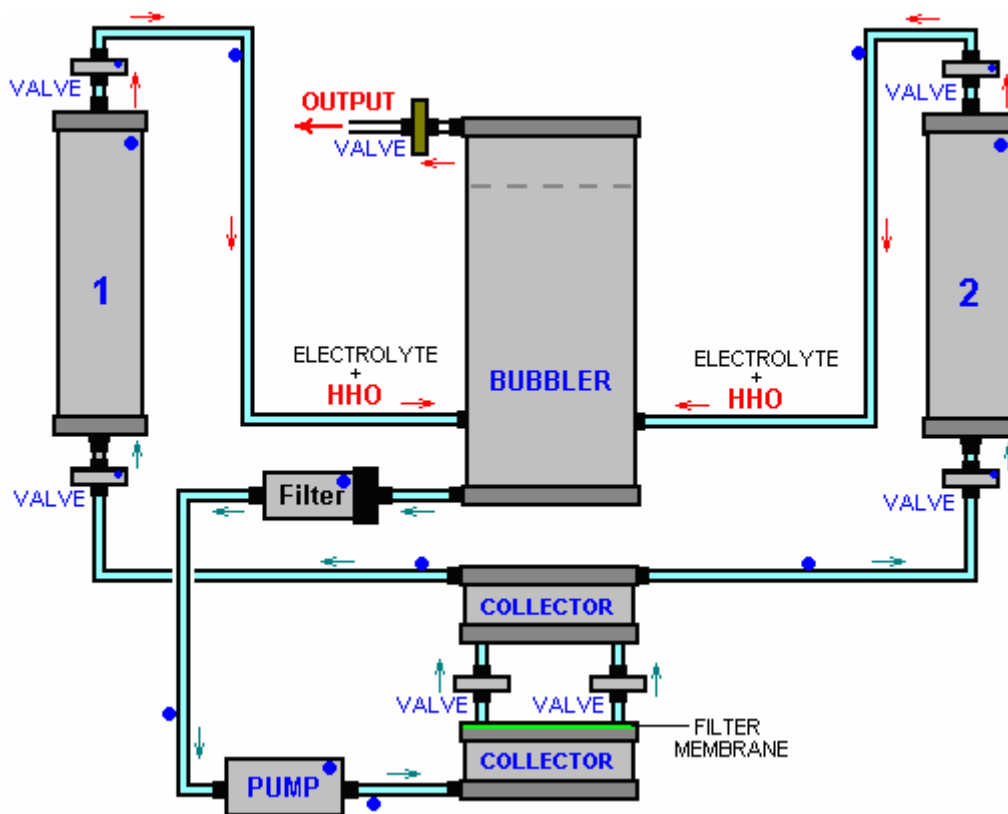


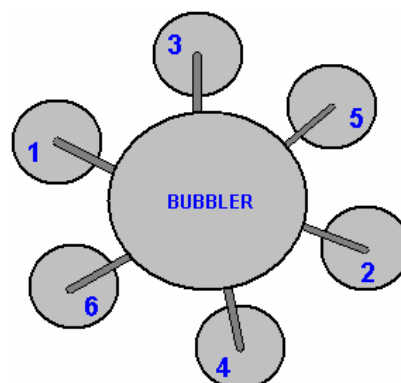
THE "HOGG" ELECTROLYSER

SELWYN HARRIS OF AUSTRALIA INTRODUCES THE "HOGG" ELECTROLYSER WHICH PRODUCES 4.5 OR 5 LITRES OF HHO PER MINUTE AND SO IS CAPABLE OF RUNNING A MODIFIED GENERATOR TO PRODUCE KILOWATTS OF EXCESS ENERGY.

A HOGG ELECTROLYSIS CELL HAS TWO STAINLESS STEEL MESH ELECTRODES COILED AROUND EACH OTHER. THIS GIVES A LARGE ELECTRODE SURFACE AREA IN A VERY COMPACT CONTAINER. IN THIS DESIGN THERE ARE SIX IDENTICAL CELLS ALL OF WHICH FEED INTO A LARGE BUBBLER. FOR CLARITY, ONLY TWO OF THOSE SIX CELLS ARE SHOWN HERE :



THE ITEMS MARKED WITH A BLUE DOT FORM JUST ONE OF THREE IDENTICAL SETS, THAT IS, THREE FILTERS FAN OUT FROM THE BOTTOM OF THE BUBBLER, THE FLOW THROUGH THEM BEING CAUSED BY THREE SEPARATE PUMPS AND THE TWO ELECTROLYSER CELLS MARKED "1" AND "2" ALONG WITH THEIR ASSOCIATED PIPES AND FOUR ONE-WAY VALVES, ARE REPLICATED TO GIVE ELECTROLYSER CELLS "3" TO "6" WHICH ARE NOT SHOWN IN THIS DIAGRAM. THOSE THREE IDENTICAL SETS ARE CONNECTED TO THE CENTRAL BUBBLER AND THEY ARE SPACED EVENLY AROUND IT AT 120-DEGREE POSITIONS HORIZONTALLY AS SHOWN IN BROAD OUTLINE HERE :



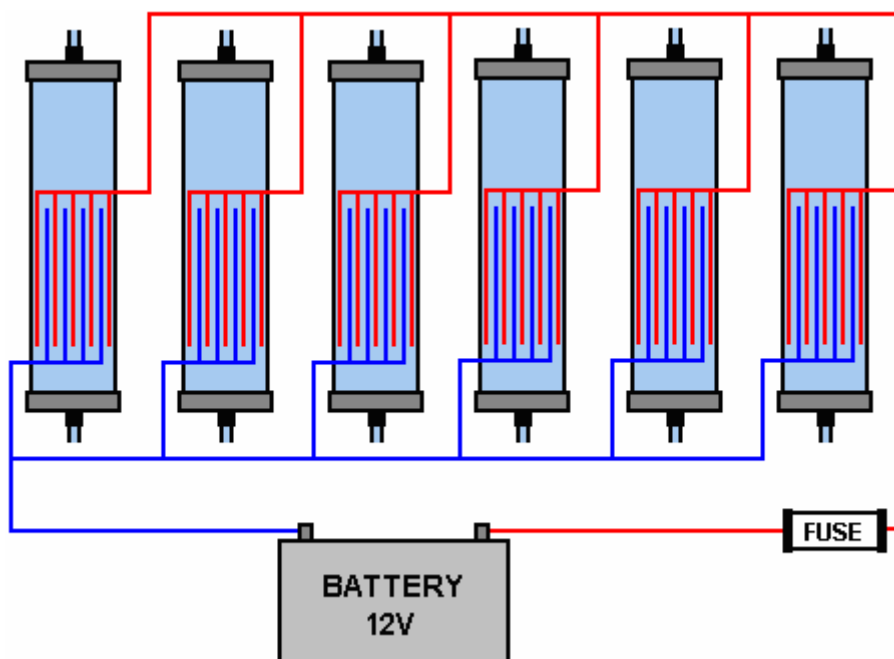
RAINWATER IS CIRCULATED THROUGH THE SET OF CELLS USING THREE SMALL PUMPS AND THERE ARE TWO WATER COLLECTORS BUILT ON TO THE BOTTOM OF THE BUBBLER. EACH ELECTROLYSIS CELL IS COMPLETELY FULL OF 'ELECTROLYTE' AND SO IT IS A STREAM OF 'ELECTROLYTE' WITH HHO BUBBLES IN IT WHICH IS FED INTO THE BUBBLER.

EACH OF THE THREE PUMPS HAS ITS OWN FILTER TO TRAP ANY PARTICLES, AS EXPERIENCE HAS SHOWN THAT RAINWATER CAN CONTAIN A GOOD DEAL OF ADDITIONAL MATERIAL. THE FILTERS ARE STANDARD IRRIGATION IN-LINE FILTERS MADE FROM TRANSPARENT PLASTIC TUBE AND FILLED FOR THREE QUARTERS OF THEIR LENGTH WITH FINE PLASTIC SPONGE MATERIAL.

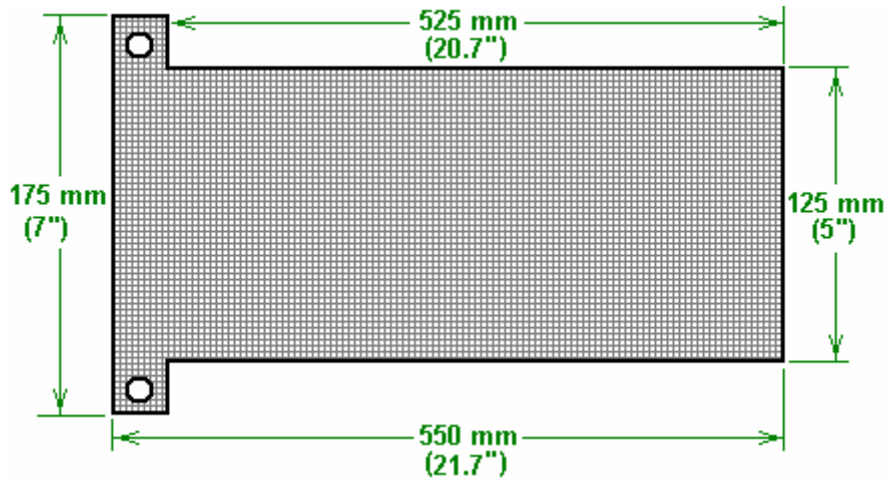
A KEY FEATURE OF THIS CELL DESIGN IS THE USE OF TWO POWERFUL NEODYMIUM MAGNETS PER CELL. THESE ACT DIRECTLY ON THE WATER AND THAT CAUSES A MAJOR INCREASE IN THE GAS PRODUCTION RATE. THE MAGNETS HAVE THEIR NORTH POLE FACING TOWARDS EACH OTHER.



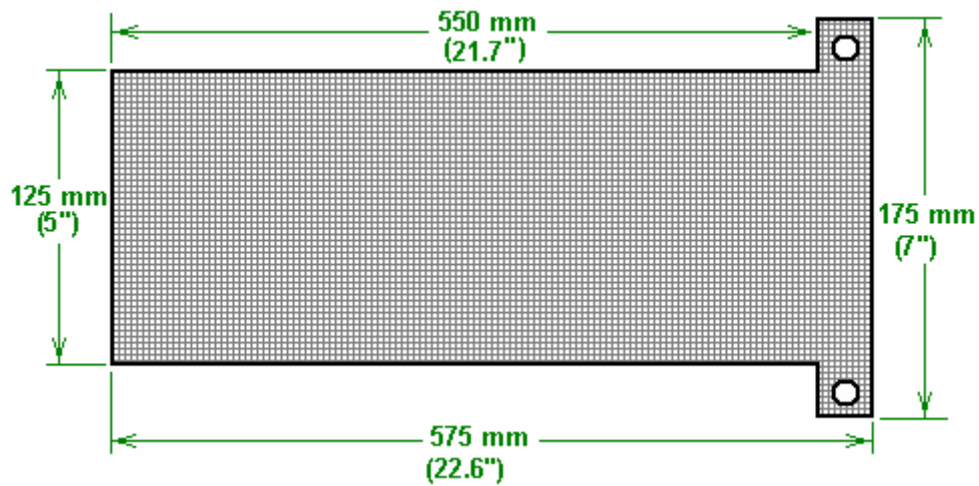
THE TWO MESH ELECTRODES ARE MADE FROM STAINLESS STEEL WIRE OF 0.32mm DIAMETER AND WOVEN TO GIVE 2mm HOLES BETWEEN THE WIRES AND A 0.65mm OVERALL SHEET THICKNESS. THESE DIMENSIONS ARE IMPORTANT AS OTHER MESH SIZES AND STYLES DO NOT GIVE SO GOOD A PERFORMANCE. THE ELECTRODES ARE WIDER AT ONE END IN ORDER TO FORM A CONNECTION TAB WHICH ALLOWS EASY ELECTRICAL CONNECTION TO EACH ELECTRODE. THE ELECTRODES ARE THEN WIRED IN PARALLEL SO THAT EACH CELL GETS 12-VOLTS ACROSS IT AS SHOWN HERE :



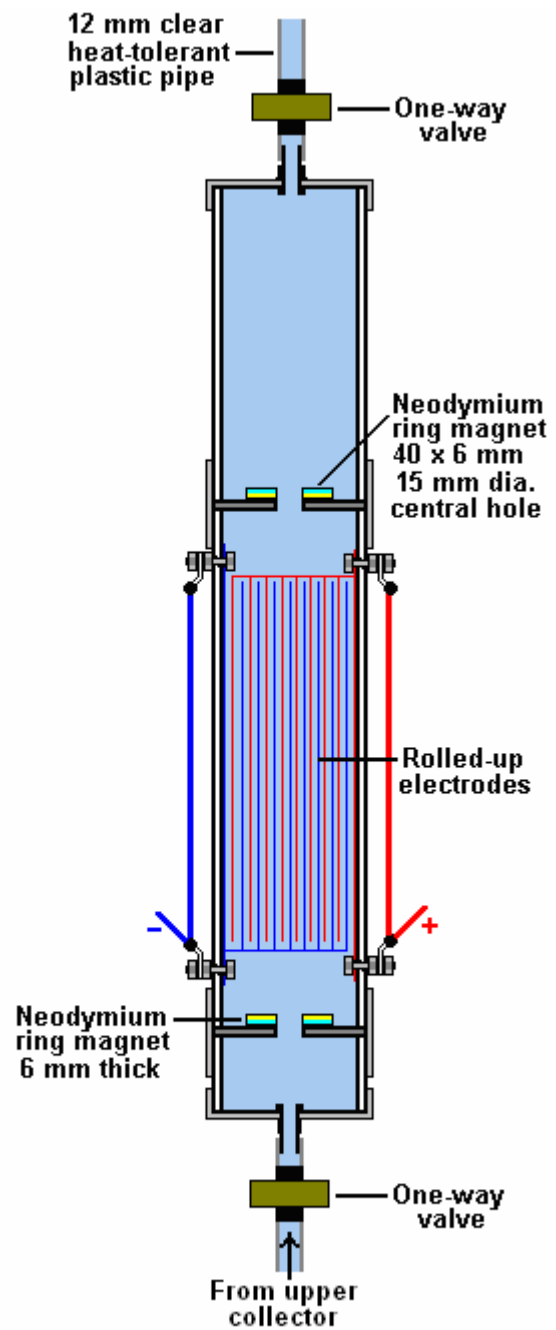
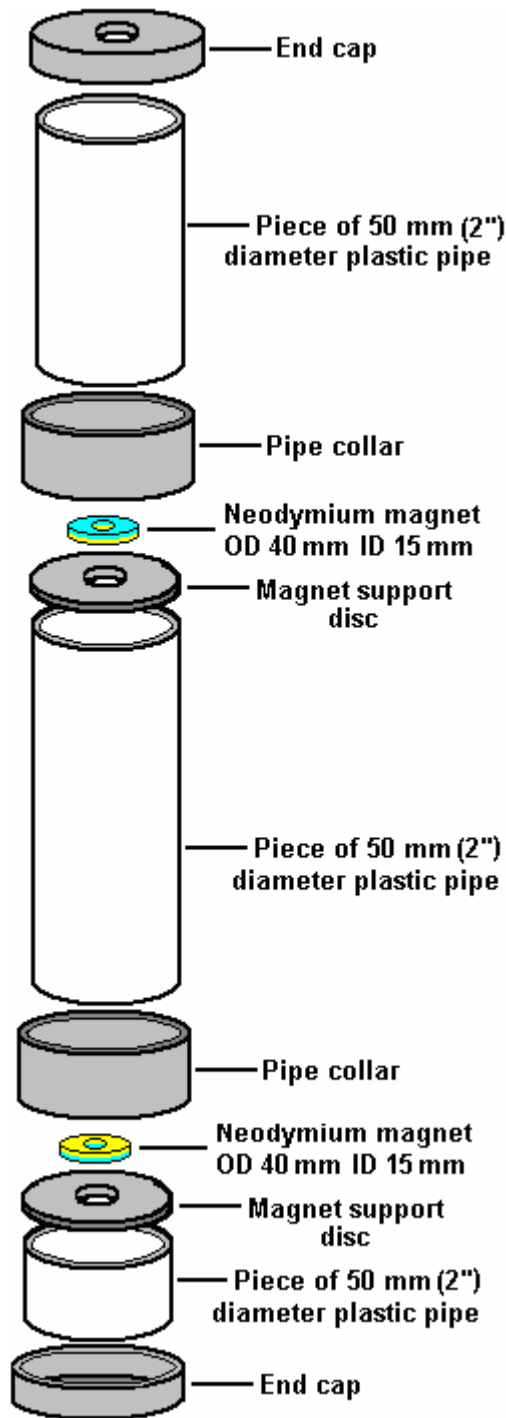
THE TWO MESH ELECTRODES ARE CUT LIKE THIS :



AND THIS :

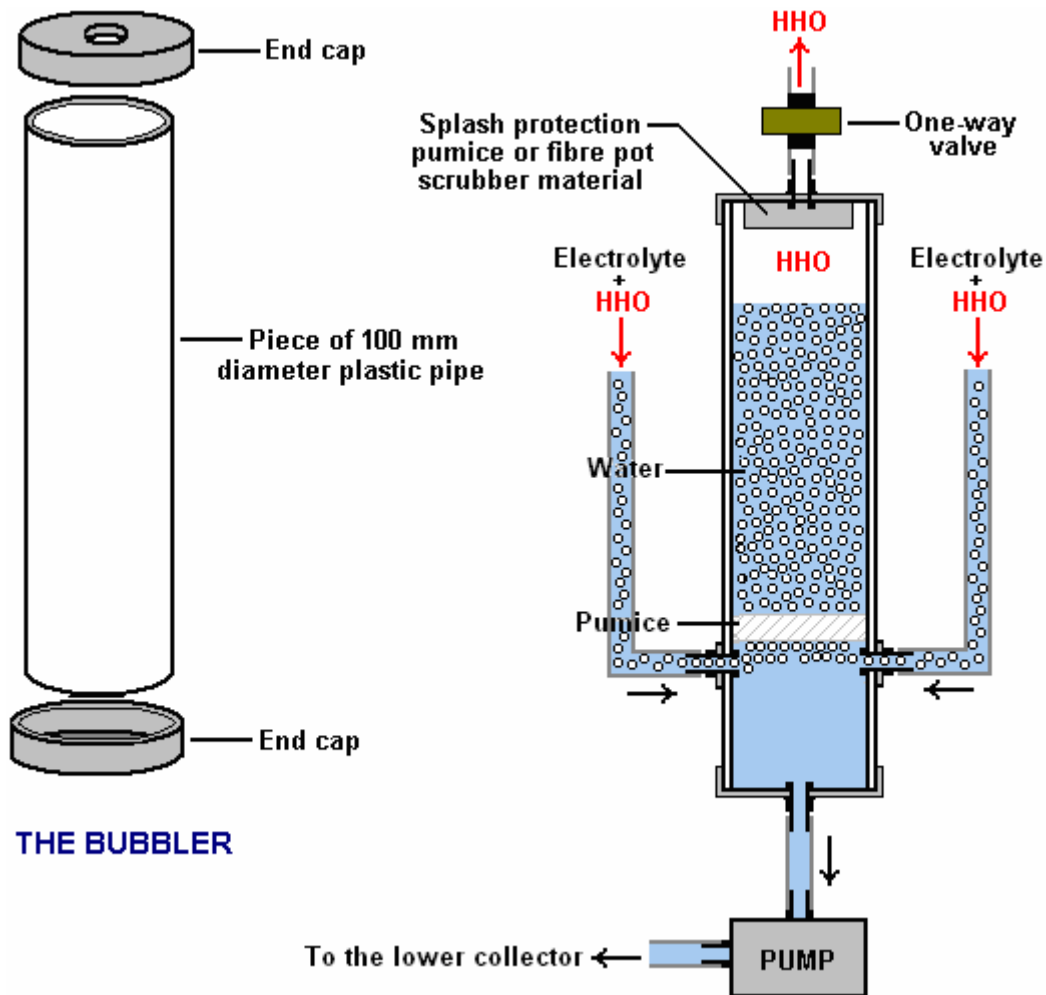


THE SIX ELECTROYSER CELLS AND THE SINGLE LARGE BUBBLER ARE CONSTRUCTED USING STANDARD PLASTIC PLUMBING MATERIALS :



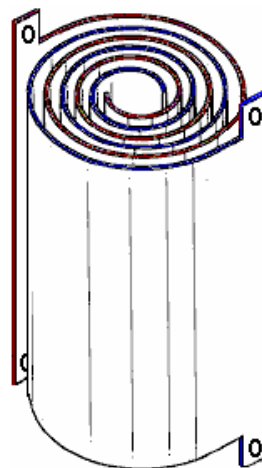
ONE ELECTROLYSER CELL

THE CONNECTING PIPES ARE HEAT-TOLERANT CLEAR PLASTIC AND ARE 12mm (HALF-INCH) DIAMETER. THE BUBBLER FABRICATION IS ALSO ACCOMPLISHED USING PLASTIC PLUMBING MATERIALS CONNECTED LIKE THIS :



THE BUBBLER

AS SOME PEOPLE HAVE DIFFICULTY IN VISUALISING THE WAY IN WHICH THE ELECTRODES ARE COMBINED, THIS SKETCH MAY HELP :



THE TWO ELECTRODES ARE KEPT SEPARATED BY SMALL FIBRE WASHERS HELD IN PLACE BETWEEN THEM AT STRATEGIC PLACES USING SUPER GLUE. THE MESH ITSELF IS THEN TREATED BY BEING IMMERSSED IN CITRIC ACID IN ORDER TO MAKE IT WORK WELL WITH RAINWATER WHICH IS THE 'ELECTROLYTE'.

THERE ARE THREE PAIRS OF ELECTROLYSER CELLS, EACH PAIR BEING CONNECTED TO THE UPPER COLLECTOR RESERVOIR. THE WATER BEING PUMPED OUT OF EACH CELL IS PASSED THROUGH ONE OF THE THREE FILTERS BEFORE ENTERING THE COLLECTOR RESERVOIR WHICH FEEDS THE SMALL PUMP WHICH KEEPS THE WATER CIRCULATING,

WHICH IN TURN, KEEPS REMOVING ANY PARTICLES WHICH HAVE GOT INTO THE RAINWATER.

WHEN USED WITH RAINWATER FROM A BARREL, THIS ELECTROLYSER DRAWS 1.4 AMPS PER CELL, GIVING A TOTAL INPUT OF ABOUT 115 WATTS WHEN BEING RUN ON A 12-VOLT ELECTRICAL SUPPLY. WHILE RAINWATER IS SUPPOSEDLY PURE, THE REALITY IS THAT IT SELDOM IS, AND ITS ABILITY TO CARRY CURRENT VARIES DRAMATICALLY FROM PLACE TO PLACE AND EVEN MORE WIDELY FROM COUNTRY TO COUNTRY. IF YOU DECIDE TO BUILD THIS ELECTROLYSER AND FIND THAT YOU DO NOT GET ANYTHING LIKE 1.4 AMPS FLOWING THROUGH ANY ONE CELL, THEN YOU MAY WELL HAVE TO ADD A SMALL AMOUNT OF ELECTROLYTE TO THE WATER IN ORDER TO GET THE CURRENT FLOWING.

A WORD OF WARNING – DO **NOT** IGNITE ANY HHO GAS IN THE OPEN AIR AS THE SOUND SHOCK WAVES CREATED COULD DAMAGE YOUR HEARING PERMANENTLY, LEAVING YOU DEAF FOR THE REST OF YOUR LIFE.

NOTES : <http://www.free-energy-info.com/Hogg.pdf>

VIDEO : <https://youtu.be/s7A8GkYzcUM>