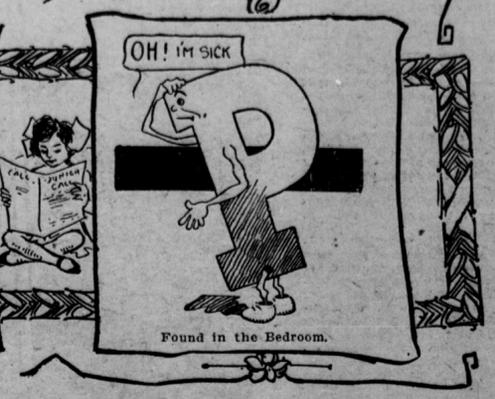
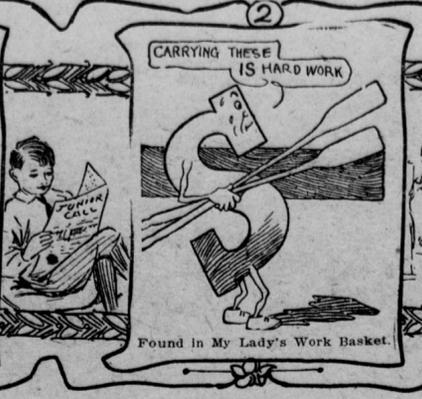
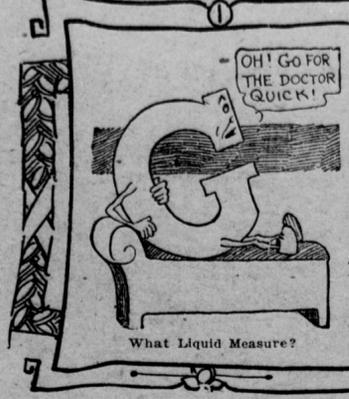


FOUR SPLENDID FOUNDATIONS WILL BE AWARDED FOR SOLVING THESE PUZZLES



WRITING CONTEST

Arrangement of papers: Subject, Name, Address, School, Grade.

WRITE ON ONE SIDE OF THE PAPER ONLY

WHAT SORT OF A PET DO YOU LIKE BEST, AND WHY?

Every boy and girl either has a pet of his or her own or wants one. If you have one of your own, tell us about it. How you got it and when; just what you like about it best of all, and why you prefer it to any other pet. Those of you who haven't any, tell us what sort of a one you would rather have and your reasons for that particular preference.

Children all have animals and birds, and we'll expect to receive any number of letters from the Juniors this week on the above subject. Oil up your fountain pens and get to work and let's see which of you possesses the most interesting pet. Letters in by Wednesday. Don't forget.

OPEN LETTER SECTION

Any Junior may write a letter for this section on some topic of public interest. Keep track of the letters from week to week and do not take subjects already written on, unless you do not agree with some writer and wish to answer in a letter of your own. The letters may be from 200 to 400 words, must be in by Wednesday of each week, and must be on a subject of public interest.

The letters given below were sent in answer to the question which was published in The Junior Call of October 9, "What improvement can you suggest in the public school system?" The first four are prize winners. The fact that your letter has not drawn a prize does not necessarily condemn it. It may be inferior to the prize winners in only one little detail, and the following week may see you the successful competitor, so don't give up hope. Keep on trying.

AWARDED A PRIZE

LARGER SCHOOLROOMS

GERTRUDE RODDY,
2015 Twenty-fourth Street, San Francisco, Commercial High, Senior Year, Age 15 Years

Every Junior knows how hard it is to study in a small, stuffy room on a warm June day when all nature is showing the world her great treasures. Even the open windows of the schoolroom do not alleviate the heat in any way and the result is that the pupils are petulant, their brains will not perform their work. They are like a machine which has not been oiled.

Large schoolrooms are a necessity always, but especially in warm weather. I advocate the plan of a certain city, which has a classroom in the open air for each class, equipped with seats and desks. This experiment has been a great success. Brighter eyes, rosier cheeks and better class work is the result of this plan.

Another thing which we hear a great deal about at present is the drinking cup in the public schools. It breeds every sort of disease, and when from 400 to 500 pupils drink from the same cup each day it is any wonder that the dreaded white plague, consumption, is wading thousands of our children to its arms each year? Death, the reaper, will gather a large harvest day by day in the room. A radiator is banished and a sanitary invention takes its place.

Public schools are provided with small stoves, which smoke and cause an endless expense for coal and wood, in the schoolroom. Instead of a pupil coming into a classroom on a cold November day shivers with the cold until the fire is lit; then it takes such a long time to warm the room. A radiator would, if provided, prove more economical and would be a blessing in cold weather.

There should be more basket ball and tennis courts in the schoolyard. Then a swimming pool, which be fixed and used by pupils. Swimming is a very useful thing to learn, for it may some time save us from drowning if we ever travel on the high seas.

Every school should have a school garden maintained by the pupils. Each class could have a plot, and grow to working in the class and the November day shivers with the cold until the fire is lit; then it takes such a long time to warm the room. A radiator would, if provided, prove more economical and would be a blessing in cold weather.

AWARDED A PRIZE

SHOULD TEACH SWIMMING

MERVYN MILLS,
Richmond, Cal. Tenth Street School, Seventh Grade, Age 13 Years

Almost every day in the week numbers of lives are lost in this great world simply because drowning persons have been unable to swim. Three-fourths of the people live near oceans, seas, bays, lakes or rivers, and all boys and girls like to bathe, swim, wade, fish and row. Any of these sports exposed to a person to drowning if he does not know how to swim. For instance, if one is wading or swimming in the water and he gets tired and he is rowing there is always danger of the boat being upset.

I don't doubt that it would be an expense to the public, but it would be the saving of many lives. At times people in great numbers have been drowned in ships, and it is a shame for living they will have to do sums very rapidly.

Another thing I think that is useful in the schools is grammar. If you speak incorrectly everybody will say to the child that was not taught properly in school. These two studies

AWARDED A PRIZE

ADVOCATES HALFDAY SESSION

DOROTHY RUSSELL,
1017 Green Street, Pacific Heights School, A Seventh Grade, 12 Years

I do not know much about the public school system, but I will endeavor to suggest a few things that, in my judgment, would greatly improve it.

At present the school hours are from 9 a. m. until 3 p. m., with an hour for exercise, which is so necessary for the children's health. In the present day school the length of the study period is five hours. Now, if the school session took in at 8 o'clock and lasted until 1 there would be more time for pleasure. Also there would be more pupils attending school, as the poorer class of people could work in the afternoon and earn enough to carry them through the more advanced grades of study.

In my argument, I think, is sufficient to show that a half day session is better than a whole day session. The schools should be more interested in the standing of the pupils depends, to a large extent, on the amount of exercise they get. The yards could not only be spacious, but should contain amusements for the children, such as swings, flower gardens, etc.

There should be more schools of correspondence for students of small towns who are prevented by distance or other considerations from continuing their studies beyond grammar school or high school courses.

AWARDED A PRIZE

MORE FIREDRILLS NEEDED

MARY CASENAVE,
1427 South Seventh Avenue, San Francisco, Bay View High, Sixth Grade, Age 12 Years

It is hard to say what improvements can be made in the public school system, but I think that the children should be drilled more in case of fire. We do not have as many fire drills as we should have. If a fire were to break out in a school, an almost sure there would be a panic. The children are drilled, I think, at least twice a month, but that is not enough. When a fire drill does come there are some children who try to be funny and what they do when there's a fire drill, and if they were a real fire they would jump on top of one another. We should at least be drilled once a week.

I read in the paper some years ago of a fire in a school in Cleveland, where so many children were burned. Had those children been well drilled, and if they had obeyed their teachers, they would, maybe, have been saved. It is not only the drilling, but obedience, that may also save your life.

For instance, were not the girls of Mount St. Joseph's asylum saved from death by being well drilled and by obeying their superiors? If they had not obeyed they would have died when their bodies would be lying under the ruins of the building. So, in public schools, we need more drilling, and the children will have to obey in order to be saved from death in case of fire.

AWARDED A PRIZE

ARITHMETIC AND GRAMMAR

BEATRICE MARTIN,
51 Cheney Street, San Francisco, Fairmount School, A Sixth Grade, Age 11 Years

I think if I had charge of all the public schools in San Francisco I would make a little change in the studies. I would have about two hours for arithmetic, one hour in the morning and one in the afternoon, and then the children would not get so tired. Arithmetic is very important, because when boys and girls are grown and have to make a living they will have to do sums very rapidly.

Another thing I think that is useful in the schools is grammar. If you speak incorrectly everybody will say to the child that was not taught properly in school. These two studies

A FEW SUGGESTIONS

MARJORIE L. MAUZY,
1105 O'Farrell Street, Pacific Heights School, A Eighth Grade, Age 14

Just the subject I have been waiting to write on and now that my opportunity has come I will take the chance and suggest a few improvements to the public school system. The first and most important is the amount of home work which is given us each night. Our teacher makes our home work very interesting and our principal advises us to study an hour before dinner and an hour after. Two hours of good hard work ought to be enough time to do our home work, but why must we have home work? From 3 to 3 o'clock, five hours, we are in school.

In my class we have two half hour study periods. The rest of the time is divided among the different studies. One period in the week we have drawing, another time nature study, composition, music, etc., so that we are busy all day. I often say to my school-mates and maybe you think so too, Juniors: "I love school, but I hate the home work." The members of the board of education should think that they were once children and disliked home work. Juniors, if I ever get the opportunity to have a heart to heart talk with the board, I am sure this will be my heartiest appeal.

The second suggestion pertains to the manual training and cooking of the public schools. The girls take cooking and the boys the manual training, but my suggestion is that they split the term of each and give the boys a chance to learn to cook and the girls a chance to learn carpentering. You might laugh, Junior girls, but I tell you it's mighty fine to know how to drive a nail straight and Junior boys, you will never regret knowing how to cook. My brother, a few years my senior, can cook as well as any chef.

There are other suggestions I would like to make, but I will leave them for another time. Think over what I have written and see if you won't soon come to the same conclusion.

TOO MANY CHILDREN TO ONE TEACHER

FRANCES FINLEY,
R. F. D. No. 4, Box 23, Santa Rosa, Mark West School, Age 13 Years

Ever since schools have been in the United States they have been steadily improving, but there is still a great deal to be done. There are about 10,000 teachers in California with an average of about 40 children to each teacher. A few schools have about 60 pupils to each teacher. I think that 60 pupils are entirely too many for one person to teach. There are no, sort of, other schools that are not large enough for all the pupils, and they are crowded and unhealthy. In certain cities they are building the schools larger, giving one teacher less children, and I think it is a very good idea, too. About three children out of every hundred graduate from the high school. If schools would leave out a good many unnecessary studies, substitute other and more helpful books and make the examinations a little easier I think a great many more pupils would graduate.

In the high school they are gradually taking up more advanced studies and courses and we shall soon be able to do other things. We need to learn by going through high school.

READING AND SPELLING

NADA DAVIS,
129 Huddell Street, San Francisco, Fairmount School, A Sixth Grade, Age 12 Years

It is hard to decide what branch of the public school system ought to be improved. I think if I had charge of all the public schools in San Francisco I would have the children read more than they do now. Every day I would have each child read a paragraph and then have a spelling test. We can not read the words they did not understand. Reading is very important for children, and it is the only way you could not learn arithmetic, history and geography if you think not to read. That is the reason I would not have the children read more time for reading than anything else.

Spelling is also important. It helps to develop the mind, because when it is dictated you have to remember it. I would have about an hour for spelling. First I would explain all the words and then would have them written.

DISEASES AND LOW SEATS

GERTRUDE SHARP JR.,
Mill Valley, Cal., Transpacific Park School, Fourth Grade, Age 10 Years

You have often seen children coming to school with bad colds, sore throats and other little things. Some of the boys and parents say "Oh, that's nothing; she only has a little cold." But it is something, for most all child diseases come from colds. Other children take the cold from the sick child and carry it on. Then many children are sick with a cold just for one child.

Some of the classes at my school have very low seats. There are quite a number of big boys and girls. The seats are so small and they hurt their backs. Some of the school children are round shouldered. Their parents scold them for not standing up straight. It is not the child's fault. It is the low seats for big children. If the board of education would put in larger seats for the children, it is a shame for all these boys and girls to be stoop shouldered. It ought to be attended to right away.

Now Juniors, if you are sick with a cold or a sore throat or any other thing, don't come to school if you can help it.

SEWING FOR GIRLS

IRENE ANDERSON,
3266 Laguna Street, Pacific Heights School, Eighth Grade A, Age 13

I think that sewing ought to be taught in the San Francisco schools. In many city schools two afternoons in each week are devoted to plain sewing, but as we have cooking once a week one afternoon would be enough for sewing. Many a woman gets married who doesn't know how to sew on a button, handle a broom or cook a potato. They think that music, singing, speaking of languages, etc., are the only necessary accomplishments for a lady. But music and singing can not make a housewife.

I can not say that I am overfond of sewing, but I think every girl and woman should learn to sew by hand as well as by machine. As to cooking, I believe I could stand all day making pies and bread. I do not say that I am a fine cook, for once when I made an apple pie it was so heavy that I had to throw it out.

Juniors, there is a greater need of good housewives in the world than of artists and musicians.

WOULD BEAUTIFY SCHOOL GROUNDS

FRANCES McCONOLOGUE,
508 Mark Street, Pacific Heights School, Seventh Grade, Age 13 Years

Improvements are needed everywhere. Things are never perfect.

In our school they should have cooking and sewing classes for the girls. For the boys the study of many different trades. This would all be helping the pupils. The school would need much improving. Improvements to the school could be done in many ways. Here are some: In the schoolyard the younger children could plant climbing vines along the fences and they could have swings under big shady trees. Basketball and tennis courts should be added. There are many other things which, however, take too long to mention.

IMPROVEMENTS I THINK NECESSARY

KATHERINE ROTH,
2615 Laguna Street, A Eighth Grade, Pacific Heights School, Age 12

First I think that at least one foreign language should be taught in the public schools. German is more desirable and necessary, owing to the majority of German-Americans.

On second consideration I think it would be a good idea to have gymnasium work and music in the grammar grades. The former is necessary for the development of the muscles. It makes the weak child stronger and the strong child more powerful. The latter would help to bring out the talent of the children and give them a great opportunity for the poorer ones, who can not have the chance at home. Then last, but not least, I think there should be a longer summer vacation and not so many small ones during the school term.

NO PUBLIC DRINKING CUPS

KATHRYN HERMAN,
1015 Green Street, San Francisco, Pacific Heights School, B Fourth Grade, Age 10 Years

I think the schools should all be fire-proof and have iron fire escapes. Every day we should have a fire drill, so, in case of fire, we could all get out safely. Then there should be a rule enforced making each child bring his own cup to drink from. I think this would make a great change in things, Juniors, don't you?

SOME IDEAS OF HER OWN

FLORENCE McDONALD,
2217 Steiner Street, San Francisco, A Fourth Grade, Pacific High School, Age 10 Years

I think the public schools are nice in some ways, but not in others. If I had a school this is what I would do: I would buy books for the poor children who could not afford them. Then I would have each class play in a separate yard, because when the large children run they are apt to bump into the smaller ones who are not quick enough to get out of the way. The

NOTICE

These puzzles are for Juniors from 10 to 16 years only and ARE NOT for grownups. Juniors must write name, address, age and school on postal bearing their solutions; otherwise they WILL NOT be considered.

Winners of Puzzle Prizes

Four very fine fountain pens will be given away each week for correct answers to the puzzles. This does not mean that every one answering the puzzles gets a prize. But if you persist, you will surely get one. If you do not get it this week keep on trying. Perhaps you will be successful next time. The Junior follows the fairest possible method of awarding its prizes. All answers must be spelled correctly, written neatly and sent in on postal cards. Those received in other ways will not be considered.

The correct answers to the puzzles published in The Junior Call of October 9 are as follows: 1, Mountains. 2, Rapid. 3, Phlox. 4, Walnut. 5, Kansas. 6, Windlass.

Prizes were awarded to the following who answered them correctly: Lionel Sorace, 714 Fillmore street, San Francisco. W. A. Brewer Jr., Burlingame. Eliza Peoples, 2509 Flirting street, San Francisco. Phillip E. Trittenbach, Tittletown.

Amsterdam receives yearly nearly a thousand pounds weight of a curious and interesting vegetable substance known in Java and in the trade as kapok, which is being used for stuffing cheap mattresses and pillows. It is a sort of yellow wadding that nature uses as a covering for the seeds of certain trees in the Malaccas. Its fibers being very non-resistant, it has been found impossible to spin or weave it; but it gives excellent results for bedding, making a mattress delightfully soft if it is exposed to the sun before being used. It is exceedingly light and buoyant, in this greatly surpassing cork, as it will support in the water 35 times its own weight.

A Fly Eating Plant

In England there grows a little reddish-leaved odd looking plant known as sundew. It is but an inconspicuous weed, and yet literary and scientific honors have been heaped upon it. The leaf is round and flat, and is covered by a number of small red glands, which act as the attractive and enticement to the misguided insects. Their knobby ends are covered with a glutinous secretion, which glistens like honey in the sunlight, and so gains for the plant its common English name. But the moment a hapless fly, attracted by hopes of meat or nectar, settles quietly in its midst, on hospitable thoughts intent, the viscid liquid holds him tight immediately, and clogs his legs and wings, so that he is snared exactly as a sparrow is snared with birdlime. Then the leaf closes over him slowly but surely, and crushes him by folding its edges inward gradually toward the center. The fly often lingers long with ineffectual struggles, while the cruel, crawling leaf pours forth a digestive fluid—a vegetable gastric juice, as it were—and dissolves him alive piece-meal in its hundred clutching suckers.

Age of a Fish

The age of a fish can be determined with accuracy by inspection of the otoliths or bony concretions which are found in the auditory apparatus. These otoliths increase in size during the entire life of the fish, each year adding two layers, a light colored layer formed in summer and a dark layer formed in autumn and winter. The alternate layers are sharply contrasted and very distinct, so that there is no difficulty in counting them. The number of pairs of layers is equal to the number of years the fish has lived.

By this method Wallace has made an interesting study of the distribution of fishes of the plaice species over various sea bottoms, according to age. In this way the rapidity of growth of fishes and the effect of fisheries on the population of the sea can be determined. Scientific American.

Facts About the Gila Monster

Dissension and discussion have raged for years about the hideous head of the Gila monster. This great lizard of the southwest has been pronounced absolutely deadly by one set of partisans, and absolutely harmless by another. Somewhere between lies the truth. If any human being has actually been bitten by a helodermis the event has either escaped notice or has been so hedged about with obstructive legends as to have forfeited scientific credence. But the saurian itself has been studied and dissected and its venom has been analyzed. The venom is related to snake poison, but is neither crotaline nor elapine. From animal experiments it is thought that it might be fatal to man under unfavorable conditions. There are no fangs proper. The poison gland is in the lower jaw, instead of in the upper as in snakes, and its product is projected through small ducts which open in the gums outside the teeth. The Gila monster has the grip of a bulldog. Torture will not loosen its hold once fastened on. It is through this intimate contact that the venom works into the wound.

Fortunately, the lizard is slow to anger and prefers flight to battle, so it is likely to be a long time before science has an opportunity of studying the effect of its venomous jaw clamp upon man. There are a few vaguely rumored reports of prospectors having perished in the desert of Gila monster poison, but these are so confused with symptoms suspiciously resembling alcoholic poisoning as to lead Dr. R. W. Shufeldt, an authority upon the Reptilia, to remark that "a quart of raw whiskey, practically given at one dose, may prove more fatal than the bite of 10 helodermans."—Everybody's Magazine.

Troublesome Spiders

Spiders once caused the Argentine republic not a little trouble. Not that they were in any way dangerous or destructive in themselves. The grievance was simply that they would spin webs. Any one who has gone across the fields on an autumn morning before the sun has dried the grass will remember how the dew sparkled on the spiders' webs stretched across the grass and the bushes. It was just this dew on the webs that caused the trouble in the Argentine republic.

The web spinning spiders are so plentiful that they have, on one occasion at least, completely demoralized the telegraph service. They would spin their webs across the telegraph lines, and as soon as dew fell or a shower came up every microscopic thread with which the wires abounded became wet and established a minute leak. The effect of millions of these leaks was practically to stop the operation of the lines.

The government telegraph department, especially in Buenos Aires, was put to much inconvenience. A number of expedients were tried, but to no purpose, until at last on one line as a last resort it was decided to connect Buenos Aires and Rosario by an underground cable about 50 miles long. On this important line some years ago the effect of the webs was to cut down the speed of working from 300 to 400 messages an hour to 30.

Wonders of the Seton Indians

These are the vows of the Seton Indians: Not to rebel. Not to kindle a wild fire; nor to leave a fire in camp without some one to watch it. Not to protect the songbirds; not to injure or frighten songbirds, nor to molest their nest or eggs, nor to molest squirrels. Not to make a dirty camp, nor to big streams of any kind into the camps of these under 14, nor to point a weapon at any one. Not to smoke (for those under 18). Not to have firewater in camp. To keep his word of honor sacred. There are now scattered over the country between 150,000 and 200,000 of these Seton Indians. Although, of course, only a few of them, from fairly near by, can attend the national council at Wyndygoul, their organizations are strong and vigorous and are run on the same general plan throughout the country. These boys have opened to them a clear and understanding fact on the book of the woods and fields and the open sky. Put one of the Seton Indians down at random in any part of the world, and it would be hard for him to be bored. They early become learned in the art of self-government and are a radiating force for the diffusion of the qualities that make for manliness. They are safe and sane.—Everybody's Magazine.

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