Democratic Matchman.

# Bellefonte, Pr., Oct. 20, 1905.

THE CASH ACCOUNT.

I cannot make the thing come out Though I have thought and thought and thought,

And tried to make a careful note Of everything I have bought. The more I think and think and think, The more in vain my brain ferments. Confound the pesky cash account ! Where did I spend that thirty cents ?

Ten cents for car fares-that's all right ; Three dollars for a new straw hat : For luncheon, fifty ; shoes shine, five-Oh, hang it ! Yes, I've got all that ! Considering the scant supply, The treasury has too many vents. It's outgo, outgo all the time-Where did I spend that thirty cents?

Cigars, four-fifty, grape juice ten. (I think it had some toam on top) ; Bleachers and peanuts, thirty-five, And ten cents more for ginger pop. But still that haunting deficit. My deep perplexity augments. What was it for ?--Oh, Well, here goes "For foreign missions, thirty-cents !" -Louisville Courier Journal

ECONOMY IN FOOD.

BY RUSSELL H. CHITTENDEN Director of the Sheffield Scientific School of Yale University Author of "Physiological Econo-my in Nutrition."

If thou well observe

The rule of not too much, by temp'ance taught, In what thou eat'st and drink'st, seeking fro thence Due nourishment, nor gluttonous delight, Till many years over thy head return: So may'st thou live, till ripe fruit drop

Into thy Mother's lap, or be with ease Gathered, not harshly pluck'd, for death mature Paradise Lost.

Milton was not alone in his conception of the value to mankind of temperance in diet. Many of the old time philosophers and thinkers were plainly of the same opin-ion. Sir William Temple, John Locke; Lord Bacon, and many others, in their writings all clearly expressed belief in the efficacy of a simple and regular diet, "limited by every man's experience of his own easy digestion, and thereby proportioning, as near as well can be, the daily repairs of our wasting bodies." "Certainly," says Lord Bacon, "diet well ordered bears the greatest part in the prolongation of life."

These early advocates of temperance in diet were not scientific men trained in the habits of exact analysis; most of them lived in an age when nutritive conditions were measured simply by strength of arms and keenness of intellect as indicated by the life and prosperity of the nation. Thev knew little of nitrogen requirements, while the potential value of the food-stuffs was to them an unknown quantity. Yet they knew, as well as we of the present generation, that "the daily repairs of our wasting bodies" were to be accomplished by the taking of food, recognizing, however, at the same time the possible injurious effects upon the race of inordinate or intemperate and habit as contrasted with reason in the dietetic customs of their generation.

HABIT AND CRAVING

Cornaro, the Venetian, who wrote his last treatise, "The Birth and Death of Man,"

told that Congress has provided sums rang-ing from ten thousand to twenty thousand dollars a year from 1894 to 1905, making a yields 4100 small calories, or 4.1 large cal-

Proteid or albuminous foods, however, total of \$182,500, for the study of human are chiefly of value because of the need of nutrition in this country. The same re-port states that "the total number of per-sons—men, women, and children—includ-ed in all these studies is not far from 15,the body for nitrogen in this particular form to make r ood the loss of tissue mater-ial. Further, no other form of nitrogen than proteid can supply this need; hence, as previously stated, the proteid foods are es-sential foods, without which the body can-not exist. They are of value, however, for 000." As a result of these dietary studies -i. e., studies of the actual food consumption of people of different classes in differ-ent parts of the United States, --certain ditheir nitrogen and not for their potential etary standards have been suggested. These energy or fuel value, the latter being more standards, covering the quantities of food per day, "are intended to show the actual advantageously supplied by fats and carbohydrates. Stress, however, should be laid upon the fact that proteid substances when decomposed within the body yield a large

floating about through the system, may exeroise more or less physiological action up on the individual organs and tissues. This action is undoubtedly at times injurious to the well-being of the individual, as seen, for example, in the effects of undue amounts of uric acid in gout, rhenmatism, etc., to say nothing of more serious results. Further, it is easy to see, in view of these facts, that an excess of proteid food necessarily imposes more strain upon certain organs of the body, as the liver and kidneys, than an excess of carbohydrate or fat, which foods are capable of being burned up directly to simple gaseous products, such as carbonic acid and water, and which are more quickly and easily eliminated from the body.

#### AMOUNTS OF FOOD REQUIRED BY STANDARD DIETARIES

Accepting the daily dietary standards previously enumerated, and which are based upon observations as to what people are accustomed to consume, it is plain that the average man doing from light to moderate muscular work must take each day approximately 116 grams of proteid matter (18 grams of nitrogen), with sufficient fat and carbohydrate to yield a total value of 3050 large calories. The usual proportion of carbohydrate (mostle storage to b) of carbohydrate (mostly starchy foods) is about 500 grams to 50 60 grams of fat. In

other words, the average man needs, according to the above hypothesis, approximately 120 grams of proteid, 500 grams of carbo-hydrate, and 60 grams of fat for his daily ration. In order to obtain these amounts of nutriments he would require, each day, three fourths of a pound of ordinary roast beef, one pound of boiled potato, one half pound of white bread, and one fourth of a pound of butter. Naturally, much greater variety of food might be adopted with the same nutritive value as the above; but these figures will suffice to give some impression of the quantities of ordinary cooked foodstuffs required to yield the nitrogen and the total fuel value called for by the above standard dietary.

A more elaborate diet, one in large meas ares free from meat and having essentially the same content of nitrogen, and with a total fuel value of approximately 3000 cal-ories, would be as follows: fried hominy, six ounces; syrup, three ounces; baked po tato, eight ounces; butter, one and one half ounces; baked spaghetti, ten ounces; mashed potato, ten ounces; boiled turnip, six ounces; bread, two ounces; apple-sauce, eight ounces; apple-tapioca pudding, twelve ounces; fried sweet potato, eight ounces; fried bacon, one ounce; fruit jam, four ounces; coffee, one and one half pints; and tea, three fourths of a pint. Such a diet, owing to its vegetable nature and lack of concentration, is naturally quite volumi-nous. A greater concentration of diet is easily obtained by replacement of a portion of the vegetable matter by meet; and this the ordinary man, with his highly developthe true physiological requirement is no doubt desirable as tending to prevent any danger of under-nutrition, but any great average fuel of 1600 calories. A second excess must of necessity be detrimental. The ideal diet is that which suffices to professor, but with a body-weight of about meet all the wants of the body-i.e., the 160 pounds, maintained equilibrium, etc., maintenance of body-weight, nitrogen qui for nearly nine months on a daily intake of librium, health, strength, vigor, and en-durance—and, in the period of adolescence, fuel value of 2400 calories. This latter to supply material for the growth and development of the tissues of the body. Anything beyond this quantity is just so much added to his greater body-weight, called of an excess which must inevitably do harm for a somewhat larger fuel value in his if continued indefinitely, and detract in daily diet. some measure at least from that high degree of efficiency which every enlightened

subject, however, likewise a university

fuel value of 2400 calories. This latter

person was much more active physically

than the first subject mentioned, which fact

(Continued next week.)

People to Blame for Corruption

Governor of Missouri Makes Reform Speech in

Philadelphia, Oct. 17. - The great

battle between the local Republican

organization and the City Party, the

municipal reform organization re-

cently formed here, was enlivened by

the visit of Governor Joseph Folk, of

Missouri, who came to lend his voice

in the interest of good government.

The Missouri governor addressed a

large and enthusiastic audience in the

Academy of Music. He spoke under

the auspices of the City Club, which

claims no connection with the City

The crowd that attempted to gain

entrance to the Academy was so great

that the doors were closed before the

meeting began. Several thousand per-

sons who could not get in were ad-

dressed by City Party speakers. Gov-

"The most conspicuous fact of mu-

nicipal governments in the United

States today is that they are govern-

ments by the few and not by the peo-

ple. There is more aggressive rotten-

ness and less aggressive patriotism in

our large cities than anywhere else.

If the patriotism can be made as ag-

gressive as the rottenness, the prob-

lem of good government would be

solved by the people taking the gov-

ernment into their own hands. If cor-

ruption exists in Philadelphia, the peo-

ple are to blame; if corruption is to

be eradicated the people alone can

do it. The fight you are making here

is a battle which will be felt by every

town, city and state in the land. The

benefit of a victory for good govern-

ment will be universal, and the evil

efforts of a defeat will demoralize

those who believe in good government

by the people. The average man does

"The strength of the lawless ele-

ment is great, but it is nothing when

it comes in contact with a public con-

science thoroughly aroused. Philadel-

phia at last seems to be awakening,

and though the gang has been strong

it is being shattered beneath the shafts

of public opinion under the leadership

of Mayor Weaver. The people can

overthrow civic evils whenever they

want to and get just as good govern-

ment as they deserve or as bad as they

owes his city, state and his country.

ernor Folk said in part:

Philadelphia.

Party.

Impressed with the importance of this problem from a physiological, economical, and sociological standpoint, the writer began, some two years ago, a careful study of the true needs of the body for food, with a view to ascertaining how far the so-called dietary standards of civilized man are in accord with physiological requirements. The investigation was made upon a large number of men, representing different types, ages, and nationalities, under differ-ent degrees of mental and physical activity, with a view to having the inquiry as broad as possible. Further, the study was con-tinued over a long period of time, in order to afford ample opportunity for the detec-tion of possible changes, favorable or un-favorable, that might be slow in developing.

degree of accuracy the true requirements of the body for food? As a preliminary to answering this question, it must be remem-bered that the living body is constantly undergoing change, that it is the seat of in-cessant chemical decomposition, varying in extent with the degree of bodily activity, the temperature of the surrounding air, etc. gans of the body-the proteid, fat, and carbohydrate-is constantly undergoing oxidation with liberation of energy in the form of beat, by which the body is kept warm, and in the form of muscular work, both voluntary and involuntary-i.e., the voluntary movements of the limbs as in walking, and the involuntary movements of the heart, respiratory muscles, etc. To make good this loss of tissue material, food is To make going on in the body, are the gaseous carkidneys and in the smaller measure through the bowels. not appreciate the solemn duty he

"The moral revolution that is now eening over revival of the rule of the people. Four years ago the laws against bribery in all of the states were considered as practically dead letters. Not because the offense was uncommon, but because it was uncommon for officials to be prosecuted for it. Here was a crime worse than any other, for their offense violated the law, while bribery strikes at the foundation of all laws. Yet the law denouncing it was not enforced; bribery became the usual and expected thing all over the land: corrupt men feasted and fattened at public expense, laws became merchandise on the market, and all this time the public conscience was asleep. When the revelation came the people saw how they had been plundered, they saw the offense in all its enormity, and from one end of the land to the other there was a civic awakening. "I have spoken of corruption, bribery and grafting, using the terms as they are commonly used synony mously. While the effect on the public may be as injurious from grafting as from boodling there is a distinction between them. The boodler sells his vote and prostitutes his trust for bribe easonable amount of physical activity, are money contrary to law, but the grafter is not always a boodler. The remedy for corruption, bribery and grafting of every kind is to enforce the law. If the system is working an illegal game instead of trying to beat the game, the better way is to stop the game."

# THE WAR OFFICIALLY OVER

Russia and Japan Notified Treaty Has Been Signed.

St. Petersburg, Oct. 16. - Spencer Eddy, the American charge d'affaires, yesterday afternoon officially informed the foreign office that the emperor of Japan ratified the Russo-Japanese peace treaty Saturday.

The French minister at Tokio at the same time informed the Japanese government that Emperor Nicholas had sogned the treaty. The ratifications were exchanged at Washington.

Japan Evacuating Manchuria. Tokio, Oct. 16.-It is believed that the government has sent an order to Manchurian headquarters to commence the evacuation of Japanese troops today. It is expected that the Japanese will effect a complete withdrawal of their troops in six months.

CAPTAIN TAGGART WINS Army Officer Granted Divorce and Cus-

tody of Children.

Wooster, O., Oct. 14 .- Judge Eason, who heard the divorce case of Captain Elmore F. Taggart against his wife. has rendered his decision. The court grants Captain Taggart the divorce and the custody of the two children, Culver, aged 11, and Charles, aged 7. Although Mrs. Taggart is denied possession of the children, she will be permitted to see them. Captain Taggart was in court during the rendering of the decision. Mrs. Taggart is ill and was not present. The court room was crowded with an eagerly expectant throng of people. Judge Eason, before giving his decision, reviewed the petitions, cross petitions, answers and affidavits. In the course of his statement, Judge Eason said that the testimony was deeply touching. The charge of drunkenness against Captain Taggart, the court said, was not sustained.

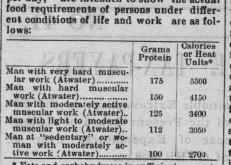
COAL TAR DYE IN BUTTER

Chemist Wiley Makes Report on League Island Case.

Washington, Oct. 17. - That samples of butter submitted as portions of a large quantity supplied to the League Island navy yard at Philadelphia, prove to be colored with coal tar dye is the substance of a report which Chief Chemist Wiley, of the department of agriculture, will submit to Secretary Wilson. Specimens were recently taken for analysis from the League Island hospitals, kitchens and barracks, from the United States receiving ship Lancaster and other navy craft by representatives of the Pennsylvania dairy and food commission, who are said to have obtained similar samples from the men who sold the product. Secretary Wilson will refer the report to President Roosevelt, who will call the attention of the department of justice to the matter.

### MARKLE MINERS STRIKE

Men Demand Reinstatement of Dis-Hazleton, Pa., Oct. 17 .- All efforts to adjust the differences between the employes of G. B. Markle & Co., of Jeddo, have failed, and one of the most stubborn strikes since the big strike of 1902 was inaugurated, as the entire operations of this firm were tied up. throwing idle between 2500 and 3000 men and boys. The miners' local union of Jeddo met, and while opinion was divided on the question of strike. the motion finally prevailed, and unless some wiser counsel prevails the struggle will be a long and bitter one, as Superintendent Smith, of the firm. asserts that under no consideration will the discharged driver, John Kardisko, be reinstated. Kardisko's reinstatement was one of the points in dispute.



100 2700 \* Fats and carbohydrates in sufficient amounts to furnish, together with the protein, the indicat-ed amount of energy. These standards are much the same as

those adopted by most other countries in the civilized world, though perhaps calling for somewhat higher values; but even perfect agreement on standards devised this method of study does not carry conviction that the standards in question repviotion that the standards in question rep-resent in any degree the daily needs of the body for food. Custom and habit, the pleasures of eating, the so-called "cravings of the stomach," the too prevalent belief that by hearty eating lies the road to health and strength, all tend to lead people on to greater and greater freedom in the taking of food. Why, therefore, the mere fact that people are in the habit of eating certain quantities of food in the twenty-four hours should be taken as a basis on which to found dietary standards is difficult to explain, especially as the example furnished by many persons in different parts of the world and in different periods of time has indicated the possibility of maintaining health, strength, and vigor (with even im-provement of the bodily condition) on amounts of food absurdly low as compared with the quantities called for by the so-called standard distance called standard dietaries.

NATURE AND COMPOSITION OF FOODS All the food-stuffs made use of by man

are composed essentially of four distinct groups or classes, viz.: (1) Proteid or albuminous foods. These

occur in both the animal and the vegetable kingdom, and are specially conspicuous in meats, fish, eggs, milk, flour or bread, ce-reals, peas, beans, etc. They are substances characterized by containing nitrogen (when pure and dry they contain about 16 per cent.), and hence are frequently termed nitrogenous foods. Further, since the foods of this class are absolutely essential to life, they are often spoken of as the "essential foods." In lean meats and eggs the proteid material, aside from the water present, com-poses the great bulk of the food-stuffs; in wheat flour, on the other hand, there is present about 13.5 per cent. of proteid, with an admixture of about 72 per cent. of carbohydrate, mostly starch; in fresh green peas, aside from the water, there is present quantities of food. They plainly depre-cated the dominating influence of instinct 7 per cent. of carbohydrate. With the exception of meats and eggs, most proteid containing foodstuffs have a large admixture of carbohydrate material, mostly starch.

(2) Carbonydrates. These are preemi-nently vegetable products, and as they are entirely free from nitrogen, they are term-ed non-nitrogenous foods. They are rep-resented mainly by starches and energy and energy and the similar the second of the similar terms of the similar terms of the second unlike the proteid foods, are frequently used as pure products separated more or less completely from the admixtures with and variety of the ingredients, it will be which they occur in nature, i.e., as canesugar, beet-sugar, etc., and as corn-starch, arrowroot-starch, etc., Many natural vegetable food-stuffs, however, eliminating the water, are composed largely of starch, as rice, with 79 per cent. of starch and only 8 per cent. of proteid; raw potatoes, with 18.5 per cent. of starch and 2.2 per cent. of the ordinary person proteid Raw potatoes contain about 78 per cent. of water.) (3) Fats. These foods, like the carbohydrates, are free from nitrogen and occur in both the animal and the vegetable king-They are widely distributed, being dom. mixed in varying proportions in nearly all natural food-stuffs, but are especially conspicnous in fat meats, bacon, cream, butter, vegetables, oils, etc. Compared with carbohydrates, they contain a relatively large percentage of carbon and hence are capable of yielding per gram a relatively larger amount of heat by oxidation. (4) Inorganic salts or mineral matter, the bulk of which passes through the body more or less nochanged. The nutritive value of the food-stuffs is expressed in terms of nitrogen or proteid, and in fuel value (calories), or heat-producing power, i.e., the amount of heat set free in their combustion. A calorie is the amount of heat required to raise one gram of water one degree centigrade, i.e., from 0° to 1°. This is a gram degree unit of heat, or small calorie. A large calorie is the amount of heat required to raise one kilogram of water one degree centigrade, i.e., a kilogram-degree unit of heat. It is obvious from these statements that a large calorie is the equivalent of one thousand small calories. The calorific value of a carbohydrate or fat is determined by direct experiment, i.e. by burning a weighed amount of the subtances in oxygen, in an air-tight bomb, and measuring, under proper precautions, the amount of heat liberated. By such a method it is learned that 1 gram of carbohydrate will yield 4,100 small calories or 4.1 large calories, while 1 gram of fat will yield 9,300 small calories or 9.3 large calories. These substances, when oxidized in the bomb-calorimeter, are completely burned to carbonic acid and water. The same thing happens in the body, and the heat liberated is the same in amount as when the oxidation is carried on in the labora-With proteid or albuminous substances when oxidized in the bomb-calorimeter, are completely burned to carbonic acid and water. The same thing happens in the body, and the heat liberated is the same as in the laboratory. With proteid or albuminous substances the case is somewhat different. When proteid foods are taken into the hody they are transformed and mainly oxidized to carbonic acid, water, and urea. The latter substance is then eliminated from the body in the excretion from the kidneys. When burned in a calorimeter, on the other hand, proteids are completely oxidized to carbon In the United States, a systematic and cooperative study of the nutrition of man has been conducted by the Department of Agriculture, through the Office of Experi-ment Stations and man interest of the body, the urea being a substance which Memory shifts and many interesting and is composed of carbon, hydrogen, nitrogen, valuable data have been obtained and re-coorded. In a recent pamphlet issued by small store of energy which is lost to the Messers. Langworthy and Milner we are body. In the body, 1 gram of proteid

man desires to attain. number of nitrogenous compounds, ante-cedents of the final product urea, which,

How, now, are we to ascertain with any The material composing the tissues and ornecessary, and in amounts sufficient to counterbalance the loss incidental to the daily activities. If this loss is not made good by the daily diet, there is a gradual diminution of body weight, owing to the using up of the store of reserve material and of the organized structure of the body itself. Further, it is to be remembered that the final decomposition or oxidation products, which result from the changes bonic acid excreted through the lungs, water excreted through the lungs, skin, and kidneys, and nitrogen in various forms, but especially as urea, elimitated through the

It follows from these statements that the amounts of nitrogen, carbonic acid, and water passed off from the body are a measure of the extent of decomposition taking place within the system. For example, if there is eliminated 26 grams of nitrogen in the day's excretion from the kidneys, that means the breaking down in the body of 100 grams of proteid material, since the nitrogen thrown out from the kidneys can come only from the decomposition of proteid substance. This obviously implies the necessity for 100 grams of proteid food to make good the loss. (Pure, dry proteid material contains on an average 16 per cent. of nitrogen.) If, now, a man is kept permit it to become. under daily observation, comparing each

the age of ninety-five, says in one of his discourses, "It is certain that habit in man eventually becomes second nature, com-pelling him to practice that to which he has become accustomed, regardless of whether such a thing be beneficial or injurious to him. Moreover, we see in many instances -and no one can call this into questionthat the force of habit will triumph even ovel reason."

Again, the great philosopher John Locke, in his celebrated essay on education, says: "I do not think that all People's appetites are alike, . . . but this I think, that many are made Gourmands and Gluttons by Custom, that were not so by Nature: and I see in some Countries, Men as lusty and strong, that eat but two Meals a Day, as others that have set their Stomachs by a constant Usage, like Larmus, to call on them for four or five."

It is interesting to observe from the foregoing quotations how clearly these writers recognized the effect of custom and usage upon dietetic habits; and we have in this view a partial explanation at least of the origin of the dietetic rules and standards which exist even in this present day of scientific method. It is well to remember, however, that the so called cravings of appetite are purely the result of habit. A habit once acquired and persistently followed soon has us in its grasp, and then any deviation therefrom temporarily disturbs our equi librium. The system makes complaint and we experience a craving, it may be, for that to which the body has become accustomed, even though this something be, in the long run, distinctly injurious to the welfare of the body. There has thus come about a sentiment that the cravings of the appetite for food are to be fully satisfied, that this is merely obedience to nature's laws. This idea, however, is fundamentally wrong. Any one with a little persistence can change his or her habits of life, change the whole order of cravings, thus demonstrating that the latter are purely artificial, and that they have no necessary connection with the welfare or needs of the body. In other words, dietetic requirements are to be founded not upon so-called instinct and craving, but upon reason and intelligence. DIETETIC STANDARDS

In barmony with what has been stated, In narmony with what has been stated, dietetic standards have been set up by var-ious authorities, in many lands, and for different classes of people; but they are based primarily upon observations as to what people, living under different conditions of life, are accustomed to consume. Such data are interesting and instructive tory. as showing the dietetic habits of mankind, but they are of little value as indicating the real needs of the body for food. Bodyweight, health, strength, mental and physical vigor, endurance, and the ordinary redisease, must all be maintained sistance through the agency of the food consumed. There must be enough food, and the proper proportion of the different kinds of food, to sure a condition of physiological and body equilibrium; but anything beyond the quantities requisite to attain this conon would seem to be quite unnecessary, diti and, indeed, may prove distinctly injurious

In the United States, a systematic and

render possible great variety in matters of diet; but whatever the character of the found that the nitrogen content and fuel value of the daily food of mankind will in general correspond in large measure to the dietary staddards usually adopted throughout the civilized world.

The writer's experience, indeed, leads to consume far more food than even the standards calls for. This is well illustrated by some recent observations made in the writer's laboratory while studying the dietetic habits of a group of United States soldiers whe, while living on the ordinary army lation, were allowed reasonable freedom as to the quantity of food consumed. Thus on one day the following dietary was made use of:

Breakfast: Beefsteak, nine ounces: fried potatoes, nine ounces; fried onion, one ounce; thick meat gravy, two ounces; bread six ounces; coffee, one and one half pints, with one half onnce of sugar.

Dinner: Roast beef, seven ounces; boiled potatoes, fourteen ounces; boiled onions, two ounces; bread, nine ounces; coffee, one quart, with one ounce of sugar

Supper: Corned beef, eight ounces boiled potatoes, seven onnces; boiled onions, one ounce; bread, six ounces; fruit jelly, four ounces; coffee, one pint, with one ounce of sugar.

For a period of two weeks each of the soldiers in this detail consumed every day an amount of food approximately equal in nutritive value to the above, though natur-ally there were variations from day to day in the character of the food taken. Yet these men were not doing any unusual amount of muscular work; indeed, the amount of work they were called upon to perform was considerably less than what they were accustomed to do in the ordinary performance of their duties as soldiers in the regular army.

Naturally, variations in the degree of muscular activity-i.e., the amount of muscular work to be performed-will call for variations in the amount of food to be taken if the body is to be maintained in equilibrium, but there is no justifiable reason for such excessive quantities of foodquantities far beyond the amounts indicat-ed by the so-called dietary standards.

Another illustration of this common tendency toward excessive eating, especially on the part of persons who are engaged in vigorous muscular work, was seen by the writer in studying the dietetio habits of a group of university athletes who were in a high state of training for their competitive contests. It was found that these men, under the mistaken belief that their strength was to be maintained and increased by a hearty meat diet, were in the babit of tak ing each day of meat and other proteid foods at least fifty per cent. more than is called for by the existing dietary standards,-aud this in addition to an amount of non-nitrogenous food sufficient to yield far more than the fuel value implied as necessary for men of their weight and activity. THE TRUE NEEDS OF THE BODY FOR FOOD.

Do the real needs of the body demand such quantities of food each day as the ordinary dietary standards call for, or as man from his acquired habits has been me accustomed to? A slight excess of food beyond

day the composition of the food taken with the composition of the varions excretions, noting at the same time the body weight. physical strength, and reaction time of the nervous process, etc., it is possible to as certain with accuracy the influence of different qualities and quantities of food, with reference both to the maintenance of strength and vigor, and to that of bodyweight and nitrogen equilibrium. THE MENTAL WORKER.

Professional men, whose work is mainly mental rather than physical, would not seemingly require as much food for the maintenance of a high degree of physical strength and mental vigor as the purely physical worker. In order to test this ques tion and at the same time to ascertain what the real demands of the body for food are in the case of the mental worker, six men, professors and instructors in the university were selected, upon whom the effect of smaller quantities of food could be studied. The men chosen ranged from twenty-five to forty-seven years of age. They were all men of good physique and good health, and varied in body-weight from 146 to 170 lbs. These men were under daily observations for periods of from six months to two years. The results of the experiments with these subjects may be summed up as tollows: Professional men, whose daily work is primarily of a mental character rather than physical, though by no means excluding a quite able to maintain their bodies in a state of nitrogen equilibrium-i.e., to balance the loss of nitrogen from the body by nitrogenous food-through an intake of fifty grams of proteid per day, and with an additional amount of carbohydrate and fat sufficient to yield a total fuel value of about 2000 calories per day. This was accomplished by several persons for periods rang ing from five to nine months, with mainte

nance of a constant body-weight (after the initial loss of weight due to the restriction in diet), and with continuance of mental and physical vigor, etc. This means that all the apparent needs of the body, with men of this class, can be met by at least one half the amount of proteid food called for by the existing dietary standards, and by approximately two thirds of the calorific power generally considered as necessary. This is surely a physiological economy worthy of some consideration. We are informed that man with light to moderate muscular work requires 112 grams of proteid food per day, with a total fuel value of 3050 calories, while a sedentary person needs 100 grams of proteid and 2700 calories daily. As these standards are based upon the observations made on 15,000 persons, we are justified in assuming that peo-

ple or inarily consume at least this quan-tity of food. But the subjects of our experiment, men leading very active lives, were quite able to maintain unimpaired standards adopted as necessary for bealth and strength.

In fact, the statement made above is quite conservative, as the writer has no desire to over estimate the degree of economy it is possible and profitable for the mental worker to practise in his daily dietary. To give an illustration of the actual economy practised by some of the subjects of our ex-

person-a university professor, 47 years of stant body-weight and general physiolog-

# Three Killed On Railroad.

Harrisburg, Pa., Oct. 16 .- Within a few hours three men met death on railroads in or near this city. Mark Coryell, a Pennsylvania railroad yard brakeman, whose family reside in Sunbury, caught his foot in a guard rail at the Union Depot, and a locomotive struck and killed him before he could escape from its path. The body of a man, whose name is believed to be Harry Kroh, residence unknown, was found on the Philadelphia & Reading railway near Derry Church, this county. Pennsylvania railroad trackwalkers found the mangled remains of an unknown man in Steelton.

# Pennsy Orders 500 Locomotives.

Philadelphia, Oct. 17. - The Pennsylvania Railroad company announced that it has placed orders for 500 locomotives and will shortly let contracts their mental and physical vigor, and with every evidence of gain in their general health, on quantities of food far helow the by a locomotive company of this city and the other half will be constructed at the Pennsylvania railroad shops at Altoona.

#### Struck Monster Gas Well.

Parkersburg, W. Va., Oct. 17 .- The Philadelphia Gas company, operating in Lewis county, has struck a monperiments, mention may be made of one ster gas well. The gas is beyond all age, weighing now 127 pounds-who for a five miles. Every effort to control the gas has so far failed.

#### DEFENDED HIS MOTHER

Son Kills Father, Who Was About to Attack Her With a Knife.

Trenton, N. J., Oct. 17.-William T. Bevins, Jr., aged 23 years, in defense of his mother shot and killed his father in a houseboat on the Delaware river. The father and mother had not been living together lately, having been obliged to give up housekeeping because of the father's drinking habits. The father visited the son's houseboat, where the mother was stopping. The father had a butcher knife with him and according to the statement made by the son was about to attack Mrs. Bevins when the young man rushed out and fired his revolver. The father fell and was at once taken ashore by the son. The father died in an ambulance while being taken to a hospital. The son was arrested.

Confessed to Save Another. New York, Oct. 14.-Mary E. Golding, cashier for the Larkin Soap company, confessed in police court that she had embezzled at least \$2000 from her employers within four years and had made use of it to support and care for her father, mother and invalid sister in Buffalo. She was sent to prison in default of bail. The young woman was unsuspected even by her employers when, to save another employe upon whom suspicion of her peculations had fallen, she voluntarily went to her employer with the same confession which she made in court.

# Murdered By Unknown Man.

Tamaqua, Pa., Oct. 16.-At Coaldale. near here, Michael Starrto, a miner, was stabbed to death by an unknown man. The chief of police and a posse are searching the mountains for the slayer. The mine workers are aboused and it is feared that if the murderer is captured he will be roughly handled.

# Earthquake In Cuba.

Santiago, Cuba, Oct. 16.-Another earthquake shock was felt here Sunday afternoon. It was stronger than that of Friday or Saturday.