FREAK BIRDS AND BEASTS IN THE PHILIPPINES.



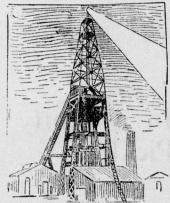
If Uncle Sam could collect a pair of specimens of each species of beasts, birds and reptiles which inhabit his newly acquired Philippine possessions he would have a zoological "biggest show on earth." Some of the most remarkable ones are shown in the accompanying cut. The spectre is the most grotesque of Oriental animals. Its eyes are like a great pair of spectacles and its feet and ankles are uncovered bone formations. The kaguan, or flying fox, is a bat. It lives on fruit. The mongoose is a pest which we should beware of importing. The zibeth is a variety of civet cat. The buceros rhinoceros, who imprisons his mate in a hollow by building a plaster wall over the entrance hole, so that she cannot leave the nest during the nesting season, is the oddest of Philippine fowls. Father Hornbill feeds his wife through a small hole all the while. When the eggs are hatched he hammers down the wall and lets her out. The paradise major is one of the most gorgeous birds in the world. The buffalo is used as a beast of all work.

SENCE OF THE PROPERTY OF THE P Modern War Mechanism. \$

Searchlights, Steam Ploughs and Heliographs in South Africa.

As might be expected, the English are using in the South African war the most modern military appliances that can be had. They are thoroughly up to date in the matter of guns and ammunition, and even the surgeons are using new means of developing X rays. The War Office has negotiated with Marconi's business representatives for wireless telegraphic outfits, and by this time the apparatus ought and by this time the apparatus ought to be in service. Moreover, a num-ber of other appliances that are not necessarily instruments of war have been put to use in the contest with

the Boers.
One of the most striking instances One of the most striking instances of this kind is the employment of a steam plough for digging trenches. The ploughshare and pruning hook are particularly typical of the arts and spirit of peace, but now, for the first time in history, the former implement has become a military weapon. The steam plough is not in itself any novelty. It has been used for years on a large scale in the western parts of the United States, where the great wheat and corn crops of the country are raised. It is also well known in other parts of the world where agricul-



KIMBERLEY SEARCHLIGHT.

powerful electric light is installed on the shaft head at the De Beers mine. By this light signals were exchanged be-tween Kimberley and the force under Lord Mathaen.

ture is conducted on the wholesale

plan.

The particular plough used in South Africa was designed by Colonel Templer, of the Royal Engineers, and differs only in trifling details from that with which the American wheat frower breaks up the surface of the fertile prairie. The superiority of this means of digging trenches is so manifest that one wonders why it was never thought of before. A three wheeled "traction engine," such as is

it has furnished an excellent means of telegraphing. By switching the current on and off the light can be broken up into dots and dashes, to form telegraphic letters. The enemy might see these signals, but as a secret code would doubtless be employed, the significance of the flashes would not be understood except by the initiated. Searchlights have been made whose rays could be discerned at a distance of fifty or seventy-five miles. At Kimberley it was known that Lord Methuen's army had come within twenty or thirty miles nearly a fortnight ago. No difficulty should have been experienced in sending messages concerning the situation in the beit has furnished an excellent means of concerning the situation in the be-leaguered city, therefore, although a



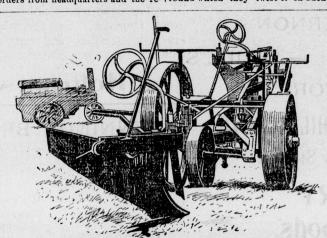
HOW BOERS DESTROY RAILWAYS.

reassuring response could not so eas-

ily be transmitted.

The Boers, too, are learning to use modern methods. A small contingent have realized the uselessness of mereout in front, carries only a small part of the load, and is used mainly for steering purposes.

There is nothing especially new in the resort to telephony. The American Signal Service has long had ample equipments of this kind for field work, particularly in the dissemination of orders from headquarters and the re-



NEW STEAM PLOUGH FOR CUTTING TRENCHES.
(Used for the first time in the South African War.)

ceipt of reports from subordinates

ceipt of reports from subordinates during an action. It is not at all likely that the English are ahead of the United States in this respect. However, some interesting features are presented by one of the instances of telephony in South Africa just described in the dispatches.

After arriving on the field of battle at Elandslaagte, General French saw the necessity of prompt reinforcements. In his army were several telegraphers, who were provided with portable telephones, batteries and incidental apparatus. A regular telegraph line passes in the vicinity of Elandslaagte. General French's men tapped one of the wires of this line. The first step was to establish an electric connection with the overhead wire. This was done by suspending thereon, by a metallic hook or clip at the top of a light, portable stick, one end of another wire. The latter extended downward to a box containing a telegraph key and sounder, two or three cells of battery, and a convenient combination of telephone transmitter and receiver. To make the apparatus work, it was further necessary to run the lower end of the hangparatus work, it was further necessary to run the lower end of the hanging wire into the ground. Thus a regular "circuit" was formed, the earth affording a return route for the ourrent. Either a telegraph key or a telephone could be used according to

way that it is absolutely impossible to use it again for railway purposes. When the usual plan is adopted, the British troops merely search for the

missing sections and replace them.

A valuable method of communicating, which the British are using in South Africa, is the heliograph, such as our army has long employed on the Western plains.

General Buller, while at Free station communicated daily with Gan.

tion, communicated daily with General White, at Ladysmith, about two ty miles away, with the heliograph. Sun rays flashed back and forth told the besieged army to be of good cheer and assured the relief column that the garrison, though hard pressed, was cheerful.

Mormons' Curious Alphabet. An alphabet intended for exclusive use in Mormon literature was de-signed by Orson Pratt and W. Phelps, both contemporaries of the great apostle of the Latter Day Saints,

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SECRET SPELLING SYSTEM.

Brigham Young. The Mormon abecedary consists of forty letters based on a sort of phonetic system. It has never come into very general use, but is employed when secret intelligence is transmitted from one head of the church to a distant apostle.

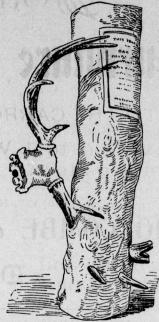
A South Sea Island Bride.

The bridal procession was ap proaching. In front, walking abreast, came the wedded pair—tall, handsome, and of an excellent tawny hue. The bride, a beautiful young girl, exhibited a ludicrously absurd appearance. Her shapely legs and feet were naked. She were a low bodice; of scarlet satin, bedecked with shoulder knots of brilliant blue. Round her knots of brilliant blue. Round her body so many robes, some of the paper-like barkcloth, others woven of the native grass, were enwrapped, that her aspect, instead of impressing us, as it doubtless did the natives, respect for her wealth, merely e comic suggestion that the poor child was parading inside a barrel Her pretty head, running over with close rings of tan-tipped hair, was uncovered; and her neck and limbs glistened with oil. - Blackwood.

Health the Mainspring of Success.

The chief essential of success for s young man is what the vast majority of young men think about the least—that is, good health and a sound con-

A very singular zoological curiosity is now on exhibition at the New York State Museum of Natural History, at Albany. It consists of a section of the trunk of a large oak tree directly



UNIQUE ZOOLOGICAL SPECIMEN.

through which is thrust the antler of what must have been a large deer. A part of the skull remains attached, still bearing the other antler, plainly showing that the deer must have died upon the spot, being unable to pull away from the tree after once becomaway from the tree after once becoming fast. Of course the presumption is that the antier was not imbedded in the oak when it was full grown; evidently the deer while rubbing his horns on a young sapling, or butting against it, in some way got fast, and the tree as it grew gradually grew more and more round the imprisoned prongs. The specimen was found in prongs. The specimen was found in the Michigan woods.

A Blind Shot.

A well-known divinity professor, a grave and learned man had five daughters, whom his students irrevently named "Genesis," "Exodus," "Num-bers," "Leviticus" and "Deuteron-

Beginning his lecture one day, the professor said: "Gentlemen, I wish to speak to you about the age of Gen-esis."

Roars of laughter came from the

"Genesis is not so old as you sup-

"Genesis is not so old as you suppose," continued the professor.

More roars—so long continued, indeed, that the worthy man had time to think before he made the next remark. He said timidly—and he managed to hit the mark this time:

"I may not be thinking of the same Genesis as you are!"—Collier's Weekly.

Odd Companions.

A Maine man has a fox and a hound that are boon companions. that are boon companions. When both animals were in the pup stage, they were placed together and have now enjoyed a year of each other's society in peace and harmony. They sleep together and play with each other much after the manner of two frolicsome pups. The fox has perfect freedom of action, coming and going at will, but he always returns at night at will, but he always returns at night share the dog's bed .- Kennebec (Me.) Journal.

A Famous Western Capitalist.

Among the progressive element for which the middle West is famous, Mr. John C. Hubinger, of Keokuk, Iowa, is without a peer. As a manufacturer, as an enterprising capitalist and as a as an enterprising capitalist and as a philanthropist his fame has spread over many States. Although but forty-seven years of age, he can look back upon scores of commercial victories, each one of which has benefited mankind, for his liberality is as bountiful as his business sagacity is marvelous. Mr. Hubinger was born in New Orleans. La., his parents bein New Orleans, La., his parents being of French and German origin. Almost before reaching man's estate he secured patents on a number of valuable mechanical inventions. thereby laying the foundation of his present

His attention was early directed to the manufacture of starch by improved processes, and in the course of time he became the head of a concern hav-ing an annual business of millions of dollars.



JOHN C. HUBINGER

While Mr. Hubinger is devoting his best energies to the manufacture of his new and wonderful product, this will not interfere with the exercise of the splendid hospitality which he, his wife and his four children dispense at their palatial Keokuk home.

An apparatus has been devised for automatically photographing people as they enter shops and other places.

FOR FARM AND GARDEN.

Acorns as Hog Feed.

Where acorns are used largely in fattening hogs a rather soft, spongy flesh is produced, while the lard is very oily and does not harden readily. This difficulty can be largely overcome by feeding corn two or three weeks before butchering.

It is an old saying among dairymen that "the making of a good cow is half in the breed and half in the feed." This is equally true of poultry. One cannot get fat chickens or good laying hens from any breed if they are not fed properly, but with food enough one breed may be fattened easily. The same breed and same food would give good results in eggs. This is why we dislike a mixed flock of fowl, with blood from s half dozen breeds of fowl. When you are giving one hen just enough to stimulate her to egg production, you are giving others just production, you are giving others just enough to fatten them so they will not, or cannot lay. If the feed is reduced to take off their superfluous fat then the others do not have enough to make eggs from. Get the right breed and then learn how to feed them.

What used to be called good plow What used to be called good plowing, the turning a furrow over smoothly and leaving the upturned surface perfectly level, is not thought as important now as it was when we were young. The plowing match at agrisultural exhibitions does not draw the rowd it once did, even when there is no counter attraction of trotting horse, bicycle match or baseball game to draw the people away. The improvements in harrows, horseshoes and cultivators enable the farmer to pulverize his soil, as it could not have been done by the plow, and to leave the level if he wishes, though it may have been but poorly plowed. And any of the farmers are beginning to think that the best plowing is what our fathers would have called a poor job, the furrow set on edge instead of turned over, and then worked mellow afterward. The land so handled gives a better crop than that which been turned upside down.

Feeding for Eggs.

The question of feeding hens at the least cost to obtain the best results is one that has long puzzled poultry raisers, many of whom differ on material points regarding the method of

terial points regarding the method of feeding.

Some advocate giving a warm mash early in the morning, while others prefer the first food to be grain of some kind thrown in the scratching shed among the litter. The latter say the exercise thus obtained, gives the lowls an appetite and aids the digestion, while the former say the fowls need the mash first, since the fowls need the mash first, since the long hours of fast make it necessary to furni h a food which can be easily

and quickly digested.

One thing is certain, that if hens are given a full feed of mash early in

are given a full feed of mash early in the morning they will not take the express which they should have during the remainder of the day.

Their hunger has been satisfied, and they will content themselves with standing around, huddled together in a corner of the house. While, on the other hand, if given grain first, or even only a partial feed of mash, they will then begin to hustle for more.

A hen should be kept busy all day tong, and then given, before roosting

A hen should be kept busy all day tong, and then given, before roosting time, all that she will eat. Half-fed aens will not lay; neither will lazy hens. It therefore follows that the method of feeding is just as important as the kind of food that is given.

No matter how perfect the ration may be, if not judiciously given, the results will not be satisfactory.

A good plan to adopt is to give just

of exercise. During very cold weather corn should be fed, but at other times oats and wheat will give the best results. -Home and Farm.

Making Butter Without Ice

If these directi ns are followed, one can find a ready sale for every pound of butter made, as the butter will be sweet and will stand the warmest weather wit out tasting old. The milk is cooled as soon as possible after being drawn from the cows, then strained into two gallon tin buckets. I prefer deep-setting. The covers are not put on the buckets until the milk is perfectly cool; then it is set in the cellar on bricks which have air slaked lime sifted among them once a week. The cellar is kept very clean, and is well ventilated at night. I skim the milk after it has set for 24 hours, and muk after it has set for 24 hours, and stir the contents of the cream jar thoroughly every time that new cream is added. The cream should only be slightly acid when churned. Overripe cream will not make good butte. I tuse a barrel churn, and when the but-ter comes in grains I draw the milk off and wash till the water runs clear. Then I take up the butter in butter bowl and salt, using one and a half ounces to the pound.

Work salt in as lightly as possible, work sait in as lightly as possible, and set in a cool place for 24 hours. Instead of working and beating with the paddle to get the brine out, take a large soft cloth and press the brine out, all when the cloth becomes wet, wring it out and press again. Work-

ing spoils the grain and keeping qualing spoils the grain and keeping qualities. After the brine is absorbed, shape and mold in one pound prints, wrap each in waxed butter paper and pack in waxed paper lined box until marketed. I use no soap for washing milk vessels. Rinse them well in cold water, and scald, putting soda in the scalding water. The sooner the milk is cooled after being drawn the better the butter will be, and the more cream you will get. The dryer the cellar or milk house, the better. Good butter can not be made when milk is kept in a damp, mouldy place.—Mrs. Lobert a damp, mouldy place.—Mrs. Lobert Ashworth in the Epitomist.

Fattening Fowls,

For fattening fowls for market nothing is better than corn and cow peas, writes Fred Grundy in Poultry Topics. They will round out a fowl in about ten days or two weeks, giving them that plump meaty appearance that buyers and consumers are delighted with.

Finishing fowls for market is an art that few people fully understand. One must be guided largely by previous conditions. If the birds have leen confined in a yard all the senson they may be penned in a small enclosure and finished up for market in about ten days by being fed all they can eat. If, however, they have an unlimited range all summer it will not do to shut them up and begin stuffing them all they will swallow. Such a course would kill them off in short order. Finishing fowls for market is an art

would kill them off in short order.
Begin fattening range fowls gradually. Feed them corn or corn and cow peas in the evening and again in the morning when they are let out. About the third day call them up at noon and give them a little corn. Gradually increase the quantity given them at a feed until about the sixth day, when they may fill themselves up to the beak three times a day. In 15 to 20 days they should be ready for market. market.

In fattening fowls, young or old, there are two things beside feed that are absolutely necessary, and these are water and grit. I'e sure to provide an abundance of both if you desire the quickest results. Keep them close by your feeding spot so that the birds can obtain all they desire. Where highly fed they need lots of water to soften the food, and lots of grit to grind it with.

Separate the fowls you desire to fatten for market from those you intend to keep. If all of them have had free to keep. If all of them have had free range through the season don't pen up those you are fattening. It is not safe to do so. Pen up those you intend to keep until you are ril of the others. Feed the penned fowls lightly on soaked oats and bran and a very little group on the care. Give these little corn on the ear. Give them a cabbage, squash, pumpkin or any sort of green or succulent stuff once a day keep them quiet and in good health.

The fruit grower might assume with The fruit grower might assume with considerable confidence that if the roots of his trees and bushes and vines were in excellent condition t at there would be no failure of the crop. This would only be comparatively true, for there are insects and blights that attack the fruit and foliage of trees and vines growing on good roots; but as a rule the damage done by these pests is much less on stock that is in pests is much less on stock that is in pests is interested in stock that is in a thriving condition. So we can say that primarily the condition of the crop is largely determined by the rots and their relative vigorousness. In the winter time the roots are the only part of the stock that must be protected from the excessive cold, and if they are not damaged the trees will

if they are not damaged the trees will weather the hardest winters. Artificial protection of the roots in the north is thus a generally recognized necessity, but we do not a ways give the same care and attention to the roots in the summer.

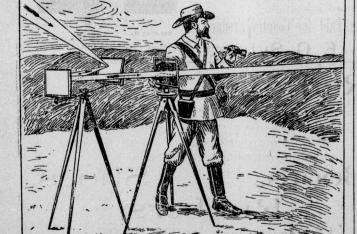
Root-injured trees in the first place should never be planted. If the nursery man sends them to you to fill an order, return them, and have them deducted from the bill. They will always prove disappointing and unsatisfactory. It is better to take the bull by the horns, and remedy the evil at the outset. In transplanting our stock most of the small fibrous roots are inresults will not be satisfactory.

A gool plan to adopt is to give just a little, say one quart to fifteen hens, of mash, made of equal parts of corn meal, ground oats and shorts, with a few vegetable scraps, mixed the evening previous, and allowed to stand over night. This will partially appease their hunger until laying time, after which they will begin to hustle for the grain. Millet makes one of the best grains to be given, as the small seed furnishes a greater amount of exercise. During very cold weather transplanting stock without disturbing the rootlets, or at least without seriously injuring them. When these roots are transplanted, the roots should be soaked in water and moist earth at once. That tends to compensate a little for the tree's loss of vitality. But the main thing in some vitality. But the main thing in sum-mer is to have the roots growing in congenial soil. This can only be ac-complished by having the soil well drained and the trees sunk well down. They should not have a mound of earth around them in summer, for that makes the water run of. They should makes the water run of. They should rather have a hollow circle around the trunk where the water can collect. This, of course, only when the soil is thoroughly drained below. Then no stagnant water will collect. In this slight hollow the fertilizers and moistures can be poured, and they will see the course of thre can be poured, and they will go direct to the root feeders where they are needed, a d there will be little or no waste such as is often the case by the present system.—Professor James S. Doty, in American Cultivator.

Hope Town's Remarkable Bridge

Hope Town's Remarkable Bridge.

The bridge at Hope Town, over which Lord Methuen's column recently advanced, is the most remarkable structure of the kind in Cape Colony. Its length is no less than 1400 miles. The bridge at Aliwal North is only 860 feet long. Hope Town is notable as being the last town on the Orange river. A few huts or scattered farmsteads are the only signs of human habitation along the great waterway for 600 miles to the Atlantic.



BRITISH SIGNALING LADYSMITH BY HELIOGRAPH.

employed in hauling heavy wagons from town to town or in operating itinerant threshing machines, drags the steam plough of Colonel Templer on terra firms. At Kimberley it has the connection of the wheels are large and broad, and the third,