

Life & Health

FEB · MARCH

~ 1915 ~

6^d

The Warburton Sanitarium

WARBURTON, VICTORIA



THIS institution has been established for the purpose of treating persons suffering from all kinds of diseases except infectious cases. For those who are "run down" and require a bracing atmosphere or a change of diet, the Warburton Sanitarium is the ideal place. The Sanitarium is well equipped for treating disease by the most modern methods. Maternity and surgical cases receive special attention. Registered by the Board of Health as a Private Hospital.

Send to-day for illustrated booklet and further information to

THE MANAGER, The Warburton Sanitarium,

Mt. Donna Buang Road,

Warburton, Victoria

Telephone 5, Warburton Exchange

**YOUR HEALTH
IS YOUR CHIEF ASSET**

AND

COMMONSENSE

CLOTHING

<i>Men's "Aertex" Cellular Shirts - - - - -</i>	<i>4/6</i>
<i>Men's "Aertex" Cellular Pants - - - - -</i>	<i>5/6</i>
<i>Men's Cellular Drawers</i>	<i>4/6</i>
<i>Men's "Wolsey" Natural all-wool Shirts from</i>	<i>7/3</i>
<i>Men's "Wolsey" Natural all-wool Pants from</i>	<i>7/9</i>
<i>Other makes of Natural all-wool Shirts from</i>	<i>4/11</i>
<i>Other makes of Natural all-wool Pants from</i>	<i>5/3</i>
<i>Natural Wool and Cotton Shirts from - - -</i>	<i>3/3</i>
<i>Natural Wool and Cotton Pants from - - -</i>	<i>3/11</i>
<i>Balbriggan Shirts from</i>	<i>2/6</i>
<i>Balbriggan Pants from</i>	<i>2/9</i>
<i>All-wool Sweaters from</i>	<i>7/6</i>
<i>Women's Combinations, all-wool and Cellular from - - - - -</i>	<i>8/6</i>
<i>Women's Vests, short sleeves - - - - -</i>	<i>5/6</i>
<i>Women's Vests, O.S. - -</i>	<i>6/6</i>
<i>Women's Vests, all wool</i>	<i>2/6</i>
<i>Children's Vests from</i>	<i>1/6</i>
<i>Children's Commonsense Corset-bodice - - -</i>	<i>2/11</i>

IS ESSENTIAL
TO YOUR HEALTH

CRAIG'S ARE SPECIALISTS
IN HYGIENIC APPAREL FOR
MEN, WOMEN, AND CHILDREN.

THE LARGEST ASSORTMENT
IN AUSTRALIA
THE UTMOST POSSIBLE VALUE
—ALWAYS P

LET US SEND YOU
**OUR HANDSOME NEW
CATALOGUE**

NO MATTER WHERE YOU RE-
SIDE IT GIVES YOU **ALL THE
ADVANTAGES OF METRO-
POLITAN SHOPPING.**

CRAIG'S

(Craig Williamson's Pty. Ltd.)

822 Elizabeth St., Melb.

OUR NEW CATALOGUE OF

Fashions for Spring and Summer

1914-15

Is ready, and will be forwarded to Any Address
on receipt of a card

BALL & WELCH PTY. LTD.

180-188 FLINDERS STREET, MELBOURNE
569-581 GEORGE STREET, SYDNEY

Almost a Man

By Mary Wood-Allen, M.D.

A FRANK talk to a boy who was
"almost a man." Every boy
will read it and be the better for it.

It is a help to mothers and teachers
in teaching the lad concerning him-
self, purely, yet with scientific ac-
curacy.

**PRICE 1/- POST
FREE**

Signs Publishing Co. Ltd.,
Warburton, Victoria

Are You Suffering from Constipation?

"Chronic constipation prevails to an alarming
extent in civilised countries. It is safe to say four-
fifths of the population are affected with it to a
greater or less extent."

"In every case permanent relief may be prom-
ised, no matter how chronic the condition, pro-
viding no growth or organic obstruction exists, which
is extremely rare."

These are extracts from a valuable little work entitled—

Chronic Constipation

By D. H. KRESS, M.D.

After carefully discussing the evils resulting from
this malady, the Doctor takes up in detail the
primary and secondary causes, the correct diet to
be followed, and the rational treatment to ensure
permanent relief. A number of successful cases
which have been treated are also given, which prove
that the treatment suggested is effective.

48 Pages. Price 6d.

Order from our General Agents or
SIGNS PUBLISHING COMPANY LTD.
Warburton, Victoria, Australia

Life and Health

The
Australasian Health Magazine

*Published Every Two Months.
64 Pages and Cover*

Editor: A. W. Anderson

Medical Contributors: W. Howard James, M.B.,
B.S., Melbourne; P. M. Keller, M.D.; Florence
A. Keller, M.D.; A. Stuttaford, M.D.; Franklin
Richards, M.D., C.M., Montreal; Eulalia Richards

Price (Payable in Advance):

For 12 months, post paid, Commonwealth
and New Zealand, 3/6

Foreign Countries, post paid, 4/6

All orders sent direct to the publishers or their
agents, either for single subscriptions or for clubs,
must be accompanied by cash.

SIGNS PUBLISHING COMPANY LIMITED, Melbourne
and Warburton, Victoria, Australia

*When forwarding Money Orders or Postal
Notes, please make same payable to SIGNS
PUBLISHING COMPANY LIMITED, WAR-
BURTON, and not to individuals. All remit-
tances from New Zealand should be in the form
of Money Orders, as Postal Notes or Stamps
are not negotiable in the Commonwealth.*

Our General Agents

Address: "Life and Health"

Victoria

Chancery Lane, 422 Little Collins St., Melbourne
C/o Victoria and Tasmania Tract Soc., 327 Collins
St., Melbourne

New South Wales

"Tereora," The Avenue, Strathfield
Royal Chambers, 45 Hunter Street, Sydney

South Australia

116 Grote Street, Adelaide
28 Waymouth Street, Adelaide

West Australia

103 William Street, Perth

Queensland

186 Edward Street, Brisbane
Corner Peel and Grey Streets, Brisbane

New Zealand

Royston House, 70 Nairn Street, Wellington
83 Willis Street, Wellington
86a Cashel Street, Christchurch
Strand Arcade, Queen Street, Auckland

ALMOST A WOMAN

By Mary Wood-Allen, M.D.

THIS valuable book deals care-
fully in a chaste, yet thoroughly
scientific manner with the laws of
health, and the changes which ac-
company development into woman-
hood.

It speaks to the young lady just
as a mother would like to talk to her
daughter.

It is a boon to every mother.

**PRICE 1/- POST
FREE**

Signs Publishing Co. Ltd.,
Warburton, Victoria

Baby's Firsts

By Mary Wood-Allen, M.D.

A practical book on the physi-
cal care of the babe, from the
time of its arrival to the begin-
ning of the second year. Written
by a physician and a mother, it
treats all the topics considered
in a scientific yet simple and
thoroughly practical manner. It
is a boon to mothers of moderate
means, as it tells how to make
many of the small things which
add to the baby's comfort.

Price (post free) - 1/-

Order from our General Agents or
SIGNS PUBLISHING CO. LIMITED,
Warburton, Victoria, Australia

THE
"Signs of the Times" Announce-
ment for 1915

IN addition to the usual editorial matter dealing with current events, it is the intention of the Publishers to devote considerable space during the year 1915 to the consideration of Special Bible Topics covering the principal features of the everlasting gospel. The following is a partial list of the articles arranged for:—

Can We Trust the Old Book ?
Daniel's Great Historic Panorama
Why are the Angels Invisible ?
The Sanctuary in Type and Antitype
Coming of the World's Redeemer
The Seven Churches of Revelation
Why Is This an Age of Wonders ?
The Signs of Christ's Appearing
The Seven Seals of Revelation
Philosophy of Salvation—Will All
Be Saved ?
The Little Horn of Daniel's Vision
The Resurrection

Divine Immortality
Where Are the Loved and Lost ?
Spiritualism—Satanic or Divine ?
Is the World Growing Old ?
Home of the Redeemed
The Sabbath in History
Why Does Christendom Observe Sunday ?
Which Is the True Church ?
The Holy City
Israel Lost and Found
Life Under the Law and the Gospel
The Seven Trumpets of Revelation
The Kingdom Restored

A Special Series of Articles on the Nature of Man will also be furnished by Dr. W. Howard James

The question Box will be re-opened, and questions sent in by subscribers will be answered by Pastor R. Hare.

YOU CANNOT AFFORD TO MISS A SINGLE NUMBER.

Send in your subscription Now for one year.

Price 4/6 post free, Commonwealth and New Zealand.

Order from our General Agents, or
SIGNS PUBLISHING COMPANY LIMITED,
Warburton, Victoria, Australia;

CONTENTS

EDITORIAL

Flesh Foods	<i>W. Howard James, M.B., B.S.</i>	7
If Temperance is Good for the Army, Why is it not Good for the Civilian?	<i>A. W. Anderson</i>	12
One Class Benefited by Saloons		14
The Tobacco Heart		15
Neurasthenia from Lack of Table Salt		15
Alcohol and Mortality		15

CHATS WITH THE DOCTOR

W. Howard James, M.B., B.S., Melb.

Blackheads—Dandruff—Sweating Feet—Red Eyes—Acute Giddiness, etc.—Food for Cattle—Dyspepsia—Neuritis after Accident—Sanatogen—Neuritis and Heart Disease—Stammering—The Inebriate—Head Lice—Nervousness—Rupture—Cough of Long Standing—Granose Biscuits for Children—Deafness		17-21
--	--	-------

GENERAL ARTICLES

Auto-Intoxication, or Self-Poisoning	<i>David Paulson, M.D.</i>	23
Nervous Prostration		25
Correcting Heredity		25
Liquid Nerves		26
Alcohol Not Needed in Medicine	<i>W. B. Holden, M.D.</i>	26
More Solar Surgery		27
Freezing a Patient to Cure Him of Consumption		28
The Rest Cure		28
The Diseases of the Battlefield		29
"With Love from Peter"		30
The Man Wonderful	<i>R. Hare</i>	32
Teaching Self-Reliance		33
A Problem in Eugenics		33

DIET IN HEALTH AND DISEASE

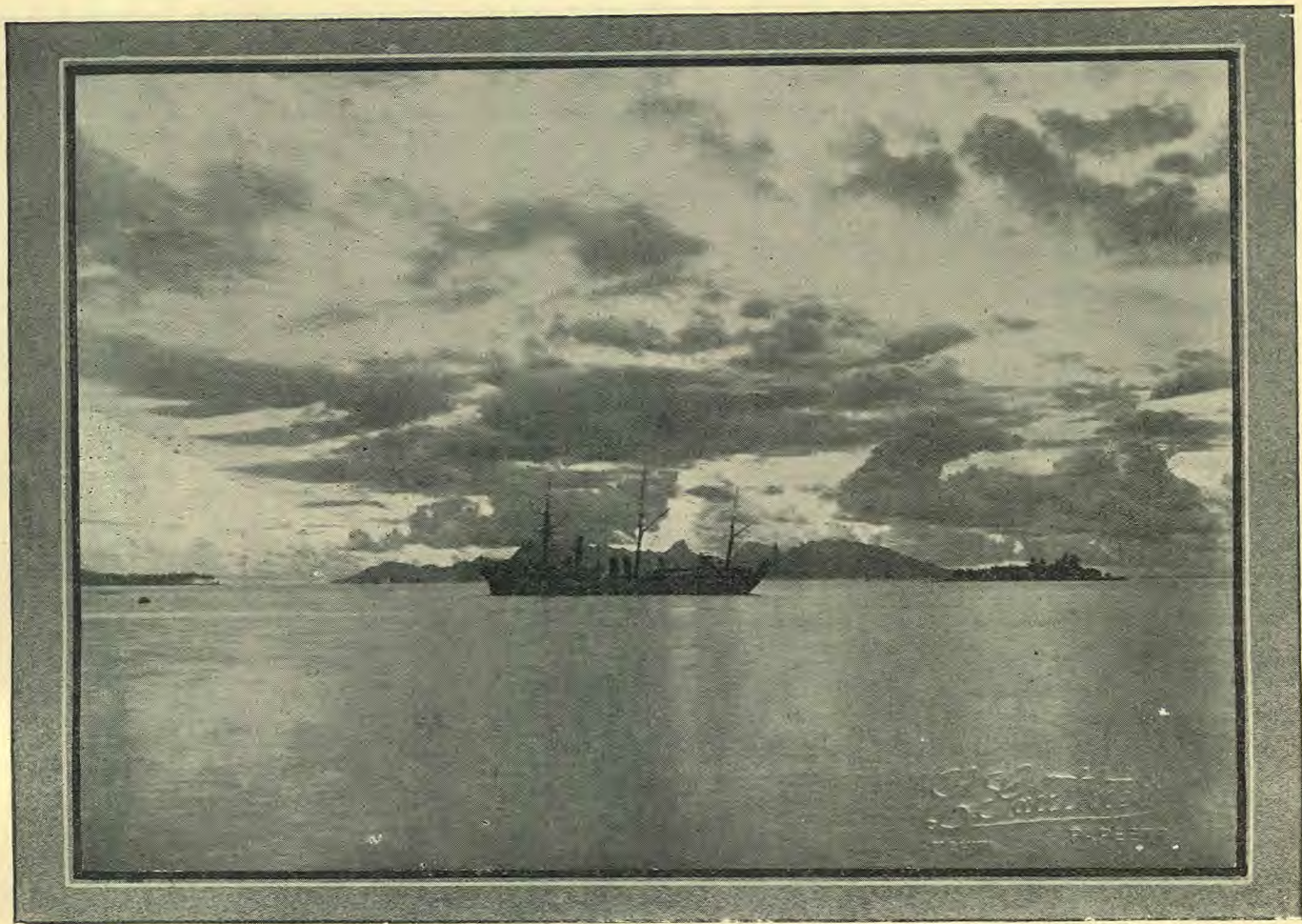
Extremes in Diet	<i>Mrs. E. G. White</i>	34
A Well-Balanced Dinner Menu	<i>Mrs. Ruth Haskell Hayton</i>	36

QUIET TALKS WITH MOTHERS

The Guest in the House	<i>Barbara Caye</i>	38
Truthfulness	<i>Constance Cooke</i>	40
A Remedy (poetry)		42
The Children's First Teeth		42
Spinal Curvature in Babies		43
A Use for Old Millinery		43
Mother's Knee (poetry)	<i>R. Hare</i>	45
Remedies for Children's Diseases	<i>Edythe Stoddard Seymour</i>	45

THE CHILDREN'S HOUR

Miss Fret and Miss Laugh (poetry)	<i>Margaret E. Sangster</i>	47
The Wise Squirrels	<i>Ellen Velvin</i>	47
The Good Old Way (poetry)		48
Two Ways to Measure the Height of a Tree		48
John's Opportunity		48
The Broken Saw		49
The Happiest Little Boy		50
Bobby's Day	<i>Gertrude Cushing</i>	51
Under the Bluff		52
Grandmother's Remedy		53
Boy Wanted	<i>Dr. Frank Crane</i>	54
Liking What We Have to Do		54
Such Impertinence		55



SUNSET IN THE TROPICS

L. Gauthier, Photo., Papeete

LIFE &

HEALTH



Vol. 5

FEBRUARY-MARCH, 1915

No. 1

Flesh Foods

W. HOWARD JAMES, M.B., B.S.

AUSTRALIA is the greatest flesh consuming country in the world. We consume fifty per cent more than the Americans, over a hundred per cent more than the English, and ten times more than the Japanese. The area of our land in proportion to our comparatively small population is so large that we can use it most prodigally. We can devote a very large portion of it to the production of cattle and sheep. If we had the population of China we could not do this. It would be necessary to get all that could be got out of the soil, and that would be by the production of cereal foods. Land employed for agricultural purposes will sustain a hundred times more inhabitants than that devoted to pasture. A family with only a limited area of land must devote its attention to agriculture in order to secure a living, and not to the grazing of cattle. Francis William Newman, professor of University College, London, says, in his "Essays on Diet":—

"If men fed wholly on beef, then four, five, or even seven acres for the cattle would not go so far in giving food to men as a single acre devoted to feed us by its vegetable crops. Moreover, in a region given over to grazing, a small rustic popu-

lation suffices to tend the cattle; hence the rural areas are emptied of men, who are constantly driven out of the country into the town. This is a grave, national evil." Again he writes in speaking of the dangers which threaten his country:—

"Just alarm is widely spreading concerning a fact too broad to be denied—the growth of our towns, and the disproportionate emptiness of our country. This is everywhere the symptom of progressive national decay. The Roman poet, Horace, saw it already before his eyes in Italy. Small freeholds had become rare. On the great estates were beautiful villas, splendid parks cultivated for elegance, not for service. The fruit tree was evicted (to use his phrase) by the barren tree. The towns were full, and the country empty. Grazing superseded agriculture; cattle took the place of robust freemen, and were tended by a sparse population of slaves. . . . No impartial and well informed person can look on Great Britain without discerning the same alarming phenomenon in contrasting our rural districts with our towns. . . . If the towns renounced flesh eating, we should see in a single generation, even without improved land tenure, a tide of emigration

set the other way—from towns to country. Rustic industry would be immensely developed. All motive for expatriation of our robust youth would for a long time yet be removed, and the country might be enormously enriched, not in an upper stratum of great fortunes, but (if national morality kept pace with wealth) down to the bottom of the community. . . . The area for which twenty men suffice to tend oxen grazing on it, might need the labour of a thousand (including rustic artisans), if it were duly laid out for crops."

What is true of England is also true of Australia. The prosperity of our country is measured by the resources of our land, and not by the size of our cities. By developing the land "national morality" would "keep pace with wealth," for it is the city life that demoralises. Cultivate the lands, and an increase of our population would be an absolute necessity. There would be not only an emigration from the towns to the country, but also from the British Isles and other crowded countries.

"Mr. W. Hozle, the well-known statistician, stated before the Manchester Statistical Society that twenty-five cents' worth of flour, or oatmeal, or fruit, or selected vegetables, would give as much nourishment as five times the amount spent for flesh. Thus, were the non-flesh diet adopted by the working people, they would save considerable in money; they would be stronger and healthier and happier; and the increased usage of vegetables, nuts, fruits, and cereals would rehabilitate the peasantry, and bring back to the country districts their long-lost prosperity."—*Diet and Endurance*, by J. R. Leadsworth, B.S., M.D., p. 40.

The adoption of a non-flesh diet would not only increase very materially the population of our rural districts, and consequently the prosperity of our country, but it would reduce very considerably the cost of our food, and permit our wages to be devoted more largely to other comforts of life. In the American "Bulletin," No. 142, Department of Agriculture, we have the following quotation: "At twenty cents

a pound, ten cents buy five-tenths of a pound of meat, which contains 515 calories of energy actually available to the body, while the same amount spent for oysters furnishes only 125 calories of energy. But in contrast to this, note that ten cents' worth of wheat-flour produces available energy amounting to 5,410 calories of energy. It is thus seen that grains which contain the food elements in almost perfect proportion for the human organism are the cheapest of all foods. Many families are wasting their hard earnings for food which is devoid of nourishment." In the "Bulletin," No. 121, United States Department of Agriculture, a long list of quantities of articles is given that could be purchased for ten cents, and also the amount of energy (represented in calories) these amounts would produce when consumed. We will select but a few:—

Ten cents spent in kidney beans would produce 3,210 calories; in Lima beans, 4,065 calories; in dried peas, 5,510 calories; in wheat-flour, 8,250 calories; in corn-meal, 8,275 calories; in oatmeal, 6,195; in potatoes, 4,130 calories.

The contrast between the non-flesh foods as far as economy is concerned is remarkable. Ten cents spent in sirloin of beef would produce, according to price paid, only 415 to 1,120 calories; in smoked ham, from 770-1,675 calories; in cod-fish, 165-275 calories; in dried salt cod-fish, 395-525 calories. Thus the flesh foods produce even less energy than potatoes for the amount spent.

It is argued, however, that the nearer a food approaches in structure and composition the human flesh, the more easily it is digested, assimilated, and converted into the tissues of the body, and that as flesh foods have a greater similarity to the tissues of the body than non-flesh foods, they are to be preferred. According to this idea the cannibal, after all, was not altogether lacking in wisdom, for human flesh certainly has a greater similarity to his own tissues even than that of any other animal.

Work, however, is not an evil. The

healthy man is the man who works. In sickness, where the digestive powers are much enfeebled, food is rendered more easily assimilated by a pre-digestion. In this way milk, eggs, or flesh foods, which are peptonised outside the body, can be absorbed and formed into tissue, when otherwise they would produce serious digestive disturbances, and yield no increase of energy. But what would be the

Sir Henry Thompson, Dr. Jeuttner, Linnaeus, Sir Richard Owen, Prof. Wm. Lawrence, and many other well-known physiologists and anatomists declare that the structure of man's teeth and alimentary canal is essentially that of the vegetable eater. The alimentary canal of the flesh-eating lion and tiger is short. The food contained in the flesh food taken is quickly exhausted, and to prevent poison-



Selected vegetables contain five times more nutriment than flesh foods

effect of giving these artificially digested foods to the healthy individual? His digestive organs would most certainly lose their power and become much debilitated, and his general health would undoubtedly suffer and be more prone to disease. Similarly, even though, for the sake of argument, we granted that flesh foods may be more quickly transformed into human flesh, it does not follow that the individual would in any way gain by this lessened expenditure of energy. The alimentary canal was made to work, and to materially lessen that work is not productive of health but of debility and disease.

Baron Cuvier, Dr. Spencer Thompson,

ing from absorption of bacterial products, it must be quickly passed out of the system. On the other hand, the anthropoids and all the quadrumana derive their alimentation from fruits, grains, and nuts, and these have comparatively a very long alimentary canal. The frugivorous food contains more nourishment than the flesh foods; and in order to extract this nourishment a long alimentary canal is absolutely necessary. To lessen the work of this canal, which is constructed to do special work, means debility and disease. Dr. Jeuttner writes: "The large apes resemble the species of man more than any other group of animals. The apes



GOOD-LOOKING VEGETARIANS READY FOR THE BUTCHER

Sears, Photo., Melbourne

are vegetarians, very healthy and strong, are long lived, and possessed of fine sensibilities and instincts. In captivity they become sickly, weak, learn to eat meat, and appropriate many bad traits characteristic to the human species. Civilised apes usually die of tuberculosis."

Metchnikoff, the famous successor of the renowned Louis Pasteur, is a firm believer in evolution. He believes that man's ancestors were closely related to the frugivorous anthropoid apes. Man, however, has had a superior mental development, one of the results being that he has chosen a mixed diet of flesh and fruit. His mental development, however, has outstripped the changes in the body, for man still retains the long frugivorous alimentary canal. He has learned to live quickly, to think quickly, and to eat quickly, but the long alimentary canal is against him. It does not allow him to throw off quickly the undigestible, quickly decomposing, and putrefying parts of his flesh diet; consequently, this famous scientist proposes that we aid the evolution of nature, as far as the body is concerned, by a surgical operation, the removal of the, to the flesh-eater, useless and dangerous colon, the terminal part of the alimentary canal. "There is a way," says the Wiseman, "that seemeth right unto a man, but the end thereof is death." We believe the Wiseman is right, and are quite willing to wait for Nature to substitute a short alimentary canal before we indulge in the flesh foods suitable for the fully evolved man.

Throughout the alimentary canal the digestive juices convert our foods into substances which are easily absorbed into the general circulation, and thus nourish the body and produce energy for its various functions. When the digestion becomes disordered through unsuitable food, imperfect mastication, and the action of bacteria, products are formed which enfeeble the body and depress the mind, and the individual suffers from what is known as auto-intoxication. When the excretory organs, the liver, the kidneys, and the skin are acting vigorously, these prod-

ucts to a large extent are thrown off, but the continuation of absorption of these hurtful bi-products lessens the power of these organs, and the symptoms of auto-intoxication are more or less permanent. A considerable reduction in diet enables these excretory organs to regain their power, and a natural recovery takes place. Dr. Leadsworth states: "The opinion is gaining ground that tuberculosis is due primarily to a previous toxemia or blood poisoning. Nervousness and neurasthenia often disappear when the intestinal canal is cleared of the putrefying substances that have, perhaps, existed there for years. Bouchard, speaking of these poisons that are continually being manufactured from food substances in the intestinal canal, says that, in view of such conditions, man is constantly standing, as it were, on the brink of a precipice. Every moment of his life he runs the risk of being overpowered by poisons generated in the stomach (alimentary canal)."

There are no foods with such dangerous bi-products as the flesh foods. Quoting again from "Diet and Endurance," by Dr. Leadsworth: "The experiments of Dr. Palier have shown that, by injecting germ cultures taken from human feces into the tissues of a healthy animal, no effect was produced if the cultures were taken from the waste material of a vegetarian; but, on the contrary, when these germs were taken from the bowel excretions of a flesh-eating animal, they were found to be extremely virulent, giving rise to symptoms of intoxication and inflammatory conditions. Palier suggested that these germs were more than likely the exciting cause of appendicitis and diseases of the gall bladder in those who subsist largely upon flesh foods. As an evidence of the truthfulness of this, it is asserted that Dr. Senn observed in his extensive travels in the interior of Africa, that the tribes of blacks who subsisted entirely upon a fleshless diet were immune from appendicitis and like involvements of the bowels." One can follow a herd of cattle or a flock of sheep for days without noticing any offensive smells, but the case is

far different with an army of soldiers. In beings who live on animal foods it is said that one-third of the excretion from the bowels is germs. This subject will be further dealt with in our next issue.

If Temperance Is Good for the Army, Why Is It Not Good for the Civilian?

THE whole world seems to be waking up to the baleful effects of alcoholic drinks. In the United States there is a measure before Congress to banish drink from the nation. In Russia the Czar has forbidden the sale of alcoholic liquor, and his millions of troops must satisfy their thirst with something more beneficial than intoxicating drinks.

Alcohol has been condemned at the bar of reason as a foe of humanity. After being worshipped as a benefactor of the race for centuries this enemy of humanity has been stripped of its mask, and proved to be a wily, deceitful foe. Much has been written by the medical profession of late years against the use of alcoholic drinks, and the work of temperance reformers has been much assisted by the condemnation of alcohol by these scientific men.

The European war has already shown the advantage of teetotal armies. Steadiness of nerve, accuracy of vision, alertness of the intellectual faculties are an absolute necessity in a modern army; and experience has taught that these necessary qualities are missing in men who are under the influence of drink. Certain misguided people, whose sympathies are influenced more by their cravings of appetite than by the exercise of their reasoning faculties, have protested loudly against the decisions of the authorities to supply no drink to the troops as an interference with individual liberty. But if this be true, every regulation of the military authorities is an interference with individual liberty.

Seeing that it can be shown that the health and comfort of the troops are better

preserved by the prohibition of drink, it is certainly the duty of the authorities to make the prohibition, and they are to be commended for their thoughtfulness. But if it can be shown that drink is injurious to troops, surely it is self-evident that drink must be also injurious to all other men. And if it is right and proper for the State to prohibit drink for its soldiers, why would it not be equally right and proper for the State to prohibit drink for its citizens?

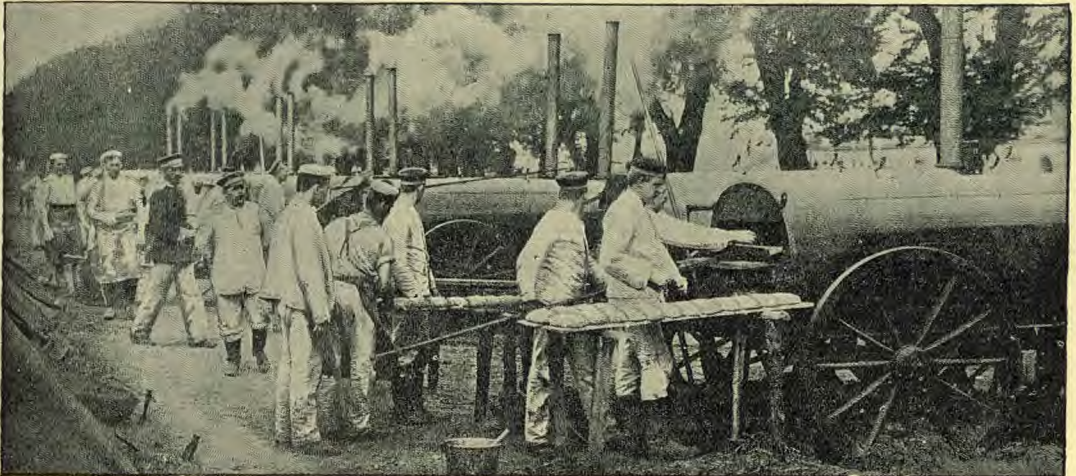
That drink is injurious to soldiers is so aptly stated in an editorial in the *Melbourne Age* that we take the liberty of re-printing the article:—

“It would be well for those who have been protesting against the abolition of the “wet” canteen in connection with the Australian Expeditionary Forces to preclude further agitation with an investigation of the true relation of alcohol to military efficiency. One of the first striking facts to emerge from such an inquiry is that the most experienced army commanders of all civilised countries are unanimous in regarding liquor as a deadly menace to the health and morale of troops engaged in active operations. Elaborate scientific experiments conducted in the field by expert physicians, and spread over a long course of years, have convinced the scientific world that even a moderate indulgence in alcohol unfailingly produces in the average soldier the following effects: (1) It impairs his sight and diminishes his power to see signals. (2) It confuses prompt judgment. (3) It spoils accurate shooting. (4) It hastens fatigue. (5) It lessens resistance to exposure and disease. (6) It increases shock from wounds, and thereby curtails the chances of recovery. On all these points the leading medical authorities of Europe are in close accord. Army leaders are not in a position—not being doctors—to pronounce such detailed judgments; but personal observations of actual experience in athletics and war have brought them into perfect harmony with the experts’ general conclusions. With scarce one notable exception, the general officers of Great Britain and

France are advocates of total abstinence by soldiers in time of war, and the highest army leaders of Germany have repeatedly expressed similar views. The Kaiser, indeed, not so long ago, publicly declared that the next great war would be won by the most temperate belligerent nation.

“What the army officers of Russia think of alcohol is demonstrated by the Czar’s ukase—issued at the outset of the war—positively forbidding any sort of commerce in liquor throughout the entire length and breadth of the vast Muscovite Empire. And this ukase cost Russia a sudden and absolute loss of revenue to the amount of

following the teaching of world-old military experience, and adopting the matured counsel of the greatest soldier that any age has seen. No man, dead or living, saw more of warfare in all its multifarious phases and conditions than Napoleon Bonaparte; nor has any captain ever entered more intimately into the life of the common soldier. The ‘Little Corporal’ has left many valuable aphorisms to guide the captains of to-day, but none more precious than these two: ‘It is only a sober army can succeed,’ and ‘The foe is less to be feared than wine.’ As it would be absurd to credit Napoleon with any



Scientific American

Bake Ovens of the German Commissary Department. Capacity, 16,000 loaves per day

£93,000,000 per annum. At a smaller sacrifice the French Government was moved, at the instance of General Joffre, to forbid the sale of absinthe even before the French armies were pushed back to the Marne. Lord Wolseley, and the late Lord Roberts, spent much of their latter years endeavouring to establish teetotalism in the regular naval and military services of Britain; and Lord Kitchener’s final admonition to all British troops going to the front contains an earnest direction rigidly to abjure wine. So widespread an agreement to contest the war with armies pledged to temperance constitutes an event of quite phenomenal significance. But the army leaders of the Allies are merely

expert knowledge of the destructive properties of alcohol, it is clear that his opinion was deduced from contrasts and comparisons, and that he learned his lesson from that greatest of all tutors—experience. There still might be room for uncertainty were the conclusions of army leaders to be in conflict with the judgments of science; but where is the room to doubt when we know that the medical profession of the whole world is practically of one mind in declaring that the generals are right?

“It is now accepted as an axiom that troops who abstain from liquor are able to endure worse privations and to work and fight more effectively than troops whose

energies are stimulated with the dram. The worst effect of alcohol—from the point of view of the commander—is that it breaks down the natural powers of resistance of the soldier to disease. When the soldier is physically exhausted, worn out with fighting, hunger, and exposure, it might seem to the ignorant a blessed thing to carry to his parched lips a cheering draught from the distillery. But the doctor and the general know better. Each in his different way has learned that he had almost better poison the man outright; for it is certain that liquor fed to a soldier thus circumstanced will lend him but an illusory and fleeting sustenance, and that it will render him prone to the attacks of a thousand deadly maladies. Since the war we are now engaged in is first and foremost a struggle of endurance between armed nations, facing each other in entrenched positions, and toiling desperately and almost continuously for mastery, it becomes clear that it is of paramount importance to do nothing to diminish the disease-resistant qualities with which nature has endowed our troops. For that reason we must not give them 'wet' canteens when they are in the field; and while they are in training we must teach them to abstain from alcohol, so that, later, they may never feel the need of so mischievous a spur.

"And there is the moral factor to consider. Who will muster hardihood to deny that drink is the mortal enemy of discipline? Search the criminal records of our long peace, and dispute if any can, that drink maddens; that alcohol is chiefly responsible for our gallows and our gaols. It is more than probable that the most awful outrages attributed to the German armies during their ruthless tramp across Belgium and France were committed by sections of drink-maddened soldiery. 'Innumerable witnesses,' says the *Times*, 'testify that the trail of the German troops is marked by myriads of empty bottles.' The fact, if it be a fact, excuses nothing, but it explains much. The kindest of men become savage under the accursed influence of alcohol; and a

victorious army, inflamed by the passions excited during battle, then further bankrupted of reason by indulgence in the cup, may readily be ripened to treat their beaten adversaries with atrocious cruelty. And this is true of every nation and of every time. Fortunately, the Allies have taken care that when they are victors and invaders their triumphant legions will not violate the laws of warfare, incited by the diabolic whisperings of drink-mused brains. That the Allies prohibited 'wet' canteens principally for reasons of military efficiency is obvious, but it is simple justice to credit them also with a sensible foresight to preserve their national repute. Let us hope that the local clamour for the 'wet' canteen will promptly disappear. It is a stupid and a recklessly short-sighted agitation. The clear duty of every patriotic citizen is to support the 'dry' canteen, and by every possible means to help our military authorities in their efforts to instil habits of abstinence in our gallant young trainees. One method we may suggest is a tacit agreement among the people to refrain from treating and 'shouting' any of our troops. The practice is neither wise nor kind."

A. W. A.

One Class Benefited by Saloons

I HAVE a friend who lectures on temperance. He is more dramatic than some of us. At one point in his lecture he takes out his gold watch, and holding it toward his audience, says, "I will give this watch to anyone present who will arise and tell me one class of people in this world that has ever been benefited by the saloon."

He made that offer all over this country, and no one ever took it up, until one day a gentleman stood and said, "I think I can tell you one class."

"What's that?"

"The undertaker."

My friend was about to unchain his watch and hand it over, when an old man arose, and said: "Hold on! Before you give away that watch, allow me to say

that I have been the undertaker in this community for thirty-five years, and I have buried a great many of that kind of people; but whenever I am called upon to lay away an old soak or any member of his family, I always know it's a charity job; that I shall never get my money. I should be much better off to-day if I had never had to bury one such case."—"Dry or Die."

The Tobacco Heart

"'TOBACCO heart' is common in men of forty to fifty years, and the mortality from heart failure is rapidly increasing. Men who smoke before they go on the running track or into the gymnasium quickly get out of breath, while the same men, if they abstain from smoking before exercising, have good wind.

"The fact that tobacco weakens a man's wind and lessens his endurance, affords the best positive proof that it shortens life; for the power to live long means simply the power to breathe well and endure long the physical strains and emergencies to which the body and especially the heart is continually subjected during life."

Neurasthenia from Lack of Table Salt

DR. ALEXANDER HAIG, of uric acid fame, has observed that those who deprive themselves of salt are apt to become neurasthenic, and he is of the opinion that many persons owe their neurasthenia to a deficiency of salt in the dietary. A paper by him on this subject appears in the

Medical Record of June 6. He says: "I have thus seen a considerable number of cases in which increase of salt has caused a very marked improvement in nutrition and in the production of urea from the proteins of the food. I have also met with some cases of obstinate dyspepsia in which absence or deficiency of salt was the sole cause of trouble. . . . Vegetarians, if they do not bear these points in mind, will be more liable to suffer from neurasthenia [from absence of salt in the diet] than meat eaters." It is the herbivorous, not the carnivorous, animals that travel a long way to obtain salt.

Alcohol and Mortality

HENRI SCHMIDT, deputy from the Vosges, one of the departments of France, and president of an antialcohol society, "L'Alarme," has published an article showing the influence of alcoholism on mortality in France. In the nonalcoholic regions of France there are fewer deaths from tuberculosis, 1.95 per thousand inhabitants in 1906-08. In the West, where the consumption of alcohol is heavy, the tuberculosis deaths were 2.61 per thousand inhabitants during the same time. The deaths from other causes are also higher in the alcoholic than in the non-alcoholic regions of France, and infant mortality is particularly high in the alcoholic regions. In Normandy, where the greatest number of alcoholic women are found, the infant mortality is extremely high. The largest proportion of stillbirths occur where there is heavy consumption of alcohol and absinthe.





THE UPPER YARRA, VICTORIA

N. J. Caire, Photo, Melb.



NOTICE TO SUBSCRIBERS: All questions for this department must be addressed to the EDITOR, "LIFE & HEALTH," WARBURTON, VICTORIA, and not to Dr. W. H. James, who will treat correspondence only on usual conditions of private practice. Subscribers sending questions should invariably give their full name and address, not for publication, but in order that the Editor may reply by personal letter if he so desires. Because of this omission several questions have not been answered. To avoid disappointment subscribers will please refrain from requesting replies to questions by mail.

273. Blackheads

"Pansy" asks for a cure for blackheads.

Ans.—These are produced in the face, neck, and shoulders through the sebaceous glands becoming packed with cheesy material, and the development of a parasite called the *Acarus folliculorum* or *Demodex folliculorum*. They are really caused by an overworked skin which cannot excrete the waste products quickly enough, and finally the cheesy matter becomes locked up in the gland. In order to lessen the amount of waste products and thus lessen the work of the skin, diet should receive special attention. Avoid all greasy foods, foods cooked with fat, rich cakes, and rich, mixed dishes. Eat largely of rice and fresh fruit. The skin must be kept active by constant bathing in very hot water followed by cold water. Alternate the hot (five minutes) and cold (one minute) applications for twenty (20) minutes every evening, and follow by a mild sulphur ointment (30 grains of precipitated sulphur to one ounce of white vaseline). Out-door exercise and anything that will improve the general health will increase the activity of the skin and lessen the liability to this trouble. The blackheads may be removed by squeezing between the nails.

274. Dandruff

This trouble is also due to increased work of the glands of the scalp. All that

is necessary in most cases is frequent washing of scalp in cold water, rubbing thoroughly at the same time. Hard brushes and small toothed combs should be avoided. Soft brush may be freely used. Sulphur application is useful after the washing. About one dram (60 grains) to an ounce of cold cream or white vaseline, and add thirty grains of boracic acid. Use every alternate night. The following is an excellent lotion to rub into the scalp:—

℞ Resorcin, 20 grains
 Alcohol 5 drams
 Water 5 drams

275. Sweating Feet

Cold applications to the feet night and morning with vigorous friction will be found serviceable. Any astringent lotion will check the sweating, such as alum water (one ounce to pint of cold water). A dusting powder can be employed with advantage, such as the following: Equal parts of calamine, oxide of zinc, starch, talcum and starch.

276. Red Eyes

"Kadina" complains: "I am greatly troubled with my eyes. There is always a greasy discharge from them. They are always red, tired-looking, and watery. My face is also very pale. I have been working in the mines for some years."

Ans.—The trouble is probably constitutional, and will not disappear until the general health is improved. Bathe the eyes frequently in cold water. Sponge the body with cold water at least once daily, and use a good rough towel for drying. Sleep in a well ventilated room with the windows opened to fullest extent at night time. Abstain from tea, coffee, and hot drinks at mealtimes. Fresh fruit taken at the close of a meal, the drinking of water one hour before meals, will lessen the desire to drink with meals.

277. Acute Giddiness, etc.

"J.T.F." writes; "About six years ago I was suddenly seized with acute giddiness, often accompanied by vomiting and excessive sweating. Sometimes the vertigo came so suddenly as to cause me to fall, and sometimes I had sufficient warning to get to a seat or reach to a fence for support. My general health became very much impaired, dirty tongue, constipation, etc. One doctor said it was "petit mal" (mild epilepsy), another "Menière's disease." A specialist found I was quite deaf in one ear, and another stated the giddiness was due to stomach trouble."

Ans.—We do not think there can be any doubt but that the giddiness, sweating, and stomach troubles are all connected with some ear disease, some affection of the "semicircular canals." This form of vertigo is often called "Menière's disease" or "auditory vertigo." The auditory nerve is closely connected with the pneumogastric, a nerve which largely controls the action of the heart and alimentary canal, hence the sweating and stomach disorders. We do not think "J.T.F." will ever fully recover from the attacks. Much, however, may be done by careful dieting, as given under "Eczema" in this issue.

278. Food for Cattle

G.D. asks some questions in regard to dry and green grass for cattle.

Ans.—We would advise him to write to the agricultural department of his

State. They will probably supply the information required. We have had no experience in these matters.

279. Dyspepsia

"Helensburgh" complains: "I am a sufferer from headaches with occasional vomitings of bile. . . . At one time stewed fruits, baked apples, and such fruits as pineapple and good apples agreed with me well. Now, however, I usually suffer if I take them. . . . Am worried about what I may take in the evening. Meat of any kind disagrees, causing a thumping sensation in the head during the night. . . . Eggs (even one) fail to give me peace, and any acids, jams, preserves, etc., will be certain to give me the worst kind of attack. . . . I am not sure of ease even after an evening meal of toast. . . . Practically every morning at about four o'clock I awake with putrid taste in the mouth. . . . Flatulency occurs often after drinking water in early morning, and if much wind passes relief from headache usually follows. . . . By the advice of a medical friend I take one-sixth grain of calomel three times a day after meals. It makes the bowels act more freely, but so far has not effected a cure. They do not remove the bad taste. . . . I have read the article by Dr. Leadsworth on "Bilious Headaches," in Oct.-Nov. number of LIFE AND HEALTH. Will you kindly let me know which treatment there set out would be likely to apply to my case."

Ans.—We would most certainly advise that the evening meal be omitted altogether, and believe in this case a cure will certainly result. The third meal is only really necessary for those with small appetites. The dry diet should be adopted as far as possible, and the meals should consist largely of granose or wheatmeal biscuits, toasted corn flakes, zwieback, cold crisp toast. Toast should on no account be buttered while hot. Avoid tea, coffee, and cocoa. No drinks should be taken at mealtime. When eggs are taken, they should be very lightly cooked, and always at a temperature below boiling point.

Avoid all fried dishes or foods cooked with fat or grease of any kind. If plain water cannot be taken in the morning, add some fruit juice. That obtained after washing and soaking dried apricots is excellent. Fresh fruits should prove of benefit, and probably will agree after the omission of the third meal. After a couple of weeks a third meal of fruit only could be taken. Water, or water with a little fruit juice should be taken freely before bedtime and on rising in the morning. It is better to take several drinks than one large draught. Discontinue the calomel, it is too poisonous a drug to be taken regularly. All of the treatments recommended by Dr. Leads-worth in the Oct-Nov. issue of LIFE AND HEALTH are good. The hot leg packs and the charcoal probably would not be necessary in this case.

280. Neuritis after Accident

"Helensburgh" also writes: "My wife met with an accident two months ago by falling from the kitchen dresser on to the muscle of her arm. The local doctor found no fracture, but the pain ever since has been intense. The pain seems now to be principally in the shoulder, and it is impossible to move the arm backwards or upwards."

Ans.—We would recommend morning and evening treatment with hot fomentations. Blanket should be used for fomentations, as flannel does not retain the heat a sufficient length of time. Wring out of boiling water, cover with one layer of dry blanket, and apply every ten minutes until three or four have been given. Galvanism would prove useful—one pole on spine and other rubbed over the painful parts for ten or fifteen minutes daily.

281. Sanatogen

"A. R." asks our opinion concerning the above.

Ans.—It is certainly a food and a stimulant, but we believe money would be better spent in milk, eggs, gluten, and malted nuts.

282. Neuritis and Heart Disease

"South Portland" writes about her daughter aged twenty-one years. "At nine years of age two doctors declared that she was suffering from valvular trouble (heart). . . . Of late her hair has lost its brightness, and is coming out very much. . . . Her appetite is variable. . . . A doctor treated her twelve months ago for neuritis of the right hand, and as she has much milking to do it was very hard on her. Kindly give me a reply at your earliest convenience, as the milking season is at its height."

Ans.—We could not give a satisfactory reply to this inquiry without a personal examination. In all diseases of the heart, especially when they exist from childhood, abstinence from flesh foods is very beneficial—for meat diet certainly increases the work of the heart. We would recommend abundance of good, plain diet—milk, eggs, rice, gluten, granose biscuits, wholemeal bread, and fruit. A daily cold sponge certainly helps to keep the system in good working order, and it should be remembered that plenty of fresh air night and day is as necessary as good food. If she has neuritis of right hand, milking is certainly an injurious exercise.

283. Stammering

"Anxious" writes: "My little grandson, aged two years and five months, who could talk as plainly as I can, up to a fortnight ago, suddenly started to stammer very badly. The doctor seems to think there is nothing to worry about as the boy is strong and healthy, but as he is of a very nervous temperament my wife and myself are very anxious. We are afraid he has had a sudden shock or a fall."

Ans.—The child should be prevented from talking as much as possible; the quieter he is kept the better. If he does talk, try to teach him to talk very slowly and in very short sentences only. Avoid everything that in any way excites him. The probability is that a few months will see him all right again.

284. The Inebriate

"Inebriate" writes: "What treatment would you advise to restore a male drunkard thirty-two years of age. He has been drinking for several years. Are any of the advertised cures, such as bi-chloride of gold and anti-alcohol of any value in destroying the drink crave?"

Ans.—A good deal can be done in the way of diet, but there must be some effort on the part of the patient. Abstinence from all flesh foods, tea, coffee, pepper, pickles, mustard, and irritating foods will do much to lessen the craving for drink. We have no faith in most of the advertised "cures." Inebriates should be treated in a special institution where they are constantly under supervision. We would recommend "Inebriate" to write to the Methodist Central Mission, Melbourne.

285. Head Lice

A subscriber complains of the above. She has tried quite a number of remedies without avail.

Ans.—Remedies for this trouble should be continued for several days, and after several days' rest the treatment should be resumed in order to destroy those developed from nits, which would probably escape destruction during the first treatment. An infusion of quassia chips is an old and favourite remedy. Pour a quart of boiling water over one-quarter pound of quassia chips, and saturate the roots of the hair every night for a full week. Kerosene oil is a good, but not a pleasant remedy. The hair should be saturated with the oil two or three times a day for two or three days, and then washed in hot soap and water. This is a certain cure. Pedic pomade is a proprietary remedy which has been much used of late. It is very successful and not difficult to apply.

286. Nervousness

"Vocalist": "What diet would you specially recommend for one who wants to enter an examination for singing. . . .

We have apples, dates, prunes, figs, nuts, and granose biscuits every day. My nerves are very bad when it comes to a day for singing at a concert, and usually I get an attack of toothache or neuralgia for the evening. Can you tell me why I always get a 'flush' after eating a raw apple?"

Ans.—The following should be omitted from the dietary: Tea and coffee, all flesh foods, pepper, mustard, and spices. The "flush" after eating an apple is probably due to some temporary digestive trouble. Apples should be mature and well masticated, and used only at the close of a meal, never between meals, or after a meal in which vegetables have been taken. We would specially recommend milk and cereal foods, light evening meal, and plenty of sleep. Temperament probably plays a most important part in this case; and, consequently, constant use of the voice in company will be necessary in addition to a careful dietary.

287. Rupture

"Dean's Marsh" writes concerning her son four years of age: "When undressing him two nights ago I noticed that from the stomach down into the private part seemed to be much larger on the right side than on the left. On examining, it seemed to contain something firm, about the size of my thumb, while the left side was quite soft to feel. In the morning it did not seem any different to left side and quite as small. But to-night it is much larger again."

Ans.—The signs given certainly point to rupture. If the symptoms do not disappear after using a well-fitting truss for about six months, or if there is any difficulty in keeping the rupture back with a truss, then an operation is advisable.

288. Cough of Long Standing

"O.S." writes: "I would like to know how to treat a cough of long standing, which is very persistent and seems to baffle all efforts to get rid of. Patient is

a lady of about forty years, and ten or twelve years ago contracted chest trouble through participating in open air meetings, as well as sometimes in crowded and heated halls at all times and in all weathers. Her health is otherwise good."

Ans.—There are so many different conditions that cause chronic cough that it is very difficult to give a line of treatment without a previous examination. Very often there is some throat trouble, as, for instance, a long uvula. It may be due to catarrh, bronchitis, and tubercular disease. Sometimes a persistent cough is associated with ear or womb trouble. "O.S." states that cough mixtures and emulsion barely give temporary relief. Cough mixtures very rarely give any benefit in chronic cough; in fact, they are a hindrance rather than a help, as they interfere with the digestion and, therefore, the general health. The essential thing in all chronic cough complaints is to improve the general health. Often a change of climate will do more good than anything else. Overwork, especially indoor work, is injurious. Work in the open air is the best, as long as it is not too fatiguing. Plenty of fresh air is needed night and day. Sleep with the windows open to fullest extent. Remove all heavy curtains; in fact, the bedroom should not have curtains of any description. Sponge the whole body every day with cold water. See that the food is nourishing. There should be a liberal supply of fats and proteids if the digestion is good. Eggs, milk, gluten, nut foods, and rice are all good. If fruit is taken at the close of the meal, it will help the liver and bowels in their work, and keep the blood in a healthy condition. Apart from an examination we cannot recommend anything special to relieve the cough.

289. Granose Biscuits for Children

M. H. P. writes: "Would you kindly say how much granose biscuit would be sufficient for a meal with milk for a child four months old?"

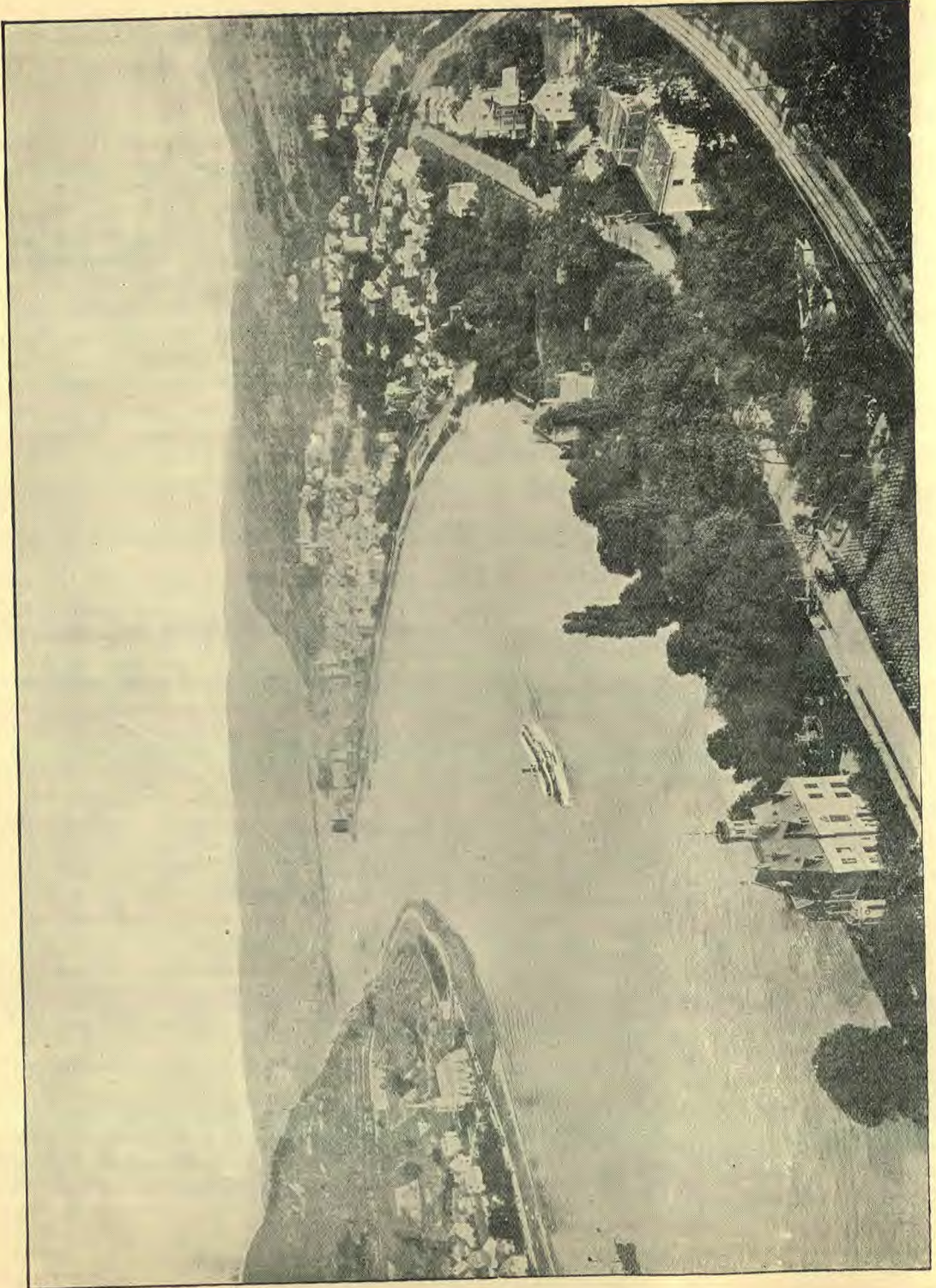
Ans.—Granose biscuits are excellent for children after they have reached the age of eight months, but we would only recommend them in exceptional cases before that age. Very often cow's milk disagrees and requires something to thicken it in order to prevent the formation of large curds. It should be remembered that milk contains all that is necessary for the young child, and that what is added is only to help its digestion. Half a granose biscuit boiled in half a pint or more of water, and strained, would do nicely to add to milk when it cannot be taken by itself.

290. Deafness

"C. J. A." asks: "Will you kindly tell me what treatment is best for deafness, caused, it is said, by tumours forming near the drum of the ear, and then bursting or discharging and clogging the drum of the ear?"

Ans.—In all ear troubles a specialist should be consulted. A very common cause is extension of throat trouble up the Eustachian tube to the middle ear. The essential part of the treatment in these cases is to attend to digestion, especially when the subject is of a bilious nature, and where constipation exists. That which coats the tongue also keeps the throat and ear in an unhealthy condition. Syringing the ears without special advice is a very unwise procedure. It is by no means suitable for all cases of deafness, and may do harm.





A BEND ON THE RHINE



Auto-Intoxication, or Self-Poisoning

DAVID PAULSON, M.D.

ONE of the richest fruits of modern scientific medical investigation is the fact that although we have many diseases there are but few *causes* of diseases. While there are fifteen hundred different ways of being sick there are only a few ways of becoming sick. And again there are only a few ways of becoming well.

That simplifies the problem for ordinary non-medical people. Those who are not sick have only to think of a few things to do to preserve their health. Those who are sick need only to do a few things to recover their health.

The Inside Climate

Patients frequently wonder whether a "change of climate" would not prove beneficial, while their dietetic habits are producing a climate within that is more important from a health standpoint than the outside climate. People chase frantically over the earth to take advantage of better climates, while they carry with them the wretched climate inside that is the most important cause of their ills. The Bible has well said, "the eyes of a fool are in the ends of the earth." Prov. 17:24.

More than twenty years ago Bouchard, the great French investigator, announced that the body was a factory of poisons; and we have convincing evidence of the truth of this statement. We drink pure water; but when it leaves the body through the skin or kidneys it is deadly

poison. The air we breathe may be pure; when we exhale it from our lungs it contains poisonous substances.

Bouchard made some instructive experiments which brought to light a number of fundamental principles. For instance, he injected into the vein of a rabbit's neck the kidney secretion from a man suffering from convulsions, and in a few moments the animal had similar spasms. In other words, the poisons that produced the cramps were circulating in the man's blood and his kidneys were not subtracting them rapidly enough, and hence he was suffering from their accumulation in his blood.

Again Bouchard injected into the blood of another healthy rabbit the kidney secretion of a man who lay in a dangerous stupor. In a few moments the rabbit was in a similar condition. In this case there were certain poisons in the man's blood that were *stupefying* him.

Frequently when living on a strictly meat diet the kidney secretion is several times as poisonous as when living on a simple non-flesh diet. This gives a hint as to how diet influences auto-intoxication.

Germs Make Toxins

The greatest mischief-makers we have to contend with are the germs that naturally inhabit the large intestine. They are not there for any good purpose. They have no more business there than weeds have in a cornfield. They are part of the

curse that we have to groan under in this sinful world.

The practical problem before the farmer is to destroy the weeds and cultivate his corn. We have before us the same interesting problem; how to *discourage* the germs that inhabit our alimentary canal and yet nourish ourselves.

Unfortunately the prevailing dietetic programme tends to actually feed the germs and to poison the man, and hence the overwhelming increase in Bright's disease, high blood pressure, hard arteries, apoplexy, neurasthenia, and heart diseases, which are increasing by leaps and bounds, and which are now known to be largely caused by the constant absorption of these poisons.

How the Body Protects Itself

Some will naturally wonder, if the colon under ordinary circumstances is a hotbed for germs that hatch out vicious poisons, why the body is not more frequently overwhelmed by auto-intoxication.

This is because God has endowed the human body with an enormous ability to subdue and destroy poisons. The thyroid gland is constantly manufacturing a poison-destroying substance; and we now believe some of these poisons frequently over-stimulate this gland and so produce goitre.

The liver is our champion poison destroyer. It stands between us and destruction. Practically all the digested food substances, plus the poisons the germs have manufactured, pass through the liver and are renovated before passing into the blood. Unfortunately the liver can be overworked; then it becomes more and more a filter permitting the poisons to slip through; and these toxins soon find the weakest spot in the body.

If the sciatic nerve happens to have suffered from a severe jolt some months and even some years previously, they will discover the fact and set up sciatica. If the joints are more favourable these toxins may slowly, but gradually, develop a painful condition called arthritis.

How Slumbering Germs May Be Wakened

At this time of the year many people, especially in our large cities, are carrying about pneumonia germs in their throats. Why don't they get pneumonia?—Because the natural resistance of the body does not permit the germs to set up their pernicious activity. Some severe over-exertion, loss of sleep, a fit of indigestion, an unusual chilling of the body, may suffice to lower the vitality enough so that pneumonia germs can begin their death-dealing work.

So it is with the various germs that inhabit the large intestine. Some general dietetic indiscretion, a rich feast, a late supper, or some other strain on the body, may speedily arouse their activity, over-tax the liver, fill the system with toxins, and then there may be an extensive crop of either mental or physical symptoms: depression, lassitude, and a sense of weariness. For it is now known that one variety of these colon germs has a special gift for manufacturing fatigue poisons. If these are injected into an animal, it speedily has all the symptoms of weariness. Sometimes people are tired not so much because of the work they have done, but because of the poisons that they are absorbing from their alimentary canal.

There may be a gradual heaping up of these poisons in the system until they produce a sudden crisis, which frequently reveals itself in sick headaches. Others have an outburst of cold or slight attacks of otherwise unaccountable fevers for several days. Sometimes these poisons destroy the red blood cells, and so the patient suffers from anæmia. In other patients they set up a catarrhal condition of the bowels, or lay the foundation for ulcer of the stomach or intestines.

WHEN irritated, the maxim I most frequently use is this: "These are the annoyances incident to my business. To fret when they occur means that I cannot manage my business without friction.—*George Lincoln Walton, M.D.*

Nervous Prostration

NERVOUS prostration is a more or less complete collapse of the nervous system. It occurs when the sufferer has urged himself beyond the limit of his nervous endurance. It is most common in early or middle life, when the nervous system is most constantly taxed. When it occurs in the very young, excessive work at school is usually the cause. When it comes on later in life, it is because the struggle for existence is proving too severe.

The breakdown is not always caused by actual overwork; sometimes it means, in old-fashioned phrase, that "the candle is being burned at both ends." Only very strong people can work hard and keep late hours as well. The man of average physical powers must make up his mind to devote himself to his work, and get his recreation in healthful occupations outdoors.

Nervous prostration does not declare itself without warning. There are many danger-signals. It may be no longer possible to accomplish the usual quantity or quality of work, because of impaired memory or loss of the power of concentration; peevish irritability and a tendency to constant fault-finding may appear in a person formerly equable and serene; headaches may return each day at about the same time—that is to say, as soon as a certain degree of fatigue is reached; there may be nervous indigestion, and the simplest food may cause distress. In some cases the mental depression is so great that a strong man, at the least provocation, will burst into tears like a girl.

Most cases of nervous prostration could have been prevented if taken in time. The ordinary man is intelligent enough to recognize in himself the many signs of overstrain, and there are few so driven by circumstance that they cannot, if they choose, relax a little, and evade the coming trouble. If another hour is added to the night's sleep, another mile added to the daily walk, an occasional day deliberately taken for complete rest, an interesting hobby taken up, the habit of worry

firmly checked, the nervous system will quickly right itself. Worry is the greatest spendthrift of nervous force. We should all learn to be as obstinate about not worrying as we often are about worrying unnecessarily.—*Selected.*

Correcting Heredity

NOT so long ago people lived in abject fear of the boggy of physical inheritance, for they believed that the sins and weaknesses of the father were visited in the most literal sense upon the children. They thought that the law was an iron one from which there could be no appeal. We are wiser now, and happier, for we have found out that in the matter of disease heredity does not determine our fate, but merely marks an avoidable tendency.

Just as the poor man's son may become a millionaire, so the sick man's son may become a man rich in health and strength; although in either case the man concerned will have to work hard and fight many battles. To the human being determined to win the prize of health, the knowledge of inherited tendencies to disease will be in itself an advantage. Being forewarned, he is forearmed.

A person who knows that his mother and perhaps an aunt or two have died of tuberculosis, will from the beginning throw up defences against that particular enemy. He will live day and night in fresh air, eat suitable food, wear proper clothes, and so live that his inherited tendency will grow yearly less, until by and by he is in no danger of contracting tuberculosis. He did not *inherit* it; he never *had* it; and finally, by sensible living, he has eliminated the disposition toward it from his tissues.

In this fight against inherited physical tendencies, we not only gain health for ourselves, but benefit those who are to follow us. The man who succeeds in eradicating his own tendency to gout is likely to have children still less liable to the disease than himself, and so on from generation to generation. It is certain

that true wisdom for ourselves as well as true love for those who are to come after us consists in recognising our physical weak spots and in making every effort to strengthen them.—*Selected.*

Liquid Nerves

WHEN your wife thinks she hears a burglar down-stairs in the middle of the night, and her hair stands on end, her nerves are not responsible, even if the burglar isn't really there. That is to say, the immediate agent that produces all the outward physical signs of terror and excitement is a liquid secretion of the adrenal glands. The nerves doubtless open the floodgates that liberate the fluid, but it is the fluid itself that, in its direct effect on the tissues, produces the symptoms in question. Owing to this property, we are told by Dr. Leonard K. Hirshberg, in the *New York Sun* (May 10), the name of "liquid nerves" may well be applied to the adrenal secretion. Prof. W. B. Cannon, of Harvard University, and his students and colleagues of the Harvard physiological laboratories, have just concluded an investigation of the emotions of rage, pain, and fear, and their effects upon the human tissues, in which this curious part played by the adrenal fluid is strikingly brought out. This research, we are told by Dr. Hirshberg, began after the discovery that some animals and some human volunteers suffered certain strange stomach disorders after painful irritation. Says the writer:—

The little lumps of tissue just abaft the kidneys called adrenals pour a steady flow of their juices, called adrenin, or epinephrin, or adrenalin, into the blood.

This stuff bombards the tissues just as electric shocks do the nerves. It is not altogether a figure of speech to call it liquid nerves. If the adrenals are removed from sheep and calves, and this substance is drunk or injected into the veins, the pupils of the eyes dilate, the hairs begin to stand up as they do upon the back of the fretful porcupine, and other strange things happen.

In a word, this material does exactly what you have always been taught the sympathetic nerves do. What you expect always from the nerves may now be brought about by the juices of these ductless glands.

A fragment of muscle from the bowels of an animal was taken by Dr. Cannon as a rage thermometer. So sensitive is this strip of intestine that a drop of a mixture of 20,000,000 drops of water in which there was a drop of adrenalin will show by shrinking it. Dr. Cannon was thus able to prove that every time a dog barks at a cat and the cat humps her back and prepares in terror for war an extra amount of adrenal juice has been poured into the blood.

Moreover, whenever pain was inflicted upon animals, as in catching beavers and fur-bearing animals in traps, seizing chickens by the throat, catching bears, birds, or shooting animals, an excess of epinephrin was discernible plainly in the blood.

Whenever fear, rage, or pain occurred these different emotions caused an increased bombardment of the blood with this animal drug.

If adrenin is injected into the blood it causes the liver to loosen up its storehouse of sugar. This sugar is set free in the blood, and the victim may be mistakenly said to have diabetes, the sugar disease.

Dr. Cannon finds that epinephrin drives the blood from the digestive tissues and sends it helter-skelter through the heart, lungs, legs, and brain.

Furthermore, it is evident from these researches that the blot will clot from five to ten times as rapidly in angry persons as in cool and collected, placid persons.

All of these discoveries show how marvellously nature protects the human race from extinction. None of these wonderful effects is due to your wishes or is under your voluntary control. The instant you fight or run away, show anger or fear, your emotions stir up the adrenal fluids and sugar begins to flow from your liver into the blood. This gives food and fuel to your busy muscles, removes "that tired feeling," shoots the blood into your heart and lungs, where it is needed, and stops the bleeding of wounds.

Thus it is proved for the first time that pain, anger, and fear, like peace, have their victories no less than complacency and war. Many a man who bled to death because he was calm and cool could have no doubt been saved if he had but summoned up the rage of a Cæsar or the indignation of a full, adle-pated Hotspur.

Alcohol Not Needed in Medicine

W. B. Holden, M.D.

ALCOHOL is diluted and used for sponge baths. The alcohol does no good; it does no harm. Its discontinuance would work no hardship. A tepid sponge bath of warm water is just as efficient.

Alcohol is used to disinfect the surgeons' hands and the patients' skin before operations. There are many methods of disinfection equally good. Hence alcohol for this purpose is not an essential.

Alcohol is used in the preparation of many medicines. The tinctures and fluid extracts of medicines have from ten to twenty-five per cent of alcohol to pre-

serve and keep the active principles in solution. As the dose of most fluid extracts and tinctures is from five to fifteen drops, the one to three drops of alcohol is quite inconsequential. The alkaloids and active principles of medicines can be more accurately administered in pill and tablet form.

Being Rapidly Discarded

Alcoholic preparations of medicine are rapidly being discarded by even those physicians who still rely largely upon drugs as curative measures. One of America's largest pharmaceutical houses confines its operations almost exclusively to the dry preparation of medicines. The elimination of alcohol in medicinal products would be no calamity.

Alcohol in the form of brandy, whisky, wines, and beer is used by many physicians for a great variety of conditions.

It is true that alcohol to the amount of about three ounces a day may be oxidised in the body. Gunpowder may be oxidised in a cook stove, but that does not prove that it makes a safe and satisfactory fuel.

The history of alcohol has been one of delusion, and its reputation for value in disease is only another illustration of its delusional qualities, in that it has deceived a large body of learned and investigating men. However, many of the world's foremost physicians condemn the use of alcohol.

It Makes the White Blood Cells Drunk

Alcohol in medicinal doses lowers the resistance of the body to infection. The white blood cells are one of the body defences against invading germs. The white blood cells will attack and destroy the bacteria. Alcohol definitely injures the white blood cells, and is as disastrous as drunkenness in an army on a battlefield. There is no physiologic action of alcohol that cannot be duplicated more safely and more effectually by other means.

Should the absolute prohibition of alcohol in medicine be realised, the following effects would be noted: A considerable number of physicians would feel them-

selves hopelessly crippled, others would soon find substitutes that are better; many would never miss it; and the patients of all would be benefited.

More Solar Surgery

THE remarkable results obtained in France and elsewhere by treating tuberculosis simply by exposure to the sun's rays are elaborated by Dr. Guy Hinsdale in *The Interstate Medical Journal* (St. Louis). The open-air treatment for consumption is of course universally known, but according to Dr. Hinsdale the part played in it by exposure to sunlight has not been sufficiently recognised. To this, he thinks, is due the success of the great seaside sanatoria. In the Alpine resorts described by him the effect of the sun is recognised and directly utilised. In our previous article Professor Poncet was mentioned as the first to devise this method, and Dr. Rollier, of Leysin, as the first to propagate it. Dr. Hinsdale gives credit to the French surgeons and the Swiss surgeon Bernhard, of Samaden, but lays most emphasis on Rollier's treatment, which he describes in substance as follows:—

The patient is clothed in linen or white flannel, according to the season; he wears a white hat and is protected from direct sunlight on the face by a screen, and wears smoked or yellow glasses.

And now comes the peculiar and interesting method of exposure. It makes no difference where the disease is located, whether in the hip, the spine, or the cervical glands, the invariable rule is to begin with the feet. The next day the legs will be exposed; the third day the thighs. On the fourth day the abdomen is exposed; on the fifth the thorax. Finally on the sixth or seventh day he exposes the neck and head with careful supervision.

The whole system of heliotherapy aims at acquiring a progressive pigmentation of the skin; this is the underlying basis of the whole matter; it is nearly always proportional to the resistance of the patient and enables him to bear the sunlight and cold air in a most surprising manner.

The actinic solar rays are antagonistic to the tubercle bacillus, and that is not to be denied. Bronzing of the skin varies from a copper to a chocolate colour. Without it no one could endure the sun-cure for so many hours a day or engage, as some of them do, in winter sports with scarcely any protection at all.

It has been calculated that the sunlight has considerably more actinic force at these mountain

stations than at the seashore, and hence the time required for the solar cure is probably less than elsewhere. Rollier's record of about 1,200 patients and about 1,000 cures is one of the greatest contributions to modern surgical progress, and especially to the fight against tuberculosis."

Freezing a Patient to Cure Him of Consumption

FREEZING of living persons is the somewhat heroic remedy proposed by the Russian scientist Bachmetieff, for the Koch bacillus is killed at 6 deg. Cent. below freezing point, it being the cause of tuberculosis, so that by congealing the person affected with the disease the microbes are all killed. Then he brings back the subject to life by a very gradual re-heating. He has already succeeded in applying his method to various animals such as the rat and others by producing artificial respiration in them at the same time that the freezing process is going on, and he thus produces suspension of life by cold which is of great interest to science and may also prove of much utility. Freezing of cattle in winter would thus preserve them without food, and they could also be transported over great distances when in this state. Many other applications of the idea can be imagined. Of course, the method has not as yet been applied to the larger animals nor to living persons, but in principle this does not appear to be impossible, and it now remains to be proved whether a human being can be actually frozen and then brought back to life.—*Scientific American*.

The Rest Cure

It is always easier to recognise the need of a rest cure, says the *Youth's Companion*, than it is to put the cure into operation. First of all there is the difficulty of deciding just where and how to give it. Then it becomes necessary to persuade the patient to take it, and every rest-cure patient is a problem by himself, and usually a difficult one. It is quite

possible to be in urgent need of the rest cure and at the same time to be more obstinate, vociferous, and unmanageable than all the rest of the family put together. That is why physicians advise against attempting the rest cure in the home. It is very likely to fail there in the case of the patient, and to succeed only in making patients of the other members of the family; for worn-out people are hard to handle, although they may be perfectly tractable and reasonable when they are in a state of health.

That is the reason that a good sanitarium is the best solution of the problem. The patient is at once removed from his over-solicitous family, and becomes simply one case among other cases—although he may be tactfully recognised as a very "interesting" one. Furthermore, a life of gentle but inflexible rule and habit is established. The days glide by, and they are made to glide and not to drag, which is, perhaps, the most valuable secret of the system.

But, unfortunately, many people who need the rest cure cannot afford to go to a sanitarium. In those cases, we must strive to attain as far as possible the atmosphere and methods of the sanitarium. Break the day up into periods, and let them be punctually observed. Try to get the patient into a mood of willing obedience to some one person, even if you have to persuade the doctor to play the ogre for that purpose. Let the meals be a succession of mildly exciting picnics. Admit one visitor a day—no more—as a concession and a treat. And if you can possibly find the money, have a professional massage the patient at regular intervals. Remember that an impatient, intractable, and thoroughly bored person lying in bed is not taking a rest cure.

A CAREFUL investigation by competent scientists in England has shown that there is no ground for the belief that tuberculosis may be transmitted by the mouthpiece of the telephone.

The Diseases of the Battlefield

OUR troops at the front have hitherto been singularly free from the attacks of an enemy more to be dreaded than the Germans. In other campaigns, disease has slain its thousands where bullets and shells have killed hundreds, and it is only too likely that before long our present immunity from it will cease. Why disease should attack masses of men in the

of flies bred in the rotting carcasses of men and horses and in the filth that inevitably collects round perpetually shifting camps and bivouacs. As everyone now knows, these insects are ceaseless and tireless carriers of infection, and it is difficult to see how, under existing conditions, the plague of them can be abated. Luckily, with the approach of winter, their activity ceases.

Of the diseases which assail an army



Illustrated London News

How science helps to preserve the health of troops in the field. A British water filter cart being filled from a river

prime of life, living in the open air, and on the whole well fed and clothed, at first sight seems strange. As modern fighting begets an intolerable thirst, which the soldier is naturally tempted to slake as and when he can, the blame has generally been laid upon the drinking water. All modern armies, since the striking experience of Japan in the Manchurian campaign, pay special attention to this, and with good results. But an irremovable source of disease remains in the myriads

in the field, a few stand out so prominently that all others may practically be neglected. These are cholera, typhoid fever, dysentery, and pneumonia; and they have this in common, that they are all caused by specific bacilli. Thus cholera is the child, so to speak, of the dreaded *vibrio*, and pneumonia that of the pneumococcus; while typhoid and dysentery have each their own special microbe. Their modes of attack are, however, different, for the pneumo-coccus can enter the

organism by the nose and mouth only; typhoid and dysentery through the alimentary canal; while the way in which cholera is propagated is at present unknown. All four, perhaps, have this in common, that while the microbes causing them are probably always present with us—that of cholera being a doubtful exception—they seem only to assault a subject previously weakened by exposure, bad feeding, or intemperance. It is on these facts that our chance of successfully repelling them mainly rests.

The first means of combating these enemies is, therefore, isolation. Directly a soldier is shown to be suffering from any of these diseases, he should be separated from his fellows, and removed to a place where his ejecta, sputa, and the like, can no longer form a centre of contamination. This may seem a counsel of perfection to those who know the conditions prevalent in war time, but much might be done by careful preparation, and isolation hospitals at the base might well be organised by civilians who are but too apt to think that surgical cases are the only ones worth attention. If it be true, as announced in the daily press, that the Austrians are already suffering from cholera, no time should be lost in making these preparations, and the service thus rendered to the just cause of the Allies might easily prove more valuable than many more sensational.

There remains the means of prevention, which is, proverbially, better than cure. First among these is inoculation, which, in the case of typhoid especially, has been abundantly proved to be effective. The experiments carried out by Professor Vincent, the Head of the Medical Service of the great Paris hospital of Val-de-Grâce, leaves no reasonable doubt possible on this point, and inoculation against typhoid is now compulsory in the French army. Most of our own officers have already voluntarily submitted to it, and it is to be hoped that the rest of our soldiers will, before long, follow their example, and thus avert a great danger from their

comrades. Then comes the careful avoidance by the soldier of any drinking water other than that boiled and filtered now supplied to him by the transport and supply service.

Nor is the question of clothing to be neglected. The soldier may be trusted to keep himself as warm as he can for comfort's sake; but a belt of flannel worn round the stomach next the skin is said to have proved its efficiency as a preventive of cholera and dysentery in Oriental countries, and might well form one of the useful presents to be sent to our troops from their friends at home.

In these matters the soldier can do much to help himself. There is still the psychological side of the case, in which he must depend a good deal on his officers. A light heart will often carry its owner unscathed through centres of infection which will prove fatal to the mentally depressed, and is one of the most valuable prophylactics known to science.

Hence the officer should do what he can to keep up the spirits of his men, should encourage them to sing, and should take care that they hear any good news which is going. By so doing he will be rendering another invaluable service to his country, even if he adds thereby to the cares on his already over-burdened shoulders. Fortunately, if there is any faith to be placed in reports, the natural temperament of Tommy Atkins in war will make his task in this respect a light one.—*F. L., in Illustrated London News.*

“With Love from Peter”

AMONG the children's garments the other day at the depot from which they are despatching clothes to Belgium was a little boy's warm navy blue coat with a cap to match. In one of the pockets of the coat was a tiny envelope containing a threepenny piece, with the inscription, “With love from Peter.” It was a small Australian boy's love-offering to a little Belgian brother in distress.



BELGIAN REFUGEES IN ANTWERP WHO HAD FLED TO THE CAPITAL BEFORE THE GERMAN ARMY
Bread was cut up into huge portions by the authorities and handed out to the boys and girls and their parents

The Sphere

The Man Wonderful

R. Hare

A CLAY model truly, yet so grandly beautiful that the Creator was willing that it should stand as a final representation of His work in this part of the great universe. A clay model, for man is "of the earth, earthy," yet so marvellous in its powers, so perfect in its proportions, so majestic in its bearing, and so beautiful in its aspect that neither science nor nature can improve upon its outlinings or construction. Reubens, Michael Angelo, Raphael and all the great art masters of history, have been led to gaze in astonishment as they have endeavoured to copy its perfections, and the poets have never ceased to sing its loveliness.

Monksasy, the Hungarian artist, took some coloured dust, threw it upon his canvas, and lo! "Ecce Homo" came forth. Men whispered of the artist's inspiration, of the life-like forms, the figures, proportions, and the enchanting prospectives that the canvas presented. Then they weighed £24,000 as its price. Yet all its beauty was copied, and without life.

But the living clay-form, outlined by the great Creator-Artist, with its many sensibilities, its quick perceptions, its ceaseless activities and its natural beauty, is far more wonderful. Sculptors and artists at best can but reproduce; God, in nature, sets the copy.

Poets sometimes talk of "divinity in the human form." Surely this language is not inappropriate, for man is the most perfect of all nature's formations. With a face, mirror-like, in which every passion of the soul may be reflected, an eye that can smile or weep as fancy or sorrow wills; a hand that can touch in tenderness, labour in life's multiplex necessities, or strike with a blow of death the opposer; and an intelligence God-like in its range of thought—surely the man of the muse may be pardoned in thus dreaming divinity of the man wonderful. True, shame mantles the spirit when we think of how the Creator's masterpiece has been dis-

honoured; sorrow floods the soul when we remember what it might have been without sin—still the divine clay model is a beautiful thing.

Disease has weakened and deformed for ages and generations; hurtful passion has taken the bloom from cheeks and brow to leave behind the pale face and lustreless eyes; anxiety has undermined the nerve forces till the heart trembles and the steps grow feeble. Still, man—the human man—is beautiful, and oh, that he might learn to value the wisdom that planned and the power that has so generously endowed the model of clay.

Did man but know and believe, he has within reach possibilities that would link him with the stars. A child of dust truly, yet capable of walking with the Divine and then to "shine as the stars forever."

In the human ear we have the telephone in miniature; in the eye, all power-principles of the telescope; in the nervous system, that harp of a thousand strings, is to be seen the first of all telegraphs, while in the joints of that body mechanics can find all the primary levers and powers exemplified.

An old man, now almost forgotten, spent two years at work on a clay model, in a lonely garret in Paris. With tender fingers and patient care he moulded, smoothed, and then again retouched its outlines till the clay seemed to possess voice and soul. One night the frost came down over Paris, and the old man, fearing that the great cold might cause his model to crack, arose from his couch and with reverent hand placed his covering—the only covering he possessed—over the clay. The statue was preserved and now stands in one of the Paris museums, but the old artist lies in his grave. After that night his cold body was found with closed eyes turned toward the clay that his hand had moulded.

It is even so with the human clay model. In order that it might be preserved Love stepped down, and cast its mantle of righteousness over the sightless clay with its beating heart. Then the

moon looked down at Love cold and stiff on Calvary, but the model has been preserved for the gallery of the eternal.

Yes! Man is still the wonderful. And if he would but listen to the story of his own being he could not but rise higher.

Teaching Self-Reliance

HENRY WARD BEECHER, says *Unity*, used to tell this story of the way in which his teacher of mathematics taught him the virtue of self-reliance:—

I was sent to the blackboard, and went, uncertain, and whimpering.

“That lesson must be learned,” said my teacher, in a very quiet tone, but with terrible intensity. All excuses and explanations he trod under foot with utter scornfulness. “I want that problem. I don’t want any reason why you haven’t it,” he said.

“I did study two hours.”

“That’s nothing to me. I want that lesson. You need not study it at all, or you may study it ten hours. Suit yourself, but I want that lesson.”

It was tough for a green boy, but it seasoned me. In less than a month I had the most intense sense of intellectual independence. One day, however, his cold,

calm voice fell upon me in the midst of a demonstration—“No!”

I hesitated, and then went back to the beginning, and on, reaching the same point again, “No!”—uttered in a tone of conviction—barred my progress. Then, “Next!” was called, and I sat down in red confusion.

He, too, was stopped with “No!” but went right on, finished, and as he sat down was rewarded with, “Very good!”

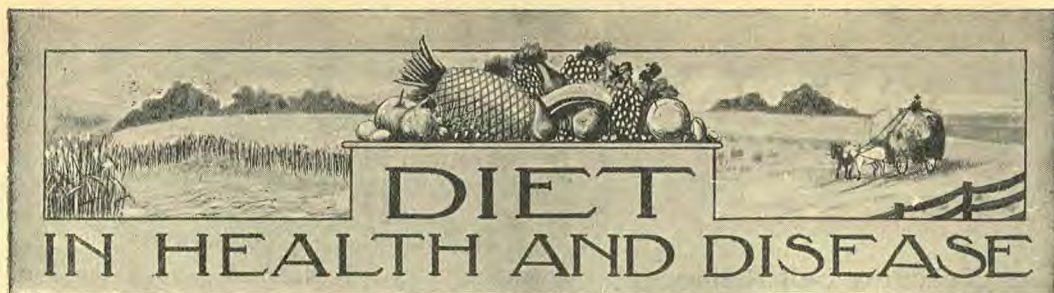
“Why,” I cried, “I recited just as he did, and you said ‘No!’”

“Why didn’t you say ‘Yes,’ and stick to it? It is not enough to know your lesson. You must know that you know it. You have learned nothing until you are sure. If all the world says ‘No,’ your business is to say ‘Yes,’ and prove it.”

A Problem in Eugenics

A REJECTED pair of applicants for a marriage license under the new Pennsylvania eugenics law are under the surveillance of the Reading police to prevent an elopement into another State. If the vigilance fails and the couple slip through, are married and return to Pennsylvania, contempt of court proceedings will follow. It’s pretty evident that the States which have rushed into the eugenics business are going to have their hands full.





Extremes in Diet

MRS. E. G. WHITE

NOT all who profess to believe in dietetic reform are really reformers. With many persons the reform consists merely in discarding certain unwholesome foods. They do not understand clearly the principles of health, and their tables, still loaded with harmful dainties, are far from being an example of Christian temperance and moderation.

Another class, in their desire to set a right example, go to the opposite extreme. Some are unable to obtain the most desirable foods, and instead of using such things as would best supply the lack, they adopt an impoverished diet. Their food does not supply the elements needed to make good blood. Their health suffers, their usefulness is impaired, and their example tells against rather than in favour of reform in diet.

Others think that since health requires a simple diet, there need be little care in the selection or the preparation of food. Some restrict themselves to a very meagre diet, not having sufficient variety to supply the needs of the system, and they suffer in consequence.

Those who have but a partial understanding of the principles of reform are often the most rigid, not only in carrying out their views themselves, but in urging them on their families and their neighbours. The effect of their mistaken reforms, as seen in their own ill-health, and their efforts to force their views upon others, give many a false idea of dietetic re-

form, and lead them to reject it altogether.

Those who understand the laws of health and who are governed by principle, will shun the extremes, both of indulgence and of restriction. Their diet is chosen, not for the mere gratification of appetite, but for the upbuilding of the body. They seek to preserve every power in the best condition for highest service to God and man. The appetite is under the control of reason and conscience, and they are rewarded with health of body and mind. While they do not urge their views offensively upon others, their example is a testimony in favour of right principles. These persons have a wide influence for good.

There is real common sense in dietetic reform. The subject should be studied broadly and deeply, and no one should criticise others because their practice is not, in all things, in harmony with his own. It is impossible to make an unvarying rule to regulate every one's habits, and no one should think himself a criterion for all. Not all can eat the same things. Foods that are palatable and wholesome to one person may be distasteful, and even harmful, to another. Some cannot use milk, while others thrive on it. Some persons cannot digest peas and beans; others find them wholesome. For some the coarser grain preparations are good food, while others cannot use them.

Because principle requires us to discard those things that irritate the stomach and impair health, we should remember that

an impoverished diet produces poverty of the blood. Cases of disease most difficult to cure result from this cause. The system is not sufficiently nourished, and dyspepsia and general debility are the result. Those who use such a diet are not always compelled by poverty to do so, but they choose it through ignorance or negligence,

Some householders stint the family table in order to provide expensive entertainment for visitors. This is unwise. In the entertainment of guests there should be greater simplicity. Let the needs of the family have first attention.

Unwise economy and artificial customs often prevent the exercise of hospitality



E. E. Thorpe, Photo., Vavau, Friendly Islands

THE CARPE PLANT

This plant is a member of the Taro family, the root being an excellent food similar to the Yam. The leaves measure 3ft. 3ins. long by 2ft. 9ins. wide.

or to carry out their erroneous ideas of reform.

God is not honoured when the body is neglected or abused, and is thus unfitted for His service. To care for the body by providing for it food that is relishable and strengthening is one of the first duties of the householder. It is far better to have less expensive clothing and furniture than to stint the supply of food.

where it is needed and would be a blessing. The regular supply of food for our tables should be such that the unexpected guest can be made welcome without burdening the housewife to make extra preparation.

All should learn what to eat and how to cook it. Men, as well as women, need to understand the simple, healthful preparation of food. Their business often

calls them where they cannot obtain wholesome food; then, if they have a knowledge of cookery, they can use it to good purpose.

Carefully consider your diet. Study from cause to effect. Cultivate self-control. Keep appetite under the control of reason. Never abuse the stomach by overeating, but do not deprive yourself of the wholesome, palatable food that health demands.

The narrow ideas of some would-be health reformers have been a great injury to the cause of hygiene. Hygienists should remember that dietetic reform will be judged, to a great degree, by the provision they make for their tables; and instead of taking a course that will bring discredit upon it, they should so exemplify its principles as to commend them to candid minds. There is a large class who will oppose any reform movement, however reasonable, if it places a restriction on the appetite. They consult taste instead of reason or the laws of health. By this class, all who leave the beaten track of custom, and advocate reform, will be accounted radical, no matter how consistent their course. That these persons may have no ground for criticism, hygienists should not try to see how different they can be from others, but should come as near to them as possible without the sacrifice of principle.

When those who advocate hygienic reform go to extremes, it is no wonder that many who regard these persons as representing health principles reject the reform altogether. These extremes frequently do more harm in a short time than could be undone by a lifetime of consistent living.

Hygienic reform is based upon principles that are broad and far-reaching, and we should not belittle it by narrow views and practices. But no one should permit opposition or ridicule, or a desire to please or influence others, to turn him from true principles, or cause him lightly to regard them. Those who are governed by prin-

ciple will be firm and decided in standing for the right; yet in all their associations they will manifest a generous, Christlike spirit and true moderation.

A Well-Balanced Dinner Menu

Mrs. Ruth Haskell Hayton

Roasted Potatoes

BOIL or steam until tender, good, equal-sized potatoes. Drain well and place in a baking-dish, with one tablespoonful of oil in the bottom. Brush the top of potatoes with a little oil, place in the oven, and turn from side to side until all are equally browned.

Mashed Turnips

Wash the turnips and pare, and drop into boiling water, cook until perfectly tender; turn into a colander and press out the water with a plate or large spoon; mash until free from lumps, season with a little cream or butter if desired, salt to taste. If the turnips are especially watery, one or two hot, mealy potatoes mashed with them will be an improvement.

Lettuce and Tomato Salad

Arrange the lettuce leaves on a plate; have a ripe tomato peeled and cooled, lay on the lettuce, run a sharp knife across the middle of the tomato, cutting it nearly in two, then crosswise, so that the four quarters will fall back, and yet hold together underneath. Drop a spoonful of mayonnaise dressing in the centre of the tomato, and serve.

Rice Mould Custard

Wash one-half cup of rice, and cook until perfectly tender. When done, mould in cups, filling about half full, and serve with a boiled custard made of one pint of milk, three tablespoonfuls of sugar, a teaspoonful of cornflour and one egg.

SOME DELICIOUS DESSERTS

Blackberry Sponge

Fill an earthen basin closely with small cubes of bread, pouring over the bread, as it is fitted into place, hot blackberry juice—blackberries cooked until soft with sugar to taste, and passed through a sieve. Use all the juice the bread will absorb. Set the sponge aside in a cool place for hours, then turn from the mould. Serve with blackberries and cream.

Fruit Custard

Heat a pint of red raspberry, strawberry, or currant juice to boiling, and stir into it two even tablespoonfuls of cornflour rubbed smooth in a little cold water. Stir constantly until thickened, then add half a cup of sugar, or less if the fruit juice has been sweetened; take from the fire and stir in the stiffly beaten whites of three eggs, stirring all the time so that the hot mixture will coagulate the egg. Make a custard of a pint of milk, the yolks of three eggs, and three tablespoonfuls of sugar. When done, set to cool. Put in a glass dish when cold, placing the fruit mixture by spoonfuls on top, and serve.

Floating Island

Make a custard of a pint of milk, flavoured as desired, and the yolks of three eggs; sweeten to taste, and steam in a double saucepan. When done, turn into a serving dish. Have the whites of the eggs beaten to a stiff froth, and drop for a few seconds on the top of a pan of scalding water, turning so that both sides may be alike coagulated, but not hardened; skim off, and put in islands on the top of the custard. When quite cold, drop bits of different coloured jellies on the islands, and keep in a cool place until needed, or put a spoonful of fruit jelly in the bottom of small glasses, and fill with the custard with a spoonful of the white on top.

Apple Charlotte

Take three cups of nicely stewed tart apples which have been beaten smooth, or rubbed through a

apples and add two tablespoonfuls of cold water to the pie. Roll out the upper crust as thin as can be lifted from the table, make a few cuts in it so that the steam can escape, wet the edge of the lower crust: press together, and cut away overhanging portions, place in the oven, and bake until a light brown, or from fifteen to twenty minutes. Apples that do not cook quickly may be stewed before making into pies.

“THOMAS EDISON and Henry Ford are among the best known foes of the cigarette. The famous inventor and the noted automobile manufacturer have gone into the work of discouraging the cigarette



Sturdy Vegetarians

colander and sweetened to taste. The apples should have been cooked with only enough water to make them the consistency of thick marmalade. Remove the hard crusts from slices of bread, spread them quite thickly with prepared apple, and pack in layers in a pudding dish. Cover with a simple custard made of a quart of milk, three tablespoonfuls of sugar and two eggs. Let it stand half-an-hour, then bake. Other fruit marmalade may be used in place of the apple preparation if preferred.

Apple Pie

Pare, core, and slice thin ripe, tart apples. Line a pie-dish one to two inches deep with crust, and fill with apples. Mix one tablespoonful of flour with four tablespoonfuls of sugar and one-half teaspoonful of grated nutmeg. Sprinkle this over the tops of the

habit with much earnestness. Edison says, ‘I employ no person who smokes cigarettes.’ Ford will have Edison’s letter containing these words printed and framed, and ask that it be hung in the public school buildings of Detroit.”

“THE nobler the aims, the higher the mental and spiritual endowments, and the better developed the physical powers of the parents, the better will be the life equipment they give their children.”



The Guest in the House

BARBARA CAYE

ABOVE the door of a certain English country house the writer knows, carved in the stone, are the words "And Yours, My Friend." It is a charming greeting, full of cordial welcome, and would assure the arriving guest of gracious, unflinching hospitality even though the habits of the master and mistress were not already well known. No brief sentence or inscription could more truly or fully express the whole underlying spirit of hospitality, for hospitality is but sharing with the guest, who by virtue of being under our roof is, for the time being, a member of our family, whatever we have, be it much or little.

The tie between host and guest has always been reckoned sacred, even among the most barbarous peoples, and the exercise of hospitality is very properly considered both a duty and a privilege, especially if one only regards the scriptural injunction about "using hospitality without grudging" and thereby "entertaining angels unawares." There is little likelihood, perhaps, of our attributing angelic similitude to some of the guests we entertain, but so long as they are under our roof let our hospitality be generous and gracious.

"Now," says the practical-minded reader, "all this talk of the sacred bond between host and guest and the duties and privileges of hospitality may seem all very well and inspiring, but it isn't giving the housewife any practical suggestions

about making the guest in the house comfortable and happy," so we may venture to proceed directly to the subject, dividing and subdividing it with analytical zeal. In the first place, the guest in the house is to be considered from two points of view—that is to say with reference to the hostess's duty to her guest and, *vice versa*, the guest's duties toward the hostess.

Let us begin with the first and, as we promised we should do, make a subdivision, drawing a distinction between the chance and the invited guest. In her treatment of chance guests the hostess has an opportunity to show more spontaneous and fundamental hospitality than when friends have been invited and are expected either for a meal or for a longer visit.

It is a gracious custom, that some people observe, always to have an extra place set at the table for friend or stranger who may happen in near meal times. Of course it does not mean that anyone who enters the house in the neighbourhood of meal times is forthwith bidden stop for luncheon or dinner, but, when one knows a place is already prepared and that there will be no disarranging of domestic machinery, it is much easier to say, "Won't you stay for dinner?" and it is pleasant for the person who stays under such circumstances to feel that his coming hasn't made even a ripple on the surface of domestic arrangements—and one can always tell, by intuition if not otherwise,

whether an order has been quietly given "to set an extra place."

Then, again, out of consideration for the chance guest, the thoughtful and provident mistress of a house will keep her guest-room in a state of perpetual readiness for immediate use. Whether chance guests use it merely for a few moments, while getting ready for dinner, or whether they spend the night there, it adds appreciably to their sense of being welcome to find everything made ready and waiting apparently just for them.

Before passing on to the treatment of the invited and expected guest, we must pause for a few moments to consider the casual caller. It is not pleasant and usually not edifying to indulge in the bad negative habit of saying "don't." It is much wiser and infinitely pleasanter to take the positive attitude and say "do." Exception, however, occasionally compels us to use the ungracious "don't," and we must now resort to it. *Don't* have in your house a disagreeable, frigid little reception room where the casual caller is inhospitably bestowed until you make your appearance. With the aid of a discriminating butler or waitress to answer the door bell, such a room may be a most valuable adjunct in quickly getting rid of people you do not wish to see and whose going you would gladly hasten, but to have those whose presence is really welcome to you thrust in such a place is almost as bad as throwing a bucket of cold water over them. It is much better to have even the unwelcome caller shown into a "human" room, and then trust to polite diplomacy to speed his or her departure. Be sure to have something of interest—books, magazines, pictures or some feature of decorative interest—to divert the caller while waiting and also try to make your appearance as soon as possible.

If you are blessed with chance visitors in the evening, remember that it is always an easy matter to contrive some form of light and informal refreshment. It isn't that people are hungry and need to be fed, but the giving and sharing of food

and drink is a world-old symbol of hospitality, and will never lose its significance so long as we remain human.

Now, having duly disposed of the methods of welcome accorded guests whom chance sends our way, it behooves us to devote a little space to the guest expected, for whom, naturally, some slight preparation has been made in the way of inviting other friends to meet them at dinner or planning some social diversions.

First and foremost, don't pester your guests with perpetual efforts to entertain them. The highest compliment you can pay them, as they have come under your roof to become members of your family for the time being, is to treat them as members of the family and allow them to choose their own amusements.

Be sure to give your guests a reasonable amount of your time—the afternoons and evenings for example—but remember also that they will wish to have some time to themselves, and will probably enjoy being let pretty much alone in the mornings, unless there is something of special interest to be seen or done. Nothing is more tiresome or wearing than to visit in a house where an occupation for every moment of the waking hours is planned out for you while, on the other hand, it is always a delight to stay in a household where your presence is taken as a matter of course and you feel perfectly free to follow your best judgment.

Even though you may be making an effort to entertain your guests, make a little more effort and absolutely conceal the fact. Nothing makes any right-minded guest more thoroughly uncomfortable than to feel and know that he or she is the object of an effort at entertainment.

And now let us look for a moment at the reverse side of the question and regard the guest's duties toward the hostess. One obligation begets another, and the responsibility of hostess to guest involves a corresponding responsibility of guest to hostess, a fact which thoughtless visitors sometimes seem disposed to ignore.

In the first place, there is the comprehensive duty of accommodation to the general habits of the household where one is visiting. The thoughtful guest will always try to conform his or her ways to the customs of the host's or hostess's family during the period of their stay. Nothing will conduce more to fulfilling this duty of accommodation than a punctilious promptness at meal times and the observance of tidiness in the condition of one's room. It is extremely annoying to a hostess to have meals kept waiting and the food spoiled, to say nothing of the servants' tempers, pending the tardy appearance of a dilatory and inconsiderate guest.

Tidiness is a golden virtue in a guest, and it is astonishing to note how often it is lacking in the rooms even of those who are invariably immaculate in their personal appearance. A hostess does not, of course, expect her guests to be like a certain worthy missionary bishop, who always insisted on making his own bed wherever he might be staying, but she is surely justified in looking to them to keep their belongings in some semblance of order.

By way of one last word, may we suggest that, on a guest's part, some of the old-fashioned conventions of good breeding, such as "thank you" letters, be observed. Old-fashion courtesy is too much discounted and disregarded in our busy day and hustling generation.—*American Homes and Gardens.*

REMEMBER to keep yourself properly poised whatever you may be doing during the day. Don't always lean to one side. Don't always bend in one direction. When you do bend, let it be at the hips. Never allow the shoulders to fall forward. Keep the head well back and up. If these little points are remembered and put into practice you will have no cause to find fault with your carriage. A little defect, such as one shoulder being a trifle lower than the other, will appreciably mar what otherwise would be a good figure.—*Macfadden.*

Truthfulness

WHETHER truthfulness is a characteristic or a virtue to be maintained by a more or less constant struggle, depends largely upon the individual; admitting that there are some children who possess a sturdy quality of candour which will survive in defiance of defective training, and that there are also a few who have a distinct tendency to untruthfulness, it is, nevertheless, the fact that most of them come to us with minds like an unwritten page upon which we, by virtue of the hard-earned right of parenthood, are privileged to trace the first characters.

Correct training from the very beginning, patiently persisted in through the early years of adolescence, may so deeply root the habit of truthfulness in a child's character that it will become to all intents and purposes an innate quality. And yet the same child in other environment, under other training, is perfectly capable of developing into the so-called "born liar"—worst of the cumberers of the earth. How many parents fail to grasp the unparalleled opportunity that is theirs in having the *first chance!*

Most children are neither naturally good nor naturally bad (strong characters, or children subject to exceptional hereditary influences excepted). The rank and file—and indeed all children to an extent—are so much raw material, each with his definite limitations outside of which no amount of mere training will carry him, any more than silk can be woven from cotton—although a very good imitation is sometimes made in both fabrics and children. To expect a noble-spirited, honourable citizen to develop from the child whose infancy and youth have been nourished in an atmosphere of petty falsehood and deception is too preposterous.

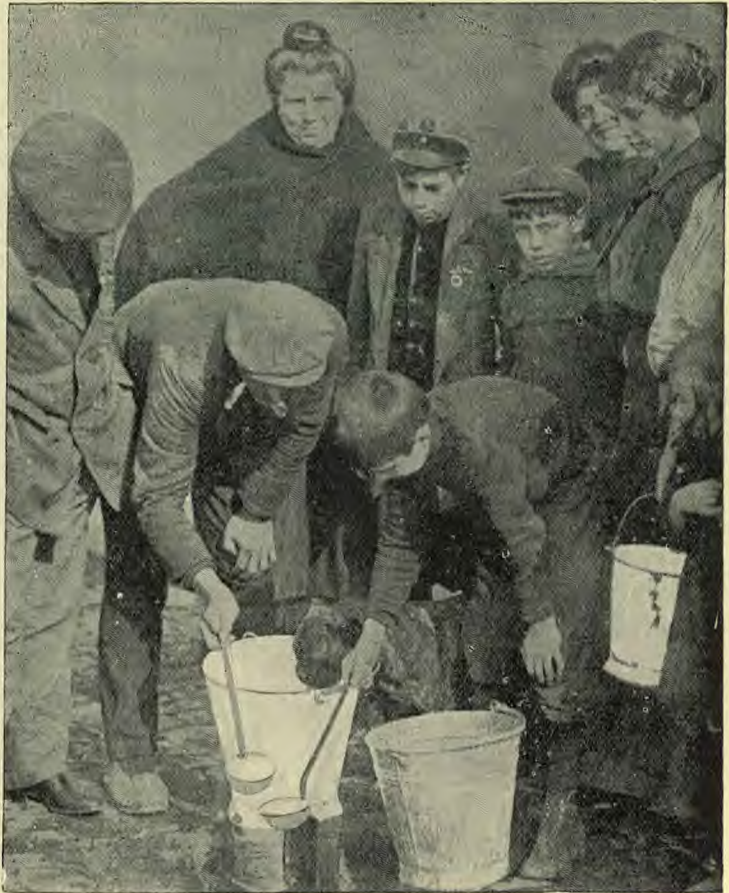
Some women, honourable enough in what they look upon as "things of importance," will descend to degrading little deceits incomprehensible to one who regards truth as having definite boundaries within or without which one must stand. Such is the mother who stills her baby's

howl of protest against being left in another's care, by taking off her hat, and saying, "Mother won't go then if baby doesn't want her to"—and then sneaks off at the first opportunity. She reaps the liar's inevitable reward—more lies. She must repeat the performance again and again as baby becomes more and more tyrannical, having learned his power. She consoles herself with the thought that baby "doesn't know the difference." But baby soon learns. After once or twice catching sight of his mother returning from her stolen outing as he is being amused at the window by some one else who also thinks "baby doesn't know the difference," he gains his first perception of the fact that it is possible to say one thing, meaning quite another. And it is that wonderwoman, his *mother*, who has shown him! It doesn't shock his sensibilities in the least, though it may hurt his feelings, for as yet he knows no "right" or "wrong." Here at last is something about which baby "doesn't know the difference."

The child is like a little sponge; he absorbs facts about living with every breath he draws, and if he puts this lesson and others like it to a practical test when he is a little older and, finding it useful, continues to do so, why blame *him*? It is true he would no more have admired honourable behaviour on his mother's part than he deplors the reverse—it has simply been the means of turning his little feet into the wrong path.

Such a mother does not deliberately choose this course; she blunders into it, and frequently, either through ignorance of the laws of cause and effect or from weakness of character, pursues it to the end, often a very bitter one.

The baby is older; he is suddenly taken ill; in terror, for she loves her baby as



The Sphere

Thoughtful people of Antwerp providing animals with water during the water famine caused by the recent siege

well, if not as wisely as other mothers, she persuades him to take some castor oil, telling him how good it will taste. When he discovers the untruth of this statement he refuses to finish the dose. She insists, telling him if he doesn't she must send for the doctor, and he will give baby much worse medicine, and may have to hurt him to make him well. Baby be-

comes worse in spite of the dose which he has heroically taken, and the dreaded doctor comes, to find a frantic child and a despairing mother who exclaims, "Oh, doctor, I don't know what makes him act so; he's usually so good with strangers. I can't do anything with him!"—incidentally, neither can the doctor.

She tells the child a "big black bear" will get him if he is naughty, and then deplores her fate to the neighbours, because "he never *will* go to bed till I do, and he's so sleepy and cross I never have a restful evening. Oh, dear, I'm all tired out!"

Several years later the boy, no longer a baby—breaks his father's saw. He is afraid to tell. His mother says, "Well, just go to bed early and I'll say you haven't been well all day, and father need never know you did it. He'll never think of you." Later still, when the boy plays truant and tells his teacher he has been ill; when he opens his mother's purse and takes her money even as he destroyed his father's property so long ago, she weeps brokenly, "I've tried to be such a *good* mother to him, and this is the way it ends." Unfortunately even *this* is not always the end.

There is another type of falsehood sometimes seen in people from whom one would be justified in expecting greater discernment. I once saw an instance of this type which made a lasting impression on me. The little scene was enacted in a street car. A well-dressed woman boarded the car accompanied by a curly-headed little fellow carrying a new white Teddy bear. As the conductor stopped for her fare he asked, "How old?" "Four," she replied. The conductor passed on with her fare and the little boy tugged at his mother's sleeve. "Mother, you forgot! When the man comes back I'm going to tell him about the five candles I had on my birthday cake yesterday."

"S-sh! No, no Benny, you mustn't do anything of the kind," the mother whispered.

"Why not?" and the serious, intelligent little face looked puzzled.

"Well—Oh, because!"

It certainly *was* an unanswerable question. The mean deceit that she could bear to practice, and excuse to herself somehow—heaven knows how—she could *not* bear to confess to the innocent little fellow at her side. But be sure he found her out, and that before long.

Instances might be multiplied *ad infinitum*, and they would teach no more than this: be scrupulously truthful *yourself* in thought, word, and deed, and you will have made a giant step in the right direction toward rearing truthful children.—*Constance Cooke.*

A REMEDY

Now is it not too bad such things
As measles, mumps, and rash
Should so contagious be that one
Will catch them in a flash?

And that quick tempers and sour looks
And spirits sad and blue,
And long-drawn faces, sighs, and frowns
Should be contagious, too!

And isn't it a pleasant thought,
That nothing we may meet
Is caught more rapidly than smiles,
And spirits bright and sweet?

And that each one of us may help
Some sad complaints to banish,
If we keep giving smiles to all
Till frowns and sour looks vanish?

—Selected.

The Children's First Teeth

BECAUSE the first teeth of the child drop out so early, says the *Youth's Companion*, parents often suppose that they are of little importance, and therefore do not bother to take measures for preserving them. But the proper development and shape of the jaws depend on the retention of the first teeth until the second set is ready to replace them. Also, every child's physical and mental growth depends upon proper nutrition, which in turn requires sound, symmetrical teeth for chewing the food; and the proper growth of the second set of teeth does not take place if the first teeth are lost early. Moreover, if the first teeth are allowed to decay, the food, at every motion of chewing, is mixed with the micro-organisms that swarm in

the cavities of the teeth; and these injurious bacteria are carried with the food into the alimentary canal, to interfere with digestion and do great harm.

Care of the teeth should begin when they first appear. Wipe off the baby's teeth with a bit of clean cotton dipped in saturated boric acid solution, two or three times a day. When the children are old enough, teach them to brush their teeth. After the cleansing, have them rinse the mouth with the boric acid solution. That will remove all food debris left by the brush. When a small cavity appears, have it repaired by the dentist; do not extract the tooth.

Retention of the first teeth helps to cause a normal growth of the bony parts of both the upper and the lower jaw. That growth is necessary in order to accommodate the second set of teeth, which are nearly twice as numerous as the first.

Early decay or extraction of the first teeth is often followed by deformities of the teeth and jaws, which are humiliating to the child and to the parents. Sometimes the deformities can be corrected by a skilful dentist, but even then it is generally at the expenditure of much pain to the child and a considerable sum of money. This is surely one of the things in which an ounce of prevention is worth a pound of cure.

Spinal Curvature in Babies

THE appalling frequency of spinal curvature among infants and school children has been investigated by a number of physiologists, who find that it is often caused by the manner in which the child is carried by the mother or nurse, who supports it on the left arm while the right hand holds it pressed firmly against her own body. According to an article in *La Revue* (Paris), this position, when too frequently and continuously maintained during the day, often results in a compression of the tender young bones of the pelvis and upper thigh which is sufficient to cause a deviation in the vertebral

column. This condition is found most often in girls, and it becomes most visible in the early teens. We read further:—

“Dr. Engelmann, of Vienna, who has made a long series of observations on this subject based on autopsy, has found that this scoliosis is ordinarily shown more on the left side than on the right. It may be very serious when the child's skeleton is frail or it is predisposed to rickets.

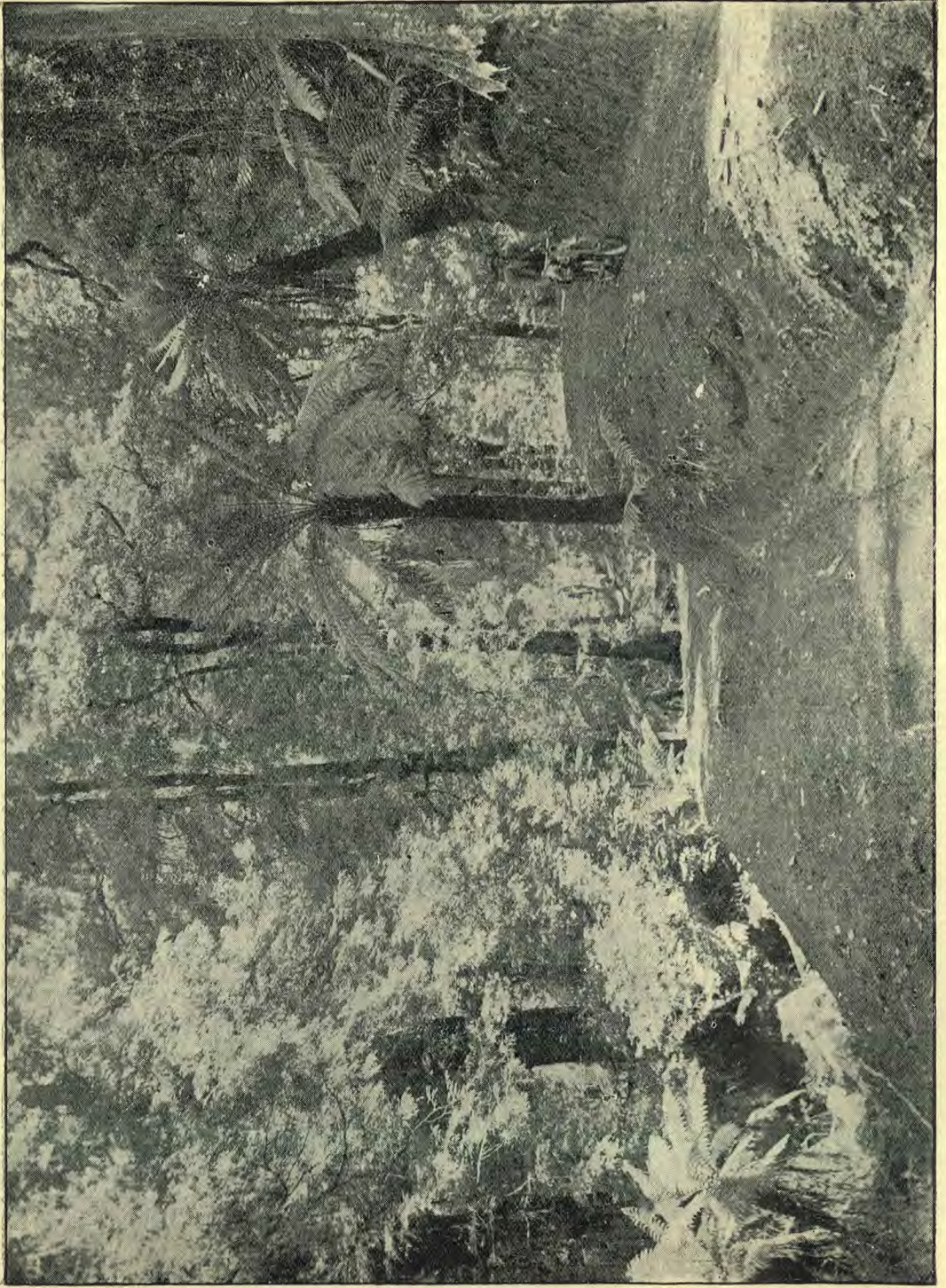
“Statistics established with meticulous care by such well-known physiologists as Schroder, Waithe, and Combe attest that among 2,314 pupils in the primary schools who were carefully examined, 91.4 per cent presented deformations of the dorsal spine with incurvation to the left.”

It is stated also that E. Muller found that 68 per cent of the victims of scoliosis inclined the head on this side. According to Dr. Engelmann this affection is entirely due to the vicious method of holding the new-born infant. Hence he urges exceedingly great care in this matter, which is the more important as a long-established scoliosis is almost irremediable, the usual remedies of orthopedic corsets, massage, plaster jackets, etc., being not very effective in cases which have become chronic. *Translation made for the Literary Digest.*

A Use for Old Millinery

FEW women preserve their old hats for any other reason than the possible chance of renovating them for further wear, but one mother keeps them for quite another purpose. Her little daughter was obliged to remain in the house much of the time during her early school days, and the mother was therefore taxed to the utmost to find employment for her. An occupation that kept the child busy for hours during the shut-in periods was trimming hats and having an “opening” all her own.

The old hats and the trimmings were carefully preserved. With thread, needles, and a paper of pins, the little girl would create wonders. When she had finished the hats, she would exhibit them to the



MOUNT DONNA BUANG ROAD, WARBURTON, VICTORIA

family, who were free to make comments on the colour schemes and arrangement. After the exhibition, all the trimmings were removed and put away in the proper boxes to await another "opening."—*Selected.*

MOTHER'S KNEE

R. Hare

There is a sacred place where childhood lays its head,
And casts its griefs and hopes of yet to be;
A place where sorrow pillows all its pain—
'Tis mother's knee!

No anxious thought invades the spirit resting there,
And childhood's eyes their brightest visions see
Pictured through teardrops when in love it rests
By mother's knee.

O sophist, grudge not love its dreams secure and
sweet,
Its brighter day, its ever calmer sea,
Since it has found earth's dearest, holiest place
By mother's knee.

Remedies for Children's Diseases

For a Burn

CARRON OIL should be kept on hand for burns. Make it by shaking equal parts of limewater and olive oil together until they form a milky-looking emulsion. Apply on a clean cloth. Vaseline, olive oil, butter, or lard can be used until the other is ready, or for a slight burn.

For a Cut

Bathe a cut with hot water; if bleeding much, pack on baking soda and bandage rather tightly; if blood comes in spurts from an artery, tie firmly between the cut and the heart, bandage the place, and send for a doctor.

For Sick Stomach

If sick stomach comes from overeating, stop all food, and give a teaspoonful of lime water in milk every half hour. Feed thin milk two hours after vomiting stops. If there is diarrhoea and vomiting, send at once for the doctor.

For Loose Bowels

Give a teaspoonful of castor oil; but if it is possible to do so, get the doctor at

once, especially in the summer, for a diarrhoeal condition may in a few hours get so serious that even the doctors may not be able to do anything for the child.

For Constipation

Feed between the regular feedings sweet cream, orange juice, prune syrup, or strained oatmeal gruel made from long-cooked oats.

For Eczema

Avoid all soap over eczema spots, clean with olive oil, and if the surface is moist and angry, dust with talcum powder, preferably the borated talcum. Keep the child from scratching the spots. In case of eczemas, one can almost be certain that there is something in the diet that needs correcting.

For Heat Rash, Stomach Rash, Hives

For any such eruption first give a dose of castor oil, then dab moist baking soda over the irritated skin, and let it dry on. Repeat this often if there is itching. Give orange juice between feedings.

To Remove a Splinter

Heat the end of a needle red hot; when cold, pick out the splinter with it. Drop a little peroxide of hydrogen on the place.

For a Dog or a Cat Scratch

Wash the wound and drop peroxide of hydrogen on it. Always keep this in the house (and bandages, too), as it is very cleansing and healing. A four-ounce bottle costs but a few pence.

Contagious Diseases

Mothers should know how to distinguish contagious diseases from ordinary heat rash or a rash caused by indigestion. If there is any doubt, call a doctor. Some grow worse so rapidly that the patient gets beyond help before the doctor sees him.

Diphtheria

This comes on suddenly, with fever, sore throat, vomiting, and pains in the back and limbs. On examination the throat shows white spots. Children less

than a year old or nursing babies seldom contract the disease. It is very contagious, and one should step aside when the patient coughs. The eyes as well as the mouth take the germs. In severe cases of croupy cough, examine the throat for white spots. Membranous croup is one of the worst forms of diphtheria.

If a child has been exposed to diphtheria, or the disease is present in the neighbourhood, have him gargle his throat every day with peroxide and water, or salt and water; if the child is too young to gargle, wash the mouth with a clean cloth dipped in a peroxide solution.

If the baby is already sick from diphtheria, send for the doctor, and get a room ready to keep the child separate from the rest of the family. Remove all unnecessary furniture. Make a pail of water milky-looking with creolin, and go over the floor and furniture with a damp cloth wrung from the water. Washing soda or soap can be used if creolin is not at hand. While waiting for the doctor, inject warm water into the bowels to clean them out.

Scarlet Fever

Scarlet fever is also very serious and very contagious; sometimes the case develops so fast that the patient dies in a few days. Others have it very lightly. All should be kept isolated, and stay in bed while the rash is out. Later the skin dries and peels, and the child should stay alone until the doctor says it is no longer likely to transmit the disease.

Scarlet fever comes on suddenly; the child complains of sore throat; sometimes this symptom is very severe. Vomiting usually is severe at first. The rash appears in fine, bright-red pimples about the third day, first on the front of the neck

and around the armpits. The chin, nose, and mouth are free from rash. A physician should always be called, as dangerous complications occur.

Measles

The disease is usually considered mild, but often there are complications that make it dangerous, and even fatal. The patient should stay in bed, in a partly darkened room, with the eyes shielded from the light, until the rash is gone. The purplish-red rash appears first on the face, the spots being about the size of a split pea. The eyes and nose run, and there is a cough.

German Measles

The rash of German measles resembles that of measles, but is rose-coloured and disappears a minute after pressure. The glands back of the ears and under the chin swell about the time the rash appears. It is the mildest of all these diseases, and needs no treatment. Keep the child indoors while the rash is out.

Whooping-Cough

starts with an ordinary-sounding cough; after the disease progresses, there are a number of short coughs followed by a prolonged whooping sound. In light cases there is little of the whooping, but it is just as contagious as in severe cases. If there is much vomiting, feed a few spoonfuls of milk between coughing spells. Keep the child out-of-doors as much as possible, bundling him well when the weather is bad. Avoid heating exercise, for this is sometimes fatal.

Mumps and Chicken-Pox

Mumps, with the swollen glands under the angle of the jaw, and chicken-pox, with its watery-looking blisters, are both mild diseases. Keep the child indoors. —*Edythe Stoddard Seymour.*





CHILDREN'S HOUR

MISS FRET AND MISS LAUGH

Cries little Miss Fret,
In a very great pet:
"I hate this warm weather! It's horrid to tan!
It scorches my nose
And it blisters my toes,
And wherever I go, I must carry a fan!"

Chirps little Miss Laugh,
"Why, I couldn't tell half
The fun I am having this bright summer day!
I sing through the hours,
And cull the bright flowers,
And ride like a queen in the sweet-smelling hay!"

Margaret E. Sangster.

The Wise Squirrels

UNDER a large tree there lived a family of squirrels. All through the summer they climbed the trees, and ran gaily along the branches, and raced over the stone wall.

One day, when the little family was running off through the fields, two children came through the wood, and saw a curious-looking hole under one of the trees. They poked a stick into the hole, and found that it contained quantities of nuts. It was the very store that the little squirrels had all worked hard to collect for their food during the coming winter.

Without a thought of cruelty, the children took all the things out. The squirrels returned, and were frantic with fear and rage; they bustled about, ran up and down the trees, and chattered and scolded their very hardest. But the children did not understand, and kept on putting all the nuts into a little basket, which they carried away to their home. The children were followed for a while by the poor

little squirrel family, who did all they could to make them understand.

The children took the basket to their mother, thinking that she would be pleased; but she was not at all pleased; she was very sorry. She explained to them how hard those little animals had worked to get all the nuts together, and she said that unless the nuts were put back, the poor little squirrels would starve. The little girl was quite willing to put everything back, but the boy had a cruel thought; he decided to put the things back, and to go by himself the next day and take them all out again.

The squirrels saw the children come back with the basket, and watched them put all their treasures into the hole under the tree again. And as soon as the children were out of sight, down from the tree scrambled the squirrels. After a lot of chattering among themselves, the old squirrels scratched all the things out of the hole, and then they each took a nut and they carried their treasures off a long, long way, and buried them in a hole in the old stone wall.

How hard they worked, and how hot and weary they grew! But they did not stop until every nut was stored away safe in a new storehouse.

And the next day, when the little boy crept slyly to the old storehouse under the tree, he found not a single nut, berry, or one tiny piece of anything that a squirrel could eat. There was nothing except an empty hole. And the squirrels, who were frisking about, looked down from a safe distance and chattered at him mockingly.—*Ellen Velvin.*

THE GOOD OLD WAY

The motor car goes whizzing by,
The aeroplane floats through the sky;
But the man who walks, his cares are few—
He gets where he is going to.

—*Washington Star.*

Two Ways to Measure the Height of a Tree

SHUT yourself up like a pocketknife, making your hips the hinge; and, placing your head between your knees, and your back to the tree, sight to the top of the tree. At a distance just equal to the height of the tree you will see the top of the tree, and no higher. To get this location is easy, and then all that is left to do to ascertain the height of the tree is to pace off your distance from the tree. This is the German forester's method of measuring the height of trees.

Another Method

On a bright day measure the shadow of the tree whose height you wish to learn; then measure the height of the shadow of some other vertical object, as the fence post. As the shadow of the post is to the real height of the post, so is the shadow of the tree to its real height.

John's Opportunity

JOHN GRANT, a strong, healthy boy eighteen years old, fairly good-looking, having a high-school education, a quick perception of business methods, and one year's experience in a large business establishment, had attained to the wage of fifteen shillings a week, and had no prospect of advance so far as he could see.

The situation was freely discussed at home. His father was willing that John should make a change if he was convinced that he could do better; so after reading advertisements, looking about the city for several days, and talking with friends, he found an opening in a large retail and wholesale hardware store. The salary would be but eight shillings a week for the first six months.

Mr. Williams, the junior member of the firm, said to him: "I cannot promise

anything definite. The business is a good one to learn. You can make yourself a useful man to us by becoming thoroughly acquainted with all the details of the business; and as fast as you prove yourself capable, we will recognise your services in some way. We have already several bright young men who have learned the business, and their advancement would naturally come first. If you wish to come under these conditions, the place is open to you."

John accepted the position, as it offered him some chance of advancement; and as the complicated details of the business became more and more familiar, he felt that he was making progress. Yet a dozen others in the business were just as bright, and apparently had made the best use of their opportunities. Still he kept looking for some chance to do more.

By watching closely for several weeks every detail, he noticed that large lots of goods were constantly coming from abroad, and that Mr. Williams always attended to the checking of the bills and marking the goods. This seemed to him strange; for Mr. Williams was a very busy man, and had enough to do without looking after such minor matters. John soon found, however, much to his dismay, that these bills were made out in French or German, and that no one in the store but Mr. Williams could decipher them.

John was not afraid even of two such formidable foes as French and German. He purchased books, and began to study at once. By constant application, he was able, at the end of the year, to make a bill of goods in either of the languages. He obtained access to the old bills, and made a special study of them. All this time he was doing his very best work in the store, and often helped Mr. Williams in arranging the foreign goods.

One day a larger assortment than usual came in, much to the dismay of Mr. Williams, who exclaimed, "I don't see how I can spend the time to mark these goods."

"Let me do it," quietly remarked John.
"You?"

"Yes, sir; I think I can do it correctly."

"But these bills are in French."

"I know it, and I have been studying French and German. I think I can read any bill that we have ever had."

"Well, try it, and see how you can make out."

Mr. Williams watched him for a while, and then said: "You seem to know what you are about. If you can do this, all right. It will relieve me more than I can tell."

John did the work so satisfactorily that at the next importation the bill was handed to him as a matter of course.

One day, a month later, he was called into the office, and interviewed by both the active members of the firm. The senior member said: "In my forty years' experience in this business you are the first boy who has seen this opportunity and improved it. I had to do the work until Mr. Williams came; and one reason that he became a member of the firm was because he could attend to this part of the business. We want you to take charge of the foreign goods. It is an important position; in fact, it is a matter of necessity that we have some one who can do this work. You alone, of the twenty young men we have here, saw the place, and fitted yourself for it. We cannot pay you yet as much as we may pay you later; for it is necessary to prove your staying qualities, but we have little doubt they will be shown in due time. For the rest of the year we will pay you two pounds a week. At the end of the year we will consider the matter again."

The result was that after John had been there five years, he received four hundred pounds a year, and had been sent to France and Germany. "John Grant will probably become a member of the firm by the time he is thirty years of age," Mr. Williams said to a friend. "He saw the opportunity, and fitted himself for it at some sacrifice, but it paid. It always pays."—*Selected.*

WHEN a dog is afraid of his master you had best be suspicious, too.

The Broken Saw

MR. JONES was accounted a hard master. He never kept his boys; they ran away or gave notice they meant to quit; so he was half his time in search of boys. The work was not very hard—opening and sweeping out the shop, chopping wood, going on errands, and helping round. At last, Sam Fisher went to live with him. "Sam's a good boy," said his mother. "I should like to see a boy nowadays that had a spark of goodness in him," growled the new master.

Sam had been there but three days before, in sawing a cross-grained stick of wood, he broke the saw. He was a little frightened. He knew he was careful and he knew he was a pretty good sawyer, too, for a boy of his age; nevertheless, the saw broke in his hands.

"And Mr. Jones will thrash you for it," said another boy who was in the wood-house with him.

"Why, of course I didn't mean it, and accidents will happen to the best of folks," said Sam, looking with a sorrowful air on the broken saw.

"Mr. Jones never makes allowance," said the other boy; "I never saw anything like him. That Bill might have stayed, only he jumped into a hen's nest and broke her eggs. He darn't tell of it; but Mr. Jones kept suspecting and suspecting, and laid everything out of the way to Bill, whether Bill was to blame or not, till he couldn't stand it and wouldn't."

"Did he tell Mr. Jones about the eggs?" asked Sam.

"No," said the boy; "he was afraid; Mr. Jones has got such a temper."

"I think he'd better have owned up at once," said Sam.

"You'll find it easier to preach than to practise," said the boy. "I'd run away before I'd tell him," and he turned on his heel and left poor Sam alone with the broken saw.

The poor boy did not feel very comfortable or happy. He shut up the wood-house, walked out into the garden, and then went up to his little chamber under

the eaves. "Oh, Lord," said Sam, falling on his knees, "help me to do right."

I do not know what time it was, but when Mr. Jones came into the house the boy heard him. He got up and crept downstairs, and met Mr. Jones in the kitchen.

"Sir," said Sam, "I broke your saw, and I thought I'd come and tell you before you saw it in the morning."

"I should think morning soon enough to tell of your carelessness. Why do you come down to-night?"

"Because," said Sam, "I was afraid if I put it off I might be tempted to tell a lie about it. I'm sorry I broke it; but I tried to be careful."

Mr. Jones looked at the boy from head to foot, then stretching out his hand, "There, Sam," he said heartily, "give me your hand. Shake hands; I'll trust you, Sam. That's right; that's right. Go to bed, boy. Never fear, I'm glad the saw broke; it shows the mettle's in you. Go to bed."

Mr. Jones was fairly won. Never were better friends after that than Sam and he.

Sam thinks justice has not been done Mr. Jones. If the boys had treated him honestly and "above board" he would have been a good man to live with. It was their conduct which soured and made him suspicious. I do not know how this is; I only know that Sam Fisher finds in Mr. Jones a kind and faithful master.—*Selected.*

"Do thy little, do it well; do what right and reason tell."

The Happiest Little Boy

"GUESS who was the happiest child I saw to-day?" asked papa, taking his own two little boys on his knees.

"Oh, who, papa?"

"But you must guess."

"Well," said Jim, slowly, "I guess it was a very wick 'ittle boy, wif lots and lots of tandy and takes."

"No," said papa, "he wasn't rich; he



Kindness to Dumb Animals is a Source of Happiness

had no candy and no cakes. What do you guess, Joe?"

"I guess he was a pretty big boy," said Joe, who was always wishing he wasn't such a little boy; "and I guess he was riding a bicycle."

"No," said papa, "he wasn't big, and of course he wasn't riding a bicycle. You have lost your guesses, so I'll have to tell you. There was a flock of sheep crossing the city to-day, and they must have come a long way, so dusty, and tired, and

thirsty were they. The drover took them up, bleating and lolling out their tongues, to the great pump in Hamilton's court, to water them; but one poor old ewe was too tired to get to the trough, and fell down on the hot, dusty stones.

"Then Jim,—then Joe,—I saw my little man, ragged and dirty and tousled, spring out from the crowd of urchins who were watching the drove, fill his old, leaky felt hat, which must have belonged to his grandfather, and carry it one, two, three,—oh, as many as six times, to the poor, suffering animal, until the creature was able to continue with the rest."

"Did the sheep say, 'Tank you,' papa?" asked Jim, bravely.

"I didn't hear it," answered papa, "but the little boy's face was shining like the sun, and I'm sure he knows what a blessed thing it is to help what needs helping.—*Selected.*

Bobby's Day

"THIS is a stupid old place! There is nothing to do! I wish that we had stayed at home."

Bobby sat on the side of the bed and banged his heels on the floor.

"We have been here only one day," said his mother, "and you don't know half the beautiful things there are to do. Go out and find the other children. That's a good boy." And with a kiss, his mother drove sulky Bobby out into the sunshine.

On the verandah he was greeted with shouts of "Oh! There's Bobby! Come on, Bobby! We're going fishing on the wharf! It's great fun!"

The wharf was in sight of the hotel, and was a safe place. Off they ran, and Bobby was soon contentedly seated on the edge beside four other boys. Ten little legs and five fish-lines dangled above the clear water. For half an hour they were quite happy, watching the darting minnows that were disturbed by the swinging hooks, and by some fishermen who were mending a sail near by.

But as no fish came their way, they

decided to walk on the beach and skip pebbles. A few yards from the wharf Bobby's bright eyes saw something move in the grass; he ran closer, and found a large spotted turtle.

Taking off his sweater, he bundled up his prize, and followed by the other boys, he hurried with it to find his mother. She was not in her room, and he returned to the verandah.

Pretty soon an older boy came along, and told Bobby that the turtle would die if he did not have earth and water. Poor Bobby did want to show the turtle to his mother. Then he thought of a plan. He found an old box and filled it with earth, which he carried upstairs and put in his mother's wash-basin, and then poured in water.

There was so much earth and the bowl was so small that the water rose rapidly to the top, and some overflowed. Bobby looked at it in dismay, but the turtle flapped about happily, so he went out again to wait for his mother.

When, an hour later, he led her to her room, they found a bowl full of dirty water, several puddles on the clean matting, but no turtle! They hunted under the furniture and in all the corners, but they could not find it.

"You may take off your shoes and stockings," said mother, quietly, "get up on the bed, and stay there for an hour. I'll bring your supper." Then she closed the door and went downstairs.

How Bobby longed to get out! He could hear the children outside, laughing and calling, and he could think of a hundred things now that he wanted to do. He made up his mind to be very careful after this, and to think before he did things.

When mother was dressing, later, she stepped on Mr. Turtle, tucked away in the corner of her closet. That was not pleasant. Bobby was sent to put it where he had found it, "And don't go near the water," his mother added.

When he came in sight of the lake, he thought of what the big boy had told him, and decided that he would put the turtle

into the water. He was sure that if he was careful his mother would excuse him. There was a broad, flat stone temptingly within reach, and Bobby jumped on it. Then he leaned way forward and gave the turtle a toss.

Just at this minute his foot slipped—and into the water went Bobby. He scrambled to his feet and ran back to the beach. He was wet to the skin.

When he came in, his mother said, "I think this time you had better get into bed instead of on it."

It was only five o'clock, and Bobby burst into tears, but he obeyed.

When his mother came to kiss him good-night, he said, sleepily, "I don't know yet whether I like this place, but it seems to me that a lot of things happen."
—*Gertrude Cushing.*

Under the Bluff

FRED and Wilton were spending the summer with their parents in a bungalow that stood on a sandy bluff overlooking the sea. It was not a very high bluff,—perhaps not more than twice the height of a grown man,—but it dropped suddenly to a shining beach that was bare for a long distance when the tide was out. There were other cottages near by, but Fred and Wilton were the only boys in that part of the summer colony.

One day when they were playing on the bluff, at a safe distance from the edge, a gust of wind blew off Fred's straw hat, and rolled it over the bluff. Of course he hurried after it; but he had to go a long distance before he could get to a path down to the beach, and when he got to it, the hat was nowhere in sight. Wilton ran down to join in the search, and together they looked up and down the beach, and up in the air and out to sea. but there was no hat to be seen.

Where do you suppose they found it at last? It was in a cosy little cave that the high tides of winter had hollowed out under the bluff. The sand was piled up in front so that the cave was so well

hidden that the boys had never before noticed it. Fred shouted with glee when he peered over the sand pile, but not so much at the discovery of the lost hat as at the discovery of the unsuspected cave.

"A pirate's cave!" he shouted. "It's just what we want!"

They ran for their small sand shovels, and soon were hard at work making the cave larger. They dug away sand from the back wall, and piled it in front of the opening. Then they reached upward with their shovels, and scraped away more sand from overhead in order to make the cave higher. It was great sport, and they worked for an hour or so.

"We must have some seats," said Wilton, when the work was done to suit them. "I will fetch two of those little boxes from behind the house."

So off he went for the boxes, while Fred remained in the little cave. Wilton was gone only a minute or two. When he came down the path from the top of the bluff, and walked along the beach toward the cave, he stopped short in amazement, and let the boxes fall to the sand. Something had happened to the cave! Wilton will never forget his feelings as he stood there and realised what had happened. The gap in the bluff and the big pile of sand told the story. The roof had fallen in. They had dug away too much of the sand.

"Fred! Fred!" called Wilton, wildly. There was no answer. Wilton did not stop to call again, but ran as fast as he could back to the path up the bluff.

"Help! Help!" he cried, breathlessly. "The roof of the cave fell in! Fred is buried in the sand!"

His mother heard him, and so did some of the neighbours. His father was away, but Mr. Austin, who lived near by, seized a shovel, and told the others to do the same and to follow him. A moment later the men were digging with all their might in the sand pile.

Wilton tried hard to help, but his mother kept him close beside her. In a very brief time, although it seemed a long time indeed to Fred and his mother, there

was a joyful shout from one of the men; and then they pulled out Fred, wholly unharmed, but blinking hard as he came suddenly from the darkness into light. He had been in the rear of the cave when the front part of the roof fell, and so the sand had not buried him, although the place left him to stand in was very small and wholly dark.

"That was a pretty narrow escape,

Grandmother's Remedy

BOBBY was almost always as happy as he could be; and Beth's fat little face was always ready to entertain the whole family with smiles, morning, noon, and night. But one day Bobby growled and grumbled, and two deep wrinkles in Beth's forehead drove all the smiles away. And what do you suppose was the reason?



Boys can Make Themselves Very Useful in the Vegetable Garden

boys," said Mr. Austin, as they all went up the path again. "Digging sand caves is dangerous business."

"We have had enough of it!" cried Wilton and Fred together; and there was no need of their promising their mother to be more careful in the future when they played near the bluff.

When their father came home and heard the story, he called the boys his two heroes—because Wilton had acted so promptly, and because Fred had been brave, and had not cried when he was suddenly shut in the dark hole behind the pile of fallen sand.—*Youth's Companion*.

"Girls don't have to do anything," said Bobby, as he sat down with a thump on a box in grandmother's room. "Girls don't have to feed hens or fill the wood-box, or dig in the garden, never. I wish I was a girl, so I do!"

"Girls don't have to do anything!" exclaimed Grandmother Stone, in surprise. "Well, well, well! You come with me a minute, Bobby, and we'll see if you are right."

Bobby followed grandmother into the sitting-room. But when they got there, both were surprised; for, sitting in the big rocker, was Beth, her eyes full of tears.

"I wish I was a boy same as Bobby!" she said sorrowfully. "I'm tired as anything of dusting rooms. Boys don't have to dust, or mend stockings, or do anything." And Beth hid her head in the duster and sobbed.

"Well, I never did!" exclaimed grandmother. "Supposing you do Bobby's work to-day, and he will do yours. I know that he will be glad to change work with you."

But would you believe it? Bobby shook his head.

"I'm going to feed the hens myself," he said.

Beth wiped her eyes in a hurry.

"Girls never fill wood-boxes," she said.

And then they both laughed, and stopped grumbling for that day. So you see grandmother's remedy was a wise one after all.—*Christian Uplook.*

Boy Wanted

WANTED.—A boy that stands straight, sits straight, acts straight, and talks straight.

A boy whose finger nails are not in mourning, whose ears are clean, whose shoes are polished, whose clothes are brushed, whose hair is combed, and whose teeth are well cared for.

A boy who listens carefully when he is spoken to, who asks questions when he does not understand, does not ask questions about things that are none of his business.

A boy that moves quickly and makes as little noise about it as possible.

A boy who whistles in the street, but does not whistle where he ought to keep still.

A boy who looks cheerful, has a ready smile for everybody, and never sulks.

A boy who is polite to every man and respectful to every woman and girl.

A boy who does not smoke cigarettes and has no desire to learn how.

A boy who is more eager to know how to speak good English than to talk slang,

A boy that never bullies other boys nor allows other boys to bully him.

A boy who, when he does not know a thing, says, "I don't know," and when he has made a mistake says, "I'm sorry," and when he is asked to do a thing says, "I'll try."

A boy who looks you right in the eye and tells the truth every time.

A boy who is eager to read good books.

A boy who would rather put in his spare time at the Y.M.C.A. gymnasium than gamble for pennies in a back room.

A boy who does not want to be "smart" nor in any wise to attract attention.

A boy who would rather lose his job or be expelled from school than to tell a lie or be a cad.

A boy whom other boys like.

A boy who is at ease in the company of girls.

A boy who is not sorry for himself, and not forever thinking and talking about himself.

A boy who is friendly with his mother, and more intimate with her than with anyone else.

A boy who makes you feel good when he is around.

A boy who is not goody-goody, a prig, nor a little Pharisee, but just healthy, happy, and full of life.

This boy is wanted everywhere. The family wants him, the school wants him, the office wants him, the boys want him, the girls want him, all creation wants him.—*Dr. Frank Crane.*

Liking What We Have to Do

"DUSTING is the most disagreeable work there is; I hate it!" fretted Agnes, as she went about her task scowlingly and unwillingly.

"It depends on how you look at it," spoke up grandmother from her easy-chair by the fireplace. "I suppose you wouldn't care very much about washing windows, either, would you?"

"I should say not," responded Agnes. "I hate all that kind of work."

"And yet," went on her grandmother, "there was once a very rich girl, who never knew what it was to have to work, who chose washing windows as the best thing she could think of to amuse herself."

Agnes paused in her work and regarded her grandmother with astonishment.

"It's true," said the old lady. "The story is told that when Queen Victoria was a girl she went to visit an aunt. The aunt, wishing to do what would please and entertain her niece most, asked Victoria what she would most like to do. The girl replied that she had always wanted to wash windows. The aunt gave her her wish. Bucket and wash-cloths were brought forth, and the girl who afterwards was Queen of England scrubbed away at the windows as long as she pleased."

Agnes went on with her dusting, thinking vigorously all the while. "I suppose," she said at length, "it really isn't what we do, after all, that counts; it's the way we look at it."

"That's just it," answered grandmother. "Everything in this world is work of some kind, whether we call it so or not. It's as much work to play on the piano, or to play tennis, or to make taffy, or write letters to one's chums, as it is to dust or sew or do some other useful task. We can make any occupation pleasant if we try to. Even dusting can be made interesting if you look at it that way; see how well you can do each article, take a real interest and pleasure in mak-

ing it just as clean and shining as you know how. It's not the work, but the way we look at it that makes any occupation pleasant or distasteful. One of the best resolutions a girl can make is that she will resolve to like what she has to do, to enjoy whatever it is, and to do it the very best she knows how. It makes the work so much easier and pleasanter. It makes you cheerful and happy, and it makes everyone around you cheerful and happy, too."

"I'll try it after this," said Agnes, carefully dusting the intricate carving of the cabinet before her.—*Presbyterian*.

Such Impertinence

"IF they's one thing I can't abide, it's them naggin' women," wound up the village oracle, after having disposed of the woman suffrage question, while the evening mail was being distributed.

"You all know my eldest daughter, Pauline, is a reg'lar high-speed talker since she got her high school eddication complete over to the city. She's got an idee she knows everything a woman ought to know, and then some, and don't hesitate to give it out that-a-way. Why, this afternoon she got on one o' them naggin' streaks, and had the gall to tell me right to my face that my English ain't no good! And me a committee man and hirin' of teachers in this very school district for more'n twenty years! I been about sick ever since."—*New York Sun*.



Armageddon!

What Does It Mean?

What is its significance? The daily papers make frequent use of the word. It is heard in the legislative halls of the great nations of the world. And it commands attention from the man in the street. Whence its power?"

The above extract is from the first chapter of a work entitled—

ARMAGEDDON

*Recent Developments in Europe,
Turkey, and the Far East, in
the Light of Prophecy*



The author, G. Teasdale, deals with this important subject in such an interesting way that the attention of the reader is held from beginning to end. The following chapter headings will give some idea of the ground covered.

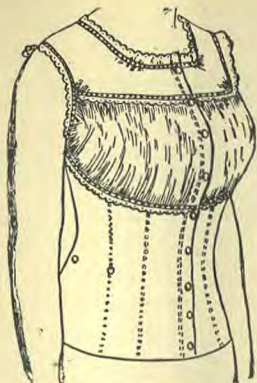
INTRODUCTORY. THE FALL OF WESTERN ROME.
SARACENIC INVASIONS.
THE TURK IN PROPHECY. THE NATIONS ANGRY.
THE EASTERN QUESTION. THE FALL OF TURKEY.
THE EAST AWAKENING. CONCLUSION.

Well Illustrated. Intensely Interesting. 122 pages, limp cloth

Price **1/-** (post free)

Order from our General Agents, or
SIGNS PUBLISHING COMPANY LIMITED :: WARBURTON, VICTORIA

HEALTH APPLIANCES FOR HOME USE



SOLID COMFORT is to be found in wearing the

GOOD HEALTH BODICE

A perfect substitute for the corset. Gives satisfactory support, and allows perfect freedom of movement. A well-made and well-fitting garment.

Patterns, cut to measure (post free) 1/6

Bodice carefully made to measure in either white or drab jean.

PRICES: plain, 7/6; trimmed, 10/6.

In ordering send bust, waist, and hip measurements, also length front and back from base of neck to waist line. Measurements should be taken snugly over underclothing.

TESTIMONIAL

“Rabenau,” Mt. Victoria.

To Manager, Sydney Sanitarium,

Dear Sir,—The “Freedom Waists” came duly to hand, and they fit splendidly, for which accept my sincere thanks. They are a boon to me, for I have not worn corsets for over twenty years, and on returning to Australia I had a difficulty in buying anything in that line to suit me, until I learned about your “Freedom Waists.” Now I am perfectly satisfied.

I remain yours faithfully,

C. J. B. DURHAM.

Send all orders to SANITARIUM, Wahroonga, New South Wales

Telephones: Wahroonga 134 and 137.

BOSISTO'S
PARROT BRAND
 TRADE MARK
EUCALYPTUS OIL
 FOR RHEUMATISM, SPRAINS, BRUISES, WOUNDS,
 COUGHS, COLDS, BRONCHITIS, &c.
 AVOID IMITATIONS
 ASK FOR **BOSISTO'S**
 PARROT BRAND

HYPOL
 THE FAMOUS
COD LIVER OIL EMULSION
 FOR ALL Chest Complaints AND Wasting Disorders
 OBTAINABLE EVERYWHERE

When replying to advertisements please mention "Life and Health."

"All is Not a Cold That Sniffles!"

*What appears to be a cold is
often the first symptom of a
more serious ailment.*

Read Our NEW BOOK—

COLDS:

Their Cause, Prevention, and Cure

By G. H. Heald, M.D.

Price **1/3** Post. 1d. extra

*Learn to treat successfully all colds,
and to live so that you will not be
susceptible to colds or any other com-
mon ailment.*

Order from our General Agents or
SIGNS PUBLISHING CO. LTD.
Warburton, Victoria

Dr. Eulalia Richards

Is Practising at
141 MACQUARIE STREET, SYDNEY

Baby's Firsts

By DR. MARY WOOD-ALLEN

A valuable book on the physical care of the babe from the time of its arrival to the beginning of the second year. Written by a physician and a mother, it treats all the topics considered in a scientific, yet simple and thoroughly practical manner. A boon to mothers; it tells how to make many of the small things which add to the baby's comfort.

Price, post free, 1/-

SIGNS PUBLISHING COMPANY LIMITED,
Warburton, Victoria



A Word of Appreciation

"I have read your little book—
"Nature's Smallest Creatures" with a
good deal of interest. So many of our
text books are dry-as-dust collections
of facts described in the briefest way
possible, that it is a pleasure to come
across something written so as to show
the keen enthusiasm of the author for
the beauties of the infinite little in the
world of life."

(Signed) (Dr.) T. S. Hall,

Biological Department,

Melbourne University.

Nature's Smallest Creatures

By C. HALLAM

Twenty-three chapters of delightful
and entertaining reading, which, as
the result of exhaustive, microscopic
research, give a peep into an other-
wise invisible world of life and beauty.
This excellent work will be especially
appreciated because of the author's
successful effort in making nature
study intensely interesting to young
and old. 132 pages, fully illustrated.

PRICE ONE SHILLING

POST PAID

Order from our General Agents, or

SIGNS PUBLISHING CO. LIMITED

Warburton, Victoria, Australia

Does Vegetarianism Interest You?

IF SO, CALL AT THE
SANITARIUM HEALTH FOOD CAFÉ
422-424 Little Collins Street, Melbourne



View of Dining Room, Vegetarian Café

An excellent assortment of **HEALTH FOODS** always on hand
BRANCHES IN ALL STATES

Note carefully the Addresses—

THE SANITARIUM HEALTH FOOD COMPANY

SYDNEY (Head Office), Royal Chambers, 45 Hunter Street
SYDNEY 283 Clarence Street one door from Town Hall
MELBOURNE, Chancery Lane, 422 Little Collins Street
ADELAIDE, 28 Waymouth Street, near King William Street)
BRISBANE, 186 Edward Street, (near Queen Street)
WELLINGTON, N.Z., 83 Willis Street, (over Shortt's Pictures)
AUCKLAND, N.Z., Strand Arcade, Queen Street

Write or call for copy of **NEW DESCRIPTIVE BOOKLET**



ALWAYS USE

SALUTIS SOAP

(THE OLIVE OIL SOAP)

Unequalled for Toilet and Nursery
Refreshing and Fragrant

RECOMMENDED AND USED BY THE
SYDNEY SANITARIUM

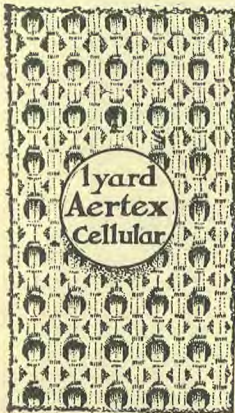
Obtainable at

THE SANITARIUM HEALTH FOOD COMPANY

45 Hunter Street, Sydney,

And all Branches throughout Australia and New Zealand

Sole Agents : B. CALLOSE & SONS, Sydney



Aertex Cellular Shirts

FROM

4/6

Aertex Underwear
Pyjamas
Socks, Etc.

Equal in Weight to



Diagram showing the wonderful protective quality of Aertex Cellular in proportion to its weight.

Samples and price lists on application

DAVID BRAHAM & CO.
76 Market St. Sydney

Telephones Burwood 664 and 427

H. R. REUBEN

Dental Surgeon

Railway Parade
Burwood, N. S. W.

Dietetic Errors

How They May be Avoided;
Their Relation to Disease.

By D. H. Kress, M.D.

64 Pages . . . Price Sixpence, postage 1d

Dr. Franklin Richards

Formerly Medical Superintendent of the
Sydney Sanitarium

Is Practising at

141 MACQUARIE STREET, SYDNEY

The Most Aromatic and Delicious
Cereal Beverage Made

Frucerea Essence

The New Instantaneous Food Beverage
For Breakfast Dinner and Tea

No Boiling or Straining

Makes a delicious cup of Cereal-Coffee in a minute. Does not attack the heart and nerves as do Tea and Coffee. Prepared wholly from grains and fruits by our special process.

Guaranteed under Pure Food Act

READY INSTANTLY

Here's the way you do it—

Place a teaspoonful of the Frucerea into a cup and add boiling water and milk with sugar to taste—that's all.

Always Keep a Bottle in the Home

NOTICE: Cold milk added to coffee will always spoil the effect—therefore hot milk is preferable.

MANUFACTURERS—

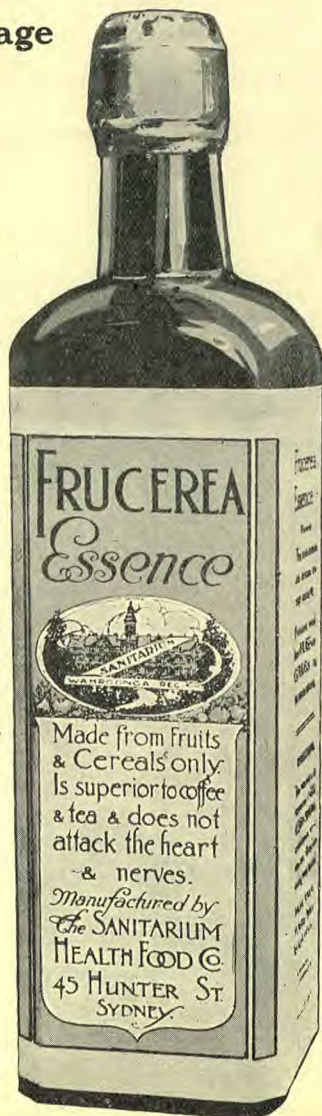
SANITARIUM HEALTH FOOD CO.

Head Office: 45 Hunter Street, Sydney

BRANCHES AND AGENCIES

MELBOURNE, Victoria, Chancery Lane, 422 Little Collins Street
ADELAIDE, S.A., 28 Waymouth Street
BRISBANE, Queensland, 186 Edward Street
PERTH, W.A., 103 William Street
AUCKLAND, N.Z., The Strand, Queen Street
WELLINGTON, N.Z., 83 Willis Street (over Shortt's)
CHRISTCHURCH, N.Z., 86 Cashel Street
HOBART, Tasmania, H. Moore, Liverpool Street
LAUNCESTON, Tasmania, J. Beck, Charles Street

On application to any of the above addresses our new descriptive booklet will be supplied free.



When replying to advertisements please mention "Life and Health."

Kruse's Fluid Magnesia



For INDIGESTION, BILIOUSNESS,
and ACIDITY

Allays Feverish Conditions due to the Vaccination
and Teething of Infants

A Mild Aperient for Old and Young

The Genuine Kruse's Fluid Magnesia

Is Manufactured by

FELTON GRIMWADE & CO.

Whose Name appears on every Label

Christchurch Sanitarium and Health Home

PAPANUI, CHRISTCHURCH, N. Z.

An Ideal Home for the Treatment of Non-Contagious Diseases

The treatments consist of baths of different kinds, including Electric Water Baths, Hot Air and Vapour Baths, Sitz Baths, Packs, and Sprays.

Electricity in its different forms, Galvanic, Faradic, Static, and Sinusoidal Currents being employed and adapted to the requirements of individual cases.

Trained Nurses of both sexes in attendance.

Massage.—Swedish Manual Movements which are of great value in improving weak muscles, restoring displaced organs, and correcting curvature of the spine, given by trained manipulators.

Special attention is given to all forms of digestive disorders, and the diet required for their treatment.

Diet receives special attention.

Good Health Cook Book

By Mrs. Lauretta Kress, M.D.

Contains a most valuable selection of choice recipes, proper food combinations, tables of nutritive value of foods, coupled with a treatise on general dietetic principles.

Neatly bound in cloth cover
(post paid) - - - 2/6
Limf cloth covers (post paid) 1/-

Order from our General Agents, or
SIGNS PUBLISHING CO., LIMITED,
Warburton, Victoria, Australia.

20th Century Pocket Inhaler

(PATENTED)

Made of Polished Rubber. Strong, Handsome, Convenient



Closed, Ready for Use, Mouth or Nose

Does not interfere with any other treatment

The only Inhaler adopted extensively by Physicians of all Schools

Impossible to get out of order



Nose Piece



Mouth Piece, Open, Showing Inner Case

Use for Coughs, Catarrh of Head, Throat, and Lungs, severe Colds in Head and Throat, Influenza, Headache, relieves pain in Lungs, relieves Tonsillitis. Protects the mucous membrane of mouth, throat, and bronchial tubes. Exceedingly pleasant.

Inhaler Outfit and Medicine for over twelve months **5/-**

Extra bottles of Medicine, per bottle (post free) **1/6**



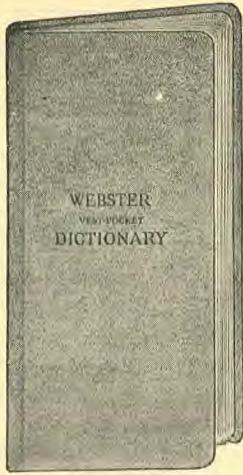
As Used for Mouth, Throat, and Lungs

Address: LIFE AND HEALTH

Warburton, Victoria, Australia

Or Our Agents

FIVE BOOKS IN ONE
VOLUME



FIVE BOOKS IN ONE
VOLUME

THE AUSTRALIAN
Webster Dictionary

and complete
VEST-POCKET LIBRARY

45,800 Words—Absolutely Full Pronunciation

More than this, the same covers contain four other complete books:—

1. The Gazetteer
2. The Parliamentary Manual
3. The Expert Calculator
4. The Literary Guide

Writers, Speakers, and Business Men

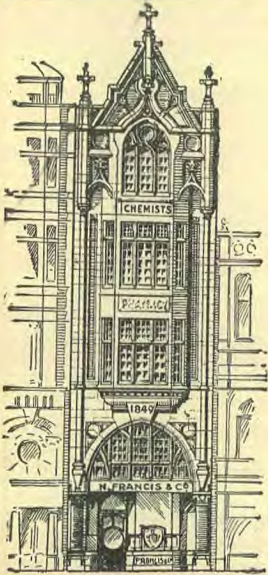
Will find this literary wonder unexcelled in quality and unequalled in quantity by any other abridged dictionary

Bound in Red Leather, blocked in gold (post free) 2/6

Send to our Agents or to LIFE & HEALTH Office, Warburton, Vic.

H. FRANCIS & CO.

CHEMISTS



And Importers of Air Beds and Cushions, Enemas, Silk Elastic Stockings, Bandages, Galvanic Batteries, Abdominal Belts, Trusses, and Surgical Appliances generally.

Price List Posted Free on Application.

Agents for FRANCIS'S PREPARED OIL for every description of Wounds, Bruises, and Strains in Cattle and Horses. 2/-, 3/6, and 7/-.

ORDERS BY POST promptly attended to, and despatched on day of receipt.

280 BOURKE STREET

Branch Pharmacy: 111 COLLINS STREET

New Building, 280 Bourke St.

The Sydney Sanitarium

Wahroonga, New South Wales



THE SYDNEY SANITARIUM, Wahroonga, on the North-Shore Hornsby railway line, is an ideal place to go for health, rest, and wholesome recreation. Delightful scenery, bracing climate, sanitary buildings and grounds, large orchard. Modern equipment for Hydro-Electro-Radio-Photo- and Masso-Therapeutic Applications; also Surgery and Obstetrics. Registered as a Private Hospital. Large staff of well-trained, kindly nurses and attendants. Resident physicians and surgeons. All Non-contagious Cases received.

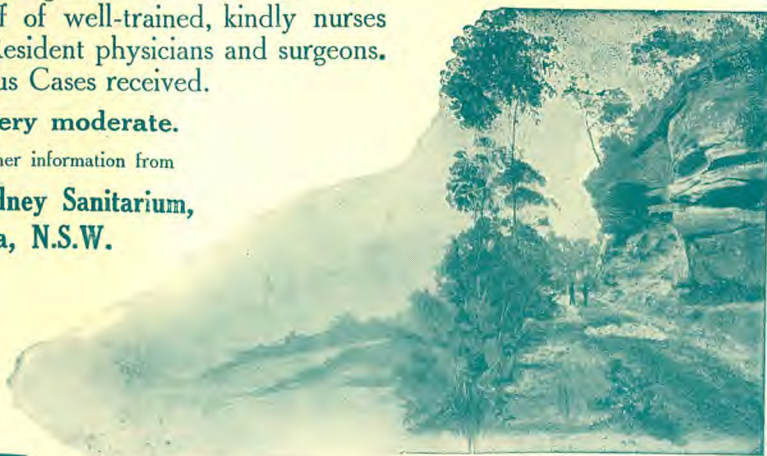
Rates very moderate.

Further information from

**The Manager, Sydney Sanitarium,
Wahroonga, N.S.W.**

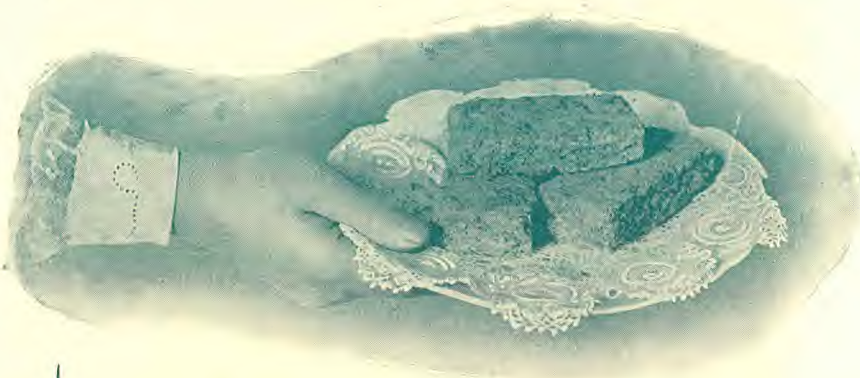
TELEPHONES

Nos. 137 and 354
Wahroonga



One of the Beauty Spots near the Sanitarium

For Every Table Every Meal



GRANOSE BISCUITS

Are made from the choicest wheat, which has been so treated that all the nutrition contained in the grain is retained. The starch is perfectly cooked and dextrinised, and ready to be instantly dissolved in the stomach.

Manufactured by

The Sanitarium Health Food Co.

Head Office:

45 HUNTER STREET, SYDNEY



Free Sample and Price List on Application. Branches and Agencies in Every State