

## TO PREVENT RAILWAY ACCIDENTS.

Speaking of the Des Jardins accident which occurred in 1857, a writer in the last Atlantic Monthly says.—It appears to have been immediately caused by the derailment of a loosmediately caused by the deraument of a 1000-motive, however occasioned, just as it was en-tering on a swing draw-bridge. Thrown from the tracks, there was nothing in the fooring to prevent the derailed domestive from deflectto prevent the derailed locomotive from deflecting from its course until it toppled over the
ends of the ties, nor were the ties and flooring
apparently sufficiently strong to sustain it
even while it held to its course. Under such
circumstances the derailment of a locomotive
upon any bridge can mean only destruction;
it meant it then, it means it now; and yet our
it meant it then, it means it now; and yet our income any range out mean only destruction; it meant it then, it means it now; and yet our country is to day full of bridges constructed in an exactly similar way. A very simple and inexpensive appliance would make recidents from this cause, if not impossible, at least highly improbable. It is only necessary to ingary improbable. It is only necessary to make the ties and flooring of all bridges between the tracks and for three feet on either side of them sufficiently strong to sustain the whole weight of a train off the track and in motion, while a third will as the track and in motion, while a third rail, or strong trues of wood, securely fastened, should be laid down midway bets en the rails throughout the enwhich is a property of the bridge and its approaches. With this arrangement, as the flanges of the whoels are on the inside, it must follow that in case of derailment and a divergence to one side or the other of the bridge, the inner side of the flange will come against the central rail or trues just so soon as the divergence amounts to half the space between amounts to half the space between th of the bridge and its approaches rail or truss just so soon as one covergence amounts to half the space between the rails, which in the ordinary gauge is two fest and ten inches. The wheels must then glide along this guard, holding the train from any further divergence from its course, mail it can be cheeled. Meanwhile, as the tree and flooring extend for the space of three feet outside of the track, a sufficient support is furnished by them for the other wheels. A legislistic enactured compelling the construction of all bridges in this way, coupled with additional provisions for the interiocking of draws with their signals in the cases of bridges across navigable waters, would be open to the objection that laws against dangers of acctadent by rail have almost invariably proved inselective wheether was the provision. effective when they were not the probably and all the distributions and the distribution of the distributi der disasters like those at Jardina terrors of the past.

PERH AND PERALTY OF SPECIMENT LABOR. PERH AND PERMIT OF STULENT LABOR.

Do you think that what are called the lower classes, labor only? There as no greater misches then no in surross. On the contrary, it cases, more only; take then so to suppose. On the contrary, it is more true to say that, in proportion as you mount higher and higher in the scale of so niety, the more you will find that individual networks their labor the y, the more saxiety attends their labor, the or, the more saxiety attends their labor, the here they the command of their own time. labor, the more automated of their own time-less have they the command of their own time-they may have higher rewards, they may not be convexmed by such immediate pressure as to food and raissent but I repeat it, they labor, or they have labored, more severely, and tator, or tasy have lattered, more severely, and they have been subject to more severe checks and disappointments. Who do you think tolk most severely, the clerk in a merchant's resunting-house or the merchant himself? Who has the most time for rest and repose? Who has the heast of that navisty of heart Who has the most time for rest and repose? Who has the least of that anxiety of heart which forbide him to rest, indeed, when he lies down at night? Depend on it, that often and often when the clark elseps soundly, and wakes lightly and refrashed at morn, his master has been wearing out the hours of the night in complicated accounts or toileous correspondence. One naturally turns to what one knows by experience there is no profession so much extried, or I may admit, in some sensos, so well rewarded as my ewa, yet look sion so much envised, or I may admit, in some remon, so well rewarded as my own, yet look at enccessful lawyers, how many full rectimes to the toil and anxiety they undergo, with broken health and shattered constitutions, how many retire from the field, while not a few perish in the prime of membood. It is a common observation that Chief Justices of my now Count are always were sent hefore. common observation that Chief Justices of my even Court are always worn out before their times by the continued labors of their office. It was only a short time ago that in a conversation I had with an officer of the House of Lords, he said to mo, "I have seen now four Lord Chansellers on the Woolsack, and watched the effects of office on their health—every one in turn has felt them—the counter-

too often contemplate our lack of courage or too often contemplate our lack of courage or resolution, we shall become all the more cowardly and vacillating. Perhaps for all a good rule would be, to be careful not to dwell too constantly upon one subject, lest we become as unfortunate as the man who thought so long on the advantages of an erest carriage that at last he firmly believed that stooping caused all the ills that afflict our world, or that schoolmaster who thought all penmanship was absolutely sinful unless the writer worked from his elbows instead of from wrist or finger joints. How many last summer were or finger joints. How many last summer seized with the symptoms of hydronic or finger joints. How many last summer were seized with the symptoms of hydrophobia simply from thinking constantly of the risk they ran of being bitten by a mad dog. We have been acquainted with a lady who having left a room with a lighted candle in her hand, could never resist the temptation of returning at least once in the dark less ahe had dropped a spark on the floor. And how many there are who feel nervous upon entering their bedroom at night, fearing they may intheir bedroom at night, fearing they may in-advertently come upon a latent burglar. The forms in which such a painful incubus may grow upon one are countless, and gain hold upon us almost with the rapidity and ferocity upon us almost with the rapidity and revolvy of a cuttle-fish seizing its victim with its ten-tacula. It should be guarded against. It may move upon us now only like a train of loaded cars slipping over the top of a down-grade at the rate of a yard a minute, but very grade at the rate of a yard a minute, but very soon they will be, unless checked, rushing at sixty miles an hour.—Phrenological Journal.

Summer. - Whoever has been privileged to ear Professor Youmans' delightful lecture on hear Profesor Youmans' delightful lecture on the chemistry of the sunbeam, cannot have forgotten his computation of the run's great mechanical and chemical power. And any housekeeper who has brought her pale, droop-ing plants from the cellar after their winter's retirement, and has watched them gradually straighten themselves up, and deepen and brighten their color and sond out new growths, must have been impressed ansew with the sun's wonderfully stimulating power. We cannot doubt that human beings are as succeptible as plantes are to the kindly influence of smahine. How the little children thrive in it, and would glidly throwsway hats and of smahine. How the little children thrive in it, and would gledly throwaway hats and bounets that rob them of a share of it, and we know of one motier who found her tmy daughter indulging in a sun-bath, not, of course, because she thought it would be good for her, but from abeer pity for her "petr little feet and legs and body that never had any smahine." A day of hard work in the school-room or the atomore. Michael harms in stred. room or the store or hichen leaves we tired, and perhaps discouraged abon. our work, and with the feeling files it is a hard, thenkless was the feeling files it is a hard, thankless would without mark, let us to be a word, a sterile may shine fall upon us, and in duo time his may shine fall upon us, and our own place in it the best of all. Happy the woman and happy her household whose carpets and compension do not keep her in the shadow of a false sconomy or a false pride, but whose windows and face and soul are wide open to the sun.—Northampton Jeursel.

The FANT RESERT RESERT DELUX UX.—For farmers

THE EARLY RISING DELCE DX .- FOR ISSE THE EARLY RIBINO DELIK UK.—For farmers and those who live in localities where people can retire at eight or mise o'clork in the evening, the old notion about early rising is still appropriate. But he who is kept up till ten or sizven or twelve o'clock, and then rises at five or six, because of the teachings of some old ditty about "early to rise," is committing a sin against God and his own soul. There is not one wan in ten thousand who can afford sin against God and his own soul. There is not one man in ten thousand who can afford to do without seven or eight hours' sleep. All the stiff written about great men who slept only three or four hours a night is apportyphal and a lie. They have been put upon unch small allowance considually, and prospered; but no man ever yet kept healthy in body and mind for a number of years with less than seven hours' sleep. Americans need more sleep than they are getting. This lack makes them so neapors, and the insane at lense so populous. If you cannot get to hed till late, then rise sarly. If you cannot get to hed till late, then rise late. It may be as Christian for one man to rise at eight as it is for mother to rise at firs. Let the rossing bell in rung at least thirty ninutes before your public appearance. Physicians say that a sudden jump out of hed gives irregular motion to the pulses. It is barbarous to expect children insang. It is barbarous to expect children insang.

ratched the effects of office on their health—
every one in turn has felt them—the countemevery one in turn has felt them—the countembecomes clear that nothing but rest or rough
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example in the intervent of the intervent has a chief article of food. The stuplying inframes that it counts over them leads to an
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a notable paper on Iroland's lack of enterprise. cargo on the return-voyage will consist of fresh He took the ground that it was all due to the meat, game, fruit, skins, silk-worms, eggs, and three "P's," "Potatoes, Popery and Pork," such other articles as may serve to thoroughly and there are sound arguments in support of this opinion. We know there are some who this opinion. We know there are some who will accuse the learned Doctor of sacrilege for associating infallible Popery with the grunting porker and the starchy potato, but no such idea can deter the scientist in his search for truth. If Fenian agitator will weigh this subject properly they may find that a mistake has been made in attributing the degradation of Ireland to John Bull, and be led to so change their operations as to make a more or change their operations as to make a move on Potatoes, Popery and Pork as the real enemies of their country.—Ucreland Leader. Potal

THE EMISSION OF CARBONIC ACID FROM ROOTS.—It is generally known that leaves decompose carbonic acid when they are exposed to the action of the sun, and disengage carbonic acid when kept in the shade. This is easily proved by simple apparatus, but it is not so readily shown that carbonic acid is emitted from the roots. An interesting experiment, which evidences the latter fact, may be made by means of a slab of polished marble permeent, which evidences the latter fact, may be made by means of a slab of polished marble placed a few inches beneath the soil and cover-ed with fine sand. Beens are planted in the sand, in which they will grow well for several weeks. When the plants begin to wither they are pulled up, and the marble pirte removed. The surface of the latter over which the roots have ron will be found covered with fine have run will be found covered with fine groove, which indicate the course of the root. Marble is entirely insoluble in pure water . but like all varieties of earbonate of lime, it is soluble in water charged with carbonic acid, so that the grooves show that the roots must have emitted earbonic scid, which thus acted upon the stone.—Scientific American.

NURSING CHILDREN. - The Brutch Median

Journal reports that Dr. Friedinger, the Director of the Vienna Founding Hospital, has lately shows how greatly the mortality of children within the first year may be milinenced by the conduct of those who have the care of them. Until a few years are the Jamishing. Until a few years ago, the Jewish mants were unwillingly received by the numers, none but the most inferior would take charge of them, and the mortality among them was an high as 85 per cent. After consultation with the Jewish occurril, Dr. Friedinger offered a reward of five florins to each nurse who would take charge of a Jew child, and an additional five florins if it were alive at the end of a yelr. The result has been that the mortality all on the first year to 60 per cent, in the send of to to per cent, and in the third to 22 per centing, among them being deathese, and even consumption It is on a blindness, and even consumption It is on a blindness, and even consumption It is on a blindness, and even consumption It is on the women—on the mothers of our race—that the world effects of sea-drinking fall with the greaterile free of sea-drinking fall with the greaterile free of the drinking fall with the greaterile free of the drinking fall with the greaterile free fall of the drinking fall with the greaterile free fall of the drinking fall with the greaterile free fall of the drinking fall with the greaterile free fall of the drinking fall with the greaterile free fall of the drinking fall with the greaterile fall with the greateri offered a reward of five floring to each m evil effects of sea-grinking fall with the great-est weight. How many women, who think they cannot "get along a single day without tea, owe to it their cold feet and hands, their liability to frequent colds, their peculiar diffi-culties, especially their weakening ones, and their habitual loss of appetite, rendering them a prey to "dinner-pills," or the absurditier termed "strengthening medicines," so long in request. No wonder that tea-drinkers are so frequently small enters, when their tea has vogue: No wonder that ten-drinkers are so frequently small enters, when their ten has gradually destroyed their appetite! According to Dr. William Alcott, one cause of a scrofulous constitution, by inheritance, is to be found in the use of tas by ancestors, and he reasons out the matter on sound physological principles. Abserting that whatever serofulous remaitintion, by inheritance, is to be found in the use of ten by ancestors, and he reasons out the matter on sound physiological principles, observing that whatever weakens the merus—especially those of the stomach—in a mother, is sure to entail a tendency to disease on her offspring, which will not unfrequently prove to be scrofula, or that diseast and universal disease—unberculous consumption. There is also reason to infer that much of our modern syn-disease and curdisease is caused by the ten-drinking habit of our populations. The hearing is affected, at least indirectly, by colds—so much more communicate that among our forefathers before the introduction of ten. This is an absolute necessity, and it cannot be explained by any change in the climate for the worse, sayhow, the fact is certain, and it is equally certain that the residen heating produced by ton, as rapidly followed by refriguration or chill, cannot fail to be a perpotual cause of the affection in question—so often the precursor of consumption.

consumption.

—M. Tellier, the inventor of the tes untchine bearing his name, has undertaken to test on a grand scale the possibility of transporting food preserved by cold. With this need in view, he has purchased a mino-hundred one in view, he has purchased a mino-hundred inspected forms of reinigenators, by this means transforming the hall of the visual into an immense icohor. The first trip of the d'Frimesso icohor. The first trip of the d'Frimesso icohor. For these test at France to the niver Plate. Her first easy will consist of wine, beer, butter, obsess, hope, triputables, dr., which, up to the present time, have been conveyed to the tropics with difficulty. The

test the value of the new system of refrigera-tion. In a recent communication to the Academic dee Sciences announcing his purpose.

-Prof. C H. Hitchcock has found distinct traces of glacial at on upon the summit of Mount Washington, 6,293 feet above mean tidewater. Boulders not over six inches long, consisting of gneiss, have been transported more than a dozen miles, and have the pecu shape and arrangement of glaciated

— Most of the thirst which calls for so much water-drinking, and all of the thirst which demands artificial beverages, is abnormal, and is occasioned by improper aliments and sea-sonings. Those who use a pure dietary and somings. Inose who use a pure divisity and little or no seasonings, require comparatively very little water, while if their exercises are moderate and their other habits hygienic, they make the season at all makes despite as all can do very well without drinking at all. Science of Health.

## DOMESTIC.

About Butter.—While some dishes are improved for most tastes, by the judicious use of good butter, a vastly greater number are spoiled by its injudicious use of bad butter. And here I wish to say, emphatically, that I know of no judicious use to which had butter can be applied by a housewife, except making it into soan. To but had butter into paster. can be applied by a housewife, except making it into soap. To put had butter into pastry, puddings and vegetables, does not make the butter good. It simply spoils the pastry, pud-dings and vegetables. Many dishes are over-done with sweet butter. while others in which it is usually found are much better without it. American cooks have entirely to with of American cooks have entirely too much faith in the virtue and potency of gream. - Half a lournal of Health. GEARAX GENS. -At our broasfast table we

GEASIAN GENS. At our breakfast table we consider Graham gams inderpensable. This is our recipe. Two teacropfuls of buttermilk, a little salt, three even cupfuls of Graham flour, and one teaspoonful of soda. Sur well and bake in iron gem pans, which should be not on the store before filling, put them into a very het oven and bake from fifteen to twenty minutes. If you want them of extra quality, take me teacupful of buttermilk, one egg. two teacupfuls of the flour, with soda and salt, as hefore. Very good gems are made by taking one teacupful of sweet milk or water, one and helf the flour, and boding meat.

The Science of Rothing.—In boding meat for soup, old water should be used at first, so for soup, old water should be used at first, so The Science of Foursia.—In boiling most for soup, cold water should be used at first, so as to extract as much of the nutrient juices as possible, and the heat be raised gradually. But if the mest be wanted in a boiled state for itself, and not for its soup, then it should be plunged at once into boiling water and kept boiling for a few minutes, so that all the outer albumes may be congulated, in order to imprison the sapid and nutritive juices then cold water should be added till the temperature is reduced to 160, at which it should be kept till the cooking is completed, because that beat is necessary for the congulation of the coloring matter of the blood. In all cases no much host than is sufficient should be employed in cooking. Thus, in making soup, all the firs in the world will not make the water hotter than its boiling temperature, at which point it can be retained at a very moderate expenditure of fuel. Violent obnilition, such as we see cooks often practice, while it does no good, does much harm, not only by wasting coal, but also by carrying off in the steam much of the storastic and rolatile ingredients of the food.—Fref. Lyen Planfar for soup, cold water should be used at of the food.—Fref. Lyon Picufair

decorp. Hard Furniture.—The rule in buying second-hand furniture is, I'se common sense. Don't buy snything whetever merely became it is cheap. If you don't need it, don't buy it at all. If you do need it, buy either the new or the second-hand, whicherer, upon examination, appears to be the best. All things being equal, of course one would naturally give the preference to the article that costs the least. If a lady can procure accord-hand furniture without too great an expenditure of time at suctions and the like if the draft made upon her patience and temper is not too arrong, and if she makes no sacrifice of refinement to economy if the furniture has been well kept, and is tolerably fresh and reasonably pood-looking, and if a proper reduction is made in the perior, it is a decided advantage to buy it. If you are so fortunate as to be able to purchase the termiture you desire from some triend, you may buy without fear but echorwise three are certain articles that cannot be bought without running great risks. Indeed, we might say they should SECOND-HAND FURNITURE - The rule in buyfeer but cohorwise there are certain articles that cannot be bought without running great risks. Indeed, we might say they should move be beeght at artifoux, of from the regular dealers in second-hand ware. These articles are bridding, bedatesda, carpeta, off-clotha, and upheldstored farmium.—Novaber a Martin. Mesitin