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ELECTRICITY RELEASED FROM MATTER[1]

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IN this situation I am reminded of something written a few years ago by Dr. Keen, the noted surgeon of Philadelphia. Dr. Keen was born in 1837 and he remembers men who were in their eighties when he was a child. Those men were born about 1760, and they in turn remembered men who were born around 1700 and whose lives therefore overlapped the life of Isaac Newton. So short is the history of physical science that three human lives suffice to span the entire time from our days back to the founder of modern physics! This is an extraordinary fact to think of, and no less extraordinary is the fact that *two* human lives suffice to cover almost the whole of the history of electrical science. One of these is the lifetime of our distinguished guest.

[1] Address delivered at the Massachusetts Institute of Technology, March 29, 1933, in connection with the celebration of Professor Elihu Thomson's eightieth birthday.

Try to think back, not 80 but 160 years, to the year 1773. Then, there was hardly anything deserving the name of electrical science—little more than an orderless assortment of quaint scraps of information about static charges, sparks and permanent magnets. Only one great electrician whose name we all remember lived wholly before that time; he was, of course, Gilbert. One other did most of his electrical work before that year, though he lived long past it; that, of course, was Benjamin Franklin. Now try to recall all the names of early electricians you possibly can. Unless you have lately been reading the history of electricity, I would wager that every one of them will belong to the 80 years following 1853. You will doubtless begin by running over the names of the electrical units. Well, Volta, Coulomb, Ampere, Gauss, Weber, Faraday and Henry all flourished in that period; and so did Galvani, Oersted, Cavendish and Davy.