an epithelioma—the name for cancer in that part—or from swollen glands and not a malignant change in lymph nodes, or from hemorrhoids and not rectal cancer when bleeding occurs.

The correct diagnosis of cancer is in nearly every instance a matter of difficulty, and trained experienced minds and senses are needed to arrive at correct conclusions. Even endowed with these, the doctor often finds it necessary to make long, painstaking study to be sure. For this reason you cannot trust to your own judgment but must turn to your doctor if you accidentally notice an open ulcer on the surface of the skin, or find a lump somewhere on the body, or have bleeding from any of the body cavities, or note any other change from the normal. The chances are great that these symptoms will be of minor importance, but in a sufficient number of cases to make an important difference there will be evidence of early and curable cancer. See your doctor, and if you have none take pains to find one and a good one. If you honestly cannot afford to pay his fee, go to the out-patient department of a good hospital. Go somewhere, and go quickly, where you can learn the truth and, if necessary, get the treatment which may save your life but which, if delayed, may be quite ineffectual some weeks or even days later when a local removable condition has become spread too widely to be entirely eradicated. Don't be your own or your friends' doctor under these circumstances.

Since it is true that in some instances cancer is of such an insidious nature that it gives rise only to hidden symptoms until it is well advanced, it is important that you take the trouble to have a thorough examination at least once a year by a competent doctor. It is not uncommon for an examination to disclose the disease at a very early stage, with very happy results in treatment. We therefore ask that you put aside your fears, your tendency to unconcern, and act instead in a rational manner in exactly the same way as you would if threatened with any other misfortune. Do not allow fear, dread, or carelessness to govern your actions. A knowledge of the truth will not add to your distress, but may on the contrary rid you of an unfounded phobia.

If you are threatened with cancer, or already have cancer, this knowledge may well be the essential thing in the restoration to good health. We say "threatened" intentionally because we know many conditions which are not now cancer but which, if left uncared for, may change to cancer.

So you see, careful consideration has been given to this question of arousing your fears and bringing about anxiety by making you give thought to something that otherwise may have escaped your attention entirely. It is not fear or unhappiness that we would arouse, but a reasonable attitude of caution and action. We know that in this way we can very greatly lessen the total amount of human suffering and unhappiness and it is for this that we are striving. We ask your help.

IS IT CANCER?

The signs and symptoms of malignant growths.

RALPH LEVIN, M.D.

As THE ARTICLE ON THE PRECEDING PAGES POINTS out, cancer can be cured in its early stages, and it is necessary to consult a physician immediately when any sign or symptom occurs that may be a danger signal of this disease. Therefore, it is well to have some knowledge of what these early symptoms may be.

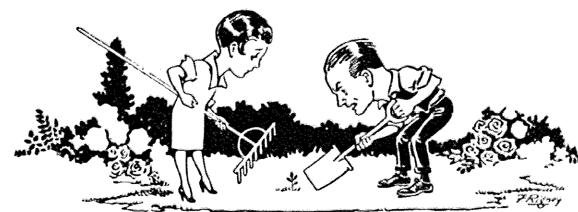
In cancer of the skin the signs are readily detectable. Swellings not due to injury and which do not disappear; ulcers which do not heal; changes in the appearance of the scars of old burns; pigmented warts or moles which begin to grow suddenly larger, become ulcerated or otherwise change are the most common of these signals.

The first sign of cancer of the breast may be a small painless lump, or there may be a discharge from the nipple.

Cancer of the uterus may manifest itself by an irregular blood-tinged watery vaginal discharge without any pain. Such a discharge is particularly

to be suspected if it appears between menstrual periods or after the menopause. An odorous discharge even in the absence of blood may be present in cancer of the uterus though it usually occurs at a relatively advanced stage in the course of the disease.

A hard ulcer or thickening of the tissue lining the tongue, cheek, gum margin, palate or tonsil, which appears in a person past middle age and does not heal in a period of a few weeks, may indicate cancer. Diminished mobility of the tongue with associated difficulty in swallowing and speaking, and severe shooting pains, are early symptoms of cancer of the tongue. Ulcers are often



You rid your garden of the smallest weed. Why not root out the most devastating growth in the human system?

found at the sites of jagged teeth, ill-fitting dental plates, and pyorrhea or tooth infections. Ulcers on the lips—seen in habitual pipe-smokers—must be suspected.

Cancer of the stomach may be suspected in a person of middle age who develops pressure and slight pain in the upper abdominal region, loss of appetite, loss of weight and strength, nausea, and vomiting. Any symptoms of dyspepsia in a person of middle age, which do not clear up in a few days, may be due to cancer. In some instances a previous condition of indigestion becomes exaggerated. An x-ray examination after the stomach has been filled with a mixture of barium (which makes the stomach show up on the x-ray film) is often needed to make the diagnosis.

Pain is not frequent or constant in the early stages of cancer of the rectum. The most characteristic symptoms are general discomfort in the rectum, difficulty in emptying the bowel, constipation that is sometimes followed by diarrhea with discharge of small amounts of mucus. Bleeding may or may not be present.

Sometimes the only sign of cancer of the large intestine is blood in the stool. This may be bright red, or, if it is blood that has remained for some time in the intestine, it will be black. Constipation developing in middle age and at times alternating with diarrhea may be a warning that cancer of the intestine is present. Again the x-ray is indispensable. In this case the examination is made after the barium has been administered by enema.

Blood in the urine may be a symptom of cancer of the bladder or kidneys. X-ray photographs to establish this diagnosis are taken after a dye has been administered into a vein and excreted through the kidneys or else after the injection of a dense substance (lipiodol) into the ureters or tubes leading from the kidneys to the bladder.

Cancer of the bones occurs in younger people than the other forms of cancer described. Here pain and swelling are frequently early signs. Whenever such pain persists either with or without swelling, an x-ray must be taken.

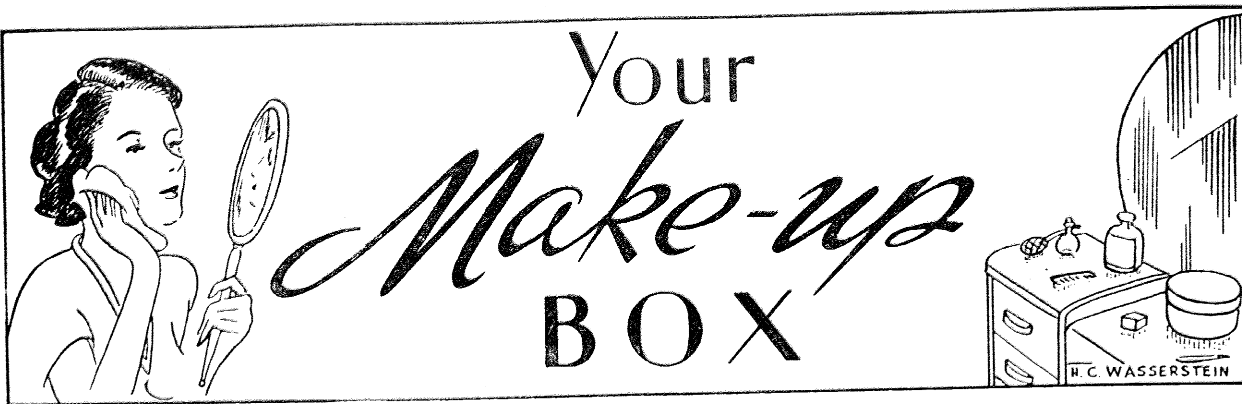
Unfortunately a definite warning sign does not always occur when cancer is in its earliest stage, and the patient may be aware that trouble is present only when the disease is advanced. As was previously stated the earlier the disease is treated the better the results of treatment. For this reason it would be well if all people past 40 would have complete examination by a physician at regular intervals, so that any "silent" cancer could be discovered and treated.

X-rays and the element radium have the power to kill cancer cells, and are used in conjunction with surgery in the treatment of cancer. In cases where surgical removal is performed it is followed by x-ray and radium treatment in order to prevent further growth and spreading of the disease. In some cases x-ray and radium treatment also precede surgical operation, and in others radium or x-ray treatments are performed without surgery. There is a constant improvement in the equipment and technique of x-ray and radium treatment, so that cases are curable today which were considered hopeless ten years ago. Under no circumstances should vaccines, salves, radium waters, or any of the countless "cancer cures" be used. These have all been proved valueless, and they only serve to delay effective treatment.

Health Conditions in School Buildings

According to the North Carolina State Board of Health school buildings should be equipped with:

1. A safe and adequate water supply.
2. Sanitary toilets and toilet paper.
3. Sanitary drinking facilities.
4. Lavatories, soap, and individual towels.
5. School lunch facilities.
6. Proper lighting and seating.
7. Adjustable heat, humidity, and ventilation.
8. Individual places for hats and wraps.
9. Adequate play space, equipment, and supervision.



FIRST IT WAS VASELINE TO KEEP THE lips from getting chapped. Then came colorless pomade, which accomplished the same purpose, but smelled and tasted better. And very soon the more daring women began to buy their pomade in the "natural" shade. Of course they wouldn't admit it was for adornment, at first—just a matter of protection. But from that it was an almost imperceptible step to the frank use of lipstick.

LIPSTICK

by

MADELINE ROSS

Dermatologists can't quite agree on whether they approve or condemn the use of lipstick. Some say it protects the lips from wind and cold. Others insist that it dries them and that it may even possibly be responsible for malignant infection. But most women aren't waiting for the dermatologists to come to an agreement. They have made up their minds long ago. And as far as they're concerned, if the medical authorities don't like the present form of lipstick, they can go back into their laboratories and invent a satisfactory substitute. So the question is no longer, "Shall I use lipstick?" but, "Which lipstick shall I use?"

There are several varieties on the market today, but all of them consist essentially of a colorless waxy base, plus pigments and perfumes. And whether they cost a dime for a generous stick at the five-and-ten, or two dollars at a swanky store on the Avenue, what you get is much the same.

The base gives lipstick its consistency. It is made of waxes and oils blended together to form a semi-solid mass. If the formula is too long on oils, and short on the harder waxes, the lipstick will feel sticky when it's put on. And if you take it out on a really hot summer day, it's likely to have the consistency of butter that has been left out of the refrigerator too long. Then there's the chance that the manufacturer was too cautious and overloaded his formula with solid waxes. In that case you can rub and rub, and by the time you reach the desired color effect, your lips will probably feel as if they'd had three coats of heavy floor wax.

But generally the manufacturer is not likely to go to such extremes. Because if he does, you're likely to buy his competitor's brand next time, and before he knows it he'll be out of the business.

Color is a much more difficult problem than consistency. Women who use lipstick demand that the color should stay on for some time; they can't be bothered with putting on a new coat every few minutes. At the same time, they want to select for themselves the color they prefer. And that makes life complicated for the cosmetic manufacturer.

The dye that makes lipstick indelible is known as bromo acid. In its original state its color is orange. But as it comes into contact with moisture and air a chemical reaction takes place and the color is changed to a purplish red which actually stains the lips. *Tangee* is an example.

It is possible, of course, that you don't want your lips to be purple. You may want them to stay bright red all day. The manufacturer tries to pacify you by mixing another red dye with the bromo acid. When you apply this lipstick, the color of the non-indelible dye is predominant. But if you look into the mirror an hour later you will note a decided change in the color. And in a couple of hours your lips will have become the red-violet characteristic of bromo acid. That's because the red aniline dye has, by this time, worn off, and only the indelible color remains on the lips.

The manufacturers have a third alternative. Lipstick can be (and occasionally is) manufactured without bromo acid, using the aniline dye alone for coloring. The color of such a lipstick does not change as time goes on. But there is no indelible stain, and the color wears off quite rapidly.

A factor which must be taken into consideration in discussing indelible lipstick is allergy. Some people are hypersensitive to bromo-acid dye. Usually the allergy, if it is present, manifests itself in an itching and cracking of the skin of the lips. With continued use of the dye the lips may swell and become severely irritated. People who are sensitive to indelible lipsticks would do well to switch to one of the brands advertised as "non-allergic." It isn't quite true that such products are "non-allergic." In fact, there is no substance known to which some few people are not sensitive. But such lipsticks do have the common allergens removed, and, in all likelihood, if you can use cosmetics at all you can use these with safety.

Another ingredient which is likely to trouble sensitive people is perfume. Some perfumes form an irritating combination with the other ingredients of the lipstick.

A final word on indelibility—while lipstick users have been quietly blessing the availability of good, lasting lipsticks, hotel and restaurant owners, and even hostesses who use it themselves, have been cursing it roundly. For lipstick that's indelible on your lips is likely to be just as indelible on damask napkins or your hostess' best towels and pillow cases. Some restaurants are trying to soften the blow by serving lipstick tissues with their napkins, and a few desperate hostesses have switched to red napkins and face towels. But still, trade journals estimate the annual loss of linens due to lipstick as running into hundreds of thousands of dollars.

THE PROCESS OF CHILDBIRTH

MARK HORNSTEIN, M.D.

An obstetrician explains what women want to know about pregnancy and labor.

OF ALL BIOLOGICAL PROCESSES NONE, PERHAPS, interests the average person more than that of childbirth. For the layman it is a subject that is frequently replete with mystery, and for many expectant parents it takes on the aspect of an adventure into the unknown. There is, to be sure, some justification for this attitude of awe in the face of impending birth, for even under the best modern conditions, vexing problems can arise. But an intelligent understanding of the fundamentals of the process will remove many needless fears and at the same time make possible better management of both pregnancy and the actual delivery. It is to give the lay reader such an understanding that this article is presented.

The enlightened expectant mother today who is able to do so places herself under the care of a physician as soon as she thinks conception has taken place. Indeed, many women consult a physician before embarking upon motherhood in order to make sure that the condition of their health warrants undertaking the bringing forth of children. Unfortunately not all women can afford prenatal care by a physician. Some of those who cannot may receive competent care in clinics, but others, especially those in rural communities, do not have access to clinic facilities.

THE SYMPTOMS OF PREGNANCY

Most women know that failure to menstruate on time usually signifies pregnancy, though they also know that this is not an infallible sign. If a woman of child-bearing age who has been living a normal life and who usually menstruates regularly fails to menstruate within a reasonable number of days, the chances are that she is pregnant, although there are cases in which a considerable delay is not due to pregnancy. There are two symptoms of early pregnancy which also usually accompany normal menstruation but which in the case of pregnancy persist for days or weeks, namely, tenderness of the breasts and a heavy sensation in the lower abdomen. The malaise or nausea of pregnancy seldom appears before the third week and a positive diagnosis of pregnancy by manual examination is usually not possible before the second month. The biological tests known as the Friedman and the Aschheim-Zondek tests, in which urine from the woman is injected into a female mouse or rabbit, will give a positive diagnosis at about the third week.

The medical supervision of early pregnancy entails physical examination, a special obstetrical examination, and instruction on the hygiene of pregnancy. Frequent reexaminations are advisable in order to detect possible complications that may arise in spite of the best prenatal care, and to watch for impairment of the various body functions as a result of the added burden.

COMPLICATIONS THAT MAY ARISE

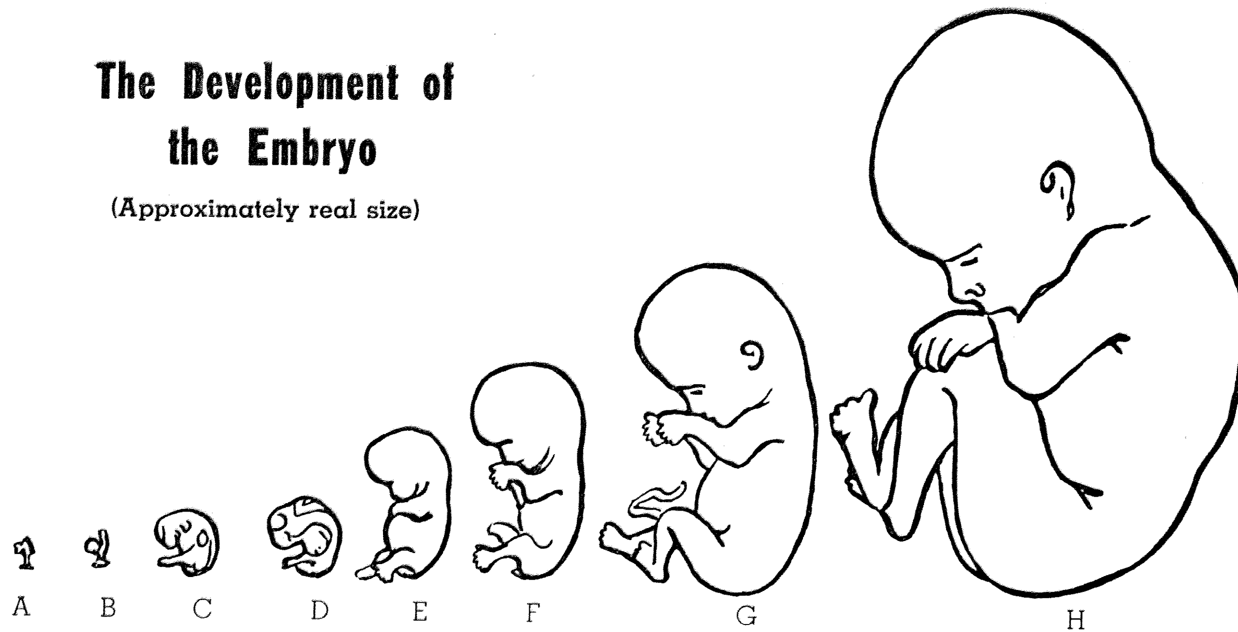
One of the most common as well as the most serious complications is that known as the toxemia (blood poisoning) of pregnancy. It is the most serious because the prospective mother is usually unaware that anything is wrong until a serious stage has been reached. The most important duty of the physician in charge of a pregnancy is to watch for this condition which can be detected early by frequent urine examinations and blood pressure tests.

Advice on diet, exercise, dress, and proper living form part of the prenatal care, although in general the hygiene of pregnancy does not differ materially from the routine of the normal healthy person. Measurement of the pelvis, listening to the heartbeat of the unborn child, and the determination of the child's position in the womb are of little importance during the early months, and it is only at a later stage that the doctor is much concerned with these factors. Regardless of how little attention is paid to other factors, however, the wise doctor is never remiss about urine examination and blood pressure.

Various complications may arise in the course of pregnancy, each calling for some appropriate action or inaction. Organic deficiencies of the kidneys, heart, or lungs may be so mild as to escape

The Development of the Embryo

(Approximately real size)



(A) 12 days; (B) 21 days; (C) 30 days; (D) 34 days; (E) 6½ weeks; (F) 2 months; (G) 3 months; (H) 4 months.

detection in the early months, but will be brought to light at a later stage. Some such deficiencies can be remedied by rest and medication, a few by diet, while some may require premature termination of pregnancy either by artificially bringing on labor or by cæsarian section, that is, delivery of the baby by means of surgical incision of the abdomen. Such a procedure is often necessary when kidney disease is aggravated by pregnancy, and may legitimately be resorted to, even though there is not a very good chance of delivering a viable baby, that is, one capable of living.

The decision of whether or not to resort to premature termination of pregnancy is one that calls for full exercise of the doctor's ability. He prefers to allow the unborn child time to reach the maximum degree of maturity consistent with viability, and on the other hand he must not allow the pregnancy to progress so far that it will endanger the life of the mother. Sometimes the latter mistake is made, the pregnancy being dragged out while the mother is treated for her ailment by various medical means. The possible danger in such a procedure is not only in the risk to the mother's life, but the child may also show the effects of the malady by stunted growth or early death. Early interruption of pregnancy therefore sometimes offers a better chance for both mother and child.

Among the danger signals for which the patient must be on the lookout and which must be immediately reported to the doctor are blood stains and bleeding. However, moderate staining without pain is not uncommon and does not signify an imminent miscarriage, which is preceded by cramps or early backache. During the later months even staining alone may portend a serious complication such as *placenta previa*, a condition in which the afterbirth is implanted low. Free bleeding at any time, with or without pain, is a danger signal and requires the attention of the doctor.

THE SYMPTOMS OF TOXEMIA

Most booklets of instruction issued by maternity agencies warn the expectant mother to report such symptoms as headaches, dizziness, and dimness of vision. These are usually late complications of the toxemia of pregnancy which should never arise if proper care has been taken previously. The experienced doctor does not wait for these symptoms before acting.

The vomiting of pregnancy may also be considered as a result of a toxemia. Vomiting normally subsides before the end of the third month but when it persists special measures will be called for. If it is what is known as "pernicious vomiting" it is usually curable by medical means, although sometimes artificial interruption of pregnancy will be required.

The actual delivery of the child is described by the term "labor," which is a literal translation of the French *travail.* Both terms have been used by English and French respectively for centuries, although the latter have also substituted the less frightening *accouchement* which means literally "being brought to bed." The fact that these terms were used at all is at least a hint that childbirth was not as easy in less enlightened times as some of our patients are inclined to believe. The science and art of obstetrics as we know it is much younger than the other branches of medicine. Until recent times practical women attendants had the run of the field, and still have, to a considerable extent, in some countries as well as in some sections of our own. It is true that even in the middle ages men "specialists" were called upon in emergencies. These, however, were usually preceded by the priest, and with good reason, for the prevailing squeamishness of the times with regard to masculine presence in the delivery room did not favor the male "specialist's" acquisition of much knowledge of the art. Often these men understood the problem less than the midwife.

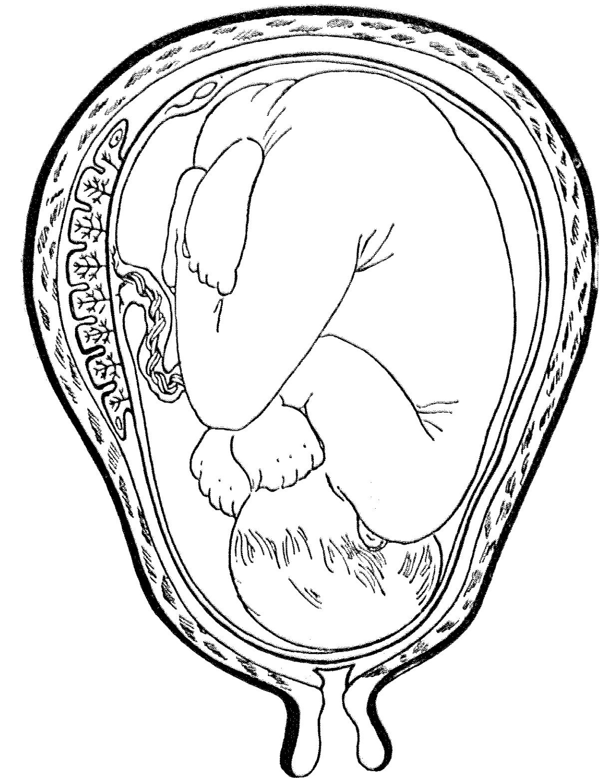
THE BEGINNING OF LABOR

But the concern of the expectant mother on the subject of labor is with a few specific questions: When will it take place? How is she to know that the time has come? How long will it take? Will she have to suffer much?

She knows in a general way that labor is due about 280 days after the last menstrual period, but she is often reluctant to believe when told that it may take as much as a full month longer. On the other hand it does not strike her as strange that some children are born at seven or eight months. The fact is that pregnancies do last longer than nine or ten months, and although such prolonged gestations sometimes mean difficult labor they often have no significance whatever.

The patient will know that labor is approaching if there are stains, but actual labor does not begin until the muscular walls of the womb start contracting. In easy cases these first contractions are free from pain, and the patient may not be aware of anything unusual until quite late in labor. The contractions may be timed at varying intervals, from a few minutes to a half-hour or even an hour apart.

These contractions serve two main purposes: to enlarge the opening of the womb; and to expel the child from the pelvic cavity. But the child cannot emerge from the pelvic cavity before it has emerged from the womb. The common practice of urging a woman in childbirth to make expulsive efforts before she feels a spontaneous urge to do so is, therefore, not only useless but definitely injurious to herself and occasionally to the child. During this opening stage the patient should remain in bed in a relaxed position. The notion that sitting or walking are of benefit is erroneous and is based on the fallacy that gravity is an aid in childbirth. The manner in which the womb's contractions bring about enlargement of its opening is as follows: The contractions of the muscular structure making up the walls of the organ take place in an up-and-down direction in such fashion that the conical lower end of the womb is pulled up into the wider upper part of the womb. As the opening is originally situated in the center of the conical lower end, the effect of this upward pull is to widen the opening. Another important result of the contractions is that the lower end of the womb is pulled up out of the pelvic cavity, making more room for the passage of the child. Still another beneficial result is that the shortening of the organ renders it thicker and thus increases its expulsive powers.



The unborn child in the womb at a late stage of pregnancy.

It has often been asked why such an elemental process as childbirth should be productive of pain. In truth, more and more evidence is coming to light which indicates that the contractions of the womb are in themselves not particularly painful, any more than the normal con- (*Continued on page* 32)

Are You a Sodium Bicarbonate Addict?

CARL MALMBERG

Soda pills and "alkalizers" may relieve pain and distress, but they're dangerous if you become dependent on them.

Bicarbonate of sodium, or "soda," as it is familiarly called by those who are addicted to it, is one of the most harmless substances used in self-medication. For this reason it has found its way into a number of exorbitantly priced proprietary products, and is used in large amounts by those who buy it as sodium bicarbonate from their pharmacists, or as baking soda from their grocers.

Sodium bicarbonate relieves some types of intestinal distress which are of a simple but sometimes obscure nature, and it also gives dramatic relief from the pain of some very serious stomach ailments. It is because of this latter fact that real dangers are involved in its indiscriminate use. It may give enough relief to mask for long periods of time the symptoms of serious disease, and thus prevent early diagnosis and treatment.

THERE'S ALKALOSIS, TOO

Stomach and intestinal ulcers generally cause severe pain. This pain is almost always promptly relieved by "soda." Moreover, such pain can be relieved for long periods of time by the regular use of this substance. However, the drawback lies in the fact that the ulcer may get worse and sudden emergencies such as internal hemorrhages or perforation of the bowel may ensue while the pain, which should serve as a warning, is kept in the background by this simple medicament. When abdominal pain or distress is chronic, regular medication with "soda" is a dangerous procedure unless a diagnosis of the cause has been established and use of the substance has been advised by a physician. The dramatic relief which "soda" sometimes gives is often accompanied by a dangerously false sense of confidence that all is well.

"Soda" often causes belching, and when belching is desirable it often gives relief. Belching follows the use of "soda" because the acid in the stomach reacts with the "soda" to give off a gas, carbon dioxide, which usually forces its way out by means of the belch. Occasionally, however, the exit from the stomach is tightly shut so that the "soda" gives off the gas and causes distension of the stomach with considerable more distress than existed before.

In the past few years the notion of alkalinizing has been spread far and wide through the medium of advertisements. "Soda" is an alkali and has therefore achieved prominence in this field. Although this subject has been mentioned in these pages before it is worth repeating that the entire notion of indiscriminate alkalinization is the sheerest nonsense. Alkalinization is of value only in special conditions, and excessive alkalinization presents a definite danger.

Although it would take relatively large amounts of "soda" or any other non-corrosive alkali to produce the condition known as alkalosis, it can be done and persistent alkalinizers have accomplished this strange but dubious feat. The amount of alkali necessary to produce this condition, in which the blood becomes excessively alkaline, varies somewhat with different individuals, but is possible only when very large amounts are taken. Those who take "soda" regularly in quantities which they themselves determine should bear this possibility in mind.

One of the early signs of excessive alkalinization is a burning sensation on urination. This is caused by the large quantities of alkali in the urine. Soon after this effect is noticed serious depression of breathing may occur. Convulsions have also occurred after the excessive use of "soda."

KEEPING ON THE ALKALINE SIDE

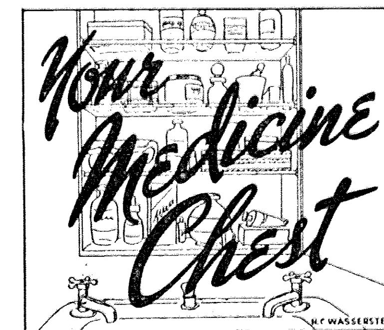
As for attempting to "keep on the alkaline side," that is, alkalinizing the system, the body, the blood or what have you, it is well to remember that actual alkalinizing of the system is of value only in certain very rare conditions, and that it is possible only with large amounts of alkali. Therefore, the widely advertised proprietary alkalies not only have no use, but the doses recommended are far smaller than those which would be necessary really to alkalinize. It is the old story of many patent medicines: what they claim to do won't do you any good—but they don't even do what they claim to do!

An ironical and sometimes tragic aspect of the use of stomach "alkalizers" or anti-acids is that the symptoms for which so many extravagant claims are made, such as heartburn, distension, gas, belching, regurgitation, bitter or brown taste in mouth, are frequently caused by a total absence of acid in the stomach. Strangely enough, "hyperacidity" or indigestion due to excess acid in the stomach produces symptoms which are exactly the same as those caused by "achlorhydria" or absence of acid in the stomach. It is true that the former is more common but the latter becomes more and more frequent with advancing age. In this latter condition heartburn, gas, and belching may be relieved by sipping dilute acid and made worse by taking alkalies. All of which goes to prove that self-medication without a doctor's supervision may be a foolish if not a dangerous business.

Among the common proprietaries sold for the treatment of minor ailments and for alkalinization, and which contain "soda" as an important constituent are: *Alka-Seltzer, Sal Hepatica, Alkalex Tablets, Bell-Ans, Sodamints, Citro Carbonate, Alka-Zane, Bi So Dol, Peptans, Cal-Bis-Ma, Al-Caroid,* and *Papsomax*. The "Citrates and Carbonates," which every druggist mixes, also fall within this category.

It is safe to use a teaspoonful or so of "soda" for intestinal distress if you do so only occasionally. If you must buy an alkali for such distress you can get it for a few cents at your grocer's if you ask for baking soda, and for a few cents more you can get chemically pure sodium bicarbonate at your druggist's. Both are identical in all essential respects, and it doesn't matter which you get. If you want to waste your money, be certain to ask for some special type of advertised tablets or powder; at best such products can do no more for you than ordinary baking soda.

If you need "soda" frequently in order to allay stomach pain or distress, then you ought to go to a physician to find out what is wrong with you. Your symptoms are a sign that an expert diagnosis is needed. When this is made then you can get rational treatment for your ailment and thus cure or control it before it gets beyond control and puts you in the hospital.



First Aid for Burns

Burns are among the most common household accidents, and you will do well to see that your medicine cabinet contains the few articles that are essential in the proper treatment of this painful and often serious emergency. If there isn't room at present in your medicine chest for these items, make room by throwing out some of the nondescript potions, pills, and salves that have accumulated.

First degree burns are those in which the skin is red but not blistered or broken. They should be treated by immersing the injured part in running cold water. This will relieve the pain and diminish the inflammation. In most cases it is all that need be done. However, if the burn is extensive as in the case of sunburn the best treatment is to get into a tub of cool water to which a pound or so of bicarbonate of soda or boric acid has been added; or a cold, sopping-wet compress of boric acid solution (one teaspoonful to a glass of water) may be laid on the affected part. Oily substances may be used but they are much less effective than wet compresses because they hinder evaporation of heat from the burned area. However, if the circumstances make a cream more convenient, ordinary cold cream, vaseline, or olive oil may be used. Butesin picrate ointment contains an anesthetic that relieves the pain of a burn but it *should never be used over large areas* because of the danger of poisoning; and it should never be used for severe burns in which the skin is broken or blistered.

Such burns, known as second degree burns, should, if possible, be treated by a physician because of the danger of infection. Until a physician can be seen, first-aid treatment is the same as for first degree burns except that no greasy substances of any kind should be used, since they favor the introduction of germs and infection of burned areas.

In the more severe so-called third degree burns, emergency medical and often hospital treatment is imperative. In severe burns it is not only necessary to relieve pain but it is even more important to combat the shock that almost always accompanies a severe and extensive burn. Furthermore, in a hospital it is much easier to apply the medicaments that will prevent the poisoning of the system, infection, and terrible scarring that so often accompany or follow a third degree burn.

The most important medicament used in such severe burns is tannic acid. If immediate medical care cannot be obtained or if the patient cannot be rushed to a hospital at once, tannic acid solution should be applied to the burns. For this reason from two to three ounces of tannic acid powder should always be kept in the medicine chest. The solution should be prepared *just before* use by dissolving four teaspoonfuls of the powder in a glass of water. Sterile gauze soaked in this solution should be laid over the burned area. If tannic acid powder is not available, use cooled, very strong tea (two teaspoonfuls of tea steeped for 15 minutes in a cup of boiling water). Such tea is virtually a solution of tannic acid.

Editorials

Rural Group Health Plan We welcome the announcement by the Farm Security Administration that farm health cooperatives are to be set up in various rural areas of the United States. Under the plan, some 77,000 families who are receiving aid from the FSA will be able to get complete emergency medical, dental, and hospital care in return for a monthly payment of $2 per family.

Such a plan, when put into operation, should help materially in providing medical facilities to a group of citizens whose medical needs have long been neglected—the farmers.

No Money—No Doctor We hope that those doctors who are opposed to health insurance on the ground that it would destroy the sacred "personal relationship" between physician and patient, read the following Associated Press dispatch which recently went out to many newspapers throughout the country:

Philadelphia, Oct. 24.—A son born unaided yesterday to Mrs. Marion Bricker, twenty-two, died before the belated arrival of medical aid summoned by police.

Police Sergeant Edwin Johnson said he telephoned "half a dozen" physicians after an anonymous call but that "none of them was willing to go out at that time of day on a charity case."

"I bawled them out, but it didn't do any good," he said.

Johnson finally communicated with Dr. Anthony Donato, a hospital physician. Dr. Donato was taken in a police automobile to the woman's room, but the infant was dead. Sergeant Johnson reported Mrs. Bricker was "out of funds, hence unattended delivery."

The mother is recovering.

In view of this short but tragic story we feel justified in wondering whether some of the medical spokesmen who loudly insist that the "personal relationship" be maintained, do not actually mean a *cash* relationship. And while we constantly hear much fine talk about the "right of the patient to choose his physician," we cannot help wondering if what is not actually meant is the *right of the physician to choose his patient.*

According to the "Principles of Medical Ethics" formulated by the American Medical Association, "the poverty of a patient . . . should command the gratuitous services of a physician." This is an expression of a noble sentiment, but the many unattended sick in America today need something more tangible than fine phrases. Ask Sergeant Johnson—he knows. He "bawled them out, but it didn't do any good."

Such a shameful occurrence only serves to emphasize the need for a maternal and child health program such as that described by Dr. Martha M. Eliot elsewhere in this issue. It also emphasizes the pressing need for a system of health insurance, under which such occurrences would be impossible.

Amendment Number Eight The people of New York State will have an opportunity to bring the passage of a health insurance bill closer when, on November 8, they go to the polls and vote on the proposed amendments to the State Constitution. Amendment Number Eight would permit ". . . the use of state money and credit for social welfare, including provision by insurance or otherwise, against the hazards of unemployment, sickness, and old age." We urge all our New York readers to support this progressive change in the Constitution, and to vote "Yes" on Amendment Number Eight.

Pay for Internes We should also like to see the passage of the Burke Bill for pay to internes in New York's municipal hospitals. This bill, which failed to pass the City Council in the last session, is now up for consideration again, and, if passed, would grant each interne a salary of $680 a year.

Certainly this is not too much to pay for the services of these young physicians whose work is of such importance to the community. No other profession is expected to donate a year or two of free public service as a prerequisite to individual practice, and to ask medical graduates to continue to do so is obviously unfair. Moreover, it is against sound public policy, for underpaid, overworked hospital personnel cannot provide the type of hospital care which any community must have in order to be a safe place in which to live.

Mayor LaGuardia and New York City councilmen should be urged to pass the Burke Bill.

THE CONQUEST OF DIABETES

MILTON MALEV, M.D.

How four men, working in widely remote places, solved the mystery of a disease that was 100% fatal.

A diabetic person is like a beggar sitting on a bag of gold—a striking example of the tragic paradox of want in the midst of plenty. His veins are loaded down with the very sugar that he needs to sustain life, but he cannot use it. He lacks the spark that will burn the sugar down into energy, and it continues to circulate in his blood, cold and unused. Worse: without the burning of sugar, even the fats that he eats cannot be completely burned, for fats burn only in the presence of burning sugar, and when incompletely burned these fats leave heavy, poisonous acids that bring on coma and death. In the vain and never-ending effort to dilute the sugar and acids that clog his blood-stream, the diabetic drinks enormous amounts of water, and passes enormous amounts of sugar-loaded urine. As the months go on he loses weight and strength, and eventually lapses into the coma caused by the accumulated acids. This picture of thirst, emaciation, and coma that constitute diabetes has always been recognized as a specific disease, and all the ancient writers on medicine give descriptions of it. But of its nature and cause they were, of course, completely ignorant.

The story of the conquest of diabetes is the story of providing artificially, for those who lack it naturally, the first item in this diabetic house-that-Jack-built: the spark to burn the sugar that will furnish the spark to burn the fats completely. That artificial spark was discovered sixteen years ago. Throughout the centuries diabetics always died—now they live. The story of the discovery that gave them the gift of life covers many lands. It includes a series of steps none of which would have had significance except for the preceding one. Each of the collaborators in this work carried it one step further until it reached its successful culmination only a few years ago.

SCENE ONE: ENGLAND

The drama has four scenes, the first one of which is seventeenth century London. Dr. Thomas Willis wondered about these diabetics of his, these patients whose flesh, he said, seemed to turn to water and to be passed out in their urine. The secret of this fatal thirst-disease, he felt, must be in the urine. Chemical methods for analyzing urine were, of course, unavailable to him, but he had his five senses and he used them. The urine of diabetics, he said, tasted sweet every time. He knew, because he had tasted it in every case he encountered. Here was the first break in the fog that had surrounded the disease. It was somehow connected with the inability to use sugar; sugar was eaten and then excreted unchanged.

A good beginning, but it left the major question unanswered. What was it that made a person diabetic? Where in his body was the lack that made him unable to use sugar, so that it collected in his blood and was spilled out through his kidneys? Was it some nerve disease? Was there something wrong with the spleen or liver or with the blood itself? Until the seat of the disease could be found, there was no hope of understanding it.

SCENE TWO: GERMANY

And that brings us to Scene Two: this time Germany in the latter half of the last century. It must be confessed that the world-renowned Professor Minkowski was not interested primarily in diabetes. In his experiments with the pancreas he was interested in its surgery and its effect upon digestion in the intestine. The pancreas is a gland shaped much like a pollywog, with a large head and a long tail, and it is plastered crosswise against the backbone in the upper part of the abdomen. For many years it was known that it manufactured a digestive juice which it discharged into the intestine through a short duct protruding from its head—a juice which has the power to digest meat. No one suspected that the pancreas had any other function besides this, and certainly no one suspected that in its peculiarly shaped bulk was the seat and origin of the spark that burned sugar in the blood.

True, for twenty years there had lain hidden in the medical literature a brief report offering a clue to the double nature of this organ. In 1869 an anatomist by the name of Langerhans had been studying cut sections of pancreas under the microscope and he noted for possible future reference a fact which was later to prove all-important: scattered throughout the gland there were little groups or islands of cells that were *different* from the tissue cells of the gland itself, cells that were not connected with any duct, and that apparently took no part in the manufacture of digestive juice

which was thought to be the pancreas' only function. What these "islands" of Langerhans were doing there, no one had bothered to try to explain; so far as Minkowski or anyone else knew, they had no function.

Minkowski was engaged in cutting out completely the pancreas glands of a number of dogs and studying the effect of this operation on the digestion of meat in the intestine. He noted that after the pancreas was out, his dogs would invariably become thin and remarkably thirsty, and would eventually die in coma, but the fact that these symptoms were a perfect replica of what happened in human diabetes seemed to escape him for a long time.

A CHANCE OBSERVATION

This missing link in the chain of evidence was first discovered by one of his assistants, one whose name is unfortunately lost to posterity. This unknown hero, a member of the hard-driven corps that worked and worshipped at the feet of the great Minkowski, was snatching a brief moment of rest one day in the sunny yard in back of the laboratory building, the yard in which the dogs, operated and awaiting operation, were wont to play. As he idly watched the dogs Minkowski's assistant was struck by a peculiar circumstance: the puddles of urine left by the operated, pancreas-less dogs were overrun with swarms of eager flies; the puddles left by the healthy dogs were scorned.

He made mental note of this fact and returned to work. The next day he watched the dogs again and there seemed to be no question about it—there was something about the urine of the operated dogs that attracted those flies. The Minkowski training was one in which thoroughness was the watchword, and so this trivial fact was promptly investigated. The urine of the pancreas-less dogs was analyzed and it was found to be loaded with sugar and acids. The dogs' blood was analyzed and the same was true there. This was the second and greatest break in the fog: diabetes was connected with malfunction of the pancreas. But what part of the pancreas? That was easy. In hundreds of laboratories the pancreas of every person who died of diabetes was eagerly studied under the microscope, and the answer was always the same: the gland part of the organ, the juice-producing part, was always intact; the islands of Langerhans were shrunken and obliterated. Minkowski and his co-workers built well on the foundation that Willis had laid down.

It was immediately obvious, of course, what direction any effort must take towards the alleviation of diabetes. Somehow, island tissue must be supplied to the sufferer. Diabetics were fed pancreas in every form, and from every animal, and the effect on the blood- and urine-sugar studied. No good. Before the pancreas could be absorbed it was thoroughly digested in the stomach and destroyed. It became clear that if this substance was to be supplied effectively it would have to be injected directly under the skin or into the blood. And so pancreases of various animals were chopped up very fine and extracts were made of them with various acids, alcohols, and alkalies. The resulting solutions, hopefully supposed to contain the essence of the Langerhans islands, were injected into long-suffering diabetics. The results were just as discouraging as before. The blood-sugar stayed up and the urine remained loaded, and for a reason which soon became obvious to everyone. Every pancreas, of course, contained, in addition to its island tissue, its gland tissue which was chock-full of digestive juice, and in the process of manufacturing the extracts this digestive juice destroyed the island tissue just as effectively as if it had been passed through the stomach and intestine. And here progress towards a diabetic panacea was up against a stone wall—there were no means of obtaining island tissue free from its surrounding, destructive, digestive-juice-containing gland tissue. The islands are tiny microscopic dots, and no mechanical means could be devised for getting them free.

SCENE THREE: JOHNS HOPKINS

The solution of this apparently insoluble problem is the theme of Scene Three—this time America in the year 1909. Dr. W. G. MacCallum, whose scientific life is a brilliant record of anatomical studies in every phase of disease, was pathologist at the Johns Hopkins Hospital, and that year he was concerned with a study of atrophy—the process whereby parts of the body become shrunken, useless, and inert. Such atrophy comes on when the nerve or blood supply to a limb or organ is somehow interrupted, and it lies unused. MacCallum wanted to know what would happen to a gland if its nerve and blood supply are permitted to remain intact but the gland is rendered useless by tying off its duct so that it cannot discharge its products? The pancreas was a handy gland to work on and MacCallum decided to use it to find the answer. In a series of dogs he carefully tied off the duct through which the pancreas discharges into the intestines the digestive juice it manufactures. The dogs remained perfectly healthy, apparently, but after weeks or months when they underwent autopsy, and their pancreases were looked at under the microscope, the picture was an astounding one.

Every speck of gland tissue had been destroyed and replaced by harmless fat—and in this fat like little beads there remained the perfectly healthy, intact Langerhans islands—*island tissue free from gland tissue.*

The theme of Scene Four is now, of course, perfectly obvious. The wonder is only that it waited thirteen years to be enacted. The scene shifts to the University of Toronto in Canada, and the principal actor is Frederick Banting. We need not dwell here on the story of his life—it has been told and retold. This tall, quiet, sandy-haired young surgeon from a small town in Ontario Province had returned from the World War to find his practice vanished, and, in the general economic upheaval of the times, hard to reestablish. He secured a low-paid post as demonstrator of anatomy to freshman medical students at the University of Toronto. The day came when the pancreas was the subject for the next day's demonstration, and in his characteristically plodding, thorough fashion, Banting prepared for his lecture by reviewing the physiology of the organ. The record, from Willis through Minkowski and MacCallum, lay before his eyes, and to his everlasting credit he realized that in that record lay every element for the successful artificial production of the substance that would mean life to a diabetic. Banting was no Minkowski, and no MacCallum. He had little experience or training in research; all he had was a precious idea and the ability and willingness to work on it.

OF DOGS AND MEN

With his idea in mind he approached the Professor of Physiology at Toronto to explain what he proposed to do and to ask for an assistant, the use of a laboratory, and a few dogs to work on. His request for an assistant was an expression of the inherent modesty and honesty of the man; the work ahead would require accurate chemical analysis of blood and urine, and he did not himself feel qualified to do it. Charles Best, a second-year medical student, was assigned to assist him and they plunged into the work. Banting's surgical training stood him in good stead. Following the MacCallum technique, he tied off the pancreatic ducts in his animals and waited several weeks for the gland tissue to die and be replaced by fat. He then carefully removed the organs and made extracts of them.

That extract, if his theory was right, must contain a substance that would burn sugar in the blood and eliminate it from the urine. No human subjects were needed for the experiment: his pancreas-less dogs were as completely diabetic as Minkowski's had been forty years previously. He injected his extracts under the skin of his diabetic dogs, and one can picture the tenseness and anxiety of the two men as Best stood before his chemical table measuring the blood sugar before and after the injection. The result is now history—the substance worked and today the world has insulin.

MILLIONS ARE SAVED

This, of course, is not the end of the story. Means had to be found to purify and concentrate and standardize the extract; to produce it in commercial quantities and to study its dosage and its dangers. All these things have now been done. There are millions throughout the world today who live from day to day, and are kept healthy and active, by virtue of this marvellous extract. Without insulin they would certainly die.

Frederick Banting—
He completed the job

There is a moral in this long and complicated story that may, perhaps, be stated here. In these days of intense national rivalries, when one hears so much nonsense about the supposed scientific superiority of one race over another, it is well to remember this story of the discovery of insulin. The work was begun by an Englishman, continued by a German Jew and an American, and finally brought to its culmination by a Canadian. Science is timeless and international; it belongs to no race or nation; it belongs to mankind.

PSYCHING THE JITTERBUG

PERCY SEITLIN

Are the devotees of "swing" completely wacky, or is there a method in their madness? An analysis of a current phenomenon that has given rise to much comment and argument.

I don't like the word "jitterbug," but that's what everybody is calling the kids who go for swing, and we'll have to use the word a few times just for the sake of identification.

What they mean by *jitterbugs* is a lot of kids who've got the jitters and express this fact in a particularly spectacular way when they're listening to a certain kind of music. The kids are not *all* wacky, though, as this word *jitterbug* would seem to imply.

This jittering is dancing, no matter how you look at it, and dancing in response to the stimuli of music and rhythm is nothing new. The impulse to dance is present among children who don't know the meaning of the word and never have seen dancing in their lives.

The impulse to dance is, of course, primitive and sexual in character. It is one of the many ways provided by art to blow off steam. It is no coincidence, therefore, that the music that throws the jitterbugs into action is also primitive. It is still in its very early stages of development. It started with the psalms brought over from England by the Pilgrims and Puritans and proceeded through Stephen Foster, the minstrel shows, the cake walk, ragtime, and the blues to what we now call swing. Various influences have contributed, not the least of them being the Negro.

Ajay

YOUTH CALLS THE TUNE

Some people say our popular music will never grow up. Daniel Gregory Mason, dean of American musicologists, wrote that jazz is "the musical expression of an attitude toward life . . . shallow, restless, avid of excitement, incapable of sustained attention, skimming the surface of everything, finding nowhere satisfaction, realization or repose."

Reading over these words of Professor Mason's, it seems they could pretty well be used to describe the average adolescent as we know him today. Adolescence is the time when the panacea or cure-all is most ardently sought after. One looks for a force from the outside to guide one's life. It is a time when great stress is placed on the necessity for conformity, as witness the tendency among students to adopt the same fashions at the same time; or it may be a time when non-conformity is militantly insisted upon. The "children" employ various methods to fight the impositions of the "adult" world, but they usually gang up together, and it is just as well that they do, for a number of reasons. According to psychiatrists consulted by this writer, the kid who joins the others at the Paramount and Randall's Island jam festivals and goes jittery with the rest of them is in better mental health than the kid who sits home alone and professes not to like this sort of thing.

It is important, it seems to me, to make this point now, when from certain quarters swing is being attacked as an evil moral force. In a *New York Times Magazine* article an unnamed Chicago psychiatrist was quoted as saying that "epidemics of swing are produced by mass contagion" and that "the most efficacious treatment is to segregate the victim of swing from the jitterbug, the carrier of the virus." He advises that "this would be a wise thing for many parents to do if their children are innocent bystanders who are being drawn into the swing craze."

The old idea, long advanced by the Church, that anything providing emotional release and enjoyment is to be regarded with suspicion, is still with us. It crops up all the time, today as yesterday. Music, all kinds of music, has had a number of struggles of this kind. Beatrice Kaufmann in her book, *From Jehovah to Jazz*, tells us that in our own country, the first public concert in 1731 roused the protests of God-fearing citizens against the repetition of such performances as "tending to discourage industry and frugality and greatly increase impiety." Also, that the post-colonial Boston city fathers, in planning summer "pops" concerts on Boston Common, stated: "Let it [the music] refine and educate the millions, and not merely tickle up the idle old whistling, drumming, foot-lifting habit which is a chronic irritation of the rhythmic nerves."

So, we can expect to hear from many quarters that swing is bad for the kids and that the jitterbugs are hellward bound.

FROM SWING TO BLUES—AND BACK

Generally speaking, it seems to the writer that the opposite is true. There is always the need for the kind of stimulus that swing provides. It is when this need is denied that we are apt to have trouble. It is also true that the *direction* of a mass manifestation is equally as important as its *content*. Perhaps even more so. If, as the New York *Times* article points out, "one of these modern pied pipers should take to swinging the Horst Wessel on an impish clarinet or a raucously satiric trumpet," that would be one thing. If, on the other hand, the kids are simply rolling in the aisles of the Paramount to Count Basie's playing of "Big John Special," that is something else again.

In any given case of jitters, whether in an adolescent or a belated adolescent, swing is not a causal factor. Some jitterbugs jitter more than others. They give an impression of nervous instability that cannot be ignored, but swing did not make them that way. Widespread jitters resulting from certain causes, not the least of them being the atmosphere of cultural chaos and economic insecurity in which the kids are growing up today, seems to call for some such expression as swing music. Tomorrow, as Paul Whiteman has predicted, it may be the *blues*, and one of these days you might find the kids wailing in the aisles of the Paramount instead of cheering. But, today, it is swing that they go for. And, who can blame them?

Safeguarding Mothers and Children

MARTHA M. ELIOT, M.D.

The assistant chief of the Children's Bureau describes the maternal and child health section of the National Health Program.

THE NEED FOR AN EXPANDED PROGRAM FOR maternity care and health supervision and medical care for children was included in the National Health Program as one of the major measures to be given precedence in the development of the proposed plan for the health of the American people.

Among the first questions which come to mind when the problem of maternal and child health is discussed is: Why is an expar[illegible] program needed today?

The answer to this question may be found in some of the facts presented to the National Health Conference last July by the Technical Committee on Medical Care which reported, on the basis of these facts, that there is today a great and unnecessary wastage of maternal and infant life, and that there is widespread impairment of health among mothers and children.

First on the list of recommendations made by the Technical Committee on Medical Care was that calling for expansion of public health and maternal and child-health services. "The objective sought in this phase of the Committee's proposed program," said the report, "is to make available to mothers and children of all income groups and in all parts of the United States minimum medical services essential for the reduction of our needlessly high maternal mortality rates and death rates among newborn infants, and for the prevention in childhood of diseases and conditions leading to serious disabilities in later years."

TWO MILLION BIRTHS A YEAR

Each year a birth occurs in 2,000,000 families in the United States. But in the attempt to bring new life to our nation each year about 14,000 women die; about 75,000 infants are stillborn; nearly 70,000 infants die in the first month of life —four-fifths of them from causes associated with prenatal life or the process of birth; and at least 35,000 children are left motherless. That this great wastage of maternal and infant life is unnecessary is shown by the fact that where proper facilities have been made available the maternal death rate has been reduced to about one-half that of the country at large.

In the death rate of infants under one month of age there has been but slight decline during the twenty-two years of record, and no decline in the death rate on the first day of life. These deaths are closely associated with the problems of maternity care, and, as in the case of stillbirths, reduction in rate should result from more skilful care. Nearly one-half of all deaths in the first month of life are among prematurely born infants; with proper care of the mothers many premature births could be prevented and with proper care of the infants a larger proportion could be saved.

INADEQUACY OF FACILITIES

Great progress has been made in cutting down the death rate of infants in the first year of life. Nevertheless, each year some 53,000 infants die from the second to the twelfth month of life. Since 1929 infant mortality in rural areas has been higher than in cities. In spite of the great gains that have been made there are still parts of the country and special groups in the population in which the death rate of babies under one year of age is about as high today as it was for the country as a whole twenty years ago.

That many deaths of mothers and infants are closely associated with economic conditions is too well known to need discussion. Recent studies have shown that many women receive no prenatal care, or inadequate care. In 1936, nearly a quarter of a million women did not have the advantage of a physician's care at the time of delivery. In 1936, only 14 per cent of the births in rural areas occurred in a hospital, as contrasted with 71 per cent in cities. For the great majority of the 1,000,000 births attended each year in the home by a physician, there is no qualified nurse to aid in caring for the mother and baby.

It is estimated that more than 1,100,000 births occur each year in families that are on relief or have total incomes (including home produce on farms) of less than $1,000. Health officers report that many expectant mothers, because of lack of funds, go without proper prenatal care or hospital care and do not seek the services of a physician until it is too late to save them from serious illness or death.

In most communities resources are limited for providing medical, nursing, and hospital care at the time of childbirth. Certain communities, mostly urban, have provided a physician's care and hospital care through public or private effort, but heretofore there has been no planning on a na-ional scale to make medical and nursing care at the time of delivery available either in the home or in the hospital for mothers in families that cannot provide such care unaided.

When we consider the fact that the declining birth rate is bringing about an increase in the proportion of persons in the older age periods and a decline in the proportion of children in the population, the conservation of child life is recognized to be imperative if we are to maintain in the future the proportion of people in the productive ages necessary to an economically productive nation. In the recent National Health Survey in eighty-four cities it was found that of all children under 15 years of age having illnesses that disabled them for seven days or more, 28 per cent had had neither physician's care nor hospital care. The proportion going without such care was largest among children in families with incomes of less than $1,000 a year but not on relief (33 per cent), larger even than among children in families on relief (29 per cent).

PREVENTABLE DEATHS

In the period 1934-36, an average of 14,000 children under 15 years of age died annually from whooping cough, measles, diphtheria, and scarlet fever; 35,000 from pneumonia and influenza; 19,000 from diarrhea, enteritis, and dysentery; 15,000 from accidents; 4,000 from cardiac conditions, largely rheumatic; and 4,000 from tuberculosis—an average annual total of 88,000 deaths. These figures represent only a small proportion of the total number of children who are affected by these conditions and who, though they recover, may have suffered permanent injury to their health. The proportion of deaths that are preventable is not known, but there is no doubt that many deaths and a great deal of ill health could be prevented by such measures as more adequate control of communicable disease, protection of the milk supply, systematic health supervision, and by early diagnosis and prompt treatment of the conditions and diseases that, without such diagnosis and treatment, tend to become really serious or chronic.

In addition, there occur also in childhood many relatively minor conditions that interfere with growth and development or with the general health of the child. Prompt treatment of these is often as important in preventing future disability as is the treatment of more serious diseases.

Child-health centers and clinics to which parents otherw[illegible]ble to obtain such services may take their chi[illegible]n for health supervision or for diagnosis and treatment are still lacking or are insufficient in number in many areas. Reports from forty-three States show that in 1937 there were approximately 6,000 child-health centers serving 734 counties, towns, or other local units in rural areas. About two-thirds of the rural areas of the country are not yet provided with such centers.

THE CRIPPLED AND HANDICAPPED

It is estimated that more than six children in every 1,000 of the population under twenty-one years of age are crippled or seriously handicapped by disease or conditions such as poliomyelitis, tuberculosis, birth injuries, injuries due to accidents, and congenital deformities, who may be benefited or entirely cured with proper treatment. It is estimated that in the northern parts of the country at least 1 per cent of all school children have rheumatic heart disease, a condition largely remediable with prolonged care. Approximately 30 per cent of all children under fifteen years of age have defective vision. Approximately two-thirds of all school children have dental defects. Widespread inadequacy of nutrition is responsible for many cases of the deficiency diseases in children, for increased severity of illness and for retardation in recovery.

When it is realized that 13,000,000 of the 35,000,000 children under fifteen years of age in the United States are in families that have an income of less than $800 a year or are on relief, it becomes apparent that such families are able to pay but little towards the medical care necessary to meet their children's needs and that the problem of providing sufficient care must be the concern of government through health and welfare authorities.

Since the first grants to the States for maternal and child health under the Social Security Act became available in 1936, the public health agency in every State, the District of Columbia, Alaska, and Hawaii has strengthened and extended its maternal and child-health program. Our two and a half years' experience with this program and with federal grants to the States for services for crippled children has made us (*Continued on page* 31)

Questions and Answers

Letters addressed to this department will be referred to one of our doctors. However, diagnosis and prescription will not be undertaken. All letters should be signed and accompanied by a stamped, self-addressed envelope.

Advice to Food Handlers

New York City

DEAR DOCTORS:

I am a counterman in a cafeteria. Will you please tell me what health precautions are necessary on my job?—E. J.

Answer—The restaurant and cafeteria worker can, by carelessness, endanger the health of his fellow-workers, the public, and himself. Lack of personal cleanliness is one great hazard. The liberal and frequent use of soap and hot water for the hands and arms takes care of more germs than we usually think, and the so-called antiseptics and germicides are usually unnecessary. The chemicals in these preparations may injure the skin of a worker who is sensitive to them, but soap and hot water are tolerated by everyone.

The hands should be carefully washed before beginning work, after handling other things than food, and after going to the toilet. Many of the diseases that affect the stomach and intestines are caused by germs which enter the mouth along with contaminated food and drink. Sicknesses contracted in this way include typhoid fever, Malta (undulant) fever, dysentery, and others.

The food handler should be on his guard against spoiled and contaminated foods. No food should be used from cans that are rusty or swollen out of their usual shape. If a can is rusty there may be a tiny hole in the can through which germs can enter from the outside. If the can is swollen, the swelling is an indication that the food is spoiled and that gases have been produced. While foods may be unfit for use even though there are no odors, unusual odors from foods show them to be unfit for eating.

A further danger is infectious illness of the food handler himself. If a food handler suffers from a common cold his sneezing and coughing will endanger those who work with him. If he is a counterman the public may also be affected. If the disease is syphilis there are times when his saliva may be infected with the germs, and the utensils he uses may carry the disease to fellow-workers and to the public.

The restaurant and cafeteria worker must look out not only for the health of his fellow-workers, but also for the health of the public. Included in the public are not only strangers, but also friends and relatives. Each food worker who looks after his own health is contributing to the public welfare.

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Thirty Dollars Wasted

Milwaukee, Wis.

DEAR DOCTORS:

A friend of mine claims he cured his severe rheumatism with Dr. Hercules Sanches' *Oxydoner*. This device is a metal object three inches long and one and one-quarter inches in diameter with wire attachments and a band arrangement to strap on the leg. The metal object is to be placed in a wooden or earthen bucket and the band is strapped on the leg over night.

In reading the booklet on the device "Victory Over Disease," I think it has all the earmarks of a fake for which $30 is charged. Will you please tell me what you think of it?—S. M.

Answer—From your description there is no doubt that the *Oxydoner* is a fake. It is but one of a long series of similar fakes, the most famous of which was that of "Dr." Perkins, a century ago. His was a couple of metal plates which were strapped to the neck.

What happens to the metal object in the tub? Nothing except possibly that it rusts. Neither the wires nor the leg strap conduct anything from the bucket to the leg. Your friend got better not *from* using the *Oxydoner* but *while* using it. Some chronic diseases like rheumatism often get better by themselves, usually for a short time, sometimes for a longer period.

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Paternity Tests

Brooklyn, N. Y.

DEAR DOCTORS:

Due to some marital troubles I would like some vital information from you. I would like to know if there are blood tests to determine the *true father* of a child. In this case, as you no doubt realize, there is another man involved.

If there is such a thing, and if it is accurate, I should like to know where this may be obtained, and under reasonable conditions.—S. H.

Answer—Each one of us belongs to one of the four groups into which human beings can be classed on the basis of certain substances in their blood. These substances produce changes in the blood of other groups than their own, such as causing the other blood cells to dissolve. It is on the basis of such changes that the laboratory can determine to which of the four groups a person belongs. This is important especially in the transfusion of the blood since blood from an improper donor may severely affect the person getting the blood and sometimes may even kill him.

The substances that determine our blood groups are inherited. As a result it is possible, *within limits*, to determine parenthood by means of such tests. Usually the blood grouping test is done on the father, or on the man who is said to be the father. This is how the public has come to know the test as the "paternity test," although it is just as effective in determining the mother or in straightening out dis-

(*Continued on page* 31)

LOW BLOOD PRESSURE

People are usually concerned only with HIGH blood pressure. However, if your systolic pressure is below 90 you had better see a doctor.

DURING THE LAST DECADE PEOPLE HAVE BECOME blood-pressure conscious. Most people, however, think of blood pressure in terms of "high blood pressure," and are likely to be concerned about it only if their blood pressure is "high," that is, if they have the condition known technically as hypertension. Indeed, so much attention has been devoted to high blood pressure that the victims of the opposite condition, low blood pressure or hypotension, may justly feel neglected. However, the people who suffer from this condition are at least as numerous, and probably more so, than the high-pressure victims.

Before discussing abnormal blood pressure it is necessary to define blood pressure and to establish within rough limits what should be considered normal. In any system of irrigation there must be a series of pipes or conduits to conduct the irrigating fluid, and a force to pump this fluid through the pipes. The human body contains such a system in its blood vessels (the pipes) and the heart (the pump). Blood pressure is a measurement of the pressure exerted by the blood on the sides or walls of the blood vessels through which it is flowing. The blood vessels consist of arteries, capillaries, and veins. The arteries conduct blood from the heart to the various organs and parts of the body where, in the tiny capillaries, the smallest of the blood vessels, the exchange of food and waste takes place, and the blood returns to the heart by way of the veins.

SYSTOLIC AND DIASTOLIC PRESSURE

With each heartbeat blood is driven into the arteries which are elastic pipes capable of expansion and contraction. As the heart pumps the blood into the arteries they expand. As the heart relaxes the arteries contract and drive the blood onward into the capillaries and veins. Thus, it is the blood pressure which keeps the blood moving. There is an increase in the pressure every time the heart contracts, and this maximum pressure is called the systolic pressure, corresponding to the period of heart contraction known as the systole. As the heart relaxes the pressure within the vessels decreases, and this minimum pressure is called diastolic pressure, corresponding to the period of heart relaxation known as the diastole. Usually the diastolic pressure is about two-thirds of the systolic.

These pressures are measured by means of a simple instrument with a very formidable name—a sphygmomanometer. It consists of a rectangular rubber bag five inches wide and nine and one-half inches long, encased in one end of a long cloth band. Attached to the bag are two rubber tubes, one of which is connected to a rubber bulb by means of which air may be pumped into the bag, the other to a column of mercury which measures the pressure inside the bag (see cover cut).

RECORDING THE BLOOD PRESSURE

In measuring the blood pressure the cloth band containing the rubber bag is wrapped around the upper part of either arm, and air is introduced into the bag by pressure on the rubber bulb until the pressure within the bag is great enough to compress the main artery of the arm (brachial artery). A stethoscope is then placed over this artery at the bend of the elbow and the pressure inside the bag is gradually released by means of a valve in the rubber bulb. As soon as the physician who is listening through the stethoscope hears the regular sounds of the blood being forced through the artery he reads and records the height of the column of mercury, and thus finds the systolic pressure. More air is then released from the bag, and when the sounds become faint the height of the column of mercury is again recorded in order to get the diastolic pressure.

Both measurements are of equal importance since one indicates the strength of the heartbeat, the other the condition of the blood vessels. The average person discussing his blood pressure is usually interested only in the systolic figure. This may be due to the fact that the physician rarely troubles to explain the nature of the diastolic pressure to his patient, or it may be that the patient himself is more likely to be impressed by the greater magnitude of the systolic pressure.

What is normal blood pressure? It is often said that normal systolic pressure should be 100 plus your age, but this is not so. One hundred and

twenty at the age of twenty plus one-half a point for each added year would be more nearly correct, but like most generalizations this should not be accepted too rigidly. Women generally have slightly lower blood pressure than men.

During childhood the systolic pressure gradually increases. It usually ranges from 75 to 90 millimeters of mercury during infancy, from 90 to 100 millimeters in childhood, and from 100 to 120 millimeters at puberty. The diastolic pressure remains around 50 millimeters during the first few years of life and after that it remains around 60 millimeters until puberty. In adults the normal systolic pressure varies between 110 and 145 millimeters. It may be five or ten millimeters lower in women and higher (140 to 150) in old people.

FACTORS CONTROLLING PRESSURE

What are the factors which keep the blood pressure at certain levels? The strength of the heartbeat, the elasticity or rigidity of the blood-vessel walls, and the secretions of the endocrine glands, particularly the adrenal glands, are some of the chief factors. The heart and blood vessels are supplied with nerves which control their activity. These nerves in turn are controlled by centers in the brain. The function of the endocrine glands is to a certain extent influenced by the emotions. Thus, we see that any disturbance of the heart, blood vessels, nerves, or endocrine glands may be reflected by a change in the blood pressure.

In an adult a systolic pressure below 100 is low. There are, however, many individuals whose systolic pressure is below 100 but who do not have any symptoms or signs of disease. Such people probably are slightly different from average in their glandular make-up and should not be considered sick or abnormal. Just as some individuals are unusually short or tall so there are people whose pressure may be lower or higher than average. Low blood pressure is of significance only when it is associated with other symptoms such as weakness and loss of energy.

It is important to recognize that low blood pressure is not in itself a disease. It is a symptom or sign of many different diseases. When your doctor finds that you have low blood pressure he attempts to find the cause. Whenever the systolic pressure falls below 90, a doctor should be seen.

After acute infections such as grippe, influenza, pneumonia, severe sore throat, and typhoid fever low blood pressure may be present for some time. This may be due to the added burden during sickness on the adrenal glands which play a part in keeping the blood pressure up. Careful recuperation, plenty of rest, and a nutritious and easily digestible diet are important during the period after such illnesses, and as the general condition of the patient improves the blood pressure will rise again to a normal level.

Tuberculosis of the adrenal glands, known as Addison's disease, may also be a cause of low blood pressure. The systolic blood pressure falls from a normal level to below 90 millimeters of mercury. The low pressure is associated with marked weakness, gastro-intestinal disturbances, and a characteristic skin eruption. Until a few years ago Addison's disease had a rapidly fatal ending, but with the discovery of a hormone of the adrenal glands known as cortine, a new and promising period opened in the treatment of the disease. Today patients have their lives prolonged many years by the use of cortine.

Neurasthenia is a nervous disorder frequently accompanied by low blood pressure. A patient with neurasthenia requires psychiatric management combined with measures designed to improve his general condition such as good food, exercise, and adequate rest and recreation.

There are some people who experience weakness, faintness, and even loss of consciousness when they change from a sitting or lying position to standing. Observations have shown that these symptoms are due to a sharp drop of the systolic and diastolic blood pressure, and the cause for the drop has been assumed to be due to a disorder of part of the nervous system. There is no known effective or permanent remedy for this condition.

Persistent use of remedies containing coal-tar products, among which the most commonly used are the hypnotics such as veronal, luminal, allonal, and many others ending in "al," may result in a lowering of the blood pressure to below normal.

BLOOD PRESSURE AND LONGEVITY

Many normal people enjoy perfect health with a blood pressure hovering around 100 or even lower. In fact many doctors believe such people have a longer life span than people with so-called normal blood pressure of 120 to 150. To offset this advantage, however, it is also true that people with low blood pressure do not usually feel so alert or vigorous as those who have higher blood pressure, and consequently they may not enjoy life so much. However, they are not likely to be denied such minor dissipations as coffee, tea, moderate amounts of alcohol, smoking, or the pleasures of eating well—indulgences which are sometimes forbidden to persons with higher blood pressure.

SEXUAL PROMISCUITY

The person who has one love affair after another is not always motivated by a desire for adventure. Analyzing the Casanova complex.

SEXUAL PROWESS OR THE FREQUENT PERFORMANCE of the sex act has been regarded variously as an admirable evidence of healthful vigor and as a sign of moral degeneracy or personality distortion. But regardless of what we think of the Casanovas, Don Juans, Messalinas, Catherines, and their erotic exploits, we may wonder what factors made them behave the way they did. Although it is a complex subject, the following discussion may shed some light on it.

There has been much speculation as to what bodily attributes are supposedly indicative of the amorous temperament. Philosophers and writers from Aristotle down to the present have attempted to add to our wisdom on this subject, but while occasionally someone has had a sensible word to say it is usually covered with a thick layer of nonsense. Almost every physical characteristic from hairiness and "small, high breasts," to cross-eyes and a "long leg below the knee" have been noted as a concomitant of an erotic disposition. The very diversity of these speculations indicates their lack of value to us.

The failure of writers to deal adequately with the subject is due in part to the inadequacy of the psychological knowledge that prevailed until relatively recently, and to failure properly to define and analyze the subject.

THE PHYSICAL FACTORS

It is undoubtedly true that the sexual function, like all bodily functions, is influenced by the physical constitution and by the general state of bodily vigor and health. An adequately functioning glandular system and a minimum of health is necessary for normal sexual function. It is also undoubtedly true that the sexual needs of persons vary somewhat according to the response to these physical factors. For example, an individual with one set of endocrines will quite properly participate in more sexual activity than another whose endocrines function at a different pace.

Yet within the limits of average health and an average set of endocrine glands there is still an enormous variation in sexual behavior in different individuals. Among physically normal people there is great variation in the conscious and unconscious attitude towards sex. These variations in attitude are linked with great variations in the desire for sexual relations, in the amount of preoccupation with sexual relations, in the ability to perform, and in the setting in which sexual acts can be best performed. Thus, if we examine a large group of people who indulge excessively in sexual relations and who are very promiscuous, we will find among them all kinds of personalities and many kinds of emotional problems.

THE DON JUAN TYPE

Yet all these people will also have in common a deficiency in emotional make-up which prevents them from forming a complete, well-rounded relationship with a person of the opposite sex. There is a lack of ability to get full satisfaction from normal sexual relations, as well as ability to love. This statement may seem somewhat contradictory since the lives of such individuals may be one long series of love affairs or sexual episodes. Yet beneath this apparent capacity for love there usually lurks an emotional impoverishment, a defect in the capacity for a fully reciprocal love relationship.

Let us examine some concrete examples of so-called "Don Juan" types. There is a type of man who will make love to every woman he meets if the opportunity presents itself. The woman may be young or old, attractive or ugly, but the fact that she is a woman is enough to make him wish to have sexual relations with her. He can no more pass up an opportunity for a sexual experience than a drunkard can pass up an opportunity for a drink. Such a man often possesses a high degree of skill in determining quickly whether a woman is likely to comply with his wishes.

If we inspect the sexual behavior of such a man we find that it has a compulsive element. He seems to have lost something of his ability to choose, to discriminate, to decide whether or not he wishes to act in a certain way. There is a rigidity, an

automatic aspect, to his response to any situation presenting a sexual opportunity. Such a compulsive tendency is an indication of an unconscious neurotic mechanism that is beyond the individual's control.

One of the important characteristics of neurotic persons in general is a tendency to react in the same way to very different situations which have one common element. Their unconscious drive makes them react to this common element without taking into account the other elements in the situation which would ordinarily modify or alter the response.

Let us return to our "Don Juan." What could make a man act in this invariable way towards women, like a drug addict to his drug? There are many possibilities, but we will take one as an example. Suppose the man has a strong unconscious drive towards homosexuality. Let us suppose further that this drive is not only unknown to him, but also that knowledge of its presence would be very abhorrent to him. With this unconscious homosexual drive constantly striving for expression, he must exert equally strong unconscious efforts to prevent the drive from gaining expression and becoming conscious. He must constantly prove to himself and to others that he is not homosexual. What better proof could he furnish than having sexual relations with women? Each sexual episode convinces him anew that he is not homosexual, and helps to prevent the unconscious fear, as well as the unconscious wish to be homosexual, from gaining expression in consciousness.

UNCONSCIOUS WISH REMAINS ACTIVE

We may ask why he must continue to prove this to himself again and again. Why is not the self-deception successful without repeated demonstrations? The reason is that an unconscious wish, so long as it remains unconscious, continues to be active. It constantly seeks avenues of expression, and the defense against it must be equally constant.

Can a person be cured of this type of personality difficulty? He can if the difficulty makes him sufficiently uncomfortable to seek treatment. With treatment the unconscious wishes and their background are brought into consciousness. The man would not only discover that he had an unconscious wish for homosexuality, but also why he had it and how it developed. It might be found that its presence and strength were due to unfortunate childhood experiences which prevented normal development of the personality. As this repressed material was brought to light the patient could learn to assimilate it into the rest of his personality. The unconscious drives would themselves become modified and his behavior would change.

Let us next examine the case of a woman who cannot say "no." She yields to every sexual overture that is made to her. Her response to any advance is so prompt that a casual flirtation tends quickly to ripen into a sexual relationship. She overestimates the amount of feeling her partner puts into a mild flirtation, believes him to be in love with her, and reciprocates at once. Because she overestimates his feeling she makes undue demands on his time and affection; she wants to see him constantly, phones him many times a day, eagerly awaits his arrival. Defending himself against her erroneous assumptions, the man begins to withdraw. As she perceives this her disappointment is intense and her efforts to hold him become frantic. Inevitably they have an effect opposite to the one she desires. The man withdraws completely and she has been through another disappointing love affair.

Some women go through this cycle of unhappy love affairs repeatedly. Intensely eager for a love relationship, they are overwhelmed by their repeated inability to hold a man's affections. Each time the disappointment increases their inability to say "no," to turn down any offer, however slight, which might at last lead to the relationship they desire but are unable to obtain.

Like the man previously discussed, such a woman suffers from an inner uncertainty she is trying to overcome. She feels unsure of her ability to inspire love and affection. Together with this unsureness is an excessive need for affection and dependence on it. The excessive strength of the need and her inability to handle it causes her to do the very things which prevent her from obtaining fulfilment of her need.

On close examination of such a woman's sexual behavior we find that what appears to be an excessively strong sexual impulse which leads to promiscuity is in reality a search for affection. The particular circumstances which cause such a woman's need for affection to gain expression in this special way can be found in a study of her personality and her life.

SEX CARRIES EXTRA BURDEN

One could go on to consider a great many types of people who are promiscuous sexually and find a considerable variety of mechanisms at work. It is possible to make some generalizations about the entire group. Whenever we find a person who acts compulsively in this respect, who feels impelled to make advances to or to encourage advances from any possible sexual partner, we usually find we are dealing with an individual whose sexual function has undergone certain changes from the normal. Sex has been made to assume an extra burden, to carry a double load. For him, sex has come to serve a purpose that it is not called upon to serve for people whose sexual behavior is more normal.

The extra burden that is put upon sex in such a situation is usually the result of a need for self-reassurance. The person has some inner doubt about himself, usually some unconscious doubt which he repeatedly tries to resolve by sexual activity. The nature of the inner doubt, the cause of the insecurity, will vary from person to person just as will the behavior used in an effort to overcome it.

Compulsive sexual relations is, then, one of the means people use to get friends, to cheer themselves, to assert themselves, to quiet a feeling of restlessness, to forget their troubles. When the reasons behind the abnormal behavior are worked out with the patient by a psychiatrist, the difficulties that the person has been trying to solve by sexual relations are cleared up, and the sexual life becomes normal again.

Jerry the "Incorrigible"

Third Instalment

I. T. BROADWIN, M.D.

Synopsis

Jerry is a youngster whose life in the city slums has bred in him a contempt for all authority but the use of force. Unmanageable at home or in school, he bullies other children, steals, and drives his mother to distraction.

At the same time he is starved for affection and ashamed to show it. He longs for some degree of understanding from the adults around him, and, failing to find it, his behavior grows worse. Unless something happens to change him he is almost certainly bound for the reformatory.

As this instalment opens he is on his way to a camp conducted by a social work organization, where it is hoped he will show some improvement.

JERRY'S MOTHER WAS DEEPLY AFFECTED WHEN he tried to evade her last kiss at the railroad station as he was leaving for camp. "Aw, don't worry," he grumbled as he lost himself in the group of hilarious children and climbed up the steps of the car.

"Uncle Bob! Uncle Bob!" was the cry that arose from all quarters of the car when one of the counsellors arrived. The newcomer seemed to radiate friendship, and those who had been at the camp the previous year quickly told the others about him. He was soon surrounded and submitted to a barrage of questions: "When do we have the first overnight hike?" "Are the old canoes fixed up?" "How is the fishing this year?"

"Wait a minute, fellows," Uncle Bob broke in, "I've got a few things to do and when I get through we can chat about all these things." A person of Uncle Bob's character did not think of discipline as something separate and distinct from his ordinary comradely intercourse with the boys.

"Jim," he said to one of his colleagues, "I can't see why some of the counsellors have such trouble understanding these boys. You know, as you watch a group of them milling around they all seem to be asking for one thing, and that's friendship."

"Yes, that's true, but you can't reach them all in the same way. I'm afraid that some of our counsellors aren't aware of the difficult problems some of the children present. Some of them seem to feel that the troublesome ones behave the way they do purposely in order to annoy the adult. They don't seem to realize that a child develops a particular pattern of behavior and acts out that pattern according to certain needs within himself, and not always because he wishes to annoy some grown-up."

"Yes," Bob replied, "and sometimes our counsellors carry personality problems around with them, too, so that they are prevented from seeing the child except in the light of their own bias and prejudices. Each boy has to be looked upon as an individual and respected as an individual."

A train trip is always a thrilling event in the life of a child. It satisfies his demand for new sights and sounds, and what is even more important it gives wings to his fantasies. Undoubtedly the trip had some such significance to Jerry but to

(Continued on page 26)

JERRY THE "INCORRIGIBLE"

(*Continued from page* 25)

look at him you would hardly have known it. The other boys were busy talking, commenting excitedly on the scenery, planning exploits and excursions in the country. Jerry listened with a somewhat cynical sneer but did not join in.

Station wagons met the boys and carried them to the camp. Great excitement and hub-bub prevailed when the director came to meet the boys and give them their initial instructions. Rules were explained, boys divided off into age groups, and counsellors assigned.

The camp was situated about sixty miles from the city in the foothills of a range of mountains. A social service organization endowed the camp, which was able to accommodate about 120 boys at a time. Tents were used for sleeping quarters, and there were six boys to a tent and a counsellor for every two tents.

Jerry had eyed the director suspiciously while he gave his instructions, and now he viewed the boys in the same manner. He soon had everyone in the camp—adults and children alike—classified according to his own notions. The adults were classified as easy or hard, the boys as squealers, sissies, or regulars. In the tent he found one boy explaining in detail to the newcomers what the instructions were, what duties were expected, and what the program of the day was likely to be. This boy, Ed, was about Jerry's age and size. Jerry did not like him, and found his apparent officiousness annoying. The fact that Ed's ideas should fit in with the plans of the counsellors, and that he should act as a representative of the grown-ups, struck Jerry as an indication of weakness in Ed.

"Listen fellows," Ed said, "I've been here before, and there are some rules to follow. We got to get to the bunks, straighten them out, hang up our clothes, and report to the main house for the program. Let's get started."

JERRY KEEPS QUIET

Jerry followed sullenly, but he was busy with plans for upsetting the influence of Ed and showing the counsellors that they could not boss him. Characteristically, however, when he arrived at the bunks and found a counsellor there, he fell into line and carried out the work as the others did. Open defiance was not in Jerry's line, since beatings and punishment had developed strong feelings of self-preservation and he had learned that subtle, underhand ways were the safer methods of showing defiance.

The days at the camp passed quickly as the routine carried the boys along. When baseball teams were chosen, Jerry had to be coaxed to join, and when groups were formed for a hike or boating he showed little enthusiasm. "Jerry, why don't you show some pep?" the counsellors would often remark. "Show the boys what you can do. You're good at a lot of things, you box well, you are a good first baseman. Why don't you get some of the fellows together and show them how to do things?" When complimented in this way Jerry would inevitably respond. However, when a counsellor told him, "Look at Ed. He gets the bunch together and he does things," Jerry would shrink back, his smile would disappear, and he would answer, "What do you want anyhow, I ain't doin' nothin' wrong." In the back of his head was the oft-repeated scene at home, when his mother would point out the good behavior of his younger brother or that of the neighbors' boys.

JERRY AND ED CONTRASTED

During the course of the six weeks Jerry had a good time, he improved physically and he gave no outward evidences of bad behavior. At the end of the period the counsellors met to discuss the boys and to prepare a report on the progress they had made. Counsellor Jim remarked that he had no particular difficulty with Jerry but said he could not get under the kid's skin. As a contrast to Jerry he called attention to Ed, who joined in the group activities, who made friends with the boys and the grown-ups alike.

"If you knew Ed at home, you'd think the contrast between the two boys was even more striking," Uncle Bob told the group. "I was his social worker for a time in the city, and he hardly ever went out or joined the other boys in his neighborhood. He prefers to sit at home near the radio, reading detective stories. He neglects his school work and plays truant quite often. His mother complains that he nags her continuously and never does a thing for her unless she gives him money. What confuses her is that the neighbors all think she is lucky to have such a 'nice boy.' But the strangest think about Ed is that at home he soils and wets himself every day. In spite of punishment and bribes he has persisted in this peculiar habit since he was five years old. However, here you'll agree that he's clean and wholesome. Last year he wet his bed a few times. This year he hasn't wet his bed at all and certainly has not soiled himself."

Counsellor Jim wondered why, since neither boy did much for the parents at home, Ed was so cooperative at camp and Jerry was just the opposite.

Bob pointed out that since Ed did respond to the adult he must not only have experienced a certain amount of love and affection, but that he was also capable of responding to it. However, there must be reasons why he responded at camp but did not respond at home and at school. Bob, who knew Ed best, told the others what he thought these reasons were.

A BID FOR ATTENTION

He pointed out that Ed's mother was extremely indulgent towards Ed, not because of laziness or ignorance but because of compulsion. Early in life she had vowed that if she ever married and had children she would give them all the love and affection that she had missed as a child. She often told how cruelly she had been treated by her own mother and how she had been denied the simplest signs of affection or sympathy.

Ed was not allowed to enter kindergarten at the usual age because his mother feared he was too young. She gave him all the love and affection she could, fondled him, and protected him from the ordinary little problems that a child usually has to meet and cope with.

Ed began to soil himself when his younger sister was born. It was as though, having been babied for such a long period, he was unable to stand aside and let his new-born sister take his place. He could no longer ask his mother to continue to baby him, but he could try to get her to do so by imitating the baby, by soiling and wetting himself as a baby did, and acting in a defiant manner so as to attract his mother's attention even if it came in the form of punishment and reprimands. Thus his inner needs prevented him from behaving in a manner consistent with his age towards the adults in his home. When treated kindly by other adults he would act in a grown-up way. School was identified in his mind with his parents, and so there too he acted like a child, seeking an undue amount of attention. At camp he would do anything asked of him and act like a real grown-up, but as soon as he returned home and again fell under the influence of his mother, he would return to the pattern of behavior he exhibited before coming to camp. However, he was being treated by a psychiatrist in the city who reported that there was improvement from year to year and that good results could ultimately be expected.

Returning to a discussion of Jerry, Bob stated that from his observation Jerry had not received, or at least felt he had not received, the love or affection that Ed had experienced. Jerry did not expect affection from adults and when confronted with it he did not trust it. Therefore, even at camp he showed himself incapable of adjustment to the adult. The conclusion arrived at by the group of counsellors was that Jerry did not show the promise that Ed did.

Jerry returned home after the six weeks at camp to resume the same troubled existence he had previously led. The year rolled by, a repetition of the previous one. Since he was now older, the complaints about him became more serious. The school authorities threatened to send him to a probationary school, one devoted to the care of delinquent children. Fights at home resulted in Jerry's continued absence. Jerry's mother told Mr. Steele, the social worker, that she was sure Jerry was stealing more than before, and from what she heard the gang he went with was the worst group in the neighborhood. She threatened again and again to bring him to Children's Court before he was caught by the police, for then he might really be in a bad fix.

(*To be continued*)

Keep Sick Children at Home

IF A CHILD SEEMS ABNORMAL OR ILL IT IS WISEST to keep him at home and, if indicated, call the family doctor for advice. Parents should make it a part of their morning routine to carefully inspect their children and check for any of the following signs:

1) Fever—usually indicated by a flushed face.
2) Running nose.
3) Red or running eyes.
4) Continued coughing or sneezing.
5) Discharging ears.
6) Sores or eruptions of the skin.
7) Abnormal pallor.
8) Vomiting or complaint of nausea.
9) Unexplained lassitude.
10) Swollen glands in the neck.

If any of the above signs are detected at school the child will be excluded at the discretion of the school doctor. Such an exclusion frequently is no reflection on the parent as the condition may have developed after the parent examined the child. Therefore, if called by the school kindly cooperate with the school and health authorities and do not immediately assume a belligerent attitude toward those who are trying to protect your child and the community.

Your Health—Published by the Newton (Mass.) Health Department.

Who's Who on Our Advisory Board?

DR. HANNAH M. STONE

Dr. Hannah M. Stone was born in New York and received both her formal and professional education in that city. From her early childhood she was brought up in the "odor of medicine," for much of her leisure during school and high school days was spent in her father's pharmacy. After high school she entered the Brooklyn College of Pharmacy and was graduated with a pharmaceutical degree in 1912. For several years thereafter she was on the staff of the Research Laboratory of the New York City Health Department and the Pathological Laboratory at Bellevue Hospital as assistant in bacteriology and serology. At the same time she took pre-medical work at Columbia University and obtained her medical degree from the New York Medical College and Flower Hospital in 1920.

Dr. Stone has taken a leading part in the development of the medical aspects of birth control in this country and is one of the pioneers in contraception. For the past fifteen years she has been associated with Margaret Sanger as the Medical Director of the Birth Control Clinical Research Bureau. She has lectured widely on sex education, marriage hygiene, and contraception both here and abroad, and her articles have appeared in many medical and lay journals. In 1931, she helped in establishing the first marriage consultation service in New York City and she is at present the Medical Director of the Marriage Consultation Center of the Community Church, New York.

In the summer of 1934, and again in the summer of 1935, Dr. Stone visited the Soviet Union and made a close personal study of Soviet medicine in its relation to maternal health work. In a number of the cities she visited in the U.S.S.R. she was invited to speak before medical groups on her experiences in this field and to demonstrate the American techniques of contraception.

With Margaret Sanger, Dr. Stone edited a volume entitled *The Practice of Contraception*, and she is a co-author of *A Marriage Manual*, a standard textbook on sex and marriage. Recently she contributed a chapter on "Birth Control and Population" to *America Now*, a symposium on present-day American civilization.

Book Reviews

Our Common Ailment. By Harold Aaron, M.D.
The Horse and Buggy Doctor. By Arthur E. Herztler, M.D.
Beauty Plus. By Mary MacFadyen, M.D.

OUR COMMON AILMENT. CONSTIPATION: ITS CAUSE AND CURE. By Harold Aaron, M.D., 192 pp., Dodge Publishing Co., N. Y., $1.50.

Another book has just appeared on the great American disease—constipation. Dr. Aaron's book is not, however, "just another book," but a welcome addition to the library of the intelligent layman. Dr. Aaron is medical consultant to Consumers Union and has written for Health and Hygiene. The book is an enlargement of the series of articles on constipation that Dr. Aaron wrote for *Consumers Union Reports*.

Our Common Ailment begins with a chapter that is usually omitted in books for the layman, a chapter on the anatomy and activity of the intestines. Dr. Aaron points out what so many people misunderstand, that not all of the intestinal tract is involved in constipation. It is only the last two yards of our intestines, called the large intestine or colon, in which the stools are formed. The condition of the colon determines whether there is constipation or not; the condition of the abdominal or belly muscles plays only a minor role in the act of defecation.

Dr. Aaron begins by asking the question, "What is constipation?" What is constipation for one person is considered to be normal habit for another. Many people think they are constipated when the bowels do not move for a day after stopping their usual laxative. The best definition, according to Dr. Aaron, is "that constipation is present if defecation is painful or difficult, or if there is a sense of incompleteness of evacuation." It must be noted that there is no mention of time or frequency. It may be normal for one person to defecate once a day, while for another every second day is normal. The important thing is that the movement should not be difficult, and that there should be a sense of complete evacuation.

Newspaper, magazine, and radio advertising for constipation remedies is primarily quackery. Such advertising makes no attempt to analyze the causes of constipation. If the quack should attempt to do so the potential victims would realize that not all of them had the same cause and the quack "remedy" or nostrum could not cure all of them. Dr. Aaron points out that there are three main types of constipation: (1) trouble in emptying the end of the colon or rectum; (2) spastic constipation in which the colon's muscles undergo spasm or cramp so that the stool is held in a vise-like grip; and (3) the least important type, the kind of constipation in which the stool moves very slowly through the colon.

Constipation is a symptom of disease or illness, and not a disease in itself. It is clear then, Dr. Aaron points out, that it is necessary to treat the underlying cause of the constipation. Only by careful study of patient's history and by a physical examinaton can the doctor find the cause of the constipation.

Fortunately for most of us, Dr. Aaron says, the cause of our constipation is not due to organic disease of the colon, but to improper habits in our daily lives. We devote too little time to obeying the "bowel urge" which appears shortly after a meal, and which soon disappears if it is not obeyed. Too many of us are "ashamed" to excuse ourselves from company in the living room when the urge comes. There are other causes, the chief of which is poverty. Among the "third of a nation" that is ill-housed there are often no toilets, or the toilets are dirty, poorly ventilated, ill-heated, or used by too many people. Even in our city apartments large families have a single toilet so that the "bowel urge" must wait until the toilet is unoccupied. Worry makes us overlook the urge and so encourages the development of constipation.

This book is different from the usual "health" book. In the first place it clearly shows the connection between social, economic, and psychological factors and everyday ailments such as constipation. The book has special interest for workers since it traces the origin of many instances of constipation to working conditions and shows that by the proper use of existing knowledge and the influence of trade unions, the incidence of constipation can be reduced. Lastly, the book discusses the popular laxatives on the market, mentions many of them *by name*, shows their advantages, shortcomings or dangers, and proposes a rational method of treatment that does not make one a slave to the patent-medicine industry. This plan of treatment is the most detailed and comprehensive that we have seen in any popular health book and is alone worth the price of the book. There are also excellent chapters on colitis, gas, and hemorrhoids.

Carl Malmberg.

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THE HORSE AND BUGGY DOCTOR. By Arthur E. Hertzler, M.D., 322 pp., Harper and Brothers, N. Y., $2.75.

This book is the product of a smug and successful middle-class physician. The author has practiced medicine for over half a century and is the owner of the Hertzler Clinic in Halstead, Kansas. He is, therefore, no longer a country doctor but rather a successful business man in the business of medicine. He is extremely individualistic and criticizes the present trend towards government participation in medicine. He says that "the Rockefellers have done more for medical education than all the rest of the laymen since the beginning of time." It may be a coincidence, but it is also a fact that the publication of this book at this time helps the reactionary hierarchy of the American Medical Association rather than the people's National Health Program recently elaborated in Washington.

The book is written in a light and entertaining fashion. It abounds in amusing situations, is witty and well told. However, the "homely humor" is often associated with exaggerated statements and frequently the conclusions are not warranted by the partially true "facts" cited to support them.

The story is that of the author's history and experiences during fifty years of rural medical practice. It begins with his early recollections of the ravages of diphtheria, and goes on to relate how he became interested in medicine, later took the brief medical courses offered at that time, and finally became a country practitioner. There are excellent word pictures of the poor roads, the condition of the sick, and the practice of medicine in rural districts. The doctor apparently worked quite hard, attended sick people at all hours, and frequently had to travel long distances by horse and buggy. Finally, he became successful, had many patients coming to his office, was able to study in Germany, to increase his practice, and eventually to build a private hospital.

It is easy to see why this book should be popular, even though it is evident from the very beginning that the doctor has no great respect for the "public" as such, and also that he undoubtedly has an axe to grind. First of all, Dr. Hertzler is not the only person in this wide world and certainly not the only doctor who has had to work long and hard. Behind and between the quaint Kansan humor, one easily detects the complacency of the successful business man. He tries to show the doctor as an ordinary human being, attempting to meet difficult situations with the intelligence he happens to have plus common horse-sense and increasing medical knowledge and experience. But he would like to have us believe that only the doctor, or rather the medical profession, has been responsible for the advance of medicine. For instance, he states that: "The public . . . still occupies itself enthusiastically with placing obstructions in the path of progress." He forgets two important things: First, that the profession is in itself a part of the public, and secondly, that the progress of medicine goes hand in hand with the improvement of society as a whole, that is, with the advance in machinery and engineering, sanitation, public works, roads and transportation, and education. He makes confusing statements concerning the "Professors of Medicine" and the "Researchists," belittling them in favor of the practical doctor, the "practitioner." Here too, because it suits him, he forgets the devastating ravages of diphtheria which are described in the beginning of the book; he forgets that the prevention and cure of diphtheria were due to these same researchists, laboratory men, and the public health programs which he derides. He would rather thank and praise men like Rockefeller who, he claims, have done more for medical education than all the rest of the laymen since the beginning of time. But since the only contribution of the Rockefellers to medicine has been money, there is no reason why any government agency or public health schemes cannot set aside similar amounts of money for education, not only in medicine but in all social fields.

The viciousness of the book becomes apparent only when it is viewed from a social point of view. On the surface, it seems to be a harmless, amusing story of a doctor's life. One becomes suspicious, however, about the motive behind the book as soon as one reads the preface. Here, the doctor states that his idea of writing the book came to him when he wanted to have a story for his young daughter. It soon becomes apparent that he was influenced in the form and probably the content of the story by a "publisher friend." From the author's opinions about the public, about the holiness of the doctor-patient relationship, and his fears and criticism of socialized medicine, one begins to recognize in the doctor's "genial philosophy" an effective propaganda vehicle against progressive health measures that are being widely discussed now by different sections of the public. While at one point he says that it is not for the doctor to say whether or not he likes the trends in human affairs, at another we find him expressing an adverse opinion concerning the

President's statement that one-third of the American people are without adequate food, clothing, and shelter. He says: "I wonder where these people live." And also: "The last diphtheria death in this community occurred nearly thirty-five years ago in a child whose father was a doctor of philosophy an import, not a native Kansan, needless to say." These statements show that while Dr. Hertzler would like the average medical man to refrain from looking into the trends in human affairs, he himself, in relating the innocent story of his life, does like to look into human affairs and to throw in his weight and authority as an old doctor, on the side of his choice—that of reaction.

Actually his statements about the rarity of diphtheria and syphilis in Kansas are utterly false and can be so proved by reliable documents. Reference to the War Department publication, *Defects Found Among Drafted Men*, shows that Kansas had a higher syphilis rate than many other states. Over 500 diphtheria deaths in Kansas were still reported as recently as 1934 and 1935. Other reports by the Kansas City and the Kansas State Boards of Health reveal that the incidence of syphilis, both as a disease and as a cause of death in Kansas, is at least that of the average for the United States.

The author harps on the subject of the doctor's need for individualization. He states that there are sufficient medical resources in the country and that the only reason that people do not avail themselves of these resources is that they do not need them or are too foolish to obtain medical advice when they do need it. He forgets to mention the results of the National Health Survey, which included Kansas. He forgets to mention that huge sections of the United States have little or no medical resources or facilities, and that the pleasant doctor-patient relationship is possible only to the patient who is fairly well-off and can pay for the doctor who must somehow manage to acquire money to pay for his living after spending an enormous sum on medical education.

Finally, if you have to read this book, get it from the library. If it happens to be out, you are not missing a great deal. It is a fair story but only part of it concerns a country doctor. The author himself seems to have been a country doctor for only a short time and after four or five years of buggy riding he became a medical business man. Because of its adverse social outlook, the book is misleading and dangerous.

J. S. Miller, M. D.

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BEAUTY PLUS. By Mary MacFadyen, M.D., 272 pp., Emerson Books, Inc., N. Y. $1.96.

From the viewpoint of the lay reader the "debunking" books on beauty and health suffer from a lack of constructive advice on what to do and are strong on what not to do. From the medical viewpoint, however, this is not so pertinent a criticism since the greatest danger arises from doing the wrong things. However, Dr. MacFadyen has written an excellent book full of positive information, telling what to do, as well as what not to do. Information on the care of the skin and hair, posture, diet, weight, and "feminine hygiene," is given completely and in an intimate, chatty fashion free from affectation and condescension. It is the kind of advice that a sophisticated older sister with medical training might give to her juniors. This book is one of the best of its kind, and because of its general excellence we should like to call attention to some of its good points and make some criticism and minor corrections of certain of its details.

There is, on the whole, sound advice on the care of the skin. For example, the author emphatically states that soap and water is the best cleanser for the skin. She also takes a sensible stand on the use of cold creams and cosmetics, pointing out that it is useless to rule them out, and that women have a right to use any aid in making themselves as attractive as possible.

Dr. MacFadyen rightly warns against the use of freckle removers containing mercury or salicylic acid, and against all eyelash dyes. She cautions against sunburn and excessive exposure to the sun and offers a salol sunburn preventive lotion already familiar to readers of Health and Hygiene in the form of a cream. Electrolysis is advised as the only effective method for permanent removal of superfluous hair, and warning is given concerning the use of other methods.

There is an obvious inconsistency when the author states that there is no such thing as a "skin nourishing cream," and then nevertheless prints a formula for one. The same is true of skin astringents, mouth washes, skin peels, and mud packs. If these are of no use, why use them or give formulas for them? Furthermore, several formulas for cuticle removers are given which include potassium hydroxide, a powerful alkaline chemical responsible for inflaming and irritating the nail folds and causing hangnails.

The outbreak of pimples is associated with diet and correcting the diet is supposed to result in miraculous improvement, a claim which cannot be upheld. The traditional treatment for acne is outlined and x-rays are advised as a last resort. For years we have been advising our readers that self treatment of acne is useless and that x-rays, the most efficient but by no means a perfect treatment, should be used without wasting any time. Excessive sweating is in no way due to the use of coffee, tea, or highly seasoned foods, as the author states.

To counterbalance these errors correct advice is presented on the proper kind of shoe and emphasis is placed on correct posture and its influence on the general appearance. Numerous useful exercises are given and amply illustrated. Sensible dieting is advised as a method of retaining a youthful figure and to preserve the general health. The advice on what constitutes correct weight is very sensible. There are clear and simple discussions of sex physiology, hygiene, menstruation, female masturbation and pregnancy. Questions of sexual morality and the "double standard" are simply and intelligently presented. It is pointed out that frigidity in intercourse among women is chiefly due to psychic and early environmental training. The uncertainty of the "safe period" or rhythm method of contraception is stressed. Venereal diseases receive only short treatment, but in this connection a point is made that has received insufficient emphasis, that is that the germs of syphilis and gonorrhea die when the secretions in which they are present dry. One should not, therefore, develop any phobias about ordinary non-sexual contacts.

As befits a volume on beauty, Dr. MacFadyen's book is presented in an attractive format and contains many interesting and well-executed illustrations.

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QUESTIONS AND ANSWERS

(*Continued from page* 20)

putes that occur when it is thought that babies have been mixed up in a maternity hospital or orphanage.

Gonzales, Vance, and Helpern, medical examiners of New York City, discuss the "paternity test" in their book, *Legal Medicine and Toxicology*. They point out that the tests have limitations because while they may definitely exclude a man as the father of a child, they cannot prove positively that he *is* the father. The tests show only that it is *possible* for him to be the father; another man in the same blood group *may be* the father.

The "paternity test" is usually done under the direction of the courts in cases where it is thought necessary. In such cases the test is done by experts selected by the judge.

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Developing the Breasts

New York, N. Y.

Dear Doctors:

I would like very much to know if there is any way of developing the breasts—either by diet or exercise?—L. E.

Answer—There is no known way to develop the breasts. The size of the breast depends upon the glands of internal secretion. The breasts are part of the generative system and therefore they develop somewhat after childbirth and nursing. If a person is underweight and desires to put on fat by eating plenty of starches and sugars, a certain amount of the fat will be deposited in the breasts.

CORRECTION

The heading on page 20 of some of the copies of last month's issue should have read "Who's Who on Our Advisory Board," instead of "Who's Who on Our Advertising Board."

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Creosote for T. B.

Providence, R. I.

Dear Doctors:

I would like some information concerning *Mistura Creosote* (Killgores) for the treatment of pulmonary tuberculosis.

A friend of mine is taking it. He swears by it! Says there is nothing like it!—L. H.

Answer—Creosote is a fairly good antiseptic. It is used to preserve wood exposed to dampness such as telegraph poles and wharf piling. It used to be given quite generally in all sorts of coughs and chest conditions and was once thought to be a specific for tuberculosis.

When taken into the body, creosote is eliminated through the lungs and can be detected on the breath. It shares this property with a number of other substances such as ether and the flavoring ingredients of whiskey and of garlic. Because it was an antiseptic and because it was excreted through the lungs it was considered particularly effective in lung conditions. But, this is the rub: creosote is excreted only through healthy lung tissue and not through the diseased portions where it would be needed.

However, creosote does stimulate the lining of the bronchial tubes so as to increase the bronchial secretion. This is decidedly undesirable in tuberculosis because it tends to make the infective sputum more liquid. The looser the sputum, the more easily it penetrates to other parts of the lung and so helps to spread the disease.

Aside from these theoretical considerations, creosote is now known to be ineffective in tuberculosis. It may stimulate the appetite and so allow the patient to put on weight by making him eat more, but it will not cure the disease itself. Besides there are other and pleasanter appetite stimulants, if that is what is desired.

As a matter of fact, there are no drugs which will cure tuberculosis, although from time to time they appear, achieve some popularity, and then are discarded when they are proven ineffective. The only real treatment consists of rest, adequate nourishment and, where necessary, surgical measures for the collapse of the lung such as pneumothorax. Money spent otherwise is wasted.

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SAFEGUARDING CHILDREN

(*Continued from page* 19)

aware of where these activities fall short and has given us a basis of administrative experience on which we can plan for needed expansion.

The Act makes available $3,800,000 a year for maternal and child-health services, and additional funds are made available from State and local sources. The grand total budgeted as of September 1 for the fiscal year ending June 30, 1939, is slightly more than $7,000,000. The Technical Committee on Medical Care recommends a gradually expanding program reaching by the tenth year a total additional expenditure of $165,000,000, of which $95,000,000 would be allocated to maternity care and care of newborn infants, $60,000,000 to medical care of children, and $10,000,000 to services to crippled children. The Committee recommends that approximately one-half the cost of the expanded program should be met by the federal government.

At the present time the largest sum expended from combined federal, state, and local funds for maternal and child-health services is for public health nurses. Although the number of counties in which there is a public health nurse is increasing—there are 300 more counties this year than last—there are still 1,022 counties in which there is no full-time public health nurse to advise and help mothers in the care of themselves and their children. This is about one-third of the total number of counties in the United States.

Planning for the care of the mother at delivery and of the infant in the neonatal period is becoming recognized as one of the most important services to be rendered by the local staff. In approximately 100 local areas in twenty-nine States, organized home delivery nursing service has been reported, an accomplishment far beyond expectations and one that has taxed the ingenuity and initiative of those responsible for it. In a number of States the problems of medical and nursing care of the premature infant are being given special attention. (*Turn to next page*)

In Oklahoma a special demonstration of care of mothers at delivery and of infants during the neonatal period is being conducted as part of a State plan of maternal and child-health services. For the purpose of the demonstration there were added to the staff a full-time obstetrician, a full-time pediatrician, three field nurses, and a supervising maternity nurse. Funds were made available to pay local physicians for maternity care, including delivery care, and necessary hospitalization is being supplied by the county for women who are unable to obtain this care from their own family resources.

If such demonstrations could be extended to all counties where needed, there is no question that the maternal and infant mortality rates could be lowered.

Though not yet able to provide funds to pay doctors for delivery cases, a number of States are exploring ways of meeting the need of general practitioners for case-consultation service in obstetrics and pediatrics. In eighteen States, obstetricians or pediatricians are being employed on a full-time salary basis for this purpose, usually to work in a single district or county demonstration unit. In twenty-two States, consultants are employed on a part-time basis, and in four States specialists may be called for consultation from an approved list by general practitioners, and payment is made on a case basis.

One of the gratifying developments in regard to the conferences for health supervision of expectant mothers and children is that the services of local practicing physicians are being increasingly utilized in conducting them. The 3,135 physicians who conducted conferences during the last fiscal year were all paid for their services from maternal and child-health funds. Another interesting development is the increased interest on the part of practicing physicians in post-graduate education in obstetrics and pediatrics. Last year courses in obstetrics and pediatrics were held in thirty-eight States with an enrollment of approximately 10,000 physicians.

The Social Security Act has brought great progress in maternal and child-health work. But the figures as to territory covered by medical clinics and conferences, by public-health nursing advisory services, by special types of maternity nursing service, show how much ground is still uncovered, how much remains to be done. That the State health departments are conscious of unfilled gaps is shown by the response of the States to the question as to their greatest needs in providing for maternal and child health. Twenty-eight States listed specific needs that totaled $22,000,000 annually. The needs appearing most frequently in these lists included funds for payment of physicians' fees for delivery and other medical care, hospitalization for maternal cases, additional nutritionists, and additional public-health units. Many other States included other needs without specifying the required personnel or costs.

Having come to the realization of the necessity for a courageous attack on the problem of maternity care and care of newborn infants that would meet the need with no half-way measures, national organizations and individual citizens have united in an effort to develop public opinion favorable to action.

●

CHILDBIRTH

(Continued from page 9)

tractions of other muscular organs like the intestine, bladder, or heart. This evidence suggests that the pain is the result of interference with the normal development of the contractions. In other words, the same abnormal factor which causes the pain also delays the progress of the labor. This explains why some women can have children easily and rapidly. In such cases there is no interference with the function of the womb, and the opening is accomplished without pain so that the woman is not even aware of the impending birth until the last few minutes.

This brings up the matter of the alleviation of pain in childbirth. It is obvious that if the above conception of the cause of pain is true, a better understanding of the physiological process and of the manner of eliminating factors which interfere with the normal womb function will so lessen the pain of childbirth that the use of drugs will be relegated to secondary importance.

Volumes have been written on the relief of pain during childbirth, and many methods and variations of methods have been used. There is one group of drugs, the barbiturates, which place the patient in a daze so that she is not fully conscious nor does she remember very clearly afterwards what has happened. These drugs, however, have the disadvantage of not being entirely effective as pain-killers. Another group of drugs, the opium derivatives, really alleviate pain, but possess the disadvantage of not being suitable for use in the later stages of labor when the pains are most severe, since when so used they may be dangerous to the child. Therefore, a judicious combination of two or more drugs is required when the doctor decides that the use of a pain-killer is advisable. The combination must be properly balanced to overcome the objections of each type of drug, and will depend upon the type of labor and its proper estimation by the physician rather than upon the extent of the patient's pain or complaints.

There is also the anesthetic which is inhaled and which can be used to great advantage for a short time before and during the actual birth. But in the final analysis the problem of alleviating the pain of childbirth is an obstetrical rather than a pharmaceutical problem.

In spite of the tremendous advances in the field of obstetrics it would be idle to assert that the last word has been said even in the matter of the mechanism of the actual birth of the child. Textbooks still give as established facts assumptions propounded by authors of many decades ago. In spite of claims to the contrary, the material facilities for instructing medical personnel in a high type of obstetrical care are adequate, but despite this fact there are many undeniable deficiencies in our present-day methods of instruction, and most heads of teaching institutions readily admit that there are decided shortcomings in the results achieved throughout the country. They generally agree that the medical student and interne do not receive adequate training, especially as regards bedside teaching and practical experience under supervision. There is overemphasis on lectures and mannequin and dummy demonstration, and dummies of necessity bear no more resemblance to a living woman than a tin soldier does to a live doughboy. Moreover, hospital physicians hold too many appointments, and as they have their private practices to take care of as well, their time is limited and the interne usually learns by watching an older interne. Internes and nurses are overworked and cannot give the patient the attention and care required.

American motherhood deserves the fullest utilization of our highly developed obstetrical techniques, and ways must be found to organize maternity care so that mothers will have the benefit of the best that science has to offer.

What social workers are thinking and doing today is of vital concern to every person interested in social betterment

Read "Profiles" of WILLIAM HODSON, MARY SIMKHOVITCH, LILLIAN WALD, WAYNE McMILLEN, CHARLOTTE CARR, MARY VAN KLEECK and others in coming issues of **SOCIAL WORK TODAY**

The popular picture of the bustling and officious charity worker engaged in helping so-called unfortunate people "back on their own two feet" is *out.*

The majority of social workers are now employed by the public in relief bureaus, social security agencies and numerous other public welfare organizations. They are looking up from their preoccupation with individuals to see what is happening to them, to all of us, in *society.*

Through day-by-day contact with the "end products" of economic maladjustment they are analyzing their social role and are beginning to join hands in the fundamental job of bringing justice and order into the social structure.

SOCIAL WORK TODAY is the organ of the progressive in the field, who while working to improve current professional standards and practices are at the same time accepting this responsibility for acting on broader social issues.

SOCIAL WORK TODAY played an important role in helping to eliminate the degrading philosophy of charity from welfare programs. SOCIAL WORK TODAY espouses the *rights* of the unemployed for jobs and for a decent standard of living. SOCIAL WORK TODAY covers the "minimum spheres of interest" of an alert, socially conscious individual: public welfare, social legislation, social action, the labor movement, minority groups, case work theory and practice, war and peace. *Sixth year of publication.*

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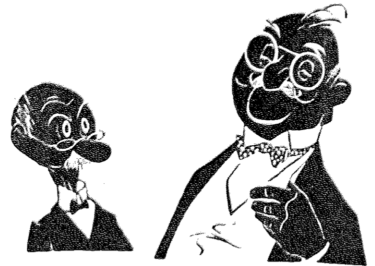
The Poor and Pulseless Patient and the Hard and Heartless Doctor



By DEXTER MASTERS

Oh doctor, my doctor, whatever shall I do?
A sickness has assailed me and my pulse is down to two;
My temperature is mounting but my funds are bending low;
Oh doctor, my doctor, wherever shall I go?

Wherever shall he go?
WHEREVER shall he go?
His temperature is high, but his funds—alas—are low.

Hushabye, my sick one, the poor should ail in quiet;
Forget your little aches and pains and go improve your diet;
Some milk (Grade A), some sirloin (top), and then a long vacation
Will make you quite a man again—no charge for consultation.

No charge for consultation,
No charge for consultation,
But what'll he use for money while he's taking his vacation?

Oh doctor, my doctor, there must be some mistake;
The sickness that is in me doesn't come from eating cake;
Nor does it come from eating bread, nor anything at all;
It comes from eating nothing—oh, whither shall I crawl?

Yes, whither shall he crawl?
Oh, WHITHER shall he crawl?
For he basn't eaten anything, not anything at all.

Hmmm, my little irritant, and hmmm, my poorly sick one,
My observations lead me to conclude that you're a thick one;
For such as you the clinics are, so go you forth and find one;
I never use them much myself, but I'm sure I wouldn't mind one.

He says he wouldn't mind one,
He SAYS he wouldn't mind one,
Now how about the fellow whom he's telling to go find one?

Oh doctor, my doctor, the clinics are all filled,
Their staffs are going crazy with the patients to be pilled;
Three seconds to a customer is all that they can give,
And I need a little more, good sir, than *that* if I'm to live.

Oh sir, if he's to live,
GOOD sir, if he's to live,
He needs some better treatment than the clinic men can give.

So that's the sort you are, eh? So that's the way you've reckoned?
Why, you're probably a follower of Roosevelt the Second!
I suppose you'd simply have me do without my compensation?
Well, they figure things another way in my Association.

In his Association,
In HIS Association,
They figure first and foremost on a goodly compensation.

Oh doctor, my doctor, but *something* must be done!
My malady is getting worse, my pulse is down to one;
I have no thought or wish, sir, to cut into your fee;
Let those who have it pay it—but that still leaves me.

That still leaves him, says he;
And with that we must agree;
Oh, is nothing to be done for the patient SANS a fee?

Drawings by Sam Berman

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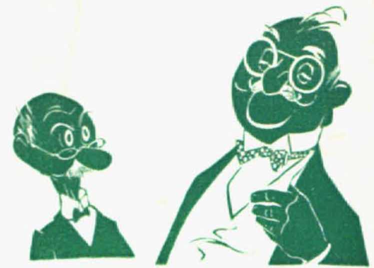
The Poor and Pulseless Patient and the Hard and Heartless Doctor



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