



Tom Tit's Experiment

HAVE you boys and girls ever had the fun of making a sand motor?

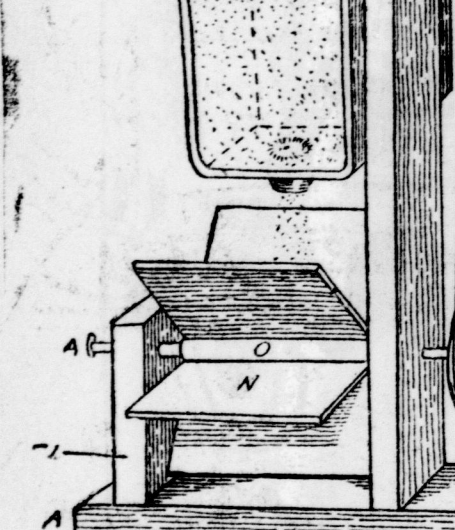
If not, don't miss it this week. Follow these directions by Tom Tit and you will have a motor to be proud of.

Take four pieces of wood about ten inches long, two and one-half inches wide and one-half inch thick.

Use one for the foundation, A-B. Set up the others, C, D and E, and fasten them to the foundation. Then set up a shorter piece, F, about three and one-half inches long.

Construct a sand wheel by first whitening the axle O, bore a little hole in each end, make the shaft wheel R, with a hole in the center of it; then, taking a long, thin nail, run it through O and R as an axle.

Before you do this, however, take visiting cards and with strong glue attach them, firmly to O as wings, N, for the sand wheel.



Parts of a Sand Motor

TROUBLES

MOTHER," said the little lad, "Doesn't your people look so bad."

"While I'm always full of life, don't you wish you were a boy?"

"Father, working every day, doesn't have much time for play. Except on holidays, you see."

"When he's home and plays with me."

"You have always lots to do—sewing, washing, baking, too? Many worries fill your head."

"Even after I'm in bed."

"Do you know, I've got a plan. What would you like to be a man?"

"We will keep a lot of cows. Like they do in story books."

"Then you won't have much to do, and I'll stay all day with you. Guess you'll have to learn to play. Or what could we do all day?"

"Now you're always darning socks. You don't care for trains or blocks. No use giving you a toy-box, boy? Don't you wish you were a boy?"

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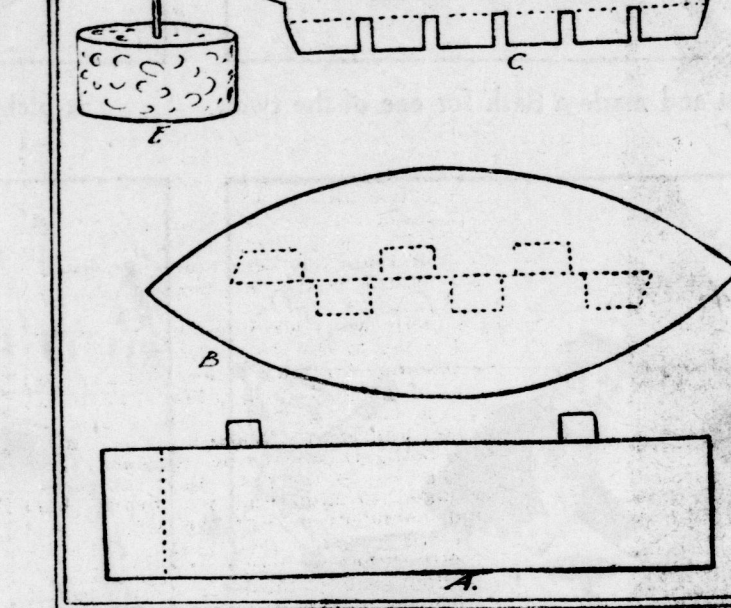
OUR GIRLS AND BOYS CONDUCTED BY POLLY EVANS

Boat To Put Together

GET out your points and scissors, boys and girls. Let's have some fun cutting out and coloring a boat.

Cut out the numbered parts and paste them on paste-board. Cut and A, together, placing each of the ends not marked by a dotted line over each of the ends which are marked by the dotted line, and pasting only as far as the dotted lines.

Bend the little flaps on A at straight angles; then place B upon AA and paste to the flaps.



Bend the flaps on C alternately to the right and left, so that each forms a right angle, and paste the flaps on the pieces marked them on E.

Take two corks of the same size as those shown, and stick a pin through the center of each. Place these two corks under the boat in the position shown in D, and stick the pins upward through E. Your boat is then finished.

Its appearance can be improved, of course, by placing silver paper upon the sides, etc.

You can then place your boat in a vessel filled with water, and, placing a tube in your mouth, blow through it, causing your little boat to rock on the waves.

AROUND THE WORLD GAME

THIS is such a jolly good game that it is worth your making special preparations for.

Suppose you hang on the walls a profuse number of railway maps, tourists' guides, etc., which can easily be got from railway and tourist offices.

You know what a parlor car looks like. Well, suppose you arrange the chairs in the room to look as much like those in a parlor car as possible.

The hostess should dress like an official guide or gatekeeper with cap and brass buttons. As each guest appears she should give him a ticket with this inscription printed or written on it, or better yet, painted prettily, so that it will do for a souvenir:

From Jollyville to Most Any Place. Good for Continuous Trip Only. (Write the date of your party.)

At the next door should stand an official to punch the tickets and hand each guest a travelers' guide. You should have made these guides yourself previously to the party. Use several sheets of white paper, each provided with numbered lines, bound with pretty water-color paper on which you paste or paint a picture of a tourist (easily found in any magazine advertising page) and the title, "Travelers' Guide."

When all your traveler guests are seated in the parlor car, call "all aboard," pull a tiny rope and make a bell ring—which means that the train has started.

Then let some one, imitating a vendor, carry a trayful of candy, peanuts, magazines, etc., up and down the car, making as much of a nuisance of himself to the passengers as possible, the more the fun.

Presently the train stops and the conductor should call out the place in the language of the country where you are now supposed to be. If in France, for instance, call out, "Paris! Descendez, messieurs les voyageurs."

At that all your passengers should arise, walk around the room and examine the numbered articles you have placed here and there. When they come to No. 1 they must guess what geographical place it stands for and write the name down on the line marked No. 1 in their guides.

After the guests have guessed for about ten minutes, make a "chon-choo" sound, call "all aboard!" and start off for another trip, landing presently in another country. Then all off for another ten minutes of guessing.

Here are suggestions for your puzzle articles:

A clear (for Havana).
A cup and saucer (for China).
Manila paper (for Manila).
Box of gold cream (for Greece).
A new Noah's Ark (for Newark).
A bit of Castle soap (for Castle).
A cork (for the city of that name).
A Leghorn straw hat (for Leghorn).
A bit of coral (Naples).
The Red Sea (a red letter C).
A picture of a man on a bicycle (Wheeling).

A bottle of cologne (to suggest that town).

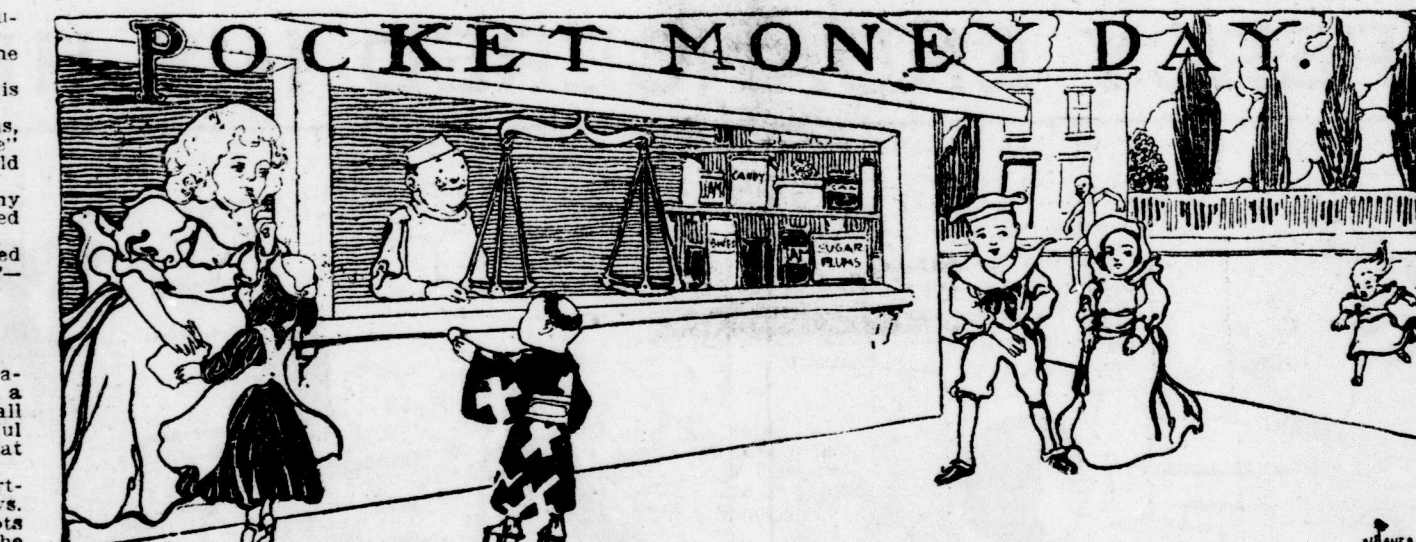
An alphabet card of capital letters (to represent all the capitals).

A bit of Dresden, of Delft and of Sevres china (to recall the three places of their manufacture).

A bit of the linen called "brown holland" (to suggest that country).

An orange (for Florida).
Brazil-nuts (for Brazil).
Macaroni (for Italy).
And a philopona ought to do very well for the Philippines.

After the guessing is over gather up all the travelers' guides and invite your guests to the refreshment counter, which should look as nearly like a railway lunch counter as possible. Sandwiches, fruit, cake, etc., should be served by a couple of girls appropriately dressed.



POCKET MONEY DAY.
All the dollies go for goodies, just across the way;
Mr. Goody gives them heaps, for just a little pay,
On Pocket Money, Pocket Money, Pocket Money Day.

PUZZLES & PROBLEMS

Answers to Last Week's Puzzles and Problems

Jumbled Proverb.
"Never scold your lips in other folks' broth."

Transposition Puzzle.
Poughkeepsie, N. Y. Eau Claire, Wis.
Omaha, Neb. Vidalia, La.
Louisville, Ky. Altona, Pa.
Los Angeles, Cal. Niagara, N. Y.
Yorktown, Va. Scranton, Pa.

Riddles.
1. One (p).
2. It burns no longer.

Similes in Dry.
As wet as a fish—as dry as a bone.
As plump as a bird—as fat as a pig.
As hard as a diamond—as soft as a cat.
As strong as a horse—as weak as a mouse.
As light as a feather—as heavy as a bear.
As plain as a pike's tail—as rough as a bear.
As light as a drum—as free as the air.
As heavy as lead—as light as a feather.
As steady as a plumb—as uncertain as weather.
As slow as a tortoise—as swift as a dove.
As gay as a jack—as sick as a dog.
As hot as an oven—as cold as a frog.
As true as a needle—as false as a monk.
As brave as a lion—as timid as a mouse.
As stiff as a poker—as limp as a noodle.
As dead as a bat—as deaf as a post.
As cool as a cucumber—as warm as toast.

Domino Puzzle.
By gently pushing the domino marked "6," you can cause all the lower tier dominoes to move to the right just enough to cause five equal-sized rectangular vacant places to appear.

Match Puzzle.
Can any of you boys and girls tell Polly Evans how the position of seven of these eleven matches can be altered so as to make a six?

What Birds?
Here are three more pictures of birds for you to complete. Then, can you tell Polly Evans what kind of birds they are?

Riddle.
What is the difference between a hungry boy and a greedy boy?

Can You Read Polly Evans' Mind?
Polly Evans has thought of eight words. Here they are, with several letters omitted. Now, can you read Polly Evans' mind and tell her the eight words she thought of?

Incomplete Sentences.
Following are half a dozen sentences, in each of which one word is left blank. See if you can find each word in the list of jumbled words and put in its proper place.

1. Kirk — is a very popular writer of books.
2. When children are not — they are likely to be petulant.
3. When we are in — our true friends come forward to help.
4. A Paris hat is usually an expensive

True Story of a Parrot

HARLIE is a large green parrot, with a red head, green and yellow wings and a white ruff around his neck.

He came from South America, and is now about 15 years old. His home is in Baltimore, where he is a great pet in the family in which he lives.

Harlie is a very bright bird, and has a wonderful command of English for a parrot, and also speaks Spanish, in which language he is polite enough to give vent to his bad temper, which he displays more frequently than he did when he was younger.

Harlie loves his mistress dearly. In the morning, when she goes into the room where his cage stands, he always says, "Howdy-do." Harlie wants his breakfast. Then, if she gives him a cherry or a piece of apple or peach, he takes it in his claw, and, tasting it, says, "Pretty good, pretty good."

He knows the time of the different meals, and no one can confuse him. For instance, sometimes his mistress will say at breakfast time, "Does Harlie want his dinner?" and he replies, "Charlie wants his supper."

When visitors call he always greets them with "Howdy-do?" and when they leave says "Good-bye," but when his mistress leaves, it is "Good-bye, dear."

His fond mistress has been in the habit of letting him out of his cage every day for a change, and very often goes all over the house with him perched on her shoulder. At such times he frequently says to her, "Come, kiss me; don't you want to?" or will vary it by saying, "Don't you want to kiss me, dear?" and then, if she turns her head, he will put his bill to her lips.

Harlie is a mark of affection never bestowed upon any one else. In fact, some members of the family he dislikes very much, and when they come near his cage and tease him—as they sometimes do—he screams and ruffles up his feathers and jumps around in the most angry manner.

Harlie is a very vain bird, but a very clean one, and enjoys his bath nearly every morning, after which he spends much time preening his feathers, and when he is dry and every feather in place, he will say in the most complacent tone, "Char, pretty good, pretty good."

Once when his mistress was moving his cage was put in a dark room, from which everything had been removed. Harlie evidently did not appreciate this kind of treatment, for when in the even-

ing she came in to see how he was getting along, he said in the most disgusted manner, "What's the matter?"

When the stork brought a little baby girl to the home of his mistress, not long ago, Harlie at once became very jealous. Whenever he catches a glimpse of this wee baby, or hears her crying he ruffles up his feathers and gives vent to the most angry and disagreeable shrieks.

But one day he further showed his jealousy by doing something he had never done before, and which sealed his doom, for then his mistress decided to part with him. When she was carrying him around the house as usual on her shoulder the baby happened to cry, and it enraged him so much that he walked down her arm and deliberately took a nip out of the back of her neck. The pain was so great that she threw out her arm with great force she caused Harlie to land under a bed, where for some time he remained sulking and saying, "Poor Charlie, poor boy."

After this display of bad temper he was put back in his cage, and there Charlie will live until his mistress decides upon a new home for him. This will probably be in a country where there are no babies or other pets to excite his jealousy.

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WHAT PHYLIS LEARNED ABOUT MINNOWS

LITTLE PHYLIS likes to go a-fishing, and she has brought home all sorts of things, from sea to land fish.

Many little stories of her "fishes" are told by Lenore E. Muelers in "Stories of Little Fishes." The new series tells what Phylis learned about minnows.

Phylis and her minnows were left alone at their summer cottage one day. Her father and brother Jack took the boat and went across to the other end of the lake to fish.

As they expected to be in the boat all day, mamma thought Phylis would do better to stay with her.

Phylis waited quite a while at first; for with her father and Jack as teachers, she was becoming quite a little fisherman. She had learned to bait her hooks and take the fishes off as well as Jack.

When she ran down to the lake shore, there on a great rock where she loved to sit, was a can of bait and her line and hook.

"He's the nicest brother I ever had," said Phylis, laughing. "You sit beside me, mother, and I'll show you what I can catch. Perhaps it will be a little fish. If it's a catfish and whale, you'll have to run, or it will spout water all over you, you know."

So mamma sat down on the rock beside Phylis, and all was quiet for a while. Then the float began to bob up and down quite alarmingly.

"Mamma, and Phylis: 'you must keep still or you'll scare them away!'"

Another bobbing of the float, and Phylis gave a jerk which threw the fish straight against mamma's face.

"Oh, I beg your pardon, mamma," cried Phylis.

"Is it a whale?" mamma asked, as she wiped the water away.

"Well, really," began Phylis, and then she began to laugh, for the fish she had caught was not more than three inches long. "It is hardly a whale. I do not

know how it is that I nearly always catch minnows. They are only good for bait."

"Oh, no!" said mamma. "They are good to eat, except that they are so little and so full of bones that it hardly seems worth while."

"There are more than a thousand species of minnows. They are not large fish. In the Eastern States we scarcely ever find one more than a foot in length, and more often they are only a few inches."

The hornhead is a sort of minnow which is common in almost all of our small streams. Every boy or girl who goes a-fishing knows it. It is probably a hornhead which you caught."

"The minnows have beautiful colors," said Phylis. "I caught one a few days ago, and its back was bluish green and its sides a bright green, with glints of gold where the light struck it. Underneath it was pale, but not exactly silver. Its fins were a pale red-yellow."

"That was a hornhead," said mamma. "The spring minnows have a spot of crimson on each side of their heads and a rosy tinge on the under part of the body."

"Well," said Phylis, as she cast in her hook for another fish, "I think more of minnows than I did."

Cloth Made From Wood

United States Consul Atwell writes from Roubaix, France, to the State Department:

"Justin Muller read a paper recently before the Industrial Society of Mulhouse on certain printed goods, the warp of which is composed of cotton, and the woof of a thread made from wood pulp."

These goods were introduced almost four years ago. At the outset sheets of wood pulp were cut into fine shreds and twisted into thread by machines made for the purpose. Later the paper process has been abandoned, and the wood pulp is passed directly over grooved metal sheets forming very thin ribbons, which pass in turn over a machine that twists them into a regular thread of any desired length.

"These threads of wood fibre are known as xylolite, silvaline and icelita, and are numbered like any others. The dynamometer resistance of this thread in a dry state, taking 100 as the resistance of jute threads, is not about 55; that of cotton thread in a dry state is 100. The difference is widely in favor of jute and cotton; but it is thought that improvements may increase the resistance of the wood pulp thread. As it is to be used only in mixed goods great resistance is not of essential importance."

"Dischloths are made of this thread in connection with hemp and the mixture is washed, dyed and printed. While wet the wood pulp softens; but recovers its resistance in drying. There are already manufacturers for the production of wood fibre thread in Germany, Spain and Netherlands, and France will shortly have a factory. It is thought that this thread may be used advantageously in the manufacture of passementerie, and that it may replace jute and cotton in the composition of many articles."

Surprise Cut Out

Here is a jolly cut-out stunt. When you have learned to do it quickly and well, will be a nice surprise for you to spring on your friends.

It is all in the folding. Follow the pictures and you can do it.

Figure 1