THE CHILDREN

BRAIN EXERCISED AT HOME

Something Entertaining as Well as Instructive for Boys and Girls on Cold Winter Evening.

Often of a cold winter evening boys and girls like to spend the time in doing something entertaining and instructive as well. A good pastime that will prove instructive is that of solving problems. Distribute pieces of paper among those present and tell them to solve the following problems, the answers to which are given below:

1. What two numbers multiplied together will produce seven?
2. How may four fives be placed so as to make six and a half?
3. If five times four are thirty-three what will the fourth of twenty be?
4. What is the difference between twice twenty-five and twice five and twenty?
5. Divide the number fifty into two such parts that if the greater part

Working Problems.

be divided by seven and the lesser by three the quotient in each case will be the same.

Some may answer correctly and some will be caught, easy as the problems appear.

Here are the answers:

1. The two numbers are 7 and 1.
2. The figure 5, the fraction 5-5 and the decimal fraction .5.
3. Eight cents and one-fourth.
4. Twice 25 are fifty. Twice 5 and 20 are 30.
5. The two parts are 35 and 15.

SILVER COIN MADE TO JUMP

Clever Little Trick May Be Performed With Port Wine Glass, but Conical Form Is Easier.

Choose a wineglass of the conical form, shown in the illustration, whose greatest diameter is a little larger than a silver dollar. At the bottom of the glass place a silver quarter, and above it the dollar, which will fall only a little way into the glass; it will rest horizontally, like a lid upon it. Now tell your friends that without touching either glass or coin you have it in your power to make the quarter of a dollar jump from its position. All you have to do is to breathe strongly on the silver dollar. It will rotate and so assume a vertical position. At the same instant

The Jumping Coin.

the compressed breath at the bottom of the glass will cause the quarter to skip from its position quite a distance on the table, after which the dollar will slowly go back to its former position. Sometimes this trick may be performed with a little port wine glass, but with the conical form it is still easier.—Magical experiments.

BEES PARTICIPATE IN WAR

Terrifying and Demoralizing Method of Repelling Besiegers Employed by Themiseyraeans.

In these days of scientific warfare there are more ways of killing a man than of going to church, but you would have to look far and wide before you would find a more terrifying and demoralizing method of repelling besiegers than that employed by the people of Themiseyra, an ancient city of Asia Minor. A Roman historian tells that when the city was besieged there were great buildings put up to be pushed toward the walls so that the attackers might advance uninjured. But the Themiseyraens were a capable people, and they chopped holes in the tips of the buildings and cast down on the heads of the advancing army whole swarms of bees and all the wild and ferocious animals that their municipal menagerie had contained.

Likewise, in England, a few hundred years later, the Danes and Norwegians were attacking the ancient Roman city of Chester, then held by the Saxons. After all the ordinary methods of warfare had failed to drive away the Norsemen the bee hives of Chester were brought to the city walls and overturned on the heads of the enemy, who retired in haste.

FLED FROM CHINESE REVOLT

Two Missionaries Arrive in California but Have Little to Tell About the Fighting.

The first missionaries to come out from war-stricken China arrived in San Francisco the other day on the steamship Siberia from Hankow. They are Rev. James Webster, an English minister, who for seven years has been conducting a mission at Hunan, in the vice-royalty of Wu Chang, where the Chinese rebellion had its inception, and Rev. A. W. Martin, who for three years has had a mission at Nanking.

Their reports of the rebellion are rather meager, as both were gathered with all other foreigners into the consulates as soon as the war broke and were kept under excellent protection until the time of their departure.

Mr. Webster, who went to Hankow immediately following news of the uprising, with all other foreigners left that city two days before it was captured, burned and sacked by the imperial forces. During his stay there the city was under the control of the insurgents, and he says those who had lived in Hankow for years declared that the municipality was governed better by the rebels than it had ever been before.

Mr. Webster sent his family back to his old home at Nottingham, England, last February, and now is on furlough and on his way to join them during the holidays.

Mr. Martin is returning to his home in Iowa with his wife and children. All four of the children were born in China and now are receiving their first view of America.

He and his family, with all other foreigners, were hurried into the American consulate on November 8 as a result of the fighting near Nanking, and on November 9 all the women and children were rushed out of that city by rail to Shanghai. The city's gates were closed, and at the request of the American consul, Gracey, a detail of 104 marines was sent ashore from the gunboat New Orleans to insure protection to the Americans.—San Francisco Chronicle.

Where She Would Be Taught.

Women, writes Marion Harland, should emulate the sagacity of their spouses in selecting wisely the foodstuffs and whatever else goes to making up the comfort and comeliness of the home. Expenses should be regulated by the sum their husbands can afford to hand to them for the defrayment of domestic expenses. But who is to instruct the raw girl just out of school, in the principles and details of applied household economics? The almost universal fashion of sending the daughter to boarding school at the age of 12 or 14 and from boarding school to college for four years more, vacations being passed at watering places, the seaside, or abroad, effectually precludes the possibility of learning housewifery from her mother. Admirable as may be—and in many cases are —the department of domestic science established in our leading institutions of learning for girls, one year of apprenticeship in the kitchen of a home where economy is a present and practical consideration would make a better business partner for the prospective husband than a four years' course in the model offices and demonstration halls of the best equipped college in the country.

The Englishman.

An English actor was traveling with an American company and won his way into the heart of every member by his kindly courtesy and quiet consideration. One of the ladies, wishing to find out if a sense of humor was also one of his qualities, propounded to him the following conundrum:

"Which dies the harder, a sculptor or a barber?"

The Englishman gave it up, and she replied:

"A sculptor, because the barber curls up and dies, but the sculptor makes faces and busts."

The Englishman laughed, not boisterously, but that she attributed to his well-bred reserve, and decided in his favor. Later in the evening he came to her and said:

"Miss F., would you mind if I told you something?"

"No," she answered.

"I wouldn't hurt your feelings," he went on in his delicate way, "you American ladies are so charming; but you do make some peculiar grammatical errors. That conundrum, now. You know, it isn't busts, it's bursts."

New Nets for the "Wanted."

Through a Paris contemporary we learn of a novel method adopted by the Prague police authorities to detect the perpetrators of high crimes and misdemeanors. But whether the project will prove a success remains to be seen.

When a person of distinction in the annals of crime is being sought and the police experience difficulty in laying hands on the suspect, in future they will send to every cinematograph exhibition in Bohemia a photograph of the person "wanted." During the entertainment the picture will be shown with some little explanatory note, and at the conclusion each member of the audience will be free to act as an amateur detective. It seems very likely that this method will be fruitful in actions for damages.

That Is Natural.

Mrs Towne—So Hiram Sharp's girl Effie has become a music teacher.

Hepzibah—Yes; we call her Eff Sharp.—Boston Transcript.

DENTISTRY NOT NEW

SAMPLES OF ANCIENT WORK IN MUSEUMS.

Most Interesting Because the Oldest Is Specimen of Bridge-Work Which Was Found in a Phoenician Tomb at Sidon.

Dentistry, though considered peculiarly modern, has been found highly [illegible]

single ox tooth grooved to imitate rather closely two human teeth. In the laws of the Twelve Tables, written in Rome 450 B. C., while it is expressly forbidden to bury gold ornaments with bodies, a special exception is made for gold with which the teeth may perchance be bound together. The museum of Pope Julius at Rome contains a gold cap made of two small plates of gold stamped out to represent rather closely a middle lower incisor and these two pieces soldered together to form the crown of a tooth.

The satiric poets of Rome, especially Martial, referred frequently to artificial teeth. Martial speaks of an old woman who was so scared that as she ran away her teeth fell out. In one epigram he answers the question why one woman's teeth are dark, while another's are white, though both are of the same age, by saying that one of them buys her teeth, while the other has her own. The Romans had a number of different kinds of dentifrices, and took great care of their teeth. Galen describes a form of pastile containing aromatics and opium that might be used as a toothache gum. The filling of teeth with various kinds of metal is described by Celsus, though the first sure reference to gold filling does not occur until about the middle of the fifteenth century. The transplantation of teeth, especially from the mouths of slaves into those of their mistresses, seems to have been practiced rather commonly in the early days of the Roman empire.—Journal of the American Medical Association.

Their Days of Struggle.

Sara Allgood, a versatile member of the Irish Players, has always dreamed of being a singer, and may go into musical comedy. Speaking of the Players, in New York, she said: "The enthusiasm of us all when this company was first organized was really wonderful. It wasn't for money we worked then, I can tell you. It was not, indeed. Because we got between 5 and 15 shillings a week, and that only if we were lucky. Often we would get nothing at all. When I was raised to 15 shillings a week I thought I owned the world. At night after the play we'd chip in for a little feast, and the boys would run out and get it—one for tea, another for sugar, another for bread, and so on. Many's the time I've dressed myself for my parts in clothes I made from my mother's old dresses. And Kerrigan used to borrow things from his house to use as stage properties, once a poker, another time a blanket. We had nothing of our own and no money to get anything with. Why, even yet I wear the old cape in 'Hyacinth Valley' that I stole from my aunt in those days. I've never paid her for it, but I've promised to give her five shillings when I go back to Ireland now."

Aristocratic Pests.

A most interesting development in connection with efforts to destroy the alfalfa beetle is reported from the region of the Mediterranean. Its destructive power in alfalfa fields is enormous. So valuable has the alfalfa become to the farmers of the country that the appearance and ravages of the pest are occasion of deep and widespread concern.

But how did the beetles find their way from the Mediterranean shores to the plains of the West? It may be understood readily that they have taken passage on vessels from that part of the world to our eastern ports. But how did they make the trip overland?

A partial answer, at least, to these questions is found in the results of investigation of the "sweepings" in palace cars in the west. The "vaccum cleaner" is used in cleaning these cars. Thirty-seven of the destructive pests were found a few days ago in the clutches of a cleaner used in one compartment of a sleeping car!

More Than Two.

"There are always two sides to a question."

"That used to be the accepted idea," replied Senator Sorghum; "but the number of parties formed to take up different sides would indicate that the modern question as a rule is at least hexagonal."

JUST BARKING.

Bark! Bark! Bark!
Old Rover and little Pat.
Bark! Bark! Bark!
What are they barking at?

Up in the morning early,
They bark the livelong day;

woodsman he will not have to drink water from the stagnant pools in order to keep life in his body.

Queer as it may seem, an experienced man can hunt for days through such dry tracts and yet experience no inconvenience on account of the lack of water. Nature has provided a means which is only known to the initiated. Every old huntsman carries with him when going on a long hunt a small auger, by which he can secure a refreshing drink and water to cook with at any moment.

A cottonwood tree or a willow is the well which the wily huntsman taps. He examines each tree until he finds one that has what a woodsman calls a "vein." It is simply an attenuated protuberance. By boring into this "vein" a stream of clear water will flow out. It is not sap, but clear, pure water. The huntsmen say that the water is better than the average to be had from ordinary wells. There is no sweetish taste about it, but it has a strong flavor of sulphur and is slightly carbonated.

The reason for this phenomenon cannot easily be explained, but that a supply of water can be contained in a tree is not so surprising. The fact of its flowing is the wonderful feature, showing that it must be under pressure, or, in other words, that there is more at the source of the supply. When it is considered that the trees furnish water in the dry season and that the ground is literally baked, it is the more remarkable, especially when the roots of the trees do not extend to any great depth into the ground.

AMUSING GAME FOR WINTER

Interesting Pastime for Young Folks on Dull, Long Evenings—Prizes May Be Given.

Can you make a picture composed solely of the figure 8? It is an amusing as well as an interesting game for

The "8" Figure.

the home, and our artist has shown what can be done in this direction. Many amusing pictures can be thus drawn by the amateur artist. Two competitions might be held, one prize going to the person who draws the most amusing or interesting picture, using the smallest number of the figure 8, while a competition might also be held for those who use the greatest number of figures in one picture.

Can You Tell?

Twenty tiny sardines
Packed in a tin!
We can get them out,
But how did they get in?

SPEEDY WORK AT TAILORING

From Shearing of Wool From Sheep's Back to Finished Garment Accomplished in One Day.

A man walked into a tailoring shop, the other day and asked to have a coat made.

"When do you want the garment?" asked the tailor.

"This evening. I want to wear it to a dinner."

"Impossible!" cried the tailor. "Make a coat in a day—unheard of!"

Yet it has been done—yes, from the shearing of the wool from the sheep's back to the finished garment. This feat was accomplished as far back as 1811 by John Coveter, near Newbury, in England.

At five o'clock in the morning Mr. Coveter was presented two Southdown Wedner sheep. At first the sheep were shorn, the wool spun, the yarn spooled, warped, loomed and wove. After that the cloth was burred, milled, rowed, dyed, pressed, and late in the afternoon put in the hands of the tailors.

By half-past six the coat was finished, and Mr. Coveter presented it to one of the gentlemen of the town amid the thundering applause of 5,000 spectators.

MACHINERY TO SAVE LABOR

Manufacturers Turn Out Pretty Near Everything Needed on Modern Farm at Reasonable Prices.

(By B. E. LARA, Illinois.)

During the progress of our state fair this fall I spent a good deal of time looking over the wonderful exhibits of farm machinery.

Nor was I the only interested person; machinery power attracted much attention, as is but natural considering the vast importance of such exhibits. The manufacturers are now turning out pretty nearly everything in the way of labor-saving machinery and at prices so low that they can be adapted to the small farmer as well as the man with hundreds of acres.

Gasoline and kerosene engines are made in almost numberless styles and sizes.

There is the little two-horse power motor which takes up no more room than a sewing machine and which will do twice as much work around the farm house and barn as the strongest hired man. These little engines will run the churn, the separator, the washing machine, mowing machine, saw the wood, make the feed cutter hum and pump water from the well. The engines run up in size to 40-horsepower. They are simple in construction, easily managed by any man who has an aptitude for operating machinery or who will take the pains to learn. The prices run from $90 for the little fellows up to $2,000 for the biggest engines.

Manufacturers of traction engines have made many improvements in these machines during the past few years. As now constructed they are more economical in the use of fuel, more simple in construction and better adapted for a variety of uses. One exhibitor performed some remarkable feats with a 15-horsepower traction engine. He ran the machine up embankments which would test the agility of a two-horse team hitched to an empty wagon, drove it over six inch fence-rails, back turned and twisted with greater facility and speed than is possible with the best trained team of horses.

Hitched to a gang of plows or discs, trailing harrows to any desired number these engines will do the work of half a dozen teams and as many men with perfect ease and less expense.

LOW VITALITY OF CHICKENS

Becoming Common Complaint and Must Be Dealt With—Many Ideas Advanced as to Cause.

(By PREN MOORE, Idaho Experiment Station.)

All over the country infertile eggs and chicks low in vitality is a common complaint, and it is fast becoming an alarming condition, one that must be dealt with. All kinds of ideas are offered as to cause, many suggest inbreeding, while others suggest the lack of free range, neither of which bear very close relation to the real cause.

Line breeding (commonly called inbreeding) is absolutely necessary that the height of breeding perfection may be attained. The fact that wild birds are inbred, and have been from time immemorial, bears conclusive evidence that line or inbreeding has no effect on fertility. Quails will lay a large number of eggs, and will usually hatch every one of them; strong, vigorous fellows, every one looking alike, both in type and color.

Birds kept in close quarters, if properly cared for, will produce as great a percentage of fertility as those on free range.

The secret all lies in feeding and care of the birds. The breeding hen should be kept in breeding condition throughout the entire year. Hens forced for heavy egg production will not produce a satisfactory percentage of fertility. In fact, the balanced rations, so generally used for egg forcing, are not practical feeds for the hens. Hens that have been forced to lay like smoke throughout the winter, cannot be expected to produce fertile eggs when wanted for hatching.

To Insure Fresh Eggs.

In some of the large cities of Germany egg depots are established in which the quality and freshness of the eggs are guaranteed. For every bad egg the purchaser is entitled to get 16 good ones. If this method was in vogue in this country, under present conditions, there wouldn't be enough good eggs to go around after the first day's purchase had been made. Some pure food enthusiasts advocate a government provision which will compel every poultryman and farmer who sells eggs to mark them with his name so that they may be traced back and if he continues to sell bad eggs he will be barred permanently from all public markets.

Cull Potatoes for Hogs.

Potatoes that are too small to market may be used to advantage as a food for young pigs. Many farmers consider it no loss to have from 2 to 3 per cent. of their potato crop too small for commercial use as it gives them such a good winter pig food. It requires but a short time to cook them, in which way they are very beneficial. A little salt added while they are boiling will give them a relish.

Value of Dense Fleece.

A dense fleece is valuable not alone for the increase in quantity of wool, but for the protection that it affords the animal from the elements and the dust and chaff that flies about in the yards where they are fed.

TO TELL FUNNY STORY

PROPER METHOD IS REVEALED BY THEOPHILUS SMIFF.

Take Joke by the Hand and Lead It About Until Thoroughly Acquainted, Then Assume Air of Undertaker and Spring It.

Ever since Cain slew Abel for calling one of his pet jokes a "chestnut," the world has been taking lessons in the art of being funny. The desire to be funny lurks in every human breast. There have been men who have lived it down, and these have invariably become great statesmen.

The Morning Telegraph has called upon Theophilus Smiff, the great expert and scientist, who is said to have been the first man who ever made a theater box office man smile, but he kept his secret well and became famous. Prof. Smiff said:

"Humor is anything that is funny. It is in everything and in everybody. Extracted humor is followed by laughter, for it is by striking the responsive humor chord in the human breast that we get our only true effects.

"Therefore, no matter how good the joke, unless it be told in a manner to strike that cord, it falls of its own dead weight and furnishes us with one of the saddest sights in life.

"Select from any well known joke book a story. It should not be too new, as it is likely not to go so well as an old reliable joke that has been through several campaigns. Then cut from it all unnecessary adjectives, descriptions and apologies.

"Never apologize for a joke.

"Take your joke by the hand, and after having led it about until you know all of its family history, assume the air of a funeral director telling the relatives from which side of the casket they are to view the late lamented, and then give utterance to your jape.

"The best way is to get the point of the story well in mind and then put it away entirely until you need it. Nothing so intereferes with the success of a joke as to have the point hanging around in plain sight before the story is well started.

"Remember above all things that the face should be solemn, and the voice low and well modulated, with just a suspicion of sadness in it.

"Learn to pause at the right place, and if you are in doubt at all, the best place to pause is just before you start.

"This has been known to save a man many friends that he otherwise might have lost."—New York Morning Telegraph.

Wonderful Curiosity.

On the banks of the Williamette river, a short distance above Portland, Ore., stands one of the most remarkable rocks in the world. It is known as the Balancing rock. Rising from a broad base is a small column, roughly round in shape. Just above this is a huge mass of rock, bearing a tree on the summit, the total height of rock and column being about 100 feet. Although a great deal larger and heavier than the pillar on which it stands, the big rock is very accurately balanced. For how many centuries this odd freak has stood not even the wisest scientists are able to determine, but it has evidently been there for a very long period. The entire rock is of a volcanic nature, and the most singular thing about it is the fact that the knob and pillar are entirely disjointed from one another. Wind and weather, no doubt, are slowly wearing the Balancing rock away, but the process is so imperceptible that, failing some unforseen catastrophe, the monument will probably endure for many centuries.

Vanderbilt Gets a Tip.

There are a lot of stories told of that famous amateur whip, Alfred Vanderbilt, who has once again taken to himself a wife. On one occasion he had an amusing experience while driving his coach between London and Brighton. At one stopping place an American approached him and handed him a substantial "tip." "I touched my hat in customary style," said Mr. Vanderbilt afterwards, "took the money and put it in my pocket, and I think I had the better of him. I don't know whether this particular American intended it as a snub because I was a coachman or because he didn't know me; let us give him the benefit of the doubt—either way it's good enough." Mr. Vanderbilt, by the way, inherited £20,000,000 from his father, the late Cornelius Vanderbilt. He owns over 100 prize horses and considers coaching "the finest sport in the world."—London Tattler.

Mighty River Amazon.

It has been stated in official consular reports that the aggregate navigable waters of the Amazon and tributaries for all sort of craft are estimated to exceed 45,000 miles. The average depth is from 40 to 150 feet and the average width from 6 to 40 miles.

At the mouth near Para the river is 138 miles wide, including the Island of Marajo and the northern and southern outlets. The immense volume of water discharged marks a path of yellow water in the blue of the Atlantic easily distinguishable for 150 miles at sea, creating a fresh water sea while out of sight of land. This yellow or old gold colored water uniting with the equatorial current trends to the north at the rate of six miles an hour, and entering the Caribbean sea forms what is recognized as the Gulf etc.