

Figure 2. The First Fuel-Battery System (1842). Grove several years before had the dream of "effecting the decomposition of water by means of its composition"—in our language, of using a hydrogen-oxygen fuel battery (four cells of which are shown connected in series above) as the power source for an electrolysis cell in which hydrogen and oxygen are produced. Twenty-six cells in series were required to decompose water in the upper cell. Sulfuric acid was the electrolyte, and the electrodes were platinum.

The combination of fuel battery and electrolyzer is the basis of regenerative electrochemical systems for energy storage.

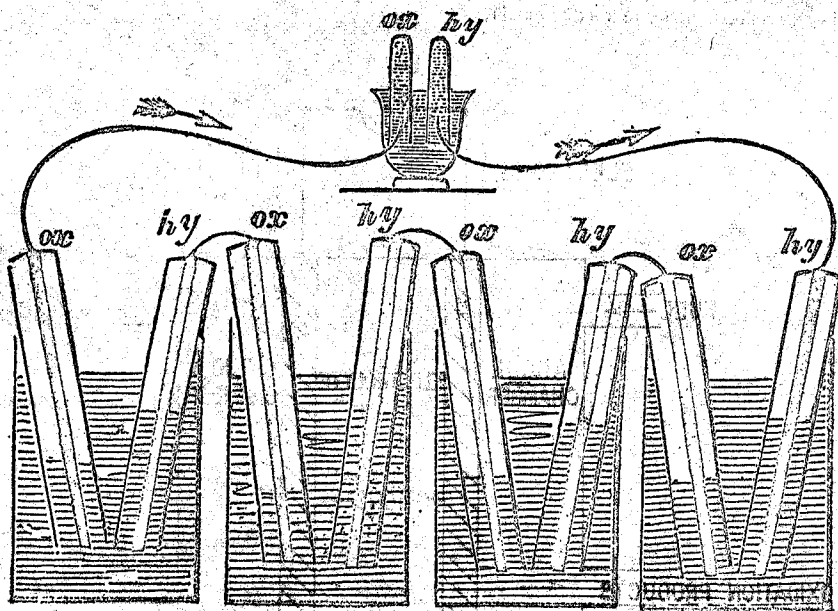


FIGURE 2