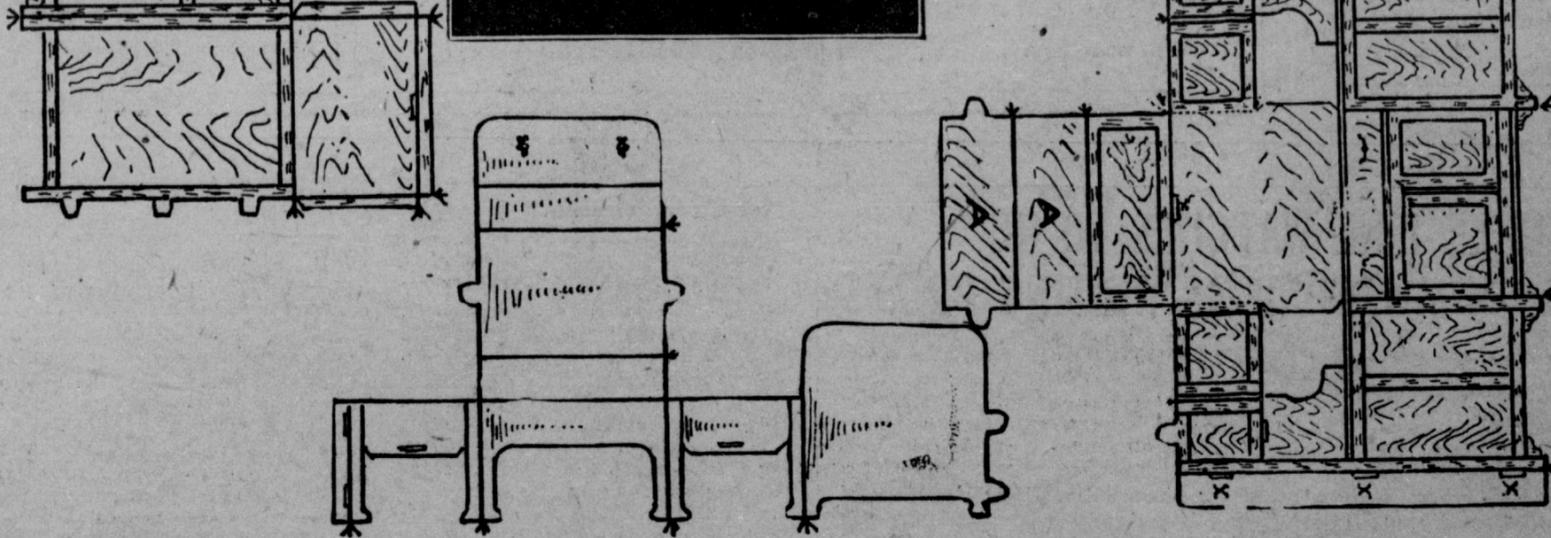


# ADDITIONAL KITCHEN FURNITURE FOR THE PAPER DOLL



and its top folds toward the front to make the top of the sideboard.  
If you did not make the paper-doll's apartment from a box which was described the week before the publication of the furniture series began, but would like to make a room for the furniture published here, you may



**T**HE remaining pieces of Miss Paper Doll's kitchen furniture are being published today. As you will remember, some of the kitchen furniture was published last week. The three pieces published in today's page are the dresser, the sink and the ice chest. Color the pieces of furniture to match those which you cut out last week before cutting the pieces out. Then cut

each piece out roughly and paste it on a piece of letter paper. Finish cutting out each piece very neatly. The pieces are made by folding each piece along the lines marked by the arrows. Cut the small slits that are opposite the tabs. The slits are most easily cut with a penknife. Thrust the tabs through the slits and paste them down. The sink and the ice chest are easy to put together, but the dresser is more difficult because there are so many

folds. The dresser has a closet opening, with two small doors at the top. To make the dresser it is necessary to cut out the two side pieces which you see are not grained like the wood, and cut also the two dotted lines. Fold back the top of the dresser, then fold the two pieces marked A together, with the A's showing. This will make the closet shelf when it is pasted together. Then fold the side pieces and the back. The back comes up above the front

easily construct one from a box that is about eight inches long, six or seven inches wide and four inches high. The best way to arrange these box rooms is to take away one long side of the box so that it is easy to put the furniture in place. Cut a window in one side or in two, if you like, and curtain it with white tissue paper gathered on a thread at the top and fastened across the top of the window with two small pins stuck in each end.

## HOW A BOY CONSTRUCTED A WIRELESS INSTRUMENT

**B**y the aid of the accompanying diagrams I think any boy should be able to construct a simple, easily adjusted wireless receiving set, whose cost is trifling. I will first give a brief explanation of the use of the various instruments. First comes the tuning coil. When a station is in the act of sending great waves of oscillations, unseen, unheard, unfelt, are being radiated in all directions. If a station sends with a very long aerial, or antenna, the wave radiated is long, and if sending with a smaller aerial the wave set up in the ether is correspondingly short. For this reason we have the tuning coil at the receiving end so constructed that it will add more wave length to the receiving station to correspond to any station to which it is desired to tune.

The detector is the center of the whole outfit, for here the incoming wave, surging between the brass point and the silicon crystal, sets up a current which may be heard in the receivers which are connected across it.

To construct the tuning coil first obtain a perfectly smooth cylinder of some soft wood 3 inches in diameter and 10 inches long, and on it place two ends  $4\frac{1}{2}$  inches square. Upon the spool thus formed wind enough wire to cover it with one layer, and bring one end of the coil to a binding post. The wire should be No. 24 enameled copper, and it will require about one-quarter pound.

The sliding contact consists of a

### Enter the Family

A maiden lady, Miss Cocker by name, and her niece, who bears the same cognomen, went one evening to a reception at the house of a friend. "What name, please?" inquired the footman.

"Miss Cocker," answered the elder lady.

"Miss Cocker, too," joined in the niece, hurriedly.

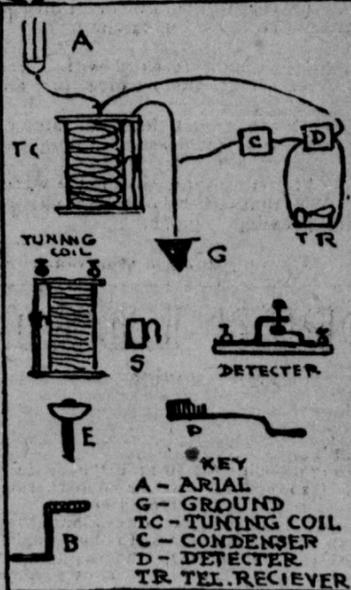
Whereupon the man of plush and buttons opened the drawing room door, and, with all the dignity of his profession, ushered them into the midst of the company with the convulsing announcement:

"Miss Cocker and Miss Cockatoo!"

brass rod 10 inches long,  $\frac{1}{4}$  inch square, to be drilled at both ends and screwed to coil ends when the slider is finished. The slider consists of a piece of square tubing which just fits the rod. Solder a piece of brass spring to it, as shown at S. When the slider is placed on a coil connect it to a binding post, bend the spring so that it makes light contact with the coil and scrape the coil where the spring connects. Give the coil several coats of shellac.

To make the detector take a strip of brass three inches long, one-eighth inch thick and a half inch wide. Bend as shown at B. Drill and thread it for a brass screw  $1\frac{1}{2}$  inches long and with the top of the spool bolted to the head. File screw as shown at E. Drill the other arm of the bent brass strip and screw it to a base about four inches square.

Solder a piece of brass tubing to a piece of the spring brass a half inch wide and  $2\frac{1}{2}$  inches long, brass tubing to be a fourth of an inch deep and one-half inch wide, in which is to be set a piece of polished silicon. Screw spring and cup thus formed to base, after bending spring as shown at P. Silicon must come direct under brass screw. Mount two binding posts on the base



7x15 inches. Cut two strips of common wrapping paper six inches wide by one yard long, two cardboards 6x3 inches and obtain two strips of tinfoil five inches wide and one yard long. To build up the condenser lay a strip of paper on a table. Above it lay a strip of tinfoil, being sure to get all perfectly even. Then lay another strip of paper and another of tinfoil. Place the two cards at one end of the strips and then bring wire connectors from each strip of foil out on opposite sides and roll condenser on cards. Press between the two bases and screw down at four corners, if desired, mounting two binding posts on one of the bases, to which connect the two wires from the strips of tinfoil. The instrument is then complete.

For the aerial, as long as we are only to have a receiving station, iron wire well galvanized to prevent rust is as good as any other. The aerial can be as big or as small as you desire, but try to get it up in the air a little if you wish to get good results. Get it good and long if possible.

For a ground instrument the gas pipes or water pipes are excellent. For the hookup of the instruments I would refer you to the diagram. The telephone receivers, the one part of the apparatus that we can not make ourselves, may be bought at any good electrical store. With a set such as I have described very good work can be done. I myself have read Cape Cod very clearly with it. H. N.

### The Functions of the Army

Representative Bartholdt of Missouri, the great preacher for world peace and the disarmament of nations, became very much peeved, not to say infuriated, recently when the army officers in Washington started a furore to show that vast sums of money should be appropriated in order to insure this country against defeat in the event of war.

"The army," declared Bartholdt, in his thick, German accent, "is a body of men appointed to figure out what should be done in time of war, and to point out that we couldn't do it, if there was a war!"—The Twice-a-Month Popular.

and connect one to the "bridge band" and the other to the spring. To make the condenser, cut two bases