

fever. He also found that in the wards of puerperal women which were visited by the students who worked in the dissecting rooms, a larger percentage would die than in those accessible to the midwives only. They did not dissect. He reduced the mortality, by merely obliging the students to wash in calcium chlorid before entering the sick wards, by more than two-thirds. He learned from clinical observation what Lister learned from Pasteur. He established the contagious character of puerperal fever, like Oliver Wendell Holmes, who in 1843 wrote his immortal paper in the *New England Medical Monthly*. They shared a similar fate, with great differences, it is true. Holmes was, on account of his observations, ridiculed by Hodge and Meigs, the obstetrical sages of Philadelphia, until Hodge and Meigs found themselves alone with their prejudices and ignorant obstinacy,—and enjoyed smilingly the admiration and veneration of the English-speaking world for fifty years afterwards. Semmelweiss was persecuted by Braun and Scanzoni, and, I am sorry to say, also by my friend Spaeth, who would not admit that their lack of methods had killed thousands of women and newly-born, and was driven out of Vienna and angered into a lunatic asylum. Posterity had to come to the rescue. As a rule, the benefactors of mankind have been crucified or starved; all is considered corrected by a monument.

1848. Crusell (1810-58) expounded the indications of galvanocaustics, mainly in strictures, carcinomata, and ulcerations (Bull. Phys. Math. de l'Acad. Imper. des science De St. Petersburg). He claimed chemical effects only, denying the vital action of galvanism.

The quantitative analysis of urea was taught by Robert Wilhelm Bunsen (1811-1899), the same who afterwards, in co-operation with Kirchhoff, founded spectral analysis.

Per Hendrik Malmsten (1811-1883), discovered the trichophyton tonsurans (Hygiea VII) and *Balantidium coli*.

1849. J. Arnott (1794-1885), taught the employment of cold for the purpose of procuring anæsthesia.

Claude Bernard (1813-78) performed his "piquure" of the fourth ventricle and caused diabetes.

Pollender, a veterinarian, discovered bacilli in the blood of animals infected with anthrax, preceding Brauell (1855), and Davaine and Robert Koch (1876). (Ferd. Cohn Beitr. Zur Phys. d. Pflanzen.)

Jos. C. Hutchinson (1827-87) invented the spirometer.

Charles D. Meigs (1792-1869) found thrombosis in veins to be one of the causes of death in puerperal women.

Marion Sims (1813-83) cured a vesico-vaginal fistula.

In 1850 another American, William Detmold 1808-1895), of New York, opened an abscess in the cranial cavity and was roundly abused