



The HOME and HOUSE KEEPING of To-day

HAVE A COTTON WEDDING.

A "Poverty Party" is an appropriate entertainment for a cotton wedding to which all the guests are asked to come in cotton costumes. The girls wear cotton frocks and the men summer suits. Both sexes affect canvas shoes and cotton gloves.

The invitations for a cotton party can be written on squares cut from a yard of white cotton material which has been starched very stiff. Envelopes should fit these novel cards very exactly.

Decorate the room with cotton balls made with raw cotton, tissue paper and wire where the real plant is inaccessible. Or a snow scene can be produced at any time of the year by using mounds of raw cotton, sprinkled with silver dust on the mantelpiece, bookcase or wherever opportunity offers.

Cotton millinery flowers are strictly in keeping and cotton goods in white of any other color can be cut to imitate ribbon to be used as bows, loops or streamers.

The supper table should have an unmistakably cotton cloth and napkins to match. Little mounds of jeweler's cotton in pale pink, blue or yellow to accord with the color of the rest of the decorations are placed around the base of the candlesticks, side dishes and centerpiece. Candles have calico shades and the centerpiece could take the shape of a real or artificial flower arranged in a picturesque sunbonnet which depends by the string from the chandelier.

In the way of amusements have a contest in which the gentlemen hem strips of cotton goods, while the women write ten minute essays on the subject of cotton.

Or let each lady draw a design on a cheap cotton dollie, the outline to be embroidered in colors by her partner.

A spider contest with cotton tapes instead of cords is exciting. Either gifts or fortunes may be attached to the hidden ends of the tapes.

Fudge making would be in accord with the informality of the cotton function, and a quotation bee in which the players must give quotations or proverbs on subjects named by the hostess might take out the fun.

Prizes for the games could take the form of cretonne covered photograph frames and pincushions, embroidered magazine covers, laundry bags and sewing reticules of flowered chintz.

Make boxes covered with bright calico for distributing the usual "wedding cake" souvenirs.—Buffalo Courier.

ENAMEL PORTRAITS AND CARICATURES.

At the Boston Galleries, writes a London correspondent, are seen Mrs. Whipple's enamels. They mostly take the form of personal ornaments, though she has some pretty bonbonnières among them. The lovely translucent colors and the bright gems and pearls used in their settings combine to form very beautiful jewels, which can, nevertheless, be sold very cheaply, and this should enhance the popularity of the show.

Colonel Whipple's water-colors, which line the walls of the room, are very freshly and rapidly painted with a precision and careful definition of detail which add to their charm.

He is not afraid of introducing figures, and he is always careful that his skies shall harmonize with the general tone of the scenery. His sketches of English cottage life are particularly characteristic.

In the same room there are forcible oil portraits by Mrs. Hamilton Johnstone, of which the paintings of her husband and daughter are the best. She has copied some Gainsboroughs with less success.

Mr. Rene Bull, the war correspondent of "Black and White," is showing a mixed collection of pen-and-ink caricatures and some wash drawings of scenes in the Boer war.

DANGER TO DRESSES.

That fiendish practice of a certain type of male idiot, throwing away lighted matches and burning cigarette stumps in street cars and other public places is fraught with danger for women in summer. A woman's light summer dress and a smoldering cigarette are as bad a combination as a lace curtain and a lighted gas jet. As women are always, by the nature of their garments, more likely than men to catch fire, they ought to have firmly fixed in their minds what to do in that emergency. After one's skirt is blazing is a bad time for making up one's mind what to do.

The thing to do is to lie down and roll. It is all very well to scream for help, but that can be done simultaneously with the rolling. If a wrap is handy, that is a great help, but it is madness to rush about looking for aid. The motion fans the flames, and when the person is in an upright position it takes only a moment for them to reach the face. The difference between the horizontal and the perpendicular in such a case is demonstrated by lighting two matches and holding them in the two positions. The perpendicular match is gone while the other is smoldering.—New York Tribune.

PENALTY FOR BEING LATE.

Because of the growing tendency

of a certain class of the community to arrive in theatres late, interest will be felt here in the plan started in a London playhouse whereby persons who arrive after the curtain has risen are excluded from the auditorium until the end of the first act. It is not a new reform, for it was the rule in one New York theatre for several years. The principal offenders on both sides of the water, it is necessary to admit, are women. Unfeeling persons have been known to intimate that the late arrival of the offenders was due to a desire to show their costumes. Others, who think they know the intricacies of the feminine mind, have alleged that it was due entirely to an inherent desire to procrastinate. Those whose attention was distracted by the late comers did not care a rap for the cause. It has been observed, however, that the women who arrive at the London playhouses late are growing fewer and promptness to a desire on their part fewer. One observer ascribes their leave dinners where the conversation to use the new rules as an excuse to have reached the point of stupidity.—

WIVES WHO NEVER SPEAK.

The Korean woman who speaks or even nods on her wedding day immediately becomes an object of ridicule and loses caste. Neither threat nor prayer must move her, for the whole household is ever on the alert to catch a single muttered syllable. Her period of silence often lasts for a week or more, and when complete silence is broken she only uses her tongue for the most necessary uses.

Some sixty years ago a native of Pennsylvania undertook for a wager of £30, to remain mute for the first month of her marriage. Her husband, not being in the secret, left her, only to return later, when he was apprised of the real reason of her silence.

A Brussels couple named Dupont quarrelled so bitterly on their wedding day that the wife vowed that her husband should never hear her voice again. His entreaties went for nothing, and to her dying day she kept to the letter of her oath.

A Brunna woman, whose husband was in hiding from the authorities, inadvertently betrayed his whereabouts to a police spy. As a result, the man was taken and received a term of imprisonment. So much did she take to heart this misfortune, brought about by her gossip, that she resolved to remain mute to the end of her life.—Tit-Bits.

LIGHTHOUSE KEEPER FOR 50 YEARS.

Ida Lewis, better known throughout the United States as the Grace Darling of America, quietly observed the fiftieth anniversary of her connection with the Lime Rock Lighthouse in Newport Harbor. Just half a century ago Miss Lewis went to the lighthouse to assist her father, who was the keeper. He became paralytic and the daughter attended to the work. After his death Miss Lewis, on account of her great work in saving lives from death by drowning, was made keeper of the lighthouse by a special act of congress. As it will require another act of congress to depose her, she will probably be connected with the light until her death. During her fifty years at the lighthouse Miss Lewis has saved eighteen persons from death by drowning. Five of the persons rescued were soldiers stationed at Fort Adams. Miss Lewis has been honored by President Grant, General Sherman and Admiral Dewey and thousands of persons from all parts of the country have visited Lime Rock Lighthouse for the sole purpose of seeing its heroic keeper. Medals and trophies of all kinds have been awarded her for her deeds of bravery. Miss Lewis is a native of Newport and is about seventy-five years of age.—Newport dispatch to the Boston Transcript.

PATTI AND THE WASP.

One of Mr. Santley's most amusing experiences occurred at Brecon about four years ago, when he assisted Mme. Patti in giving a concert in aid of the local hospital. The prima donna appeared with Mr. Santley in a duet. The vocalists had just recommenced singing, when the baritone burst out laughing and left the platform. His companion almost immediately followed, although she attempted to continue. In response to loud cheers, Mme. Patti returned and said: "The cause of all this merriment is that a wasp has been trying to get into my mouth and we could not go on."—Tit-Bits.

IDEAS OF ECONOMY.

A man's idea of economy is to buy what he wants when he has the money and go without it when money is lacking. He does not believe in substitutes. His creed is sensible at all events. Some women have spells of thrift, or what they regard as such, and during those times they positively waste money because they look for cheapness. Wearing quality is the first consideration and when that is overlooked there is no economy.—New York Journal.

The railroads of England and Ireland are of different gauge. Those of Ireland are 5 feet 3; of England 4 feet 8½ inches.

STARS MOVE IN TWO STREAMS

SIR DAVID GILL ON THE GREAT PROCESSIONS IN SPACE.

They Move in Opposite Directions, He Says, and Both Streams Are Alike in Design and Development—The Story of the Evolution of Stars Being Made Plain.

Sir David Gill opened the annual meeting of the British Association with his presidential address dealing entirely with astronomical subjects, writes the London correspondent of the New York Sun. While it was probably the most technical and least popular inaugural address to which the association ever listened it contained matters of interest to laymen.

Sir David announced the confirmation of a discovery of which South Africa had the first news. He said:

"By patient and long continued labor in the minute sifting of numerical results the grand discovery has been made that a great part of space, so far as we have visible knowledge of it, is occupied by two majestic streams of stars travelling in opposite directions. Accurate, minute measurements have given us some certain knowledge as to the distances of the stars within a certain limited portion of space, and in the cryptograms of their spectra has been deciphered the amazing truth that the stars of both streams are alike in design, alike in chemical constitution and alike in process of development.

"Whence have come the two vast streams of matter out of which has been evolved these stars that now move through space in such majestic procession? The hundreds of millions of stars that comprise these streams—are they the sole ponderable occupants of space? However vast may be the system to which they belong, that system itself is but a speck in illimitable space. May it not be but one of millions of such systems that pervade the infinite? We do not know. Canst thou by searching find out God? Canst thou find out the Almighty unto perfection?"

Referring to the revelation of the spectroscopic that many of the nebulae were merely inchoate masses of luminous gas, Sir David said:

"Evidence upon evidence has accumulated to show that such nebulae consist of matter out of which stars (that is suns) have been and are being evolved. The different types of star spectra form such a complete and gradual sequence as to suggest that we have before us, written in the cryptograms of these spectra, a complete story of the evolution of suns from inchoate nebulae onward to the most active sun, like our own, and then downward to the almost heatless, invisible ball.

"The period during which human life has existed on our globe is probably too short, even if our first parents had begun the work, to afford observational proof of such a cycle of change in any particular star, but the fact of such evolution with the evidence before us can hardly be doubted.

"I most fully believe that when the modifications of terrestrial spectra under sufficiently varied conditions of temperature, pressure and environment have been further studied this conclusion will be greatly strengthened, and in this study we must have regard also to the spectra of the stars themselves.

"The stars are the crucibles of the Creator. There we see matter under conditions of temperature, pressure and environment, the variety of which we cannot hope to emulate in our laboratories, and on a scale of magnitude beside which the proportion of our greatest experiments is less than that of a drop to the ocean. The spectroscopic astronomer has to thank the physicist and chemist for the foundation of his science, but the time is coming—we can almost see it now—when the astronomer will repay the debt by wide reaching contributions to the very fundamentals of chemical science.

Other points that Sir David brought out included a statement that even with the scant material available it now seemed certain that the sun's actual velocity was between eighteen and twenty kilometers a second.

Sir David appealed to the public and the Government for funds to enable the survey from Cape Colony to Cairo to be completed so that the largest arc of meridian that can be measured on the earth's surface might be drawn. He also appealed for the erection in the southern hemisphere of a huge reflecting telescope of dimensions similar to those of the American telescope on Mount Wilson.

He enthusiastically welcomed the proposal of the Carnegie Institute to establish a meridian observatory in the Southern Hemisphere, saying the task undertaken by such an observatory, by the Cape conservatory and, if possible, by another in the Southern Hemisphere and by three observatories in the Northern Hemisphere would be regarded by astronomers of the future as the most valuable contribution that could be made to astronomy at the present day.

Taken in conjunction with the astrophysical survey of the heavens, now so far advanced, it was an opportunity that if lost could never be made good. It was a work that would grow in value yearly and one that would ever be remembered with gratitude by the astronomers of the future.

Young street merchants are noticeably increasing in numbers in New York City. Their principal stock in trade is collar buttons and shoe laces.

COMMON HOUSE SNAKES.

They Have Interesting Ways and May Be Trained for Pets.

My grandmother was sitting one day in her armchair in front of an old-fashioned cupboard, when, to her very great surprise, a house snake fell into her lap and wriggled to the floor. In some way the snake had found its way into the house unobserved, perhaps through an open door or window, and had crawled to the top of the cupboard in search of food.

The first name given to this reptile was well chosen, for it is found about houses and other buildings more frequently than any other snake. I remember when I was a boy in the country to have seen several about the porch of the house, but they invariably made their escape, just to give mother the shivers as she recalled grandmother's experience of long ago. Mother would on these occasions declare that I let the snake get away on purpose, but who ever heard of a boy permitting a snake to escape if he could prevent it?

Ophiobolus dollatus triangulus (Bole), is also known as the milk snake, although it most likely cares no more for milk than would any other thirsty ophiidian; but because it frequents springhouses, in which milk is kept, to catch frogs and salamanders which live in these cool places, the owner of the milk could not resist the temptation to give it a new name. Another of its many local names is "thunder-and-lightning snake," but I cannot imagine why so gentle a serpent should be so named. It is perfectly harmless. Recently I saw a frightened specimen bite a school girl, but she only laughed. An uncle of mine once caught a house snake lying on a shelf in his store. Knowing its value he placed it in his corn-crib, where it remained all summer. It is needless to say that the mice quickly disappeared. Besides mice and rats the house snake catches many crickets, grasshoppers, cockroaches and other insects. It is very beneficial to the farmer and should never be killed.

It varies much in color but the markings are very distinct. Gray or silvery bands and reddish-brown blotches mark the back, while beneath it is checkered with black and yellowish-white, making this a handsome reptile. Frequently when disturbed it sets its short tail vibrating as many other snakes do when angry. It is an expert climber, but seldom climbs trees, preferring to creep about old-houses and barns. On one occasion I knew of one climbing up a small tree a few feet to a bird's nest.

Those who care to handle reptiles will find the house snake an interesting pet. It sometimes reaches a length of four feet; specimens ordinarily, however, are less than three feet. The young are hatched from eggs.—From Nature and Science in St. Nicholas.

METALS WHICH HARDEN STEEL.

Fresh Hunt by the Government for Special Ores.

Those alloys of iron which give the hardest steel are produced by the addition of one or more of the following metals: nickel, chromium, manganese, tungsten, vanadium, molybdenum, titanium, cobalt and uranium. As the United States produces much more steel than any other country in the world, a supply of these materials is a matter of consequence in the manufacture of tools, armor plate and steamship shafts. According to a bulletin of the United States Geological Survey, the annual production of hardening metals in this country amounts to \$458,327, and of this sum \$393,667 represents the output of tungsten. The price of tungsten, which has been increasing for a number of years, was quoted at from \$5 to \$6 a unit (twenty pounds) in 1905, and at \$12 a unit in the spring of 1907. Only small quantities are at present imported into the United States, as European markets utilize practically all that is produced in foreign localities, mostly in Peru and Australia. Large deposits of tungsten are found in Australia, and it is not improbable that sufficient may be obtained there to permit a certain portion of it to be shipped to the United States, but for the present this country will have to look within its own borders for sources of supply.

The increased demand for the steel hardening metals has stimulated prospecting for the ores in the United States, and information concerning them is eagerly sought. So many inquiries have reached the United States Geological Survey that a special investigation of the subject has been planned, which has been assigned to Frank L. Hess. In the course of this work, which will extend throughout the summer and into the fall, Mr. Hess will visit South Dakota, Idaho, Colorado, Montana, Washington, Oregon, California, Nevada, Utah and Arizona. The results of Mr. Hess's work will be reported in a bulletin on the steel hardening metal deposits other than manganese.

Why He Came Then.

Bishop Brewster, of Connecticut, is noted for his funny stories, and his latest is said to be about an old reprobate who decided to repent and announced to every one that whatever wrong he had done should be made right. So a man whom he had cheated out of a large sum of money went around at midnight to demand it.

"But what did you come at this hour for and wake me up? Why not wait till to-morrow?" said the old sinner crossly.

"I came now," replied the man, "to avoid the rush."—Harper's Weekly.



WHAT IS A DAY'S FLOWING?

While cutting a furrow 9 inches wide, the plowman walks just about 11 miles while he is turning over an acre—that is, without reckoning the journey from the stable to the field and back again, says an authority. It is one of the advantages of long fields that the time occupied in turning at the ends is so much less than on shorter stretches and smaller fields. In plowing an acre 352 yards long, cutting a 9-inch furrow, the man goes 27 1/2 times around, and turns on the headland 55 times. If we allow one minute for turning, the time thus occupied is equal to 55 minutes, or, say one hour's work—the hardest of the day, too. This would be a field of average length. When a field is 179 yards long, the number of turnings is doubled, and the amount of hard work and time absorbed is one hour and fifty minutes. In a field 117 yards long, the plowman turns 165 times in order to cut through an acre with a 9-inch furrow; and allowing one minute for each turning, two and three-quarter hours are occupied in that operation. The plow pace, to do good, steady work, varies from 1 1/2 to 2 miles per hour. Applying these figures to the 11 miles walked in plowing an acre, at the rate of 1 1/2 miles an hour, takes seven and one-eighth hours. With a 10-inch furrow, there is one mile less of walking, which may be computed as half an hour to three-quarters, according to the estimate of traveling pace. With a 10-inch furrow on light hand, where the furrows are 352 yards long, from six to seven hours are occupied per acre, at the ordinary pace of 2 miles per hour. Thus, in short fields a great amount of extra work becomes necessary, and time is lost in turning. So, an acre may require eight or nine hours. Plows cutting a double furrow, or three, or four, or more, furrows at the same time, may be estimated on the same lines. These statements apply only to the conditions of the older sections of the country. Upon large farms, with plows and teams to correspond, a much larger day's plowing can be done.—Implement Age.

TO BUILD UP PASTURES.

G. C. Watson of the Pennsylvania College of Agriculture says: How to increase the productivity of run-down pastures is a question that is confronting many farmers in the Middle and Eastern States. . . . When we consider the cause of the unprofitable condition of these pastures we cease to wonder that they are not remunerative. Much land in the United States has been cleared of timber that ought never to have been cleared—land that is worth more to produce timber than anything else. This land has been wholly cleared of forests and either seeded artificially or permitted to become seeded naturally to such grasses and other plants as would maintain themselves under the existing conditions. These grasses grew more or less luxuriantly for a time, but finally the soil becomes so exhausted that they are now wholly unsatisfactory. The question now is how to restore the fertility of which the soil has been robbed. The land must be made more fertile through the application of plant food or the growth of leguminous crops, or both. If the land is not to be plowed but to remain in grass undoubtedly the owner should seed the land with clovers and grasses early in the spring. A mixture of white clover, alsike and red clover would undoubtedly be better than either alone. With these may be mixed timothy and June grass. It is probable that nature will seed the land to June grass, but some assistance will help to make a good turf sooner than if left to nature. A thorough harrowing with a spike-tooth harrow before the seeding would be most beneficial. Immediately after seeding apply a top dressing of barn manure. The manure thus applied will not only furnish plant food for the grass that is already on the land and the young seeding but it will form a mulch to protect the young plants and will materially help them to become thoroughly established. If the land is not limed this may be applied as the top dressing some time during the Fall preceding the Spring seeding.

FARM NOTES.

Different plants require different soil and different soil food for their growth. Therefore, the crops should be rotated so that the soil will have time to recuperate.

Contact with others who have succeeded or failed is always beneficial. If one has the ability to analyze their doings and apply their methods with whatever variations are necessary.

About the worst nuisance that one can imagine is a scrub bull running at large on the highways. The chances are he will land in some neighbor's pasture where he is not wanted.

When salting butter add one tablespoonful of granulated sugar to ten pounds of butter and notice the improved flavor.

It is estimated that all the inhabitants of the world could stand comfortably in the space of 89 square miles.

If we sell our butter to private customers we should try to salt to the taste of each. This may be some trouble, but, after all we depend upon the tastes of our patrons for our sales. If we miss the mark as to taste, we miss the sales.

Get butter to the consumers as quickly as possible after it is made. The fine, delicate aroma of freshly made butter is quickly lost.

Duck feathers sell at 40 cents per pound. Goose feathers bring double the amount.

Eggs—intended for hatching should not be kept over four weeks. They must be turned every day or two.

It will require seven pounds of skimmed milk to equal one pound of lean beef for flesh-forming qualities.

One dollar per head is the average cost of keeping a fowl a year, and the same amount is a fair estimate of the profits.

RETIRING AGE OF HENS.

It is the opinion of the Iowa State Register and Farmer that the retiring age of the average hen is three years. The following is a discussion of that idea:

"We are asked how long a hen can be made profitable on the farm under ordinary conditions. As a rule, when a hen is three years of age it is time to let her go. She should then be placed on the retired list. We do not mean by this that she is past her days of usefulness, for she may not be, but, as a rule, she can no longer be made to pay. She is too old to serve on the table, and is probably too old to sell to anyone else to serve, but she may do to can. That is, she may be used for a canner hen.

A three-year-old hen is occupying room that ought to be given a younger hen. Many will keep a hen the second year, but no person engaged in the egg business will accept a hen as a gift that has passed her second winter. If a poultryman who makes the business a study cannot make them pay it is no use for farmers who give it only passing notice to accept it. There is always more or less guesswork in ascertaining the age of hens after the first or second year, and on many farms may be found hens that are almost old enough to vote. Some of them may be known by certain marks on them, but most of them are really older than they are given credit for being. Their appearance is about all one can go by after they are past two years old, and it will be well to let all the old-looking hens go."

WHEREIN SOME DAIRYMEN FAIL.

We have frequently referred to the high averages in point of milk production attained by cows in Denmark. Investigations in the dairy industry of Denmark show that cows there produce on an average almost three times as much butter a cow as does the average cow in Canada. Why is this? The problem is not difficult of solution. The Danes have developed a high degree of dairy intelligence. They recognize the importance of breeding to the best dairy bulls they can secure, and they feed liberally, but judiciously.

There is nothing to hinder farmers elsewhere from bringing their herds up to the same degree of proficiency, provided they set aside that prejudice held by many against learning from dairy books and journals. The great dairy question is not the simple, easy problem it once was. It used to be that the man who had not sufficient brains to embark in and make a success of any other occupation or profession, was qualified to follow the plow. Not so now.

Dairying is a matter of mental intelligence, brains first and then hands. When our farmers realize this they will be in a position to achieve the results that Danish dairymen are achieving. But so long as they believe that reading and study, or in other words, intelligence, are not essential to success in dairying, just so long will they continue to hold their place in the ranks of unprogressive men.—Canadian Dairyman.

COW SUCKING-PREVENTIVE.

A dairyman writes the "Rural New Yorker" that to prevent a cow from sucking herself, he tried a "calf weaner" which fastened in the nose of the cow like a bull ring—only it clamped between the nostrils, and made to open and shut and clamped the cartilage between the two nostrils, and there were some five or six spikes extending out in every direction about three or four inches long. That prevented the cow from sucking herself after all other methods had failed. This will not only prevent a cow from sucking herself, but will wean a calf. It can be got from almost any good hardware merchant and is extensively used in Texas to break calves from sucking their mothers.

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