

FARM AND GARDEN NOTES.

NOTES OF INTEREST ON AGRICULTURAL TOPICS.

Late Ripening of Southern Corn--Keeping Eggs in Cellars--Making Cherries Profitable, Etc., Etc.

Late Ripening of Southern Corn.

It would naturally be supposed that as corn loves a warm climate this crop would succeed better in the Southern States than in the North. But it does not, and the failure appears to be due to the long time required to ripen the grain. All the Southern varieties have very large cobs, and the grain remains in the milky stage a long time. The truth is that the Southern States have fewer hours of sunshine and longer nights than States farther north. Where the nights are longest the plant is chilled so that the heat of the daytime does not hasten the crop to maturity as the longer days in the north will do.

Keeping Eggs in Cellars.

During the summer months, when the air temperature is often near blood heat a large part of the day, it is extremely difficult to keep eggs even a few days without starting the germ to growing. Of course this ruins the egg, and as during the night the cool air chills the egg, it is good for nothing, even for incubation. Many farmers make the cellar the place where they store their eggs until they have a chance to market them. The truth is that in summer it is not best to have eggs longer than three or four days after they are laid before disposing of them. The cellar often has very unwholesome air, and as the egg shell is porous its contents are affected injuriously without regard to the temperature where it has been kept.

Making Cherries Profitable.

A great many farmers have cherry trees whose crops go unpickerd except by birds and what are used in the family. Yet where there is nearness to a canning factory or to a shipping station it is possible to make more profit from this fruit than from any other. Unlike the other small fruits the cherry tree needs no cultivation. It will succeed perhaps better in a soil than if the land around it is cultivated. The cherry tree roots deeply and never suffers from drought. The cherries should be fully ripe before being picked, as they will not ripen off the tree. The fruit should be gathered when quite dry, not wet with either rain or dew and with stem attached. It must be handled carefully so as not to bruise the skin or even remove the bloom from it. If the stem loosens in its connection with the fruit, that cherry should be thrown out, as it will rot and spoil the fruit next to it.

The Bee Moth Pest.

When the bee moth attacks the colony so that powdered or finely chipped wax can be seen near the entrance of the hive, it is usually safe to decide that the queen is a poor one, possibly infertile, and that as a consequence the colony is weak. It is better to take such colonies and destroy the queen if there is one, then unite the bees with another colony that has a good, vigorous queen. If there are many moth worms in the comb reject it entirely until it has been fumigated with the fumes of burning sulphur.

Sometimes such a colony, if not very badly infested, will come out all right if given a new queen and a comb or two combs of brood and bees from a strong colony, yet it is not as certain as removing them from the old hive and uniting them with another colony. There is more chance of leaving some worms in the hive and having them increase.

The Italian bees seem to have more power to defend themselves from the bee moth than the black bees have, but they are not entirely safe against the attacks, though such a claim has been made for them. The only way to avoid them is to watch for them, and if they are found adopt one of the above plans. The giving a new queen and more bees to a weak colony may prevent reducing the number of colonies, but may not increase the amount of honey to be gathered, as the one strong colony made by uniting them may prove more productive than two weak ones would be, and will be likely to go through next winter better.

To Obtain Earliest Tomatoes.

Among people who desire to excel in the earliness of the tomato crop, there seems to be a growing conviction that the age of the plant is an important factor; in other words, a plant must be about so old before it bears. I incline to think that there may be something in it. Some varieties bear earlier than others. Much depends upon the kind of soil. I planted two pieces with tomatoes, one on sandy soil, facing the sun, the other on a dead level piece of cold clay. The planting was done the same day, from the same lot of plants; those planted on the sandy slope facing the sun ripened ten days before the others. Land may be so rich in nitrogen as to prevent early ripening--the plants just keep right on growing.

The method in vogue by those who aim to "get in" with the first tomatoes is to sow the seed quite early, in the greenhouse the middle of January, in this section, and transplant in flats later on. Keep them in a low temperature, even as low as fifty degrees at night occasionally. When growth has advanced sufficiently, they are planted in six inch pots, with some drainage in the bottom, and, as soon as the weather permits, placed in the frames out of doors, giving all the air they need during the day, and matting well at night. When the time has come for planting in the field, good substantial furrows are made, as for potatoes, and

just enough manure, or fertilizer, given each plant to carry the crop to the ripening point, say 100 pounds nitrate of soda, 400 of acid phosphate and 200 of muriate of potash per acre. A moderately poor soil with this treatment will give an earlier crop than a stronger soil, or one more liberally supplied with nitrogen, the idea being to have the nitrogen about used up by the time the crop is ready to ripen.--Rural New Yorker.

Best Crops or Green Manuring.

Those crops which possess the ability, when grown under the proper conditions, to take free nitrogen from the air will be found much more useful for green manuring than crops not having this capacity. The only crops which possess this ability are the legumes (clovers, peas, beans, vetches, etc.). The other crops sometimes used for green manuring have no capacity actually to increase the store of plant food in the soil. They may conserve, or in other words, prevent in some measure the loss of soil nitrogen, may increase the store of humus in the soil, and make the stock of plant food therein more available. They cannot increase by a fraction of an ounce the total amount of either nitrogen, phosphoric acid or potash.

Crops of this description may prove quite useful when employed as green manures on rich soils, for it is on soils of this description that loss of nitrogen is most likely to occur. These crops may further of course serve to cover the soil and protect from loss through wind or surface washing. With these effects, however, their valuable functions cease. Among the crops of this class most useful for the purposes named are buck-wheat, white mustard, rape, oats, barley and winter rye. Spurry, a crop comparatively little known is another coming into this class which is reported by the Michigan experiment station as very useful in improving light, sandy soils, known in that State as "the Jack pine plains." Of the seed of this crop from six to eight pounds to the acre is sufficient. The other crops of this class named are too well known to make it necessary to give directions as to sowing.

Among the legumes which may be useful for green manuring, the clovers undoubtedly are most valuable. Of these the most important kinds are the crimson clover, the common red, the mammoth red and the alsike. Among other crops which may be useful are lupines, vetches, the field pea, sweet clover, the cowpea, the horse bean and the soy bean.--Professor William P. Brooks in New England Homestead.

Losses from Weeds.

It would be difficult for most farmers to calculate how great is the loss from the prevalence of weeds in crops. In a season when dry weather prevails these losses are comparatively small, though even then the weeds take water from the soil which is not all returned when they are uprooted and buried in it. The weed that is buried is surrounded by air spaces, keeping the soil more porous than it otherwise would be, and therefore drying it out faster. The case is still worse as regards the fertility that the weed has taken. It was originally entirely soluble, but the weed has to ferment and be resolved into vegetable mould before it can be put in the same soluble condition. Yet we have known farmers to delay cultivation of hoed crops so as to have more grass and weeds to be plowed under.

It is often said that weeds are a preventive of good farming; that there would be much less cultivation of hoed crops if it were not that the growth of weeds made it necessary. Yet where the cultivator is kept going all through the season so often as to prevent any weed from reaching the surface, the weed killed as quickly as it sprouted has done the soil more good and less harm than it could do at any subsequent stage of its growth. At this early period, about all the plant substance has been directly furnished from the swelling and decomposition of the seed in germination. At this time the carbonic acid gas which the seed gives off when it germinates makes its plant food more soluble than it ever can be after the plant puts forth roots and begins to draw from the soil. Finely powdered malt has been used as a fertilizer. When it has been applied in contact with seed grain of any kind, it has produced remarkable results, though it is too expensive a fertilizer to be used on a very large scale. But the ordinary weed seed is much smaller and has far less fertilizing material in it than has a grain of barley.

It is the peculiarity of most weeds that most of their growth is taken directly from the soil, and that both it and the moisture to make the plant food soluble are needed by growing crops. Each day's growth of a weed among hoed crops lessens the yield. If the weed is left until late, its roots will be so intermingled with those of valuable crops that one cannot be destroyed without uprooting the other. A little care in destroying the weeds while small will save much labor later, besides the inevitable shrinkage of the crop among which the weeds have been allowed to grow.--American Cultivator.

Poultry Notes.

Kill off all the weaklings as soon as you discover them.

Don't use any old tin can or pan for a water vessel.

Tin is no fit thing for a water dish, earthen ware fountains are much better; such as can be easily and quickly cleaned.

Little chicks will never be subject to gapes if moved at once to ground uninfested with the gap worm. This usually means ground on which no fowls have ever run.

A food that chicks over a week old greatly relish is cooked outtakes.

The brooder is far ahead of the hen for winter and spring use.

THE YAQUI INDIANS.

THE STRONGEST AND FIERCEST OF ALL MEXICAN TRIBES.

Futile Efforts of the Spanish to Conquer Them--How a Brave Chief Kept Faith Under Extraordinary Provocation to Treachery.

The Yaquis are a people, Indians though they be, who have never been conquered. True, peace has from time to time been patched up between them and the Mexicans, but only after overwhelming losses on the part of the latter. The region inhabited by the Yaquis lies in the southern portion of the State of Sonora.

While even more fierce in the nature than the Indians of other tribes, the Yaquis are intellectually far above ordinary, to which fact is doubtless due their characteristic success in battle. Three centuries ago the Yaquis were the strongest and most formidable of all the tribes of Mexico. In Cortez's time their number was estimated at 50,000, and their haunts extended from Durango, in the south, throughout the entire northwestern part of Mexico, and all that portion of the United States as far north as Colorado.

The first war with the Yaquis dates back to the period when Coronado invaded this vast territory. The entrance of the Spaniards into their domain was viewed by the Indians as trespass, and was met with violent opposition on their part. The superior arms of the invaders, however, prevailed, and in one year the Yaquis lost over 20,000 of their tribe. Since that early date they have cherished the most bitter hatred for the Spaniards, and certain customs and encroachments originating with them and subsequently handed down to the Mexicans have been the cause of the almost perpetual warfare throughout the ensuing years. It is this continual strife that has proved so disastrous to the ranks of the Yaquis. In the early part of the present century their number had decreased to less than 37,000, while to-day there remains only about 15,000 of the once powerful tribe. Of this latter number there are about 5,000 able-bodied warriors.

Such a force would at first seem insignificant, but the Yaquis are an extraordinary race of warriors. To begin with, the men are physically far superior to the troops with whom they are contending. Secondly, they are better armed, being equipped with Winchester rifles, whereas the standard Mexican arm is the Remington, and lastly, their stronghold in the Sierra Madre Mountains is practically invincible. Hence, to conquer these 5,000 Yaqui braves, provided the entire tribe has taken to the war-path, is a serious undertaking. The Mexican government doubtless realizes this only too well. From February, 1848, the date of the Guadalupe Hidalgo treaty, until the treaty of Ortiz in July, 1897, there was scarcely a year that the troops were not engaged in fighting the Yaquis. And, finally, after the Mexican government had sacrificed over 35,000 soldiers and many millions of dollars in its vain endeavor to vanquish this restless foe, it was obliged to make overtures with terms satisfactory to the Indians before the latter would come down from the mountains and return to their former peaceful pursuits in the valley of the Yaqui River.

The manner in which this treaty was brought about involves the following story, related by one of General Torres's staff:

"In one of the many forays of 1896 and 1897, a young Yaqui warrior was wounded and captured. Instead of ordering him shot, Colonel Pinado, the officer in command, directed that he should have the kindest treatment. When the Indian recovered, Colonel Pinado set him free and asked him to bear a message to Chief Tebitate, the Yaqui leader. In this message the Colonel proposed a conference to terminate the long war. Tebitate, however, returned word that the fate of a former chief, Caleni, who had been lured down from the mountains on a similar pretext and shot, was too fresh in his memory, and that he did not care to leave his defenses to meet any Mexican officers in conference. He more-over stated bluntly that if Colonel Pinado wanted to see him, he would have to come into the mountains, attended only by the Indian messenger. He concluded with his assurance of personal safety to the Colonel, and promised that no attempt would be made to avenge Caleni's death by breaking faith, as the Mexican General had done.

"Under the peculiar condition of affairs, it took a man of great courage to accept Tebitate's invitation. Colonel Pinado, however, was thoroughly familiar with Yaqui character. He knew also that there was extraordinary provocation to break it in this instance. His brother officers were all opposed to the step, but when the matter was reported to General Torres, he ordered Pinado to proceed to the mountains and open negotiations with the Yaqui chief. The daring Mexican obeyed, and, departing with his solitary guide, penetrated the mountains for several miles. At length they came to a little valley, where stood the Yaqui chieftain, surrounded by a dozen of his braves. After the betrayal of Chief Caleni, the tribe decreed that their chief should always be attended by not fewer than twelve warriors as a body guard. As he approached the group of Yaquis, Colonel Pinado banded his rifle to one brave and his revolver to another. Then he held out his hand to Tebitate. The chief took it, and, patting the Colonel on the shoulder, said: "Colonel Pinado, I thought I was a brave man and a soldier, but by this act you have surpassed even a Yaqui's bravery."--St. Louis Globe-Democrat.

Ex-Empress Eugenie drinks from thirty to forty cups of tea a day.

MEXICAN STREET NAMES.

A Fashion in Nomenclature That is Appalling to the Strangers.

The street names of Mexico are something really appalling to the newcomers. Some years ago the streets of the city were renamed systematically with numerical avenues running east and west, and streets north and south, and although the new names are prominently posted on all the corner houses, they are never used except in official documents. Every one uses the old names. Many of these are place names, or streets are named for some occurrence or tradition, or for the character of the trades that formerly predominated in them. The number of names is infinitely multiplied because each block is regarded as a street and has a separate name. When the name of a street continues the same through more than one block, the various squares are designated as first, second, third, etc. Many of the street names seem very odd to foreigners. Those named for the deity and religious personages are numerous. For instance, there is the Heart of Jesus street, and the street of the Holy Ghost; Ave Maria street, and the avenue of the Love of God. Others are the street of the Saint of the True Cross, the Arches of Bethlehem, and the Graves of Saint Sunday street, the Bridge of Saint Peter and Saint Paul, and the street of The Crosses of Sorrow.

Not only are the names of streets unusual, but they are often found in the most incongruous locations. For instance, if you walk down Jesus street, and continue in the second block, you will be startled to find that you are then on the street of the New Slaughter House. The Alley of the Egg and Potato street are just as likely to be the prolongation of the Back of Saint Teresa street as any other. The street of the Seven Princes may no longer be inhabited by royalty, but the avenue of Illustrious Men was named for real persons. The street of the Lost Child derived its name from a popular tradition, but the avenue of the Fifth of May was named for a famous battle with the French.

There are a large number of the capital's streets named for living things. There are the street of the Little Bird, street of the Fish, Bull street and Goat street, and the streets of the Piles, Rats and Roosters. Then there are the streets named for various tradesmen, as the streets of the Hatters, Tobacconists, Coachmen, Milkmen, etc. One short block glories in the name of the street of the False Entrance of Saint Andrew. The alley of the Little Candle Shop, the street of Heads, street of a Thousand Wonders, the Square of the Thief, are other oddities. It is not recorded exactly as to whether Sad Indian street and the street of Crazy People were named after those who endeavored to learn all the street names of the City of Mexico, but if you at least feel inclined to use harsh language after trying it yourself, you should first go over to Devil street--Modern Mexico.

Brains Were Necessary.

When the City Councils of Pittsburg paid their annual visit to the municipal poor farm the other day there were included in the party a German and an Irishman who are great friends, but between whom a sharp line is drawn in the matter of nationality. Going through the home department, the German, with a suspicion of race prejudice, remarked:

"I notice that these people are nearly all Irish."

"So they are," the Irishman said; "but wait till we get over into the crazy house; that's where they keep the Dutch."

They entered the insane department just as an inmate who imagines he is a great orator, was making a speech in German.

"What did I tell you?" asked the Irishman.

"Oh, well," replied the German, "you can't go crazy if you haven't got brains."--New York Tribune.

"What did I tell you?" replied the German, "you can't go crazy if you haven't got brains."--New York Tribune.

A Change All Around.

"There goes a party who will be heard from," said Smith, pointing to a young man who was going down the street. "He has managed to keep his head in love and financial matters, and they are the two great tests."

"Two months ago he was a young man with all the world before him and with no prospects ahead of him except a determination to fight life's battles."

"He was in love with a young lady living in this city," but his financial condition prevented him from declaring his passion. Besides, he was not sure that the young lady in question cared for him.

"But by one of those curious turns of the wheel of fortune an old aunt, that he had never seen, died and left him a large sum of money. Without delay he called upon the young lady and asked her to marry him, saying nothing about the fortune that had been left him. He met with a point blank refusal."

"Two days later the girl heard of his unexpected windfall and wrote him a note saying, 'I have changed my mind.'"

"His answer was just as short. It said: 'So have I.'--Detroit Free Press.

Big Guns Cost Money.

A naval battle is a more expensive undertaking than most people imagine. It costs \$588 to fire one of the thirteen-inch guns just once, and the other callings in proportion. The one-pounder can be fired for \$1.12. It costs \$5.70 for every shot from a six-pounder; \$33 for a five-inch gun, \$40 for the six-inch, \$45 for the eight-inch and \$290 for the twelve-inch cannon.

NEWS FOR THE FAIR SEX.

ITEMS OF INTEREST ON NUMEROUS FEMININE TOPICS.

Jewel Boxes for An Empress--New Industry for Women--Ornamental Hat Pins--Fashion in Bracelets, Etc.

Jewel Boxes for An Empress.

The jewel-boxes of the Empress of China are made of non-flammable wood, and were presented to Her Imperial Majesty by the renowned Grand Old Man of China--His Excellency Li Hung Chang.

New Industry for Women.

Another industry applicable to women is suggested by a lady of Genesee, N. Y., who successfully maintains a jam kitchen. She started her kitchen six years ago. The cooking is all done by gas. She keeps seventy hands during the busy season, and uses hundreds of tons of fruit. She finds a market for her jam in all the large cities, including New York, Boston and Chicago. A great deal of her trade, however, is in private orders. She secures many society families as buyers of her delicacies by sending them a list of her preserves.

Ornamental Hat Pins.

In order to keep the hat on the head and to fasten the veil it is necessary to use ornamental pins. The plain black or white bonnet pin is quite out of date. There are a great many superb hat pins worn, and there are, moreover, many inexpensive ones that are very pretty in design. Among the handsomest are the gold ones in the form of birds. The swallow with ruby eyes is very fashionable and very beautiful; but in the inexpensive pins are those of silver set with colored stones, or made of silver wrought in some odd form. To fasten the veil are small pins that can also be used for breast-pins. These are set with imitation jewels, or are made simply of silver, gold or fire gilt.

To fasten the loose hairs at the back of the head there are smart little pins of imitation jewels, generally in round or oblong shape. In rather better style, however, are those same pins in tortoise shell; they are not conspicuous, and answer the purpose just as well. Too many imitation jeweled brooches give rather a tawdry look to a well-turned-out costume.--Harper's Bazar.

The Fashion in Bracelets.

The very latest and prettiest bracelets, known as the Catacuzene bangles, are two fine golden bands, connected by tiny gold chains. The lower bracelet, worn just below the elbow, is set with pearls, the upper one, worn near the shoulder, glistens with diamonds. This fashion is the revival of a mode introduced twenty years ago by the mother of young Prince Catacuzene, Julia Dent Grant's fiancée. Another fashion in jewelry that is being pushed calls for a fine gold chain, strung with all sorts of souvenir bangles. Young girls wind them about their forearms, and the number of the girl's admirers may be pretty accurately determined by the bangles.

Women's Mouths and Character.

A certain philosopher declares that a woman is known by her mouth. Not by the words that issue therefrom, but by the shape and color of the lips, and the lines and dimples that gather about this important feature. He is supported in his theory by physiognomists, who all endeavor to impress us with the fact that no woman with the small, red lipped "Cupid bow" mouth, so praised in song and story, was ever intellectual or generous of heart, and says Woman's Life, it is consoling to those whose mouths are not in accordance with the lines of beauty laid down by the poets to be told that a "wide, straight mouth, with strong, white teeth," denotes the woman of superior intelligence, goodness of heart, strength of mind and a thousand and one other sterling qualities which we all like to think we possess.

It is the fashion at present for women to hold their lips very slightly apart. This is supposed to give that innocent, wistful, wondering expression which was the peculiar property of the heroines of old fashioned novels, but which bicycle riding and kindred modern amusements have caused to vanish. It is difficult for the thin lipped, determined woman to acquire this trick, but perseverance works wonders.

Women Factory Inspectors.

The employment of women as factory inspectors in the United States has attracted comparatively little attention, although it is thought that it is a calling for which the sex may easily fit itself. There are in the United States, however, according to authorities, an insufficient number of inspectors of either sex. For the sixteen million factory employes, it is stated, there should be at least one thousand inspectors. There are, in fact, about one hundred and thirty for the States and provinces, and of these only thirty are women.

"One reason of this difference in the employment of the two sexes," said an interested woman, "is that politicians give the preference to men, choosing the candidates without reference to fitness for the office, but because of their ability to promote their leaders' interest. The States employing women as inspectors introduced them into office in the following order, beginning in 1887: Pennsylvania, New York, Massachusetts, Illinois, Rhode Island, Ontario, Quebec and Michigan. Governor Altgeld of Illinois, in 1893, made a woman chief inspector of factories and a other assistant inspector, and appointed five others for the State.

"This has been found to be an un-

precedented and unique instance of a choice of candidates for office on account of their personal ability to perform the work. It is thought that women who have served for a length of time in shops or at a trade is especially fitted to fill these places."--New York Tribune.

The Popularity of Leather.

It has come to pass that leather is quite as important to eternal fitness of a woman's attire as gold or silver or tinkling brass has ever been. With innovations in amusements follow innovations in the costume thereof, for fun and fashion go hand in hand in these end-of-the-century days.

One of the prettiest accessories is the golf belt with its rings and straps. The rings are heavily gold-plated, and the buckle, which must be small, is made to match. White leather shows off to the best advantage, but its durability is another thing.

Washable belts are dear to the hearts of economists, and the canvas belt is an old standby, and the shopkeepers say the demand for elastic belts continues. These elastic belts ought to be popular with stout women.

There is a certain kind of white leather used for belts that can be washed most successfully and without leaving ugly stains or a bargain-counter look to it afterward. Soap and water is used when the right belt is found.

Seal belts, green kid and patent leather, with padded harness buckle, are stunning implements for the tailor-made girl.

The coin belt is worn by those who can afford it. The Mexican dollar is the most popular coin, owing to its small value. Old Roman coins, imitations of genuine coins in Japanese and Chinese money bind the waist of many a girl.

The ultra-fashionable girl has discarded her large buckles for the other extreme. The new figure, with its narrow waistband, has had its effect upon the width of belts and the size of buckles. Then, too, the soft crush belts are prettier if just caught with a broochlike pin.

Inlaid enamel belts from Algiers are to be found among the extravagant fancies of the belt-wearing ones.

Medallion-shaped pieces, squares, inverted squares, diamond-wise, with their tiny settings of enamel, are joined by metal chains at intervals by means of an arrangement on the backs of the pieces. A velvet ribbon to match the waist can be run through the belt.

Fashion Notes.

Cashmere is coming back to favor with all the fineness of French merino. Removable stocks made of plain and fancy colored satin are very much liked.

White pique suits showing colored polka dots trimmed with bands of plain material which match the spots. Children's hats having a straw crown and brim of accordion-plaited organdie, or point d'esprit with a big ribbon bow in the front.

Chenille is prominently used among galloon garnitures, as well as for hand embroidered trimmings and separate bodies.

The new supple weaves of taffeta silk are in great use this fall, both for gowns and accessories, to say nothing of the pretty dotted and striped patterns and the weaves barred with satin in contrasting colors for fancy waists.

A white organdie flowered in yellow, made up over yellow silk, with insertions in the organdie of black lace, a new idea. A corn colored sash with fringed ends would make a pretty addition.

A gown of shepherd's check had facings of scarlet leather. The short, tight fitting coat was of an Eton cut and had a vest of the scarlet leather fastening with tiny gold buttons. The collar was also of leather, with an inner one of linen, and a jaunty bow of scarlet satin.

Useful Caterpillars.

It is now said that the cocoon of the tent caterpillar can be carded, if not reeled. If this prove true, then an apparently unmitigated curse will be turned into a blessing. The tent caterpillar is the great pest of the apple tree, and it may be that the apple tree will take the place of the mulberry tree as food for the silk worms. It is estimated that an average tree will support ten or twelve tents of caterpillars, yielding 3,000 makers of silk, and representing a yield of three pounds of silk, worth \$1 per pound. It is further said that with proper appliances attached to the trunks of the trees for the worms to spin their cocoons in, not much time would be expended in gathering the product, which would equal the apple proceeds of a tree at 75 cents a barrel. However, the worm might be improved so as to produce a finer grade of silk, and in the end the result would be that the silk would be more profitable than the apple.--Farm and Fireside.

A Prussian Military Experiment.

A regiment of Prussian artillery, quartered at Glogau, in Silesia, has been carrying out some interesting experiments in taking guns across the Oder. Three barrels were fastened to the axle of each wheel, and another at the pole, in such a way as not to interfere with the immediate use of the guns on land. Arriving at the bank, the horses were detached, and the guns were pushed into the water and guided across by the rest of the soldiers, who also looked after the horses in the water. The experiment proved very successful, and the military authorities decided that the system could be adopted with great advantage in cases of emergency, where there were no pioneers at hand to build bridges.