BUSINESS NOTICE.

The "Miramichi Advance" is published at Chatham, Miramichi, N.B., every Thursday morning in time for despatch by the earliest mails of that day.

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Advertisements, other than yearly or by the season are inserted at eight cents per line nonpareil, for first insertion, and three cents per line for each continuation.

Yearly, or season advertisements, are taken at the rate of $5.00 an inch per year. The matter, if space is secured by the year, or season, may be changed under arrangement made therefor with the publisher.

The "Miramichi Advance" having its large circulation distributed principally in the Counties of Kent, Northumberland, Gloucester and Restigouche, New Brunswick, and in Bonaventure and Gaspe, Quebec, in communities engaged in Lumbering, Fishing and Agricultural pursuits, offers superior inducements to advertisers. Address,

Editor Miramichi Advance, Chatham, N.B.

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Come and see our Work and compare it with that of others.
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CHATHAM, N. B.

LAST BATTLE OF WATERLOO.

Belgian Woman Remembers Scenes on Battlefield.

Madame Dupuis, residing at a little village in the neighborhood of Brussels, appears to be the last known surviving witness of the battle of Waterloo.

She is a hundred and four years old; fifteen, eighty-nine years ago. She is still very active and intelligent. Madame Dupuis is by no means weary of life. "I cannot think of leaving my boys alone in the world." she has been heard to say. Her boys are jolly bachelors, aged respectively eighty and seventy-eight.

Madame Dupuis still has many hideous memories of the field after the battle—when bands of prowlers went about among the forty-six thousand killed and wounded, searching for money and other valuables, stripping the living as well as the dead of their clothes, and murdering those who had sufficient energy to resist.

CHEAP ADVERTISEMENTS.

Some of the Japanese tradesmen in the smaller towns of Nippon have a curious way of advertising their business. On their right forearms they tattoo figures—the shoemaker a shoe, the wood-cutter an axe, the butcher a cleaver. Underneath these emblems are such inscriptions as, "I do my work modestly and cheaply," or "I am as good at my trade as most of my fellows." When they are looking for work they bare their arms and walk about the streets.

A bad entrant, like a woman's pencil, is pointless.

The address slip pasted on the top of this page has a date on it. If the date of the paper is later than that on the slip it is to remind the subscriber that he is taking the paper without paying for it. See Publisher's announcement.

Board Works Jan 1 01

MIRAMICHI ADVANCE

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About the ....House

VALUABLE HINTS.

Before turning out a pudding always let it stand for three or four minutes to allow the steam to escape.

To test an oven for baking sponge and pound cakes, put into the oven a piece of white paper; look at it after five minutes, when it should be yellow if the heat is right.

Small cakes and castel puddings require a hot oven with the shelf put near the top, but large, rich cakes require slow baking after the first twenty minutes.

To prevent a beetroot that is broken from losing its color in cooking, burn it with a red-hot poker. This will form a new skin and prevent it bleeding.

Try glycerine for removing stains of tea and coffee from table linen. Procure it if good quality, and with it rub the affected parts, afterwards wash the linen in the ordinary way.

Wash lisle thread stockings in tepid water with a little blue; use only boiled soap, and that for the feet only. Rinse thoroughly in water containing a few drops of ammonia, and hang to dry, but not in the sun.

An excellent furniture polish. Dip a chamois leather in tepid water, take it out and wring it dry. Rub the furniture with this and it will remove all finger marks, stains, etc., more effectually than any prepared polish, and will make the wood appear as good as new.

Hot water cans and jugs will last much longer if, instead of being hung in the usual way, they are turned upside down directly they are emptied. Always keep a zinc tray in the pantry for this purpose. It is the few drops of water in the bottom which cause them to rust into holes.

Baked milk tastes very like cream and is most nourishing. Put new rich milk into a stone jar, with a cover, and bake for several hours in a steady, moderate oven. If you have not a cover for the jar, cover with greased paper, and tie down carefully. Served cold with stewed fruit this is excellent.

Ink can be removed from paper, if the stain is not too old, as follows: Take a teaspoonful of chloriated lime and add just enough water to cover it. Take a soft cloth, moisten it in the mixture, and pat (do not rub) the stain gently, and it will slowly disappear. If one application is not enough, try a second.

To clean brown boots. First put the boots on the "trees." Then put a little soda in some tepid water. Wash the boots with saddle soap, using it as dry as possible, on a soft bit of flannel. Wipe off the soap, but do not make the leather very wet. Leave in the air to dry. Then polish with any good brown boot polish.

In making cheese sandwiches put the yolks of two hard-boiled eggs into a basin with a tablespoonful of butter; beat them up together until quite smooth, add a quarter of a pound of grated cheese with a seasoning of salt, pepper and mustard. Mix all together, and spread between slices of bread and butter.

For boiled beetroot wash the beet thoroughly but carefully so as not to let it bleed. Put in a pan with plenty of salted boiling water, and boil for one hour. Take out and skim at once. Slice into a vegetable dish. Have ready in a saucepan a little melted butter and vinegar. Boil up, pour over the beet, and serve.

Medicine will never remedy bad habits. Indulgence of the appetite, indiscriminate dosing and drugging have ruined the health and destroyed the lives of more persons than famine or pestilence. If you will take advice you will become regular in your habits, eat and drink only wholesome things, retire and rise very regularly. Make a free use of water to purify the skin.

Baked fish has far more flavor than boiled, though it does not look so nice. The fish should be placed on a greased tin, covered with buttered paper, and cooked in a moderate oven. The cook should be very careful in baking fish not to dry it up. Serve with a good white sauce poured over, and garnished with chopped parsley, capers, lemon, or hard-boiled egg. Fillets of plaice tied in knots and cooked like this are excellent.

The fruit used for preserving should always be gathered in dry weather, and when choosing it, one need not insist on the large size of berries, for often the smallest strawberries possess the best flavor. In particular, there is a small scarlet strawberry which makes excellent jam. Pick the fruit, and discard any unsound berries; weigh them, and to every pound of fruit allow threequarters of a pound of preserving sugar. Put a layer of fruit in the preserving pan, then a layer of sugar, and repeat this until the vessel is about three parts full. Stand the pan at the side of the stove, and keep stirring; remove the scum carefully as it rises, and let the fruit boil gently for three-quarters of an hour or more. Then take out a little in a saucer, and if it sets, it is done enough; pour it into jars; tie down with parchment covers when cold, and store in a dry cupboard.

FOR THE COOK.

Simple Ginger Beer for the Children—Turn a gallon of boiling water on four large spoonfuls of ginger, then set where it will cool. When just lukewarm add a half pint of molasses and a cup of "lively" yeast. It will be fit to drink as soon as fermented.

Mexican Sauce.—Thinly slice one large white onion and fry it brown in one tablespoonful of butter. Add two large tomatoes peeled and cut fine, one medium-sized sweet red pepper and one green pepper freed from veins and seeds and chopped fine, and simmer for twenty minutes. Now add one clove of garlic well bruised, one-half of a teaspoonful of celery salt, one-third of a teaspoonful of black pepper, the same of salt, and one teaspoonful of Worcestershire, simmer for five minutes longer and rub through a sieve.

Elizabethan Cheese Cakes.—Boil a pint of new milk in a double boiler, beat three eggs and stir into the milk while still at the boiling point. As soon as it bubbles up remove from the fire and put in half a glass of wine to separate the curds from the whey. Cream together three eggs and six ounces of powdered sugar and add to the curd, together with a teaspoonful of rose water, half a pound of sweet almonds blanched and pounded fine and a quarter pound of melted butter. Mix thoroughly, then pour into patty tins lined with a good rich paste, allowing a teaspoonful of the mixture to each patty. Ornament the top with Zante currants and almonds cut in thin strips and bake from fifteen to twenty minutes in a slow oven. Leave in the tins until cold. This recipe, which is said to have been given by one of Queen Elizabeth's maids, may be simplified by using Neufchatel cheese in place of the curds and whey and buying the patty shells at the baker's.

Banana Cream.—Remove the skins from five large ripe bananas and pound the fruit to a pulp with five ounces of sugar. Beat one cupful of good sweet cream to a froth and add the juice of a lemon and the banana pulp. Dissolve half an ounce of gelatine in half a cupful of cold water, and strain. Let this cool, then whisk it gently into the cream, add the pulp, and mold into shape.

Chocolate sponge.—Into a basin put one ounce of cornflour, and three ounces of grated chocolate; mix this smoothly with cold milk to a thin paste. Put the remainder of a pint of milk on to boil, pour it on to the mixture, stirring thoroughly; dissolve rather less than half an ounce of gelatine in some milk, and then add it to the other ingredients. Stir while all cooks for seven minutes. Add the beaten yolk of an egg, sugar to taste, and a few drops of vanilla essence. Pour into a large basin, and when the mixture commences to set whisk it till a sponge. Pour into a wet mould and turn out when set.

Hot Chocolate Sauce.—A hot chocolate sauce, to be eaten with ice cream, is made by placing in a granite saucepan a pound of light-brown sugar, two ounces of bitter chocolate (grated), a fourth of a pint of fresh sweet milk, and an ounce of best butter. Boil together until it forms a soft ball when dropped in cold water then take from the stove and flavor with vanilla. Pour into the sauceboat and serve hot with each portion of cream. The cold cream immediately hardens the hot sauce, which forms a smooth chocolate coating over it. The two do not unite, and the taste of the two separate flavors is delightful. In preparing this sauce care must be taken that it is not boiled too long, else the coating will harden too much, making it difficult to manage with the spoon or fork, while if it is not boiled long enough the two separate flavors are apt to blend. Experience alone can teach the exact stage when done, but once attained this dish cannot be surpassed. It may be made early and reheated before it is served.

TEN HOME COMMANDMENTS.

Have many interests and no studies.

Have time for everything and be never in a hurry.

Make your household one harmonious whole, no matter how small the scale.

Know how to talk and how to listen, how to entertain and how to amuse.

Do not forget that "society" is the death of home life—hospitality its flower.

Use only what you can comfortably afford in good quality and ample quantity.

Let your home appear bright and sunny. It is not easy to be unpleasant in a cheerful room.

A certain formality is necessary to save everyday life from triviality, and freedom from looseness.

Treat your servants wisely and kindly, and it will be impossible for them to either impose or oppose.

Do not forget—your home should not only be a well-conducted dormitory and boarding-house, but truly a home, the center and focus of all interest, pleasure, and happiness for everybody connected with it.

The poor, deluded bride thinks she is marrying the best man at the wedding.

With the exception of yourself, everybody is more or less deceitful.

MIRAMICHI FOUNDRY
STEAM ENGINE AND BOILER WORKS
Chatham, N. B.

JOSEPH M. RUDDOCK, - - - PROPRIETOR

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GANG EDGERS, SHINGLE AND LATH MACHINES, CASTINGS OF ALL DESCRIPTIONS.
Can Dies,
Iron Pipe, Valves and Fittings of All Kinds.
DESIGNS, PLANS AND ESTIMATES FURNISHED ON APPLICATION.

Mary Lorton's Tragic Morning

I.

"Where is Mrs. Lorton? I must see her instantly!"

Ivy Bamford didn't know how ugly she looked, with that wicked gleam in her eyes, as she flung these words at the head of her old schoolfellow's housemaid.

But Mary Lorton herself came into the hall with her baby in her arms, and saved the maid any trouble in answering. She smiled sunnily, and held forth the baby to kiss and be kissed.

"Not yet, Mary. It's most important!" said Ivy, with a glance at the servant.

"So important that you can't give poor little Erie a kiss?" said Mary reproachfully. And then she started as a sudden terror came to her. Ivy's face was so suggestive of tragedy. "Nothing has happened to Lovelace? He hasn't been run over?"

Ivy seemed quite to like this change in her friend.

"Oh, no, not that," she said. "But I ought to tell you. I'll come in."

With the door of the breakfast-room shut upon them both and the baby she spoke out.

"I hope you won't think I mean to be nasty, and all that sort of thing, in telling you, but I feel it's my duty, dear Mary, if you don't know it already. Your husband and Helena Greene have gone off to London together."

"Ivy, what do you mean?" cried Mary Lorton.

"I mean, dear, exactly what I say. You didn't know, then? Well I thought as much. You, poor thing, never guessed how much they were to each other before he married you. I did, but I supposed it was all over. I was in one of our pensioner's cottages by Greenstoke Junction not an hour ago, when I chanced to see Helena Greene pass and go up to the station. Not five minutes afterwards your husband came running up, and he must have been only just in time to catch it—the London train, I mean—for I heard it whistle in before he could have got up the steps.

"Well, I thought it queer—Helena Greene and your husband both in Greenstoke so oddly, you know—and it occurred to me to go up and inquire. They told me at the booking-office that a lady and a gentleman had just had tickets for London."

Mary put little Eric on the floor.

"Roll about, darling!" she said gently. Before she could say anything in comment on this strange news there was a knock at the door.

It was a telegram for herself. "From Lovelace," she whispered, after reading it and breathing deeply. "He says he mayn't be home tonight."

Ivy turned to the window. She was afraid the triumph in her eyes might betray her.

"It's horrid that I should come and frighten you like this," she murmured, "but I thought I ought. They both seemed so excited. It was their being so fond of each other in the past that made me suspicious."

"Were they?" stammered poor Mary.

"Well, rather, if Helena's to be believed. She used to write him love-letters by the dozen." of Lord Kelvin's mind, as of the rare prevision of his intellect, that the last words—"unless new sources, now unknown to us, are prepared in the great storehouse of creation"—should have been added to that remarkable sentence.

"He never told me about it. But, Ivy, I can't think—— You don't think there is anything in it? We love each other so dearly. Why when he went off this morning, he—but I can't talk about it. He was fonder than ever."

Ivy coughed drily and smiled.

"Perhaps it was what men call a blind, Mary," she suggested. "They do make such fools of us women, you know."

Mary drew herself up.

"I trust Lovelace," she said proudly, and challenging her friend with her honest eyes.

"All right," said Ivy, "I won't bother you about it any more, then. But isn't the Westminster Palace a hotel lawyers often stay at in town? I thought that the real time elapsed between the telegram and the wedding was arranged, and that not be asked to wait. And, besides, Helena had already breakfasted and lunched, thanks to her dear Bob's stupidity.

At last Mary was alone with Lovelace. They had waved their hands to the wedded pair as long as it seemed advisable, and now they were alone.

"Well, little Slyboots, how did you get into the secret?" said Lovelace, slipping his hand into his wife's arm. His laugh was delightful.

But Mary didn't laugh. She pressed his hand to her side instead.

"Take me somewhere, dearest, where I can tell you by ourselves," she whispered. "Oh, Lovelace, I am so ashamed of myself!"

"Really!" said he, still laughing. "Come, we'll find a waiting-room!"

And there, in a Victoria waiting-room, Mary made her confession. It was a confession of suffering, as well as of doubts and outrage—those broken drawers!

He was very grave about it; couldn't speak, indeed, for gravity, until she was quite through with her bitter story and its beautiful ending.

"You will forgive me, dearest?" she begged finally, with her hand on his arm.

"Forgive!" he exclaimed, and he clasped her to him as if a public waiting-room were just the same as the home nursery. It is true they had the place to themselves.

"Sweetheart," he continued. "I'm glad you've found the letters. We'll put them in the fire together tonight. It was foolish to keep them. They belong to the tomboy time of life. I was thinking to myself only just now what a much better bargain I had than old Bob. But there's someone I'll not forgive in a hurry, and that's Miss Ivy. Well, we'll go home now. I sent you that wire after getting the first of Master Bob's four. I didn't know what might be going to happen."

He laughed again.

"Come along, darling," he said. "You're my heart's queen for life. Just bear that in mind."

"And you, Lovelace, are my king again."

She couldn't help saying it. If it sounded ridiculous, he didn't seem to see it.

Hand in hand for a moment or two, like lovers, they moved to go.

But they soon felt more merciful to poor Ivy, and, at her husband's instigation, Mary sent her a telegram before they left London.

"Have just been with Lovelace to Helena's wedding. Home five o'clock. Come and have some tea with us."

Ivy got her punishment and her tea at the same time.—London Answers.

It was an hour's run without a stop from Greenstoke Junction, and every minute of that hour increased Mary's despair.

What should she do? What could she do? And what good to do anything?

She would still go on to London. Not to that hotel, but to Agatha Masten, a schoolfriend like Ivy, who was painting pictures and becoming quite famous. Agatha would help her, perhaps.

The train pulled up at Reading.

Five minutes passed, and no one had troubled her solitude. Again the porters passed up and down, crying, "London train!" or "Paddington the next stop!" And then the whistle of departure was heard.

They were moving off, when a gentleman in a frock-coat and tall-hat, with a white flower in his coat, and a small bag in his hand, came hurrying to the train from another platform.

"Oh!" gasped Mary when she saw him. She turned her face away. But she felt that he would choose just her compartment, and he did so. There was a brief wrangle with a servant of the company, and then the door was banged upon the intruder, and Mary was recognised.

"Why, Mrs. Lorton! This is luck!" cried the gentleman festively.

Mary made a great effort to be ordinary.

"Good-morning, Mr Lander!" she whispered, forcing a smile.

He was a Huddlecombe man, a friend of Lovelace's, and an actor.

"Oh, I say," he protested, "won't you shake hands? Do you know about it? Has Lovelace split to you, Mrs. Lorton?"

He smiled profusely.

"I don't understand," said Mary. "But, of course, I will shake hands with you, Mr. Lander. I—— You look so hot. I didn't want to trouble you."

"Trouble!" he cried. "But you can't know, or you'd be wishing me luck. I have made a mess of it. I was due in town hours ago, but the confounded train had an accident. I've sent your husband four telegrams in the last three hours!"

"Indeed!" said Mary. "To Huddlecombe?"

"Huddlecombe, Mrs. Lorton? Not much!"—with a more expansive smile still. "Lovelace can keep a secret, then! Don't you know he's in town?"

"Ye-s," said Mary.

"Of course you do! Well, I'll make a clean breast of it. There's a certain dear girl who loves me well enough to run away from her dragon of an aunt and marry me. Her aunt loathes me, just because I'm an actor and not a bad one either, as you know! Lovelace is backing me, bless him! And in two hours we'll be at the registrar's and there'll be no Helena Greene left in the world."

"You are going to marry Helena, Mr. Lander?" Mary said slowly.

"Yes, if Heaven and the Great Western Railway Company will permit, Mrs. Lorton," he replied. "Don't I look like a bridegroom—just a little?"

It was all over with Mary then. She let her weakness do what it pleased with her. She heard Bob Lander's alarmed cry of, "Why, what's the matter? and then for a spell there was oblivion. Only a short spell, however.

They drove from Paddington together as fast as a hansom could be made to go, and soon that dear old hotel was before them.

And then Lovelace himself came to them in the hall, with just the honest, puzzled look on his face Mary knew would be there.

"I'll tell you all about it afterwards, dearest," she said. "It's quite an accident."

He had to be content with that, and was. All the dissatisfaction of which he was just then capable was for the bungling bridegroom.

"She's almost ready to give you up, you scoundrel!" he said smiling sternly on Bob. And Bob replied that he couldn't wonder, but that it would take her all her time.

Then Helena was brought forward, and they all drove away to the registrar's. Lovelace had managed things magnificently. There was no further hitch. Only the breakfast was sacrificed, for the train to St. Leonards, where the honeymoon was arranged, was not to be asked to wait. And, besides, Helena had already breakfasted and lunched, thanks to her dear Bob's stupidity.

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HOW OLD IS THE EARTH

A VERY OLD MUMMY IN THE BRITISH MUSEUM.

Darwin Says That Over 300,000,000 Years have Elapsed Since the Earth has been a Planet

The time has admittedly gone by for attempting to "reconcile the facts of Nature"—to use a recognised phrase—with the chronology of the Bible, which makes the age of the world rather less than 6,000 years.

Indeed, in the Egyptian Rooms at the British Mescum, the visitor can see for himself objects which go back to an authenticated period long antecedent to 4,000 years B.C., and great is the wonder produced on the minds who first make their acquaintance. In that same department, among the mummies, there is what is in many respects the most striking of the exhibits in the department—the body of a man who belongs to the Stone Age. It lies in an accurate representation of the peculiarly shaped grave in which it was found, and it has been in consequence somewhat irreverently nicknamed by the habitues of the Museum "the man in the pie-dish."

A RELIC OF 50,000 B. C.

The particular interest in that corpse—which men, women, and even children look upon without the least thought or suggestion of the fear or horror usually inseparable from death—is that it is unquestionably the oldest exhibit in the Museum; and scientists have been rather struck by the fact that the authorities of the great institution have not, so to say, taken the bull by the horns, and boldly labelled that exhibit as dating from 50,000 B. C. Thus, with one single stroke of the pen, Bishop Usher's Biblical chronology is multiplied by about nine, and it may be that an even higher number would be required to satisfy the requirements of the age of that particular specimen.

How long has the earth been a planet capable of supporting not only human but all forms of life?

In an address Lord Kelvin once delivered on the subject, he gathered together the opinions of various scientific men, which cannot but be of interest to every thinking being, from Darwin, in his "Origin of Species," stated that "In all probability a far longer period than 300,000,000 years has elapsed;" while later on, in the same book, he wrote: "He who can read Sir Charles Lyell's grand work on the "Principles of Geology," which the future historian will recognise as having produced a revolution in natural science, yet does not admit how incomprehensibly vast have been the past periods of time, may at once close this volume."

WHEN THE SUN DIES.

Lord Kelvin himself—then Professor William Thomson—over forty years ago, made an attempt to calculate the length of time during which the sun has been burning at its present rate, and in that connection he wrote: "It seems, on the whole, most probable that the sun has not illuminated the earth for 100,000,000 years, and almost certain that he has not done so for 500,000,000 years. As for the future, we may say with equal certainty that the inhabitants of the earth cannot continue to enjoy the light and heat essential to their life for many million years longer, unless new sources, now unknown to us, are prepared in the great storehouse of creation."

It is a remarkable evidence of the acute perception of Lord Kelvin's mind, as of the rare prevision of his intellect, that the last words—"unless new sources, now unknown to us, are prepared in the great storehouse of creation"—should have been added to that remarkable sentence.

As an example of the very extraordinary range of time given to the age of the earth, consider the following statement from Professor Juke's "Students' Manual of Geology." He wrote: "Mr. Darwin estimates the time required for the denudation of the rocks of the Weald of Kent, the erosion of space between the ranges of chalk-hills, known as the North and South Downs, at three hundred million of years. It may be possible, perhaps, that the estimate is a hundred times too great, but that the real time elapsed does not exceed three million years; but on the other hand, it is just as likely that the time which actually elapsed since the first commencement of the erosion, till it was nearly as complete as it now is, was really a hundred times greater than his estimate, or thirty thousand millions of years.

86,000,000 YEARS OF LIFE.

Professor Phillips, in a lecture to the University of Cambridge, considered the rate of erosion between the ranges of the North and South Down to be rather one inch a year, than Darwin's estimate of one inch in a hundred years, so that on mere geological grounds he reduced the times to about a hundredth. Calculating however, the actual thickness of all the known geological strata of the earth, he came to the conclusion that life on the earth's surface may probably date back to between 38 and 96 million years.

Within the last ten years, Professor Sollas, of Oxford, working on new principles applied to the stratified rocks, reduced this time very considerably, for he wrote: "So far as I can at present see, the lapse of time since the beginning of the Cambrian system is probably less than 17,000,000 years, even when computed on an assumption of uniformity, which to me seems contradicted by the most salient facts of geology."

STARTLING FIGURES.

What are the data, it will naturally be asked, on which calculations of this magnitude are made? Among the most important are the consideration of the underground heat which is constantly being conducted out of the earth—in other words, the cooling of the earth, the speed at which the earth rotates on its axis, as well as physical properties of rocks at high temperatures.

The loss of heat by conduction was Lord Kelvin's first argument for limiting the age of the earth. He found that if the earth had been losing heat in the past "with any approach to uniformity for 20,000 million years, the amount of heat lost out of the earth would have been about as much as would heat, by 100 deg. C., a quantity of ordinary surface rock of 100 times the earth's bulk. This would be more than enough to melt a mass of surface rock equal in bulk to the whole earth. No hypothesis as to chemical action, internal fluidity, effects of pressure at great depth or possible character of substances in the interior of the earth, possessing the smallest vestige of probability, can justify the supposition that the earth's upper crust has remained nearly as it is, while from the whole or from any part, of the earth so great a quantity of heat has been lost."

EARTH ONCE RED-HOT.

By considering the cooling of the earth, and by tracing backwards the process of cooling, Lord Kelvin came to "a definite estimate of the greatest and least number of million years which can possibly have passed since the surface of the earth was everywhere red-hot." This estimate he expressed in the following words:

"We are very ignorant as to the effects of high temperatures in altering the conductivities and specific heats and melting temperatures of rocks, and as to their latent heat of fusion. We must, therefore, allow very wide limits in such an estimate as I have attempted to make; but I think we may, with much probability say that the consolidation cannot have taken place less than twenty million years ago, or we should now have more underground heat than we actually have; nor more than 400 million years ago, or we should now have less underground heat than we actually have."—London Answers.

INVENTIVE ENGLISHMAN.

Some of the Contrivances He Has Recently Produced.

The chief fault with most inventors is the way they rush hastily to conclusions, almost before they have formulated an idea. In fact, their method of work is analytical instead of being synthetical—that is to say, they start with a conclusion and work backward to discover the fundamental principles ruling it, says the London Daily Mail.

To inventors who have ideas, but are without means or ability to carry them out, Mr. Braun of Pentonville road, King's Cross, comes like an angel in disguise. He is an inventor's modeller, and constructs from mere skeletons of ideas complete models of almost eperything imaginable. Last year 2,300 inventions were brought to him, and out of this number he made models of 1,400, varying from a patent shirt button in two pieces, which can be fastened to a garment without being sewn on, to a gun for firing the higher explosives, such as dynamite. This latter invention, it may be remarked, was refused by our Government, and is now about to be accepted by the Russians.

A very curious fact about inventors is that they usually invent out of their trade or profession. It is rare that a man connected with the railway invents anything to do with trains, or a military man anything connected with the art of warfare. Mr. Braun finds that clergymen are the most inventive of mankind, and their inventions are usually articles of domestic value. Tailors and bootmakes rarely invent anything. Of nations the English are the most inventive, while the Americans possess the greatest imitative faculty, and that of adapting their inventions to commercial purposes. Germans are also prolific inventors, their inventions usually being of

A SCIENTIFIC CHARACTER.

The inventions that come beneath the notice of Mr. Braun are of a heterogeneous nature, being simple and complex, useful and foolish. These inventions emanate from men and women of all classes and professions in life and stool number, of whereby the milk is partially sterilized by means of a charcoal filter as it runs into the pail.

A device for preventing seasickness by destroying the oscillation of a boat has also come into Mr. Braun's hands. The feature of this is a spring to which a chair can be attached by iron rods, and thereby remain horizontal when the deck is aslant. This invention is soon to be tried on the P. & O. liners.

Another invention, which was not quite perfect, but had great possibilities, was an autocar to traverse the ocean bed. The motive power was to be compressed air, and the car was to sink by means of a huge worm, through which the water was forced up a shaft in the car. The car was not destined for warfare, but for treasure seeking of scientific research. Its great feature was that it would rise to the surface of the water upon any derangement of the machinery.

One of the wildest inventions ever thought out was that of a clergyman. This gentleman had conceived the idea of traversing the Sahara Desert with a tricycle, and his plan was for the cyclist to lay his track as he travelled. For this purpose two flexible boards were attached to his tricycle, so that as he rode over one the other worked round over his head and planked itself on the sand in front of him when necessary. A little petrol engine was to drive the contrivance, and the petrol for its consumption was to be carried in the hind wheel, which was to be made in the style of the front wheef of a steam roller.

SOAP ARTISTS.

Street Decorators Take to Windows in the Winter.

During the winter months many of the street artists, or "scriveners," as they are generally called, get a good living by going round to the small publicans and tradesmen in the poorer districts of London, and, by means of sticks of yellow soap, drawing fanciful drawing, accompanied by lettering, on the mirrors and on the shop windows.

One street artist, who has a "pitch" during the summer months in the West End, decorates all the mirrors in a seaport town up north from September to January. He admits making so much as £3 a week, and getting his meals and drinks free in addition.

Bacchus, surrounded by a number of pretty women drinking from cups, is a drawing in soap to be seen at a small inn at Liverpool. It was drawn by a well-known exhibitor in his young and impecunious days. The artist received five shillings for it at the time, and recently he offered the owner £5 for it. The offer was refused, however.

Some public-house artists prefer whiting to soap for drawing on glass and some beautiful designs can be drawn with this material if one is gifted with any amount of artistic ability.

A young artist named Gibbens recently set forth from Birmingham to London without a penny in his pocket, but with a supply of whiting. He stopped at wayside inns and offered to draw designs on glass for a meal and a few pence. Out of seventy houses he called at he was given work at fifty. When he reached London he had a sum of £10 3s. 2d. in his possession.

No man is a nonentity unless he is a prominent woman's husband.

ROYALTY HIRE SYSTEM

CORONATION PAID FOR BY INSTALMENTS.

Over Thirty Magnificent Pianos Hired by the Late Queen Victoria.

The statement that Queen Victoria got her pianos on the hire system reads curiously to many people, who imagine that when Royalty require a thing they simply order and pay for it, irrespective of cost. During the latter years of her reign, however, it is a fact that Queen Victoria decided to have her pianos on the hire system, and after her death over thirty of these instruments were removed from the different Royal residences by Messrs. Erard, who had supplied them, says London Answers.

Most of them are magnificent upright grands, superbly decorated, and are much sought after by all sorts of people—especially Americans, who would pay huge prices to secure such a relic of Royalty. Only purchasers who are likely to appreciate such pianos properly are allowed to have them, and innumerable applications from undesirable persons have been refused.

His Majesty the King, when Prince make use of the hire system. Particularly was this so with regard to horses, when there were many guests to be entertained at Marlborough House or Sandringham. Plenty of Royal carriages there always were, but as many of them were only used once or twice a year, to keep a stud of horses sufficiently large to draw them would have entailed an enormous needless expense. When occasion arose, therefore, horses were "jobbed" or hired to fill the gap. When the Prince entertained large numbers of people at once—such as deputations and delegates—who needed refreshing and feeding, the china and glass were invariably hired—if, indeed, as was often the case, the whole thing was not put in the hands of caterers.

UNLUCKY CROWN OF SERVIA.

King Peter of Servia is having an unpleasant exerience of the "hire-purchase" system at the present time, as his crown is being paid for by instalments. This is not the bronze crown which is being made from a cannon kept as a relic of his grandfather, but is the jewelled structure necessary for State occasions. It is to cost $62,500; but money is scarce in Servia, so the Paris firm who are making it agreed to accept payment by instalments. Two instalments of $6,250 each had been paid before the King discovered that the officials entrusted with the payments were endeavoring to "square" the manufacturers to put in bogus jewels, and divide the illicit profits between them. The payment of future instalments on the Royal crown is to be made by King Peter himself.

A MAGNIFICENT PAUPER.

The King of Spain is an example of a poor-wealthy monarch who is obliged to resort to the hire system. Gold plate, jewels, trophies, and all sorts of costly ornaments he has in plenty, but they are the property of the Crown, and useless except to look at. He has a decent income—on paper—but it is rarely paid, and consequently he has to hire right and left when he wants to "make anything of a splash."

For his forthcoming European tour, carriages, uniforms—practically everything—has to be hired; and the reason that he is not including England in his travels is on the ground of expense. His new castle which is being built at Guadalajara, in the province of that name, near Madrid, is being paid for on the rent-purchase, or "every-man-his-own-landlord" principle.

His neighbor, the King of Portugal, either from choice or necessity, also patronises the hire system. To celebrate the visit of King Edward to Portugal, King Carlos presented his consort Queen Amelia with a magnificent rope of pearls, each of which was separated by a diamond. A Dutch firm got the order, and accepted payment on the hire-purchase system. It is satisfactory to know that the instalments are being paid regularly.

THE KING OF SWEDEN

is an ardent devotee of the hire system. Very big reunions and elaborate functions are rare in the Swedish Court, so that when anything out of the way does happen, hiring has to be largely resorted to. A few years ago there was a great party including Queen Alexandra (then Princess of Wales), the King and Queen of Denmark, those of Norway, the Czar and Czarina of Russia, the King and Prince George of Greece, and German grand dukes and princes without number. The reunion was held at Fredensberg Castle, and it was difficult to know what belonged to the place and what did not. Furniture was hired—some all the way from England—beds were hired, plate linen, even, and silver all came from outside sources, and entertainers were fetched all the way from London to amuse the guests. Her Majesty of Sweden hit upon a happy idea to avoid horse-hire for his enormous number of guests and their retainers. As head of the Army, he commandeered some of the cavalry horses for the purpose.

GREATEST HIRE ON EARTH.

There is no evidence to show that the German Emperor himself ever indulged in the luxury of the hire system; but the innumerable little heads of the kingdoms and duches which make up his Empire do. It is well-known fact that at the Coronation of the Czar of Russia the display of jewels was the greatest ever seen at one single ceremony in the world, and the bulk of these was worn by German duchesses and princesses, who were present in huge numbers, German and Russian relations being very cordial at the time.

Here were ladies wearing jewels to the amount of fifty times their husbands' yearly income! Where did they get them? The answer came from the Continental jewellers and diamond merchants, whose stocks, for the time being, were sadly ravaged and diminished. The jewels were all hired. Not one stone in five hundred that glittered and flashed in the palace on the Neva belonged to the woman who wore it, and many a beauty's crowned head was aching with the thought of how her temporary magnificence was to be paid for.

The King of Italy is not a keen hirer. He certainly ordered a magnificent steam-yacht—the "Pia"—from a British firm on the hire system; but after using it for a short season, and paying two instalments, he returned it, and rumor says it was sold to Mr. Rockefeller. Its exact whereabouts is a mystery, but it has disappeared from European waters.

REMARKABLE TREE.

There is at the present time in the gardens of Mr. W. R. Armstrong, at Benwell, England, a remarkable tree. It is a Niphetos tea rose, and was planted under glass eighteen years ago from a 5in. pot into a prepared border. At present it covers an area of 1,300 square feet. The blossoms are well formed and white, with petals beautifully tipped with pink. Last year, in spite of the lack of sun, 16,000 blossoms were gathered from this rose. This year more than 4,800 have already been gathered, and it is thought that the number will be about 18,000.