

LEARN with DAWN

You too Countryman, can be a Freedom Fighter

Simple firing cap

In our last issue we discussed about a simple firing cap. In this issue we will talk about a more sophisticated and stronger version of the simple firing cap which can be made by sealing the clamped wire (the bridgewire) inside or Eureka wire* (see note.) instead of strand of steel wool or flashbulb wire (these can be used if you can't get Nickel-chrome or Eureka wire).

1. Instead of simply clamping the bridge wire by bending over the copper wire it should be wound around first, as shown. Note: You can't wind steel wool or flashbulb wire — it breaks too easily.

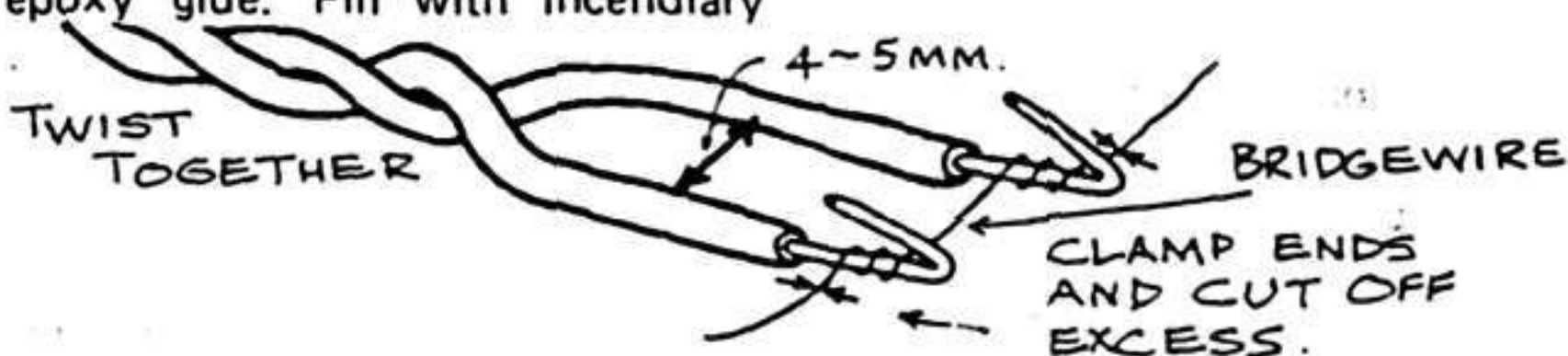
2) Clamp the bridgewire with pliers as before and cut off the excess. EITHER (A) fill half a gelatine capsule with incendiary powder and insert the bridgewire into it. Seal the open end with epoxy (Pratley) glue. OR (B), roll a piece of paper about 2cm long around something giving a diameter of about 7mm. (eg, a round pencil). Glue the edge to make a tube. Seal one end with epoxy glue. Fill with incendiary

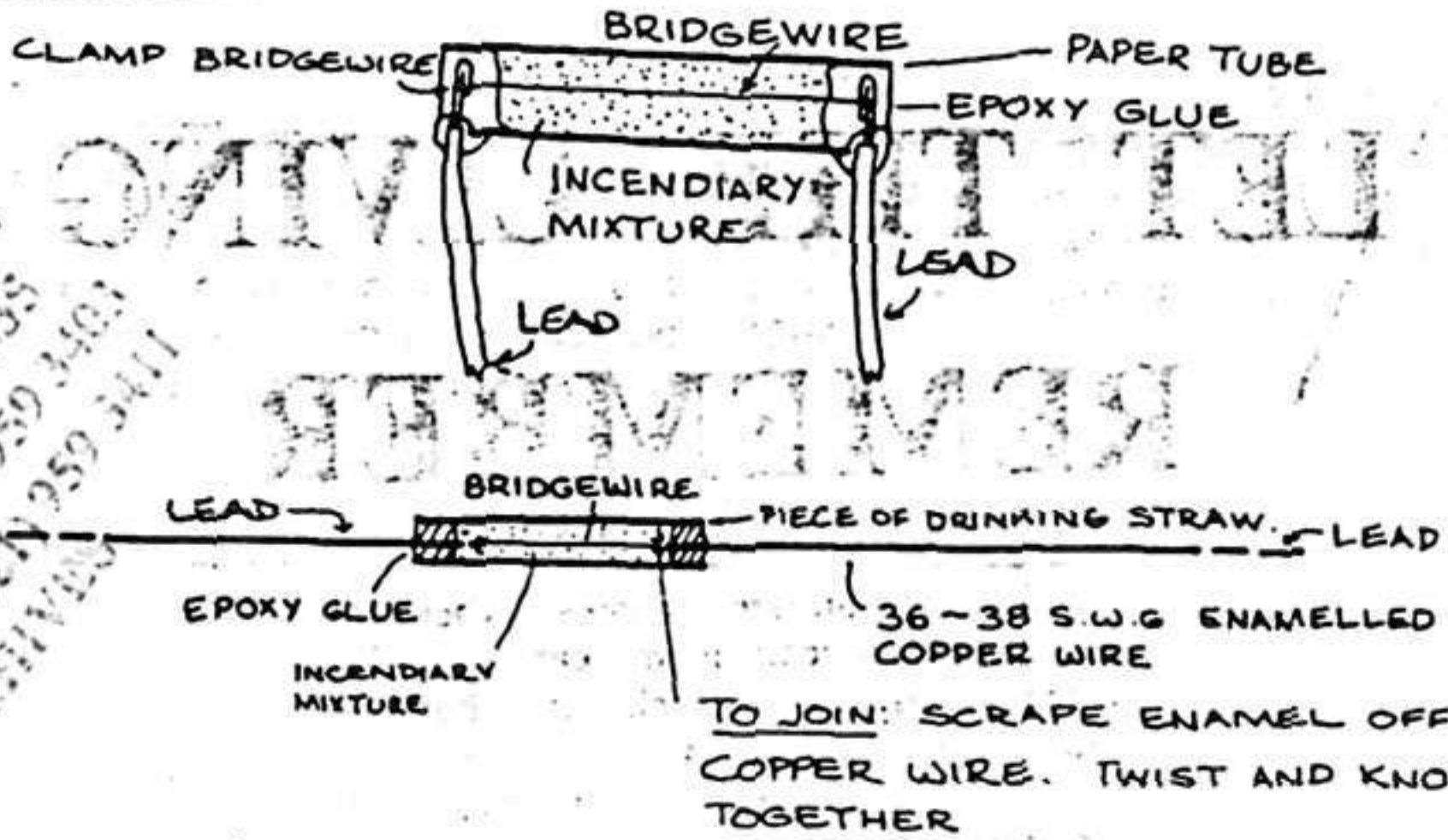
powder, insert the bridgewire — and seal the open end.

There are many other ways of making small electric igniters. With the ideas given on the previous pages you can invent your own. All of them work in the same way. An electric current passes through a thin wire (filament bridgewire) which becomes very hot and glows. This sets fire to the incendiary mixture which flashes or explodes.

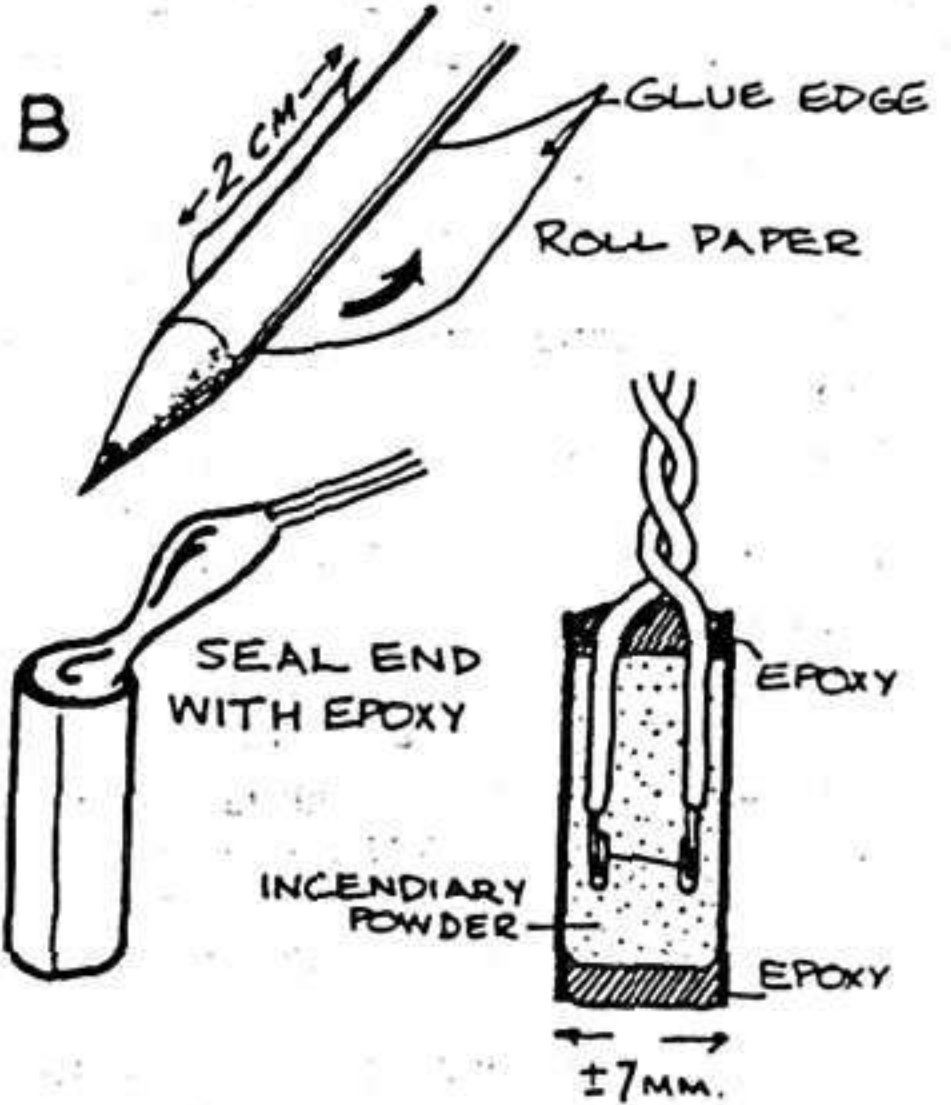
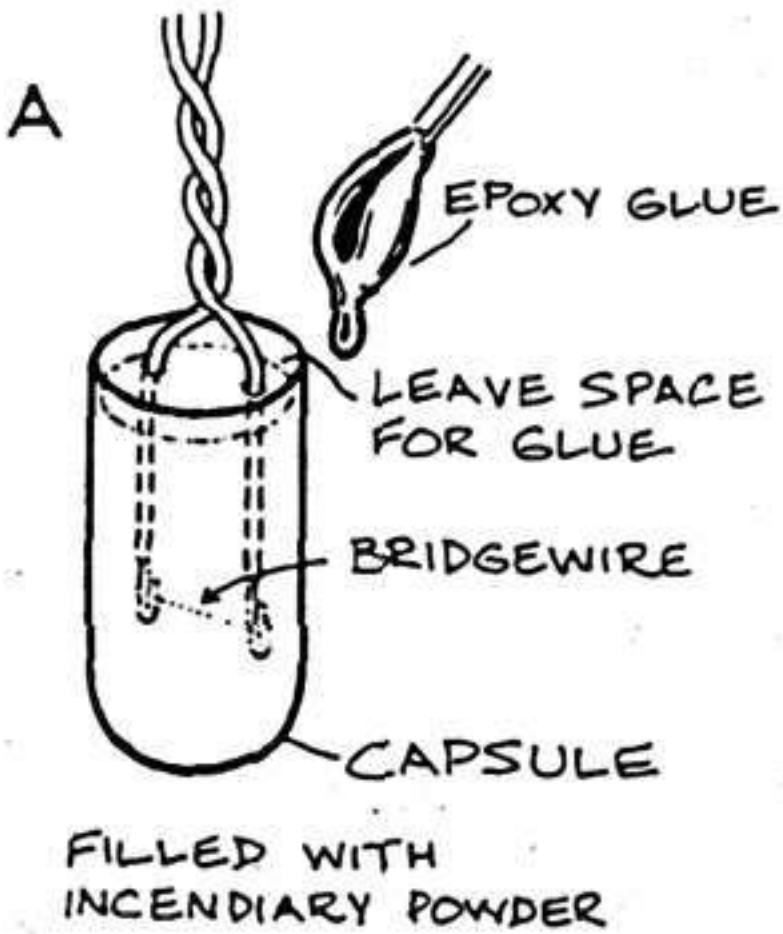
Here are two more which are easy to make. The first is made in the same way as the firing cap except that the bridgewire is much longer and instead of both wires going in one end, one wire goes in each end. The second is a way of making a very small igniter and instead of using plastic insulated copper wire, it uses very thin enamelled copper wire* (see note below). Note: the second example simply uses a piece of drinking straw instead of a paper tube.

*Nickel-chrome resistance wire, Eureka wire and enamelled copper wire is bought





OR



from electronics/radio dealers. To make bridge wires ask for a roll of 48 or 46 S.W.G. Nickel-chrome or Eureka wire S.W.G. is the measure of its thickness - the higher the number the thinner the wire). You can use 42 or 44 S.W.G. if

you can't get 48 or 46 but then you must use a bigger (9 volt) battery. Flash bulbs for cameras can be bought from chemists or photographic dealers. Steel wool can be bought from supermarkets.