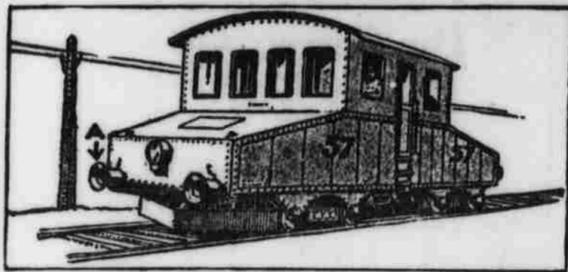


DOES AWAY WITH COUPLING



NEW SWITCH ENGINE

ELECTRO-MAGNET EMPLOYED TO THE BEST ADVANTAGE.

Invention of Swiss Engineer Eagerly Adopted by Railroad Authorities—Simple in Effect, But Admirably Adapted to Work.

To expedite the shifting of cars in railroad yards and to lessen some of the hazards now generally associated with this work, an ingenious Swiss inventor has called to his aid the electro-magnet. So sound were the principles he employed and so practicable was his equipment that the installation is now in daily use upon the switch engines in the busiest yard in Bern.

A form of storage battery locomotive has been built especially for this work. Instead of the usual buffers at the front and rear, the tractor is fitted with iron cylinders, two at each end, and placed where they will be directly in line with the regular buffers on ordinary cars. These iron cylinders are wound about with coils of insulated copper wire, and when an electric current is sent through the cylinder become powerful magnets, and exert sufficient force to hold firmly the rounded heads of the car buffers that fit into the outer ends of these magnets. The ends of these magnets, by the way, have dished faces and, with the car buffers, form flexible joints that permit the trains to take curves and to allow, besides, for a reasonable measure of vertical movement.

When a car is to be shifted the engineer runs his storage battery locomotive up against the first car of the train to be moved, and just before the four buffers come in contact the electric current is sent through the coils. The moment they touch the effect is as if the car and the locomotive had been coupled, because when the contact is perfect each magnet has a grip of quite 3,800 pounds.

The engineer, standing in his cab, has complete command of the movements of his locomotive and of the gripping and releasing of the cars he is handling. To make or to break his hold by means of his magnet buffers he has only to operate an electric switch. No one is exposed between the cars, and shifting can be done with exceptional speed and ease, not to mention greatly increased safety. The storage battery locomotives at Bern have been found very practicable, and are more economical than the steam engines for this work.—New York World.

New Railroad in Lapland.

A railroad is projected for Finnish Lapland in order to make available deposits of iron ore in that region. The first part to be built, if the scheme materializes, will probably be from the village of Rovaniemi, connected by rail already with the port of Kemi on the Gulf of Bothnia, and Sukkavaara, 87 miles distant. From Sukkavaara further extensions of the line may be built to the mouth of the Neida river on the Arctic ocean, whence Finland would be enabled to export iron ore all the year round. Eleven miles of this link would be in Norwegian territory. The total length of the line, which would be one of the farthest north in the world, would be 280 miles.

Court Ruling Reversed.

In 1842 a man entered into an agreement with his wife to let her keep the children after they had separated. Later he decided to take the children himself and was upheld by the court, which declared that "the very being and legal existence of the woman is suspended during marriage, or, at least, is separated and consolidated into that of her husband." The same sort of case came up in New York the other day, and, referring to this old law, the judge said: "We have emerged from the dark ages, during which married women had the status of slaves and chattels." He gave the child to the mother because, he said, the real test is the welfare of the child.

A Distressing Mistake.

"Did you hear what happened at Nell Grimshaw's wedding Thursday evening?"  
 "No, I've been out of town. I hope it was nothing serious."  
 "It came very near being serious. She had just started down the aisle, leaning on the arm of her father, when the organist struck up 'Too Much Mustard' instead of the wedding march, and in three seconds nearly everybody in the church had begun to tango. Luckily the preacher had the presence of mind to turn off the lights and in a few minutes order was restored so that they could go on with the ceremony."

MAKE EXPERT RAILROAD MEN

Italians Are Considered Among the Best That Can Be Employed on the Lines.

"The don't-care man is a burden," said Pietro Matteo in a recent address to his fellow countrymen on safety first in railroad work. And in that phrase Mr. Matteo unconsciously set forth the reason Italians have become so successful as railroad men. Their rise in this particular field has shown that they are not "don't-care men."

Twenty years ago there were practically no Italians employed on railroads. Today they may be numbered by the thousands. Out of 140,000 men working on the Pennsylvania railroad east of Pittsburgh 11,000, or more than one-fourteenth the total number, are Italians. Twenty years ago the few engaged in railroad work were laborers. Today they occupy positions of trust and responsibility.

Italians have shown an aptitude for railroad work and an amazing versatility in it. They have become actively interested in every branch of the service. As an example of the range of their activities take the following list of occupations in which the 553 Italians employed on the West Jersey and Seashore railroad and Camden Terminal division are engaged.

Subdivision foremen	..... 11
Subdivision assistant foremen	..... 11
First laborers	..... 11
Track watchmen	..... 5
Laborers watchmen	..... 25
Crossing watchmen	..... 7
Bridgemen	..... 1
Station laborer	..... 1
Car cleaners	..... 11

KEEPING DOWN FIRE LOSS

Railroad Has Organized Its Employees Until Almost Point of Perfection Has Been Reached.

One of the greatest eastern railroads had 1,929 fires on its properties last year. The values exposed to loss were over \$350,000,000. The actual loss was \$278,730, or less than eight cents on each \$100 of values exposed. Of these fires 441 were put out by the company's own employees before the arrival of the public fire fighters.

The employees are organized and drilled to fight fires. They are provided with apparatus suitably placed and kept always in good condition. Doubtless these precautions cost something. But it is evident that they "pay."

Enlightened self-interest has led the railroad to keep down its fire loss. Unfortunately all property owners are not equally enlightened. Hence the need of stricter laws than we have for enforcing care in fire prevention. It must always be remembered that fire loss is a total loss. Insurance merely distributes the loss from the individual upon the community.

Milk as a Stimulant.

The experience of French soldiers in the European war has demonstrated that milk is one of the most powerful stimulants known. So beneficial have been the results obtained from its use that the government has urged the sale of milk instead of soft drinks to soldiers on duty for rest and recreation behind the trenches. The great advantage of this fluid as a drink for fighting men lies in the fact that it stimulates them effectively, neither befogging their minds, dulling their sense nor affecting the steadiness of their nerves.

Siam's Railroad Development.

Siam's new railroad, the Siam-Southern, now has 389 miles of its line open to traffic, of which 120 was opened during the last year. The total length of the line, including branches, will be 740 miles, leaving 351 miles still to be built. When completed the line will shorten the time required for mail to reach Siam from Europe by three or four days, and the journey from the port of Penang to Bangkok, capital of Siam, which now consumes six to eight days on the water, will take two and a half days.

Curious Woman.

"Henpeck says he has never belonged to a club of any kind; he is not a member of any fraternal order; he does not use tobacco in any form; he is a total abstainer from all alcoholic drinks, and he has eyes for no woman save his wife."

"I know it. And yet she doesn't seem to be absolutely sure that he is an ideal husband. Curious about woman, isn't it?"

Has Excellent Record.

The Empire State Express has been running for nearly twenty-five years. During that time it has carried almost 8,000,000 passengers without one fatal accident.

Responsibility Rests on Guard. Until a guard gives the signal, not even a station master can authorize the departure of a train in England.

SUDAN GRASS GAINING FAVOR

Plant is Decidedly Drought Resistant, Making it Well Suited for the Semiarid Regions.

(By J. C. HACKLEMAN, Missouri College of Agriculture.)  
 Tests of sudan grass by the Missouri agricultural experiment station during the last two years indicate that this new crop will be of value to Missouri farmers, especially in the southern part of the state. Seed may be secured from any reliable seedman, but it is well to take the precaution of buying northern-grown seed so as to avoid the possibility of introducing Johnson grass.

Sudan grass is a tall, rank growing, annual grass closely related to the cultivated sorghums and resembling Johnson grass. It differs from Johnson grass, however, in not possessing the heavy root stalks or underground stems which make Johnson grass so difficult to eradicate in those regions which are well suited for its production. The plants average from three to five feet in height when drilled or broadcasted and have stems a little larger than a lead pencil. If grown in rows and cultivated, it reaches a height of from six to nine feet on good soil with a corresponding increase in the size of the stems. When planted thinly it stools very freely, sometimes producing as many as 100 stems from one crown.

Like the other sorghums, sudan grass does best in a warm climate. It should not be planted until all danger of frost is past and the ground thoroughly warmed. It is decidedly drought resistant, which makes it well suited for the semiarid regions of the Southwest. It is also being grown with success in the more humid regions, but it has not attracted as much attention there as in the drier sections where there are not so many other good hay plants. Two cuttings are usually made, and under very favorable conditions sometimes three or four. It has rather wide adaptations as regards soil, growing successfully on almost every soil, from a heavy clay to a light sand. It does best, however, on a rich, well-drained loam.

Two methods of seeding are practiced, broadcasting or drilling solid, or drilling in rows to be cultivated. An ordinary grain drill may be used and the seed covered from one-half to one inch deep. Where drilled in rows a sufficient number of the holes are stopped up to put the rows the proper distance apart. Where an ordinary corn cultivator is to be used, the rows should be from 36 to 42 inches apart. Where seeded broadcast from 20 to 25 pounds of seed to the acre are required, while seeding with a drill requires about five pounds less. If seeded in rows four to five pounds is sufficient.

It is customary to cut for hay just after full bloom and to cure in light windows and small cocks. It may also be harvested with a binder and cured in shocks. Where grown for seed it is usually harvested with a grain binder when the first heads are fully ripe.

MOISTURE NEEDED BY CROPS

Sufficient Quantity at Right Time Insures Abundant Yields—Purpose of the Fallow.

The last year has told us quite plainly that with sufficient moisture at the right time there is practically no limit to the yields of our crops. It has shown us that, at present at least, there is no shortage of soil fertility and that the determining factor in crop yields is moisture. What we would impress here is the fact that the summer fallow was created for the purpose of storage and control of soil moisture although latterly it has been put to the more apparent use of weed destruction.

Because large yields were secured last year from ill-prepared land is no guaranty that there is any probability that they will be repeated. They indicate only that a large water supply in the soil will give large yields. The way to be sure of a large water supply is to summerfallow and to do it right. There is much land not prepared for crop. To seed this will be taking a gambler's chance. The only satisfactory and sane method to follow will be to seed what can be properly prepared, even though the area is small, and to summerfallow the remainder.—Farmers' Advocate.

TEST VALUE OF FLAX STRAW

Department of Agriculture Investigating Feasibility of Using It for Making Paper.

The United States department of agriculture has been investigating the feasibility of using flax straw in the manufacture of paper and fiber board. It is estimated that approximately 1,400,000 tons of flax straw are burned or go to waste each year on American farms.

Flax is grown chiefly in the Dakotas, Minnesota and Montana, in which states approximately 2,000,000 acres are devoted to this crop. The actual seed crop runs about 20,000,000 bushels, and the crop of straw about 1,600,000 tons.

If some practical way can be found for using this straw to advantage, it would add greatly to the value of the flax crop. The fact that our timber, from which most of our paper is made, is being used more rapidly than it is growing, makes it highly desirable that some annual crop should be found which can take the place of wood pulp in the manufacture of paper.

WASHINGTON GOSSIP

Warning Issued Against False Weather Prophets

WASHINGTON.—The department of agriculture of the United States has issued a warning to the public against credence in so-called new systems, astrological and otherwise, of forecasting weather conditions. Belief in these systems, the notice asserts, often proves disastrous to farmers and other folk whose enterprises are affected by atmospheric or other weather conditions. The warning against these fallacies says:

"The latest misrepresentation of this character now being presented to the people of the country is an alleged new system of long-range weather forecasting said to be based on the rifts and spottedness of the sun and its shafts of solar radiation. When photographed with powerful telescopes, or when presents a characteristic spotted appearance which undergoes slight changes from day to day, and greater changes with longer intervals of time, depending upon the well-known rotation of the sun upon its axis and the periodic recurrence of the sunspot maxima and minima.

"These and certain well-known related phenomena are represented to be the basis of the so-called discovery."  
 "During the past several years the weather bureau has received, in the form of letters, circulars, diagrams and blue prints, full specifications concerning all essential details of this alleged new system of forecasting. The so-called discovery is fully known to the weather bureau and has received fair and impartial study and examination by its scientific staff. Moreover, other scientists of international reputation now connected with the strongest institutions in the world engaged in astronomical research and conducting investigations in solar and terrestrial physics have also passed upon these new theories.

"These authorities are in accord that the deductions and conclusions drawn from the solar conditions on which the new system is based are unwarranted. Solar phenomena of the kind described do not have any direct influence upon the weather at any particular time and place, and, therefore, cannot be made the basis of weather forecasting.

"Spacious references to the moon, to the planets and to the spottedness of the sun and its shafts of radiation alleged to dominate terrestrial weather are but picturesque frameworks upon which to display weather forecasts for sale."

Bill to Regulate Podiatry Stumped Colonel Hall

A BILL to regulate the practice of podiatry in the District of Columbia, Col. L. J. Hall, the chief bill clerk of the house of representatives, scratched his head. This has been the habit of men perplexed since Adam became worried about the insidious activities of the first serpent.

During the years that he has been connected with the billroom of the house, Colonel Hall has handled bills and resolutions covering almost every topic under the sun.

But here was a bill, introduced by Congressman Maher of New York, to curb the practice of podiatry, and proposing, furthermore, "to protect the people from empiricism in relation thereto." The new man in the bill clerk's office averred he didn't know such a thing existed in the District of Columbia, although he'd always had his suspicions. The evils of a city, he complained, pass all understanding.

And then it dawned upon Colonel Hall and the bill clerks! "Podiatry? Why, that's corn doctoring. You know the corn doctors of our boyhood days?"

Why, of course. It is but a commentary on the passing of the old order of things. Podiatry, it seems (although few ever knew it was that), must go the way of sassafras tea, blueamass and calomel, fresh-drawn herb juice and the odoriferous asafoetida bag that hung warningly about one's neck.

Just now it is impossible to say why Congressman Maher has gone on the warpath against that American institution—the corn doctor. Perhaps Mr. Maher hasn't a corn; perhaps he has one and it won't come off, or somebody has stepped upon it.

Mrs. Wilson and Flowers of the White House

AS FAR back as one can remember White House chatelaines have been devoted to flowers and have taken great pride in having the bit of ground just back of the right wing planted with the flowers each has liked best. Mrs. Roosevelt chose to have it fitted with so-called old-fashioned flowers, while Mrs. Taft preferred only roses.

The flower associated with Mrs. Wilson is the large orchid, the cultivation of which in this particular garden would be out of the question. Mrs. Wilson has worn the orchid at all society affairs, and, indeed, all times since her engagement to the president was announced. Before that time she was usually seen with great bunches of violets as a corsage bouquet, or the pure white gardenia fastened somewhere to the left of her throat.

The most beautiful foliage as a background for orchids is the maiden-hair fern, which, when separated from the root, withers so quickly that it must constantly be replenished. It would seem that this has been arranged for in Mrs. Wilson's case by the quantity of potted ferns placed in every available spot throughout the White House. These are sent from the White House conservatories, where they are raised to perfection. There are several varieties of the maiden-hair, each one of which seems to be more beautiful than the others.

The great lawn which stretches from the portico of the White House toward the Potomac is pretty well inclosed in shrubbery and dotted with fine trees of every species. Surrounding the whole place is an iron fence, directly inside of which is a hedge of privet, planted during the administration of President Taft. So rapidly does this favorite hedge shrub grow that it already has become a formidable barrier for those who enjoy seeing the president's grounds, even if they cannot walk upon them. It will not be many more years before the White House inclosure will be as much walled in as are the grounds around Buckingham palace and the other homes of Europe's monarchs.

Woodlawn Mansion May Be Summer White House

WOODLAWN MANSION, the home of Nellie Curtis Lewis, in the historic Mount Vernon district of Fairfax county, Virginia, will be the "summer capital," unless rumor has run awry. President Wilson and his wife have made several trips to the Woodlawn neighborhood in the past few weeks.

Woodlawn is located about sixteen miles south of Washington and there are splendid roads for motoring between the two points.

The Mexican situation and necessity for frequent conferences with his advisers over European war problems that confront him give color to the gossip that the president may find it advisable to spend the summer nearer Washington, than the summer home recently selected in New Jersey, and it is possible that Virginia may reap that distinction from the Northern state.

Woodlawn mansion was erected in 1805 by Maj. Lawrence Lewis and his wife, Nellie Curtis Lewis, and is considered the statelyst of all of the mansion houses of the upper Potomac.

HUSBAND OBJECTS TO OPERATION

Wife Cured by Lydia E. Pinkham's Vegetable Compound

Des Moines, Iowa.—"Four years ago I was very sick and my life was nearly spent. The doctors stated that I would never get well without an operation and that without it I would not live one year. My husband objected to any operation and got me some of Lydia E. Pinkham's Vegetable Compound. I took it and commenced



to get better and am now well, am stout and able to do my own housework. I can recommend the Vegetable Compound to any woman who is sick and run down as a wonderful strength and health restorer. My husband says I would have been in my grave ere this if it had not been for your Vegetable Compound."—Mrs. BLANCHET JEFFERSON, 703 Lyon St., Des Moines, Iowa.

Before submitting to a surgical operation it is wise to try to build up the female system and cure its derangements with Lydia E. Pinkham's Vegetable Compound; it has saved many women from surgical operations.

Write to the Lydia E. Pinkham Medicine Co., Lynn, Mass., for advice—it will be confidential.

Cooling It Off.

Bill—I see a pocket-size electric fan has been invented.

Jill—To keep money from "burning" in the pocket, no doubt.

HOW TO REMOVE DANDRUFF

Itching and Irritation of the Scalp With Cuticura. Trial Free.

On retiring lightly touch spots of dandruff, itching and burning with Cuticura Ointment. Next morning shampoo thoroughly with Cuticura Soap and hot water. These super-creamy emollients do much to keep the scalp clean and healthy and to promote hair growth.

Free sample each by mail with Book. Address postcard, Cuticura, Dept. L, Boston. Sold everywhere.—Adv.

Apt Mechanic.  
 The phrase, "apt mechanic," is good English. Of course it is. It simply means "fit mechanic" or "good mechanic."

The leap-year girl who proposes to a wine bibber wins if she loses.

Thousands Tell It

Why dally along with backache and kidney or bladder troubles? Thousands tell you how to find relief. Here's a case to guide you. And it's only one of thousands. Forty thousand American people are publicly praising Doan's Kidney Pills. Surely it is worth the while of any one who has a bad back, who feels tired, nervous and run-down, who endures distressing urinary disorders, to give Doan's Kidney Pills a trial.

A Colorado Case

Mrs. John Brumley, 114 Twelfth St., Greeley, Colo., says: "I believe I would be dead if it weren't for Doan's Kidney Pills. My back began to ache, soon followed by blinding dizzy spells. My feet swelled terribly and the swelling extended up into my limbs and hips. I couldn't sleep and my nerves were wrecked. After doctor's treatment failed, Doan's Kidney Pills restored me to good health."

Get Doan's at Any Store, 50c a Box  
**DOAN'S KIDNEY PILLS**  
 FOSTER-MILBURN CO., BUFFALO, N. Y.

The Army of Constipation

Is Growing Smaller Every Day. CARTER'S LITTLE LIVER PILLS are responsible—they not only give relief—they permanently cure Constipation. Millions use them for Biliousness, Indigestion, Sick Headache, Sallow Skin. SMALL PILL, SMALL DOSE, SMALL PRICE. Genuine must bear Signature.

Wm. Wood

DEFIANCE STARCH

is constantly growing in favor because it Does Not Stick to the Iron and it will not injure the finest fabric. For laundry purposes it has no equal. 16 oz. package 10c. 5c more starch for same money. DEFIANCE STARCH CO., Omaha, Nebraska

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