

There is an ominous silence. Evidently the boy has disappeared. But the conjurer turns around and shouts, and the boy, wearing the same jacket and turban, is seen in a neighboring tree. He descends. A tom-tom is beaten, and after a few incantations, the basket is seen to stir, and soon the blanket heaves up, and is thrown aside, and the boy is seen standing before us, as sound as ever. This trick, like the last, can be performed in any locality, on the deck of a ship, etc., thus showing that trap-doors have nothing to do with the result. How is it done?

First, as to the basket. It will be seen, when we think it over, that the peculiar shape of the basket renders it capable of being employed in the following manner: The small boy, as soon as he is placed in the basket, curls up, and wriggles his body, eel-wise, around the edges of the basket. That is, he coils around the inner surface, just as a snake might coil up within it. Now it will be seen that it is possible for the conjurer to leap into the opening, stamp on the ground, etc., since the open space in which he treads is unoccupied by the boy's body. He steps in the middle of the circle of flesh. And when he runs the sword through the basket, he only runs it through those places where the boy's body is not concealed.

So much of the trick is plain: how about the disappearance and reappearance in the tree? There are two boys, dressed exactly alike. The first one never leaves the basket. He simply remains quiet until he receives the signal to show signs of life again. The second boy climbs up a neighboring tree at some convenient moment, and shouts when he sees it is the proper time to make his presence known. So much for the famous basket trick!

A very clever trick often seen is the following: It is known as the "dry sand trick." The fakir brings forward a pail which he proceeds to fill with water. He then shows some ordinary sand, quite dry. To prove its dryness, he takes up a handful, and blowing sharply upon it, scatters it in all directions. He then takes up another handful and drops it into the water. We can all see it lying in the bottom of the pail, under the water. Next, showing his hands empty, he places one in the pail, and brings out a handful of the sand. Blowing upon it, it still scatters in all directions—showing it to be as dry as ever. This is repeated several times, until all the sand is again extracted.

This is a very clever trick, and would never be discovered, unless its secret were told. It is performed in the following manner: Fine, clean sand is selected, washed carefully in hot water several times, and dried in the sun. Some of this sand is then placed in a frying pan with a lump of fresh lard and is cooked until all the lard is burned away. The result is that every particle of sand is covered with a thin coating of grease, so that when this sand is dropped into the water the sand is impervious to the water (owing to its coat), and so remains as dry as ever.

Another trick that Indian fakirs perform is known as the "colored sands trick." The conjurer eats several colored sands or sugars—blue, red, yellow, etc.—and swallows them. Nevertheless he can, at the request of any of the spectators, immediately blow out of his mouth any one of the colored sugars desired or called for. This is repeated until all the colors are blown out in turn.

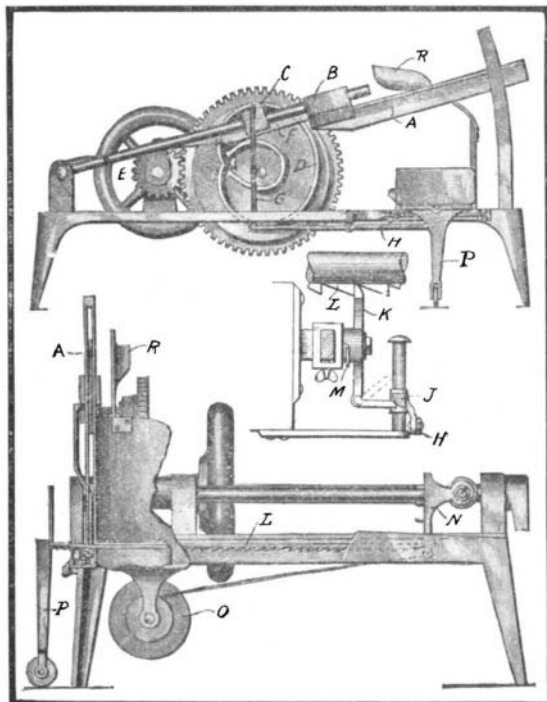
The conjurer really swallows the sugars, in the first case—to his detriment, be it said. But he has, concealed in his mouth, several little capsules, each containing one of the sugars of the same color as that eaten. These are concealed within the mouth, between the teeth and the cheek, in various positions around the mouth—in a certain order, which the conjurer knows. Now, when any color is called for, the conjurer simply works the capsule containing this color to the front of his mouth, breaks it with his teeth, and immediately blows out the sand. This is repeated until all the capsules are broken in turn.

A little trick sometimes shown is known as the "diving duck." A bowl is shown empty, and then filled with water. In the water is now placed a small artificial duck. Upon command of the fakir, it dives quite naturally of its own accord; then it rises to the surface, and this is repeated several times. At the conclusion of the performance, the duck is taken out and handed to the spectators, who can examine it. No amount of examination will reveal the secret, however. It is this: A fine silk thread passes up through a small hole in the bottom of the bowl, and when the conjurer places the duck in the water, he manages to slip this thread around the duck. Now, he has only to pull this thread, when bowl is filled, and the duck dives. At the end of the performance, the thread is broken, and the duck may be examined as much as desired.



MACHINE FOR SLICING BREAD.

Although the machine which is here illustrated has been specially designed for slicing bread, it may be used with equally good results for slicing vegetables



A BREAD-SLICING MACHINE.

or any other articles capable of being cut with a knife. The special advantages of this machine are that it is light-running, compact, and of simple construction, and that a draw-cutting action is continuously imparted to the knife while the machine is in operation. The action of the knife and the feed of the material to the knife is automatic, and capable of adjustment for cutting thick, medium, or thin slices.

In the accompanying engraving the knife is indicated at A. It is attached to a block B, mounted to slide on a bar which normally holds the knife in its upper position under tension of a spring. This bar is connected to a cam roller C, which engages a cam rib D formed on the face of a gear wheel. Meshing with this gear wheel is a pinion E, to which is affixed a crank. A rod F connects this crank with the carrier B. When the gears are turned, the crank causes the knife A to be drawn back and forth, while at the same time the cam D alternately depresses and releases the knife. The bread to be sliced is supported on a carriage, which is automatically fed under the knife after each stroke. The feed mechanism is operated by means of a connecting rod G, attached to the lever H, which rises and falls with the bar on which the carrier B is mounted. When the rod G is raised, the bar J is lowered, and coming in contact with a pawl on the latch K, serves to swing the latter out of engagement with the ratchet teeth L formed on a bar under the bread carriage. The latter is then drawn forward by a coil spring O, operating a drum on which is wound

a cord that connects with the rear end of the bread carriage. As soon as the latch K disengages the rack, the bar J slipping past the pawl releases the latch, and permits it to return under action of the spring M and engage the next tooth L. There are three sets of bars formed with ratchet teeth and the teeth are of different lengths on the several bars so that by adjusting the latch to engage one or another set of teeth the slices will be cut correspondingly thick or thin. The bread is held in the carriage by means of prongs formed on the rear wall, as indicated at N. The forward end of the carriage is supported on a roller P. While the bread is being sliced, the operator may hold it down on the carriage by pressing down on the spring plate R. The inventor of this slicing machine is Mr. Edward A. Seaburg, of Seattle, Wash.

SOME RECENT TOYS AND TRICKS.

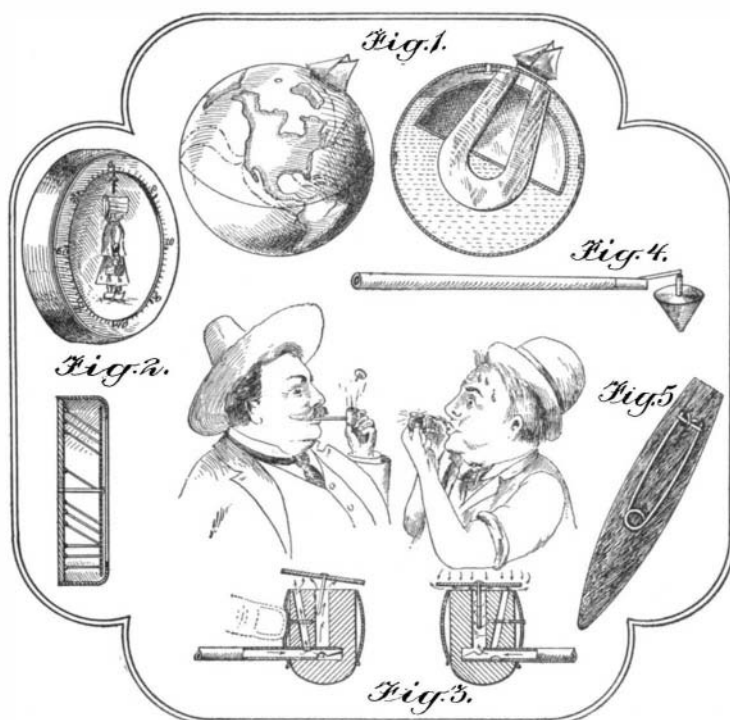
He learns best who is taught unawares, and hence when a toy illustrates a scientific principle, or serves as a means of instruction, its value is more than doubled. Most of the toys in the following collection are of the educational class. The boy who owns a geographical globe, such as illustrated in Fig. 1, will doubtless develop a great interest in geography and navigation. The globe is partly filled with water or oil, which supports a float. The latter carries a magnet with the poles touching the inner surface of the globe. On the face of the globe a small ship with an iron keel is placed. As the globe is turned about, the magnet is moved to different positions, and the ship, owing to magnetic attraction, is made to sail to different ports. The principal lines of navigation are marked on the globe, and the game is to move the globe so that the ship will sail along these lines.

The device shown in Fig. 2 is called a "sound motor." It is adapted to be placed on the sounding board of a piano or other musical instrument, and when the instrument is played, the dial of the motor slowly rotates. The secret is shown in the cross-sectional view. The dial is pivoted on a central pin, and its periphery is supported by a series of bristles. The sound serves to vibrate the dial, and the intermittent flexing of the bristles causes the dial to turn on its axis.

In Fig. 3 we have a trick pipe, based on a well-known scientific principle. The exhibitor produces a pipe, places a paper disk over the bowl, and putting the stem in his mouth, blows the disk off with a sudden puff. Then he hands the pipe to a friend, asking him to do likewise. Strange to say, the latter is unable to blow off the disk, and even when the pipe is turned over while he is blowing, the disk hugs the mouth of the bowl. The reason is that the air which is blown through the pipe, on reaching the disk spreads out in all directions in a thin sheet, and produces a partial vacuum under the disk, so that the latter is held to the pipe by the pressure on its outer surface. The opening in the bowl is of much smaller diameter than usual, and a central pin on the disk serves to hold the latter in proper position on the pipe. The pipe is provided with a secret passage in the wall of the bowl, and there is a hole in the stem, which may be turned to register with this passage. The exhibitor turns the stem so that when he blows, the air passes partly through the bowl and partly through this passage. Hence the disk is tipped up on one side, so that the partial vacuum is not formed, and the paper may readily be blown off. As a precaution, the secret passage is provided with a valve connected to a flexible sleeve placed on the outside of the bowl. The exhibitor, by flexing this sleeve, opens the valve. The advantage of this is that in case he should forget to turn the stem when handing the pipe to his friend, the valve will still prevent the latter from performing the trick.

Few people realize that a steel ball will freely roll around the end of a magnet pole, from which it may be pulled off only with the greatest difficulty. The property is utilized in Fig. 4. It consists of a blowpipe fitted with a magnetic needle at one end. A light top provided with a steel stem is suspended from the needle by magnetic attraction. On blowing through the pipe, the top is spun by the stream of air issuing from the pipe, but the rotation of the top does not cause the spindle to fall off the needle.

The trick cigar illustrated in Fig. 5 can hardly be classed as an educational toy. However, it is such a vast improvement upon the ordinary trick cigars, which explode when they are partly consumed, that we have included it in this list. Its operation hardly needs any explanation. A stiff wire spring with the ends tied together under tension is placed in the cigar. As the cigar is smoked the string is burned, and the spring flies open, much to the astonishment of the smoker, and yet without endangering his eyesight.



SOME RECENT TOYS AND TRICKS.