

HISTORY OF SERIALS

The London "Standard" Was First English Paper to Print Serial

It is said that the Old Lady of Shoe Lane, as the now defunct "Standard" was nicknamed, was the first English newspaper to print a serial story, although to-day the papers which do not are to be counted on the fingers of one hand.

A well known editor, now dead, tells a good story of when Trollope came to him to arrange for the appearance serially of "Doctor Thorne." The editor offered the author two thousand pounds, but the latter wanted three. To this the editor objected, and the novelist offered to toss for the other thousand. The editor objected, and the matter was settled amicably.

"Uncle Tom's Cabin" was written as it ran, and the authoress intended to bring it to an end in twelve instalments. It ran to forty-three. For the serial rights Mrs. Stowe got \$300, and thought she had done well.

The first title in "All the Year Round," in the very first number, dated April 30th, 1859, is "A Tale of Two Cities," and the opening words are, "It was the best of times, it was the worst of times."

STARS AND PLANETS

There is a good deal of difference, as science has found out, in the visibility of stars and planets when viewed through a telescope by daylight. This varies according to the color of the heavenly bodies.

BURMA GRASS FOR PAPER

Kaing Grass May Form a Good Paper Material

The possibilities of utilizing the Kaing grass of Burma for paper making have for some years past been investigated by interested persons, in consultation with paper manufacturers in England, and it is now announced that the conversion of this grass into pulp and subsequently into paper can be accomplished in a simple and economical manner.

The yield of unbleached pulp is 33 per cent, calculated on the air-dry grass. This does not compare badly with esparto grass, from which about 43 per cent. of unbleached pulp is obtained. Kaing grass grows in great profusion in all parts of Burma, frequently reaching a height of ten feet.

Wreck's Sole Survivor

James Boyle, the sole survivor of the collision between the passenger boat Conemaugh and the collier Retriever off Greenore was the principal witness at the inquest at Kilkree. He was still suffering from the effects of his experience and for some time was unable to proceed with his evidence.

Instead of Glass

Unbleached heavy cotton cloth may be used as a substitute for glass on hot beds and the material used for dressing it is three parts linseed oil, one ounce acetate of lead, and four ounces of white resin.

For the first time since the Reformation service has been held in the ruins of the Abbey of Shaftesbury. Hang up the lantern while working in barn or stable. Many barns are jarred by lanterns being knocked over and starting fires.

A GOOD CLOTHES-TREE FROM OLD MATERIAL

Something That a Clever Boy Can Make With the Aid of Very Few Tools

Here's an ornamental article for boys to try a hand at. It isn't as easy as it looks though it's simple enough for a beginner in the use of tools to make successfully.

It will be found useful in the hallway or in sleeping apartments. You probably can find an old wooden bedstead in the attic which will provide enough material when torn apart to do away for this clothes-tree. If you order from the mill you can have the upright post cut tapering to just suit your needs.

You will notice that it is three inches square at the base and only 2 inches at the top. Fig 2 is the base of the post. It fits snugly down on the cross. Use the pieces that form this cross or base proper to get the right size for your mortises.

Mark the lines carefully and saw slowly, turning the piece over and sawing from the other side after every tenth stroke. When you have cut deeply enough bore two holes with a three-quarter bit in the pieces which are to come out and saw from the holes to the other saw cuts with a coping saw. A coping saw is a small wire frame with detachable blades, and may be purchased for 15 cents.

Finish trimming your mortises with a wood chisel and finally rub with sandpaper wrapped around a square stick. The top of the post is shown in Fig. 4. It is shaped with wood chisel and sandpaper.

The cross, which acts as a base, is formed of two pieces fitted together.

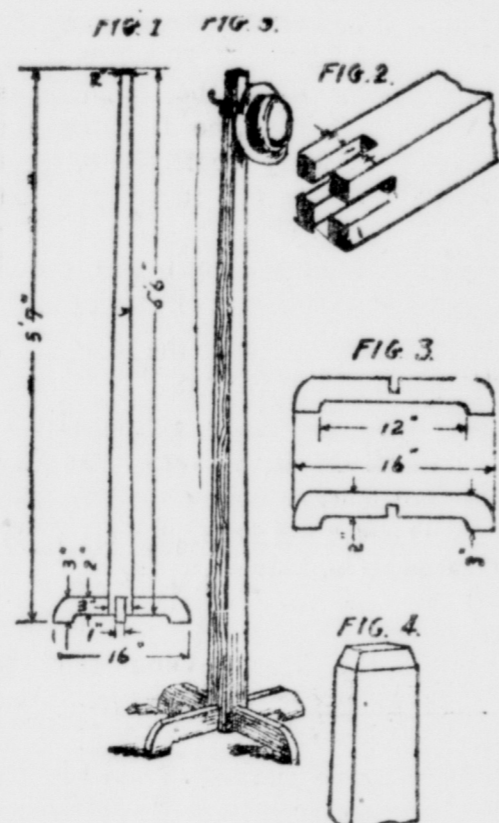


Diagram showing completed clothes-tree and how the different parts are made.

Study the diagram marked Fig. 3. The notch or mortise is in the top of one end and in the bottom of the other.

The cutting is done with saw and chisel, the final part of the fitting being accomplished with the old reliable sandpaper rub. The curves are easily managed with the coping saw. Whenever the pieces come in contact with each other in the assembling use a thin coating of liquid glue.

In finishing the surface, first stain any desired shade and then fill with paste color of the same shade if hardwood is used, lastly polishing with wax.

FIRE

Rome burned for eight days. Fire is a great purifying element. Neither Nelson nor Napoleon ever saw a gas lamp.

A fire which cost \$150,000,000 gutted Moscow in 1812.

New York's fire department is practically a military organization.

Machines for the extinguishing of fires were employed by the Romans. No building is really fireproof, although many are "fire-resisting."

To protect wood against fire, silicate of soda is the most effective remedy.

The use of the burning lens to generate fire was known to the ancient Greeks.

The best fuel for a fire engine is dry shavings, dry firewood and steam coal.

There are traces of an organization for the extinction of fire as far back as 2,000 years before Christ.

The first fire engine in which steam was used to drive the pumps was that of L. Jithwaite in 1829.

There is no doubt that the original method of finding fire was by the friction of two pieces of wood.

Between 1865 and 1895

more than quadrupled the number and apparatus of her fire brigade.

No Greek or Roman army crossed a frontier without carrying an altar in which a sacred fire always burned.

In the great fire of London in 1666, the damage amounted to ten and three-quarter million pounds and involved 436 acres.

The origin of fire varies, according to old time fables. The Greeks held that Prometheus brought to earth the torch he had lighted at the sun, and hence there was fire.

Radium as Cancer Cure

Of 746 cases of cancer treated in the Radium Institute of London last year there were 69 apparent cures, while 328 were reported improved. Many of the cases came to the attention of the institute in too advanced a stage to be remedied.

The comparatively new curative known as radium is especially useful in dealing with superficial cancers of the skin and with cases that are not easily operable. Conveniently handled, it gets at growths which cannot be reached by means of the X-rays. Because the patient can take radium in the mouth, cancer of the mouth, or palate, for instance, can be readily dealt with by radium.

Those birthmarks commonly known as "port wine stains" seem to be effectively treated with radium. A porter suffering from this disfigurement had repeatedly been refused employment. He went to the institute and after a time the mark was entirely eradicated.

A yearling is a young horse or other animal in the second year of its age.

The largest single sun-spot ever recorded had a diameter of 143,000 miles.

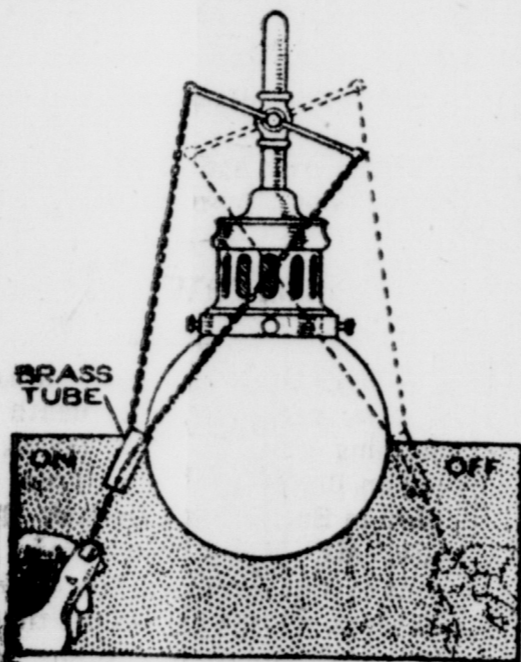
A barking fox at night indicates the coming of a heavy snow.

RECORD RAILWAYS

Russia has beaten all records in railway construction. She built a great double-track, broad-gauge line from Alexandrovsk, an ice-free port on her north coast, down to Petrograd, and completed it within six months. It is 1,220 miles long, and 10,000 men, mostly prisoners, were employed upon it. Then look at the Great Siberian railway! Five thousand five hundred and twenty-seven miles of line, most of it across wild plain and forest and over great mountain ranges, in a climate where for five months of the year the ground is frozen to the consistency of granite, and all this in eight summers! It is a record which, even in North America, has never been equalled. It cost one hundred and forty millions, and since its completion another twenty-two millions have been spent in improving the line.

The best work done in America under similar, but even worse conditions, was the construction of the White Pass and Yukon Railway, which opened up the route from the coast to Skagway to the gold region of Klondike. Within twenty miles from its starting point this line has to climb the White Pass, a height of just off three thousand feet. When the station at the summit was opened seven feet of snow surrounded it, and the thermometer registered 57 degrees below zero—that is, 89 degrees of frost!

Distinguishing Fixture Chains Annoyance through inability to locate quickly the proper chain for lighting a gas lamp in the dark was overcome by fitting a small brass tube to one of the chains as shown in the illustration. The tube was solder-



to the chain by which the light is turned on and the other chain passed through the tube and is grasped below it. To turn on the light, it is only necessary to slide the hand along both chains and to grip the tube, drawing on the chain attached to it. To turn the light off, the exposed end of the other chain is drawn.—Popular Mechanics.

FIRST ANAESTHETIC USED

Chloroform Was Discovered in 1848—Whose Honor?

Sir James Simpson, Professor of Midwifery in the Chair of Edinburgh University, is not actually the discoverer of chloroform, was, at any rate, the first to introduce its anodyne

as an anesthetic into surgical practice. This was in 1848. Previously all operations were performed without anesthetics, the patient being drugged with whisky and held down by strong men while the operation was performed. No medical discovery ever did more to alleviate human suffering.

Sir James is generally given credit for the actual discovery of chloroform, but it is stated in some works that it was discovered some years previous to his first experiments by an American doctor named Guthrie and by a French physician named Souberian. In any case, it was Dr. Simpson who proved its great value as an anesthetic, and the room in which he made his first experiment still exists in Edinburgh. The story goes that he tried the chloroform on himself and two medical friends. They proved its efficacy by simultaneously falling beneath the table. Sir James had considerable prejudices to overcome before chloroform was adopted generally by the medical profession, it being denounced at one time as dangerous to health, morals, and religion.

Tricks of the Green Man

Those who have seen films in which a player taking two parts appears in those parts at one and the same time, in the same scene, will wonder how it is done. The player, of course, does not play both parts at once. He, or she, plays one part, and while doing so the camera operator, by one of his many tricks, keeps blank that portion of the film on which the player is photographed taking his other part. When that part in which he has played is finished the operator winds back the film to the beginning, and the unexposed blank portion is exposed for the first time, while the other part is covered. Then the player takes the other part.

Filling the Radiator

It not infrequently happens with the motorist that when an empty radiator is filled up and the car runs a short distance, the water level will be found to have fallen considerably, though no overheating has occurred and no leak exists. The reason for this is that the water requires some little time to percolate through the various restricted passages in the cooling system, and a little shaking down results in a falling of the level.

A War-time Problem

A baker informed the Rugby tribunal that he had advertised for women workers. The reply he had received was from a girl, aged sixteen, who confessed that she knew nothing of the business and asked for six dollars per week.

It is not uncommon to have a Rhode Island Red cock throw a white feather. It is no sign of impurity. These white feathers are apt to develop with age.

DRINKING IN JAPAN

Terrible Havoc Wrought by Addiction to "Sake"

That drinking is a widespread habit in city and country life alike, says Captain Bickel, is a widespread general impression in the minds of most missionaries. As, however, outward evidences of direct intoxication are comparatively scarce in public, I fear that the terrible havoc wrought by liquor in Japan is not fully understood. Reports from many prefectures give striking evidences that drink has a terrible grip on the communities. A few places report drinking as being moderate but by far the large majority of the reports have statements such as the following: "Fifty per cent. of the village A drink." "The village of B with 600 houses spends 12,000 yen (\$6,000) per year on sake." "Several families in the village of C spend above fifty dollars each year on alcohol." (The figure represents about the annual earnings of unskilled workers such as night watchmen or porters, and more than most workers will earn in a country village). I have intimate knowledge of one county largely given over to the manufacture of shoyu (a sauce like a ketchup) in which the consumption of sake largely outstrips the profits on this main source of income. Liquor shops are largely on the increase in country districts.

MOTOR OILS AND COLD

Proper Kinds of Oil and Anti-Freezing Mixtures

Many anti-freezing compounds use alcohol, glycerine, water and calcium chloride. The best of the three sets is that using alcohol, glycerine and water, but for really cold weather, more alcohol and glycerine and less water should be used. When these solutions are used and evaporation occurs it is not necessary to add make-up solution to compensate for the evaporation. The alcohol evaporates much faster than either of the other liquids, so it is necessary to add only alcohol to bring the radiator to capacity.

During cold weather it is necessary that the owner pay attention to oil changes in the gear cases. In cold weather lighter oil should be used than in summer because of the effect of cold on the viscosity of oil. Some use a medium cylinder oil for the rear axle, while others prefer a semi-fluid oil. Heavy oil or grease should not be used. Before the oil is placed in the case, the latter should be thoroughly cleansed and flushed twice with kerosene.

PEOPLING THE CLAY BELT

Model Homes Built in New North Country For Railway Employees

The action of the Canadian Northern Railway in building one hundred houses at a number of division points on the Montreal-Port Arthur section of its transcontinental line provides homes—modern, comfortable and of pleasing design, for the employees of the road and their families. The conditions of occupancy are so easy that it will be a comparatively simple matter for the C.N.R. employees to virtually own outright the towns of Brent, Capreol, Foleyet, Horne Payne and Jellicoe.

With the exception of electric lighting, which may be a later development, the houses in New Ontario are equipped quite as completely as homes of similar size in long established towns and villages in Old Ontario. They contain a large living room—from which a winding staircase leads to the upper floor—a kitchen, a pantry, and a bedroom, on the ground floor. Above, there are other two bedrooms, a bathroom, and a sewing room, all of fair size. One of the hardships in winter has been eliminated by the provision of a roofed-over coal and wood bin outside the house, but against the kitchen, with a sliding door arranged in the wall so that the household supply can be replenished without the usual cold out-of-door journey. Beaver board supplies the interior finish, and ship-lap may be added outside.

As a general rule the plan has been followed of placing each house at the side of a good sized lot, to facilitate the planting of the remainder to garden truck for table needs. It is understood that the Ontario Government will later throw open to settlement a township contiguous to the town of Foleyet and another to Horne Payne, in the great clay belt. It is confidently expected that the building of these homes will mark the beginning of a new era in the New North. First there should follow the stores to cater to the needs of the town dwellers, and then settlers to take up the adjacent land, because of the inducement of a good market, and the advantages of adequate shipping facilities.

Won Success Early



HON. CHARLES A. DUJNING who became Provincial Treasurer for Saskatchewan in the Cabinet of Premier Martin at the age of thirty-one. He was born in Leicestershire, England, and was head of the Saskatchewan Co-operative Elevator Company at the time of accepting the portfolio.

WATERING HORSES

When Care is Needed—Feed Hay and Grain Together

Many horses are killed and many more are injured by careless feeding and watering. Never water a horse immediately after feeding grain. This washes the grain through the stomach before it is properly mixed with the stomach juices and is liable to cause colic. If the horse is very warm, let him drink a few swallows and then hold his head up for a minute or two, and thus cool his stomach slowly. Try it yourself in hot weather. You can drink a quart of cold water without injury if you will but take several minutes for the first few swallows.

When horses are brought in hot from their work they should first be given water cautiously, and then fed hay and grain together, allowing them to exercise their own judgment in the selection of their food.

Burning Rubbish

Do not allow combustible rubbish to accumulate in or about the house, but do not burn quantities of paper, or other rubbish in a fireplace or in the firebox of a stove or furnace. The ashes along the flue passages, and the pipe-chimneys are liable to overheat and start soot fires. Burn such material in the ash box below the firebox, where it can do no harm.

Rather Inconvenient

A little slum child was enjoying his first glimpse of country life. He sat by the farmer's wife just as the man was setting, watching her pluck a chicken. He was gravely silent for a long time, then asked: "Do you take off their clothes every night, lady?"