

Free to Twenty-Five Ladies.

The Defiance Starch Co. will give 25 ladies a round trip ticket to the St. Louis Exposition, to five ladies in each of the following states: Illinois, Iowa, Nebraska, Kansas and Missouri who will send in the largest number of trade marks cut from a ten cent, 16-ounce package of Defiance cold water laundry starch. This means from your own home, anywhere in the above named states. These trade marks must be mailed to and received by the Defiance Starch Co., Omaha, Neb., before September 1st, 1904. October and November will be the best months to visit the Exposition. Remember that Defiance is the only starch put up 16 oz. (a full pound) to the package. You get one-third more starch for the same money than of any other kind, and Defiance never sticks to the iron. The tickets to the Exposition will be sent by registered mail September 5th. Starch for sale by all dealers.

Many a man who marries an heirless lives to regret monkeying with a get-rich-quick game.

FITS permanently cured. No fits or nervousness after first day's use of Dr. Kline's Great Nerve Restorer. Send for FREE 62-00 trial bottle and treatment. Dr. R. H. Kline, Ltd., 311 Arch Street, Philadelphia, Pa.

You can easily make a man hot by rubbing him the wrong way.

I do not believe Pina's Cure for Consumption has an equal for cough and cold.—**JOHN P. BROWN, Trinity Springs, Ind., Feb. 15, 1904.**

Women can invent excuses with a pretty candor.

If you wish beautiful, clear, white clothes use Red Cross Ball Blue. Large 3 oz. package, 5 cents.

It's a case of quick consumption with the man who bolts his food.

Carpets can be colored on the floor with PUTNAM FADELESS DYES.

In Florence, lately, one of several Italian ladies who were entertaining Mark Twain, asked what was the American national game. "Poker," he responded. When she laughingly protested that he was facetious, he gravely reiterated his statement, and added: "Madame, to the game of poker the American people owe the most valuable lesson a nation can learn: Never give up, even after you have lost your last chance."

Mrs. Van Rensselaer Cruger tells a story of a Washington hostess who invited an attaché of one of the foreign legations to dine with her. The invitation was formally accepted, but on the morning of the appointed day a note, written by the foreigner's valet, was received, which read: "Mr. Blank regrets very much that he will not be able to be present at Mrs. Swift's dinner tonight, as he is dead."

Love is the sun that hatches the flowers of the soul. The face, which reflects all the inner sentiments of the heart, betrays the love of its owner, and is beautiful.

It's a case of love's labor lost when a woman is compelled to take in washing in order to support a worthless husband.

The man who is vain takes pride in showing it on the smallest provocation.

After buying experience a man seldom boasts of his bargain.

Digressions are often the brightest sunshine of life.

A spoiled child is almost as bad as one that is too fresh.

A man consumes more or less time when he is eating dates.

ARMY TRIALS.

An Infantryman's Long Siege.

This soldier's tale of food is interesting. During his term of service in 17th Infantry in Cuba and Philippines, an Ohio soldier boy contracted a disease of the stomach and bowels which all army doctors who treated him pronounced incurable, but which Grape-Nuts food alone cured.

"In October, 1899, when my enlistment expired, I was discharged from the army at Caluluto, Philippines, and returned to the States on the first available steamer that left Manila. When I got home I was a total wreck physically and my doctor put me to bed saying he considered me the worst broken-down man of my age he ever saw and after treating me 6 months he considered my case beyond medical aid.

"During the fall and winter of 1900 and '01 I was admitted to the Barnes Hospital in Washington, D. C., for treatment for chronic inflammation of the stomach and bowels but after 5 months returned home as bad as ever.

"I continued taking medicine until February, 1902, when reading a newspaper one day I read about Grape-Nuts and was so impressed I sent out for a package right away.

"The result is quickly told for I have used Grape-Nuts continually ever since with the best results, my health is so I can do a fair day's hard work, stomach and bowels are in good condition, have gained 49 pounds in weight and I feel like a new man altogether.

"I owe my present good health to Grape-Nuts beyond all doubt for medical science was exhausted." Name given by Postum Co., Battle Creek, Mich.

Had he consulted any one of several thousand physicians we know of they would have prescribed Grape-Nuts immediately.

Look in each pkg. for the famous little book, "The Road to Wellville."

WITH THE WORLD'S BEST WRITERS

LABOR AS JOY OR CURSE.

It is worthy of note that all the great historical religions of the world—whether of the millions of Egypt toiling under the lash to build the pyramids at the wages of a couple of onions and a piece of dry bread a day, or of the millions of India working in the rice swamps amid swarms of pestiferous insects, or of the millions of the Semitic race whose traditions have been gathered together in the story of Eden and of the fall in the Book of Genesis—all have been rooted and grounded in the problem of the common doom of man that he must eat his bread in the sweat of his body and the sweat of his mind. None of these religions affects to treat the issue flippantly, rhetorically or with commonplace platitudes, but with awful seriousness. The enormous over-weight of the burden of the work in comparison with the strength, spirits, interest and reward of the worker is what oppresses the minds of these teachers and prophets and brings them to the common ominous conviction that this must be the outcome of some primeval curse and of some stupendous moral catastrophe, redemption from which is the end and aim of all higher spiritual hope.

Labor may be either joy or curse. All turns on whether it is encountered with freshness, spontaneity and zest, or whether it is the draining to the dregs the springs of life. Once for all, out with it, fair and square and plump! There is no more dignity nor elevation in mere labor than in a mechanical pump-handle. What it lifts from the living, central springs beneath determines all. Our joy must be in this living water welling up, as we ourselves quaff its refreshment or extend it to the thirsty lips of others. For this sole joy that is set before us must we endure the cross and despise the palm. We think the poets exempt from this toil, pure children of inspiration. Never the weary pump-handle for them but only the leaping geyser. But hear what Milton has to say: "No worthy enterprise can be done by us without continual plodding and wearisomeness to our faint and sensitive abilities."—Boston Herald.

SUBMARINE HAZARDS.

The death of eleven men in the British submarine boat A 1 as a result of a collision with a merchant steamer is the first fatality that has followed an accident to a modern craft of this kind when ready for service with hatches battened down. The early attempts at under-water navigation of course were only a form of suicide, but the submarine boat of the latest type when properly handled, seems to be as safe as anything that takes the chances of the sea. When the Moccasin was cast adrift in a storm she rolled ashore, and after pounding on the beach for several days was finally hauled off as good as new. Any surface torpedo boat after her experience would have been a total wreck.

Even the British boat that has just had so tragic an experience does not seem to have been injured by a blow that probably would have sunk a battleship. The lesson of her experience is the particular need of vigilance on the part of the lookout on a boat which, being invisible, cannot depend on other craft to do any of her watching for her. Perhaps, too, the periscope eye of the submarine, may be opened to improvement.—New York World.

BOOMERANG OF GREED.

The failure of D. J. Sully, the cotton speculator, is merely another instance of overreaching greed. If Mr. Sully had been content with a moderate profit of a million dollars, or perhaps of three or four millions, he could undoubtedly have come off with a whole skin when cotton reached the abnormal figures of the last of January. But like other men intoxicated by success, he was not satisfied with his achievement. The fascination of the "game" or greed for money—they amount practically to the same thing—urged him into another bold movement. He believed he could put cotton to almost any price he pleased and he failed.

The case is by no means peculiar. The successful speculator who becomes overconfident, tries to run a corner and is pulverized in the attempt, is a familiar figure in American market history. Natural laws which are always at work eliminating the unfit rarely allow the too greedy speculator to escape. Occasionally a rare combination of qualities may save him, but as a rule the man who tries to hold up society and pick its pockets is overwhelmed. He may win for a time—when the gods would destroy they first make mad—but in the end he rarely survives.

Yet the failures that strew the path do not deter other ambitious and grasping men from setting out on the same course. Every new aspirant imagines that he will prove too smart to be caught. The mistakes of others he will avoid. He does not perceive that he is defying the law that compensation legitimately goes only for service done. He does not foresee that finally he, too, will succumb to the boomerang of greed.—Pittsburg Dispatch.

VAST IRRIGATION SCHEME.

The cost of irrigating the arid lands in Wyoming will be much less than the original estimates owing to the fact that the government will be able to utilize one of nature's vast reservoirs for confining the waters from the mountain country during the flood season.

Rising near the boundary of the Yellowstone National park, in northwestern Wyoming, that nature's wonderland, rushes into a canyon cut down through solid granite. The flow of the Shoshone, named by the Indians "Stinking Water" because of its sulphurous origin among the Yellowstone springs, is highly variable, in time of flood 8,000 or 10,000 cubic feet per second, and again as low as 250 feet. The possibilities of this project, therefore, lie in the storage of the floods. Joining the walls of this granite canyon, the government will build a cement and stone dam, as immovable as the everlasting rocks themselves and rising 170 feet above the river level, forming a great lake covering 3,300 acres and with a storage capacity of 5,000,000,000 gallons. It is estimated that 500,000 acres will be irrigated.—Utica Globe.

RUSSIA, LAND OF GRAFTERS.

To Petersburg came three American business men to secure a gold mining concession. There are 851 places where gold is found in Russia, and our friends wanted the privilege of working one of those places. First, they had to deposit \$50,000 with the Ministry of the Interior as "good faith." So much for the regular legal part of the program. Now for the irregular, illegal part. They kept in their room at the Hotel Europe a bag of hard, cold cash in golden rubles. This cash they doled out in installments, first to this prince, then to that count, for "influence." Each time they handed out the money they were told that their proposition had been found good, and promises were made that the concession would be speedily granted. Each time the would-be concessionaires believed that they had accomplished something, and each time they were disappointed and had to refill the money bag. The wearisome delay in the negotiations continued week after week; technical obstacles, each more serious than the preceding one, were brought forward; and so weeks grew into months, and the Americans were not one step nearer the goal. Deciding that bankruptcy would come before any kind of a definite conclusion could be obtained, they went away with what cash they had left and an accumulated amount of disgust. Their \$50,000 was returned with all legal formalities, but considerably more than that sum was left in the hands of the princes and counts. Such has been the experience of many other Americans seeking to do business in Russia—each in sheer desperation abandoning his enterprise.—Gilson Willets in Leslie's Weekly.

WISDOM OF MODERATION.

Instead of contemplating new avenues for extravagant display of force or wealth, let the country consider the wisdom of moderation. It has been suggested that a public debt under certain conditions serves a wholesome purpose in restraining waste and checking those enterprises which have no other inspiration than national vainglory or aggrandizement. "Private credit is wealth; public honor is security."

The nation that needs to consider economy is not consuming vast wealth and exploiting immense resources in huge and monstrous armaments that challenge the world. She is likely, indeed, to avoid offense to other nations, to be slow to anger, and to cultivate the rewards of peace. Instead of seeking distinction as the exponent of mere splendid materialism, such a people would meet the magnificent description that was made by the poet Milton:

"Enflamed with the study of learning and the admiration of virtue; stirred up with high hopes of living to be brave men and worthy patriots, dear to God, and famous to all ages."—Boston Globe.

THE VALUE OF TREES.

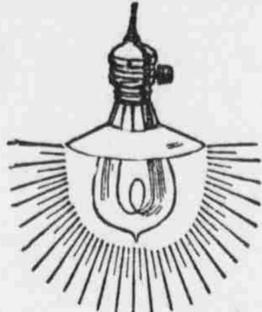
In many parts of our country farming would be impossible but for the trees, such is their influence upon the streams. They regulate the water supply, and their tendency is to prevent both floods and drought; they supply fuel, one of the greatest necessities of life, and they furnish the lumber for the building of our cities, railroads, ships, and a thousand other things without which our present state of civilization would not have been possible for ages, if at all. This is why we should be careful of our forests, which are fast dwindling away in many sections; this is why we should legislate against sheep-grazing in the forests, and against all other practices which tend to cause forest fires, and why we should try to protect our trees from their natural enemies, such as landslides, floods, insects and fungi. And it is well to bear in mind the fact that we cannot replace in fifty years a tree which we can destroy in an hour.—Woman's Home Companion.

SCIENCE and INVENTION

Incandescent Lamp Reflector.

How far would it have been possible to advance business methods toward their present high standard, and what would be the volume of business transacted this year, were we still hampered with the candles or pine fagots of our forefathers as a means of lighting stores, offices and residences? It is the conveniences of the age which have aided most in increasing the volume of daily transactions in the commercial world to their present enormous amount, and no greater convenience has come to the business man than the method of lighting the desk, office and manufacturing plant. What would our ancestors of less than 100 years back have thought of tapping a pair of wires at any point and inserting a little glass bulb, turning a button and obtaining a light better than a dozen of their candles could afford them? To-day it has become such a common affair that we seldom pause to think of the improvement, but simply take it for granted, as we have learned to do the thousand and one other things which the inventor has placed at our disposal.

But even this little glass bulb, with its rays of light streaming out all around, is open to improvement. In almost every use to which this lamp is put there is no necessity for the rays which illuminate the space above the carbon film, and this inventor proposes not only to shut them out, but to reflect them downward again, where they will increase the brilliancy of the vertical rays. This is accomplished by the use of the little metal reflector shown in conjunction with the incandescent electric light in the picture. The under surface of this



Increases Power of End Rays. shade is nickel-plated and highly polished, serving to deflect the light rays which have an upward trend. To attach it to the lamp, the bulb must be unscrewed, and inserted between the adjustable wings above the reflector proper. A. J. Partridge of Chicago is the inventor.

Wind's Mystery.

The meteorologist is gradually divesting the wind of its mystery and is able to explain convincingly how and when it originates. The study of a great number of observations taken simultaneously all over the country, and in fact all over two continents, has enabled the expert to foresee just when at night the layers of air near the earth become cooled, and as cool air is heavier than warm air, a law of physics that is generally appreciated theoretically, but usually overlooked practically, this heavy air tends to move down the hillside. The tendency becomes after a time sufficiently pronounced to produce a general downhill movement, eventually resulting in a perceptible breeze.

That is what is commonly designated locally as "the mountain breeze," and which from its origin is practically in one constant direction, though the intervention of powerful storms may temporarily reverse the customary movement. Vice versa during the day the presence of warmer and therefore lighter air near the earth causes a movement of the atmosphere with an upward tendency, creating the so-called valley breezes. In certain favorably situated localities the appearance of the mountain or the valley breeze is as regular as clockwork, the transitional period being marked by a calm.—Philadelphia Record.

Alloy That Defies Temperature.

Consul Guenther of Frankfurt reports the invention by Dr. Guillaume of an alloy of steel and nickel which has the useful property of not expanding with increase of heat, retaining practically the same volume under all changes of temperature. By altering the proportions of the constituents, a metal is obtained which contracts when heated. The utility of an alloy which maintains an unchanged volume, despite changes of temperature, is very great in making accurate measuring instruments, clocks and watches. The new alloy—called "invar"—has already been used for pendulums and instruments for tropical surveys with excellent results.

Science and Health.

One-fifth of all deaths during last winter were from pneumonia.

It is estimated that in all about 720 tons of ore have been used to produce about one-fifth of an ounce of radium. When lightning strikes a tree the heat generated is sometimes so great that all the sap is converted into superheated steam, which explodes, tearing the tree to splinters.

"If we ask a person to estimate the number of stars visible on a clear night," says Houzeau, "we shall have an exaggerated answer, the actual number being a little over 3,000."

Remember this, that very little is needed to make a life happy.

BARN AND STORE HOUSE.

Plans for Commodious Structure for the Farm.

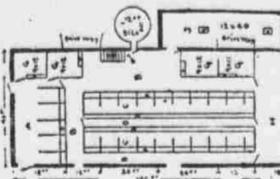
M. McM.—Kindly publish a floor plan for a basement barn, 100 feet long and 40 feet wide, to accommodate 35 cattle, 8 horses, and to have two box stalls for cattle and two for horses, besides a root house, to hold 2,500 bushels, a silo 12 feet square, and a place for manure. How thick should the walls be and how deep should the foundations be laid?

(2.) How should the barn be laid out above and how long should the posts be?

(3.) The barn will be built on clay soil, 200 yards from a running stream. Could water be drawn from this stream by a windmill, and what size of pipe should be used?

The accompanying plan contains five single horse stalls, two box stalls for horses, 38 cow stalls, and two box stalls for cattle. The manure shed is at the end of building, with a door at each side wide enough to drive a wagon through to draw the manure out.

The root house is under one of the drive-ways, and extends along the side



Ground Floor Plan of Stock Barn.

A—Horse stable, B—Feed room, C—Cow stall, D—Passage behind cattle, E—Gutter, G—Box stall, H—Manure shed, I—Silo, J—Root house, K—Ventilator.

of barn wall towards the silo. It is 12 by 40 feet and 8 feet high. It should be arched over with concrete and have two ventilators in the arch. These ventilators are used to fill the house with roots, and there should be a window at each end of root house for light. There should also be a cold air pipe coming in near the floor for ventilation; the ventilators in the arch answer for the outtake pipes. A root house the size given will hold about 1,500 bushels of roots, as one bushel of roots occupies about 2 1/2 cubic feet. Should the root house not be large enough it can be turned with the end to the basement of barn, between the driveway and silo, and making it 20 by 30 feet and 10 feet high. It would then hold about 2,400 bushels. The silo is placed beside the other driveway and is twelve feet in diameter and built round. Silos used to be built on the inside of barns, but of late they are built on the outside. In fact for the last six years I have never built nor seen one built on the inside of a barn.

2. The barn above should have a mow 18 feet wide over the horse stable, then 12 feet for a driveway, then two 20 foot mows and a 12 foot driveway, and then an 18 foot mow over the manure shed. The posts of the barn should be 18 feet long. The stairway will go down inside of the mow, the door opening from the edge of the driveway floor. The hay and straw may be thrown down through doors in the side of the mows in each driveway.

3. You can draw the water from the stream providing you do not have to lift it too much, and a 1 1/2-inch pipe would be large enough.

4. If the wall is built of stone it should not be less than 18 inches thick; if of concrete one foot is thick enough. The foundation should be put down at least 20 inches and after the wall is completed the soil should be graded up 8 inches higher. This will always keep the ground drier and allows the water to run off and not settle along the wall.—N. B. H.

Power from a Running Stream.

J. H. H.—What size of stream, and what fall would be required in order to develop four horse power from a hand made paddle wheel, and also from a turbine? What is the best form of home-made wheel?

For a paddle wheel of good construction under a head of thirty feet, 88 cubic feet of water per minute should supply four horse power, or for a turbine under a head of four feet, 668 cubic feet of water per minute would be required to furnish the same power. As the correspondence does not specify any particulars as to amount of fall or size of stream, it is impracticable to answer this question.

Ants in an Orchard.

A Subscriber.—Please tell me what will kill an ant hill in an orchard.

One of the simplest remedies for the destruction of ants in orchards is to pour into each nest about a teaspoonful of bisulphide of carbon, afterwards plugging the hole with a small piece of sod pressed down with the foot. The liquid evaporates quickly and the fumes penetrate into all the parts of the nest, destroying all the occupants. Another remedy is to pour scalding water into the nests.

Tar Paper on a Roof.

G. W. B.—Would a layer of tar paper between dry, well seasoned lumber and the shingles on a roof tend to rot the lumber? What would the effect be on the lumber if it were green?

The tar paper being antiseptic in character would tend to preserve the dry lumber; on the other hand it would in a measure delay the drying of the green lumber, and in that way tend to encourage decay in the lumber.

Tree's Wonderful Vitality.

A curious incident occurred during the gale at Hansworth, a short time ago, says a Scotch paper. A large tree was blown down across the roadway. A number of men were told off to remove the obstruction, which they commenced to do by lopping off some of the larger branches. After about half a ton had been thus removed, the tree began to lift itself from the ground, and as soon as a little more weight was taken off it sprang into a vertical position, which it retained despite the subsequent rough weather. It was found that the roots had been stretched, but not broken, and were sufficiently elastic to pull the trunk after it had been relieved of some of its weight.

Deafness Cannot Be Cured

by local applications, as they cannot reach the diseased parts of the ear. There is only one way to cure deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the Eustachian Tube. When this tube is inflamed you have a rumbling sound or imperfect hearing, and when it is entirely closed, Deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever; and cases out of ten are caused by a starb, which is nothing but an inflamed condition of the mucous surfaces. We will give One Hundred Dollars for any case of Deafness (caused by catarrh) that cannot be cured by Hall's Catarrh Cure. Send for circulars free.

F. J. CHENEY & CO., Toledo, O. Sold by Druggists, etc. Take Hall's Family Pills for constipation.

Value of Carrier Pigeons.

The best carrier pigeons are worth several hundred dollars in the market, and some cannot be purchased at any price. During the annual pigeon show in New York last year \$200 and even \$300 was refused by the owners for some of their choicest pets. The average exhibits were valued at \$25 and \$50. Prices, however, do not stand in the way of the pigeon fancier today, for excellent homing pigeons can be purchased for \$5 and less. One can start a loft with half a dozen breeders, and within a few seasons have all the birds desired.

Wiggle-Stick LAUNDRY BLUE.

Won't spill, break, freeze nor spot clothes. Costs 10 cents and equals 20 cents worth of any other bluing. If your grocer does not keep it send 10c for sample to The Laundry Blue Co., 14 Michigan Street, Chicago.

"I am disgruntled," said Senator Foster recently: "I'll never give money to a street beggar again as long as I live. There was a very pitiful-looking beggar in the avenue, a few minutes ago, and my heart going out to him, I stopped to hand him a few small coins. I had difficulty, I admit, in finding my change, but was that any reason for the beggar to frown at me and say, impatiently: 'Hurry up, sir, I've lost several customers while you've been muddling over them pennies.'"

What a "Yeggman" is.

The word "yeggman" is now eligible to dictionary honors. It has court authority. In a recent damage suit at Lynn, Mass., the plaintiff set forth that by calling him a yeggman the defendant meant "that the plaintiff was a desperado, a criminal, a night burglar, a tramp burglar, a crook, a freebooter, a murderer, a man who posed as a tramp in the daytime and was a burglar in the nighttime."

A well known actor was telling his sixteen-year-old son, who he considers very immature and young for his age, that he ought to be doing something for his glory and his country. "Why, when George Washington was your age, my son, he was surveying the estate of Lord Fairfax." The boy thought a moment, then he replied, quietly: "Well, when he was as old as you, pa, he was president of the United States."

An Easy Way To Do It.

Mineral, Idaho, April 11.—Mr. D. S. Colson of this place has something to say which will be of interest to many men. Mr. Colson claims to have found a simple way to get rid of pains in the back, Sciatica or Rheumatism. He has cured himself and so claims personal experience in proof of his method.

Mr. Colson says:—"I had awful pains in my hip. They got so bad at last that I could hardly walk. I tried several things, but got no relief till I began to use Dodd's Kidney Pills and I had taken but a few of these pills till the pain left me entirely.

"Dodd's Kidney Pills certainly did me lots of good and I consider them a great medicine."

The remedy that cured Mr. Colson is the same that has been making such sensational cures of Bright's Disease, Diabetes, Dropsy and Rheumatism all over the country. The name of the medicine is Dodd's Kidney Pills.

Self-made men generally act as though they were proud of their job.

A man is never satisfied until he attends his own funeral.

MEXICAN

Mustang Liniment

cures Cuts, Burns, Bruises.

\$500 Given Away
Write us or ask an Alabastine dealer for particulars and free sample of
Alabastine
The Sanitary Wall Coaling
Destroys germs and vermin. Never runs or soaks. You can apply it with cold water. Beautiful effect in white and colored linoleum. Not a disease-breeder. Get of date hot-water glass preservation. Buy Alabastine in 5 lb. packages, properly labeled, of paint, hardware and drug dealers. "Kiss an Alabastine" and our Artists' ideas free. ALABASTINE CO., Grand Rapids, Mich., or 145 West 41, N. Y.