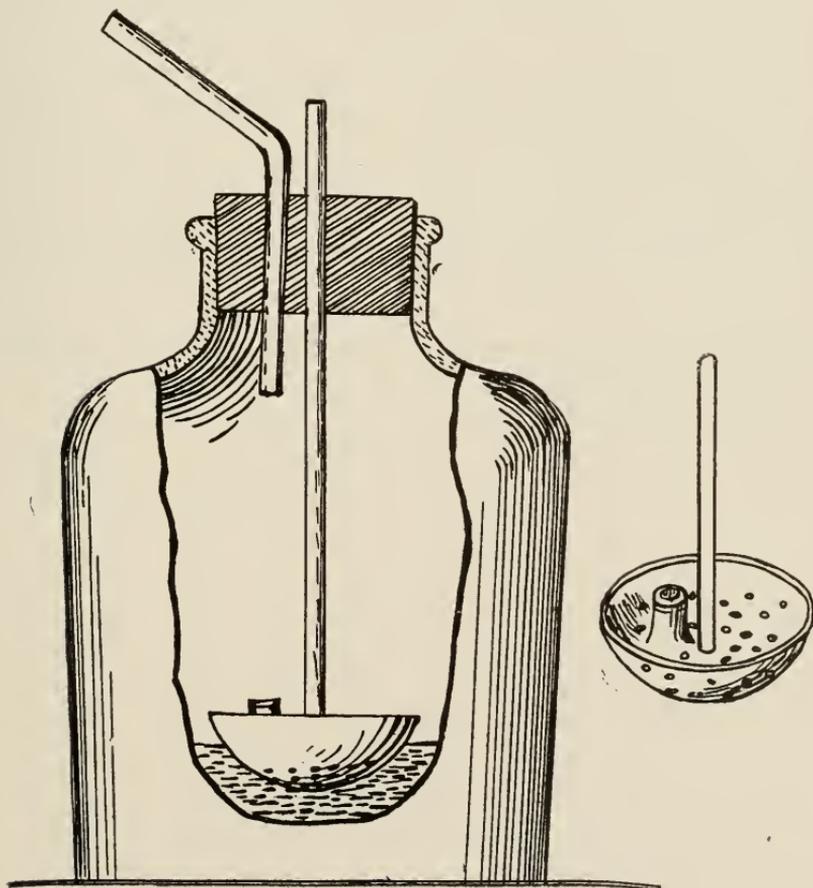


## A NEW GAS GENERATOR.

BY RAYMOND BELLAMY.

This generator is really so new that it exists only on paper. There is, therefore, still a question as to its efficiency, although it is so simple in its construction that it can hardly fail to perform its work satisfactorily. It is designed for use whenever a gas is to be made by intermingling of a liquid and a solid and will be found to be especially adapted to the generation of hydrogen sulphide for analytical work.



This generator's claim to superiority is based on its simplicity of structure, its inexpensiveness and its ease of operation. All the special apparatus required is a bowl-shaped member, attached to an upright rod, the bowl being perforated. This can be made any size desired, but should be of some material which will resist chemical action, preferably glass. This can be used with a vessel constructed especially for the purpose, or with an ordinary wide-mouthed flask or bottle.

In use, the rod extends through one of the holes in an ordinary rubber stopper. Through the other hole is the tube furnishing an outlet for the gas. The acid or other liquid is put in the bottle or flask receptacle and the solid is placed in the bowl-shaped member. Now when a quantity of gas is desired, by pressing downward on the rod, the bowl with its solids will be lowered into the liquid and the chemical action will begin. When a sufficient amount of the gas has been obtained, by raising the bowl out of the liquid the action will be stopped, as the acid will run out through the perforation in the bowl. This will save the unused chemicals and prevent the escape of the poisonous and obnoxious gas. As a still further safeguard, the bowl can be constructed with a projection on it, this projection having a concave depression; this will be arranged in such a way that when the bowl-shaped member is lifted from the liquid, this depression will fit over the outlet for the gas and completely shut off the escape.

The principle of the generator will be made clear by an examination of the accompanying drawing.

*Moore's Hill, Indiana.*