

ICE ON THE FARM.

It is Not Only a Comfort But Has Also Many Economic Uses.

The majority of farmers look on ice as a luxury only to be enjoyed by the rich who live in cities and regard an ice-house as a needless extravagance.

Ice saves fuel during the summer by diminishing the amount of cooking that is done daily if not three times each day.

Every farmer who has a creek, lake or fish pond on his place can obtain a supply of ice from it at the cost of cutting it.

There is economy in large ice-houses. They are cheaper to build and to fill. There must be the same thickness of sawdust or other material around a small cake of ice as around a large one.

Good Floors For Stables.

A great deal has been written about clay, stone, concrete and brick as materials for the floors of stalls and loose boxes.

Mud on the cows should not be allowed. Use the brush. A cow should be kept as clean as a horse.

SCIENCE AND INDUSTRY.

Eastern woodworkers are using naphthalene as a wood preservative.

The Austrians are constructing portable electric-light plants to be used in entraining and detaining troops at night.

The saving which will result in substituting electricity for horse-drawn power on the street railways of this country is hinted at by the fact that the operation of one street railway in England by electricity will result in saving \$60,000 per annum over and above the present cost of operating it by horses.

A Swedish scientist claims to have discovered the secret of petrifying wood by artificial processes.

The curious fact has been demonstrated by Sir John Lubbock that certain kinds of ants are unable to exist without keeping other ants as slaves.

A new Parisian industry is the manufacture of hour-frost glass, which is covered with feathery patterns resembling those naturally produced upon window-panes in cold weather.

A lecturer in the Royal Institution, London, attempts to "define poison accurately" as follows: "Any substance which otherwise than by the agency of heat or electricity is capable of destroying life either by chemical action on the tissues of the living body, or by physiological action after absorption into the living system."

A curious photographic apparatus, in which a camera is raised by a rocket and lowered by a parachute, is being developed by a French inventor, M. Amedee Denisse.

How to Obtain Health.

The great secret of unvarying health is before every thing, to have a body in a high state of vigor, and once having that to keep it.

John Wentworth's Sobriquet.

Long John Wentworth, who recently died in Chicago, used to tell this story of how he got the name by which he was so well known.

UNCLE SAM'S GOVERNMENT.

A Description of the Executive Powers of the Different Departments.

The great mass of work imposed upon the Executive Power of the Government—embracing so many distinct subjects, and requiring so many thousands of agents to perform—must be arranged and treated in an orderly and systematic manner.

An executive department, then, properly means one of the grand divisions of Government work boldly marked out or suggested by the express provision of the Constitution.

To some of these executive departments are intrusted matters which, on their face at least, do not strictly belong to the grand division to which they have been assigned by law.

Witchcraft in Germany.

A farmer in Germany lost several head of cattle within a few months, and his family agreed that this could only be the result of witchcraft.

What They Eat.

The tailor—Roast goose. The builder—Plumb pudding. The druggist—"Pizen" things.

—She (looking over the autumn landscape)—"Isn't it perfectly beautiful, George?" He—"It is simply delicious! I could gaze on it for hours."

JEWELERS' CUSTOMERS.

How Various Specimens of Femininity Do Their Shopping.

"Whom do we have the most trouble with? Why, ladies, of course. I'll guarantee that two-thirds of the time our clerks spend behind the case they are occupied in answering the conundrums propounded by members of the gentle gender.

"There are three distinct species in this class of visitors. First in order comes the matron. Her husband has given her a watch or a piece of jewelry.

"Next we have the charming misses. A pretty girl with eyes brightened at the prospect of marriage with the man of her choice.

PERNICIOUS WEEDS.

How Their Seeds Are Scattered by the Cold Winds of Winter.

There is a kind of winter seeding not generally entering into the plan of the average farmer. Winter is in thought associated with a period of rest and comparative death in the vegetable world.

Safe Burial of Bowlders.

Having buried many large stones, I affirm that the dangers incurred is very slight if the work is attempted in the right manner.

Origin of Electrical Terms.

The technical terms used in regard to electricity refer to units of various nature. Thus the unit of capacity is one farad; the unit of activity, one watt; the unit of work, one joule; the unit of quantity, one coulomb; the unit of current, one ampere; the unit of resistance, one ohm; the unit of magnetic field, one gauss; the unit of pressure, one volt; the unit of force, one dyne.

OPENING A MINE.

An Operation Which Demands Many Thousands of Dollars.

Working a gold mine sounds very nice, but very few people are aware of the difficulties and expense attending this operation.

There are plenty of men in this city who have been "bitten" in small mining schemes, and who do not now understand why they were failures.

The first thing the prospector does is to "think up" some capitalist friend whom he thinks would be willing to invest in the enterprise.

"I have one of the finest propositions you ever heard of. I have discovered croppings that indicate the presence of a ledge 8 feet wide, and which I am certain will be found permanent.

"All I need is enough money to run this tunnel. I can then haul the ore to a custom mill (there is one about a mile distant), and after that the mine will pay for itself. I only need \$3,000 at the outside, and if you will put up this amount you may have a half interest in the property."

The first thing to be done is to drive a tunnel into the solid rock some 8 feet square and a distance of 200 feet.

For the first few days the work progresses favorably, and the capitalist receives the most encouraging letters from his mining friend.

Difficulties are not only encountered in running a tunnel or sinking a shaft, such as the caving in of the work, rebellious rock and others too numerous to mention.

To estimate the actual cost of the opening up of a mine from the "grass roots" would be a very difficult matter.

"As much sometimes as \$200,000 are spent in opening up a mine before any "money" is taken out.

Having buried many large stones, I affirm that the dangers incurred is very slight if the work is attempted in the right manner.

PONDEROUS MACHINERY.

Preparations Made for Work on Uncle Sam's Army and Navy.

Every year the machinery in the iron mills at Pittsburgh, Pa., is being made more ponderous. The necessity for this lies in the demand for immense castings.

There is not a single bit of apparatus in it but what is the largest of its kind in the world.

The shears, which snap a bar of iron in two as though it were tissue paper, exceeds any thing in size that has ever been known by the sons of Vulcan.

But now the Government itself is going to throw all these marvelous achievements in the background by the improvements at the navy yard in Washington City.

The miners have "struck a horse." This is generally some rock about as easy to drill through as so much cast steel.

There may be 10 feet of this sort of work, there may be 50, at any rate, before the difficulty has been overcome.

Of course more money will be demanded, and then still more until the capitalist becomes disgusted and quits the thing all together.

All the tools and machinery to make this big cannon are being made purposely for the job, so large and strong must they be.

The 110-ton gun will be of 13-inch caliber, will require a charge of 1,000 pounds of powder, and will throw a projectile weighing 2,000 pounds.

Transporting the gun finally over the different lines of a railroad (if the ocean route is not taken), would require stronger iron bridges than are now in use.

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