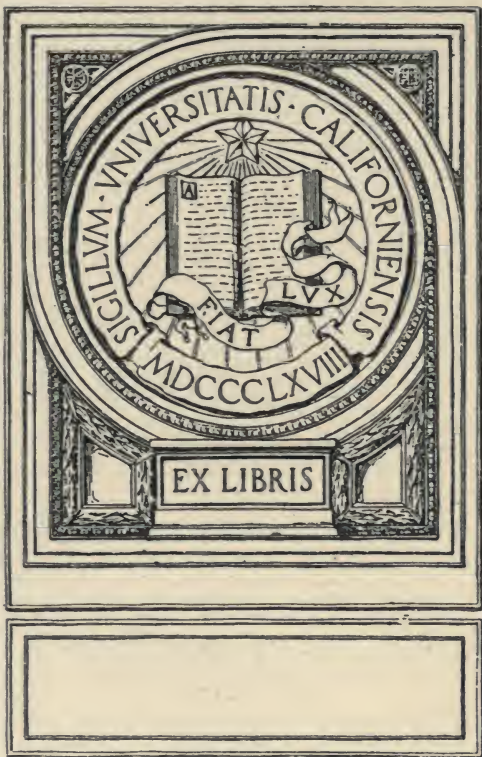


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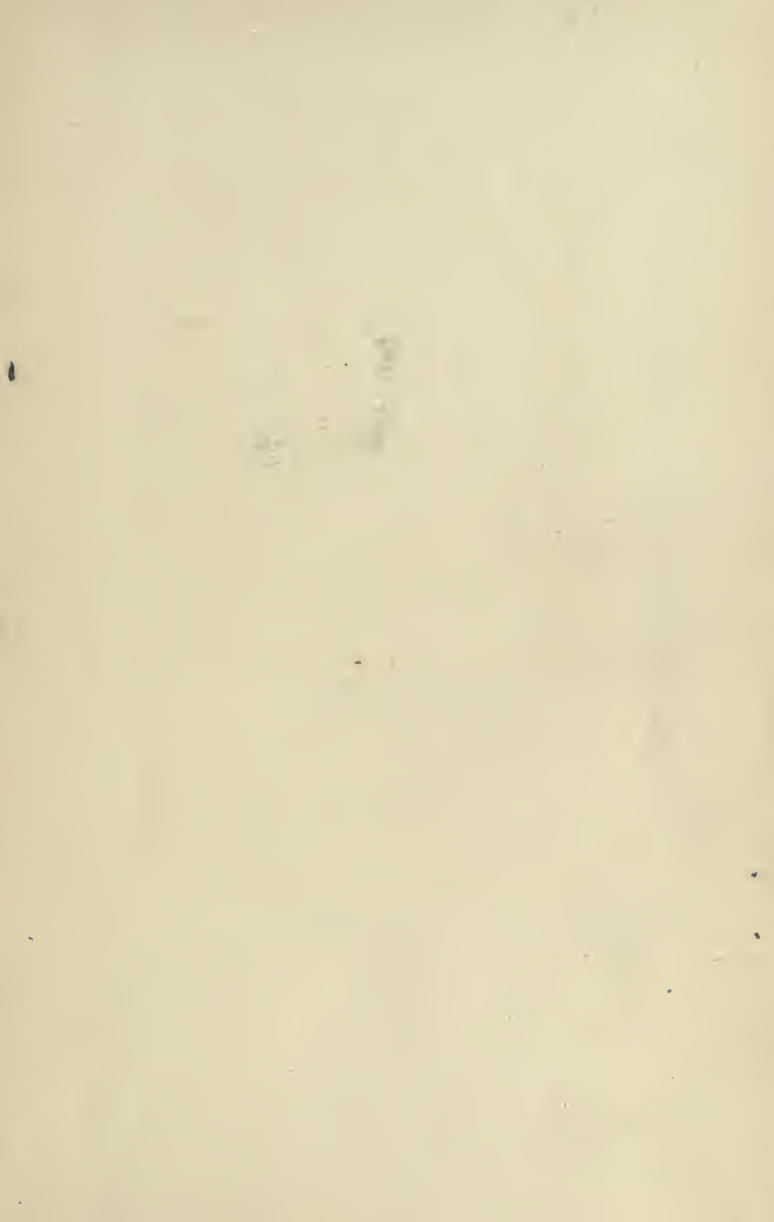


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SENSE-PLAYS
AND
NUMBER-PLAYS
—
ASHFORD



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**SENSE-PLAYS AND
NUMBER-PLAYS**

SENSE-PLAYS AND NUMBER-PLAYS FOR THE SCHOOL AND NURSERY

BY F. ASHFORD B.Sc.



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FOREWORD

A SYSTEM of educational apparatus simple or complicated, but always conventional and formal, is being advocated by the followers of Madame Montessori as the best means of providing for the proper sense-training of children. It was invented in order to enable the teacher of a very large class to have at hand employment which the individual child could find for himself without much suggestion or interference from without. It has advantages—presupposing a very large class and a large amount of imitativeness and docility on the part of the children, but to us in England it seems like a revival of the old ‘Gifts’ and ‘Occupations’ of Froebel.

The twentieth-century educator, like him of the nineteenth century, has sought to crystallize her ideas in a scheme with a particular apparatus based upon the scheme.

Crystallization means constraint within boundaries and a state of rest, and such conditions are inimical to life—the fixation of the apparatus marks the departure of the spirit which brought it into being. New teachers may take and handle the skeleton, but it will no longer have life or soul. We can still read with profit Froebel’s chapter on the Boyhood of Man, but of his sphere, cylinder,

and cube we see only the tedious formality. We may gather much of wisdom, patience, and benevolence from the pages of *Anthropological Pedagogy*, but let us be chary of insets unless we cut them ourselves out of paper or dough, of fitted cylinders unless in the form of a little chalk-box and its lid, or of sanded letters unless we want to cut them out in sand-paper for ourselves.

The greater part of the apparatus in an educational storeroom is devised in order to interest children in subjects for which they are not as yet prepared. We have a fancy that they shall appreciate geometrical abstractions, and we provide correct cubes and spheres, and rectangular prisms empty of all interest save that of form, before they are capable of making an abstraction.

We have a conviction that they must be made to read and write before they show the least desire for these accomplishments or are able to visualize sufficiently well to copy a letter from a blackboard. Until a child can enunciate clearly he has no business with reading; until he can draw with a bold and easy line he must not concern himself with writing.

Destructive criticism is of little value. In these pages I have gathered up and described a few sense-plays and number-plays, most of which can be taken with quite large classes of children; in which the materials used are common household things or children's natural treasures¹ all easily available from the kitchen cupboard, the wood, the sea-shore, or the hedge, and not painstakingly

¹ See Coventry Patmore's *Toys*.

devised with mistaken ingenuity by some adult mind.

Children's play-work at its best is expressive, or constructive and purposeful. But to express, one must accumulate experience by instinctive action and imitation. There is now no need to point out that the child's earliest experiences are tactile and muscular, the other senses being more or less specialized from these simple and diffuse origins. Next come taste and smell with localized and somewhat specialized sense-organs, and lastly come hearing and sight with highly complex sense-organs, dependent upon so much earlier experience, and in later years superseding to a large extent all the simpler sensations.

The child's first experiences and first pleasures are the warmth of its mother's body, the taste of its mother's milk, and the touch of her smooth skin. Our babies must begin by holding and handling, stroking and feeling, tasting and smelling, accumulating thus a store of experience which will assist them to interpret objects of sound and sight with speed and rightness.

By means of these little plays sensations in their likeness and unlikeness may be accumulated and compared, the simpler first and the more complex later on. There is no special virtue in them; a wise mother, nurse, or teacher will think of many more. I should like to point out, however, the simple, homely way in which they are 'played,' for that is the secret of their success. The children's talks are based on real conversations, the characters are those of real children, and the details of the

descriptions are given with a purpose. It should be possible to compare the docile imitative attitude of the younger ones, who spend so much time repeating what is suggested to them, with the more positive inventive spirit of the older ones. The age of the children is not precisely given. Every teacher should know better than any expert what her own particular children are capable of doing and (to some extent) thinking.

In these plays talking, nay shouting, and running about are freely permitted unless there is a serious obstacle; the noise and movement do not hinder, they help very much; more especially do they help the younger children.

The teacher is sometimes an observer and a seldom interfering providence; sometimes she is an elder sister playing the game too. This *rôle* is her favourite with the younger children. Her presence is a quiet stimulus. Her smile, her appreciation, give an additional zest to the games. She does not wait upon the children, they do every possible action in getting out materials and arranging the schoolroom individually—each one for himself, or helping each other. The children are consequently self-reliant, handy, and are developing a sense of order. They always tidy the room and dust their chairs and tables with their own hand-made little dusters. The schoolroom is their room, and they rise to the sense of ownership.

CHILDREN OF THE PLAYS

YOUNGER CLASS

Ages from Four to Six or Seven Years

DICKY. Excitable, imaginative, dramatic, resourceful. Has a vivid mental life and free expression of it. Small and slender.

NELLY. His sister, and a year younger. Of similar build; also quick, excitable, and imaginative. More docile than her brother.

JENNY. Plump and rosy. Vigorous, dramatic, fond of directing the others.

GEORGIE. Plump and pale. Externally placid, generally reserved, observant, and when excited reveals much unexpected thought.

SAMUEL. Well-grown and normal. Has an all-round intelligence. Even-tempered, frank, active.

JOYCE. Rather overfed and pale. Her nature seems to be curiously warped. In moments of self-forgetfulness she may be generous and amiable, but is usually grudging and disagreeable. She is observant and reserved.

JULIE. Feminine, intelligent, irritable.

PET. Curled darling. Rather over the normal in size, but has little stamina and little mental power.

CHORUS OF OTHER CHILDREN

OLDER CLASS

Ages from Six to Nine Years

MARY. Quiet, rather backward, "good," too much restrained at home.

MEG. Lively, dramatic, hasty, and inaccurate, but energetic. A leading spirit.

PATTY. Vain, without good looks, self-conscious, affectionate, inclined to fall out with the others, sometimes disagreeable to them.

JACK. Straightforward, unselfish, peculiarly irritated by Patty, who is related to him. Undisciplined at home.

ERIC. Slow and solid. The pleasures of appetite appear to be his greatest diversion.

HENRY. Accurate, dogmatic, critical. Seems at present to have no emotional life.

CHRISTOPHER. Interested, slow to develop, but very promising. Left-handed. Has a knack of learning through doing things the wrong way first. His mistakes are wonderfully ingenious.

JIMMY. A somewhat ill-nourished and uncared-for child. Affectionate, more influenced by encouragement than blame. Desirous of notice. Somewhat crafty.

CHORUS OF OTHER CHILDREN

WE MAKE NECKLACES

I HAVE a box of large round glass beads ; it is a tin box. I keep it closed.

“ Guess what’s in this box ! ”

“ Sweets.”

“ No.”

“ Biscuits.”

“ No.”

“ Needles and cotton.”

“ No.”

“ What then ? ”

“ Listen ! ” I give the box a shake.

“ I know, I know. . . . Glass beads ! ”

“ That’s quite right.”

“ Are they for us ? ” “ How lovely ! ” “ Can I make a string for the doll ? ”

“ What will you want besides beads ? ”

“ Cotton.”

“ I’m afraid that’ll break.”

“ String.” “ And needles.”

“ I don’t think you’ll want needles.”

“ Shan’t we ? ”

“ Here’s a ball of thin string. You can come out and cut off a piece presently when you’ve thought how much you’ll want.” There is a quiet interval.

“ I’ve thought.”

“Come along then. You know where the scissors are kept.”

“Now can I have the beads. I’m the very first.”

“Take as many as you can hold in your two hands.”

The quick, excitable little Dicky puts his string in his mouth and makes two prodigious grabs. Then he retires quietly, his attention entirely engrossed with holding his precious possessions. He runs straight out to me again.

“Oh, dear; they’re rolling all about the table. Could I have a few bricks to make a fence round them?”

“Yes.” He runs to the cupboard.

“Oh! There are those tin plates. I thought I could put them in one of those.”

“Give the rest out to the other children,” I suggest.

“Would you mind looking after *my* beads then?” he inquires ingratiatingly. “’Twould be a pity if any got lost.”

The children gradually settle down to stringing the beads.

“Wet the end in your mouth. Look! And make it into a point, like this!” cries Samuel.

“Oh dear! As fast as I put them on they run off the other end!” sighs Nelly.

“You must make a big knot,” says Julie. “Like this. . . . You turn it round and make an ‘O,’ then you push the end through the ‘O’. . . . You try.”

Julie enjoys the sense of superiority.

“ Like this ? ”

“ Yes, then like this ! ”

“ ’Tisn’t any good.”

“ Choose a bead with a little hole.”

“ I can’t get the string through.”

“ I will ! . . . No, I can’t. It’s too wet and squashy.”

“ Will you ? ” she asks me.

I cut off the unpleasant end and thread the bead. Nelly dances back to her place with it.

They take a good deal of time. Very few require any assistance from me ; they show each other, but I prevent any lazy people from letting others actually do their work.

Gradually they finish, and tie the final knots with great care and solemnity.

“ I’ve tied three knots one top t’other at each end,” cries Dicky. “ They’re beautifully strong.”

“ Now count your beads, and see who was able to grab the most.”

They all count aloud, pulling the beads along the string. After one or two false starts they announce the results.

Joyce’s hands were the largest, but she hadn’t the most beads.

“ I wonder why that was.”

“ She’s got slippery fingers ; they all ran out.”

“ She didn’t squeeze them tight enough.”

“ She left holes for them to run through.”

The handy and acquisitive Samuel had contrived to retain the largest number. He hung his beads round his neck and swaggered up and down.

“He’s the richest man. He’s got the longest gold chain,” I remark.

So he chants as he walks :

“I’m the richest man. I’ve got the longest gold chain.”

Pet has lost half of hers, and we have a hunt on the floor, pretending we are the ants in the story who found the pearls in the wood. We pick all up and run and drop them in a tin plate.

“One, two, three . . . twenty-four.”

“Fancy, some people dropped twenty-four beads,” cries Georgie.

TOUCH-PLAYS

I

WE have, naturally, a school rag-bag. I collected most of the odds and ends from my own needlework and from my dressmaker.

I begin an afternoon by saying, "Nelly, get me the rag-bag, if you please."

Nelly trots across the floor, tumbles the bulgy, scarlet thing out of the cupboard, and holding it up by the throat with both hands, drags it into the middle of the floor. She unties its strings, and with a big pull opens its gaping mouth.

The others begin to crowd up to her, but I motion them back to their seats.

"Find me some bits of velvet, Nelly."

She does so.

"Now choose some others to help you."

"Dicky! Jenny! Samuel!"

"That'll do. Let them help you to show the pieces to all the children who don't remember."

I pick out some satin, calico, and flannel from the bag also, and my assistants make them known to the children, who are not sure of the names. An animated hum of conversation is kept up all the time.

"We've finished," they presently announce.

"Well, then, come here to me," I say, "and bring your rags too."

“ Now you’ll each want your treasure-bag—*empty*,” I say with the air of imparting a State secret.

“ I shall put my things on the top of the cupboard,” says Dicky, spreading a duster on a chair.

“ I shall have a tin plate to keep mine from rolling,” says Samuel.

“ So shall I.”

The bags are quickly emptied.

“ Now all you others will have to divide into five. See, I’ll count you. All the ones run to Nelly, all the twos to Jenny, all the threes to Dicky, all the fours to Samuel, and all the fives to me.” I count them as quickly as may be, and they divide into little clumps.

“ Don’t forget who is your captain,” I warn them, “ for you must all run away to the wall and come back to him when I clap.”

The four captains hide a piece of velvet in their bags ; I tie the strings so as to leave a convenient opening and so as to prevent their contents from being disclosed.

I clap my hands and cry, “ Ready ! ”

The captains stand firm against the shock of their eager followers, holding the bag openings firmly with both hands.

“ What have we got to do ? ” cries some one.

“ Why, we haven’t told them our secret yet,” I say, laughing. “ It’s just this. You’re to put one hand in our bags and in my box and guess what the piece of stuff is by the feel of it. Whisper what you think to your captain.”

“ P’raps we’ve got a snake in to bite you,” suggests Jenny wickedly, with the result that the

more timid ones draw back until some bolder spirits have ventured first. The guesses, most right, but a few wrong, are communicated breathlessly to us in whispers, and we nod or shake our heads as the case requires.

The velvet is afterward pulled out, named, exhibited, and felt again by all those who made a mistake, in order that they may correct their judgment. The children are then ordered off to the walls and corners again; a new material is substituted in the bag and, with renewed appetite, the trial is gone through again.

Then we have a little joke among ourselves and repeat the velvet, with much suppressed giggling. "Whatever *are* they doing?" cries some one, but their minds are not sufficiently subtle to suspect a trick. Suggestion is too strong for most of them. They have already had velvet, therefore it must be something else. Only a few of these young ones place sufficient reliance on their judgment to say, "It feels like velvet, it must be velvet, it *is* velvet." When they do so they have achieved in small things a measure of self-reliance greater than many adults ever attain in their more complex opinions of later life.

II

When each of the children remembers to bring a large clean pocket-handkerchief we play a game with a few children blindfold. They are to recognize a few others by the sense of touch alone, all the rest forming an excitable and critical audience.

The whole class stands in a circle and the blind men

are counted out with some old counting rime, as, for example, the gipsies' rime about their crock :

Eatie oatie my black boatie—
Three feet and a timmer hattie—
O U T spells Out.

The man who is "out" is usually selected, although rightly the rime is repeated until only one man is left in.

Six blindmen are thus picked out and blindfolded. Then we have to choose some others to be guessed. This is done with an awed silence, for by no sound must the blindman be assisted. Only my voice is heard saying the counting rime.

"Can I go first?" pipes up Georgie, the usually silent.

"Oh, you stupid," cry out two or three. "They'll know your voice."

"Ssh!" says some prudent person. It is impossible to recognize a "Ssh!"

They feel the first child and guess her by a very long pigtail. They guess the second by his wild curls. They guess the third by her belt with pocket attached. The fourth is Samuel with nothing to distinguish him.

They feel all over his clothes.

"Strap-shoes!" "Socks!" "Jersey!"

"Whoever can it be?"

"His hair's quite short and ordinary."

"Here's a scar on his knee."

"Everybody nearly's got that!"

"Buttons on his shoulders!"

"Pooh! that's no good."

"He's a bit bulgy in front."

“ His knickers are soft.”

“ His face is quite, very ordinary ! ”

They become too familiar. Samuel screws up his eyes and blushes. The onlookers are much amused ; they shriek with laughter.

“ Yes, his knickers are velvety and up and down. I know. . . . Corduroy !—That’s Samuel.”

“ Right,” chorus the class.

“ I’m the only one to guess that time,” remarks the winner, not failing to pat himself on the back. . . .

So the game is played with its excitements and discoveries. The class is the critic—a severe one, who keeps the players at their best, straining after acuteness of perception, training and teaching themselves and never guessing that they *are* being trained and taught.

It is a game with many possibilities. For a week or so it is the fashion to identify coats and hats in the cloak-room with shut eyes ; to identify the coarseness of sand-paper by a tactile impression—I am sawing up two-inch wood into bricks and hazel-sticks into pillars for the children, and they are sand-papering the ends—to compare the ‘ feel ’ of sand and clay, of the paper they draw on and the paper they write on ; to rhapsodize over dear pussy’s soft coat or the rabbit’s woollier clothing ; to caress the doves ; to treasure up dear dicky-bird’s feathers or a lock of lamb’s wool ; to cry out against the nasty rough bricks and bumpy rough-cast of the outer walls ; to polish and handle their little pebbles ; to admire the polished walnut of the piano, and the clear glaze of our Devon-ware

vases ; to cherish woolly leaves or silky or smooth ones ; to lay the cool delicacy of a pansy petal against the cheek ; to argue about the relative roughness of bath-towels and blankets and door-mats ; to live in an ever-widening world of tactile interests on which the power of accurate and keen visual observation may be built up.

III

One day I said to the older children : " I wish we had a lot of little cushions made of different materials for the little ones to play with. We've a nice basket we could keep them in. I want little cushions of velvet and satin and silk and flannel and serge——"

" And flannelette ! "

" And calico ! "

" And pretty-coloured casement-cloth ! "

" We could make some."

" How big ? "

" Four inches square."

" We can bring bits."

" Get some out of the rag-bag."

" We've got nothing to stuff them with ! "

" The little ones will pick out some woolly cloth, unravel it, I mean, and make fluff for you."

" That 'ud be lovely."

" When can we begin ? " " Can't we begin now ? "

" When we've remembered to bring the pieces," said Henry soberly. " And some of you will never remember."

“ I’m going to write it on a piece of paper now, so there ! ” said Meg fiercely, “ and put it in my pocket. ” Flushed and hasty she writes :

“ Rags for cushions. ”

The pieces were soon brought in spite of Henry’s gloomy forecast. We selected the suitable ones ; they must not be too thin. One or two children heated the toy irons at the fire and smoothed out the creases.

The children first cut out paper squares for patterns out of waste paper. Then they cut out the cloth in one or two pieces. If they had a large enough scrap and decided to have both sides of the cushion of the same material, they cut out one piece, folded it double, and stitched it firmly on two sides. If they had small scraps and wished to have the top and bottom different, they cut out two squares and sewed them firmly on three sides. These simple devices required a great deal of discussion, argument, and forethought.

“ It’s funny to be sewing them inside out. ”

“ They must be jolly strong, ” remarked Christopher, in his deep, throaty little voice—he imitates assiduously an elder brother—“ or the stuffing’ll come out. ”

The sewing was finished and the right side was brought to view.

“ Oh ! how beautiful they look now. ”

“ Green and blue ; yours is *very* pretty. ”

“ Why, yours is the same stuff as your blouse ! ”

The little ones have provided us with soft wads of wool. The woodwork class has sent us some

sawdust. These materials were in large, flattish cardboard boxes, leaving room for spilling inside.

"Somebody put the boxes on the floor."

The first child to come did it while the others resumed their seats.

"Now then! I s'pose we can have which we like?"

"Certainly."

"Wool!" "Wool!" "Wool!" chanted the majority.

"There won't be enough wool for all those," I said.

"Sawdust!" "Sawdust!" "Sawdust!" chanted nearly half the class. Some obliging people had changed their minds.

I held up my hand for silence.

"I'm going to mix them," said the ingenious Christopher in the lull.

"Sawdust is as good as wool. It will make a hard cushion. I know. My doll's stuffed with sawdust," said Patty. "Sometimes she leaks."

"We've got a hassock stuffed with sawdust," said Jimmy the clumsy-handed.

"I should suggest that Jimmy uses wool," I said. "The sawdust will immediately leak out of the holes he has left."

"There!" said Henry. "I'm for sawdust because *mine* is certain not to leak."

They had to take it in turns to fill their cushions. Some had not yet finished the first stage of the sewing. Those who finished first came out first, and perhaps contrived to make two cushions while the others were doing one.

They crowded round the boxes, and knelt upon the floor.

“ I’m going to put as much as ever I can in mine,” said Meg.

“ You’ll bust it,” said Christopher.

“ Feel mine.”

“ It’s as hard as a tennis-ball. The little ones’ll hurt themselves with it, if they throw it about.”

“ Yours is splitting.”

“ Not much.”

“ I should throw mine in the fire if it split open like that.”

“ I can sew it over outside.”

“ Well, you might, but it’ll not *look* nice.”

“ Yours is thin and flabby.”

“ Shut up ! I haven’t half finished yet.”

“ Well, you were getting up.”

“ I wanted to stretch my knees,” feigned Patty.

“ I’m getting up, but I’m going to the other box,” said Christopher, “ to get wool now.”

“ Sawdust in one half and wool in the other ? ”

“ No, mixed. I shall shake them up.”

“ You’ll spill them,” said Jacky.

“ I shall hold the opening. You’re spilling some ! ”

“ I’ll get the brush and sweep it up.”

“ Shall I help ? ”

“ No ! ”

“ Haven’t you people finished yet ? ” I said. “ There are others wanting to come ; you must go back now.”

“ I’m ready. Let me come.”

“ Let me.”

The first ones went back to their places greatly preoccupied with holding their precious cushions so that the stuffing should not spill. With great difficulty they turned in the obstinate edges.

"I'm going to pin it. I say, bring me a pin-cushion, Mary. If I walk about I shall spill my sawdust. . . . Please."

"You nearly forgot," said Christopher.

"Thank you, Mary; you're a dear thing!"

"Will you help me, please, this cushion is very obstinate?" said Patty. Every one else was very occupied in the struggle with the refractory material, and I went to help Patty.

For the sewing we had darning or crewel needles, and a variety of coloured threads. We matched our cloth and thread; if we couldn't find a match we used a lighter or darker shade of the same tint, or found a good contrast.

"How beautifully Mary does sew!"

"What lovely little stitches, Mary," cried Meg. "They're all exactly the same size."

"Well, yours aren't," said Jack. "Mine are better than yours."

"I *know*. I can't think how Mary does it."

"I know why you *can't* do it; you're sticking in your needle and watching her," he remarked.

"I should say you're just as bad," said Henry, without looking up, and sticking in his needle with great precision.

"Christopher's stitches look like a row of crooked teeth," said Patty.

"Shut up!" replied Chris.

"I don't think bright green and orange look very

nice together," pursued Patty, encouraged by his irritation, leaning over him and dropping her cushion on the floor.

"You can't talk," he answered in a huffy voice. "He, he! Yours will look lovely when you've finished with it."

"I think Mary and Henry are going to beat you all this time," said I, and every one quickly settled down to work again. How the robuster children hate to be beaten!

By and by, after Mary and Henry had stuffed their second cushions all the others were finished. They were then handed round, caressed, patted, admired, and despised. An attempt was made to play ball with one bad one; but Jimmy, who disclosed himself as the maker, promptly put a stop to that diversion.

Mary and Henry got the basket and collected them all.

"Oh! Don't *throw* them in," cried Meg to a careless child. "If they drop on the floor and get stepped on!"

"I lay mine in carefully in that little hole where there's just room," said Willy sweetly.

"And I balance mine on the very top of them all," cried Christopher boldly.

"And I bury mine so that they'll have to search for it," said Patty, enjoying the contrast of ideas.

Then Mary and Henry took them to the little ones and came back and told us how pleased they were, and how they ran out and got hold of the cushions and patted them, and how they all had to feel which had the wool inside.

“Julie said she was going to make a little hole and find out, but the others wouldn’t let her spoil one.”

“They’ll find it rather hard to make out mine, I expect,” chuckled Christopher.

A TASTING-GAME

ON Shrove Tuesday we were going to make pancakes, and children had brought eggs, milk, flour, sugar, and currants and sultanas.

“How lovely and smooth the eggs are.”

“Let me feel!” “Let me!” “Me!” So the egg went round from hand to hand.

“Here! Hold it carefully. ’Twould be awful if you dropped it.”

“Oh, that would be an end of everything,” said Patty, who likes to exaggerate.

The egg made its tour in safety. I was glad to think the shell would be removed, for it was quite grubby.

“I believe I could tell the feel of sugar and flour,” said Mary unexpectedly. I gave her an encouraging glance and she came out and judged correctly.

“I would like to *taste* the sugar,” said Willy.

“And eat it all and then there’d be none left for the pancakes,” said Jack. Willy looked rather abashed.

“He didn’t mean to *eat* it, only to *taste* it,” I said. “Perhaps you’d like to play a tasting-game before we use the things, Willy?”

“Oh yes, let’s!” they chorused.

“What about the pancakes?” said Eric, with practical gustatory views.

“ We’ll do both ! There’ll be time if we begin at once,” said Meg.

“ Will there ? ” inquired Eric of me.

“ Yes,” I replied.

“ Well, then ! ” cried Meg in scornful accents, silencing the objection.

They brought out their spare handkerchiefs from their boxes. They had all made them from cheap muslin at school.

In order not to delay the proceedings I quickly chose six children whom I wanted to reward for effort.

Meg, much to the fore, jumped up and blindfolded them.

I gave Henry a piece of paper to cut into four with a paper-knife—he is handy and careful—while I got salt and soda from the kitchen. Henry arranged the papers in a row on the table and put out a dessertspoonful of salt, soda, sugar, and flour on each of the four paper squares.

“ This is more fun than just feeling,” said Eric, who happened to be blindfold.

“ Depends on what you have to taste ! ” said Jack with a touch of wickedness in his voice.

“ Is anything nasty ? ” inquired Patty in a superior tone, “ Because, if so, I’m glad I’m not a blindman.”

“ You shut up,” said Jack, jogging her with his elbow.

“ P’raps one is *poison*,” she pursued determinedly, in a much louder voice.

The blindmen turned pale. Isolated from the world by the loss of their chief sense they were filled with doubt and dread.

“What a goose you are, Patty,” said I, and the blindmen’s mouths resumed their expression of cheerful anxiety. “There’s nothing that can hurt you the least bit, but one of the things is just a little unpleasant, and one is nasty if you have too much ; so you had better take just a wee pinch of each.”

The tasting began, but Patty had been aroused, and intended to revenge herself on Jack.

“If Jack had the doing of it he would put horrible things for the poor children to taste,” said she.

“Shouldn’t, then.”

“That would be a nasty, mean thing to do,” said Meg.

“Shouldn’t, then,” repeated Jack, much ruffled.

“I didn’t say *you* would ; I only said it would be mean,” remarked Meg judicially.

“I said he would, and I say it again,” continued Patty.

“I’m sure he wouldn’t,” I remarked, putting an end to the discussion, “and anyone who wants to spoil the game by quarrelling can go out of the room.”

There was silence till the first tasting was complete.

“Sugar !” “Salt !” “Flour !” “Flour !”

“Flour’s right,” chorused the children. “Fancy calling it sugar.”

“I couldn’t taste at all,” said one.

“You didn’t take enough of it,” I said.

“They were afraid,” laughed Jack, recovering himself.

“Neither could I ; so I just guessed and it wasn’t right.”

They tried the second test.

“ Sugar ! ” said they all at once.

The next produced a simultaneous cry of “ Salt ! ”

“ Why, I believe it’s too easy for them, ” said some of the onlookers.

They tried the last test. One made a wry face, another spluttered.

“ It’s nasty, ” said most of them.

“ I rather like it, ” remarked Jimmy, who wished to be peculiar.

“ Well, what *is* it ? ”

“ Soap, ” said one. “ Don’t know, ” said the rest.

“ Why, that’s too difficult for them, ” remarked the onlookers.

“ Soap isn’t far out, ” I said. “ It’s soda, washing soda ; and they put a kind of soda into soap. ”

“ Then it wouldn’t poison you to eat soap ? ”

“ No ; it wouldn’t *poison* you, ” said I.

“ But it might make you *very* ill, ” remarked Jack, with interest.

“ Well, no one would *want* to eat soap, ” said Meg. “ It’s much too nasty. ”

“ I like the taste of soap. I always lick my soapy fingers, ” persisted Jimmy, in spite of disbelief pictured strongly on the faces of the others.

“ Now let *me* be a blindman and try, ” they all began to ask ; and we repeated the game once or twice with different children before setting to work in earnest on our pancakes.

The Christmas pudding afforded still more exciting material for a tasting-game. We had

raisins and currants and sultanas and candied peel, flour and sugar, bread-crumbs and chopped suet.

We put out small quantities of these materials, storing the bulk till the next day in the school pantry, and played with them for three-quarters of an hour.

SCENTS

ONE day Jimmy waited for me at the door with a big posy of summer flowers. His father is an enthusiastic gardener ; it is a pity his mother does not take the same interest in her children.

We went in together, and we put the flowers in a big jar upon the low table.

“ They do smell nice, Jimmy. . . . Why, you’ve brought sweet peas, mignonette, and some lemon-plant (scented verbena), and some sweet briar ! ”

“ And roses and French marigolds and little sunflowers.”

The children, as they came in, crowded round the table.

“ How scrumptious,” cried Meg.

“ How pretty,” said Willy, in quiet admiration.

“ Every sort of colour,” said Patty. “ Every possible sort of colour. Yellow and red and pink and blue and purple and white.”

“ And green for the leaves,” remarked Christopher.

“ That only makes seven colours,” said Henry.

“ And cream-coloured makes eight,” cried Patty.

“ That’s only very pale yellow,” Henry replied.

“ *Well ?* ” she remarked aggressively.

“ Well ! I don’t call that a colour ! ” he argued.

“ Some of the sweet peas are pink and blue mixed,” whispered Kitty.

"Yes," I said to her. "It's difficult to decide what colour they are."

"Pale violet."

"I know—mauve," said Patty.

"Mauve, what an idiotic word," said Jack.

"It's a real word; haven't you heard it?" I remarked.

"What's this one called?" said Mary quietly to me.

"Ask the boy who brought them."

"Who was that?" they ask, looking round. Jimmy is discovered, modestly blushing.

"Jimmy!" say they, slightly disappointed. He has not a high reputation amongst them.

"It was very kind of him," said Jack, determined to be just.

Jimmy beamed in reply.

"Well, what's the name, Jimmy?" repeated Mary gently.

"French marigold," he replied, swaying his body to and fro with pleasure.

"I should like to do nothing but look at those flowers all the afternoon," cried Meg.

"Well, you can go and do it. But you'd wriggle after five minutes," said Eric.

"Let's do something *new* with them," she continued, disregarding him.

"Draw them."

"*Draw them . . .* she calls that *new*!" said Jack to Patty.

"Sh! Let me think. Oh dear, do be quiet—I nearly had an idea," said Meg.

They all laughed.

"Couldn't we feel them and guess what they are like we used to do?" she suggested dreamily.

"Too easy," said Henry decidedly.

"We haven't used our blindfold handkerchiefs for ages," said Mary.

We tried it, but Henry was quite right; they had outgrown it.

"We can all guess right, and that's very dull," declared Patty.

"I think I like guessing right," said Kitty, shaking her curls.

"*You* were wrong once—and the only one," said Henry critically.

"But I was right four times," she contested with a little spirit.

"What's this leaf that smells so?"

"Lemon-plant," answered Jimmy.

"I know; we'll have a smelling-game," yelled Meg. "Why didn't I think of it before?"

"Don't take those leaves; they're not yours," said Jimmy fiercely to Jack, who was stripping the lemon-plant.

"You're spoiling that branch," I said severely. "Put down the leaves."

We chose blindmen. And seven boys and girls went to fill seven jam-pots with water, and arranged them on the table.

The handkerchiefs were adjusted, and Jimmy proudly arranged a selection of flowers in the jars. Two sweet peas in the first and fourth, the lemon-plant in the second, the sweet briar in the third, the roses in the fifth, the marigolds in the sixth, the sun-flowers in the seventh.

He whispered to me, "They won't guess there are two lots of sweet peas. That'll puzzle them."

"Why, Jimmy, you've put . . . don't you see what you've done?" called out Meg.

"Ssh!" said Jimmy angrily.

"Put your hands behind, so that you can't possibly touch," called Henry to the blindmen.

Jimmy said "Number one," and led them to it. They took their turns at sniffing.

"Rose." "Sweet pea." "Sweet pea," "Sweet pea." "Sunflower." . . .

"Oh!" "Oh!" in chorus from the onlookers.

"Three right. Sweet pea's right," said Jimmy.

"Who's keeping the score?" I inquire.

"I will," cried Meg, and flew to the cupboard for pencil and scrap of paper.

"Number two," announced Jimmy.

The first blindman sniffed and contemplated his sensations for a whole minute.

"*Well?*" inquired Jimmy.

"Sweet briar." "Sweet briar." "Lemon-plant."

"I dunno. Lemon-plant." "Sweet briar."

"Lemon-plant's right."

"Only two right this time. Put it down, Meg. I was one," said Jack.

"Number three," said Jimmy, hauling them up to it.

"*Don't* pull me over," said a ruffled blindman.

They all guessed sweet briar.

"They knew it couldn't be lemon-plant," said Patty.

"Number four," announced Jimmy.

"Rose." "Rose."

"It's awfully like sweet pea," said Jack, after long thought. Then he said undecidedly, "Rose."

The others all laughed.

"Rose," "Rose," said the last two, with some hesitation.

"All wrong," said Jimmy.

The blindmen let their jaws drop.

"It's another sweet pea, clever," said Jimmy very sweetly.

"I did *say* that," said Jack, but no notice was taken of him.

"'Tisn't fair," said the others.

"Why not?" said Jimmy. "'Tis fair, isn't it?" he inquired of me.

"Of course," I said, laughing. "They're only upset because they were taken in."

The marigolds were a puzzle.

"They smell very strong."

"Nasty, I think."

"I like it better than any."

"You're *pretending* you do. You wouldn't if you sniffed it as hard as I did."

"Sunflower." "Sunflower." "Marigold." "Marigold." "Rose."

"Goodness, she calls it a rose!" said Jimmy.

The last child is evidently defective in this sense and must have more opportunities than the others, for she is not afflicted with a cold. People with colds must not be allowed to smell flowers for fear of infecting others.

Jack gave a big sneeze.

"That old marigold smell tickles my nose," he said.

They all guessed the sunflower right.

“Now be unblinded,” I said, and several children offered to untie the knots.

“Pouf. It was hot inside that thing,” said Jack.

“Smell the flowers again now you can see them,” I said, “and then you’ll know them better next time.”

“Now may I have a turn?” “May I?” “May I?” clamour the others, but I solve the difficulty by letting each blindman choose another to take his place.

One wintry day we had spices to smell—cloves and cinnamon, tea and coffee, and a very little pepper. On another occasion we had onions and apples and oranges, sliced potatoes and cabbage; on yet another methylated spirit, turpentine, paraffin, linseed oil, and eau-de-Cologne.

SOUND-PLAYS

I

THE sense of hearing apart from the musical sense may be developed by several informal plays.

One day after a rather noisy lesson I said, "Now then, let's be as quiet as the sleeping castle in 'Briar Rose,' so that you can all hear yourselves breathe, like the Prince did. . . ."

"Are you ready? One . . . two . . . three."

Some one squeaked a chair.

"Dicky, you spoilt it," grumbled Pet.

"Now you're spoiling it worse," said Nelly, championing Dicky.

"What about you?" replied Pet, and I felt that the endless circle had begun.

"Sh! Sh!" I said, and then whispered, "You're to be really most mousy quiet, as long as I hold up my hand."

I waited a moment and then raised it. A restful silence prevailed, while eyes brightened and ears strained at attention.

Presently I lowered my hand. The noise broke forth like water from a sluice-gate.

"I did." "I could." "I couldn't." "I couldn't hear a thing." "I could hear the fire go crack."

"Let's try again," I said, and presently raised my hand again for a minute or rather more. . . .

“ I did then.” “ I did ever so loud.”

“ Now rest your head against the next child’s chest. You can take turns,” I said.

“ You and me,” “ I haven’t got anyone,” “ Come here, then,” and similar cries echoed about the room.

Then I signalled for the refreshing silence.

“ Oh, there’s such funny noises ! ”

“ What did you hear ? ”

“ I heard a rushy noise like water.”

“ I heard a thumpy noise.”

“ I heard both.”

“ I heard a funny old roar.”

“ She’s got a thing inside her that goes—Bump ! Bump ! Bump ! ”

“ Anyone know what *that* is ? ” I inquired.

“ Stomick.”

“ I heard it one day inside Pussy, too—ever so fast,” said some one eagerly ; “ but she scratched me.”

“ When I was running I stood still, and it went Bang-a-bang-a-bang ! And Dad said ’twas my heart beating,” cried Dicky, tumbling out his words in haste. “ I thought it was just myself.”

The others began thumping on their knees with their fists, saying “ Bang-a-bang-a-bang ! ”

I waited a little until the noise subsided.

“ Tom’s got an awful rushy noise inside him. It’s in his throat, and it makes him cough,” announced some one.

“ He has a cold,” “ It’s his cold,” said several.

“ Joyce laughed and it made a awful funny noise.”

“That’s her wind going in and out ; her bref I mean,” said Jenny.

“I don’t breave when I laugh,” asserted Joyce.

“Yes, you do.”

Another time in search of quiet I held up a loud-ticking watch and waited till every one could hear it, and on one occasion we all contrived to hear a pin drop from a good height to the tiles round the fireplace.

II

Another day I sent Pet out of the room ; Pet had been unduly sat upon by the others, and was in danger of losing her self-respect. So I showed her how to hide away the big watch where it couldn’t be seen.

She then called in the children, and I whispered to her, “Tell them the watch is hidden away.”

“The watch is hidden away.”

“They’re to find it by hearing the ticks, and when they’ve found it they’re to sit down on the floor.”

“You’re to listen for the ticks, and when you’ve found the watch you’re to sit on the floor. . . . Sh ! You’ll never do it if you talk,” she added, with a gush of self-confidence.

“Must we *see* it ? ”

“No ; you mustn’t *try* to see it.”

It was very entertaining to see them bottling up their effervescent chatter, some of them with their fingers on their lips, tip-toeing about the room with great self-restraint. One after another silently

dropped upon the floor until only a few were left.

“ Shall I tell them ? ” whispered Pet.

“ Yes,” I replied.

So she fished out the watch and handed it to the first finder, Samuel, and said, “ Your turn to hide it next.”

“ You’d better show him, Pet,” and I left her chief tease to receive instruction from her mouth. He submitted with a very good grace.

III

When we were having a quiet rest in the garden one day late in spring, we lay and listened to the birds.

A lark was trilling in the blue. The children first heard it, and afterwards peering and blinking at the light they discovered the tiny speck—only to lose it again.

“ Oh, how it does twitter and sing ! ”

“ So high up. Higher than the highest tower, is it ? ”

“ And its wings beating all the time.”

“ It went up in jumps.”

“ There it is again, coming down ! Oh, ever so quick ! ”

“ Where’d it go ? ”

“ And it’s stopped singing,” said a disappointed voice.

They heard a blackbird fly squawking out of a bush in the garden and saw it rise over the hedge to the field on the other side. They heard a starling trilling and chuckling on a chimney-pot.

“ But we heard him once inside, and it sounded *much* louder.”

“ I believe he thinks he’s laughing.”

They heard a swallow twittering softly as it flew to and fro to its nest under the eaves. How it dared build there I could not imagine !

“ The swallow just sings to itself, like I do,” said Nelly, in a little dreamy voice.

They heard the church clock strike a long way off and counted the strikes. They heard a breeze make a stir among the leaves.

“ The leaves are all whispering to each other.”

“ Secrets, I ’spect.”

“ *You* can’t tell what they say.”

“ Neither c’nyou ! ”

They heard a couple of noisy sparrows chirping.

“ We’ve got two bad sparrows near our bedroom window, and they quarrel like anything,” said Jenny, sitting up suddenly. “ They *are* rude to each other.”

Presently two crows flew over us with a quiet “ Croak-croak.”

“ That means bad luck to somebody here,” said Joyce.

“ They’re only grunting to each other,” said Dicky.

“ Nem’ mind ; it’s bad luck,” said Joyce, with satisfaction. “ I ’spect somebody here’ll be killed with a bow and arrow like the cock-sparrow.”

“ The robin you *mean*,” said Julie scornfully.

Next a thrush tuned up very prettily in an oak near by, singing charming little sequences.

“ How lovely ! ” whispered one or two ; and then

they must all sit up and find its sunlit body among the boughs.

A hen announced her egg to the world from a distant fowl-run, and her ringing voice was drowned by the rumble of a cart along the road.

The children all began to converse in a soft dreamy fashion.

"I heard a bee fly quite close to me. He *was* humming loud."

"I saw him ; he went to the black pansies."

"The air's all full of little winds and noises."

"There's another lark."

"Dear little dicky."

"I heard something rustle under the bushes."

"P'raps 'twas a mouse."

"Or a fairy."

The great yellow school cat emerged by degrees, stretching his forelegs and yawning. He shut his mouth with a snap and sat down suddenly as if to say, "Movement is hardly thinkable on such a warm afternoon."

"Lazy old thing."

"He must be hot in his fur coat."

"A funny sort of fairy."

"What pretty talks the swallows have."

"Who taught the birds to sing ? "

"Nobody teaches them ; they find out."

"God does, of course."

"D'you hear the sheep baaing—a very long way off ? "

"Quite soft and pretty for a sheep's noise. All the noises are half asleep this afternoon."

IV

One wet day we had a Beast's Charade. Each child pretended to be an animal and the others had to guess which he represented. The noise was generally of assistance.

Samuel walked on all fours and roared and pretended to devour Nelly, who began to be quite frightened.

"That's enough, Samuel," I said.

"Tiger," shouted one.

He shook his head. It was a rule that he must only nod or shake his head; he must not speak man-fashion.

"Lion," shouted another. He nodded.

"Right, right," said the guesser, clasping his hands with pleasure. It was Georgie.

He proceeded to rush about on all fours, to toss his head, and make a noise that had some resemblance to a whinnying horse.

"Sheep." He shook his head.

"Next," I said, for we were taking turns to guess.

"Oh! *I know!*" cried an impatient child.

"Horse," said Joyce, whose turn it was.

Then she began hopping round the room, and cawing, and was guessed at once.

On a similar occasion we had "Beasts Truckle the Trencher." Each child chose to be some animal with a characteristic noise. The child who began ran out and turned the trencher, and imitated the dog's bark. The dog rushed out and caught it.

He in turn said "Cock-a-doodle-doo," with much realism, and out rushed the cock.

He said, "Cuck-cuck-cuck-cuck-Coo!" and out ran his hen.

We had a horse, pig, cow, sheep, hen, cock, dog, cat, mouse, crow, donkey, turkey, and goose.

The game could be played (in case of large classes) with different groups in turn, the other children being occupied with quiet handwork, drawing or sewing, or building with bricks at the other end of the room.

Another game which everybody can play at once is, "Who speaks?"

The children stand in a ring with one blindfold in the middle with a stick. The blindman points the stick and the child indicated speaks, disguising his voice if possible, and the blindman guesses who it is. If he cannot guess the child who first stood next to him takes his place; if he does guess he has another try. This is the most satisfactory way of arranging matters, for it makes the blindman anxious to guess correctly and the speakers anxious to disguise their voices.

In "Jacob and Esau" the blindman points to another who slips inside the ring, and who answers "Esau" every time that the blindman calls "Jacob," thus giving the blindman a clue to his position. When Esau is caught the blindman has to guess who he is by the voice and the feel of his head and dress.

In the ordinary 'Blindman's Buff,' of course, the child's ear is sharpened by listening for the movement of the others. This game is only suitable for the little ones; with older ones it is generally spoilt by one or two cunning persons who insist on being caught every time.

V

As the drawing lesson is the rational place for the chief training of the colour sense, so the singing lesson offers the most important training of the musical sense. Both these sides of our sensitivity are served and delighted by a highly developed art, and it is in acquiring the power of simple expression in these arts and in learning to appreciate beauty in these forms that the child's perceptions are trained.

The actual learning of songs by ear from the teacher's voice, beginning with simple nursery songs and going on to the higher examples of folk music is the right way of progress.

But in the singing lesson a few (but only a few) pleasant exercises are not out of place.

We sing down the scale to the sounds "Ding-dong," pretending to pull bell-ropes as we do it.

We discover there are always eight bells, and a different child stands for each bell, and pulls it, sounding the note when his turn comes. Then we have a muffled peal singing loudly and softly by turns. Or we have an echo answering the loud peal from the other end of the room. We have a good peal of bells in a church near by, and some of the

children learn to imitate the changes and teach them to the others.

No child is without some musical sense, and the younger ones who sing a great deal in their nursery days soon develop a good ear.

THE SNAKE-GAME

“LET’S all catch hold tails and pretend we’re a snake.”

“What does the snake say?”

“Sss . . .”

“Are you ready? We’ll all hiss.”

“Don’t pull, but keep close together.”

We begin to hiss lustily, and I, who am the snake’s head, finding my body rather unwieldy, contrive to lead round until we have made the snaky letter ‘S.’

“We’re making the snaky letter! D’you see? We’re making a big ‘SS’?”

After a good many contortions the snake’s head gets a little out of breath.

“Shall the snake go to sleep now?”

Still hissing, the head runs round and round, always inside its own tail, until the whole snake is twisted up in a spiral. Then all the joints of its long body subside upon the floor and the hissing ceases.

The snake is asleep.

Sometimes in the playground the unwieldy snake, always hissing, tries to catch a little rabbit, who easily eludes it, although he or she has only got two legs.

If the snake’s head manages to catch the rabbit the whole snake coils up round him to give him a good squeeze.

SOUND ANALYSIS OF WORDS

THE sound analysis of words without any attempt to write them down is a very important exercise for the little ones and should be frequently taken before reading and writing are begun. Clear enunciation is essential to an understanding of the written word, especially those simple phonetic words with which one would try as far as possible to begin the reading and writing exercises.

The children stand in a line. Those who miss are sent dramatically to the 'very' bottom of the class. Those who enunciate clearly start near the bottom of the line, and have to work themselves up.

(If the teacher likes she may provide herself with a dunce's cap and a newspaper stick, together with a mock-severe tone of voice and frown.¹ The danger is that the chastisement and dunce's cap may be a much-craved distinction.)

"Tell me a word beginning with 'D'" (the sound).

"Dog," "Dunce," "Dirty," "Dinner," "Tongs," come in rapid succession.

¹ "Full well the busy whisper circling round
Conveyed the dismal tidings when he frown'd."

“Tongs! . . . Bad boy, go to the bottom. Now tell me what tongs does begin with!”

“‘T’” (sound).

And so forth. Frequently a child is teacher and takes the class.

After a few lessons the children are asked to give all the sounds in simple words. The same ceremonial will stimulate effort and interest.

“Give me the sounds in the word ‘dog.’”

“D, o, g.”

“Give me the sounds in the word ‘cat.’”

“K, a, t” (I use the phonetic symbols).

“Give me the sounds in the word ‘man.’”

“M, a, n.”

And so forth, increasing the difficulty in subsequent lessons.

A pleasant variant is :

“Give me a word to rhyme with ‘man.’”

“Can.” “Pan.” “Fan.” “Swam.”

“‘Swam’ doesn’t rhyme with man, does it?”

“No, of course not,” say all the others.

“Go to the bottom of the class! It’s disgraceful!”

“Ham.”

“The very same kind of mistake! We want words ending in ‘n.’ Go to the bottom of all!”

“Tan.” “Bran.” “Han.”

“That’s no word at all. Did you mean ‘han-d’?”

“Yes.”

“Very shocking mistake. Go to the bottom.”

&c. &c.

On another day perhaps we make nonsense rhymes, each child contributing a line.

I saw a man,
He had a can,
Oh ! how he ran,
And caught a fan,
Filled up with bran,
 &c.

COLOUR-MATCHING

SOME of the little children have brought red apples to school for drawing, some have brought green apples, and some have brought oranges. Those who couldn't bring any have fetched the little cushions from the play-basket or some bright woolly balls that they once made.

They are drawing on cheap grey-brown paper with coloured chalks, and they are only allowed the three primary colours to begin with. They share their coloured objects one between two or three or four sitting all round their little tables.

"Here's your paper on the table," I say, putting out the sheets in three piles for them to help themselves from.

They each get a piece of paper and find their chalk-boxes in the drawer, where they are kept in compartments (A's to F's in one compartment, &c., for they are all labelled with the children's initials).

"I'm going to do my own orange first."

"Isn't it a fine colour?"

"It's yellow."

"No, 't isn't then."

"Well, *what* then?"

"Orange."

"That's its name. Ha, ha!"

"It's the colour too. Yours is too yellow."

“ Well, what can I do ? I haven’t any other.”

“ I’m doing something.”

“ Well—what ? ” in a challenging voice.

“ Look,” with a touch of scorn.

“ You’re putting on red. It’s not red,” with a greater touch of scorn.

“ Didn’t say ’twas red.”

“ Now I’m smovvering the red in yellow. See ? ”

The other child looks on wonderingly.

“ Isn’t that lovely ! ”

“ It’s streaky,” she replies critically.

“ Nem’ mind. Sometimes they’re streaky inside.

. . . ’S better’n yours anyway,” and he turns his back on her.

The child on his other hand has an apple, and is energetically rubbing on red chalk in silence.

“ ’Tisn’t that colour,” says the critic, smarting under criticism.

“ It’s red ! ” he replies in protestation.

“ But not like that ! ”

But no notice is taken of his remark, and he turns to the next table for a more respectful audience.

“ What a lovely green cushion,” he remarks to Nelly.

“ I thought it was blue,” she replies.

“ I don’t call it blue. Let me show you how to put some yellow on your drawing.”

“ All right,” says the compliant Nelly, always rather mistrustful of herself. He does so. “ I don’t *think* that’s very nice,” she mildly protests.

“ Oh well, I’ll do it better’n that in a minute.”

“ But you mustn’t spoil it. . . . No ! Let

me do it," she pleads, elbowing him out of the way.

He reluctantly gives up the yellow chalk and leaves her; then going back to his own orange he sees the colour wants improvement and makes it a great deal more life-like.

As soon as every one at a table has finished they all get up and walk round and compare and criticize the work.

"That's not a bit the colour!"

"That's lovely. . . . I 'spect you'll be able to keep that and put it in your cover."

(Each child has made a brown paper cover in which to keep the good drawings carefully.)

"Orange is much difficulter to make than red."

"What do you call Nelly's cushion? I call it *green*."

"I call it *blue*."

"It's very pretty."

"But her picture's not nice."

"He wouldn't let me do it by myself," sighed Nelly.

"Do the next one by yourself," I suggest, and then they exchange apple for orange and cushion for apple.

"My apple's green and pink, too. . . . How can I make it pink?"

"Pink's like this. You put on red thin," remarks the officious one, seizing her chalk.

"Nao!" she squeals, and he puts it down hurriedly and runs off to his place, where he begins at once to plaster on his paper a very fair similitude

of the red apple, using a little blue to tone down the red.

Only the three colours, a pure blue (ultramarine), a yellow, and a scarlet, are given them, in order that they may be compelled to make their own secondary tints. A greyish-brown packing-paper is to be preferred to ordinary brown paper, which has too decided a tint of its own. A cheap plain buff wall-paper does very well.

Brightly coloured balls, fruits, bright flowers, not too delicate or small, balls of coloured wool, Teddy bears, rattles, school-made necklaces of large bright beads or seeds, cheap and brightly stained wooden toys, a wooden doll with a green, blue, or scarlet frock and striped 'pinny,' a nigger doll in striped dress, a red-coated wooden soldier, an air-balloon, a group of tiddly-winks, are subjects interesting to and suitable for the crude but lively colour-sense of the younger children.

A TALK ON COLOUR AND OTHER THINGS

“LET’S get out our treasure-bags and look at our things,” says Georgie in a husky important voice at my ear.

“Very well,” I reply, wondering what he is thinking of, but not asking any questions. “You can get out yours if you like.”

“May we get ours out, too ?” says Julie.

“If you wish.”

Georgie’s person seems to be swelled out with emotion. His inflated chest, his bulging cheeks, his pursed lips, his rigid shoulders indicate a high degree of tension. His eyes, generally half hidden in his screwed-up lids, shine with unwonted clearness. He grasps his bag firmly by the neck ; he parades to his seat with it, his right hand privily seeking its appropriate pocket. The fingers stray about the opening and at last dive in, bringing out something hidden in a tight fist.

His figure now bears great resemblance to the Justices’ ; he is as full of self-importance. The other bag-grasping hand meets its fellow in front of his rounded form. The tight fingers undo themselves one by one, and he reveals a piece of red jasper and a fragment of transparent yellow flint.

He handles them with both hands, and admires

the colouring, and then becomes conscious of a want, conscious of an unsympathetic world around. Of what value is a possession unless it excite envy or at least admiration in your neighbour's breast ?

If at this point I had said, "Throw away those horrid stones, Georgie," he would have done so in shame and haste to be rid of all their disappointment. As it is he stands irresolute, blinking his eyes. (It is his bad habit.)

Then Julie looks up from a surveyal of her treasures.

"Oh, Georgie ! What a lovely red stone, *and* a gold one. Do you think it's really gold ? "

Georgie's face lights up with a sudden smile ; he spreads out his hand and gloats over his beautiful possessions, but says nothing.

"Oh, Georgie ! Now you've got all colour stones, haven't you ? "

"Not got blue," he replies modestly, "'cept blue slate. 'S really grey."

He opens his bag with pride, and arranges all his stones upon his table.

"Not going to put out seeds and things ; only stones," he remarks.

"Only stones," echoes Julie, now a thrilled spectator.

He places in order his red jasper, the yellow flint, a little pebble of white marble, of green-veined marble, of red-veined marble, a fragment of micaceous stone which glitters, a dark piece of slate, a fragment of bright red tile, a fragment of white quartz, a round bit of bottle-glass, green and translucent.

"I like the little white one best ; it's so smooth

and pretty, like a little egg," says Julie. "I've got six white ones. I call them lucky stones. . . . Or else I like the white and green," she adds uncertainly.

"I like the new red one," says Georgie, at length drawn out of his silence. "It's hard and it won't write. . . . So's the new yellow one; both hard as hard."

"They'll have to be your special private ones," says Julie. They both handle, stroke, and weigh them.

"Look!" says Georgie, popping the jasper into his mouth. It comes out all wet and as it were polished.

"Oh, how lovely!" squeaks Julie, doing the same with the flint.

"Ah! Don't swallow my stone," says Georgie, grabbing it when it reappears, and wiping it on his knickers.

"Get a little basin of water," I suggest, "then you can both dip in your stones."

Georgie and Julie both want to fetch it, both want to carry it back.

"We'll have to take turns or it'll all be spilt."

"Me first then," says Georgie.

"All right," says Julie.

"I know one that'll look lovely in the water."

"Which is that?"

"My round green one. You can see the light through it; lovely green light, if you hold it up and look at the window."

"Let me."

"Here then."

“ Oh, Georgie ! It’s a lovely green, bright and shiny. Wait a minute, I must look again.”

“ Now I must.”

“ Where did you get your new stones ? ”

“ My dad found them in his pocket yes’day. He was at Yorkshire, by the sea.”

“ Did he bring it all the way back.”

“ Yes. For a s’prise present.”

“ My dad only brings me picture post-cards.”

“ I got that green one myself, at the sea, at Torquay ; and the white, and nearly all.”

“ I wonder what’s making that funny waggly light on the ceiling,” questions Samuel in a very loud voice ; he is doing some weaving.

“ That’s a Jack-a-Noddy,” shrieks Dicky. “ Somebody’s got a looking-glass.”

But on inquiry nobody has.

“ It’s a fairy light ; a Jack-o’-Lantern,” says Jenny.

Georgie dips his hand into the bowl.

“ Why, it’s all broken up into little shivers,” says Samuel, in astonishment.

Julie bends over the bowl.

“ Why, it’s all gone,” say several children at once.

“ What’s gone ? ” says Julie, awaking to her surroundings and looking round.

“ Why, it’s come again ! ” cries Dicky, dancing with excitement, and glancing rapidly about the room. “ I b’lieve I know where it comes from,” he says in a low excited voice. “ Shall I whisper ? ”

He runs out and does so.

“ Yes,” say I ; “ so it is.”

Every one else is much puzzled.

"I 'spect it is the window-glass somehow," says Samuel.

Georgie looks up and sees it. He looks down and fishes up another stone; he sees the ripples on the water, and then glancing up at the squeaks of the others he sees the dancing light upon the ceiling.

"It's the sun on my little pond," he says delightedly, but only Julie hears him.

"It's the sun on our bowl of water," says Julie.

She takes it up and carries it out of the sunlight. The Jack-a-Noddy shivers, gathers himself together, and gives great walloping leaps as she moves along. Then suddenly and silently he is gone.

The children greet the ridiculous movement with shouts of laughter; the disappearance is followed by silence.

"He's dead," says Joyce, with evident relish. He was much too gay and frivolous for Joyce.

"No," says Dicky, "I won't have him die; he's only gone out. I'll fetch him in again." So in he jumps and wallops.

Then ever so many of the children have to get out their tin plates and make other Jacks, and they have a big battle on the walls and ceiling to the shrieks of the delighted spectators. . . . The bowl is forgotten.

"My Noddy-man's stopped nodding; he's gone to sleep," says Georgie. And there sure enough he is, a pale stationary disc of light.

"Wake him up, wake him up!" they cry, and Julie's fingers break him into a thousand flickering fragments.

TWO CHILDREN TALK IN A FREE-DRAWING LESSON

THEY ILLUSTRATE THE STORY OF BRIAR ROSE

“ I AM making the green grass and the blue sky first, and a yellow sun.”

“ Doesn't say anything about that in the story.”

“ Nem' mind, you always have them.”

“ I'm going to draw the beautiful Prince coming to Briar Rose.”

“ *I'm* going to draw the horses and dogs asleep in the yard. . . . The horses are brown and white and the dogs are black and white. I must get a pencil.” He runs to the pencil-box and gets one.

“ Briar Rose is sleeping on a sofa. I shall make it red—a bright, bright red like a poppy.”

“ There's a horse leaning against the wall ; his head's hanging down, but he's not eating.”

“ The sofa has gold legs. . . . I shall get a pencil, too, to draw the curvy legs.”

“ The dogs are going to be curled up on the ground, like our Nipper . . . but he barks in his sleep. . . . 'Twould be nice to draw a bark.”

“ You are silly. You can't draw a bark.”

“ I *know*, but I'd *like* to. . . . But everything's quiet now, so it doesn't matter.”

"I'm going to give Briar Rose a green dress."

"I shouldn't."

"*Well!* what would you give her?"

"A gold one."

"But she's going to have a gold crown and gold shoes."

"And I'm going to put a gold saddle on the King's horse, and a gold collar on the King's dog."

"Don't forget the yard's all over grass."

"I'm drawing it now; it's the colour of your Briar Rose's dress."

They draw in silence for a bit.

"What are you drawing now?" without looking up.

"I'm drawing her face."

"Let's see. Be careful; you must make her eyes shut."

"That dog's eye is open," pointing to the paper.

"It's only a black spot on it."

"I b'lieve you really made a mistake."

"Our Nipper's got a spot on his eye. . . . He has reelly. . . . Have you finished her face?"

"Nearly."

"Oh! What awful red cheeks. You should have made 'em pink."

"They aren't awful!" with much chagrin. "I'll rub off some." She proceeds to do it with her fore-finger.

"Now I'll draw the wall and the gate."

"Are you making the wall red?"

"Yes, it's brick."

"And outside of that hundreds and hundreds of trees all thick like a jungle. They're green of

course, with dark brown branches." He scrubs on quantities of green chalk.

"That's rather nice."

"Yes. Now I've finished. . . . I like mine better'n yours."

"Mine isn't finished. I've got to draw a window and curtains. They'll have to be blue; it's the only colour I haven't used."

"But your sky'll have to be blue; you'll see it through the window, of course. . . . I should put on some red and make purple curtains."

"Well, I might. . . I might make a cloudy sky."

"That 'ud be horrid."

"Well, the purple curtains 'ud look very grand."

"Now will you print 'Briar Rose' very beautifully at the bottom of your pictures?" I ask.

"Yes! Yes!"

"Don't write it *on* your pictures," I warn them.

I put the word on the blackboard in capitals and small print characters. They run out to have a look before they begin to write.

"I'm going to do every letter a different colour."

"I'm going to do mine red and yellow in stripes, to match my picture."

"I'm going to do mine in pencil; it's easier."

The conversation during the drawing lesson is of the greatest assistance to the younger children, who always talk about what they are doing. With older ones, who often talk of other, generally trivial, things, the opposite is true.

A PAPER-CUTTING "MAGIC"

I BROUGHT some newspapers to school (penny ones, without distracting large print or pictures), and cut them up quickly into squares with a penknife, while the children watched and speculated. I had also some brown packing-paper—fairly smooth—in which some school materials had been sent. I cut that also into convenient pieces, a little larger than the newspaper squares.

The children each fetched one or two of the latter and their scissors from the scissor-box.

I said, "Watch me, and I'll show you a cutting-out magic. . . . See, I am folding my square into two, corner on corner."

"That makes a three-corner, like our baby's shawl," said a little girl.

"And then I fold it over again—so." I waited until the children had got as far with their own squares.

"Let me help you, Nelly," said Jenny. "You've got it wrong. Look, that's the way."

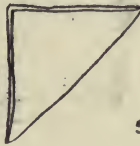
"Then," I said, "you cut it straight across the little folded corner. . . . so. And then comes the magic." I opened out my square, and lo and behold there was a little square in the middle.

The children shrieked with delight.

"Now I'm going to do it," they all cried.

"Oh! Oh! Look, a little square in the middle!"

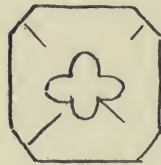
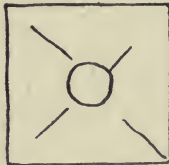
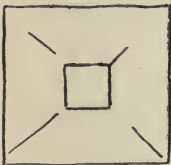
Joyce picked up the bit she had cut out and flattened it with a heavy hand upon the table.



Stages of Folding.



Three ways of cutting.



"I've found another square," she remarked with solemn pleasure.

All the others found theirs too.

"Would you like to stick them both on a piece of brown paper," I inquired.

"Why, how nice!"

“ Shall we come and get some ? ”

“ Shall I get out the paste ; here’s some old bits of newspaper to stand the pots on,” said Jenny.

“ We’ll use these two tables for pasting,” said Dicky, helping to arrange things. “ We must put some newspaper on first.”

They cut out the two other patterns sketched, and compared the ‘ insets ’ with the spaces they had once filled.

Then inventive minds suggested other forms, and we had a variety such as anyone may discover who has a few squares of paper, some scissors, and a little ingenuity. Some were merely curious, notched, or spotty, some were quite beautiful with curved outlines, the four-leaved clover and the Maltese cross being two of the prettiest and simplest ; these were obtained by folding the paper yet again before cutting. Any that I approved—and of course I took into consideration the age and ability of the children when approving or condemning—were stuck on the pieces of brown paper, and either kept at school or taken home. Most of them found time to colour the patterns with their chinks, adding thereby to their beauty and interest.

NUMBER-PLAYS

I

EVERY one of the younger children has a little treasure-bag (school-made, of course) with his own marbles and shells and nuts and beads in it. We collect such things ; also pebbles and fir-cones and sticks and conkers and walnut-shells, and we store them in boxes in our little low cupboards, where the little people can easily find them.

With the assistance of two children, one to put up the trestles and the other to help me in laying the boards on them, I arrange three trestle tables in the middle of the room, but with a few feet of space between them. I then clap my hands—the signal for attention.

“ Guess what you’re going to do,” say I.

“ Drawing.”

“ We should want all the tables,” says some one.

“ Bring me the treasure-boxes,” I say.

“ Are we going to count ? ” “ Do let us write down the numbers.”

“ When I say ‘ Be off ! ’ you must all run away to the wall and not peep.”

“ Oh ! Oh ! ” “ I wonder what for.” “ It’s a guessing-game.”

“Be off!” They all scamper away like puppies.

“Now when I say ‘Ready!’ you’re to run back and count something.”

I put out six sticks in a row on each table. Then I call, “Ready!”

(A bundle of ordinary firewood will provide good material, or if the numbers of children be small a box of safety matches.)

They all run to look, and begin to count the sticks at once. Then they rush at me. I am embraced and dragged down by one and tiptoed to by another until they have all informed my hot and tingling ear.

“Six!” “Five!” “Nine!” “Six!” “Six!” “Six!” and so forth.

“Now let’s count again slowly to make sure,” I say.

So they all count. “Six is right.”

“I’m right!” “I’m right!” chant the lucky ones, dancing with delight.

“Of course you’re nearly all right. It was easy, wasn’t it?”

“Yes, dreadfully easy!”

“You’ll have to be more careful next time, I expect. Now I’m going to have Samuel and Georgie to help me.”

“You go to the other tables and put out what I do, then let the children whisper to you as soon as they know.”

“Now the rest of you—Be off!” I call.

“And no peeping,” squeaks Georgie.

We put out eight sticks in two squares.

“Oh! it’s easy as easy,” cries Dicky, counting

with his first finger, and framing the words with his mouth.

"I can't do it," says Pet plaintively. "They'se making too much noise."

"Your hand's in my way," I hear Julie squealing.

"You'll do it presently," I say encouragingly.

Joyce waddles up to me and says firmly, "Seven."

"Sh!" I say. "Count again."

She stumps back with an unmoved countenance.

"Eight," whispers Dick, with his hands round his mouth.

I nod to him and he capers round the room.

"Eight," whispers Nelly, pulling me down to her level.

I nod again and she capers after Dick, squealing "I'm right too."

When they have all done we count the sticks slowly aloud to make sure.

"How many counted right at your table, Samuel?"

"Oh, lots."

"Who was first?"

"I was!" calls out somebody, "I was, I *was*!"

"Yes, you was," says Samuel.

"Were," I suggest softly.

"How many of your people counted right, Georgie?"

"I dunno. . . . Two or thurree."

"I did, I did!" eagerly protest about two-thirds of his group.

"Who was first?"

"I think him," says Georgie, aiming a stumpy, wavering finger.

"No, *I* was. Really *I* was."

"Georgie's a sleepy boy," I say, holding up his face to me, while a sheepish smile overspreads it.

Next time, having packed off the guessers to the walls again, we arrange seven sticks to make two adjoining squares. Many people, in a great hurry, give the number as eight.

After that I put seven sticks as two rows of five and two. That is counted immediately because we always formally arrange numbers in that way in order to agree with the Roman notation.

Then I put out two groups of five and two more, and that is fairly quickly counted.

Last of all I throw down a higgledy-piggledy group of twelve, and that takes quite a long time to count.

"Oh, dear! I don't know where I began," says Nelly.

"Your hand's in my way."

"You're talking too loud. One, two, three. . . . No! One, two, three. . . ." shouts Samuel.

"Julie won't *let* me count," wails Georgie. "She's putting her hand in my way."

"Oh, dear! I've got to begin all over again," says Dicky.

"One, two. . . . I'm going to wait a minute," and he shuts his eyes and turns his back. But he cannot hold himself in; the next moment he has returned to the group at the table, and is counting with all his might and main.

Next morning, after one or two preliminary

trials we divide up into several groups, so that there are only a few children in each.

Our little movable trestle tables are soon stacked against the walls, and some arranged at intervals round the room; we can thus manage without undue noise or any confusion.

I pass from one group to another (they are all playing the game), watching and, when there is any difficulty the children seem unable to settle for themselves, making suggestions. And I find it very delightful to watch the busy excited little companies, the active counting fingers, the moving lips, the serious faces of the children in charge, and the delighted caperings of those who have counted right.

After each count comes the minute of relaxation at the far end of the room while a new arrangement is being made. The waiting, the secrecy, and the running to and fro are enjoyable in themselves.

Many other arrangements of increasing difficulty can easily be devised. The grouping of the Roman numerals (and of the Arabic also) will suggest many formal ones, and so will the geometrical figures.

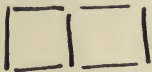
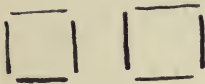
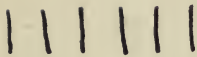
Repetition of a group of sticks or stones, arrangement in twos, threes, fours, &c., will form a basis for the shortened addition known as multiplication; and for this purpose stones, shells, nut-shells, or conkers will do as well as or better than sticks.

Higgledy-piggledy arrangements and arrangements in a circle give the difficulty of remembering where the counting began and must leave off.

II

Sometimes we just count the things in the room. The number of children, the number of hands (in twos), the number of tables, the number of trestles (two to a table), the number of window-panes, beams in the ceiling, panels in the cupboards, fingers spread out at one table (four children with ten fingers each, or two thumbs and eight fingers), number of yellow leaves on the six crocuses in the bowl, on the eight primroses on one plant, and so forth.

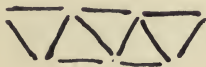
Number Plays - I



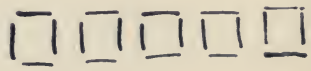
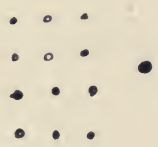
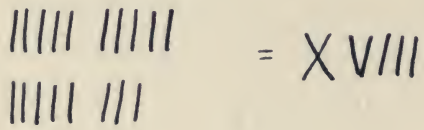
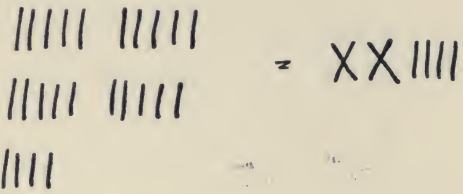
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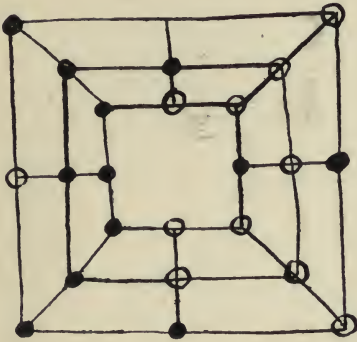
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Number Plays



Nine Men's Morris.



Black III.

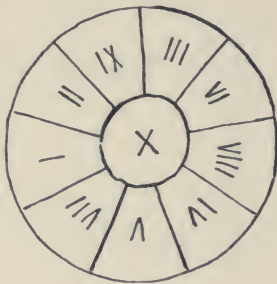
White II

Noughts and Crosses

O		X
X	O	X
O	X	O

Nought has scored
1.

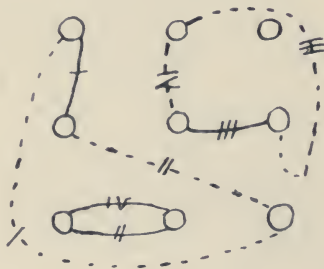
Tit-Tat-Toe



Hickory Dickory Dock



Nine Os



A ---

B —

B has won

III

THE LITTLE ONES PLAY NUMBER-GAMES
WITH THEMSELVES

ONE fine day I said, "Let's have some counting in the playground."

"Yes, let's!"

"Run along out then."

The first child to get to the glass door opened it, and they all ran out on the grass. It was lovely overhead but somewhat moist underfoot, so we could not sit down.

"Now I'm going to tell you to make one long line, and I shall be *very cross* if you're not quick."

My severity was received with much laughter.

"Now listen, little ones," I said, with great emphasis. "I want the biggest child at *this* end and littlest child at that end [pointing] and all the others in between like steps. . . . Now begin!"

Such a scramble as it is difficult to imagine, such a chatter as frightened all the sparrows away and caused the school cat to jump from his warm window-sill and flee for his life. It was like the clattering of homing rooks.

"*I'm tallest!*" "*I'm tallest!*"

"No, no; it's *me!*"

"*Me!*" "*Me!*"

"I 'spect I'm littlest," said Nelly, skipping up and down. She was not much elated; it was an inferior distinction. "I'll run right to the other

end." She stood there squeezing and clapping her hands, bright-eyed, watching the struggle of the others.

The middle ones squeezed themselves into a bunch and fought out of it again, and argued and struggled to convince one another of their superiority in height.

"Move down, move down!" cried Dicky, holding his head bravely up in the very middle of the press. "Move down, Nelly."

"Move, move up, Julie! We shall never have room," cried Samuel, near the top.

Joyce stood outside and watched the contest. When the line straightened itself she planted herself in front of Samuel.

"You can't stand there, Joyce," he protested.

"Make room then; I b'long here," she replied stolidly.

So Samuel edged away and squeezed a place for the obstinate little damsel.

"Oh! You're hitting me," snarled Pet.

"No, I never," some one answered.

"I think you're a very 'rude boy," she said more quietly.

Georgie in the thickest of the scrum threw his head back and stood firm with tightened lips. As the crush lessened he sighed, "Ah, that was *fine!*"

The line was fairly straight at last, after nearly ten minutes serious labour and competition.

"Now we're ready."

"Not quite. He's wrong!"

"He's too far up."

"Sam's wrong."

I wanted to see what Joyce would do. So I said, "Joyce, you shall be judge."

"Both begin with 'J,'" said some one irrelevantly.

Joyce walked solemnly down the tiptoeing and swaying line. She pulled out Samuel by the arm. The boy reluctantly came. She silently towed him three or four places down and stuck him in a more suitable position.

"Make room," she said shortly, and Samuel shook himself a little as she let him go.

"Thank you, Joyce," I said. "Now Nelly shall be judge—she is the smallest."

Nelly skipped out, her eyes shining.

"I think those two are wrong," she said.

"Tell them to come out," I whispered, "and stand back to back."

"You're to come out and stand back to back," she commanded.

They did so.

"Oh yes, they were wrong," said everybody.

She made several corrections in the same way, and the gradations were by that time fairly regular, but the straight line was trying to turn itself into a broken circle.

"Tell them to make their line straight," I whispered.

"You're to make your line straight," she proclaimed, and they did so.

"Now run back to your place," I said.

"What a beautiful line! You'd better march past. I'll be the King and look at all my fine soldiers to see if they know how to march. Dicky shall be

my officer, and count them all for me. All the soldiers must remember to salute me or I shall put them in prison."

The long file strutted round the garden. I saw by the look in Joyce's eye that *she* was going to be put in prison. She turned her head away and did not salute. Two soldiers marched her off to a corner of the garden, where she remained covered with glory, and Dicky said :

"Now, you've got not so many soldiers by one."

IV

The next morning was wet, so we divided into groups in the schoolroom, and marked the heights of all the children with their initials on the prepared wall surface. For this occasion I borrowed sticks cut by another class. They were round hazel-sticks a foot in length and divided by grooves round them into quarters of a foot.

I put Samuel and Dicky in charge of two other groups, each armed with a light drawing-board, which they held horizontally on the head of the measured child so that its edge touched the wall and gave the height by its under surface.

The height marked by a piece of chalk the child himself measured from the floor upward with a foot stick under the criticism of the onlookers. The heights were thus obtained to the nearest quarter foot ; nearer would have been nonsensical because of the inaccuracy of the measurers.

The children stood in their bare feet, for it was

early summer and sandals were the rule—sandals and brown bare legs. Every one had to contrive to fasten and unfasten his own buckles.

V

Another fine day we had the line-play again in the garden, and it did not take so long the second time.

After that the children arranged themselves in double files, then three abreast and four abreast, marching round afterwards in great style in each formation.

VI

DOMINOES

I buy some penny boxes of dominoes, and we arrange our little tables all about the room and play in groups of three.

Dicky, Julie, and Joyce are at one table. Dicky runs to fetch the box and deals round the dominoes.

"Put them upside down," says Julie.

"I am," says Dicky. "Only sometimes they topple wrong way up."

"One for you, one for you, one for you! . . .

"Two for you, two for you, two for you! . . .

"Three for you . . ." He chants as he deals.

"Now then, ready!" he cries, and shuffles back into his little chair, spreading his hands over his own pile.

"Who begins?"

"I'll begin," says Julie.

"Werry well," says the good-tempered Dicky.

Julie lays down her first domino—a blank and a six.

It is Joyce's turn.

"Put down a six or a white to join on, Joyce," cries Dicky excitedly.

Joyce stolidly turns over her things.

"There's one; there's one. I thought I saw one!" says Dick.

"Must there be two sixes or two whites?" says Joyce, with aggravating calm.

“No ; but you can if you like,” cries Dick.

Joyce planks down a double-six. Julie begins to match it against the other six, but Joyce slaps her hand and insists on doing it deliberately herself.

“Have you got a white one too ? ” says Dicky, a little sadly. He wishes Joyce would be a little jollier.

Joyce nods and deliberately puts it out—a white and a five, while Julie is dancing with impatience.

“Oh, dear ! I’m sure you’ll win and I shall be last,” cries Dicky.

Julie begins to play again, but Dicky reaches out both hands to restrain her. “Oh, Julie, it’s my turn,” he pleads, and Julie collects her scattered dominoes to cover her mistake. She is always conscious of an imaginary audience.

“Oh, oh ! I can match one,” cries Dicky. “I’ve only got one to match. No, no ; I’ve got another.” He puts them down with eager fingers, jumps up, clasps the back of his chair, and does a little caper before he sits down again.

Julie is ready and matches one domino against Dicky’s. Then it is Joyce’s turn.

“I wish you were not so slow, Joyce,” said Julie severely.

Joyce is aggravatingly silent and proceeds to take longer than ever. I come up.

“Are you tired, Joyce ? ” I inquire jovially. “Would you like to lie down ? ”

She shakes her head and hurriedly plays her turn, the other two watching with relief. She is really enjoying the game, but seems to fancy that

her *rôle* is to appear preoccupied and indifferent to what excites enthusiasm in the others.

"I can match two, I can match two!" cries Dicky. "P'raps I'm going to win."

"I can only match one," says Julie.

Presently a shout announces the end of the game, and the other children turn their heads to see.

"I've won, I've won, I've *won!*" says Julie, running up to me.

"How lucky. Put it down on your score."

She runs back to her place.

We play the game for half an hour or so, and then add up the totals. Several children stand at the head of the scores as winners, and we give them all a clap.

VII

Simple numerical games with ordinary playing-cards or the penny packets of Tom Thumb playing-cards can be played by the older children when a recreative change is needed, as, for example, on a Friday morning. They are an aid to the visualization of number groups. Such a one as "Sevens" is quite suitable, where one child leads off with a seven. The numbers six and eight of the same kind must follow, and a child may play either or both when his turn comes, and if he had them, five and nine of the same kind as well; or he may always play another seven to start another suite. The winner is the child who first gets rid of all his cards.

VIII

I will describe a few other number-games, some of ancient origin, which are always played with great zest. They can all be played by groups of children sitting round separate desks or tables, or better still in groups on the floor. The little ones will soon learn to rely on themselves to keep the rules.

Nine Men's Morris is an ancient Greek game played with the square arrangement shown in the illustration, and twenty-four black and twenty-four white stones. The square may be drawn on a large sheet of paper or on cardboard. An older class should get them ready for the little ones as an exercise in geometrical construction. The outside square should be about one foot across.

The game is played by two children (two others can watch and take turns). The stones are placed on the points where the lines cross, and the object is to complete a line of three of one's own colour. Each time this is done the successful child writes down '1' on his score. The game might seem altogether too simple to an adult, but young children find it quite difficult to circumvent their opponents.

Any contrasting objects may take the place of black and white stones, *e.g.*, stones and conkers, sea-shells and walnut-shells, discs of brown and white paper, or squares and discs cut out of paper.

Noughts and Crosses is a similar game played by two. It is simpler and does not provide so much scope. It may be a corruption of the Nine Men's Morris. It is very familiar. The object is to get three O's or three X's in a row.

Hickory Dickory Dock is played in different ways. We have played it thus :

With a small plate and a blue or red crayon the children draw a round on a piece of paper, cut it out, and then carefully arrange the clock-figures round it.

When the face is thus finished two or more children take it in turns to close their eyes and dotting with a pencil say :

Hickory Dickory Dock,
The mouse ran up the clock,
Clock struck one, Down he came,
Hickory Dickory Dock.

On " Dock " the pencil is kept still, and the child opens his eyes to see what number he has hit. If a number he writes it on his score, if not he writes down nothing. Four children can easily play at this, and they must prevent each other from peeping and mistakes in the scores, for eagerness may overcome honesty. At the end of a certain time the scores are added up.

Tit-Tat-Toe is similar to the last, but the figures are arranged irregularly and in compartments, so that a hit anywhere in the round counts for something. Here again the children make their

own drawings for the game ; score is kept in the same way, and with the same precautions. The ring should be about six inches across. A larger number may be used with older children, say twenty in the middle and nineteen compartments outside.

While the eyes are closed the following rhyme is said :

Tit-tat-toe,
My first go,
Three jolly butcher-boys all in a row,
Stick one up, stick one down,
Stick one on the old man's crown.¹

Skittles. Home-made skittles may be contrived out of thick hazel-sticks or small fir logs by the wood-work class. The bottoms are sawed off flat and smoothed down with sand-paper, the tops are shaved off into a dome by means of a good knife, and then with Indian ink and water-colour paint quaint faces and costumes are drawn upon them. They are then presented to the younger children, the more sets the better.

The game is of course to fix up the skittles at equal distances apart in any orderly arrangement the children may fancy, and then, standing behind a line drawn on the floor, to aim a ball at them, knocking down as many as possible.

Score is kept by one child on a small board or large sheet of paper. A large class would of course be divided into groups. Each child has to add up his own score correctly, and number is thus a very important part of the game.

¹ *i.e.* the centre of the ring, where the highest number is.

Nine O's. Nine O's involves number only in the scoring, but it makes children very observant of space and distance.

Two children play at a time ; one has a blue and the other a red crayon.

One draws nine O's in a square ; the O's are at least three inches apart. Then the game begins. Julie's object is to try and prevent Dicky from joining all his O's.

She joins the two corner ones with her blue line. (Dotted line 1.)

Dicky joins the first and the one below it with his red line. (Black line 1.) Every O is joined up by two lines and then it is done with. The lines may not cross or touch each other.¹

Julie joins that one with the corner one. (II.....)

"Oh, dear!" cries Dicky, "you've done for me now. You've made two of the poor O's prisoners. How can I get at them?" He sits and puzzles over it. "Oh! I see. It's all right after all. I can join them together by themselves." He draws a line. (II——.)

Julie changes her sphere of action and joins up two outside ones. (III.....) "Why I nearly joined that bottom one in the corner three times. I was just going to," she says.

Dicky's concentration increases. He draws his third line in silence. (III——.)

With a sudden inspiration Julie draws her fourth line. (IV.....)

Dicky looks very puzzled, thinks that he is sold,

¹ *There are only two dimensions. The O's are divalent!*

but quietly draws his fourth line (IV——) in a gentle despair.

It is then Julie's turn. She searches about the paper. Behold there is one unjoined O, and it is her turn to draw. She has beaten herself. She bites her lip in disgust.

The situation slowly dawns upon Dicky.

"I've won, I've won, I've won!" he shouts at last, scarcely able to contain himself.

WEIGHING AND MEASURING

THE kitchen scales and the larger weights gave us material for much work and play. The younger children did not of course use these appliances, but had a see-saw and balanced their weight-stones on it. The see-saw was made by the woodwork class and consisted of a long (but thick and firm) plank, with a wooden edge set in a block on which it swung. The game always began by balancing the beam accurately, and when that was done objects and weight-stones were counterbalanced at either end. The weight-stones were rounded flints approximately doubling in size. A pound stone, a two-pound stone, and a four-pound stone they were called. The pound standard was first selected, and others found to counterbalance it accurately, the two-pound stone to counterbalance two of the pound stones, and the four-pound stone to counterbalance two of the two-pound stones. Then the weights of fresh stones were guessed and proved by balancing, and a similar guessing game was played with any objects in the schoolroom.

The older children were ready to use kitchen balances and guessed the weights of all kinds of objects: bags of stones, conkers, fir-cones, books, blocks of wood, coal, coke, fire-irons, potatoes, turnips, &c., and materials used for the pancakes

and Christmas pudding, the weights being afterward tested by the scales. The games were organized in exactly the same way as the tasting-games, the children dividing into groups with weigher and scorer.

With cheap and abundant water and a varied collection of jam-pots used for paint-water, and with a pint and half-pint measure the children played guessing-games as to the capacity of the various vessels.

Both these plays occasionally gave place to a game of shops where the commodities were priced and sold by weight or by measure.

For a few days they insisted that they were in Africa, and had to buy their paint-water by the gill from a water-carrier. Shells or beads or conkers make very good primitive money, or cardboard coins may be used.

ANOTHER WEIGHING

OUT of the stick-box and out of the stone-box we got sticks and stones of very nearly the same sizes and some one brought some bits of thick lead pipe and some one an old iron weight with no name on it, and another a small iron round from a cooking-stove (probably surreptitiously).

When the things were collected we found we had some pieces of deal, a piece of oak, a flint, and a bit of marble, the lead and the iron. The lead pipe must be hammered flat, the children said, "because it looks bigger than it really is." They handled the things and then, at another table, handled the weights, and at length declared they were ready to begin.

The guessers we chose first were some who had won in a previous game. Those we chose second were the worst ones in order to make sure that they had some practice. They lifted the various objects in turn and guessed their weights while the remaining children looked on. Their guesses were afterward tested by the scales.

Then we divided into groups and borrowed three pairs of scales, and there was room for every one to play.

Each group chose a scorer and an umpire, the one to keep count and the other to control the pro-

ceedings, but they took turns at guessing ; they did not want to miss anything. There is danger in letting each child keep his own score unchecked. With the best intentions a child may allow his ambitions to overcome his sense of honesty and fairness, and a bad habit of dissembling may be formed.

A discussion followed the weight-guessing.

Henry said, "Deal is the lightest thing we've got here."

"And lead is the heaviest," said Meg.

"Well, it's just a bit heavier than iron, but not much," remarked Christopher, wagging his head.

"Well, I said it *was* heavier," argued Meg.

"And oak's heavier than deal."

"We've got an oak box at home that's awfully heavy," said Patty. "I can't move it."

"I nearly did," said Jack.

"You didn't," said Patty.

"Here's something I've forgot," said Willy, dragging from his pocket a fisherman's cork float.

"Oh, bother ! We ought to have three of them," said Christopher.

"I believe they've got some in the other room ; the babies were using them for rafts," I said. "Run and ask very quietly, Christopher. Knock at the door, and don't interrupt if they're in the middle of a story, just wait," I added, holding him by the sleeve till he heard me.

He returned triumphant and handed them out to the three umpires, and in a moment we were at the game again.

"Our lot's done," announced Meg first.

“Cork’s the lightest of all. Quite the lightest.”

“Ours isn’t finished. Do be quiet,” said Jack.

“We’ll wait for every one,” I said. “Have you added up your scores yet?”

“Well, do it then, and I’ll write them in my book.”

“Cork’s the lightest,” whisper the irrepressible first set.

“Ssh! They do worry us,” complained the others.

“Some folks’ll have to go outside in a minute,” I suggested.

“We’ve done now,” announced the slowest set.

“Let me see; how did you keep your scores to-day?” said I.

“We all had strips of paper, and Christopher had two,” said Meg. “He was scorer. Everybody weighed with their hand, and wrote down their guess.”

“Did they read it out?” This is a precaution against altering.

“Yes; when everybody’d guessed, we all read it out. And then I weighed on the scales.”

“Were you umpire?”

“Yes, and then the one who was nearest had a tick on Christopher’s paper. That’s how we did every time.”

While the scores were being added some of the unoccupied children helped, some looked out of the window, some continued to handle and heave the weights and the materials they had been using.

“Oh! do let’s have the bath from the little ones’ room and let the corks float,” cried Christopher.

“ Well, you might,” I said. It is a shallow sponge-bath, in which they sometimes have sand and water and sail their little boats. “ I shall have to fetch it, I suppose,” I said with an affectation of fatigue.

“ Oh no! Two of us could,” Christopher volunteered with great eagerness.

“ And scrape all the walls and doors ? ”

“ No, no ! ”

“ Are you quite sure ? ”

“ Yes, yes ! ” Christopher elbowed through the children and made for the door.

“ Choose two strong and careful people to help you.”

“ Henry and Eric,” he said without hesitation, though he is not very friendly with them.

Henry and Eric were departing with a preoccupied air.

“ One of you must undertake to open the doors,” I called after them.

Soon we heard a mysterious scuffling noise in the passage.

“ It’s like what Alice heard when the lizard came down the chimney,” said Mary, who was standing near me.

Next there was a sound of voices arguing.

“ That’s just like it, too,” laughed Meg.

The door was flung open with a flourish by Christopher, while the other two supported the shallow bath and trundled it gently along.

“ Perhaps Mary will get some water,” I suggested, in order to encourage her.

“ Where’s the can ? ” she asked. She really knew, but was diffident.

“In the shed,” cried Meg. “I know, I know! Let me show you, Mary. Come along!”

“You’re to get the water, Mary,” I said.

They brought back the can between them, hanging their free arms well away from their bodies to balance the weight on the others. Mary poured out the water in a silence which permitted its splash to be heard distinctly.

Certain foreseeing people had quietly possessed themselves of the things, and were holding them ready. The others bethought themselves of them at this moment and were disappointed.

“How beautifully the cork floats.”

“It’s hardly in the water at all.”

“It’s right *on* the water, not *in* the water.”

“That’s why they use it for life-belts.”

“Those at the baths are made of canvas,” said Patty.

Everybody laughed.

“But cork underneath—clever!” said Christopher.

“Then why do they use it for bottles?”

“Because it’s so light to hold, I ’spect.”

“Oh, I know! It’s not that; it’s because it won’t let the water out.”

“And because it’ll squeeze in.”

“This cork’s all hard,” remarked Jack thoughtfully.

“It’s been in the sea, on a fisherman’s net,” I said.

“Oh!”

“What for?”

“Oh! I seen them when I was by the sea, all

along the sides of the net. And they bob up and down on the water," cried Meg. "The net's under the sea," she added more softly, a questioning look on her face.

"Do the fish try to bite them?" asked Mary.

"No, of course not," laughed Christopher.

"Well, what then?" ejaculated Meg, and Christopher turned away with a sheepish expression.

"I should say they were to keep the net up, so that it wouldn't get lost," said Meg slowly and thoughtfully.

"Oh—ah!" sighed the rest with satisfaction.

"Now let's try the woods," said Patty.

"I thought she meant places full of trees," laughed Willy.

The others ignored this fatuity.

"Don't splash. Put them in gently so that the water doesn't wet them," said Meg, spreading out her empty hands in a warning gesture.

The bits of oak and deal were quickly laid on the water.

"Why, the oak's going to sink."

"No, it isn't!"

"Well! I shouldn't like to sit on an oak raft. I should get wet every time a wave came along."

"It's nearly under the water."

"The deal's all right."

"Hooray for the deal!"

"Which wood do they make boats of?"

"They make the keel of a hard heavy wood——"

"Like oak!"

"And the sides of a lighter wood that will bend," I said.

“Like deal! I shall look very particularly at the next boat I see,” said Henry.

“That won’t be till the holidays,” said Eric.

“P’raps not.”

“A boat of all oak would sink,” said Jack.

“Battleships are made of iron,” contradicted Henry.

“What rot!” cried Christopher. “Let’s try the iron.”

“It’s drowned at once,” sighed Willy. He rather fancied an iron ship.

“Well then, who says ships are made of iron?” jeered Christopher.

“Let’s try the lead.”

“What a splash!”

“That was stupid,” I said. “We’re not dressed for a shower-bath.”

“And the stones.”

“They all sink, of course. How dull,” said Christopher.

“I want a tin lid from the cupboard,” said I, “and one of the tin plates.”

Mary fetched the one and Christopher the other.

“This lid and this plate is really made of thin iron; look, it’s rusting along the edge,” I said. “Do you see, children?” I handed it round. “It’s just turned over.”

“Oh!” they murmured with attentive eyes fixed on the objects.

“Look, it sinks in the water,” I said, dropping it in sideways, and waiting to be contradicted.

“Let me have it,” said Meg, reaching for it.

But Jack got it first, and she gave it up to him, according to our rule.

“Look!” said Jack, but he clumsily dropped it in again.

Meg got it this time and held it with careful, graceful finger-tips. “Look!” she said, and floated it triumphantly on the water. “I ’spect it’s because it’s thin, and it’s hollow like a boat.”

I let them fetch a cup and saucer and a small bottle and they found that they all floated empty and sank when full because the glass and china were heavy. This very interesting play was leading them on by sure degrees to the conceptions of relative weight and flotation.

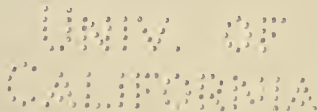
Our lesson ended in a play with a fleet of oddly consorted boats. Corks, flat bits of wood, tin lids, paper boats, and walnut-shells.

“It makes me think of the bits you get round your feet when you paddle in the sea after a storm,” said Meg.

“Let’s drop the iron and lead on them so that they sink!” cried Jimmy, always more interested in pranks than reasoning.

“Yes, but no wet clothes,” I said cheerfully, but very firmly. “Anyone who makes a big splash will certainly have to clear out of this!”

“And we shall never play it again,” added Patty.



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