WITH ILLUSTRATIONS BY DON C. WILSON (Copyright, 1902, by Little, Brown, and Company)

CHAPTER XII.

were raised at once, and the chase | Christ have mercy!" was renewed, with the pursuer not a mile away, and heading about southwest, which would soon bring her within range of the brigantine, whose course lay due west.

seconds later there came the report him. of a gun. "A pressing invitation for us to show our colors," remarked Lafitte, as he watched the shot strike the water.

The pursuer then began a more per-Presently Lafitte, who was standing

a shot work now? Try, and see." leveling his gun, calculated the dis-

tion. There was a report, soon followed by a trembling of the enemy's spars; see the result.

just below the futtocks," announced from sight. Lafitte, looking through his glass.

other such sweet song" said Lopez pulling rapidly to where Ehewah, still coolly, watching his men reload the gun.

The enemy had meantime come a little closer, and was dropping shot viciously about the brigantine.

"Lopez, make haste with the gun!" | frame, drew it into the boat. cried Laro, with an oath. "Give them pairing damages, and "-turning to the | enemy's vessel, after which he rowed i

As Lafitte's lips parted to speak, the dying man, as if divining what he An hour before sunset the fog rolled might be about to say, cried with a stopping before a stout oaken door in ap, revealing the man-of-war anchored sudden burst of strength, "No, no, ear enough for the men on her deck boy; try to tell me no soothing lies! be seen plainly without the aid of Living, I never knew fear; and dying is ass. The anchors of both vessels I scorn it! Ah-Madre de Dios!

And with this last cry, Laro's voice was stilled forever.

Lafitte's heart repeated the prayer, as he folded the dead man's hands across the broad chest; and scarcely A curl of smoke soon rose from | had he done this when he was startled | the Englishman's deck, and a few by the noise of a commotion above

A short time passed, with the "Black toward the enemy. His glance had alplied, "Greetings to you, Ezrah. Is it Petrel's" crew uneasy and Lopez ready followed the direction of their swearing softly in his native tongue. eyes, and he saw one of the "Black sistent firing with her bow-guns, but by the Indian, Ehewah, toward the none of the shots reached their mark. English vessel; and clinging to it,

near Lopez, asked quietly, "How would The old gunner, with a shout due to from the boat's gunwale, and drawing his long repressed feelings, set about his knife, hurled it at the Indian; but tance, and obtained the proper eleva- sea. He then rowed on, and Lopez,

At this, the Indian had stopped rowand the brigantine's crew crowded to ing, and struck the gunner over the head with an oar, continuing the blows "You have struck their foremast, until Lopez released his hold and sank

A boat which had been lowered "Aye, sir; and I will sing them an- from the English ship was now seen pausing, appeared waiting for the gunner's body to rise.

This it soon did; and the Indian. showing an agile strength one would not have accredited to his slight

crew-"should she get close enough | in their company to the man-of-war; ;



With a cursing cry he sank.

aboard in their midst.

having saved his life.

Lafitte, bidding Garonne accompany

tention, when the gleam of a gold

It was a bracelet which the Indian

Both Lafitte and Garonne knew

complished," mused Lafitte aloud.

Garonne, forgetful of his usual re-

broke forth into a flood of curses,

The mate turned to the cabin door.

"None, save to let the men have

Long before midnight she was feel-

ing her way north, toward the mouth

of the treacherous channel that would

of wakening birds was filling it with castle will cost \$5,000 000

which the latter checked at once.

band, hanging over Laro's bunk,

to try any tricks with grappling-irons, and Lafitte, watching through his have the cutlasses ready, my hearties. glass, saw the form of Lopez carried And remember that it is no quarter."

A sound, half roar, half snarl, came from the men; and the next moment | nim, went below, to Laro's cabin. Gathere was a whistling amongst them | ronne lit the brass lamp swinging over as a cannon-ball struck the bulwark the small table, and turned to Lafitte, n front of Laro, filling the air with | who stood looking about him, as if for pits of wood, and then glancing into some sign of Ehewah's treacherous inthe water.

A large, sharply pointed piece of ragged wood struck him in the side, caught their eyes. and with a cursing cry he sank, face downward, upon the deck, the blood had always worn upon his naked arm from his wounds spattering those near- since the day Laro placed it there. est him, several of whom had been in a burst of gratitude to Ehewah for hit by the flying splinters.

Lafitte sprang forward, and placing als arms around the quivering form, enough of the Indian's tribe-lore to turned the distorted face to the air. | understand that this was Ehewah's Then, looking up at the gunner, who | mute announcement of ended friendwas staring wildly at the sight, he ship and lovaity. cried, "Fire, Lopez, as you never fired; before!"

A prompt discharge followed the and having hung Laro's gift where we order, and a wild shout of joy went found it, went his way, intending to up from the crew of the "Black Pe attempt that which he has now ac-

The enemy's foremast was again! Then, as if struck by an afterstruck, this time with disastrous ef- thought, he went to Laro's bunk, and fect, as could be readily seen; for her throwing aside the rich draperies, discrew were getting the sails off with closed a heavy wooden locker. all possible speed. Her fore-royal and Its lid was, contrary to custom, top-gallant sails were clewed up, and locked; and when Lafitte opened it, a the topsail-yard let go by the run, disarranged collection of papers and while the mast was swaying percepti- | canvas bags showed within.

Lare, by Lafitte's command, had jewel touched, but charts and papers been borne to the main cabin, where gone that are of more importance ne was laid upon a divan; and the than all the valuables. The rascal brigantine had been ordered to come knows the way to the Barra de Hierro; to anchor. The enemy had already and the charts he has taken will indone this, and, in her present crippled | form others, showing them where to condition, there was nothing to fear find what now belongs to the Senorita from her, as the distance between the Lazalie." vessis was too great for advantageous firing, even had the Englishman straint when in Lafitte's presence, now been in proper form to continue the

Laro was breathing heavily, in broken gasps; and beckoning to Lafitte, where he paused, and asked in a voice he asked to have sent away those who i trembling with the anger he dared were about him, still striving to check not show, "Have you any orders for the blood that flowed so freely as to me, captain?" soak the red of the divan until it

showed black. Lafitte sent the others away, and only half-allowance of grog is served. known as the cross-channel cup. The sitting down by the dying man, took The fog is coming in, and we will sail competition is open to the world for one of the hands that were already as soon as may be."

"Jean, you will take care of La- the fog was again about the "Black swim as far as possible across the zalie?" And Laro's black eyes, their Petrel," enclosing her in a world channel. The second man would then mockery forever slain, looked at him where she was the sole tangible thing. | take up the task, and would be folwith appealing wistfulness.

Lafitte nodded, and pressed the hand he held.

"She will have plenty of wealth, as | their secure haven. you know; see that it is delivered to her safely, and kept securely afterward. Take the girl away, Jean; take her to the nuns, in New Orleans, as I bring the crew to their island strongshould have done before this; and hold, the Barra de Hierro. do you and she have the church say | The early morning air was heavy | which will cost \$1,000,000. His cow | masses for my soul. My soul!" he re- with odors of aromatic shrubs grow- shed cost \$ 50,000 and his chicken peated, in a quick gasp. To where ing beyond the beach, and the carol coop \$150,00° and the new Killarney ington who were bossing things at the sion bureau. will my soul go?"

Stopping only to draw a blanket over the face and form of the dead, he went on deck, where a number of ex- his grave face; and catching Lafitte's cited men were gathered on the side Petrel's" smallest boats being rowed while his hoarse voice poured forth a

volley of menacing words, was Lopez. Lopez had loosed one of his hands Ehewah dodged, and it fell into the no longer shouting, attempted to draw himself over the stern of the boat.

The crew of the brigantine saw Ehe- had seemed fully contented with her and thin, and wherever the colonel a dose such as will set them to re- wah parley with the men from the luxurious and independent life.

> (To be continued.) ORCHIDS COST HUMAN LIVES.

> > Plants Are Great. in the most deadly swamps of Mexico, by him. in the torrid and malarial districts death if caught.

music, when Lafitte came ashore, leaving Garonne in charge of the brigan-

His course lay inland, at first over waste fields, and then cultivated ones, of sugar cane, coffee and tobacco. Then came some banana and fig plantations, interspersed with groves of palms and cocoanut trees, until, after

a walk of twenty minutes, he reached

a clearing in which stood many small

huts, evidently dwellings; and apart

from these rose the walls of a stone

building, surrounded by a high wall,

there was no response; and, after a

longer silence than suited his humor,

trast with the white cotton of his rai-

ment, draped in a barbaric fashion

"My young captain!" he exclaimed

Ezrah listened with a face showing

that of anger that the nation his mas-

ter had taught him to hate should

His young mistress, the Senorita

and Lafitte, after bidding the Arab to

been passed upon the Barra de Hierro.

to which Laro-her only living rela-

the fervor of her uncurbed nature.

he called still louder.

thread and needle.

al! well here?"

hurial

own apartments.

that you have returned."

he fell to striking upon the door, while

Lafitte crossed the open space, and

with circular towers at the angles.

chids, an exquisite white flower of the Sobralia genus, was actually discovered in a fastness of the mountains on an altar on which human beings had recently been sacrificed.

This was a grewsome enough place of discovery, but it has a paraliel in the case of another equally lovely flower which was discovered wreathed around human bones exposed in a native cemetery in New Guinea. So firmly were some of the plants attached to the bones that they could not be removed and one was actually brought to England growing in the inside of a human skull. Of eight hunters who went to Mexico to hunt.orchids seven lost their lives within a year and the sole survivor returned with his health

Cause of Thanks.

"He doubtless stole in here to per-It was a Coffee county boy who marform what to him was a religious rite. ried and went to Texas, and upon ar- looked at him in amazement and riving there wrote promptly back to his friends that he "got there safe and

"It is as I supposed-not a coin nor

all well, thank God." Finally his name was dropped, him. Ocean. self forgotten, till one day, ten years after his departure, something brought up his name, and the old query came

up, "Why doesn't he write?" same old song. "Well, anyhow, he got thar safe an

ville Banner.

Novel Relay Swimming Race. A novel cross-channel swimming race from Calais to Dover has been promoted by the Belgian Swimmnig their supper at once, and see to it that | federation for a challenge cup, to be teams of five amateur swimmers. Like an army of shrouded ghosts. The first swimmer of each team would

But, as over a path familiar to blind lowed by the others in tunn. The eyes, the hands that manned her team whose men first reaches shore could shape an unerring course for would win the cup. The race is to take place in July or August. Howard Gould Spends Money. Howard Gould is not saving much money just now. He is building a sea wall around his Long Island home that the flag was kept flying.



Never Mind the Old Times. Never mind the old times; were bright an' sweet! Violets at your feet; the wall, called for admission. But

But the new times wear a smilin' face That's mighty good to meet, An' you'd better find the light that makes the mornin'! Never mind the old times:

They were great, I know; Old friends that we loved so! But the new times sing the song of Hope This resulted in its soon being opened cautiously, to show a stalwart Where sweeter roses grow, an' you'd better find the light that giant, whose black face and naked makes the mornin'!
-Frank L. Stanton, in Atlanta Constituarms showed all the darker by con-

Eccentric Colonel Burke. that told of its not having known "Yes," said Gen. Coates. "I knew Col. Martin Burke, who was in command at Fort Lafayette when prisonin Spanish, a pleased surprise lighting ers therein quartered made the fort and the commander subjects of conhand, he kissed it as the latter retroversy. Apart from any controversy, Col. Burke was an interesting personality and an old character. I remem-"Yes, my young captain. All is well; ber him as one of the old school army but it will be more than well, now ! officers given to some eccentricities that made me smile then and often Lafitte waited until the Arab (for cause me to smile now. He occupied such he was) had closed and barred a trying position, but he made mindthe gate; and then, in a few words, ing his own business a matter of prohe told him of what had taken place, fessional pride, and he never would adding that Laro's body would be go near Washington for fear that some brought ashore later in the day, for investigating committee would get hold of him.

"The boys on duty at Fort Lafayno emotion whatever, save perhaps ette had a constant reminder of the colonel's kindness of heart. He found, on occasion, a dog hurt in collision have been the means of the former's with an army wagon or a gun carriage. The dog's leg was broken, and he was in pitiable condition, and Lazalie, was of course not yet awake; the colonel's orderly reported that he was no better than a dead dog. The leave her undisturbed, went to his colonel, however, ordered the poor little beast taken to his own quarters, Lazalie was now sixteen; and, since and in due time the dog recovered, leaving a convent school in Seville, with a supreme disregard of all militwo years before, her entire time had tary regulations and proprieties.

"This latter quality undoubtedly grieved the colonel, but he stood by tive-had brought her, and where she the mischievous puppy through thick went with his traditional dignity went Laro, of necessity, passed much of Sam, the puppy, with his abnormally his time away from the Barra de developed bump of mischief. The colo-Hierro; and, during his absence, La | nel always appeared on dress parade zalie was its head and ruler, except | in the full dress of the old-time reguwhen Lafitte found it necessary to lars, and he held every man in line visit the island. Then the Spanish to a most serious cast of countenance girl gave place-and with entire will and most dignified manner. The uniingness-to the man whom, from their form, as Burke wore it, was queer first meeting, she had loved with all enough to make any man smile, but Sam, at these parades, was a full comedy in himself.

"He would caper about the colonel's legs, indulging in pranks that would make a horse laugh, and yet the colo-Dangers of Hunting for Beautiful nel stood there in stately pose, blind to the puppy's pranks, but watchful It is said that 2,000 different spe- as to the expression on the faces of cies of orchids have been discovered the officers and men in line. These and introduced to civilization. A re- poor fellows nearly died of suppressed cent investigator into the history of laughter, and they were always wonthis plant, according to the Detroit dering what Sam would do next. But News-Tribune, says that one human whatever they expected him to do, he life has been sacrificed to each speci- always did something else, and no men of this flower. Orchids flourish | matter what he did, the colonel stood

"The men on duty at Fort Lafayette of the Indies, in the Brazilian forests in the latter part of the civil war may and in places infested by pestilence, have forgotten the most notorious prisfierce animals and fiercer tribes of oners held there, but I will venture to savages, some of which believe that say that not one of them has forgotthe orchid is an object of veneration, ten the eccentric colonel or his pato tamper with which means certain | tient orderly, or the dog Sam. Those nearest the colonel testified that the One of the most beautiful of all or- orderly never showed impatience or irritation except on one occasion. The colonel had worked late one night on some perplexing papers, and, halting for a moment in his work, pushed his spectacles up well on his head, in-

stead of taking them off. "This was his regular habit, but on this occasion he pushed the glasses back farther than usual, and when, on resuming his work, he put his hand up he found no spectacles. This was disconcerting and irritating, and he shouted, 'Orderly, orderly, come here, sir!' The orderly had been sound asleep for two hours, but he jumped

up, wriggled into his clothes, and presented himself to his absent-minded colonel. Burke looked him over in disapproval of his unusual appearance and snapped out, 'My glasses.'

"The orderly turned on his heel without a word and in a minute placed before the colonel two glasses, a pitcher of water and a decanter. Burke roared, 'My glasses, you fool. My speceacles, my spectacles!' Then the worm turned. 'Yure glasses, colonel,' And that was the very last time said the orderly, 'are on the top of that he ever did write to them. They your head, sor. An' ye call me from waited and they waited, and they me bed to tell ye that' The colonel wondered and they wondered and in high dudgeon put his hand to his they wondered, and never a word fur | head, but found the glasses, and then | presented his bill to the G. A. R. post ther from the wanderers. Some anxi- said, 'Having found the glasses, go to at Clifton Springs. The question arose ety was felt, or would have been felt, bed at once. I never would have as to whether the county wherein she but for one old woman of distant kin, found them myself.' Any reference to had her legal residence or the county "Well, he got thar safe, and they're mind the figure of quaint but soldierly cided that Livingston county, where

The Flag at Washington. Our recent articles about the display of the United States flag in for the reminiscences and documents of And the same old woman piped the mer years bring out many reminis- surviving comrades produced under cences. Another old veteran writes:

"It is a somewhat curious fact that they're all well, thank God."-Nash- previous to the War of the Rebellion the flag was not often seen in the many organizations have neglected so cement and water, and brushed upon agination that cuil apples fed to cows national capitol or anywhere else. I far to record their doings, but recent- the walls like whitewash, the walls would dry up their milk flow. Anknow a veteran born in Kentucky, ly there has been shown a general will be found to have been rendered other absurd proposition is that sour who says he entered the service in desire to repair the omission, and impervious to water. A cistern can be 1861, at the age of 17 years, and until many regimental histories are appear made of cement alone, and if the earth matter of fact apples which are not he enlisted and was mustered into the ing. service he had never laid eyes on the flag and did not know what it looked like! A flag has been displayed over the capitol at Washington for a good | Pennsylvania infantry have made many years, probably fifty, though plans to erect on the Crater battlefield Cisterns are usually under floors, and 80.8 per cent; protein, 7 per cent; there is no authentic record of its hav- in Prince George county, near Peters- if not they can be floored over and the carbohydrates and fat, 18.2 per cent. ing flown 'officially for that length of burg, a handsome granite monument under side lathed and plastered with time. It is only since the war that to cost \$7,000. The monument is to adamant. It becomes hard as stone, is each end of the capitol has had its be erected in memory of those of the rot-proof, dirt-proof and moistureown flag. During the early days of regiment who fell in the Crater fight. proof. Built in this way a cistern can the disturbances which brought on the It was this regiment that dug the tun- be made more cheaply, as it does not than to have the use of a mongrel bull war of the rebellion, the one little old | nel for the mine. flag on the west front of the capito was discontinued. 'It roused sectional feeling to see it flying there' was the somewhat treasonable reason given by the officials, whose duty it was to see

capitol at that time, but it did not go with the 'First Defenders' of Pennsyl vania, the gallant little body of 500 men, who hurried to Washington on the very first train after the presidents call for men to wipe out the stain of the fall of Fort Sumter. These 'First Defenders' antedated all other troops in getting into Washington, and they camped in the basement of the capitol on the night of April 17. They asked why the national capitol displayed no colors, and were told the reason as above. This angered one of the 'First Defenders,' and he climbed the perilous height of the then unfinshed dome, carrying with him the large regimental flag of his organization. This flag he nailed to the dome, and there it remained until the elements whipped away the last thread of it, long before the close of the war. A storm was raised when people got up in the morning and saw the old flag flying from the dome, and many were the inquiries as to how it got there, but it was many a long year before the truth came out. The soldier who did it knew that he would be severely disciplined if he told what he had done, and his comrades who had helped him were loyal to him. The flag was there, and no man could be found who would take it down."-New York

The Badge Money Cannot Buy. A heavy disk of bronze, bearing the state seal surrounded by the inscrip tion, "Department of Michigan, G. A



" designates the comrades of the Michigan department. Upon the retional Encampment G. A. R., Boston.' is the place and date of the national winter rye was sown in the fall, pas- amount to 1,500,000,000 pounds. The encampment in gold letters. The pin tured then, late, and early in spring. value of the output, exclusive of Sun is lettered "Organized May 6, 1868. Then allowed to grow until in bloom, days and holidays, was, he said, \$1, Michigan."

Their Sons in Civil War.

A letter from Hillsboro states that James D. Daniel of Orange county. now 97, had five sons in the confed-

erate army.

same company with two sons. There an excellent time, for later the roads the war with Mexico and the civil war | make much dust. Then when the and never received a wound. He is 93 fowls must be kept confined and the years old and is active and interested in everything.-New York Herald.

Point of Law Cleared Up. A decision upon a point involved in the law granting the wife or widow of dust must be dry and if possible warm an honorably discharged union soldier it, slightly warm. Chickens will not or sailor may, if circumstances require, after her death be provided Farm Star. with a funeral at the expense of the county has recently been rendered by the attorney general. In the case considered the widow of a soldier at Clifton Springs went to Mount Morris to visit and died while there. The undertaker who had charge of the burial who whenever his name was mentioned would always say:

Hotel Lafayette, or Bastile Lafayette, wherein she died should pay the burial the garden could not be filled, even by or Fort Lafayette always brings to my expenses. The attorney general de-Col. Martin Burke."-Chicago Inter | she died, was responsible for the bill. -New York Press.

Regimental Histories.

Regimental histories enriched by keen criticism are the best possible foundations for an accurate history of the customary manner with brick and wars. It is to be regretted that so cement a wash is made of clear

Monument for Crater Battlefield.

Veterans Passing Away. "This reason may have seemed 150 a day. This is a higher rate than good to the jellyfish patriots in Wash- ever before in the history of the pen-



Build Up a Field.

There is no lesson so effective as the bject lesson. We try to induce the farmer to drain and fertilize all his farm, but we will have little impression on him till we have been able to place some object lesson before him, such as inducing the leading farmers 'n every locality to take one field and build it up, as it were, to a high state of fertility. A few farmers have done this under the instruction of professors of the agricultural colleges, and more are doing it. Their example is being followed by the farmers immediately around them, who have been impressed by the things that are

By the building up of a field the farmer himself will learn about his land many things that he never knew before he began that work. It is surprising how many things there are about farms that their owners do not know. There was one man that lived in a locality where the popular impression was that the land could not be drained. They said that the texture of the soil was such that the water simply evaporated from its surface, but did not pass through it. Under the instruction of the state agricultural college the man put in a series of drains, and, behold, they worked to perfection. The other farmers in that vicinity came to see his drains and were moved by what they saw to construct drains of their own.

This man had land that was deficient in potash. By draining he lowbegan to build up a field.

down as to its cost and products. There are very few fields that cannot be improved either mechanically, in fertilizing or in moisture contents.

Buckwheat, Rye and Fertility.

The discussion of buckwheat as a feed reminds us to say that it has even a greater value as a fertilizer of the soil, as we demonstrated fully on sandy land that had been reduced to the unprofitable point by too much cropping to wheat; that was several years ago, however. Rye was used in connection with the buckwheat, Makers' association at St. Louis, M. verse appears the little bronze button but the element most needed was se- M. Wentworth of State Center, Iowa, surrounded by the words, "38th Na. cured through the buckwheat, the rye in giving some figures of the magni affording some feed during the opera- tude of the dairy and creamery inter-This disk is pendent from an oxidized tion, and helping to put the soil in est, said that the production of butter silver pin by a cherry ribton on which good mechanical condition. First, this year in the United States would when it was plowed under and sown | 000,000 daily. To move the year's pro to buckwheat. That, in turn, was duction of butter would require 43,plowed under and again sown to win- 750 cars, each containing 20,000 An inquiry whether any man was ter rye. The following spring red pounds. This succession of cars would living in North Carolina who had clover was sown in the rye, when an extend 330 miles if placed end to end. sons in the confederate army is elicit- excellent stand resulted and the soil or from the world's fair grounds to a ing replies of an astonishing charac was again in condition to play its part point forty miles beyond Chicago. It in crop growing.

The Dust Bath.

erate army. Three of these are liv during the winter months nothing is trains. If sections were placed six so good as the dust bath. Don't think | miles apart the first section would be In the same township W. G. Wright | that lice don't multiply in winter, for | whistling in Manila, Philippine islands, is still living, 88 years of age. His they do, especially those great gray before the last section left the world's son, J. B. Wright, was in the confed | fellows. Get a box, a barrel, or any- fair grounds. thing that will hold the dust away in At the soldiers' home one of the the dry, and now fill it or have the inmates named Bunn served in the children fill it with road dust. Now is is also at the soldiers' home a veteran will be too damp with the fall rains who served in the Indian war of 1835 and heavy night dews to dry out and earth is hard and frozen, put some of the dust in the shallow box, set it in the sunshine or light of the poultry house windows, and notice how they enjoy that dust bath. Remember, the dust in damp earth in winter time .-

Multiplier Onion.

The old-time "multiplier" onion is not of much importance now. It is a persistent grower and succeeds most en a place in many a garden to the within her or to improve the milking benefit of the owner.

Building a Cistern. If after a cistern has been built in

in which it is made is of a solid clayey | decayed are the very best condiment nature the wall of cement need not for dairy stock and tend to increase ne over two inches in thickness. Bricks rather than diminish the flow of milk. The survivors of the Forty-eighth would have to be used for the arch, Scientifically speaking the composibut it is better not to make an arch. | tion of the apple as a feed is: Water, be circular, as it makes the walls The sad news is sent out from stronger and takes less material for a Washington, on the authority of Pen- given amount of water stored. Two sion Commissioner Ware, that the parts of sand to one of cement are old soldiers are dying at the rate of about right.—The Rural New Yorker.

Alfalfa as Cow Feed.

It has often been said that from a chemical standpoint alfalfa is an ideal ration for milk cows but this is not a fact. A cow weighing 1,000 pounds and giving her full capacity of milk should receive twenty-nine pounds of dry matter, 21/2 pounds of digestible protein, thirteen pounds of digestible carbohydrates and one-half pound of ether extract daily. If a cow should receive thirty pounds of alfalfa a day with no other feed she would not get enough dry matter by 11/2 pounds. She would receive thirty-two per cent too much digestible protein and not enough carbohydrates or fat. Theoretically speaking, in feeding alfalfa to dairy cows it should be fed in combination with some crop which will supply the nutrients in which alfalfa is deficient, such as corn fodder. Alfalfa and corn fed in combination results in greater efficiency in that it requires less dry matter to produce one pound of butter fat or 100 pounds of milk. The nutritive ratio of alfalfa, that is the proportion of protein or albuminoids to carbohydrates and fat is undoubtedly too narrow for best results. Corn and other crops supplementary to alfalfa must find an important place in farm practice in the irrigated west .- Denver Field and Farm.

Cheap Man, Poor Butter. At one place that I called last sum-

mer, the creamery had but four months before passed into the hands of the farmers. They had asked various creamerymen for advice and were ered the soil water more than a foot | told that the most important thing to and lay bare a layer of soil that was do was to hire a first-class buttermakrich in potash. The roots of the plants | er and not allow a few dollars in went down to it and the owner of the wages to stand in the way. They, field was relieved of the necessity of however, were of the opinion that a sending away for potash. He possibly good enough man could be obtained had never discovered this truth till he for \$35 or \$40 and got a young man for the latter figure. In four months One field on a farm should be made they lost nearly \$400 on the butter and to bear the greatest possible crop; the day I got there he had left them that the value of the farm for crop pro- after washing up, and when I got duction may be understood. It will be there about 7 o'clock in the evening an experimental lot and its value will the cream was at a temperature of 70 depend on the care that is given it and had 51/2 degrees of acidity-plenty and on the figures that are written ripe enough to churn. There was no water in the glass on the boiler and no water in the tank, the pump was broken, and the churn, which was a new one, was in a very bad condition. I got some ice and cooled the cream down and stayed two days breaking in a new man, who, I am pleased to say, has been having good success, some of the credit for which may be due to his wife, who works in the creamery with him.-Prof. J. G. Moore.

Magnitude of the Dairy Business. In an address delivered at the re cent meeting of the National Butter placed in sections of twenty-five cars. 1,750 locomotives would be required to haul the butter output, and it would To keep the fowls free from lice take 8,750 train men to operate the

Cause of Stringiness in Milk. Stringiness in milk is caused by fungi which develops in the system of the cow. In an affected cow the temperature is raised one or two degrees above normal. Like most other fungi this does not grow out into filaments in the milk while within the body, but in five or six hours after the milking the surface layers are found to be one dense net-work of filaments. If a needle is dipped in this and lifted the liquid is drawn cut into a long thread. Care should be taken in the water supply which is likely to cause stringiness and two drams bisulphite of soda daily until the stringiness disappears is recommended.

Foundation of Dairying. The motherhood of the cow is the foundation of dairying. This foundaanywhere. Sometimes it gets to be tion has not been understood in the little better than a weed. But it had past, and the mother quality was set some points in its favor. It had a at naught. The care and feeding of habit of getting up in the spring at the mother are things that should the first opportunity and for a short receive our first attention, but they time was passably good. Its place in have been the things to receive atthe earliest of vegetables. It would dry it has been the custom to cut take care of itself when once planted, down her feed and sometimes to let and would hold its own against grass her go with only hay and a poor qualand weeds if given an equal opportu- ity of hav at that. This is not a treatnity with them. It might yet be giv- ment that is likely to develop the calf

Apples Good for Cows.

qualities of the cow herself.

One of the theories that have been exploded as worthless is the old imapples will create sour milk. As a

Avoid Mongrel Bulls.

A farmer can afford to pay \$5 for have to be so deep, and can be larger for nothing. He can have a grade in diameter. A cistern should always calf of the highest excellence; if a female, she would sell for twice what a heifer by a mongrel bull would bring. If a male, it would bring onethird more as veal, and if raised for beef, would bring nearly double what the mongrel steer would bring, and A well-built drain is a permanent do it in the first cross.-Clark Bell in Country Gentleman.