Teachers' Guide Series
Book Two
M. Helen Beckwith

Lesson Plans
Domestic Animals
TEACHERS' GUIDE SERIES

BOOK II

LESSON PLANS

DOMESTIC ANIMALS

BY

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THE CAT

SUGGESTIONS

The lessons on the cat are suggestive only; the work is planned to last the whole month. It is designed for the little children, particularly, who have just entered school, and to whom school work is apt to grow tiresome after the novelty wears off.

Much easy reading can be combined with the lessons, by drawing little pictures in place of the nouns in the first reading lesson, as,

See Pussy's (picture of two eyes).
This is her (picture of tail).

Children love to make cats out of two circles, and if made good size, with sandpaper glued across the back, they make good match-scratchers. The mat on which kitty sleeps may be woven, and the articles in the story drawn and cut, viz., Belle's basket, the saucer, bottle of milk, stalks of catnip, a ball she plays with, the tree she climbs, the cat in different positions, and the rhymes and songs illustrated.
“lost his mittens.”  “found his mittens.”
DOMESTIC ANIMALS

THE CAT

It was almost three o'clock when Miss Clare took down a chart that had been hanging against the blackboard, and the children spied the picture it had covered. Just a little drawing in white chalk—a kitty and a tiny girl, looking at each other.

"Pussy-cat, pussy-cat, where have you been?"
laughed Miss Clare, writing the words by the little girl's feet.

"I've been to London to see the queen,"
called the little people, merrily.

"Pussy-cat, pussy-cat, what did you see there?"
"Only a little mouse under the chair,"

the dialogue continued.
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"Pussy-cat wasn't very wise, was she, children? She couldn't have had very good eyes, could she? I would have seen more than that, in a big, splendid palace, and have taken at least one good look at the queen herself, wouldn't you? But then, some people never do see much, even when there is a lot to see, do they?"

"How many of you little people have a pussy-cat at home?"

Nearly every hand went up.

"Very well; now I shall know to-morrow morning what kind of eyes you have, and, perhaps, what kind of ears you have, and if they are 'good to see and hear with, my dears';" and she began pinning some little pink papers to the children's frocks and blouses, on which were the following hektographed questions:

1 What is the color of your kitty?
2 What kind of a coat does she wear?
3 What does she eat?
4 How often do you feed her?
5 What does she like best to eat?
6 What sounds does she make? What do they mean?
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7 Is she fond of you? What has she done to make you think so?
8 Does she play? Does she work?
9 Is she of any use?
10 What is your kitty’s name?

“Now,” Miss Clare continued, after reading the questions aloud, “if you can’t remember them, why, ask someone to read them to you; but, if you have the right kind of eyes, I think you can find out the answers for yourselves. Bob, Belle, and Bess may wait one little minute to find out the secret I have for them;” and when the good-nights had been said, the day’s work was over.

There was a great call for cats that night in all of the homes: big cats, little cats, and middle-sized cats, all came in for a share of inspection, and forty little heads were nearly bursting with information when nine o’clock came the next morning. I wish I could tell you of all the funny things they told Miss Clare, and how much she learned of the way in which pets were cared for in different homes—her principal reason for sending those questions home, by the way—but if you want to know, why ask the children themselves, while I tell you
of the mysterious packages Belle, Bob, and Bess had.

In Belle's covered basket was her darling Snowflake — white, from nose to tail; Bob's package held a bottle of fresh milk; and Bess's a saucer, as clean and white as kitty herself.

As soon as the room was quiet, Miss Clare poured the milk into the saucer. Bess put it on the number-table, and Belle lifted out pussy-cat.

It was so still, Pussy was not at all afraid, and while she was eating her breakfast — for Miss Clare had asked Belle not to give her any at home — the little folks crept up softly to see how she ate it, and to watch her wash herself afterward. They discussed the shape of her body, her legs, and her tail; and John measured her with a ruler. He found out her length, from nose to tail, and then measured her tail. How long do you suppose she was, and how high?

Jenny said papa told her cats had thick fur because, sometimes, they had to sleep out in the cold and wet, and that the hairs were set into the skin so that they all pointed one way, from the head to the tail. This kept the rain from getting through to the skin. In
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summer time, many of the hairs fell out, but they grew again before cold weather came. Then the children must all pat Snowflake "just once," to feel her soft fur; must hear the queer crackling noise it made when Belle rubbed her back briskly; and must look at her eyes by the window in the sunshine, and in the twilight, down in the basement.

Then they put her back in the basket to take a "cat nap."

Miss Clare wrote a list of points, "discovered and discoverable," on the board, to which something was added each day.

1. **Body**
   Shape; size.

2. **Covering**
   Kind; use; color; wearing qualities; how repaired.

3. **Eyes**
   Use; color; shape.
   - Seen in sunlight
   - Seen in twilight
   - Difference.
4 Tongue

How does it feel? How does kitty use it?

a As a spoon; for what?
b As a sponge?
c As a file?

The next day the basket came again, but it held a black cat this time, and later, a gray one, and then a tortoise-shell.

Mrs. Price came over one morning, and showed them her beautiful Angora kitty; and after school, one night, they all went down the alley to see Tim's little kittens, five of them, out in the shed, with the mother-cat, in a basket. Tim was watching them most carefully, and he told, very accurately, of the way in which the mother cared for them. He saw her wash them, and give them food, and yes — spat them with her paw, if they were naughty. One day, she seemed to think they had been receiving too much company, for she made a new home for them in a box at the other end of the shed, and Tim saw the moving take place; she carried each one over in her mouth. His joy was very great the morning he reported that one had its eyes open.
Joe brought his cat one morning, and some stalks of fresh, green catnip. The basket was uncovered and left, with kitty in it, at one end of the long table, and the catnip placed at the other, to see if kitty had a "good smell" — Joe said — and would find it.

Another day, some small bones were given the visitor, to see if she would eat off the bits of meat, and to see how she did it. Again, Jenny held her audience spellbound as she described, with eloquent gestures, how her Teddy caught a mouse.

The list on the board was a long one now, so many things were added.

5 Ears
   Position; shape.

6 Nose
   Has kitty a keen scent?

7 Whiskers
   Where are they? Length; use.

8 Teeth
   Are they large or small?
   Are they all alike?
   Why not? Different uses.
9 Limbs
   Number; shape.
   How joined to body? Joints.

10 Feet
   How does kitty walk?
   Why does she make no noise?
   How many toes? How many claws?
   What are the claws made of?
   What is their shape?
   How does kitty use her claws?
   Are the front and back claws alike?

11 Tail
   Shape; length.
   What use is it?
   Do all cats have tails?

12 Kittens
   How do they look when very little?
   Are they pretty?

13 Habits
   How does kitty sleep?
   How does she take a bath?
   Does she get angry?
How does she defend herself if you hurt her?
Does she like you to pet her?
How do you smooth her hair? Why?
Did you ever see her climb a tree?
What did she want?
How does the mother-cat care for her kittens?

I am kitty's eyes — round in shape, and green in color. There are holes in the centre that grow small in the light and large in the dark. I can see best in the dark. I am made in this way to help kitty find her food when she has to hunt for it, for she likes mice best; and they come out of their holes more often at night.

Or,

I am kitty's teeth. See the tiny front ones, and the long, pointed ones on each side? They are to hold a mouse tight when I catch it.

Little Billy told this story that his Uncle Ned told him:

Long, long ago, a kitty caught a bird one morning; but, as she was about to eat it, a sly fox came along.

"Good morning," said the fox. "Just going to eat your breakfast? Well, let me tell you, sir; no gentleman eats until he first washes his face."

Kitty laid the bird down on the ground — for it was quite
dead — and began to wash herself. Then the sly fox reached out his long paw, took the bird and ran off with it.

Poor kitty had to hunt for another breakfast, and she said, "After this, I shall eat first, and wash myself afterward," and cats do so to this day.

They "played cats," also. They chose Tim, one day, and he made such a good one! He arched his back (walking on hands and feet), to show he was angry; scratched when Bob rubbed his fur the wrong way; purred when Nellie patted him gently; "shinned" up a pole in the centre of the room to rub down his claws; measured the space in the half-opened door with his whiskers to see if he could go through, and howled terribly when some one stepped on his foot.

There were little games, too, found in kinder-garten song books.

There was "Puss in the Corner," also.

They sang

"I love little kitty, her coat is so warm,
And if I don't hurt her, she'll do me no harm;
So I'll not pull her tail, or drive her away,
But Pussy and I very gently will play.
I'll smooth her soft fur and give her some food,
And Pussy will love me, because I am good."
Miss Clare sang a song she knew as a little girl, called "The Old Black Cat," and Teddy recited the old rhyme of the "Three Little Kittens Who Lost Their Mittens." This latter the little folks greatly enjoyed, and Miss Clare illustrated it for them on the blackboard.

Those blackboard pictures! What delight they took in them, and there was a new one nearly every day:

Kitty playing with a ball; eating milk out of a saucer; asleep, with "tail and nose together"; running up a tree; stretching after a nap; carrying a kitten by its neck; spitting at a dog; crying over the lost mittens; laughing when they were found and hung up to dry; and watching at a mouse's hole.

There were some pretty Perry Pictures pinned on a strip of burlap on a small blackboard, and the children tried to draw a great many more to add to the collection. When the month was over, and all the pictures erased, Miss Clare gave a little sigh of satisfaction as she added these notes in a well-worn note-book:
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ANIMAL STUDY FOR SEPTEMBER

Object
1. To see if the children have pets, and, if so, how they are treated.
2. To impress kindness to animals.

Method
1. Have different cats brought that the children may see the salient characteristics of the family versus the accidental, as size, color, etc.
2. Emphasize the use and adaptability of each organ, rather than to simply notice the organs themselves.
3. Songs, games, stories, rhymes, and pictures to add interest and relieve monotony.

Results
Much better oral expression from children.
More interest taken in school matters by "home people."
Better control of muscles; keener powers of observation, and A jolly good time by all of us.
THE DOG SUGGESTIONS

Some novels that teachers may find interesting that have dogs for heroes are: "Bob, Son of Battle," "The Call of the Wild," and "The Little Shepherd of Kingdom Come." Kipling and Long will furnish ideas, and a good encyclopedia will contain good pictures and many interesting facts.

Two stories for the children are: "Moufflon" and "Dicky Smiley's Birthday," in "The Story Hour," by Kate Douglas Wiggin.

For drawing; modeling, painting, or cutting, follow the ideas in the stories told, using objects mentioned there. A mat for doggy to lie on, his collar, the dish he eats from, a cookie that he likes, a loaf of bread before we cut him a slice, the knife to cut it with, a newspaper that he brings from the office, a basket he can carry in his mouth, etc. Don't forget to let them illustrate some stories, even if you can see no "results," and let them draw the dogs that visit you.
THE DOG

Pit, pat, pit, pat, softly sounded the steps in the hall, and then there was a sharp bark at Miss Clare's door. She opened it and a large dog walked into the room. A card was tied to his collar with some writing on it that said:

"Good afternoon, little people! My name is Bruno, and I have come to visit you for fifteen minutes." The teacher read this to the children, and then to their delight Bruno began to walk slowly through the aisles, looking at each little friend out of his big brown eyes.

Meanwhile Miss Clare was writing this question on the blackboard: "In what ways is a dog like a cat?" and when Bruno had finished his survey of the room and had taken his stand by the teacher's desk, the children were ready to answer it.

They discovered some resemblances easily, as:

Shape.
Shape of limbs.
Shape of tail.
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Use and number of organs, and some differences, as:

Size.
Covering.
Sounds made.
Feet.
Eyes.
Teeth.
Ears.
Tongue.

As the time for the visit was now over, Miss Clare said, "I am sure that we can find out many other things and I will try and coax Bruno to visit us again to-morrow," and Tom — whose father owned a market — volunteered to bring a bone for him to eat.

With nine o'clock came Miss Clare and Bruno. The bone was there, also; a good meaty one, that Tom hid on a low shelf in the cupboard, leaving the door ajar.

Bruno found it very quickly, and began at once to eat it, leading the children to decide that he had a keen scent, large, strong teeth, and good eyesight.
"He fared much better than the dog in the story," laughed Miss Clare. "Don't you remember how

"Old Mother Hubbard went to the cupboard
To get her poor dog a bone,
And when she got there, the cupboard was bare,
And so the poor dog had none"?

With a ruler they measured Bruno, his length, height, tail, and ears, examined his eyes in the light and in the dark, felt of his coat, searched for whiskers, and studied his color. Miss Clare questioned if dogs were always larger than cats.

"Yes," was the decided answer from all but quiet little Johnnie, who said he had seen a dog smaller than an Angora cat.

This reminded the guessers that dogs varied in size, and they came to the conclusion "that some dogs were as small as cats, but that no cat was as big as a large dog."

They noticed that Bruno walked a little lame. "What makes him?" inquired John.

"When he was a small dog," said Miss Clare, "he was out playing with his little master in a field near a railroad. The boy was throwing sticks for
the dog to bring back to him. One stick fell on the track and as he ran to get it, the train came along. Bruno jumped, but the engine hit his leg and broke it. A doctor set it and it got well in time, but he has been afraid of the cars ever since. He will not cross a track if he can help it.

"One Sunday my brother and I were out walking and we came to a bridge across the river. Bruno was with us and when he saw there was a car track across it he would not go over. We coaxed and scolded, but he would not stir. At last we left him, knowing he could find his way home well enough, but what do you think! when we reached the other side he was waiting for us. He had gone down the steep bank and had swam across the river!"

It was now time to tell the dog good-by, so after giving him many love pats, and a piece of cake, they saw him trot quietly home.

The next day Charlie brought his dog, a spaniel. He was a beauty, with curly hair so soft and silky, and the brightest eyes! He could do many tricks and was very willing to do them for his little master, who spoke so lovingly to him.

"Sit up and beg, Fritz," Charlie would say, and
Fritz would sit on his hind legs, and hold out his front paw in such a droll way. He would roll over, jump through a hoop, shake hands, go to sleep, and play "hide the ball." Charlie would put him in the hall after showing him the ball, and then he would hide it in the school-room. Fritz never failed to find it.

Dogs were not as plenty as cats in the homes, but the children did have visits on different days from a pug and a poodle, beside the two mentioned. From these four, and a great many pictures, they learned that dogs differed not only from cats but from one another and they made this list for the blackboard.

Dogs vary in:

Size
   Being small, medium, or large,

Covering
   The hair being short, long, straight, curly.

Color
   Being black, white, brown, yellow, gray, or mixed,
Shape of Ears
Erect or drooping.

Shape of Tail
Straight, recurved, slim, bushy, short, or long.

Of course there were other variations, but these were little children and Miss Clare did not think it wise to be too technical.

She told them she had read in a book that there were over one hundred and eighty kinds of dogs in the world, more than some of them would be able to count, but maybe they would like to know about a few kinds and of what use they were to man.

She put pictures of these on the board.

The greyhound they admired for his beauty, and they could easily imagine what a good hunter he might be, and how swiftly he could get over the ground.

The hound, too, was a favorite when they learned that he was often able to find people that were lost, having such a keen scent that he could follow their footsteps.

The dogs of the Eskimos were not overlooked, for what could these people do without their faithful
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dogs in those cold countries where so few animals are able to live, there is so little food?

Stories were told of the St. Bernards, whose homes are in the Alps, and whose work of rescuing lost travelers from the cold was graphically pictured. It was to this family that their visitor, Bruno, belonged. The Newfoundlands, who made such good watch dogs, were so faithful and courageous, came in for a large share of attention, while stories of the shepherd dogs, the Scotch collies, were received with loud applause.

OLD WATCH TO THE MOON

"Bow, wow, wow,
Out to their posts the stars come now,
And we must begin — the Moon and I —
Our still night watch; she in the silver sky,
While down low in the dewy grass I lie.

"Bow, wow, wow,
Within the dark house the dear ones sleep now —
And close I sit all through the silent night
With my heart as full as the Moon’s of light —
They trust old Watch and sleep, and they do right
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"Bow, wow, wow,
O Moon so near to heaven, O you
Must know! — I have no words to speak my pain —
But, tell me, Moon, are faith and love in vain?
Will there not come a time when all is plain?

"Bow, wow, wow,
I hear the dear ones talking soft and low
Of some fair land where they shall journey soon,
Where all shall gain some longed-for boon —
And shall I not be with them there, O Moon?

"Bow, wow, wow,
I shall tell them there that I loved them so! —
What if I did wrong in the Old-Time Land,
Where they used to blame me with word and hand?
It was only — I could not understand."

They learned the second stanza to repeat, and this taken from

**THE FAITHFUL DOG**

"If thou hast a dog, when he comes at eve,
Laying his ample head upon thy knee,
And looking at thee with a glistening eye,
Repulse him not, but let him on the rug
Sleep fast and warm, beside thy parlor fire,
So mayst thou win
A willing servant, and an earnest friend,
Faithful to death."—Mrs. Sigourney.

The little people originated a few games which they found entertaining. One was this, to be played at recess:

Choose two boys for shepherd dogs, and two more for shepherds, and divide the remaining children into two flocks of sheep. Then the two flocks run together, the game being to see if each dog can remember and separate his own sheep, driving them to the pasture where his shepherd waits.

Another is to be played in the school-room. Choose a boy for a watch dog. He must go to sleep with his back to the door, the game being to see if any child can steal in so softly that the dog will not know it.

Of course they played they were St. Bernards and found men lost in the snow, some able to be guided to the monastery, and some so weak that they required help. The sharp barks, however, always brought the monks to the rescue.

Songs telling about dogs did not seem to be very plentiful, but this one found in an old Music Reader, was used as a duet.
FIDO AND HIS MASTER

"Come, come, my pretty Fido,
Come, come here, I say."
"No, no, my little master,
Do please let me stay;
Here on the warm rug I
Lie softly and snugly,
A sleeping, sleeping, sleeping with Tray."

"Come, come, my pretty Fido,
Stand up for some sport!"
"No, no, my little master,
I'd much rather not.
I hate such a riot,
Do let me be quiet,
A dreaming, dreaming, dreaming so sweet."

"Come, come, my little Fido,
Come here for some meat!"
"Yes, yes, my little master,
It smells good and sweet.
I long to begin it,
I come, then, this minute,
I think it, think it, think it a treat."

The children brought many little stories, incidents, and pictures from home, and from time to time new questions were put on the board.
How does a dog sleep?
Is a dog a clean animal?
Does he wash himself as a cat does?
Does he like the water?
What sounds does he make?
Can he climb a tree?
Does he get angry?
Why is his tongue not like a cat's?
Did you ever see any baby dogs?
What do we call them?
How does the mother care for them?
Does a dog sweat?
Did you ever see a dog after he had been running?
What did he do?
It is said that a dog will turn round and round and scratch with his paw before going to sleep. Is this true?

All of these questions called for keen observations on the part of the children, and Miss Clare seemed pleased with her experience, for in her little notebook was found this entry:
ANIMAL STUDY FOR OCTOBER

Object

To increase the child's interest in animals. Dogs chosen because of their intelligence, because they are common, and are easily recognized. Use pictures and blackboard drawings. Have at least three dogs visit the school that we may study resemblances and differences.

Use stories to bring out the dog's characteristics and passions, such as grief, love, sympathy, gratitude, pride, etc., and to inculcate good habits, such as responsibility, courage, obedience, and promptness.

Results too intangible to put down in black and white, but perceived and felt.
THE COW

"I am thinking of an animal that has a backbone like a cat, but no fur. It has four legs like a dog, but it cannot bark, and it is a great deal bigger than either of them, or both of them together," said Miss Clare, with a merry twinkle in her eye that the little folks knew meant a "funny lesson," as Tom said. They were all attention.

"I suppose if I should ask you what you would like best to eat, somebody would say 'ice cream,' and another 'chocolate cake,' or 'taffy-on-a-stick,' but if I should ask my animal friend she would make such a dreadful noise that half of you would put your fingers in your ears and never wait to have me tell you that she was only saying 'gr-ass, grass.'

"I should never dare ask her to come and visit us, for she is so clumsy that I don't believe we could ever get her up the stairs, and if we could, she never could sit in one of our chairs as pussy and doggy did."
"I will tell you a little more about her, and perhaps you may be able to see her, after all. She has a thick coat of coarse, short hair that keeps her warm except in the very coldest weather. At the end of her tail there are some long hairs, like this" — and she drew a tail.

(Miss Clare did not consider herself an artist, so in a case of this kind the animal was put upon the board the night before from a stencil drawing. The outline was followed with a lead pencil and the chalk marks erased. Standing now by the board Miss Clare could see the pencil line; the children could not. In this way she could draw the separate parts, arouse the curiosity of the little folks, and keep their enthusiasm from waning.)

"She has four slender legs," continued the teacher, "and four feet that have hoofs. She has two large ears that stand out from the sides of her head, a large nose, and two lovely, big, brown eyes. When we put in her back, her udder (sketching them very rapidly), and her horns, I am sure everybody will be ready to tell me that my friend is a —"

"Cow," cried a chorus of voices.

"Yes, one of our best friends; to-morrow we will
find out something more about her," it having been discovered that cows were not very familiar animals.

The next day Miss Clare said, "Would you like to play 'going visiting'?" Taking a chart from the wall the children saw sketched on the board a faint suggestion of a house and near by a snug little barn.

"My friend, Mr. Brown, lives here. This cow (the one drawn the day before) belongs to him. See! he is just going to take her out for a drink of water." (Sketching a halter round her neck, and a watering trough close by.) "Let us ask him to tell us about her.

"I will be Mr. Brown" — putting one of the boy's caps on her head — "and you may ask me anything you like."

"What color is your cow, Mr. Brown?"

"She is red and white, but my neighbor has one that is black and white and another that is all red."

"How big is she?"

"How large? Well, when I stand beside her (sketching in a man's head behind the cow), you can see my head, neck, and shoulders; but if one of you small boys should stand the other side of her we couldn't see you at all, unless it was your feet. So,
boss—so. She is very thirsty. She will drink as much as a pailful usually."

"What does she eat?"

"Grass in summer. I keep her in that pasture behind that hill then, and my boy, Johnnie, drives her out and back morning and night. I wish Johnnie was here to see all you nice little people, but he has gone out to the farm to stay with grandmother until after Thanksgiving. Now that it is cold, I keep the cow in the barn, and she eats hay and meal. Come and see her teeth. She has strong back teeth in both jaws, but she has no teeth in front in her upper jaw. In place of teeth she has a ridge of skin, hard as bone. See what thick lips she has! She pushes them out to take the hay and licks it in with her tongue. See how long and rough her tongue is! Feel of her nose! It is always moist.

"Oh! I must tell you a little more about the way she eats. When she bites off the grass or hay she does not really eat it at first, but she packs it away in a bag that she has inside of her big body. Isn't that a queer way to do? When the bag is full, the grass, or whatever she has eaten, comes up into her
mouth, a little ball at a time, and then she chews it and really eats it. We say about animals that eat in this way, 'they chew the cud.' Now I must take her back to the barn. Come over some morning early and I will milk her for you. Good-by."

"Good-by, Mr. Brown. Thank you for showing us your cow," added Grace.

Miss Clare enjoyed playing in this way herself so much that of course she made it very real to the children, and by the next day they began to bring items from home. Sam's father had been a farmer's son, and he told his little lad how he drove the cows to pasture when he was a boy. In this pasture was a tinkling little brook where the cows came to drink, and tall trees that made shady places where they could lie down and rest. There were swampy places where the cowslips grew, and willow twigs from which the boys made whistles. Pete, his shepherd dog, always went with him, and would drive the cows home alone.

Paul's father was interested, too. He told his little boy about the horns. He said: "Long, long ago, when cows were wild, they needed their horns to defend themselves from wild beasts. Now that
they are tame and kept in pastures and barns, they are not of much use, and when a farmer has many cows he sometimes cuts off the horns. This is to prevent them from fighting one another, as cows often will do. The horns are not quite smooth. They have little wrinkles in them. Some farmers say they can tell how-old a cow is by the number of wrinkles in her horns.

The boy whose father owned the market brought a cow's foot. This was examined carefully. They saw how the hoof was divided, and Miss Clare explained that this was called a cloven foot, and called their attention to the two small toes at the back of the foot.

William had spent the previous summer on his uncle's farm. As his mother was anxious to have him profit by this experience, she had spent much time with him in out-of-door study. She came to school with him one morning to help him recall these happy days.

Do you know how a cow lies down?

William said that she bends her front legs under and so lowers her head and shoulders, and then she bends one hind leg and then the other under
her. When she gets up she rises on her hind legs first. He said also that cows were fond of salt, and would lick a piece out of your hand. His uncle sometimes put salt on a cow’s back and other cows would lick it off. Cows often lick themselves and one another with their rough tongues, to clean themselves and to get rid of insects. Their tails they use as brushes and for the same purpose.

That reminded Miss Clare of the story of “The Cow Who Lost Her Tail,” in Miss Poulsson’s “In the Child’s World,” and she told it to the little folks. They began now to make the blackboard list:

1. **Size**
2. **Shape**
3. **Covering**
4. **Color**
5. **Limbs**
   - Feet.
   - Hoofs.
   - Toes.
6. **Stomachs**
   (Not too much detail.)
7 Head
   Face.
   Ears.
   Horns.
   Nose.
   Mouth.
   Lips.
   Tongue.
   Teeth.

8 Tail
   Length.
   Use.

During these days, for seat work they had been trying to draw the animal from the blackboard pictures; its different organs; the barn; the pasture; and now Miss Clare gave them some cows to cut out that she had hektographed on drawing paper. She folded the papers so that they were double when cut, and by opening them a little, they could stand up beautifully. After each child had cut one cow, he could trace around that and cut as many as he liked.

They all liked to have a great many, a whole barnyard full. They were allowed to paint them with
water color on both sides. They used different colors, copying from some good colored prints that were in the room. Stables were made to keep the cows in, mangers for hay, troughs for drinking water, and bags for meal.

Thus far little had been said of the usefulness of the cow, but one morning Miss Clare reminded them of Mr. Brown's promise to show them how he milked. "Shall we go to-day?" Everyone was ready, and they found Mr. Brown, milk-pail in hand, waiting for them.

He sat down on his three-legged stool (which they made later of cardboard and toothpicks) and showed them the whole process. They could almost hear the tinkle of the stream against the pail. "So, boss, so boss, steady there," he said to her, for she was not quite used to so many visitors. "I don't believe any of you have fingers strong enough to milk her," he explained.

"How much milk does she give, Mr. Brown?" asked Jimmie.

"This pail nearly full night and morning, but I get several quarts more in the summer when she has fresh grass to eat."
"Come into the house, now, and have a drink. Mrs. Brown will strain it off into pans for the cream to rise. To-morrow she is going to make butter. You had better come and see how she does it."

Then Miss Clare went into the hall and came back as Mrs. Brown, carrying a glass pitcher full of truly milk and a tiny tumbler, that each might have a taste. Wasn't that a surprise realistic enough to make the children rub their eyes and wonder if they were dreaming?

The milk that was left was poured into a tin dish and placed on the desk to see if the cream would rise. It did, and the next morning after seeing (in imagination, of course) Mrs. Brown skim her milk and make butter, they took the cream from theirs. Miss Clare added some more bought of the milkman and they made some "truly" butter themselves by shaking the cream in a glass jar. It was put into a little tray, patted and salted, and served on crackers for a little luncheon at recess.

The dishes, pails, and churns were drawn, painted, and made of clay, and some pans and pails were made of tea-lead one of the children brought. This
was folded around the drawing models (cylinders) and bits of wire added for bails and handles.

To the list now they added:

9 UDDER
   Shape.
   Size.
   Use.

10 PRODUCTS
   Milk.
   Cream.
   Butter.
   Cheese.

11 Food
   Kind.
   Quantity.

12 Habits
   How does a cow lie down?
   How does she get up?
   How does she eat?
   What sounds does she make?
   Does she get angry?
How does she defend herself?
Is she a handsome animal?
Is she a graceful one?
Can she run fast?
What is a baby cow called?

They heard the poem of “The Cow,” by Robert Louis Stevenson, and “The Story the Glass of Milk Told Me,” from “In the Child’s World,” and learned the finger plays relating to milk and butter by Miss Poulsson. They made a list of articles of food in which mamma used milk, and were surprised at the length of it.

To crown all, it was decided to make a cake, the children agreeing to furnish the materials.

“Choose those that don’t never forget, Miss Clare,” urged Sallie, “or somebody’ll spoil it.”

To this they all agreed, and a list of the needed articles was written upon the board, each child copying the one thing he was to bring. The list included

Mixing dish.
Large spoon.
Small spoon.
Baking tin.
Measuring cup.
Egg.
Sugar.
Flour.
Salt.
Milk.
Baking powder.

Every one took a hand at the mixing and beating. A kind neighbor baked it for them, and sent over a slice of cheese to eat with it. It proved a great success.

But there were other things for which they were indebted to the cow. "Where did we get the roast beef and juicy steak that we had for dinner?" questioned the teacher. "Did you remember that it was cow's flesh that you were eating? When a little boy looks at the soles of his shoes he often needs to say 'Thank you' to the cow, for very likely it was from her skin made into leather that they were made. From her horns, knife and fork handles, combs and buttons are made; from her fat, candles, sometimes; and from her hoofs we get glue. Even her hair is
mixed with mortar to plaster our houses. From her bones a food for plants is made that the farmer mixes with his soil to help the grass, vegetables, and flowers grow."

To the list was added:

**Other Products**

- Flesh — beef.
- Hair — plaster.
- Hoofs — glue.
- Skin — leather.
- Horns — buttons, combs, etc.
- Bones — fertilizer.

As Thanksgiving drew near the story of the Pilgrims was told; the departure from England and Holland; the journey; the house building; the children and the babies. "How they must have missed the milk and cream of the old Dutch home, for no cows came in the *Mayflower!*" exclaimed Miss Clare. "How the mothers must have racked their brains to have good things to eat without any milk! How glad everyone must have been when a ship did finally come that brought some animals!"
How they must have patted bossy’s side, looked into her brown eyes and stroked her soft nose! How good the milk must have tasted, and the fresh, sweet butter the good mothers made!"

A game that they often played was the kindergärten "Farm Yard Gate," and a favorite story was "The Cow with the Golden Horns," found in "A Pot of Gold and Other Stories," by Mary E. Wilkins. They also learned to recite that pretty old poem by Jane Taylor:

THE COW

Thank you, pretty cow, that made
Pleasant milk to soak my bread,
Every morn and every night,
Warm and sweet and sure and white.

"Do not chew the hemlock rank,
Growing on the woody bank,
But the yellow cowslip eat,
That will make it very sweet.

Where the bubbling water flows,
Where the grass is fresh and fine,
Pretty cow, go there and dine!"
The note-book summary may read:

ANIMAL STUDY FOR NOVEMBER

Object
To make children somewhat acquainted with our common domestic animal, chosen for this month to connect with harvesting, winter preparation and Thanksgiving.

Method
Pictures, descriptions and stories principally.
(Few of the children had seen a cow.)
Sheep-shearing.
THE SHEEP

Suggestions

Be careful not to make the talks too technical. Make the animal seem a real live one, not "a mass of wool and flesh." Put in a great deal of fun, and tell as many rhymes as possible, not forgetting the old classic, "Mary had a Little Lamb."

"Little lambs so white and fair,
Are the gentle shepherd’s care.
Now he leads their tender feet
Into pastures green and sweet,"
sang Miss Clare softly, as she pinned to the board a beautiful picture of "Sheep on the Hillside," one cold morning in December.

"Some of you little people who went out into the country last summer saw sheep that the farmers had. This picture will make you think of the pasture where they loved to stay nibbling the short, green grass.

"If you should go out there now, you would find
the fields all white with snow, and when you asked for the sheep the farmer would tell you that he had them hid away all snug and warm in his big barn, or in the sheepfolds that he had had made for them.

"But in some places in the world where sheep are raised, it is never very cold, and they have no snow at all. There the sheep and lambs can stay out-of-doors all the year. The man who owns them or
cares for them is called a shepherd. He stays out with them night after night, to see that no harm comes to them, especially to the little lambs, who are not strong enough to care for themselves, and so 'he leads their little feet where the grass is fresh and sweet,' as it tells us in the song.

"Some of you have never seen any sheep, have you? But you have seen so many pictures of them that I think you know how they look. However, here is one that I got at the toyshop last night that looks very much like a real one, only it is not nearly as large."

(Here, to the delight of the children, Miss Clare showed a small but excellent toy sheep covered with wool.)

"It is very pretty, isn't it? We will pass it around. You may all feel of it, and then be ready to tell me something about the

Shape of the body,
Number of limbs,
The coat that he wears."

These questions having been answered satisfactorily, Miss Clare said: "To-morrow, see if you
can bring me any pictures or stories. Ask the people at home to help you."

The next morning the little toy lamb was on hand again, and the teacher said: "Let us play that our little toy sheep is a real, truly one that has come to visit us. If he could talk he would say: "Good morning, children. Do you want me to tell you something about myself? Your teacher says you have had animal friends visit you before. Which one do you think I look the most like?"

"The dog," replied Willie.

"That is a pretty good guess. I am nearer the size of the big dog that came to see you than any of the others, and I am somewhat like him in shape. I have as many legs as he, but my feet are different. See, here is a foot (one procured from the butcher); it is split, more like that of a cow. Do you know that in the bottom of my foot is a little sac, that has something in it that gives out an odor, or smell, as I travel along? I don't know as you would notice it, but the other sheep — my cousins, you know — following behind, can smell it on the stones and grass over which I walk. That is one reason we follow one another so well. Our sense of smell is keen,
“Sheep are like cows in another way. You do not see any horns on my head, but a great many sheep do have them, especially those that are wild. Some have very small horns, and some very large ones, like my cousin, ‘the big horned sheep.’ Some have horns that branch out, and some have horns that curl until they nearly form a ring, but they are all hollow. I like many things to eat that a cow does, such as grass, clover, meal and salt, and my teeth are much like hers. Our coats are not alike, we do not make the same noise, and I never give you milk to drink. I haven’t much of a tail, either, but some members of my family have much longer ones. I have some far-away cousins who have such fat tails they can hardly carry them. The people in that country use this fat for butter, and what do you think! They sometimes make little carts with four wheels to them, and fasten them to the sheep, so that they draw their own tails! Perhaps that was where Bo-Peep lived, for don’t you remember the story?

“Little Bo-Peep has lost her sheep,
And can’t tell where to find ’em.
Let ’em alone, and they’ll come home,
Dragging their tails behind them,”
“If you think you can remember all this, maybe I’ll tell you something more another day. Good-bye.” And the little toy lamb disappeared into its sheepfold — Miss Clare’s desk — while the children helped to put this list on the blackboard:

A sheep *resembles* a cow somewhat in
Shape of body.
Shape and number of
Limbs; eyes; ears; horns; feet; teeth; in-food required; in care required.

A sheep *differs* from a cow in
Size.
Sounds.
Products.
Covering.
Habits.

The next day they began to learn the “Barn Yard Song,” from “Holiday Songs,” by Miss Poulsson, beginning, “With a baa! baa! baa!” and also “The Lambs,” in her “Finger Play” book.

Pictures began to come in of sheep and shepherds, and under an outline drawing on the board was written:
Domestic Animals

"Baa! baa! old sheep,
Have you any wool?"
"No, sir; yes, sir; three bags full.
One for my master, one for my dame,
One for the little boy that lives in the lane."

"But how can he get it off his back?" queried wee Jamie.
"To be sure! How can he, children?"
"Pull it off," shouted Sam.
"Take him to the barber and have it cut," suggested Fred.
"Pretty good," laughed Miss Clare. "Do you think our toy sheep could tell us anything about it? We might ask him." So the lamb came forth once more and said:

"Pretty cold morning, isn't it, children? I suppose you all wore your thick coats to-day. I am glad of mine now, but there are days when it feels rather hot and uncomfortable. Do you know what the farmers do for their sheep, then? They cut or shear off their wool.

"Shall I tell you how I saw it done last year? It was in June, when Farmer Brown said to his man one morning, 'John, the sheep shears are
coming here to-day. I want you to go down to the pasture with me, and drive the sheep up to the barn.' Then they went down and drove us all up — the whole fifty.

"Soon the men came with their big shears to cut off our coats; not mine — I was too little — but the old sheep. They would take a sheep, tie his legs together, lay him on a bench, strap him down, and then shear him. I asked an old sheep afterward if it hurt, and he said, 'No, not at all, but it always frightens me.' He told me I wouldn't be sheared until I was a year old.

"Another sheep told me that farmers sometimes washed their sheep before they were sheared. He said there was some oil in the wool which kept the rain from running through to our skins and wetting us, and that when sheep were taken to a brook or pond and bathed, this was washed out and the wool was left very soft and white.

"One thing more, children, before I leave you. Ask your mothers to-night what folks use lamb's wool for, and tell your teacher to-morrow. Goodbye," and off he ran. The children clapped their hands at this, and Frank said, "What a nice story he told us, didn't he, Miss Clare?"
Yes, indeed! and don’t forget what he asked you to find out."

The words fairly tumbled over one another the next morning, the children were so anxious to answer the lamb’s question, and later they divided them into groups telling what might have been made from the “three bags full,” in this way:

**Master’s Bag**
- Trousers.
- Coat.
- Vest.
- Flannels.
- Overcoat.
- Socks.
- Caps.
- Mittens.

**Dame’s Bag**
- Skirt.
- Dress.
- Shawl.
- Hood.
- Stockings.
- Gloves.
LITTLE BOY'S BAG, WHO LIVES IN THE LANE
Toque.
Pants.
Sweater.
Leggins.
Night-dress.
Blankets.

Nellie’s grandma, such a sweet old lady, came one day and told them how people in the old days used to send the wool to the mill to be made into soft white rolls, and then the women at home would spin these into yarn, knit stockings of it, and weave it into cloth.

By putting some yarn through the holes in an old slate frame, and then weaving some more in cross-wise, just as they did their paper mats, the children made a piece of cloth themselves, and grandma had shown them the stocking she was making for her little grandson Carl. She used four bright, shining knitting needles to knit it with. For seat work there was the folding of sheep folds and barns; the cutting of sheep and lambs, as they did cows; the drawing of shears, racks of hay, measures for meal,
and bags for grain, and the modeling of the articles in clay.

They also cut clothing from paper and cloth, such as hoods, mittens, coats, jackets, caps, dresses and shawls, dyed paper different colors with water colors, and painted striped blankets and stockings.

When they found there was no part of the sheep but what could be used in some way, the other products made a long list, including:

**THE FLESH** — for food
Lamb; mutton.

**THE FAT** — suet and tallow
Soap; candles.

**THE SKIN**
Gloves.
Parchment.
Book covers.

**BONES** — burned, ground
Fertilizer.

For stories there were "Jason and the Golden Fleece," and "Cupid and Psyche," in "In Myth-

For games, in "Marching Plays," by Grey Burleson, was a "Flock of Sheep" that the children thought great fun; while dividing the little folks into flocks, each with a shepherd, whom they followed wherever he led, was a favorite recreation.

But Christmas came on with the stories of the shepherds and the Christ-Child, the making of little gifts to take home, and the singing of the dear old carols. When this happy time was over, someone who peeped into Miss Clare's note-book read:

ANIMAL STUDY FOR DECEMBER

Object

1 To familiarize the children with another domestic animal.
2 To lead them to trace manufactured articles back to the raw products.
3 To awaken gratitude and love for the kindly care that is given them.

Results

The children seemed to have a better comprehension of the Christmas Story, and enjoyed the songs more than any previous class.
THE GOAT

SUGGESTIONS

The query, "What do goats eat?" was addressed to a gentleman who is very familiar with the character and habits of the Billy in the following sketch. He wrote: "Goats eat most everything from tree trunks in the forests, to harnesses in the stable. Billy got at our carriages and ate the enamel from the shafts; he ate the bark from our trees, and I don't know what would have happened if he had gotten into the coal bin. He insisted upon sampling everything he saw. When deigning to partake of food he ate a little corn, sometimes a few oats, a bit of hay, a morsel of grass, and other green stuff, but only a little of any one thing.

"He was exceedingly temperate in the matter of drink, drinking infrequently and but a little, and usually his beverage was water.

"The goat is the most liberal liver in the world when some body else provides the stuff. His extravagance at others' expense is something marvelous."
THE GOAT

"Oh, Miss Clare! Miss Clare!" shouted Roy, bursting into the school-room the first day after vacation, "come out and see Freddie's team, quick." Dropping everything, Miss Clare rushed to the door and such a dear little "turn out" as met her eyes.

First, there was the wagon — such a dear little wagon, painted yellow, with a foot mat, a whip socket, and a seat just big enough for two, if the two happened, as in this case, to be tiny boys.

Next, there was the harness — such a shiny leather harness, with buckles and straps, and rings and reins.

Then there was the driver — such a proud little driver in a bright red cap, who sat up so stiff and tall and held the reins. Beside him sat the passenger, a serious looking little passenger, who wore a red cap, also, and sat stiff and straight and held the whip.

By the side of the wagon stood brother Tom, keeping one eye on the driver and the other on the
horse, which, by the way, wasn't a horse at all, but the very cutest little "Billy-goat" it had ever been Miss Clare's lot to see.

The little people crowded around it admiringly, and the teacher said, "Look at the goat carefully, children, for I shall want you to tell me about him after school opens," while Fred explained that the team came on New Year's Day, a present from Uncle Fred, who lived in New York.

When the "quarter bell" rang, Tom said he must take Little Brother home and go to school himself, but that they would drive over again the next day.

Now it happened that Miss Clare had written in her note-book for January, "Animal Study—Goats," but she had no idea that she was to be aided in such a realistic way; so the children found several pictures of goats drawn on the blackboard when they went in, and they were soon comparing them with the "real one." Then they compared goats with sheep and found

Some resemblances:

Size.
Shape.
Number of legs.
Feet.
Hoofs.
Sounds made.

Some differences:
  Covering.
  Use.

They talked a little about the difference in habits, Miss Clare telling them that goats are good climbers, and can live in rocky places where their little sharp hoofs find their way into each little crack or crevice so that they do not fall.

She said, "They do not go about in flocks as sheep do, and they can run fast and jump high, so they are not driven as sheep are. They do not need shepherds to watch them, and they will come home at the right time if they know some good food will be ready for them."

The next morning everyone was on hand early to see the little team drive up, and as Little Brother stayed at home Fred gave different children short rides, one at a time. During this second visit they discovered Billy's beard of long hair hanging from
his chin, and John was very anxious to measure it. They noted several of his peculiarities; he did not trot off quietly like a pony, but walked in a jerky, uncertain way, stopping often, and was ready to investigate everything that attracted his attention.

He was a sort of gray in color, with a short head, forehead flat and wide, and a small nose. His horns were quite large, rather flat near the head and curving toward the back. They looked in his mouth, and Miss Clare told them that goats have thirty-two teeth, but as they do not have them all at once, any more than children do, people tell the age of goats by the number of their teeth until they are five years old. Fred was questioned as to the food Billy ate.

He said, "He doesn't eat very much of any one thing. He likes lots of kinds; a little corn, a bite of potato, a piece of cabbage, and some oats. He eats hay, too, and any kind of green things. Papa says he eats tin cans, and nails, and old iron, but he is only in fun when he says that; but he truly does want to taste of everything he sees, for he ate some paint off the carriage one day, and another time we found him chewing an old harness. You have to look out for him and not leave things where he can
Domestic Animals

get them. He drinks water, of course, but not very much at a time."

Miss Clare said, "An old Billy-goat is sometimes cross, and will butt with his horns anything he does not like. He has to be kept by himself and in a place where he will do no harm."

They looked at Billy’s hair and saw that it was short and coarse. For this reason, Miss Clare told them, it was not of much use except for Billy himself, but she added: "In some countries there are goats that have two kinds of hair, one long, coarse kind outside, and a soft, fine kind like wool underneath.

"The soft wool is made into thread, and then woven into beautiful shawls. They are so fine and soft, of lovely colors, and it takes so long a time to weave one, that they cost a great deal of money."

The children were anxious to hear Billy "talk." Fred said he made a noise very much like a sheep, and that he made it a great deal when he was alone in the barn. They supposed that he was lonesome.

The little folks were intensely interested in goats in general by this time, and one morning Sallie announced that some goats gave milk.

Fred looked incredulous, until Miss Clare ex-
plained that it was a mother, or Nanny-goat, that gave milk, while his was a father, or Billy-goat.

She said, "A Nanny-goat is often called 'the poor man's cow,' because she eats little, and it costs little to keep her. She is gentle and playful, and likes to
be petted. She is clean in her ways, and her milk is rich and sweet.

"She doesn't give much, a pint or a quart sometimes, but not much more, for she is a little animal, you know, while a cow is large. She has a bag like a cow and is milked in the same way a cow is. A goat is not hard to milk. Sometimes a man will teach Nanny to jump upon a bench, or he will sit upon a stool and put her hind legs in his lap while he milks her.

"In summer the goat can be tied to a stake in the yard and allowed to nibble the grass. She likes leaves, too, green or the pretty colored ones that we have in the fall, and will bite the bark from trees and shrubs. Nanny likes a dry place to stay in, especially at night when she goes to bed. If she stays where it is wet it makes her feet sore.

"A friend of mine had a goat and a Shetland pony in the same stable. They never quarrelled, but ate out of the same rack, though Nanny would eat some weeds that the pony threw away. She was very fond of lettuce and cabbage.

"The children used to gather acorns for her in the fall and spread them in the barn to dry and then
give them to Nanny. She loved them dearly, and would run away to the woods and gather them for herself whenever she got the chance.

"We do not have many goats in our country, but in some places where the pasture is so rocky that no cow can live, there are many goats, and from their milk the people make butter and cheese."

The blackboard list looked like this now:

**Body**
- Shape.
- Size.

**Covering**
- Kind; color; use.

**Legs**
- Feet; hoofs.

**Tail**
- Shape.
- Size.

**Head**
- Eyes.
- Ears.
Domestic Animals

Nose.
Mouth.
Teeth: kind; number.

Horns
Number; shape; position; size.

Billy-goat
Beard.
Large horns.

Habits
Can be driven in harness.
Sometimes cross.
Butts with horns.

Nanny-goat
No beard.
Smaller horns.
Bag for milk.

Habits
Gentle; playful.

Food of Goats
Hay.
Oats.
Grass.
Vegetables.
Leaves.
Shrubs.
Weeds.
Water infrequently.

Products
Milk.
Butter.
Cheese.

Other Products
Flesh for food.
Hair for cloth in some countries.
Skin for leather.

Names of Goats
Billy — Nanny.
Young goats — kids.

Little Jimmy told a very interesting tale one day. He said, "My auntie had a goat that always knew when the fire alarm rang in the town, and off he would rush to the fire. He would stand by and watch the fire until it was all over, and then he
would trot off home again. All the firemen knew Billy and always looked for him at every fire. He never got in the way, nor never got hurt."

Miss Clare told them this old riddle one morning:

"Little Miss Nanny-goat
In a white petticoat.
The longer she stands
The shorter she grows."

They drew pictures of the answer (a candle) and cut some from white paper. To their collection of animals they now added some paper goats, cut and painted, and made little carts of box covers with milk-stopper wheels for Billy.

Sheds were folded for Nanny to sleep in, and pastures and barns were drawn and painted. Milking stools were made again, and pans and pails for holding milk.

Stories were not very plentiful; an old fable or two, and a tale from Miss Poulsson’s "Through the Barn-yard Gate," were used, but as the little folks were introduced to Robinson Crusoe this month, he was able to supply all the deficiencies. He furnished such interesting seat work, and afforded such a good
chance to review many things already made. First there was the long voyage, with the ship to be folded, his chest of clothes and the wardrobe itself to be cut. Then there was the wreck, the island, and the gathering of the things he was able to save to be drawn, a raft to be woven of slats, a canoe and a hut to be constructed, and gardens and fields to be measured and laid out.

There were trees, fruits, and birds to be painted, cooking utensils, dishes, and tools to be made of clay, and the last story of the goats, which Miss Clare told in this way:

· Robinson Crusoe's Goats

"Now you must know poor Robinson Crusoe had been living on the island a long time, and he was very tired of the things he had to eat. One day he said to himself, 'How good some milk would taste, and some cheese, and some nice fresh butter. Oh, how I wish I had a cow! how I do wish I had one!' Then the thought came to him, 'Why, there are some goats on this island, but, dear me! they are so wild I could never catch one. To be sure I might
shoot one, but what good would a dead goat be? Goat's meat is not very good, and it is milk, not meat, that I want. How can I catch one?' Now you remember Crusoe didn't give up very easily, so he kept thinking about the goats.

"At first he made some snares to trap them, but they were too smart for him and always got away after eating all the bait. Then he dug some deep holes in a place where they liked to feed and put some corn into the holes. The next day the corn was gone, and he could see where the goats had scrambled in and out.

"Next he took some long, thin sticks and wove some covers as you weave mats, and put these over his holes. On top he put some leaves and corn, and at the ends he put big stones to hold the covers down. Then he went home to bed. The next day he went to look at the traps and found that a big Billy-goat had stepped on to the cover of one, and that it had broken and let him through. He could not get out, for the stones held the cover on, even if he climbed up and tried to butt it with his horns.

"He was so fierce Crusoe did not know what to do with him, and besides he could give no milk, so
he took off the cover, and Billy jumped out very quickly and ran away. When he looked in another hole, however, he found three little kids, a Billy and two Nannies. They were easily managed, so he tied their legs together and brought them all home.

"They were quite wild at first and would not eat, but by throwing them some corn, they soon found out he was their friend. He fastened them to some stakes, and every day he took them some food, a little barley or rice, some green leaves and fresh water, and by and by they would eat from his hand. Then he fenced in a piece of land and let them loose, and they would follow him all around inside the fence begging for corn.

"Later he captured some more goats in the same way, until he had quite a flock. He milked them every day, and oh, how good the milk did taste! He made butter and cheese, too.

"As his clothes began to wear out, I don't know what he would have done for new ones if it had not been for the skin of the goats.

"He made a hat first, and it had a flap hanging down behind to keep the hot sun off his neck. He
made it with the hair outside so the rain would drip off and not run down inside his jacket.

"Still later he made himself a jacket, a pair of trousers, a belt, some bags to hold his game, and an umbrella. The umbrella was the funniest of all, and the hardest to make.

"He said any one would have smiled to see him sit down to dinner. On one side sat Poll, his parrot, the only one beside himself that could talk. On each side were two cats and near by an old dog, and Robinson would give first one and then another a bite from his plate.

"I think the kitties as well as Crusoe must have been glad when they could have some milk, don't you?"
THE HORSE

"I came to school this morning," announced Miss Clare, "with a friend who seemed very glad and happy over some new shoes. My father told me yesterday he was going to get him some, but as he has rather queer shaped feet, one can't go to the store and buy him some as your father does you. If I should ask you how many toes you have on each foot, you would all say 'Five,' but this other friend of mine has only one on each foot, and he wears his shoes fastened to his toe-nails—nailed right on. Did you ever hear of such a queer way of wearing shoes?

"Shall I tell you a little more about him, and perhaps take his picture for you? Well, his ears are rather long and stand up quite straight like this (sketching in some horse's ears over a pencil drawing done the night before). His face is not as wide nor his nose as large as a cow's. When we have put in his four legs, his tail, and his back (sketching rapidly), I am quite sure you are ready to call him a"—
“Horse,” cried a chorus of voices.

“Yes, indeed! Isn’t he one of our best friends? Just think how fond I must be of Dandy, who brings me to school so many mornings, and often saves me the long walk home at night.

“Now let us look at our picture again and see what else he needs. He could see better — could he not? — with an eye on this side (putting one in), and he needs a tuft of hair to come over his forehead — so. We will put in his mane, arrange his tail a little, and — there! Does he not look very well?

“I have just time to tell you a little about his teeth. You know a cow has no teeth in the front of her upper jaw, but a horse has. He has six teeth on each jaw, that are sharp at the edges so that he can cut off the grass that he eats. Then there are a pair of pointed teeth on each side of these, and then a gap without any teeth at all. Back of this gap are some broad, flat teeth with which the horse chews his food as you do yours. Now, what do you suppose that gap is for? See if you can find out, and notice all the horses that you see going home, so that to-morrow you can tell me about a horse’s
“teeth, color, coat.”

The next morning Miss Clare said, “Who is able to tell me about the horse’s” —? (pointing to the word “teeth”).

Johnny’s hand was waving wildly.

“That is the place where the bits go in. A horse wears a little bar in his mouth to which the reins are fastened. You could not guide a horse without bits, my father says,” while Willie added:

“My father took me out to the stable and showed me how to put the bits in. Papa put his thumb on old Bob’s jaw where the gap is, and Bob opened his mouth wide and they slipped right in.”

In regard to his coat, they decided that it was made of short coarse hair, and was thicker in winter than in summer.

“To make it look smooth and glossy, you must comb and brush it just as we do our hair,” explained Fred, and then he produced a curry-comb and brush which his father had loaned him for the morning. These were received with great applause, and were passed around and examined by all the little folks, who afterward made drawings and cuttings of them.
For color they gave black, white, cream, and gray, while one little boy added roan, sorrel, bay, and chestnut.

"Tim told me those names," he said, "and we went over to Mr. Gray's stable to see his horses. He has twenty of them, and he told me that he gave them hay, oats, and corn to eat. In summer they eat grass, and they drink lots of water, a whole pailful at a time, as a cow does. He has one horse that likes apples and sugar very much. He let me give him a lump of sugar. I put it in my hand, so (holding it out flat), and he ate it all up, but he did not bite me."

Miss Clare explained that a horse's lips are flexible; that the mouth is lined with a thin skin or membrane; that the tongue is long and narrow, and that he has large nostrils, through which he breathes.

"His teeth are very strong, and they have some ridges and marks," she said, "by which some men are able to tell the age of a horse."

The teacher rode home that afternoon, and when the team came for her they all went out to look at Dandy. He was wearing his new shoes, and the driver lifted up one foot that the little folks might
see the hoof and the shoe, and Miss Clare promised a visit to the blacksmith at some future day.

They found this old rhyme written on the board the next morning:

"Shoe the old horse,
Shoe the old mare,
But let the little colt go bare."

And they learned this old song:

"Ho, rider ho, ho!
No longer can your horse go.
I tell you, sir, he wants a shoe.
The blacksmith he will make it you.
Some nails to hold it on his foot,
The blacksmith now for you will put,
And, then, Master Rider, you can again bestride her,
And, then, Master Rider, you can again bestride her."

Miss Clare told them that in the old days men always rode on horseback, for there were few carriages and poor roads, and that in some parts of the world now, that is the usual mode of conveyance. At eleven o’clock they put on hats and wraps, and the whole company went to see Mr. Pine, whose large smithy was in a nearby street.

The teacher had interviewed the blacksmith early
in the morning and obtained his permission for the visit. I cannot begin to tell you how much fun they had; but if you really wish to know, why, "Go thou and do likewise." It happened that Mr. Pine was just ready to shoe a horse. They noticed that he wore a leather apron, and held the horse's foot between his knees. He pared the hoof with a large knife, filed it to make it smooth, and measured it for a new shoe. He heated the shoe red hot at the forge, pounded it on the anvil, and when it was just the right size, cooled it in water, and nailed it to the hoof.

He showed them that the nails were not like the carpenter's nails, but were long and flat, with a sharp point. He told them if the shoe was too tight, it would pinch the foot and make corns, and if he was careless in driving in a nail, it might hurt the horse and make him lame.

He explained the difference between a summer and a winter shoe, the latter having sharp little pieces of iron, called calks, on them, which stick to the ice and prevent the horse from slipping. He asked the children if they could not sing him a song, and with one accord they struck up:
"Cling, clang, goes the blacksmith's hammer,
Cling, clang, how the anvil rings.
As he shapes the curving horseshoe
Hear the song the blacksmith sings.
Blow bellows, heat iron, burn my fire a blazing bed,
Strike hammer, ring anvil, shape the iron while it's red."

This visit was remembered for many days, and was often represented in illustrative drawing and cutting.

They compared the horse with the cow and found some resemblances, as:
- size,
- shape,
- color,
- coat,
- limbs,
- food eaten,

and that they differed in regard to
- teeth,
- feet,
- tail,
- stomach,
- use,
manner of eating,
sounds made.

The horse has no horns nor udder, is swift and graceful, while the cow is clumsy and slow.

The blackboard list read:

1 SIZE
   Large.

2 COVERING
   Coarse hair.

3 COLOR
   Black, white, cream, gray, bay, sorrel, chestnut, roan.

4 LIMBS
   Feet, hoofs, toes.

5 TAIL
   Length, material, use.

6 HEAD
   Face, nose, mouth, ears, eyes, lips, tongue, teeth, mane, foretop.
7 Food
Hay, oats, corn, meal, grass, water.

8 Bed
Straw, sawdust, leaves.

One morning was spent in talking about the care of a horse. He should be well fed, have a warm, clean, light stable, be combed and brushed, have plenty of water, and wear a blanket in cold weather. He should not stand in the wind without a covering, should not have his tail docked, his mouth hurt with cruel bits, nor be beaten nor scolded. His harness should fit, he should not be driven too fast nor too long without a rest, nor hurried up hill. He ought not to be asked to draw too heavy a load.

Miss Clare asked them to bring in some stories telling of the intelligence of the horse, and here are two that were given:

Fred’s Story

“My uncle had a kitty who stayed out in the barn and slept in the horse’s manger. Old Jim was very kind to kitty and let her stay, except when he was
going to have his supper. Then if kitty was lying in the hay he always took her up in his mouth and dropped her on the floor. Uncle said he guessed old Jim was afraid he'd make a mistake and eat her instead of hay.”

**Nate’s Story**

“At the grocery store where papa works they had a horse that always went home at twelve o’clock to get his dinner. If papa was out getting orders at the different houses and Ben heard the noon whistle blow, he would start for home on a run, without waiting for anybody. They never hitched him when driving, as he would wait any length of time if he did not hear the whistle. When that sounded he wanted his dinner.”

**Miss Clare’s Story**

“My brother had a horse named Bell who was very intelligent. If you said, ‘Bell, have you had your supper?’ and she had not been fed, she would always whinny.

“One day brother Harry went for a long drive and at night he stopped at an hotel out in the coun-
try. 'Rub down my horse and give him four quarts of oats,' he said to the hostler at the stable, and then he went into the house to get his own supper. Later he went back to the stable. 'Have you had your supper, Bell?' he asked. Bell whinnied 'No.'

"'Why haven't you fed my horse?' Harry said to the hostler.

"'She has had her supper,' said the hostler.

"'You are mistaken; she has not.'

"'I know she has,' answered the man.

"'Did you feed her yourself?' inquired Harry.

"'No, but I told my boy to.'

"Then Harry hunted up the boy. 'Did you feed my horse?' he asked. 'No,' said the boy, 'someone called me to the telephone and I forgot it.'

"'There,' said Harry, 'what did I tell you? Bell said she had not been fed, and she never tells lies.'"

Another story:

JOHN AND BYRON

John was a negro boy, full of fun and frolic. Byron was a large, white horse. Both lived and worked on Grandma Hudson's farm.

John had a habit that Byron disliked. While he was eating
his supper of sweet hay and golden corn, John would stand in front of the stall and tease him, by making all sorts of ugly grimaces.

John thought it fine fun to see Byron get angry and try to bite him through the bars of the stall.

Uncle George had often reproved John for this naughty habit, telling him that the horse would hurt him some time if he continued his insults.

One day when Uncle George was away, John went into the stable to bridle Byron, and lead him to the well. But, as he was reaching up to take hold of his mane, Byron opened his mouth, seized John by his thick, curly hair, lifted him from the floor, and walked leisurely out into the barn-yard.

Grandma heard a loud scream, and ran to the kitchen door to see what was the matter. There was Byron, with John hanging from his mouth, marching across the yard; he was not trying to hurt the boy, but only giving him a vigorous shake now and then, to show him what he could do if he had a mind to. When he had punished him sufficiently, he dropped him on the ground, and trotted away to the well. In this novel way John was taught to abandon the cruel and dangerous habit of teasing animals. We all thought Byron's trick a very smart one for a horse. — *Our Dumb Animals.*

The teacher asked them to find out how a horse slept at night, how he got up when lying down, and what a baby horse was called.
To the list now they added the horses' different ways of moving. They can,

- walk,
- trot,
- gallop,
- canter,
- pace,
- run,

and the children learned the song, by Mrs. Gaynor:

"Oh, a gallant horse, big and strong am I,
A-gallop, a-gallop, a-trot.
And I arch my neck, and my head hold high,
A-gallop, a-gallop, a-trot.
Like the winds that blow o'er the plains near by,
With my rider bold I can swiftly fly,
And my hoofs beat time on the road so dry,
A-gallop, a-gallop, a-trot."

They had a great many pictures of horses, and the teacher told them of the little Shetland ponies, Indian ponies, and the beautiful Arabian steeds. She told them also that horses can be trained to do a great many different things; that there are horses that draw the fire-engines, driving horses, saddle horses,
Domestic Animals

war or cavalry horses, car horses, hunting horses, and racing horses. She gave out paper and pencils, and let each child tell of the work he had seen or heard of a horse doing, and the following list was taken from the different papers.

A horse

- plows,
- rakes,
- harrows,
- treads machines to thresh grain,
- treads machines to saw wood,
- carries milk,
- draws coal,
- draws ice plow to cut ice,
- draws cars, hacks, coaches, carriages, hearses,
- draws all kinds of heavy loads.

Of course they illustrated their work in their usual manner, painting, drawing, cutting, and modeling all sorts of objects connected with the subject, and dramatized several of the stories told them, "Old Sol" being a great favorite.

They played the blacksmith game, fire engine horses, high stepping horses, the farmer, the knights,
and the circus horses. The stories Miss Clare used were:

"Old Sol," "Nahum Prince." ("In the Child's World." — Poulson.)

"How Athens was Named," "Pegasus, the Horse with Wings," "A Dangerous Ride." ("In Myth-land." — Beckwith.)

"Village Blacksmith," "Bell of Atri." — Longfellow.

Stories from *Our Dumb Animals*.

Songs:

"Ho Rider." ("Kindergarten Chimes." — Wiggin.)

THE DONKEY

"Do any of you little folks know what it is to have a cousin?" inquired Miss Clare, one windy March morning.

"I thought you did"—noticing the flutter of hands.

"Some of us have big cousins and little cousins, girl cousins and boy cousins, cousins with blue eyes and cousins with black eyes; but did you know that our friend, the horse, has a cousin, too, and that they look quite a good deal alike? The cousin has four legs like a horse, hoofs that look like his, a gap in his teeth for a bit, he wears the same kind of coat, the same shoes, and his name is

Donkey

"Did you ever see one? Let us try to draw his picture. First, he has very long ears (drawing them over an outline), not much of a mane, and a tail that has long hair only at the end."
“He is not as large as the horse, nor of the same color, for a donkey is nearly always gray with a darker stripe down his back, and often one over his shoulders.

“He has a keen smell, good eyesight, and excellent ears, perhaps because they are so big. Now, see if you can find out anything about donkeys at home and tell me to-morrow.”

Knowing that donkeys were rather unfamiliar animals, the next day Miss Clare borrowed a little toy one of a shop-keeper down town. It was an excellent model, of just the right color, and when one moved its head, it gave forth a most realistic bray, to the great delight of the little folks. After it had been duly admired, William said, “See if it can tell us a story, Miss Clare.” So after a long delightful bray, it began as follows:

“I hope my voice does not frighten you little people. It is only a donkey’s way of saying, ‘I am glad to see you,’ and ‘Good morning.’ It is not a very pleasant voice, I admit, and so thought a great-uncle of mine who lived long, long ago. He didn’t like the sound of his voice, and one day, hearing some grasshoppers chirping out in the meadow, he
went to them and said: 'Oh, grasshoppers, what sweet voices you have! I never heard anything half so fine as your song. Do tell me what kind of food you eat, that I may try it and have a pleasant voice also.'

'Dew, we eat,' said the grasshoppers, 'nothing but dew.' So the donkey said, 'I will eat nothing but dew,' but in a very little while he died of hunger. None of us have ever tried to improve our voices since then.

'I hear that you know a great deal about my cousin, the horse, and that we are alike in many ways, but, dear me, people don't treat me as well as they do him. They call me slow, and stupid, and sometimes beat me with sticks. Do you suppose any donkey likes that?

'If you look at my feet you will see that they are quite small, and I can pick my way carefully over a narrow mountain path where a horse cannot go. I am not as large as he and do not need so much room.'

'What do you eat?' asked Tim.

'Oh, hay and grass, as horses do, but not so much at a time. I will eat some things that a horse won't;
thistles, for instance. I like those, and I like to lie down and roll over in them. Their needles brush out my hair as a curry-comb does a horse's. I like to roll in the sand, too, and I will do it sometimes even if I have a load on my back. That makes my master cross; but if he brushed me off, of course, I
should like that better; but, alas! donkeys have a hard life," and he gave another bray.

"I don't like mud," he continued. "I always take pains to go around any I see in the road. I like the clean, cool water, and will drink no other kind. I never put my nose deep down in the tub, though. I just take little sips. I heard a man say we were afraid of the shadow our big ears make in the water when we go to drink, but we are not so silly. I am afraid of water, though, and I never will cross a stream and get my feet wet if I can possibly help it.

"Donkeys have good eyes. I can tell my master a long way off, and in the dark I know when he is near, for I can smell him."

"Can you gallop?" queried John.

"Yes, but only a few minutes at a time. I can run and pace, also, but it tires me to try to go swiftly. Oh, I am only a slow beast!"

"How old are you?" questioned Paul.

"I don't know exactly, but it takes a baby donkey about four years to grow to his full size, and he lives to be twenty-five or thirty years old.

"It takes less room for us than for horses, less
food, and less care. In the old days, many men who had little money could keep a donkey when they couldn't afford to keep a horse.

"Well, folks, I must say good-by now," and he disappeared into his box.

The next day several pictures were brought, and Charles said: "Papa says a donkey has a good memory, for he knows the different places in which he has lived, and different roads he has traveled.

"If you try to make him carry too heavy a load, he will bend down his ears, show his teeth, and look pretty ugly, but I would, too, if a man wasn't kind to me."

"Yes," said Miss Clare, "that is one of a donkey's ways of talking."

"A donkey does not often lie down to sleep," chimed in Walter. "He goes to bed standing up. If you cover up his eyes he will stand perfectly still. If he lies down on his side so that one eye is on the ground, so (illustrating by stretching his head out on the desk), and you cover up his other eye with a cloth, or a board, he won't even try to get up.

"Papa says donkeys are the best kind of ponies for little boys to have, for they are patient and slow."
I asked him if he wouldn’t buy me one, but he said I had two good feet of my own and didn’t need one, but I could tell Santa Claus about it.”

Miss Clare explained that donkeys in some parts of the world are used a great deal. You will see them fastened to little milk, fish, or vegetable carts, for they are strong and can carry heavy loads. They do not need as warm a stable as a horse and can live on poorer food.

Their blackboard list read:

**Body**
- Size and shape.

**Legs**
- Feet.
- Hoofs.

**Covering**
- Kind.
- Color.
- Use.

**Tail**
- Size and shape.
- Covering.
Movements
Walks.
Runs.
Paces.
Gallops.
But only for a short time.

Use
Draw loads.
Draw carts.
Plough.
Climb steep mountains and hills.

Head
Eyes.
Ears.
Nose.
Mouth.
Teeth.

Habits
Patient.
Slow.
Stupid.
Affectionate.
Good memory.
Timid.
Sure footed.

Food
Hay.
Oats.
Grass.
Vegetables.
Weeds.
Thistles.
Clean water.

Miss Clare told them the following story:

"Once upon a time there was a soldier at Gibraltar who owned a donkey by the name of Valiant. The soldier was sent to Malta, and after a while he sent to Gibraltar for his donkey. ‘Put Valiant on board the next ship that sails,’ he wrote. ‘I cannot get along without the dear little beast.’ So in a few days the donkey set sail with the sailors for Malta. When they were far out on the sea, a great storm arose, the ship struck a rock, sprung a leak, and everybody was in danger of being drowned. The men got out the row-boats. ‘We must try to
row to land,' they said, 'but we cannot take the donkey. He must swim or drown,' and they pushed him overboard. They reached the shore at last and took another ship for Malta, and when they reached there they told the soldier that his poor little donkey was lost in the sea.

"Not long after that, one morning, a little donkey was seen walking through the streets of Gibraltar. He went straight to Mr. Weeks' stable and brayed for something to eat.

"How surprised Mr. Weeks was to find it was Valiant, but he had no idea how the donkey got back, for he had supposed he was in Malta. Nobody could explain until one of the sailors came home and told what had happened. And, only think, little Valiant not only swam to shore, but he found his way back to his old home, over mountains and streams, a distance of two hundred miles, with no one to help him or tell him the way.

"I don't believe anyone ever called him stupid after that, do you? I hope he was put on another ship and sent to his master, who, I am sure, would be kind to him after that."

There did not seem to be many songs about the
donkey, so Miss Clare remodeled some of the old ones, substituting "donkey" for "horse," and proceeded in the same manner at game time.

They enjoyed dramatizing some of Æsop’s Fables, which contained few characters, such as, "The Ass and the Grasshoppers," "Ass in the Lion’s Skin," "Ass and the Wolf," "Ass and Frogs," etc.

They reviewed the Christmas story of the journey to Bethlehem, when Mary’s beast was a donkey, and the children brought several little anecdotes from home.

They made mountains in the sand table before school, and sent long trains of paper donkeys (which they had cut, mounted, and colored) over the narrow passes into the valleys below. They made donkey carts, also, and filled them with loads of gay paper boys and girls, gorgeous vegetables, or shining brass milk cans.

There were shoes to be cut and sewed and modeled in clay, and the little beast himself, with quite marvelous results; and when the month closed they agreed with Miss Clare in thinking that the donkey is one of the most useful of our four-footed friends.
"This little pig went to market."
THE PIG

Miss Clare and Michael were holding an animated conversation at the teacher's desk.

"Yes'm, six of them, awful pretty," were the words borne to the listening children, followed by "'bout so long," and Michael was measuring with his hands.

Miss Clare nodded, smiled, said "Yes, indeed," and added, after a glance at the clock, "a quarter of twelve will be a good time;" then Michael walked to his seat with a proud air, nothing more was said, and the classes were called as usual.

Just before noon, however, the teacher said, "Get your hats, very quietly, for we are going a little earlier than usual. Michael has invited us to go home with him for a few minutes. He has something to show us that we know you will like to see."

Michael lived with his grandfather in a little house down the back alley, not far away, and when
the children came in sight there stood the old man
by the gate looking down the street.

"Oh, so they came, did they? All the children and
the teacher, too? You are very welcome;" and he
led them to the back of the house.

Here was a small yard fenced in with rough
boards that Grandfather called a sty. The children
climbed up, peeped in, and what do you think they
saw? A mother and six little white pigs!

I cannot begin to tell you how pretty and cunning
they looked, with their pink skin, soft white bristles,
and little curly tails. They were running around
and giving little shrill squeals and low grunts.

Grandfather climbed into the sty, picked up one
of the little animals, and brought it out so that the
children could examine it more carefully. As he
held it, they looked at its feet and saw that each
one was split into two toes, and that each toe had a
hoof; they noticed the number and shape of its
legs; its ears, eyes, mouth, and teeth; felt of its
tail, and its covering of bristles, which was much
stiffer than the hair they had seen on any other
animal.

"Look at its odd little nose, children," said Miss
Clare. "See how flexible it is! Piggy can turn it any way he likes. The end of it is called the snout."

Just then the mother pig (Grandfather called her the sow) gave a loud grunt and began to dig a hole in the ground with her snout; all the little pigs ran up and tried to dig, too, with their little noses.

"If you were to dig a hole, you would want a spade or a hoe, would you not, children? Or maybe some dirty boy would use his hands; but not one of you would think of using his nose, I am sure," continued the teacher.

"When pigs are wild they do not have their food brought to them, but must find it for themselves. They live largely upon roots, and their sense of smell, which is keen, helps them to choose the kinds that are best to eat, and they dig these up with their snouts. Pigs can dig real deep holes where the ground is not hard and stony and they will sometimes dig from under their sty when the farmer thinks he has them nicely housed."

"Our old pig did that!" exclaimed Michael, "and we had to chase her all round the alley before we got her back."

"Pigs are contrary creatures," explained Grand-
father. "They are sure to go in the wrong direction when you try to drive them."

"What do pigs eat?" inquired the children.

"Potatoes," said the teacher, "and other kinds of cooked vegetables; milk, sweet or sour; any kind of meal; scraps of food left from the table, and clover and some kinds of weeds in summer. They must have water to drink, but they are not as dainty and particular about its being clean as most other domestic animals are. They are greedy creatures, and make a disagreeable noise in eating."

"Would you like to see them eat?" asked Grandfather.
He went into the house and presently came back with a kettle of warm swill, which he poured into a trough in one corner of the sty.

What a scrambling and squealing there was then! In their haste the pigs fairly tumbled over one another, and one greedy little beast fell right into the trough! Sorry looking he was indeed as he waddled out.

Miss Clare noticed that Grandfather kept his sty very clean. There was a bundle of straw in one corner for the pigs to sleep on; the troughs he scrubbed out with an old broom, and the water was fresh and clean. She complimented the old man on his neatness, thanked him for the pleasure he had given them all, and then sent the little people home to their dinners.

When school opened the next morning there was a pig sty on the blackboard and a whole family of pigs, "looking just like the truly ones," Tom said.

The children found that a pig is not a hard animal to draw, so they reproduced the picture and cut out some hektographed pictures to add to their farm-yard collection. Some of these they colored
when they found out that pigs are black, black and white, as well as white.

Miss Clare explained that pigs are found in many countries and are called swine. She told them that a long time ago in some parts of England swine were kept in large herds, as is now the custom in parts of our own country. She said that the man who took care of the swine was called a swineherd, just as a man who takes care of sheep is called a shepherd.

The swineherd had a horn and a great whip, and he could take care of five or six hundred swine. He fed them when the sun rose, and then they went where they pleased during the day, feeding upon roots and acorns; but when the sun was setting they scampered for home, where warm beds and good food were waiting for them. The horn was blown before they were fed, and what a rush and scramble there would be when they heard it!

The swineherd knew his pigs as a shepherd does his sheep, and if any were missing at night he took his dogs and whip, went after them, and drove them home.

The little folks found "Piggy Wig and Piggy Wee"
in the Poulsson "Finger Plays" very entertaining, and they illustrated it on the blackboard in a very realistic manner.

For seat work they made gates for the sty out of slats, folded troughs of paper, and made buckets, kettles, pails, vegetables, and pigs of clay.

The use of pigs was discussed, and the children learned that this animal differed from the others they had studied in that it is raised as an article of food only; though Miss Clare told them she had read of one man who had a pig that he trained to hunt as a dog does. This pig could smell the game a long way off, and when it did smell it, it would stand quite still and try to hold its little curly tail out straight, as a dog does.

The blackboard list read:

**Body**
- Size.
- Shape.

**Legs**
- Feet.
- Hoofs.
Covering
  Kind.
  Color.
  Use.

Head
  Ears.
  Eyes.
  Mouth.
    Teeth.
  Nose.
    Snout.

Sounds
  Grunts.
  Squeals.

Tail
  Size.
  Shape.

Food
  Vegetables cooked.
  Meal of all kinds.
Milk, sweet or sour.
Scraps from house table called “swill.”
Clover and some weeds.
Water.

HABITS
Movements.
   Slow.
   Awkward.
Dirty.
Stupid.
Digs with snout.
Not dainty as to food or water.

The attention of the children was now directed to swine as articles of food. Miss Clare told them of the stock-yards in Chicago, a city of animals with a great city, and described the pens or houses in which they are kept, hundreds and hundreds of them, and the manner of feeding them.

“IT is said,” explained the teacher, “that every part of the pig is used in some way except the squeal. The inside fat, when melted, is known as lard, and we use it when we cook. The flesh of the pig is
called pork, and when this is salted it will keep a long time. The salt pork is put into tubs and some of it is put on board ships that are going for long sails over the big ocean. The sailors cannot get much fresh food out at sea, and if it were not for salted pork and beef, they would have no meat at all.

“Ham, bacon, and sausages we get from the pig, also, and when all of the fleshy parts have been disposed of, there are still some other uses for piggy. The brushes with which we smooth our hair, clean our clothes, wash our teeth, and black our shoes are all made from the stiff hairs on his back; his skin, so thick and hard that no water will run through it, makes the best of saddles; some of his bones are made into buttons, hair-pins, and combs, while the hoofs, refuse grease, and bones are converted into glue, soap, candles, bone meal, and fertilizer.”

The children found out at home and brought long lists of food in which mamma used lard and other parts of the flesh of the pig, and they had a clay “baking day,” when they made doughnuts, pies, croquettes, etc., galore.

To their list they now added:
Use

Food Products
Pork.
    Fresh, salted.

Ham.
Bacon.
Sausage.
Lard.

Other Products
Bristles for brushes.
    Clothes.
    Hair.
    Nail.
    Teeth.
    Shoe.

Bones
Buttons.
Hair pins.
Combs.
Bone meal.
Skin
Saddles.
Purses.

Refuse Matter
Glue.
Soap.
Candles.
Fertilizer.

The pig does not seem to be celebrated in song and story to any great extent. Miss Clare told the old fairy tale of "The Three Tiny Pigs"; the nursery rhyme, "This Pig Went to Market"; Æsop's "The Porker, the Sheep, and the Goat," and "The Eagle, Cat, and Wild Sow"; "The Prodigal Son," from the Bible, and the following little anecdote from Harper's Young People:

TWO GOOD SWIMMERS

One bright summer morning as I was strolling toward the beach on the Island of Mackinac, I saw, a short distance ahead of me, two little pigs; one perfectly white and the other perfectly black, both of the same size, trudging along side by side in the same direction as myself.
Domestic Animals

They seemed so out of place, and I was so curious to know whither they were bound, that I followed them unobserved. They did not walk aimlessly, but as if they had some special object in view, and some definite destination.

I wondered what they would do when they reached the water. I was not long in being answered. Without a moment’s hesitation, they plunged into the waves, side by side, and swam out and away toward another island, six miles distant. I stood and watched them until their two little heads looked like balls bobbing up and down, side by side, all the time.

When I related the incident to the landlord, a little later, he looked astonished and annoyed.

“Those pigs,” he said, “were to have been served up for dinner to-day. They were brought here this morning in a boat from that island, six miles away, and we thought we might allow them their freedom, never thinking of their making an attempt to go home.

“And did you notice,” he continued, “they chose the point of land nearest the island where they came from, to enter the water? Singular that the little animals should have been so bright! And, furthermore, they weren’t landed there; that makes it more strange.”

I, too, left the island that day, and I have never heard whether these brave little pigs ever reached their destination or not.

The children made up a game for themselves which they called “The Swineherd,” playing it as they did “The Shepherd,” at recess; and they sang the song
of "Five Little Pigs," a finger play, in "Games and Rhymes," by Hailman.

As pigs did not seem to the teacher to be animals she cared to have the children imitate, they drew lessons from them as to what to avoid, such as uncleanliness, table habits of greediness, uncouth noises when eating and drinking, laziness, etc., though the lesson of physical kindness in the way of care and food was impressed upon the little folks as was done in all of their animal studies.
Fowls

THE HEN

"Will you take the basket, Tom, please?" asked Miss Clare as she drove up to the school-house door. "If you hear a little noise, don't be frightened," she continued, merrily, as they went in, "for it contains something that is alive."

There was a piece of netting tied over the basket, so Tom peeped in and saw — feathers. He caught a glimpse, also, of a tiny dark eye, but it was after the morning hymn had been sung and everybody was sitting with a "straight back," that the cover was finally removed; then, as Miss Clare tipped the basket down, out walked a hen.

She was a very handsome white one, with beautiful long tail feathers. As the room was very quiet she did not seem at all afraid, and as she walked slowly across the room the children were bidden to watch her most carefully.
THE COCK THAT CROWS LOUD AND LONG IN THE MORNING
Feathers were now passed around, and the little folks discovered that the short, fluffy ones covered the hen’s body, while the longer ones were found in wings and tail. They noticed the rib in each feather, and the variegated hues, and came to the conclusion that hens were not all of the same color.

Attention was then called to the number and shape of the feet and the manner of walking. A hen’s foot was passed, that they might see the different lengths of the toes, the long nails, and the little pad or cushion in the centre of the foot. By this arrangement the hen is enabled to cling to its perch and not fall off, even when asleep.

Some corn was now sprinkled on the floor, and while Biddy was eating it Miss Clare crept up softly from behind and seized her by the legs. She struggled for a minute, but soon kept very still. Then the little folks crept up for a nearer view. They saw that a hen’s eyes are round and bright with a pupil in the middle of each. There was a little twitching or winking, if one looked carefully, that could be seen, and Charlie thought Biddy closed them tight at bedtime as he did his.

The ears were a puzzle, but Ned noticed a tiny
lid on each side of the head, and when one of these was gently lifted there was a little round hole to hear with.

Just over the bill was Biddy’s nose or nostrils—two more holes—and when Pete held out some corn on a book she opened her mouth to swallow it, and he saw her tongue.

They admired the bright flesh on the top of her head, called the comb, and the flaps of the same color, the wattles, that hang down on each side, and after seeing her take a drink of water they watched the teacher put her back in the basket, tie on the netting, and give her to Brother Harry, who called to take her back home.

“Now,” said Miss Clare, “we shall talk about the hen again to-morrow, though Biddy will not be here, and I shall expect you to tell me about her:

**Body**

Size.

Shape.

Covering.

Colors,
### Legs
- Number.
- Shape.

### Feet
- Toes.
- Nails.

### Head
- Comb.
- Wattles.
- Eyes.
  - Shape.
- Ears.
  - Position.
- Nose.
- Mouth.
  - Tongue.

"Find out, too, all you can about food for hens and where people keep them."

A fine large cock was the first thing that met the eyes of the little people when they looked at the blackboard the next morning, and near by was Biddy reaching out for some corn that lay at her feet.
"I know what 'tis," exclaimed Fred; "it is a rooster. Grandpa has one, and grandma says he is the man of the hen-house. If a hawk or a weasel comes stealing 'round after a chicken he will fly at him and drive him off."

"Yes," said Miss Clare, "a good farmer always has some roosters or cocks among his fowls. They are brave and courageous, and look after the wives and children — the hens and little chickens. It is the cock, too, that crows loud and long in the morning, telling people as well as hens that it is time to get up. Oh, a cock is a handsome fellow as he stands out in the morning sunshine, calling, 'Cock-a-doodle-doo,' or as the old rhyme says:

"Cock-a-doodle-do,
My dame has lost a shoe,
My master's lost his fiddle stick,
And don't know what to do.

"Now, who is going to tell me what a hen eats?"
The little folks were ready, and grain, such as rye, oats, corn, and barley, were mentioned, as well as many vegetables.
"You must cook the vegetables," said Harry.
“You may boil potatoes, carrots, peas, beans, cucumbers, and almost everything that grows in a garden, but it is better to mix some meal with them, though, and in the winter hens like the food warm. They eat scraps and bits of meat, too, and father gives our hens little stones that he calls gravel and bits of broken oyster shells, and they eat them just as they do corn. I asked him why, last night, and he says hens haven’t any teeth, and they eat these things to help grind up their food.”

Miss Clare smiled approval, and John added:
“You need a hen-house that is snug and warm, and a yard outside where they can run about. They like grass to eat, and lettuce, cabbage, and chickweed. You must keep the house clean. Uncle Frank whitewashes his hen-house inside every little while. Hens like water to drink, and sour milk, and they’ll scratch in the dirt and eat the bugs and worms that they find there.”

Then they learned the song by Mrs. Gaynor in “Songs of the Child World,” beginning “Mr. Rooster wakes up early in the morning,” and had Æsop’s tale of “Cock-a-doodle and the Piece of Gold.”
The use of hens came next. There were none of the children but what knew that we get our eggs from hens, and a few were ready with some details.

Paul said: "Once at grandma's we were going to have a hen for dinner, and grandma showed me some tiny little eggs, and one quite large one, that she found inside the hen when she was getting it ready to cook.

"The eggs didn't have any shells, not even the
biggest one, just a thick skin, 'cause shells are the last part of the egg to be made so they can squeeze together and not take up so much room. When an egg is all made Biddy knows about it and climbs into her nest and lays it. She never lays but one a day, and she cackles when she comes off.”

“What does she say? inquired the teacher.

"'Cut-cut-ca-dah-cut'; and it sounds like 'Johnny get your hair cut,' Cousin John says. When you go to get the egg it is always warm if the hen has just laid it."

Miss Clare told them she had read that a good hen will lay about two hundred eggs a year, if she has a good home, a yard to run in, and plenty of food and water.

"She likes something like hay or straw for a nest," she continued, "though she will often steal away in the summer and make a nest for herself in the grass and bushes. When you see a hen scratching and clucking, and staying on her nest a long time, people call her a "sitting hen," and the farmer gives her or lets her lay for herself a whole nest full of eggs. Then she feels very happy. She sits on them day after day, hardly coming off to eat or
drink, and keeps them warm with her soft, downy feathers. Every day she turns them half way over and moves them around so that all will be kept warm, and then after twenty-one days, if all goes well, she hears a little 'chip, chip, peep, peep,' and out comes a downy little chick; 'peep, peep, chip, chip,' and another and another comes out, until there is a whole brood of them, ready to run about, and crying for something to eat. Oh, they are so cunning, like fluffy little balls, and the good mother hen takes such good care of them, cuddling them under her warm wings at night, calling them in out of the wet, scratching up bugs and worms for them, calling, 'Cluck, cluck, come quick, here's a worm! here's a bug! here's Sally with some dough! hurry up, hurry, hurry,' and oh, how they scamper!' She told them, too, a little about hatching chickens in an incubator, and showed them pictures of several kinds.

One morning they found a group of eggs drawn on the board, and out of one a little chicken was peeping. Underneath was printed:

"This is little yellow head,  
Who says he's very well.  
He thought he'd rather take a walk,  
Than stay inside his shell."
Domestic Animals

They talked of coops, of hawks, weasels, and other enemies of chickens, and had boards full of illustrations: nests with eggs, downy chickens, cocks and hens, dishes for water, bags of grain, coops, and hen-houses.

The finger play of Miss Poulsson's, "Good Mother Hen," was much enjoyed, and "The Happy Hen" in "Marching Songs" (Guy Burleson), made a good game. A favorite song was this, from the "Niedlinger" song book:

"I think when a little chicken drinks,
He takes the water in his bill,
And then he holds his head way up,
So the water can run down hill."

"What eggs are used for," formed one lesson. The children remembered the happy Easter egg hunt they had, and brought long lists of food in which they were used, and told how they liked them cooked.

Hens, chickens, and roosters are particularly good for paper-cutting, and these were added to the animal set. There were coops, eggs, nests, and dishes drawn and modeled, and little stories written, illustrated, and tied into books.
But there were other uses of the hen. Who did not like chicken to eat, stewed, fried, baked, roasted, and made into salad and pies; and who did not enjoy pillows and cushions filled with soft feathers? Roy said they made pens out of the long quills when his grandma was a little girl, and she wrote with one in school.

The blackboard list grew apace. They added:

**Food**

- Vegetables (cooked).
- Grass and other green stuff.
- Gravel.
- Grain, as rye, corn, barley, wheat.
- Bugs, worms.
- Meal.
- Water.

**Movements**

- Runs.
- Walks.
- Flies.
Domestic Animals

Sounds
Clucks.
Cackles.
Squawks.

Habits
Shy.
Makes nests.
Lays eggs
Hatches chickens.
Scratches in dirt.

Rooster
Fights.
Brave.
Defends home.
Calls hens in morning.

Products
Eggs.
Chicks.
Articles of food.
Feathers.

Stories were numerous; some were taken from "In the Child’s World," such as "The Lost Chicken,"
“Pe-wee’s Lesson,” “The Story of Speckle,” while the old fairy tale of “Henny Penny and Chicken Little” was often called for.

At the close of the month the children were ready to express much gratitude for the hen and the good things she gives us.
THE DUCK

SUGGESTIONS

If teachers wish to go more into detail in regard to different varieties of ducks, much information can be gleaned from natural histories and encyclopedias.

"Out into the water
On a bright warm day,
Mother leads her children
For a merry play."

"Who do you suppose the mother is?" inquired Miss Clare, after the little people had read this verse from the blackboard one bright June morning.

"We would all like to go out and paddle a day like this, would we not? However, I doubt very much about our mothers taking us. But this mother is always glad to go. She has the same number of feet our mothers have, the same number of eyes, the same number of ears, though one needs bright eyes to find the ears."
"She wears a dress that is smooth and glossy, and often it is beautifully colored. As for her children, why, she usually has a dozen or more babies, all of the same size and all looking much alike. Fortunately they don’t require as much care as our home babies; the mother never stops to wash and dress them. Oh, no, indeed! She just opens her mouth, says ‘Quack, quack’ (deftly rolling up a curtain that covered a section of the board and revealing a drawing of ducks), and here you see the whole family out for a morning plunge.

"Notice the feet," continued the teacher; "they look somewhat like hen’s feet, but the three front toes are joined together with thick skin, while the back one is smaller and free. A foot of this kind is called a web foot.

"Ducks are fine swimmers; even the babies, as soon as they are out of the shell, rush for the water and swim off as easily as the mother, without one lesson. They use their feet as paddles.

"Notice a duck’s bill; here is one I have drawn large. See! it is broad and flat, with holes here for the ducks to breathe through the nose. The whole bill is covered with a tender skin. If you watch a
duck out on the water not far from the shore, you will see her dive her head down into the soft mud. She is after bugs and worms, and the edges of her bill are made in such a way that they act as a strainer;

they keep the insects in her mouth and let the muddy water run out.

"A duck has soft, pretty feathers that keep out cold and wet, and she lays eggs as a hen does. The
little ducklings are hatched from eggs as chickens are, but the mother duck sits on the eggs longer — twenty-eight days.

"My cousin that I visited last summer keeps ducks, and at that time she had about fifty little ducklings. She told me that meal and uncooked food was not very good for little ducklings, so twice a day she baked great cakes of dough for them. She made the cakes of meal or grain mixed with water. It was great fun to see her feed them out in the yard. She broke the cake into small pieces, and how they would run and scramble for it! On pleasant days she let them run about in the yard and take a little swim in the water, but on rainy days they were kept in the duck-house.

"'What harm will it do if they get wet?' said I. 'Don't they get wet swimming?'

"'No,' she replied, 'only a little, and the hot sun soon dries their feathers; but rain chills them all through. The first year I kept ducks, a good many died from cold and wet, and I learned to be more careful. One must not let ducklings stay in the water very long at a time, either, for they often get cramp in their legs.'
"Then she picked up a little duckling that had fallen into a pan of water, and took him into the kitchen to dry by the fire.

"Now we have found out something about a duck's

Eyes.
Ears.
Nose.
Bill.
Covering.
   Color.
Feet.
   Toes.

To-morrow I will tell you something more."

The next day there was a little duck-house drawn on the board with sloping roof, two front windows, and a door at the end.

"My cousin has her duck-house on a little hill, so that the water will run off and not soak into the ground and make it damp.

"There is clean straw on the floor, which is taken out and burned when it gets soiled, and the house is made snug and tight so no weasel, rat, or other enemy
can get in. Inside there are large pans for drinking water, troughs for food, and the nests.

"The nests are along the wall at the back on the floor. They are made of hay and straw, and strips of board are nailed in front to keep them in place. Last summer she had some coops outside, like chicken coops, where she kept the smallest ducklings.

"I told you yesterday about the food of the little ones. The old ones ate meat and vegetables chopped, meal mixed with water, grain, green stuff, bugs, worms, etc. She said she gave them more cooked food in winter when it was cold.

"The father duck does not lay eggs. He is called a drake, and looks after his family as the rooster does his. He usually has two feathers in his tail that are recurved or turned back over his back.

"Ducks are found in many countries. Don't you remember about the ducks of the little Chinese girl in 'Seven Little Sisters'?

"Let us think now of some of the ways in which ducks resemble hens," and they put this little list on the board:
**Ducks and Hens**

Lay eggs.
Sit on eggs.
Hatch their babies from eggs.
Like the same food.
Have feathers.
Are good to eat.

And this one also:

Ducks differ from hens in having
Curved necks.
In sounds made.
In manner of walking.
In liking water.
Different feet.
Different bills.
No comb.
No wattles.

Later the children learned the little song in the "Niedlinger" song book beginning:

"Mrs. Duck went to call on Mr. Turkey,
And she walked with a wobble, wobble, wobble.
She said "How-de-do" to Mr. Turkey.
Mr. Turkey said, "Gobble, gobble, gobble."
This proved such a favorite that they often dramatized it, as well as one in the Jenks book:

"There they go in the water clear,
One, two, three, four, five, I declare."

One morning Miss Clare told them of the wild ducks that go south in such flocks in the autumn.
"There are many varieties," she said, "of different sizes and various colors. See if you can find out about any of them at home."

The next day Tom told about the "wood duck." He said: "They nearly-always go in pairs, and they build their nests in the woods, sometimes on the ground, but often in a hollow tree. Papa found a nest once in an old tree stump with thirteen eggs in it. They were covered over with soft down that the mother bird had pulled from her breast to keep them warm. Later, when they were hatched, he said he supposed the mother duck took them in her bill and carried them down to the ground, one by one, and led them off for a swim, for that is the way wood ducks do.
"They like seeds, acorns, oats, other grain, and
insects to eat; they are called 'summer ducks,' too, because they stay here only in the summer."

Ned said there are some ducks in England called "burrow duck," because they often lay their eggs in rabbit burrows.

Canvas-back duck, the wild duck that is especially good to eat, was mentioned. These are usually found near rivers, go in flocks, and are good divers.

The eider duck was not forgotten, Miss Clare telling the children of its home in the cold northland. "It has such lovely soft down that people like it to put inside comfortablys and pillows. The mother bird takes this down from her breast to line her nest and to cover over her eggs. Sometimes the father bird helps her by plucking the down from his breast also.

"The eggs are good to eat, and the people in the cold country are glad to have them, as there are no hens' eggs."

For seat work the little folks made pretty pictures by pasting white paper ducks on a blue background; clay ducks were also made, as well as eggs, drinking pans and dishes from this plaster material.

Cardboard houses and coops decorated the sand
table and whole duck families were added to the animal collection.

Stories were not so very numerous, though *Dumb Animals* furnished some, and the old tale of the "Ugly Duckling" was a favorite.

So the school year came to a close, and as Miss Clare was saying good-bye to the little ones, this note from Tom's father was handed to her:

**Dear Miss Clare:**

I am unable to meet you face to face to-day and to wish you a happy vacation as I intended to do. I am sorry for this, but my greatest regret is that I cannot personally express my gratitude to you for this year's animal lessons. They have done more for Tom in awakening a love for life and the care of it than you will ever know. Rest assured that I shall do all in my power to strengthen the feeling in the days to come.

Cordially yours,

17 Cedar Street.  
C. J. Van Norman.
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