# MULE SHOWED HOW

Packing of Earth 5, Hoofs of Animal Taught Lesson.

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Starting in MD on South Dakola Homestend Claim, H. W. Camb bell To Doy. Hap Profitable Farms in Four States. 11.1

Am coln. No Themy fix A grand ago, during the "dark days on the west, when every crop failed and thousands or settlers were returning. back east." a discouraged farmer it South Dakota, looking over his ruined. field for the last-time before trekking tack to Vermont, noticed that in the tracks made by his old lame miniwhere the soil was packed by the weight of the animal, the wheat had grown strong and tall. As a result of this observation, South Dakota is just now harvesting one of the largest wheat crops of any state in the emion, and is filled with prosperous farmers, while the erstwhile discouraged farmer bimself, B. W. Campbell of this city, is owner of five big! wheat farms aggregating 30,000 acres. which produces an average of 69 bushels per acre. He is known as the "Bononza Farmer" of the west, and all because a lame mule tramped across his wheat field one day.

The good stalks of grain growing in the mule tracks, and surrounded by juny stems, set Campbell to thinking. From it he evolved a new system of farming. His neighbors laughed at him and remained poor, while Campbell prew rich. When he wanted new tools with which to farm, according to his new ideas, the farm implement manufacturers made light of his ideas. Campbell made his own tools, and togay they are being manufactured in Odessa, And Hungary. Hyderab I and a half dozen cities in the United States.

When Campbell took up a home stead in Dakota territory, in 1881, all he possessed, besides his family, was a few farming implements, a plow, a magon, etc., a lame mule and a long horned ox. The ox and mule, yoked together, broke the sod and put in the crop of wheat. The rains came, the water fell on the loose sandy soil, sank into the ground and ran off just about as fast as it fell. As a result, when the long, hot days of the sunny summer arrived, the blades of wheat dried up and died.

Other farmers had similar experiences. After several years they decided to leave the country, and wrote "back home" for funds with which to do so.

Campbell had been a machine shop foreman in Vermont, and had no one to whom he could write for assistance. He was desperate, and was preparing so leave the country, going anywhere. But he walked out to look once more at his burned field. And he noticed small bunches of good wheat. His curiosity was aroused. He examined carefully and found that these bunches were growing in the tracks

"What did is?" he asked himself
But he didn't leave the farm. For
days, however, he asked himself the
question, "What did it?" And finally the answer came to him.

"It was the packing of the earth

The next year, when Campbell fowed his wheat, he rolled it with a home made roffer for days and days. His neighbors laughed at him.

When the wheat sprouted every kernel came up, and so did that planted by his neighbors, who again laughed at the 'fool Vermont machinist who thinks he knows how to farm."

thinks he knows how to farm."

Then came the long, hot days, and the neighbors' wheat dried up and burned.

But Campbell's didn't. His fields, were green, and in the time of harvest it was found that he had raised the biggest crop that country ever saw. Campbell's theories had been groven and the next year every farmer in that country packed his wheat ground down at the bottom of the furrow.

#### JOB PAID ONE CENT YEARLY

Letter Carrier on Small Route in Illinois Loses Position Paying Small Salary.

Galena, Ill.—After carrying mail over an eight-mile route since 1881 for the pay of one cent a year, the carrier has lost his job. It was not from neglect of duty that this employe of the government was severed from the payroll. Neither is there any evidence that he was unwilling to continue longer the duties of his position, for he worked as long as his penny a year was forthcoming.

The postoffice department has decided to discontinue star route. No. 39,125, between Dodgeville and Minstal Point. This line of eight miles was a remnant of the old route established between Milwaukee and Galena in 1835. It was reduced to eight miles in 1881. The carrier has received offers as high as \$20 for his government order paying him his yearly stipend, but has thus far resisted the souvenir hunters

Oil After Earthquake.

Zamora. Mexico.—Since the recent carthquakes an oil spring has been found on edge of Lake Chalapa and preparations are being made to bore that vicinity.

in that vicinity.
This will open up a new of field in

### RAT AND RATTLER IN FIGHT

Common Hours Rodens Defeats Big Shake in a Fibrice Battle Last. ing Thirteen Rounds.

Now York was common house the region 1 for all a with a cartle nake with to rattle make with to rattle make with to rattle on a common the farm of fillward Hawking, near Bayonne, it other may be killed the rattle on the last on it and repairing a committee in epitie on it and repairing results the epitie by dead

Twelve times the make collect sound if there and mark at the at Each time the bittle animal priged and say to self. The rattler vas coiling for the thirteenth stroke when the rat dashed in and sank ite long, shap teeth into the snake's neck antil they met and focked. The ratther reared itself and, thrashed wildly about the place in its efforts to free itself. The rat suffered terrible punishment while that thrashing was going on. Not for an instant, however did it loosen its grip. It seemed to know that to do so would spell death for it, and it was not ready to die. When finally the rat had finished its poisonous foe it let go its hold, backed off, and seemed well satisfied with what it had done. .

The fight was not due to accident p It was set up by Hawkins, a truck! farmer, and his brother, Joseph. They watched it from start to finish, and after the rat had won they asserted: they would match the victor against all comers in the rat or the snake line. Joseph is a farmer in Sussex county. N. J. He took the rattlesnake to Bayonne in a suit case, after he had captured it in his chicken house and narrowly had escaped being bitten Edward Hawkins had caught a large rat in a barrel trap. He suggested that the snake and the rat be permitted to fight to the death. The men thought the rattler would make short work of the rat and swallow it In the Hawkins barn there is a small! drying room, which has no crevices in the walls or floor. The rat and the rattler were turned loose in that room, and the two Hawkins watched them from the trap door above. When the rat had circled about the room and discovered there was no way it could. escape, it dashed at the snake whenever it was uncoiled. The rattler rattled and the rat squeaked viciously The fight raged all over the room, until finally the rat got the hold that strangled the snake with the unlucky thirteen rattles.

#### HALT ON RECKLESS GAMBLING

Young Aristocratic Englishmen and Attaches of Foreign Legations

Are in Disgrace.

London.—Society is gossiping about the tremendously high gambling by members of two of the most exclusive clubs in the west end, some of whom are young attaches of the foreign legations, other gilded youths of aristocratic English families.

Following other heavy losses at the card table, one diplomat lost \$12,000 on Tuesday afternoon, an amount equal to his salary for three years. Whatever his private fortune he had to default on his debts of honor. Consequently he will not be recognized by the gentlemen who won his money nor by the others, and his career in diplomacy is ruined.

Of course, foreign diplomats are immune from all legal proceedings. But not so with English gamesters. One of these, an officer in a crack cavalry corps, has lost \$400,000 in six weeks, it is reported. Certainly he is being put through bankruptcy now by the money lenders who had his notes.

Another young English aristocrat who was hit heavily at the game has an ornamental position at court. The fact that he has ruined himself financially was told to King Edward, who ordered an angry complaint to be ad dressed to the house committee of the club where the gambling went on. In consequence of this remarkable communication, almost direct from his majesty, three members have been asked to resign from the club for violating its rules governing the size of stakes at cards. The others are not members of this club; they were enjoying.its hospitality while their own clubhouse was being renovated.

#### FARMERS' EDUCATION RECORD

Greatest Progress in History is Noted in Teaching of Agriculturist in Various Colleges.

Washington.—Never before in the history of the world has there been such progress in agricultural education as that in the United States during the last 11 years, according to the opinion of R. J. Crosby, specialist in agricultural education of the department of agriculture, expressed in a report issued recently.

In 1897 the income of landsgrant colleges aggregated only \$5,000,000; now it is \$18,000,000. The property of these institutions was valued in 1907 at \$51,000,000; now it is \$106,000,000. Then there were fewer than 4,000 students in agricultural schools; now there is more than 14,000.

Pole Homes Petrified.

Stockholm.—Pole dwellings 4,000 years old, similar to those discovered in the north of Switzerland, have been unearthed in a swamp on the plateau east of Lake Vetter, northwest of Stockholm. The excavations disclosed petrified apples, wheat kernels, nuts, pottery, flint and horn implements, amber ornaments and wild boar teeth, all in good state of preservation in the

# NEW COTTON FIELD

Sahara Desert May Be Used for Growing Staple Product.

Two New Yorker, Head Expedition to Explore Finance African Ousis—
Expect Conflict with Teuregs
and Other Tribes.

Lordon The secretaries limits for cotton to each of a letter each one soft the Scharacter of Aleson V. Armour and Jordan I. More et New York are headed now for the heart of Africa with one of the largest and best equipped expeditions that ever entered

the black continent.

Messrs. Armour and Mott completed fitting out the expedition before they left London 10 days ago. The last consignments of tents, supplies, arms and ammunition have been dispatched to Genoa, to be loaded on a ship for

Tripoli.
Nearly 200 white men, including many European, soldiers of fortune, have been engaged to command the army of blacks with whose aid the two Americans hope to fight their way through the Touregs and the wild, cruel, nomadic tribes whose country is still almost the least known terri-

Armour and Mott, it is understood, decided on this dangerous undertaking after hearing of the success of Isidore Morse, John McFadden, "the English cotton king," and of several others interested in cotton, on getting from the Italian government enormous concessions of land in Erythrea, southeastern Egypt, where is some of the finest cotton growing fand in the world.

world.

The land obtained by Morse, McFadden and their associates covers millions of acres, extending from the Red Sea west to a line drawn through Kassala, parallel with the Red Sea coast line. The acreage is as large as that of the original grant obtained by the

chartered company in Rhodesia.

So well have Morse and McFaiden guarded the secret of their tremendous grant that even now it has not reached the ears of many persons outside of the Italian government. Morse left London five days ago for Rome to settle further details in connection with his concession; his plans are progressing to put the cotton-raising scheme in active operation.

The German emperor, whom he has often entertained aboard his yacut, is a close friend of Allison V Armour and formerly was his classmate at Heidelberg. The emperor is deeply interested in the outcome of the under-

taking The expedition will land at Tripoli and, according to present plans, will strike inland with the object of reaching Ghat, the chief city of the Toureg country, 500 miles south by west from Tripoli. As 150 miles of the northern part of the Sahara must be traversed to reach Ghat, the expedition will be transported by camels from a point 100 miles east of Tamassanin. From Ghat the great caravan will go southeasterly, keeping well to the solthwest side of the Tarso mountain range, toward Lake Tchad, in which neighborhood are some of the most fertile oases in the whole vast desert.

South of Lake Tchad the expedition will enter the domain of the sultan of Bornu, on whose good offices Armour and Mott count. They expect the sultan to provide them with a military escort.

#### SAN JOSE SCALE SPREADING

Principal Commercial Apple Orchards
of Entire Country Menaced by
Pestiferous Insect.

Washington—The principal commercial apple orchards of the country are destined to become infested with the San Jose scale, according to a bulletin entitled "Fumigation of Apples for the San Jose Scale," just pubtished by the department of agriculture. The scale is spreading rapidly

over vast areas each year.

Although there are numerous orchards not affected in the western and eastern states, where the disease is well-established there is no doubt, according to the builetin, that these soon will be visited by the scale. It is regarded as a certainty that there will be a spread of it west of the Mis-

The bulletin treats of the fumigation of the trees and fruit and contains a statement that a little carelessness in spraying, the use of improper solutions or unfavorable
weather conditions at the time of
making applications may allow the
survival of the scale is sufficient numbers to result, later in the season, in
their settling in considerable numbers upon the fruit.

Body Turns to Stons.

Paul Limerick, who died ten year; ago, was disliftered at Mount Calvar oemetery a few days ago, preparator to removal and re-burial, it was found

the remains had become petrified.

The features, with the exception of the nose and eyes, were perfectly preserved, and the hair and mustache were as natural as in life. The petrified body had assumed a dark

brown color.

This is the sixth case of petrification found in Mount Calvary in recent years, but the other bodies were not nearly as well preserved as that of Limerick. It required five men to remove the body.

## CCAL'SBY-PRODUCTS

TAR ONE OF THE MOST VALU-ABLE IN COKE MAKING.

Splendid Work Dire by Chen sts in Working Up Useful Substage as from This Once Despised "Waste" Material.

Few are tamiliar with the complete nessewith which former wasted obmonts of coal are recovered and trans-Orned into valuable product in the manufacture of coke from hard coal It is not so long ago that gas works were paying to have one or these byproducts, then called a waste product, arried away from the works. This was tar. Not only was no revenue derived from it, but it actually cost money to get rid of it. Now, this tar is one of the most valuable by-products in coke making. From every ton of coal converted into coke about nine gallons of coal tar are produced, and the history of chemistry tells of no more skillful work than was done in working up useful and valuable products from this black, sticky mass

Over 200 separate substances have been isolated from tar. Of the first importance are anthracene and naphthalene. Anthracene, in a pure state, is a beautiful yellow crystal, and is the starting point for a series of the well-known coal tar dyes. Naphthalene is also the basis of a series of dyes, but is better known in the form of moth-balls. Although coal tar is black, the naphthalene comes out of it as white as snow.

Two other important products obtained from the tar are carbolic and crysylic acids. The uses of these two products as disinfectants and germi cides need no description. Tur there is another use for carbell; acid which is not so generally known, viz, that transforming of it into picric acid by treatment with concentrated nitric acid. This pierie acid is the base for deadly "high explosives" And. strangely enough, after you have shot a man to pieces with pieric acid, you can allay his, pain with the same thing, for pieric acid has a place in SUTTENTY

Books have been written on the products obtained from coal tar, but here we can but touch upon the subject, and we may conclude with the mere mention of creosote off for preserving timber, etc., of pitch for roofs and for roads, of pyridine for denaturing alcohol. We must leave untouched the great number of complex chemicals which are either used themselves or are transformed into other substances in a never-ending cycle.

made into coke from hard coal produces about 5½ pounds of pure ammonia, which is equivalent to about 22 pounds of ammonium sulphate, a fertilizer of unrivaled merit. This fertilizer is made from the ammonia by combining it with sulphuric acid, or oil of virriol. Or the ammonia may be converted to the liquid ammonia of the drug stores, or it may finally appear as real liquid ammonia, which is pure ammonia gas liquified by pressure and cold.

Further uses of ammonia are as smelling salts and the carbonate of the baker, which makes mostible all the modern dainty confections. The ammonium chloride used in batteries also is derived from the coal which goes to make coke.

Other products of commercial importance derived from the hard coal coke processes are benzol and toluol. From benzol nitro-benzol is made, and from that aniline is made, and from aniline springs a series of dye-stuffs of such importance that millions of dollars are invested in plants for their manufacture. Besides making dyes, benzol and toluol have a multitude of uses. Benzol is the best solvent known for organic compounds, and is used for extracting grease from garbage, in the "degrassing" of hides. in varnishes, shellac, varnish removers; for dissolving rubber, waxes and gums. Toluol in general is used for similar solvent purposes. One important use for benzol is gas enrichment One per cent, of benzol vapor introduced into ordinary coal gas will increase its luminosity by about 12 can-

There are many strange things with strange names made from benzol and toluol, and their development during the last century is one of the beacon lights of chemical history.

Jerry and Joe.

Jerry Simpson loved to work off jokes on prominent men who "got after" him. He and Joe Cannon, now speaker, had many lively tilts. One day Jerry made a rip-snorting anti-expansion speech in the house; just the kind that a Populist like Jerry could make

"Had you made that speech in Manila," said Canson, getting the floor and leveling his finger at the Kansas rongressman, "you would have been tried by a drum-head court-martial and shot."

as leave be shot in Manila for making a speech of that kind as to be shot in congress by an old smooth-bore brass Cannon from Illinois."

That reply tickled Tom Reed so much that he came up to Jerry and said: "That was all right, Jerry, I forgive you a lot of things for that!"—Kansas City Journal.

Not That Way in Life.

the stage."

"Which shows that realism on the stage is an utter myth."—Louisville "Courier Journal."

## MUCH TIMBER LEFT

Predigal Use of That Product to Still Going On.

Original Forests of Cruntry, Which in Quantity and Variety Exceeded Those of Any Other Region on

Washington. The annual report of the forestry bure to as to the fumber supply of the Puri d States indicates that a product his rill going or, despite the publicity given and the widespread interest in national conservation of all resources. It is pointed out that the annual consumption of timber in the United States is still ten times that of France, per capita, and nearly eight times that of Germany. Some of the striking features of the report are as follows:

The original forests of the United States, which in the quantity and variety of their timber exceeded the forests of any other region of similar size on the globe, have been reduced by cutting, clearing and fire from an acreage of \$50,000,000 to one of not more than \$50,000,000, with a total stand of some 2,500,000,000,000,000 board feet.

Most of our forests are private property. About one fifth of the standing tumber in the country is held by the federal government in national parks and on the unreserved public domain and by the states in state, reserves or other state lands. These public forests contain more than 199, one, one acres of saw timber.

The private forests are of two distinct classes. (1) farmers soldiols and (2) large holdings, eliner individual or corporate. The woodlots are chiefly scattered and detached remaints of the original forests. They are mainly in the eastern half of the United States, and cover some 290,000,000 acres, with a stand of perhaps, non-mondou,000,000 board feet of saw timber and 1,000,000,000 cords of wood. Aside from their protective and ornamental value, they furnish much firewood, many posts, polys and crossties and some lumber and cooperage stock.

The large private holdings contain about 1700,000,000 feet. These holdings generally include the best timber in the regions in which they occur. They are the principal sources of the timber which is used to-day, and upon the manner in which they are managed depends in a large degree the timber supply of the future. The value of the forest products of the United States in 1907, the last year for which detailed data are avail-

able, was approximately \$1,280,000,000. The fact that timber has been chenp and abundant has made us careless of its production and reckless of its use. We are cutting our forests three times as fast as they are growing. We take 250 cubic feet of wood per capita annually from our forests, while Germany uses only 37 cubic feet and France but 251. On the other hand, Germany makes her state forests produce an average of 48 cubic feet of wood per acre.

The necessity for more farm land may eventually reduce our total forest area to 109,009,000 acres less than it is at present. It is entirely possible, however, to produce on 459,000,000 acres as much wood as a population much greater than we have now will really need if all the forest land is brought to its highest producing capacity and if the product is economically and completely utilized.

#### SAVES LIFE TO WIN BRIDE

Young Man, Resident of Washington, Proves Champion Lightweight Rescuer and a Speedy Love Maker.

Washington.—Joseph, Booker, 23 years old, is the champion lightweight life-saver and the speediest love maker in this community. Joseph met Miss Blanche Wilson of Cumberland, Md., a short time ago. Miss Wilson is a welterweight and has the best of Joseph by 28 pounds.

Joseph proposed a boat ride on the Chesapeake & Ohio canal, and had pulled the boat as far as Glen Echo when it capsized in 18 feet of water. When Joseph came to the surface Miss Wilson was a dozen feet from him, vainly trying to reach the overturned boat. A heroic effort negotiated the distance just as Miss Wilson had sunk for the second time Joseph grabbed her and pulled for the shore.

The bedraggled young man and woman were taken to the home of Manager Shaw of Glen Echo park. Dry clothes were given them, and while their own were drying they took a stroll. En route Joseph proposed marriage and was accepted.

Farms to Fenian Foes.
Halifax, N. S.—In recognition of their services in 1866, when Canada was threatened with an invasion by the Fenians, the Canadian government is about to award to the 175 living members of the impromptu army of this city grants of 160 acres of land each. The grants are from the public lands of the Canadian north-

Dog Reveals Woman's Death.
Pittsburg, Pa.—A dog's mouraful whines at his mistress' door resulted in the finding of Mrs. Annie Graham dead in a trunk in her home. She was a widow, aged 55, and lived alone. The coroner's deputies reported that she fell, accidentally, her neck being broken by striking a trunk, into which her body tumbled. She had been dead several days.

LOBSTERS THAT BORE WOLLS

Are a Boon to Australian Color at a According to Story Told by

the Traveler.
Lobeters dispel drought in A a

train for peak mextracted with his off yet pack a deficate me sel from the house carbot case.

Adstralma coloritis at the hoots to a drought, he said, otten continued their dried prings, nataculously for, inglogain. Frosh water lobsters work that maracle

In every creek and spring, you see there are large to ter settlements. If these lobsters to to find moisture they perish there, when their streams dry up, they tollow the water down into the earth. They dig, dig dig just like out Panama caho work erse and in the ind their strong claws pierce through the soft clay covering of some hidden spring, and a rill of sweet, fresh water bubbles up."

He lighted a cigarette and gazed through the open window at the moon

lit sea.

"Some thousands of lobster artesian well borers, working away frantically like that, day and night," he said, "are bound to discover enough springs "break any reasonable drought."—Los Angeles Times

#### WORN BY WIVES OF ARTISTS

Interesting is the Result When Men of Talent Devise Garments for Helpmeets.

When the Society of American Notices or the National Academy of Design holds a reception it is always interesting to a sartorial observer to pick out the women whose husbands have designed their costumes.

have designed (their costumes.

Some of the wives with artistic have bands plainly do not care for color or line and come out in the latest fashions. Then there are others whose gowns show évidences of planning which the spouse has had a finger parding the tint of the fabric or the way it is fashioned.

way it is fashioned.
Some of the women one sees at these exhibitions trail about in artistic and soulful robes which look as though plucked from an unwilling Botticelli angel and become sharily stained in the fray. Very charming are other of these artistic draper even though they lack that perfection of finish and trimness which in fashionable life is regarded as the height of sartorial perfection.— Brooklyn

A New English Word. Mr. Churchill added a new word to the English language in one of his speeches at Edinburg recently. "We had a period of bad trade last year, and the shortfall in our revenue was only a million and a half. In Germany there was a shortfall of eight millions, and in the United States the shortfall was not less than nineteen millions." "Shortfall" is not recog nized by any existing dictionary, but the "New England Dictionary" has only got so far as "sauce," so there may yet be time to find room for it there. It is a much more expressive word than "deficit," because of the elements of the compound are native; the make up of the word is understood secondary meaning.-Dundee Adver-

Important Item of "News." It cannot be very hard to get pleat of news for an English newspape as the following from the St. James' Budget indicates: "The prince of Wales, in inspecting the coast guard at Newquay, was passing a petty off cer, which he stopped and turned back. 'Aren't you Goddon?' he asked "I am, sir," said the gratified petty" officer. 'Were you not with me is Canada 20 years ago?' 'Yes, sir,' said the officer... Mr. Goddon had been leading hand in crosstrees when his royal highness was midshipman of the top. Give me your hand, said the prince, with a smile. I hope you will have a long and enjoyable career in your present position."

Seamen Scarce in England. Ten years ago it was estimated that while during the preceding half cen tury the British merchant tonnage had L almost trebbled, the number of Ber ish seamen engaged in the mercant. marine had decreased by 25 per cent. and the boys and young men by 85 per cent. In 1857 there were \$6,914 petty officers and sailors, not including Lascars, employed in the mercantile marine of the United Kingdom; in 1875 it was estimated that there were 82,000; in 1899 the estimated number had fallen to 60,709, while in 1901 there were only 44,290.—Fortnightly Review.

Thought Astor Was Crazy.

People said John Astor was craz, because he paid \$1,000 an acre when he bought the estate of Asron Burr a hundred years ago. It was a farm of 120 acres, located about where 21st street is now in Manhattan. In tenyears he commenced to sell lots at \$5,000 an acre. But, fortunately, he did not sell much at that price. What it is worth to-day is hard to compute in millions.—Cent\_per Cent.

Price of Life.
Young Lady—Give me a yard of—
why, haven't I seen you before?
Draper's Assistant—Oh, Maud, have
you forgotten me? I saved your life
at the seaside last summer.

Young Lady (warmly)—Why, of course you did. Then you may give me two yards of the ribbon, please.—Illustrated Bits.

L'ABEILLE DE LA NOUVELLE-ORLÉANS