MODIFICATION OF AN IMPROVED ANAEROBE JAR.

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The explosion of one of our anaerobe jars after use for a year without accident has led to a slight modification of the apparatus previously described. Reference to Text-figs. 1 and 2 of the article referred to will show the copper wire terminals B₁ and B₂ leading through the rubber stoppers C₁ and C₂ beside the glass tubing D. It has been found that after some months of use the copper wires become corroded where they are in contact with the rubber stoppers, probably due to the interaction of moisture, heat, and some constituent of the rubber stoppers (possibly sulfur). The accident referred to was due to the breaking of one of these corroded wires resulting in the production of a spark just outside the rubber stopper when the electric current was turned on. The corrosion may be avoided by having the copper wires enter the coil through the bore of the glass tube D, joining the nichrome wire A through small holes in the side of the tube within the coil. Although the capillary rubber tubing E₁ and E₂ used for insulation has been found to have no appreciable corrosive action on the copper wires it is further suggested that for B₁ and B₂ one may use wire insulated with a non-corrosive insulation such as asbestos, thus eliminating the rubber tubing altogether. We also pack the bore of the glass tube with asbestos at either end where the wires pass into it and wrap the joint with insulating tape (F). The modifications recommended are shown in Text-fig. 1.