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THE SUGGESTIBILITY OF CHILDREN.

By MAURICE H. SMALL, Fellow in Clark University.

Belief in the power of men to influence men is very old. In the blindness of antiquity, it endowed certain classes with supernatural power and made them mediators between their fellows and the gods. It gave the Egyptian doctor prestige, for, in the Ebers Papyrus, an Egyptian medical document of 1552 B. C., there is a record of a case of laying on of hands and raising them in benediction to drive away disease. It gave a prerogative to the Persian Magi while they sang their incantations and taught kings and philosophers and astrologers the mysteries of sacred things. It followed the Indian fakir when he told his beads and set the votive lamps aglow.

This belief had its origin in *mystery*. Not all could hold direct communion with the gods. Heraclitus says: "The Lord whose temple is at Delphi, neither utters nor conceals his meaning, but shows it by a sign." The same philosopher hints at the *charm* of mystery when he says: "The *hidden* harmony is better than the open."

To understand these "signs," to reach the "hidden harmony," and to gain influence with their fellow men, soothsayers and prophets sought seclusion; Massalian priests practiced their ecstatic dancing; and Hesychast monks, or "Navel-Souls," upon Mt. Athos, shut out the world with their fixed stare, and fell into trance-like meditation.

From time to time since then, men have tried to discover how it is that one person may influence the psychic activity of another. After many centuries, superstition was forced to yield to the instinct of scientific inquiry. Mesmer tried to answer the question on the ground of animal magnetism; Puységur met it with his psycho-physical theory; the term "hypnotism" came into use, and while the great school of the Salpêtrière, explains the hypnotic condition as a *real neurosis*, the school of Nancy declares with equal emphasis that the "*idea* makes the hypnosis"¹ and that "the hypnotic state is a psychic condition in which the subject is simply open to suggestion in a greatly increased degree."²

¹Bernheim: Suggestive Therapeutics.

²Dr. C. L. Tuckey, Faith Healing in Medical Treatment; Nineteenth Century, Dec., 1888.

This explanation makes hypnotism only an *extreme form* of a universal impulse, the simplest effect of which, is seen in the reaction of natural objects on the mind through sense perception, and in the influence, direct or indirect, designed or accidental, which individuals exert upon one another everywhere.

In this paper, it is the aim to show some of the results of psychic activity, intentionally induced by indirect methods, and also to show in the records of imitative acts, which are simply the motor expression of a psychic state of which suggestion is the cause, the more accidental influence of environment on children, and it seems both legitimate and sufficient, to regard "suggestibility," in a provisional way, as a natural condition of mind which makes it possible for psychic activity to be induced in a human being by means of a hint, sign or symbol; an indirect question, proposition, association, or kindred stimulus.

In this paper, Section A presents a record of experimental work; B, a classified record of 4,335 cases of personal experience furnished by educators, pupils, and parents; C, some inferences from the data, with hints about their relation to education.

A. EXPERIMENTAL WORK.

I. IN GROUPS.

The general *aim* of the experiments was to see how far illusions of sense could be produced by simple means in healthy children, grouped in their own schoolrooms. No attempt was made to estimate the part played by imitation in producing the results; it is so closely related to suggestion that separation is not possible, yet, care was taken to reduce the chance for it to a minimum. The work was done with nine grades, the last including the four classes of a high school. No pupil was passed over in any test excepting at his request.

1. *Tests for Illusion of Perfume.*

Means. An atomizer with a Newman spray tube, some distilled water, and, incidentally, some very faintly perfumed cards, one of which was placed in the hands of the teacher, while another was given to some pupil who was asked to step to the desk and see whether the card was perfumed or not, but who was charged not to give judgment until asked.

Method. After a moment of talk about matters of immediate interest to the grade in which the experiment was to be made, in order to gain the attention of all, the pupils were asked about some of the pleasures of last spring—walks in search of flowers, what flowers came first, where they were found, why boys and girls like flowers, and how men preserve the fragrance of May-

flowers, violets, apple blossoms, and roses. Then they were asked whether they thought they could tell if the odor of any flower were in the room.

I next placed labelled perfume bottles on the teacher's table and, taking the atomizer, told the pupils that I was about to make a spray in the room, as they might have seen friends at home spray plants; that if any one felt sure that he could smell perfume after the spraying, I wished him to raise a hand at once and hold it upraised until I could count hands in the room at the end of the trial, which lasted about a minute; but that I wished no hand raised, unless the pupil thought he got perfume.

A generous spray was then made in two or three places in the room. The teacher in each room assisted in the counting, until the pupils of the Fourth year were reached. From this grade, the pupils *wrote* the name of the perfume which was suggested to them.

Results: Grades I, II, III. The children of Grade I at first seemed to manifest an expression of wonderment in their faces, but like the other grades, they were eager and very attentive. When they saw the spray, smiles went over their faces, their hands went up, some declared that they could "smell it," that it was "nice" or "real strong," and some wanted "some on their handkerchiefs." When asked by their teacher if they were sure that they were not mistaken, many declared themselves "sure." In two rooms of Grade II, I made a second spray immediately after the first had been recognized, and asked if the pupils noticed any change. Several at once answered: "It's a good deal stronger."

One reason for writing the name of the perfume in all trials after Grade III, was that the first teacher in charge of a room of pupils in Grade IV, said that her pupils would follow certain leaders if they had an opportunity. In Grades VI, VII, and VIII, there was a marked uncertainty of manner. The pupils hesitated more about writing than those in the grades before them. Certain movements seemed to indicate that it would be a help to them to know what their friends were writing. The 23 in Grade VIII (see table) who "thought," for an instant, that they "got the perfume," were not at all sure. No one in this room wrote. Some of the number said that "for a moment during the spraying," they "thought that they got the odor of Mayflowers, then of apple blossoms," but that "it went away and did n't come back."

The names written in the different rooms were in themselves a suggestion. Mayflowers, violets and apple blossoms were the favorites in the order named, but the one most frequently mentioned in the introductory talk always secured most votes. About 8 per cent. of the names were scattering. Of these,

"White Rose" and "Lily of the Valley" were the favorites. "Lavender," "Heliotrope," and "Lilac Sweets," "Musk," and "Jockey Club," were named several times each, while "H-o-a-r-t-s C-l-o-n-e" and "H-o-r-t-s C-o-l-o-n" appeared once each as a compliment to "Hoyt's Cologne."

It is interesting to note that three teachers, two of whom were in a side room during the experiment, got a faint suggestion of perfume.

The table which follows, shows the numerical result in 540 cases. The letters, S, F, N. S, O, and G. C, at the head of the columns, stand respectively for, "strong," "faint," "not sure" (degree words used by the pupils) "no perfume," and "given card."

TABLE I.

Grade.	s.	%S.	Perfume.		No Perfume.		O.	%O.	G.C.
			F.	%F.	N.S.	%N.S.			
I,	93	98	-	-	-	-	2	2	1
II,	62	95	-	-	-	-	3	5	1
III,	55	83	-	-	-	-	11	17	1
IV,	55	63	11	13	-	-	19	23	4
V,	20	50	8	20	-	-	12	30	2
VI,	19	27	7	9	10	14	35	50	3
VII,	4	13	-	-	-	-	27	87	1
VIII,	-	-	-	-	23	67	11	33	2
High,	-	-	25	47	-	-	28	53	4
Total,	308	51		33			148	19	
				392			148	Av. % Illus'n,	73

In one room of Grade VI, the work was done immediately after a recess. The work in Grades VII and VIII, was taken up just after school opened in the morning. The writing of the name of the perfume seemed more of a distraction here than in the lower grades. It would be interesting to know how far these matters would account for the great variation in results in these Grades, but it could not be determined at the time of the experiment. The results give much higher percentages of illusion in older pupils in the case of individual tests. Compare with table III, Individual Tests.

2. Tests for Illusion of Taste.

General. The subjects were children of Grades I, II, III, and IV. Salt, sugar, and quinine were the substances used. Salt was omitted after the second grade in order not to take too much time from the work of the class. *Distilled water* was used in the tests. The teachers recorded results.

Method. The pupils were asked if there were any in the room who did not know the taste of *sugar*, and how much sugar it would take to sweeten a common sized cup of tea or coffee.

Then they were asked if any one present would like to see if he could taste a very few grains of sugar. There was always an eager desire to try, and some pupil was at once asked to fill a wide-mouthed, four-drachm vial at the faucet. He was then allowed to put a few grains of sugar into the vial, which was immediately put into a box containing three similar vials that had been previously filled with distilled water. The box also contained three small pipettes for dropping the liquid. The child selected was given a taste of the sugar solution. After being asked to tell just what he thought, each pupil in a room was given an opportunity to taste, but distilled water was used instead of sugar solution.

In a few cases, the liquid did not taste sweet on the first trial, but a repetition with a larger quantity usually produced the illusion. When increased quantity failed, pipettes were changed and the pupil was given sugar solution.

During the sugar test, the faces of all were bright and smiling. There were no odd movements of eyes, mouth, or body. Each pupil gave judgment almost as soon as the water had dropped upon his tongue. The degree-words were: "sweet," "real sweet," "a little sweet," "it's good," "it's as sweet as a cup of tea with a whole spoonful of sugar in it," and one declared it "just right." A few timid ones in Grades I and II, did not wish to try. Some of these were old enough to have been in Grade VI, which may help to explain their lack of desire to make the trial.

The results appear in

TABLE II.

Grade.	Number Pupils.	Very Sweet.	Little Sweet.	Total % Sweet.	Did not Taste Sw't	Error.	Total % D. N. T. S.	Did not Try.
I,	94	76	16	98	-	-	-	2
II,	70	47	16	90	4	-	6	3
III,	64	24	33	89	7	-	11	-
IV,	87	18	47	74	3	17¶	23	2
Total,	315	165	112	88		31	10	7

¶ In the experimenting, it was the plan to mention but one substance at the time of any test, but in one room of Grade IV, the idea of bitter substances was brought in by accident so as to be contrasted with sweet substances. The first ten pupils in the room pronounced the water sweet. The eleventh said "bitter," and eleven of the fifteen remaining declared it "bitter" and persisted even when I gave them genuine sugar solution. In another room, two girls said, "It tastes like perfumery." The test followed that for illusion of perfume.

The same method was followed in using *salt* in Grades I and II. It was apparently less pleasurable than the sugar test. The faces of the pupils were more sober, and in a few cases, slight contraction of the muscles about the mouth was noticeable. There were more who did not wish to try the experiment than in the sugar test. The results were: whole number pupils, 89; said "salt" in some degree, 75; did not taste the salt, 4 (three of these said, "It is sweet"); did not try, 10. Of those who made the trial, 95 per cent. got the illusion, 5 per cent. did not.

The test with *quinine* showed the most marked effect of suggestion both in immediate, and in after signs. These signs were: (1) careful watching of the face of each pupil tested, by all the others; (2) in the faces of some pupils, an expression of perplexity that changed to dread after others spoke words that gave the idea of great bitterness, and these did not "wish to try" when their turn came; (3) rapid opening and shutting of the eyes while waiting for the water to drop from the pipette upon the tongue; (4) the *bitter face*, deep wrinkling about the eyes and mouth; (5) on the part of many who made the "bitter face," little nervous shakes of the head and body. Some laid the head down upon the arm for a moment; others wiped the mouth out with a handkerchief, and two boys in Grade II, spit the water out as soon as they tasted it, declaring it "awful bitter."

The *Results*. 288 pupils, about equally divided between Grades I, II, III, and IV, were concerned in the test. 218, or 90 per cent. of those who made the trial, pronounced the water bitter in some degree. 23 did not find it bitter (six of these said "sweet"); and 47 did not feel willing to try.

The degree of bitterness was expressed by the words, "a little bitter," "bitter, ough! I don't like it," "awful bitter," "tastes like bitter medicine," "tastes like Paine's Celery Compound," and one boy who declared the water "just right" in the *sugar* test, came through the *quinine* test with the opinion that it was "bitter, but not so awful bad."

Ten minutes after the quinine test, I asked in several rooms if any could still taste the bitter substance in the mouth. A large number said they could. In some cases the reflexes of the bitter reaction appeared in a slight degree, and I saw one nervous little girl wipe her tongue again. In one room of Grade I, there was a boy much older than the rest in the room. He pronounced the water "just a little bitter." In the front seat of the last row, a tiny boy said, "just a little bitter." The teacher in charge of the room said, "I was amused to hear Harry say what his brother said so long before."

The most persistent suggestion of bitterness was that of a boy in Grade IV. When he entered school on the morning

after the test in his room, he said to his teacher, "That bitter stuff that Mr. Small gave us yesterday, made me awful sick after I got home." A case somewhat similar was that of a little girl in Grade I, who had not missed a day for the term. Soon after my entrance to her room, this little girl became ill. She was excused from school, but speedily returned with her mamma. The lady received a cordial invitation to enter the room and examine materials and methods and speedily convinced herself that the child was wrong in saying that there was "a doctor up to school" who was "going to vaccinate everybody."

3. *Test for Illusion of Sight.*

The *means* used were a small wooden box with a little windlass passing through its sides near one end, and a toy camel made of cast iron and heavy enough to slide on a smooth table with perfect steadiness. A black thread, two feet long, was tied around the camel's neck, and the free end was then passed through a hole in the end of the box which was kept next to the camel during the experiment, and fastened to a stick. Within the box and passing over the windlass, was another thread which unwound from a concealed windlass near the rear of the box. When the box was held in a vertical position before a roomful of pupils, it was possible to slide the cover half way up and show the working of the windlass without revealing the fact that the thread which played over it was not connected with the neck of the camel.

The *Method*. After showing the action of the windlass, the apparatus was placed on a table near the center of the platform, with the thread nearly straight. The directions were, "Fix your eyes on the tip of the camel's nose." "When——— thinks all have their minds set on the work and says 'ready,' the crank will be turned as slowly as possible; if you see the camel move, raise a hand and keep it up." Each trial lasted a minute. The box was always pressed down upon the table by my left hand, while the crank was being turned by the right.

The *Results*. 381 pupils made the experiment. Grades I, II, III, IV, VI, and VII, were included. 291 saw the camel move, although it never did; 90 saw no motion. The respective per cents are 76 and 24. In Grades I-VII, the per cents of illusion were respectively, 96, 81, 80, 70, 34, and 71. The sixth grade room which gives the low per cent, is the same that lowered the per cent. of illusion for that grade in the perfume test. The room was large and light, and the experiment was made soon after recess. This experiment is repeated in the Individual Tests and a comparison of results will be interesting. See table III.

II. INDIVIDUAL TESTS.

These tests were made with thirteen boys and girls in the two upper classes of a high school, and eight boys and girls in the seventh grade of grammar school. All were in normal health and strength. They were also acquainted with the experimenter. For this reason, there was not the slightest nervousness or anxiety in any case to impair the judgment.

1. *For Illusion of Taste.*

The subject filled two vials with water, put a little sugar into one and a little salt into the other, and sat down at the experimenting table. After being blindfolded, each was asked to tell the taste of the liquid dropped from the pipette upon his tongue. Distilled water was used, as in the Groups. After a trial, the subject removed the bandage from his eyes, poured the water from one vial, filled it again after rinsing it carefully, and put some quinine into it. The test was repeated in all its steps just as before. The results of this test will be shown with those of the whole group, in table III at the end of this series.

2. *For Illusion of Motion.*

The camel was used as in the Group work. It was placed about twelve feet from the observer, and was placed so that, if moved, its motion would be at right angles to the line of vision in the first trial; in the second, parallel to that line. In this experiment, two who did not discover motion said, "My eyes are not very good, any way." Some who saw motion, determined it relatively. One of these "saw it" (the body of the camel) "move *just a little*" over a vertical joint in the sheathing of the stair-railing above which it was placed. Another "saw the opening between the camel and the wall, grow just a little wider."

3. *For Illusion of Heat and Cold.*

In this experiment, a lamp, a pin with its point pushed through the rubber tip of a pencil, and a smooth-pointed piece of wood were used. After an area near the middle of the back of the hand had been pointed out, the subject was blindfolded. He was told that I wished to judge of his ability to discriminate degrees of heat and cold. The words used in the experiment were: "I shall now heat the pin in the flame of the lamp. I will not burn you, for I will try the pin on my own hand first." I usually succeeded in burning *myself*, however, and at once told the subject, at the same time remarking, "Now I am bringing it straight toward the spot on the back of your hand. There! do you feel it?" At this instant five of the twenty-one felt

the hot touch plainly, although the pin had not touched them at all. One of the grammar school boys, in describing the sensation, said, "I felt a feeling shoot right through my hand."

A high school boy, when asked if he noticed any smarting after the "burn," replied: "It doesn't exactly smart: it feels sort of funny; I can't describe it."

When the illusion could not be produced by mere words, the pin was heated again and the subject was touched lightly and quickly with the smooth-pointed piece of wood. At the first trial, nearly all felt, first a light touch, then a sensation of heat; but some jerked the hand from the table the moment they were touched. After being assured that they would not be burned, another trial was agreed to by them, and they readily recognized both touch and heat.

The experiment for Illusion of Coldness is less satisfactory than that for heat, because of the presence of the "cold spots" in the skin. These had not been previously located and marked. This fact, however, would in no way affect three who felt the cold touch without having been touched. In this experiment, the pin was cooled on a frosty window-pane, but the subjects were touched with the pointed wood, as in the previous experiment. A young man of seventeen, felt the *heat* of the pin, but did not get any sensation of coldness.

4. *For Illusion of Touch.*

On the right hand of each subject, an area about an inch square was located between the wrist joint and the thumb, another of the same dimensions on the middle of the back of the hand, and a third, on the right side of the hand, between the wrist and the little finger. The eyes of the subject were then bandaged and all was ready for the trial. The aim was to see whether it is possible to produce sensations of itching, tickling, or light touch upon the hand, without touching it at sensitive points.

Taking a finely ravelled thread, I said to the subject: "We will try the area named first." "I am bringing the thread down toward it. If you feel it, I want you to tell me where, and what the sensation is like. There! if any one were touching my wrist, perhaps I should feel the lightest little touch imaginable." In the cases in which a reaction was secured without stimulation, I was usually interrupted with, "Now I feel it!" Then my description went on: "In a moment, it might grow plainer as though a mosquito were alighting on the spot, and it might change to an itching as though he were just beginning to bite." At this point, a girl of sixteen scratched her hand with a good degree of energy, and a boy of twelve repeated the act three times. In his case, it took the combined

efforts of his father, his mother, and the experimenter, to convince him that his hand had not been touched. In only six of the twenty-one cases was there a result without stimulation. The others apparently knew nothing of dermal sensations.

After having tested each in this way, I removed the bandage from the eyes, and drew the frayed string lightly over the hand. When the eyes had been bandaged once more, I said, "I shall now touch you lightly with the tip of this pencil. If you feel it, tell me where." The subject was always touched on the nails, where so light a touch could not be felt. In eighteen cases, the touch was located on the "left side of the wrist," "right side of the wrist," "back of the hand," "near the base of the thumb," and three failed to get any sensation. Two located the sensation outside of the areas named at the start.

5. *For Illusion of Heat Waves.*

The area to which the attention of the subject was called was a narrow one extending from the wrist along the back of the hand to the middle finger. Each subject then saw me light a match and move it backward and forward over this area. At the same time I described the sensation of warmth produced by the waves from the match. The subject was next seated at a table on which he laid his hand palm downward. His eyes were bandaged, a thick note-book was held about six inches above his hand, and a match was lighted and moved backward and forward close to the upper cover of the book. When the match was heard burning, nearly all the subjects felt waves upon the hand. Several said it "felt as though some one were fanning warm air" over their hands.

In the table below, R shows that an illusion was produced by the method and means outlined in the description of the five preceding divisions: O, indicates "no illusion;" RR, very marked illusion; J, jerked hand from table; S, scratched hand; "soda," "tastes like soda;" II. O. S, illusion without stimulation; T, illusion after stimulation; W, illusion of heat waves.

In the results under "Motion," the dash marks cases in which the camel was thought to move parallel with the line of vision as well as at right angles to that line.

In these experiments, out of 21 possible chances, illusion of taste occurs 17 times for sugar, 17 for salt, and 17 for quinine; the illusion of heat was noted in 19 cases, and that of cold, in 20. There are 6 cases of illusion of touch without stimulation, and 18 cases after the subjects had been made to fix attention upon the sensations of the skin upon the hand by stimulation with the string. Waves of heat were felt in 17 of the 19 cases tried. 11 of the 13 subjects from the high school saw the camel move in one direction; 7 saw it move in two directions.

TABLE III.

Subject.	Sex.	Sweet.	Salt.	Bitter.	Motion.	Heat.	Cold.	Il. O. S.	Il. T.	Waves.
W-n.	M	R	O	R	R	RR	R	O	O	O
S-n.	F	R	O	R	R	R	R	O	RR	O
L-r.	M	O	O	R	R	R	R	O	O	O
A-s.	F	R	R	R	R-	R	R	O	R	R
C-u.	F	R	R	R	R-	RR	R	O	R	R
T-e.	M	R	R	R	O-	R	O	O	R	R
S-n.	M	R	R	R	O-	R	R	O	R	R
S-r.	M	R	R	R	OO	R	R	R	R	R
F-x.	M	R	R	R	R-	R	R	R	R	R
S-e.	M	R	R	R	R-	O	R	O	R	R
O-d.	M	O	R	R	OO	Rj	R	R	R	R
G-n.	F	R	O	R	R-	O	R	O	RR	R
F-e.	F	R	R	O	R	R	R	Rs	R	R
I.	M	O	R	R		RR	RR	R	R	R
II.	F	O	R	O		RR	RR	O	O	R
III.	M	R	R	O		R	R	O	R	R
IV.	F	R	R	soda		R	R	O	R	R
V.	M	R	O	R		R	R	O	R	R
VI.	F	R	R	R		R	R	O	R	R
VII.	F	R	R	R		R	R	O	Rs	
VIII.	M	R	R	R		RR	RR	R	R	

B. CLASSIFIED RECORDS FROM SYLLABUS XI, "SUGGESTION AND IMITATION."

The eye of the child is quick to see whatever is novel; the ear, alert to hear every new sound; the soul, always waiting birth into new experience. The child feels a relationship to all life. To him, the flowers by the wayside are alive with grotesque faces; the trees are voiceful; the waters of the streamlet, playing children. In the thunder cloud, he hears an angry, muttering giant; in the breeze, a song; in every bird-note and animal-cry, an echo of the past.

To the harmony of these sympathetic vibrations with the past, it is always necessary to add that of those impulses of the child-soul which find expression in moral dynamics. The child is born to aspire. He wants to be a man. His idea of what a man is, comes wholly from what he sees of the man in action. Every change in attitude, every new position of the head, every movement of the lips, every frown, squint, change in facial expression, every gesture of the adult, suggests to the child new possibilities in himself. "How is it done?" "Can I do it?" are the questions that follow each new act observed. The motor mechanism is set to work. The new act is reproduced. The child is more a man, because he has assured himself that

he can do those outward acts which, so far as he is aware, are the content of manhood.

Nothing can be more interesting or instructive than records of actual cases of suggestion and imitation. Those which follow, are typical examples of

I. IMITATIONS OF A SPEAKER OR SINGER.

1. *Attitude.* Children, 7-9. "My pupils often play school. One noon I watched them through the open door. They took turns at teaching. Every girl put work on the blackboard for her class, and, while doing it, stood with her left hand behind her back. It was my habitual attitude. They simply imitated everything I was accustomed to do when teaching."

2. *Attitude.* Girls, 5, 7, and 9. "These girls play school every day. Each imitates the teacher in the room in which she belongs. The girls have different stoops for each room, and copy the voice and manner of the teacher."

3. *Position of Lips.* Girl, 9. "L. until recently had a teacher whose under lip protruded. After a short time, L. held her lip in the same position. Presently she was promoted. The teacher in the new room always kept her lips tightly drawn. L. gave up the old habit and now goes about with lips compressed. We cannot break her of the habit."

4. *Squinting.* Boy, 5. "Last fall, he went to school for the first time. Soon after, his mother noticed that he had a peculiar squint when very much in earnest. She found later that he got the habit from his teacher."

5. *Position of Head.* "I once heard a fine singer. I noticed the manner in which she stood, held her head, and sang. As soon as I was alone, I tried to sing, keeping the same attitude and poise of the head."

6. "*Cross Eyes.*" Girl, 10. "I had a 'cross-eyed' schoolmate. I thought it must be nice to look in two directions at once, and practiced trying to look that way until my own eyes were seriously injured."

The same craving to test personal power and to gain new experience, that appears in the preceding records, is seen in the tendency of children to copy the lisps, drawls, dialects, inflections, mannerisms of speech, and slang expressions of others, and to reproduce as nearly as possible, the beating of drums, the screaming of whistles, and the ringing of bells, as well as the voices of animals and other natural sounds.

Three classes of reasons are given for these imitative acts: 1. To see if the individual *can* reproduce them; 2. To see how they would *sound* when reproduced; 3. To learn how the vocal organs would *feel* while reproducing them.

Additional illustrations will be found in a continuation of the personal records.

7. *Head, Lips, and Hands.* Adult. "Mrs. E.'s daughter read an essay at graduation. Mrs. E. watched her closely and moved her head, lips, and hands exactly as her daughter did."

8. *Mannerism.* Girl, 10. "My sister, at ten, struggled to wipe her nose after the manner of a very pretty and stylish woman at church."

9. Girl, 11. "At eleven, I aspired to say 'pardon me' as the daughter of a professor used to say it. At about the same time, I caught the word 'penetrate' for 'get through,' the phrase, 'I perceive,' for 'I see,' and other expressions of the same kind."

10. *A Drawl.* Girl, 12. "One of our ministers used to speak very slowly. Whenever I spoke of him, I would roll the r's and talk slowly like this; 'It's —a—very—fine—day.'"

11. *Dialect.* Boy, 5. "My little cousin took a great fancy to our English washerwoman. He soon caught her habit of dropping or inserting the letter 'h' and used to sing, 'Little Hannie Rooney is my Sweet'art.'"

12. Girl, 3 yrs. 8 mos. "Madge was taken to Scotland. When she returned, she could not speak plain English. It took three months to break her from the Scotch dialect."

13. Boy, 5 or 6. "Charlie played with Irish boys about his own age. In a short time, his father could scarcely recognize him by simply hearing him talk. His dialect was very marked."

14. Girl, 8. "My niece tries to speak like her teacher. The teacher is French and has a peculiar way of pronouncing many words."

15. Girl, —. "I had a schoolmate named Ratowski. When I first heard the name, I was constantly adjusting my vocal organs and wondering how the name would sound, if I were to pronounce it."

16. Adult. "When I hear an odd or striking note in music, my throat seems to go through the same strain as the singer's. I do not notice this until the music stops, when I find that my throat really aches from the tension."

17. Girl, 15. "One of my girls invariably copies the tone and manner of those whom she admires."

18. *Complete Impersonation.* Girl, 8. "At this age, I took the name of a schoolmate and acted in every way as she did. She had a long braid of hair which she used to toss from side to side. I greatly admired this, and braided a woollen scarf, which I fastened upon my head to imitate it. I also copied this girl's manner of holding her pencil, walking, and talking."

19. *Slang.* Girl, 17. "The most foolish imitations that

have become general in our high school, are slang expressions and talking through the nose. It is extremely difficult to leave off these habits."

20. *General.* Adult. "From childhood, I have found it almost impossible to avoid catching other people's manners, squints, scowls, tones, and shrugs. In describing the recitations of pupils, I am compelled to watch carefully lest I reproduce lisps and peculiarities of all kinds. I first noticed this when a friend told me that it was not necessary to visit my school to know all about it. I decided then that I must guard against seeming to poke fun at the pupils."

The total number of papers giving a record of cases like those described in this section, is 958. These have been summarized in natural groups. 337 cases are described as imitating "unconsciously." In most of these cases, the act was apparently taken up consciously and became habitual. The 337 cases class as follows: imitation of position of the head, 30; lips, 229; hands, 58; imitation of a frown, 4; squint, 4; drawl, 4; tone, 6; cross-eyes, 2.

Of the 621 records of "conscious" imitation, the classes are as follows: bodily attitude, 100; poise of head, 61; position of hands, 51; position of lips, 78; frown, 34; squint, 31; general expression of face, 33; cross-eyes, 42; odd movement of the eyes, 10; dialect and inflection, 57; tone and manner, 60; drawl, 26; lisp, 9; form of address, 6; slang and profanity, 23. The fourth, fifth, sixth, tenth, eleventh, and twelfth years show the largest number of cases. Attitude and gesture have little or no interest after the fifteenth year, but the poise of the head, which begins to be noted about the fourth year, and the expression of the lips, are studied with increasing interest up to adult life.

The motive seems to be similar when children make

II. IMITATIONS OF PECULIARITIES OF WALKING.

21. *Gait.* Boy, 16 months. "He takes delight in imitating the gait of his aunt."

22. *Limp.* Girl, 2. "Counterfeits her grandmother's rheumatic limp, and exclaims with well-feigned agony, 'O my hip!'"

23. *Limp.* Boy, 3. "Harry's grandfather limped and was never seen without a cane and his dog Milo. One day Harry was seen limping around and dragging a worsted dog by means of a string. 'Why do you walk like that?' asked his mother. 'This is grandpa and his dog Milo,' was the reply."

24. *Position of Feet.* Boy, 12. "Once I saw a man walking and his feet went out just as though it was quarter of three. After that, I tried to walk like him."

Cases like these are very common. Children in the kindergarten catch the limp of the teacher, if she is so unfortunate as to have one. A roomful of girls, eight years old, are reported to walk with a peculiar "switching gait" like their teacher; and several girls of twelve report that they are trying to "walk like an older friend who carries herself gracefully." So, too, on the street and at the public gathering, boys pick up the hitches and halting steps of the weak and maimed, the strut of the dude, and the swagger of the pompous.

The total number of cases of this class is 160. Of these, 70 are imitations of a limp; 90 are of some hitch, switch, swing, or swagger that seems characteristic of the gait of the person imitated.

Far more serious in their nature, and directly related to the hygiene of the schoolroom, are the records of

III. NEUROSES INDUCED BY SUGGESTION.

Some of the records which follow were furnished by physicians interested in the work of the schools. All are authentic. Every teacher will recall some of the forms from personal experience.

25. *Spasmodic Cough.* Children, 10-14. "One little girl in a school had a spasmodic cough. Her laughter always ended in a fit of coughing. In a short time the majority of the children in the room began to cough in the same way. They could not seem to help it."

26. *Adult.* "One evening at church, I heard a harsh, grating cough. Some one across the room took it up, and in a short time, half the people in the room were coughing."

27. *Speech Defect.* Children. "In a certain family, the oldest girl is tongue-tied. She cared for two younger children while they were learning to talk, and although they have no physical defect of the tongue, both talk as their sister talks."

28. *Stammering.* Boy, 5. "A boy of ten in this neighborhood, has stammered from infancy. Harry teased him by repeating his broken sentences, and soon became as bad as he."

29. Boy, 12. "He played with a boy who stammered and was in the same class at school. He imitated this boy at first, 'to see how it would sound.' Now he cannot speak in any other way, and he cannot break from the habit."

30. Boy, 4, and several other children. "When I was four years old, a boy who lived next door, stammered badly and soon had all the children in the vicinity stammering. It was only by means of great exertion that mamma kept me from being a terrible stammerer."

31. Boys, 7-10. "A boy of seven in my school used to

stammer. At the end of twelve weeks, several of the older boys stammered badly when reciting."

32. *Stuttering*. "One morning, when I was 12, a boy appeared in the reading class for the first time. He stuttered frightfully. I took it up that day, and, for fifteen years afterward, I did not speak a perfect sentence."

33. *Adult*. "There is a boy in this place who stutters. In trying to break him of it, his mother has contracted the habit."

34. *Hysteria*. Girls, 17-20. "The lesson for the day was not well prepared by the class. The teacher was exasperated and spoke some sharp words. At the close of the lesson, a girl had hysterics and, five minutes later, seven others were affected." [In two other institutions, under conditions almost exactly the same, larger numbers were reported.]

35. Girl, 11. "One of my school friends had hysterics in a way that we all admired. She grew rigid in all her body and my sympathy and admiration were so active that I was likewise threatened, but my father's stern voice made me limber."

36. Girls, 12-15. "In a certain school, where the girls were from twelve to fifteen years old, one girl fainted and four others fainted from pure sympathy."

37. Girls, about 12. "L—— had an attack of hysterics in school. While watching her, several other girls began to show the same symptoms. L—— was carried from the room and the teacher threw water in her face. The same treatment had to be used with several others."

38. Girls, 17-20. "In a boarding school for both sexes, although the surroundings were pleasant, hard feelings sometimes arose on the part of the girls against the teachers. A girl who was a favorite with the pupils, but was not considered such with the principal and his wife, one day had hysterics. By the end of the term, five were affected and occasionally had a mild attack of hysterics. At the end of the year, the number had increased to fifteen. When a pupil was attacked, the teacher usually dismissed the class and after a few sharp words, left the stricken one alone."

39. *Chorea*. Girl, 10. "A girl of ten had chorea. Another girl of the same age who had no nervous weakness, began to be affected. I had her placed in another room at school and she soon recovered."

40. Boy, 10. "A servant in his home had chorea. In spite of his parents, the boy imitated her and became so bad that she had to be discharged."

41. Children, 6-12. "In 1894, in the Orphan Asylum at —, N. J., there was a little girl who had chorea. In a short time after her coming, several boys began to imitate her for

sport. The habit soon spread to her friends as well as to those who were making sport of her. A large number of children were affected. After the little girl was sent away from the asylum, the choreic movements in the others, ceased gradually, excepting in the case of one child who was sent to the Asylum for the Feeble-Minded as incurable."

42. Girls 14-19. "In a city high school, in which the department for girls, numbering 500, was independent of that for boys, in the last part of 1892 and the first of 1893, there was a peculiar spreading of nervous movements or choreic twitchings. One girl was affected with spasmodic twitching of the eyes, involving movement of the cheeks. She was a favorite and soon several of her friends showed signs of the habit. Later not only her friends but all who were much in contact with her were affected. At the end of the year, this girl went away and signs of the habit began to die out. The writer caught the habit in a mild form, but 'broke off' when she found 'how it looked.' Another girl was less fortunate. When the movements of her eyes ceased, her head began to jerk. She said she could not stop the movements because the impulse seemed to spread from one part to another.

The work in this school was not difficult and the spreading of the habit seems to be due simply to suggestion. About fifteen per cent. of the total number of pupils, or 75 in all, were affected."

43. Girl, —. "I once had a teacher who had a habit of twitching her mouth. I never could look at her without unconsciously twitching my mouth in the same way. At last I could not look at her at all during a recitation. Other girls felt just as I did, and some who said nothing, were imitating the teacher."

44. Boys, ——. "A *jumper* (so called because he would jump or speak when touched, or addressed suddenly), once went to a school that I attended. Before he had been there half a term, five or six of the boys were very bad jumpers."

45. "I know a man forty-five years old who cannot watch a person saw wood, drive oxen, or do any other kind of work for five minutes, without repeating the same words and making the same motions. He has been so from boyhood."

In answer to the syllabus, 214 records of neuroses through suggestion were received. Some of these records show that but a single individual has been affected by the example of another; but the majority of the records shows that the act of one has been taken up by several and repeated to their injury. The number of records of Spasmodic Cough is 41. Each record shows the spread of the coughing through a roomful of children at school, a church audience, or other public gathering. Of

Stammering and Stuttering, there are 71 records. In some instances, a single individual suffered from the presence of the child of defective speech; more often, many in a class or school, fell victims to the imitation. Every record counted, is that of a case in which the habit was broken with great difficulty, if it was broken at all. There are 33 records of Hysteria. The smallest number of individuals affected in any record, is 3; the largest, 15. Of Chorea and Choreic twitchings, there are 79 records. The lowest number of sufferers named in a single record is 1; the highest, 75. All the cases of hysterics, excepting three, are between the ages of 10 and 20. More than half the cases of chorea are between 7 and 12; nearly all between 7 and 17. Only a few of the records of stammering show that the habit is contracted after the fifteenth year. The spasmodic cough ranges over a much longer period, although children are rather more susceptible to it than adults.

Records of similar cases, although more complicated ones in some instances, are those of Dr. Laquer, *Zeitschrift für Schulgesundheitspflege*, No. 8, 1889, p. 423; Prof. Hirt, reported in *Zeitschrift*, No. 4, 1893, p. 225, from *Berl. Klinische Wochenschrift*; Dr. Wichman, reported in *Zeitschrift*, No. 9, 1886, pp. 549-50, from *Deutsch. Med. Wochenschr.*; Kotelman, *Zeitschrift*, No. 10, 1893, p. 548; Dr. Rembold, of Stuttgart; Bernheim, *Suggestive Therapeutics*, pp. 324-5; Hyslop, *Mental Physiology*, p. 490.

IV. IMITATIONS OF INDUSTRY, OCCUPATION, AND OFFICE.

In this class, there are many cases in many lines. Those which follow, will give some idea of the nature of all.

46. *Carpenter*. Boy, 8. "He watched the carpenters for several days; then he began to play 'carpenter.' He gave orders to imaginary men and worked as nearly like the carpenters as he could."

47. *Builder*. Boy, 9. "He visited Lowell. After coming home, he built houses, churches, railroads, stations, and stores. He also laid out streets, as nearly as he could remember, like those in Lowell, for which he named them."

48. *Farmer*. Children, 6. "All the little boys near my home built barns of shingle binders, and took pine cones for cattle and horses. The cones of the spruce and hemlock, were sheep and poultry. Grass was pulled for hay, and tall ferns were cut for trees. One of the boys built a barn 4x4x8 feet, and a house a little smaller."

49. *Farmer*. Boy, 4. "My brother used to play with sticks for cattle and was often heard shouting, 'Whay, go 'long there!' as he had heard the men who were driving the cows. He used to sell and exchange cattle with imaginary men. 'This

is a first-rate cow,' he would say, 'good milker, kind and gentle.' Of another, 'I can't rec'mend her, Mr. —, one teat don't milk and she kicks.'"

50. *Butcher.* Boy, 6. "George often saw his father, a butcher, slaughter animals. One day he got some pieces of glass for knives, fixed a place for killing, tied frogs up by their hind legs and cut their throats with the glass."

51. *Butcher.* Boys, about 1, 5, and 7. "The older boys saw their father and his men butcher a pig. A few days later, they got a butcher knife and actually killed their little brother. When asked why they did it, they said, 'We were just killing a pig.'"

52. *Grocer.* Boy, 3. "This boy goes to different members of the family and takes their orders, then loads his wagon with toys and delivers these as groceries. When taking orders, he quotes prices regularly."

53. *Grocer.* "A few days ago, I saw several children playing store in a large yard. They had counters and a desk made of old boards. They also had an old pair of scales with which they weighed out sand, stones, and other things as groceries."

54. *Electrician.* Boy, 5. "Irvin saw men putting in a system for electric lighting. He drove sticks into the ground and stretched ropes around the porch and in the windows. His father bought him some little burners which he arranged on his lines. He used to play by the hour, climbing the posts like a regular electrician, to mend the lines."

55. *Brakeman.* Boy, 5. "On the way home from Trenton, the brakeman would enter the car to call the stations. At nearly every station, the conductor's little boy came in soon after and did the same. He also played conductor and came around calling 'tickets, please.'"

56. *Doctor.* Girl, 6. "Her father called a physician to examine her lungs. He sounded and thumped in the usual way. A few minutes after he went away, she was seen sounding her doll and placing her ear on its chest just as she had seen the doctor."

57. *Doctor.* Children, 5, and 7. "They gathered roots, grass, and weeds. These were put into water and kept there until the water was dark colored. The dark liquid was put into bottles for medicine; the weeds and grass were kept for poultices. The patients used to live in fence corners, and when the young doctors were called to attend a case, one became a horse until the patient's dwelling was reached, then turned into a doctor again."

58. *Dentist.* Girl, 5. "This child went to the dentist's with her sister. The child's doll had some teeth. After re-

turning she placed the doll in a chair and prepared to fill its teeth. She made a small hole in a piece of paper, put the paper over a tooth and fastened it with a string, just as she had seen the dentist fasten the rubber dam. She used pins for instruments, and, after a good deal of imaginary hurting, finished the work."

59. *Minister.* "When Percy came from church, he used to take a high stand for a pulpit, and imitate the minister's attitude, drawl, and phrases, such as 'I must close now,' 'I will end with this thought,' 'As my time is brief I will hasten to mention this last point,' and similar expressions."

60. *Reporter and Lawyer.* Boy, 11, Girl, 10. "They played in the attic on stormy days. Their offices were in opposite corners of the room. Between their desks a cord was stretched. Suspended from the cord, was a pasteboard box with a string attached to each end. J.'s father is a reporter. J. was impersonating him. M. was the district attorney. They said the strings were a telegraph system. The messages were placed in the box, a bell was rung at the opposite desk, and the messages were drawn in by the strings attached to the box."

61. *A Trial.* 14 boys about 7 years old. "After going to a trial with his father, Willie had a party. The boys played 'court.' There were two judges, a jury of four boys, another of five, opposing lawyers, and an older boy who was given the name 'Captain,' 'because,' said Willie, 'I can't remember your name, but captains are over vessels and you shall be over our trial.' When all was arranged, John was tried for killing his sister. A little later, when we heard them talking, they thought John should be hanged for the 'first hard murder.' Then Willie came and asked his mother what was 'hard on the thermometer.' She did not understand and asked what he meant. He replied, 'I know, it's the temperament.' When the verdict was rendered, John was pronounced 'guilty of murder in the first temperament.'"

62. *Executioner.* Boy, 8. "After reading of the execution of the Chicago Anarchists, this boy was curious to know how it would feel to be hung. He got a rope, fastened it securely overhead, put the noose around his neck, and owing to an accident, was very nearly strangled."

63. Boy, 15. "After reading of an execution, Harry put a cat into a bag, erected a gallows, fastened a rope around the cat's neck and hanged it."

64. *Policeman.* "Boys in this city play 'Policeman.' Several pose as 'drunks.' A call is given at the 'station' and along comes an express wagon drawn by two boys. Two others on the seat are policemen. The 'drunks' are tumbled into

the wagon, the officers take their places and the team goes off on the jump to the station."

In all, 435 records fall into the class named in this Section. These records are divided as follows: teachers, 99; ministers, 88; storekeepers, 57; doctors, 51; post-masters, 10; lawyers, 9; music teachers, 6; farmers, 6; jockeys, 12; newsboys, 7; conductors, 7; ploughmen, 5; butchers, 4; bakers, 4; dentists, 4; expressmen, 3; cooks, 2; stock raisers, 2; Sunday School Superintendents, 3; tramps, 6; carpenters, 3; drayman, corn packer, electrician, quarryman, motorman, brick-maker, stone-mason, builder, painter, milkman, sawyer, well-digger, ice cutter, seamstress, laundress, milliner, clerk, telegrapher, stock broker, reporter, fisherman, fish-vender, street car conductor, gate tender, switchman, gardener, bill-poster, brakeman, coachman, servant, engineer, photographer, frame-maker, barber, sailor, detective, librarian, lecturer, dancing master, teacher of *Del Sarte*, Jew peddler, beggar, policeman, judge, captain, general, executioner, 2; city government, deacon, priest, bishop.

It will readily be seen that a large percentage of the industries and occupations are co-operative. These records would seem to indicate that the common pursuits of life attract children and are engaged in by them most largely from three to seven. The eighth, ninth, tenth and eleventh years furnish eighty per cent. of all the merchants reported. Fifty per cent. of the ministers are between three and seven; one-half the remainder are between seven and ten. The youngest doctor is three; more than half the entire number of doctors are in the sixth, seventh, eighth and ninth years. Nearly all the teachers are between five and eleven.

Perhaps no better topic can be found for a group of widely varying imitations than

V. IMITATIONS, ILLUSTRATING THE DRAMATIC INSTINCT.

These show two natural divisions: (1) Imitations for the exaltation of self through consciousness of power to perform dangerous, hazardous, thrilling, sensational or marvellous feats; (2) Imitations which please and develop the esthetic sense.

The acts of the former class are usually suggested by flaming pictures, cheap literature, the talk of braggarts, and spectacular entertainments. Some of these acts show a repetition of the characteristics of more primitive types. Such are walking bridge railings on "all-fours" in imitation of monkeys, painting the face like a clown, playing Indian and gypsy, "nail-keg" bands and tribal gatherings. Without doubt, nearly all these acts have in them more of good than of harm for the growing child, but to blight the harmful element and bring the helpful to its perfect fruition is a task that calls for careful thought.

Acts of the second class are inspired by the charms of Wonderland, the magic of myth and story, the rhythm of poetry, the deep impulses of romance, and the dignity of ceremonial. The clown and ape of Class 1 are succeeded in these acts by lords and ladies, princesses and kings. Coarse apparel is exchanged for fine; the grunt of the savage, for the polite salutation; rude musical instruments give way to the concert programme; the pirate and the vandal simply pass before a cultured audience and off the stage to receive justice at the hands of the officers of organized society. The elements of all that is ideal are in this class; rough sounds that will grow into harmony; jingles, into poetry; runes, into ritual; rubrics, into religion.

The cases which follow, give some idea of the scope of Division (1).

65. *The Circus.* Several girls, 10-12. "We had been to the circus. One day a big tree near our house, blew down. We saw in it a fine 'Jumbo' and at once organized a circus company with a clown and special attractions. The writer was the 'Fat Woman'; a very thin boy was the 'Living Skeleton'; and a boy on stilts, was to be the 'Giant.' Later the company quarrelled and the show went to pieces."

66. Children, 8-12. "Fifty children of the Orphan Asylum at P——, one day went to Barnum's circus. For days after, parts of the show were repeated every recess. The matron often found boys standing on their heads in the middle of a bed, or upon pillows scattered about on the floor. 'When I am a man I'll buy a lot of horses and see if I can ride like that;' and 'When I get big, I'm going to be in a show,' were common remarks. Some of the children resolved to be good a whole year, so that the manager of the asylum would take them to the show again."

67. Boys, 8 and 12. "I took my boys to the Colby Athletic Exhibition. Before reaching home, the younger had arranged to have his mother sacrifice one of his suits of underwear to make an athletic costume, and the next evening the boys were on the third floor of the house, with mattresses dragged from two beds, wrestling and tumbling like professional athletes."

68. Boy, 8. "After going to the Musee, he tried to swallow swords (lumps of wet cotton), eat fire, stand on his head, lift chairs with his teeth, and do many other things which he had seen at the show."

69. Boys, 8-12. "As soon as the circus posters were put up, these boys became interested and began to hold meetings in our wood-shed to form plans for a show. After the details were arranged, a tent was raised and a course of training went on secretly for a week. Then the parade came off. It was headed

by the clown, who was seated on a wagon drawn by a goat. The others followed in a style of dress suited to the occasion. The regular programme was: 1. Song by the clown; 2. Cavalcade, sommersaults, and leap-frog; 3. The clown makes the goat ma—a—a and stand on its hind legs; 4. Trapeze performance; 5. Juggling; 6. Fancy riding (the clown made an unsuccessful attempt to ride the goat); 7. Dog jumping through a hoop; 8. Music by the boys."

70. Boy, 8. "I saw a circus picture of a man jumping from a ladder 150 feet from the ground. When I got home, I climbed an apple tree and did the same."

71. Boy, 4. "About a year ago this boy went to a circus. For some time afterward he had to be watched closely to prevent him from injuring himself by the daring leaps he made."

72. *Wild West*. Boys, 12-15. "My brother and several other boys went to Buffalo Bill's Wild West show. They came home and started in for themselves. My brother would ride on horseback and try to catch the other boys with a lasso. The boys also tried to shoot with their air rifles in different positions as they had seen Col. Cody."

73. "Some Indians had been selling medicines in our town. My brother and the boys at his school began to wear feathers and play Indian. Any boy who did not wear feathers, was set upon by the Indians and captured; then if he would not wear them, he was punished."

74. Boys, 10. "These boys were much interested in Indian stories. They adopted as far as possible the dress and ways of Indians. They used to have desperate battles with imaginary foes, and often scalped their sisters' pet dolls. The idea was first suggested from the studies of Indians in the history class at school."

75. *Prize Fight*. Boys, 5-12. "One Saturday morning, after one of Sullivan's victories, a number of boys went to a spot called Wildwood for a prize fight. They charged one cent admission. The boys who did the fighting were younger than the others. They fought like young lions. One of them was named Sullivan."

76. *Gypsy*. Girls, 8-9. "After seeing a band of gypsies, these girls played that they were gypsies, and stole property and children whom they kept until the children were rescued by their mammas."

77. *Burglar*. Boy, about 14. "This boy lived in a small Maine town. After reading about the adventures of robbers, he began to make false keys and collect an outfit of burglar's tools. He entered several dwellings and stores before he was detected. He is now serving a sentence in the Maine state prison."

78. "Not long since, several small boys after reading of robberies and secret gatherings, formed a band with a fearful pledge. Although the members were very young, they carried weapons and kept the pledge. One little fellow became nervous and sick. His mother found a loaded pistol under his pillow, promised him protection, and obtained a confession. The band was speedily broken up."

79. Girls, 10. "We heard of train robbers. Some of us dressed in our mothers' clothes; some dressed as boys. It was night and our train was speeding on swiftly, when the robbers burst in and shot the passengers with toy pistols, or stabbed them with wooden swords. The robbers took the money of the passengers, which consisted of stones and paper. When the passengers came to life, they put the robbers into prison."

80. *Gambler*. Boys, about 10. "Several of my boys had been reading about gamblers. One day they left the building and I sent some one to find out what they were doing. Four sat at a table playing cards. On the table were some cigarettes and a drinking glass. Other boys were permitted to be present if they brought candy, fruit, or money to be used as stakes."

81. Boys, 6-8. "The men in town had been disposing of personal property by the 'numbered ticket plan.' A short time after, I found that the boys in my primary school were 'putting up' their pencils, pocket knives, and other articles in the same way."

82. *Striker*. Boys, 10-12. "During the Brooklyn trolley strike, I visited my sister in that city. One day I went out to find her two boys. They were at the end of the block with about a dozen companions, playing strike. They had a box with glass in the sides for a car. One of the boys would pull the car across the lot by means of a long rope. The others stood in line and threw stones at it, making the glass fly in all directions."

83. Boys, 10-12. "Last summer during the strike at Philadelphia, these boys had a Sunday School teacher who had been paying them one cent each to attend Sunday school. The next Sunday after the strike, none of the boys appeared. During the week, the teacher met one of them and asked why the boys had not been in their places. Willie's reply was: 'A cent ain't enough; we've struck; we all want two cents.'"

84. *Anarchist*. Several boys, about 12. "We heard about the attempts of anarchists to blow up a prominent business man. At that time we had a teacher who was much disliked. We saved our money until we had enough to buy several pounds of powder. We then made a man of the teacher's old clothes, put it in a small building, with the powder under it and set it off. It demolished the man, and also the building."

85. *Torch Light Procession.* "After the last presidential election, the small boys of this city had a torch light procession. It was led by boys with drums. Next came boys with brooms to symbolize the sweeping out of the other party. After these, were boys with flags, mottoes on pasteboard, and a few with real torches."

86. *Coxey's Army.* Boys, 8-14. "These boys were full of the Coxey craze. They formed an army led by a band equipped with kettles, cans, and similar articles. They marched around town under their captains, made speeches, and cooked stolen eggs. After the 'egg racket,' their parents came in, and there was no more 'Coxey's Army' in Mauricetown."

A summary of the records in this division, shows these results: total number of records, 603; imitations of circus, 250; Indians, 58; Wild West, 35; robbers, 50; gypsies, 12; striker, 10; dancing bear, 7; prize fight, 5; U. S. mail robber, 6; anarchist, 3; drunken men, 3; murderer, 2; hunter, 6; merry-go-round, 2; hand organ man, singer of comic songs, duelist, bull-fighter, thief, pirate, wrecker, lottery, gambler, clown, juggler, swallower of swords, magician, contortionist, equilibrist, bridge jumper, tight rope walker, cowboy, scout, detective, monkey, bareback rider, high diver, base ball game in which each player has the name of an old leaguer and plays the same position, drum corps, Coxey's army, 5; fireman, 8; drum major, 12; torch light procession, 104.

The records of the circus, Wild West, and torch light procession, as well as those of imitations of Indians, gypsies, strikers, prize fighters and anarchists represent *groups* of boys and girls. The smallest number of individuals reported in any record of a circus or torch light procession is 7; the largest number in any record, is 125.

The circus age seems to be from 6-12, although there are seventeen records for the thirteenth, fourteenth and fifteenth years. There is a deepening interest in robbery up to the age of 15. The gypsies come at five and are gone at nine. The tenth year has by far the largest number of these imitations—about 90 in all.

The following records illustrate Division (2).

89. "In my early childhood, it seems to me that my brothers and I lived in a little theatrical performance from year to year. We were 'stump orators,' the country doctor, the preacher, and sometimes, our own parents."

90. *The Theater.* "At sixteen, my sister saw her first play. On the following week, she was seized with violent fits of anger, so like those of the actress whom she had seen that they seemed to the family to have been suggested by the play."

91. *Concert.* "Sister and I went to a concert. The next

afternoon, we removed the clothing from a large wardrobe in my aunt's room for a stage, put on aunt's dresses and adorned ourselves with flowers. Then we took turns at singing from our stage. When we finished there was quite a crowd in the street opposite our window."

92. *A Play.* Girl, 13. "One night I saw a play called 'Dot, the Miner's Daughter.' Some of my friends and I at once got up an entertainment. We made six dollars, which we gave to a lame boy."

93. Girl, 10. "After hearing a play, I went home and wrote a little play which some of my friends helped me to present."

94. Boy, 12. "After reading Robinson Crusoe, he made an island in a small pond, hollowed out a cave in one side, made a boat out of a log, planted trees on the island, made a cove in which to keep his boat, and carried two pet lambs to the island to represent Crusoe's goats."

95. Girls, —. "We read a story in which the heroine was stolen by gypsies. After that, we played that Grace and I were brother and sister; that Grace was stolen; that years after, in a strange city, I became acquainted with the captain of a company of soldiers stationed there, and found him to be my lost brother."

96. *Impersonating Royalty.* Girls, 10-14. "In our yard there was a large tree with four wide-spreading branches. We called these England, Scotland, Ireland and Wales. Smaller branches were called castles. One was Windsor; another, the Summer Castle.

We took to impersonating Queen Victoria and the Princess of Wales. Each of us tried to live the life of the one whose name she took. Our conversation was such as we fancied would befit royalty. We could not talk unless we were in the same castle. In order to communicate with foreign countries, we put in telegraph lines, put our notes on strings, and pulled them from one branch to another. From the time that we were ten, until we were too old for such sport, *we fairly lived in that tree.*"

97. *Living Stories.* Girls, 5-10. "'Grimm's Fairy Tales' was given us at Christmas. We spent the rest of the year acting out our favorite stories. I was the princess, Grace was the prince, and little Florence had to take the ugly characters."

98. *The Battle of Trenton.* "I passed a sand bank. A group of boys were playing the battle of Trenton. The roads were laid out, the forces were distributed, cannon guarded the approaches. The bed of the Delaware was hollowed out and the place of Washington's crossing was marked. The boys poured water into the channel, and sent chips over for boats."

99. *Living Stories.* Girls, 5-10. "The two older sisters

were fine ladies. The youngest, dressed in tattered garments, was a beggar and came to the doors of the rich ladies who took her in and made her a fine lady. This was suggested by stories."

100. *Unveiling a Monument.* Boys, 7. "I saw a group of boys on the street. One was completely wrapped in a flag. Another was speaking: 'All get ready now; I am about to unveil the monument.' Here he pulled off the flag, remarking, 'Gentlemen, the monument is unveiled.'"

101. *The Salvation Army.* Children, about 10. "They had been watching the Salvation Army. One night, I saw a number of them standing in the middle of the street. First they sang all the songs they had heard; then one prayed; testimonies followed; then there was another song, after which the bystanders were invited to join them at their meeting house."

102. *A Prayer Meeting.* Girls, 8, 11, and 11. "We had been to prayer meeting and I proposed that we should repeat the service. We had one to read, one to pray and the other to exhort. We did not do it irreverently."

103. *A Confirmation.* Girl, 5. "After having seen a Confirmation, H. G. put on her cousin's cassock and surplice and said that she was Bishop M. She then imitated him closely in speech and action."

104. *A Baptism.* Girl, 7. "This girl played with spools a good deal. After being baptized, she never added a spool to her family without first baptizing it and giving it a name. She had about thirty spool-children, and she could tell the name of each as soon as she saw it."

105. Girl, 8. "When I was eight, my sister and I saw a baptism. The next day we filled a large pan with water, dressed our dolls in their night clothes, and dipped them in the pan, talking to them as the minister had done in the real service."

106. Girl, 11. "I was visiting near a prison. In one corner of the court was a rectangular excavation nicely concreted. I often wondered what it was for, when playing with the warden's children.

One day I saw a baptism by immersion. I saw a use now for the excavation, and suggested to the children that we baptize each other. We went through the ceremony with great solemnity, repeating the exact words of the service. When my playmate shivered on stepping down into the imaginary waters, I gently rebuked her, telling her that she was not to think of her body."

107. Boy, 10. "At the age of ten, I saw a Methodist baptismal service. The next day I repeated the ceremony on the cows in the barn."

108. Children, 8-12. "After seeing a baptism, we used to

baptize each other in some tall grass that grew near our school-house."

109. *A Wedding.* "After seeing a church wedding, sister and I made bridal veils for our dolls and married them to imaginary grooms. When my doll was married, my sister's doll was bridesmaid; when hers was married, mine was bridesmaid."

110. Children, 7. "A prominent man of our town had just been married. One of the girls told us about the service. After that, different boys and girls were married on a large flat rock near the fence. One of the larger boys was the minister and read an exact copy of the service. The bride and groom were presented with sticks, books, and leaves, and walked to the woods and back for a bridal tour."

111. George, 12; Sarah, 10; and Frank, 8. "George was the rector; Sarah and Frank were the bride and groom. The ceremony was always performed in the parlor at the home of one of the children. George would play a march while the bride and groom slowly entered the parlor. Then he would read the Episcopal service, to which the proper responses were given. A wedding feast followed, after which, the couple, attended by the rector, made a short tour."

112. *A Funeral.* Boys, about 9 or 10. "Sammy and a friend were digging a well. They had made a deep hole, when a neighbor told Sammy, that it would be better to stop digging. 'Well,' said Sammy to his friend, 'Let's bury Mr. S——,' a prominent townsman who had just died. So they buried a bottle and made a grave."

113. Children, 7-10. "I was attending a country school. One day there was a funeral in the church across the way, and the pupils were allowed to go. At noon the next day, we decided to have a funeral. We rolled up a coat for a corpse, and selected a boy ten years old to preach the sermon. The minister took his text from John XIV, 2-3; 'In my Father's house are many mansions,' etc. After the sermon, we went to the grave. There, the minister said: 'Ashes to ashes, dust unto dust,' and we returned to school for the afternoon."

There are 267 records in Division (2). The number representing groups who act their favorite stories, or historical incidents is 70; other classes are as follows: theater, 41; concert, 29; commencement, 3; church entertainment, 2; opera, 1; Salvation Army, 3; prayer meeting, 5; camp meeting, 1; devotional attitudes, 6; musical director, 2; violinist, 2; Memorial Day procession, 4; soldier, 6; band, 16; church choir, S. S. concert, choir boys, chorus singer, serenader, harpist, street musicians, minstrels, the Shepard Family, Swiss Bell Ringers, whistlers, warblers, actor, actress, dancing girl, polite man.

boor, dude, ghost, putting on airs, and among ceremonies, wedding, 19; baptismal, 12; communion, 2; and funeral, 21.

The youngest theatrical star is five. From ten to twelve, the tendency to act stories that have an element of beauty and appeal to the deeper feelings like sympathy and the appreciation of what is generous, just, and worthy, is very striking.

Books and plays from which scenes have been abstracted by the young people described in the records, are: Grimm's Stories, Red Riding Hood, Robinson Crusoe, The Octoroon, Dot, the Miner's Daughter, Old Kentucky, Punch and Judy, Uncle Tom's Cabin, Cricket on the Hearth, Swiss Family Robinson, Huckleberry Finn, Ivanhoe, Cooper's Novels, Romeo and Juliet, and Hamlet.

These characters have been lived over by children to their great delight: Columbus, George III, Mary, Queen of Scots, Queen Victoria, the Princess of Wales, the Czar of Russia, Daniel Boone, Dr. Kane, Capt. Kidd, Robinson Crusoe, Tom Sawyer, William Tell, Vanderbilt, Will Carleton, Mrs. Brownning, and Mrs. Cleveland.

VI. SCHOOL FADS.

The English dialectical term from which the word "fad" is derived, means "a colored ball," or "a bundle of straw." This throws some light upon a class of acts that spread among children everywhere through suggestion; but the records which follow, give a still clearer idea of the nature of School Fads, and how slight a stimulus leads to their inception.

114. *Sachet*. Children, 8-10. "One morning I put a small sachet in the front of my dress. One corner could be seen as I wore it. The next day, a little girl came with one just like mine. In two days many of the children had them."

115. *Ribbon*. Boys and Girls, 12-13. "One day last fall, when I was teaching, I wore the cuffs of my shirt waist tied with ribbons instead of using cuff buttons. The next day all the girls fastened their cuffs with ribbons. When there were no eyelets in the cuffs, they either tied or pinned the ribbons on. The fad kept spreading, the bows got larger, and the hanging ends longer, until it was quite amusing."

116. *Dressing the Hair*. "Our class sport had his hair cut in a new way. Before night, all the boys in his division had followed his example."

117. Girls, about 16. "A stylish girl one morning came to school with her hair arranged in a new way. Soon the style was adopted by the whole school. Girls who did not readily adopt it were ridiculed into it. A girl who would not take it up, was considered of a lower order than the rest."

118. *Curls*. Girls, 10-15. "At one time the girls in our

school had a great craze for curls. The straight haired ones bravely endured the discomfort of curl papers and their pain was lessened by thinking how pretty they would look on the next day."

119. *Friendship Pins*. Girls, 14-16. "In our school, the boys used to make initial pins, and pins in the form of swords, snakes and tennis racquets, for the girls, some of whom soon had a large collection. The girl who did not have at least two or three was considered extremely unpopular."

120. *Friendship Rings*. Girls, 8-12. "We obtained these by getting each friend to give us a cent until we had collected enough to pay for a ring. One girl was ambitious enough to write President Cleveland asking for a cent, but her success could not have been great, as she never bragged any about it."

121. *Ribbon*. Girls, 16-18. "A girl came from New York to our school. She wore red ribbons. We thought she must have the *stylish color* and all adopted it."

122. *Souvenir Cards*. Girls, 12-15. "We were fond of collecting souvenir cards in our school. They contained the giver's name, the date, and a bit of bright ribbon pasted on a particular corner."

123. *Mottoes*. Boys, about 10. "It is a fad with school-boys in this vicinity to wear mottoes on their caps like, 'Look out for me;' 'Don't get me mad,' etc."

124. *Tobacco Tags*. Boys, 6-18. "I have seen the boys about here collect cigarette pictures and tobacco tags. They wear the tags in geometrical forms on their coats."

125. *Wool Book Marks*. Both sexes. In our school it was a fad to pick threads of wool from the clothing of our friends. Our object was to see who would get the most colors. We used our collections for book marks."

126. *Worsted Babies*. 150 Girls, 10-18. "One day a girl wore a worsted baby to school. In a short time, all the girls had worsted babies suspended from their dresses."

127. *Opinion Books*. Girls, 17-20. "One day at school, a girl told how she had written her opinion of a certain other girl, who found it and got very angry. The next day we made opinion books. In each, faults, and marks of beauty were written. Every girl who was invited to write, had to tell what one had the sweetest disposition, the finest eyes, and other things of a similar nature. The books were very popular."

128. *The Secret Society*. Boys, 8-12. "They organized with the name Patriotic Sons of America. They said that their purpose was to study the history of great wars, that they might be ready to fight if the United States should become involved in a war."

129. "*Industrial Order*." Pupils, 12-14. "Soon after the

chartering of the Odd Fellows in this town, several of my pupils organized the 'Industrial Order Club.' They deserve the name for they are trying to be helpful in every way."

130. *The Cowboy Club.* Boys, 11. "This club is somewhat literary. Its leader encloses a list of those whose biographies the club has read with great interest. The names are, 'W. F. Cody,' 'Wild Bill,' 'Texas Jack,' 'White Beaver,' 'Sitting Bull,' and 'Tall Bull.'"

131. *Benefit Society.* 10 girls, 10-13. "These girls formed a band called the 'Benefit Society.' They met daily on a flat rock under an old apple tree. Each girl signed a paper promising to do everything in her power to help all members of the society. The president used to call the meeting to order. Then each member was called to the platform in turn, and all the others, as their names were called, were compelled to tell whatever had seemed to them improper in the one on the platform since the last meeting. This process was called 'cooking.'"

132. *White Clover Club.* Girls, 16. "This club was organized for mutual improvement, at the suggestion of a favorite teacher. Its emblem was the white clover, because the girls knew that this was the teacher's favorite flower."

133. *Golden Rod Society.* Girls, 10-12. "The object was to have something that not every one knew. The society was called the 'G. R. C.' Its password was 'a rod of gold.' Its emblem, a spray of golden rod. The members strove to find out everything that they could about this flower."

The School Fads have been grouped under ten headings.

1. *Hair Fads.* All refer to some method of arranging or wearing the hair. Among girls these are noted: hair worn in a single braid down the back, in two braids, in two braids crossed at the back, wound around the head, and tied with a ribbon at the crown, the Marguerite braid, the figure eight, low roll in the neck, the Psyche, pasted smoothly on the head, smooth and low over the ears like Mrs. Browning, parted on the side, baby bangs, and curls. Among boys, hair clipped closely, parted in the middle, and football hair.

2. *Necklace Fads.* The necklaces were made of: "memory buttons," beads, shells, different colored seeds, dandelion chains, different colored leaves, and mountain cranberries.

3. *Rings and Bracelets.* The souvenir rings were: "friendship rings" (see record 120), "Memory circlets" (made by filing out the middle of a dime), and "merry-go-round rings." The ornamental rings were made of: grass, horse-hair, rubber buttons, celluloid, shells strung on ribbon, beads, bone, colored string, and strips of gold paper.

It was a fad in some schools, to wear the ring always on the

right hand, with others, always on the left, or on a particular finger, and in one, to wear it on the thumb.

4. Friendship Pins. When the children could not raise money enough for "friendship rings," they had to be content with "friendship pins." Any kind of stick pin, satisfied the younger children. The older ones were more fastidious, and had silver hearts, brownie pins, "Trilby hearts," pins in the form of darts, initials, swords, snakes, tennis racquets, and other similar designs. While Fraternity emblems may have suggested the idea of school pins, class pins, and class rings, these are only a more esthetic form of the ring and pin fads.

5. Ribbon Fads. Some of the ways in which this class of fads finds expression are: bow on right side, bow on left side, in button hole of dress, in button hole of coat, in button hole of boot, in the hair, on the top of the head, narrow ribbon on dress, pencil, penholder, and around neck to hold key to pencil box, ribbon and bells on dress, on boot, on garter, ribbon collections, ribbon for "friendship canes," "memory hoops," and a different colored ribbon for every day, as red on Monday, blue on Tuesday, pink on Wednesday, and so on for the week. Red is the favorite color in a majority of the schools reporting. Other colors named for the ribbons are: orange, yellow, green, blue, baby blue, violet, pink, lavender, white, black, and for centennial year a combination of red, white and blue. Records like No. 121, give the reason for the adoption of a color in most cases. Sometimes it is selected to denote a secret; sometimes to identify the members of a "gang" to their fellows.

6. Crocheting. Twelve schools report making "fan edge," five make "zephyr caps," and others make lamp mats, smoking caps, worsted slippers, and embroidered bags.

7. Charms. These are worn on the watch chain by boys. Girls attach them to ribbons and wear them in various ways. In general the charms are in the form of rings, baskets, arrows, and carvings. The material for the charms includes hazel nuts, chestnuts, walnuts, the cups of acorns, horse chestnuts, and sea beans, and fifty-eight schools report using the pit of the cherry, plum and peach. These charms are made by boys for their girl friends, and the number which a girl has, serves as an index of her popularity. Record 119 affords a parallel to this.

8. Flower Fads. Sometimes the preference of a teacher, a flower myth, or some passing fancy has given a flower a favorite place. It has been studied, worn, admired, loved, and when its season has passed, it has been reproduced in paper, or cloth. These are the favorites named in the records: apple blossom, arbutus, daisy, dandelion, golden rod, hyacinth, lily of the valley, iron wood blossom, snowdrop, sunflower, sweet pea,

white clover, violet, chrysanthemum and evergreen. It is the same esthetic sense that leads to the choice of a class flower, or a flower for each individual in a class, and to the custom already established by several states and nations, of choosing state and national flowers.

9. Secret Societies. Most of these are started by the organization of some fraternity in the town where the children live; some by the zeal of an older friend for an order or club in which he is interested. Many of these children's societies have a high aim, although this cannot be said of all with equal confidence. Records 128-133 give so good an idea of all this class, that further details are not necessary.

10. Miscellaneous. Here, ninety-seven schools report seventy-one forms of fad. Among these are: making ear-rings of acorns, initials of wire, shell bands for the hat, aprons of a particular color, pattern, material, sachet bags, worsted babies, wire spectacles, four cornered hats, mystery albums, autograph albums in the form of boots, mittens, etc., opinion books, souvenir cards, ornamental book marks, wool book marks, collections of marbles, slate pencil stubs, seeds, eggs, bits of tin, spools, tobacco tags, cigarette pictures, stamps, letter heads, monograms and stolen souvenirs. Still others mentioned are: wearing veil, chameleons, waists and sweaters alike for the same grade, class initials on clothing, little flags, red bandannas, and secret emblems in chalk upon the clothing; also setting up lemonade stands and pin stores.

The fads already referred to have sprung up and become general in 536 schools. In the ten classes described there are 182 different forms of fad. The number of schools reporting in each class, and the age limits between which the different classes fall, are as follows: Hair Fads: No. schools, 51; age, 10-15; different forms, 15; Necklaces: No. schools, 32; age, 8-17; forms, 7; Rings and Bracelets: No. schools, 78; age, 6-12; forms, 13; Friendship Pins: No. schools, 10; age, 6-10; forms, 10; Ribbon Fads: No. schools, 55; age, 10-18; forms, 20; Crocheting: No. schools, 22; age, 8-16; forms, 6; Charms: No. schools, 64; age, 8-16; forms, 12; Flower Fads: No. schools, 45; age, 8-16; different flowers, 16; Secret Societies: No. schools, 42; age, 7-17; forms, 12; Miscellaneous Fads: No. schools, 97; age, 9-16; forms, 71.

VII. MISCELLANEOUS EXAMPLES OF THE EFFECT OF SUGGESTION.

This list includes 102 records. Some of them will suggest cases recorded in medical annals; some will seem, to the one who glances at them superficially, to be due simply to curiosity.

134. *Pure Suggestion.* "In a certain school, one of the

large girls had sore eyes and put on glasses. Within a week, eight or ten others were wearing glasses."

135. "While attending an academy, I had a room mate, who when she saw any one cut, bruised, or hurt, always felt the exact pain herself. It was just the same when we told her of an injury to another."

136. Boy, 12. "One time I was with a person who kept saying his throat was sore. My throat began to feel sore, too."

137. "A man was repairing a fence. A child stopped to look at him. In two minutes the crowd was so large that all had to be sent away."

138. Children, 8. "A class was passing a window. One looked out. Nearly every child who came afterward, looked out."

139. *Living Pictures*. Children, 7-10. "Last November about thirty children at Port Jervis, were much interested in a 'living picture' entertainment, which they gave in a barn for an admission of five pins. Several mothers decided to attend. When the curtain rang up, they were horrified to find their children coming upon the stage entirely nude."

140. *Playing Horse*. Boy, 5. "He was playing horse with a boy about his own age. The horse spoke. The driver warned him, telling him that horses never talk. The horse spoke again, received a blow, instantly became human, and the game ended in a lively fight."

141. *A Cat Fight*. Girls, 6-12. "We used to take delight in getting into opposite corners of the room and producing the vocal portion of a cat fight."

142. "A boy 18 months old gets down on the floor and laps milk from a saucer like the cat."

143. Boy, 8. "This boy was lying at full length on the floor and going through the wildest contortions. When asked what he was doing he replied, 'This is a snake.'"

Among these records, the county fair occurs 12 times, girls from four to six raise the dress when crossing the street in 21 cases, train occurs 6 times, steamboat, 5, judge of races, starter, bow-legged man, stiff-legged man, knock-kneed man, deaf man, blind man, bald-headed man, widower, Arctic explorer, tease, scold, smoker, once each. Various ills imitated are: sore eyes, headache, hoarseness, asthma, rheumatism, nervousness, broken arm, broken leg, railroad accident, shipwreck.

The animals named in the syllabi records are: the cat, dog, cow, horse, bucking mule, kangaroo, buffalo, rabbit, pig, goat, bear, wolf, seal, hawk, chicken, canary, monkey, and snake.

VIII. SUGGESTION AS CHILDREN USE IT.

Children appreciate the rights of individuality better, almost,

than their elders. They do not like to ask too great favors. Rebuff wounds them. For this reason they express their desires by hints, words of praise, skillful little inductions, that at first seem to point nowhere, and while employing these methods, they watch every change in the attitude, every varying expression of the eye, every little tremor in the voice of the one who has the power to gratify their desires, and to whom all their hints and suggestions are directed. The records which follow are typical.

144. *Indirect Association.* Boy, 7. "I was gathering flowers when this boy came into the yard, saying, 'Good morning, Miss ——; what pretty flowers you have! We have n't any at our house. Mamma likes flowers ever so much. I told her I'd get her some somewhere.'"

145. *A Suggestive Question.* Boy, 7. "One day this boy visited his grandmother. He was hungry but did not wish to ask for a lunch. At last he suggested, 'Gammie, don't it make you hungry to walk half a mile?'"

146. *Praising a Thing.* Girl, 10. "I had been using colored crayons. Clara came to my table and said, 'That chalk looks pretty on the board. I have a blackboard at home.'"

149. *A Comparison.* "Mother was cooking. A small boy came in and began to talk. After a while he remarked: 'My mother doesn't make such good cookies as you do.' After mother had given him four, he went out, but soon returned and said: 'Mrs. B——, those cookies are tarnation good.' He got the fifth."

148. *An Hypothesis.* Girl, 5. "Grandma, I'm hungry." "Will you have a glass of milk?" "No." "Some bread and butter?" "If I was a grandma and had a little girl who was hungry, I would give her a piece of cake."

149. *A Hint.* "A little girl was playing on the sofa at the house of a friend. She suddenly asked, 'What is the sofa made of?' 'Almost everything,' was the answer. 'Is there any custard pie in it?' was the next query."

150. Boy, 9. "His mother is morbidly afraid of tramps. One day he wanted her to go to a place to which his father was going, that he might be taken with them. His mother did not favor the plan, until he remarked, 'I hope forty tramps will come!'"

151. Boy, 5. "This boy was calling on a neighbor. He grew hungry. Picking up a corn cob, he said, 'When I'm hungry, I eat 'most anything.'"

152. *Disease to get Remedy.* Girl, about 3. "She saw a bottle of cough syrup on the table. She coughed sharply for a few minutes. When she saw it was without effect, she asked, 'Mamma, don't you hear baby cough? She need med'n.'"

153. "When my little cousin wishes to look at my watch,

she will ask, 'Do you suppose that little boy is chopping wood now?'

154. Boy, 7. "I wanted a ball. I wrote my wish on a piece of paper and threw it on the floor."

155. A *Letter*. Girl, 10.

—————, Mass., Nov. 11, 1895.

MY DEAR SANTA CLAUS,—

I am going to tell you what I would like for Christmas. I would like a bank for my money, and if I had a muff it would keep my hands warm. I guess I could bat a tennis ball real high, and a nice book would be lovely. And would you be kind enough to bring me some chess men, and a box of paints, and a bag of candy?

O Santa Claus! have you a chain for my silver watch, and a scarf pin that you could hang on the Christmas tree for me? I would like to see you ever so much, but I suppose you would n't like to have me see you on Christmas night. Perhaps my forefinger would look pretty with a ring on it.

There are 713 records in this general division. The subdivisions with their respective numbers are as follows: Awakening associations indirectly, 221; calling attention to the thing desired by saying, "I wish I had," "I like," "I love," etc., 207; asking questions leading up to the desired end, 60; praising the beauty or quality of the thing desired, 51; making a negative hypothesis, 18; a positive hypothesis, 15; an unusual display of affection for the one who has the ability to give what is desired, 17; making gestures, 18; expressive looks with words secondary in place, 25; making comparisons between persons, places, or incidents, 19; some act, sign, or symbol, not to be misunderstood, 25; asking for something for some one else, 10; imitating the motions of something, 8; dreaming of a thing and telling the dream, 5; expressing a fancy, 3; writing a letter and leaving it to be discovered, 2.

IX. SUGGESTION IN THE PERSONALITY OF THE TEACHER.

It is often remarked by teachers, that the exactions of graded schools, the shortness of the school day, and the fact that a class usually remains with a teacher but a single year, make it almost impossible for teachers to have any influence with their pupils outside of formal teaching. Teachers must realize their difficulties, but it shuts the door against hope, to magnify them. Far more accordant with professional spirit are the words of Prof. Dawson, lately of the University of Michigan, who says, "If the teacher have a mind and heart large enough, his life becomes a tremendous suggestion every hour that he is in contact with a pupil."

Prof. Dawson's words agree perfectly with the testimony of pupils in their answers to the syllabus. They report copying

the teacher in the following particulars: thick lips, protruding under lip, tightly drawn lips, gentleness of voice, talking through set teeth, pronunciation, phrases, accent, inflection, manner of scolding, frown, squint, cross-eyes, twitching of the eyes, nervous twitching of the mouth, smiles, laughter, poise of head, professional air, peevish ways, facial expression, manner of wiping nose, manner of raising brows, manner of sitting in a chair, automatisms, gestures, tastes, desires, ideals, and aspirations.

But there is another side. 244 students say that the attitude of the teacher toward his class and toward the subject taught, has made them enjoy or hate it. The words of these pupils are preserved in the records which follow.

156. *Grammar*. "Four years ago, I disliked grammar. A few months later, I took it with one who was much interested in it and my favorite teacher. After one quarter with her, grammar was my favorite study."

157. "I have always attributed my dislike of grammar to the indifference of the teacher with whom I first tried to study it."

158. Girl, 12. "To me grammar was the most senseless of subjects. A new teacher came who thought it the nicest study she ever had. Before a month she made me love her and the grammar too, by her great interest."

159. Young Man. "When I first began grammar, I liked it. My second teacher disliked the subject and did not mind saying so. I therefore got a strong dislike for the subject, which has continued up to the present time."

160. Young Lady. "I have always hated grammar because I took it first with a teacher who had no interest in it."

161. Young Lady. "I took grammar in the town school. The text-book was poor and the teacher inefficient. At the end of the term, I hated grammar and disliked the teacher."

162. *History*. Boy, 12. "Last year, Willie did not like history. This year he has a teacher who illustrates every point, and he is so interested that he reads all the books of history that he is able."

163. Boy, 14. "Howard had disliked history. Last spring the teacher was fond of history and made it *seem very real* to Howard. At the end of the term he had the highest rank in the class."

164. "I always liked history, until this year, when I came into contact with a teacher who was not in sympathy with me."

165. *Geography*. Girl, 10. "I had a strong dislike for geography. My new teacher was fond of it and *had something to show us from every country studied*. I soon became interested, especially in the *stories* she told us of each country."

166. Girl, 12. "I enjoyed geography until our teacher

made us go out and make capes, rivers, and islands in the sand. I dislike geography strongly."

167. *Algebra*. Young Lady. "I was fond of algebra. My teacher disliked it. He told us that it was of no use except to teach to some one else. The problems got difficult. I thought it did not amount to much and dropped it."

168. Young Lady. "When we first began the study of algebra, we asked our teacher what good it would do us. She replied, 'I do not think it will do you any good, but it is in the course and I have to teach it.' I could not bear algebra while she taught me."

169. Boy, 14. "I know a boy who studied algebra at fourteen. I am sure he had the ability to make a success of it, but the teacher showed no interest in it and the boy gave it up."

170. *Geometry*. "My teacher showed no fondness for geometry; I did not like it, and grew to despise it."

171. "A class of twelve took geometry with a lady who had no fitness for the work. Their next teacher put aside the method of committing demonstrations, constructed new figures, and taught the application of principles. The class became enthusiastic."

172. *Arithmetic*. Young Man. "I was made to enjoy arithmetic through a teacher's interest after several teachers had failed to make it real to me."

173. Young Lady. "In my school were some boys who disliked arithmetic. I disliked it in my early studies, but in trying to teach it, I became interested, and seeing my interest, the boys came to like it."

174. *Greek*. "Sometimes when Greek went hard and I was about discouraged, it brought interest back to have the teacher tell about the flora and fauna of the country of which we were studying, or tell us stories of the people and their ways."

175. *German*. "I never disliked a study until I came to German. My teacher was book-bound, had neither enthusiasm nor originality, and did not know what to require of us. I studied it for a time, found it hard, tried to give it up, was not allowed to, and it became a grind. I have studied Latin and learned to speak Italian by myself since leaving school, but I have never looked at German."

176. *Botany*. Class, 13-16. "We took botany as an extra study for the pleasure we hoped it would give. The teacher seemed to think it a science of words and never thought of studying nature. The work was learned by rote, and there was no interest in it. The teacher blamed the pupils."

177. *Gymnastics*. "A friend of mine teaches gymnastics.

Her class grudged the time they gave at first. She was awkward, and constantly violated the principles of the masters whom she wished to follow, but her interest was so great, that her class became enthusiastic. Its members have improved in health and bearing."

Of the 244 cases in which, according to these records, the attitude of the teacher has meant so much to the pupil, the subjects of dislike, or enjoyment, and the number of times each is mentioned are: grammar, 42; arithmetic, 33; geography, 32; history, 28; algebra, 22; geometry, 19; physiology, 13; classics, 13; physics, 10; book-keeping, 6; reading, 5; astronomy, chemistry, psychology, music, 2 each; botany, geology, zoölogy, drawing, etiquette, gymnastics, civil government, and moral philosophy, one each.

Among the reasons for dislike, lack of interest in the subject on the part of the teacher is named 72 times; poor methods, 15; personal dislike for pupil, 9; lack of enthusiasm, 4; incompetency, 3; compulsion, 1; sarcasm, 1. The degree-terms showing the feelings of the pupil are: "I did not enjoy the subject;" "I took no pleasure in it;" "I disliked the study;" "I was disgusted with it;" "I have never been able to conquer my dislike for it" (9 times); "I fairly hate the name of it."

The opposite side of the picture is more pleasing. "I am growing interested in the study;" "I have come to enjoy it;" "It is the best study I have," are, as before, the words of the pupils, and they attribute it to the teacher's interest in the subject, 104 times; his enthusiasm, 11; his interest in the pupil, 5; and to that class of systematic suggestions which constitute individual teaching, 19 times.

There is a class of records that go one step further. They tell the story of changes in character and purpose in boys and girls through careful suggestion on the part of some teacher. There are 101 of these records and they are full of interest.

178. "A boy had been vicious. He was expelled from school. A new teacher came. He showed the boy the value of time, the need of a good equipment in the competitions of men, the transitory nature of opportunity, and the need of using each day wisely. It was all done indirectly. There was no preaching. The boy went to work. The hints were kept up. The boy became a satisfactory student."

179. Boy, 12. "Every one seemed to think I was a wild boy. Two Sunday school teachers determined to believe that I was not wholly bad. I saw what they thought and made up my mind not to disappoint them."

180. Boy, 15. "Up to this age he was idle and shiftless. He played truant and spent his time in the woods or fishing. At last he left school altogether. A lady went to his town to

teach. She heard of him and looked him up. She invited him to return to school. He thought it would be useless. At last he went. By degrees he was interested in his studies. He is now a strong teacher."

181. Boy, 13. "Bert was a liar, and the teachers put no confidence in him. A new teacher came. She trusted the boy and showed that she did. He was a better boy."

182. Boy, 13. "He was idle and disturbing in school. His teacher found that he was interested in birds and studied birds with him. At the end of the term he was as helpful as any of the pupils."

183. Boy, 15. "He was not studious and had been called bad. I set him at work for me. He soon voluntarily sought after opportunities to be helpful."

184. "Albert was always tormenting his teacher and his mates. A new teacher came and one day told me that she would make him the best boy in school. I said, 'He will never be any better,' and she looked at me with displeasure. She began by telling him that she wished to make him a special helper as soon as he could get over his *childish ways*. She told him also that it was a shame for a bright boy to be always at the foot of his class. He began to think, and was soon good and studious."

185. Boy, 14. "Every one thought he would go to ruin, but he was completely changed by the careful suggestions of a teacher. I have heard him say many times, that Miss C——, by her kindness and confidence, saved him from a worthless life."

186. Girl, —. "My friend's sister disliked school so much, that her father often had to carry her to school by main force. This year she has a new teacher and her parents find it almost as difficult to keep her at home."

187. Girl, 11. "None of her teachers could get along with her. Miss B—— came, not to punish the child but to tell her of the *good things which she was capable of doing*. The year spent with this teacher made a great change in the girl."

188. Boy, 12. "He had been regarded but little better than an *idiot* in a school which he attended for four years. One day a teacher heard him make a striking remark, worked with him individually afterward, encouraged him, and now he is regarded as an unusually bright young man."

189. Girl, 16. "Miss C——, who is in the high school, says: 'Mr. P—— treats me as though I were a lady and I wish to be what he seems to think I am, but Mr. H—— acts as though he expected me to be rude in his room, and I act my worst there.'"

190. Boy, 14-16. "James was a bad pupil. Nothing was too mean for him to do. He had been punished, sent home,

and reproved many times. A new teacher took him *fishing, gunning, and made a companion* of him. The change in the boy seemed a miracle to the people in town. He never returned to his old ways, and is an honorable and respected young man."

191. Boy, 9. "He was in papa's Sunday school class and very mischievous. Papa ignored him at first. *It didn't work*. Then he kept the boy more fully employed, invited the boys to our home and gave them freedom and a good time. These things changed the boy and he just loves papa."

192. Girl, —. "In our school there was a girl whose only ambition was to make trouble. When a teacher reproved her, she would fly into a passion. One day she struck the girl who sat behind her full in the face. The teacher simply told her to remain after school. This is the dialogue that followed: 'Jane, what made you strike Susie to-day?' 'I wanted to.' 'Do you not know that it is wrong to do such things?' 'I don't care if it is!' After a while Jane began to cry, saying she was sorry for her act. The next morning she swept into school haughtily as though angry at having yielded. Her teacher still followed the method. Before the term ended, the girl was attending school regularly and doing fairly in her work. Before the second term closed, she was studious and amiable."

193. "Several cases are now in process of transformation in our school. One boy is truthful. It helps him to have that trait recognized. Another has his knowledge of plants and animals turned to account. He is learning to think and to study.

"One was completely changed by a frank apology from me when I was in error. I explained my error and asked his pardon. He stared at me stupidly for a moment. He caught the idea. His face softened. His eyes filled with tears."

In six of the 101 cases of this class, teachers have found it necessary to teach the child the meaning of authority through physical force. In all the rest, the change has been effected by little hints that made the pupils think great thoughts. As one reads the records carefully, and asks himself what the elements are which have combined for such results, he catches a vision of teachers broad-minded, self-controlled, knowing young life, filled with faith in youth's possibilities for good, ready in sympathy, and quick to select the right thing to do on each occasion; teachers who make the *pupil reveal to himself* that the best is the only thing desirable, lead him to think that he can attain it, and assist him to make his thought life.

C. SOME INFERENCES AND APPLICATIONS.

The new material for the psychology of illusions in Section

A, is incidental. The aim of the study as a whole has been to present data bearing on the suggestibility of normal children. A careful study of the records in A and B, seems to indicate that in healthy children, suggestibility is

1. A universal condition ;
2. High in degree ;
3. Largely within the control of any one who knows the working of the child mind. [A.]

No thoughtful educator can fail to make from the same records, a multitude of inferences related to every department of instruction. Among these inferences, some of the more important are :

1. The necessity of removing from the public schools, stutters, emotional prodigals, and nervous defectives. [B, III.]
2. The need of care that the teaching force is large enough to prevent teachers from breaking down because of overwork. [Record 43.]
3. The prominence of the motor element in learning and the importance of calling it into play in teaching. [B, I, II, IV and V.]
4. Ground for urging a fuller and higher use of the dramatic instinct in the classroom. [B, V, especially in (2), records, 94, 96, 97, 98, and 99.]

If it should seem at first that giving play to the impulse for dramatic action is likely to make pupils stagy and artificial, it will be remembered that the danger lies in too little freedom for dramatic expression. The amateur only is stagy ; the actor who knows the stage, reflects from the footlights nothing but perfect human naturalness.

Of course it is necessary to guard against the dangerous element in plays of the circus group ; this is easily done by learning the actual source of the danger and diverting the attention to something safe that will cause the same flow of spirits and awaken a sense of power and superiority. One of the best ways for securing this result would be to induce boys and girls to invent new games calling for suppleness, strength, skill and competition, to supplement those now in use and the courses in manual and industrial training.

5. A possible use of the social instinct as it crops out in School Fads [B, VI] to awaken interest in studies like history, literature, and science.

6. The danger in leaving children too much alone, and the necessity of closer companionship with children on the part of parents and teachers. [B, records 50, 51, 62, 70, 71, 75, 77, 78, 80, 81, 84, 86, and 131.]

7. In Suggestion as Children Use It [B, VIII], a hint at the natural method of child discipline.

8. The strong influence of the attitude of the teacher upon the tastes and ideals of the pupil. [B, IX.]

9. That although a bright teacher may interest pupils in a study, large sympathies, personal interest in the pupil, and ability to appreciate the good in him, are necessary to awaken purpose and develop strong character. [B, IX.]

In conclusion, a word about the relation of suggestion to other methods of work cannot be amiss. It is a method which requires a better knowledge of childhood, a clearer perception of the nature and relation of things, and better judgment than any other. It does not despise drill or formal work. It realizes that some things must be perfectly mechanized, but it selects these with the greatest care, knowing that only the most fundamental blocks in the building of yesterday's wisdom, can meet the demands of to-day, or survive until to-morrow. It does not despise the needs of the individual, for, while it believes in the co-operative work of class drill, it believes just as strongly that much of the time now spent with classes on useless details might be used more profitably in giving hints suited to the needs of each pupil, and calculated to arouse in him the deepest and most thoughtful interest in his work.

One very important thing for the schools to teach is the art of independent thinking. History is replete with records of delusions, devil scares, crazes, and stampedes, and one who reads these records and sees their parallel in a thousand phenomena of every day life, cannot help wishing for some process in education that will prepare men to see *all* possible aspects of a thing, enable them to play a sort of mental solitaire until these aspects are classified, and make them self-reliant enough to trust their own judgment after it is formed. Suggestion aims to secure just this kind of strength, balance, and independence. It tries to throw the pupil on his own resources at every point. It never loses sight of the charm of mystery. It deepens the learner's interest by leaving to him the joy of discovery. It tries to make the pupil see himself just as he is. It cannot become flattery when used by an *honest* teacher. It tries to keep close to Nature. It is silent. It is patient. It can wait for results. It helps the teacher to make himself unnecessary to the pupil. It makes the pupil master of himself. *L'art de suggérer est l'un des plus délicats et des plus utiles à connaître. S'il est difficile, en effet, sans lui, de communiquer la science, il est plus difficile encore de faire aimer le bien et de former des hommes.*¹

¹ Thomas, *La Suggestion*.

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