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The Causes of Dyspepsia.

BY ARTHUR LEARED, M. D.

THE digestive power may be compared to the physical strength. Every individual can without inconvenience carry a certain weight, while any addition to it is accompanied by a proportionate sense of oppression. In the same way, what is called indigestion is often simply a result of excess. The amount of food which each man is capable of digesting with ease has always a limit. This limit bears relation to his age, constitution, state of health, and habits.

For undisturbed digestion two conditions are essential: A proper relation of the aliment to the digestive organs, and a healthy state of the organs themselves. The first is generally within direct control; but, obviously, with the second, this is not the case; and when, as frequently happens, both conditions are imperfectly fulfilled in the same person, more or less dyspepsia ensues.

Bearing in mind these general views, let us examine the influence of particular causes; and first, as regards age. Appetite, or the natural feeling that food is wanted, indicates that the waste of the body requires to be replenished—that the outlay begins to exceed the income. From birth to the moment of dissolution, waste and supply are in active operation. The infant, in consequence of its rapid growth, requires food at short intervals, and the energy of the wasting process is shown by the activity of his excreting organs. So long as growth continues, the same conditions may be observed, but in a lessening degree. When the stature and form of the body are matured, the demands for nutrition are less urgent, and, after middle age, are diminished still more. The practical inference is that the man of advanced years does not require, and should not take, as much food as the young man.

How this was recognized by a profound thinker, may be read in Cicero's "Essay on Old Age." He expresses himself gratefully that, while advancing years increased his desire for conversation, they had diminished the necessity for food and drink. But such reflections are seldom made, and still more rarely acted upon. At all stages of adult life, but particularly during its decline, the appetite is overstimulated by condiments, and tempted to excess by culinary refinements.* Dyspepsia is not the worst result of this. Gout, and still more serious maladies connected with an impure state of blood, closely follow.

Infringements of the laws of digestion are constantly and in many instances unconsciously committed. One man digests with ease food which would be fatal to the comfort of another. Nevertheless, the diet of persons associated together is apt to be the same, and a sufficient individuality in matters of eating and drinking is seldom observed.

When the general health is impaired from any cause, digestion infallibly suffers. In many instances it is sought to prop up the one by overtaxing the powers of the other, and dyspepsia is often thus permanently added to the old disorder. The proverb, "Custom is second nature," applies to the human constitution. Health may be maintained by gradual usage, under circumstances which would be disastrous to the novice. In this country, great faults are committed in the relative amount and distribution of meals. Breakfast frequently consists of tea or coffee, with a small proportion of plain bread or toast. This allays the appetite, but is insufficient for the supply of bodily waste during the long interval between breakfast and a late dinner.

Experience shows that the delicate stomach suffers severely from these causes. In some instances, the long-unemployed organ secretes an excess of mucus, which greatly interferes with digestion. A sufficient amount of food at breakfast has a direct influence on the digestion of dinner, in which process

*Abernethy, in his peculiar style, insists that civilized man "eats and drinks an enormous deal more than is necessary for his wants or welfare. He fills his stomach and bowels with food which actually putrifies in those organs."

large quantities of gastric juice—a fluid charged with nitrogenous and other materials—must be suddenly extracted from the blood. No argument is needed to prove that the blood will be better fitted for these demands upon it, if replenished by the absorption of a substantial breakfast. If gastric juice, insufficient in quantity or of bad quality, be supplied, the appetite for dinner exceeds the digestive power, and another material cause of dyspepsia arises. Long abstinence thus causes the amount of food taken at dinner to be relatively, as well as absolutely, in excess. When a sufficient quantity of nutriment has been taken in the morning, less will be requisite at a later period, and less will be desired.

The distribution of meals in point of time is by many regarded as quite unimportant. Dinner, as has been said, comes late, quickly followed by tea, and sometimes by supper also. This approximation of meals is pernicious, for the human stomach was unquestionably intended to have intervals of rest. The organ should be allowed to act on its contents *en masse;* to eat constantly, like a ruminant animal, is altogether unnatural. The health of any individual would speedily break down, were even the proper amount of food taken in equally divided portions at very short intervals.

Continual alteration of the time of meals is another great mistake. Every hour of the day for dinner, from one to eight, will sometimes be ranged through in the course of a single week. Such irregularities may long be endured by the robust stomach, but are very injurious to the weakened organ. In relation to time, all our functions are singularly influenced by habit. Digestion, therefore, will be best performed at the period when the stomach, from habit, expects employment. The kind and quality of food are essential considerations; and these subjects will be considered elsewhere. Adulteration of food is without doubt a cause of dyspepsia. Inferior articles of diet may produce serious inconvenience; and the impurities of water are well known to disorder digestion.

The effects of universal communication are nowhere more obvious than on the luxurious table. To furnish the refined *cuisine*, all climates, both sea and land, are laid under contribution; and the stomach is expected to digest everything that is put into it. Huddling together such various products, and neglect of the relation between climate and food, are active causes of dyspepsia. The substantial dishes of this country accord badly with the thermometer at ninety degrees; thus, among the English in India, inflexibility in regulating the kind and quantity of food taken, is the cause of much ill health.

Under the head of the relation of food to the organs may be placed the effects of insufficient mastication. It is a fruitful source of dyspepsia, and is more frequently caused by haste or carelessness than inevitable from the want of teeth. The great prevalence of dyspepsia in the United States has been attributed to the rapid and characteristic manner in which meals are there dispatched. In some employments the insufficient time allowed for meals is, for the same reason, a cause of disturbed digestion, and too often gives rise to permanent disease. Besides actual loss, soreness of the teeth or of the gums, sometimes attended by fetid secretions, greatly interferes with mastication. It is most important that solid food should be duly prepared, by chewing, for the action of the stomach; and it is also important that the starchy elements of food be sufficiently submitted to the action of pure saliva.

There are numerous other causes which affect the digestive organs less directly, but no less injuriously. It has been assumed by some writers that the conditions of civilization are incompatible with the highest degree of health. But there is every reason to believe that dyspepsia affects all races. The Laplander is especially subject to water-brash; the Maories of New Zealand suffer much from dyspepsia; and the use of bitter substances to promote digestion is known to many savage tribes. The extremes of abstinence and repletion common with savages, their precarious mode of existence, their fits of complete indolence, followed by exhausting fatigue, must cause them a full share of digestive trouble.

The relative superiority in physical strength of civilized over savage nations has been sufficiently proved. Refined and settled habits are not *necessarily* attended by any physical disadvantages. But it is observable that those who live in towns are most affected by dyspepsia. There it is that the mental powers are most overtasked, and the relation between mind and body, as well as their mutual reactions, disregarded or forgotten. Too large a share of the nervous energy, so necessary for digestion, is expended in mental toil or business anxieties. In many cases, attention to the commonest physical wants is neglected in monotonous pursuits; the appetite for food is disregarded until it no longer exists; exercise is either not taken at all, or is fitful and unseasonable; ventilation is neglected, and a close and polluted atmosphere is breathed. Such is no overdrawn picture of the town life of vast numbers who suffer, more or less, from dyspepsia.

Two habits, smoking and taking snuff, require special notice as causes of dyspepsia. Smoking produces a depressed condition of the system, and a great waste of saliva if the habit of spitting is encouraged. I have met some severe cases of dyspepsia clearly resulting from these causes. Some individuals are unable to acquire the habit of smoking even moderately. Deadly paleness, nausea, vomiting, intermittency of pulse, with great depression of the circulation, come on whenever it is attempted. Smoking has been attacked and defended with much zeal. Its adversaries have strongly urged that the practice is a potent cause of dyspepsia. The late Sir Benjamin Brodie was a great enemy to tobacco.

The effects of taking snuff are more insidious, as no warning is given by immediate bad consequences. Great snuff-takers are often sufferers in the stomach. In addition to the specific effects of tobacco, the continued stimulating and mechanical action of snuff on the mucous membrane of the nose is injurious. Irritation is directly transmitted from the nasal surface to that of the stomach, with which it is continuous. Dry snuffs are more hurtful than moist, as they penetrate farther.

Persons engaged in offices are exposed to a directly-exciting cause of indigestion. The stooping posture in which they write, mechanically interferes with the stomach's action. I have even traced well-marked dyspepsia to sitting immediately after dinner in a low arm-chair, so that the body was curved forward and the stomach compressed. In some trades, the pressure of certain implements upon the pit of the stomach, as in the case of curriers, bootmakers, and weavers, produces severe dyspepsia. Many bad cases, attended with water-brash, occur among the weavers of Spitalfields.

Self-indulgent, luxurious habits are highly injurious to healthy digestion; but on this threadbare subject it would be mere waste of time to enlarge. Idleness, and the want of a definite pursuit in life, must also rank high in this class of causes. To preserve the general health, occupation is as necessary for the active mind as exercise is for the vigorous body.

The importance in the system of the reproductive functions is such that their exhaustion must, sooner or later, react on the functions of nutrition. Lamentable instances of the results of sexual excess are occasionally met, and dyspepsia is almost invariably one of these. But the injurious effects of a free indulgence of the sexual instincts have been highly colored. Unprincipled men, who prey on the young and inexperienced, magnify and distort the significance of certain ailments, the treatment of which, in too many instances, passes out of the hands of the regular practitioner.

In youth, the sensations are quickest, and the impressions most fresh and vivid; so that it might be supposed life would be always then most keenly enjoyed. But its earlier years are frequently clouded. An aching desire for change and excitement often destroys present happiness; and, when the desired excitement is unattainable, *ennui* and a hopeless indolence ensue. Experience convinces me that this condition of mind is but a frequent result of a feeble state of health. This can be often traced to an overstrain of the mental powers—a strain daily increased among men by a spirit of emulation, fostered and rewarded by the competitive system to an extent formerly unknown. Accomplishments also among girls are made objects of relentless perseverance. In both sexes, at a time when growth is incomplete, and new functions are springing into existence, the mental are developed at the expense of the bodily powers. Nutrition suffers because appetite and digestion are impaired, and the power of the mind itself is weakened. Over-exertion of mind fatigues equally with that of the body. No reasonable doubt can therefore be entertained that *thinking* is the result of a physical action in the brain. In what may be for convenience termed secretion of thought, demands are made on nutrition just as in bodily exercise. It has been often observed that great *thinkers*, if healthy, are usually large *eaters*.

The state of the air we breathe is highly important in relation to dyspepsia. We live at the bottom of an elastic medium, presenting everywhere the same general composition, and exactly adapted to the exigencies of animal life. Any accidental impurity of the atmosphere tends to disturb the balance of health. Oxygenation of blood is the object of respiration; and its replenishment is the object of digestion. On the other hand, the digestive secretions, as well as the nervous energy by which they are governed, depend for their perfection upon the perfect state of the blood. For this reason, ill-ventilated workshops and crowded sleeping-rooms among the poor, and the overheated and impure atmosphere of assemblies and public places of amusement among the better classes, are constantly acting causes of dyspepsia.

Many invalids are affected by changes of weather, especially if these changes occur suddenly. Even in the healthy a general feeling of discomfort is caused by easterly winds; and various disorders are greatly aggravated by them. Rheumatic patients are

especially susceptible of bad effects from damp or cold winds, and many dyspeptics are hardly less so; an unusually dry atmosphere is equally injurious to others.

As in the case of a change of climate, the quantity and kind of food required are much influenced by season and temperature, and the agency of these in causing dyspepsia is, therefore, not to be wondered at. Some dyspeptics are always better in summer than in autumn or winter; others, the reverse; while a great many tell us they suffer more in spring than at any other season.

Our bodies are at all times pervaded by electricity, the condition of which often completely changes. The clear, serene atmosphere is usually charged with positive electricity, and this, by induction, causes our bodies, as well as the earth itself, to be negative. In wet or stormy weather the opposite of this state of things is usual; the atmosphere is negative while our bodies are positive. We are unable in health to detect these electrical changes; but we might reasonably look for their effects when disease had rendered the body less capable of resisting external impressions.

We have still to consider instances in which, although the food may be suitable, and the digestive organs healthy, dyspepsia may be induced by an immediate and accidental effect upon the organs, through the influence of the nerves. There are certain sensations, of which nausea is a remarkable instance, not obviously assignable to any of the five senses; and all these sensations seem capable of being excited by mental influence. We are all conscious that the stomach is a region of sympathy; and here Van Helmont places the seat of the soul itself. With the stomach, or with the bowels, easily confounded with it, various passions—as joy, sorrow, compassion, and indignation—have been in all times associated.

It is universally known that bad news received at or preceding a meal will spoil the best appetite. A disagreeable mental impression sometimes even produces severe dyspepsia, with epigastric pain and sense of oppression, nausea, or vomiting. The intimate nervous connection between the stomach and the brain leaves us at no loss to explain this; and probably an arrest of the secretion of gastric juice is the immediate cause; for in the same way the mouth will become dry from a diminished secretion of saliva. Dyspepsia is also produced or aggravated by severe mental exertion immediately after meals, because of the untimely expenditure of nervous power.

Violent bodily exercise when the stomach is full is a well-known cause of disturbed digestion; and in this case the disturbance seems mechanical. The motions of the stomach cannot be favorably carried on while its contents are tossed about by rapid movements of the body; for we know it is essential to the due solution of food that it should be all in turn brought into contact with the stomach's surface.

A cold bath after a full meal will frequently disturb digestion; and a hot bath either of water or air will do so with still more certainty. Dyspepsia from warm and cold bathing occurs, in each case, on the same principle, but for opposite reasons. It has been proved, from observations on Alexis St. Martin, that congestion of the stomach is most unfavorable to the secretion of gastric juice. Now, the shock of cold bathing produces congestion, by driving the blood from the surface of the body to the viscera; on the other hand, a certain flow of blood to the stomach is equally indispensable, and *that* would be interfered with by the hot bath, because it draws the blood from the viscera to the surface. Free bloodletting soon after a meal is commonly succeeded by vomiting, and this affords another example of the effect of sudden withdrawal of blood from the digestive organs.

Dyspepsia has the widest range of all diseases because it forms a part of almost every other; and some, as pulmonary consumption, are in many instances preceded by it. In such cases, early attention to the defects of nutrition would often avert a fatal issue. The gravest forms of dyspepsia accompany organic changes in the alimentary tube itself, as cancer and ulcer of the stomach. It cannot be affirmed that simple dyspepsia does not sometimes shorten life by producing another disease, or even prove fatal of itself; yet it is certain that digestion may be performed with difficulty for many years without more serious results than proverbial suffering and discomfort.—*Causes and Treatment of Imperfect Digestion.*

King James's Counterblaste to Tobacco.

[THE following very antique production was first printed in the year 1604. It is given *verbatim*, as it then appeared, the orthography peculiar to that time being retained. The author, King James VI., of Scotland, wisely foresaw what would be the evil results of the use of the filthy weed, and he certainly produces a very remarkable essay against it.—ED.]

That the manifolde abuses of this vile custome of Tobacco taking may the better be espied, it is fit that first, you enter into consideration both of the first originall thereof, and likewise of the reasons of the first entrie thereof into this Countrey. For certainely as such customes, that haue their first institution either from a godly, necessary, or honorable ground, and are first brought in by the means of some worthy, vertuous and great Personage, are euer and most iustly holden in great and reuerent estimation and account, by all wise, vertuous and temperate spirits: So should it, by the contrary, iustly bring a great disgrace into that sort of customes which, hauing their originall from base corruption and barbarity, doe in like sort, make their first entrie into a Countrey, by an inconsiderate and childish affectation of Noueltie, as is the true case of the first inuention of Tobacco taking, and of the first entry thereof among vs. For Tobacco being a common herbe, which (though vnder diuers names), grows almost euery where, was first found out by some of the barbarous Indians to be a Preseruatiue or Antidot against the Pockes, a filthy disease, whereunto these barbarous people are (as all men know,) very much subiect; what through the vncleanly and adust constitution of their bodies, and what through the intemperate heat of their Climat: so that as from them was first brought into Christendome that most detestable disease, so from them likewise was brought this vse of Tobacco, as a stinking and vnsauorie Antidot for so corrupted and execrable a Maladie, the stinking Suffumigation whereof they yet vse against that disease, making so one canker or venime to eate out another.

And now good Countrey men let vs (I pray you) consider what honour or policie can mooue vs to imitate the barbarous and beastly manners of the wilde, godless and slauish Indians, especially in so vile and stinking a custome? Shall wee that disdain to imitate the manners of our neighbor, France (hauing the stile of the first Christian Kingdome,) and that cannot endure the spirit of the Spaniards (their King being now comparable, in largenes of Dominions, to the great Emperor of Turkie.) Shall wee, I say, that haue been so long ciuill and wealthie in Peace, famous and inuincible in Warre, fortunate in both, wee that haue been euer able to aide any of our neighbors (but neuer deafed any of their eares with any of our supplications for assistance;) shall wee, I say, without blushing, abase ourselues so farre as to imitate these beastly Indians, slaues to the Spaniards, refuse to the world, and as yet aliens from the holy Couenant of God? Why do wee not as well imitate them in walking naked as they doe? in preferring glasses, feathers, and such toyes, to golde and precious stones, as they doe? yea, why do wee not denie God and adore the Deuill, as they doe?

Now to the corrupted basenesse of the first vse of this Tobacco doeth very well agree the foolish and groundlesse first entrie thereof into this Kingdome. It is not so long since the first entrie into of this abuse amongst vs here, as this present age cannot yet very well remember both the first Author, and the forme of the first introduction of it amongst vs. It was neither brought in by King, great Conquerour, nor learned Doctor of Phisicke.

With the report of a great discouery for a Conquest, some two or three Sauage men were brought in, together with this Sauage custome. But the pitie is, the poore wilde, barbarous men died, but that vile, barbarous custome is yet aliue, yea in fresh vigor: so as it seems a miracle to me how a custome springing from so vile a ground, and brought in by a father so generally hated, should be welcomed vpon so slender a warrant. For if they that first put it in practice heere had remembered for what respect it was vsed by them from whence it came, I am sure they would haue bene loath to haue taken so farre the imputation of that disease vpon them, as they did by vsing the cure thereof. For *Sanis non est opus medico*, and the counter poysons are neuer vsed but where poyson is thought to precede.

But since it is true that diuers customes, slightly grounded, and with no better warrants entered in a Commonwealth, may yet in the vse of them thereafter prooue both necessary and profitable; it is, therefore, next to be examined if there be not a full Sympathie and true Proportion betweene the base ground and foolish entrie and the loathsome and hurtfull vse of this stinking Antidot.

I am now, therefore, heartily to pray you to consider, first, vpon what false and erroneous grounds you haue first built the generall good liking thereof; and next, what sinnes towards God, and foolish vanities before the world, you commit in the detestable vse of it.

As for these deceitfull grounds, that haue specially mooued you to take a good and great conceit thereof, I shall content myselfe to examine heere onely foure of the principals of them; two founded vpon the Theoricke of a deceiuable apparance of Reason, and two of them vpon the mistaken Practicke of generall Experience.

First, it is thought by you a sure Aphorisme in the Physickes, That the braines of all men, beeing naturally colde and wet, all

drie and hote things should bee good for them; of which nature this stinking suffumigation is, and, therefore, of good use to them. Of this Argument, both the Proposition and Assumption are false, and so the conclusion cannot but bee void of itself. For as to the Proposition, That because the braines are cold and moist, therefore things that are hote and drie are best for them, it is an inept consequence: For man beeing compounded of the foure Complexions (whose fathers are the foure Elements,) although there bee a mixture of them in all the parts of his body, yet must the diuers parts of our *Microcosme*, or little world within ourselues, bee diuersly more inclined, some to one and some to another complexion, according to the diuersities of their vses; that of these discords a perfect harmonie may bee made vp for the maintenance of the whole body.

The application, then, of a thing of a contrary nature to any of these parts is to interrupt them of their due function, and by consequence hurtful to the health of the whole body. As if a man, because the Liuer is hote (as the fountain of blood,) and as it were an ouen to the stomacke, would therefore apply and weare close vpon his Liuer and stomacke a cake of lead; he might, within a very short time (I hope,) bee susteined very good cheape at an Ordinarie, beside the cleering of his conscience from that deadly sinne of gluttonie. And as if, because the Heart is full of vitall spirits, and in perpetuall motion, a man would therefore lay a heauy pound stone on his breast, for staying and holding downe that wanton palpitation, I doubt not but his breast would bee more bruised with the weight thereof, then the heart would be comforted with such a disagreeable and contrarious cure. And euen so it is with the Braines. For if a man, because the Braines are colde and humide, would therefore vse inwardly by smells, or outwardly by application, things of hote and drie qualitie, all the gaine that he could make thereof would onely be to put himselfe in a great forwardnesse for running mad, by ouerwatching himselfe, the coldnesse, and moistnesse of our braine beeing the onely ordinarie meanes that procure our sleepe and rest. Indeed, I do not denie but when it falls out that any of these, or any part of our bodie growes to be distempered, and to tend to an extremitie beyond the compasse of Natures temperate mixture, that in that case cures of contrarie qualities, to the intemperate inclination of that part, being wisely prepared and discreetely ministered, may be both necessarie and helpefull for strengthning and assisting Nature in the expulsion of her enemies; for this is the true definition of all profitable Physicke.

But first, these cures ought not to be vsed but where there is neede of them, the contrarie whereof is daily practiced in this generall vse of Tobacco by all sorts and complexions of people.

And next I deny the Minor of this argument, as I haue already said, in regard that this Tobacco is not simply of a drie and hote qualitie, but rather hath a certaine venemous facultie ioyned with the heat thereof, which makes it haue an Antipathie against nature, as by the hatefull smell thereof doeth well appeare. For the Nose being the proper Organ and conuoy of the sense of smelling to the braines, which are the onely fountaine of that sense, doeth euer serue vs for an infallible witnesse whether that Odour which wee smell be healthfull or hurtfull to the braine (except when it fals out that the sense it selfe is corrupted and abused through some infirmitie and distemper in the braine.) And that the suffumigation thereof cannot haue a drying qualitie, it needs no further probation, then that it is a smoake, all smoake and vapour, being of it selfe humide, as drawing neere to the nature of the ayre, and easie to be resolued againe into water, whereof there needes no other proofe but the Meteors, which being bred of nothing else but of the vapours and exhalations sucked vp by the Sunne out of the Earth, the Sea, and waters, yet are the same smoakie vapours, turned and transformed into Raynes, Snowes, Dewes, hoare Frostes, and such like waterie Meteors, as by the contrarie the raynie cloudes are often transformed and euaporated in blustering winds.

(To be Continued.)

The Line of Safety.

BY J. H. WAGGONER.

MEDICINES are taken with the idea of averting danger by their means. When sickness comes upon men and women, the great majority consider that there is no safety but in taking medicines. And with many there is not much care exercised in regard to the choice of nostrums; if it is *medicine* it must be good for the sick!

In my younger days, I had considerable experience in nursing the sick, and thereby I had good opportunities to observe the habits of physicians. Two things I noticed: The most successful physicians were more sparing in the use of medicines than others. But this I especially noticed, that young doctors, just from the schools, used far more medicines than old men of long practice. On this subject I had a conversation with a young doctor, in Western Illinois, in 1844. It was

a very sickly season; the cases were mostly severe, and many fatal. I had taken care, in that and the previous year, of several severe cases in the hands of an old and very successful practitioner. The young doctor asked me if I saw any difference between his practice and that of Dr. M. I answered that there was a marked difference, and chiefly in this, that he used at least four times the amount of medicine that Dr. M. used in similar cases. He replied that he did not think Dr. M.'s practice was strictly scientific; he did not conform to the teachings of the books and the schools.

In this statement he was probably correct. In the schools, students are generally taught to believe that the healing power is in the medicine. Observation teaches the practitioner that the recuperative force is in the system, and he learns to distrust medicine and trust more to nature and to careful nursing. To vindicate Dr. M.'s practice, I referred to the years in which he had practiced with such marked success, and the small percentage of fatality under his hands. I knew him in some cases to put patients off without medicine for a day or two until they felt better, and then they were persuaded to dispense with treatment entirely. In one case, which I well remember, where the patient would not be put off, he kept her along a number of days on pills which he assured me contained nothing but wheat flour! Of course the recovery was satisfactory, and the reputation of the doctor was further established.

Young doctors consider that among the sciences that of medicine is one of the most certain and reliable. Long experience and careful observation convince that it is the most unreliable; little better than a series of dangerous experiments from first to last. Thus Prof. Parker confessed: "Of all sciences, medicine is the most uncertain." Prof. Valentine Mott said, "Our remedies are unreliable."

And why not? how is their reliability established? A physician has a case; it strikes him that a certain drug would be efficient; he administers it, and the patient recovers under the treatment; he reports the case in some medical journal, and forthwith the medicine is supposed to be the proper one to administer in that or like diseases. Yet it may never again be given to a patient of the same habit, or under the same conditions. The uncertainty, instead of being removed by observation on many cases, is increased. The following paragraphs I copied from a work which I read of late:—

"Drs. Ayers, Copeland, Neligan, M. Cazenave, and others laud calomel as the only cure for cholera. Drs. Bailey, Gull, Bennett, Tanner, and numerous physicians of eminence state that it increases the mortality."

"In apoplexy, Dr. Johnson, Sir Astley Cooper, Sir Benjamin Brodie, and hosts of followers advocate immediate and copious bleeding. On the other hand, Drs. Bennett, Turner, Forbes, Tanner, and other distinguished practitioners condemn the practice as almost certain death."

"Out of curiosity we have collected the names of over three hundred allopathic physicians who consider cod-liver oil a cure for consumption; while three hundred and eighty pronounce it worthless and injurious."

Reader, where is the line of safety in this matter? Long years ago I read a bit of advice which I am every year more convinced is good: "Throw physic to the dogs"—if you want to kill them.

San Francisco, Cal.

Swedish Movements.—No. 3.

BY W. J. FAIRFIELD.

THOUGH movements have been described as applied externally, they are internal in their effects. Though the cutaneous tissues intervene, yet it may be said that they reach directly the various internal structures of the body.

The movements are not limited to any particular number, neither is the manner of giving them confined to any exact method; but new movements and different methods of administering them may be invented as different cases may demand. The desired results may be best gained in the treatment of one case by applying a certain combination of movements, with variations, as the change in the case may demand. In another case, a very different course of treatment must be pursued; therefore, in applying treatment, a prescription should always be given by a physician, who should require that it be carefully followed. Though the physician should be responsible that the movements prescribed are the proper ones for the case in hand, he cannot be expected to meet the outside influences that may often be very prejudicial to effecting a cure.

As stated in the previous article, the patient must correct all injurious habits; for the very fact of illness, in the majority of cases, is conclusive evidence of unhygienic habits being indulged in to a greater or less extent. One branch of hygiene should not be taken along to the exclusion of another;

for, however perfect in itself the movement system may be, it sustains a very intimate relation with the various branches of hygiene.

The exact manner of applying the movements depends altogether upon the condition of the patient as before stated. If the patient is much debilitated, the movements should be given at first very gently, and continued but a little while at a time. As the patient progresses, very gradually increase the movements, and continue them a little longer. To apply the movements once a day would be rather too vigorous treatment for feeble patients, especially to begin with. Stronger patients bear them more frequently with benefit.

In active movements, the patient is placed in an easy, free position, either sitting, lying, kneeling, or any position which will suitably adjust the body for the required action. The operator then directs the patient in what manner to move the part of the body he designates, and the direction in which to move it, while he resists the movement with a force modified in accordance with the exertion of the patient, and graduated to the active part as well as to the system at large. Thus the resistance is not uniform, but varies according as the operator perceives the action of the muscles and the bearing they have on the whole system, besides the local place of action. In other cases, the operator reverses the action, he acting, while the patient resists. The patient is not passive at any time, but should exercise the will power constantly.

The operation is a sort of wrestle, actively engaging only a limited part of the body. The movement should be slow and steady, which will more readily fix the attention and concentrate the will. Several repetitions of the same movement are made, directed with great care and precision, the operator being cautious not to fatigue the patient. In most cases, every portion of the body is, in turn, and at proper intervals, subjected to similar operations.

Passive movements are movements especially adapted to cases of extreme debility, either in a part or the whole of the system, and cases in which there is too great an activity of the nervous system. Passive movements tend to diminish excessive sensibility, pain, and other nervous symptoms; while active movements, having their origin in the cerebro-spinal nervous system, will, in some cases, aggravate such symptoms unless the necessary precaution is taken. The following-named movements are generally passive; *i. e.*, they are given by the operator, the patient being acted upon: Stretching, rotating, rolling, fulling, wringing, twisting, stroking, knocking, clapping, tapping, shaking. The last four produce a vibratory motion.

Temperance and Vegetarianism.

THE following is an interesting abstract from a paper read by Mr. Napier, at Bristol, Eng., on "Vegetarianism as a Cure for Intemperance;" we copy the extract from the *Herald of Health*, of England :—

"Twenty years ago he read in 'Liebig's Animal Chemistry' that most people found that they could take wine with animal food, but not with farinaceous or amylaceous food. He was at that time a vegetarian, and he felt in his own person the truth of this statement of Liebig, as did also some members of his family, who, after becoming vegetarians, had no inclination for alcoholic liquors, although brought up to their moderate use. He was induced thus to inquire whether vegetarianism might not be a valuable cure for intemperance. Having applied it successfully to twenty-four cases, he would briefly give the results. One person, aged sixty-one, of a Scotch aristocratic family, had contracted habits of intemperance in India. His habit was to eat scarcely any bread, fruit, or vegetables. His breakfast was mostly salt fish and a little bread; his dinner consisted of joint and very little else; and he consumed during the day from a pint to a quart of whisky, and was not sober more than half his time. He was induced to return to the oatmeal porridge breakfast, and adopt a diet for dinner of which boiled haricot beans, or peas, formed an important part. About this time his wife became so alarmed as to the consequences of the cattle plague that all the family were put upon a vegetarian diet. The husband grumbled very much at first, but his taste for whisky entirely disappeared, and in nine months from the time he first commenced eating largely of beans, and two months from the time he became an entire vegetarian, he relinquished alcoholic liquor entirely, and had not returned to either flesh or alcohol.

"The author also instanced the case of an analytical chemist, aged thirty-two, who was given to intemperance, but who, on having his attention drawn to Liebig's statement, was induced to adopt a vegetarian diet, and, following up this, before six weeks he was a total abstainer. As other instances, he mentioned a lady of independent means, a clergyman, a country gentleman, a girl of nineteen, a man and his wife and sister (all over forty years of age), a bedridden gentle-

man (cured in thirty-six days), a captain in the merchant service, a half-pay officer, a clergyman and his wife, both of intemperate habits, who were cured by a diet mainly farinaceous. A gentleman of sixty had been addicted for thirty-five years to intemperate habits, and his constitution was shattered. After an attack of delirium tremens he was induced to adopt a farinaceous diet, which cured him in seven months. He was very thin, but his weight increased twenty-eight pounds. Two sisters, members of a family noted for intemperate habits, adopted vegetarianism, and were cured in about a year. A clerk who had lost several situations through intemperance, was cured by vegetarianism, and was taken back by an employer at a higher salary than he had ever received. A governess, aged forty, lost her situation through intemperance, and was cured, by adopting a farinaceous diet, in nine weeks. Two military pensioners were cured in six months. Three old sailors were cured in like manner in the same period.

"The author then mentioned various articles of diet which he regarded as specially antagonistic to alcohol. These were macaroni, haricot beans, green dried peas and lentils, soaked for twenty-four hours, well boiled with onions and celery, rice, and highly glutinous bread. The author stated that he had himself found his health benefited by a vegetarian diet, and all whom he had induced to adopt it had received similar benefit. After pointing out the increased economy of this diet, he recommended those who had a distaste for it to try sea-side or mountain air. He then alluded to the increase of national wealth which would arise from the employment of land now growing barley for other purposes; and added that nations living on a farinaceous diet are less given to drunkenness than meat-eating populations."

A Vain Delusion.

A FAVORITE theme with the editors of so-called health journals and household medical guides is that of "overwork," and so much has been written on this subject and of such a nature, that, were we to believe and act upon this advice thus given, the world would become almost a hive of drones. We confidently believe that so far as honest brain work goes, the more we do of it the better, and if, owing to a reckless disregard of recognized hygienic and sanitary laws, an occasional "student" finds an early grave, let the blame be put where it belongs, and not credited to the worthy zeal that some call "overwork." Having long held to this opinion, and believing that facts would sustain us, we are gratified to find that an eminent English physician has given expression to a like view, and, coming as it does from one high in authority, we trust it will receive the attention from both students and drones that it deserves.

We condense from Dr. Wilk's communication as it appears in the *Lancet*, as follows: After answering the simple question, "Are people suffering from overwork?" with a decided "No!" the writer says: "Medically speaking, I see half a dozen persons suffering from want of occupation to one who is crippled by his labors. Very often when a business man complains of being overdone, it may be found that his meals are irregular and hurried, that he takes no exercise, is rather partial to brandy-and-soda, and thinks it is not improper to poison himself with nicotine every night and morning."

Passing from man to woman, the case is made to appear even more severe. It is not overwork, therefore, that is to be deprecated, provided the work is legitimate, and such as to claim a normal exercise of the functions. The brain is an engine of many horse power; its energy must be accounted for in some way; if not used for good purposes it will be for bad, and "mischief will be found for idle hands to do." So work is actually a safeguard. The human body is made for work, and just as the muscles are better prepared for work by previous training, so the nervous system, whether it be the brain or spinal column, becomes more energized by use. It is only during sleep that the brain is actually inactive, and hence, if we will not give it work to do, it will find that to engage its energy, even though in the end the labor be profitless.

After referring in a plain, though hardly gentle, manner to the men and women whom the frivolities of life "sadly busy," the writer contrasts them with those whose minds are never at rest and yet who live to a good old age. As the closing passages are not only truthful as to facts, but of value by the suggestions they contain, we are prompted to quote them at length—and should there be among our readers some of these overworked brain-workers, they will find in these words sage counsel and encouragement. The writer refers to the honest, cheerful, but constant, workers as follows:—

"Practically they have no rest, for, when one object of study is complete, they commence to pursue another. It is by the happy faculty of diverting the powers into different channels that this is accomplished. Instances

might easily be quoted of statesmen, judges, and members of our profession, who know no absolute rest, and who would smile at the suspicion of hard work injuring any man. I make it a custom to ask young men what their second occupation is—what pursuit have they beside their bread-earning employment. Those are happiest who possess some object of interest, but I am sorry to say there are few who find delight in any branch of science. The purely scientific man finds his best recreation in literature or art, but even in intellectual work so many different faculties are employed that a pleasant diversion is found in simply changing the kinds of labor. For example, a judge after sitting all day, and giving his closest attention to the details of the cases before him, may yet find relief in his evenings by solving problems in mathematics. The subject of overwork, then, is one of the greatest importance to study, and has to be discussed daily by all of us. My own opinion has already been expressed, that the evils attending it on the community at large are vastly overestimated; and, judging from my own experience, the persons with unstrung nerves who apply to the doctor are not the prime-minister, the bishops, judges, and hard-working professional men, but merchants and stockbrokers retired from business, government clerks who work from ten to four, women whose domestic duties and bad servants are driving them to the grave, young ladies whose visits to the village school or Sunday performance on the organ are undermining their health, and so on.

"In short, and this is the object of the remarks with which I have troubled your readers, in my experience I see more ailments arise from want of occupation than from overwork, and, taking the various kinds of nervous and dyspeptic ailments which we are constantly treating, I find at least six due to idleness to one from overwork."—*Appleton's Journal.*

Evidence in Favor of the Curability of Diseases by Nature.

BY SIR JOHN FORBES, M. D., F. R. S.

ALTHOUGH no one doubts the power of nature to cure many slight and even some severe diseases, there yet exists in the minds of the members of the medical profession, and still more strongly in the minds of the public, a most unjust appreciation of the extent of this power. As, however, it is, in the highest degree, important to both parties that an exact, or, at least, an approximative, estimate of it should be obtained, it is proposed to attempt to do something of the kind in the present chapter.

In looking for evidence on this point, it is natural to examine, in the first place, those fields which are calculated to supply it in the greatest purity; namely, such as present the least possible amount of the interference of art. It is with these, consequently, that we shall commence our inquiry.

I. One of the first instances that naturally occurs to the mind is the great field presented by the pathology of the inferior animals. In the case of wild animals we have but slight knowledge either of their diseases or of their results, except, perhaps, as to the healing of wounds inflicted by the hunter, and as to some facts attending pestilential visitations. Wounds, we know, of the most desperate kinds, have been repaired in them by the natural processes, as proved by the examination of their bodies, when afterward killed by the sportsman or found dead from other causes in their native haunts.

In the case of fatal epidemics, it is known that many more animals are affected with the disease than die of it; consequently, all those restored to health must be so restored by the power of nature alone.

Evidence equally authentic of the power of nature in curing epidemic diseases among domesticated animals, as in the case of horses, cattle, and sheep, is occasionally to be met with, either where, from special circumstances, no medical treatment has been possible, or where, from circumstances of another kind, such treatment has not been had recourse to.

Those who maintain, at all hazards, art's potency, and nature's impotency in the cure of all diseases, human and bestial, may, indeed, have warrant for their doubt, or even for their positive verdict, in the instances where the doctor has attacked the disease of his four-footed patients with bloodletting and purging, and all the other weapons of veterinary heroism; but we hope they will resign to us and nature without much struggle some of the cases, at least, in which no more energetic practice has been had recourse to than placing in the stall some wych-elm, tying on the tail some red threads, anointing the hairy hide with the creature's own dung, or even making a slit in the ear with a pair of rusty scissors.

It would be unsound logic, and it might indeed be untrue in fact, to assert that the autocratic power of healing possessed by animals must be possessed in the same form and degree by man; but it is a simple matter of fact that there is a similar power existing in both; and it is most logical to reason from

the one to the other as to the general nature and result of the processes.

II. A second field—and one presenting not merely inferential, but positive and unequivocal, evidence of the power of nature to cure human diseases—is that supplied by the medical history of savage or uncivilized nations. The reports of travelers and of residents of such countries leave no doubt of the fact that, of the diseases occurring among such people, the greater portion that have a favorable issue (and the number is great) must owe this entirely to the inherent powers of the body.

Cases in which any energetic interference, good or bad, has taken place, would better be left entirely aside, and those alone be considered which have either not been treated at all, or treated in any way that could not influence, beneficially at least, the natural processes. And of this kind of cases we have an abundant supply, some few being left entirely untreated, a larger portion being treated only by superstitious charms, and perhaps an equal number being treated by some preparations of indigenous herbs possessing no medicinal powers.

Among the sacrifices intended to procure relief from disease, among some savages, some were curiously impersonal: In the case of a middling great man, a finger or two would be amputated from one of their dependents; but for a chieftain nothing less would suffice than the strangling of a child.

One popular form of the charms used by the Africans, mentioned and described by Mungo Park, consists in writing the charm on a board, and drinking the matter of the words when it has been carefully washed off—a mode of practice very analagous to and, we doubt not, as efficacious as that of the Homeopathists, who, in point of fact, if they adhere rigidly to the original Hahnemannian dose, do literally prescribe words and not things.

A peculiar mode of curing the ague, we are told by Hasselquist, existed in the Morea in his time, which, though very comfortable to the patient, must be very obnoxious to the horticulturists of the country where it is much practised. The patient has merely to lean against a peach-tree during the fit; the ague is cured, but the tree is killed! This the author reports on the authority of an eye-witness!

III. The state of medical knowledge and of practice among nations in an imperfectly civilized state, both in ancient and modern times, has afforded and affords the same kind of evidence in support of the autocracy of nature in healing diseases. Among many of the civilized nations of the ancient world, as the Israelites, the Romans and the Greeks, through a considerable portion of their history, the order of physicians did not exist, the treatment of diseases being left to the priests, and being, generally speaking, of such a nature as could hardly have any beneficial influence at least.

Even in the original school of the great Hippocrates himself, the means more commonly employed in the treatment of diseases were almost nugatory, and certainly incapable of changing the natural course of disease, whatever that might be—a circumstance to which we are disposed to attribute a good deal of the success of the Hippocratic practice, when compared with the results obtained in the more perturbative schools of subsequent times.

For ages after the Romans became a civilized people, the medical art was virtually unknown among them, and had no professors. Even in the time of Pliny, though physicians were then tolerated, they seem to have been regarded rather as a nuisance than otherwise.

Even in Christian Europe, in these present times, while the towns groan under the load of superfluous doctors, and the inhabitants groan under the load of superfluous physic administered to them, many of the remoter and less populous country districts are often virtually without medical advice, the inhabitants in their sickness having to rely mainly, if not entirely, on the skill of the old crones of the village, with their warm cordials and herb-tea from vegetables of their own vicinity.

Under such management, no doubt, persons die who might recover under a better treatment as regards regimen, &c.; but still, everybody who has had an opportunity of witnessing such things must admit that a large proportion of the patients recover, the common remark being, "It was wonderful to see how many did struggle through their severe and long illnesses."

IV. A more limited but an equally authentic source of evidence in favor of nature's ability to cure diseases, is found in the history of isolated individuals, or isolated bodies of men, of greater or less extent, who have been attacked with sickness under circumstances in which no medical aid or no medical appliances were procurable. The published narratives of travelers supply many instances of this kind.

V. Another source whence the desiderated information has been obtained and is still obtainable to a considerable amount, is certain systems or modes of practice which have been prevalent at different times in the history of physic, and which, from their inertness, injuriousness, exclusiveness, or other peculiarities, allow of no other inference than that the re-

coveries, when they have taken place, are to be attributed to nature alone.

Some of these systems have supplied evidence of an unequivocal kind, and need little or no sifting or weighing to show on which side of the question it bore and bears. Of this kind is especially that practical doctrine known in modern times by the name of "Expectation," or "The Expectant System," and which, originating in the profound sagacity of Hippocrates, has been adopted, in a greater or less degree, by his wisest followers down to the present time.

Of this system, the variety termed Pure Expectation, affords a most unexceptionable field for obtaining such results, and on the largest scale, seeing that it is still followed to a very great extent, in many diseases at least, even by medical men, in various Continental countries, and by the wise women, the prescribers for the poor in the rural districts of all countries.

Under this head of Expectation we may include numerous non-medicinal plans of treatment that have been or still are in vogue in different countries, and which are far from unfruitful in prosperous results. Of this kind are the grape-cure; the milk-cure; the whey-cure; goat's-milk-cure; vegetable diet; change of air; sea-voyages; land-travel; mineral waters, so-called, but which possess no active ingredients, &c.

Under the same category I might bring a large proportion of the cases that are, after the failure of more active means, submitted by our surgeons and physicians to long-continued courses of our so-called vegetable alteratives, such as sarsaparilla, cetraria, dulcamara, taraxacum, uva ursi, &c., but I refrain from including the results obtained in such cases under my present category of natural results.

VI. Leaving the domain of legitimate medicine, we find an ample field for gathering evidence of a similar kind, in the proceedings of the numerous race of impostors and quacks to be found in every age and in every country.

It is of no use to attempt to ignore such results. There are few medical men who have seen much practice, that have not had occasion to know of them from the unquestionable testimony of their friends, or even to verify them by more direct evidence.

Homeopathy comes obviously under the head of cases now being considered; but it is so important a link in our chain of evidence as to deserve a special notice.

VII. Besides the evidence derived in the aggregate from the more formal systems of treating diseases displayed in the voluminous records of practical medicine, the same authorities supply us with innumerable detached facts bearing on the same subject of nature's autocracy; some recorded purposely as so bearing, but the greater number, though equally valid as evidence, being adduced under views and with intentions entirely different.

A still more prolific source of similar evidence is furnished by the modern medical journals of all countries—now accumulated to a huge mass—which constitute the theater on which young practitioners usually exhibit their first literary efforts. It is true that the cases so recorded are too generally treated heroically to furnish pure evidence; but, to compensate for this defect, they often supply evidence of a still stronger kind, by showing not simply the power of nature to overcome natural disease, but to overcome this and the artificial disease superadded by the energetic ignorance of the practitioner.

A vast amount of evidence derived from this source—though, for obvious reasons, not formally recorded—exists in medical tradition and in the unwritten testimony of medical men. I could supply a good deal myself. When old Dr. Warren, in answer to the question, "What will cure acute rheumatism?" replied, "Six weeks," he merely expressed what his experience had led him to know of the relative power of nature and art in this disease. The same kind of testimony was given, and on a wider scale, by another celebrated professor, who, on being told that a new sect (the Homeopathists) had sprung up, which cured diseases by infinitesimal doses of medicine, replied that he himself had long been in the habit of doing more than this, viz., curing diseases by none.

VIII. But of all the examples of the autocracy of nature in curing diseases, supplied by the records of medicine or by its actual practice, there is none which, in point of extent or in force of evidence, can compare with that furnished to us by the new school of practice known by the name of Homeopathy. Since the establishment of this system, now more than fifty years, an immense number of the sick in all civilized countries have been treated according to its precepts and practice; that is (according to the opinion of the best judges, in which opinion I entirely concur), nominally by drugs, but actually left to the resources of nature, or at most aided, it may be, by regimen and faith.

IX. The evidence supplied by the various sources indicated in the preceding pages—and it would be easy to add to the number—can leave no doubt on the mind of any one of the truth of the general fact of the sufficiency of

nature to cure most of our curable diseases without any assistance from art; although, unquestionably, such cure may be facilitated and rendered more rapid, in many cases, by the appliances of art, either in its regiminal or medicinal form.

The one great result obtained from the study of these various authorities, is this—that the power of nature to cure diseases is infinitely greater than is generally believed by the great body of medical practitioners and by the public generally. So great, indeed, is this power, and so universally operative, that it is a simple statement of the facts to say that, of all diseases that are curable and cured, the vast majority are cured by nature independently of art; and of the number of diseases that, according to our present mode of viewing things, may be fairly said to be curable by art, the far larger proportion may be justly set down as cured by nature and art conjointly. The number of diseases cured entirely by art (of course, I omit in all these statements *surgical* art) and in spite of nature—in other words, the number of cases that recover, and would have died had art not interfered—is extremely small.—*Nature and Art in Disease.*

Dr. Holmes on Trail Dresses.

OLIVER WENDELL HOLMES wrote as follows in the "Professor at the Breakfast Table":—

Our landlady's daughter is a young lady of some pretensions to gentility. She wears her bonnet well back upon her head, which is known to all to be a mark of high breeding. She wears her trains very long, as the great ladies do in Europe. To be sure their dresses are so made only to sweep the tapestried floors of chateaus and palaces, as those odious aristocrats of the other side do not go dragging through the mud in silks and satins, but, forsooth, must ride in coaches when they are in full dress.

It is true that, considering various habits of American people, also the little accidents which the best-kept sidewalks are liable to, a lady who has swept a mile of them is not exactly in such a condition that one would care to be her neighbor. But confound the make-believe women we have turned loose in our streets! Where do they come from? Not out of our parlors, I trust. Why, there is n't a beast or a bird that would drag its tail through the dirt in the way these creatures do their dresses.

Because a queen or a duchess wears long robes on certain occasions, a maid of all work or a factory girl thinks she must make herself a nuisance by trailing about with her—pah! that's what I call getting vulgarity into your bones and marrow. Making believe what you are not is the essence of vulgar people. If any man can walk behind one of these women and see what she rakes up as she goes, and not feel squeamish, he has got a tough stomach. I would n't let one of 'em into my room without serving them as David served Saul at the cave in the wilderness—cut off his skirts, sir; cut off his skirts.

Do n't tell me that a true lady ever sacrifices the duty of keeping all about her sweet and clean to the wish of making a vulgar show. I won't believe it of a lady. There are some things that no fashion has a right to touch, and cleanliness is one of those things. If a woman wishes to show that her husband or father has got money which she wants and means to spend, but does n't know how, let her buy a yard or two of silk and pin it to her dress when she goes out to walk, but let her unpin it before she goes into the house.

Bad Advice.

EDITOR HEALTH REFORMER:—The excellent article by Mrs. White in the August number of your journal, on the "Power of Appetite," reminded me of something so strikingly in contrast with it that I venture to relate it.

I was present lately at a consultation with one of the most eminent old school physicians in America, a distinguished author and lecturer, and his advice seems worthy of record. The patient was a gentleman suffering from lack of power to assimilate food, and was, in consequence, much reduced in flesh and strength. After a careful examination of the vital organs, which were pronounced in good condition, the advice given was simply to live upon what is called a "generous diet," to exercise no control over the appetite, but to eat everything for which there was a desire. "*Be governed by your appetite and not by your reason.* Eat what you want, and when you want, and as much as you want. If you like bacon for breakfast, eat it. Drink wine after dinner, and use also tea and coffee if you like them."

These were some of the expressions I noted down *verbatim* at the moment. There was no inquiry as to habits of life, further than to ask if the patient restrained his appetite, which he was explicitly recommended not to do. In answer to a question, smoking was also approved of, even in the case of nervous persons. The mental and physical habits of the patient were treated as of no consequence,

and no advice given different from that above mentioned. A drug prescription was however given.

I have no comments to make, but thought the opinions of so great a man should be placed upon record. Although I prefer not to give his name, I can vouch for his eminence in the profession, and trust that less celebrated practitioners may make a proper use of his learned counsel. I may remark, however, that it was by a precisely opposite course to that which he recommended, that is, by being guided by my reason and *not* by my appetite, that I, some years since, recovered and still maintain excellent health; and I have been led by the above occurrence to make some comparisons between the value to humanity of profoundly learned men whose word is law and whose fame is world-wide, and those less pretending, but practical, persons whose studies have been directed to the simple and actual wants of the body, and to the promotion of those hygienic conditions the necessity of which may be made apparent to the common mind.

For the present, I am inclined to agree with Mrs. White and the HEALTH REFORMER that an uncontrolled appetite is the source of innumerable ills. In my own case, control was gained only after the adoption of an almost purely vegetable diet. A "glorious appetite" under complete control makes a feast of the plainest meal, and adds to life a true enjoyment. E. F. B.

THE GAME OF LIFE.

THERE'S a game much in fashion—I think it's called *euchre;*
(Though I never have played it for pleasure or lucre,)
In which when the cards are in certain conditions,
The players appear to have changed their positions,
And one of them cries, in a confident tone,
"I think I may venture to 'go it alone!'"

While watching the game, 'tis a whim of the bard's
A moral to draw from that skirmish of cards,
And to fancy he finds in the trivial strife
Some excellent hints for the battle of life;
Where—whether the prize be a ribbon or throne—
The winner is he who can "go it alone!"

When great Galileo proclaimed that the world
In a regular orbit was ceaselessly whirled,
And got—not a convert—for all of his pains,
But only derision, and prison, and chains,
"It moves, *for all that!*" was his answering tone,
For he knew, like the earth, he could "go it alone!"

When Kepler, with intellect piercing afar,
Discovered the laws of each planet and star,
And doctors, who ought to have lauded his name,
Derided his learning and blackened his fame,
"I can wait!" he replied, "till the truth you shall own;"
For he felt in his heart he could "go it alone!"

Alas! for the player who idly depends,
In the struggle of life, upon kindred or friends;
Whatever the value of blessings like these,
They can never atone for inglorious ease,
Nor comfort the coward who finds with a groan,
That his crutches have left him to "go it alone!"

There's something, no doubt, in the hand you may hold,
Health, family, culture, wit, beauty, and gold,
The fortunate owner may fairly regard
As, each in his way, a most excellent card;
Yet the game may be lost, with all these for your own,
Unless you've the courage to "go it alone!"

In battle or business, whatever the game,
In law or in love, it is ever the same;
In the struggle for power, or the scramble for pelf,
Let this be your motto—"RELY ON YOURSELF!"
For, whether the prize be a ribbon or throne,
The victor is he who can "go it alone!"

—*John G. Saxe.*

Hatching Out a Woman.

THE following humorous sketch is from "The World on Wheels," by B. F. Taylor:—

When the necromancer turns farmer, sows a few kernels of wheat in a little tin-box of earth, claps on the cover, sends a few sparks of electricity through it, whips off the lid and shows you the green blades an inch and a half long, in a minute and a half, it is a phenomenon, but not a miracle. You can see something quite as marvelous in the World on Wheels any day. Enter a well-filled car in "the wee small hours ayont the twal." The light is dim but not religious with the uncertain glimmer of candles or the smoky flare of kerosene, which ought to be banished from every civilized and Christian road. The seats are heaped with shapeless piles of clothes. Folks are shut up like jack-knives or bagged like game. Here and there a head is visible, swaying about when there is n't any wind, as if everything had "lodged" except a bearded stalk now and then. By-and-by the gray, cold, unspeculative dawn begins to show at the east windows, and there is a stir among the bundles. A man with hair over his front like a Shetland pony's mane emerges from a blanket. A boy with the head of a distaff changes ends. A girl blossoms out in the next seat.

But there is one large heap of clothes that you watch, and they are good ones. A dainty hat with a feather in it swings from the rack above by one string. A muff like a

well-to-do cat reposes in the wire manger. The bundle appears to be composed of cloaks, shawls, and a lap-robe. It is *shaped* like an egg, and it *is* an egg. First, one shawl gives a little lift, then another. There is a slight surge of a cloak. Off goes a shawl. A snug gaiter with a foot in it emerges at one end, and a disheveled head at the other. Forth comes a hand, and at last the chrysalis is rent, and the occupant is hatched out before your eyes. But it is anything but a butterfly. It is a crumpled, drowsy piece of womanhood, who slept in her head but not in her hair.

The trying, pitiless light of early morning plays upon her terrifically, and she knows it. It amuses you to watch her under your eyelids. She brings forth from her reticule a liver-shaped device, and she hangs it on behind, like the fender of a canal-boat, just over her combativeness and philo-progenitiveness, and what not. Then she arranges and sorts out curls and ringlets for different organs. You ought to see that head. It grows like a soap-bubble. She claps a love of a friz on her self-esteem, which allies her to angels; a coil of a curl upon her firmness, which brings her, sometimes, within neighborly distance of donkeys; she borders her brow with ringlets, trails a braid about her inhabitiveness and constructiveness, touches up the tress on her veneration, and the head is artistically complete. She washes her face with a handkerchief, rights her collar, shakes out the creases, tosses the little hat upon the top of all things, and is ready for breakfast. Who talks of necromantic *wheat*, when here is a human *flower* hatched from an awkward bundle in less than thirty minutes!

Anecdote of Dr. Cox.

THE usual opening sermon before the theological students of Union Seminary, New York city, was delivered in 1863 by Dr. Samuel Cox. It was upon the personal habits of the students. Among other things he spoke earnestly against the use of tobacco by ministers, glancing now and then as he spoke to see what effect his words might have upon the professors, some of whom at that time were well known users of the weed. He then went on to give his own experience in the matter as follows:—

"In the year 18—, I was coming down the Hudson on Saturday evening, returning from a successful tour collecting funds for Auburn Theological Seminary. I had finished my work, and in a happy mood was smoking a cigar on the deck of the steamer, when I was approached by an ill-dressed and partially drunken sailor holding out a stump of a cigar and saying, 'I say, doctor, gi'—gi'—gi'v's a light.' Of course the request was granted, but it made me consider what was the example I was setting. Here was a poor drunken man that knew me and that had thus accosted me. I determined from that moment to continue the habit no longer, and begging pardon of all the fish, I threw my cigar overboard. I have kept my promise. Would that some other younger ministers who smoke in private or in public, might seriously consider what is their example on the young people of their flock."—*Mirror.*

A Chat about Sleep.

A VERY thin young lady, of about thirty years, came to consult me about her "skin and bones." I have frequently met her when she seemed even more emaciated, but now she "would give the world to be plump." Sitting down in front of me, she began with—

"Do n't you think, doctor, that I look very old for twenty?"

I admitted that she looked rather old for twenty.

"Can anything be done for me? What can I take for it? I should be willing to take a hundred bottles of the worst stuff in the world, if I only could get some fat on these bones. A friend of mine was saying yesterday that he would give a fortune to see me round and plump."

"Would you be willing to go to Cliff Springs in Arkansas?"

"I would start to-morrow."

"But the waters are very bad to drink," I said.

"I do n't care how bad they are; I know I can drink them."

"I asked if you were willing to go to Arkansas Springs, to test the strength of your purpose. It is not necessary to leave your home. Nine thin people in ten can become reasonably plump without such a sacrifice."

"Why, doctor, I am delighted to hear it; but I suppose it is a lot of some awful bitter stuff."

"Yes, it is a pretty bitter dose, and has to be taken every night."

"I do n't care; I would take it if it were ten times as bad. What is it? What is the name of it?"

"The technical name of the stuff is 'Bedibus Nineo'clockibus.'"

"Why, doctor, what an awful name! I am sure I shall never be able to speak it. Is there no common English word for it?"

"Oh, yes. The English of it is, 'You must

be in bed every night at nine o'clock.' We doctors generally use Latin. 'Bedibus Nineo'clockibus' is the Latin for 'You must be in bed every night at nine o'clock.'"

"Oh, that is dreadful. I thought it was something I could take."

"It is. You must take your bed every night before the clock strikes nine."

"No; but what I thought was that you would give me something in a bottle to take."

"Of course I know very well what you thought. That's the way with all of you."

One person eats enormously of rich food till his stomach and liver refuse to budge; then he cries out, "O doctor, what can I take? I must take something."

Another fills his system with tobacco until his nerves are ruined, then, trembling and full of horrors, he exclaims, "O doctor, what shall I take?" I write a prescription for him—Quitibus Chawibus et Smokibus.

I will suppose my patient is not a classical scholar, as I am sure my reader is, and so I translate it for him into English. He cries out at once, "O doctor, I thought you would give me something to take."

Another sits up till thirteen or fourteen o'clock, leads a life of theaters or other dissipations, becomes pale, dyspeptic and wretched, and then flies to the doctor, and cries out, "O doctor, what shall I take? What shall I take?"

"Tell me, what time do you go to bed?"

"As a general rule about twelve o'clock."

"Yes, I thought so. Now, if you will go to bed every night for six months at nine o'clock, without making any other change in your habits, you will gain ten pounds in weight and look five years younger. Your skin will become fresh, and your spirits improve wonderfully."

"I'll do it. Though, of course, when I have company, and during the opera, I can't do it."

It is regularity that does the business. To sit up till twelve o'clock three nights of the week, and then get to bed at nine o'clock four nights, one might think would do very well, and that at any rate it would be, so far, so good. I don't think that this every other night early and every other night late, is much better than every night late. It is regularity that is vital in the case. Even sitting up one night a week deranges the nervous system for the whole week. I have sometimes thought that these people who sit up till eleven or twelve o'clock every night get on quite as well as those who turn in early six nights, and then sit up once a week till midnight. Regularity in sleep is every whit as important as regularity in food.

At length my patient exclaimed, "Doctor, I will go to bed every night for six months before nine o'clock, if it kills me, or rather if it breaks the hearts of all of my friends."

She did it. Twenty-one pounds was the gain in five months. Her spirits were happily enlivened, and she spent half her time in telling her friends of her delight with the new habit. She had no further cause to complain of skin and bones.—*Dio Lewis.*

Causes of the Degeneracy of the Teeth.

PROF. CHASE asserts that fifty years ago, when he was a boy, the profession of dentistry was unknown in America, and there were not more than half a dozen dentists in the United States. Toothache was not common, and sound teeth, even in very aged people, were the rule and not the exception. The reasons for the change in the character of the teeth of the present generation, he asserts, are to be found in the nature of the food we eat, particularly in the bread, which popular prejudice demands should be perfectly white; and to secure this the millers are forced to carefully bolt out the gluten cells of the wheat, the great magazines of phosphates for the grain. The point is one of such importance that we quote from the article, as follows:—

"To supply the daily loss of the lime salts from an adult body weighing one hundred and forty pounds, fifty grains of the salts of lime would be required. This is found in about twenty ounces of unbolted wheat flour, or one hundred ounces of superfine flour. From twenty to thirty ounces of unbolted wheat may be taken as a representative of the value of the food which is daily eaten by a healthy person of one hundred and forty pounds' weight. It is simply ridiculous to suppose a person of that weight could eat and digest one hundred ounces of flour! Consequently, those who do make superfine wheat flour an important factor in the nutrition of their bodies, fail in getting the necessary amount of lime salts. Now, this is true of thousands and hundreds of thousands in the United States. The teeth of these fine-flour eaters are defective; their children inherit their defective dental organization, and so the mischief spreads. Irish girls who come to this country for service usually have good teeth, but in two or three years their teeth decay surprisingly. This is easily accounted for, when it is notorious that they eat large quantities of food made from superfine flour, of which they rarely tasted in their native country. An American dentist who visited Germany said that he visited a children's

school where there were over two hundred pupils, and made an examination of their teeth, and moreover failed to find even one decayed. These children used black bread. The first settlers of Ohio, Kentucky, and Vermont gave good teeth to the generation succeeding them, because their food consisted of vegetables, beans, peas, and maize, in large proportion. Superfine flour was a luxury unknown to them. They were glad to get wheat pounded in mortars, or coarsely ground between stones, without bolting. I very well recollect that the people of Vermont, even thirty years ago, did not average one barrel of superfine flour for every six persons. Thus not more than one-twelfth of their food was made up of this flour.

CHARLES LAMB ON INTEMPERANCE.—This eminent man, though a scholar and an able writer, was a victim to the vice which has ruined so many of our great men. He knew his condition, but his enervated will had no power to rescue him from a drunkard's grave, as the following lines from his pen clearly show:—

"The waters have gone over me, but out of the black depths, could I be heard, I would cry out to all those who have set a foot in the perilous flood. Could the youth to whom the flavor of the first wine is delicious as the opening scenes of life or the entering upon some newly-discovered paradise, look into my desolation, and be made to understand what a dreary thing it is when he shall feel himself going down a precipice with open eyes and passive will; could he but feel the body of death out of which I cry hourly with feebler outcry to be delivered, it were enough to make him dash the sparkling beverage to the earth in all the pride of its mantling temptation."

TOBACCO INSANITY.—A Tennessee journal, the Pulaski *Citizen*, mentions a recent case of a well-known citizen, Mr. Claude J. Woodring, who has had to be placed in confinement on account of mental derangement, and adds that "his aberration is announced by physicians to be due to *the excessive use of tobacco*, and it was determined to confine him so that he could be effectually weaned from it." An inquisition held at the county court room resulted in a verdict in accordance with the foregoing. We have no doubt that if a searching inquiry should be instituted into the producing causes of insanity, the use of tobacco would be found to be one of the most prolific. It has become not only a great nuisance to those who do not themselves use it, but is an active destroyer of health and usefulness among those who are its devotees and victims.—*National Temperance Advocate.*

MRS. WINSLOW'S SOOTHING SIRUP.—Dr. R. L. Harlow recently read a paper before the Androscoggin Medical Association, in which he justly denounces this poisonous mixture, that has not only killed its hundreds, but is spoiling the health of thousands of children. He states that the amount sold yearly contains over 15,000,000 grains of morphia, which amount is administered to infants without professional advice.

A PHILADELPHIA milliner's apprentice went to visit her mother in the country last Sunday, and when that worthy matron beheld her child she exclaimed: "Isabel Marie Stephens, what on airth do you mean, coming out in broad daylight with your gown all kajummuxed up in a heap behind ye, and all bound up in that way in front of ye? And hain't ye got no stockings all of one color, that ye haf to wear them zebra-colored things? Thought ye was goin' to be a milliner. Sh'd think ye'd married a barber, and was playing up signboard for him. Did I ever think one of my girls would come to this?"

DESERVED PUNISHMENT.—A butcher, near Hanover, has recently been imprisoned for two years, in punishment for selling trichinous meat, which caused the severe illness of four hundred persons, and the death of more than fifty. The dangers of poisoning by these loathsome parisites is increasing daily. The disease seems to be rapidly spreading among the scrofulous race, and many predict that the hog will, ere long, be wholly abandoned as an article of food. It is passing strange that this is not already the case, when a man runs the risk of his life whenever he indulges in ham or sausage.

A PUFF.—A western journal, wishing to do the handsome thing by the local doctor, recently announced that "Dr. Crawford was called in, and under his prompt and skillful treatment, the young man died on Wednesday afternoon." This the Detroit *Free Press* calls the puff oblique.

IT has been estimated that the American nation smokes 5,168,000 cigars a day. This, at five cents a cigar (and what sort of a cigar can you get for five cents?) would amount to over $250,000 a day.

The Health Reformer.

BATTLE CREEK, MICH., NOVEMBER, 1875.

J. H. KELLOGG, M. D., : : : EDITOR.

Ventilation.

How to get pure air in our churches, halls, factories, and dwelling and sleeping rooms is a question which has become one of the most serious problems with which sanitarians have to deal. We must "breathe or die," one author says; and more than this, we must breathe *pure air*, or die by degrees, if not at once.

In the summer season, this question is less important; for the windows are simply opened widely, and the winds ventilate our houses and other edifices. But when winter approaches, most people seem to forget that the demand for oxygen is even greater than in the warmer seasons of the year. As a consequence, the houses are carefully banked up with straw and dirt, lest a few stray inches of untainted air should enter through the cracks in the floor or some loosely fitting joint. The outside windows are nailed fast, and the door casings are padded with felt to prevent the entrance of one solitary whiff of fresh, unpoisoned air. Within the dwelling thus securely barricaded, air-tight stoves are kept at a temperature just a little below the melting point, and the inmates dodge furtively in and out in order to maintain the maximum degree of heat by preventing the ingress of any of Heaven's pure, vitalizing, invigorating air.

When a person enters such a hot-house, he is struck at once with the close and fusty odor of the air. What is the matter? What gives the air of the room this smell? Poison! It is fairly charged with gaseous poison, which is slowly, but surely, poisoning all who breathe it, and materially shortening their lives.

SOURCES OF CARBONIC ACID.

The name of this poison is *carbonic acid*; or, more correctly, carbon di-oxide. It is a deadly gas, and kills more people annually than war or famine. From whence does it come? 1. From the lungs of every man, woman, and child, and every living animal; 2. From our candles, lamps, and gas-lights; 3. Sometimes from our stoves and furnaces when the draft is insufficient. In addition to carbonic acid there is also another poison which comes from the lungs of all animals, which is of an organic nature. It is not so abundant as carbonic acid, but is even more deadly.

HOW MUCH CARBONIC ACID IS PRODUCED IN AN HOUR?

A man sends out from his lungs FIVE GALLONS of this poisonous gas every sixty minutes when he is asleep. If he is talking or singing, he produces twice as much—TEN GALLONS. Think of it! A single burning gas jet produces TWICE AS MUCH AS A MAN. An ordinary stove produces *as much as ten men*. Six persons produce a barrel of carbonic acid in one hour, or twenty-four barrels of deadly poison in a single day. An audience of five hundred persons produce more than *one hundred and sixty* barrels of the gas in two hours, with a proportionate amount of organic poison.

Every breath pollutes and renders unfit for breathing, three cubic feet of air. The air of a seven-by-nine bed-room, with two persons in it, *becomes unwholesome in five minutes* if there is no change of air by ventilation.

HOW MUCH CARBONIC ACID IS REQUIRED TO KILL A MAN?

Carbonic acid accumulates in old wells, and other low places, and in the bottom of the great tubs in breweries where beer is undergoing fermentation. If a man falls into one of these places, he dies before he can get out. This is the effect of the pure gas. If a person breathes a mixture of the gas with air, the effect will be just in proportion to the amount of gas. If there is much gas, suffocation will occur speedily. If there is a small proportion only, its effects will be more slowly produced, resulting in colds, consumption, dyspepsia, headache, vertigo, nervous diseases of various sorts, and general defective nutrition.

HOW TO VENTILATE.

Heated ventilating flues communicating with the roof are the best. The old-fashioned fire-place was an excellent ventilator.

If neither is available, ventilate by means of the windows. If possible, open a window at the top on one side, and another at the bottom on the opposite side; or, open both at the top if there is a stirring breeze. Another excellent way: Place beneath the lower sash a strip of wood three or four inches wide and as long as the width of the sash. This will cause the upper and the lower sash to overlap. Through the opening thus formed, the air will enter; and being reflected up, no current will be felt. When there is little motion in the external air, the window should be lowered one inch for each individual in the room. If unpleasant currents are produced, cover the opening with a fine wire screen.

The air of an ordinary room should be completely changed three times every hour for each occupant. Sick rooms require more thorough ventilation still.

Ventilation is more necessary in the winter than in the summer; more important in the night than during the daytime. Cold air is not dangerous if breathed rightly. Night air out of doors is just as wholesome as night air in-doors. It is all the air we have during the night. Don't be afraid of it. In large cities, night air is more healthful than day air.

Iron Tonics.

MANY years ago, Prof. Liebig, a noted German chemist, made a chemical analysis of the blood, and found iron in it. He claimed to prove by his experiments that the color of the red corpuscles of the blood was due to the presence in them of the oxide of iron, which was supposed to play a very important part in the transmission of oxygen from the lungs to the tissues, and the removal of carbon di-oxide (commonly called carbonic acid) from the system.

Since these supposed discoveries were made it has been taught in all the schools that iron is the coloring matter of the blood. The name applied to this peculiar compound is *hæmatosin*. Whenever a person is found to be deficient in red-blood corpuscles, as is the case in most invalids, especially dyspeptics, he is dosed with iron, either in its metallic state, or in combination with some acid. In this way it has been supposed that red-blood corpuscles could be increased in a person's blood, and the theory has given rise to numberless quack medicines which are sold under the various names, "blood tonics," "iron tonics," "iron bitters," etc.

It has recently been proved, by the experiments of Malder and Van Gondover, two distinguished chemists, that the coloring matter of the blood contains *no* iron. They extracted every particle of iron from the blood, and yet the *hæmatosin* was as red as ever.

These experiments were made and published to the world more than three years ago; and yet our medical friends, both regular and irregular, continue to dose their patients with iron as vigorously as ever, notwithstanding the manifest absurdity of the practice. Even if it were true that animal organisms can digest and assimilate mineral, inorganic, dead, inert matter, there would be no reason in administering iron with a view to the production of an increase of the coloring matter of the blood, when it has been proved that the coloring matter contains not a particle of the metal. Thus the practice is doubly absurd.

Beef Tea and Extract of Meat.

THE idea that beef or mutton tea, chicken "broth," or meat extract, which is the same thing, is peculiarly nutritious, has become very firmly rooted in the popular mind, yet this opinion is utterly without foundation in fact. Meat extract is not condensed nutrition, containing as much nutriment as the meat from which it is made, as many suppose. It is simply a solution of the impurities of the venous blood of the animal from the flesh of which it was made. A noted chemist says that the constituents of beef tea and meat extract "are the products of regressive [putrefactive] change, and are not necessary for the constitution and formation of the organs; nor can they, when taken with food, add to the substance of those organs. These elements have been got in isolated forms, as creatine, sarkine, taurine, urea, uric acid, tyrosine, lactic acid, acetic acid, and others; each organ has its own corresponding extractive principles, or its own products of decomposition, the conditions of this decomposition varying for the various organs."

Each of the strange substances named above is a poison. They are all formed by the decay of the tissues. It will be noticed that in the list there is no albumen, fibrin, sugar, caseine, or other nutrient element. The effect of beef tea, when administered, is that of a stimulant, which means that it is a poison which is expelled by the system when taken into it.

Under the mistaken notion that it is highly nutritious, beef tea is often given to the sick, sometimes being made the sole article of food for days or weeks. No doubt persons have actually starved to death under this regimen for reasons already quoted.

The effects of beef tea and meat extracts have been studied upon animals. A German physiologist, Kemmerich, fed them to dogs, carefully noting the results. He found that "if an animal gets for food only extract of meat, it will succumb more quickly than if no food at all were given."

Prof. Voit says of this article, "When vessels, fortresses, armies, and hospitals are supplied with this meat extract, they obtain what will not supply the place of a single grain of the nutritive elements, and in this regard it is analogous to table-salt, coffee, tobacco," etc.

Thus it appears that in dosing sick people with beef tea and similar substances, injury, rather than benefit, is wrought. If the patient is suffering from fever, the stimulating effect of the beef tea will increase the unnatural temperature.

Michigan Board of Health.

THROUGH the courtesy of Dr. H. B. Baker, Secretary of the State Board of Health, we have received an abstract manuscript report of the recent meeting of the board, from which we condense the following:—

Dr. A. Hazlewood read a paper on trichinæ, giving an historical review of the subject. He stated that where these parasites have gained access to the body through the medium of pork, they multiply in the intestines, producing living young, which migrate to the muscles, in which they find a permanent lodgment, and work irreparable mischief by the destruction of the contractile tissue of the fibres. Thus, if a person has once been infected with the worm, he must suffer all his life in consequence, if he is not killed outright.

Another interesting question which was discussed was "The Use of Poisons in Agriculture;" the use of Paris green receiving special attention. Numerous analyses of soil upon which Paris green had been used, and of straw and wheat raised upon such soil, had been made. They proved the entire absence of arsenic from the straw and grain, and that Paris green does not remain in the soil, as such, being decomposed, so that the arsenic enters into an insoluble compound, thus becoming devoid of injurious properties. Thus it is evident that there can be no possible danger of the poisoning of wells or streams from Paris green used upon crops. Dr. Kedzie suggested that the ill effects which have sometimes seemed to follow the use of potatoes might be due to the destruction of the vines, rather than to any substance used to destroy the bugs.

The Methodists vs. Tobacco.

IT is getting to be almost the fashion for Methodist conferences to pronounce an annual vote of disapproval of the use of tobacco by both laymen and ministers, especially by the latter class. So far, so good; but we have been looking for some more efficient action than this, something more effective than a mere protest against an evil and filthy habit.

In view of the many circumstances which combine against any advance move in this direction, we had little hope of seeing any radical reform in the direction indicated; but the action of the last Methodist conference held in Canada, seems to strike well at the root of the matter. According to report, a vote was passed during the session forbidding the use of tobacco in any form by all Methodist ministers belonging to that conference.

This is what we call "hitting the nail on the head." If every Methodist conference in the United States would take a similar action, and enforce it rigorously, how many hundreds of pulpits would speedily be purged, either of the filthy spittoons and exhausted quids which now disgrace them, or of their slavish incumbents, who have too long polluted the sacred desk and defiled a pure gospel with their stinking vice!

People's Department.

A Puzzled Reformer.

MR. EDITOR:—I see you have a people's department in your journal. I am glad to see it, and hope the people will be free to write, ask questions, and gain all the useful information possible through its columns. If this is its object, as I understand it, may I come in for a share, Mr. Editor? I have long been a reader of your excellent journal, and have thought its teachings about right; but of late I have been sorely puzzled on the subject of which I wish to inquire, and I do so in all sincerity, with due respect to those whom I may address.

You discard all medicines, and advocate the use of hygienic agencies only in treating the sick. Now, there are instances when it seems as though some remedy must be instantly used, or death would be the result; as in case of a sudden fall, when no limbs are broken or fractured, but there is such fright from the shock as to impede circulation, the nerves relax, and the person faints. What is to be done? Is it not better to give something to strengthen and bring back to consciousness than do nothing and hope for such a result?

Then again, a child is taken with vomiting and diarrhea, has every symptom of cholera infantum. The use of water is resorted to, according to directions from a reliable source, administered by one of experience in using it. No pains is spared, but to none effect. The vomiting continues, and as it can retain no nourishment, it grows weaker every day, and evidently must die if help is not soon had. The thought of having a drug doctor is repulsive to the friends, and there is no other near; but an old lady advises to give some weak lye (made by pouring boiling water on wood ashes), a half teaspoonful of the clear liquid in its drink, increasing the quantity until the vomiting ceases; it was done, and with good result. No vomiting occurred after the first dose. The judicious use of water, given strictly according to directions, failed to check the diarrhea after several days' using it; and fearing to let it run any longer, a simple vegetable remedy was given. Two half teaspoonfuls were all that was necessary, and the result was good. From that time the child began to mend, took its usual food, and soon got well.

It is far from my intention to condemn the use of water and other hygienic agencies, but simply that the whole truth may be arrived at. Before I close, permit me to cite one case more; that of catarrh in acute form. Warm soft-water nasal injections were used persistently for a long time, and apparently did no good; but when salt was added to the water, it *very soon* effected a change, and the catarrh soon ceased. Now, rather than have a person suffer so long with catarrh, he had better use salt water at the first; but what must we think of it? Why is it not advised? Is it classed as a medicine, and thus discarded?

Hoping you will give a candid and truthful reply through the REFORMER, I remain, yours ever in the cause of progressive reform,

A SUBSCRIBER.

The difficulty of our subscriber has arisen wholly from two sources: 1. A misapprehension of our position; 2. Unacquaintance with *all* the remedies afforded by the hygienic system of practice. For the benefit of those of our readers who may have encountered similar difficulties, we will consider the several points more definitely.

We do not discard, indiscriminately, the use of *all* drugs, under all circumstances. Reference to back numbers of the HEALTH REFORMER for this year will show that this is not our position; it never has been our position. Drugs are good remedies for cases appropriate for their use. Caustics, antiseptics, anthelmintics, hemostatics, anesthetics, and other drugs are invaluable under certain circumstances. It is not the *use* of drugs, *per se*, that we deplore and discard, but the *abuse* of agents so potent for evil. What we understand by the abuse of drugs may be best understood by reference to former numbers of the REFORMER, and to our tracts and other publications. It is not claimed that drugs will not *cure* disease. Who does not know perfectly well that opium will *cure* pain? that chloral hydrate or bromide of potassium will *cure* sleeplessness? and that lye, magnesia, or lime water, will cure sour stomach? Our complaint against drugs is not so much for what they will *not* do, as for what they *do*. The same opium that eases a man's pain, poisons his whole system. The chloral which induces sleep, also weakens the nerves and eventually works irreparable injury. The lye, lime water, or magnesia, neutralizes the acid, and so allays acidity of the stomach; but it does not remove the cause which first produced the acidity, and greatly injures the delicate lining of the stomach. So we might

explain of all medicines. They relieve symptoms often, but do not eradicate the disturbing cause. Yet, as we have before intimated, there are certain emergencies in which the use of a drug is wholly justifiable, since the good it may do is greater than the harm it will work.

The cases which are cited could all have been treated, however, with perfect success, without the use of any drug, had remedies suited to the wants of each case been properly applied. When people faint, artificial respiration and fresh air are more effective than any drug. In the case of vomiting and diarrhea, the food was undoubtedly at fault. In nasal catarrh, as in catarrh of other organs, we often prescribe the local use of some mild antiseptic or disinfectant. The object is to cleanse the congested surface from impurities. We have used both common salt and permanganate of potash for this purpose. In so doing, we do not violate any law of hygiene any more than in washing our hands with soap and water.

Importance of Hygiene.—Tens of thousands —who knows it not—lead sedentary and unwholesome lives, stooping, asphyxiated, employing as small a fraction of their bodies as their minds. And all this in dwellings, workshops, what not?—the influences, the very atmosphere of which, tend not to health, but to unhealth, and to drunkenness as a solace under the feelings of unhealth and depression. And that such a life must tell upon their offspring, and if their offspring grow up under similar circumstances, upon their offspring's offspring, till a whole population may become permanently degraded, who does not know? For who that walks through the by-streets of any great city does not see? . . . . . Do I say that we ought not to save these people if we can? God forbid. The weakly, the diseased, whether infant or adult, is here on earth; a citizen no more responsible for his own weakness than for his own existence. Society, that is, in plain English, we and our ancestors, are responsible for both; and we must fulfill the duty, and keep him in life; and, if we can, heal, strengthen, develop him to the utmost; and make the best of that which fate and our deservings have given us to deal with. . . . We must teach men to mend their own matters, of their own reason and of their own free-will. We must teach them that they are the arbiters of their own destinies; and, to a fearfully great degree, of their children's destinies after them. We must teach them not merely that they ought to be free, but that they are free, whether they know it or not, for good and for evil. And we must do that, in this case, by teaching them sound practical science; the science of physiology as applied to health. . . . As to the laws of personal health, enough, and more than enough, is known already, to be applied safely and easily by any adults, however unlearned, to the preservation not only of their own health, but of that of their children.—*Chas. Kingsley.*

Calomel in America.—The following is a queer rhyme which used to be sung by traveling concerts; although not so true now as once, it faithfully represents the manner in which calomel was used in the "regular" practice a quarter of a century ago:—

Physicians of the highest rank,
To pay their fees we need a bank,
Combine all wisdom, art, and skill,
Science and sense in Calomel.

When Mr. A. or B. is sick,
Go call the Doctor, and be quick:
The Doctor comes with much good will,
But ne'er forgets his Calomel.

He takes the patient by the hand,
And compliments him as his friend;
He sits awhile his pulse to feel,
And then takes out his Calomel.

Then turning to the patient's wife,
Have you clean paper, spoon, and knife?
I think your husband would do well,
To take a dose of Calomel.

He then deals out the precious grain—
This ma'am I'm sure will ease his pain;
Once in three hours at toll of bell,
Give him a dose of Calomel.

The man grows worse quite fast indeed—
Go call the Doctor, ride with speed;
So Doctor comes like post with mail,
Doubling his dose of Calomel.

The man in death begins to groan;
The fatal job for him is done;
He dies, alas! but sure to tell,
A sacrifice to Calomel.

And when I must resign my breath,
Pray let me die a natural death,
And bid the world a long farewell,
Without one dose of Calomel.

Salt Items.—Testimonies against the use of this condiment multiply on every hand. A friend tells us that when at work with a fellow-laborer, several years ago, he noticed that small crystals daily accumulated upon the under surface of his friend's shirt sleeve. Upon examination it was found that they were crystals of salt which were deposited

by the evaporation of the perspiration, which was very profuse. Here, then, is an ocular demonstration of the fact that salt, being useless in the body, is carried out and deposited upon the surface unchanged.

Another friend was for many years afflicted with sore eyes—a chronic inflammation of the lids. Together with other members of her family, she renounced the use of salt for a time as an experiment. After a short time, she observed a marked improvement in the condition of her eyes, suffering much less inconvenience from them, and being able to read much more easily. For some reason she partially returned to the use of salt, as formerly. She at once noted an increase of irritation in those delicate organs, which was followed by complete recovery when she again discarded the use of salt.

To establish beyond the possibility of question the connection between the use of salt and the inflammation of her eyes, she several times resumed the use of salt for a short time and always with the effect to cause the return of the old irritation, which vanished again very soon after the discontinuance of the use of this irritating, clogging, caustic chemical.

Our friends who clamor so loudly for proof of the irritating effects of salt from experience, have here as good experimental evidence as they can ask.

Scowling.—Do n't scowl; it spoils faces. Before you know it your forehead will resemble a small railroad map. There is a grand trunk line now from your cowlick to the bridge of your nose, intersected by parallel lines running east and west, with curves arching your eyebrows; and oh! how much older you look for it! Scowling is a habit that steals upon us unawares. We frown when the light is too strong and when it is too weak. We tie our brows into a knot when we are thinking, and knit them even more tightly when we cannot think. There is no denying there are plenty of things to scowl about. The baby in the cradle frowns when something fails to suit. "Constitutional scowl," we say. The little toddler who likes sugar on his bread and butter tells his troubles in the same way when you leave the sugar off. "Cross," we say about the children, and "worried to death," about the grown folks, and as for ourselves, we can't help it. But we must. Its reflex influence makes others unhappy; for face answereth unto face in life as well as in water. It belies our religion. We should possess our souls in such peace that it will reflect itself in placid countenances. If your forehead is ridged with wrinkles before forty what will it be at seventy? There is one consoling thought about these marks of time and trouble—the death angel almost always erases them. Even the extremely aged in death often wear a smooth and peaceful brow, thus leaving our last memories of them calm and tranquil. But our business is with life. Scowling is a kind of silent scolding. It shows that our souls need sweetening. For pity's sake let us take a sad-iron or a glad-iron, or smoothing-tool of some sort, and straighten these creases out of our faces before they become indelibly engraved upon our visage.—*Christian at Work.*

Col. James Bowie.—A correspondent of the New York *Tribune* relates the following:—

"I remember a story I heard forty or fifty years ago. A stage-coach was going along an Arkansas road. On the back seat were three women; on the middle one, two men, tall and muscular; while the forward seat held only a small man, wrapped up completely in a blanket. After a time one of the powerful men on the middle seat lit a cigar and smoked. The smoke went full in the face of one of the women, who was both young and timid. She sickened, and then requested the man to stop smoking. This aroused the ruffian in him, and he roughly declared, 'I have paid my fare; it is customary to smoke, and I will smoke as much as I have a mind to.' Accordingly he took out a fresh cigar, and started the smoke-cloud again. The woman could only add that 'smokers ought not to forget to be gentlemen.' This remark excited the man's rage to white heat.

"At this point the small man on the front seat laid aside his blanket, put his left hand on the knee of the enraged ruffian, in order to withdraw his attention from the women and to himself, while with his right hand he drew a bowie-knife from its case between his shoulder-blades. Pointing the weapon at the heart of the brute, and looking him square in the eyes, the little man quickly said: 'I am Col. James Bowie, and unless you throw that cigar away in one minute, I will put this knife into your heart, as true as there is a God.' The ruffian comprehended in an instant with whom he had to deal, and threw his cigar out of the window without adding a word. Col. Bowie replaced his weapon, drew his blanket about him, and relapsed into a condition of apparent indifference."

We have only to add to this that we would there could be a Col. Bowie to every smoker in the land. CORRESPONDENT.

Questions and Answers.

WE are daily in receipt of letters asking medical advice. In many cases we are requested to prescribe for the home treatment of a person suffering from some chronic disease or a complication of chronic maladies, through the columns of the HEALTH REFORMER. A little consideration will show that this would be quite inconsistent, if not quite impossible. In this department the most that can be done is to give brief, concise answers to as brief and concise questions. In order for a home prescription to be of value, it must be much more minute in detail than our space would possibly allow.

It is also necessary that the account of symptoms should be much more minute than would be proper to appear in print. For these reasons, those who wish directions for home treatment should send us a full account of their case, so that we can give them a written home prescription. In order to secure a full and accurate statement of the case we have prepared a list of questions to be answered, which we will forward to any one wishing a home prescription on receipt of application inclosing stamp. Many who have only slight ailments, or who are unable to visit a health institution, can be cured at home by faithfully following a carefully prepared prescription. Our terms for home prescription are $5.00 for the first prescription, and $1.00 for each subsequent letter of advice. The poor are treated at half price.

DECAYED TEETH.—C. K., Pa., writes that her daughter's teeth are all badly decayed, breath offensive, gums diseased, stomach irritable. She inquires: 1. What can be done with the teeth? 2. Do they affect her health? 3. Is their decay caused by poor health? 4. Will it be best to have them extracted? 5. Do you think it safe to use chloroform in the extraction of teeth? 6. Is there anything which can be safely used to deaden the pain?

Ans. 1. This depends wholly on the age of the patient, which is not stated. If the decayed teeth are of the first set, they may be soon replaced by sounder ones. 2. Decayed teeth have a very injurious influence upon the health. They poison the blood as well as the breath. They also produce derangement of the digestion. 3. It is quite probable that their decay is the result of malnutrition. Imperfect digestion is a common cause of early decay of the teeth. Inattention to proper cleansing is another cause. 4. Those which are so hopelessly decayed that a skillful dentist cannot save them, should be extracted at once; but every one which can be preserved by proper filling should be retained and filled at once. The loss of a single tooth is a great calamity. 5. The use of chloroform in dental operations is discountenanced as unjustifiable. 6. Ether is somewhat less dangerous. Laughing gas or nitrous oxide is quite free from danger. Besides attention to her teeth, your daughter must attend carefully to her general health.

HERNIA.—A correspondent asks, 1. Can inguinal hernia be radically cured by a truss? 2. What is the lowest expense of an operation by the surgeon's knife?

Ans. 1. Inguinal hernia is occasionally cured by long-continued wearing of a proper truss. This result is rather exceptional however. 2. There is no surgical operation by means of which the difficulty may be surely and permanently cured. Your best course is to procure a suitable truss and wear it constantly.

DISEASED LIVER.—C. E. S., Fall City, says: I have a diseased liver; can you prescribe for me?

Ans. Yes; packs, fomentations, sitz-baths, electricity, sun-baths, vapor-baths, are all good for you if properly applied. Hygienic diet, with proper exercise, is of first importance. If you wish more definite directions for treatment, send for home prescription.

MILK OF DISEASED COW.—S. H., Ill., asks our opinion respecting the wholesomeness of the milk of a cow which is handsome and sleek, and gives very rich milk, but is constantly blowing bloody, putrid matter from her nostrils, has sore eyes, often manifests feverish excitement, and has been farrow two years.

Ans. The milk of such a cow is loaded with disease and the results of decomposition of the tissues. The mammary gland has become an excretory organ. This accounts for the richness of the milk. The animal has nasal catarrh, also, which indicates the grossness of her blood. Neither the milk nor the flesh of such an animal is fit for human food.

MRS. M. J. E., Iowa: Yourself and daughter both need home prescriptions. It would be impossible to do your cases justice in a brief answer in these columns, as you will see by a little thought. You can doubtless be benefited by proper hygienic treatment.

A MAN too busy to take care of his health is like a mechanic too busy to take care of his tools.

DIETETICS.

Hygienic Cookery and Cook Book.

THE importance of wholesome food and good cooking cannot be overestimated. Common sense teaches the farmer that if he has a likely durham steer which he wishes to grow into full development of his breed, he will feed him with something besides bog hay. How much pluck and spirit will a horse get out of a ton of rye straw? Every man of intelligence should know that any food that tends to stimulate one portion of the system more than another will cause friction in nature's machinery, and cannot be well for the system; and it is because of this stimulating food, with indigestible masses of stuff, that is put into the human stomach—and a large proportion is made so by cooking—that we are a nation of dyspeptics to-day. Says Mr. Holland, "If I were to be charged with the special mission of degrading a nation in mind and body, stunting the form, and weakening in the same proportion the mental and moral nature, there is no way in which I could so readily accomplish my object as through food. No nation can preserve its vitality, and its tendency to progress, with a diet of pork and potatoes." Nothing but grains, fruits, and vegetables, properly prepared, will do this. How important, then, that we have some guide in the manner of cooking, as well as to what should be cooked.

There is no hand-book of practice which has more difficulty in gaining a reputation than a hygienic cook book. To cook well, not only requires practice, but some degree of aptness or adaptation in the culinary department. Any fool can stir up meal and water, put it into an oven, and bake it; but it is not every one that can do this in a manner so that it will come out light, wholesome bread. Much depends upon the quality of the grain or fruits which are used. Much depends upon the oven in which it is baked. The matter of the fire is of no little importance, whether a steady heat is kept up, or whether the stove is to be cooled off from one to three times while in the process of baking; and good cooks think that the condition of the wood is a matter of some importance, whether it be wet or dry. Then the putting of the ingredients together in a proper manner has very much to do in cooking food so it will be palatable and wholesome.

What I have here said, refers to cooking in general, but when applied to the hygienic method of preparing food, much more importance is attached to this matter. To introduce a new method of cooking, we not only have to meet all the general difficulties of the culinary department, but we are to meet the long-established habits of the people. To change customs which have grown with our growth, and become a part of our nature, will be found to be no small task. Food highly seasoned with pepper, salt, vinegar, and a thousand and one condiments which irritate the stomach, prevents digestion and causes dyspepsia. This course has created unnatural tastes and perverted the appetite. We also have the public sentiment against anything that takes people out of the old cart-ruts of usage; and were many of our good mothers and sisters to find themselves out of the old beaten track of mothers, grandmothers, and great grandmothers, they would think themselves on the road to ruin.

It cannot be expected that any will use the recipes in a hygienic cook book, many of which may be wholly new to them, and make a success the first time. One thing can be set down as a fact, that all these recipes (to which we shall refer) have been used by proper persons and pronounced good. Therefore, if you do not make a success the first time, try again, and then again; and if any should think that food is tasteless without salt, do not condemn the book. Try another recipe with a little salt, and commence to educate the taste by degrees. The writer could once eat salt by the spoonful; but now most kinds of food taste brackish with salt. The reason is simply that the taste has been educated to do without salt. Were our old habits and ways all right, we should not need to reform. We are in an age of enlightenment and improvement. Old things pass away, new things take their place. It is by experiment and practice that the better way is learned. A man would be called a fool who would recommend old stage-coaches instead of the iron horse which will carry him fifty miles per hour through the country. It was a long trial of experiments that effected this change, and Fulton, who launched the first steam-boat, died in the poor-house. Therefore, we urge upon all first to settle these questions: Do we need a reform in our diet? Are the principles here set forth correct? Settle these points, then. Turn over a new leaf and stick to the old song, "If at first you don't succeed, try, try again!" By thus doing, you will find that these recipes are practicable.

The Hygienic Cook Book has been revised, and somewhat enlarged. It contains much practical, useful matter for every family. Having been acquainted with every hygienic cook book, as nearly as I can ascertain,

which has been published in this country for the past twenty-five years, I can unqualifiedly say that this is the best of its size which I have ever seen.

The remarks touching eggs, milk, butter, cheese, spice, sugar, wine, time for meals, change of diet, etc., etc., are worth the price of the book. The reader is not obliged to go through a long treatise to get at the gist of the matter, but the very pith of the truth is presented in a few words. Then comes a short chapter upon the art of cooking, philosophy of making wholesome bread, etc., which is valuable.

The sixty recipes for making bread and cake, and over eighty recipes for general cooking, to say nothing of the three and one-half dozen puddings, and thirty varieties of pies; in all making over two hundred and fifty recipes for cooking, ought to convince the most fastidious that there is a supply in nature to furnish an ample variety without the *ham*, *beef*, or *salt pork*.

Then comes the bill of fare for each month in the year, and each day in the week, where, to the old, oft-repeated question, "What shall I get for breakfast," or "What shall I get for dinner," is found a ready answer.

The remarks upon drinks, and preserving fruits and vegetables, closing up with twenty-five "household hints," makes it a book which will be of value to any family in the country. We say to every person who is interested in these principles of reform, whether in the city or country, Get "Healthful Cookery," published at the Office of the REFORMER, which will be truly a "Hand Book of Food and Diet." Get one for your own use, and one to lend to your neighbors.

S. N. HASKELL.

Fruit as Food.

BY P. R. RUSSELL.

GOOD ripe fruit, in its various forms, is in part the natural food of man. The stomach demands for its healthful operation a certain amount of vegetable acid, just such as fruit supplies. Many attempt to meet this want of nature by the miserable expedient of pickles and hard cider. Good fruit is a thousand times better. We need it, and should have it freely. The markets are now all supplied; and by a little pains, farmers and those who have garden-room, can furnish their own tables with a good and varied supply for six months in the year; and for the rest of the time we can draw on the canned and the dried fruits for our table supplies. Fruit is rich, nourishing, healthful food, and should be eaten at the table, at regular meals, and *at no other time*. It is just as bad to eat fruit between meals, after meals, and in the evening, as it is to eat bread and meat.

Most people hardly get their thoughts on fruit as *food*. They think of it as a kind of frothy, trashy dainty to be enjoyed at any time except at meal-time. This is a mistake. Better a thousand times have no fruit than to add it to the full meal, or eat it between meals. The stomach wants good fruit, just as it wants good bread; but it also wants, and must have, good order and its regular rest, or it will break down. What a rich variety of good, cheap fruit is within our reach! Berries in all their varieties, apples, pears, peaches, plums, grapes, oranges, prunes, figs, etc. Some of these should be on every table, at every meal throughout the year. Some who would like the luxury deny themselves because they think they cannot afford it. This is a delusion. They cannot afford to do without the fruit. They can afford, they think, to have filthy pork and lard, tea, coffee, spices, and condiments, but forego fruit, the very luxury which above all others they need to keep the stomach and bowels in good running order.

Good fruit can be canned without sugar. If the fruit is sweet, ripe, and good, sugar is neither desirable nor necessary. It is good enough without. Fruit properly cooked and put up hot, and the cans sealed, will keep, if need be, ages without sugar. Sugar, *i. e.*, crystallized saccharine, is a modern invention. Sugar was unknown in Europe till about the middle of the fifteenth century; and when used too freely, and it generally is, is a source of much disease, and especially among children. Many of the little innocents are hurried into eternity by the misguided love of fond mothers, in stuffing them with candies, cakes, pies, sweet-meats, and sweetened milk. The poor stomach, unable to cope with such saccharine conglomerations, is thrown into a ferment, and the result is, bowel complaints, worms, and fevers, and the grave prematurely opens its mouth to receive the poor victims of folly and ignorance.

Hygienic Dishes.

THE following recipes may be found timely at this season of the year; they are simple, healthful, wholesome, and palatable to those who have learned to relish food with nature's seasoning, as all should do:—

STEAMED SQUASH. — Steamed squash is much nicer and sweeter than boiled. The squash should be cut into several pieces,

freed from seeds, and placed in a steamer. The heat should be moderate. Mash if desired.

If boiling is more convenient, use only sufficient water to prevent burning, and reduce the juice to a sirup by the time the squash is sufficiently cooked.

BAKED SQUASH.—Baking is a still better method of cooking squash. It retains all the original sweetness of the vegetable. Select a good, ripe squash, wipe thoroughly, and free from seeds. Cut into pieces of convenient size, and bake without removing the shell.

PUMPKIN.—Pumpkin may be cooked in the same way as squash, but requires a little longer time. Long cooking improves it.

PUMPKIN PIE.—Pare, cut, and stew a ripe, sweet pumpkin, using as little water as possible, and preserving all of the juice. Rub through a colander or sieve, and mix with it a little flour, about one gill to a quart of the stewed pumpkin. If too stiff, add a little water. Bake in one crust. A few chopped dates may be added for sweetening.

SWEET POTATO PUDDING.—Grate six medium-sized, raw sweet potatoes. Add two quarts of cold sweet cider, one cup of grated cocoanut, and an equal quantity of raisins. Thicken with graham flour, beat the batter well, and bake in a moderate oven.

PUMPKIN BROWN BREAD.—Equal parts of sifted pumpkin and rye and corn meal mixed with warm water, may be made into very excellent bread.

CHESTNUT PUDDING.—Boil, peel, and pound chestnuts, and rub them through a sieve. Pare and grate ripe, sub-acid apples. To one part of the chestnut add two parts of apples, a little lemon juice, and sufficient date sauce to sweeten. Bake slightly.

The above recipes were selected from "Healthful Cookery," published at this Office. Price, 25 cts., post-paid.

Recipe for Unfermented Wine.

THERE are many of our churches that would be glad to banish the intoxicating cup from their communion tables, and give their example fully on the side of total abstinence; and there are also many who would be glad to have a little pure, unintoxicating wine on hand for a sick-day beverage. For the benefit of all such, I subjoin the following recipe for making pure, unfermented wine:—

Express the juice from the grape in some kind of press. If this is not at hand, the grapes may be broken by boiling them fifteen or twenty minutes. When boiled, the seeds and skins may be removed by straining through a sieve or colander. When this is done, the juice will be found thick and muddy, with glutinous matter. This is removed by straining carefully, slowly, through a cotton or linen cloth. Now return the liquid to the boiler, and raise it to the boiling heat; put it into hot bottles or fruit cans, seal up tightly, and you have a pure, delicious article, of a rich purple color, a suitable and a divinely chosen emblem of the precious blood of Christ. It is wine—"*good wine*," like "*the wine of the cluster*," like "*the new wine*," "*bursting out in the presses*," before fermentation could take place. No sugar is necessary if the grapes are sweet. Such wine as this is manufactured in Vineland, N. J., and is being used by hundreds of churches. It is for sale at the Congregational Publishing House in Boston.

P. R. RUSSELL.

Vineland, N. J.

Lungs and Livers.—The following, clipped from the *Farmer's Journal*, may be of interest to meat eaters, and certainly will be to those who are learning a better way.

S. B. W.

"At a recent meeting of the Scottish Veterinary Association, the president, Mr. Williams, said that he had examined many lungs and livers of sheep and calves, which were studded over with small white blisters. These blisters, under the microscope, were found to contain worms in their various stages of development. The animals thus infested gave evidence of great debility. The bodies of other animals were found to contain the ova or eggs of these parasites imbedded in the flesh, and fowls which ate some of the flesh died in consequence, suffering from the presence of both worms and eggs in their livers and intestines. Prof. Whally also cited some similar facts, and remarked that the flesh of animals thus suffering would communicate the parasites to persons eating it as food, unless it should be thoroughly cooked. He also declared that a stall in which an animal had died of pleuropneumonia cannot be safely occupied by another animal within six months."

"WHAT do you think is the best size for a man?" drawled a lazy fop, who was talking to his physician. "Exercise," sternly replied the doctor.

AVOID drugs and quack medicines as you would the small-pox.

SEASONABLE HINTS!

Get Ready for Winter.

In order to be well prepared for the frigid temperature of the approaching season, a thousand things need attention which are too often neglected either entirely, or until much loss has been suffered. The farmer needs to provide houses for his cattle, and an abundance of fuel for the use of his family. Fuel is greatly injured by exposure to the weather during the long winter, being most of the time covered with snow. A wood-house is a very profitable institution, besides its convenience. Too many farmers cause their wives a great amount of unnecessary labor and perplexity by neglecting to make a proper provision for fuel, so that cooking and baking, as well as simple heating, all are done only by the troublesome aid of wet, green wood.

One of the most essential preparations for winter is the provision of suitable wearing apparel for every member of the family, from the oldest down to the youngest. All need different garments for winter than for summer. The light summer clothing should early be exchanged for that made of more substantial goods. Delaying the putting on of warm underclothing too long has given rise to many fatal cases of consumption. Warm shoes for the girls, and thick boots for the boys, and comfortable cotton-flannel under-garments for both, are what a wise mother will prepare for her children at this season of the year. Mothers sometimes seem to forget that their little daughters have "nerves" as well as themselves, and we often meet them on the streets, these bleak November days, the mother clad in furs, her limbs protected by heavy skirts at least, while her little daughter walks by her side, with limbs exposed above her knees, and protected only by thin cotton stockings. Girls must be tough, or it would seem that none of them could survive this barbarous treatment. Thousands do survive only to become chronic invalids for life. The mother who can thus expose her delicate child to dangers which she knows may be productive of life-long injury, must be heartless indeed.

Poisoned by Hats and Stockings.—Since ladies have begun to wear parti-colored hose, they should know that the color used on them is poisonous. Mr. Hart Dyke, member of the British Parliament, had adopted the fashion, and, being on an excursion from London a few weeks ago, he danced. Next day his feet swelled and the physicians were unable to discover the cause until one of them took a notion to examine the stockings he wore, which he found to be colored with aniline dye, a very poisonous substance, that had irritated the skin and raised virulous pustules. Ladies in London, Paris, and elsewhere, had been similarly affected, and not till the case of Mr. Dyke became known did the doctors even guess at the true cause of this new foot disease. But the most remarkable case of poisoning from colored wearing apparel occurred in Berlin. A gentleman bought a hat for the celebration of Pentecost Sunday, and in a few days the epidermis of his forehead became swollen, festering pimples appeared, his eyelids were swollen, and the sight of one of his eyes endangered. On examining the hat it was found that the lining was also colored, like Mr. Dyke's stockings, with an aniline dye, and the poison had the same effect upon the man's forehead as in the case of stockings and hose upon the feet of men and women. Hatters and dealers in hosiery should remember this, and have their stock of goods examined before selling them, in order to be sure that they are not dealing in secret poisons. It appears that the sanitary authorities in Europe have already taken the subject into consideration. Not many years ago, when it was ascertained that wall-paper was being colored with dyes injurious to the health, its manufacture was instantly prohibited, and but little of that kind is now to be found in the market. Hitherto it was not known that aniline colors, which are so highly esteemed for their peculiar freshness, are in their nature poisonous, but the experience of the past few months has fully proved it, and now they will probably share the fate of the unhealthy colors heretofore used on wall-paper.—*N. Y. Mercury.*

Insect Destroyers.—A correspondent of the *Scientific American* cares no more for vermin than, according to the old showman, Daniel cared for the lions. "I have not seen a bed-bug or a flea in my house," he writes, "for many years. If an army of them were to be brought in, mercury would speedily exterminate them, but I think cleanliness the best and perhaps the only preventive. The common house-fly I do not molest, believing that it more than compensates for its trouble by clearing the atmosphere of effluvia and the animalcules which always arise from the putrefaction of decaying substances during warm weather. So, also, with the birds, which are quite numerous here during the summer; instead of shooting them, or setting up scarecrows to frighten them away, I throw out

every possible inducement for them to build their nests in my fruit-trees. The birds capture a large share of the insects in the larval state, and thus the millers are prevented from depositing eggs for a future crop of worms. As to the loss of fruit by the birds, the latter are always sure to be on hand in force in the season of ripe fruit, whether they come early enough to take the worms or not. For the residue of insects which infest my vegetable garden, I find that the laboratory of the chemist furnishes materials fatal to them all, among which white hellebore and cayenne pepper are of the most utility; the bug or worm which cannot find vegetation unflavored with these articles will seek its breakfast elsewhere, and leave my garden unmolested. A few drops of carbolic acid in a pint of water will clean house-plants from lice in a very short time. If mosquitoes or other blood-suckers infest our sleeping rooms at night, we uncork a bottle of the oil of pennyroyal, and these insects leave in great haste, nor will they return so long as the air in the room is loaded with the fumes of that aromatic herb. If rats enter the cellar, a little powdered potash, thrown into their holes or mixed with meal and scattered in their runways, never fails to drive them away. Cayenne pepper will keep the buttery and storeroom free from ants and cockroaches. If a mouse makes an entrance into any part of your dwelling, saturate a rag with cayenne in solution, and stuff it into the hole, which can then be repaired with either wood or mortar. No rat or mouse will eat that rag for the purpose of opening communications with a depot of supplies."—*Boston Journal of Chemistry.*

Extinguishing Lamps.—Lamps with chimneys should not be extinguished by blowing down the chimney, as is often done, as this practice may occasion an explosion if the oil used is impure. Explosions resulting in death have been occasioned in this way. To blow out the light, blow a sharp puff *horizontally* across the top of the chimney. If this is done properly, the light will not only be extinguished, but there will be no subsequent smoking of the wick.

Detection of Adulterated Oils.—Fine lubricating oils are often grossly adulterated. To detect the fraud, fill a small bottle containing a new cork, smearing both the cork and the neck of the bottle. After pressing the cork in tightly, turn it arouud. If it squeaks badly, the oil is greatly adulterated. If it turns smoothly and silently, the oil is pure. The amount of adulteration will correspond somewhat to the loudness of the squeak made in turning the cork.

Marking Tools.—Cover the instrument with a thin film of wax by first warming it and then rubbing the wax upon it, warming again to cause the wax to spread evenly over the surface. By means of a sharp point, scratch the name or initals upon the waxed surface, and then apply nitric acid. After a few minutes, wash away the acid and wipe off the wax, and the name or design will be found nicely etched upon the tool.

To Remove Stains.—To take spots, produced by acid, from cloth, calico, or any fabric, touch with volatile sal ammonia, or spirits of hartshorn, and they will disappear. Ammonia will also remove paint and ink spots, unless made by indelible ink.

Recovery from Lightning-Stroke.—In his valuable work on "The Maintenance of Health," Dr. Fothergill has the following on resuscitation after lightning stroke: "Persons struck by lightning are not always dead when they appear to be so. There are few recoveries from this state, because no means are tried to restore the sufferer. In the tropics there are many instances of persons, struck down by lightning, recovering after a heavy thunder shower; and it would appear that cold affusion to the body has a decided action in such cases. The injured cannot be harmed by the free use of cold water, and if only an occasional recovery took place, it would be well worth the pains bestowed. The persons so injured should have cold water poured or even dashed freely over them."

Preventive of Injury from Frosts.—A London gardener says that he is enabled to prevent injury to plants which have been frosted by sprinkling them with a watering pot before sunrise. This is worth trying, at any rate.

How to Keep Lemons.—Housekeepers know how quickly lemons lose their freshness, and rot. A simple and inexpensive remedy is to place them in a jar filled with water, to be renewed every day or two. By this means the fruit can be kept fresh and sound for several weeks.

MATTHEW VAN DENBERG, of Mayfield, N. Y., was lately poisoned by using hair-dye.

SCIENTIFIC.

ittle Giants.—Prof. Leidy has observed a species of the diatom which thrive in shallow pools, knocking about with perfect ease grains of sand more than fifty times their own size. Some species of beetles will lift with their jaws a weight forty times their own.

Counting the Blood Corpuscles.—A Frenchman has contrived an instrument by means of which he is enabled to count the blood corpuscles. He finds that there are more than 4,000,000 of these little bodies in a single drop of blood. In persons suffering from consumption, cancer, or lead poisoning, the number is less than in health.

Amount of a Day's Work.—It has been determined that the average amount of work done in a day by a man is equivalent to lifting 2,000,000 lbs. one foot. Helmholtz estimated that the external work of a man is about one-fifth of the mechanical power actually contained in his food.

Guano.—Recent scientific investigations appear to establish the fact that guano is not, as has been hitherto believed, the deposits of myriads of sea birds, accumulating through ages; but is the result of an accumulation of fossil plants and animals, whose organic matter has been transformed into a nitrogeneous substance. This view is substantiated by the fact that the anchors of ships in the neighborhood of the guano islands often bring up guano from the bottom of the ocean.

Fungi.—This class of plants is one of the most interesting of all vegetable productions. It includes many thousands of species, from the mammoth horse-mushroom of the meadow to the microscopic mold formed in stale bread or moldy cheese. Two of the most remarkable features of this class of plants are, 1. The fact that, like animals—and unlike all other plants—they absorb oxygen, and give off carbon di-oxide; 2. They subsist upon organic matter, as do animals, while other plants obtain their nourishment directly from the mineral kingdom.

Some of these fungi may be eaten with impunity, and are considered delicacies, though they contain little nutriment; others are extremely poisonous. A few are used by certain tribes as narcotics.

Artificial Respiration in Asphyxia and in Snake Bite.—According to Gréhaut, carbonic acid which has entered the lungs from without may be eliminated again by means of artificial respiration without having been changed, or undergone any combustion. In cases of apparent death from asphyxia caused by charcoal vapors the employment of artificial respiration has, it is said, resulted in finally restoring the patient to life. According to Dr. Fayrer, artificial respiration is the best method of counteracting the effect of snake bites, and in his opinion it is the only method that gives the slightest promise of enabling a patient to overcome the effect of the poison. A bitten rabbit has been kept alive for several hours by artificial respiration, whereas, under the usual operation of the poison, it would have survived but a few minutes.

Amount of Force Derived by the Earth from the Sun's Heat.—An interesting computation has been made of the amount of force imparted to the earth by the sun's heat. According to the best investigations that have been made, there is received in one minute enough heat to raise the temperature of five and a half cubic miles of water one degree Centigrade. If, now, we compare this with the work done by a given amount of heat, as utilized in a steam-engine, it will be found that the heat sent to the earth in the sun's rays during the space of one minute is able to do as much work as would be done by two thousand steam-engines of one hundred horse power each, working continuously for the space of four thousand years.

What becomes of this inconceivably great amount of power is worthy of consideration; and we begin to realize the nature of the problems of the future scientists when we reflect that by far the greater part of this heat force expends itself upon the earth in actual work, only a small portion of it being radiated into space. Of course the result accomplished, such as the maintenance of the temperature of the earth, ocean, and atmosphere, the stimulating of animal and vegetable life, etc., must be the equivalent of the power retained by our globe.

Cement for Wood and Stone.—Melt and mix four parts pitch and one part wax. Add four parts of fine brick-dust or powdered

chalk. Warm before using, and apply thinly to the surfaces to be cemented.

Gilding.—By rubbing metallic surfaces with soda amalgam, and pouring on a solution of chloride of gold, gold is taken up by the amalgam; and it is only necessary to drive off the mercury by heat, to obtain a gilded surface that will bear polishing.

Literary Notices.

LONGEVITY. By John Gardner, M. D., Boston; Wm. F. Gill & Co.

This work contains much which makes it worthy of commendation. Many valuable hints respecting the means of promoting health and longevity are to be found in it. But we are sorry to see that it favors the use of beer, ale, and wines by the aged, like most similar works, especially those of English origin. This is really a serious defect, for it is this moderate tippling that originates and keeps alive the appetite for stimulating drinks, and replenishes the constantly thinning ranks of intemperates.

Dr. Gardner's position on the use of hard water is more in accordance with well-known physiological principles, as he utterly discountenances the now quite fashionable recommendation of the use of moderately hard water. Yet he is hardly consistent on this branch of the subject; for while recommending strongly the exclusive use of distilled water in one paragraph, in another he speaks approvingly of the use of mineral waters in both health and disease. We would not condemn the work on account of its few errors, for it really contains much useful and valuable information.

REPORT ON TRICHINOSIS. By Geo. Sutton, M. D., Aurora, Ind.

This little pamphlet is the result of the author's investigations of diseases produced by trichinæ. He gives the history of numerous cases of the disease known as trichinosis. The following are some of the conclusions which he draws from the facts which he presents :—

1. The number of hogs affected by this parasite vary from one in thirty to one in six, according to the locality.

2. Calling the average one diseased hog to twenty-five, we have more than 220,000 hogs, representing over 44,000,000 lbs. of pork annually sold in the markets of this country, every ounce of which is capable of fatally poisoning a human being.

3. From clinical observation, post-mortem examinations, and experiments upon animals, it is clearly established that fully nine-tenths of the disease produced by eating trichinous pork is treated under some other name, its real origin being unknown.

The author claims, upon what seem to be good grounds, that "hog cholera" is a disease quite distinct from trichinosis.

PREVENTIVE MEDICINE. By C. F. Gay, M. D., Buffalo, N. Y.

In the brief pages of this little work are presented many excellent ideas. The writer makes a very sharp thrust at those persons who swallow sugar-coated pills in accordance with the principles of homeopathy, while they are at the same time saturating their systems with tobacco poison. He also declares, very truly, that "more people are injured by intemperance in eating than by intemperance in drinking." We are hardly prepared to accept the proposition which the doctor claims the honor of having announced many years ago that disease is the *normal* condition of humanity, and health the *abnormal* condition, although the scarcity of the latter, and the prevalence of the former, would seem to favor his theory.

ON ATTITUDE AND CLIMATE in the treatment of Pulmonary Phthisis. By W. Gleitsmann, M. D., Baltimore.

The author of this valuable paper maintains that mountain air is much more beneficial to consumptives than that of warm southern climates. He claims that the effect of mountain air is to strengthen and harden the lung tissues, while a warm, moist climate enervates, and facilitates the breaking down of those tissues. His conclusions seem to be well supported by facts.

CARE OF THE SICK. Mutual Life Insurance Co. of N. Y.

The managers of life insurance companies begin to appreciate the pecuniary importance to themselves of the dissemination of sanitary knowledge among the people. This little work evidently has been prepared with this object It contains many useful hints, but, we are sorry to say, abounds with errors. It gives evidence of being the compilation of some person who was destitute of practical knowledge concerning the subjects treated, and depended wholly upon gleaning from others. It is an indiscriminate mixture of good and bad advice.

Items for the Month.

☞ A BLUE cross by this paragraph signifies that the subscription has expired, and that this number is the last that will be sent till the subscription is renewed. A renewal is earnestly solicited.

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OUR new Family Health Almanac is now ready for distribution. In view of its large circulation last year, we have this year prepared for a still larger circulation, so that all orders can be promptly filled.

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A Book for Canvassers.

WE have in preparation a book for canvassers which we think will be found to be a valuable one for general canvassing, and an efficient means of introducing hygienic principles. It is to contain the essence of health reform, which will be seasoned with a great number of "things which everybody wants to know." We shall be a little late with this work, but hope our friends will be as patient as possible.

Health Tracts for Circulation.

DURING the last year about 20,000 each of the following tracts have been scattered through the land by our agents : Dyspepsia, Principles of Health Reform, Startling Facts about Tobacco, Twenty-five Arguments for Tobacco-Using Briefly Answered, Tea and Coffee, and Pork.

We have now in preparation several others on the following subjects :—

Temperance, Ventilation, Disinfection, Disease, Drugs, Vegetarianism, and Dress Reform. Some of these have been long needed, and they will be completed as soon as possible.

Large editions will be printed, so that they can be afforded at a very slight cost. We hope by this means to encourage the distribution of hygienic literature, by which means these wholesome truths may be placed before the people.

When the whole number is completed, they will be put together in a neat package, which will constitute a concise compendium of hygienic truths.

EPIDEMIC ON TRICHINOSIS.—Another serious outbreak of trichinosis has broken out in Germany. At Dresden a superior officer, and forty sub-officers and privates, besides several citizens, are suffering from the disease, which also prevails in other large cities.

HYGIENIC HOTEL.—Dr. W. F. Ross informs us that he has recently started a hygienic hotel in Washington, D. C. He also gives treatment to those who may require it.