

known form of the lecture apparatus known as "Hofmann's tubes." It consists of two tubes, A and B, united at their

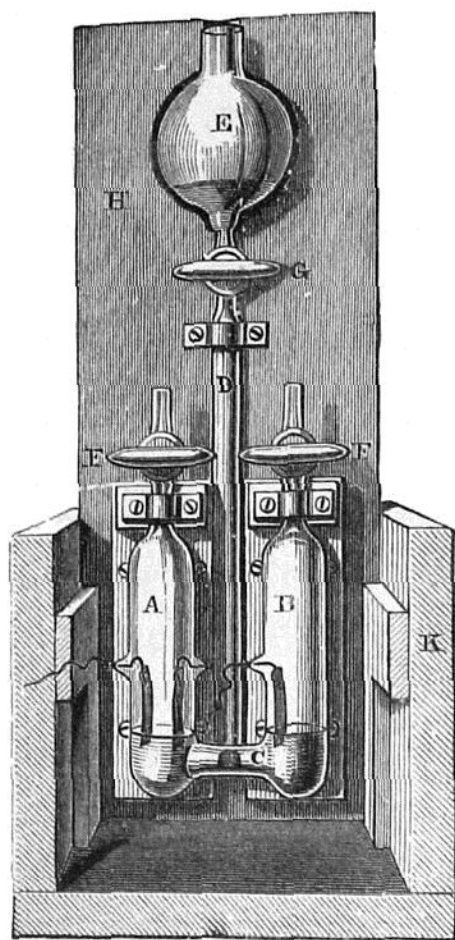


FIG. 8.—Gas-generating Apparatus.

lower extremities by a short tube, C, which connects them at the same time, by means of the tube D, with the reservoir E. At their upper extremities, A and B terminate in capillary tubes provided with stop-cocks, F, F. Communication with the reservoir can be made or interrupted by the stop-cock G. One of the tubes, A, is provided with two platinum electrodes; the other, B, has but one. Bent delivery-tubes, not shown in the drawing, fit on the tubes above the stop-cocks F, F. When about to be used, all the stop-cocks are opened, and dilute sulphuric acid poured in through the reservoir until it has eliminated all air, and is running out at the delivery-tubes. The stop-cock G is now shut, and the battery connected as circumstances may require, either with the electrodes in A, or with one in A and one in B. Gas is allowed to escape freely until one can be sure that all dissolved air is removed; the stop-cocks F, F are now closed, and G opened, and the liquid in A and B allowed to sink until it just covers the electrodes. G is then closed, and F, F opened, when the gases may be introduced into the eudiometer in the ordinary way. The whole apparatus is attached to a mahogany slab, H, which fits into the box K—shown cut through the middle in the drawing—either, when in use, as represented, or, when not in use, as a lid, with the apparatus within the box. The box thus answers the double purpose of a convenient stand and a safe packing-case.