## AFTER VACATION.

The children are all coming back to town From the fields and hills and the seaside

They are strong and merry and plump and brown, And their cheeks are as rosy and round

as peaches-And now for school, where the mistress

These little people all in a row

So many things that they ought to know. They know already where blackberries Like thimbles are set on the thorn's thin

fingers. Where the August apple falls and lies. And the lane where the latest daisy lin-

And the nest and the note of the feathered singers— But far less sure of their facts will be

The class reciting geography.

They can count the number of loads of That oxen drew through the wide barn

They can tell you the dozen of eggs that they Have found in the hayloft or on the

floor; (On the side of the hen-coop they kept the score. But these ready reckoners will be less

quick To perform a sum in arithmetic!

They can box the compass, and swim and dive.

They have learned to row and steer boat. They know where the sea-anemones live And the pools where the feathery sea

weeds float: And the rocks where the seal dries his glossy coat;

They can show you the sea-urchin's fret ted shell-But the rules of grammar they cannot tell. So much for the summer-the ocean waves Are deeper than books; and the meadow

And the minerals found in the mountain Teach greater lessons than nouns and

verbs-And the peace of nature that naught disturbs

Fills the hearts of the children and shines in their eyes, And makes them happy, and bright, and wise.

-Fortland Transcript.

## CHAMPION.

When eleven-year-old Daniel Rip-ley fished little Claude Scott out of the river, Mr. Scott gave him a handsome white-faced bull terrier as a sort of reward. At the end of a fortnight, the Ripleys, with the exception of Daniel, had little to say in favor of

"That Champion," said Mr. Ripley heavily, "knows the least of any dog I ever saw. You can whistle and whistle for him, but half the time he won't answer. He doesn't even seem to know his own name. Look at

Champion, who was lying at Daniel's feet, never stirred as Mr. Ripley in his mouth, a favorite little trick of said sharply, "Champion, Champion, his.

this morning I was coming in from the barn with a pitcher of cream, and he never offered to get out of the

Champion's sleek neck. "He is fine with the cows," he argued, "and he Then Daniel said excitedly to his drove Carrie's mastiff out of our sheep pasture. He likes to have you the other side of the barn; I want to see seems to understand you better, will." then.'

whom his associates appropriately out of the barn and around to where "The Human Encyclopedia," cleared his throat. "All white-faced animals have poor hearing," he re-"White cats are frequently deaf and so are white horses. Champion doesn't come when you call because he is deaf."

"I think you are right, Thad," remarked Mr. Ripley. Daniel threw his arms protectingly around his beloved pet. "If Champion is deaf," he asserted, "I shall teach him the sign language."

There was a shout of laughter from the group, and Daniel flushed to the roots of his red hair. Champion sprang up and licked his face as if he knew he was under discussion, and the two withdrew to the seclusion of the barn, where Daniel stretched out upon the hay, and pondered on the best scheme for the educating of a deaf terrier

"Two fingers will mean to lie down," he decided, "and I shall call him by clapping my hands."

Daniel was a patient, conscientious teacher, and Champion's one desire in life was to do Daniel's pleasure. After many weeks of vain struggle, the dog comprehended the signals which somewhat increased his usefulness.

Mr. Ripley was not greatly impressed by the results. "Oh, of course if he sees you, it's all right," he conceded, "but a dog that can't hear isn't much use on the place."

'I guess I'll take some salt up to the sheep in the hill pasture," Daniel, and he turned away so that his father might not see the grieved look in his eyes.

"I'll go along, too, for the walk," Mrs. Ripley said. So mother and son. and the faithful Champion, started of together. The path was narrow, and Mrs. Ripley walked ahead. The boy and his dog trudged along sadly behind, Champion in some way feeling his young master's depression. Suddenly he gave a sharp, short bark and raished ahead. His sudden onslaught daused Mrs. Ripley to lose her balance and fall.

"He's the worst dog we ever had," she puffed angrily, as Daniel assisted her to rise.

'Look, mother," was all Daniel

put her hand on Daniel's shoulder, as she watched Champion shaking the last spark of life out of a huge snake. "One step more, and I should have stepped on that creature!" she shud-

Champion gave a contemptuous "Woof!" and tossed the mangled serpent into the bushes. Then he deliberately took his place as the advance erately took his place as the advance guard of the expedition. I'll take it all back, Champion," faltered Mrs. Ripley, "you're a faithful fellow."
"He doesn't hear you," complained Daniel. The boy turned to his moth-

er with the directions, "put your hands on his head and stroke his face and thank him."

Champion looked lovingly into her face as she touched him. "I declare," she told Daniel, "I never noticed what human-looking eyes that dog has! He looks at you just as if he were a person." She patted his satiny coat approvingly. "When you get back, sir, you're going to have a chicken supper for killing that terrible reptile." Champion barked briskly as he

bounded ahead, once more on the lookout for any possible danger. Mr. Ripley was apparently unimpressed at the story of Champion's sagacity. "He'd have been a pretty poor dog if he couldn't have killed a

snake.' "H-m," said Daniel, "if you've finshed your chicken, come out to the barn, Champion. I'm going to teach you to do something that no other dog in the country knows."

Champion delightedly thumped his stub of a tail on the floor, and followed his master. "Mother," coaxed Daniel, "If you are all through now, won't you come out to the barn and help me teach Champion how to trail people?

"Teach him to know his own name," advised Mr. Ripley. "Father, scolded Mrs. Ripley, "how you do tease that boy!"

"It's a waste of time," he growled irritably, "to spend so much time on a deaf dog. If I have an opportunity I'll sell him and get Daniel a real

dog."
Mrs. Ripley was a short, fat woman, and she threw her head back in a way that made you think of an angry pigeon. "That dog saved my life, and we are going to keep him." "Have your own way, Jane," he agreed,

but I never could see much use in keeping an animal that wasn't physical-"The greatest musician in the world was deaf," retorted Mrs. Ripley, and she swept out to the barn after Champion

and his master. "O Dannie boy, he never can learn to do that," she protested a minute later. Daniel's clear gray eyes were full of confidence. He held in his hand an old red slipper which belonged to Mrs. Rip-ley, which he pressed against Champion's ensitive nostrils, then pointed to Mrs.

Ripley. Champion stood for an instant with his head down, and his ears, which he usually held erect, drooped; it was he usually held erect, drooped; it was easy to see that he was bewildered at the new command.

"Mother," requested Daniel, "please caught with birdlime!

"The care of the assed tree makes a move or do anything to distract him." Daniel then knelt down on the floor beside the dog, smoothed his shining coat, and laid his own red head against

Champion "He doesn't seem quite right in his the dog's nose, and led him to Mrs. Riphead to me," said Mrs. Ripley. "Why, ley. Then he patted the dog and slipped tiny piece of sugar into his mouth.

Several times he repeated the same performance. After fifteen or twenty minpath. I had to push him to make him utes, he suddenly pressed the slipper to utes, he suddenly pressed the slipper to the dog's face and pointed. Champion leaves thickly over the ground for Daniel threw his arms around bounded to Mrs. Ripley's side, and was

Daniel's prediction came true, for the

Mrs. Ripley was sitting. At the end of the week, Daniel had only to hold the red slipper in his hand and point, and Champion bounded in search of Mrs. Ripley.

Daniel's father opened his eyes at the dog's new accomplishment, and after a mild protest consented to have Champion trained to seek him out, when shown an old, battered brown hat. Saveral times, too, he matched his sagacity against the dog's to his own disadvantage. Once he slipped into the canoe and hid under the sheltering bushes at the edge of the water. Champion, hav-ing been shown the hat, arrived at the pond a few minutes later. Mr. Ripley chuckled to himself too soon, for the terrior, after a minute's hesitation, plunged into the water and struck out boldly for the canoe. He also insisted upon getting in, wet as he was, and Mr. Ripley was forced to allow him to enter the frail little craft. Champion barked victoriously as he accompanied Mr. Ripley home, and for a long time nothing was said in the household about Champion's infirmity.

Then came the morning when Champion did not hear Mr. Ripley's step, and was the unconscious means of his falling headlong down the cellar stairs. Some of the blame belonged to Mr. Ripley, for he should have watched where he was going, nevertheless he held Champion strictly responsible for the accident.

"I think we have kept that old, deaf creature long enough," he scolded, "I guess we had better sell him to Eph Saunders. Eph was asking only last week what we'd take for him." He strode angrily out of the house and left Daniel looking piteously at his mother. "Get to work on your wood," she said briskly, "and I'll talk to father when he

"O Champion," sighed Daniel, "why were you taking a nap on those stairs. Father was just beginning to find you of some use, too."

Champion whined dismally, as if he repented of his rashness, and the boy set doggedly to work on the wood pile. He had been working away for about an hour, whan a rosy, prosperous-looking man came into the yard.

"Are those cattle in the pasture to the right of the road yours?" he demanded

of Daniel. "Yes, sir," answered the boy.
"Well, where's your father?" he said you come in?'

The stranger followed the boy and Champion into Mrs. Ripley's shining kitchen. In her excitement Mrs. Ripley dropped a towel as she looked up at the stranger. He was a very pleasant man, with a quick, authoritative manner of speaking.

speaking. "I wan't to buy a little Jersey heifer in your pasture," he began. I'm willing to pay a good price for it. My time is limited, and I should like to see your husband at once. I can't wait more than twenty minutes. I couldn't have waited that long, but my car broke down at the bend, and I walked over to look at the cows. Now if you will find your husband at once. I think we can agree on a price."
"Oh, dear." sighed Mrs. Ripley,
went off in search of a hired man."

Daniel was already at the telephone calling up both the Evarts and Conants. "He isn't at either place," he reported, "and the other neighbors haven't telephones. I'll hurry as fast as I can and" -a brilliant thought occurred to him-"I'll send Champion."

The visitor watched with interest as Daniel scribbled a brief note and attached it to his pet's collar. Then Mrs. Ripley brought out the brown hat and let the dog sniff of it. The terrier flashed a keen look around the room, barked to be let out and started at a brisk trot towards the pine grove. "I'll run over to the Greeley place,"

said Daniel, as he, too, hurried off.

The man leaned back in the great, yellow rocking chair and took out his watch. Mrs. Ripley continued her housework nervously looking out of the window from time to time. At the end of ten minutes a familiar step was heard on the walk, and Mr. Ripley, followed by Champion, strode into the kitchen. The stranger was a man of few words, and in five minutes the bargain was closed, and he went out to the huge automobile which was now waiting at the gate. He paused a minute at the door. "I'll give you fifty dollars for that

dog," he offered.

Mr. Ripley leaned down and pulled a brindle ear. Daniel, heated and out of breath, had arrived just in time to hear the visitor's proposal and stood like a statue.

you that you were wanted at home."
"I didn't think you would sell him," agreed the man. Mr. Ripley extracted a five-dollar bill

"This is Champion's commission on the heifer deal," he smiled, "and you and he can spend it as you like." And by way of thanks a boy and a brindle dog rolled excitedly over the grass, while the older Ripleys laughed happily.—Kings' Treasuries.

## Trapping the Tiger.

ferocious creature, the tiger, the strongest, bravest and quickest of all

have tough and coarse leaves about the size of a man's hand; and the natives gather plenty of those leaves. Then they select a tall tree in the jungle, the lowest bough of which is ly killed, so that the blood may still several yards round the tree and pour the assad sap over the leaves.

snap your fingers or beckon; he if he will find you there. I think he and jumps for it. But the bait is out of his reach. He steps back a few yards, takes a run, and jumps again. But still he cannot reach the bait. The next time he goes back several yards. takes a longer run, and leaps with all his strength.

A tiger can at a run clear the bough of a tree eleven or twelve feet high, but cannot reach out with his paws or jaws more than fifteen feet from the ground. So now he just manages to touch the bough, but cannot get a good grip on the bait.

Now he begins to notice that something is the matter with his paws; call us. Its most prominent monuthey are covered all over with leaves, which interfere with his attempts to seize the bait. Then he tries to get rid of the leaves by wiping his paws on the ground. But that only serves to catch up more leaves. So he tries to wipe his paws on his body; that merely transfers the leaves to his body, and as soon as he puts his paw down on the ground again he picks up more leaves. In this way the leaves become stuck all over his

Now an intelligent animal like the elephant would think it all out and come to the conclusion that something was wrong with his method. Not so with the tiger. The tiger never changes his habits. Because he is never occurs to him to walk away from the tree before wiping his paws.

At last, getting quite impatient, he begins to wipe his paws on his cheeks -as every cat creature does. Then real trouble begins. The leaves accumulate on his cheeks and the sap gets into his eyes. That causes intense pain and temporary blindness. Maddened with the pain, the stupid tiger lies down and rolls over and over on the ground as cats always do. That is the last piece of folly. Covered from head to foot with leaves and glue, the tiger leaps about franticaly, and soon dashes his head against the tree. Then the wily natives rush tion. from their hiding place, throw a net over the helpless tiger and carry him

They put him into a cage, the floor of which is covered thick with sand, and let him wipe himself clean by rolling in the sand. Later they throw buckets of water over him and

BORDER.

"Shake hands." This was the instruction I gave to a couple of friends as they stood one on either side of the international border between the United States and Mexico. Their clasped hands were exactly on the invisible line which marked the end of Mexican sovereignty and the beginning of American authority, or the opposite, according to which way you and Stripes. At the present time, all of us would rather be in the position of the latter, for the red, white, and green flag of Mexico, with the eagle standing on a cactus and grasping a six years.

The Rio Grande forms the internamiles, beyond where the Rio Grande tuurns northward through New Mexico, the contiguous border between as yet been completed across this our land of peace and the neighboring range of mountains. Today it is alland of turbulence has no natural de- most a counterpart of what Califor-Mexican War, and monuments have been erected every few miles. Each monument has an inscription on one er the lower levels along the coast, side in English, and on the other side in Spanish, referring to the treaty by areas inland are semiarid. The popuwhich the boundary was established.

A few months ago I traveled along

or near a large part of this trouble-some border all the way from the Pacific to the Gulf of Mexico. There are many towns situated along it which sprawl out on both sides. In each instance the principal town is on the American side, but a settlement has border. These border towns are frequently the resort of a lawless elehand of a strong central government. Many Americans who have committed crimes in one of our American States "Oh, no," said Mr. Ripley, "he's too valuable. It isn't every dog that would come rushing into your wood lot and tell their fellow countrymen who may cross over the invisible line. Because of the impotence of local authority they seem immune from punishment or extradition there. It is no wonder from the amount he had just received that great indignation exists among for the heifer, and handed it to Daniel, Americans in New Mexico, Texas, and Arizona. They have had much provocation. I have visited a number Tia Juana (Aunt Jane) is an American town not far from San Diego, guinary fighting has occurred there, is Columbus, New Mexico, a few miles away from the "line," which gle, the lowest bough of which is about fifteen feet from the ground.

On the bough of which is was made the object of a deliberately planned raid by Mexican revolutionsible act that has yet been committed. The Government was fully justified

in deciding that our suffering and forbearance had continued long enough. Ciudad Jaurez. The Mexican city, originally called El Paso del Norte, is as much reason for its existence, and day is a city of low adobe structures, with dirty and unsanitary streets, and with few evidences of modern advancement. It would probably have pretentious village had it not been for ment today is the Plaza de Toros the United States that the promoters and managers of the races, as well as the tigated.

fact. The Rio Grande river itself has not been a protection. Not only have shots flown across this rather imposing stream near its mouth, but armed bandits penetrated American territory early last autumn to a distance of forty or fifty miles. One train was wrecked and the passengers robbed, and two were killed. Isolated ranches were raided and stock driven away. accustomed to wipe his paws on the ground or on his body, he cannot the land is covered with the mosquito think of anything else to do. Also, it and chapparel, thus making concealment far from difficult, and white inhabitants are not numerous. The ma-jority of the inhabitants in that part of Texas are themselves Mexicans, and many of them doubtless friendly to the raiders. A band of fifty or seventy-five armed men were comparatively safe from capture. A considerable force of soldiers were kept at Brownsville, and when I was there General Funston himself was a guest at the same hotel. A small man in size, he has proven his bravery and capability both in Cuba and the Philippines. To him is entrusted the re-

Our neighboring republic of Mexico Chihauhau (pronounced Che-wa-wa,) if nature had laughed herself into convulsions in which they were form-

ed. It is among these mountains and inaccessible retreats that rebellious bands have found secure hiding-places whenever pressed closely by purare traveling. The man to the left is standing in Mexico, the one on the right is (figuratively speaking) under the protecting banner of the Stars were compelled to pursue him in the effort to make our border safe.

"Las Madres" says the Mexican, whenever he is asked the name of the lofty mountains that separate the serpent in its talons, has not been lofty interior plateaus from the Pamuch protection in the past five or cific Ocean and the Gulf of California. This range of mountains effectually cuts off the west coast from the tional boundary for seven or eight best developed part of Mexico, and hundred miles. But for hundreds of for that reason this section is not so well known as those parts which are visited by travelers. No railway has as yet been completed across this markation. By various treaties it has nia was before the gold rush of 1849 been clearly established, since the —as little known, isolated, and undeveloped—but with just as great natural advantages. Dense jungles covwhere water is plentiful, while great lation is generally sparse and scattered. The only villages are at the mining centers or around the big stock ranches.

From El Paso it is a distance of a little more than two hundred miles to the city of Chihauhau. The traveler has no sooner crossed the Rio Grande until the change is seen in the Mexigrown up on the Mexican side of the can town of Ciudad Jaurez. This city has been the objective point of both revolutionists and federals in the ment, and especially is this true since troubles of that country, and has been Mexico has lacked the restraining the scene of a great deal of sanguinary fighting. For several hours on the journey southward there is nothing to be seen but the chapparel and desolate-looking hills, with just enough novelty in the little town that may be passed to make the trip strange and rather old-fashioned. Big-hatted peons stare at you from their leaning positions against the station walls. The "hee-haw" of a lone burro may be the only sound to break the si-

lence. The train rolls along through a narrow valley which is quite level, and with high tablelands all about. of these border towns, from Lower California to El Paso. and these remarks apply to all without exception.

Then the route reaches the land of the haciendas, where herds of cattle, the haciendas, where herds of cattle, sheep and goats may be seen. It is a naptha is driven off by steam which land of deep valleys, with glimpses of passes through the percolator, and California, and its principal industry majectic mountains, and sometimes the residue is known as new process is the bull-fight and gambling. San-with broad, spreading plains as well. oil meal. Ninety-four per cent. of the At length, the train reaches Chihau- old process meal is digestible while Strangely enough, the simplest animal to catch alive is that fierce and ferocious creature, the tiger, the tiger, the town of Calexico. The difference to the posite the town of Calexico. The difference to the posite the town of Calexico. The difference to the posite the town of Calexico. The difference to the posite the town of Calexico. The difference to the posite the town of Calexico. The difference to the posite the town of Calexico. The difference to the posite the town of Calexico. The difference to the principal city and but eighty-four per cent. Of the new metropolis of this section of Mexico.

Chihauhau is not a very beautiful doubt to the heating of the seeds. It ference in the moral atmosphere is city, nor is it as attractive as many of should be fed from one-half to one very noticeable after passing the Mexican custom house. The same can be said of the town of Naco, to which be recommended. It is described by the fed in the intervence of the same can be said of the town of Naco, to which is it as attractive as many of the intervence of the interve American troops were rushed a year tined to be a much larger city than at from two to three pounds and sheep The sap of the assad tree makes a or so ago, and our cannon were train- present, however, by reason of the paste more sticky than glue, and the ed toward Mexico with instructions to mineral wealth surrounding it. Five daily. It should be bought in the natives tap several trees and collect a large quantity of the sap. Also, the border in their internecine fight-there are many tropical trees that ing. Nogales, also on the Arizona in their internecine fight-there are many tropical trees that ing. Nogales, also on the Arizona in their homes here. Most of them were before feeding, as it is more palataborder, has been the scene of much interested either in mining or the ble and does away with any chances trouble from the same cause. Now it handling of mire supplies. A few of adulteration. were employed in the management of the railways centering there.

there is one of the finest grazing sections of the republic. Broad praises good feed for fattening swine.

The field bean when it is damaged On the bough they tie a tempting bait, generally a sheep or goat freshed bandits. It is the most reprehensity a sheep or goat freshed bandits. It is the most reprehensity a sheep or goat freshed bandits. either side to the foothills and form rich grazing land. The vast ranges, the temperate climate, and fair aver- and fed with some other grain. age rainfal: makes this almost an Then Daniel said excitedly to his mother, "Take your chair and put it on the other side of the barn; I want to see the bait on the bough, and the other side of the barn; I want to see the bait on the bough, and the boundary line is more noticeable are fattened the cattle that feed the given to horses as a mash. It may near. He sees the bait on the bough, properly appreciate the progressive the markets of the United States, or good advantage. Flour where the disturbance became the disturbance the disturbance the disturbance The difference on the two sides of ideal country for cattle. Upon there for once or twice each week, when desert city of El Paso, one should first go across the international lt is a region of immense ranches, standard middlings, as they often bridge and become acquainted with which form almost empires in themselves, for they are larger than some originally called El Paso del Norte is of the principalities of Europe. One much the older of the two. It had just estate in the State of Chihauhau, Next to corn, oats is the would make a Commonwealth as as much reason for its existence, and had a better start. The Jaurez of to-had a better start. The Jaurez of to-large as the States of Massachusetts

The hull of the oats forms about 20 and Rhode Island combined, with a per cent. of its weight, but it may run small farm of a million acres besides. In all, it numbers nine million acres. It is partly by forced contributions kinds of stock foods. remained nothing more than an un- from these princely landlords that the bandit leaders have been able to susthose restless "Americanos," as they call us. Its most prominent monucommissary department, while (bull ring) and, its most flourishing the horses have furnished the mounts business is the race track. Of course, They have no scruples about taking They have no scruples about taking it is not much to the credit of the any stock found on the range, and the question of ownership is never inves-

brutal bull-fights, are generally our fellow countrymen. But such is the Chihauhau and went west as far as the railroad was constructed-just across the "divide," as the highest point is called. It passes through some of the grandest and wildest mountain scenery that I have ever seen. It is an ideal place for bandits to hide in pursuit from an enemy unfamiliar with the country. For scores of miles northward, toward the Unitcountry is practically the same. It is in these regions that Villa has had his haunts for many years. In fact, there have been lawless elements at all times in these mountains that have resisted practically all efforts of the government to wholly suppress several hours before feeding to cattle, them. It will be a splendid thing for as they are not very well relished. Mexico when these conditions are wholly removed.

Hermosillo is the capital of the State of Sonora, which is the second largest State in the republic. Much of this State is useless for cultivation, as it is arid, and a part of it is very mountainous. In other sections the soil is extremely fertile, and irrigation would render it invaluable. Such projects could be carried out if there was as much enterprise on that side of the international border as on the northern side. Near the Yaqui has indeed seen troublous times in the River, the soil and climate are as well past five years. Nearly all of this adapted to fruit as southern Califortrouble has arisen in northwestern nia. There are many large mining Mexico, in the mountainous states of enterprises, the largest being at Cananea, not far from the American Sonora, and Sinalon. Chihauhau is border, and nearly all are American the largest State in Mexico, and is enterprises. The trouble with the said, but his eyes glowed with a proud light as he pointed to Champion.

"Well, where's your father?" he said long poles. Then he is clean enough to come to Bronx Park.—Ex.

"Well, where's your father?" he said long poles. Then he is clean enough to come to Bronx Park.—Ex.

"Well, where's your father?" he said long poles. Then he is clean enough to come to Bronx Park.—Ex. it is quite a roving ground that the last decade. Hermosillo is situated as linseed meal.

Mrs. Ripley turned white and she certain, but I'll ask my mother. Won't OUR TROUBLESOME SOUTHERN revolutionists have had. Mountain on the Sonora River, in the midst of ranges are ever in one's range of vis- an agricultural district and surroundion. At a distance, in the clear at- ed by rugged mountains, where there mosphere, their rough features rise are many mines of gold and silver. It like a camp of giants, and are the most fantastic mountains that earthquakes ever made in sport, looking as city in the State. With a stable government so that the mineral and agricultural wealth might be developed, Sonora would become a second California.-The Classmate. "Reformatory Record."

## FARM NOTES.

-This is an age of soil liming. Farmers everywhere are giving more attention to lime as a soil conditioner.

-Fertilizers are too high and scarce to allow the weeds to steal them from the growing crop. Keep the cultivator going.

-Indigestion in older calves is usually due to unclean milk or feed, unclean vessels, close confinement in dark, unsanitary stalls, and irregular or excessive feeding. In some cases it appears to be due mainly to sheer weakness and inability to digest.

-It is well that the farmers know what feeds are best fitted to the farm animals. Knowing food values and costs, one can figure out the most economic ration. Corn contains about 70 pounds of

starch and about five pounds of oil to every 100 pounds. It is a great heat producer and fattener in animals, but is not an ideal feed for growing animals, as it does not furnish the protein for muscle and bone growth that is needed. The cil which it contains makes the animals very fond of it. It has often been said that yellow corn was more nutritious than white corn, but there is absolutely no difference in the feeding value. Flint corn has a larger proportion of cob than the dent corn. Old corn contains about 12 per cent. of water, while new corn will contain as much as 36 per cent. Corn in which there is more than 20 per cent. of water will not keep in any great quantities. Shelled corn does not keep well in summer, and corn that has been frosted should be utilized by immediate feeding. Corn and cob meal is the whole ear ground fine.

-There are two methods by which the oil is extracted from the flaxseed and they are known as the new and the old process. By the old process the oil is extracted by extremely high pressure, while by the new process the seeds are crushed and then heated and then placed in large percolators and naptha poured over them. from one-fourth to one-third pounds

The cow pea seed ripens so unevenly that it can best be used for hay, West and northwest of Chihauhau silage and grazing. It makes a very

by rains or dampness may be fed to sheep and swine. When fed to swine they should be cooked in salt water

-Bran makes a very useful feed contain a large percentage of low grade flour. Middlings are very good Next to corn, oats is the most wide-

as high as 45 per cent. They are largely used now as a filler for some Oats is the safest feed for the horse, as the hulls give it enough bulk so the

mature horses with good teeth they should be fed whole. The spirited condition found in the horse fed on oats is not obtained with

horse very rarely gorges himself.

any other feed. There is no better feed than oats for dairy cows and it is also a very good feed for breeding swine. The oat hulls are a by-product of oatmeal factories and as such are sometimes ground along with corn and sold as ground oats and corn.

In sections where corn and oats do not thrive well barley is used extensively as a feed. Many horses are fed on rolled barley with wheat or oats, or on barley hay for roughage. Bar-ley should be prepared for feeding by ed States border, the condition of the rolling and not by grinding, as ground barley forms a pasty mass in the animal's mouth.

Dried brewers' grains makes a very satisfactory feed for dairy cows and horses, but are unsatisfactory for pigs. Malt sprouts should be soaked Kafir ranks below corn in feeding

value and palatability, but is a very important crop in the sections where it flourishes. May be fed to horses either in the heads or thrashed, but to dairy cows it should be ground or soaked before feeding.

Practical experience has taught us that cottonseed meal is not a safe feed in all cases. Dr. G. H. Conn says steers that have been closely confined for a period of 100 days and been heavily fed on cottonseed mea! often develop a staggering gait and become blind and die. It is particularly fatal to swine in from five to six weeks. No satisfactory way has been found by which cottonseed meal may be safely fed to swine.

Cottonseed meal which has been exposed to the air, or that has been made from musty or fermented seed. should not be used. It is not as good