exterior of a lead conducting plate or grid, which is either active itself or can be converted into active material by a process of electrical or chemical formation; the second method consists in treating or forming electrically or chemically the surface of a lead plate, which has been designed to present a large area to the electrolyte, whereby the surface is converted into active material.

The first method is commonly known as the pasted type of cell, although the active material is not always supplied in the form of paste. The second method is known as the Plante type, so-called because Gustave Plante, a French electrician, was the first to utilize practically the electrical method of forming the plates without the use of applied material.

The larger proportion of storage cells now in use are of the lead accumulator type mentioned so far, but there is a second class of storage cells made, which are called bimetallic accumulators, and whose elements consist of two different metals, the electrolyte being a salt of one of the metals. The principle upon which they work is the same as in the lead cells.

Naturally, lead accumulators are very heavy, and this being a great objection to their use in certain instances, a combination of elements of less weight was sought for, and the bimetallic cells were produced, but they never have been used to any great extent. The electro-motive force in them is somewhat higher than that of the lead accumulator, but owing to the danger of local action on open circuit, they will not retain their charge for more than a few days, while a lead accumulator will scarcely lose twenty-five per cent. of its charge in as many months; besides, the tendency of reducing the weight of these cells must necessarily weaken their construction, and on this account their life will be much shorter. About two years ago a small battery of this class was shown at the different dental meetings in connection with a small mouth lamp, and special stress was laid upon its high electro-motive force and its small weight. The battery has disappeared from the market, and those who invested money in buying it have probably found out by this time that the whole appliance was a failure.

It will be seen from the aforegiven description that the storage of electrical energy is entirely different from the storage of any other form of energy. A quantity of electricity cannot be stored or accumulated in a vessel or reservoir, because it does not exist in a tangible form. We are able, however, to make the electric current perform work in shape of chemical action and afterward, by setting up certain reactions, can reproduce the cur-