HOW THE BOY SCOUTS BECOME ADEPTS AT SIGNALING

New York.

TO become an adept in semaphore signaling is just now the aim of every one of the 300,000 boys who have allied themselves with the Boy Scouts of America, for every good scout must be familiar with wigwagging, as with the sign language in general, so that in case of necessity he will be able to communicate with other scouts when at great distances apart.

Nearly every boy who saw the fleet in the North river when the north Atlantic squadron was stationed here a few weeks ago was fascinated by the signaling carried on between the battleships of the great fleet by means of the flags or Costen lights. This is the semaphore signaling, which, in addition to the wireless, keeps the officers of Uncle Sam's big war flotilla in touch with each other, even when many miles apart.

Upon this occasion nearly every detail of business, from the arrival to the departure of the ships, was communicated by means of these signals. Even the drowning of the seaman from the Yankton just as the ships were drawing anchor to pass in review before President Taft was made known to the other ships of the fleet by means of the wigwag signals.

Another very interesting example of semaphore signaling, unofficial in character, was noted at this time when one night at the Ninety-sixth street subway station one-half of a detail of sailors on shore leave failed to board an express on which was the rest of the party. The doors were shut in their faces, but, nothing daunted, the party on the platform ran to the window and began an animated conversation by signs with those inside, telling them where they would meet later on. It simply goes to show how the sign language can be used in an emergency, even if it be nothing more than arranging a meeting between some sailors who have got separated in the subway rush.

Signalling Drill at Philadelphia Boy Scout Headquarters

It has spread like wildfire, the interest in semaphore signaling, and all over the country, both by day and by night, is to be seen the picturesque wigwagging of signal flags in the hands of Boy Scouts who are trying out the knowledge they have gained of this fascinating sign language. By day the flags are used and by night the Costen light or torch, and from mountain peak to mountain peak in the inland towns messages are being sent and relayed perhaps to still other points farther distant. Down in Shamokin, Pa., the other day one group of boys stood on Bunker hill—not Bunker hill, Boston—and another on a peak some miles distant, and wigwagged to each other the trail that was to be followed by a hunting party just starting out.

Receiving Signals. Troop No. 8 St. Louis

On the occasion of President Taft's visit to Milwaukee recently a detail of boys from Troop I, Boy Scouts, stationed themselves at the depot, and the moment the president left the train and entered his automobile signals by Costen light and wigwag were dispatched to the pickets at the corner of the Hotel Pfister bearing the news, "The president is here."

It isn't difficult to learn semaphore signaling, by which words are spelled out with flags held in various positions for letters. It requires practice and great care in sending messages in order not to confuse the mind of the receiving officer. In sending a message there should always be an assistant to read the message to the sender, and the one reading it should have some one to write it down, so his whole mind can be put on deciphering the signs. A fieldglass is, of course, essential in order to read the signals at any distance.

It is important, too, that there should be no haziness in the mind of the sending officer as to the exact position of the arms and flags, for the least bit of shiftlessness makes room for mistakes. If a scout is in too great a hurry there is confusion and a consequent waste of time, as the message must be repeated.

To send a message stand facing the person or station receiving the signals and holding the flags out at the full extent of the arm so that the arm and flag shall form one straight line. A valuable suggestion in regard to the latter rule is to slide the end of the flag stick up the sleeve so that the first finger of each hand lies along it.

It, of course, takes time to form the different letters; in fact, it takes more time to become familiar with the various positions. But to do this it is well for boys to get a sign manual and then practice, one at either end of the room, until they become more or less proficient in the formation of the letters. It will be found to be great sport and a splendid way of passing a rainy day. There is no reason either why girls can't learn it, too, and eventually the Girl Pioneers will doubtless take it up to a certain extent, though boys who strike the trail and go great distances from home or camp will make use of it more extensively than the girls.

In learning wigwagging there are numerous "dont's" to observe which will aid the novice immensely, one of which is that when the flags are close together, as is the case in sending the letters O and W, they must be kept separate and not be allowed to cover one another; otherwise they will confuse the receiver. Then the letters A, B and C must be made with the right hand only, and E, F and G with the left.

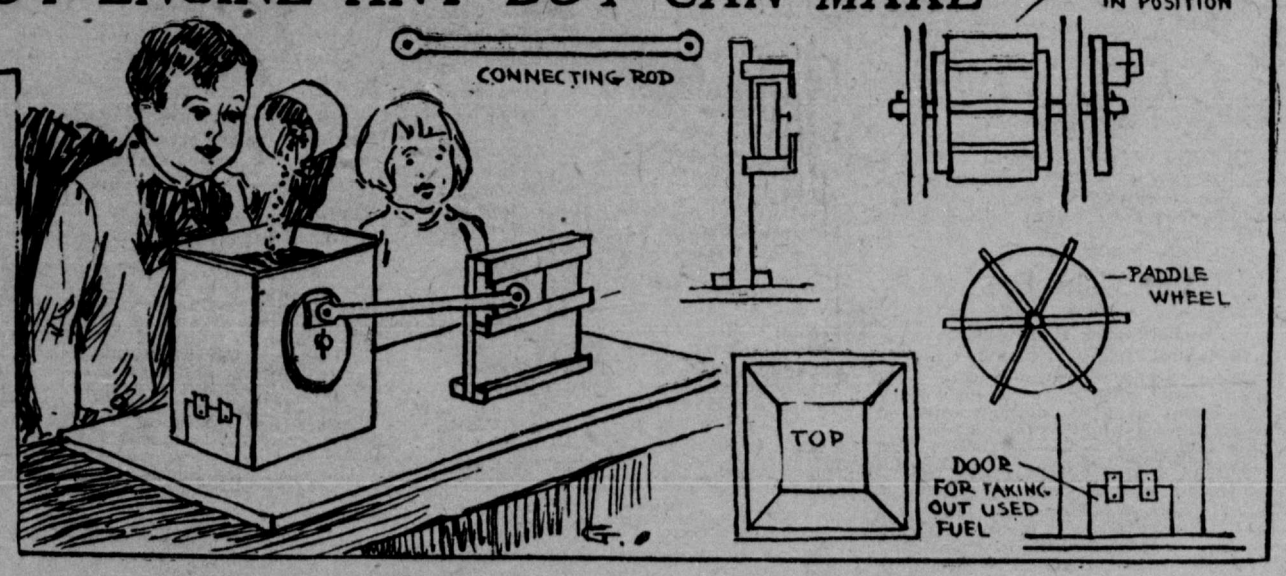
Never bring the arms across the body to form these letters, but this and all other rules must be learned by experience and actual practice, though it should be borne in mind that sending is far more important than reading. Reading can be easily learned with a little practice, but carelessness in sending is, like most bad habits, difficult to get rid of. It is suggested not to practice signaling before a mirror, for naturally all the letters are reversed, and when a scout comes to the actual practice he will get sadly mixed.

A knowledge of wigwagging comes into play in a thousand and one different ways in work as well as in play, but to show that it is something more than a mere pastime all that is necessary is to point to such men as Chief Scout Seton and Dan Beard, national scout commission, and the one who conceived the idea of the boy scouts, who are both giving up valuable time to collecting data on the sign language for books that are soon to be published.

More than this, Dan Beard, who is president of the Campfire Club of America, composed of such good scouts as Theodore Roosevelt, Buffalo Bill, Buffalo Jones and others, says that had they been familiar with semaphore signaling in years gone by it would have been invaluable to them when trekking through the wilds or camping far from the haunts of man. Take, for example, the case of one of their party who once upon a time shot a big buffalo in the wilds of the west, and, being alone, was unable to get it back to camp. Had the hunter been versed in the sign language he could with ease have wigwagged his message from his quarry to camp.

In case of such disaster as that which swept away the village of Austin, Pa., when the dam burst and telephone communication was suddenly cut off, help could have been summoned in an incredibly short space of time by means of semaphore signaling had there been those who understood it. It can be used in places, for example, where the noise is so great as to prevent one being heard; in speaking to another across a long room, in hospital wards or in the sick room, where the sound of the voice would disturb the patient. In these and thousands of other ways semaphore signaling is being used, and the Boy Scouts are acting as the medium for the extension of this very valuable silent language which promises to do as much to prevent catastrophe as to promote happiness and pleasure.

A TOY ENGINE ANY BOY CAN MAKE



THE principal features of the engine which I have built are shown in the drawings. Construct the body of a chalk box or four pieces of thin wood, and paddle wheel, piston rod, etc., as indicated in the drawings. Then fasten them on to the baseboard, either by tacks or blocks of wood or any other method. The paddle wheel, as indicated, is the result of my experience in building, and I believe it is a very good and accurate method of construction. Use one of the spools that the tailors use if you can procure one, and then slide a dowel through its center, which is already bored. Add the pieces of thin wood, as many as you judge necessary for the production of the paddle wheel.

A good cleaning device is that of a piece of paper or cardboard fastened in the box in a sloping position, so that it will not interfere with the paddle wheel and cause the fuel to empty toward the door as shown, from which it can be easily removed. Fasten a strip of zinc or cardboard on the piston box to prevent the piston from falling out. This, I believe, is a better method than having another strip of wood in its place.

Be careful of the following points of construction. You must have the center of the axle of the paddle wheel and of the piston on the same horizontal and straight line. The connecting rod must be screwed on the exterior paddle wheel and piston rod, so that it will work freely. See that connecting rod does not interfere with axle of exterior paddle wheel or zinc edging of piston box when engine is in motion.

The fuel can be rice, sand, pebbles, etc., dropped through the paper cover so that it will fall on the paddle wheels, which should be made as large as possible, yet clearing the sides of the box. Various connections can be made to produce various sorts of motions.

The cost is practically nothing, except that of an hour or two of leisure time and the result derived will be most pleasing, also causing the boy or girl to think and experiment on the various ways to produce motion and operate mechanical devices.