

After the Gold Rush

The Trials of Albert Michelson

... light-waves are now the most convenient means we have for making accurate measurements ... it is the very minuteness of the waves which permits the extraordinary degree of accuracy ...¹

Albert Michelson (1890)

The birth of modern American science might be dated roughly to the spring of 1881, but the location of the auspicious event was ironically far outside America, situated in the basement of the Potsdam Astrophysical Observatory on the outskirts of Berlin, Germany. This was where Albert Michelson began his first of a series of experiments to measure the motion of the Earth through the luminiferous ether by using an interferometer. It was his interferometer, rather than his attempted measurement of Earth's motion, that would gain for him America's first Nobel Prize and win a new respect by European scientists who, before Michelson, had not taken American science seriously since the days of Benjamin Franklin.